

**Purchasing Office**  
191 South East Street  
Frederick, Maryland 21701  
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Kerrie Koopman CPPB, CPPO,  
Purchasing Manager  
**Kim Miskell, CSBO, Assistant Purchasing  
Manager**  
Bill Meekins CPPB, CPPO, CSBO, CPCP,  
Purchasing Agent  
Shane Ryberg, Purchasing Agent

July 8, 2020

To: Qualified Construction Management Firms

Re: RFP 21C1, Construction Management at Risk Services for Brunswick Elementary School Replacement -Requests for Letters of Interest/Technical Proposals

Frederick County Public Schools (FCPS) is soliciting proposals from the awarded firms under RFP 20MISC11, Construction Management Agency Services. The qualified construction management firms shall provide services associated with planning and design, cost estimating, bidding, hazardous material abatement, demolition, site preparation, site stabilization, construction, close-out, construction management and consulting services through construction completion and normal two-year warranty period.

FCPS is in the process of beginning the design of the Brunswick Elementary School (BES) Replacement Project. The New Brunswick Elementary School will be constructed on the same site as the existing BES while the existing Brunswick ES remains in operation. Upon Substantial Completion of the New BES, the existing BES will be demolished to include any Hazardous Material Abatement and the existing Site will be restored to include the construction of any new parking areas and playfields as required.

The architect for the new Brunswick Elementary School Replacement Project design is GWWO Architects.

#### **Responses to this Solicitation**

Proposals will be received electronically via ProcureNow (<https://secure.procurenow.com/portal/fcps>) prior to and no later than 4:00 p.m., local time, on July 22, 2020. Proposals received after this time will not be accepted.

Proposals will be unsealed and the names of firms that submitted proposals will be read aloud via Skype Business at <https://meet.fcps.org/kimberly.miskell/D21WC0P9?sl=1> or by phoning (240) 235-6172 Conference ID: 7907906.

Questions regarding this solicitation are to be directed to Brad Ahalt, FCPS Senior Project Manager, FCPS Construction Management Department, [bradley.ahalt@fcps.org](mailto:bradley.ahalt@fcps.org) and copied to Kim Miskell, CSBO, FCPS Assistant Purchasing Manager, [kim.miskell@fcps.org](mailto:kim.miskell@fcps.org) no later than **4:00 pm on July 22, 2020.**

FCPS reserves the right to reject any and /or all proposals and waive any bidding irregularities associated with this solicitation and resulting selection. The award of Construction Management Services and Construction contracts is contingent upon receiving the necessary funding approval from the State of Maryland and Frederick County.

Thank you for your interest in Frederick County Public Schools Construction projects and we look forward to receiving your proposals.

Purchasing Agent: Kim Miskell, CSBO, Assistant Purchasing Manager

Attachments: Purchasing - Request for Technical and Fee Proposals (2 pages)  
Construction Management – Request for Technical and Fee Proposals (5 pages)  
Form of Proposal (4 pages)  
BES Replacement Preliminary Project Milestone Schedule (1 page)  
Brunswick Elementary School Educational Specifications (69 pages)  
Design Guide: FCPS Standards for Design of New and Renovated Facilities (39 pages)  
Brunswick Elementary School Feasibility Study (112 pages)  
AIA A133 – 2019 Standard Form of Agreement between Owner and Construction Manager as  
Constructor, as Amended (48 pages)  
AIA A201-2017 General Conditions of the Contract for Construction (75 pages)

**FACILITIES DIVISION/CAPITAL PROGRAMS  
DEPARTMENT**

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**Adnan Mamoon, Director**  
Adnan.mamoon@fcps.org  
Brad Ahalt, Senior Project Manager  
Brian Staiger, Senior Project Manager  
Tony Ray, Project Manager III  
Vernon Beals, Project Manager III  
Ryan Carter, Project Manager II  
Thomas Mulligan, Project Manager III

July 8, 2020

**Request for Proposal  
Construction Management at Risk Services  
Brunswick Elementary School Replacement Project**

**Subject: RFP# 21-C-1 - Construction Manager at Risk Selection Brunswick Elementary School  
Replacement 400 Central Avenue, Brunswick, MD 21716**

**Introduction**

FCPS is in the process of beginning the design of the Brunswick Elementary School (BES) Replacement Project. The New Brunswick Elementary School will be constructed on the same site as the existing BES while the existing Brunswick ES remains in operation. Upon Substantial Completion of the New BES, the existing BES will be demolished to include any Hazardous Material Abatement and the existing Site will be restored to include the construction of any new parking areas and playfields as required.

**Project Description**

The New Brunswick Elementary School Replacement design will be based upon the current FCPS prototype design that was initially developed for the new Blue Heron Elementary School. The new BES is to be designed for a State rated capacity of 725 students and will be a multi-story facility comprised of approximately 92,700 total gross square feet (GSF). The total gross square footage includes two add alternates: (1) A Park and Recreation Gymnasium and associated spaces (approximately 4,300 gross square feet), and (2) A Specialized Program Area to include two additional classrooms and their associated spaces (approximately 2,800 gross square feet).

The new BES Replacement will be an energy efficient building that meets, at a minimum, the USGBC LEED Silver design requirements; however, the Building is not scheduled to be Certified with the USGBC. All current local building codes of the authorities having jurisdiction and the FCPS Educational Program Specifications shall be met and adhered too. The BES Replacement Design is to be performed in accordance with the State of Maryland IAC / PSCP guidelines and DGS requirements.

The architect for the new BES Elementary School Replacement Project design is GWWO Architects.

A copy of the BES Educational Program Specifications, the FCPS Design Guide (FCPS' Standards for Design of New and Renovated Facilities) and the Brunswick Elementary School Feasibility study is attached to this RFP for your review and information.

**Project Calendar – See attached Preliminary Project Milestone Schedule**

**Design** - The Design will begin in August 2020 and will continue through Fall of 2021.

**Bidding/GMP** – FCPS anticipates bidding for this project to take place between November 2021 and January 2022. The GMP for this project must be submitted to FCPS by no later than February 10, 2022.

**Construction** - Assuming the GMP is within the FCPS Budget for the Brunswick ES Replacement Project, FCPS expects the GMP to be approved by the Board of Education by mid-March, 2022. Contingent upon the availability of adequate funding, we anticipate beginning construction in April 2022. The BES Replacement Project will be constructed in two (2) Stages:

Construction Stage 1 – New BES School Construction

Phase A – Construction Activities between April 2022 – June 2022

Phase B – Construction Activities between July 2022 – June 2023

Construction Stage 2 - Demolition of the existing BES to include any Hazardous Material Abatement and existing Site restoration.

The overall construction schedule for this project is 21 months. The BES Replacement Project Substantial Completion date for Construction Stage 1 is June 30, 2023. The New BES shall be open and occupied by the BES Administrative Staff by mid-July 2023 and then be open and occupied by the BES Educational Staff by August 2023 and ready for the opening of school. The Substantial Completion date for Construction Stage 2 is December 31, 2023.

### **Project Budget**

FCPS Construction Management's budget for the construction costs for the New Brunswick Elementary School Replacement Project is \$35 million dollars. The Construction Manager is responsible for submitting a GMP that is within the FCPS budget for this project, in accordance with AIA A133-2019. The GMP is to include the Construction Manager's Fee, Construction Manager's Not-to-Exceed General Conditions, and Construction Manager's Pre-Construction Fee, as detailed in AIA A133-2019.

### **Project Management Software System**

FCPS Construction Management will manage the Project utilizing the standard FCPS design and construction management procedures and practices to include directing the Construction Manager to utilize a Project Management Software System using an interactive cloud-based technology software to manage the Project. FCPS will require access to this system throughout the design, construction and closeout process. The Project Management Software System must be acceptable to FCPS and the Architect.

FCPS expects the successful CM Firm to manage the Project in a manner that will complete the Project on time, within budget, at a high quality and to satisfy the educational program specification requirements as per the Architect's design and specifications as well as meet the code requirements of the authority having jurisdiction over the Project.

### **Scope of Services**

Frederick County Public Schools (FCPS) is soliciting proposals from the ten (10) FCPS approved and awarded pre-qualified firms as per RFP #20-MISC-11 listed below to provide Construction Management at Risk services associated with the planning, design, cost estimating, value engineering, bidding, documentation of existing conditions, hazardous material abatement by an FCPS Approved Abatement Contractor, coordination of the FCPS Air Monitoring Firm (FCPS to provide a Third Party the Air Monitoring Firm during the Hazardous Material Abatement), demolition, site preparation, site stabilization, construction, close-out and warranty period for the above referenced Project from the date of contract award through construction completion and the normal two - year warranty period.

Dustin Construction, Inc.

Gilbane Building Company

HESS Construction + Engineering Services, Inc.

J. Vinton Schafer & Sons, Inc.

Keller Construction Management, Division of Keller Brothers, Inc.

MCN Build, Inc.

Oak Contracting, LLC

The Whiting-Turner Contracting Company

Turner Construction Company

Skanska USA Building, Inc.

For your information, FCPS will be submitting the Construction Management Services costs for the Construction Phase Activities to the State for reimbursement. The Construction Management Services for the Pre-Construction Activities (Design and Bidding) are not eligible for state reimbursement and will not be submitted.



The selected firm is expected to become immediately involved in the design, and pre-construction process upon contract award.

## **Request for Proposal Procedure**

### **A. General Instructions, Evaluation Criteria and Award**

1. Complete Proposals will include the following:
  - a. Technical Submission Part I
    1. Approach
    2. Proposed Team Members
    3. Cost Estimate
    4. Schedule
  - b. Technical Submission Part II
    1. Cost Proposal
2. Each Offeror shall submit a technical proposal and a cost proposal fully responsive to the RFP. The cost proposal shall identify in detail the complete costs for the listing of services as well as the cost estimate for the complete Offeror's proposal for the construction of the project.
3. The Evaluation Committee will independently review and evaluate all technical proposals. Interviews with the top scoring firms will be conducted via Skype/teleconference and additional points may be assigned or deducted. The cost proposals of the top firms will then be opened. Final ranking will be made based on the total score of each firms technical and cost proposal.
4. The following scoring rubric will be utilized for the evaluation
  - a. Technical Proposal Submission – Part 1

Approach	30 Points
Proposed Team	20 Points
Cost Estimate	15 Points
Schedule	<u>15 Points</u>
Total	80 Points
  - b. Technical Proposal Submission – Part 2

Cost Proposal	<u>20 Points</u>
Total	100 Points

Note: Only cost proposals from the top firms will be opened

5. The Project will be executed in accordance with local, county and state laws and standards governing the development and construction of public facilities.
6. The Construction Manager will be required to provide multiple services. Preconstruction, and construction work will be done by the Construction Manager in coordination with FCPS representatives to ensure that the Project integrates FCPS' requirements and conforms to regulatory requirements.
7. Regulatory and community presentations may be required to ensure FCPS develops a final work plan that is feasible and which can be built within its schedule and proposed compensation. In general, the selected Construction Manager will be required to provide a full range of pre-construction, construction and closeout services necessary to construct the Brunswick Elementary School Replacement, as well complete demolition of the existing building, and restore the site as required.

8. Construction Project Budget: \$35,000,000 inclusive of ALL Construction Manager costs, fees, contingency, allowances, etc.

## **B. Technical Proposal Submission Requirements**

### **1. Technical Proposal Submission – Part 1**

- A. **Approach:** The proposal must include a fully detailed and developed approach to be undertaken by the Offeror for accomplishing the Scope of Work for the Project. The approach should clearly articulate how the firm and key personnel will leverage and apply experience from other similar projects on this project. The written approach should document how the team will execute the demands to the Project by describing the processes, procedures and strategies utilized. This approach shall outline the philosophy and methodology for:
1. Approach to accomplish the scope of work including project plan, site utilization, working on an active campus, quality assurance, quality control, etc.
    - i. The written approach must address the Offeror's plan for minimizing disruptions to the traffic patterns and customary activities in the immediate vicinity of the Project site including contractor staging, parking, deliveries, noise occurring during and outside of normal working hours, etc.
  2. Communications plan for interacting with:
    - i. FCPS and its representatives
    - ii. Construction Manager at Risk's Team including: architect/engineers, subcontractors, consultants, etc.
    - iii. All outside entities/agencies
    - iv. Community Meetings/Engagement (expect at least 4 community meetings)
  3. Maintaining the Project's budget including change management, value management, risk management and development of the Guaranteed Maximum Price.
  4. Upholding the Project's schedule including:
    - i. Project Design, Permitting, Construction and Closeout Schedule to meet the project requirements (including FCPS design reviews, GMP approval, etc.)
  5. Identify challenges and solutions for this Project
  6. Capacity – Offeror's level of commitment and current work under contract for both the Offeror and the team members proposed for the project.

#### **B. Proposed Team – Proposed Team Experience on similar projects:**

Each Offeror will be required to identify its key personnel. Key personnel shall include the following: (1) the Project Executive, (2) the Field Superintendent, (3) and the Key Project Managers (Design and Construction). The Construction Manager will not be permitted to reassign any of the key personnel unless FCPS approved the proposed reassignment and the proposed replacement.

- C. **Cost Estimate** – provide a cost estimate for the project based upon the approach, educational specifications, design guidelines and design Concept.
1. Using the AAACEI recommended practices, provide a Level 1 Unifformat estimate of the construction costs.
  2. Provide a narrative for the estimate including any assumptions made by the CM at Risk.

3. Cost Estimate will be reviewed based on the completeness and quality of the estimate while meeting the program intent and NOT on the lowest/best price.

D. **Project Schedule:** Provide a complete project schedule for the project in P6 with all logic ties.

1. Include design submissions, design reviews, GMP development, GMP approval, construction, closeout, etc. Provide an excel file for the schedule with your submission.

## **2. Technical Proposal Submission – Part 2**

A. Offeror shall provide amounts for each of the following components, in the format requested (Attachment E, Offeror's Proposal Form) in addition to providing a list of any clarifications or exclusions for said amount

1. Fixed Pre-Construction Fee
2. Fixed Construction Manager's Fee
3. Not to exceed General Conditions Bid

### **Responses to this Solicitation**

Proposals will be received electronically via ProcureNow (<https://secure.procurenow.com/portal/fcps>) prior to and no later than **4:00 p.m., local time, on July 22, 2020**. Proposals received after this time will not be accepted.

Proposals will be unsealed and the names of firms that submit proposals will be read aloud via Skype Business at: <https://meet.fcps.org/kimberly.miskell/D21WC0P9?sl=1> or by phoning (240) 235-6172 Conference ID: 7907906.

FCPS Anticipates interviewing the top scoring firms on or around July 29, 2020. Firms will be notified on or around July 27, 2020 with an interview date and time. Negative or no responses to this solicitation will not negatively affect your firm regarding future solicitations.

Questions regarding this solicitation are to be directed to Brad Ahalt, FCPS Senior Project Manager, FCPS Construction Management Department 301-644-5149, [bradley.ahalt@fcps.org](mailto:bradley.ahalt@fcps.org) and copied to Kim Miskell, FCPS Assistant Purchasing Manager, [kim.miskell@fcps.org](mailto:kim.miskell@fcps.org)

FCPS reserves the right to reject any and /or all proposals and waive any bidding irregularities associated with this solicitation and resulting selection. The award of Construction Management Services and Construction contracts is contingent upon receiving the necessary funding approval from the State of Maryland and Frederick County.

Thank you for your interest in Frederick County Public Schools Construction projects and we look forward to receiving your proposals.

Sincerely,

Bradley W. Ahalt  
Senior Project Manager  
FCPS Construction Management

Attachments:

Form of Proposal  
BES Replacement Preliminary Project Milestone Schedule  
Brunswick Elementary School Educational Specifications  
Design Guide: FCPS Standards for Design of New and Renovated Facilities  
Brunswick Elementary School Feasibility Study  
AIA A133 – 2019 Standard Form of Agreement between Owner and Construction Manager as Constructor, as Amended  
AIA A201-2017 General Conditions of the Contract for Construction



## RFP 21C1, Construction Management at Risk Services Brunswick Elementary School Replacement Project

### FORM OF PROPOSAL

**Fee Proposals Due: July 22, 2020 at 4:00 pm**

**Contractor Name:**

**Address:**

Propose to provide Construction Management at Risk Services for the Brunswick Elementary School Replacement Project in strict accordance with the specifications contained in the RFP dated July 8, 2020 for FCPS RFP #21C1.

#### Construction Management Fee Proposal

The Offeror acknowledges and understands that the Fixed Preconstruction Fee, Not to exceed General Conditions Cost (bid maximum value and submit backup in monthly pay applications up to the bid value), and Construction Manager's Fee (CM Fee) as detailed in the Request for Proposal (including all supplemental documentation provided in the first step of the selection process) and assume no material alteration of the terms of the Bid Documents.

#### OFFEROR'S PROPOSAL FORM:

The Offeror's Cost Proposal is as follows:

- A. Fixed Preconstruction Services Fee is: \$ \_\_\_\_\_
- B. Fixed Construction Manager's Fee is: \$ \_\_\_\_\_
- C. Not-to-exceed General Conditions Cost is: \$ \_\_\_\_\_

Total Cost Proposal \$ \_\_\_\_\_

#### Notes:

1. The Offeror acknowledges and understands that the Preconstruction Fee, and the Construction Manager's Fee are firm, fixed prices and will not be subject to further adjustment once agreed upon in the agreement.
2. The Offeror acknowledges and understands that the not-to-exceed General Conditions Bid will not be exceeded and backup will be required for monthly invoices against the cost.
3. Offeror will be expected to include all items below, at a minimum, within the Division 1 - General

Condition's line item of their not-to-exceed General Conditions Cost.

4. A separate line item for General Requirements will NOT be accepted.
5. FCPS will not accept charging any of the General Condition items line items in CSI Division 2 through 33 unless there is an equal reduction to the Offeror's initial estimate of these General Conditions.
6. The Construction Manager's not-to-exceed Cost of General Conditions includes all scope items as detailed below:
  - a. **All Construction Document Production and Reproduction including:** printing, copying, mailings (postage, handling and delivery), electronic document reproduction and preparation, professional photography and presentations, audio visual of training and demonstrations, etc.
  - b. **All Project Utilities During Construction including:** temporary power via a generator, temporary onsite hardwired network data communication services (internet, cable tv, phone, etc.), etc. Temporary power monthly costs shall be an allowance established in the Form of Proposal.
  - c. **All Project Temporary Facilities including:** temporary or field trailer (rental, setup, tear down, relocation, etc.), utility connections during construction, furniture, office supplies, temporary toilets and sanitation, temporary fencing, temporary access roads, temporary project signage, temporary heat, temporary water, temporary weather protection, etc.
  - d. **All Project Construction General Expenses including:** project equipment rental, project signage, miscellaneous expenses, pest control, first aid facilities and extinguishers, safety measures (handrails, floor opening covers, supplies, drinking water, etc.), barricades, tools, equipment and materials to support labor, repair or restoration to damaged sidewalks, parking lots, etc. as a part of the laydown, and temporary spaces being provided by the Owner, etc.
  - e. **All Project General Clean-up including:** general clean-up, temporary labor, dumpsters, etc.
  - f. **All Final Project Professional Cleaning.**
  - g. **All Third-Party Consultants required to perform your scope of services including:** project management software licenses, fees and training, constructability reviews, site and building surveys, utility location services, seismic monitoring, project security, project safety, project scheduling, etc.
  - h. **All project field and office personnel required to perform these services including:** labor, fringe benefits, payroll taxes and insurance, travel, living and relocation expenses, vehicle or vehicle/mileage reimbursement, etc.
  - i. **Note: It will not be acceptable to have trade contractors include cost for composite cleanup crews managed by the Offeror.**
  - j. **Bonds and Insurance are included in the General Conditions not-to-exceed Cost.**  
Provide the following breakdown, but include in the value listed above:
    - Payment and Performance Bond, \_\_\_\_\_%, \$ \_\_\_\_\_
    - General Liability Insurance \$ \_\_\_\_\_
    - Other: \_\_\_\_\_ \$ \_\_\_\_\_

Provide estimated monthly electric utility costs required to support construction, but do not include in the General Conditions Costs. FCPS will provide an allowance for monthly electric utility bills. Sanitary Sewer or associated toilet services (including potable water from trucks) are excluded from this line item and must be included in the General Conditions Not to Exceed costs above.

\$ \_\_\_\_\_

Complete the following form based on key personnel and their commitment to the project.

Name	Title	Percent Dedicated to this Project			
		Design	GMP Development	Construction	Closeout

**Qualifications:**

- Please complete the Form of Proposal in its entirety and all of the information requested.
- The Owner and Construction Manager may agree to additional items or fees in addition to the items listed above for specific projects or site requirements, any such requests must be specifically required for the project and not a listed base service.
- Please base your Fee Proposal on the Preliminary Project Schedule with an anticipated Construction Schedule of approximately 21 months.
- Faxed Proposals will not be accepted.

Submitted by \_\_\_\_\_ Title \_\_\_\_\_

Date \_\_\_\_\_

An authorized officer of the Construction Management Firm must sign and date this proposal as indicated.

**RFP 21C1, Construction Management at Risk Services for Brunswick Elementary School  
Replacement**

**SIGNATURE ACKNOWLEDGING PROPOSAL**

**Note: When submitting your bid/proposal, please use this page as a cover sheet for your proposal.**

In compliance with your invitation for bidders, the undersigned proposes to furnish and deliver all labor and materials in accordance with the accompanying specifications and "Instructions and General Conditions" for the price as listed on the enclosed Proposal Sheet(s).

I/We certify that this bid/proposal is made without previous understanding, agreement, or connection with any person, firm, or corporation submitting a bid/proposal for the same goods/services and is, in all respects fair and without collusion or fraud; that none of this company's officers, directors, partners or its employees have been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or federal government; and that no member of the Board of Education of Frederick County, Administrative or Supervisory Personnel or other employees of the Frederick County Public Schools, has any interest in the bidding company except as follows:

COMPANY: \_\_\_\_\_

dba: \_\_\_\_\_

REGISTERED MARYLAND CONTRACTOR NUMBER: \_\_\_\_\_

FEDERAL IDENTIFICATION: \_\_\_\_\_ DATE: \_\_\_\_\_

The undersigned has familiarized themselves with the conditions affecting the work, the specifications, and is legally authorized to make this proposal on behalf of the Contractor listed above.

NAME (please print): \_\_\_\_\_

SIGNATURE OF ABOVE: \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE # \_\_\_\_\_ FAX # \_\_\_\_\_

E-MAIL ADDRESS (for correspondence): \_\_\_\_\_

E-MAIL ADDRESS (for receiving Purchase Orders): \_\_\_\_\_

**(DO NOT COMPLETE THIS AREA IF YOUR COMPANY IS UNABLE TO RECEIVE  
PURCHASE ORDERS ELECTRONICALLY)**

**ACKNOWLEDGMENT OF ADDENDA (if applicable)**

The above-signed company/firm acknowledges the receipt of the following addenda for the above-referenced solicitation.

Date Received by Proposer/Bidder:

Addendum #1	_____	Addendum #2	_____
Addendum #3	_____	Addendum #4	_____
Addendum #5	_____	Addendum #6	_____

**RFP 21C1, CONSTRUCTION MANAGEMENT AT RISK SERVICES FOR BRUNSWICK  
ELEMENTARY SCHOOL REPLACEMENT**

**FREDERICK COUNTY PUBLIC SCHOOLS**

**STATUTORY AFFIDAVIT AND NON-COLLUSION CERTIFICATION**

Special Instructions: An authorized representative of the bidder needs to complete the following affidavit and insert an answer to paragraphs 1 and 3.

BIDDERS: The submission of the following Affidavit at the time of the bid opening is:

☒ requested to be completed but not required to be notarized.

☐ required to be completed and notarized.

I, \_\_\_\_\_, being duly sworn, depose and state:

1. I am the \_\_\_\_\_ (officer) and duly authorized representative of the firm of  
the organization named \_\_\_\_\_ whose address is  
(Name of Corporation)  
\_\_\_\_\_ and that I

possess the authority to make this affidavit and certification on behalf of myself and the firm for which I am acting.

2. Except as described in paragraph 3 below, neither I, nor to the best of my knowledge, the above firm, nor any of its officers, directors, or partners, or any of its employees who are directly involved in obtaining or performing contracts with any public bodies has:
- a. been convicted of bribery, attempted bribery, or conspiracy to bribe, under the laws of any state or of the federal government;
  - b. been convicted under the laws of the state, another state, or the United States of: a criminal offense incident to obtaining, attempting to obtain, or performing a public or private contract; or fraud, embezzlement, theft, forgery, falsification or destruction of records, or receiving stolen property;
  - c. been convicted of criminal violation of an antitrust statute of the State of Maryland, another state, or the United States;
  - d. been convicted of a violation of the Racketeer influenced and Corrupt Organization Act, or the Mail Fraud Act, for acts in connection with the submission of bids or proposals for a public or private contract;
  - e. been convicted of any felony offenses connected with obtaining, holding, or maintaining a minority business enterprise certification, as prohibited by Section 14-308 of the State Finance & Procurement Article;
  - f. been convicted of conspiracy to commit any act or omission that would constitute grounds for conviction under any of the laws or statutes described in Paragraph (a) through (e) above; or
  - g. been found civilly liable under an antitrust statute of this State, another state, or the United States for acts or omissions in connection with the submission of bids or proposals for a public or private contract.
3. The only conviction, plea, or admission by any officer, director, partner, or employee of this firm to involvement in any of the conduct described in Paragraph 2 above is as follows:



If none, write "None" below. If involvement, list the date, count, or charge, official or administrative body, the individuals involved, their position with the firm, and the sentence or disposition of the charge.

(you may attach an explanation if necessary)

4. I affirm that this firm will not knowingly enter into a contract with a public body under which a person or business debarred or suspended under Maryland State Finance and Procurement Title 16, subtitle 3, Annotated Code of Maryland, as amended, will provide, directly or indirectly, supplies, services, architectural services, construction-related services, leases of real property, or construction.
5. I affirm that this proposal or bid to the Board of Education of Frederick County is genuine and not collusive or a sham; that said bidder has not colluded, conspired, connived and agreed, directly or indirectly, with any bidder or person to put in a sham bid or to refrain from bidding and is not in any manner, directly or indirectly, sought by agreement of collusion or communication or conference, with any person to fix the bid prices of the affidavit or any other bidder, or to fix any overhead, profit or cost element of said bid price, or that if any bidder, or to secure an advantage against the Board of Education of Frederick County or any other person interested in the proposed contract; and that all statements in the proposal or bid are true. I acknowledge that, if the representations set forth in this affidavit are not true and correct, the Board of Education of Frederick County may terminate any contract awarded and take any other appropriate action.

I DO SOLEMNLY DECLARE AND AFFIRM under the penalties of perjury that the contents of this affidavit are true and correct, that I am executing this Affidavit in compliance with Section 16-311 of the State Finance and Procurement Article, Annotated Code of Maryland, and in compliance with requirements of the Board of Education of Frederick County, and that I am executing and submitting this Proposal on behalf of and as authorized by the bidder named below.

(Legal Name of Company)

(dba)

(Address)

(City)

(State)

(Zip)

(Telephone)

(Fax)

(Print Name)

(Title)

(Date)

(Signature)

(Title)

(Date)

We are/I am licensed to do business in the State of Maryland as a:

( ) Corporation

( ) Partnership

( ) Individual

( ) Other

If required to be notarized:

(Witness)

(Title)

SUBSCRIBED AND SWORN to before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

**RFP 21C1, CONSTRUCTION MANAGEMENT AT RISK SERVICES FOR BRUNSWICK  
ELEMENTARY SCHOOL REPLACEMENT**

**FREDERICK COUNTY PUBLIC SCHOOLS**

**CERTIFICATION OF COMPLIANCE**

1. All Contractors, subcontractors or vendors must abide by FCPS Board policies and regulations while working on FCPS property.
2. Maryland Law requires that any person who enters into a contract with a county board of education may not knowingly employ an individual to work at a school (or FCPS facility) if the individual is a registered sex offender. Please reference §11-113 of the Criminal Procedure Article of Maryland Code for penalty.
3. Be advised that individuals who are registered sex offenders are not eligible to work on any FCPS project. The Contractor must initially check the Maryland Department of Public Safety & Correctional Services' MARYLAND SEX OFFENDER REGISTRY and search for the name of any employee to be assigned to work on this project. This applies to subcontractors and material/equipment suppliers as well.
4. In the event that a registered sex offender is discovered to be working on a FCPS project, whether through employment by the prime Contractor, subcontractor or vendor, the site superintendent will immediately remove the individual from the premises and permanently terminate his work assignment. FCPS may terminate this contract as a result if the Contractor is unable to demonstrate he has exercised care and diligence in the past in checking the Maryland registry.
5. Effective July 1, 2015, amendments to §6-113 of the Education Article of the Maryland Code further require that a contractor or subcontractor or vendor for a local school system may not knowingly assign an employee to work on school premises with direct, unsupervised, and uncontrolled access to children, if the employee has been convicted of, or pled guilty or nolo contendere to, a crime involving:
  - a. A sexual offense in the third or fourth degree under §3-307 or §3-308 of the Criminal Law Article of the Maryland Code.
  - b. Child sexual abuse under §3-602 of the Criminal Law Article of the Maryland Code or any other State; or
  - c. A crime of violence as defined in §14-101 of the Criminal Law Article of the Maryland Code or any other State
6. With the passing of Maryland Law MD. Code, Educ. 6-113.2, employers of all contracted staff must obtain background information relating to child sexual abuse or sexual misconduct. This means that all contracted staff having direct contact with students must meet all of the FCPS and Maryland State Department of Education (MSDE) requirements before doing business with FCPS. See: [Maryland State Department of Education Website](#); [House Bill 486 Child Sexual Abuse and Sexual Misconduct Prevention](#); [MSDE Guidelines For MD. Code, Educ. 6113.2](#); and [Employment History Review Form for Child Abuse and Sexual Misconduct](#) for additional information.

In addition, there has been no change to the current FCPS requirement, that all contracted staff who have contact with students are required to be fingerprinted in order to obtain a criminal background check. Fingerprints and background check are still an enforced FCPS requirement.

7. Under recent amendments to §5-561 of the Family Law Article of the Maryland Code, each contractor, subcontractor, or vendor shall certify by signing this affidavit that any individuals in its work-force including sub-contractors, have undergone a criminal background check, including fingerprinting, if the individuals will work in a FCPS school facility in circumstances where they have direct, unsupervised, and uncontrolled access to children.

By my signature below, I affirm under penalties of perjury that the contents of this Certification of Compliance are true to the best of my knowledge, information and belief.

Signature\_\_\_\_\_Date\_\_\_\_\_

Print name and title of  
signatory\_\_\_\_\_

Print name of  
company\_\_\_\_\_

# Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with Frederick County Public Schools (FCPS) must complete and return the Vendor Conflict of Interest Disclosure Form, in order to be eligible to be awarded a contract with FCPS.

Please note that all vendors must comply with FCPS's conflict of interest certification, as stated below.

If a vendor has a relationship with a FCPS employee or an immediate family member (spouse, child (stepchild or adopted), parent, or sibling) of a FCPS employee, the vendor shall disclose the information required below.

**Certification:** I hereby certify, that to the best of my knowledge, there is no conflict of interest involving the vendor named below:

1. No FCPS employee or the employee's immediate family member has an ownership interest in the vendor's company, or is deriving personal financial gain from this contract.
2. No retired or separated FCPS employee who has been retired or separated from the organization for less than one (1) year has an ownership interest in the vendor's company.
3. No FCPS employee is contemporaneously employed or prospectively to be employed with the vendor.
4. The vendor did not provide any information or criteria in the drafting of the solicitation prior to it being advertised for competitive pricing.
5. Vendor hereby declares it has not, and will not provide gifts or hospitality of any dollar value, or any other gratuities to FCPS employee to maintain a contract.
6. Vendor hereby declares that in the process of preparing a quote/bid/proposal for FCPS, there have been no acts of bribery, extortion, trading, laundering of corrupt practices, and/or nepotism have transpired between FCPS employee and the vendor.
7. Please note any other exceptions below.

Vendor Name & Email	Vendor Address & Phone Number
<b>Conflict of Interest Disclosure</b>	
Name of FCPS employee or immediate family member with whom there may be a potential conflict of interest. <i>If no conflict of interest, write "N/A" and initial.</i>	Disclose the relationship to the employee or the immediate family member, their interest in the vendor's company, and any additional information

I certify that the information provided is true and correct by my signature below:

\_\_\_\_\_  
Signature of Vendor Authorized Representative/Date

\_\_\_\_\_  
Printed Name of Vendor Authorized Representative

**Brunswick Elementary School - Replacement New Construction****Preliminary Project Milestone Schedule**

<b>PROJECT MILESTONE</b>	<b>Anticipated DATES</b>
State Planning Approval	TBD
<b>Project Design</b>	
Architect Appointed by BOE	July 2020
Architect Notice to Proceed	July 2020
Project Design Kick-Off meeting	August 2020
Schematic Design submission to State	December 1, 2020
Site Plan Submission	January 1, 2021
Design Development submission to State	April 1, 2021
Improvement Plan Submission	July 1, 2021
Construction Document (100% Drawings & Specifications) to State	November 1, 2021
<b>Permits</b>	
Apply for MDE/NOI Permit	December 2021
Apply for Grading and SWM Permit w/ County	December 2021
Apply for Building Permit w/ County	December 2021
<b>Project Bidding - Construction Stage</b>	
Bid Documents to CM at Risk for preparation of Bids and GMP	December 1, 2021
Receipt of GMP from CM at Risk	February 10, 2022
Award GMP Contract to CM at Risk	March 2022
<b>Project Construction</b>	
Begin Construction Stage 1, Phase A - Partial Contract Packages	April 1, 2022
Begin Construction Stage 1, Phase B - Balance of Partial and Remaining Contract Packages	July 1, 2022
<b>Substantial Completion Construction Stages 1 - Phase A &amp; B - New School Construction</b>	<b>June 30, 2023</b>
Begin Construction Stage 1, Phase C - Furniture and Equipment new School	July 1, 2023
Begin Construction Stage 2, Phase A - Existing BES F & E Removal	June 15, 2023
Begin Construction Stage 2, Phase B - Existing BES Demolition and Remaining Site Restoration	July 1, 2023
<b>Construction Stage 2 Completion</b>	<b>December 31, 2023</b>
<b>Project Occupancy</b>	
<b>BES Administration Staff Occupy the Administration Suite Only</b>	<b>July 15, 2023</b>
<b>BES Educational Staff Occupy new School</b>	<b>August 19, 2023</b>
<b>1st Day of School</b>	<b>TBD</b>
<b>Project Completion and Closeout</b>	<b>March 31, 2024</b>

# EDUCATIONAL SPECIFICATIONS

For

## Brunswick Elementary School Replacement



**FREDERICK COUNTY PUBLIC SCHOOLS**

**June 5, 2020**

## **BOARD OF EDUCATION OF FREDERICK COUNTY**

Brad W. Young, President

Jay Mason, Vice President

Liz Barrett

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Theresa R. Alban, Ph. D, Superintendent of Schools

June 5, 2020

The Board of Education of Frederick County does not discriminate in admissions, access, treatment, or employment in its programs and activities on the basis of race, color, gender, age, national origin, religion, sexual orientation, or disability.

### **PROJECT DESCRIPTION**

Brunswick Elementary School (ES) is located at 400 Central Ave, Brunswick MD 21716. The school serves students in pre-kindergarten through 5<sup>th</sup> grades and has a state rated capacity of 508 students. The September 2019 equated enrollment was 728 students. The school is operating at 148% of capacity.

A feasibility study to determine the best method to modernize and add capacity to Brunswick ES began in August 2019 and was completed in October 2019 with the assistance of consultant Proffitt & Associates Architects. The study included a building and site analysis and education assessment utilizing the current approved elementary educational specification for a capacity of 725 students that led to the development of several concept options. At the conclusion of the study, the consultant recommended, and the Board of Education approved, that the Brunswick ES be demolished and a new 725 SRC school be constructed on the same site utilizing the current prototype design modified for the site conditions.

The Brunswick ES site is 24.6 acres. The developer of the Brunswick Crossing subdivision was required to dedicate an elementary school site as a condition of development approval. The developer identified approximately 16.6 acres adjoining the existing Brunswick ES site to the east that would be dedicated to the Board of Education. The Board of Education voted to accept 9.5 developable acres. The remaining 7 acres in steep slopes, flood plain and encumbered with a Forest Resource Ordinance easement will be dedicated to the City of Brunswick.

The 9.5-acre site has been reviewed and approved by the IAC. Brunswick City Planning Commission approved the subdivision/addition plat at their May 2020 meeting. The plat and deed need to be signed and recorded. The 9.5-acre site will then become part of the existing campus.

The students, faculty and administration will remain in the existing building while the new school is designed and constructed on the remainder of the existing site. Once the new building is constructed and occupied, the existing building will be demolished and the site work will be completed. Design is expected to begin in July 2020 and construction in early 2022. The building is expected to be occupied in fall 2023. The delivery method for this project will be CM – at risk. A CM will be chosen in August 2020.



The educational specifications for the Brunswick ES replacement reflect the current approved prototype elementary school educational specifications used to design and construct the new Blue Heron Elementary School located on Gas House Pike with minor revisions that reflect many of the design changes made during design of Blue Heron.

FCPS requested local planning approval by the Interagency Committee on School Construction and Board of Public Works as part of the FY 2021 capital budget. IAC staff have recommended local planning approval, and it is anticipated that the IAC will grant the approval in June 2020. Frederick County Executive Jan Gardner included funding for design of this school in her recommended FY2021 Capital Budget. Approval by the Frederick County Council is anticipated in June 2020, with funding available in July.

These educational specifications outline the number, size, and purpose of spaces within the building. Please refer to the "FCPS Preferred Standards for the Design of New and Renovated Facilities" for additional details on design.

## **THE LEARNING ENVIRONMENT FOR FREDERICK COUNTY ELEMENTARY SCHOOL STUDENTS**

Public schools exist for the education of all children. Each child is a unique learner with no two children possessing identical physical, intellectual, and emotional characteristics.

The curriculum of the Frederick County Public Schools stresses a common core of essential cognitive and social skills. School activities and teaching methodologies and procedures should be designed to accommodate individual differences among learners in developing skill mastery. The Board of Education believes in educational equity for all students.

The teaching/learning process must consider each learner's uniqueness in these areas:

- Readiness for the learning activity
- Motivation to learn
- Ability to function in a group situation
- Ability to study independently
- The learner's self-concept

Consideration of these questions is basic to all learning experiences in which students participate. Teachers answer these questions for each learner. These answers, considered in the context of the skills and content of the disciplines, provide the basis for educational planning for individual students.

Representative educational planning activities are listed below:

- Various types of diagnostic activities used to determine a student's readiness for the learning activity
- Teacher determined instructional levels
- Observations by educators and parents
- Counseling
- Group achievement, based upon criterion-referenced measures
- Individual testing by specialists such as speech therapists, psychologists, reading diagnosticians, or physicians
- Instruction organized so each student may pursue each curriculum area at his/her own pace and in accordance with individual interests and abilities
- Diagnostic and prescriptive assessments of skill capabilities
- Student choice whenever possible
- Continuous evaluation of skills within the learning situation in order to assure that the student understands why a particular skill/content is being taught and to assure opportunities to develop the capability to transfer the application of skills/content to various problem-solving situations
- Flexible groupings and schedules which allow students, for example, to be away from school on assignment, on the school grounds pursuing assignments, and at learning stations within the school using various equipment and media to seek answers.

A school environment calls upon students to function as social beings. The degree of success

throughout the individual's lifetime depends, in large measure, upon the ability to work, study, compete with, cooperate with, and get along with others. The school program should be structured to help students learn to work together by providing the following:

- Honest competition among students
- Rewards for excellence of individual performance
- Interaction in small group activities
- Participation in large group activities
- Participation in multi-age groups in both structured and unstructured situations
- Participation in activities designed to teach children to appreciate the contributions of others
- Exposure to many and varied occupations
- Access to technology

Students should be helped to develop independent work habits essential to meet the demands of school and society, and should develop the ability to function independently by the following:

- Working on and completing independent assignments
- Using interest or learning centers to develop skills
- Pursuing activities which call for the application of prior learning
- Doing laboratory work
- Participating in student-teacher conferences
- Student-teacher planning of individual assignments
- Exercising choice in activities
- Using a variety of instructional materials and resource centers as needed
- Using out-of-school resources while completing assignments

Successful development of a positive self-concept encourages further learning. Therefore, the learning environment should provide a wide range of possibilities for success:

- Instruction which takes place at a level commensurate with the student's demonstrated previous learning
- Students should be challenged by the tasks to be performed, with sequences planned to lead from the known to the unknown
- Students should learn to select appropriate instructional materials from various sources
- Students should be taught how to cope with a variety of situations
- Students should be encouraged to love learning and to master the skills necessary to enable future learning, and to consider learning as a life-long activity.

## INSTRUCTIONAL ORGANIZATION

### General

The uniqueness of individual children makes it imperative that the organization of the school remains flexible and that a variety of instructional methods be employed to assist students in reaching their potential.

At any given time, the following relationships can be observed in a school:

- students with classroom teachers in a one-to-one relationship, in small groups, or in large groups
- students with students in seminars, doing peer teaching, involved in projects, etc.
- students with other adults, i.e. aide, volunteer, secretary
- students with other professionals, i.e. administrator, librarian, reading teacher, student teacher
- students working independently
- teachers with administrators in consultation
- teachers with parents in conference
- teachers with supervisors and other educational specialists in consultation

As much as possible, the building should have a compact footprint to reduce travel distances for classes to reach centralized areas of the building. The building design should emphasize flexibility, efficiency, and a sense of welcome.

Students will be assigned heterogeneously to a home base for administrative purposes, moving to instructional areas that meet their individual needs and instructional levels. Art, music, physical education and the media center programs will be integrated into the curriculum.

The staff will be assigned in teams to an area. Kindergarten teachers will be assigned to kindergarten, but kindergarten can be integrated with the first- and second-year team to provide flexibility based on individual needs and interests. Teachers and students of grades one through five will be assigned to instructional teams at a ratio of 1 to 24.8. The size of the teams will vary from four to possibly six teachers depending upon the enrollment of the children by year in school and/or instructional level.

### School Administration and Support Personnel

#### Managerial

- One non-teaching twelve-month principal
- One non-teaching twelve-month assistant principal
- One 12-month secretary
- One 10-month secretary

#### Operational

- One lead custodian for the first 8,500 GSF and one custodian for each 21,500 GSF of space thereafter for a total of 4-5 custodians

- One cafeteria manager
- Seven cafeteria workers

### Personnel Selection and Development

Professional positions:

In Frederick County, elementary schools are staffed on the basis of one classroom teacher per 24.8 students for grades 1-5 and one teacher per 22 students for kindergarten.

In addition to classroom teachers, schools have the following teachers who may be full or part-time according to the size of the school:

Art	Special Education
Guidance Counselor	Renzulli Resource
Music, vocal	Speech
Music, instrumental	Media Specialist
Physical Education	School Support
Reading	Technology Specialist
Learning, Language Support	English Learners
Math Intervention	Reading Intervention

Each elementary school should have two instructional assistants for a school with an enrollment between 450 and 899 students.

### New School Staff Workshop

Prior to the opening of each new school a workshop, at least one week in length and two to four weeks if possible, should be held in the school for the purpose of staff orientation and preparation. The staff will need to consider such topics as how to make maximum use of the physical plant, how to operate efficiently and effectively in teams, the relationship of flexible space and the instructional program, and the organization of students for maximum learning.

All professionals and assistants mentioned above should be involved in the workshop. In-service training should continue throughout the school year under the leadership of the principal.

## SUMMARY OF PROJECT SPACE REQUIREMENTS

### Brunswick Elementary School Replacement

SPACE	QUANTITY	NET SQUARE FEET (NSF)
<b><u>Administration</u></b>		
Secretarial/Reception Waiting Area	1	450
Workroom	1	200
Principal's Office @ 180 sq. ft.	1	150
Asst Principal's Office @ 120 sq. ft.	1	120
Conference Room	1	200
Administration Bathroom	1	50
Student Bathroom	1	300
Teacher's Lounge with Bathroom	1	400
Staff bathrooms to be distributed throughout school @ 50 sq. ft.	4	200
<b>Total Administration</b>		<b>2,070</b>
<b><u>Health Suite</u></b>		
Nurse's Office	1	100
Health Suite waiting area	1	80
Health Tech area	1	120
Rest area	1	120
Health Room w/ small shower and toilet	1	60
Storage	1	40
<b>Total Health Suite</b>		<b>520</b>
<b><u>Media Center</u></b>		
Media Office and Equipment Storage/workroom	1	300
Open Resource Area ( w/ informal reading area)	1	2,000
Small Group Instruction Area	1	400
Media Broadcast Room	1	180
STEM Lab	1	800
Computer, TV, Communications Main Distribution Frame	1	300
Remote Telecommunications Equipment Closets (one each wing)	2	200
<b>Total Media Center</b>		<b>4,180</b>
<b><u>Art</u></b>		
Art Studio A	1	980
Storage for Studio A	1	150
Art Studio B	1	980
Storage for Studio B	1	150
<b>Total Art</b>		<b>2,260</b>

**Music**

Vocal/Instrumental Music Room	2	1,600
Music Storage Room	2	150
<b>Total Music</b>		<b>1,750</b>

**Physical Education**

Gymnasium, full basketball court size (84' x 50')	1	5,900
Indoor/Outdoor equipment storage	1	350
Bathrooms Area - Boys and Girls	1	320
Teacher office/bathroom/shower/dressing	1	200
<b>Total Gymnasium</b>		<b>6,770</b>

**Pre-Kindergarten**

Pre-Kindergarten classroom @ 980 sq. ft.	1	980
Special Ed Pre-Kindergarten classroom @ 980 sq ft	1	980
Pre-Kindergarten bathrooms @ 60 sq. ft.	2	120
Pre-Kindergarten Storage Room	1	175
<b>Total Pre-Kindergarten</b>		<b>2,255</b>

**Kindergarten**

Kindergarten Classrooms @ 980 sq. ft.	5	4,900
Kindergarten Bathrooms @ 50 sq. ft.	5	250
Indoor/Outdoor Storage Rooms @ 200 sq. ft.	2	400
<b>Total Kindergarten</b>		<b>5,550</b>

**Learning Area, Grades 1-5**

General Classrooms @ 800 sq. ft.	25	20,000
General Classroom Group Bathrooms @ 300 sq. ft.	3	900
Planning Rooms @300 sq. ft.	2	600
<b>Total Learning area, Grades 1-5</b>		<b>21,500</b>

**Supporting Services Area**

Offices with desks for math and reading Interventionists and specialists, special education @800 sq. ft.	2	1600
Intervention/Collaboration Rooms (to be used for reading, math, EL, pull-out special education) @200 sq. ft.	4	800
Calming Room @200 sq. ft.	2	400
Guidance @200 sq. ft.	2	400
Itinerant Staff (Psychologist/Social Worker/Behavior Specialist etc)	1	200
Speech/Language and Itinerant Services, OT/PT @ 360 sq. ft.	1	360
EL Level 1 classrooms	1	800
Community Liaison Office/Storage	1	200
Parent Work Room	1	200

Reading Specialist/Book Rooms @ 400 sq. ft.	1	400
<b>Total Supporting Services</b>		<b>5,360</b>

#### **Food Service**

Kitchen - Serving/Food prep/Transport	1	1,400
Dry Food Storage	1	150
Non-food storage	1	60
Refrigerated storage – walk-in	1	130
Frozen Food storage – walk-in	1	120
Office	1	80
Locker/restroom/washer & dryer area	1	120
Dishwashing area	1	220
Inside receiving area	1	60
Covered outside unloading area (100 sq. ft.); 18" tailgate height	1	--
<b>Total Food Service</b>		<b>2,340</b>

#### **Cafetorium**

Dining area (250 @ 14 sq. ft. per student)	1	3,500
Stage	1	850
Chair Storage	1	300
Table Storage	1	200
Custodial Room	1	60
<b>Total Cafetorium</b>		<b>4,910</b>

#### **Custodial Operations**

Custodial Office	1	175
Locker room/shower/bathroom, women	1	90
Locker room/shower/bathroom, men	1	90
Central Indoor Storage	1	300
Indoor Satellite Storage @ 50 sq. ft.	4	200
Outdoor storage	1	350
<b>Total Custodial Operations</b>		<b>1,205</b>

#### **Maintenance**

Maintenance Office	1	120
Maintenance storage area	1	400
<b>Total Maintenance</b>		<b>520</b>

<b>TOTAL NET SQUARE FEET</b>	<b>61,190</b>
<b>TOTAL GROSS SQUARE FEET @ 1.4 net to gross ratio</b>	<b>85,666</b>

#### **SCHOOL CAPACITY CALULATION:**

Pre-Kindergarten, @ 20 students (ea)	2	40
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Kindergarten, @ 22 students (ea)	5	110
General Classrooms, @ 23 students (ea)	25	575
<b>STATE RATED CAPACITY</b>		<b>725</b>

**Parks & Rec Dept Gym (Add-Alternative)**

Spectator space in the gym	1	969
Recreation Center activities room	1	1400
Recreation Center office/storage	1	400
Recreation Center Bathrooms	1	300
<b>Total Add - Alternative</b>		<b>3069</b>

**Specialized Program (Add-Alternative)**

Classrooms	2	1600
Specialized Program Coordinator Office	1	200
Student Bathroom	1	50
Restraint/Seclusion Rooms	1	120
<b>Total Add - Alternative</b>		<b>1970</b>

**TOTAL NET SQUARE FEET with ADD ALTERNATES** 66,229

**TOTAL GROSS SQUARE FEET with ADD ALTERNATES** **92,721**

**ADMINISTRATIVE SERVICES**

## Goals

Goals for those in the administrative services are to facilitate the teaching/learning process by operating the school in an efficient, safe manner, and to establish positive public relations with parents and community members through personal contacts, phone conversations and printed materials.

## Planned Activities

### Reception Area:

- Greeting students, parents, guests, salespeople, central office personnel, employees, etc., and providing a waiting place for such persons until their purpose for being in the school can be achieved.

### Secretarial Office:

- Twelve Month Secretary. The 12 month secretary will perform such duties as: prepare non-instructional requisitions, receive and distribute mail, maintain staff attendance records, transact financial business, type letters and reports, schedule community use of the school building, register new students, maintain communication throughout the school via the intercom system, answer the telephone, assist parents, greet visitors, temporarily supervise and assist sick students.
- Ten Month Secretary. The 10 month secretary will perform such duties as: reproduce instructional materials for teachers; type instructional materials for teachers; type menus, faculty bulletins, parent bulletins, and reports; maintain files; prepare instructional requisitions; maintain student attendance records; maintain inventories of textbooks and instructional materials for teachers; maintain files of catalogues for use by teacher curriculum committees; assist assistant principal in clerical-type tasks; coordinate student field trips; schedule teacher use of the cafeteria; answer the telephone; using a computer work on attendance and scheduling matters.

### Office Workroom:

- reproduction of reports, bulletins, communications to homes, seat work for students, copying items for retention

### Principal's Office:

- receiving and conferring with students, parents, guests, salespeople, central office personnel, teachers, staff, directing activities within the school, using the public address system when appropriate, counseling students, planning, scheduling

### Assistant Principal's Office:

- conferring with teachers and students, individually and in teams, in small groups, working on curriculum, keeping records

### Conference Room:

- conferences with students, parents, visitors, teachers, other educational specialists

### Teacher's Lounge:

- teachers and other staff taking breaks

### Student Bathroom

- group bathrooms located outside the main office near the lobby, media center, and art rooms

#### Staff Bathrooms

- gender neutral single-occupancy bathrooms to be distributed throughout the school

#### Participants

Space shall be provided for 8 to 10 visitors.

#### Staff Required

- 1 Principal
- 1 Assistant Principal
- 2 Secretaries

#### Space Requirements

		Net Sq Ft
<b><u>Administration</u></b>		
Secretarial/Reception Waiting Area	1	450
Workroom	1	200
Principal's Office @ 180 sq. ft.	1	150
Asst Principal's Office @ 120 sq. ft.	1	120
Conference Room	1	200
Administration Bathroom	1	50
Student Bathroom	1	300
Teacher's Lounge with Bathroom	1	400
Staff bathrooms to be distributed throughout school @ 50 sq. ft.	4	200
<b>Total Administration</b>		<b>2,070</b>

#### Design Requirements

- |                              |  |
|------------------------------|--|
| Relationships to Other Areas | <ul style="list-style-type: none"> <li>• The Secretarial/Reception Waiting Area shall be directly accessible to the main entrance, requiring all visitors to first pass through the reception waiting area, and easily accessible to the rest of the school.</li> <li>• The Office Workroom shall be directly accessible to the secretary.</li> <li>• The Administration Bathroom and Teacher's Lounge shall be centrally located and adjacent to one another but separate.</li> <li>• Locate staff bathrooms throughout the school so that each classroom area has convenient access to a bathroom</li> </ul> |
| Spatial/Aesthetics           | <ul style="list-style-type: none"> <li>• Maximize waiting space for visitors.</li> </ul>   |

Heating, Ventilating, and Air Conditioning	<ul style="list-style-type: none"> <li>• The HVAC system shall be planned to enable year-round use of administrative spaces, with full air conditioning, humidity control and with maximum energy efficiency and insulation.</li> <li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li> </ul>
Plumbing	<ul style="list-style-type: none"> <li>• Provide 1 water closet, 1 hand sink with mirror, 1 soap dispenser, and 1 towel dispenser per staff bathroom</li> <li>• Provide hot and cold-water service in Workroom and Teachers' Lounge/Workroom.</li> <li>• Provide 3 water closets for girl's bathroom, 2 urinals and 1 water closet for boy's bathroom. Sink area to be located in an alcove in the hallway. The bathrooms to be adjacent or opposite the cafeteria.</li> </ul>
Acoustics	<ul style="list-style-type: none"> <li>• The Principal's Office and the Conference Rooms shall have sound isolation from the rest of the area.</li> <li>• The Assistant Principal's office shall have sound isolation from the instructional area.</li> </ul>
Visual/Lighting	<ul style="list-style-type: none"> <li>• The Principal's' Office and the Conference Rooms shall have visual isolation from the rest of the area.</li> <li>• Reception Area and Secretarial Office shall have visual of the front entrance as well as the entrance to the remainder of the school.</li> <li>• Lighting in all areas, particularly the Workroom, shall be bright enough to allow close-up and detail work</li> <li>• All lighting shall include dual-mode motion-sensor controls.</li> </ul>
Communications and Utilities	<ul style="list-style-type: none"> <li>• The architect shall design a two-way voice communication system to all teaching stations, the faculty lounge, other areas where teaching takes place, the cafeteria, gym, planning rooms, hallways, outside play areas, and boiler room. (See "Maryland Public School Standards for Telecommunications Distributions Systems".)</li> <li>• Electrical circuits for vending machines shall include time-controlled functionality to minimize energy consumption.</li> <li>• Provide vending machines area of approx. 40 NSF in Teachers' Lounge, with appropriate electrical power.</li> <li>• Electrical outlets shall be designed into the spaces to support office equipment, lamps, computer hardware, and cleaning of offices, and shall be adequate in number. Provide adequate duplex outlets with surge protection to ensure safe maintenance of computers. Include counter-top duplex outlets in workroom areas for equipment.</li> <li>• Provide data, voice and video to Secretarial Area, Principal's Office and Assistant Principals' Office.</li> <li>• Provide power, data and video for use of TV/monitor in conference rooms.</li> <li>• Telephones shall be located in following places: Principal's office, Assistant Principal's office, Secretaries' desks, Conference Rooms, Teacher's Lounge</li> </ul>

Storage	Secretary's office
	<ul style="list-style-type: none"> <li>• Eight (8) four-drawer cabinets with locks</li> <li>• Mailboxes for 100 persons with name slots inside dimensions 11" wide, 6 1/2" high, 12" deep. Mailboxes shall be 11" wide, wide enough to lay an interdepartmental mail envelope flat.</li> <li>• Fireproof safe facilities</li> <li>• Storage for coats, umbrellas, boots, purse</li> <li>• Storage for blank paper forms - 8 1/2" x 11", 11" x 14" and for 5" x 8" and 4" x 6" cards</li> </ul>
	Office Workroom
	<ul style="list-style-type: none"> <li>• Metal, fireproof, storage cabinets built in for paper, copier and other office equipment supplies</li> <li>• Storage for instructional materials such as writing paper, tag board, chart paper, sentence strips</li> <li>• Pigeonhole storage for sheets (8 1/2 " x 11") for individualized programs</li> </ul>
	Principal's Office
Display	<ul style="list-style-type: none"> <li>• Storage for coats and personal items</li> </ul>
	Assistant Principal's Office
	<ul style="list-style-type: none"> <li>• Storage for coats and personal items</li> </ul>
	Reception Area
	<ul style="list-style-type: none"> <li>• Storage for coats and personal items</li> </ul>
	Reception Area
	<ul style="list-style-type: none"> <li>• Bulletin board and built-in tack boards for display of student work</li> </ul>
	Secretary's Office
	<ul style="list-style-type: none"> <li>• Bulletin board built-in</li> </ul>
	Conference Rooms
	<ul style="list-style-type: none"> <li>• Built-in whiteboard and built-in tack board</li> </ul>
	Secretaries' Workroom
	<ul style="list-style-type: none"> <li>• Built-in tack board</li> </ul>
	Principal's Office and Assistant Principal's Office
	<ul style="list-style-type: none"> <li>• Built-in tack board and built-in whiteboard</li> </ul>
	Workroom
	<ul style="list-style-type: none"> <li>• Built-in counter around two (2) walls of the workroom area w/storage below, built-in tack board and built-in whiteboard</li> </ul>
	Staff Lounge
	<ul style="list-style-type: none"> <li>• Built-in tack board</li> </ul>
Additional Notes	<ul style="list-style-type: none"> <li>• Conference rooms should be sized to house at least ten (10) persons</li> </ul>

- Administrative bathroom should be either in administrative area or adjacent to it
- Provide faculty lounge area for relaxation to accommodate 10 persons and provide a stove, refrigerator, space for a microwave with shielding, and sink for staff use. It shall be visually and acoustically isolated and shall be designed for year round use.

## HEALTH SUITE

### Goals

The health suite is designed to provide emergency and temporary treatment and care for sick or injured students and staff. The school nurse also administers medications and provides health screenings, counseling, and information. An itinerant nurse will staff the nurse's office. A Health Technician will staff the health room area on a daily basis.

### Planned Activities

#### Nurse's Office:

- Used by the Nurse or Health Technician for private consultation with students and/or parents

#### Health Technician workspace:

- Staffed daily by the Health Technician, this area is for completion of paperwork and storage and distribution of medications

#### Cot area:

- Space for 2 students to rest, with curtains for privacy

#### Waiting area:

- Space for 5-7 students to await medication or for parents/students to await consultation

#### Restroom:

- ADA compliant restroom with shower and changing table

#### Storage:

- Space to store wheelchair, health supplies, clothing, and paper products

#### Circulation:

- Space for circulation amongst the health room components and space for queueing of students waiting for medication

### Participants

Space shall be provided for 2 students seeking care and 2 visitors.

### Staff Required

2 school health staff

## Space Requirements

<u>Health Suite</u>		<b>Net Sq. Ft.</b>
Nurse's Office	1	100
Health Suite waiting area	1	80
Health Tech area	1	120
Rest area	1	120
Health Room w/ small shower and toilet	1	60
Storage	1	40
<b>Total Health Suite</b>		<b>520</b>

## Design Requirements

- |  |   |
|--|---|
| Relationships to Other Areas               | <ul style="list-style-type: none"><li>• The health suite shall be directly connected to the administrative area and easily accessible to the main entrance.</li><li>• A second entrance/exit from a corridor should be considered.</li></ul>  |
| Spatial/Aesthetics                         | <ul style="list-style-type: none"><li>• As much as possible, maximize queuing space within the health suite to maintain privacy for children receiving daily medications.</li><li>• The Health Room shall be non-clinical and colorful in appearance.</li><li>• Walls shall be painted CMU or tile wainscot to allow for ease of cleaning and sterilization.</li><li>• Provide office of for nurse and/or health technician, with space for desk, files, chairs, visual access to Health Room to monitor condition of students therein.</li></ul> |
| Heating, Ventilating, and Air Conditioning | <ul style="list-style-type: none"><li>• The HVAC system shall be planned to enable year-round use of health suite spaces, with full air conditioning, humidity control and with maximum energy efficiency and insulation.</li><li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li></ul>  |
| Plumbing                                   | <ul style="list-style-type: none"><li>• Provide hot and cold-water service and sink in Health Room.</li><li>• Provide an ice maker.</li></ul>   |
| Acoustics                                  | <ul style="list-style-type: none"><li>• The Health Room and Nurse's Office shall have sound isolation from one another and from all other areas.</li></ul>  |
| Visual/Lighting                            | <ul style="list-style-type: none"><li>• The School Nurse shall have visual access to the health area, with a blind provided for privacy when needed.</li><li>• The Health Technician workspace shall have visual access to the health suite entrance and the cot areas.</li><li>• Lighting in all areas shall be bright enough to allow close-up and detail work</li><li>• All lighting shall include dual-mode motion-sensor controls.</li></ul>   |



Communications and Utilities	<ul style="list-style-type: none"> <li>• Electrical outlets shall be designed into the spaces to support office equipment, lamps, computer hardware, and cleaning of offices, and shall be adequate in number.</li> <li>• Electrical outlets shall be provided with surge protection to ensure the safe maintenance of computers.</li> <li>• Telephones (not wall mounted) shall be located in following places: Nurse's Office and Health Technician workspace</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Provide lockable medical refrigerator, appropriate base and wall storage cabinets and counter tops, desk, space for 3 to 4 file cabinets.</li> <li>• Provide storage room to accommodate storage of wheelchair, children's clothing articles, paper products, and other health room supplies.</li> </ul>
Display	<ul style="list-style-type: none"> <li>• Provide tack board and clock.</li> </ul>
Additional Notes	<ul style="list-style-type: none"> <li>• See MSDE, 2002 design guide for <u>School Health Services</u>.</li> </ul>

## **MEDIA CENTER and STEM EDUCATION LAB**

### Goals

The school library media program is designed to meet the informational needs of the school community through a unified learning approach. The program includes both a comprehensive collection of materials and appropriate instruction in its use as an integral part of the total educational program.

The media center will also house the STEM education program. STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering, and mathematics. STEM Standards of Practice guide STEM instruction by defining the combination of behaviors, integrated with STEM content, which is expected of a proficient STEM student. These behaviors include engagement in inquiry, logical reasoning, collaboration, and investigation. The goal of STEM education is to prepare students for post-secondary study and the 21st century workforce.

Specifically, the student will be able:

- to identify and describe the personnel, services, policies, procedures and physical arrangement of the library media center
- to identify and describe characteristics of print and non-print resources and appropriate technology
- to utilize systems of classification and research strategies for specific needs
- to appreciate and value books and media and to develop lifelong reading habits
- to create materials using multimedia techniques
- STEM education addresses these Maryland State STEM Standards of Practice
  - Learn and Apply Rigorous Science, Technology, Engineering, and Mathematics Content
  - Integrate Science, Technology Engineering, and Mathematics Content
  - Interpret and Communicate Information from Science, Technology, Engineering and Mathematics
  - Engage in Inquiry
  - Engage in Logical Reasoning
  - Collaborate as a STEM Team
  - Apply Technology Strategically

### Planned Activities

#### Media Center

Students will experience:

- individual and small group work including reading, browsing, studying and research
- small and large group instruction
- network, on-line, and remote access to resources
- circulation of materials and equipment
- display of instructional materials and student projects
- teacher research, planning and/or consultation
- management and organizational activities
- individual, small and large group listening and viewing
- media production by individuals and small groups
- closed circuit television production and broadcasting
- processing and repair of materials

- storage of equipment, periodicals, materials and supplies

Resource and instruction services offered to staff will include:

- consulting and planning with building and system level staff as well as with other individuals and organizations
- participating in curriculum development, implementation, evaluation and staff development services
- selecting, evaluating and securing materials and equipment in accordance with local board of education policies
- managing and implementing procedures for acquisition, organization and circulation of materials and equipment
- providing reference and information assistance to support existing curriculum
- promoting instructional materials, equipment and services to staff, parents and the community

## STEM Lab

A variety of experiences that allow students to apply science, technology, engineering and mathematics knowledge and develop the skills of creativity and innovation will be provided. These activities may include: 3D printing, hands-on projects where students solve real-world problems, using tools of engineers, scientists and mathematicians, using technology to create, coding, robotics, experimenting, building and inventing, electronics, textiles and sewing, cardboard construction

## Participants

The open resource area shall accommodate 25 students for instruction or reading in the informal reading area. The small group instruction area shall accommodate 40 students and staff in all for instruction or research. The media broadcast room shall accommodate 8 students and staff in all.

All students in grades K-5 shall have access to the STEM Lab. Approximately 24.8 students per classroom.

## Staff Required

- 1 certified library media specialist
- 1 media assistant

## Groupings

Groupings by specific areas:

- The small group instruction area will have seating at round and rectangular tables for approximately 40 students. An informal reading area will be in the media center also. This area shall include floor space for primary story hour seating of approximately 25 students.
- The STEM Lab shall accommodate a whole class of 24.8 students, small groups of 3-15, team groups, or pairs of independent workers
- The media broadcast room shall accommodate 8 students and staff.

Simultaneous Groupings: Any combination of the above listed groupings can be scheduled with the library media specialist.

### Space Requirements

<b><u>Media Center</u></b>		<b>Net Sq. Ft.</b>
Media Office and Equipment Storage/workroom	1	300
Open Resource Area ( w/ informal reading area)	1	2,000
Small Group Instruction Area	1	400
Media Broadcast Room	1	180
STEM Lab	1	800
Computer, TV, Communications Main Distribution Frame	1	300
Remote Telecommunications Equipment Closets (one each wing)	2	200
<b>Total Media Center</b>		<b>4,180</b>

### Design Requirements

- |  |  |
|--|--|
| Relationships to Other Areas               | <ul style="list-style-type: none"> <li>• Media Center and STEM Lab shall be centrally located and convenient to instructional areas, shall be adjacent to bathrooms and shall be self-contained with doors and walls.</li> <li>• STEM activities may be coordinated and correlated with the rest of the instructional program. The STEM Lab shall be directly connected to the Media Center. The number of doors shall be kept at a minimum for security purposes.</li> <li>• The Media Broadcast Room shall be self-contained with doors and walls. It shall be adjacent to the Media Center and accessible from the Media Center.</li> </ul> |
| Spatial/Aesthetics                         | <ul style="list-style-type: none"> <li>• Media Center and all support areas shall be designed to create an inviting and comfortable feeling for students and staff.</li> <li>• The STEM Lab area shall be light and bright.</li> </ul>   |
| Heating, Ventilating, and Air Conditioning | <ul style="list-style-type: none"> <li>• Media Center shall be temperature and humidity controlled for year-round use.</li> <li>• The Computer, TV, Communications Main Distribution "Frame" room shall have an HVAC system independent of the Media Center, to allow for adequate cooling and ventilation of electronics within.</li> <li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li> </ul>   |
| Plumbing                                   | <ul style="list-style-type: none"> <li>• The STEM Lab shall include a "wet area" with a minimum of one deep sink with gooseneck faucet and clay traps and one additional sink.</li> <li>• Hot and cold running water are required in the Equipment Storage/Workroom.</li> </ul>  |
| Acoustics                                  | <ul style="list-style-type: none"> <li>• Acoustical treatment shall be provided in all areas.</li> </ul>   |

- Provide tile (carpet tile use is permitted; Powerbond manufactured pile or approved equal) over the floor in the main reading area, including under the free-standing shelves, the small group instruction room and the conference room.
- Area rug shall be provided in primary story hour area.
- Media Broadcast Room shall be soundproof to accommodate student media production.
- STEM Lab shall be acoustically isolated in so far as possible.

#### Visual/Lighting

- Circulation desk and distribution area shall be located near one of the main student entrances.
- Support areas shall be visually accessible to the main reading area. Equipment storage/workroom may be adjacent and directly accessible to the library media specialist's office.
- Consideration shall be given to different types of lighting and fixtures which are best suited to the activities taking place in a given area (from 15 to 70 foot candles).
- Lighting levels shall be varied, with a ratio of 70% indirect to 30% direct (also referred to as linear LED direct/indirect lighting).
- Switches for all lights in the main reading area shall be together and located in the instructional area of the library media center with a master control switch for all lights at each entrance to the library media center.
- All lighting shall include dual-mode motion-sensor controls.
- Lighting control and the ability to darken individual areas shall be provided.
- Windows with shades shall be included, or failing that, at least a skylight.
- Teachers shall be able to visually supervise access to bathrooms.
- Glare shall be avoided in the STEM Lab.
- Teachers shall be able to supervise all STEM Lab centers.
- Roller shades are required between STEM Lab and Media Center.

#### Communications and Utilities

##### Media Office/Workroom

- Provide telephone line and telephone in the Equipment Storage/Workroom and a telephone line outlet at the circulation desk and the Media Office.
- There shall be a telephone intercom in the equipment storage/workroom with a speaker in the small group instruction room.

##### MDF Room

- The master antenna television system (CATV) headend will be located in the Main Distribution Frame room, and this room shall have a minimum of 4 independent 20 amp. circuits, AND a data outlet.

##### Media Broadcast Room and Small Group Instruction Area

- An antenna system will be needed as a backup to the cable wiring.

##### Open Resource Area

- Three (3) duplex electrical outlets and four (4) data outlets shall be installed adjacent to the circulation desk.

- Allow adequate additional (built in or mobile) vented cabinet space to accommodate 30 laptop computers/mobile devices etc. Provide cabinet with additional electrical power circuits to allow cabinet to serve as electrical charging station to charge 30 laptops/mobile devices simultaneously. These charging stations must have two 20-amp power circuits and at least two data drops.
- Provide an interactive board . This board should be sized and positioned (height adjustable if possible) appropriately for the audience.
- One teaching station consisting of electric/video/data shall be installed in each instructional area.
- Electric outlets shall be liberally installed on the perimeter of all areas of the Media Center, including walls and columns. Consider providing USB outlets and outlets for charging multiple devices at one time. A minimum of 4 ceiling mounted reels for electrical power in the center of the room is recommended. Permanently connecting equipment to these reels is prohibited.

#### STEM Lab

- Provide multiple duplex outlets, recommend minimum data/power every 4'. Provide power outlets in any area where cabinets are located to avoid use of extension cords.
- Provide an interactive board or screen. This board should be sized appropriately for the instructional program.
- Provide a built-in countertop area for 3D printer, color printer and desktop computer with appropriate electrical work.

#### Storage

##### Media Office/Workroom

- This space shall accommodate materials storage for print and non-print collections, equipment storage space for school audiovisual equipment, periodical storage and display space for current and back issues, office supplies and processing materials storage, and a built-in wardrobe, that can be locked, for coats, purses, and other staff member valuables.

##### Media Broadcast Room

- Provide storage with locks for expensive Media Broadcast Room equipment.

#### STEM Lab

- STEM Lab “wet area” should have usable cabinetry above and below the sinks. Counters in wet area shall be 24” deep, with vertical backsplash for small item storage, total counter depth is 25”.
- Locked cabinets for STEM Lab materials and equipment and counter height tote tray storage.
- Provide built in student work benches and countertop and above countertop storage along one full wall of the STEM Lab.
- Provide storage for ongoing STEM activities such as projects, designs, and prototypes.

## Display

- Provide two recessed, wall-mounted, glass front, and lockable, lighted display case in the main reading area.
- Provide dry erase board, interactive board or screen, bulletin board and tack board in the small group instruction areas. A small tack board for notices, schedules, etc., shall be provided in the equipment storage/workroom.
- Provide permanent wall screens, retractable, in the main reading area and in the Small Group Instruction areas.
- In the STEM Lab, provide at child's eye level, non-reflecting, magnetic dry erase boards, preferable multi-board recessed sets with a screen on the back section, map rails and 2 flag holders. Cork strip shall be incorporated above all dry erase boards and bulletin boards. Provide additional hooks for pocket charts (at least 6 additional clips per room). Provide one tack board.

## Additional Notes

## ART

### Goals

The elementary art program shall provide opportunities for the personal acquisition of skills, understanding of historical relationships, creative and aesthetic expression, and for making visual judgments. This elementary art program shall integrate with the child's basic program and promote interrelated concepts and complete the elementary essential curriculum.

### Planned Activities

### Participants

All students in grades K through 5 shall receive art instruction

### Staff Required

1-2 art positions

### Groupings

Many different groupings will be used during the school year. There will be basic groups of 24, small groups of 5-15, and also individual instruction, often being conducted simultaneously.

### Space Requirements

<b><u>Art</u></b>		<b>Net Sq. Ft.</b>
Art Studio A	1	980
Storage for Studio A	1	150
Art Studio B	1	980
Storage for Studio B	1	150
<b>Total Art</b>		<b>2,260</b>

### Design Requirements

**Relationships to Other Areas** Art activities may be coordinated and correlated with the rest of the instructional program. The art rooms shall be convenient to the instructional areas and to centralized bathroom facilities. If possible there shall be access to an outside door.

### **Spatial/Aesthetics**

- Heating, Ventilating, and Air Conditioning**
- No hood vents are required. One kiln per art classroom is required and shall be located within the associated storage rooms. Kilns shall be self-vented kilns with 3-5" vent, similar to a dryer vent, and preferably along an outside wall.
  - Provide appropriate ventilation to meet ASHRAE guidelines.



Plumbing	<ul style="list-style-type: none"> <li>• Provide a minimum of two deep sinks with goose neck faucets and clay traps in each Art Studio.</li> </ul>
Acoustics	
Visual/Lighting	<ul style="list-style-type: none"> <li>• Lighting shall be bright and even for a visually oriented program. Northern window exposure is preferred. Provision shall be made for darkening room windows for presentations.</li> <li>• All lighting shall include dual-mode motion-sensor controls.</li> </ul>
Communications and Utilities	<ul style="list-style-type: none"> <li>• Provide 110 vac duplex electrical outlets on work counter and spaced evenly to code around the room. If a kiln is determined to be needed, phasing of electric current to the art room must be identified by engineers prior to kiln purchase.</li> <li>• Provide multiple duplex outlets for each classroom recommend minimum data/power every 4' in classrooms.</li> <li>• Instructional spaces shall be provided with a Classroom Technology Space (should not be in the corner due to ventilation concerns) with a vented built in lockable cabinet 36 inches tall by 36 inches wide by 30 inches deep. Consider a mobile wireless podium for the teacher. Cabinet will have a personal computer and document camera on top, and shelves inside for a DVD player, a sound amplifier and for storage or technology accessories for such items as DVD remote, and an optional mobile device. USB charging ports should also be provided. Cabinet will be located near interactive board or screen. Provide cabinet with sufficient electrical power (and ventilation) for all devices, data drops and provide rough-in to the ceiling.</li> <li>• Allow adequate additional (built in or mobile) vented cabinet space to accommodate 30 laptop computers/mobile devices etc. Provide cabinet with additional electrical power circuits to allow cabinet to serve as electrical charging station to charge 30 laptops/mobile devices simultaneously. These charging stations must have two 20 amp power circuits and at least two data drops.</li> <li>• Provide an interactive board or screen. This board or screen should be sized and positioned (height adjustable if possible) appropriately for the audience.</li> <li>• Provide power outlets in any area where cabinets are located to avoid use of extension cords.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Provide one large locked storage room in or near each Art Studio with shelving to store art materials, with the base shelving providing a 3' opening and remaining shelving providing 24" clear opening.</li> <li>• Counter height tote tray storage for 150 tote trays to store student work</li> <li>• Cabinets for damp clay storage</li> <li>• Cabinets for art supplies in the rooms</li> <li>• Cabinets for storage of 3-dimensional projects</li> <li>• Flat map-like drawers for storage of paper 23" x 36"</li> </ul>

Display

- Provide built in white board and tack board. Cork strips shall be incorporated above all white boards and bulletin boards.
- Provide tack board on all open wall space.
- Provide a lighted show case gallery for 3-dimensional art work in a highly visible area of each Art Studio.

Additional Notes

- Provide a second teacher area including desk, chair, data, voice, and phone in one of the art studios to accommodate a part-time staff member if needed.

## MUSIC

### Goals

The elementary school music program shall stimulate individual growth in musical expression; develop in children skills in identifying and using various elements of music; help each child gain enjoyment through understanding, performing, interpreting, and creating music; develop in each child an understanding of the relationship of music to our universal cultural heritage; and develop in children an understanding of the role of music in contemporary society.

### Planned Activities

Participating in vocal and instrumental music and learning about music.

### Participants

All students in grades K-5 shall receive general vocal music instruction. All students who desire string/instrumental instruction shall be given that opportunity. String instruction shall be available to fifth grade students.

### Staff Required

1-2 vocal music teachers  
2 itinerant instrumental teachers

### Groupings

Classes as enrollment and space allow, up to 30. Larger groups may use the cafeteria. Both instrumental teachers come one day a week on the same day and space will be arranged for their classes from other spaces that aren't being used full time.

### Space Requirements

#### Music

		<b>Net Sq. Ft.</b>
Vocal/Instrumental Music Room	2	1,600
Music Storage Room	2	150
<b>Total Music</b>		<b>1,750</b>

### Design Requirements

- Relationships to Other Areas      The music area shall be easily accessible to the Stage and the cafeteria and to centralized bathroom facilities. A piano shall be easily accessible to the Stage.
- Spatial/Aesthetics
  - The music area shall be near the stage (could be located in the cafeteria or gym). The music area will include a sound system station.
  - Doors to music spaces shall accommodate large instruments, such as drums.

Heating, Ventilating, and Air Conditioning	<ul style="list-style-type: none"> <li>• Pay special attention to minimizing noise levels of HVAC equipment in music areas.</li> <li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li> </ul>
Plumbing	<ul style="list-style-type: none"> <li>• None needed.</li> </ul>
Acoustics	<ul style="list-style-type: none"> <li>• The music rooms shall have sound isolation from other areas.</li> <li>• Provide acoustic tiles.</li> </ul>
Visual/Lighting	<ul style="list-style-type: none"> <li>• All lighting shall include dual-mode motion-sensor controls.</li> </ul>
Communications and Utilities	<ul style="list-style-type: none"> <li>• Adequate duplex electrical outlets and data and video outlets shall be provided in all areas. Provide multiple duplex outlets for each classroom recommend minimum data/power every 4' in classrooms.</li> <li>• Instructional spaces shall be provided with a Classroom Technology Space (should not be in the corner due to ventilation concerns) with a vented built in lockable cabinet 36 inches tall by 36 inches wide by 30 inches deep. Consider a mobile wireless podium for the teacher. Cabinet will have a personal computer and document camera on top, and shelves inside for a DVD player, a sound amplifier and for storage or technology accessories for such items as DVD remote, and an optional mobile device. USB charging ports should also be provided. Cabinet will be located near interactive board or screen. Provide cabinet with sufficient electrical power (and ventilation) for all devices, data drops and provide rough-in to the ceiling.</li> <li>• Allow adequate additional (built in or mobile) vented cabinet space to accommodate 30 laptop computers/mobile devices etc. Provide cabinet with additional electrical power circuits to allow cabinet to serve as electrical charging station to charge 30 laptops/mobile devices simultaneously. These charging stations must have two 20 amp power circuits and at least two data drops.</li> <li>• Provide an interactive board or screen. This board or screen should be sized and positioned (height adjustable if possible) appropriately for the audience.</li> <li>• Provide power outlets in areas with cabinets to avoid use of extension cords.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Provide countertop and above countertop shelving (mixture of closed and open) in vocal area and practice areas to house books, materials, records and small instruments along one full wall. Provide area for student tote trays. Sink required for washing and sanitizing of instruments. Provide one percussion cabinet on casters for storage of rhythm band instruments.</li> </ul>
Display	<ul style="list-style-type: none"> <li>• White board and tack board</li> </ul>
Additional Notes	<ul style="list-style-type: none"> <li>• Provide a second teacher workstation in one of the music rooms to accommodate a part-time music teacher if needed. Provide desk, chair, data, voice, and phone</li> </ul>

## PHYSICAL EDUCATION

### Goals

Elementary physical education is an integral and vital part of the total educational process. It aims for the same goals that give purpose to all the other learning experiences of the school - the development of the whole child.

Recognizing that each child is a unique individual, with different physical, mental, emotional, and social needs, the purpose for this particular program is to provide a carefully planned sequence of learning experiences designed to fulfill the growth, development, and behavioral needs of each student.

- To develop an acceptable level of physical fitness, an understanding of the components of fitness, and an appreciation of the lifelong value of fitness through personalized physical education activities.
- To develop the skills of movement, the knowledge of how and why one moves, the ways in which movement may be organized, and the value of movement.
- To learn to move skillfully and effectively through exercise, games, sports and dance.
- To develop and demonstrate positive social and emotional behavior, appreciation of individual differences, while focusing on the traits of character.
- To develop an awareness of safety practices and procedures.

### Planned Activities

The physical education program in grades K to 5 may include the following kinds of activities:

Calisthenics	Stunts and Tumbling
Locomotor Movement	Gymnastics
Non-locomotor Movement	Basketball
Rhythms	Volleyball
Games and Relays	Net and Paddle Games
Rope Activities	Floor Hockey
Ball Handling Skills	Softball
Self-Testing	Track and Field
Physical Fitness	Flag Football
Soccer	Activity Zones

### Participants

Elementary students participate in a structured physical education program at least two days per week. The number of students involved in an activity or series of activities will range from a small group to a regular class of as many as 30. On some days this school will have 2 physical education teachers, so the gym may need accommodate up to 60 to 65 students on these days, or an alternate space such as the cafeteria or outdoors may be used.

### Staff Required

1-2 PE teachers

## Groupings

Students involved in physical education will arrive with varying degrees of ability and interest. A primary purpose of the program is to arrange an activity or series of activities in a manner so that all students become actively engaged for an entire class period. This may be accomplished through individual tasks, pairs of students, small groups, circuit training stations and team sports.

## Simultaneous Groupings

During the course of a class period students may participate in a given activity on an individual basis, may be divided into groups, and when appropriate, as an entire class. There may be two classes with as many as 65 students in the gym at one time, depending on enrollment at the school.

## Space Requirements

<b><u>Physical Education</u></b>		<b>Net Sq. Ft.</b>
Gymnasium, full basketball court size (84' x 50')	1	5,900
Indoor/Outdoor equipment storage	1	350
Bathrooms Area - Boys and Girls	1	320
Teacher office/bathroom/shower/dressing	1	200
<b>Total Gymnasium</b>		<b>6,770</b>

## Design Requirements

- |                              |   |
|------------------------------|---|
| Relationships to Other Areas | <ul style="list-style-type: none"><li>• The gymnasium shall be located with immediate access to staff office, rest rooms, storage areas, health suite and outdoor play areas.</li><li>• Indoor storage shall open into gymnasium or into hall area with ample space for moving large pieces of equipment.</li><li>• The gymnasium and cafeteria shall be separated by an operable partition.</li></ul>  |
| Spatial/Aesthetics           | <ul style="list-style-type: none"><li>• Consider locating the stage adjacent to the gymnasium rather than the cafeteria to allow for larger assemblies. If this is not possible, provide portable risers to be used in the gymnasium.</li><li>• Consider the flow of traffic in designing corridors, entrances, and exits to the gymnasium.</li><li>• Gym shall have at least one wall free of obstructions.</li><li>• Gymnasium shall have a clear height below the structure of at least 20 feet.</li><li>• Provide operable divider curtain, ceiling suspended and electrically keyed for raising and lowering and aligned so it is three (3) foot inside on of the out-of-bounds lines, for access between spaces when curtain is down.</li><li>• Provide protective matting on the walls under basketball backboards and in other areas where appropriate.</li><li>• Gymnasium floor to be appropriately marked i.e., 30' circle in middle</li></ul> |

of floor and a full-size basketball court, and additional lines specific to each building as shown in the plans and specifications (e.g. magic club, dots and corners).

Heating, Ventilating, and Air Conditioning	<ul style="list-style-type: none"> <li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li> <li>• Provide air conditioning for the gymnasium.</li> </ul>
Plumbing	<ul style="list-style-type: none"> <li>• Provide two (recessed) mounted drinking fountains in gym located to allow access to each when room is divided.</li> <li>• Provide 1 water closet, hand sink, shower, mirror, soap and towel dispensers and 2 full size lockers in office area.</li> <li>• Provide 3 water closets for girl's bathroom, 2 urinals and 1 water closet for boys' bathroom.</li> <li>• Provide sink alcove outside bathroom.</li> </ul>
Acoustics	<ul style="list-style-type: none"> <li>• No special treatment needed.</li> </ul>
Visual/Lighting	<ul style="list-style-type: none"> <li>• Provide lighting with minimum of 30-foot candles.</li> <li>• All lighting shall include dual-mode motion-sensor controls.</li> <li>• Office doors and windows shall have breakage resistant safety glass.</li> </ul>
Communications and Utilities	<ul style="list-style-type: none"> <li>• Provide electrical outlets on all four walls of the gymnasium to allow for safe operation of custodial gym-floor maintenance.</li> <li>• Office and gymnasium shall have multiple data outlets and connection to the school's network.</li> <li>• For gymnasium, and for teacher's office, provide data, voice and video outlets, plus multiple electrical outlets, the exact number and location of outlets to be determined during project design and to meet FCPS requirements.</li> <li>• Provide connection to school-wide network.</li> <li>• Provide PA sound system for gym, suitable for use by teachers with the type and location of controls, outlets, mixers amplifiers and speakers to be determined during project design process and to meet FCPS requirements.</li> <li>• Technology and audiovisual controls for gymnasium shall be accessible from the gym.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Storage areas shall have 10-foot ceilings and shall be located with direct access to the instruction areas, and designated storage areas shall have double 8-foot-high doors to be installed on storage and activities areas to allow for movement of large pieces of equipment.</li> <li>• Storage space to accommodate folding chairs (500) to be used for large group activities with spectators.</li> </ul>
Display	<ul style="list-style-type: none"> <li>• White boards, bulletin boards and marker boards, where installed must face the gym side of the room and must be height adjustable 7 to 10 feet and free of any pen ledges.</li> </ul>
Additional Notes	<ul style="list-style-type: none"> <li>• Provide two (2) chin-up bars of adjustable height on opposite walls of gym.</li> </ul>

- Provide an 8-foot high by 40-foot-long transverse climbing wall with mat locking system.
- All basketball backboards shall be ceiling suspended and electrically keyed for raising and lowering hoops for forward fold, basket height adjustment and shall be aligned at three (3) feet inside the out-of-bounds line. Safety straps shall be provided to prevent uncontrolled lowering.
- Provide six (6) basketball baskets and backboards, ceiling suspended, electronically keyed for forward-fold, including safety straps; wall safety padding 5'x10' located behind each basket; sleeves for volleyball standards for oversized gym.
- Appropriate floor markings for basketball, volleyball, magic club, color zone shape, and other activities per information provided to architect.
- All Weather Play Areas:
  - See pre-K and Kindergarten sections for play area appropriate for those grades
  - Primary hard surface area 90' x 125'
  - Intermediate hard surface area 110' x 175' to be equipped with four basketball backboards, with 6" goose-neck posts with no adjustment mechanisms
  - Shall include paved walkways between paved play areas and between school and play areas.
- All weather areas shall contain markings for hopscotch; four-square; 20, 30, and 40-foot diameter circles; basketball; volleyball; and kick ball as specified by county drawings, and space permitting a painted oval 1/10-mile simulated running track with 4 four lanes around the perimeter.
- Playground Apparatus Areas and Pieces:
  - Provide separate playground areas for Pre-K and K, primary, and upper elementary.
  - These areas shall be approximately 100' x 200' or large enough to allow for free and safe play after installation of equipment.
  - Exact specifications for this area provided by Facilities Services Division.
- Athletic Fields (if space is available):
  - One soccer field 150' x 240'
  - One flag football field 150' x 240'
  - Space for conducting track and field events
- All athletic fields shall be located on same side of building as the gymnasium



## PRE-KINDERGARTEN

### Goals

The pre-kindergarten program will help the child:

- develop confidence in oneself as a competent person
- build a sense of physical and mental well-being by engaging in movement activities and social play as vehicles for integrating experiences into thought and action
- establish one's role in social settings and develop skills to live, work, and play in harmony
- capture and expand the desire to learn about and understand people, places, things, and events
- use prior knowledge as a foundation for learning to integrate and organize sensory experiences and new information in order to question, make decisions, and solve problems
- express thoughts, ideas, feelings, knowledge, and experiences by engaging in action, interaction, and reaction in an expanding environment
- represent knowledge, experiences, and feelings through individual expression

### Planned Activities

Pre-kindergarten space will provide opportunities for:

Discussions	Listening activities
Reading activities	Writing activities
Math manipulative activities	Cooking activities
Block construction	Art activities (such as painting, cutting, pasting)
Sand and water activities	Rhythmic activities
Singing activities	Viewing films and filmstrips
Woodworking activities	Gross-motor activities
Dramatizations	Science Explorations

### Participants

Optimum of 20 per session, in groupings of 2 to 5, 5 to 15, 15 to 20

### Staff Required

1 teacher, 1 instructional assistant

### Groupings

A portion of the daily schedule is devoted to a work period at which time there is a variety of simultaneous groupings of students. At any one given time, the following groupings could be functioning:

Dramatic play center, 4 students	Art center, 4 students
Library center, 2 - 4 students	Listening center, 2 - 4 students
Block center, 2 - 4 students	Science center, 2 - 4 students
Woodworking, 2 - 4 students	Manipulative play, 2 - 4 students
Water or sand play, 2 - 4 students	Other learning stations, 6 - 10 students

## Space Requirements

### Pre-Kindergarten

		<b>Net Sq. Ft.</b>
Pre-Kindergarten classroom @ 980 sq. ft.	1	980
Special Ed Pre-Kindergarten classroom @ 980 sq ft	1	980
Pre-Kindergarten bathrooms @ 60 sq. ft.	2	120
Pre-Kindergarten Storage Room	1	175
<b>Total Pre-Kindergarten</b>		<b>2,255</b>

## Design Requirements

Relationships to Other Areas	The pre-kindergarten area shall be located adjacent to the kindergarten area in order that there might be an interchange of students. However, the pre-kindergarten area shall be self-contained due to the noise level of various activities. The pre-kindergarten area shall be easily accessible to the main entrance.
Spatial/Aesthetics	<ul style="list-style-type: none"><li>• Windows provided in this room shall be installed at height appropriate to a pre-kindergarten child's eye level.</li></ul>
Heating, Ventilating, and Air Conditioning	<ul style="list-style-type: none"><li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li><li>• The instructional areas shall be planned for year-round use with individually controlled temperature controls for each area.</li></ul>
Plumbing	<ul style="list-style-type: none"><li>• The Pre-kindergarten Classroom shall include a "wet" area, with sink enclosed in usable cabinetry, water, cabinets, etc., of 300 square feet. Sink shall be provided with fully enclosed base cabinet. Water will be required for toilets and sinks (sinks with clay traps and gooseneck faucets) in the wet area and for water coolers.</li><li>• Provide one bathroom in the classroom with door visible to classroom teacher. (The Pre-kindergarten Classroom's bathroom square footage area shall not reduce that of the teaching station.)</li><li>• Install bathroom fixtures and wet area fixtures, and door closer mechanisms, for pre-kindergarten size children.</li></ul>
Acoustics	<ul style="list-style-type: none"><li>• Each classroom shall be acoustically isolated in so far as possible.</li></ul>
Visual/Lighting	<ul style="list-style-type: none"><li>• All lighting shall include dual-mode motion-sensor controls.</li></ul>
Communications and Utilities	<ul style="list-style-type: none"><li>• Provide multiple duplex outlets for each classroom recommend minimum data/power every 4' in classrooms.</li><li>• Instructional spaces shall be provided with a Classroom Technology Space (should not be in the corner due to ventilation concerns) with a vented built in lockable cabinet 36 inches tall by 36 inches wide by 30 inches deep. Consider a mobile wireless podium for the teacher. Cabinet will have a personal computer and document camera on top, and shelves inside for a DVD player, a sound amplifier and for storage or technology accessories for such items as DVD remote, and an optional mobile device. USB charging ports should also be provided. Cabinet will be located near interactive board or</li></ul>

screen. Provide cabinet with sufficient electrical power (and ventilation) for all devices, data drops and provide rough-in to the ceiling.

- Allow adequate additional (built in or mobile) vented cabinet space to accommodate 30 laptop computers/mobile devices etc. Provide cabinet with additional electrical power circuits to allow cabinet to serve as electrical charging station to charge 30 laptops/mobile devices simultaneously. These charging stations must have two 20 amp power circuits and at least two data drops.
- Provide an interactive board or screen. This board or screen should be sized and positioned (height adjustable if possible) appropriately for the audience.
- Provide power outlets in any area where cabinets are located to avoid use of extension cords.

#### Storage

- Provide built-in pre-kindergarten size lockers in hallway just outside of Pre-kindergarten Classroom.
- Counters in wet area shall be 30" deep, with 6" deep surface beyond vertical back splash for small item storage, total counter depth is 36".
- Open storage, accessible to children, for blocks, manipulative items, puzzles, books, toys, games, and woodworking materials with small lumber pieces of from 1 to 5 feet in length.
- Instructional storage, enclosed, for instructional materials, kits, paper of all sizes, science and AV equipment, pre-prepared learning stations, pictures, charts. Provide several blueprint type files for flat paper storage. Provide secure storage for simple woodworking tools and supplies.
- Built-in classroom storage to be located only on the corridor wall with all other storage provided by mobile units.
- Indoor/Outdoor Storage - Provide locked exterior storage room for equipment and supplies with access to inside and outside, adjustable shelving on two walls, and with wall rack 10' long with five 10" hooks five feet above floor level (to hang big wheels, etc.)

#### Display

- Provide at child's eye level, non-reflecting, magnetic white boards, preferable multi-board recessed sets with a screen on the back section (sliding components), map rails and 2 flag holders. Every classroom needs built in white boards and tack boards. Cork strip shall be incorporated above all white boards and bulletin boards. Provide additional map hooks for vinyl pocket charts (at least 6 additional clips per room).

#### Additional Notes

- An outdoor play area appropriate for ages 3-6, both grass and hard surfaced, shall be provided. The pre-k/kindergarten hard surface play area shall be 75' x 100' with appropriate markings (see physical education section). Access to outside areas shall be fenced and ramps will be provided if required.

# KINDERGARTEN

## Goals

The kindergarten program will help the child:

- gain a positive self-identity
- learn to live effectively with her/himself and others
- learn to work and play independently
- develop self-discipline
- better understand and enjoy the world in which he/she lives
- develop the desire to learn
- pursue and satisfy his/her natural curiosity
- enjoy the satisfaction of solving problems - reasoning, planning, making choices, evaluating
- expand his/her knowledge through inquiry, discovery, investigation, experimentation, exploration
- develop and understand language
- strengthen physical skills
- develop good health and safety practices

## Planned Activities

Kindergarten space will provide opportunities for:

Discussions	Dramatizations
Listening activities	Reading activities
Writing activities	Math manipulative activities
Cooking activities	Block construction
Sand and water activities	Art activities (such as painting, cutting, pasting)
Rhythmic activities	Singing activities
Viewing films and filmstrips	Woodworking activities
Gross-motor activities	Science Explorations

## Participants

Classes of 22 per session are the expected number of participants

## Staff Required

1 teacher and 1 instructional assistant

## Groupings

Individual, 2-5 students, 5-15 students

## Space Requirements

### Kindergarten

		<b>Net Sq. Ft.</b>
Kindergarten Classrooms @ 980 sq. ft.	5	4,900
Kindergarten Bathrooms @ 50 sq. ft.	5	250
Indoor/Outdoor Storage Rooms @ 200 sq. ft.	2	400*
<b>Total Kindergarten</b>		<b>5,550</b>

\*May be 1 @ 400 sq ft or 2 @ 200 sq ft each

## Design Requirements

Relationships to Other Areas	The teaching area for grade 1 shall be directly accessible from the kindergarten area
Spatial/Aesthetics	<ul style="list-style-type: none"><li>• The area for Kindergarten classroom shall allow ample space for movement activities requiring use of large muscles.</li><li>• Each Kindergarten classroom shall be scaled to meet the physical needs of its occupants, including bathroom, etc.</li><li>• The area shall be light and bright.</li><li>• Windows provided in this room shall be installed at height appropriate to kindergarten child's eye level</li></ul>
Heating, Ventilating, and Air Conditioning	<ul style="list-style-type: none"><li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li><li>• The instructional areas shall be planned for year-round use with individually controlled temperature controls for each area.</li></ul>
Plumbing	<ul style="list-style-type: none"><li>• The Kindergarten classroom shall include a "wet" area, with sink enclosed in usable cabinetry, water, cabinets, etc., of 300 square feet. Sink shall be provided with fully enclosed base cabinet. Water will be required for toilets and sinks (sinks with clay traps and gooseneck faucets) in the wet area and for water coolers.</li><li>• Provide one bathroom in the classroom with door visible to classroom teacher. (The kindergarten classroom's bathroom square footage area shall not reduce that of the teaching station.)</li><li>• Install bathroom fixtures and wet area fixtures, and door closer mechanisms, for kindergarten size children.</li></ul>
Acoustics	<ul style="list-style-type: none"><li>• Each Kindergarten Classroom shall be acoustically isolated in so far as possible.</li></ul>
Visual/Lighting	<ul style="list-style-type: none"><li>• Teachers shall be able to visually supervise access to bathrooms.</li><li>• Glare shall be avoided</li><li>• Teachers shall be able to supervise all centers, and any partitions shall be at student height (clear sight lines)</li><li>• Individual lighting control with ability to darken an area within the confines of given areas shall be provided.</li><li>• All lighting shall include dual-mode motion-sensor controls.</li></ul>

## Communications and Utilities

- Provide multiple duplex outlets for each classroom recommend minimum data/power every 4' in classrooms.
- Instructional spaces shall be provided with a Classroom Technology Space (should not be in the corner due to ventilation concerns) with a vented built in lockable cabinet 36 inches tall by 36 inches wide by 30 inches deep. Consider a mobile wireless podium for the teacher. Cabinet will have a personal computer and document camera on top, and shelves inside for a DVD player, a sound amplifier and for storage or technology accessories for such items as DVD remote, and an optional mobile device. USB charging ports should also be provided. Cabinet will be located near interactive board or screen. Provide cabinet with sufficient electrical power (and ventilation) for all devices, data drops and provide rough-in to the ceiling.
- Allow adequate additional (built in or mobile) vented cabinet space to accommodate 30 laptop computers/mobile devices etc. Provide cabinet with additional electrical power circuits to allow cabinet to serve as electrical charging station to charge 30 laptops/mobile devices simultaneously. These charging stations must have two 20-amp power circuits and at least two data drops.
- Provide an interactive board or screen. This board or screen should be sized and positioned (height adjustable if possible) appropriately for the audience.
- Provide power outlets in any area where cabinets are located to avoid use of extension cords.

## Storage

- Elementary school sized student lockers, standard in size throughout the school, shall be provided in the corridor just outside each classroom whose students the lockers serve, and shall include a horizontal shelf above the lockers for student temporary storage of book bags, books, etc.
- Counters in wet area shall be 30" deep, with 6" deep surface beyond vertical back splash for small item storage, total counter depth is 36".
- Instructional storage, enclosed, for instructional materials, kits, paper of all sizes, science and AV equipment, pre-prepared learning stations, pictures, charts. Provide several (4-6 needed, depending on standard cabinetry available) blueprint type files for flat paper storage. Provide secure storage for simple woodworking tools and supplies.
- Open storage, accessible to children, for blocks, manipulative items, puzzles, books, toys, games, and woodworking materials with small lumber pieces of from 1 to 5 feet in length.
- Built-in classroom storage to be located only on the corridor wall with all other storage provided by mobile units.
- Indoor/Outdoor Storage - Provide locked exterior storage room for equipment and supplies with access to inside and outside, adjustable shelving on two walls, and with wall rack 10' long with five 10" hooks five feet above floor level (to hang big wheels, etc.) These storage areas to be shared by more than one kindergarten classroom.

## Display

- Provide at child's eye level, non-reflecting, magnetic white boards, preferable multi-board recessed sets with a screen on the back

section (sliding components), map rails and 2 flag holders. Every classroom needs built in white boards and tack boards. Cork strip shall be incorporated above all white boards and bulletin boards. Provide additional map hooks for vinyl pocket charts (at least 6 additional clips per room).

**Additional Notes**     An outdoor play area, both grass and hard surfaced, shall be provided. The hard surface area shall be 75' x 100' with appropriate markings for hopscotch, four square, kickball and 20, 30- and 40-foot diameter circles.

## GENERAL CLASSROOMS GRADES 1 – 5

### Goals

Teachers and students will be assigned to instructional teams at a ratio of 1 to 24.8. The size of the teams will vary from 5 to possibly 8 teachers depending upon the enrollment of the children by year in school and/or instructional level.

Classroom teachers will be responsible for all subjects and will have supplemental assistance from other professionals such as the literacy specialist and math specialist, speech therapist, resource room teacher and from paraprofessionals, i.e. Assistants and volunteers, all of whom will function in the team area much of the time.

Learning experiences must be provided by an instructional team which considers the learning potential, rate, style and setting for each individual within the team. To meet the differing needs, teachers must use many techniques and methods through which all children may experience success. Some movement of students will take place with each team and between teams to ensure correct placement for each child.

### Language Arts

The ultimate goal of the language arts program is the development of each student to his/her optimum level in the communication skills of listening, speaking, reading, and writing. The emphasis is on the fusion of these skills as a total communication process taught through a comprehensive, specifically identified, instructional sequence that will develop each student's ability to comprehend and communicate to the degree that she/he may deal effectively with the problems of today's world. An additional goal will be the concomitant nurture and development of critical thinking skills that will permit students to develop the competencies necessary for living in and contributing to a language-oriented society.

FCPS is committed to ensuring that all students become independent readers and writers for many different purposes. Students will use their literacy skills to negotiate an increasingly complex and information-rich world. Students will refine and apply their knowledge of reading, writing, speaking, and listening by engaging in a variety of diverse texts and writing for authentic purposes and audiences. Students will find joy in reading and writing.

The FCPS elementary language arts program is based on research and best practices for instruction and assessment. The goals and objectives of FCPS elementary language arts program are to:

- Produce independent and strategic readers and writers.
- Provide students with the necessary foundational skills in reading and writing.
- Accelerate the reading and writing achievement of all students in language arts.
- Differentiate for students who are not yet meeting language arts expectations.
- Provide teachers curricular resources and assessments that are aligned to the MCCR frameworks.

In order to meet these essential discipline goals and objectives, the following kinds of experiences must be provided:

- develop pre-reading skills
- listening experiences which incorporate a variety of messages and input sources
- language experiences which utilize multi-sensory activities



- reading experiences which incorporate a variety and quantity of types of reading materials
- writing experiences which allow one to consider purpose, audience and genre in a variety of written formats which would involve editing and spelling skills
- speaking experiences which consider purpose, audience, tone, and mood and involve different organizational formats

## Mathematics

The mathematics program has three major goals: teach children to develop mathematical skills and reasoning abilities needed for problem solving, teach children to choose appropriate technological tools to solve problems and teach children to demonstrate positive attitudes towards mathematics in school, culture, and society. An emphasis will be on solving problems through practical applications of mathematics and using concrete experiences to construct conceptual understanding of mathematics. Technology (computers and calculators) will be fully utilized to supplement direct instruction as appropriate for every student.

The mathematics curriculum must be adjusted to meet the special needs of all children. Attention shall be focused on flexible grouping and cooperative learning strategies to meet the favored learning styles of a diverse population.

Standards in mathematics include:

- apply problem solving skills, communications skills, reasoning skills, and connections to solve a variety of problems
- show, describe, and use numerical concepts and relationships using concrete, pictorial, and symbolic representations
- estimate and apply measurement skills using standard/non-standard and metric/customary units in mathematics and other disciplines
- predict and demonstrate congruency, similarity, symmetry, and reflection using one, two and three dimensional objects as appropriate to solve problems
- collect, organize, and display data; interpret information in oral and written form
- demonstrate basics concepts of probability such as predicting and finding outcome
- describe, extend, and create a variety of patterns and functional relationships

## Science

The main goal of the science program is for students to apply science and engineering practices and cross-cutting concepts in the life, physical, and earth/space sciences.

In the elementary science program, lessons from a variety of science units will involve students in hands-on investigations of age appropriate concepts to build the foundation necessary to understand the Maryland State Science Standards (MSSS).

In order to meet these goals, the following kinds of activities must be provided:

- hands-on exploration of major concepts
- vocabulary and concept development based on the hands-on experiences
- application of concepts through hands-on activities in new situations
- opportunities to read and write about science
- use of instructional technology
- integration of skills and concepts with other subject disciplines

- field trips to the Earth & Space Science Laboratory (ESSL), school grounds, local sites and grade-level field trips

### Social Studies

The goal of social studies is the promotion of civic competence--the knowledge, intellectual processes, and democratic dispositions required of students to be active engaged participants in public life. The primary purpose of social studies is to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. Concepts and tools in each of these disciplines; civics, economics, geography and history are applied as students study specific content described in state standards. These disciplinary ideas are the lenses students use in their inquiries throughout the grades to lead to deep and enduring understanding. Social studies instruction provides experiences that develop in students the knowledge, concepts, strategies, and skill needed to promote citizenship in a diverse and changing world. Social studies instruction is meaningful, engaging and challenging.

In order to meet these goals, the following kinds of activities must be provided:

- develop questions and plan inquiries
- apply disciplinary tools and concepts
- develop and use domain specific vocabulary
- gather and evaluate sources
- read and write about civics, economics, geography, and history
- develop claims and use evidence
- communicate and critique conclusions
- use instructional technology and tools
- integrate skills and concepts of other subject disciplines
- take informed action

### Computer Education

Learning to use the computer is an integral part of a student's education. The computer is also an excellent instructional tool. Computers will enable students to extend academic abilities and will assist them in mastering basic skills. Students will use the computer as a tool for:

- reinforcement, remediation, and extension of specifically targeted curriculum objectives
- activities which will develop students' mathematics problem-solving skills and strategies
- developing writing process skills
- simulated experiences that could not be addressed by other means
- collecting and managing information
- creative expression in the areas of art and music

Computer experiences planned may include:

- large group learning activities using a projection device to view computer and video images
- individual learning activities for remediation, reinforcement and extension.
- use of software, extensions, and applications that address objectives in content areas
- use of software that fosters the growth and development of problem-solving skills and strategies

- production of materials, displays, and projects which enhance or supplement curriculum objectives. These activities with a computer will provide another means of student creative expression

Students will:

- become comfortable, competent and self-sufficient using computers and associated peripherals.
- develop keyboard awareness and proficiency.
- use computers as tools for accomplishing tasks.
- select appropriate applications software to assist with a specific task.
- Integrate software use into lessons.

### Planned Activities

### Participants

Approximately 24.8 students per classroom

### Staff Required

1 teacher per classroom

### Groupings

Home base groups of 24.8, small groups of 3-15, team groups, pairs of independent workers

### Space Requirements

#### **Learning Area, Grades 1-5**

		<b>Net Sq. Ft.</b>
General Classrooms @ 800 sq. ft.	25	20,000
General Classroom Group Bathrooms @ 300 sq. ft.	3	900
Planning Rooms @300 sq. ft.	2	600
<b>Total Learning area, Grades 1-5</b>		<b>21,500</b>

### Design Requirements

**Relationships to Other Areas** Grades 1 and 2 areas shall be directly accessible to the kindergarten area. Grades 3 through 5 areas will be grouped together. All grades shall be directly accessible to intervention rooms.

All grades 1 - 5 classrooms shall be conveniently accessible to:

Media Center	Health Room
Gymnasium	Principal's Office
Music Room	School Office
Cafeteria	Computer Lab
Art Room	Assistant Principal's Office

Spatial/Aesthetics	<ul style="list-style-type: none"> <li>• Each classroom shall be scaled to meet the physical needs of its occupants.</li> <li>• The classrooms area shall be light and bright.</li> </ul>
Heating, Ventilating, and Air Conditioning	<ul style="list-style-type: none"> <li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li> <li>• The instructional areas shall be planned for year-round use with individually controlled temperature controls for each area.</li> </ul>
Plumbing	<ul style="list-style-type: none"> <li>• The Classroom shall include a “wet” area, with sink enclosed in usable cabinetry, water, cabinets, etc., of 300 square feet. Sink shall be provided with fully enclosed base cabinet. Water will be required sinks (sinks with clay traps and gooseneck faucets) in the wet area and for water coolers.</li> <li>• Group bathrooms to be located convenient to all general classrooms.</li> <li>• Provide 3 water closets for girl’s bathroom, 2 urinals and 1 water closet for boy’s bathroom.</li> <li>• Provide a sink alcove in hallway for student bathrooms</li> </ul>
Acoustics	<ul style="list-style-type: none"> <li>• Each classroom shall be acoustically isolated in so far as possible.</li> </ul>
Visual/Lighting	<ul style="list-style-type: none"> <li>• Teachers shall be able to visually supervise access to bathroom facilities and all centers; any partitions shall be at student height providing clear sight lines</li> <li>• Glare shall be avoided</li> <li>• Provide individual lighting control with ability to darken an area within the classroom.</li> <li>• All lighting shall include dual-mode motion-sensor controls.</li> </ul>
Communications and Utilities	<ul style="list-style-type: none"> <li>• Provide multiple duplex outlets for each classroom recommend minimum data/power every 4’ in classrooms.</li> <li>• Instructional spaces shall be provided with a Classroom Technology Space (should not be in the corner due to ventilation concerns) with a vented built in lockable cabinet 36 inches tall by 36 inches wide by 30 inches deep. Consider a mobile wireless podium for the teacher. Cabinet will have a personal computer and document camera on top, and shelves inside for a DVD player, a sound amplifier and for storage or technology accessories for such items as DVD remote, and an optional mobile device. USB charging ports should also be provided. Cabinet will be located near interactive board or screen. Provide cabinet with sufficient electrical power (and ventilation) for all devices, data drops and provide rough-in to the ceiling.</li> <li>• Allow adequate additional (built in or mobile) vented cabinet space to accommodate 30 laptop computers/mobile devices etc. Provide cabinet with additional electrical power circuits to allow cabinet to serve as electrical charging station to charge 30 laptops/mobile devices simultaneously. These charging stations must have two 20 amp power circuits and at least two data drops.</li> <li>• Provide an interactive board or screen . This board or screen should be sized and positioned (height adjustable if possible) appropriately for the audience.</li> </ul>

	<ul style="list-style-type: none"> <li>• Provide power outlets in any area where cabinets are located to avoid use of extension cords.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Instructional storage, enclosed, for instructional materials, kits, paper of all sizes, science and AV equipment, pre-prepared learning stations, pictures, charts. Provide several (4-6 needed, depending on standard cabinetry available) blueprint type files for flat paper storage. Examples of items stored here: <ul style="list-style-type: none"> <li>○ storage for texts, workbooks, and supplemental books - 2 , 36"x48" bookcases with adjustable shelving</li> <li>○ storage shelves for paper of varying sizes: 8 1/2 x 11, 11 x 18, 18 x 24, 24 x 36, 36 x 52, including materials for learning stations</li> <li>○ storage for instructional materials such as kits, games and concrete materials for mathematics</li> <li>○ Provide storage amongst each classroom for supplemental materials not in use that may be shared by multiple classes.</li> <li>○ teacher shall have locked storage for personal belongings</li> <li>○ teacher shall have storage for professional books; supplies to make stations such as scissors, paste, pens, tape, etc.; storage for typing paper and other supplies</li> <li>○ built-in closed storage at wet area for science and art materials - deep shelving can be provided if counter tops are 30" x 6" raised back (36" depth)</li> <li>○ built-in open front storage area beneath the counter top in the wet area, a minimum of 26" high, 36" wide, and 16" deep</li> <li>○ Provide dedicated space for classroom library</li> </ul> </li> <li>• Built-in classroom storage to be located only on the corridor wall with all other storage provided by mobile units.</li> <li>• Counters in wet area shall be 30" deep, with 6" deep surface beyond vertical back splash for small item storage, total counter depth is 36".</li> <li>• Elementary school size student lockers, standard in size throughout the school, shall be provided in the corridor just outside each classroom whose students the lockers serve and shall include a horizontal shelf above the lockers for student temporary storage of book bags, books, etc.</li> </ul>
Display	<ul style="list-style-type: none"> <li>• Provide at child's eye level, non-reflecting, magnetic white boards, preferable multi-board recessed sets with a screen on the back section (sliding components), map rails and 2 flag holders. Every classroom needs built in white boards and tack boards. Cork strip shall be incorporated above all white boards and bulletin boards. Provide additional map hooks for vinyl pocket charts (at least 6 additional clips per room).</li> <li>• Grip-a-strip shall be placed in the hallways.</li> </ul>
Additional Notes	<ul style="list-style-type: none"> <li>• Provide two planning rooms in different parts of the building to allow 8-10 staff to gather for planning or professional learning activities. Provide a table with adequate seating, whiteboard, and tack board.</li> </ul>

## **SUPPORTING SERVICES**

### Goals

Supporting services are services provided by school personnel outside and also within the traditional classroom setting. These services are provided to students in need of them in consultation with classroom teachers.

The following programs comprise the total area of supporting services:

- Speech/language and itinerant services
- Occupational/physical therapy itinerant services
- Special education resource
- Language Learning Services
- Math Intervention
- Reading Intervention
- Reading services
- English Language Learners
- Elementary guidance
- Behavioral specialist services
- Psychology and social work services
- Community Liaison

Personnel providing supporting services will form a team to coordinate efforts in working with individual students, to facilitate the keeping of records, to reduce duplication of effort and to reach as many students as possible. Some intervention spaces will be flexible, allowing for a variety of interventions to take place in the same space either simultaneously or concurrently.

Supporting services provides services to children who do not need major curricular adjustments, but who need some form of consultative services to help them function more effectively. Its goal is to provide counseling and liaison between pupils, parents, teachers and community agencies through the psychologists, pupil personnel workers, public health nurses, and social workers who comprise the staff.

The goal will be accomplished through:

- conferences with teachers
- conferences with parents, and home visits
- conferences with children
- conferences with any combination of the above persons
- contacts with other agencies
- testing
- conferring with other personnel in supporting services

### Speech/Language and Itinerant Services

The function of this program is to further the objectives of the Essential Curriculum. The program is integrated with the regular instructional program whenever possible.

The goals of the speech/language and itinerant services programs are:

- to conduct assessments necessary for program placement
- to write and implement Individualized Education Programs (IEPs) for use in both the speech/itinerant's room and the regular classroom

- to deliver speech/language therapy and itinerant services (hearing impaired services, vision services, and Occupational Therapy/Physical Therapy services)
- to provide consultative services to parents and classroom teachers of students who receive speech/itinerant services
- to provide appropriate materials for instruction

The goals will be accomplished through:

- informal and standardized testing
- small group and individual instruction
- conferences with students, teachers, and parents
- record keeping/planning
- provision and storage of appropriate materials/equipment

### Special Education Resource

Special education resource provides programs for those children who need a minimal amount of assistance in order to succeed in regular classes. The goal of the program is to give to the child the educational and social support which he or she needs to make progress commensurate with his or her ability. At all times, maximum effort will be made to educate the child with his non-disabled peers.

For a period of time each day or intermittent days during the week, a student with a disability may receive special education instruction in the Intervention Room, if this environment is specified on the IEP. The teacher will provide the instructional service defined in the children's individualized education plans.

Goals will be accomplished through:

- yearly planning for Type I activities for the entire school, as well as individual class or grade-level groupings (filed with principal) which reflects school-wide philosophy and long-range planning
- regular in-service activities involving all school staff on effective implementation of all three levels of activities
- maintenance of materials and equipment for efficient and effective student and staff use
- maintenance of records outlining use of room, materials, activities, etc.
- increased one-to-one facilitation with students as Type III activities are identified and implemented within curriculum compacting
- significant increase of Type II activities within the intervention rooms and individual classrooms
- training of teachers and students in independent research and product-creation strategies
- increased parental and community involvement in development of resource room, available resources, and product creation

### Calming Room

Teachers and support personnel work with students to identify times when the student may need to step aside from the learning area to calm down rather than resorting to disciplinary measures. The principal will determine how to furnish the calming room. In general, it should have light colors, an ability to lower the lighting level and little to no furnishings.

## English Language Learning Program

English language learning programs are mandated by COMAR and Title III of Every Student Succeeds Act. Instructional models do vary somewhat from school to school. Choosing the most appropriate instructional model will depend on several factors such as the number and distribution of ELL students in a school, the school's instructional schedule, the number of ELL instructors servicing the school, student proficiency levels based upon LAS Links scores, and so on. In all cases, ELL teachers should collaborate with classroom teachers to ensure that ELL instruction and classroom instruction are aligned and coordinated.

Instructional settings for ELL students will vary. Level 1 students will spend most of their time in an ELL classroom. ELL instructors typically work Level 2 and 3 ELL students in the general classroom or in groups no larger than 6-8 students at a time.

## Reading and Math Intervention services

The role of intervention services is to work individually or with small groups of students, no larger than 8 students at any one time. The interventionist works daily with students in an approved intervention that requires anywhere from 30-45 minutes of instruction. Generally, most interventionists work with approximately 6 groups a day in the intervention rooms. Although the interventions are short term in nature the interventionist changes groups throughout the year and carries a full case load.

## Outside therapy/testing and Behavior Support

School counselors, psychologists, and other student support personnel are integral members of the staff at all schools, where they serve to monitor and promote student success from the time they enroll through graduation. There are times when students require additional supports and services beyond those received within the regular school program. When this occurs, school staff will often coordinate with parents and their outside therapy agencies and service providers to comprehensively meet the needs of students for their continued success. This coordination may include outside therapists coming within the school environment to provide these services. By doing this, not only will the supports and services to students be coordinated, but also the amount of time students are out of school is diminished because students will not have to leave school for travel to appointments.

## School Support and Elementary Guidance

The school support program has been in existence for some time and was originally designed as a pro-active, preventative program to deal with potential student problems at their inception. Since 1986 elementary guidance has been a legislatively mandated program. Elementary guidance is developmental in nature and helps all children in the areas of personal and academic growth, educational and career decision making skills, and interpersonal relations. While guidance focuses on developmental programs for all students, school support focuses on behavioral programs for a small number of children. There are indications that these two programs will work together where appropriate, but the focus for each program is distinct.

Instructional settings will vary from large group development of problem-solving skills to small group interpersonal conferencing, and to individual counseling where appropriate.



### Community Liaison

The Community Liaison's role is to develop and maintain home-school communication in matters related to social and academic growth of identified students. This person maintains family contacts, assists parents in understanding and utilizing school and community programs, participates in the IEP process, and develops parent education programs to support student education. The Community Liaison meets with small and large groups of parents and/or students.

### Planned Activities

#### Participants

- diagnostic and adjunctive services - completely individualized on a need basis
- speech and hearing services - small group sessions
- special education resource - small group sessions
- English language services – small groups
- Math and reading intervention services – small groups, individualized
- guidance - large group, small group, individualized
- reading services - large group, small group, individualized
- enrichment services - large group, small group, individualized
- calming room - individualized

#### Staff Required

- part-time pupil personnel worker (itinerant)
- part-time psychologist (itinerant)
- full-time speech and hearing therapist (itinerant)
- part-time itinerant teachers (hearing, vision, occupational therapist, physical therapist)
- 4-5 special education resource teachers
- 1 guidance counselor
- 3 Reading and Math Specialists
- 2-3 ELL teachers
- Behavioral support
- 2 Instructional Assistants
- visiting services from the Social Worker
- 1 Community Liaison

#### Groupings

- independent workers, one-to-one, small groups of 2 to 6 or 7 to 15, whole classes

#### Simultaneous Groupings

- It shall be possible to organize all of the above groupings simultaneously.

## Space Requirements

### Supporting Services Area

		<b>Net Sq. Ft.</b>
Offices with desks for math and reading Interventionists and specialists, special education @800 sq. ft.	2	1600
Intervention/Collaboration Rooms (to be used for reading, math, EL, pull-out special education) @200 sq. ft.	4	800
Calming Room @200 sq. ft.	2	400
Guidance @200 sq. ft.	2	400
Itinerant Staff (Psychologist/Social Worker/Behavior Specialist etc)	1	200
Speech/Language and Itinerant Services, OT/PT @ 360 sq. ft.	1	360
EL Level 1 classrooms	1	800
Community Liaison Office/Storage	1	200
Parent Work Room	1	200
Reading Specialist/Book Rooms @ 400 sq. ft.	1	400
<b>Total Supporting Services</b>		<b>5,360</b>

### Design Requirements

**Relationships to Other Areas** All supporting services spaces shall be dispersed throughout the school to provide convenient access for all classrooms. Intervention rooms shall be dispersed throughout the classroom areas to provide access from each grade level.

The various staff providing interventions will have desks in centralized offices. These spaces will be identical to classrooms (see general learning area) to allow for flexibility in space usage from year to year.

A small conference room will be provided for testing, meetings requiring privacy, and outside therapy.

A calming room shall be provided in two separate classroom areas.

- |   |   |
|---|---|
| <b>Spatial/Aesthetics</b>                         | <ul style="list-style-type: none"><li>• Bathroom facilities shall be directly accessible to all students in the area</li></ul>  |
| <b>Heating, Ventilating, and Air Conditioning</b> | <ul style="list-style-type: none"><li>• The area shall be planned for year-round use and shall be fully air-conditioned with individually controlled temperature control for each area, consistent with building HVAC zones.</li><li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li></ul> |
| <b>Plumbing</b>                                   | <ul style="list-style-type: none"><li>• No plumbing is required in any of the supporting services spaces.</li></ul>   |
| <b>Acoustics</b>                                  | <ul style="list-style-type: none"><li>• Each of supporting services rooms shall be acoustically separated from each other and from other areas.</li></ul>   |
| <b>Visual/Lighting</b>                            | <ul style="list-style-type: none"><li>• Glare shall be avoided.</li><li>• All lighting shall include dual-mode motion-sensor controls.</li></ul>  |

- Individual lighting control and ability to darken the intervention rooms are needed
- Individual rooms shall be visually separated from each other and from other areas

#### Communications and Utilities

- Provide multiple duplex outlets for each room recommend minimum data/power every 4' in classrooms.
- For each intervention room provide 2 data, 1 voice and 1 video outlet plus appropriate electrical power.
- For each intervention office provide 12 data, 12 voice and 12 video outlet plus appropriate electrical power.
- Computers shall be connected to the school-wide network.
- Instructional spaces shall be provided with a Classroom Technology Space (should not be in the corner due to ventilation concerns) with a vented built in lockable cabinet 36 inches tall by 36 inches wide by 30 inches deep. Consider a mobile wireless podium for the teacher. Cabinet will have a personal computer and document camera on top, and shelves inside for a DVD player, a sound amplifier and for storage or technology accessories for such items as DVD remote, and an optional mobile device. USB charging ports should also be provided. Cabinet will be located near interactive board or screen. Provide cabinet with sufficient electrical power (and ventilation) for all devices, data drops and provide rough-in to the ceiling.
- Provide infrastructure necessary for an interactive board or screen in intervention rooms.
- Provide infrastructure for two interactive white-boards or screens in each intervention office. These boards should be sized approximately for the instructional program.
- Intervention rooms - duplex outlets, include data wiring, provision for closed circuit TV
- Guidance Rooms - duplex outlets, include data wiring
- Book Room - duplex outlets, include data wiring, telephone outlet
- Small Conference Rooms – duplex outlets, include data wiring

#### Storage

##### Intervention Office:

- Provide shelving, to be shared by Enrichment and the Resource Room teachers, to include shelving for books, kits, tapes, labs, stations and games
- Provide adjustable shelving to store language arts textbooks, materials of instruction (such as charts, kits, games, and literature units), teacher's guides, assessment materials, and professional books and journals.
- Portable storage is needed for tote trays in the intervention offices.

##### Speech/Language and OT/PT Room

- shelving in rooms used by adjunctive services, and speech therapist shall be provided for books, audio recorders and projectors

Book room:

- Built-in storage with cabinets, closed shelves and drawers to house learning stations, charts, paper, art supplies, games, teacher resources, kits, and tapes; two bookcases to cover one wall, approx. six feet high and 12" deep with adjustable shelves
- Portable storage is needed for tote trays in the book room.

Community Liaison:

- Provide a storage area for food and clothing to be distributed. Provide space for a fridge and freezer (to be provided by the food bank).

Display

- In intervention rooms, provide teaching areas at child's eye level, with non-reflecting, magnetic white boards, preferable multi-board recessed sets with a screen on the back section (sliding components) and tack boards. Cork strip shall be incorporated above all white boards and bulletin boards. Provide additional map hooks for vinyl pocket charts (at least 6 additional clips per room).
- Provide an area near the main entrance with storage/display for fliers and other resources as well as a bulletin board for display of upcoming events.

Additional Notes

- Intervention Offices – provide systems furniture to accommodate up to 12 staff in each office space.
- Speech/Language and OT/PT Rooms: ceilings to be provided with a means of hanging hammocks, ball nets, similar.

## FOOD SERVICE

### Goals

The food service facility includes a finishing kitchen, a covered dock area, and a cafeteria dining area. The kitchen facilities and equipment shall be adequate for finishing (completion of cooking or heating) preparing and serving meals.

The dining area shall be a light, attractive place for students. Select colors that are light for ceiling, walls and floors. Careful attention needs to be given to traffic patterns for students in relationship to serving, seating, dish return, and exits. The most congested areas will be the lines of students waiting to be served. Provide a means to control the serving lines and to avoid the crossing of serving lines, or the exit of students from the serving lines with food on their trays, by students returning dirty trays to the dishwashing room.

The use of sound absorbing materials in walls and ceilings is desirable. However, all floors shall be non-porous, non-slippery tile for easy cleaning.

Specific goals include:

- to serve the most nutritious meals to the greatest number of students for the least cost
- to "safeguard the health and well-being of the nation's children" (National School Lunch Act)
- to provide for improved nutritious education for students
- to make meal time a pleasant and relaxing time for students
- to use the meal time as a time for fostering the social development of the student
- to be able to serve the meals in an appealing and expeditious manner

### Planned Activities

- Finishing and serving meals

### Participants

725 students

### Staff Required

- 1 Site Assistant Employee and 6-7 staff workers

### Space Requirements

<b><u>Food Service</u></b>		<b>Net Sq. Ft.</b>
Kitchen - Serving/Food prep/Transport	1	1,400
Dry Food Storage	1	150
Non-food storage	1	60
Refrigerated storage – walk-in	1	130
Frozen Food storage – walk-in	1	120
Office	1	80

Locker/restroom/washer & dryer area	1	120
Dishwashing area	1	220
Inside receiving area	1	60
Covered outside unloading area (100 sq. ft.); 18" tailgate height	1	--
<b>Total Food Service</b>		<b>2,340</b>

### Design Requirements

- |  |   |
|--|---|
| Relationships to Other Areas               | <ul style="list-style-type: none"> <li>• Convenient to instructional area</li> <li>• 3 serving lines</li> <li>• Directly accessible to outdoor entrance-especially bus unloading area</li> <li>• Kitchen directly accessible to covered loading platform</li> <li>• Loading platform is to be accessible at all times for deliveries without being a disturbance to any student activities</li> <li>• Kitchen is directly accessible to adequate food service parking area with 4-5 parking spaces.</li> <li>• Kitchen is directly accessible to personnel lockers and restroom area (includes washer/dryer area)</li> <li>• Storage area directly accessible to kitchen and to contain no control panels; facilities to maintain the temperature at 70 degrees F or below at all times</li> <li>• Maintenance and operations easily but not directly accessible to kitchen</li> <li>• No through traffic</li> <li>• Dumpsters easily accessible from dining area</li> <li>• Removal of trash from the cafeteria without going through kitchen</li> </ul> |
| Spatial/Aesthetics                         | <ul style="list-style-type: none"> <li>• The serving area shall be light and bright to create a non-institutional environment.</li> <li>• The design shall allow for quick and easy clean-up.</li> <li>• Provide serving area for a triple line (inside kitchen area)</li> </ul>  |
| Heating, Ventilating, and Air Conditioning | <ul style="list-style-type: none"> <li>• Provide for adequate heating and ventilation, and air conditioning for year-round use.</li> <li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li> <li>• Provide separate heated and air-conditioned office area.</li> <li>• Storage facilities shall maintain proper temperatures and have a thermometer prominently displayed.</li> <li>• The walk-in refrigerator and freezer need to be temperature monitored by a computer.</li> <li>• Ventilation in kitchen must be separate system from the rest of the school, to avoid cooking and other odors from spreading throughout remainder of school.</li> <li>• Provide for free circulation of air at workers' level.</li> <li>• Provide induction hoods over cooking area and over the dishwashing equipment (Cooking hood equipped with filter).</li> <li>• Provide venting for clothes dryer.</li> </ul>   |
| Plumbing                                   | <ul style="list-style-type: none"> <li>• Provide hot and cold water in kitchen and employee area</li> </ul>   |

	<ul style="list-style-type: none"> <li>• Provide drainage and waste lines with accessible cleanouts large enough to eliminate splash-down area</li> <li>• Provide hot and cold water for a washer and dryer</li> <li>• Provide male/female connections for all gas or water equipment</li> </ul>
Acoustics	<ul style="list-style-type: none"> <li>• The kitchen shall be acoustically isolated from the dining area.</li> <li>• The dining area shall be acoustically treated to help with sound reduction.</li> <li>• Adequate sound and security system established for safety and well-being of the students.</li> </ul>
Visual/Lighting	<ul style="list-style-type: none"> <li>• Adequate lighting shall be provided with capability for individual control in all areas.</li> <li>• Lighting in serving areas so designed to enhance the appearance of the food.</li> <li>• Emergency lighting shall be provided in the kitchen area.</li> <li>• Office shall have visual of receiving area and kitchen area.</li> <li>• All lighting shall include dual-mode motion-sensor controls.</li> </ul>
Communications and Utilities	<ul style="list-style-type: none"> <li>• Provide 110- and 220-volt duplex outlets as required by the kitchen area - additional outlets for added flexibility and future growth</li> <li>• Provide duplex outlets flush to walls and floor, provide telephone in manager's office and serving area, 3 wall clocks</li> <li>• Provide electronic display board for information on menus/coming events to be controlled from the Food Service Office.</li> <li>• Provide doorbell at the loading dock with a bell located in the food preparation area able to produce a tone loud enough to be heard over operating equipment.</li> <li>• Provide dedicated computer line for two computer cash registers on serving lines and one in Manager's office as well as a computer line for FCPS email service</li> <li>• Provide a secondary computer network between the serving line cash registers and the office computer in the kitchen manager's office. This network will be in addition to the FCPS network connection within the manager's office.</li> <li>• Provide utility meters to record food service energy use, with meters to be located in open kitchen area.</li> <li>• Bell or buzzer for phone to be heard in kitchen area</li> <li>• Consider providing electronic menu boards or touchscreen menus for ordering food in the cafeteria area to allow for easy update of food options and easy selection for those who aren't able to read</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Provide storage for dry food, non-food items, food requiring refrigeration, and food required to be stored frozen.</li> <li>• Provide locker area for cafeteria employees with restroom facilities and washer/dryer area</li> </ul>
Display	<ul style="list-style-type: none"> <li>• Provide bulletin board in the manager's office, bulletin board in personnel locker area, bulletin board in kitchen area, dry erase menu boards at each serving line.</li> </ul>

- Provide areas for food service information and student work and well-being displays and posters.

Additional Notes

**Food Preparation Area must meet or exceed the county and state health sanitation requirements and building codes.**

- Provide covered loading dock with not more than 18" tailgate height and enough space to accommodate two trucks at one time and with ramp and steps
- Loading dock shall not be shared by other, non-food service trucks
- Provide shielded storage area for trash until pickup - dumpsters advisable - away from loading dock
- Provide Inside receiving area
- Provide utility area
- Provide washer/dryer area
- Grease trap area shall provide access for the pump truck to clean out

Equipment:

The following equipment must be accommodated within the facility:

Storage Areas

- dry Food Storage – Metro Max Shelving – Mobile
- non-food Storage – Metro Max Shelving – Mobile
- refrigerated Storage – Metro Max Shelving – mobile
- freezer Storage – Metro Max Shelving – Mobile

Office Area

- 1 bulletin Board
- 2 desks, Lockable
- 4 chairs
- 1 file cabinet w/lock
- 1 copier
- 1 calculator
- 1 bookcase
- 1 telephone
- 1 clock
- 1 waste can
- 1 window blind (if outside window is available)
- 1 computer FCPS – networked
- 1 Café Enterprise (Accountability Computer)

Locker/Dish room/Washing & Dryer Area

- 8 lockers
- 1 full-length mirror
- 1 bench
- 1 toilet
- 1 hand sink
- 1 small mirror
- 1 hot air hand dryer
- 1 soap dispenser



- 1 mop sink & rack
- 1 small bulletin board
- 1 washer
- 1 dryer
- 1 closed metal cabinet
- 1 dryer vent
- 1 wall-mounted shelf
- 1 Metro Max Shelving – Mobile

#### Inside and Outside Unloading/Receiving Area

- 1 water outlet
- 1 hand truck
- 2 donnage racks

#### Serving Area (mobile)

- 3 cashier stands
- 3 Café Enterprise – (Accountability Computers)
- 3 milk coolers
- 3 utility carts
- 3 condiment bars
- 4 tray caddies – mobile
- 3 serving counters – mobile
- 3 hot food counters – mobile w/heat lamps, with five wells and drains
- 3 cold food counters – mobile w/refrigerated cold pan (flat top preferred)
- 3 heated cabinets – mobile

#### Dishwashing Area

- 1 booster heater
- 1 exhaust hood
- 1 three-compartment sink (pot washing w/over shelf)
- 1 hose and reel
- 3 trash cans
- 1 scrape hole
- 1 counter top
- 1 hand sink
- 1 utility cart
- 1 dish machine
- 18 racks for dish machine
- 1 storage cabinet – mobile
- 1 soiled dish table
- 1 clean dish table
- 1 tray dryer
- 2 pot & pan shelving – mobile

#### Preparation Area

- 2 double combi/steamer oven
- 1 double cavity convection steamer
- 2 pan storage racks
- 2 tray carts

- 2 pan racks – mobile
- 4 utility carts
- 1 double Crescor hot unit
- 1 ice machine/bin Hoshisaki only
- 1 walk-in refrigerator
- 1 double convection oven
- 1 prep sink with two compartments
- 1 utility raceway
- 1 work table with bottom shelf, sink and drawers
- 1 work table with bottom shelf and drawers
- 1 work counter w/sink and drawers
- 3 pass-thru refrigerators
- 3 pass-thru warming cabinets
- 1 reach-in refrigerator – mobile
- 3 trash cans
- 2 hand sinks
- 3 Crescor heated transport carts
- Metro Max Shelving – mobile
- Walk-in freezer

Truck, Satellite w/lift gate controls on truck

## CAFETERIA

### Goals

- to provide an area for assemblies or special programs especially when combined with the gymnasium
- to make meal eating time a pleasant and relaxing time for students
- to use the meal time as a time for fostering the social development of the student
- to provide additional space for PE classes
- to utilize the space to its maximum capabilities

### Planned Activities

- eating meals
- large group assemblies
- chorus and other musical performances
- stage productions
- community adult activities, especially public meetings
- alternate classrooms, especially Physical Education

### Participants

Up to 250 students to be seated simultaneously.

### Staff Required

See Kitchen section. Other staff to be assigned for supervision as required.

### Groupings

Cafeteria shall be designed to allow approximately 250 students, to be seated at the same time for dining. The Cafeteria shall be adjacent to the gymnasium, separated by a moveable wall, to allow for large group assemblies.

### Space Requirements

<u>Cafetorium</u>		<b>Net Sq. Ft.</b>
Dining area (250 @ 14 sq. ft. per student)	1	3,500
Stage	1	850
Chair Storage	1	300
Table Storage	1	200
Custodial Room	1	60
<b>Total Cafetorium</b>		<b>4,910</b>

### Design Requirements

- |                              |  |
|------------------------------|--|
| Relationships to Other Areas | <ul style="list-style-type: none"><li>• Convenient to instructional area</li><li>• The school Gymnasium shall be adjacent to the Dining Area of the cafetorium and separated from it by a movable partition. The stage</li></ul> |
|------------------------------|--|

could be located at the opposite end of the Dining Area from the movable partition or at the opposite end of the Gymnasium from the movable partition. If the stage is not located adjacent to the Gym, portable risers may need to be provided. The floor of the stage shall be 30" above the floor of the cafeteria or gym. This will allow an additional number of people to view activities on the stage by simply opening the partition and expanding the audience into the gymnasium.

- Directly accessible to kitchen serving areas
- Easily accessible to student restroom facilities
- Easily accessible to music room
- Easily accessible to outside activity area
- Directly accessible to outdoor entrance - especially bus unloading area

- Spatial/Aesthetics
- The stage and dining area shall be capable of being subdivided into instructional areas.
  - Stage area shall be accessible to the main floor and designed for conversion into a classroom with a hallway entrance.
  - The cafeteria should be located so that daily trash can be routed to the outdoor receptacles without passing through the kitchen area.
  - The dining area shall be light and bright to create a non-institutional environment.
  - The design shall allow for quick and easy clean-up to allow area to be easily used for other purposes.

- Heating, Ventilating, and Air Conditioning  
Plumbing
- Provide appropriate ventilation to meet ASHRAE guidelines.
  - Provide air-conditioned dining and stage areas.
  - Provide water closets as required by code for student bathrooms
  - Provide a sink alcove in hallway for student bathroom
  - Provide hot and cold-water source in Custodial Room; provide cold water drinking fountains in dining area, placed low enough and in the proper position for 6-10 years old students

- Acoustics
- The stage shall be acoustically isolated to allow activities which will not be hampered by activities in the main room or kitchen.
  - The dining area shall be acoustically treated to help with reduction of sound during meals but also to assist in sound projection during presentations.
  - Adequate sound system for stage productions or assembly activities.

- Visual/Lighting
- Special lighting shall be provided for the stage.
  - Adequate lighting shall be provided with capability for individual controls in all areas.
  - All lighting shall include dual-mode motion-sensor controls.
  - High bay fluorescent lighting for quick re-strike time to promote turning off lights
  - Emergency lighting shall be provided in the dining and stage areas.
  - Design to allow stage performances to be seen and heard from all

areas in the dining room.

- Design mounts and connections for four (4) wall mounted TV monitors to improve visibility for audience during presentations.

Communications  
and Utilities

- Sufficient duplex electrical outlets in Dining and Stage areas - flush with walls and floor
- Provide for public address system, closed circuit TV, two clocks, motorized projection screen

Storage

- Doors to storage rooms must be high and wide enough to accommodate chair trucks, cafeteria tables, and band risers.

Display

- Bulletin boards in dining and stage area.
- Provide areas for food service information and student work and well-being displays and posters.

Additional Notes

## CUSTODIAL OPERATIONS

### Goals

- to maintain a clean, healthful, and pleasant facility which is conducive to quality learning and teaching.
- to maintain the continued high-quality appearance and operation of a significant public investment.

### Planned Activities

- daily operation of the school facility
- daily and periodic maintenance of the school facility
- meetings and training sessions for updating of procedures

### Participants

### Staff Required

- 4-5 persons (person-years) for this school

### Space Requirements

<b><u>Custodial Operations</u></b>		<b>Net Sq. Ft.</b>
Custodial Office	1	175
Locker room/shower/bathroom, women	1	90
Locker room/shower/bathroom, men	1	90
Central Indoor Storage	1	300
Indoor Satellite Storage @ 50 sq. ft.	4	200
Outdoor storage	1	350
<b>Total Custodial Operations</b>		<b>1,205</b>

### Design Requirements

Relationships to Other Areas      Custodial spaces shall consist of custodial office, central indoor storage area, small locker room with adjoining shower and bathroom for men and for women and several small indoor satellite storage spaces conveniently located throughout the building.

Spatial/Aesthetics      • All spaces shall be ADA compliant.  
• Provide a conference table with seating for six in the custodial office.

Heating, Ventilating, and Air Conditioning      • Provide appropriate ventilation to meet ASHRAE guidelines, particularly in storage areas and the washer/dryer area.  
• All spaces except outdoor storage area shall have HVAC; outdoor storage shall be minimally heated and cooled to avoid temperature extremes.

Plumbing      • Provide bathroom and locker room area with adjoining shower for men and for women.

	<ul style="list-style-type: none"> <li>• Provide washer and dryer hookup in central indoor storage area for laundering of mop heads and rags.</li> <li>• Satellite storage areas to have hot and cold water, floor sink, drain, chemical dispenser with back-flow prevention, and waste/water drainage tanks.</li> </ul>
Acoustics	<ul style="list-style-type: none"> <li>• No specific requirements.</li> </ul>
Visual/Lighting	<ul style="list-style-type: none"> <li>• All lighting shall include dual-mode motion-sensor controls.</li> </ul>
Communications and Utilities	<ul style="list-style-type: none"> <li>• Custodial office will require Data, telephone, fax and video. Provide an FCPS networked computer.</li> <li>• Provide ample duplex outlets in office, storage rooms, and outdoor storage area.</li> <li>• Provide duplex outlets (outside mount) at HVAC penthouses.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Provide shelving and workspace in central indoor storage area.</li> <li>• Provide shelving and mop tacks in satellite storage areas.</li> <li>• Custodial office will require a lockable desk with desk chair, lockable file cabinet, bookcase, waste can, recycle can.</li> </ul>
Display	<ul style="list-style-type: none"> <li>• Provide bulletin board, tack board and whiteboard in custodial office.</li> </ul>
Additional Notes	<ul style="list-style-type: none"> <li>• Outside storage area to house outdoor equipment will be located within the building and have direct access to the fields. The outside storage area will have a 10' wide roll up door as well as a pedestrian door and 24" shelving units in the rear of the space. It would also include overhead lighting and electrical outlets will be provided.</li> </ul>

## MAINTENANCE

### Goals

To maintain and repair the facility and its systems and equipment to ensure their long life, economical operation, and maintain it in excellent condition that is conducive to quality learning and teaching, and protective of the significant public investment in it. To ensure the safety and comfort of the building occupants through both scheduled maintenance activities and unscheduled repairs and modifications.

### Planned Activities

- daily and periodic operation and maintenance of the facility and its systems and equipment
- meetings and training sessions for the staff to update maintenance procedures

### Participants

### Staff Required

- 1 person (one person-year) for this school

### Space Requirements

#### Maintenance

		Net Sq. Ft.
Maintenance Office	1	120
Maintenance storage area	1	400
<b>Total Maintenance</b>		<b>520</b>

### Design Requirements

Relationships to Other Areas	The maintenance storage/office shall be adjacent to the utility area and will house EMS systems, plans, equipment operating manuals, and maintenance system records and forms as outlined in the maintenance handbook.
Spatial/Aesthetics	<ul style="list-style-type: none"><li>• Architect will design the utility area to allow sufficient space for the building systems equipment and sufficient space around the equipment to allow convenient access to it for the proper repair and maintenance of it.</li></ul>
Heating, Ventilating, and Air Conditioning	<ul style="list-style-type: none"><li>• Provide appropriate ventilation to meet ASHRAE guidelines.</li></ul>
Plumbing	Provide office with HVAC
Acoustics	
Visual/Lighting	<ul style="list-style-type: none"><li>• All lighting shall include dual-mode motion-sensor controls.</li><li>• Utility area will have energy efficient ceiling and wall-mounted lighting to improve visibility around equipment.</li></ul>



Communications  
and Utilities

- Provide duplex outlets in office and utility area and outside mount duplex outlets at all HVAC penthouses and pads.
- Provide an EMS system terminal and printer in maintenance office.
- Provide data, telephone, fax and video in Maintenance Office. Provide an FCPS networked computer.

Storage

- Work room and storage area will provide areas for Area Maintenance staff to repair equipment and tools, store materials for other school maintenance.
- Provide lockable desk with chair, lockable file cabinet, bookcase, waste can and recycle can in Maintenance Office.

Display  
Additional Notes

- Provide bulletin board and whiteboard in Maintenance Office.
- Cooling tower, if applicable, shall have integral railings and catwalks.
  - Rooftop mechanical units elevated more than 24" from roof deck shall have integral ladders and catwalks.
  - Provide aluminum ladders to transit between roof sections when the roof elevations are separated by 24" or more, or where parapet walls are present.
  - Provide permanent means of ensuring OSHA-compliant fall protection for post-construction (ie, maintenance) inspection and maintenance of the roof surface, roof-mounted equipment and skylights.
  - Mechanical room shall have overhead doors or panels to allow for installation and removal of equipment without dismantling.
  - All mechanical equipment shall be placed to allow individual units to be removed without the removal of adjacent units.
  - Provide 2-3 parking spaces for Maintenance vehicles.

## GENERAL BUILDING DESIGN REQUIREMENTS

### A. REFERENCES

References. Design professionals are referred to the partial listing of resources below.

Maryland High Performance Green Building Program: The school shall be designed and constructed to meet requirements of the Maryland High Performance Green Building Program with the exception of obtaining an independent, third-party certification as an element of one of the proprietary rating systems described in the Program. The architect or engineer of record shall indicate in the construction documents, the selected high-performance rating system used for design and construction with which, the project is compliant. The LEA may obtain a Letter of Opinion from an Independent Third Party to be submitted as a compliance document in accordance with Appendix B of the Program..

Universal Access. The architect shall design the building with "universal access" pursuant to Title II of the Americans with Disabilities Act, either the Uniform Federal Accessibility Standards (UFAS) or the ADA Accessibility Guidelines (ADAAG) whichever is chosen to apply **and** the *Maryland Accessibility Code* (COMAR05.02.02) revised March 18, 2002. See Maryland Building Codes" links at the Maryland Department of Housing and Community Development (DHCD) web site, [www.dhcd.state.md.us](http://www.dhcd.state.md.us). Information on the design of building facilities for children, such as drinking fountains, sinks, water closets, is also found in ADAAG, as is information on newly constructed or altered play areas. Also refer to the *Handbook for Public Playground Safety*, published by the U.S. Consumer Product Safety Commission.

Architects and engineers shall comply with the *Administrative Procedures Guide* of the Maryland Public School Construction Program, dated 1994 and as subsequently amended, for all phases of design and contract review and approval, including life cycle and roof analysis.

The State of Maryland adopted the International Building Code on October 15, 2001, as an amendment to the Maryland Building Performance Standards (MBPS), and design professionals should contact Frederick County to determine whether any amendments have been adopted to account for local conditions.

Design professionals are referred to two publications of the Maryland Department of General Services: *Procedures for the Implementation of Life Cycle Cost Analysis and Energy Conservation*, and *DGS Statewide Roofing Policy*.

Design professionals are also referred to the Frederick County Public Schools *Standards for the Design of New and Renovated Facilities*. The latest copy can be obtained from the FCPS project manager.

**FCPS Standards for the Design of New and Renovated Facilities**

**(REVISED June 2020)**

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## **GENERAL RESPONSIBILITIES OF THE ARCHITECT/ENGINEER**

### **PRE-DESIGN:**

1. Architect shall obtain the Educational Specifications for the project and follow accordingly. Design is to conform with all current -MSDE regulations, state/local codes and all AHJ requirements.
  - a. Guidelines for Controlling Indoor Air Quality Problems Associated with kilns, copiers and welding in schools.
  - b. Carpet and Indoor Air Quality in Schools.
  - c. Science Laboratories and Indoor Air Quality in Schools.
  - d. Interior Painting and Indoor Air Quality in Schools.
  - e. Selecting HVAC Systems for Schools.
  - f. Maintaining Acceptable Controls and Indoor Air Quality in Schools.
  - g. HVAC System Automatic Controls and Indoor Air Quality in Schools.
  - h. Technology Education
  - i. Science Facilities
  - j. Library Media Programs
  - k. Standards for Telecommunications Distribution Systems
  - l. Conserving and Enhancing the Natural Environment
  - m. School Health Services
  - n. Fine Arts Programs
  - o. Family and Consumer Sciences
  - p. School Food and Nutrition Services
  - q. Maryland Standard for New and Re-Roofing Construction System Guarantee requirements
  - r. Physical Education Facilities Guidelines
  - s. Other design guidelines as put forth by the Maryland State Department of Education.
2. Indicate design sq. ft., budget, and A/E estimate on design meeting minutes.
3. Provide survey monuments at property corner.
4. A/E Team to collaborate/cooperate with FCPS commissioning agent during design, construction and commissioning of HVAC equipment.
5. A/E Team to perform design of traffic signals, as required and as a reimbursable expense to FCPS.
6. A/E Team to utilize State/National Standards for design of athletic fields.
7. Design Team to contact utility companies in advance of design to determine construction and clearance requirements.
8. Design services to include design of access roads and utilities to school sites.
9. A/E Team required to provide necessary documentation to appropriate authorities regarding installation of fuel storage tanks and preparation of SPCC Plan. Documentation to be sent to authorities via registered mail.
10. Perform water flow/pressure testing as required for proper design of building and site water requirements.

11. Architect to research and apply for energy initiatives/rebates, where applicable.
12. Frederick County now requires a permit for installation of all tanks (Water, Fuel, Gas, etc.).
13. Confirm City of Frederick requirements on trap primers.
14. A/E team to track educational specification throughout design via space analysis.

#### **SCHEMATIC DESIGN:**

1. Architect shall tabulate areas of rooms required by the Educational Specifications at each phase of design (schematic, design development and construction documents).
2. Design Team shall consider earlier substantial completion dates and project durations.
3. Indicate design sq. ft., budget, and A/E estimate on design meeting minutes.
4. A/E Team to collaborate/cooperate with FCPS commissioning agent during design, construction and commissioning of HVAC equipment.
5. Architect must coordinate design of playground equipment with FCPS pre-approved playground equipment contractors.
6. Provide color renderings of elevations at SD Phase.
7. Meet LEED silver certification requirements for all State funded projects.
8. Meet COMAR regulation requirements for emergency power generation.
9. Review all Maryland Emergency Management Agency (MEMA) guidelines for applicability.
10. Show access to Environment areas on SD plans.

#### **DESIGN DEVELOPMENT:**

1. Architect to provide to owner: plans and specifications in format specified by FCPS Project Manager as a reimbursable expense.
2. Architect shall tabulate areas of rooms required by the Educational Specification at each phase of design (schematic, design development and construction documents).
3. The design team shall forward data to utility companies as required to ensure timely connections (prior to the bidding phase).
4. Indicate design sq. ft., budget, and A/E estimate on design meeting minutes.
5. Perform chemical analysis of water hardness/treatment and potable water for all well-fed schools.
6. A/E Team to collaborate/cooperate with FCPS commissioning agent during design, construction and commissioning of HVAC equipment.
7. Provide sidewalk to FDC connection as required by Frederick County Fire Marshal.
8. Provide means of egress out of mechanical courtyards as required by Frederick County Fire Marshal.
9. Provide color rendering of elevations during DD Phase.
10. Design stub-out of underground utilities (data, telephone, fire alarm, power, etc.) for future portable classroom.
11. Obtain playground equipment layouts from Project Manager. Distribute playground equipment around school accessibility to appropriate grade levels and to distribute foot traffic.
12. Provide catwalks around roof-top mounted mechanical equipment where required.

13. Provide design to address OSHA Fall Protection requirements for applicable roofs and mechanical equipment.
14. Provide site utilization plan for addition/renovation projects to address project construction access, temporary parking, staging areas, use of playgrounds, athletic fields, student/pedestrian access, etc.
15. Provide construction phasing plan addressing sequence and timeframes for demolition, construction, renovation, etc.
16. Coordinate location and design of technology cabinets where applicable with FCPS Project Manager.
17. Meet LEED silver certification requirements for State funded projects.
18. Air Conditioning to be provided in kitchen and gymnasium.
19. Review ADA accessible routes during renovation projects and modify as required to achieve compliance.
20. Discuss installation of analog classroom clocks and telecommunications clock systems with FCPS Project Manager.
21. Address CO2 Detection for all renovation projects with the FCPS Project Manager.
22. A/E Team to provide draft specifications at end of DD phase.
23. Add Waterproof membrane to top of all masonry walls/columns to avoid water infiltration.
24. Gross to net square footage efficiency factor for new elementary schools shall meet 70% (1.4 net/gross sf).
25. Gross to net square footage efficiency factor for new secondary schools shall meet 65% (1.5 net/gross sf.)
26. Reduction of "Confined Spaces" as practically applicable.
27. Designate roof sections on roof plan for future replacement.

#### **CONSTRUCTION DOCUMENT:**

1. Architect shall develop "during construction" and final egress plans to be submitted to fire marshal for approval. Plans shall include temporary enclosures and utilities that may be required.
2. Architect to provide to owner: plans and specifications in format specified by FCPS Project Manager as a reimbursable expense.
3. Architect shall tabulate areas of rooms required by the Educational Specification at each phase of design (schematic, design development and construction documents).
4. The Frederick County Standards for Inclusion of Community-Use Gyms in Public Schools as set forth by the Frederick County Division of Public Works, Bureau of Parks and Recreation shall be included as appropriate. A copy is included with this document.
5. Provide base line data for inclusion in FCPS data base i.e., areas of paving, carpet, hard surface flooring, roof area, BTU ratings, boilers, chillers, etc. See Project Manager for further clarification.
6. Provide site plan indicating location of all easements and rights-of way.
7. Indicate design sq. ft., budget, and A/E estimate on design meeting minutes.
8. Meet Frederick County Fire Marshal requirements for building signs/address.

9. A/E Team to provide complete set of specifications for FCPS review at CD Phase.
10. Architect shall prepare color board during design phase and provide FCPS prior to bid.
11. A/E Team to collaborate/cooperate with FCPS commissioning agent during design, construction and commissioning of HVAC equipment.
12. Specifications must state that FCPS will begin moving furniture and equipment into building prior to substantial completion.
13. Provide doorbell at exterior kitchen doors on loading docks. Provide audible telephone alarm in Food Service.
14. FCPS will provide Asbestos Abatement and Industrial Hygiene Services for most projects. Verify with Project Manager.
15. Meet bid document submission requirements as per State funded projects.
16. Provide ramps to all loading docks.
17. Provide frost proof hydrants at athletic fields for irrigation purposes, if underground irrigation system is not required.
18. Specifications shall require that only pre-qualified roofing contractors, playground installers, data cabling contractors and hazmat abatement firms bid FCPS projects.
19. Require line item in contractor's schedule of values for close out documents, O/M Manuals, As-built Drawings, etc.
20. Provide utilities to support FCPS supplied chemical dispensing equipment in custodial closets. Obtain specifications from FCPS Project Manager.
21. FCPS will provide toilet tissue, paper towel and soap dispensers, to be installed by contractor.
22. Provide listing of all required warranties in specifications to facilitate closeout.
23. Meet LEED silver certification requirements for State funded projects.
24. Provide commercial washer and dryer for Physical Education area.
25. Include pipe sizes on riser diagrams and floor plans.
26. Provide list of informational prices for eligible/ineligible state items.
27. A/E to include a basic floor plan with room numbers only, with no other markings on all new buildings, renovations and additions.
28. CM reimbursable expense will contain line item for 3-D coordination drawings.

#### **CONSTRUCTION:**

1. A finish sample board shall be provided by the Architect and kept in the project trailer throughout the construction period.
2. A/E Team to collaborate/cooperate with FCPS commissioning agent during design, construction and commissioning of HVAC equipment.
3. Complete documentation required by AHJ for fuel storage tanks.
4. Provide conforming drawings in a format directed by owner as soon as possible after receiving bids to include all addenda items.
5. Mechanical Engineer to provide minimum one day training for FCPS Maintenance Department staff on the general operation of the HVAC and control system, after substantial completion of HVAC system.

6. Payment for control work will not be approved beyond 75% until commissioning is completed and accepted by Construction Manager, Design Team and Owner.

**CLOSEOUT:**

1. Architect shall generate from Contractor's as-built and field directives drawings two (2) copies of record as-built as well as one in electronic format and deliver to FCPS.
2. A/E Team to collaborate/cooperate with FCPS Commissioning agent during design, construction and commissioning of HVAC equipment.
3. Architect to provide written statement verifying that, to the best of their knowledge, the project was designed and constructed without the use of asbestos containing building materials.
4. O&M Manuals to be provided via (2) hard copies as well as electronic format to be turned over to FCPS at Substantial Completion.
5. Provide final Alta Survey of the entire site after completion of new construction, addition project or project that includes site work to reflect as-built conditions.
6. Radon Testing – The completed structure shall be tested for radon per EPA's Radon Measurement in Schools (latest edition). Remediation will be enacted in spaces with radon levels above the minimum acceptable level.

**DESIGN PREFERENCES:**

1. Design of enclosed courtyards should be avoided.
2. Include provision for future portable classrooms (e.g. electrical conduit, fire alarm, etc.). Identify future location on site plan and number of portables.
3. Assure that loading dock canopies clear roof of delivery trucks.
4. Provide standardized room numbering system (inside/outside) whereby architectural room numbers will match permanent room numbers in school. Stairwells and exterior doors to be numbered as well. Coordinate with Project Manager for specific requirements.
5. Avoid widespread use of curved walls/stairways.
6. Loading docks will be designed to accommodate 2 vehicles.
7. Provide non-operable windows in all occupied rooms; Check with PM regarding windows which allow emergency egress.
8. Avoid designing water piping in exterior walls.
9. Coordinate make/model of computer for EMS system with FCPS Tech Services Staff.
10. Provide details for sidewalks at entrances to minimize frost heaving.
11. FCPS prefers modular retaining walls where appropriate.
12. FCPS prefers light/pastel paint colors, minimizing number of colors in new school projects.
13. Provide terrazzo treads on main stairs only. Provide sealed concrete or alternative low maintenance finish on secondary stairs.



14. Hard surface flooring is preferred in most locations, please obtain standards list from PM and confirm locations.
15. Avoid placing underground utilities where future portable classrooms will be placed on site.
16. Design substantial borders around mulched areas. Avoid use of residential style borders.
17. Avoid open sink base cabinets.
18. Consider using the same mechanical control system in each Maintenance Cluster.
19. Paper towel dispensers to be standard in all restrooms. No electric hand dryers.
20. No floor receptacles on stage floors.
21. Do not include "Bubblers" in classroom sinks.
22. Utilize FCPS Standardized Building Automation System (BAS) and Control System. Obtain from FCPS Project Manager.
23. Separate bus loop from parent drip off loop and provide parking lot lighting in islands.
24. Coordinate utilities and ventilation required for Art Room Kilns and provide requirements for kilns in construction specifications. Kilns will be contractor purchased and contractor installed.
25. Avoid placing storm drain inlets near above ground fuel tanks.
26. Architect to designate "Shelter in Place" locations on plans.
27. Provide Staff restrooms on each floor of multiple story buildings.
28. Consider interior and exterior lighting schedule in BAS system. Motion sensors to comply with LEED.
29. Limit student access to roof.
30. Civil Engineer to discuss maintenance of Storm Water/Bio-Retention areas with FCPS staff.
31. Basis of design for scoreboards is Nevco.
32. Acoustical Cloud ceilings shall not be installed in corridor applications.
33. In high school weight rooms ensure protection on wall mirrors.
34. Civil to verify invert elevations in the field.
35. Sod around perimeter of building as standard.
36. Any security vestibule project could include interior modifications to improve the visual control and /or control access into the schools at the Main Entrance. As a general rule, please consider the following as potential scopes of work:
  - a. Minor Interior Demolition (Door Cut-Ins)
  - b. Providing new Aluminum Storefront Systems and Hardware.
  - c. Extending Interior Finishes
  - d. Minor Electrical Work as required.
37. Please reference FCPS specification for metal roof refinishing section 099654, shown in the appendices letter B, number 3.
38. Ceilings are to be standard square edge 2' X 2' or 2' X 4' grid ceilings, where appropriate.
39. Ceramic tile to be standard sizes and colors
40. Due to the continual changes in technology, telecommunications system requirements are to be developed with FCPS staff as appropriate for each project.
41. Vegetative roofs are to be avoided on all new/renovation and roof replacement projects.
42. No pervious pavement will be included in the designs of new/renovated facilities.

## **OUTLINE SPECIFICATIONS:**

The intent of this document is to establish guidelines for certain products listed herein to be used in construction projects for Frederick County Public Schools. These guidelines are not intended to mandate the use of specific products, but establish the level of expected quality, performance and life expectancy when products are specified. When requirements for a specific product are not offered, FCPS would rely on the Architect's professional expertise to write prudent specifications.

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### **DIVISION 01 – GENERAL REQUIREMENTS**

#### **010000 GENERAL REQUIREMENTS**

- A. Contractor, Subcontractors and all employees shall conform to all FCPS policies while on FCPS property, including but not limited to use of tobacco products, vaping, controlled substances and possession of weapons.
- B. Provide specifications for state job sign including the names of the Board of County Commissioners and dedication plaques, meeting local and state requirements.
- C. Prime Contractors must have supervision on site when sub-contractors are working.
- D. Contractors to provide minimum 2-3 week notice when scheduling equipment demonstrations.
- E. Standard warranty period to be 2 years beginning at completion of commissioning and receipt of O&M Manuals.

#### 011310 PROJECT MANAGEMENT AND COORDINATION

- A. Architect/Construction Manager (see contract requirements) shall conduct progress meetings every two weeks (or otherwise specified by FCPS) and distribute minutes to FCPS and Contractor(s) within 3 business days of the meeting.
- B. In addition to progress meetings, other meetings with FCPS may be held periodically throughout the construction phase as needed.
- C. Project records and documents to be managed with Project Management Software. Collaborate effort of Construction Manager, A/E and FCPS.

#### 012000 PAYMENT PROCEDURES

- A. Submit requisitions on Application and Certificate for Payment and Continuation Sheet(s) (AIA Documents G702 & G703)
- B. Contractor is advised to review rough draft of requisitions with Owner's agent(s) prior to submitting for approval.
- C. Requisitions shall be dated the last day of the month and cover the previous period. Contractor shall obtain all required signatures and deliver to the project manager not later than the 10<sup>th</sup> day of the following month.
- D. Copies of all required permits shall be submitted with the first requisition.

#### 012300 ALTERNATES

- A. Add Alternates to be determined by FCPS Project Manager. Include the following list as a guideline of Add Alternates where applicable:
  - 1. Window Blinds
  - 2. Stage Curtains
  - 3. Ceramic Tile corridor walls in lieu of Paint
  - 4. Wood flooring in gym in lieu of Resilient (if applicable)
  - 5. Terrazzo flooring in corridors
  - 6. Appliances
  - 7. Gym Equipment
  - 8. Kilns
  - 9. Greenhouses (if applicable)
  - 10. Acoustical Wall Panels
  - 11. Irrigation piping to athletic field
  - 12. Artificial Turf

#### 013200 CONSTRUCTION PROGRESS DOCUMENTATION

- A. Provide construction progress documentation as required by project manager.

#### 013300 SUBMITTAL PROCEDURES

- A. Submit copies of submittals electronically using FCPS approved document management software.
- B. Processing of submittals and shop drawings will be coordinated between Owner, Design Team and Construction Manager.
- C. Samples of materials shall be provided at the request of FCPS.

#### 014000 QUALITY REQUIREMENTS

- A. Contractor shall provide quality control coordination
  - 1. Conduct pre-installation conferences as required by other sections of the Project Manual.
- B. FCPS will contract third party testing and inspection services for soil, concrete, structural steel and fire proofing/fire blocking and other services deemed necessary by FCPS.
  - 1. Contractor shall notify Construction Manager and inspection agency of when Contractor is ready for inspection.
  - 2. Contractor shall pay for re-inspection services resulting from Contractor error or omission.

#### 015000 TEMPORARY FACILITIES AND CONTROLS

- A. When a facility is to be occupied during construction, temporary fencing (6'-0" high minimum) shall be installed and maintained around construction and storage areas throughout the entire construction duration.
- B. Temporary office facilities with utilities shall be provided for FCPS staff as required. Obtain requirements from the Project Manager.
- C. Provide temporary toilet facilities.
- D. Provide temporary water as required by NFPS and coordinate with the authority having jurisdiction.
- E. Coordinate the location of temporary trailers with FCPS.
- F. Provide temporary site access and circulation as required.
- G. Provide building address sign visible from the street throughout the duration of construction.
- H. Provide temporary parking, bus loops, maintain vehicular access and athletic facilities (including other amenities) as required to allow the continued use of the building and site.
- I. Coordinate requirements for temporary utilities, heat and cooling, and dust control with the Project Manager.
- J. Construction security services will be provided by FCPS. Coordinate with Project Manager.

#### 017800 CLOSEOUT PROCEDURES

- A. Contractor shall deliver a finished building cleaned by a professional cleaning agency approved by FCPS.
- B. Submit project closeout forms as required by FCPS.
  - 1. Certificate of Substantial Completion (AIA G704)

2. Contractor's Affidavit of Payment of Debts and Claims (AIA G706)
3. Contractor's Affidavit of Release of Liens (AIA G706A)
4. Consent of Surety to Final Payment (AIA G707)
5. Use and Occupancy Permit as issued by the authority having jurisdiction.
6. Evident of closeout of all permits mentioned in section 01290.
7. See FCPS Project Manager for other required close-out documents.

## **DIVISION 2 – EXISTING CONDITIONS**

### **024113 SELECTIVE DEMOLITION**

- A. FCPS reserves the right to claim all salvaged materials.
- B. All appropriate refrigerant recovery and disposal procedures shall be followed. Copies of reports shall be delivered to the Project Manager.
- C. Occupied portions of buildings shall be permitted to perform daily operations during selective demolition activities.
- D. All systems (new and existing) shall be maintained that support occupied portions of the buildings during selective demolition activities.
- E. Building components wrongly demolished shall be returned to original condition at no additional cost to FCPS.
- C. Complete catalog data for all equipment to be included in O&M Manuals.
- D. Any additional items noted in Owner/Architect or Owner/CM Agreements.

### **024114 CUTTING AND PATCHING**

- A. In a project where a Construction Manager is employed, the CM shall coordinate cutting and patching requirements. Contractor will perform cutting and patching.

## **DIVISION 03 – CONCRETE**

### **033000 CAST-IN-PLACE CONCRETE**

- A. Provide concrete finish appropriate to specified floor finish.
- B. Provide air-entrained concrete for all exterior applications.
- C. Minimum interior slab thickness for 5" per Maryland Department of General Services requirements.
- D. Level tolerances for concrete slabs (non-cumulative) shall be as follows:
  1. 1/8" 10 feet for critical areas where required for specified floor finish.
  2. 1/4" 10 feet for all other slabs.
- E. Measure for F(F) and F(L) tolerances for floor in accordance with ASTM E 1155, within 48 hours after slab installation. Finish concrete to achieve the following tolerances.
  1. Exposed to View and Foot Traffic: Ff20 and F1 15.
  2. Slabs to be covered with Thin Floor Coverings (i.e., resilient flooring): Specified overall value of flatness, F(F) 25 with minimum local values of flatness, F(F) 24; and of levelness, F(L) 17.
  3. Slabs to be covered with carpet and other slabs: Specified overall values of flatness, F(F) 25; and of levelness, F(L) 20, with minimum local values of flatness, F(F) 20; with minimum values to flatness, F(F) 17; and of levelness, F(L) 15.

4. Slabs to be covered with Wood Flooring, Resinous Flooring and Terrazzo; Specified overall values of flatness, F(F) 45 and of levelness, F(L) 35; with minimum local values of flatness, F(F) 30 and of levelness, F(L) 24.
5. Slabs for Polished Concrete Floor Finish:
  - a. Bull-floated, smooth, pan-finish floor from edge to edge, with no rough areas.
  - b. Floor Flatness number (FF); 50 (preferred); 45 (minimum).
  - c. Floor levelness number (FL); 35 (preferred); 30 (minimum).
6. Provide control joint layout screed requirements for polished concrete as appropriate.
7. FCPS is open to use of Fiber Reinforced Concrete in certain applications. Floor finishes must be confirmed by architect.

#### **DIVISION 04 – MASONRY**

##### **042000 UNIT MASONRY**

- A. Sound Block shall be incorporated into gymnasiums and cafeteria where appropriate.
- B. Provide the following flashing for masonry walls:
  1. Utilize stainless steel thru-wall flashing similar to “Mighty Flashing”.
  2. Stainless steel or copper sheet for counter flashing.
  3. Base flashing for roof/wall connections is covered in Division 7.
  4. EPDM thru-wall flashing not allowed.
  5. Do not use rope weeps.
  6. Ensure all materials specified in masonry system are compatible.
- C. Reglet’s are not permitted. Provide through wall flashing in masonry assemblies.
- D. Stipulate NCMA low fit grout method only.
- E. All penetrations through masonry walls shall be flashed per NCMA guidelines. Architect shall clearly detail all conditions on the Drawings. FCPS inspector will monitor proper installation.
- F. Mortar nets should be considered to keep weeps clear.
- G. Provide 1” minimum clear airspace for cavity walls.
- H. Special consideration should be given to mounting heavy equipment (e.g. basketball backstops, transformers, large mirrors) to masonry walls. Expansion anchors should be avoided. Through –wall bolts with washers through grouted masonry should be detailed.
- I. Brick should be specified that has a low rate of absorption.
- J. Final masonry selections should be reviewed with FCPS prior to specification.
- K. Masonry control joints should be adequately detailed in the Construction Documents.
- L. The use of mortar admixture will be considered.
- M. Standard masonry shapes should be used where possible.

##### **042100 CLAY MASONRY RESTORATION AND CLEANING**

- A. Consideration should be given to the condition of existing masonry during renovation projects.

#### **DIVISION 05 – METALS**

#### 051200 STRUCTURAL STEEL

- A. Column grids should be as uniform as possible.
- B. The quantity of columns should be kept to a minimum, consistent w/economical spans.
- C. Slope roof structure to obtain minimum slope of ¼" per foot.

#### 052100 STEEL JOIST

- A. Slope roof structure to obtain minimum slope of ¼" per foot.
- B. Coordinate spacing, web members and bridging to facilitate the installation of specific MEP items through and/or between joists where required.

#### 053100 Steel Decks

- A. Steel deck shall be galvanized, 20 gauge minimum.
- B. Edges of metal deck shall be detailed and supported around openings.
- C. Perforated, acoustical metal deck should be considered to control sound, where exposed.

#### 054000 COLD-FORMED METAL FRAMING

- A. Interior, non-load bearing, light gauge metal framing shall be 22 gauge minimum.
- B. Exterior or load bearing, light gauge metal framing shall be 18 gauge minimum.

#### 055000 METAL FABRICATIONS

- A. Exposed, exterior lintels shall be hot-dipped galvanized.
- B. Provide one of the following non-slip, tread finishes for interior conc.-filled, metal pan-formed stairs.
  - 1. Pre-cast terrazzo
  - 2. Cut stone (e.g. slate or granite)
  - 3. Safety rib stair treads (alum. w/vinyl inserts)
  - 4. Line-X with appropriate sealer
  - 5. Broom finished stained concrete
  - 6. Other types of resilient flooring as approved by Owner.

#### 055200 GRATINGS

- A. Fiberglass grating should be considered in corrosive environments.

#### 057000 ORNAMENTAL HANDRAILS AND RAILINGS

- A. Corrosion-resilient railing assemblies should be considered in corrosive environments.

### **DIVISION 06 – WOOD AND PLASTICS AND COMPOSITES**

#### 061000 ROUGH CARPENTRY

- A. Coordinate requirements for fire-retardant treated wood with local codes.

### **DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

#### 071300 SHEET WATERPROOFING

- A. Provide waterproofing, protection/drain board and drainage for all retaining walls.

#### 072100 THERMAL INSULATION

- A. Placement of batt insulation directly over suspended ceilings should be avoided.
- B. Review of soffit & column insulation details with FCPS Project Manager.

#### 073113 ASPHALT SHINGLES

- A. Provide 40 year shingles with 30# asphalt felt (minimum) or waterproof membrane.

- B. Provide vented sheathing board as recommended by manufacturer where shingles are applied over stressed-skin or heavy wood decking.

#### 074113 ROOF PANEL

- A. Provide 20 year NDL water-tightness and finish warranty.
- B. Provide snow retention system that does not compromise warranty.
- C. Finish shall be "Kynar 500", or equal.
- D. This system preferred for non-low slope roofs.
- E. Architect shall review roofing system with Project Manager prior to final selection of metal roofing system.
- F. Appropriate NRCA roofing details shall be incorporated into the documents.

#### 074213 WALL PANELS

- A. Provide 20 year finish warranty
- B. Finish shall be "Kynar 500" or equal.

#### 075100 SINGLE PLY ROOFING

- A. Provide 25 year NDL water tightness warranty.
- B. Single-ply roof shall be TPO, PVC or approved by FCPS and carry a 25-year NDL total system warranty.
- C. Include FCPS standard specification for single-ply roofs into the documents. Obtain latest version from the Project Manager.
- D. Appropriate NRCA roofing details shall be incorporated into the documents.
- E. Single-ply to be as light in color as possible to reflect heat.
- F. Only pre-qualified roofers are able to bid FCPS projects. Verify pre-qualified roofers with FCPS Project Manager.
- G. Include the following specifications in the design:
  - a. CONTRACTOR WARRANTY PERIOD: Two years from the date of Substantial Completion.
  - b. BASE FLASHING SHEET MATERIALS
  - c. TPO Field Membrane Sheets:
    - a. Flexible thermoplastic polyolefin roofing membrane with polyester weft-inserted reinforcement.
    - b. Exceeds the performance requirement of ASTM D 6878.
    - c. Surface Color: White or Gray (exposure) (gray underside).
    - d. Thickness: 60 mil
    - e. Approved equal by Owner.

#### 076200 SHEET METAL FLASHING AND TRIM

- A. Downspouts shall discharge directly into storm sewer. Rain water shall not be directed to ground adjacent to buildings. Downspout to storm sewer pipe connections shall be standard rubber/plastic and removable.
- B. Seal laps in flashing. Provide details for steps and end treatments of flashing.
- C. Finish shall be "Kynar 500", or equal (if color required).

#### 077200 ROOF ACCESSORIES



- A. Provide access to all roof areas via door and fixed ladder or stair. **Avoid the use of roof hatches.** Roof hatches, if provided, to have translucent acrylic dome.
- B. Provide access ladders as appropriate to address differences in roof elevations.
- C. Avoid ladders or any access from the ground onto the roof.

#### 078100 APPLIED FIREPROOFING

- A. Use of spray-on fireproofing should be minimized.

#### 078400 FIRESTOPPING

- A. Meet certification requirements for sealing of penetrations as per UL/fire marshal requirements.
- B. Third party inspections shall be provided as directed by FCPS for compliance with specific listed assemblies.
- C. Installers shall be certified system installers.

#### 079005 JOINT SEALERS

- A. Exposed construction joints shall be caulked

### **DIVISION 08 – OPENINGS**

#### 081113 HOLLOW METAL DOORS & FRAMES (Interior Applications Only)

- A. Provide reinforcement in steel door frames for hardware installation.
- B. Throats of steel frames to be grouted or in contact with masonry shall be coated with asphalt emulsion.
- C. Steel doors shall be fabricated with closed top and bottom edges, flush as an integral part of the door construction or by addition of steel channels with channel webs placed even with top and bottom edges.
- D. Stile and rail type steel doors are not permitted.
- E. Removable mullions are specified in section 08710.

#### 081416 FLUSH WOOD DOORS

- A. Wood doors must be solid core. Hollow core doors will not be accepted.
- B. Quality Standards: Comply with NWWDA I.S. 1-A, "Architectural Wood Flush Doors." And AWI's "Architectural Woodwork Quality Standards Illustrated."
- C. Specify premium-grade doors and veneers uniform in color (e.g. "select white" or "select red/brown").

#### 083100 ACCESS DOORS AND PANELS

- A. Specify sized appropriate for required access for maintenance. Coordinate with Divisions 15 and 16.

#### 083323 OVERHEAD COILING DOORS

- A. Factory-finished aluminum preferred.

#### 083510 FOLDING DOORS

- A. Use of folding (bi-fold) doors will not be permitted.

#### 083613 SECTIONAL OVERHEAD DOORS

- A. Use of wood sectional doors will not be permitted.
- B. Provide motorized operators for all sectional overhead doors.

#### 084313 ALUMINUM FRAMED STOREFRONTS

- A. Finish shall be anodized or "Kynar 500", or equal.
- B. Refer to section 08710 for hardware requirements.
- C. Frames and frame anchorage shall be appropriate to support heavy-duty doors.
- D. Provide a twenty-year finish warranty.
- E. Provide door thresholds and sweeps that minimize entry of vermin and water.

#### 085200 ALUMINUM WINDOWS

- A. Finish shall be anodized of "Kynar 500", or equal.
- B. Provide automatic opening windows/shades for clearstories or windows above normal reach.
- C. Provide screens for all windows.
- D. Provide a twenty-year finish warranty.
- E. Provide heavy –commercial grade windows.
- F. Provide locks on operable windows.
- G. Fixed windows preferred, limit amount of operable windows per classroom.

#### 086300 METAL-FRAMED SKYLIGHTS

- A. Minimize use of skylights. Clearstory windows should be considered where skylights are desired.

#### 087100 DOOR HARDWARE

- A. Provide through-bolted attachment of closers to mineral core fire rated doors.
- B. Provide steel back plates for closers.
- C. Provide through-bolted attachment of panic devices to wood doors.
- D. Locksets shall be Best "93K" extra-heavy-duty with 7-pin "Best" cylinders.
- E. Keying shall match FCPS standard.
- F. Provide continuous door hinges at exterior, cross-corridor and fire-rated doors and doors over 3'-0"W or 7'-0"H.
- G. Provide butt hinges for other doors.
- H. Exit devices shall be Corbin-Russwin 5200 series, with square bolt and 900 series trim, or approved equal. Finish shall be US32D.
- I. Surface door closers shall be Corbin-Russwin DC2200, A11 or A12, or approved equal.
- J. Pulls and plates shall be stainless steel.
- K. Hardware templates shall be submitted with O&M Manuals.
- L. Provide wall stops where possible. Provide floor stops at other locations.
- M. Provide weather stripping, including floor sweeps for all exterior doors.
- N. Include applicable provisions of FCPS Finish Hardware Master Specification in the Project Manual. Obtain latest version from the Project Manager.

### **DIVISION 9 – FINISHES**

#### 092000 TYPICAL FINISH SCHEDULE

Item:	Base Bid:	Add Alternate:
Classroom Floor	TBD by FCPS PM	

Classroom Base	4" Vinyl/Rubber Cove	
Classroom Walls	Latex Paint	
Classroom Ceilings	Square Edge Acoustical Panels	
Administration Floor	TBD by FCPS PM	
Administration Base	4" Vinyl/Rubber Cover	
Administration Walls	Latex Paint	
Administration Ceiling	Square Edge Acoustical Panels	
Media Floor	TBD by FCPS PM	
Media Base	4" Vinyl/Rubber Cove	
Media Walls	Latex Paint	
Media Ceiling	Square Edge W/Drywall	Tegular W/Drywall
Gym Floor	TBD by FCPS PM	Wood
Gym Base	4" Vinyl/Rubber Cove	Vented Wood
Gym Walls	Latex Paint	
Gym Ceiling	Painted Acoustical Deck	
Cafeteria Floor	TBD by FCPS PM	Resinous Fluid Applied
Cafeteria Base	4" Vinyl/Rubber Cove	
Cafeteria Walls	Latex Paint	Ceramic Tile
Cafeteria Ceiling	Square Edge W/Drywall	Tegular Acoustic. Panels
Computer Lab Floor	TBD by FCPS PM	
Computer Lab Base	4" Vinyl/Rubber Cove	
Computer Lab Walls	Latex Paint	
Computer Lab Ceiling	Square Edge Acoustical Panels	
Computer Lab MDF & IDF Closets	Sealed Concrete/Square Edge Acoustic Panels	
Music/Band Floor	TBD by FCPS PM	
Music/Band Base	4" Vinyl/Rubber Cove	
Music/Band Walls	Latex Paint	
Music/Band Ceiling	Square Edge Acoustical Panels	
Corridor Floor	TBD by FCPS PM	Rubber
Corridor Base	4" Vinyl/Rubber Cove	Terrazzo Base
Corridor Walls	Latex & Alkyd Paint	Ceramic Tile
Corridor Ceiling	Square Edge Acoustical Panels	Tegular Acoustic. Panels
Main Stairways	TBD by FCPS PM	
Toilet Floor	TBD by FCPS PM	Resinous Fluid Applied

Toilet Base	4" Vinyl/Rubber Cove	Ceramic Base
Toilet Walls	Latex & Alkyd Paint	Ceramic Tile
Toilet Ceiling	Painted Drywall	
Secondary Stairways	TBD by FCPS PM	
Mech./Elec. Ceilings	No ceilings unless required by code	

#### 092100 PLASTER

- A. Plaster use shall be limited and require approval of FCPS.
- B. Smooth (non-abrasive) finishes are preferred.
- C. Control joints shall be indicated in the Contract Documents.

#### 092116 GYPSUM BOARD ASSEMBLIES

- A. Provide abuse-resistant drywall in high traffic areas.
- B. Provide moisture-resistant drywall where required.
- C. Provide minimum 22 ga. Metal studs @ 16 o.c.
- D. Provide solid blocking between studs as required for supporting construction (e.g. for cabinets, visual display boards, etc.).
- E. Level 5 Finish not required.
- F. Provide Acrovyn corner protection as required.

#### 093000 TILING

- A. Additional materials (1%) to be furnished to FCPS shall be of same lot and color number as was furnished for project.
- B. Limit shapes and colors to manufacturer's standards.
- C. Schluter strip to be used at exposed tile corners.
- D. Provide ceramic in all restrooms, floors and walls.
- E. Provide ceramic in corridors or as add alternate.

#### 095100 ACOUSTICAL PANEL CEILINGS

- A. Contractors to provide FCPS with 1% of ceiling tile and grid to attic stock (per the specifications) of the same lot and color as installed during the project.
- B. The primary ceiling tile for all areas shall be a 24"x48"x5/8" square edge lay-in fine fissured ceiling tile with Bio guard and Humiguard per Armstrong #1729 or USG Equal.
- C. An alternate ceiling tile may be considered at entrance areas, Media Centers and adjacent tile shall be 24"x24"x5/8" square edge lay-in fine fissured ceiling tile with Bio guard and Humiguard per Armstrong #1728 or USG equal.
- D. All ceiling grid shall be 15/16" intermediate duty white in color as per Chicago Metallic 200 Series or Armstrong equal.
- E. All areas exposed to moisture shall receive vinyl-faced gypsum panels. (Vinyl Rock)

#### 096429 WOOD FLOORING

- A. Utilize FCPS standard gymnasium line layouts. Obtain latest design from the Project Manager.
- B. No gym floor logos at elementary schools.
- C. Flooring system options should be discussed with the Project Manager.

- D. Provide #2 and better 1 ½" wide maple with clear oil finish for gym floors where required- Robbins Air Channel Star or equal.
- E. Discuss use of wood flooring on stage floors with FCPS Project Manager.
- F. Provide oil base finish for wood floors.
- G. Coordinate threshold requirements with door hardware specifications.

#### 096500 RESILIENT FLOORING

##### 1. Sheet Flooring

- A. Additional materials (1%) to be furnished to FCPS shall be of same lot and color number as was furnished for the project.
- B. Floor finish shall be furnished by FCPS and applied by the Contactor. Contractor to apply 5 coats under the supervision of FCPS. Obtain application requirements from the Project Manager.
- C. Provide flat substrate for VCT flooring to meet appropriate F (F) and F (L) requirements.
- D. Provide control joint inserts for VCT that correspond with concrete slab joints (e.g. pre-compressed bitumen/acrylic impregnated sealing tape).
- E. See FCPS Project Manager for list of preferred floor finishes.
- F. Use of rubber stair treads should be avoided.
- G. See FCPS Project Manager for list of preferred floor finishes.
- H. Provide rubber cover base in lieu of vinyl.
- I. Provide "walk-off" mats at entrance.

##### 2. Hybrid Resilient Tile Flooring

- A. Variable Cushion Tufted Textile

#### 096623 TERRAZZO

- A. Corridor floors shall be poured in place 3/8" thick minimum epoxy terrazzo (add alternate).

#### 098413 FIXED SOUND ABSORPTIVE PANELS

- A. Acoustical panels should be placed per recommendation of the manufacturer of an acoustics engineer.

#### 099000 PAINTING AND COATING

- A. Insert the following paint schedule:
  - 1. Concrete Masonry:
    - 1<sup>st</sup> Coat – Latex Block Filler
    - 2<sup>nd</sup> & 3<sup>rd</sup> Coat – Acrylic Latex Eggshell
  - 2. Drywall & Plaster:
    - 1<sup>st</sup> Coat – Latex Primer
    - 2<sup>nd</sup> & 3<sup>rd</sup> Coat – Acrylic Latex Eggshell
  - 3. Interior Ferrous Metal:
    - 1<sup>st</sup> Coat – Alkyd Primer
    - 2<sup>nd</sup> & 3<sup>rd</sup> Coat – Alkyd Semi-Gloss
  - 4. Exterior Ferrous and Galvanized Metal:
    - High Performance Coating (See Section 09960)
  - 5. Clear Wood Finish:
    - 1<sup>st</sup> Coat – Stain/Sealer

2<sup>nd</sup> & 3<sup>rd</sup> Coat – Polyurethane Finish

- B. Consider polymyx paint in high traffic areas.
- C. Paint piping in accordance with ANSI color code requirements.
- D. Limit number of colors painted in schools.
- E. Additional wall covering materials (1%) to be furnished to FCPS shall be of same lot and color number as was furnished for project.

099600 HIGH-PERFORMANCE COATINGS

- A. Provide high-performance coatings for all exterior steel and galvanized steel.

**DIVISION 10 – SPECIALTIES**

101101 VISUAL DISPLAY BOARDS

- A. Provide 48”H nominal marker boards when possible.
- B. Visual display boards shall be mounted on aluminum standards to allow height adjustments.
- C. If marker boards are required in gymnasium, omit or provide recessed tray.
- D. Specify white market boards for visual display boards unless otherwise directed.
- E. Provide sliding, by-passing marker boards for science labs.
- F. Coordinate installation of utilities and space to accommodate FCPS provided electronic interactive boards.
- G. See FCPS Project Manager for installation of digital display cases.

102113 PLASTIC TOILET COMPARTMENTS

- A. Toilet compartments shall be stainless steel, phenolic resin or other approved, vandal-resistant material.
- B. Wall brackets shall be full height and all hardware shall be institutional grade with piano hinges and continuous wall cleats/brackets.

105100 LOCKERS

- A. Coordinate sized and configuration with FCPS. Provide lockers appropriate for the function served (e.g. staff, student, and team lockers).
- B. Provide lockers to receive padlocks furnished by FCPS.

104400 FIRE-PROTECTION SPECIALTIES

- A. Fire extinguisher cabinets shall be recessed or semi-recessed.
- B. Provide Lexan or other non-breakable vision panels.
- C. Fire extinguishers shall be included in the Contract per state requirement.
- D. Request specifics on fire extinguisher cabinets and fire alarm pulls/covers from FCPS Project Manager.

106510 OPERABLE PANEL PARTITIONS

- A. Provide folding partitions on stage for future instructional use.
- B. Must require key to operate.
- C. Finished surfaces shall be hard, vandal resistant.

102800 TOILET AND BATH ACCESSORIES

- A. Specify institutional hardware, full length hinges, wall brackets, etc.

- B. Contractor to install owner provided soap dispensers and paper towel dispensers. FCPS to provide and install toilet paper dispensers. Obtain latest specifications from FCPS Project Manager. A/E to coordinate design.
- C. Provide paper towel dispenser for each classroom with a sink.
- D. Obtain list of Owner furnished/standard toilet accessories from Project Manager.
- E. Coordinate location of toilet paper dispensers in toilet stall to avoid door.
- F. Coordinate locations of toilet paper dispensers with local inspectors.
- G. Paper towel dispensers to be standard in all restrooms. Electric hand dryers are only to be installed in limited circumstances (locker rooms).
- H. Contractor to furnish and install all toilet paper, soap, and paper towel/sanitary napkin dispensers per FCPS recommended manufacturers.

## **DIVISION 11 – EQUIPMENT**

### **111313 LOADING DOCK EQUIPMENT**

- A. Provide 18" dock height unless otherwise specified.
- B. Provide steel edge angle/channel for protection.
- C. Provide dock bumpers.
- D. Docks should be sized to accommodate loading equipment (e.g. pallet jack) and trash removal.

### **114000 FOOD SERVICE EQUIPMENT**

- A. Automated accountability (cash register) system shall be connected to the office of the food service manager for monitoring purposes.
- B. Provide floor drains/sink for all drainable equipment. Provide sump pumps where required.
- C. Locate equipment to maintain sight lines from prep areas to serving line.
- D. Provide water conditioning systems for water heating equipment if applicable.
- E. Provide automatic utility shut-off connected to fire suppression system as required.
- F. Obtain list of required food service equipment from Project Manager.
- G. Kitchen Steamers
  - 1. Install a remote shut-off switch (not within easy reach of students).
  - 2. Install electrical shut-off to provide positive de-energizing during lock-out/tag-out
    - a. Lockable disconnect, if hard wired
    - b. Lockable lock-out/tag-out cover, if plug-in
- H. Kitchen walk-in boxes to include door latch to accommodate Best pad lock. (Lock to be provided by Owner).

### **114510 RESIDENTIAL APPLIANCES**

- A. Coordinate utility connections for Owner-furnished appliances.
- B. Provide fire suppression system for all ranges (including residential) as required by the Frederick County Fire Marshal's Office.
- C. Coordinate power requirements for all small kitchen appliances.
- D. Provide residential washer and dryer in Custodial and Food Service Areas.

### **115000 MISCELLANEOUS SCHOOL EQUIPMENT**

- A. Provide heavy-duty, fixed metal shelving units in storage rooms where applicable.

- B. Wall-mounted basketball backstops shall be through-bolted, into masonry with steel back plates concealed in wall cavity or secured via solid grout and masonry.
- C. Provide bike racks.
- D. Utilize FCPS playground specification. Obtain latest copy from Project Manager.
- E. Provide motorized gym divider curtains.
- F. Coordinate requirements for inserts for gym floors.
- G. Install safety straps on basketball backboards.
- H. Provide Teacher mailboxes in Administrative Area. Provide additional mailboxes when adding capacity to an existing building.

#### 115213 PROJECTION SCREENS

- A. Provide solid blocking (fire-retardant-treated where required) for mounting of projection screens.
- B. Projection screens to be 72" high x 96" wide for general purpose classrooms.
- C. Coordinate location of projection screens with fire alarm devices, visual display boards, lights, etc.
- D. Provide projection screens at locations as directed by design team.

#### 116100 THEATRICAL EQUIPMENT AND SYSTEMS

- A. Stage curtains shall carry a U.L. label and meet required NFPA guidelines for the specific school type they are being installed for. (*Request FCPS stage curtain specs from Project Manager*)

### **DIVISION 12 – FURNISHINGS**

#### 122400 WINDOW/DOOR SHADES

- A. Do not specify blinds for doors.
- B. Provide motorized operation for blinds out of reach.

#### 123450 MANUFACTURED CASEWORK

- A. Provide epoxy resin countertops and sinks for science labs.
- B. Wall cabinets shall be 15" deep minimum.
- C. Provide wire trough and grommets for computer stations.
- D. Coordinate locking requirements with FCPS.
- E. Provide teacher's wardrobe for each classroom.
- F. Coordinate power and data requirements with all casework.
- G. Media center book stacks to be provided on casters.
- H. Provide plastic laminate classroom/office countertops for casework. Add alternate for solid surface countertops.
- I. Specify plywood substrate with waterproof glue on plastic laminate countertops.
- J. Provide means of ventilation behind casework on exterior walls.

#### 124813 FLOOR MATS AND FRAMES

- A. Provide removable floor mats at entrance doors u.n.o.

#### 126100 INTERIOR FIXED AUDIENCE SEATING

- A. Provide aisle egress lighting in auditoriums as required.
- B. Coordinate requirements for tablet arms at fixed seating with FCPS.



- C. Provide hard-backed auditorium seating.

#### 126613 TELESCOPING STANDS

- A. Coordinate location of gym equipment.

#### 129300 FLAGPOLES

- A. Provide light on flagpole.
- B. Provide one (30') flagpole for new buildings.
- C. Provide sidewalk to and around flagpoles.

#### 129310 SIGNS

- A. Obtain latest signage standards from Project Manager.
- B. Provide metal dedication plaque in lobby per state requirements.
- C. Provide ADA, acrylic panel sign for interior doors. Fixed room number should be included on each sign with slot for changeable insert for room name. Room numbers on drawings shall match those ultimately used for the building.
- D. Provide painted, plywood construction sign to be erected on site for the duration of construction.
- E. Include building address which is visible from street.
- F. Provide a permanent, lighted exterior building identification sign.
- G. Meet local Fire Marshal for signage.

### **DIVISION 13 - SPECIAL CONSTRUCTION**

#### 133416 EXTERIOR FIXED AUDIENCE SEATING

- A. Exposed earth is not permitted beneath bleachers.

### **DIVISION 14 - CONVEYING EQUIPMENT**

#### 142400 HYDRAULIC ELEVATORS

- A. Elevators shall be key-operated. Cylinders shall be removable to match FCPS standard.
- B. A telephone shall be provided.
- C. Finishes shall be durable and vandal-resistant.
- D. FCPS prefers "Hole less" hydraulic elevators.

### **DIVISION 22 - PLUMBING**

#### 220500 PLUMBING

- A. Contractor shall provide water for pressure testing in the event that the permanent water source is not available.
- B. Rain water leaders shall discharge directly into storm sewer. Rain water shall not be directed to ground adjacent to buildings.
- C. Provide recirculating pumps for domestic hot water systems.
- D. Provide point of use water heaters for summer use.
- E. Provide central trap primers by area.
- F. Provide water treatment systems for Boiler, Tower Chiller and well systems.

#### 220523 VALVES, COCKS AND FAUCETS

- A. Provide isolation valves:
  - 1. for HVAC equipment to facilitate maintenance.
  - 2. for control valves, pressure gauges and thermometers to facilitate future replacement.
  - 3. to zone building to facilitate maintenance of various systems.
  - 4. Domestic water lines.
- B. Provide frost proof hose bibs on roof for mechanical equipment maintenance.
- C. Provide ball valves 1-1/2" and smaller
- D. Shower heads shall be adjustable – not fixed.

#### 221116 PIPE AND PIPE FITTINGS

- A. Provide water treatment systems as required for open and closed loop piping.
- B. Provide air vents at high points in heating/cooling piping and consider central system "Spirovent" type air separator.
- C. Provide plaster traps, installed to facilitate maintenance for art room sinks.
- D. Provide oversized saddles/hangers to accommodate pipe insulation.
- E. Roll-groove (Victaulic) piping acceptable for heat and chilled water lines.
- F. Avoid designing water piping in exterior walls.

#### 221120 PLUMBING FIXTURES AND TRIM

- A. Drinking fountains are prohibited above wood flooring.
- B. Wall-mounted water closets are preferred for elementary schools; floor mounted for secondary schools.
- C. Final selection of specific water closets shall be discussed with FCPS.
- D. Provide floor sinks in custodial closets to accommodate floor machines.
- E. Provide manually operated lavatory faucets and flush valves. Moen shall be a named manufacturer, however, not as a sole source manufacturer.

#### 221200 STORAGE TANKS

- A. Enclose mechanical courtyards (that may contain tanks) with appropriate screen wall.
- B. Provide manway for all underground tanks.
- C. Above-ground tanks shall be double-wall, vaulted with concrete.
- D. Cylindrical tanks are preferred.
- E. Provide specification requiring contractor to procure appropriate tanks permits.

#### 224500 SPRINKLER SYSTEMS

- A. Sprinkler system zoning shall match fire alarm zones.
- B. Sprinkler piping should not limit access to mechanical equipment for Maintenance.

#### 225000 CHILLERS

- A. Prefer multiple refrigeration compressors (semi hermetic).
- B. Prefer multiple refrigeration circuits.
- C. Determine water-cooled vs. air cooled by LCCA.
- D. No water-cooled chillers at well fed schools.
- E. Provide adequate tube pull clearance.
- F. Prefer multiple chillers or multiple circuit chillers.
- G. FCPS prefers Glycol in chilled water loops for freeze protection in air cooled chillers, where required.

- H. Provide variable speed chillers where appropriate.

## **DIVISION 23 - HEATING, VENTILATING AND AIR CONDITIONING (HVAC)**

### **230000 GENERAL MECHANICAL**

- A. Provide a radon gas evacuation system in all new schools and as required by specific conditions. Existing radon conditions will be provided by FCPS upon request.
- B. Mechanical equipment should be located in mechanical rooms or penthouses. Roof top units should be avoided, if possible. Provide ladder access/catwalks for roof-mounted equipment, where required by safe service.
- C. Provide waterproofed, concrete curbs to contain penthouses.
- D. Provide housekeeping pads for all equipment.
- E. Provide means for access for maintenance and general replacement of equipment (e.g. boilers and water heaters).
- F. Provide protective device covers (e.g. for sprinkler heads and thermostats) in gymnasiums and other areas of high levels of activity or subject to abuse.
- G. Locate vent stacks away from fresh air intakes. Direction of prevailing winds should be considered.
- H. Provide access panels to all mechanical equipment (e.g. VAV boxes, fire dampers, coils, etc.) to facilitate maintenance.
- I. Design HVAC and plumbing systems (e.g. boiler and chilled water piping) to allow for future expansion as defined by the Ed Spec.
- J. Provide hot/cold water and floor drains in all mechanical rooms to allow for washing of room and equipment.
- K. Provide a 2 year parts and labor warranty and an additional manufacturer's standard 3 year parts warranty for all cooling and refrigeration compressors.
- L. Provide high quality pressure and temperature gauges on suction and discharge sides of applicable HVAC equipment.
- M. Contractor shall maintain filters during construction and replace all air filters after Substantial Completion and provide one extra set of at Final Completion.
- N. All HVAC units with hot water coils shall be protected by freeze stats.
- O. Contractor shall notify FCPS to arrange for State Inspections 30 days prior to calling for inspection of pressure vessels.
- P. Provide HVAC/ATC Commissioning, air and water balancing specifications.
  - 1. Include FCPS Commissioning Agent.
  - 2. Commissioning and inspections shall be performed by a third party hired by FCPS. Third party inspector will:
    - b. Review A/E's design
    - c. Conduct inspections of systems during construction.
    - d. Verify that all systems perform properly after Substantial Completion and after Owner Occupancy.
- Q. Specify auxiliary drip pan under equipment with drain over wood floors and electrical/electronic equipment.

- R. Drinking fountains in gymnasiums over wood floors are not permitted.
- S. Include water treatment systems as required for open and closed loop piping.
- T. Provide multiple hot water heaters.
- U. Coordinate manufacturer of Mechanical Equipment with FCPS Project Manager.
- V. Provide roll-up doors to mechanical spaces to accommodate cleaning of boiler/chiller tubes and large items as well as replacement of equipment.
- W. Provide backwater valves in accessible locations.
- X. Require mechanical contractors to video tape sanitary sewer lines during and after construction.
- Y. Provide sub-meter for athletic field irrigation systems.
- Z. Provide interlock between are room kiln operation and ventilation to insure that kiln will not operate without ventilation.
- AA. FCPS encourages the Mechanical Engineer to pay particular attention to heating peripheral areas of the building.
- BB. Provide floor drains and water spigots in all restrooms to facilitate cleaning.
- CC. Provide carbon monoxide detectors and warning systems where fuel fired equipment is used.
- DD. Mechanical Contractor to provide and pay for any and all Fuel Burning Permits.

#### 230900 INSTRUMENTATION AND CONTROL FOR HVAC

- A. Consider existing controls system FCPS Maintenance Areas.
- B. Review monitoring points with Frederick County Public Schools.
- C. Prefer EMS system with graphic software.
- D. Specify system with computer and software for Owner remote access into system.
- E. Coordinate with electrical engineer to provide administrative network drop in secure location for FCPS operation of EMS. IP address will be provided by FCPS Tech Services Department.

#### 230593 AIR AND WATER BALANCE

- A. Incorporate pre-design air and water balance survey data into renovation and replacement contract documents.
- B. Incorporate air and water balance capability report into contract documents.

#### 230713 DUCT INSULATION

- A. Use of internal duct liners should be avoided.
- B. Rigid, board insulation should be considered in high-abuse areas.

#### 230716 INSULATION

- A. Provide protection for external pipe insulation (UV and damage).

#### 233113 DUCTWORK

- A. Exposed, exterior ducts should be avoided.
- B. Air velocity with regards to acoustics should be considered.
- C. Seal all ductwork.

#### 233400 EXHAUST FANS

- A. Coordinate accessibility with design team.

#### 233420 VARIABLE FREQUENCY DRIVES

- A. Consider VFD control of AHU's and pumps, where practical.
- B. Provide Laser Alignment of VFD pumps.

#### 233713 REGISTERS, GRILLES, DIFFUSERS

- A. Prefer RGD's mounted in lay-in panels.
- B. Provide heavy-duty type in potential abuse areas.
- C. Provide large exposed overhead RGD's with safety chain.
- D. Provide pre-finished, aluminum louvers with bird screens where louvers are required.

#### 235200 HEAT GENERATION

- A. Prefer hydronic boilers
- B. Prefer multiple boilers
- C. Controls/Safety Devices
- D. Include specifications for the fuel burning permit.
- E. Verify need with FCPS for dual fuel capability.
- F. Prefer base mount pumps.
- G. Provide standby pump with lead lag control.
- A. Four (4) pipe systems preferred.
- B. Expansion Tanks
  - 1. Provide with site glass.
  - 2. Provide means to add air to tank.

#### 235600 PACKAGED EQUIPMENT

- A. Provide split DX cooling units for interior computer labs, server rooms, phone and data closets and other spaces in building as required that need individual temperature/humidity control separately from central chiller.
- B. Provide multiple refrigeration circuits and compressors.
- C. Provide freeze protection methods (pumps, ATC, etc.).

### **DIVISION 26 – ELECTRICAL**

#### 260500 BASIC MATERIALS AND METHODS

- A. Device plates (including ones for hanging phones) shall be brushed stainless steel.
- B. Exposed MC cable is not permitted.
- C. Minimum conduit size is ¾".
- D. Conduit shall be used for the remainder of the circuit. Conduit installed in walls and above ceiling is preferred in lieu of below slab for branch circuits.
- E. All wiring for circuits 100 Amp and under shall be copper. Circuits over 100 Amps may be either aluminum stabiloy or copper.
- F. "J" hooks tray above corridor ceilings is the preferred method of support for data, public address and TV Cables.
- G. Color code outlets that are on the emergency generator (red).
- H. Provide engraved receptacle covers. Coordinate numbering sequence with FCPS Project Manager.

#### 260501 GENERAL ELECTRICAL REQUIREMENTS

- A. Provide protective covers for clocks, lights, speakers, motion detectors, fire alarm A/V devices, thermostats and other electrical devices in gymnasiums.
- B. Provide adequate electrical receptacles in mechanical spaces on roof for maintenance use. Installation shall avoid penetrations in roof and shall be powered separately from rooftop equipment.
- C. Provide capacity in telephone, data network, public address, power and fire alarm systems for future portable classrooms. "Stub out" utilities to future portable classroom location(s).
- D. The telephone system and associates UPS shall be powered by the generator (if one is on site). Coordinate connections with PA system.
- E. Provide duplex receptacles in corridors to accommodate custodial equipment (40' maximum spacing).
- F. Provide split DX cooling units for interior computer labs, server rooms, phone and data closets and other spaces in building as required that need individual temperature/humidity control separately from central chiller.
- G. Electrical panel locations should not limit the intended use of a space. Dedicated electrical closets should be considered.
- H. Provide Arc-Flash ratings for electrical equipment per NFPA 70E and associated requirements. ARC-Flash and short testing to be provided at Substantial Completion.
- I. Provide phase-loss protection for all 3-phase motors. The phase loss protection shall be located at the motor starter.
- J. Coordinate requirements for spare conduits with utility companies and FCPS. Spare conduits shall be provided for all electrical services, telephone services, future lighting at high school athletic fields, between buildings at multi-building facilities and as requested by FCPS.
- K. All rooms containing transformers and heat producing equipment shall be ventilated.
- L. Assure that all electrical assemblies are UL rated.
- M. Use cast iron floor boxes in slab on grade applications, or where moisture may be present.
- N. FCPS Project Manager to provide utility support requirements for interactive display screens.
- O. Advise FCPS on code requirements for Tamper-Proof receptacles.
- P. Obtain latest low voltage system requirements and specifications form the FCPS Project Manager.
- Q. Provide doorbell at exterior kitchen doors.

#### 260510 SERVICE AND DISTRIBUTION

- A. Disconnects shall be heavy-duty type.
- B. Cutler-Hammer or Square D is the preferred manufacturers of panel boards.
- C. The electrical service shall be designed for planned future additions, plus 30% additional capacity.
- D. All Distribution Panels shall have a minimum of 4 prepared spaces and 2 spare 3 pole breakers. The designer shall consult with FCPS for requirements for additional breakers.
- E. Transient Voltage Surge Suppression shall be provided on the main electrical service and branch panels feeding electronic equipment.

- F. Provide disconnect for power company at solar photovoltaic panels that back-feed power grid.
- G. Provide metallic tracer caution tape for underground conduits.

#### 260526 GROUNDING

- A. Consult with FCPS Tech Services Department for special grounding requirements.

#### 263213 ENGINE GENERATORS

- A. An outside generator is preferred.
- B. The following items are to be on emergency generator: Security system, telecommunications, fire alarm system, BAS Network Control Engines, emergency lights, PA & clock system, data racks, best card reader system, split system A/C units for MDF/IDF closets, elevator sump pump, elevator machine room, kitchen cooler, ATC panel, circulating pumps, boilers, alertus system, well/septic and water pumps, gang baths and emergency ADA controllers.
- C. Fire pumps shall be connected to the generator.
- D. Require programming software to provide for generators to allow FCPS to make programming changes. Generators shall be supplied with required hardware and software to allow owner programming.
- E. Utilize natural gas fuel, where applicable.
- F. Provide emergency generator power to emergency shelter areas in high schools. Verify requirements with FCPS Project Manager.
- G. Color code outlets that are on the emergency generator (red).
- H. Design to include interface with "Best" access system and emergency power with battery back up at the main entrance.

#### 263600 AUTOMATIC TRANSFER SWITCH

- A. The automatic transfer switches shall be the same manufacturer as the generator.
- B. Provide auto transfer switch in accordance to MEMA requirements.

#### 264100 UNINTERRUPTABLE POWER SYSTEM

- A. Provide a rack mounted UPS for all data network equipment racks.
- B. Coordinate with FCPS Tech Services Department for additional requirements.

#### 264113 LIGHTING PROTECTION SYSTEM

- A. Specify protective devices on lightning rods in high traffic roof areas near walkways and service areas.
- B. Lightning protection systems shall be bid as an alternate.
- C. Consult with FCPS Project Manager if required.

#### 265000 LIGHTING

- A. Coordinate all types of lighting fixtures specified with Frederick County Public Schools Energy Coordinator.
- B. All light fixtures shall be located in a manner as to allow maintenance and lamp replacement.
- C. Where fluorescent lights are used for night lights (this includes fixtures powered by the emergency generator), the fixtures shall have a maximum of 1 or 2 lamps connected as night lights.

- D. Corridors and gang toilets shall be controlled by key operated switches.
- E. Outdoor light control shall be as follows:
  - 1. Building mounted security lights shall be controlled dusk to dawn.
  - 2. Parking lot night lights (approximately ¼) shall be controlled dusk to dawn.
  - 3. Parking lot general lighting shall be zoned by location to allow maximum control flexibility.
  - 4. All outdoor lights shall be sharp cutoff type.
- F. Use of ground mounted flood lights to accent the building shall be minimized. Use ground mounted lights for flagpoles/signs only.
- G. Light poles and pole mounted fixtures shall be anodized aluminum.
- H. Light pole wiring insulation to have 14 gauge 3 conductor SO cord with drop down strain reliefs and fused at the bottom inside the pole. Gauge size might change depending on the type of light being used.
- I. Industrial art areas and shops shall utilize industrial high efficiency fluorescent light fixtures.
- J. Designer shall minimize different lamp types throughout the building.
- K. Utilize motion detectors to control lighting infrared sensors.
- L. Divide lighting in classrooms, corridors, gyms, cafeterias and auditoriums into sections that can be turned off for energy efficiency.
- M. Provide infrared sensors in classrooms storage rooms and closets to control lights.
- N. Specify high-bay fluorescent lights in gymnasiums, cafeterias and other high-bay areas.
- O. Provide dust covers for pendant lights.
- P. Locate exterior lighting to discourage insects at doors.
- Q. Daylight harvesting shall be used in all building spaces with windows.
- R. Provide emergency lighting in restrooms.

#### 265500 STAGE LIGHTING AND DIMMING SYSTEM

- A. See FCPS Project Manager for lighting/dimming guidelines for Elementary & Middle Schools.
- B. Minimum requirements for Stage & Auditorium Lighting at High Schools.
  - 1. Provide a basic “theatrical” dimming lighting system for both stage and house lighting. The dimming system shall have wall controls with multiple presets at all main entrances and on the stage.
  - 2. Use of a movable distributed dimming system is preferred.
  - 3. The system shall be commercial grade and shall have a programmable console main controller located in the projection booth. The console shall have the capability of storing programs for shows.
  - 4. The projection booth shall have dimmable lights.
  - 5. Night lights in the auditorium should be arranged to be able to be turned off in a code approved manner during performances.
  - 6. Dimming systems shall be provided for the TV Studio and Drama Rooms.
  - 7. Do not specify Jeamar Winches. FCPS Maintenance Department staff have project experience with this manufacturer.
  - 8. Install motorized winches on all lighting battens.



9. Consider the use of LED house lighting for energy efficiency and life of lamps.
10. Make provisions to access theatre lights for regular maintenance.

## **DIVISION 27 - COMMUNICATIONS**

Due to the continual changes in technology, telecommunications system requirements are to be developed with FCPS staff as appropriate for each project.

### **272000 CCTV SYSTEM**

- A. Coordinate current requirements with the FCPS Design staff.

### **272500 COMPUTER NETWORK SYSTEM**

- A. Include FCPS standards for installation of micro check units in the kitchen. Obtain the latest version from the project manager.
- B. Include FCPS standards for installation of computer networks. Obtain the latest version for the project manager.
- C. Include FCPS approved subcontractor list for installation of computer networks. Obtain the latest copy from the project manager.
- D. Include FCPS standards for configuration and location of power/data connections. Obtain the latest version from the project manager.

### **273000 TELEPHONE SYSTEM**

- A. Location of phone jacks to be determined by FCPS Project Manager.
- B. Telephone system equipment shall be by FCPS.
- C. Provide separate dedicated phone lines for the fire alarm and security alarms.

### **275000 PUBLIC ADDRESS & CLOCK SYSTEM**

*In addition to the information below, please reference appendices for supplementary material pertaining to this section.*

#### **1. CLOCK SYSTEM**

- A. Provide hardwired digital clocks at main office and at all public spaces including but not limited to corridors, cafeteria, gymnasiums and media center. Provide wireless Analog clocks at all general classrooms and instructional spaces that will synchronize with the Building Master Clock System.
- B. Clock system to be integral with PA system.
- C. Provide 125% capacity (based on design enrollment) to handle future portable classrooms and additions.

#### **2. INTERCOM SYSTEM/PUBLIC ADDRESS**

- A. The intercom system shall be interconnected to the telephone system.
- B. Speakers shall be provided in all rooms.
- C. All speakers shall be two-way type, no direct power.
- D. The intercom head end will be purchased by FCPS and installed by contractor, then programmed by FCPS.
- E. Public address system console should be installed in the administrative suite.
- F. P.A. system to be provided with emergency backup power from the emergency generator, and UPS backup with power conditioning.

- G. Central clock system to be integral with P.A. system/ball system.
- H. P.A. system to be designed at 125% of student enrollment capacity to handle future portable classrooms and additions.

#### 275500 AUDIO VISUAL AND SOUND SYSTEMS

##### 1. CAFETERIA SOUND SYSTEM (K-12 SCHOOLS)

- A. A cafeteria and/or stage sound system should be provided for the stage and cafeteria as applicable. The system should be housed in a lockable wall cabinet located on the stage and should include an auto mixer, amplifier, CD player and I-PAD/MP3 input to CD player. Microphone outlets should be provided in the cafeteria, on the stage and at the stage ceiling. Two wireless microphones should be provided. Speakers should be selected to provide a clear audible voice reinforcement of the program material throughout the cafeteria.
- B. The cafeteria sound system shall be interconnected to the school sound system to deactivate during an emergency All-Call.
- C. Activation of fire alarm system shall turn off power to sound system.

##### 2. GYMNASIUM SOUND SYSTEM (K-12 SCHOOLS)

- A. A gymnasium sound system should be provided for the gym. The system should be housed in a lockable wall cabinet. The system should include an amplifier, mixer, inputs from program sources, CD player and I-PAD/MP3 input to CD player. Microphone outlets should be provided in the gym, scorer's table and gym office. Additional locations shall be coordinated with FCPS Design Team staff. Two wireless microphones should be provided. Speakers should be selected to provide a clear audible voice reinforcement of the program material throughout the gym. Speakers shall be protected from damage from balls.
- B. The gymnasium system should be interconnected to the school sound system to deactivate during an emergency All-Call.
- C. Activation of the fire alarm system shall turn off power to the sound system.

##### 3. AUDITORIUM SOUND SYSTEM (9-12 SCHOOLS)

- A. A sound system should be provided for the auditorium. The system should be housed in a lockable cabinet. The system should include an amplifier, console mixer, inputs from program sources, CD player and I-PAD/MP3 input to CD player. Microphone outlets should **NOT** be provided in the stage floor, but wall and stage ceiling. A minimum of four wireless microphones should be provided.
- B. Coordinate additional requirements with the FCPS Design Team Staff.
- C. Provide 8 line minimum microphone mixer. Provide XLR and ¼" connections.
- D. The auditorium system should be interconnected to the school sound system to deactivate during an emergency All-Call.
- E. Activation of the fire alarm system shall turn off power to the sound system.

#### **DIVISION 28 – ELECTRONIC SAFETY AND SECURITY**

##### 283111 FIRE ALARM SYSTEM (ADDRESSABLE, VOICE EVACUATION)

- A. Preferred fire alarm systems manufacturers shall be Silent Knight (Fahrenheit model).

- B. Provide a fire alarm zone, modules, an LED light on the graphic annunciator panel for future portable classrooms.
- C. Provide ceiling mounted strobe units where possible.
- D. A fire alarm zone diagram and graphic annunciator detail shall be incorporated into the Contract Documents.
- E. Fire strobes are not required to say "Fire" on them. Confirm languages and message with FCPS security.
- F. Fire and security systems will each require a wireless communicator and an IP connection for monitoring services.

## 281000 ACCESS AND INTRUSION SYSTEM

### 1. INTRUSION ALARM SYSTEM

- A. Fire and intrusion panels should communicate using their built in communicators to utilize contact ID. The system shall not be proprietary and shall have the ability to be monitored by any monitoring company without equipment change.
- B. Verified passive infrared motion detection "by ADEMCO: shall be used in corridors, computer labs, and Principal's office. Coordinate additional locations with FCPS.
- C. Provided keypad at the main entrance only. Coordinate with FCPS.
- D. All alarm sensors shall be a separate addressable point.
- E. A security system manufactured by Ademco is preferred.
- F. Zoning shall be coordinated with the FCPS design staff.
- G. Use wall hung motion sensors only. FCPS has experienced problems with 360 degree motion detectors.
- H. Provide testing requirements for intrusion alarm system including all devices and operation of entire system.

### 2. ACCESS CONTROL SYSTEM

- A. The system shall be a Best access system.
- B. Coordinate the doors to be controlled via card readers with the FCPS Design staff.
- C. FCPS shall furnish magnetic access cards/SEOS swipe cards.
- D. Design to include interface with "Best" access system and emergency power with battery pack up at the main entrance.
- E. Non-Networked AIPhone system is to be purchased and installed by the contractor. Model and specification to be determined by FCPS.
- F. FCPS Project Manager to provide new mullion reader part/model numbers per FCPS Security.
- G. All control boards for Lenel system installed in MDF as distance allows.

## **DIVISION 31 –EARTHWORK**

### 312300 EARTHWORK & FILLING

- A. Excavation shall be unclassified (cost for removal of rock and importing suitable fill is included in the base bid) unless otherwise approved by FCPS. A copy of the geotechnical report shall be included in the Project Manual for Contractor use.

- B. Pitcher's mounds and base paths for baseball/softball fields shall contain proper sand/clay mixture. See FCPS Project Manager for specification.
- C. Provide adequate drainage for playfields.
- D. Contractor shall schedule a pre-construction meeting with Frederick County and Frederick City Department of Public Works as required.
- E. Include removal of excavation spoils off site as part of base bid.
- F. Consideration should be given to underground irrigation systems for athletic fields and should be bid as alternates.
- G. Athletic Facilities (dimensions/grading) – competition facilities shall be designed in both dimension and grading according to National Federation of State High School Associates standards.
- H. Athletic fields (drainage) – excess moisture shall be removed from the playing surface by surface run-off and/or through an installed internal drainage system.
- I. Specifications for excavation and earthwork shall be coordinated with recommendation of Geo-technical report.

#### 313116 TERMITE CONTROL

- A. Provide for all new construction and as appropriate for all addition/renovation projects.

### **DIVISION 32 – EXTERIOR IMPROVEMENTS**

#### 321200 HOT-MIX ASPHALT PAVING

- A. All paving including paved play areas, shall be heavy duty section, suitable for bus traffic/transporting portable classrooms.
- B. Paved play areas shall be designed for overflow parking. Coordinate with emergency vehicle (perimeter) access requirements.
- C. Frederick County Office of Life Safety prefers yellow paint on the fire lane curbs.

#### 321300 RIGID PAVEMENT

- A. Concrete sidewalks shall connect paved play areas to building.
- B. Curbs required for play and parking areas shall be concrete Provide straight curb at bus lanes.
- C. Design of concrete paving shall accommodate light-duty vehicle traffic.
- D. Provide 4" minimum crushed stone under all sidewalks.
- E. Stoops and sidewalks adjacent to buildings shall be designed to resist heaving resulting from frozen subgrade, and sloped to insure positive drainage away from building.
- F. Expansion joints in sidewalks shall be neoprene (w/"sip-strip") or other material that resists decay and shall be caulked.
- G. Provide sidewalk to flagpole.
- H. Provide minimum 6" concrete dumpster pads. Dumpsters shall not be placed on asphalt paving.
- I. Provide mowing strips at all fences and building perimeter where applicable.

#### 321900 EXTERIOR ATHLETIC FACILITIES

- A. High School athletic fields shall be designed to appropriate standards.
- B. Eliminate baseball and softball backstops in new construction in elementary schools.

- C. Tree placement shall be adequate to accommodate a riding lawnmower (approximately 6'-0" o.c.).
- D. Provide latex track surfacing over asphalt paved running tracks.
- E. Softball fields shall be skinned infields and shall receive "Beam Clay" infield mix.
- F. Baseball fields shall receive "Beam Clay" infield mix.
- G. Consideration should be given to modular block retaining walls to eliminate slopes.
- H. Provide maintenance ground cover on unavoidable steep slopes.
- I. Require landscaping contractor to mow site until site acceptance.
- J. Trees shall be selected that are not subject to vandalism or infestation of pests or prone to litter (e.g. fruit bearing trees).
- K. Establish turf on playfields as soon as schedule allows.
- L. Provide fine sand in long/triple jump landing pits.
- M. Preferred turf grass seed mixtures:
  - a. Athletic Field Seed - 80% Turf Type Tall Fescue, 10% Perennial Ryegrass, 10 % Kentucky Bluegrass or 100% Turf Type Tall Fescue (consisting of 3 varieties).
  - b. Play Areas/General Grounds – 80% Turf Type Tall Fescue, 20 % Perennial Ryegrass or 50% Perennial Ryegrass, 50 % Kentucky Bluegrass.
  - c. Sod- refer to UMD Turf-grass Technical Update.

#### 323100 CHAIN –LINK FENCES AND GATES

- 1) All fence shall be knuckled top and bottom.
- 2) Placement – Provide fence between play areas and adjacent roadways.
- 3) Placement – Provide fence around all storm water management structures as applicable.
- 4) Installation (raised bottom) – Hold fence fabric up 1"-2" above grade (to augment string trimmers) where no mow strips are required.
- 5) Fence Type – polyvinyl chloride (PVC) coated steel fence fabric with vinyl-coated and factory-painted steel posts, rails, caps and hardware.
- 6) Material requirements:
  - (a) All fencing shall be made of 9 gauge galvanized 2: mesh knuckle/knuckle wire.
  - (b) All fence line post, top rail, bottom rail, bracing and corner post shall be schedule 40 galvanized pipes.
  - (c) All corners will be 3" diameter, all line posts shall be 2" diameter and all top and bottom rails will be 1 5/8" diameter.
  - (d) All fencing will be installed with top rail and tension wire and wire tied every 16" o.c. on the top.
  - (e) All fencing above 8' will be installed with a middle rail tied every 16" oc.
  - (f) All line post will be cemented into the ground with a minimum size hole of 9" diameter and 30" depth.
  - (g) All post will be capped and space not more than 10 ft. oc.
  - (h) All gates 4-6' l width shall have 3" terminal post on both ends with bracing with minimum holes size 9" diameter and 30" deep filled with concrete (wet set).
  - (i) All gates 6-13' in width shall have 4" terminal post on both ends with bracing with minimum hole size of 12" diameter and 30" deep filled with concrete.

- (j) All gates 13' and up shall have 6 5/8" terminal post on both ends with bracing with a minimum hole size of 12" diameter and 48" deep filled with concrete (wet set).

#### 328400 IRRIGATION SYSTEMS

- A. Automatic sprinkler systems should be considered for athletic fields.
- B. Consult with FCPS for specific system requirements.
- C. Bid irrigation system as an add-alternate.

### **DIVISION 33 – Existing Conditions**

#### 330000 UTILITIES

- A. Contractor shall coordinate all connections to utilities with appropriate utility companies.
- B. Trench Marking Tape - Locator tape shall be placed above the pipe and placed approximately 18 inches below ground level.
- C. Trench Marking Wire – The Contractor shall install a minimum of 12 gauge solid copper with thermoplastic insulation recommended for direct burial, continuous for the entire length of utility laid. The Contractor shall secure the wire to the pipe by tape at intervals not greater than 12 feet. Wire connectors to be 3M DBR, or approved equal and shall be watertight and provide electrical continuity. It shall be accessible at all new water valve boxes, after meter boxes, fire hydrants, sewer manholes, sewer cleanouts, gas valves and gas meter risers as applicable to the utility line being installed.
- D. Provide as-built drawings for underground utilities.
- E. All materials to meet Frederick City or Frederick County Department of Utilities and Solid Waste Management Standards.

#### 331000 WATER UTILITIES

- A. Follow Frederick County Department of Utilities and Solid Waste Management (DUSWM) Standard Specifications for installation of water distribution systems. Obtain latest copy from DUSWM.
- B. Provide stub out connection for future irrigation waterline to athletic fields.

#### 333000 SANITARY SEWAGE UTILITIES

- A. Exterior clean-outs shall be contained in 6" concrete slab flush with finished grade.
- B. Meet Frederick City & Frederick County requirements.

#### 334000 STORM DRAINAGE UTILITIES

- A. Connect rain water leaders to storm system.
- B. Install fencing around all bio retention ponds as appropriate.
- C. Specify low maintenance ground covers.

### **APPENDICES**

Architect shall obtain the following guideline documents, and incorporate the minimum applicable provisions as follows:

- A. Maryland State Department of Education (-MSDE) Publications form the School Facilities Branch.
- B. Frederick County Public Schools (FCPS) Standards *(Request from FCPS Project Manager)*
  - 1. FCPS Finish Hardware Master Specification
  - 2. FCPS Metal Roof Refinishing Specification
  - 3. FCPS Public Address & Speaker Specification
- C. Other
  - 1. Frederick County Standards for Inclusion of Community-Use Gyms in Public Schools
  - 2. Frederick County Industrial Waste Survey Application

Frederick County Standards for Inclusion of  
Community-Use Gyms in Public Schools

1. Provide lines and pole sleeves for three volleyball courts – one parallel and two perpendicular to the primary basketball court.
2. Provide padded protection for all protruding objects.
3. Provide a lighted exterior sign(s) to direct visitors to the community gym. Sign to meet requirements of local authority having jurisdiction.
4. Access to other parts of the school should be prohibited via locking doors or gates.
5. Secure school locker rooms to prohibit use by the public. Provide toilet facilities for the community gym. These may be shared with other toilets programmed within the school, but should not permit access to other areas.
6. Provide access to a janitor's closet.
7. Provide separate storage space with a 6'0" x 7'0" door opening with direct access to the exterior for use by the Bureau of Parks and Recreation. Area requirements are identified in the Ed Spec.
8. Provide a separate office with exterior window for use by the Bureau of Parks and Recreation. A monitoring window should also be provided to the gym. Area requirements are identified in the Ed Spec.
9. Provide direct access to the parking lot.
10. Provide wood flooring in gymnasium, rubber or VCT flooring in exercise rooms and offices.
11. Provide air conditioning in gym for use during summer months.
12. Provide a separate security alarm zone for the community-use gym.
13. Provide break-away type basketball goals and upgraded backboards.
14. If divider curtains are provided, they shall be motorized.
15. Cranks or other operators shall be recessed or otherwise protected to prevent injury.
16. Provide mail slot in door to P&R Office to facilitate delivery of mail. FCPS Project Manager to coordinate with P&R Staff.



## **FCPS Checklist for Construction Projects**

*These issues should be addressed in the RFP/Ed Spec prior to delivery to Design Consultants.*

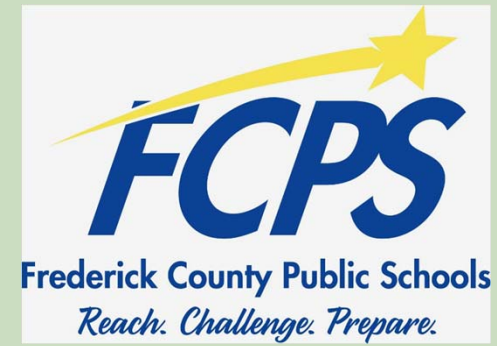
1. Is a feasibility study required for this project?
2. If future expansion is planned for this facility, are the areas and locations clearly identified in the Ed Spec?
3. Does this site possess a radon gas problem?
4. Does this facility contain lead paint?
5. Does this facility contain asbestos?
6. If a community-use gym is included in the program, in the spatial criteria identified in the Ed Spec?

# BRUNSWICK ELEMENTARY SCHOOL FEASIBILITY STUDY

Prepared for Frederick County Public Schools

By: Proffitt & Associates Architects

November 6, 2019



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## **Brunswick Elementary School**

### **Feasibility Study**

400 Central Avenue  
Brunswick, Maryland 21716

#### **Prepared for Frederick County Board of Education**

#### **BOARD OF EDUCATION MEMBERS**

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Joy Schaefer	Vice President
Liz Barrett	Board Member
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Lois Jarman	Board Member
Jay Mason	Board Member
Karen A. Yoho	Board Member
Malachi Macon	Student Board Member

#### **In consultation with Frederick County Public School staff**

Holly Nelson	FCPS, Facilities Planner
Elizabeth Pasierb	FCPS, Supervisor of Facilities Planning
Justin McConnaughey	Principal of Brunswick Elementary School
John Roop	FCPS, Maintenance Area Supervisor

## **FEASIBILITY STUDY TEAM**

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Frederick County Public Schools

191 S. East Street | Frederick, MD 21701 | Phone: 301.644.5000

### **ARCHITECT:**

Proffitt & Associates Architects, PC

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### **CIVIL ENGINEER:**

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150 S East St #201 | Frederick, MD 21701 | Phone: 301.662.4408

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ADTEK Engineers, Inc.

150 S East St #201 | Frederick, MD 21701 | Phone: 301.662.4408

### **MECHANICAL, ELECTRICAL, AND PLUMBING ENGINEER:**

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303 International Circle, Suite 450 | Hunt Valley, MD 21030 | Phone: 410.842.6411

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### **COST ESTIMATOR:**

Forella Group

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# SECTION 1:

## EXECUTIVE SUMMARY

- Introduction
- Methodology
- Project Goals
- Existing Conditions Overview
- Summary of Options
- Evaluation Criteria Matrix
- Recommendations



## SECTION 1 | EXECUTIVE SUMMARY

### INTRODUCTION

This feasibility study for Brunswick Elementary School was conducted for Frederick County Public Schools (FCPS) by the architectural firm of Proffitt & Associates Architects and their consultants in order to determine the viability of modernizing, expanding, and/or replacing the existing building and performing associated site improvements in order to accommodate an increase in student capacity. Brunswick Elementary School currently serves 762 students from grades pre-kindergarten through 5, however its current state rated capacity is only 508 students. The study explores options which would allow the school capacity to increase to 725 students in the base bid or 745 students with the specialized program add alternate and provides specific recommendations to FCPS for implementation.

The intent of the study was to evaluate the physical conditions of the existing building and site and explore options for creation of a facility that meets the educational requirements of its student enrollment and provides a cost effective, energy efficient, and safe facility to meet the future needs of the school. Not only does the existing building need to increase in size, it also needs to be fully modernized to conform to current educational facility best practices and applicable codes and standards. Options explored include modernization without expansion, modernization with additions, and full replacement. In the modernization without expansion option, all areas of the existing building will remain and will be fully modernized. In the modernization with additions option, portions of the existing building will be demolished, all existing areas to remain will be fully modernized, and new additions will be constructed to provide an increase in capacity. In the replacement option, the existing building will be demolished in its entirety and a new independent facility will be constructed on the same site. In all options, site improvements will be made to improve the flow of traffic, provide additional parking capacity, and improve accessibility on the site. All options explored comply with current specifications for instructional philosophy and current energy, accessibility, and life safety codes. It should be noted that energy codes only require newly installed or modified components to comply with current requirements, so in Options 1 and 2 the existing exterior wall envelope to remain will not be as energy efficient as newly constructed walls in Options 2 and 3. Since it does not add any additional square footage to the building, Option 1 does not provide all of the spaces required for educational programming within the building and would need relocatable classrooms to supplement the building capacity if the school is to serve more than 495 students. Options 2 and 3 both provide a State Rated Capacity of 725 students as required by the educational specifications.

The scope of work included a survey of the physical plant and evaluation of the existing building, including its structural, mechanical, electrical, plumbing, and telecommunications systems. Analysis of the existing building and site was critical to determining the benefits and limitations associated with a modernization or modernization/addition project as compared to a replacement project. The design team reviewed the educational specifications and developed three site and building concepts that are as close as possible to addressing the program criteria, given the individual constraints imposed by the scope of work. Frederick County Public Schools staff reviewed the progression of these concepts throughout the entire process.

The outcome of the study is intended to provide FCPS with information and recommendations that will facilitate the process of making a determination as to the best approach for increasing capacity and modernizing the Brunswick Elementary School. The final concept options, relative construction costs and schedules, and evaluation of the opportunities and challenges for each option are presented in this report.

## SECTION 1 | EXECUTIVE SUMMARY

### METHODOLOGY

FCPS is committed to the use of a collaborative process in order to encourage involvement of educational, administrative, and community stakeholders in the planning process. Thorough review of the existing facility requires active communication with building users, and development of responsive and appropriate design options cannot be complete without stakeholder input. An inclusive process which encourages participation and cooperation is imperative to ensure that all perspectives and voices are considered.

Review meetings were held with Frederick County Public Schools staff to review project progress and gather input based upon the varied expertise of its members. The proposed concept options are a result of the staff members' recommendations, suggestions, and guidance during the feasibility study process. Additionally, a brief presentation was made at a school PTO meeting to provide staff and parents an opportunity to learn about the project and provide feedback.

The existing school has been evaluated by the design team of architects and engineers to determine the scope of work required to provide a facility that will comply with the Educational Specification requirements dated June 2019. These Educational Specifications were developed by FCPS to provide guidance to the design team regarding the school's needs and facility requirements. They include not only basic space needs in terms of quantities and square footages for individual rooms, but also include discussion regarding designing for optimum learning environments, overall building organization, and systems and equipment requirements. An overview of the Educational Specifications can be found in Section 2 of this document.

The study is based on the following:

- Feedback received via design review meetings held with FCPS staff
- Analysis of the existing physical plant performed via site visits by the design team and FCPS staff
- Review of the building and site existing conditions documents provided by FCPS
- Review of the Educational Specifications provided by FCPS
- Research conducted by the design team

The concept options were refined and revised throughout the process and the final versions are included in this report. It should be noted that the concept options represent viable solutions for addressing the project requirements, but are not intended to be final designs. The actual design of the school may vary significantly from the feasibility study concepts and will be determined during the design phase of the project.

## SECTION 1 | EXECUTIVE SUMMARY

### PROJECT GOALS

Throughout the process, Frederick County Public Schools staff established a set of goals and objectives (delineated below) which the concept options address.

The goals for Brunswick Elementary School are:

- Develop a range of options that explore both renovation/addition and provision of a replacement school for 725 students
- Acknowledge phased development of the site with respect to demolition, new construction, access, and use of existing facilities until project is complete
- Address connections to the surrounding community in a way that is open and welcoming yet safe and secure for students
- Meet Public School Construction Program (PSCP) Feasibility Study requirements and support any previous initiatives or long term planning established by FCPS and the Brunswick Elementary school community
- Continue to provide a nurturing community school
- Look for opportunities to support 21<sup>st</sup> Century Learning
- Improve accessibility in the building and on the site
- Provide upgraded technology
- Design an environmentally sensitive school that is comfortable, naturally lit, and energy efficient

## SECTION 1 | EXECUTIVE SUMMARY

### EXISTING CONDITIONS OVERVIEW

Brunswick Elementary School is situated on a 24.63-acre property comprised of a single parcel and is located at 400 Central Avenue, Brunswick, Maryland. The Board of Education recently approved acquisition of two neighboring parcels totaling 16.7 acres from the developer of the adjacent Brunswick Crossing neighborhood. Once the additional land is acquired, the total school site will cover 41.33 acres. Brunswick Elementary School was originally constructed in 1952. Two single-story additions which contained classrooms and support spaces were constructed in 1958. Another single-story addition containing gymnasium, classrooms, and support space was constructed in 1980.

The school serves students in grades pre-kindergarten through 5 and has a state-rated capacity of 508 students. The elementary school's equated enrollment as of September 2019 was 728 students.

It is a single-story building consisting of approximately 59,315 gross square feet. The main floor level contains approximately 55,310 gross square feet, while a non-compliant ramp connects to the lower level classroom addition which contains 4,005 gross square feet. A small basement mechanical room is also present beneath the existing kitchen. It is accessed via an open stair leading down from the kitchen area, closest to the loading dock.

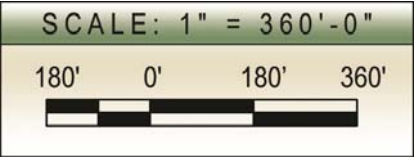
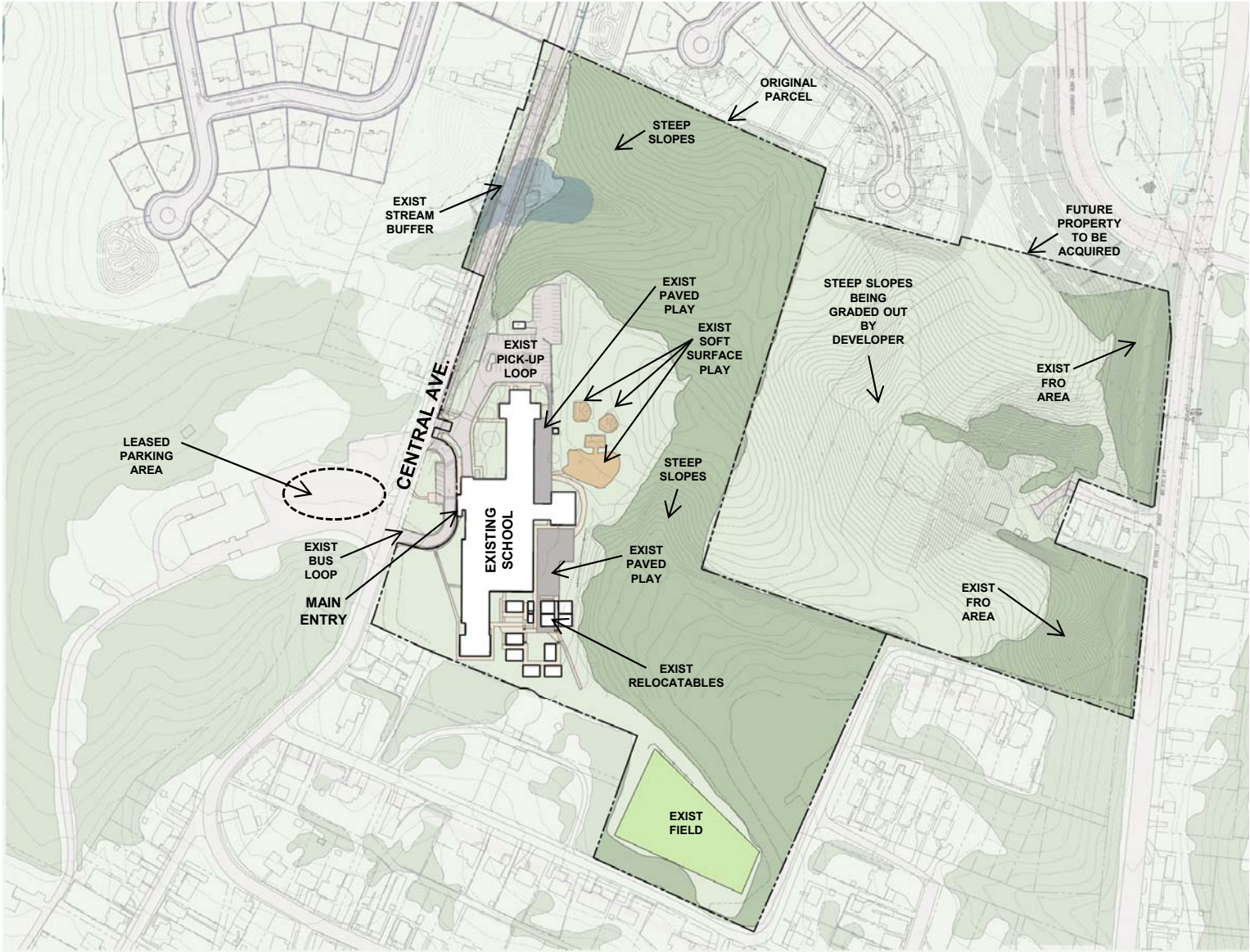
The structure is a mix of masonry bearing and steel frame with an exterior masonry façade. The majority of the exterior is red face brick, but there are also some small areas which utilize accents of stone veneer and some prefinished metal panels. Due to its age, the building is not energy efficient and is not fully accessible. There are two transitions in floor elevation that occur off of the main floor level. One is a ramped connection leading down to the far south side of the existing building and the other is a small raised stage area, accessible only by steps. The main entrance faces Central Avenue but does not have a great deal of curb appeal. The entrance has only one pair of double doors, which is uncommon for a school serving such a large population, and does not currently have a secured vestibule although plans have been made to add a vestibule in 2020.

The property is bounded to the south and east by single family homes, to the west by an existing private community center and to the north and east by land that is currently being developed into single family home lots. Vehicles access the site from three driveways along Central Avenue. Currently Central Avenue is a dead-end street, and as such there is limited if any traffic that travels beyond the school. In 2020, Central Avenue will be extended to connect with roads in the Brunswick Crossing neighborhood. The school building sits close to Central Avenue and extends almost all the way down to the southern property line. The northern portion of the property is currently undeveloped and contains steep slopes and wooded areas.

There are currently seven individual portable buildings and one 4-classroom mega-pod portable on site, all located southeast of the existing structure. Five of these spaces are used for fourth grade classrooms, five spaces are used for fifth grade classrooms, and one building houses restrooms.

# SECTION 1 | EXECUTIVE SUMMARY

## EXISTING CONDITIONS OVERVIEW

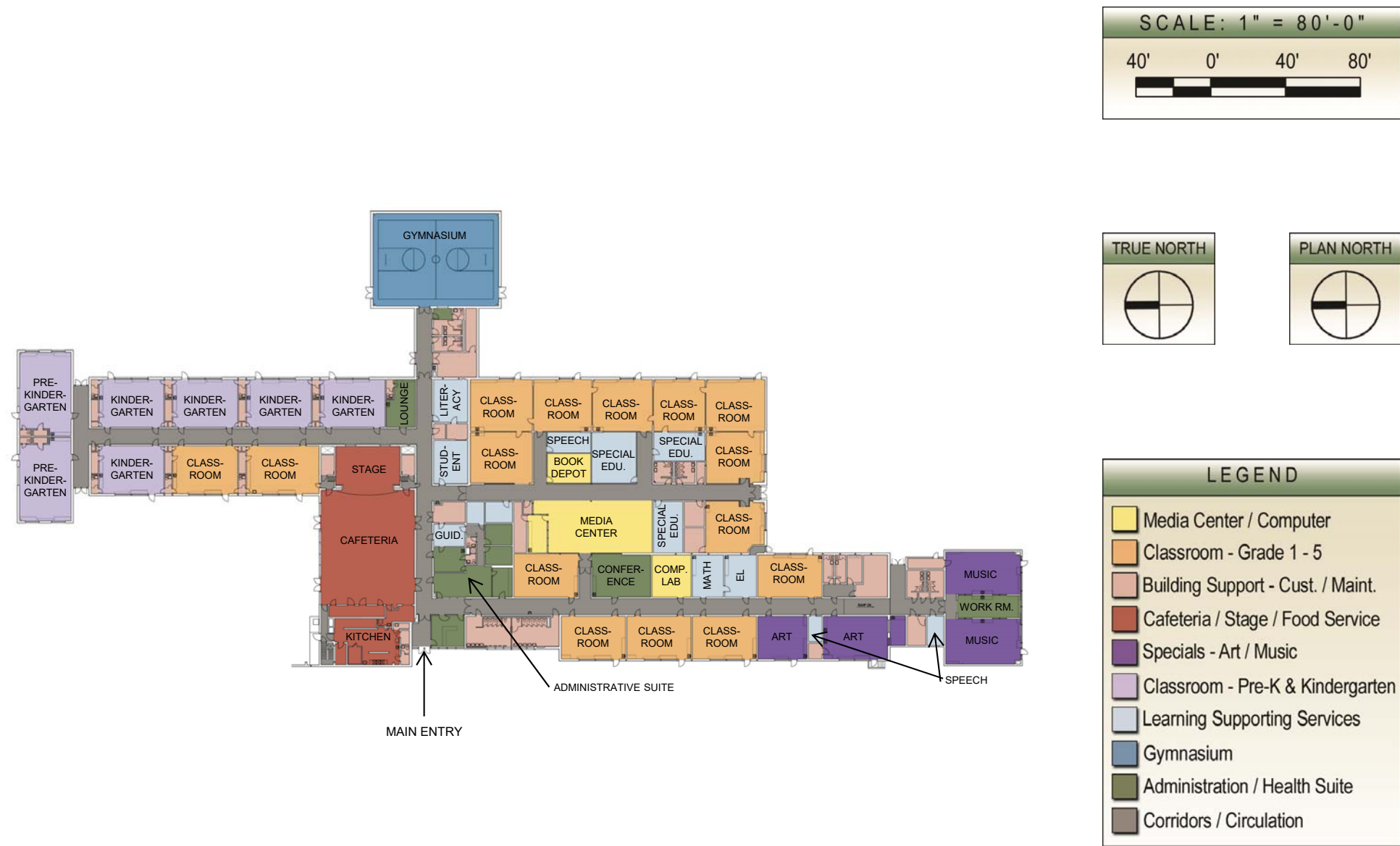


## EXISTING SITE PLAN



SECTION 1 | EXECUTIVE SUMMARY

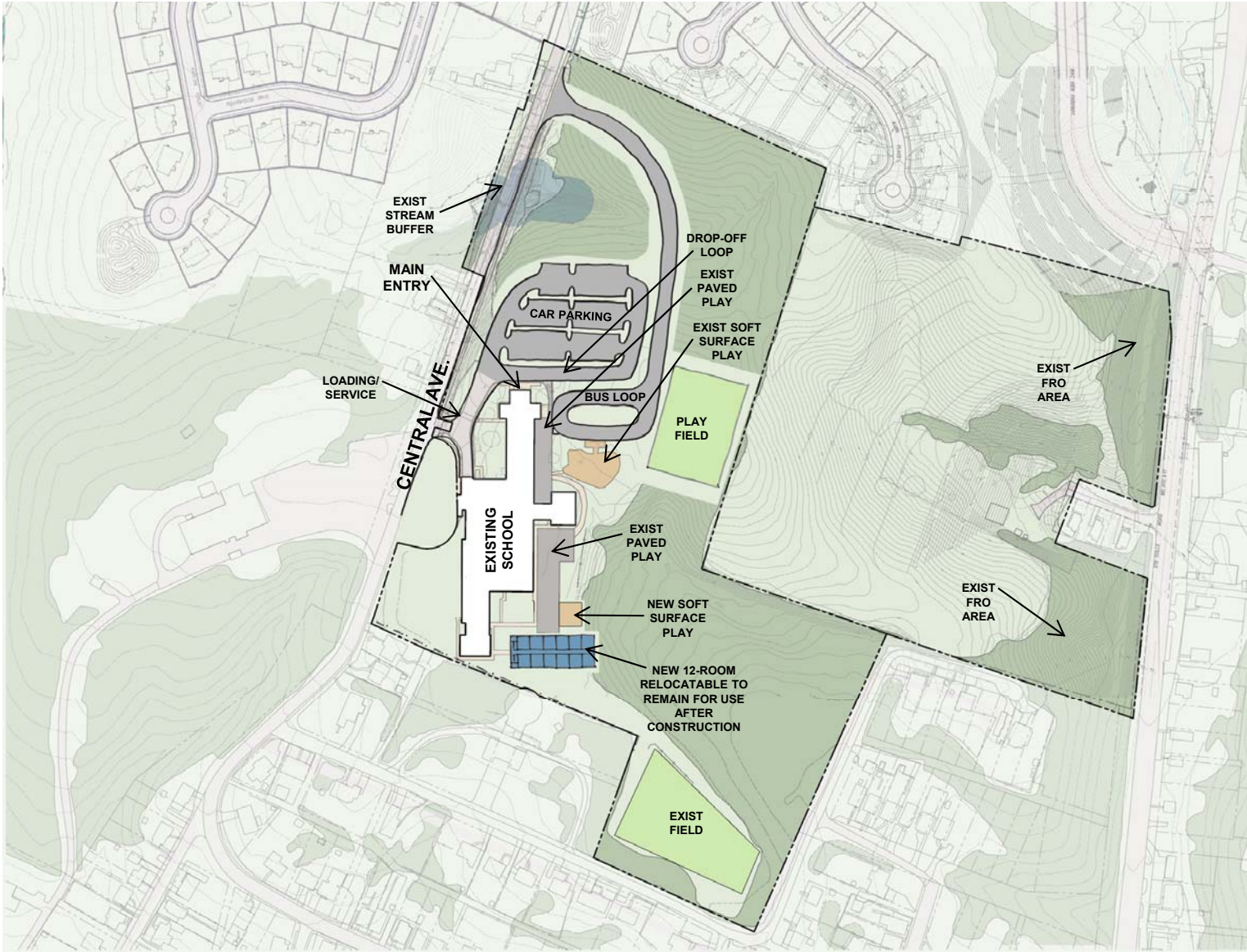
EXISTING CONDITIONS OVERVIEW



EXISTING FLOOR PLANS

SECTION 1 | EXECUTIVE SUMMARY

SUMMARY OF OPTIONS



OPTION 1

Option 1 includes a full modernization of the existing building with no additional space added. It includes a full MEP system replacement, ADA upgrades, all new finishes, casework, and display boards. There is some reconfiguration of space within the building to improve circulation and relocate the main entrance to the north end. Car rider drop off loop and parking will be accessed from Central Avenue at the same location as the existing parking access. The existing bus loop will be abandoned and a new bus loop brought in from the north end of Central Avenue to drop off at the northeast end of the building.

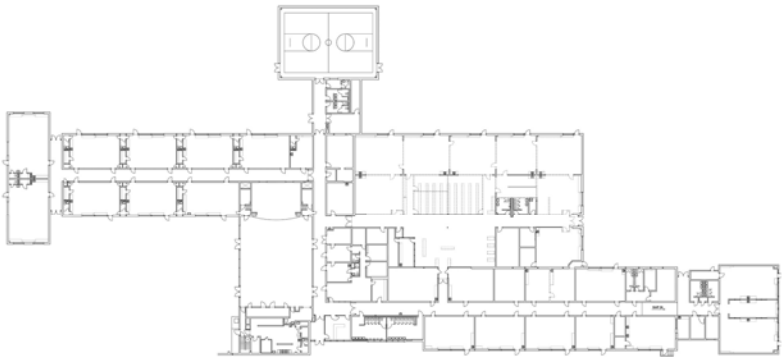
OPTION 1 | MODERNIZATION

SECTION 1 | EXECUTIVE SUMMARY

OPTION 1:

AREA OF EXISTING BUILDING = 59,315 GSF  
AREA OF DEMOLITION = -0 GSF  
AREA OF ADDITIONS = 0 GSF  
TOTAL BUILDING WITH ADDITIONS = 59,315 GSF

OPTION 1: DEMOLITION



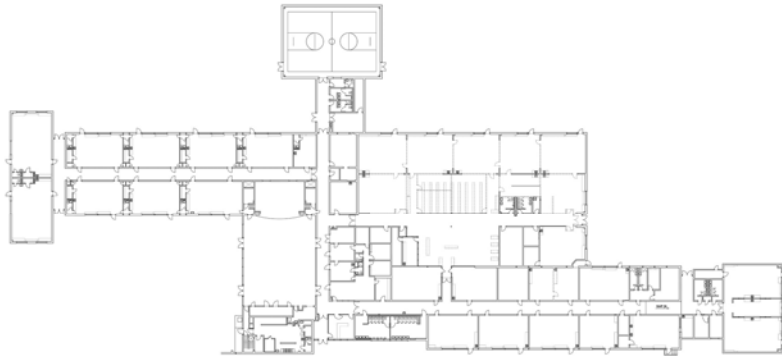
DEMOLITION

MAIN LEVEL = 0 SF

LEGEND

- Demolition
- Addition - Base Bid
- Addition - Alternate
- Existing Building to be Renovated

OPTION 1: RENOVATIONS & NEW CONSTRUCTION



RENOVATIONS

MAIN LEVEL = 59,315 SF

ADDITIONS

MAIN LEVEL = 0 SF



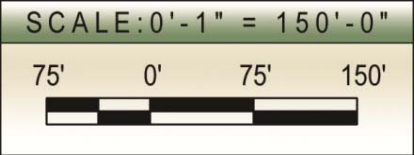
SECTION 1 | EXECUTIVE SUMMARY

SUMMARY OF OPTIONS



OPTION 2

Option 2 includes renovations and additions with limited demolition of the existing building. This option includes a complete renovation of the existing facility to remain, demolition of the existing gym wing and both 1958 additions, and construction of additional space to meet the project requirements. The new main entrance will be located at the north of the addition. Car rider drop off loop, parking, and loading will be accessed from a new entrance at the north end of Central Avenue. The bus loop will be accessed from the high point of Central Avenue, between the existing bus entrance and exit.



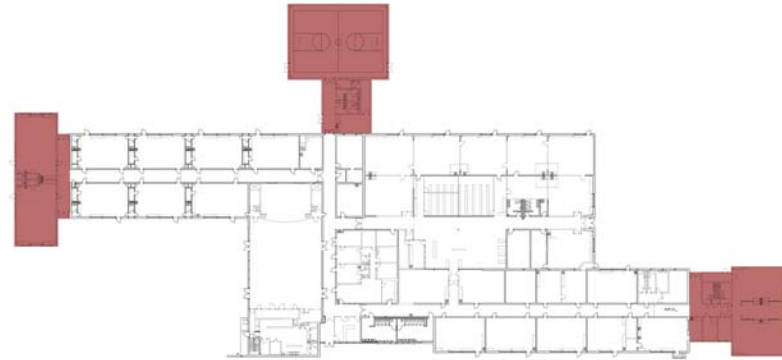
OPTION 2 | MODERNIZATION AND ADDITIONS

## SECTION 1 | EXECUTIVE SUMMARY

### OPTION 2:

AREA OF EXISTING BUILDING = 59,315 GSF  
 AREA OF DEMOLITION = - (12,185) GSF  
 AREA OF ADDITIONS – BASE BID = 49,250 GSF  
AREA OF ADDITIONS – ALTERNATE = 6,495 GSF  
**TOTAL NEW BLDG AREA W/ALTS = 102,875 GSF**

#### OPTION 2: DEMOLITION



#### DEMOLITION

MAIN LEVEL = 12,185 SF

#### LEGEND

- Demolition
- Addition - Base Bid
- Addition - Alternate
- Existing Building to be Renovated

#### OPTION 2: RENOVATIONS & NEW CONSTRUCTION



#### RENOVATIONS

MAIN LEVEL = 47,130 SF

#### ADDITIONS – BASE BID

MAIN LEVEL = 49,250 SF

#### ADDITIONS – ALTERNATE

MAIN LEVEL = 6,495 SF



SECTION 1 | EXECUTIVE SUMMARY

SUMMARY OF OPTIONS



OPTION 3

Option 3 includes a total replacement of the existing building with a new two-story construction. This option includes construction of an entirely new facility on the existing site to meet the project requirements and then demolition of the existing building. The existing building will continue to be operational during the new building construction process. Car rider drop off loop and the main parking area will be accessed from the high point of Central Avenue. A new bus loop will be accessed from the north end of Central Avenue.

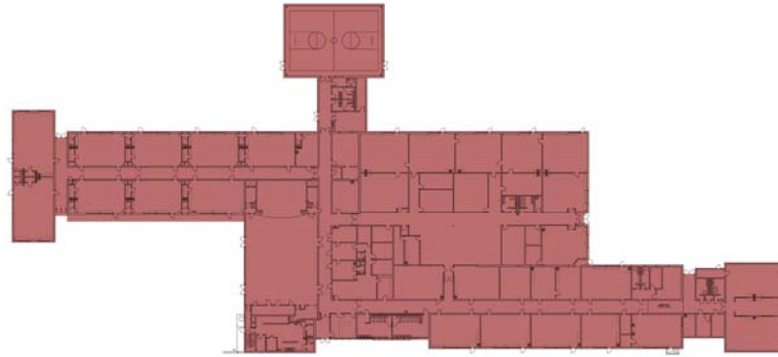
OPTION 3 | REPLACEMENT SCHOOL ON-SITE

## SECTION 1 | EXECUTIVE SUMMARY

### OPTION 3:

AREA OF EXISTING BUILDING = 59,315 GSF  
 AREA OF DEMOLITION = - (59,315) GSF  
 AREA OF NEW CONST. – BASE BID = 91,690 GSF  
 AREA OF NEW CONST. – ALTERNATE = 6,900 GSF  
**TOTAL NEW BLDG AREA W/ALTS = 98,590 GSF**

OPTION 3: DEMOLITION



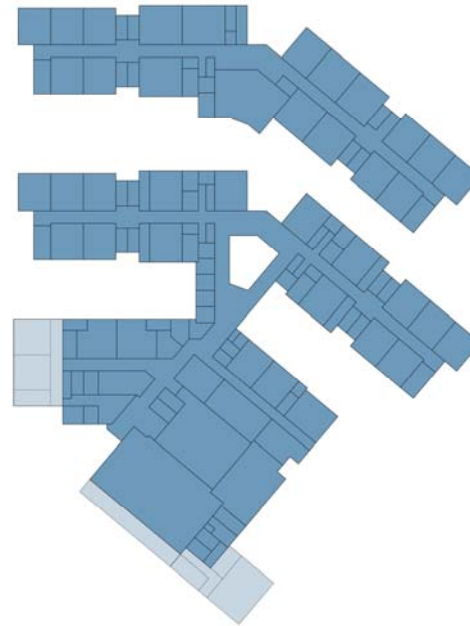
#### DEMOLITION

MAIN LEVEL = 59,315 SF

#### LEGEND

- Demolition
- Addition - Base Bid
- Addition - Alternate
- Existing Building to be Renovated

OPTION 3: NEW CONSTRUCTION



#### RENOVATIONS

MAIN LEVEL = 0 SF

#### NEW CONSTRUCTION – BASE BID

MAIN LEVEL = 61,106 SF

LOWER LEVEL = 30,584 SF

#### NEW CONSTRUCTION – ALTERNATE

MAIN LEVEL = 6,900 SF

## SECTION 1 | EXECUTIVE SUMMARY

### SUMMARY OF OPTIONS | CHALLENGES & OPPORTUNITIES COMPARISON CHART



**OPTION 1**

#### OPPORTUNITIES

- Lowest first cost of the three options.
- Good separation of buses, cars, and building services/loading.
- The majority of classrooms have direct egress at grade level.

#### CHALLENGES

- Phasing and temporary facilities will be required for 36 months.
- 10 portable classrooms will be required after completion to meet capacity of 725 plus 2 additional portables to reach opening enrollment projection of 764.
- Core spaces are undersized.
- Portions of the building are at different finished floor elevations – added cost for renovations required to create an ADA compliant ramp.
- Car stacking space is limited in the drop-off loop due to site constraints.
- The Media Center, several classrooms, and many support spaces do not have access to daylight or views to the exterior.
- Energy efficiency and thermal comfort would not be significantly upgraded in the existing portions of the building.



**OPTION 2**

#### OPPORTUNITIES

- The entire building is at one finished floor elevation, with the exception of a mechanical room and the stage.
- The majority of classrooms have direct egress at grade level.
- Good separation of buses, cars, and building services/loading.

#### CHALLENGES

- Phasing and temporary facilities will be required for 36 months.
- A courtyard is created to provide daylight and views, but may be a maintenance concern.
- Several classrooms and many support spaces do not have access to daylight or views to the exterior.
- Largest building size is inefficient and will require higher maintenance costs over time.
- Energy efficiency and thermal comfort would not be significantly upgraded in the existing portions of the building.
- 2 portable classrooms may be required to accommodate the projected equated enrollment of 764 in fall of 2023 when the modernized/expanded building would open.



**OPTION 3**

#### OPPORTUNITIES

- Classroom layouts cluster well for grade level grouping.
- Walk-out lower level helps reduce the amount of earthwork required.
- Temporary facilities are not required during construction and construction duration is shortest of all options.
- Good separation of buses, cars, and building services/loading.

#### CHALLENGES

- Balancing earth on site before demolishing the existing building may be a challenge.
- 2 portable classrooms may be required to accommodate the projected equated enrollment of 764 in fall of 2023 when the new building would open.



## SECTION 1 | EXECUTIVE SUMMARY

### SUMMARY TABLE AND COST COMPARISON OF OPTIONS

Square Footage:

	Option 1	Option 2	Option 3
Existing	59,315	59,315	59,315
New Construction – Base Bid	0	49,250	91,690
New Construction – Alternate	0	6,495	6,900
Renovation	59,315	47,130	0
Demolition	0	12,185	59,315
Existing to Remain	59,315	47,130	0
<b>Total Gross Square Feet</b>	<b>59,315</b>	<b>102,875</b>	<b>98,590</b>
<b>State Rated Capacity</b>	<b>495</b>	<b>725</b>	<b>725</b>
<b>Duration of Construction</b>	<b>36 to 38 months</b>	<b>36 to 38 months</b>	<b>24 to 28 months</b>
<b>Total Construction Cost</b>	<b>\$24,505,269</b>	<b>\$41,403,399</b>	<b>\$41,071,987</b>

The cost estimate in this feasibility study is based on current construction market conditions for both building and site. The estimates will be revised to reflect market conditions and prevailing construction costs when the project is included in the Capital Improvements Program Request for architectural and construction funding.

## SECTION 1 | EXECUTIVE SUMMARY

### RECOMMENDATION

After study and discussion of the challenges and opportunities presented by each option, the feasibility study team is recommending Option 3, a replacement facility on the same site, as the best solution to meet the project's educational and functional goals.

The Option 1 modernization does not meet the required capacity requirements in terms of classrooms and support spaces and lacks adequately sized core spaces. The Option 2 renovation/addition option has an extended construction duration when compared to the replacement facility option and requires phased relocation of classrooms to relocatables to allow for renovation, which means more impact to students and staff through the construction process. It also requires more overall square footage due to existing building constraints in terms of circulation efficiency and structural systems that dictate some of the design features and room areas.

A replacement school meets the educational specifications without compromise, is slightly less costly than the modernization and addition option, has the shortest construction timeline, and minimizes the need for future maintenance of building systems. The replacement option allows flexibility to configure the building and site for optimum adjacencies and efficiency. Replacement also affords the ability to create an energy-efficient building envelope, which will provide long term operating cost savings.



# SECTION 2:

---

## SUMMARY OF EDUCATIONAL SPECIFICATIONS

- Educational Program Requirements
- Existing Building and Educational Specifications Program Comparison
- Proposed Organization



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## SECTION 2 | SUMMARY OF EDUCATIONAL SPECIFICATIONS

### EDUCATIONAL PROGRAM REQUIREMENTS

The Brunswick Elementary Feasibility Study considered the Board of Education's approved maximum elementary school capacity of approximately 725 students in order to understand the options for the largest possible building that might be located on this site.

The educational program for the new Brunswick Elementary building aligns with the requirements set forth by the Frederick County Public Schools' educational specifications and Standards for the Design of New and Renovated Buildings Design Guide for Pre-K – 5 Elementary Schools. The educational specifications call for a construction project of approximately 90,400 gross square feet per the base bid that will provide a new elementary school of 32 teaching stations (25 grade 1-5, five kindergarten, and two pre-kindergarten classroom) as well as supporting spaces to accommodate a state rated capacity of 725 elementary school students in the base bid. Inclusion of the Specialized Program add alternate provides 2 special education classrooms and increases the state rated capacity to 745 students. There is also an add alternate for a Parks and Rec Gym. In addition, Option 3 will be designed to meet the requirements for at least a Silver LEED Certification from the U.S. Green Building Council.

General spaces to be provided as part of the new school include:

- (2) Pre-K Classrooms
- (5) Kindergarten Classrooms
- (5) General Classrooms for Grade 1
- (5) General Classrooms for Grade 2
- (5) General Classrooms for Grade 3
- (5) General Classrooms for Grade 4
- (5) General Classrooms for Grade 5
- Administration spaces
- Health Suite spaces
- Media Center spaces
- (2) Art Classrooms & storage spaces
- (1) Vocal Music Room & storage space
- (1) Instrumental Music Room & storage space
- STEM Lab
- Support Service Area spaces
- Food Service spaces
- Cafeteria spaces
- Physical Education spaces
- Custodial Operations spaces
- Maintenance spaces

A spreadsheet comparing the spaces currently provided within the existing Brunswick building with the program space requirements for a 725 student school is on the following pages. The educational specifications require 90,408 gross square feet of building area. The current Brunswick building contains approximately 59,315 gross square feet of space, which means that at least an additional 31,093 gross square feet of space is required to meet the program needs. The existing building contains only 15 classrooms, while a total of 32 classrooms are required. The school does not have any rooms that meet current space requirements for kindergarten or specials classrooms, however the existing typical classrooms average 800 square feet apiece, which meets the educational specification classroom requirements. These classrooms can be re-used in renovation/addition scenarios and once modernized, will provide a functional learning environment. The core spaces are all undersized and in general support spaces are lacking in terms of quantity, size, and location.

## SECTION 2 | SUMMARY OF EDUCATIONAL SPECIFICATIONS

### EXISTING BUILDING AND EDUCATIONAL SPECIFICATIONS PROGRAM COMPARISON

SPACE	EXISTING BRUNSWICK BUILDING			725 STUDENT EDUCATIONAL SPECIFICATIONS (BASE BID)			DIFFERENCE (NSF)
	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	
<b>Administration</b>							
Secretarial/Reception Waiting Area	1	445	445	1	450	450	-5
Workroom	1	167	167	1	200	200	-33
Principal's Office	1	162	162	1	180	180	-18
Asst Principal's Office	0	151	0	1	150	150	-150
Conference Room	1	729	729	1	200	200	529
Administration Bathroom	1	30	30	1	50	50	-20
Student Bathroom	0	0	0	1	300	300	-300
Teacher's Lounge with Bathroom	1	351	351	1	400	400	-49
Staff bathrooms to be distributed throughout school	2	122	244	4	50	200	44
<b>Total Administration</b>			<b>2,128</b>			<b>2,130</b>	<b>-2</b>
<b>Health Suite</b>							
Nurse's Office	0	0	0	1	100	100	-100
Health Room w/ small shower and toilet	1	263	263	1	500	500	-237
<b>Total Health Suite</b>			<b>263</b>			<b>600</b>	<b>-337</b>
<b>Media Center</b>							
Media Office and Equipment Storage/workroom	1	374	374	1	400	400	-26
Open Resource Area ( w/ informal reading area)	1	1,618	1,618	1	2,000	2,000	-382
Small Group Instruction Area	0	0	0	1	450	450	-450
Media Broadcast Room	0	0	0	1	180	180	-180
STEM Lab	1	478	478	1	800	800	-322
Computer, TV, Communications Main Distribution Frame	0	0	0	1	300	300	-300
Remote Telecommunications Equipment Closets	0	0	0	2	100	200	-200
<b>Total Media Center</b>			<b>2,470</b>			<b>4,330</b>	<b>-1860</b>
<b>Art</b>							
Art Studio A	1	603	603	1	1,000	1,000	-397
Storage for Studio A	0	0	0	1	150	150	-150
Art Studio B	1	786	786	1	1,000	1,000	-214
Storage for Studio B	1	194	194	1	150	150	44
<b>Total Art</b>			<b>1,583</b>			<b>2,300</b>	<b>-717</b>
<b>Music</b>							
Vocal Music Room	1	927	927	1	1,100	1,100	-173
Music Storage Room	0	0	0	2	75	150	-150
Instrumental Music Room	1	961	961	1	800	800	161
<b>Total Music</b>			<b>1,888</b>			<b>2,050</b>	<b>-162</b>

## SECTION 2 | SUMMARY OF EDUCATIONAL SPECIFICATIONS

### EXISTING BUILDING AND EDUCATIONAL SPECIFICATIONS PROGRAM COMPARISON

SPACE	EXISTING BRUNSWICK BUILDING			725 STUDENT EDUCATIONAL SPECIFICATIONS (BASE BID)			DIFFERENCE (NSF)
	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	
<b>Physical Education</b>							
Gymnasium, full basketball court size	1	3,316	3,316	1	6,272	6,272	-2956
Indoor/Outdoor equipment storage	1	294	294	1	400	400	-106
Bathrooms Area - Boys and Girls	0	0	0	1	240	240	-240
Teacher office/bathroom/shower/dressing	1	97	97	1	250	250	-153
<b>Total Gymnasium</b>			<b>3,707</b>			<b>7,162</b>	<b>-3455</b>
<b>Pre-Kindergarten</b>							
Pre-Kindergarten classrooms	2	1,173	2,346	2	1,100	2,200	146
Pre-Kindergarten Bathrooms	2	21	42	2	50	100	-58
Pre-Kindergarten Storage Room	2	25	50	1	100	100	-50
<b>Total Pre-Kindergarten</b>			<b>2,438</b>			<b>2,400</b>	<b>38</b>
<b>Kindergarten</b>							
Kindergarten Classrooms	5	797	3,985	5	1,100	5,500	-1515
Kindergarten Bathrooms	5	37	185	5	50	250	-65
Indoor/Outdoor Storage Rooms	5	40	200	2	200	400	-200
<b>Total Kindergarten</b>			<b>4,370</b>			<b>6,150</b>	<b>-1780</b>
<b>Learning Area, Grades 1-5</b>							
General Classrooms	15	830	12,450	25	800	20,000	-7550
General Classroom Group Bathrooms	6	212	1,272	3	240	720	552
Planning Rooms	1	400	400	2	300	600	-200
<b>Total Learning area, Grades 1-5</b>			<b>14,122</b>			<b>21,320</b>	<b>-7198</b>
<b>Supporting Services Area</b>							
Offices with desks for math and reading Interventionists and specialists, special education	4	420	1,680	2	800	1,600	80
Intervention/Collaboration Rooms (to be used for reading, math, EL, pull-out special education)	4	345	1,380	10	200	2,000	-620
Small Conference (testing/quiet space/outside therapy)	0	0	0	1	150	150	-150
Calming Room	1	108	108	2	200	400	-292
Guidance	1	199	199	2	200	400	-201
Itinerant Staff (Psychologist/Social Worker/Behavior Specialist etc)	0	0	0	1	200	200	-200
Speech/Language and Itinerant Services, OT/PT	3	168	504	1	360	360	144
EL Level 1 classrooms	1	388	388	1	800	800	-412
Community Liaison Office/Storage	0	0	0	1	200	200	-200
Parent Work Room	0	0	0	1	200	200	-200
Reading Specialist/Book Rooms	1	371	371	1	400	400	-29
<b>Total Supporting Services</b>			<b>4,630</b>			<b>6,710</b>	<b>-2080</b>

## SECTION 2 | SUMMARY OF EDUCATIONAL SPECIFICATIONS

### EXISTING BUILDING AND EDUCATIONAL SPECIFICATIONS PROGRAM COMPARISON

SPACE	EXISTING BRUNSWICK BUILDING			725 STUDENT EDUCATIONAL SPECIFICATIONS (BASE BID)			DIFFERENCE (NSF)
	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	
<b>Food Service</b>							
Kitchen - Serving/Food prep/Transport	1	630	630	1	1,200	1,200	-570
Dry Food Storage	0	35	0	1	300	300	-300
Non-food storage	0	27	0	1	60	60	-60
Refrigerated storage – walk-in	1	65	65	1	130	130	-65
Frozen Food storage – walk-in	0	0	0	1	120	120	-120
Office	1	66	66	1	80	80	-14
Locker/restroom/washer & dryer area	1	50	50	1	120	120	-70
Dishwashing area	1	150	150	1	220	220	-70
Inside receiving area	0	0	0	1	60	60	-60
Covered outside unloading area	0	0	0	1	0	0	0
<b>Total Food Service</b>		<b>961</b>			<b>2,290</b>		<b>-1329</b>
<b>Cafetorium</b>							
Dining area	1	3,113	3,113	1	4,000	4,000	-887
Stage	1	870	870	1	850	850	20
Chair Storage	1	76	76	1	300	300	-224
Table Storage	1	76	76	1	200	200	-124
Custodial Room	0	0	0	1	60	60	-60
<b>Total Cafetorium</b>		<b>4,135</b>			<b>5,410</b>		<b>-1275</b>
<b>Custodial Operations</b>							
Custodial Office	0	122	0	1	175	175	-175
Locker room/shower/bathroom, women	1	85	85	1	90	90	-5
Locker room/shower/bathroom, men	1	85	85	1	90	90	-5
Central Indoor Storage	2	325	650	1	300	300	350
Indoor Satellite Storage @ 50 sq. ft.	2	45	90	4	50	200	-110
Outdoor storage	1	117	117	1	350	350	-233
<b>Total Custodial Operations</b>		<b>1,027</b>			<b>1,205</b>		<b>-178</b>
<b>Maintenance</b>							
Maintenance Office	0	0	0	1	120	120	-120
Maintenance storage area	1	137	137	1	400	400	-263
<b>Total Maintenance</b>		<b>137</b>			<b>520</b>		<b>-383</b>
<b>TOTAL BASE BID NET SQUARE FEET</b>		<b>43,859</b>			<b>64,577</b>		<b>-20718</b>
<b>TOTAL BASE BID GROSS SF @ 1.4 net to gross ratio</b>		<b>59,315</b>			<b>90,408</b>		<b>-31092.8</b>

## SECTION 2 | SUMMARY OF EDUCATIONAL SPECIFICATIONS

### EXISTING BUILDING AND EDUCATIONAL SPECIFICATIONS PROGRAM COMPARISON

SPACE	EXISTING BRUNSWICK BUILDING			725 STUDENT EDUCATIONAL SPECIFICATIONS (ALTERNATE)			DIFFERENCE (NSF)
	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	QUANTITY	NET SQUARE FEET PER ROOM	NET SQUARE FEET PER FUNCTION	
<b>Parks &amp; Rec Dept Gym (Add-Alternative)</b>							
Spectator space in the gym	0	0	0	1	969	969	-969
Recreation Center activities room	0	0	0	1	1400	1,400	-1400
Recreation Center office/storage	0	0	0	1	400	400	-400
Recreation Center Bathrooms w/external access	0	0	0	1	300	300	-300
<b>Total Add - Alternative Parks &amp; Rec Dept Gym</b>			0			3,069	-3069
<b>Specialized Program (Add-Alternative)</b>							
Classrooms	0	0	0	2	800	1,600	-1600
Specialized Program Coordinator Office	0	0	0	1	200	200	-200
Restraint/Seclusion Rooms	0	0	0	1	120	120	-120
<b>Total Add - Alternative Specialized Program</b>			0			1,920	-1920
<b>TOTAL NET SQUARE FEET with ADD ALTERNATES</b>			43,859			69,566	-25707
<b>TOTAL GROSS SQUARE FEET with ADD ALTERNATES</b>			59,315			97,392	-38077.4



## SECTION 2 | SUMMARY OF EDUCATIONAL SPECIFICATIONS

	EXISTING BRUNSWICK BUILDING	725 STUDENT EDUCATIONAL SPECIFICATIONS	
SPACE	NET SQUARE FEET PER FUNCTION	NET SQUARE FEET PER FUNCTION	DIFFERENCE (NSF)
Total Administration	2,128	2,130	-2
Total Health Suite	263	600	-337
Total Media Center	2,470	4,330	-1860
Total Art	1,583	2,300	-717
Total Music	1,888	2,050	-162
Total Gymnasium	3,707	7,162	-3455
Total Pre-Kindergarten	2,438	2,400	38
Total Kindergarten	4,370	6,150	-1780
Total Learning area, Grades 1-5	14,122	21,320	-7198
Total Supporting Services	4,630	6,710	-2080
Total Food Service	961	2,290	-1329
Total Cafetorium	4,135	5,410	-1275
Total Custodial Operations	1,027	1,205	-178
Total Maintenance	137	520	-383
TOTAL BASE BID NET SQUARE FEET	43,859	64,577	-20718
TOTAL BASE BID GROSS SQUARE FEET	59,315	90,408	-31092.8

## SECTION 2 | SUMMARY OF EDUCATIONAL SPECIFICATIONS

### PROPOSED ORGANIZATION

The proposed new school building, whether it be a replacement option or renovation/addition option, should generally be organized to provide two distinct areas: public and private zones. Design options typically provide two distinct entrances, one main entrance that is used by students, staff, and visitors and can be secured as the only means of access to the building during the school day, and a secondary entrance that is intended for public after-hours use, but can also be used by staff and students as required during the school day. Public areas of the school such as the gymnasium and cafeteria should be located and configured so that public and community members would have access with nearby parking and the ability to secure those areas independently from the remainder of the building. More private spaces, such as the media center, classrooms, and student-centered space programs should be located so a distinct separation could be provided which would allow for a separate and safe environment for the students. The options provided follow these general principles, although the renovation/addition schemes sometimes have to compromise in terms of optimal adjacencies due to existing building constraints.

Some of the organizational concepts preferred include:

- A school environment that allows students to work together in small and large group activities.
- Access to technology.
- Administrative services organized to facilitate the teaching and learning process.
- Centrally located media center convenient to instructional areas.
- Physical education spaces that can support a variety of student needs and community uses.
- A cafeteria space that can be maximized in use for a variety of functions such as assemblies and special programs.
- Interior circulation that promotes a smooth and safe flow of students.
- Abundance of natural light in classrooms and occupied spaces; orientation of exterior windows to capture the most appropriate natural light.
- A school as a community center fixture so that the building may be used by the public.
- A sustainably-designed school that takes advantage of the site to provide outdoor learning areas and gathering areas around the building.
- Outdoor areas may also be used by the community.
- Security and safety should be provided throughout, balanced with the ability to allow accessibility to the building and outdoor spaces in a welcoming environment.
- Making the building “future ready” – to allow flexibility in future modernization of the school.



# SECTION 3:

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## EXISTING INVENTORY DATA

- Current Use and Enrollment
- Previous State and Local-Funded Projects
- Site Aerial Photo
- Existing Building Construction Dates and Types



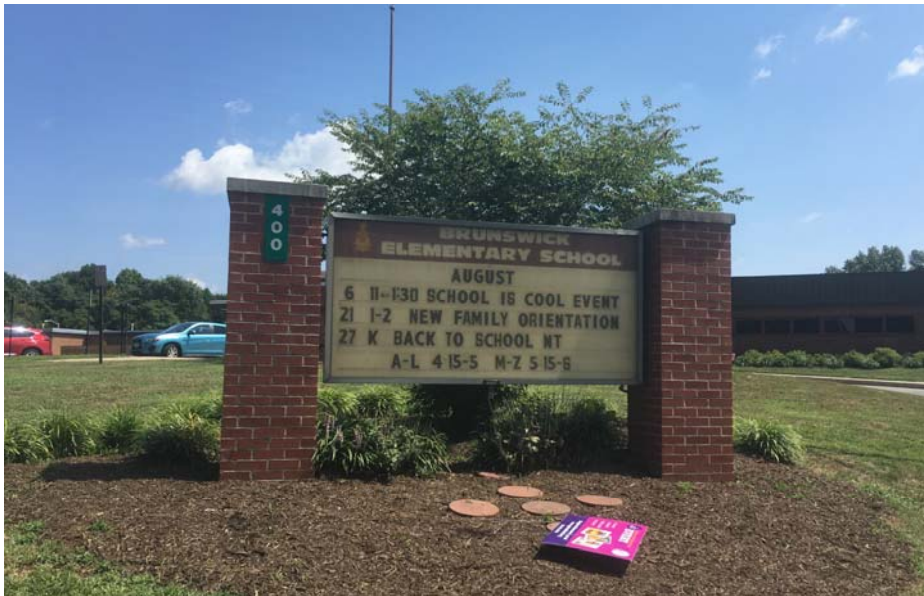
## SECTION 3 – EXISTING INVENTORY DATA

### CURRENT USE AND ENROLLMENT

Brunswick Elementary School serves students in grades pre-kindergarten through 5 and has a state-rated capacity of 508 students. The elementary school's equated enrollment as of September 2019 was 728 students.

It is a single-story building consisting of approximately 59,315 gross square feet. The main floor level contains approximately 55,310 gross square feet, while a non-compliant ramp connects to the lower level classroom addition which contains 4,005 gross square feet. A small basement mechanical room is also present beneath the existing kitchen.

There are currently seven individual portable buildings and one 4-room mega-pod on site, all located southeast of the existing structure. Five of these spaces are used for fourth grade classrooms, five spaces are used for fifth grade classrooms, and one building houses restrooms.



View of site sign along Central Avenue adjacent to bus loop



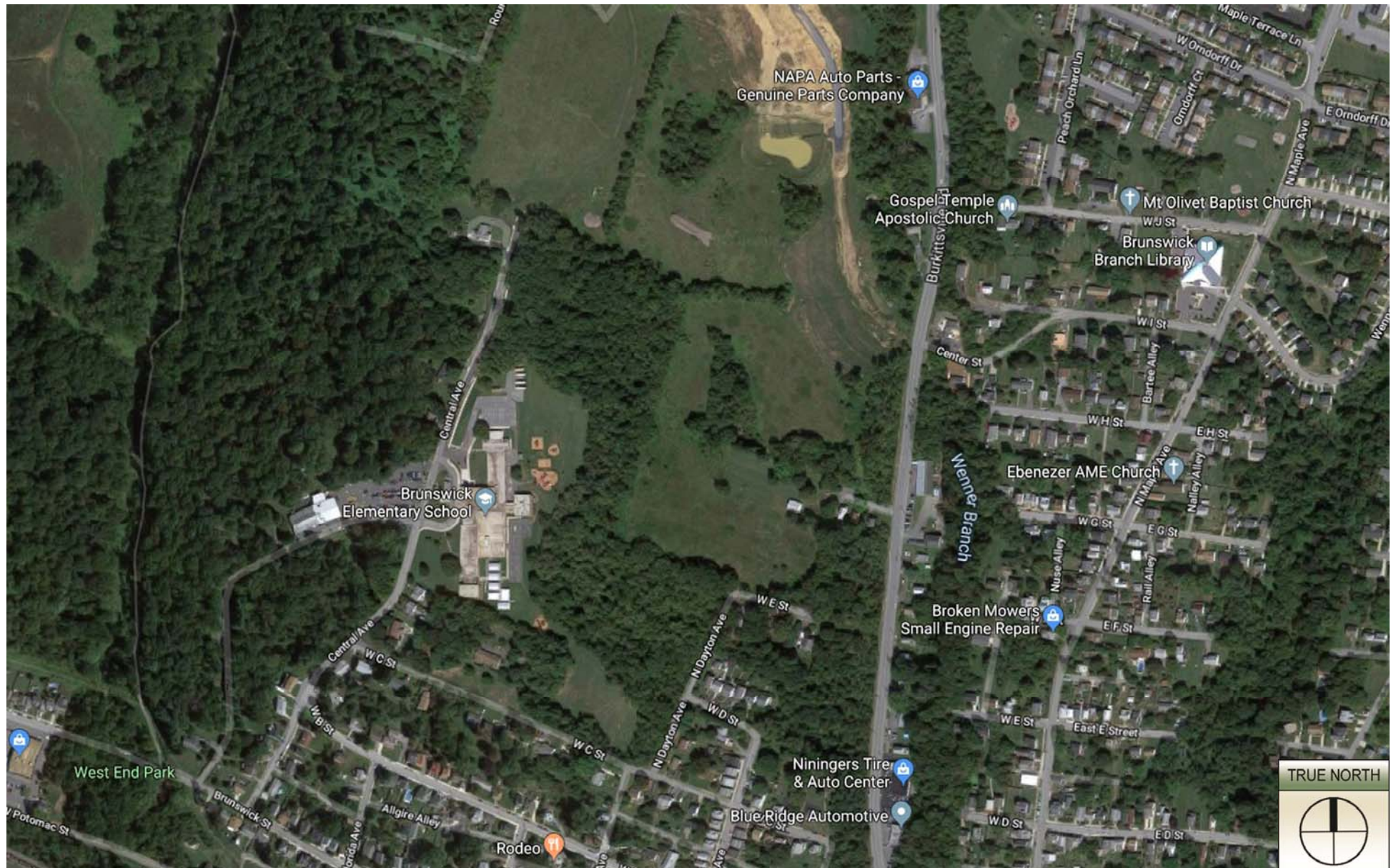
View of main entrance from Central Avenue

### PREVIOUS STATE AND LOCAL-FUNDED PROJECTS

Project	Year	State	Local
Addition	1959	X	
Addition	1978	X	
Renovation	1980	X	
Roof & Window Replacement	1993		X
Oil Tank Replacement	1997		X
HVAC	1998		X
TIMS	1999	X	X
Roof	2000		X
Asbestos Flooring Abatement	2006	X	
HVAC	2007		X
Roof	2007	X	X
Flooring Replacement	2007		X
Energy Management Lighting Retrofit	2008		X
Security Initiative – Alertus	2014	X	
RTU Replacement	2017	X	



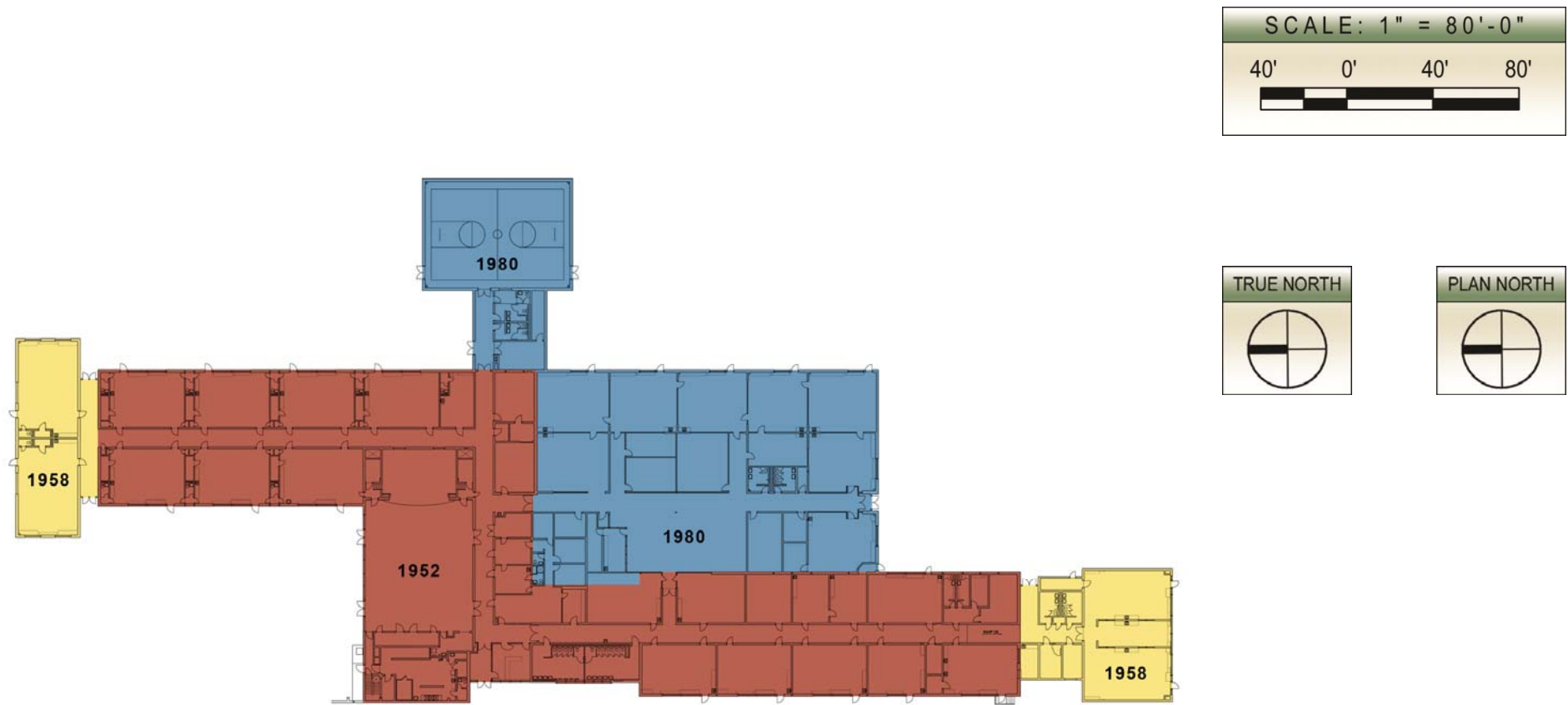
## SECTION 3 – EXISTING INVENTORY DATA



Brunswick Elementary School – Aerial Photo

### SECTION 3 – EXISTING INVENTORY DATA

The original Brunswick Elementary School building was constructed in 1952 and received additions and renovations in 1958, 1978, and 1980. The diagram below indicates when each portion of the building was constructed.







# SECTION 4:

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## EXISTING CONDITIONS ASSESSMENT

- Introduction
- General Site Information
- Site Analysis
- Architectural Analysis
- Building Code Analysis
- Food Service Analysis
- Structural Analysis
- Mechanical and Plumbing Analysis
- Electrical and Telecommunications Analysis



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

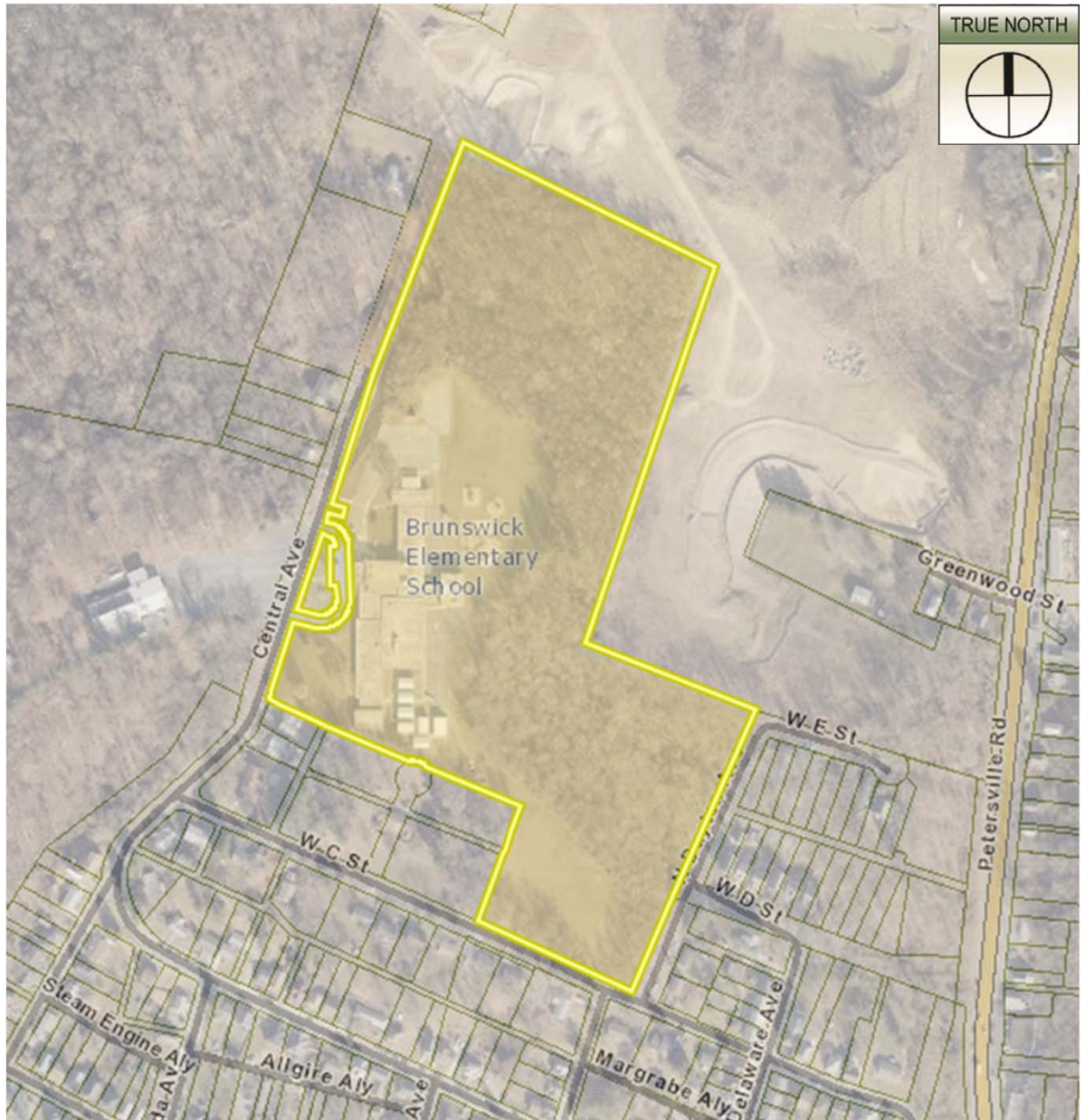
### INTRODUCTION

Brunswick Elementary School was originally constructed in 1952. Two single-story additions which contained classrooms and support spaces were constructed in 1958. Another single-story addition containing gymnasium, classrooms, and support space was constructed in 1980.

The school currently has a state-rated capacity of 508 students. It is a single-story building consisting of approximately 59,315 gross square feet. An existing conditions walk-through was conducted with the feasibility study team and members of FCPS staff to review and discuss the visible existing building features and systems.

### GENERAL SITE INFORMATION

Brunswick Elementary School is situated on a 24.63-acre property comprised of a single parcel and is located at 400 Central Avenue, Brunswick, Maryland. The school property is located within the incorporated limits of the City of Brunswick and in a RS (Residential Suburban Low-Density Residential District) Zone. Uses within the RS District are subject to the following dimensional standards: 40' maximum height; 40' front yard setback; 100' rear yard setback; and 100' side yard setback. A school is allowed by right within the RS District. The property is bounded to the south and east by single family homes, to the west by an existing private community center and to the north and east by land that is currently being developed into single family home lots.



**Brunswick ES – Aerial Photo (Courtesy of Frederick County GIS)**

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS

#### ADJOINING STREETS

Brunswick Elementary School is accessed via Central Avenue; which is a two-lane closed section road. There are other streets that directly abut the site, including West C Street and North Dayton Avenue, but there are not driveways to either of these streets.

#### SITE PARKING AND CIRCULATION

##### **On-Site Pedestrian and Vehicular Access**

Vehicles access the site from three driveways along Central Avenue. Currently Central Avenue is a dead-end street, and as such there is limited if any traffic that travels beyond the school. While the sight distance is not ideal, there is limited traffic to create a overwhelming safety concern. However, when the adjacent development is completed it will no longer be a dead-end, and the lack of sight distance particularly at the bus exit will become a problem.

Currently, there are sidewalks along Central Avenue, but there are no sidewalks directly in front of the school which forces pedestrians to either walk in the street, in the grass, or to follow the sidewalk in front of the school.

##### **Sidewalks**

The existing on-site sidewalks appear to be in fair condition but are showing signs of age. Access to the athletic fields should be provided to accommodate accessibility required by ADA. Furthermore, many of the older sidewalks are not in compliance with ADA either based on excessive slopes, or damage that creates irregular walking surfaces.



View of bus loop entrance from Central Avenue



View of bus loop entrance from Central Avenue



Sidewalk at north end of bus loop



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS (continued)

#### SITE PARKING AND CIRCULATION (continued)

##### **Bus Loop**

The bus loop consists of a one-way, 24-foot drive aisle on the west side of the building. With approximately 300-feet of queuing space and curb space, it appears that the size of the bus loop is able to support 6 buses. This configuration allows buses to pass one another provided that there are no cars parked in the driveway. The sidewalk along the bus-drop-off area, except for directly in front of the main entrance is in excess of ADA slope requirements (5.4%). Based on field observations there is only space available for one or two buses to be staged simultaneously in a ADA compliant loading zone. However, the handicap ramp from the bus loop to the building is not ADA compliant (12% slope).

##### **Car Rider Drop-off / Pick-up Loop**

Car riders are dropped off and picked up in the parking lot on the north side of the building. These students walk to the rear of the building to enter the building. This loop allows for stacking of approximately 11 cars (250' long). If more cars are in the queue, they will back-up onto Central Avenue and create challenges for north bound traffic due to limited stopping distance.

##### **On-site Loading**

The loading area is located along the northwest side of the building and accessed via the driveway from Central Avenue. There appears to be adequate space for large trucks to utilize this area provided that these areas are not blocked by cars parked in non-marked spaces.

##### **Fire Access**

The existing site layout does appear to meet current requirements for fire access. In addition, 60% of all new doors for the building addition are required to provide an accessible egress to the public way.



Bus drop-off loop



Student drop-off/pickup area & parking

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS (Continued)

#### SITE PARKING AND CIRCULATION (continued)

##### **On-site Parking**

Currently, on-site parking is provided in two (2) parking areas that occupy the north and west portions of the site. The west area is directly in front of the building along the bus loop and provides 5 spaces (2 are ADA compliant). The north parking area provides 52 spaces, of which none are designated ADA accessible spaces.

The current number of accessible spaces does not meet the minimum number per current ADA regulations; in addition, current ADA requirements are based on each lot and not the site as a whole. Furthermore, the signage of these spaces do not meet current ADA regulations. During the design phase accessible spaces should be added to every parking area per ADA regulations. Over all, the drive aisles and parking areas appear to be in fair condition. Other paved areas of the site are utilized for parking, but these areas do not appear to be defined parking spaces.

It should be noted that FCPS has a lease agreement with the adjacent private community center for use of 90 parking spaces, however it is subject to time restrictions, is costly, and is across Central Avenue from the school site which requires people to cross the road in order to access the building.



North parking/drop-off area



West parking and leased parking across Central Avenue



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS (Continued)

#### TOPOGRAPHY AND VEGETATION

##### Site Topography

The site can be best described as rolling. There are extremely steep areas of the site and also level plateaus for the building, parking and play areas. The site generally appears to be the local high point and appears to drain to the north, west and east. There appears to be no off-site drainage area that enters the site from the adjacent residences and roadways all around the site.

##### Storm Drainage and Stormwater Management

Any new construction that occurs will be required to meet the requirements established by the Stormwater Act of 2007. These guidelines establish a process by which new construction needs to utilize sustainable or environmental site design (ESD) to the maximum extent possible to satisfy water quality requirements. ESD's include but are not limited to micro-bioretenion, dry and/or wet swales, rain gardens, etc. Attempts should be made to provide for impervious disconnects and to allow for adequate open space to construct multiple smaller facilities throughout the site to satisfy these requirements. Based on our preliminary review of the soils information it appears that infiltration of stormwater should be achievable on site.



Southwest side of site slopes down toward Central Avenue



Northeast side of site play areas are level then slopes up to trees

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## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS (Continued)

#### TOPOGRAPHY AND VEGETATION (continued)

##### **Trees, Floodplains, Stream Valley Buffers and Non-Tidal Wetlands:**

Currently the site is approximately 50%+ forested, sloping to swales and drainage offsite. The forest is dominated by 12-18" upland species with Specimen trees along the stream north of the existing building. The woods appear to be moderate priority.

A small intermittent stream was located north of the school and beginning approximately 250' east of Central Avenue, flowing offsite to the west. East of the stream beginning point is a faint drainage pattern that should be investigated further during the winter/early spring high water table to assess if seeps or springs are present. A buffer will be required around the regulated intermittent stream. To the east of the school, in the area of woods, there are drainage patterns in the low area, but do not appear to be any wetlands present. There is a mix of upland and lowland trees, but no immediate evidence of wetland vegetation. This area also warrants further review during the winter/early spring high water table.

The study area to the east is subject to an existing Forest Conservation Plan, as part of the Brunswick Crossing, that will have to be amended if impacts extend offsite.

The site is located outside of mapped floodplain in Zone "X" as shown per FEMA Flood Insurance Rate Map number 24021C0385D. Furthermore, according to the Maryland Department of Natural Resources there are no nationally recognized wetlands located on or around the site.

### UTILITIES

#### **Utilities**

Generally, all utilities are located within the Central Avenue right-of-way adjacent to the site. Domestic water is serviced by an existing 6" line. The Brunswick Crossing developer is required to install a new water tower, which will improve water flow and pressure available to the site. There are two existing on-site 6" sanitary sewers from the building that connect to a 8" main in the street.

Natural gas will soon be available along Central Avenue as part of the new Brunswick Crossing development. Electrical service for the building comes from a pole directly in front of the building, as does telecommunications. There are two existing 8,000 gal fuel oil tanks on site as well as an existing propane tank.

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS (Continued)

#### SOILS

##### Site Soils

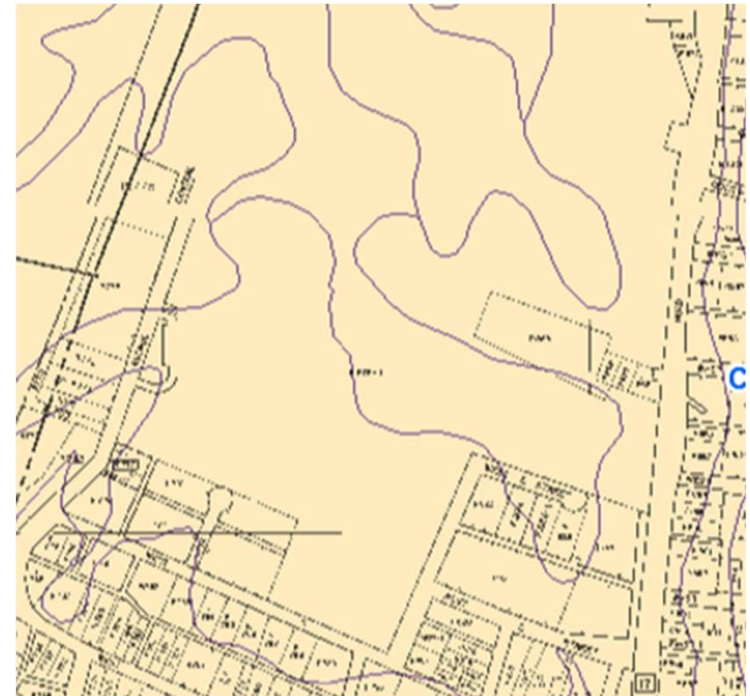
Per the Soil Survey of Frederick County Maryland, the soils on the site are in the Myesville-Burkittsville complex (MxB), and Spoolsville-Burkittsville complex (ScC and ScD). the depth to bedrock is usually between 47" to 80". In terms of hydrology, the on-site soil groups are of hydrologic soil group 'B'. Hydrologic soil group 'B' have a moderate infiltration rate; therefore future site expansions must take these factors into account for the location of BMP facilities.

##### Hydric Soils

Per the Frederick County Soil Map there are no hydric soils on the site that would deter development of this property.



Soils Survey Map



Hydric Soils Map



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS (Continued)

#### PLAY AREAS AND ATHLETIC FIELDS

There are two paved play areas on site, both are located to the east of the building. One is located immediately to the north of the gymnasium and one is located immediately to the south. A portion of the south paved play area is covered by relocatable classrooms. Both areas have striped lanes, circles, and hopscotch. The southern area also has basketball hoops.

There are four soft surface play areas located to the east of the northern paved play area. There is one additional soft surface play area located to the southeast of the relocatable classrooms.

There is an open grassy field at the northeast side of the site. It is not striped and does not have permanent goals or backstops, but is used for physical education purposes as needed. There is an additional athletic field with a softball backstop in the clearing to the far southeast edge of the site. This field is far enough away from the building that it is not regularly used by the lower grades, but is sometimes used by upper grades.



Northeast soft surface play



Southeast soft surface play



Northern paved play with soft surface beyond



Southern paved play with portables beyond



Southeast athletic field

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### SITE ANALYSIS (Continued)

#### ADDITIONAL PROPERTY ACQUISITION

Frederick County Public Schools will acquire two adjacent pieces of property located to the east of the original parcel to further facilitate the educational needs of the school. One of the parcels is approximately 15.1 acres and the other is 1.6 acres. They are both located in the same zoning district as the school, and thus are subject to the same requirements.

#### SITE CHARACTER

The additional areas can be best described as rolling. There is currently more than 80 feet of vertical elevation change across the additional property area. There are extremely steep areas of the site around the perimeter of the property, but the developer intends to level out portions of the property to create a more buildable lot.

The site currently has some pocket areas of wooded vegetation, but the vast majority of forest will be removed to level out the site. Some wooded areas will remain as forestation easement areas along Petersville Road when construction is complete.



View of additional lot looking to the southeast



View from additional lot looking southwest



View from additional lot looking northeast



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

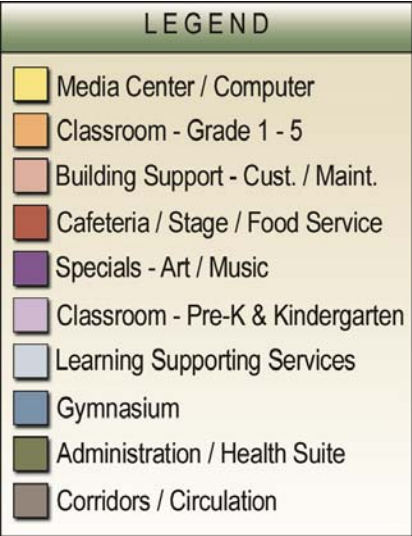
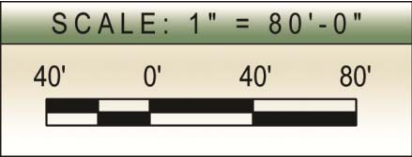
### SITE ANALYSIS (Continued)

The exhibit below indicates the additional land areas in green and pink. The proposed school layout was a diagrammatical representation prepared by the developer to show that a typical building would fit on the combined site.



SECTION 4 | EXISTING CONDITIONS ASSESSMENT

The diagram below indicates the current use of each space within the school. Note that this plan includes the proposed new main entrance security vestibule and general office relocation layout, which has been designed but is not yet constructed.



Brunswick Elementary School – Existing Floor Plans

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS

#### GENERAL SPATIAL ANALYSIS

Brunswick Elementary School is a primarily single-story building consisting of approximately 59,315 gross square feet. There is a partial basement beneath the kitchen that serves as the main mechanical and electrical room. The main entrance to the school is located at the west side of the original building, facing Central Avenue and the bus loop. The bus loop slopes up from Central Avenue toward the building entry and while the building is visible from the roadway, its low building height and primarily solid façade does not evoke a strong sense of welcome or feel particularly inviting. An entrance canopy extends out to the bus loop curb and helps to direct visitors to the entry. The main office and administration area are not located along the exterior wall facing the bus loop. They are located just across the corridor from the main entrance doors and therefore do not have visual connection to the exterior or a vestibule for security or energy efficiency. There are funds allocated to perform renovations to the entrance to create a new secured vestibule and relocate some of the general office functions to the exterior wall to improve security and supervision.

The school is organized around a main east-west corridor that runs to the east from the main entrance. It provides access to the administrative suite, the cafeteria, and the gymnasium. The majority of this corridor was constructed as part of the original building in 1952, however the gymnasium end was added in 1980. Two linear arms that serve primarily as classroom wings extend off of the main corridor. The wing that runs to the south connects near the west end of the corridor off of the entrance lobby and one running north connects closer to the east side, between the stage and the gym. The majority of these wings were constructed in 1952 and then each had some additional area added to their ends in 1958. A large rectangular addition that houses the media center, classrooms, and support spaces was constructed to the south of the main corridor in 1980.

The administration area runs along the south side of the main corridor. It includes a reception area, the health room, the Principal's office, two Assistant Principal's offices, the Guidance office, a workroom, and a staff restroom. Multi-user boys and girls restrooms are located just south of the main entrance, across the corridor from the administrative suite. In the south wing beyond the restrooms there were originally eight typical classrooms built in 1952. Five of these classrooms are currently being used for third grade. The remaining three classrooms have been renovated to provide a conference room, computer lab, two instructional support spaces, a speech room, and a small art room. In 1958, two additional classrooms, multi-user girls and boys restrooms, an office, storage space, and playroom were added to the south end of this wing. The two classrooms have been renovated to serve as an art room with storage and kiln space, staff restrooms, custodial space, and storage. The playroom has been subdivided into two music classrooms with a workroom between, however there are no doors separating the music rooms from the corridor so acoustics are a challenge. The art room, staff restrooms, and custodial spaces are at the same finished floor elevation as the remainder of the building, but beyond those, the corridor ramps down to the music rooms and support rooms. The ramp is not ADA-compliant because its approximately 10.5% existing slope is greater than 1:12.

Along the main corridor just beyond the administrative suite a cross corridor runs south to one of the 1980 additions, which includes the media center, media support, classrooms, small group instruction spaces, multi-user girls and boys restrooms, and storage spaces. This addition can also be accessed from the south classroom wing corridor. This addition is open plan and uses modular walls to subdivide the space. The media center is open to the corridors and must be passed through to access many of the classrooms. There are eight standard classrooms around the media center, three of which can be accessed only by passing through adjacent classrooms. These classrooms are currently used for first and second grade. There are also



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS

#### GENERAL SPATIAL ANALYSIS (continued)

two special education classrooms adjacent to the media center. A renovation project that is just being completed used light gauge metal stud walls to capture a portion of the media center and create new special education, speech, and book storage rooms.

Across the main corridor to the north of the administration area are the kitchen, cafeteria, stage, and staff lounge. The north classroom wing corridor connects to the main corridor between the stage and the staff lounge. This wing contains seven standard grade 1-5 sized classrooms that were part of the original 1952 construction. Currently, five of these classrooms are used for kindergarten, although they do not meet current Educational Specification square footage requirements. The other two classrooms are used for first grade. In 1958, two larger classrooms were added to the north end of this wing. These rooms are currently used for pre-kindergarten. All classrooms in this wing have single-user restrooms within the classrooms, however they are not handicapped accessible. There is a covered canopy area to the north side of the pre-kindergarten classrooms, facing the pick-up/drop-off area.

The second 1980 addition is located at the east end of the main corridor. It contains the gymnasium, gym office, gym storage, multi-user girls and boys restrooms, custodial services, and a building services office.

Six individual relocatable classrooms, a relocatable restroom building, and a four-classroom mega-pod are located to the southeast of the building. These structures are used for fourth and fifth grade classrooms.

#### CONSTRUCTION TYPE SUMMARY

The 1952 and 1958 construction is primarily masonry bearing walls with some steel columns and beams for bearing along the exterior walls where ribbon windows were originally installed. When the structure was renovated in 1980, the original ribbon windows were removed and the openings were infilled with a mix of new masonry cavity wall and smaller punched windows. The structure is slab-on-grade, except along the main corridor and classroom wing corridors, which are concrete slab on deck over a crawl space that was originally used as a pipe chase. Roof framing is steel joists with metal or insulrock deck. The 1980 media center and classroom addition utilizes masonry bearing walls exterior walls with steel columns at the interior to facilitate flexible open plan reconfiguration. The gymnasium addition consists of masonry bearing walls. The roof framing for both additions includes steel joists and gypsum decking on bulb tees.



Media center renovations under construction



Original 1952 construction with brick infill at old window openings & modified windows

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING ENVELOPE

The existing building is non-combustible construction. The structure is a mix of masonry bearing and steel frame with an exterior masonry façade. At the 1952 and 1958 portions, exterior walls are predominantly masonry construction using concrete masonry unit (CMU) back-up with brick veneer. Per the record drawings from that construction, it appears that no air space or cavity insulation is provided. Record drawings indicate that 1" of interior rigid insulation covered with gypsum board may have been added to many of the classroom exterior walls during the 1980 renovation. Exterior walls of the 1980 addition are mainly concrete masonry unit (CMU) back-up with 1" rigid insulation, a 1" air space, and 4" face brick veneer. The majority of the veneer is red face brick. The veneer is typically running bond, with every sixth course vertically laid as a header course. Soldier courses are utilized as an accent above windows. There is a small area of stone veneer below the windows at the main entrance. Prefinished metal wall siding panels are utilized above windows at the main entrance and at the south end of the 1958 playroom addition. The 1952 and 1958 construction has brick header window sills. In portions of the 1958 additions and in the 1980 addition, the windows framing runs straight down to the floor slab and incorporates solid metal panels or mechanical grilles at its base.



North end of Central Avenue facade



South end of Central Avenue facade



Stone veneer at main entrance



Soldier brick above windows



Metal panels at south side of 1958 addition



Header brick window sills



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING ENVELOPE

The masonry is in fair to poor condition, with many areas which require repair and/or repointing. Areas that seem to require the most repointing are below the window sills and above the roofline in the 1952 portion. There is also repointing required at the front façade to the north of the main entrance. See the structural narrative for additional details regarding the exterior masonry.

The roof is an existing built-up asphalt roofing system with white aggregate surfacing. The roof appears to have been replaced in two portions, one in 2000 and one in 2007. The roof over the classroom wings of the original building appears to be flat with no slope. Tapered insulation was installed during one of the re-roofing projects to create some slope at the cafeteria roof. The gymnasium roof has slope built into its gypsum decking system. The media center and surrounding 1980s classrooms have low-slope built into the steel joists. Primary drainage is via roof drains, some of which are routed internally, and some of which penetrate through the roof-edge overhang to external downspouts with boots or spill onto lower roofs. At the south 1958 addition, over what are now the music classrooms, the roof drains to a large gutter with downspouts on its north and south edges. The gutter appears to have been added to replace the original internal roof drains. The gutters require ongoing maintenance and were observed to be partially clogged with loose gravel and leaves. The northwest side had enough blockage at its outlet to be holding water and an area at the south side has been dented.



Many areas require repointing below windows



Area of 1952 building needs repointing above roofline



Chimney in need of repointing



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT



Overview of built-up asphalt roof at original construction south wing

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING ENVELOPE (Continued)

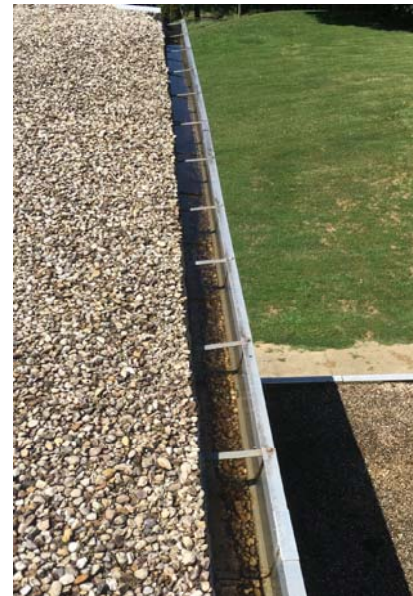
In general, the roof appears to be in fair to good condition. There are some areas where the gravel surfacing has been washed out from drains spilling from roofs above. There are also a few areas that appeared to have some standing water and there is some moss growth on the lower roof area to the north side of the 1958 playroom addition. Some of the existing sealants are starting to show signs of age and may need to be replaced soon. There are also a few areas where some flashings and trims are beginning to come loose and may require repair.



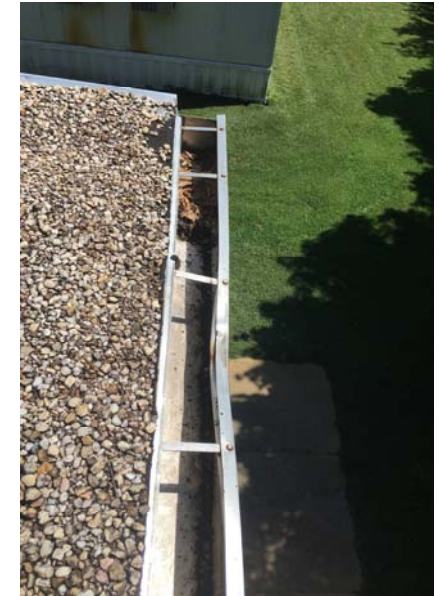
Ductwork penetration with loose flashing



Voids in metal/sealant at coping



Gravel clogging gutter



Dented section of gutter



SECTION 4 | EXISTING CONDITIONS ASSESSMENT



Area of standing water at cafeteria roof



Canopy at drop-off/pick-up and Pre-K



Cracking mortar joints & deteriorating sealant

ARCHITECTURAL ANALYSIS (Continued)

BUILDING ENVELOPE (Continued)

Transition ladders are provided for travel between the various roof elevations, however several of these are not code compliant because they do not meet the dimensional requirements of current regulations, most notably the 42” handrail height above the upper roof surface. Even some of the ladders that appear newer and do have taller handrails are just slightly short of the 42” requirement.

Roof edges have gravel stops rather than parapets. Gravel stops, fascia, downspouts, and trim are prefinished metal or stainless steel. Some of the downspouts have numerous dents. The only area of the roof that is not a built-up asphalt system is an area of prefinished standing seam metal roofing over the drop-off/pick-up canopy outside the pre-kindergarten classrooms. This canopy has a gabled pitch with gutters and downspouts at each side.



1958 addition standing water



Roof transition ladder



Non-code compliant ladder



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING ENVELOPE (Continued)

Exterior doors and frames are painted hollow metal, with the main entrance door, which has been replaced with an aluminum storefront door and frame. The hollow metal door and frame units are beginning to show their age and most of them do not have ADA compliant hardware. Exterior windows are primarily painted aluminum, with single pane glazing and many operable units. The exterior window assemblies are not thermally efficient and are in need of replacement. Perimeter sealants at the door and window openings are also beginning to show signs of failure and should be replaced.



1980 Addition typical classroom exterior door & window



1958 addition south exterior door & windows



1952 building typical exterior door & window



Deteriorating sealant at exterior frame

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING INTERIOR

Interior wall construction and finish varies throughout the building. At the main entrance some of the walls are unpainted exposed brick. All of the interior walls constructed as part of the original construction or two large addition/renovation projects are some type of masonry. The only metal stud and gypsum board walls are those which have been constructed for minor alterations since 1980. Corridors in the 1952 and 1958 construction have structural glazed facing tile up to about 4'-10" above finished floor with painted concrete masonry units (CMU) above. Corridors in the 1980 addition are primarily painted CMU. Classroom walls in the 1952 and 1958 construction are predominantly painted CMU, except for some exterior walls which received painted gypsum board installed over new rigid insulation during the 1980 renovations. The classrooms constructed in 1980 have painted concrete masonry unit exterior walls and painted gypsum board walls where abutting the original building construction. The majority of the interior partitions at the 1980 addition are demountable partitions.



Typical 1952 classroom



View of main entrance east-west corridor toward east



View of 1952 south wing corridor



Intersection of 1952 south & 1980 media corridor



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT



View of gymnasium



View of cafeteria towards stage



Terrazzo flooring with room name lettering inlay

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING INTERIOR (Continued)

The gymnasium walls are painted CMU with some areas of painted acoustical CMU. The cafeteria walls are painted CMU up to approximately door head height with some painted gypsum board above. The administration area walls are mostly covered in a wallcovering product. The media center has a combination of painted CMU, painted gypsum board, and demountable partition walls. Multi-user restrooms and restrooms at the administrative area have ceramic wall tile, while single-user classroom restrooms have structural glazed facing tile with painted CMU above.

Corridors at the 1952 and 1958 construction have terrazzo flooring with structural glazed facing tile wall base. Corridors at the 1980 additions have vinyl tile flooring with vinyl base. The drawings from that time indicate the tile as vinyl asbestos type, however asbestos was starting to be phased out at that time, so it is questionable whether these tiles contain asbestos or not. They appear more like VCT, but testing should be conducted to verify the type of material used. Restrooms have either terrazzo or ceramic tile flooring with either ceramic tile or structural glazed facing tile wall base.



Multi-user restroom with ceramic wall tile & terrazzo flooring



Multi-user restroom with ceramic wall tile & ceramic tile flooring



Administration area



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING INTERIOR

The gymnasium has vinyl composition tile flooring with rubber base. The stage has wood flooring with painted wood base. The majority of the media center, along with its support spaces, computer lab, and the administrative suite are carpeted, except for the health room and workrooms, which have vinyl tile. The majority of these areas have vinyl wall base. Classrooms are predominantly carpeted, except for some areas of vinyl tile adjacent to the classroom sinks. The large art classroom and most storage spaces are floored entirely with vinyl composition tile. A mix of structural glazed facing tile base and vinyl wall base is used throughout the classroom spaces.

Ceilings are generally 2'x4' acoustical tile with recessed 2'x4' fluorescent lighting fixtures. The media center uses larger recessed fluorescent fixtures. The gymnasium has an exposed structure ceiling with suspended light fixtures. Multi-user restrooms have painted gypsum board ceilings with recessed fluorescent lighting. Mechanical rooms and some storage closets have exposed structure ceilings.



View of stage



View of cafeteria



View of media center classroom and stack area



View of computer lab

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ARCHITECTURAL ANALYSIS (Continued)

#### BUILDING INTERIOR (Continued)



Typical 1952 classroom exterior wall

Interior doors are generally painted hollow metal in painted hollow metal frames. Restroom toilet partitions are either phenolic or laminate. Classroom casework is generally minimal. Most classrooms have base cabinets with laminate clad countertops and a sink. Some casework is painted metal. Most classrooms do not have cubbies or lockers. The majority of the casework is in fair condition.

The majority of classroom spaces have windows to the exterior that provide daylight and views, except for those at the interior portions of the 1980 media addition. The majority of other regularly occupied spaces have views and daylight as well, except for a few offices or support spaces within the media center and administrative area.

Nearly all of the existing fixtures, built-in casework, and finishes are starting to show their age and replacement of all existing items should be considered when defining the scope of work for any renovation options.



Typical 1980 classroom with demountable wall



View of art classroom

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### BUILDING CODE ANALYSIS

Building code requirements have changed significantly since the last addition was constructed, however it is anticipated that the building construction would be considered type IIB. Use Group Classification is Type “E”, Educational. The building is not currently sprinklered, except for a limited area system that exists to serve storage rooms, custodial closets, and the main mechanical room. Without a sprinkler system, buildings of this type are limited to 14,500 GSF per floor. This could be increased by up to 10,875 GSF if 100% frontage access is maintained, which would allow for a total area per floor of 25,375 GSF. The existing building appears to exceed this size and there is no evidence of any interior fire rated walls that would act as firewalls to separate the existing square footage in order to comply. It does appear as though some of the existing steel roof framing may be coated with some type of fireproofing or spray-on insulation material, but it is unclear from the record drawings as to what the purpose is behind this treatment. It is recommended that a sprinkler system be installed throughout any portions of the existing building that are to remain.

It appears given the current codes that the maximum allowable area per floor for this use would be approximately 61,625 using area increases for a sprinkler system and 50% frontage access. The actual frontage increase will be dependent upon the final building configuration. Depending upon the size and location of the proposed additions, they may require a two hour fire wall separation from the existing structure. Building height regulations for this type of building allow for a three story structure up to 75 feet tall with a sprinkler system. The zoning requirement is more stringent than this, so it will govern and limit the allowable height to 30 feet.

There were no obvious signs of hazardous materials observed during the field visits, however some materials may be present in concealed areas. It is believed that the majority of hazardous materials associated with existing flooring would have been abated when the classroom flooring replacement project was conducted in 2007.





## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### BUILDING CODE ANALYSIS (Continued)

#### SUMMARY OF ACCESSIBILITY COMPLIANCE

Generally, the school needs major renovations to be brought up to current code requirements for ADA compliance.

There are a number of ADA Compliance issues that should be addressed as part of the scope of work. The Accessibility Survey conducted by Proffitt & Associates Architects in 2014 details the non-compliant elements. A partial list is as follows:

- The existing ramp connecting the south side of the 1952 construction to the lower portion of the 1958 addition is not ADA compliant due to its steep slope.
- There is not an accessible route to the stage.
- The existing curb ramp at the main entrance is not compliant.
- There are protruding objects in circulation paths.
- Several door widths are not compliant, including doors to the single user restrooms in the north wing of the 1952 construction.
- Door hardware on the majority of doors is non-compliant (knob-style hardware is used).
- Restrooms are not ADA compliant. Many restrooms lack turning space and required clearances or do not contain accessible stalls or plumbing fixtures. Compliant grab bars are not typically provided.
- Plumbing fixtures such as classroom sinks and drinking fountains are not accessible.



ADA stall dimensions are slightly off and required grab bars not provided



Drinking fountain is not an accessible high-low type



Single-user toilet rooms are not ADA compliant due to size and door width



Nearly all of the existing door hardware is non-ADA compliant

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS

#### GENERAL DESCRIPTION

Brunswick Elementary School kitchen contains approximately 1,000 square feet and operates as a full-service prep/production facility equipped to produce and serve meals to the students and staff. Some of the equipment, is old, outdated, inefficient, non-compliant with current codes and has seen its useful life.

#### EXISTING CONDITIONS:

##### FINISHES

###### Floors

Kitchen and serving areas are thick-set quarry tile with coved base. Although old most tiles appear in sound condition. Due to smooth surface, tiles are very slippery when wet or laden with grease.

###### Walls

Painted. Old “institutional” off white in color and does not provide inviting atmosphere.

###### Ceilings

Scrubabble ceiling tiles throughout kitchen, dry storage, and serving area.

###### Lighting

Twin bulb surface mounted light fixtures. Light level throughout space varies and is not adequate and some areas are not within current code standards.



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

#### AREAS

##### Receiving

A single 3'-0" door. Door is not wide enough to accept palletized merchandise for deliveries.

##### Dry Storage

There is one dry storage room. Product is stored on shelving and also stacked on the floor. The space is small and has limited storage capacity. Walls are painted. Floors are quarry tile. Poor light level. Space is packed full indicating that there is not sufficient space for storage.





## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

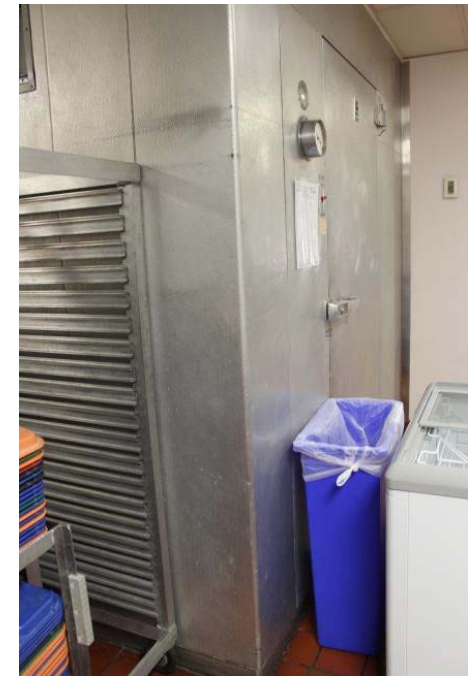
#### AREAS

##### Walk-in Freezer Storage

Unit is old and in fair/poor working condition and in constant need of repair. It is undersized for the number of students anticipated and is typically filled indicating the need for larger units. Flooring and walls are galvanized steel adding to maintenance problems.

##### Reach-In Coolers

There are three 2-compartment refrigerators. One is a pass-thru on the serving line/kitchen, one is used as a milk cooler on the serving line and the third is in the kitchen. They are of various ages and might be able to be reused in this school or transferred to another. Life cycle for this equipment is typically 10 years with normal wear and tear.





## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

#### AREAS

##### Kitchen

Amount of equipment is based on the current number of students in the school. Additional cooking equipment will be needed to properly prepare current menu items for the number of new students that are expected in the future. The space is overcrowded with little food prep area.



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

#### AREAS

##### Serving

Serving counters are 5 years old and consist of two straight-line cafeteria-style counters with provisions for hot and cold items and are in good working order. There is a pass thru refrigerator in fair condition and two half size heated cabinets. There are two milk coolers on the serving line that are also used as cashier counters as well as one behind the serving line. The space is very tight and there is no clearance at either end of the serving line to pass through.





## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

#### AREAS

##### Dishwashing

The machine is in a constant state of repair. There is a booster heater and vents to remove condensate. This equipment is past its expected life and needs to be replaced. The pot washing sink is on the back side of the kitchen and becomes labor intensive to transport pots and pans back and forth.



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

#### AREAS

##### Janitor Closet

Insufficient space to adequately store cleaning supplies. There is not proper space for the washer and dryer, and they are on different sides of the kitchen making it labor intensive.





## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

#### EQUIPMENT

##### Exhaust Hood

Hood is type 1 hood, made of stainless steel with baffle- type filters. It is in fair/good working condition.

##### Fire Protection System

There is no fire protection system.

##### Current Cooking Equipment

- 1.) (1) Steamer single stack
- 2.) (1) Double-Deck Convection Oven (new)

##### Worktables, Prep Sinks, Pot Sinks, Hand Sinks

Original to building. Pot sink is in good/fair condition. Worktables are a repurposed baker's table and a table with a stainless-steel top and galvanized base which should be painted or replaced. The number of hand sinks does not meet current health code.



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### FOOD SERVICE ANALYSIS (Continued)

#### CONCLUSIONS

The kitchen is in need of update and better organization, and poorly ventilated which leads to an uncomfortable and difficult working environment. A portion of the equipment has either seen its' useful life or is in violation of current health codes. Replace all outdated inefficient equipment with new energy saving appliances according to FCPS current menu. Student participation could be increased with a more inviting dining experience. Select bright colorful attractive finishes to promote friendly inviting atmosphere. Improve lighting and ventilation throughout space. The total square footage of the existing foodservice area(s) is under the current State recommendations. The current size of the spaces is functional but requires six lunch shifts in order to accommodate all students, which is not optimal. The kitchen will need to be increased in size if the number of lunch shifts is planned to be reduced.

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## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### **STRUCTURAL ANALYSIS**

#### **Existing Structure Condition**

Original Building: The existing original structure was built in 1952. The building is one-story tall on spread footings designed for an unspecified bearing pressure. A pipe trench runs under the corridors and feeds into a small basement mechanical room. The roofs are steel joists with steel roof deck bearing on interior CMU walls and exterior steel columns and beams.

The original building is in good condition and no major structural damage was observed.

Addition 1: Two one-story additions were built in 1958. The construction type of the kindergarten and classroom additions are similar; one-story tall on spread footings with steel joists with steel roof deck bearing on interior and exterior CMU walls. The playroom addition is gabled steel joists with 3" insulrock panels supported by light gage steel rails.

The 1958 additions are in good condition. Some minor deck rust was observed in the kindergarten addition.

Addition 2: Two one-story additions were built in 1980. The gymnasium addition is steel joists (with a slightly sloped top chord) bearing on exterior CMU walls. The classroom/library addition is interior steel beams and joists supported by interior steel columns and exterior CMU walls. The roof framing is 2" to 6" gypsum on 1" formboard supported by bulb tees. The foundations are spread footings with ABP = 2,000 psf.

The 1980 addition is in good condition.

Canopy Addition: A steel canopy was built in 1997.

The canopy is in good shape with the exception of some light rust around the bases of the columns.

#### **Structural Assessment**

ADTEK visited the building/school on August 21, 2019 for a facility walk-through. Based on our observations of visible structure, the existing structure appears in very good condition from a structural perspective. No obvious indications of major structural deficiencies or concerns were uncovered during the site visit. Only minor structural repairs are needed.

Very minor CMU cracking was observed; this seems to indicate no significant settlement issues have occurred.

Brick mortar was in poor condition in numerous locations; this is not a structural concern as none of the brick is carrying roof loads.



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### **STRUCTURAL ANALYSIS** (Continued)

#### **Structural Assessment** (continued)

One area of obvious water damage or recurring leaks was observed; this seems to indicate that, in general, structural systems have not been subjected to degrading water damage.

Based on our visual inspection, we believe the structure/school to be in good structural condition and capable of continuing to perform its intended function.

#### **Representation**

This report is intended to fairly present ADTEK Engineers, Inc.'s professional opinion of the condition of the area and component parts to which reference is made in the report, as of the date of the site observation, based on ADTEK's physical inspection and the information provided to us as to the age and the material that was apparently used, subject to qualifications expressed in this report. Unless otherwise stated, ADTEK has reported on only those items that we were able to visually inspect. It was not possible, nor was it feasible to remove major portions of the existing finish construction in order to expose concealed, and thus not apparent conditions for an internal detailed inspection.



Existing roof structure at media



Existing roof structure at gymnasium

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### MECHANICAL SYSTEMS

The existing HVAC system and equipment are of various ages and multiple types consisting of hot water boilers, self-contained unit ventilators and multiple rooftop units. Most of the equipment is beyond its anticipated life expectancy.

#### Heating system

The building is heated by a central boiler plant and hydronic distribution system. The heating plant consists of three (3) oil fired cast iron hot water boilers, Weil McLain model 488, with Riello burners rated at 704 MBH (21 BHP). The boilers were replaced in 2005 and are in fair condition.

Two (2) base mounted end suction pumps (primary and standby) are rated for 170 GPM at 45 ft. of head. The pumps were manufactured by Taco and installed in 2005 when the boiler was replaced. The pumps are constant speed/constant flow. The hydronic piping distribution is located overhead and was installed in 1979. Condition of the pipe is unknown but it is nearing the end of its median life expectancy.

Two (2) underground 8000 gallon fuel oil storage tanks serve the boilers. A duplex fuel oil transfer pump located in the boiler room delivers fuel oil to each boiler. Unused fuel oil returns back to the tank. There is not a fuel oil leak detection system and the age/type/condition of the underground fuel oil tanks is unknown. The fuel oil pump set appears to be in fair condition.



Main mechanical room boilers



Main mechanical room pumps



Main mechanical room pneumatic controls

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### MECHANICAL SYSTEMS (Continued)

#### **Classrooms**

The perimeter classrooms utilize self-contained/package cooling floor mounted unit ventilators with hot water heating coils. These units have built-in compressors and condensing sections in the cabinet with large through-wall louvers for heat rejection. The compressors are on-off capacity control. The unit ventilators were replaced in 1999/2000 and are at the end of their life expectancy.

The 1980 media center and classroom addition as well as the interior classrooms that were created at that time are served by a roof mounted multizone rooftop unit as manufactured by Trane. The rooftop unit was replaced in 2005.

#### **Multi-use and Support Spaces**

The cafeteria is served by two (2) recently (2017) replaced single zone constant volume rooftop units as manufactured by Daiken.

The kitchen is served by a roof mounted heating and ventilating unit. The unit was replaced in 2005.

The gym is served by a single zone constant volume heating and ventilating rooftop unit as manufactured by Trane. The unit was replaced in 2005.

The office admin suite and computer lab are served by individual packaged rooftop heat pump units. The units were installed as part of the 1980 addition.



Typical classroom unit ventilator



Rusting mechanical equipment on roof



New rooftop unit serving the cafeteria



## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### MECHANICAL SYSTEMS (Continued)

#### PLUMBING

**Domestic Water:** The building is served by 3" incoming public water service which enters the building in the boiler room. The domestic water heater was recently replaced with propane fired type as manufactured by PVI – Conquest.

Not all sinks/bubblers were lead tested due to cost constraints, and due to the age of the facility, it is possible that there could be some amount of lead present, therefore most fixtures have been labeled as not for consumption to be conservative.

**Fire Protection:** The building is not protected by a sprinkler system. Only storage rooms, janitor closets, and the boiler room have sprinkler heads and they are served by the domestic water system.

**Propane:** An above grade propane tank serves the domestic hot water heater.

**Sanitary:** The building is connected to a municipal sanitary system. The condition of the existing piping system is unknown. However, sanitary piping within walls is galvanized and clogs often. It was also noted that the underground sanitary in the office area is in bad condition. It was also noted that a sewer gas problem exists and all sanitary vents terminate with a cardboard filter.

**Storm Water:** An interior roof drainage system serves the majority of the building, primarily the classroom wings. The cafeteria area roof has roof drains at its perimeter that penetrate through the soffit overhang and re-emerge as exterior downspouts below the roofline. The 1958 playroom addition has gutters and downspouts that connect to underground storm via downspout boots at grade. The condition of the existing piping system is unknown.



Sink with "Not for Consumption" label



New propane tank near loading area



New hot water heaters

## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ELECTRICAL SYSTEMS

**Service:** The building's electrical service is derived from an overhead utility pole on Central Avenue feeding a pad mount transformer located in the bus loop island at the front of the building. Utility metering is located at the transformer. The main switchboard is rated at 1600A, 480Y/277V, 3 phase, 4 wire, located in the main electrical room. The switchboard is manufactured by ITE and is dated from 1979. The switchboard feeds branch panels throughout the building with step down transformers feeding 208Y/120V panels.

The majority of panelboards throughout the building are by ITE and are dated from 1979. Panels are showing their age and are reaching their physical space limitations. The incoming water service and miscellaneous sanitary pipes are located directly in front of the main switchboard, encroaching on the NEC required clearances. Portable classrooms are fed from a pad mount transformer with aerial cable. Panels from a computer networking project were added in 2000 to accommodate new computer drops throughout the building.

**Emergency Power:** A 20KW Onan diesel generator located in the main electrical room provides emergency power to the building life safety loads. An Onan transfer switch and emergency panels are also located in this area.



Main incoming electric service



Electrical transformer in bus loop island near Central Avenue

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## SECTION 4 | EXISTING CONDITIONS ASSESSMENT

### ELECTRICAL SYSTEMS (Continued)

**Lighting:** Lighting in classrooms, offices, and corridors varied throughout the building with a mixture of recessed 2'x4'/1'x4' troffers and surface mounted 2'x4'/1'x4' fixtures. Newer high bay fluorescent fixtures were used in the gym and industrial strip fixtures were used in mechanical and electrical spaces. Most of the fixtures are in fair condition and appear to contain fluorescent lamps.

Lighting control throughout the building is manual only with toggle switches being used in classrooms, offices, and corridors. No automatic lighting controls were observed.

Building mounted high-pressure sodium wall packs are located around the exterior perimeter for area lighting. Light poles with cobra head type fixture are located in the parking lot.

**Telecommunications:** The Main Frame Distribution (MDF) room is located in the Media Center area with Category 5 cabling to data outlets throughout the building. Interlogix security camera head end is also located in this area. The public address (PA) system is a Telecor XL headend and is located in the main office. PA speakers are located throughout the building including classrooms, corridors, and gathering spaces. Ceiling mounted projectors are typical in classrooms with wireless access points also observed in classrooms.

**Security:** Exterior security cameras were observed providing partial coverage around the building specifically at certain entrances and on the side of the building facing the portables. Camera coverage is also in place at the interior entrances to the building. Motion detectors are located throughout the corridors and in classrooms with disarming keypad at main lobby. Card readers are located on certain exterior doors with an intercom also provided at the main entrance for two-way communication to the main office.

**Fire Alarm:** An Edwards EST with voice notification fire alarm system was installed approximately 15 years ago. Ceiling mounted speaker/strobes are located throughout the building with pull stations at exterior exits and smoke detectors for automatic detection. Fire alarm graphic annunciator is located in main lobby with master air handling unit shut-down located adjacent to graphic.



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# SECTION 5:

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## PLANNING AND DESIGN CONSIDERATIONS

- Energy Use and Sustainability
- Options for Relocation of Students During Construction
- Design and Construction Recommendations
- Compliance with Environmental Regulations
- Local Planning Initiatives
- Historical Significance of Existing Buildings
- Proposed Project Schedule

## SECTION 5 | PLANNING AND DESIGN CONSIDERATIONS

### ENERGY USE AND SUSTAINABILITY

The Option 3 replacement building will be designed to achieve Silver level certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) for Schools Rating system. Due to their lesser new construction scope, Options 1 and 2 will not be required to achieve LEED certification. Due to the fairly rural nature of this site, it will not qualify for many of the Location and Transportation LEED credits. Other areas of design that will be addressed per LEED are sustainable site development; including stormwater management, reductions to impervious areas, reducing light pollution and heat island effect. Water use reduction and energy efficiency are critical not only from an environmental perspective, but also from a long-term maintenance cost perspective. Additional sustainable design features will include selection of environmentally preferable and low-emitting materials, provision of daylight and views, controllability of HVAC and lighting systems, and acoustical performance. These items are not only good sustainable practices, but also help to enhance occupant comfort and make the learning environment more effective for students and staff.

In addition to LEED, for all options the building will also need to comply with the current version of the International Energy Conservation Code. Many of these requirements overlap with the LEED requirements for energy and water efficiency. Building energy modeling will be required in order to verify and quantify energy savings. Modernization and renovation/addition options are approached slightly differently than new construction both from a LEED and Code perspective, however due to the fact that the entire existing building to remain will be modernized, all new components will be required to comply with current codes.

### OPTIONS FOR STUDENT RELOCATION DURING CONSTRUCTION

For Options 1, 2, and 3, portions of the existing building will remain occupied during construction. In Options 1 and 2, additional relocatable classrooms will need to be brought onsite prior to beginning the construction in order to allow for existing areas to be vacated for renovations and/or demolition. Option 1 requires up to 11 additional relocatable classrooms to be provided on site in order to phase the existing classroom renovations. Core spaces will be renovated during summer breaks. Option 2 will require a temporary gymnasium facility to be provided during the first phase of construction in order to demolish the existing gym prior to starting the addition. Once the addition is constructed, this allows students to be moved out of the temporary gymnasium and existing cafeteria areas and out of some classrooms to demolish and/or renovate those areas. Up to 6 additional relocatable classrooms are anticipated to be required during subsequent phases, potentially the temporary gymnasium space could be converted to 4 classrooms and 2 single units could be added. Depending on the capacity of the school at the time that the project starts, there could be a need for 2 additional relocatable classrooms. To be conservative, we are budgeting to have up to 8 relocatable classrooms added to the site which could be used for temporary classroom space.

In Option 3, the entire new building would be constructed while the entire existing building remains operational, which means that no additional relocatable classrooms will be required. Generally, for all options sitework will be scheduled to occur over the summer when possible to minimize disruption to operations. Phases would be timed to start and end over the summer so that staff and students can be relocated during summer break.

## SECTION 5 | PLANNING AND DESIGN CONSIDERATIONS

### DESIGN AND CONSTRUCTION RECOMMENDATIONS

Options 2 and 3 contain the following common elements (these elements are assumptions for the concept estimates but the ultimate design may vary):

#### ARCHITECTURAL DESIGN

##### CONSTRUCTION OF THE ADDITIONS/NEW FACILITIES

- All additions will be reinforced slab on grade construction. The foundation system is anticipated to consist of continuous strip footings at the exterior walls with spread footings and concrete piers as required at column locations. The structures will be steel frame construction. For Option 3, second floor levels will be composite concrete on steel deck and steel beams.
- The new construction will receive steel joist roofing systems sloped at 1/4" minimum per foot, topped with metal deck, rigid insulation, and built-up asphalt roofing. Exterior walls will be masonry cavity type constructed of 8" CMU backup, 4" air space with 2 1/2" rigid insulation, and 4" face masonry veneer.
- Exterior veneer materials will complement the existing materials, including use of face brick with some header and soldier courses. Cast stone sills will likely be used for windows in lieu of header course brick as at the existing structure due to long term maintenance concerns.
- Thermally broken aluminum windows with 1" insulated glazing will be used to provide an abundance of natural daylight. Exterior doors and frames will be thermally broken aluminum at all public and student-use areas and painted insulated hollow metal at storage and service areas.
- New interior walls will primarily consist of light gauge metal studs with impact-resistant drywall. Concrete masonry units may be used for specific high-impact areas like entrances, and at masonry bearing walls. Walls in most locations will be painted with low-VOC coatings. New restrooms will receive ceramic tile on the wet walls.
- New flooring will consist of vinyl composition tile at corridors. Entry vestibules will receive walk-off mats. Corridors and vestibules will receive a 4" to 6" high tile wall base. The classrooms will receive vinyl composition tile flooring and rubber wall base. New restrooms will have ceramic tile flooring and base.
- Ceilings throughout will primarily be 2'x4' standard acoustical tile in prefinished steel grid, with some painted gypsum board bulkheads.
- New interior doors will be prefinished solid flush wood in painted hollow metal frames. All classroom doors shall have narrow vision lights to allow for increased supervision and visibility between the corridors and classrooms.
- All newly constructed and renovated areas of the facility will be ADA accessible.

## SECTION 5 | PLANNING AND DESIGN CONSIDERATIONS

### DESIGN AND CONSTRUCTION RECOMMENDATIONS

#### SITE DESIGN

- The entire site area will be reworked to improve site circulation.
- Parking will be expanded to accommodate at least 140 cars.
- Separate entrances are provided for the bus loop and the parent drop-off loop.
- Reforestation will be required, and could be handled either on-site or by paying a fee-in-lieu.
- Stormwater management will be required to meet Environmental Site Design regulations, which will include strategies such as bioretention and infiltration.

### COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

The proposed improvements do not appear to be located within a designated wetland, navigable waterway and are outside the 100-year floodplain boundary area (as defined by FEMA), although there is a small wetland buffer along Central Avenue. Compliance with The Maryland Department of the Environment's Wetlands and Waterways Program is not required. Site disturbance greater than 40,000 square feet is subject to the Maryland Forest Conservation Act and will require a Forest Stand Delineation and a Forest Conservation Plan. Submission requirements are referenced in The State of Maryland State Forest Conservation Technical Manual (Third Edition, 1997). An Erosion and Sediment Control Plan designed in accordance with the Code of Maryland Regulations, the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, and the Stormwater Management Act of 2007 must be submitted to the Town of Brunswick, approved and implemented in advance of any site disturbance. Prior to any demolition work, the existing buildings should be assessed and abated of all ACM and lead paint hazards. Abatement requirements and approval are handled through the Maryland Department of the Environment (MDE).



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## SECTION 5 | PLANNING AND DESIGN CONSIDERATIONS

### LOCAL PLANNING INITIATIVES

The school site is not identified as a resource site in the June 2017 Frederick County Land Preservation, Parks and Recreation Plan ([https://www.frederickcountymd.gov/DocumentCenter/View/296485/Frederick-Co-LPPRP\\_Map\\_June-2017?bidId=](https://www.frederickcountymd.gov/DocumentCenter/View/296485/Frederick-Co-LPPRP_Map_June-2017?bidId=)). Additionally, per the April 2010 Comprehensive Plan for Frederick County Maryland ([https://frederickcountymd.gov/DocumentCenter/View/260739/CompPlan\\_34x44?bidId=](https://frederickcountymd.gov/DocumentCenter/View/260739/CompPlan_34x44?bidId=)), the site is not located within an Agricultural and Rural Community or Green Infrastructure boundary area.

### HISTORICAL SIGNIFICANCE OF THE EXISTING BUILDING

A review of the Maryland Historical Trust, National Register of Historic Places and the Frederick County Register of Historic Places databases indicates that the site is not located within any historic districts or preservation easements and the building is not listed on the national register.

### PROPOSED PROJECT SCHEDULE

This project is already in the current FCPS Capital Improvement Plan (CIP) and FCPS will request local planning approval by the Interagency Committee on School Construction this fall. Per the current CIP, design of this project will begin during the summer of 2020 upon award of the design contract and continue through summer 2021.

Depending upon the option selected, construction duration could range from 18 to 36 months. Assuming that funding is available in Fiscal Years 2021 and 2022, we anticipate construction to begin in summer 2021 with a fall 2023 building opening date. All sitework would be completed no later than fall 2024.



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# SECTION 6:

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## CONCEPT OPTIONS

- Option 1 | Modernization
- Option 2 | Modernization and Additions
- Option 3 | Replacement School On-Site

## SECTION 6 | CONCEPT OPTIONS

### OPTION 1 | MODERNIZATION | DESCRIPTION

Option 1 includes a complete renovation of the existing facility to remain without construction of any new space. The goal in developing this option is to modernize the existing facility by providing up-to-date systems, technology, and finishes.

In this option the existing interior spaces and functions receive minimal reconfiguration. The number of classrooms and support spaces will not change and existing adjacencies be altered only as required to relocate the main entrance and provide direct corridor access to all classrooms at the 1980 addition. The same number of relocatable classrooms will be required to remain upon completion of the project. Site modifications will include relocation of the bus loop, expansion of the existing parking and drop-off area, and accessibility upgrades as required by Code.

The existing structure will remain intact, with minor upgrades for installation of new mechanical units on the roof as required. Existing mechanical, electrical, and plumbing systems will be replaced almost in their entirety, except for select components that have been recently upgraded if determined feasible to remain. All existing exterior windows will be removed and replaced with new thermally broken prefinished aluminum windows with 1" insulating glazing. All exterior doors will be removed and replaced with new thermally broken aluminum storefront doors and frames. Approximately 20% of the existing brick veneer will require repointing. The existing roofing system will be removed down to the structural decking and replaced with new built-up roofing with code-compliant rigid insulation. Tapered insulation will be used to create slopes to drain where none currently exist.

Nearly all existing interior fixtures and finishes will be removed and replaced with new. This includes all new casework, cubbies, display boards, plumbing fixtures, etc. The existing terrazzo flooring and structural glazed facing tile in the corridors are in good condition and can remain. Existing ceramic tile flooring and wall finishes in the restrooms can also remain. Classrooms will receive new VCT flooring, new paint, and new acoustical tile ceilings. The existing demountable partitions in the 1980 addition will be removed and replaced with permanent light gauge stud walls.

In this option, construction phasing is proposed as follows (note that some phases overlap):

- Phase 1 (First summer) – Renovate existing Gymnasium wing
- Phase 2 (Year one - First summer to second summer) – Renovate 1952 north classroom wing, begin to construct new bus loop & adjacent field
- Phase 3 (Second summer) – Renovate existing Cafeteria and Kitchen, complete new bus loop
- Phase 4 (Year two - Second summer to third summer) – Renovate 1980 addition
- Phase 5 (Third summer) – Renovate existing Media Center and Admin area, expand existing parking area
- Phase 6 (Year three - Third summer to fourth summer) – Renovate 1952 south classroom wing
- Phase 7 (Fourth Summer) – Remove temporary portables, restore site, and complete new play areas

An additional ten or more relocatable classrooms will be required to be installed on site and to remain for the duration of construction in order to allow each phased area to be vacated for approximately six months during its renovation. One 12-room relocatable building will be required to remain on site after completion of construction in order to provide adequate classroom space and support spaces for 725 students.

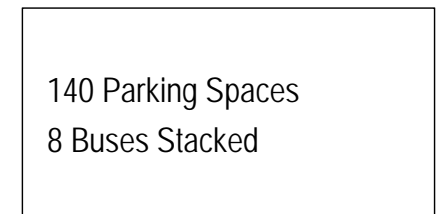
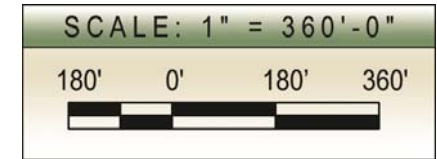
Estimated base bid construction costs: \$21,593,752 (costs do not include construction management fees or construction contingency). It is anticipated that the state would participate in a portion of the funding for the full square footage of this option.

Estimated construction duration: 36-38 months, including all associated sitework.



## SECTION 6 | CONCEPT OPTIONS

## OPTION 1 SITE PLAN



SECTION 6 | CONCEPT OPTIONS

OPTION 1 | MODERNIZATION



Brunswick Elementary School – Option 1 Floor Plan



## SECTION 6 | CONCEPT OPTIONS

### OPTION 1 | MODERNIZATION - CHALLENGES & OPPORTUNITIES COMPARISON

#### OPPORTUNITIES

- Lowest first cost of the three options.
- Good separation of buses, cars, and building services/loading.
- The majority of classrooms have direct egress at grade level.

#### CHALLENGES

- Phasing and temporary facilities will be required for 36 months.
- 10 portable classrooms will be required after completion to meet capacity of 725 plus 2 additional portables to reach opening enrollment projection of 764.
- Core spaces are undersized.
- Portions of the building are at different finished floor elevations – added cost for renovations required to create an ADA compliant ramp.
- Car stacking space is limited in the drop-off loop due to site constraints.
- The Media Center, several classrooms, and many support spaces do not have access to daylight or views to the exterior.
- Energy efficiency and thermal comfort would not be significantly upgraded in the existing portions of the building.





## SECTION 6 | CONCEPT OPTIONS

### OPTION 2 | MODERNIZATION AND ADDITIONS | DESCRIPTION

Option 2 includes a complete renovation of the existing facility to remain along with demolition of three areas of the existing building and construction of an addition in order to create additional program space to serve the new capacity. The goals in developing this option were to modernize the existing facility by providing up-to-date systems, technology, and finishes and to add onto an existing circulation path and retain daylight to all classrooms.

In this option the existing interior spaces and functions are modified and reconfigured in order to correct programmatic deficiencies and improve adjacencies. The existing gymnasium wing, north 1958 addition, and the lower portion of the 1958 south addition will be demolished. A new addition with a looped corridor will be constructed to the east of the existing building. A new courtyard will be created between the existing building and the addition. The addition will include a new main entrance and admin area, replacement gymnasium, cafeteria, food service area, music classrooms, kindergarten classrooms, support services rooms, and restrooms.

Site modifications will include upgrades to the bus loop, including relocation of its entrance/exit in order to improve sight distance and extending it to the north to increase stacking and provide an on-site turnaround. They also include a new entrance from the northern end of Central Avenue that will serve a new drop-off/pick up loop and new parking lot located to the north of the addition. New paved and soft surface play areas will be provided to the east and south of the addition and new multi-use athletic fields can be provided to the east of the new parking area.

See the Option 1 narrative for proposed upgrades to the existing facility systems and finishes. This Option does include demolition of select interior partitions at the existing building and construction of new partitions. The existing demountable partitions in the 1980 addition will be removed and replaced with permanent light gauge stud walls.

In this option, construction phasing is proposed as follows (note that some phases overlap):

- Phase 1 (First summer) – Demolish existing Gymnasium wing and existing north 1958 addition
- Phase 2 (Year one - First summer to second summer) – Construct new addition, new parking area, drop-off, and loading, and adjacent play area
- Phase 3 (Second summer) – Renovate central corridor between Cafeteria and Admin, continue construction of north portion of addition (Admin)
- Phase 4 (Year two - Second summer to third summer) – Renovate 1952 north classroom wing and complete remainder of addition
- Phase 5 (Third summer) – Renovate existing Admin area and demolish existing south 1958 addition, modify and expand existing bus loop
- Phase 6 (Year three - Third summer to fourth summer) – Renovate 1952 south classroom wing and 1980 addition
- Phase 7 (Fourth Summer) – Remove portables, restore site, and complete new play areas

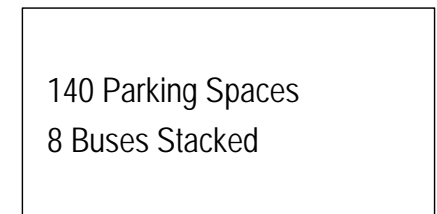
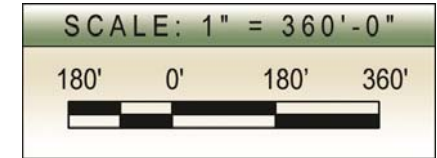
Once the addition is constructed, students can move from the existing building into the new classrooms in shifts in order to allow each phased area to be vacated for approximately six months during its renovation. A large relocatable structure will be required to serve as a temporary gymnasium facility during the first year of construction. It can then be converted into individual classroom spaces for use during later phases. At least one additional single relocatable classroom will also be required for the final year of construction.

Estimated base bid construction costs: \$36,775,474 (costs do not include construction management fees or construction contingency). It is anticipated that the state would participate in a portion of the funding for only up to 81,925 of the 102,875 total gross square feet in this option.

Estimated construction duration: 36-38 months, including all associated sitework.

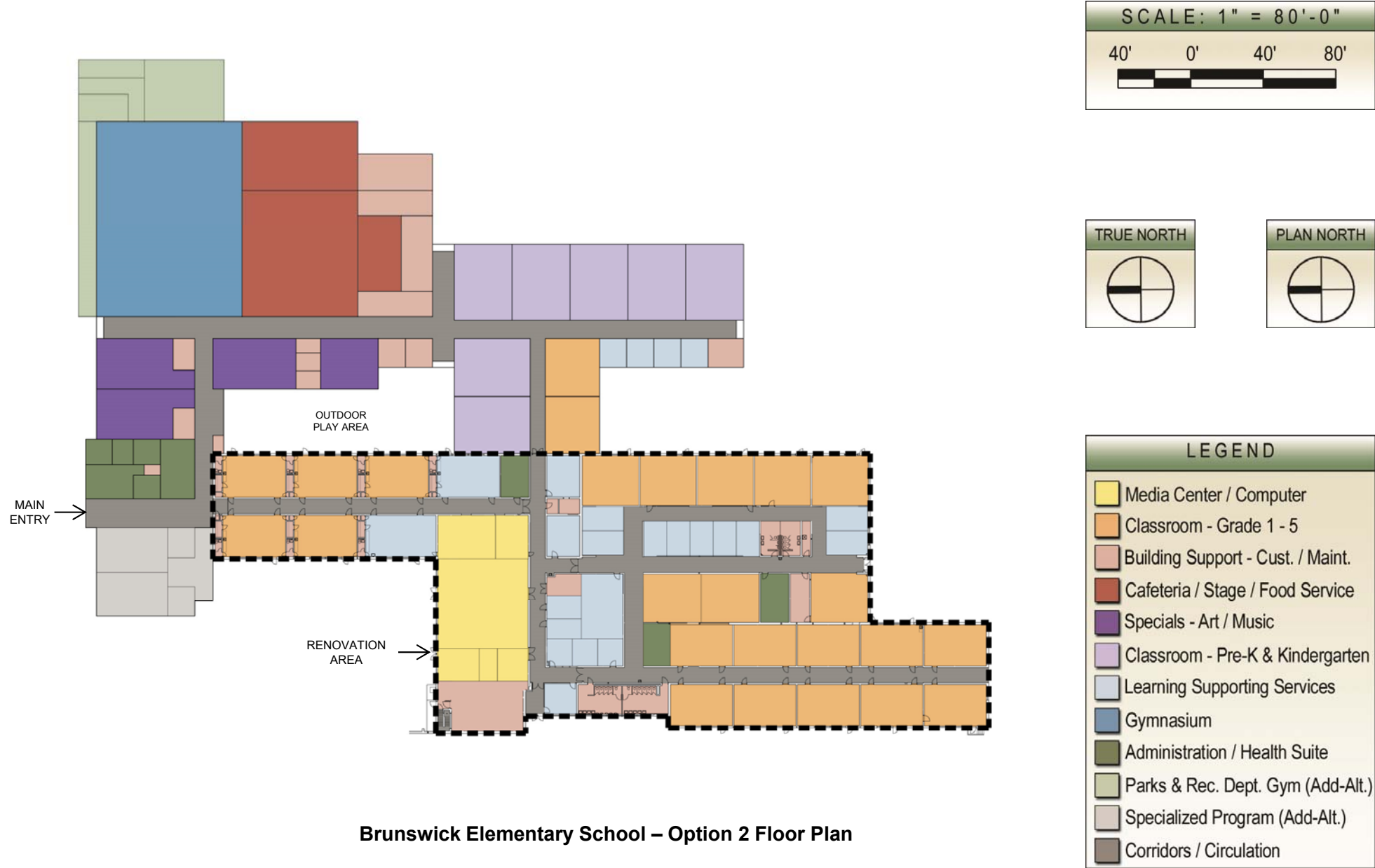
## SECTION 6 | CONCEPT OPTIONS

## OPTION 2 SITE PLAN



SECTION 6 | CONCEPT OPTIONS

OPTION 2 | MODERNIZATION AND ADDITIONS





## SECTION 6 | CONCEPT OPTIONS

### OPTION 2 | MODERNIZATION AND ADDITIONS - CHALLENGES & OPPORTUNITIES COMPARISON

#### OPPORTUNITIES

- The entire building is at one finished floor elevation, with the exception of a mechanical room and the stage.
- The majority of classrooms have direct egress at grade level.
- Good separation of buses, cars, and building services/loading.

#### CHALLENGES

- Phasing and temporary facilities will be required for 36 months.
- A courtyard is created to provide daylight and views, but may be a maintenance concern.
- Several classrooms and many support spaces do not have access to daylight or views to the exterior.
- Largest building size is inefficient and will require higher maintenance costs over time.
- Energy efficiency and thermal comfort would not be significantly upgraded in the existing portions of the building.
- 2 portable classrooms may be required to accommodate the projected equated enrollment of 764 in fall of 2023 when the modernized/expanded building would open.



## SECTION 6 | CONCEPT OPTIONS

### OPTION 3 | REPLACEMENT ON-SITE | DESCRIPTION

Option 3 includes construction of a new structure to the east of the existing building and demolition of the existing structure. The goal of this option is to provide a fully new, modern, and energy-efficient facility that meets the required programming with minimal impact on the existing building during construction.

This option is based on the current elementary prototype being developed for Blue Heron Elementary school. The new structure will be built into the topography of the site, with the main entrance at grade level at the front of the building and a lower story constructed beneath the main level at the rear classroom wing. The western portion of the main level contains the administrative suite, cafeteria, gymnasium, art, music classrooms, and support spaces. The eastern portion of the building contains classroom wings at the main level and classrooms and the media center at the lower level, which walks out at grade. Even assuming construction into the hillside, significant amounts of cut and fill will be required to accommodate the existing nearly 30 foot vertical elevation change across the proposed building pad.

Site improvements include a new pick-up/drop-off loop and parking area that will be located to the west of the building, facing Central Avenue. The entrance drive will be located at the high point of the roadway, between the existing bus loop entrance and exit, in order to provide optimal sight distance. This entrance will also provide access for the service drive and loading area. This loop and parking provide access at the main level of the building, adjacent to the administrative suite. The new bus loop entrance is proposed to enter the side at the north end of Central Avenue and follows the existing topography to loop around to the north of the two-story classroom wings. This entrance provides access at the lower level of the facility, adjacent to the media center. New paved and soft surface play areas are proposed to be located at the upper elevation adjacent to the gym and cafeteria, with additional primary paved and soft surface play space located at the lower level adjacent to the classroom wing. Multi-use athletic fields can be provided to the east of the new school and also at the southwest corner of the site after demolition of the existing building occurs.

In this option, construction phasing is proposed as follows:

- Phase 1 (Year one to start of year two - First spring to second fall) – Construct the new building, new bus loop, and majority of new parking
- Phase 2 (Remainder of year two to start of year three – Second fall to third summer/fall) – Demolish the existing building and complete new entrance drive to parking and new fields

Once the new building is constructed, students can move from the existing building into the new building so that the existing building can be demolished and relocatable classrooms removed.

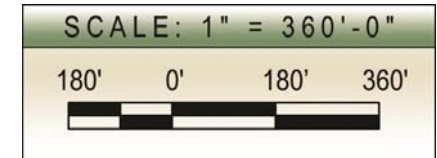
Estimated base bid construction costs: \$37,939,378 (costs do not include construction management fees or construction contingency). It is anticipated that the state would participate in a portion of the funding for up to 81,925 of the 98,590 gross square feet in this option.

Estimated construction duration: 24-28 months (16 months for construction of new building, plus 8 to 12 months to complete demolition and sitework)



## SECTION 6 | CONCEPT OPTIONS

## OPTION 3 SITE PLAN



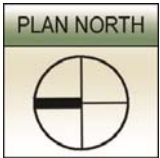
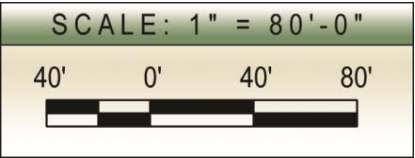
140 Parking Spaces  
10 Buses Stacked





SECTION 6 | CONCEPT OPTIONS

OPTION 3 |  
REPLACEMENT  
ON-SITE



LEGEND	
	Media Center / Computer
	Classroom - Grade 1 - 5
	Building Support - Cust. / Maint.
	Cafeteria / Stage / Food Service
	Specials - Art / Music
	Classroom - Pre-K & Kindergarten
	Learning Supporting Services
	Gymnasium
	Administration / Health Suite
	Parks & Rec. Dept. Gym (Add-Alt.)
	Specialized Program (Add-Alt.)
	Corridors / Circulation

Brunswick Elementary School –  
Option 3 Floor Plan

## SECTION 6 | CONCEPT OPTIONS

### OPTION 3 | REPLACEMENT ON-SITE - CHALLENGES & OPPORTUNITIES COMPARISON

#### OPPORTUNITIES

- Classroom layouts cluster well for grade level grouping.
- Walk-out lower level helps reduce the amount of earthwork required.
- Temporary facilities are not required during construction and construction duration is shortest of all options.
- Good separation of buses, cars, and building services/loading.

#### CHALLENGES

- Balancing earth on site before demolishing the existing building may be a challenge.
- 2 portable classrooms may be required to accommodate the projected equated enrollment of 764 in fall of 2023 when the new building would open.



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# SECTION 7:

## COST COMPARISON

- Summary of Estimated Costs
- Life Cycle Cost Analysis

## SECTION 7 | SUMMARY OF ESTIMATED COSTS & LIFE CYCLE COST ANALYSIS

### COST ESTIMATE

Construction and Project Costs									
	Option 1			Option 2			Option 3		
	GSF	\$/SF or %	Total	GSF	\$/SF or %	Total	GSF	\$/SF or %	Total
<b>Construction Costs</b>									
Total Proposed Building Area	59,315			96,380			91,690		
Hazardous Materials Abatement	59,315	4.79	284,119	59,315	4.79	284,119	59,315	4.79	284,119
Selective Building Demolition	59,315	9.00	533,835	47,130	11.00	518,430	0	0	-
Whole Building Demolition	0	0	-	12,185	7.05	85,904	59,315	7.50	444,863
New Construction	0	0	-	49,250	299	14,725,750	91,690	300.25	27,529,923
Renovation	59,315	238	14,116,970	47,130	236	11,122,680	0	0	-
Subtotal Building Costs			14,934,924			26,736,883			28,258,904
Site Demolition			59,413			166,657			202,008
Site Construction		9%	1,344,143		8.5%	2,272,635		10.25%	2,896,538
Subtotal Building and Site Costs		275	16,338,480		303	29,176,175		342	31,357,449
Phasing & Temporary Facilities Costs		8%	1,307,078		3%	875,285		1%	313,574
Subtotal Building, Site, & Phasing Costs		297	17,645,558		312	30,051,460		345	31,671,023
Design Contingency		10%	1,764,556		10%	3,005,146		10%	3,135,745
Subtotal Construction Costs		327	19,410,114		343	33,056,606		380	34,806,768
Escalation to Midpoint		11.25%	2,183,638		11.25%	3,718,868		9%	3,132,609
Subtotal Construction Costs w/Escalation		364	21,593,752		382	36,775,474		414	37,939,378
Construction Management		9%	1,746,910		8%	2,644,528		6%	2,088,406
Construction Contingency		6%	1,164,607		6%	1,983,396		3%	1,044,203
Total Construction Costs (current dollars)		413	24,505,269		430	41,403,399		448	41,071,987
<b>Additional Project Costs</b>									
Furniture and Equipment			1,250,000			2,000,000			2,000,000
Testing & Inspections, Permitting Fees			450,000			500,000			550,000
Project Planning Costs		7%	1,358,708		6%	1,983,396		5%	1,740,338
Subtotal Project Costs			3,058,708			4,483,396			4,290,338
<b>Total Construction and Project Costs</b>			<b>27,563,977</b>			<b>45,886,796</b>			<b>45,362,325</b>

Note: Costs outlined above are for the base bid scope of work only. If accepted, the Parks and Recreation Add Alternate is expected to add approximately \$1,725,000 to the construction cost. If accepted, the Alternative Specialized Program Add Alternate is expected to add approximately \$1,045,000 to the construction cost. These estimates do not include construction management fees or construction contingency.



## SECTION 7 | SUMMARY OF ESTIMATED COSTS & LIFE CYCLE COST ANALYSIS

### MECHANICAL SYSTEM LIFE CYCLE COST ANALYSIS

40 Year Life Cycle Cost Analysis			
	Option 1	Option 2	Option 3
<b>Mechanical System Installation Cost</b>			
Mechanical System Replacement Cost	3,000,000	5,000,000	4,500,000
<b>Operating Costs</b>			
Annual Operating Cost (\$)	47,708	78,185	64,680
Annual Service Cost (\$)	7,000	11,550	11,000
Annual Maintenance Cost (\$)	7,200	12,600	12,000
Total Annual O&M cost	61,908	102,335	87,680
Period (Years)	40	40	40
Assumed Annual Interest Rate	5%	5%	5%
Present Value Cost Factor	17.16	17.16	17.16
Present Value of O&M Cost (Total, \$)	1,062,341	1,756,069	1,504,589
<b>40-Year Life Cycle Cost (\$)</b>	<b>31,626,318</b>	<b>52,642,864</b>	<b>51,366,914</b>



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# SECTION 8:

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## APPENDICES

- Appendix A: Consultant Recommendations

# APPENDIX A | CONSULTANT RECOMMENDATIONS

## FOOD SERVICE DESIGN RECOMMENDATIONS

Options 2 and 3 will receive a new, enlarged kitchen with all new equipment.

- The facility will be equipped with all-new commercial-grade appliances meeting current N.S.F. requirements and installed in compliance with local governing health codes. All countertops and work surfaces will be of durable stainless steel finishes, and mounted on legs to promote sanitation and ease of cleaning.
- The kitchen will be designed to operate as an on-site prep/production facility equipped to produce and serve breakfast and lunch meals to the students and staff. Bulk refrigerated items will be stored in reach-in refrigerators & freezers. Onsite cooking will take place in convection oven, combi oven and steamer requiring a non-grease exhaust canopy. A fire protection system with this style of ventilation is not required. Trays and utensils will be washed and sanitized through a high-temperature dish machine. Clean ware will be stored on mobile pot & pan shelving.
- Serving of students will take place on modular cafeteria counters equipped with: 5-well steam table for hot food, mechanically-refrigerated frost top for cold food, ice cream cabinet, solid top counter for cutlery and snack items and a bulk milk cooler for milk and beverages. Meals will be served on re-useable trays.

Space recommendations for the kitchen areas are as follows:

<u>Area</u>	<u>S.F. Recommended</u>
Walk-in Cooler/Freezer Storage	250
Dry Storage	200
Non-Food Storage	50
Preparation/Cooking Area	600
Serving – (2) Lines	800
Pot & Pan Washing /Dishmachine	200
Utility Closet/Soap Storage	50
Staff Toilet/Locker	85
<u>Office</u>	<u>100</u>
<b>Total</b>	<b>2,335 S.F.</b>

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## APPENDIX A | CONSULTANT RECOMMENDATIONS

### **STRUCTURAL RECOMMENDATIONS**

#### **Proposed Structure Options**

Option 1 Renovations: The structural scope of this option is minor in nature. We expect to reinforce the roof joists and provide steel support frames where new mechanical units are placed on the roof.

Option 2 Renovations and Additions: The renovations will be similar to Option 1 (reinforce the roof joists and provide steel support frames where new mechanical units are placed on the roof). For the addition, we anticipate a single story addition separated from the existing structure with a firewall.

Option 3 Replacement: We anticipate a replacement building will be one-story in some areas and two-story in others. Due to the grade fall across the site, we anticipate walk-out basement with some full height cantilevered basement walls with large footings. Perpendicular CMU walls may be used to brace against the unbalanced earth pressure.

#### **Proposed Structure Overview**

The proposed building additions or replacement structure will be located along the north/south/east/west sides of the building.

Additions are expected to have minimal impact on the existing structure.

Additions may require underpinning the existing structure.

Additions will create snow drift on the existing structure that may require strengthening of the existing roof framing.

The new addition can be built while the existing building remains occupied. The underpinning operations must be installed in the summer or during a school break.

## APPENDIX A | CONSULTANT RECOMMENDATIONS

### **STRUCTURAL RECOMMENDATIONS (Continued)**

#### **Proposed Structure Foundations**

Building foundations will be designed based upon recommendations set forth in the geotechnical report. No geotechnical information has been gathered for this site as of the writing of this narrative. Therefore, the method of excavation, site preparation, ground water mitigation design, and foundation design for the proposed site have not yet been determined. Assume a conventional a shallow foundation system will be utilized for pricing purposes with an allowable bearing pressure of 2,000 psf. Frost depth is 30".

Assuming a shallow foundation system, the columns will be supported on individual square footings approximately 2'-0" below FFE to top of footing. The exterior walls will bear on a continuous strip footing poured integral with the exterior column footings approximately 2'-0" below FFE to the top of footing.

For on grade floors, concrete slab on grade reinforced with welded wire reinforcing over a vapor retarder over a graded stone capillary layer will be used. Typical slab on grade will be 5-inch thick; slab in mechanical areas will be 6-inch thick.

#### **Proposed Structure Superstructure**

**COLUMNS:** Columns are HSS6x6 at one-story areas, and W10 columns at two-story areas. Anticipated column spacing at the two-story areas will be in the 30 foot range.

**BASEMENT WALLS:** On the lower level, cast-in-place concrete walls retain soil around the new building or building addition. The walls will be designed either to cantilever or the walls will be braced by perpendicular concrete walls.

**FLOOR FRAMING:** On elevated floors, concrete slab over steel deck supported by composite beams and girders will be used. The slab system will be a 5-inch thick normal weight concrete (total thickness) over 1 ½-inch galvanized composite deck (22 gage). The composite beams will be at 7'-6" on center spacing supported by composite steel girders framing into steel columns.

**OTHER FLOOR FRAMING OPTIONS:** On elevated floors, concrete slab over steel deck supported by floor joists spaced at 2'-0" o.c. can be used. The slab system will be 4-inch normal-weight concrete (total thickness) over 9/16" galvanized form deck (28 gage). The joist framing will be supported by masonry bearing walls and steel wide-flange beams and columns in the open areas.

**ROOF FRAMING:** The roof will be a steel roof deck supported by structural open web steel bar joist framing at 5'-0" on center. The steel roof deck will be type "B" galvanized roof deck (22 to 20 gage).



## APPENDIX A | CONSULTANT RECOMMENDATIONS

### **STRUCTURAL RECOMMENDATIONS (Continued)**

#### **Proposed Structure Superstructure (Continued)**

LATERAL SYSTEM: [In the main building], lateral loads will be resisted by interior and exterior masonry shear walls. In the gymnasium, lateral loads will be resisted by exterior masonry shear walls. Loads will be distributed to the vertical elements by roofs and floors acting as diaphragms.

GYMNASIUM: At the gym, galvanized and painted acoustic deck will be used. Primed and painted long-span steel joists will bear on CMU walls. Joists can be spaced at 5' on center with the use of a 1 ½-inch deep roof deck. [If acoustic deck is not utilized, an inverted N deck is recommended to keep roofing nails from popping balls.]

#### **Codes, Design Guidelines and Material Standards**

Structural design will comply with the design guidelines of all applicable codes and standards of the authorities having jurisdiction.

International Building Code 2018

American Society of Civil Engineers (ASCE), Minimum Design Loads for Buildings and Other Structures ASCE 7-16

American Concrete Institute (ACI): Building Code Requirements for Structural Concrete ACI 318-14

American Institute of Steel Construction (AISC): AISC Manual of Steel Construction, 14th Edition

American Welding Society (AWS): AWS D1.1, D3.1, & D1.4

Steel Deck Institute (SDI): SDI Diaphragm Design Manual

American Society for Testing and Materials (ASTM): material standards as noted

American Iron and Steel Institute (AISI): AISI Specifications for Design of Cold Formed Steel Structural Members

Steel Joist Institute (SJI): SJI Catalog of Standard Specifications and Load Tables for Steel Joists and Joist Girders

American Concrete Institute (ACI): ACI Building Code Requirements and Specifications for Masonry Structures (ACI 530-16 and ACI 530.1-16)

#### **Materials of Construction**

Concrete 28-day strength:

Footings: 3,000 psi

Slab on deck: 3,000 psi

Concrete exposed to weather: 4,500 psi

Other concrete: 4,000 psi

Reinforcing steel bars:

ASTM A615, Grade 60,  $F_y = 60$  ksi

Welded wire fabric: ASTM A185



## APPENDIX A | CONSULTANT RECOMMENDATIONS

### **STRUCTURAL RECOMMENDATIONS (Continued)**

#### **Materials of Construction (Continued)**

##### Structural Steel

Wide Flange and Tee shapes: ASTM A992,  $F_y = 50$  ksi  
Angles, channels and plates: ASTM A36,  $F_y = 36$  ksi  
Hollow steel sections (HSS): ASTM A500, Grade B,  $F_y = 46$  ksi  
Pipe: ASTM A53, Grade B,  $F_y = 35$  ksi  
Anchor Bolts: ASTM F1554,  $F_y = 33$  ksi  
Welding Electrodes E70XX

Metal Roof Deck: Galvanized ASTM A653, G60  $F_y = 33$  ksi

Metal Floor Deck: Galvanized ASTM A653, G60  $F_y = 50$  ksi

##### Masonry:

Concrete Masonry Units (CMU):  $F'_m = 1,500$  psi  
Grout: ASTM C476  $F'_c = 3000$  psi  
Mortar: ASTM C270, Type M or S  
Joint Reinforcement: ASTM A82 - ladder type in CMU walls

#### **Design Loads**

Design loads will meet the minimum requirements of the International Building Code (IBC). The structure will be designed to support all dead loads such as the weight of the structure, partitions, flooring, ceiling, file storage, mechanical equipment, roofing, and all other built-in installations.

##### Floor and Roof Live Loads (minimum):

Classrooms: 40 psf plus partitions  
Corridors: 100 psf  
Stairs: 100 psf  
Electrical rooms: 100 psf  
Mechanical rooms: 150 psf  
Roof: 30 psf (not reducible)

Risk Category III (For assembly over 300 and for school occupancy)

## APPENDIX A | CONSULTANT RECOMMENDATIONS

### **STRUCTURAL RECOMMENDATIONS (Continued)**

#### **Design Loads (Continued)**

##### Snow Load:

Ground snow load: 30 PSF  
Snow exposure factor ( $C_e$ ): 1.0  
Snow load importance factor ( $I_s$ ): 1.1 (Risk Category III)  
Thermal factor ( $c_t$ ): 1.0 (heated)  
Flat roof snow load ( $p_f$ ): 23 psf + drift  
Drifting snow: as required by ASCE 7

##### Wind Loads:

Basic wind speed: 120 mph (3 second gust) ( $V_{ult}$ )  
Nominal Design Wind Speed: 93 mph ( $V_{asd}$ )  
Wind exposure: C  
Internal pressure coefficients ( $g_{cpi}$ ):  $\pm 0.18$   
Velocity Pressure ( $q_h$ ): varies with height of building

##### Seismic Loads

Importance Factor ( $I_e$ ): 1.25 (Risk Category III)  
Mapped Spectral Response Accelerations:  $S_s = 0.123$   $S_1 = 0.052$   
Site Class (to be confirmed by geotech report): D  
Spectral Response Coefficients:  $S_{ds} = 0.131$   $S_{d1} = 0.082$   
Seismic Design Category: B  
Basic Seismic Force-Resisting System and Response Modification Factor (R):  
Ordinary Reinforced Masonry Shear Walls ( $R=2.0$ )  
Analysis Procedure: Equivalent Lateral Force Procedure

##### Foundation Parameters:

Soil Bearing Pressure: To be determined by the geotechnical report.  
Minimum frost depth: 30" below grade

## APPENDIX A | CONSULTANT RECOMMENDATIONS

### MECHANICAL, ELECTRICAL, AND PLUMBING RECOMMENDATIONS

#### MECHANICAL

With the exception of the recently replaced cafeteria rooftop units, the remainder of the school's HVAC system and equipment is nearing and or beyond its useful life. Packaged unit ventilators are not recommended to serve classrooms. Natural gas is available to serve the building so high efficiency condensing type boilers are recommended to replace the oil tanks and standard efficiency boilers. Based on the architectural options, all mechanical and plumbing systems are recommended to be replaced in their entirety.

One option is a 4-pipe Fan Coil Unit system utilizing Dedicated Outdoor Air System (100% outside air DOAS units). Conditioned outside air for ventilation would be introduced into each space via an air distribution system from the dedicated outdoor air system (DOAS) air handling unit. An air cooled chiller and gas fired condensing boilers are recommended for the central cooling and heating plant. Each space would then be heated and cooled by a 4-pipe recirculating fan coil unit served by the central heating and cooling plant. Fan coil units can be the vertical type where they would be located within a mechanical closet (approximately 5' x 6') within each classroom or be located above the ceiling.

A geothermal or hybrid geothermal option is similar to the fan coil unit option except an earth heat exchanger is used in lieu of boilers and chillers. A hybrid approach is to provide supplemental boilers and cooling towers or use independent systems for the gym, cafeteria, and office admin suite.

Another option includes a deviation of the water based fan coil unit system which is to use ductless refrigeration based fan coil units known as a variable refrigerant volume (VRV) system. Multiple indoor ceiling type cassette units would be piped to a common refrigeration piping system to an outdoor air cooled heat pump unit. The DOAS unit will also be direct expansion (DX) based via packaged rooftop units or split rooftop units with natural gas furnaces. An all air distribution system such as a variable air volume (VAV) system is not feasible for the renovation/addition options based on the above ceiling infrastructure space requirements.

For assembly spaces (cafeteria, gymnasium), single zone variable flow air handling units are recommended. The cafeteria units can remain and be reused while the gym heating and ventilation system is recommended to be replaced with one which can provide cooling. These units in both fan coil type system options are recommended to be direct expansion type with natural gas furnaces such that the spaces are independent from the building system and can be used at night and / or on weekends.

Similarly, in all fan coil unit options, it is recommended that the office / admin suite be an independent VRV with DOAS system.

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## APPENDIX A | CONSULTANT RECOMMENDATIONS

### MECHANICAL, ELECTRICAL, AND PLUMBING RECOMMENDATIONS (Continued)

#### MECHANICAL (Continued)

##### SUMMARY

A 4-pipe system utilizing a central plant will be less efficient and cost more to operate compared to a geothermal system or VRF system used in conjunction with a DOAS ventilation system. A VRV system provides heating and cooling using electric and the use of heat recovery devices in DOAS units will minimize the amount of fossil fuel heating need. The use of natural gas for heat will primarily be utilized by the gym and cafeteria air handling units. The site appears to have sufficient space for a geothermal system if the budget can support the premium installation cost.

Based on the limited infrastructure space a 4-pipe distribution system will be challenging to maintain preferred ceiling heights however above ceiling units can be installed. A 2-pipe geothermal system will provide enhanced energy efficiency however room units will need to be located in mechanical closets. A VRF system requires the least amount of space.

#### PLUMBING

**Domestic Water:** A new larger public water service is recommended to serve the domestic water and fire protection system requirements.

The existing water heater shall be reused and converted to natural gas. All domestic water piping is recommended to be replaced in its entirety to meet current State of Maryland lead free law and code required hot water tempering requirements.

**Propane:** It is recommended to remove all existing propane and extend natural gas to the building.

**Sanitary:** It is recommended that the existing underground sanitary lines be videotaped to determine the condition for possible reuse or be replace in part or in their entirety.

**Storm Water:** It is recommended that the existing underground storm water lines be videotaped to determine the condition for possible reuse or be replace in part or in their entirety.

## APPENDIX A | CONSULTANT RECOMMENDATIONS

### MECHANICAL, ELECTRICAL, AND PLUMBING RECOMMENDATIONS (Continued)

#### ELECTRICAL

Service: Although the original electrical distribution system is still in operation, in general, original distribution equipment has reached its anticipated useful life and is recommended to be replaced. A new electrical distribution system is recommended and shall be configured to sub-meter by load type: HVAC, lighting, plug, and kitchen.

Cascaded surge protection devices are recommended for panelboards serving non-linear computer loads. These panelboards are also recommended to be equipped with 200% rated neutrals, served from K-factor rated dry type transformers. A separate neutral conductor is recommended to be installed for each computer circuit in order to reduce the effects of harmonics caused by non-linear loads.

Emergency Power: An outdoor natural gas or diesel generator is recommended for emergency loads with an automatic transfer switch and panelboards to serve egress lighting, fire alarm systems and other life safety related loads. The generator shall also be sized accordingly along with an additional automatic transfer switch and panelboards to serve MDF/IDF data and phone closets along with associated cooling loads, security, kitchen refrigeration equipment and other select loads.

Lighting: The existing lighting systems in the building are recommended to be replaced, largely due to physical condition and energy use. New lighting is recommended to be provided throughout the school with all lighting fixtures being LED type with a correlated color temperature (CCT) of 4000K. All lights will be recessed type in classrooms, corridors and offices, with prismatic lenses with minimum A19 pattern, frosted 0.156" thickness or Volumetric Style. Options for classrooms can be explored further and consist of recessed or pendant LED fixtures. New track lighting with color filters will be provided at stage. Lighting controls will meet ASHRAE 90.1 2013 or IECC 2015 and include wall mounted low voltage switches with preset scenes, low voltage vacancy sensors and ceiling mounted daylight sensor for daylight harvesting where applicable and room controllers. Emergency lighting will be connected to life safety panelboards via a generator transfer device so that lights can be turned off under normal operation and will transfer to generator load and turn on when power is lost. Exit signs would also be LED.

Building mounted exterior lighting is also recommended to be LED fixtures. Emergency lighting at egress doors is recommended, connected to emergency standby source per code and controlled via photocell.

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## APPENDIX A | CONSULTANT RECOMMENDATIONS

### MECHANICAL, ELECTRICAL, AND PLUMBING RECOMMENDATIONS (Continued)

#### ELECTRICAL (Continued)

Telecommunications: The telecommunications system is recommended to be updated and replaced as required. The systems shall meet current State of Maryland and Frederick County Public Schools standards. The System shall be star-wired and consist of Category 6, or better, cabling for both telephone and public address.

The Data Network will be star-wired 1000 Base-T and consist of Category 6 cabling. The System will provide all components for a complete operable LAN. A multi-strand composite fiber optic backbone will be used to link the main MDF with IDF rooms. IDF rooms will be added and strategically located to limit cabling lengths to 250 linear feet.

The public-address system, which appears to be in good working order, may be reused if feasible, with modifications and expansions required to accommodate new device layouts if the building is renovated. Otherwise, a new public-address system is recommended, including local systems for the new Gymnasium, tied into the building PA system.

Security: The intrusion detection system may be expanded if the building is renovated, with new wiring and additional devices as required to accommodate revised space configurations. The access control system and IP video surveillance system may be expanded as necessary. For a new building, all new systems will be provided.

Fire Alarm: The fire alarm system may be modified and expanded if the building is renovated with additional devices to accommodate renovations.



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# AIA<sup>®</sup> Document A133<sup>™</sup> – 2019

## **Standard Form of Agreement Between Owner and Construction Manager as Constructor** where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price

**AGREEMENT** made as of the     day of     in the year  
(In words, indicate day, month, and year.)

**BETWEEN** the Owner:  
(Name, legal status, address, and other information)

The Board of Education of Frederick County  
191 South East Street  
Frederick, Maryland 21701-5918

and the Construction Manager:  
(Name, legal status, address, and other information)

for the following Project:  
(Name, location, and detailed description)

Brunswick Elementary Replacement  
CM at Risk Services  
400 Central Avenue  
Brunswick, Maryland 21716  
RFP 21C1

The Architect:  
(Name, legal status, address, and other information)

GWWO, Inc.  
800 Wyman Park Drive, Suite 300  
Baltimore, MD 21211  
Telephone Number: 410-332-1009  
Fax Number: 410-332-0038

The Owner and Construction Manager agree as follows.

### **ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201<sup>™</sup>–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

## TABLE OF ARTICLES

1	INITIAL INFORMATION
2	GENERAL PROVISIONS
3	CONSTRUCTION MANAGER'S RESPONSIBILITIES
4	OWNER'S RESPONSIBILITIES
5	COMPENSATION AND PAYMENTS FOR PRECONSTRUCTION PHASE SERVICES
6	COMPENSATION FOR CONSTRUCTION PHASE SERVICES
7	COST OF THE WORK FOR CONSTRUCTION PHASE
8	DISCOUNTS, REBATES, AND REFUNDS
9	SUBCONTRACTS AND OTHER AGREEMENTS
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11	PAYMENTS FOR CONSTRUCTION PHASE SERVICES
12	DISPUTE RESOLUTION
13	TERMINATION OR SUSPENSION
14	MISCELLANEOUS PROVISIONS
15	SCOPE OF THE AGREEMENT

### EXHIBIT A PROJECT DESCRIPTION

### EXHIBIT B GUARANTEED MAXIMUM PRICE AMENDMENT

## ARTICLE 1 INITIAL INFORMATION

§ 1.1 This Agreement is based on the Initial Information set forth in this Section 1.1.

*(For each item in this section, insert the information or a statement such as "not applicable" or "unknown at time of execution.")*

§ 1.1.1 The Owner's program for the Project shall be as identified in the draft or final education specification provided or as specified herein.:

§ 1.1.1.1 The Project is described in the attached **Exhibit A Project Description**.

§ 1.1.1.2 The design of the school or facility for this Project (the "Design") shall include all amenities to allow efficient functionality including, but not limited to signage, security system, computer network integration including servers, exterior lighting, sidewalks, landscaping and exterior features as required to obtain a site plan, interior design services, modular workstations, playing fields, roadways, parking areas, landscaping, storm water management systems, utilities, vehicular and pedestrian access and circulation and other items specified herein, and other services and items reasonably expected and incidental to delivering an elementary school building ready for occupancy. The Architect and the design team, as assembled and determined by the Architect, (the "Design Team") shall use commercially reasonable efforts to meet the desires of the "Design Guide: FCPS Standards for Design of New and Renovated Facilities" as amended, which states preferences for the Project, a copy of which shall be available to the Architect upon request, and shall be adopted and incorporated herein by reference. If preferences are found to be unadvisable or do not comply with the building and other relevant codes and regulations, the Design Team shall promptly bring this to the attention of the Owner.

Init.

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§ 1.1.1.3 Design and civil engineering services for the Project's entire site that meet and achieve all required approvals by applicable governmental agency or agencies having jurisdiction over the Project (the "**Applicable Governmental Authorities**").

§ 1.1.1.4 The school or facility for the Project shall be heated and air-conditioned except for areas identified by the Owner in writing. The school or facility for the Project shall be equipped with a state of the art building automation system; the specific requirements for such will be coordinated between the Architect, the Construction Manager and the Owner's Maintenance and Operations Department.

§ 1.1.1.5 The Construction Manager shall conform and/or provide construction and other services as stipulated in the appropriate Educational Specifications for the Project, Design Guide: FCPS Standards for the Design of New and Renovated Facilities, correspondence between the Owner and the Construction Manager for the purposes of the specific solicitation for services, written documentation and clarifications of interview discussions, and the latest edition or version of the "State of Maryland, Public School Construction Program, Administrative Procedures Guide."

§ 1.1.1.7 Duties, responsibilities and limitations of authority of the Architect shall not be restricted, modified or extended beyond those set forth in this Agreement without written agreement of the Owner and the Construction Manager.

TBD

§ 1.1.2 The Project's physical characteristics:

*(Identify or describe pertinent information about the Project's physical characteristics, such as size; location; dimensions; geotechnical reports; site boundaries; topographic surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site, etc.)*

TBD

§ 1.1.3 The Owner's budget for the Guaranteed Maximum Price, as defined in Article 6:  
*(Provide total and, if known, a line item breakdown.)*

TBD

§ 1.1.4 The Owner's anticipated design and construction milestone dates:

.1 Design phase milestone dates, if any:

TBD

.2 Construction commencement date:

TBD

.3 Substantial Completion date or dates:

TBD

.4 Other milestone dates:

TBD

§ 1.1.5 The Owner's requirements for accelerated or fast-track scheduling, or phased construction, are set forth below:  
*(Identify any requirements for fast-track scheduling or phased construction.)*

Init.

TBD

**§ 1.1.6** The Owner's anticipated Sustainable Objective for the Project:  
(Identify and describe the Owner's Sustainable Objective for the Project, if any.)

New or totally renovated schools funded by the State of Maryland, or for which State funding may be requested, are required to achieve LEED Silver Certification. The Architect shall provide complete designs and specifications required to comply with LEED Silver Certification as a minimum requirement. The Architect shall prepare the Project charrette for the Project's scheduling meetings at the beginning of an integrative design process that sets the stage for cooperation and collaboration among all participants, including the Design Team, the Owner, the Construction Manager, and others involved in the Project. Early involvement of the entire Project team is fundamental to the successful use of a system approach to green building. The Architect shall address the Construction Manager's green building requirements in the bid documents such that Construction Manager's scope requirements are a known requirement to be included in the Guaranteed Maximum Price. The Design shall require services and construction materials supporting the LEED points identified and approved by the Owner as the charrette is being developed and modified during the Design process. The Construction Manager will be responsible for coordinating with the Architect for the construction phase LEED points throughout the design process. During the construction phase of the Project, the Construction Manager will be responsible for managing, tracking, and documenting as required for the Project to achieve the construction phase LEED Points.

**§ 1.1.6.1** If the Owner identifies a Sustainable Objective, other than as identified in Section 1.1.6 above, the Owner and Construction Manager shall complete and incorporate AIA Document E234™–2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, into this Agreement to define the terms, conditions and services related to the Owner's Sustainable Objective. If E234–2019 is incorporated into this agreement, the Owner and Construction Manager shall incorporate the completed E234–2019 into the agreements with the consultants and contractors performing services or Work in any way associated with the Sustainable Objective.

**§ 1.1.7** Other Project information:  
(Identify special characteristics or needs of the Project not provided elsewhere.)

TBD

**§ 1.1.8** The Owner identifies the following representative in accordance with Section 4.2:  
(List name, address, and other contact information.)

Theresa R. Alban, Ph.D., Superintendent of Schools

**§ 1.1.9** The persons or entities, in addition to the Owner's representative, who are required to review the Construction Manager's submittals to the Owner are as follows:  
(List name, address and other contact information.)

The Frederick County Public Schools ("FCPS") Maintenance and Operations Departments,  
The FCPS Facilities Services / Construction Managements / Planning Department,  
The FCPS Food Service Department,  
The FCPS Transportation Department,  
The FCPS Technology Services Department,  
The FCPS Elementary or Secondary School Improvement, Instruction and Administration Departments, and  
The applicable FCPS School Administration

**§ 1.1.10** The Owner shall retain the following consultants and contractors:  
(List name, legal status, address, and other contact information.)

Init.

.1 Inspection and Testing Agency:

TBD

.2 Commissioning Agent:

TBD

.3 Other, if any:

*(List any other consultants retained by the Owner, such as a Project or Program Manager.)*

- Third Party Constructability Reviewer
- Building Envelope Commissioning Consultant
- Other 3<sup>rd</sup> party Consultants as needed

§ 1.1.11 The Architect's representative:

*(List name, address, and other contact information.)*

TBD

§ 1.1.12 The Construction Manager identifies the following representative in accordance with Article 3:

*(List name, address, and other contact information.)*

TBD

§ 1.1.13 The Owner's requirements for the Construction Manager's staffing plan for Preconstruction Services, as required under Section 3.1.9:

*(List any Owner-specific requirements to be included in the staffing plan.)*

TBD

§ 1.1.14 The Owner's requirements for subcontractor procurement for the performance of the Work:

*(List any Owner-specific requirements for subcontractor procurement.)*

§ 1.1.15 Other Initial Information on which this Agreement is based:

The Construction Manager acknowledges and agrees that time is of the essence and that failure to timely perform and complete the services under this Agreement will result in significant costs, expenses, and damages to the Owner, including but not limited to damages for loss of use and enjoyment, extended overhead and management costs, extra or extended services by the Construction Manager or other contractors, claims by design professionals, and possibly other types of costs, expenses and damages incurred by the Owner. Construction Manager is responsible to the Owner for all such costs, expenses and damages, including but not limited to both economic and noneconomic losses, and liquidated damages, to the extent caused by the Construction Manager or those for whom the Construction Manager has contracted or is otherwise responsible.

§ 1.2 The Owner and Construction Manager may rely on the Initial Information. Both parties, however, recognize that such information may materially change and, in that event, the Owner, in its sole and absolute discretion, may adjust the Project schedule, the Construction Manager's services, and the Construction Manager's compensation. In the event the Owner chooses to make such adjustment(s), the Owner shall adjust the Owner's budget for the Guaranteed Maximum Price and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.

§ 1.3 Neither the Owner's nor the Construction Manager's representative shall be changed without ten days' prior notice to the other party.

Init.



## ARTICLE 2 GENERAL PROVISIONS

### § 2.1 The Contract Documents

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement and some of which may be issued after execution of this Agreement, other documents listed in this Agreement, and Drawings, Specifications, Addenda, and Modifications issued after execution of this Agreement, all of which form the Contract and are as fully a part of the Contract as if attached to this Agreement or repeated herein. Upon the Owner's acceptance of the Construction Manager's Guaranteed Maximum Price proposal, the Contract Documents will also include the documents described in Section 3.2.3 and identified in the Guaranteed Maximum Price Amendment and revisions prepared by the Architect and furnished by the Owner as described in Section 3.2.8. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. If anything in the other Contract Documents, other than a Modification, is inconsistent with this Agreement, this Agreement shall govern. An enumeration of the Contract Documents, other than a Modification, appears in Article 15.

### § 2.2 Relationship of the Parties

The Construction Manager accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Architect and exercise the Construction Manager's skill and judgment in furthering the interests of the Owner to furnish efficient construction administration, management services, and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish or approve, in a timely manner, information required by the Construction Manager and to make payments to the Construction Manager in accordance with the requirements of the Contract Documents.

### § 2.3 General Conditions

§ 2.3.1 For the Preconstruction Phase, AIA Document A201™–2017, General Conditions of the Contract for Construction, shall apply as follows: Section 1.5, Ownership and Use of Documents; Section 1.7, Digital Data Use and Transmission; Section 1.8, Building Information Model Use and Reliance; Section 2.2.4, Confidential Information; Section 3.12.10, Professional Services; Section 10.3, Hazardous Materials; Section 13.1, Governing Law. The term "Contractor" as used in A201–2017 shall mean the Construction Manager.

§ 2.3.2 For the Construction Phase, the general conditions of the contract shall be as set forth in A201–2017, which document is incorporated herein by reference. The term "Contractor" as used in A201–2017 shall mean the Construction Manager.

## ARTICLE 3 CONSTRUCTION MANAGER'S RESPONSIBILITIES

The Construction Manager's Preconstruction Phase responsibilities are set forth in Sections 3.1 and 3.2, and in the applicable provisions of A201–2017 referenced in Section 2.3.1. The Construction Manager's Construction Phase responsibilities are set forth in Section 3.3. The Owner and Construction Manager may agree, in consultation with the Architect, for the Construction Phase to commence prior to completion of the Preconstruction Phase, in which case, both phases will proceed concurrently. The Construction Manager shall identify a representative authorized to act on behalf of the Construction Manager with respect to the Project.

### § 3.1 Preconstruction Phase

#### § 3.1.1 Extent of Responsibility

The Construction Manager shall exercise reasonable care in performing its Preconstruction Services. The Owner and Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of services and information furnished by the Construction Manager. The Construction Manager, however, does not warrant or guarantee estimates and schedules except as may be included as part of the Guaranteed Maximum Price. The Construction Manager is not required to ascertain that the Drawings and Specifications are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Construction Manager shall promptly report to the Architect and Owner any nonconformity discovered by or made known to the Construction Manager as a request for information in such form as the Architect may require.

§ 3.1.2 The Construction Manager shall provide a preliminary evaluation of the Owner's program, schedule and construction budget requirements, each in terms of the other.

### § 3.1.3 Consultation

**3.1.3.1** The Construction Manager shall provide the following services relating to design and construction tasks:

.1 The Construction Manager shall consult with, advise, assist, and provide recommendations to the Owner, the Architect and other members of the design team on all aspects of the planning and design of the Work.

.2 The Construction Manager shall jointly schedule and attend regular meetings with the Architect and Owner's Authorized Representative. The Construction Manager shall consult with and advise the Owner and the Architect regarding site use and improvements, and the selection of materials, building systems and equipment.

.3 The Construction Manager shall provide recommendations to the Owner and Architect, consistent with Project requirements, on construction feasibility and constructability; availability of materials and labor; actions designed to minimize adverse effects of labor or material shortages; time requirements for procurement, installation and construction completion; prefabrication; and factors related to construction cost including, but not limited to, costs and estimates of alternative designs or materials, preliminary budgets and possible economies, life-cycle data, and possible cost reductions.

.4 The Construction Manager shall review in-progress design documents, including the documents generally described in the industry as Schematic Design Documents, Design Development Documents, and Construction Documents and provide input and advice to eliminate areas of conflict, overlapping trade jurisdictions, and overlaps in the Work to be performed by the various subcontractors, and to endeavor to confirm that all Work has been included in the Contract Documents.

.5 Construction Manager shall review completed Schematic Design Documents, Design Development Documents, and Construction Documents and suggest modifications whenever design details affect construction feasibility, schedules or cost in an effort to maintain the Project Budget and to improve completeness and clarity.

*(Paragraph deleted)*

**§ 3.1.3.2** The Construction Manager shall consult with the Architect regarding professional services to be provided by the Construction Manager during the Construction Phase.

**§ 3.1.3.3** The Construction Manager shall assist the Owner and Architect, as determined to be necessary by Owner in Owner's sole and absolute discretion, in establishing building information modeling and digital data protocols for the Project, using AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

### § 3.1.4 Project Schedule

The Construction Manager shall provide the following services related to the Project schedule:

- .1 The Construction Manager shall prepare, and periodically update, a preliminary Project schedule for the Architect's and Owner's review and approval.
- .2 The Construction Manager shall obtain the Architect's approval for the portion of the Project schedule relating to the performance of the Architect's services.
- .3 The Construction Manager shall coordinate and integrate the preliminary Project schedule with the services and activities of the Owner, Architect, and Construction Manager. As design proceeds, Construction Manager shall update the preliminary Project schedule to indicate proposed activity sequences and durations, milestone dates for receipt and approval of pertinent information, submittal of a Guaranteed Maximum Price ("GMP") proposal, preparation and processing of shop drawings and samples, delivery of materials or equipment requiring long-lead time procurement, and Owner's occupancy requirements showing portions of the Project having occupancy priority, provided that the date(s) of Substantial Completion shall not be modified without Owner's prior written approval. If preliminary Project schedule updates indicate that previously approved schedules may not be met, the Construction Manager shall make appropriate recommendations to the Owner and Architect.

### § 3.1.5 Phased Construction

The Construction Manager, in consultation with the Architect, shall provide recommendations with regard to accelerated or fast-track scheduling, procurement, and sequencing for phased construction. The Construction Manager shall take into consideration cost reductions, cost information, constructability, provisions for temporary facilities, and procurement and construction scheduling issues.

### § 3.1.6 Cost Estimates

The Construction Manager at Risk shall provide the following services relating to cost estimating:

- .1 The Construction Manager shall within **fourteen (14) days** of Notice of Award prepare a Statement of Probable Construction Cost utilizing area, volume or similar conceptual estimating techniques for review by the Architect and approval by the Owner. The Statement of Probable Construction Cost shall include appropriate contingencies for design, bidding or negotiating, price escalation and market factors.
- .2 When Schematic Design Documents have been prepared by the Architect, the Construction Manager shall, within **fourteen (14) days**, prepare a more detailed Statement of Probable Cost in a Level 1 Uniformal estimate or in another format approved by the Owner, for review by the Architect and approval by the Owner. During the preparation of the Design Development Documents, the Construction Manager shall, within **seven (7) days** update and refine this estimate at appropriate intervals agreed to by the Owner, Architect and Construction Manager.
- .3 When Design Development Documents have been prepared by the Architect, the Construction Manager shall, within **fourteen (14) days**, prepare a detailed Statement of Probable Construction Cost with supporting data in a Level 2 Uniformal estimate or other format approved by the Owner for review by the Architect and approval by the Owner. During the preparation of the Construction Documents, the Construction Manager shall, within **seven (7) days** update and refine this estimate at appropriate intervals agreed to by the Owner, Architect and Construction Manager.
- .4 If any Statement of Probable Construction Cost submitted to the Owner and Architect exceeds previously approved Statements of Probable Construction Cost or the Owner's budget, the Construction Manager shall make appropriate recommendations to the Architect and Owner to reduce the Probable Construction Cost.
- .5 Construction Manager shall notify the Owner, Architect and other members of the design team immediately if any construction cost estimate appears to be exceeding the construction budget.
- .6 The Construction Manager shall work with the Architect and Owner to develop a GMP within the Target GMP (Or Owner's Budget) as stated in the Request for Proposals unless a change in the Target GMP (Or Owner's Budget) is approved by the Owner, in Owner's sole and absolute discretion. Upon completion of the Construction Documents, the Construction Manager shall, in consultation with the Architect, furnish to the Owner a final and detailed Level 3 UniFormat probable cost estimate, including local versus state funding in accordance with the Statewide Adequacy Standards and local match requirements.

**3.1.7** To accomplish the objective set for in paragraph 3.1.6.4 above, the Construction Manager shall provide consultation throughout the Preconstruction Phase including, but not limited to the furnishing of all necessary Value Engineering services. The object of the Value Engineering is to achieve optimum value for each construction dollar spent and keep the time of completion and cost of the Work within the time and fiscal constraints set forth in the Contract Documents. In cooperation with the Owner and the Architect, the Construction Manager shall:

- .1 Formulate and evaluate alternative design, systems, and materials;
- .2 Provide cost estimates of the alternatives to be evaluated. Cost estimates shall include industry standard operating and maintenance costs when appropriate to evaluate life-cycle costs of the alternatives;
- .3 Evaluate the alternatives on the basis of costs, time schedules, availability of labor and materials and construction feasibility;
- .4 Prepare written reports at the end of the Schematic Design Phase and the Design Development Phase summarizing the Value Engineering activities. The reports shall indicate each Value Engineering alternative considered, the cost estimate for the alternative, the cost to incorporate the alternative and whether or not the Owner and the Architect agreed to accept the alternative.
- .5 In addition to the reports discussed in subsection 3.1.7.4 above, the Construction Manager shall maintain a running log of all Value Engineering alternatives considered throughout the entire preconstruction period. The log shall include the cost estimate for the alternative, the cost to incorporate the alternative and indicate whether or not the Owner and the Architect have agreed to incorporate the alternative.

*(Paragraphs deleted)*

Init.

§ 3.1.7 As the Architect progresses with the preparation of the Schematic Design, Design Development and Construction Documents, the Construction Manager shall consult with the Owner and Architect and make recommendations regarding constructability and schedules, for the Architect's review and the Owner's approval.

§ 3.1.8 The Construction Manager shall provide recommendations and information to the Owner and Architect regarding equipment, materials, services, and temporary Project facilities.

§ 3.1.9 The Construction Manager shall provide a staffing plan for Preconstruction Phase services for the Owner's review and approval.

§ 3.1.10 If the Owner identified a Sustainable Objective in Article 1, the Construction Manager shall fulfill its Preconstruction Phase responsibilities as required in AIA Document E234™-2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, attached to this Agreement.

#### § 3.1.11 Subcontractors and Suppliers

§ 3.1.11.1 After the Schematic Design, Design Development and Construction Documents are complete, the Construction Manager shall prepare bid packages and solicit price proposals for the Work in accordance with FCPS Bidding procedure, COMAR, and all other state of Maryland procurement regulations. The Construction Manager shall provide a subcontracting plan, addressing the Owner's requirements, for the Owner's review and approval.

§ 3.1.11.2 The Construction Manager shall develop bidders' interest in the Project.

- .1 The Construction Manager shall seek to develop subcontractor and supplier interest in the Project, and shall furnish to the Owner and Architect for their information a list of possible subcontractors and suppliers, including suppliers who may furnish materials or equipment fabricated to a special design, from whom competitive bids, quotes, or proposals (collectively, "Offers") will be requested for each principal portion of the Work. Submission of such list is for information and discussion purposes only and not for prequalification.
- .2 The Construction Manager shall provide input to the Owner and Architect and other members of the design team regarding current construction market bidding climate, status of key subcontract markets, and other local economic conditions. Construction Manager shall determine the division of work to facilitate bidding and award of trade contracts, considering such factors as bidding climate, improving or accelerating construction completion, minimizing trade jurisdictional disputes, and related issues. Construction Manager shall advise Owner on subcontracting opportunities for MBE businesses.

3.1.12 The Construction Manager shall recommend to the Owner and Architect a schedule for procurement of long-lead time items which will constitute part of the Work as required to meet the Project schedule, which shall be procured by the Construction Manager upon execution of either a GMP Amendment or Early Work Amendment covering such procurement, and approval of such schedule by the Owner. The Construction Manager shall expedite the delivery of long-lead time items.

3.1.13 The Construction Manager shall work with the Owner in identifying critical elements of the Work that may require special procurement processes, such as prequalification of Subcontractors or Material Suppliers or alternative contracting methods.

*(Paragraphs deleted)*

#### § 3.1.1.4 Procurement

The Construction Manager shall prepare bid packages and solicit price proposals for the Work in accordance with FCPS Bidding procedure, COMAR, and all other state of Maryland procurement regulations. The Construction Manager shall prepare, for the Architect's review and the Owner's acceptance, a procurement schedule for items that must be ordered in advance of construction. The Construction Manager shall expedite and coordinate the ordering and delivery of materials that must be ordered in advance of construction. The Owner may agree to procure any items prior to the establishment of the Guaranteed Maximum Price. The Owner may also decide to bid certain bid packages directly to the subcontractor market. Upon the establishment of the Guaranteed Maximum Price, the Owner shall assign all contracts for the items listed above to the Construction Manager and the Construction Manager shall thereafter accept responsibility for them.



### § 3.1.15 Compliance with Laws

The Construction Manager shall comply with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to its performance under this Contract, and with equal employment opportunity programs, and other programs as may be required by governmental and quasi-governmental authorities.

### § 3.1.16 Other Preconstruction Services

Insert a description of any other Preconstruction Phase services to be provided by the Construction Manager, or reference an exhibit attached to this document

*(Describe any other Preconstruction Phase services, such as providing cash flow projections, development of a project information management system, early selection or procurement of subcontractors, etc.)*

## § 3.2 Guaranteed Maximum Price Proposal

§ 3.2.1 At a time to be selected by the Owner, in Owner's sole and absolute discretion, the Construction Manager shall prepare a Guaranteed Maximum Price proposal for the Owner's and Architect's review, and the Owner's acceptance. The Guaranteed Maximum Price in the proposal shall be the sum of the Construction Manager's Cost of the Work, the Construction Manager's Not To Exceed General Conditions amount (including insurance, and Payment and Performance Bond costs), as submitted on the Bid Form, the Construction Manager's contingency described in Section 3.2.4, and the Construction Manager's Fee described in Section 6.1.2.

§ 3.2.2 To the extent that the Contract Documents are anticipated to require further development, the Guaranteed Maximum Price includes the costs attributable to such further development consistent with the Contract Documents and reasonably inferable therefrom.

§ 3.2.3 The Construction Manager shall include with the Guaranteed Maximum Price proposal a written statement of its basis, which shall include the following:

- .1 A list of the Drawings and Specifications, including all addenda thereto, including conditions of the contract
- .2 The proposed Contract Sum, including a written statement of estimated cost organized by trade categories, allowances, contingencies, Construction Manager's Fee, and other items that comprise the Contract Sum;
- .3 A list of the clarifications and assumptions made by the Construction Manager, if any, in the preparation of the Guaranteed Maximum Price
- .4 The proposed Guaranteed Maximum Price, including a statement of the estimated Cost of Work organized by trade categories, allowances, contingency funds, Construction Manager's not to exceed General Conditions, Construction Manager's lump sum fee, and other items and the fees and costs that comprise the Guaranteed Maximum Price. All scopes of Work and Contract Sums set forth in the assigned Contractor Agreements shall be included in the Cost of the Work as part of the Guaranteed Maximum Price. The Construction Manager shall also include in its Guaranteed Maximum Price all costs for self-performed and/or other Contractor Work (not otherwise included in the Contractor Agreements);
- .5 The Construction Manager shall include a contingency fund ("Contingency Funds") in the Guaranteed Maximum Price to cover unforeseen conditions, Owner-generated requests, design errors/omissions, and charges related to gaps in the scope of Work as allocated among Contractors by the Construction Manager. In no event shall charges, including, but not limited to, charges relating to errors/omissions or delays chargeable to the Construction Manager or Project costs not approved in writing in advance by the Owner, be charged to any area of the contingency. The Contingency Fund shall be identified in the schedule of values as a separate line item. The Contingency Fund may be drawn upon by the Construction Manager to pay the cost of the Work provided if (1) the Construction Manager provides the Owner with a written explanation of each requested draw upon the Contingency Fund along with the back-up documentation requested by the Owner (2) the Owner provides written authorization of each requested draw upon the Contingency Fund, and (3) each Application for Payment contains a report aggregating the Construction Manager's use of the Contingency Fund. Any amount remaining in the Contingency Fund shall be kept by the Owner and the Construction Manager shall prepare a deductive Change Order reducing the Construction Manager's Guaranteed Maximum Price by the amounts remaining in the Contingency Fund, if any, prior to final payment;
- .6 All construction and Project schedules upon which the Guaranteed Maximum Price is based, including, but not limited to, the Project Schedule and any preliminary schedules,

- .7 An enumeration of any qualifications and exclusions, if applicable; and
- .8 A list of the Construction Manager's key personnel, Contractors and suppliers.

§ 3.2.4 In preparing the Construction Manager's Guaranteed Maximum Price proposal, the Construction Manager shall include a contingency for the Construction Manager's exclusive use to cover those costs that are included in the Guaranteed Maximum Price. Use of any contingency during the construction phase of the Project must be approved in writing by the Owner.

§ 3.2.5 The Construction Manager shall meet with the Owner and Architect to review the Guaranteed Maximum Price proposal. In the event that the Owner or Architect discover any inconsistencies or inaccuracies in the information presented, they shall promptly notify the Construction Manager, who shall make appropriate adjustments to the Guaranteed Maximum Price proposal, its basis, or both.

§ 3.2.6 If the Owner accepts the Guaranteed Maximum Price proposal, the Owner and Construction Manager shall execute the Guaranteed Maximum Price Amendment amending this Agreement, a copy of which the Owner shall provide to the Architect. The Guaranteed Maximum Price Amendment shall set forth the agreed upon Guaranteed Maximum Price with the information and assumptions upon which it is based.

§ 3.2.7 The Construction Manager shall not incur any cost to be reimbursed as part of the Cost of the Work prior to the execution of the Guaranteed Maximum Price Amendment, unless the Owner provides prior written authorization for such costs.

§ 3.2.8 The Owner shall authorize preparation of revisions to the Contract Documents that incorporate the agreed-upon assumptions and clarifications contained in the Guaranteed Maximum Price Amendment. The Owner shall promptly furnish such revised Contract Documents to the Construction Manager. The Construction Manager shall notify the Owner and Architect of any inconsistencies between the agreed-upon assumptions and clarifications contained in the Guaranteed Maximum Price Amendment and the revised Contract Documents.

§ 3.2.9 The Construction Manager shall include in the Guaranteed Maximum Price all required and applicable sales, consumer, use and similar taxes for the Work provided by the Construction Manager that are legally enacted, whether or not yet effective, at the time the Guaranteed Maximum Price Amendment is executed.

### § 3.3 Construction Phase

#### § 3.3.1 General

§ 3.3.1.1 For purposes of Section 8.1.2 of A201–2017, the date of commencement of the Work shall mean the date of commencement of the Construction Phase.

§ 3.3.1.2 The Construction Phase shall commence upon the Owner's execution of the Guaranteed Maximum Price Amendment or, prior to acceptance of the Guaranteed Maximum Price proposal, by written agreement of the parties. The written agreement shall set forth a description of the Work to be performed by the Construction Manager, and any insurance and bond requirements for Work performed prior to execution of the Guaranteed Maximum Price Amendment.

#### § 3.3.2 Administration

§ 3.3.2.1 The Construction Manager shall schedule and conduct meetings to discuss such matters as procedures, progress, coordination, scheduling, and status of the Work. The Construction Manager shall prepare and promptly distribute minutes of the meetings to the Owner and Architect.

§ 3.3.2.2 Upon the execution of the Guaranteed Maximum Price Amendment, the Construction Manager shall prepare and submit to the Owner and Architect a construction schedule for the Work and a submittal schedule in accordance with Section 3.10 of A201–2017.

#### § 3.3.2.3 Monthly Report

The Construction Manager shall record the progress of the Project. On a monthly basis, or otherwise as agreed to by the Owner, the Construction Manager shall submit written progress reports to the Owner and Architect, showing percentages of completion and other information required by the Owner.



#### **§ 3.3.2.4 Daily Logs**

The Construction Manager shall keep, and make available to the Owner and Architect, a daily log containing a record for each day of weather, portions of the Work in progress, number of workers on site, identification of equipment on site, problems that might affect progress of the work, accidents, injuries, and other information required by the Owner.

#### **§ 3.3.2.5 Cost Control**

The Construction Manager shall develop a system of cost control for the Work, including regular monitoring of actual costs for activities in progress and estimates for uncompleted tasks and proposed changes. The Construction Manager shall identify variances between actual and estimated costs and report the variances to the Owner and Architect, and shall provide this information in its monthly reports to the Owner and Architect, in accordance with Section 3.3.2.3 above.

### **ARTICLE 4 OWNER'S RESPONSIBILITIES**

#### **§ 4.1 Information and Services Required of the Owner**

**§ 4.1.1** The Owner shall provide information with reasonable promptness, regarding requirements for and limitations on the Project, including a written program which shall set forth the Owner's objectives, constraints, and criteria, including schedule, space requirements and relationships, flexibility and expandability, special equipment, systems, sustainability and site requirements.

**§ 4.1.2** Intentionally deleted.

**§ 4.1.3** Intentionally deleted.

**§ 4.1.4 Structural and Environmental Tests, Surveys and Reports.** During the Preconstruction Phase, the Owner shall furnish the following information or services with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Construction Manager's performance of the Work with reasonable promptness after receiving the Construction Manager's written request for such information or services. The Construction Manager shall be entitled to rely on the accuracy of information and services furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

**§ 4.1.4.1** The Owner shall furnish tests, inspections, and reports, required by law, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials.

**§ 4.1.4.2** Within a reasonable time after receiving the same from the Architect, the Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; designated wetlands; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and other necessary data with respect to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.

**§ 4.1.4.3** The Owner, when such services are deemed necessary by Owner and the Architect, shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.

**§ 4.1.5** During the Construction Phase, the Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Construction Manager's performance of the Work with reasonable promptness after receiving the Construction Manager's written request for such information or services.

**§ 4.1.6** If the Owner identified a Sustainable Objective in Article 1, the Owner shall fulfill its responsibilities as required in AIA Document E234™–2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, attached to this Agreement.

## § 4.2 Owner's Designated Representative

The Owner shall identify a representative authorized to act on behalf of the Owner with respect to the Project. The Owner's representative shall render decisions promptly and furnish information expeditiously, so as to avoid unreasonable delay in the services or Work of the Construction Manager. Except as otherwise provided in Section 4.2.1 of A201–2017, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

### § 4.2.1 Intentionally deleted.

## § 4.3 Architect

The Owner shall retain an Architect to provide services, duties and responsibilities as described in AIA Document B133™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Constructor Edition, including any additional services requested by the Construction Manager that are necessary for the Preconstruction and Construction Phase services under this Agreement. The Owner shall provide the Construction Manager with a copy of the scope of services in the executed agreement between the Owner and the Architect, and any further modifications to the Architect's scope of services in the agreement.

## ARTICLE 5 COMPENSATION AND PAYMENTS FOR PRECONSTRUCTION PHASE SERVICES

### § 5.1 Compensation

§ 5.1.1 For the Construction Manager's Preconstruction Phase services described in Sections 3.1 and 3.2, the Owner shall compensate the Construction Manager as follows:

*(Insert amount of, or basis for, compensation and include a list of reimbursable cost items, as applicable.)*

The Owner shall compensate and make progress payments to the Construction Manager in accordance with this Article 11 for Preconstruction Services performed prior to the execution of the Guaranteed Maximum Price Amendment. For all required Preconstruction Services, the Construction Manager's compensation shall not exceed \$\_\_\_\_\_, which is a fixed fee that should include all Preconstruction Services costs for the Project (the "Preconstruction Fee"). The Preconstruction Fee shall be the Construction Manager's sole compensation for the Preconstruction Services for the Project. For Preconstruction Services, fifty percent (50%) of the total Preconstruction Fee shall be held by the Owner until the earlier to occur of the following: (1) the full execution of the Guarantee Maximum Price Amendment at which time the Owner shall release any retainage of the Preconstruction Fee to the Construction Manager; or (2) this Agreement is terminated pursuant to Section 13.1 at which time the fifty percent (50%) retainage of the Preconstruction Fee shall be forfeited by the Construction Manager and the Owner shall no longer be obligated to pay the Construction Manager the fifty percent (50%) retainage of the Preconstruction Fee.

### § 5.1.2

*(Paragraphs deleted)*

Intentionally deleted.

#### § 5.1.2.1 Intentionally deleted.

### § 5.1.3 Intentionally deleted.

## § 5.2 Payments

§ 5.2.1 Unless otherwise agreed, and except as otherwise provided in this Agreement, payments for services shall be made monthly in proportion to services performed.

### § 5.2.2

*(Paragraphs deleted)*

## ARTICLE 6 COMPENSATION FOR CONSTRUCTION PHASE SERVICES

### § 6.1 Contract Sum

§ 6.1.1 The Owner shall pay the Construction Manager the Contract Sum in current funds for the Construction Manager's performance of the Contract after execution of the Guaranteed Maximum Price Amendment. The Contract Sum is the Cost of the Work as defined in Article 7 plus the Construction Manager's Fee.

### § 6.1.2 The Construction Manager's Fee:

*(State a lump sum, percentage of Cost of the Work or other provision for determining the Construction Manager's Fee.)*

The Owner shall compensate and make progress payments to the Construction Manager in accordance with this Article 11 for Construction Phase Services performed after execution of the Guaranteed Maximum Price Amendment. For all required Construction Phase Services, the Construction Manager's Fee shall not exceed \$ \_\_\_\_\_, which is a fixed fee. Notwithstanding anything to the contrary herein, in the event Construction Manager fails to submit a Guaranteed Maximum Price proposal that is consistent with the Owner's Requirements or the Owner's budget, and Owner, in Owner's sole and absolute discretion, refrains from terminating the Contract pursuant to Article 13, then ten (10%) of the Construction Manager's Fee shall be forfeited by the Construction Manager and the Owner shall not be obligated to pay the Construction Manager ten (10%) of the Construction Manager's Fee stated herein.

**§ 6.1.3** The method of adjustment of the Construction Manager's Fee for changes in the Work:

There shall be no adjustment to the Construction Manager's Fee for changes in the Work after the GMP is agreed upon, until the value of cumulative Change Orders approved by the Owner exceeds 3% of the approved GMP Value. If the cumulative value of approved changes in the Work exceeds 3% of the approved GMP value, the Construction Manager will be allowed to include adjustment to Construction Manager's Fee (pursuant to Section 7.2.2 of A201-2017) for the portion of the Work in excess of the 3% of the approved GMP value. For example, if the agreed upon GMP amount for the Project is \$33.33 Million, the Construction Manager's Fee will not be adjusted until the cumulative value of approved changes in Work reaches \$1 Million after the GMP is approved. For this example, the Construction Manager is allowed to request adjustment to the Construction Manager's fee only for the portion of the changes in the Work in excess of \$1 Million.

**§ 6.1.4** Limitations, if any, on a Subcontractor's overhead and profit for increases in the cost of its portion of the Work:

See Section 7.2.2(G) of A201-2017.

**§ 6.1.5** Rental rates for Construction Manager-owned equipment shall not exceed \_\_\_\_\_ percent ( \_\_\_\_\_ %) of the standard rental rate paid at the place of the Project.

**§ 6.1.6** Liquidated damages, if any:

*(Insert terms and conditions for liquidated damages, if any.)*

The Construction Manager acknowledges and agrees that time is of the essence in achieving Substantial Completion and that a delay in achieving Substantial Completion will result in increased costs to the Owner. In the event that the Construction Manager does not achieve Substantial Completion as stipulated in Article 1, including approved extensions, the Construction Manager and the Construction Manager's surety shall be liable for and shall pay liquidated damages to the Owner. For each calendar day required to achieve Substantial Completion beyond the Substantial Completion Date authorized by this Contract and the Contract Documents, the Construction Manager shall pay to the Owner all direct costs charged to the Owner, plus liquidated damages, and not as a penalty, on account of the Owner's staff expense and on account of student inconvenience, disruption, and dislocation the sum of \$1,000.00 per day.

**§ 6.1.7** Other:

*(Insert provisions for bonus, cost savings or other incentives, if any, that might result in a change to the Contract Sum.)*

**§ 6.2 Guaranteed Maximum Price**

The Construction Manager guarantees that the Contract Sum shall not exceed the Guaranteed Maximum Price set forth in the Guaranteed Maximum Price Amendment, subject to additions and deductions by Change Order as provided in the Contract Documents. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Construction Manager without reimbursement by the Owner.

### § 6.3 Changes in the Work

§ 6.3.1 The Owner may, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions. The Owner shall issue such changes in writing. The Construction Manager may be entitled to an equitable adjustment in the Contract Time as a result of changes in the Work.

§ 6.3.1.1 The Architect may order minor changes in the Work as provided in Article 7 of AIA Document A201–2017, General Conditions of the Contract for Construction.

§ 6.3.2 Notwithstanding anything to the contrary set forth herein, Adjustments to the Guaranteed Maximum Price on account of changes in the Work subsequent to the execution of the Guaranteed Maximum Price Amendment may only be granted by advance written consent and approval Owner.

§ 6.3.3 Adjustments to subcontracts awarded on the basis of a stipulated sum may only be granted by advance written approval by Owner. Adjustments to subcontracts awarded with the Owner's prior written consent and approval on the basis of cost plus a fee shall be calculated in accordance with the terms of those subcontracts.

§ 6.3.4 In calculating adjustments to the Guaranteed Maximum Price, the terms "cost" and "costs" as used in Article 7 of AIA Document A201–2017 shall mean the Cost of the Work as defined in Article 7 of this Agreement and the term "fee" shall mean the Construction Manager's Fee as defined in Section 6.1.2 of this Agreement.

§ 6.3.5 Intentionally deleted.

## ARTICLE 7 COST OF THE WORK FOR CONSTRUCTION PHASE

### § 7.1 Costs to Be Reimbursed

§ 7.1.1 The term "Cost of the Work" shall mean costs necessarily incurred by the Construction Manager in the proper performance of the Work. Such costs shall be at rates not higher than those customarily paid at the place of the Project except with prior consent of the Owner. The Cost of the Work shall include only the items set forth in this Article 7.

§ 7.1.2 The Construction Manager has provided the Owner with a detailed itemization of all of the Construction Manager's General Conditions Costs in Attachment 1, which is incorporated herein by reference. Notwithstanding anything to the contrary in this Article 7 and throughout the Contract Documents, the total cost to the Owner for all of the Design-Builder's General Conditions Costs shall not exceed \$ \_\_\_\_\_ (as submitted by the Construction Manager on the bid form, and as further set forth in Attachment 1, unless agreed by written change order) and any amounts appropriated for General Conditions that are unused by the Construction Manager shall be applied as a credit for the benefit of the Owner.

§ 7.1.3 Where any cost is subject to the Owner's prior approval, the Construction Manager shall obtain the Owner's approval prior to incurring the cost.

§ 7.2 Intentionally deleted.

*(Paragraphs deleted)*

### § 7.3 Subcontract Costs

Payments made by the Construction Manager to Subcontractors in accordance with the requirements of the subcontracts and this Agreement.

### § 7.4 Costs of Materials and Equipment Incorporated in the Completed Construction

§ 7.4.1 Costs, including transportation and storage at the site, of materials and equipment incorporated, or to be incorporated, in the completed construction.

§ 7.4.2 Costs of materials described in the preceding Section 7.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, shall become the Owner's property at the completion of the Work or, at the Owner's option, shall be sold by the Construction Manager. Any amounts realized from such sales shall be credited to the Owner as a deduction from the Cost of the Work.

§ 7.5 Intentionally deleted.

(Paragraphs deleted)

**§ 7.6 Intentionally deleted.**

(Paragraphs deleted)

**§ 7.7 Intentionally deleted.**

(Paragraphs deleted)

**§ 7.8 Related Party Transactions**

**§ 7.8.1** For purposes of this Section 7.8, the term "related party" shall mean (1) a parent, subsidiary, affiliate, or other entity having common ownership of, or sharing common management with, the Construction Manager; (2) any entity in which any stockholder in, or management employee of, the Construction Manager holds an equity interest in excess of ten percent in the aggregate; (3) any entity which has the right to control the business or affairs of the Construction Manager; or (4) any person, or any member of the immediate family of any person, who has the right to control the business or affairs of the Construction Manager.

**§ 7.8.2** If any of the costs to be reimbursed arise from a transaction between the Construction Manager and a related party, the Construction Manager shall notify the Owner of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If the Owner, after such notification, authorizes the proposed transaction in writing, then the cost incurred shall be included as a cost to be reimbursed, and the Construction Manager shall procure the Work, equipment, goods, or service, from the related party, as a Subcontractor, according to the terms of Article 9. If the Owner fails to authorize the transaction in writing, the Construction Manager shall procure the Work, equipment, goods, or service from some person or entity other than a related party according to the terms of Article 9.

**§ 7.9 Costs Not To Be Reimbursed**

Other than those reimbursable costs set forth in Sections 7.3 and 7.4, and Attachment 1, no other Costs of the Work performed by the Construction Manager shall be reimbursable from the Owner to the Construction Manager.

(Paragraphs deleted)

**ARTICLE 8 DISCOUNTS, REBATES, AND REFUNDS**

**§ 8.1** Cash discounts obtained on payments made by the Construction Manager shall accrue to the Owner if (1) before making the payment, the Construction Manager included the amount to be paid, less such discount, in an Application for Payment and received payment from the Owner, or (2) the Owner has deposited funds with the Construction Manager with which to make payments; otherwise, cash discounts shall accrue to the Construction Manager. Trade discounts, rebates, refunds, and amounts received from sales of surplus materials and equipment shall accrue to the Owner, and the Construction Manager shall make provisions so that they can be obtained.

**§ 8.2** Amounts that accrue to the Owner in accordance with the provisions of Section 8.1 shall be credited to the Owner as a deduction from the Cost of the Work.

**ARTICLE 9 SUBCONTRACTS AND OTHER AGREEMENTS**

**§ 9.1** Those portions of the Work that the Construction Manager does not customarily perform with the Construction Manager's own personnel shall be performed under subcontracts or other appropriate agreements with the Construction Manager. The Owner may designate specific persons from whom, or entities from which, the Construction Manager shall obtain bids. The Construction Manager shall obtain bids from Subcontractors, and from suppliers of materials or equipment fabricated especially for the Work, who are qualified to perform that portion of the Work in accordance with the requirements of the Contract Documents. The Construction Manager shall deliver such bids to the Architect and Owner with an indication as to which bids the Construction Manager intends to accept. The Owner then has the right to review the Construction Manager's list of proposed subcontractors and suppliers in consultation with the Architect and, subject to Section 9.1.1, to object to any subcontractor or supplier. Any advice of the Architect, or approval or objection by the Owner, shall not relieve the Construction Manager of its responsibility to perform the Work in accordance with the Contract Documents.

**§ 9.1.1** When a specific subcontractor or supplier (1) is recommended to the Owner by the Construction Manager; (2) is qualified to perform that portion of the Work; and (3) has submitted a bid that conforms to the requirements of the Contract Documents without reservations or exceptions, but the Owner requires that another bid be accepted, then the

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Construction Manager may require that a Change Order be issued to adjust the Guaranteed Maximum Price by the difference between the bid of the person or entity recommended to the Owner by the Construction Manager and the amount of the subcontract or other agreement actually signed with the person or entity designated by the Owner.

§ 9.2 Subcontracts or other agreements shall conform to the applicable payment provisions of this Agreement..

## ARTICLE 10 ACCOUNTING RECORDS

The Construction Manager shall keep full and detailed records and accounts related to the Cost of the Work, and exercise such controls, as may be necessary for proper financial management under this Contract and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Construction Manager's records and accounts, including complete documentation supporting accounting entries, books, job cost reports, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, Subcontractor's invoices, purchase orders, vouchers, memoranda, and other data relating to this Contract. The Construction Manager shall preserve these records for a period of five years after final payment, or for such longer period as may be required by law.

## ARTICLE 11 PAYMENTS FOR CONSTRUCTION PHASE SERVICES

### § 11.1 Progress Payments

§ 11.1.1 Based upon Applications for Payment submitted to the Architect by the Construction Manager, and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum, to the Construction Manager, as provided below and elsewhere in the Contract Documents.

§ 11.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 11.1.3 Provided that an Application for Payment is received by the Architect not later than the first day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the Twenty Fifth (25<sup>th</sup>) day of the same month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than thirty ( 30 ) days after the Architect receives the Application for Payment.

*(Federal, state or local laws may require payment within a certain period of time.)*

§ 11.1.4 With each Application for Payment, the Construction Manager shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner or Architect to demonstrate that payments already made by the Construction Manager on account of the Cost of the Work equal or exceed progress payments already received by the Construction Manager, plus payrolls for the period covered by the present Application for Payment, less that portion of the progress payments attributable to the Construction Manager's Fee.

§ 11.1.5 Each Application for Payment shall be based on the most recent schedule of values submitted by the Construction Manager in accordance with the Contract Documents. The schedule of values shall allocate the entire Guaranteed Maximum Price among: (1) the various portions of the Work; (2) any contingency for costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order; and (3) the Construction Manager's Fee.

§ 11.1.5.1 The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. The schedule of values shall be used as a basis for reviewing the Construction Manager's Applications for Payment.

§ 11.1.5.2 The allocation of the Guaranteed Maximum Price under this Section 11.1.5 shall not constitute a separate guaranteed maximum price for the Cost of the Work of each individual line item in the schedule of values.



§ 11.1.5.3 When the Construction Manager allocates costs from a contingency to another line item in the schedule of values, the Construction Manager shall submit supporting documentation to the Architect. Contingency allocations will require advance written approval from the Owner prior to their inclusion into Applications for Payment.

§ 11.1.6 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed, or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Construction Manager on account of that portion of the Work and for which the Construction Manager has made payment or intends to make payment prior to the next Application for Payment, by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

§ 11.1.7 In accordance with AIA Document A201–2017 and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 11.1.7.1 The amount of each progress payment shall first include:

- .1 That portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the most recent schedule of values;
- .2 That portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction or, if approved in writing in advance by the Owner, suitably stored off the site at a location agreed upon in writing;
- ; and
- .3 The Construction Manager's Fee, computed upon the Cost of the Work described in the preceding Sections 11.1.7.1.1 and 11.1.7.1.2 at the rate stated in Section 6.1.2 or, if the Construction Manager's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum fee as the Cost of the Work included in Sections 11.1.7.1.1 and 11.1.7.1.2 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

§ 11.1.7.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Construction Manager does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Construction Manager intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017;
- .5 The shortfall, if any, indicated by the Construction Manager in the documentation required by Section 11.1.4 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- .6 Retainage withheld pursuant to Section 11.1.8.

#### § 11.1.8 Retainage

§ 11.1.8.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

*(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)*

5%

§ 11.1.8.1.1 The following items are not subject to retainage:

*(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)*

Not used

§ 11.1.8.2 Reduction or limitation of retainage, if any, shall be as follows:

*(If the retainage established in Section 11.1.8.1 is to be modified prior to Substantial Completion of the entire Work, insert provisions for such modification.)*

The Owner, at its sole discretion, decide to reduce retainage amount to 3% when the cumulative completion of the project exceeds 50% of the total Guaranteed Maximum Price.

**§ 11.1.8.3** Except as set forth in this Section 11.1.8.3, upon Substantial Completion of the Work, the Construction Manager may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 11.1.8. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:

*(Insert any other conditions for release of retainage, such as upon completion of the Owner's audit and reconciliation, upon Substantial Completion.)*

TBD

**§ 11.1.9** If final completion of the Work is materially delayed through no fault of the Construction Manager, the Owner shall pay the Construction Manager any additional amounts in accordance with Article 9 of AIA Document A201–2017.

**§ 11.1.10** Except with the Owner's prior written approval, the Construction Manager shall not make advance payments to suppliers for materials or equipment which have not been delivered and suitably stored at the site.

**§ 11.1.11** The Owner and the Construction Manager shall agree upon a mutually acceptable procedure for review and approval of payments to Subcontractors, and the percentage of retainage held on Subcontracts, and the Construction Manager shall execute subcontracts in accordance with those agreements.

**§ 11.1.12** In taking action on the Construction Manager's Applications for Payment the Architect shall be entitled to rely on the accuracy and completeness of the information furnished by the Construction Manager, and such action shall not be deemed to be a representation that (1) the Architect has made a detailed examination, audit, or arithmetic verification, of the documentation submitted in accordance with Section 11.1.4 or other supporting data; (2) that the Architect has made exhaustive or continuous on-site inspections; or (3) that the Architect has made examinations to ascertain how or for what purposes the Construction Manager has used amounts previously paid on account of the Contract. Such examinations, audits, and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

## **§ 11.2 Final Payment**

**§ 11.2.1** Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Construction Manager when

- .1 the Construction Manager has fully performed the Contract, except for the Construction Manager's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment;
- .2 the Construction Manager has submitted a final accounting for the Cost of the Work and a final Application for Payment;
- .3 a final Certificate for Payment has been issued by the Architect in accordance with Section 11.2.2.2; and
- .4 Construction Manager has complied with all requirements of Article 9 of AIA Document A201–2017.

**§ 11.2.2** Within five (5) years of the Owner's receipt of the Construction Manager's final accounting for the Cost of the Work, the Owner shall conduct an audit of the Cost of the Work or notify the Architect that it will not conduct an audit.

**§ 11.2.2.1** If the Owner conducts an audit of the Cost of the Work, the Owner shall, within 10 days after completion of the audit, submit a written report based upon the auditors' findings to the Architect.

**§ 11.2.2.2** Within seven days after receipt of the written report described in Section 11.2.2.1, or receipt of notice that the Owner will not conduct an audit, and provided that the other conditions of Section 11.2.1 have been met, the Architect will either issue to the Owner a final Certificate for Payment with a copy to the Construction Manager, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding a certificate as provided in Article 9 of AIA Document A201–2017. The time periods stated in this Section 11.2.2 supersede those stated in Article 9 of AIA

Document A201–2017. The Architect is not responsible for verifying the accuracy of the Construction Manager’s final accounting.

**§ 11.2.2.3** If the Owner’s auditors’ report concludes that the Cost of the Work, as substantiated by the Construction Manager’s final accounting, is less than claimed by the Construction Manager, the Construction Manager shall be entitled to request mediation of the disputed amount without seeking an initial decision pursuant to Article 15 of AIA Document A201–2017. A request for mediation shall be made by the Construction Manager within 30 days after the Construction Manager’s receipt of a copy of the Architect’s final Certificate for Payment. Failure to request mediation within this 30-day period shall result in the substantiated amount reported by the Owner’s auditors becoming binding on the Construction Manager. Pending a final resolution of the disputed amount, the Owner shall pay the Construction Manager the amount certified in the Architect’s final Certificate for Payment.

**§ 11.2.3** The Owner’s final payment to the Construction Manager shall be made no later than 30 days after the issuance of the Architect’s final Certificate for Payment, or as follows:

**§ 11.2.4** If, subsequent to final payment, and at the Owner’s request, the Construction Manager incurs costs, described in Sections 7.1 through 7.7, and not excluded by Section 7.9, to correct defective or nonconforming Work, the Owner shall reimburse the Construction Manager for such costs, and the Construction Manager’s Fee applicable thereto, on the same basis as if such costs had been incurred prior to final payment, but not in excess of the Guaranteed Maximum Price. If adjustments to the Contract Sum are provided for in Section 6.1.7, the amount of those adjustments shall be recalculated, taking into account any reimbursements made pursuant to this Section 11.2.4 in determining the net amount to be paid by the Owner to the Construction Manager.

**§ 11.3 Interest**

*(Paragraphs deleted)*

Intentionally deleted.

%

**ARTICLE 12 DISPUTE RESOLUTION**

**§ 12.1 Initial Decision Maker**

**§ 12.1.1** Any Claim between the Owner and Construction Manager shall be resolved in accordance with the provisions set forth in this Article 12 and Article 15 of A201–2017. However, for Claims arising from or relating to the Construction Manager’s Preconstruction Phase services, no decision by the Initial Decision Maker shall be required as a condition precedent to mediation or binding dispute resolution, and Section 12.1.2 of this Agreement shall not apply.

**§ 12.1.2** The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017 for Claims arising from or relating to the Construction Manager’s Construction Phase services, unless the parties appoint below another individual, not a party to the Agreement, to serve as the Initial Decision Maker.

*(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)*

**§ 12.2 Binding Dispute Resolution**

For any Claim subject to, but not resolved by mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

*(Check the appropriate box.)*

☐ Arbitration pursuant to Article 15 of AIA Document A201–2017

☒ Litigation in a court of competent jurisdiction

Init.

[ ] Other: *(Specify)*

If the Owner and Construction Manager do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

## **ARTICLE 13 TERMINATION OR SUSPENSION**

### **§ 13.1 Termination Prior to Execution of the Guaranteed Maximum Price Amendment**

**§ 13.1.1** If the Owner and the Construction Manager do not reach an agreement on the Guaranteed Maximum Price, the Owner may terminate this Agreement upon not less than seven days' written notice to the Construction Manager.

**§ 13.1.2** In the event of termination of this Agreement pursuant to Section 13.1.1, the Construction Manager shall be compensated for 50% of Preconstruction Fees and Work performed prior to receipt of a notice of termination, in accordance with the terms of this Agreement. In no event shall the Construction Manager's compensation under this Section exceed the compensation set forth in Section 5.1.

**§ 13.1.3** Prior to the execution of the Guaranteed Maximum Price Amendment, the Owner may terminate this Agreement upon not less than seven days' written notice to the Construction Manager for the Owner's convenience and without cause, and the Construction Manager may terminate this Agreement, upon not less than seven days' written notice to the Owner, for the reasons set forth in Article 14 of A201–2017.

**§ 13.1.4** In the event of termination of this Agreement pursuant to Section 13.1.3, the Construction Manager shall be equitably compensated for Preconstruction Phase services and Work performed prior to receipt of a notice of termination. In no event shall the Construction Manager's compensation under this Section exceed the compensation set forth in Section 5.1.

**§ 13.1.5**  
*(Paragraphs deleted)*  
Intentionally deleted.

**§ 13.1.6** Intentionally deleted.

**§ 13.1.6.1** Intentionally deleted.

### **§ 13.2 Termination or Suspension Following Execution of the Guaranteed Maximum Price Amendment**

#### **§ 13.2.1 Termination**

The Contract may be terminated by the Owner or the Construction Manager as provided in Article 14 of AIA Document A201–2017.

#### **§ 13.2.2 Termination by the Owner for Cause**

**§ 13.2.2.1** If the Owner terminates the Contract for cause as provided in Article 14 of AIA Document A201–2017, the amount, if any, to be paid to the Construction Manager under Article 14 of AIA Document A201–2017 shall not cause the Guaranteed Maximum Price to be exceeded, nor shall it exceed an amount calculated as follows:

- .1 Take the Cost of the Work incurred by the Construction Manager to the date of termination;
- .2 Add the Construction Manager's Fee, computed upon the Cost of the Work to the date of termination at the rate stated in Section 6.1 or, if the Construction Manager's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum Fee as the Cost of the Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion;
- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract the costs and damages incurred, or to be incurred, by the Owner under Article 14 of AIA Document A201–2017.

**§ 13.2.2.2** The Owner shall also pay the Construction Manager fair compensation, either by purchase or rental at the election of the Owner, for any equipment owned by the Construction Manager that the Owner elects to retain and that is not otherwise included in the Cost of the Work under Section 13.2.2.1.1. To the extent that the Owner elects to take legal

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assignment of subcontracts and purchase orders (including rental agreements), the Construction Manager shall, as a condition of receiving the payments referred to in this Article 13, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Construction Manager, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Construction Manager under such subcontracts or purchase orders.

### **§ 13.2.3 Termination by the Owner for Convenience**

If the Owner terminates the Contract for convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Construction Manager a termination fee as follows:

*(Insert the amount of or method for determining the fee, if any, payable to the Construction Manager following a termination for the Owner's convenience.)*

Only for the Cost of the Work incurred by the Construction Manager at the time of termination

### **§ 13.3 Suspension**

The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017; in such case, the Guaranteed Maximum Price and Contract Time shall be increased as provided in Article 14 of AIA Document A201–2017, except that the term "profit" shall be understood to mean the Construction Manager's Fee as described in Sections 6.1 and 6.3.5 of this Agreement. Notwithstanding anything to the contrary herein or in AIA Document A201–2017, the Work may be suspended by the Owner for up to 90 days due to a pandemic, including a subsequent outbreak of the COVID-19 virus without penalty and without increasing the Guaranteed Maximum Price.

## **ARTICLE 14 MISCELLANEOUS PROVISIONS**

**§ 14.1** Terms in this Agreement shall have the same meaning as those in A201–2017. Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

### **§ 14.2 Successors and Assigns**

**§ 14.2.1** The Construction Manager, respectively, bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 14.2.2 of this Agreement, and in Section 13.2.2 of A201–2017, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

**§ 14.2.2** The Owner may, without consent of the Construction Manager, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Construction Manager shall execute all consents reasonably required to facilitate the assignment.

### **§ 14.3 Insurance and Bonds**

#### **§ 14.3.1 Preconstruction Phase**

The Construction Manager shall maintain the following insurance for the duration of the Preconstruction Services performed under this Agreement. If any of the requirements set forth below exceed the types and limits the Construction Manager normally maintains, the Owner shall reimburse the Construction Manager for any additional cost.

*(Paragraphs deleted)*

*(Table deleted)*

*(Paragraphs deleted)*

**§ 14.3.2** The Contractor shall purchase and maintain insurance and provide bonds as set forth in Article 11 of AIA Document A201–2017.

*(State bonding requirements, if any, and limits of liability for insurance required in Article 11 of AIA Document A201–2017.)*

**§ 14.3.3** Maryland Code 21-102 - A certificate of authority, or certified copy of a certificate of authority, issued by the Commissioner to a surety insurer shall be accepted as evidence of qualification to become sole surety on a bond, undertaking, recognizance, or other obligation required or allowed by law, or in the charter, ordinances, rules, or regulations of a municipal corporation, board, organization, court, judge, or public officer, without further proof or



qualification regarding solvency, credit, or financial sufficiency to act as a surety or bidders may use bonding companies from Treasury approved sureties with an AM Best rating of A- or better rating.

§ 14.3.4 The Contractor shall provide a Performance Bond with a Penal Sum equal to the Contract Sum. The Contractor shall provide a Payment Bond with a Penal Sum equal to the Contract Sum. All bonds shall be written on MD COMAR 21 07 02 10 Bond and will be from a surety company acceptable to the Owner.

§ 14.3.5 The Contractor shall comply with the additional insurance requirements as set forth below:

(a) The Board of Education of Frederick County, Frederick County Council, the State of Maryland and the other entities stipulated by the Owner shall be named as an additional insured on the Contractor policies other than Worker's Compensation.

(b) All policies shall stipulate the Owner is to receive written notice thirty (30) days before cancellation.

(c) The Owner is to receive insurance certificates evidencing the compliance of insurance requirements at least (10) ten days before Work commences.

(d) Insurance policies shall contain a Waiver of Subrogation in favor of the Owner.

(e) General Liability and Umbrella Insurance policies are to be in "Occurrence Form".

(f) Insurance policies shall provide primary coverage to The Board of Education of Frederick County and Frederick County Council and the State of Maryland as additional insureds for loss, injury and damage arising out of or associated with the Work under this agreement as opposed to pro-rata with, concurrent with excess to any other insurance coverages by the Owner other than insurance Worker's Compensation Insurance.

(g) The Contractor shall purchase and maintain all insurance from an insurer acceptable to the Owner and lawfully authorized to do business in Maryland.

§ 14.3.6 The Owner provides and maintains Builder's Risk Protection. The Contractor shall provide coverage for the first \$2,500.00 for damages per occurrence. This provision shall not release the contractor of the obligation to complete the work according to plans and specifications required by the contract, and the contractor his/her Surety shall be obligated to full performance of the contract's undertaking.

§ 14.3.7 The Contractor shall provide insurance pursuant to the requirements set forth below:

Type of Insurance or Bond	Limit of Liability or Bond Amount as required by statute
Part 1 Worker's Compensation Insurance	
Part 2 Employers Liability:	
Bodily Injury by Accident	\$ 500,000.00 each accident
Bodily Injury by Disease	\$ 500,000.00 policy limits
Bodily Injury by Disease	\$ 500,000.00 each employee
Commercial General Liability Insurance, to include, premises, products, completed operations, personal injury and contractual: Aggregate to apply Per Project./Per Location, Occurrence	\$1,000,000.00
Each Occurrence	\$2,000,000.00
General aggregate Limit (Per Site)	\$2,000,000.00 aggregate limit
Products and complete operation	\$1,000,000.00 each occurrence Limit
Personal & advertising injury	\$1,000,000.00
Fire damage	\$ 50,000.00
Medical Expense (Any One Person)	\$ 10,000.00 each occurrence
General Liability insurance shall provide coverage for:	
Completed Operations to meet the Statute of Repose & Statute of Limitations;	
Independent Contractors	
Contractual Liability	



Broad Form Property Damage

Liability arising from Explosion, Collapse and Underground Damage (X, C, U)

Additional insured Endorsement (GL2010 11/85)

Terrorism-Certified & Non Certified

Option (b1)

Automobile Liability Insurance, including owned, non-owned and hired vehicles

Bodily injury liability

\$1,000,000.00 each person

Property damage liability

\$1,000,000.00 each occurrence

Option (b2)

Combined single limit Bodily injury or property damage liability

\$1,000,000.00 each person

\$1,000,000.00 each accident

Umbrella Excess Liability (true following form)

\$5,000,000.00 per Occurrence

\$5,000,000.00 General Aggregate

\$5,000,000.00 Products &

Completed Operations

Any construction contractor providing Mass Grading, Masonry, Structural Steel, Superstructure or foundation concrete, Mechanical or Electrical contractors shall be required to carry the following Umbrella Excess Liability (true following form) minimum limits:

\$8,000,000.00 Each Occurrence

\$8,000,000.00 General Aggregate

\$8,000,000.00 Products &

Completed Operations

Contractors Pollution Liability for contractors engaged in testing for, monitoring, clean-up, removal, containing, detoxifying, neutralizing, transporting, handling, storage treatment, or disposing of or processing any waste pollutants.

\$2,000,000.00 per Occurrence

\$2,000,000.00 Aggregate

*(Paragraphs deleted)*

## ARTICLE 15 SCOPE OF THE AGREEMENT

§ 15.1 This Agreement represents the entire and integrated agreement between the Owner and the Construction Manager and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both Owner and Construction Manager.

§ 15.2 The following documents comprise the Agreement:

- .1 AIA Document A133™-2019, Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price
- .2 AIA Document A133™-2019, Exhibit A, Guaranteed Maximum Price Amendment, if executed
- .3 Intentionally Deleted
- .4 AIA Document A201™-2017, General Conditions of the Contract for Construction as amended
- .5 Exhibit A Project Description
- .6 AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

*(Insert the date of the E203-2013 incorporated into this Agreement.)*

- .7 Other Exhibits:

*(Check all boxes that apply.)*

- [ ] AIA Document E234™-2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, dated as indicated below:

*(Insert the date of the E234-2019 incorporated into this Agreement.)*

Init.

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**User Notes:**

(1448112998)

[ ] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
----------	-------	------	-------

.8 Other documents, if any, listed below:

*(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Construction Manager’s bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)*

Attachment 1 Construction Manager’s Reimbursable General Conditions

This Agreement is entered into as of the day and year first written above.

\_\_\_\_\_  
**OWNER** *(Signature)*

Theresa R. Alban, Ph.D., Superintendent of Schools  
*(Printed name and title)*

\_\_\_\_\_  
**CONSTRUCTION MANAGER** *(Signature)*

\_\_\_\_\_  
*(Printed name and title)*

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# **Additions and Deletions Report for**

## **AIA<sup>®</sup> Document A133<sup>™</sup> – 2019**

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 12:18:20 ET on 06/30/2020.

### **PAGE 1**

The Board of Education of Frederick County  
191 South East Street  
Frederick, Maryland 21701-5918

...

Brunswick Elementary Replacement  
CM at Risk Services  
400 Central Avenue  
Brunswick, Maryland 21716  
RFP 21C1

...

GWWO, Inc.  
800 Wyman Park Drive, Suite 300  
Baltimore, MD 21211  
Telephone Number: 410-332-1009  
Fax Number: 410-332-0038

### **PAGE 2**

**EXHIBIT A PROJECT DESCRIPTION**

**EXHIBIT B GUARANTEED MAXIMUM PRICE AMENDMENT**

**EXHIBIT B INSURANCE AND BONDS**

...

**§ 1.1.1** The Owner's program for the Project, ~~as described in Section 4.1.1:~~

~~(Insert the Owner's program, identify documentation that establishes the Owner's program, or state the manner in which the program will be developed.)~~ Project shall be as identified in the draft or final education specification provided or as specified herein.:

**§ 1.1.1.1** The Project is described in the attached **Exhibit A Project Description**.

**§ 1.1.1.2** The design of the school or facility for this Project (the "Design") shall include all amenities to allow efficient functionality including, but not limited to signage, security system, computer network integration including servers, exterior lighting, sidewalks, landscaping and exterior features as required to obtain a site plan, interior design services, modular workstations, playing fields, roadways, parking areas, landscaping, storm water management systems, utilities, vehicular and pedestrian access and circulation and other items specified herein, and other services and items reasonably expected and incidental to delivering an elementary school building ready for occupancy. The Architect and the design team, as assembled and determined by the Architect, (the "Design Team") shall use commercially reasonable efforts to meet the desires of the "Design

Guide: FCPS Standards for Design of New and Renovated Facilities" as amended, which states preferences for the Project, a copy of which shall be available to the Architect upon request, and shall be adopted and incorporated herein by reference. If preferences are found to be unadvisable or do not comply with the building and other relevant codes and regulations, the Design Team shall promptly bring this to the attention of the Owner.

§ 1.1.1.3 Design and civil engineering services for the Project's entire site that meet and achieve all required approvals by applicable governmental agency or agencies having jurisdiction over the Project (the "Applicable Governmental Authorities").

§ 1.1.1.4 The school or facility for the Project shall be heated and air-conditioned except for areas identified by the Owner in writing. The school or facility for the Project shall be equipped with a state of the art building automation system; the specific requirements for such will be coordinated between the Architect, the Construction Manager and the Owner's Maintenance and Operations Department.

§ 1.1.1.5 The Construction Manager shall conform and/or provide construction and other services as stipulated in the appropriate Educational Specifications for the Project, Design Guide: FCPS Standards for the Design of New and Renovated Facilities, correspondence between the Owner and the Construction Manager for the purposes of the specific solicitation for services, written documentation and clarifications of interview discussions, and the latest edition or version of the "State of Maryland, Public School Construction Program, Administrative Procedures Guide."

§ 1.1.1.7 Duties, responsibilities and limitations of authority of the Architect shall not be restricted, modified or extended beyond those set forth in this Agreement without written agreement of the Owner and the Construction Manager.

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PAGE 3

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PAGE 4

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New or totally renovated schools funded by the State of Maryland, or for which State funding may be requested, are required to achieve LEED Silver Certification. The Architect shall provide complete designs and specifications required to comply with LEED Silver Certification as a minimum requirement. The Architect shall prepare the Project charrette for the Project's scheduling meetings at the beginning of an integrative design process that sets the stage for cooperation and collaboration among all participants, including the Design Team, the Owner, the Construction Manager, and others involved in the Project. Early involvement of the entire Project team is fundamental to the successful use of a system approach to green building. The Architect shall address the Construction Manager's green building requirements in the bid documents such that Construction Manager's scope requirements are a known requirement to be included in the Guaranteed Maximum Price. The Design shall require services and construction materials supporting the LEED points identified and approved by the Owner as the charrette is being developed and modified during the Design process. The Construction Manager will be responsible for coordinating with the Architect for the construction phase LEED points throughout the design process. During the construction phase of the Project, the Construction Manager will be responsible for managing, tracking, and documenting as required for the Project to achieve the construction phase LEED Points.

...

§ 1.1.6.1 If the Owner identifies a Sustainable Objective, other than as identified in Section 1.1.6 above, the Owner and Construction Manager shall complete and incorporate AIA Document E234™–2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, into this Agreement to define the terms, conditions and services related to the Owner's Sustainable Objective. If E234–2019 is incorporated into this agreement, the Owner and Construction Manager shall incorporate the completed E234–2019 into the agreements with the consultants and contractors performing services or Work in any way associated with the Sustainable Objective.

...

TBD

...

Theresa R. Alban, Ph.D., Superintendent of Schools

...

The Frederick County Public Schools ("FCPS") Maintenance and Operations Departments,  
The FCPS Facilities Services / Construction Managements / Planning Department,  
The FCPS Food Service Department,  
The FCPS Transportation Department,  
The FCPS Technology Services Department,  
The FCPS Elementary or Secondary School Improvement, Instruction and Administration Departments, and  
The applicable FCPS School Administration

PAGE 5

~~.1 Geotechnical Engineer:~~Inspection and Testing Agency:

TBD

~~.2 Civil Engineer:~~2 Commissioning Agent:

TBD

...

- Third Party Constructability Reviewer
- Building Envelope Commissioning Consultant

- Other 3<sup>rd</sup> party Consultants as needed

...

TBD

...

TBD

...

TBD

...

The Construction Manager acknowledges and agrees that time is of the essence and that failure to timely perform and complete the services under this Agreement will result in significant costs, expenses, and damages to the Owner, including but not limited to damages for loss of use and enjoyment, extended overhead and management costs, extra or extended services by the Construction Manager or other contractors, claims by design professionals, and possibly other types of costs, expenses and damages incurred by the Owner. Construction Manager is responsible to the Owner for all such costs, expenses and damages, including but not limited to both economic and noneconomic losses, and liquidated damages, to the extent caused by the Construction Manager or those for whom the Construction Manager has contracted or is otherwise responsible.

...

**§ 1.2** The Owner and Construction Manager may rely on the Initial Information. Both parties, however, recognize that such information may materially change and, in that event, the Owner and the Construction Manager shall appropriately adjust the Project schedule, the Construction Manager's services, and the Construction Manager's compensation. The Owner, in its sole and absolute discretion, may adjust the Project schedule, the Construction Manager's services, and the Construction Manager's compensation. In the event the Owner chooses to make such adjustment(s), the Owner shall adjust the Owner's budget for the Guaranteed Maximum Price and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.

#### **PAGE 6**

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement and some of which may be issued after execution of this Agreement, other documents listed in this Agreement, and Drawings, Specifications, Addenda, and Modifications issued after execution of this Agreement, all of which form the Contract and are as fully a part of the Contract as if attached to this Agreement or repeated herein. Upon the Owner's acceptance of the Construction Manager's Guaranteed Maximum Price proposal, the Contract Documents will also include the documents described in Section 3.2.3 and identified in the Guaranteed Maximum Price Amendment and revisions prepared by the Architect and furnished by the Owner as described in Section 3.2.8. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. If anything in the other Contract Documents, other than a Modification, is inconsistent with this Agreement, this Agreement shall govern. An enumeration of the Contract Documents, other than a Modification, appears in Article 15.

#### **PAGE 7**



**3.1.3.1** The Construction Manager shall provide the following services relating to design and construction tasks:

.1 The Construction Manager shall consult with, advise, assist, and provide recommendations to the Owner, the Architect and other members of the design team on all aspects of the planning and design of the Work.

.2 The Construction Manager shall jointly schedule and attend regular meetings with the Architect and Owner's Authorized Representative. The Construction Manager shall consult with and advise the Owner and the Architect regarding site use and improvements, and the selection of materials, building systems and equipment.

.3 The Construction Manager shall provide recommendations to the Owner and Architect, consistent with Project requirements, on construction feasibility and constructability; availability of materials and labor; actions designed to minimize adverse effects of labor or material shortages; time requirements for procurement, installation and construction completion; prefabrication; and factors related to construction cost including, but not limited to, costs and estimates of alternative designs or materials, preliminary budgets and possible economies, life-cycle data, and possible cost reductions.

.4 The Construction Manager shall review in-progress design documents, including the documents generally described in the industry as Schematic Design Documents, Design Development Documents, and Construction Documents and provide input and advice to eliminate areas of conflict, overlapping trade jurisdictions, and overlaps in the Work to be performed by the various subcontractors, and to endeavor to confirm that all Work has been included in the Contract Documents.

.5 Construction Manager shall review completed Schematic Design Documents, Design Development Documents, and Construction Documents and suggest modifications whenever design details affect construction feasibility, schedules or cost in an effort to maintain the Project Budget and to improve completeness and clarity.

~~§ 3.1.3.1 The Construction Manager shall schedule and conduct meetings with the Architect and Owner to discuss such matters as procedures, progress, coordination, and scheduling of the Work.~~

~~§ 3.1.3.2 The Construction Manager shall advise the Owner and Architect on proposed site use and improvements, selection of materials, building systems, and equipment. The Construction Manager shall also provide recommendations to the Owner and Architect, consistent with the Project requirements, on constructability; availability of materials and labor; time requirements for procurement, installation and construction; prefabrication; and factors related to construction cost including, but not limited to, costs of alternative designs or materials, preliminary budgets, life-cycle data, and possible cost reductions. The Construction Manager shall consult with the Architect regarding professional services to be provided by the Construction Manager during the Construction Phase.~~

~~§ 3.1.3.3 The Construction Manager shall assist the Owner and Architect Architect, as determined to be necessary by Owner in Owner's sole and absolute discretion, in establishing building information modeling and digital data protocols for the Project, using AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.~~

...

The Construction Manager shall provide the following services related to the Project schedule:

- .1 The Construction Manager shall prepare, and periodically update, a preliminary Project schedule for the Architect's and Owner's review and approval.
- .2 The Construction Manager shall obtain the Architect's approval for the portion of the Project schedule relating to the performance of the Architect's services.
- .3 The Construction Manager shall coordinate and integrate the preliminary Project schedule with the services and activities of the Owner, Architect, and Construction Manager. As design proceeds, Construction Manager shall update the preliminary Project schedule to indicate proposed activity sequences and durations, milestone dates for receipt and approval of pertinent information, submittal of a Guaranteed Maximum Price ("GMP") proposal, preparation and processing of shop drawings and samples, delivery of materials or equipment requiring long-lead time procurement, and Owner's occupancy requirements showing portions of the Project having occupancy priority, provided that the date(s) of Substantial Completion shall not be modified without Owner's prior written approval. If preliminary Project schedule updates indicate that previously approved schedules may not be met, the Construction Manager shall make appropriate recommendations to the Owner and Architect.

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The Construction Manager at Risk shall provide the following services relating to cost estimating:

- .1 The Construction Manager shall within **fourteen (14) days** of Notice of Award prepare a Statement of Probable Construction Cost utilizing area, volume or similar conceptual estimating techniques for review by the Architect and approval by the Owner. The Statement of Probable Construction Cost shall include appropriate contingencies for design, bidding or negotiating, price escalation and market factors.
- .2 When Schematic Design Documents have been prepared by the Architect, the Construction Manager shall, within **fourteen (14) days**, prepare a more detailed Statement of Probable Cost in a Level 1 Unifomat estimate or in another format approved by the Owner, for review by the Architect and approval by the Owner. During the preparation of the Design Development Documents, the Construction Manager shall, within **seven (7) days** update and refine this estimate at appropriate intervals agreed to by the Owner, Architect and Construction Manager.
- .3 When Design Development Documents have been prepared by the Architect, the Construction Manager shall, within **fourteen (14) days**, prepare a detailed Statement of Probable Construction Cost with supporting data in a Level 2 Unifomat estimate or other format approved by the Owner for review by the Architect and approval by the Owner. During the preparation of the Construction Documents, the Construction Manager shall, within **seven (7) days** update and refine this estimate at appropriate intervals agreed to by the Owner, Architect and Construction Manager.
- .4 If any Statement of Probable Construction Cost submitted to the Owner and Architect exceeds previously approved Statements of Probable Construction Cost or the Owner's budget, the Construction Manager shall make appropriate recommendations to the Architect and Owner to reduce the Probable Construction Cost.
- .5 Construction Manager shall notify the Owner, Architect and other members of the design team immediately if any construction cost estimate appears to be exceeding the construction budget.
- .6 The Construction Manager shall work with the Architect and Owner to develop a GMP within the Target GMP (Or Owner's Budget) as stated in the Request for Proposals unless a change in the Target GMP (Or Owner's Budget) is approved by the Owner, in Owner's sole and absolute discretion. Upon completion of the Construction Documents, the Construction Manager shall, in consultation with the Architect, furnish to the Owner a final and detailed Level 3 UniFormat probable cost estimate, including local versus state funding in accordance with the Statewide Adequacy Standards and local match requirements.

3.1.7 To accomplish the objective set for in paragraph 3.1.6.4 above, the Construction Manager shall provide consultation throughout the Preconstruction Phase including, but not limited to the furnishing of all necessary Value Engineering services. The object of the Value Engineering is to achieve optimum value for each construction dollar spent and keep the time of completion and cost of the Work within the time and fiscal constraints set forth in the Contract Documents. In cooperation with the Owner and the Architect, the Construction Manager shall:

- .1 Formulate and evaluate alternative design, systems, and materials;
- .2 Provide cost estimates of the alternatives to be evaluated. Cost estimates shall include industry standard operating and maintenance costs when appropriate to evaluate life-cycle costs of the alternatives;
- .3 Evaluate the alternatives on the basis of costs, time schedules, availability of labor and materials and construction feasibility;
- .4 Prepare written reports at the end of the Schematic Design Phase and the Design Development Phase summarizing the Value Engineering activities. The reports shall indicate each Value Engineering alternative considered, the cost estimate for the alternative, the cost to incorporate the alternative and whether or not the Owner and the Architect agreed to accept the alternative.
- .5 In addition to the reports discussed in subsection 3.1.7.4 above, the Construction Manager shall maintain a running log of all Value Engineering alternatives considered throughout the entire preconstruction period. The log shall include the cost estimate for the alternative, the cost to incorporate the alternative and indicate whether or not the Owner and the Architect have agreed to incorporate the alternative.

**§ 3.1.6.1** Based on the preliminary design and other design criteria prepared by the Architect, the Construction Manager shall prepare, for the Architect's review and the Owner's approval, preliminary estimates of the Cost of the Work or the cost of program requirements using area, volume, or similar conceptual estimating techniques. If the Architect or Construction Manager suggests alternative materials and systems, the Construction Manager shall provide cost evaluations of those alternative materials and systems.

**§ 3.1.6.2** As the Architect progresses with the preparation of the Schematic Design, Design Development and Construction Documents, the Construction Manager shall prepare and update, at appropriate intervals agreed to by the Owner, Construction Manager and Architect, an estimate of the Cost of the Work with increasing detail and refinement. The Construction Manager shall include in the estimate those costs to allow for the further development of the design, price escalation, and market conditions, until such time as the Owner and Construction Manager agree on a Guaranteed Maximum Price for the Work. The estimate shall be provided for the Architect's review and the Owner's approval. The Construction Manager shall inform the Owner and Architect in the event that the estimate of the Cost of the Work exceeds the latest approved Project budget, and make recommendations for corrective action.

**§ 3.1.6.3** If the Architect is providing cost estimating services as a Supplemental Service, and a discrepancy exists between the Construction Manager's cost estimates and the Architect's cost estimates, the Construction Manager and the Architect shall work together to reconcile the cost estimates.

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**§ 3.1.11.1** If the Owner has provided requirements for subcontractor procurement in section 1.1.14, the After the Schematic Design, Design Development and Construction Documents are complete, the Construction Manager shall prepare bid packages and solicit price proposals for the Work in accordance with FCPS Bidding procedure, COMAR, and all other state of Maryland procurement regulations. The Construction Manager shall provide a subcontracting plan, addressing the Owner's requirements, for the Owner's review and approval.

...

- .1 The Construction Manager shall seek to develop subcontractor and supplier interest in the Project, and shall furnish to the Owner and Architect for their information a list of possible subcontractors and suppliers, including suppliers who may furnish materials or equipment fabricated to a special design, from whom competitive bids, quotes, or proposals (collectively, "Offers") will be requested for each principal portion of the Work. Submission of such list is for information and discussion purposes only and not for prequalification.
- .2 The Construction Manager shall provide input to the Owner and Architect and other members of the design team regarding current construction market bidding climate, status of key subcontract markets, and other local economic conditions. Construction Manager shall determine the division of work to facilitate bidding and award of trade contracts, considering such factors as bidding climate, improving or accelerating construction completion, minimizing trade jurisdictional disputes, and related issues. Construction Manager shall advise Owner on subcontracting opportunities for MBE businesses.

**3.1.12** The Construction Manager shall recommend to the Owner and Architect a schedule for procurement of long-lead time items which will constitute part of the Work as required to meet the Project schedule, which shall be procured by the Construction Manager upon execution of either a GMP Amendment or Early Work Amendment covering such procurement, and approval of such schedule by the Owner. The Construction Manager shall expedite the delivery of long-lead time items.

**3.1.13** The Construction Manager shall work with the Owner in identifying critical elements of the Work that may require special procurement processes, such as prequalification of Subcontractors or Material Suppliers or alternative contracting methods.

**§ 3.1.11.3** ~~The processes described in Article 9 shall apply if bid packages will be issued during the Preconstruction Phase.~~

### **§ 3.1.12 Procurement**

The Construction Manager shall prepare, for the Architect's review and the Owner's acceptance, a procurement schedule for items that must be ordered in advance of construction. The Construction Manager shall expedite and coordinate the ordering and delivery of materials that must be ordered in advance of construction. If the Owner agrees to procure any items prior to the establishment of the Guaranteed Maximum Price, the Owner shall procure the items on terms and conditions acceptable to the Construction Manager. Upon the establishment of the Guaranteed Maximum Price, the Owner shall assign all contracts for these items to the Construction Manager and the Construction Manager shall thereafter accept responsibility for them.

### **§ 3.1.13 Compliance with Laws**

The Construction Manager shall comply with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to its performance under this Contract, and with equal employment opportunity programs, and other programs as may be required by governmental and quasi-governmental authorities.

### **§ 3.1.14 Other Preconstruction Services**

Insert a description of any other Preconstruction Phase services to be provided by the Construction Manager, or reference an exhibit attached to this document

*(Describe any other Preconstruction Phase services, such as providing cash flow projections, development of a project information management system, early selection or procurement of subcontractors, etc.)*

#### **§ 3.1.1.4 Procurement**

The Construction Manager shall prepare bid packages and solicit price proposals for the Work in accordance with FCPS Bidding procedure, COMAR, and all other state of Maryland procurement regulations. The Construction Manager shall prepare, for the Architect's review and the Owner's acceptance, a procurement schedule for items that must be ordered in advance of construction. The Construction Manager shall expedite and coordinate the ordering and delivery of materials that must be ordered in advance of construction. The Owner may agree to procure any items prior to the establishment of the Guaranteed Maximum Price. The Owner may also decide to bid certain bid packages directly to the subcontractor market. Upon the establishment of the Guaranteed Maximum Price, the Owner shall assign all contracts for the items listed above to the Construction Manager and the Construction Manager shall thereafter accept responsibility for them.

#### **§ 3.1.15 Compliance with Laws**

The Construction Manager shall comply with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to its performance under this Contract, and with equal employment opportunity programs, and other programs as may be required by governmental and quasi-governmental authorities.

#### **§ 3.1.16 Other Preconstruction Services**

Insert a description of any other Preconstruction Phase services to be provided by the Construction Manager, or reference an exhibit attached to this document

*(Describe any other Preconstruction Phase services, such as providing cash flow projections, development of a project information management system, early selection or procurement of subcontractors, etc.)*

**§ 3.2.1** ~~At a time to be mutually agreed upon by the Owner and the Construction Manager, the Construction selected by the Owner, in Owner's sole and absolute discretion, the Construction Manager shall prepare a Guaranteed Maximum Price proposal for the Owner's and Architect's review, and the Owner's acceptance. The Guaranteed Maximum Price in the proposal shall be the sum of the Construction Manager's estimate of the Cost of the Work, Cost of the Work, the Construction Manager's Not To Exceed General Conditions amount (including insurance, and Payment and Performance Bond costs), as submitted on the Bid Form, the Construction Manager's contingency described in Section 3.2.4, and the Construction Manager's Fee described in Section 6.1.2.~~

**§ 3.2.2** To the extent that the Contract Documents are anticipated to require further development, the Guaranteed Maximum Price includes the costs attributable to such further development consistent with the Contract Documents



and reasonably inferable therefrom. Such further development does not include changes in scope, systems, kinds and quality of materials, finishes, or equipment, all of which, if required, shall be incorporated by Change Order.

PAGE 10

- ~~.1~~ A list of the Drawings and Specifications, including all ~~Addenda thereto, and the Conditions of the Contract;~~ addenda thereto, including conditions of the contract
- ~~.2~~ The proposed Contract Sum, including a written statement of estimated cost organized by trade categories, allowances, contingencies, Construction Manager's Fee, and other items that comprise the Contract Sum;
- ~~.2~~ ~~.3~~ A list of the clarifications and assumptions made by the Construction Manager-Manager, if any, in the preparation of the Guaranteed Maximum Price proposal, ~~including assumptions under Section 3.2.2;~~
- ~~.3~~ ~~A statement of the~~ ~~.4~~ The proposed Guaranteed Maximum Price, including a statement of the estimated Cost of the Work organized by trade categories or systems, including allowances; the Construction Manager's contingency set forth in Section 3.2.4; and the Construction Manager's Fee; Work organized by trade categories, allowances, contingency funds, Construction Manager's not to exceed General Conditions, Construction Manager's lump sum fee, and other items and the fees and costs that comprise the Guaranteed Maximum Price. All scopes of Work and Contract Sums set forth in the assigned Contractor Agreements shall be included in the Cost of the Work as part of the Guaranteed Maximum Price. The Construction Manager shall also include in its Guaranteed Maximum Price all costs for self-performed and/or other Contractor Work (not otherwise included in the Contractor Agreements);
- ~~.5~~ The Construction Manager shall include a contingency fund ("Contingency Funds") in the Guaranteed Maximum Price to cover unforeseen conditions, Owner-generated requests, design errors/omissions, and charges related to gaps in the scope of Work as allocated among Contractors by the Construction Manager. In no event shall charges, including, but not limited to, charges relating to errors/omissions or delays chargeable to the Construction Manager or Project costs not approved in writing in advance by the Owner, be charged to any area of the contingency. The Contingency Fund shall be identified in the schedule of values as a separate line item. The Contingency Fund may be drawn upon by the Construction Manager to pay the cost of the Work provided if (1) the Construction Manager provides the Owner with a written explanation of each requested draw upon the Contingency Fund along with the back-up documentation requested by the Owner (2) the Owner provides written authorization of each requested draw upon the Contingency Fund, and (3) each Application for Payment contains a report aggregating the Construction Manager's use of the Contingency Fund. Any amount remaining in the Contingency Fund shall be kept by the Owner and the Construction Manager shall prepare a deductive Change Order reducing the Construction Manager's Guaranteed Maximum Price by the amounts remaining in the Contingency Fund, if any, prior to final payment;
- ~~.4~~ The anticipated date of Substantial Completion upon which the proposed Guaranteed Maximum Price is based;
- ~~.6~~ All construction and Project schedules upon which the Guaranteed Maximum Price is based, including, but not limited to, the Project Schedule and any preliminary schedules;
- ~~.7~~ An enumeration of any qualifications and exclusions, if applicable; and
- ~~.5~~ A date by which the Owner must accept the Guaranteed Maximum Price.
- ~~.8~~ A list of the Construction Manager's key personnel, Contractors and suppliers.

§ 3.2.4 In preparing the Construction Manager's Guaranteed Maximum Price proposal, the Construction Manager shall include a contingency for the Construction Manager's exclusive use to cover those costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order. Price. Use of any contingency during the construction phase of the Project must be approved in writing by the Owner.

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§ 3.2.6 If the Owner notifies the Construction Manager that the Owner has accepted the Guaranteed Maximum Price proposal in writing before the date specified in the Guaranteed Maximum Price proposal, the Guaranteed Maximum Price proposal shall be deemed effective without further acceptance from the Construction Manager. Following acceptance of a Guaranteed Maximum Price, accepts the Guaranteed Maximum Price proposal, the Owner and Construction Manager shall execute the Guaranteed Maximum Price Amendment amending this Agreement, a copy of which the Owner shall provide to the Architect. The Guaranteed Maximum Price Amendment shall set forth the agreed upon Guaranteed Maximum Price with the information and assumptions upon which it is based.



...

§ 3.2.9 The Construction Manager shall include in the Guaranteed Maximum Price all required and applicable sales, consumer, use and similar taxes for the Work provided by the Construction Manager that are legally enacted, whether or not yet effective, at the time the Guaranteed Maximum Price Amendment is executed.

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§ 4.1.2 Prior to the execution of the Guaranteed Maximum Price Amendment, the Construction Manager may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. After execution of the Guaranteed Maximum Price Amendment, the Construction Manager may request such information as set forth in A201-2017 Section 2.2. Intentionally deleted.

§ 4.1.3 The Owner shall establish and periodically update the Owner's budget for the Project, including (1) the budget for the Cost of the Work as defined in Article 7, (2) the Owner's other costs, and (3) reasonable contingencies related to all of these costs. If the Owner significantly increases or decreases the Owner's budget for the Cost of the Work, the Owner shall notify the Construction Manager and Architect. The Owner and the Architect, in consultation with the Construction Manager, shall thereafter agree to a corresponding change in the Project's scope and quality. Intentionally deleted.

...

§ 4.1.4.1 The Owner shall furnish tests, inspections, and reports, required by law and as otherwise agreed to by the parties, law, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials.

§ 4.1.4.2 The Within a reasonable time after receiving the same from the Architect, the Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; designated wetlands; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and other necessary data with respect to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.

§ 4.1.4.3 The Owner, when such services are requested, deemed necessary by Owner and the Architect, shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.

PAGE 13

§ 4.2.1 **Legal Requirements.** The Owner shall furnish all legal, insurance and accounting services, including auditing services, that may be reasonably necessary at any time for the Project to meet the Owner's needs and interests. Intentionally deleted.

...

The Owner shall compensate and make progress payments to the Construction Manager in accordance with this Article 11 for Preconstruction Services performed prior to the execution of the Guaranteed Maximum Price Amendment. For all required Preconstruction Services, the Construction Manager's compensation shall not exceed \$ \_\_\_\_\_, which is a fixed fee that should include all Preconstruction Services costs for the Project (the "Preconstruction Fee"). The Preconstruction Fee shall be the Construction Manager's sole compensation for the Preconstruction Services for the Project. For Preconstruction Services, fifty percent (50%) of the total Preconstruction Fee shall be held by the Owner until the earlier to occur of the following: (1) the full execution of the Guarantee Maximum Price Amendment at which time the Owner shall release any retainage of the Preconstruction Fee to the Construction Manager; or (2) this Agreement is terminated pursuant to Section 13.1 at which time the fifty percent

(50%) retainage of the Preconstruction Fee shall be forfeited by the Construction Manager and the Owner shall no longer be obligated to pay the Construction Manager the fifty percent (50%) retainage of the Preconstruction Fee.  
§ 5.1.2 The hourly billing rates for Preconstruction Phase services of the Construction Manager and the Construction Manager's Consultants and Subcontractors, if any, are set forth below.  
(If applicable, attach an exhibit of hourly billing rates or insert them below.)

Individual or Position	Rate
<u>Intentionally deleted.</u>	
§ 5.1.2.1 Hourly billing rates for Preconstruction Phase services include all costs to be paid or incurred by the Construction Manager, as required by law or collective bargaining agreements, for taxes, insurance, contributions, assessments and benefits and, for personnel not covered by collective bargaining agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, and shall remain unchanged unless the parties execute a Modification. <u>Intentionally deleted.</u>	
§ 5.1.3 If the Preconstruction Phase services covered by this Agreement have not been completed within <u>( )</u> months of the date of this Agreement, through no fault of the Construction Manager, the Construction Manager's compensation for Preconstruction Phase services shall be equitably adjusted. <u>Intentionally deleted.</u>	
...	
§ 5.2.1 Unless otherwise agreed, <u>and except as otherwise provided in this Agreement,</u> payments for services shall be made monthly in proportion to services performed.	
§ 5.2.2 Payments are due and payable upon presentation of the Construction Manager's invoice. Amounts unpaid <u>( )</u> days after the invoice date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the principal place of business of the Construction Manager. (Insert rate of monthly or annual interest agreed upon.)	

—%

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The Owner shall compensate and make progress payments to the Construction Manager in accordance with this Article 11 for Construction Phase Services performed after execution of the Guaranteed Maximum Price Amendment. For all required Construction Phase Services, the Construction Manager's Fee shall not exceed \$ \_\_\_\_\_, which is a fixed fee. Notwithstanding anything to the contrary herein, in the event Construction Manager fails to submit a Guaranteed Maximum Price proposal that is consistent with the Owner's Requirements or the Owner's budget, and Owner, in Owner's sole and absolute discretion, refrains from terminating the Contract pursuant to Article 13, then ten (10%) of the Construction Manager's Fee shall be forfeited by the Construction Manager and the Owner shall not be obligated to pay the Construction Manager ten (10%) of the Construction Manager's Fee stated herein.

...

There shall be no adjustment to the Construction Manager's Fee for changes in the Work after the GMP is agreed upon, until the value of cumulative Change Orders approved by the Owner exceeds 3% of the approved GMP Value. If the cumulative value of approved changes in the Work exceeds 3% of the approved GMP value, the Construction Manager will be allowed to include adjustment to Construction Manager's Fee (pursuant to Section 7.2.2 of A201-2017) for the portion of the Work in excess of the 3% of the approved GMP value. For example, if the agreed upon GMP amount for the Project is \$33.33 Million, the Construction Manager's Fee will not be adjusted until the cumulative value of approved changes in Work reaches \$1 Million after the GMP is approved. For this example, the Construction Manager is allowed to request adjustment to the Construction Manager's fee only for the portion of the changes in the Work in excess of \$1 Million.

...

See Section 7.2.2(G) of A201–2017.

...

The Construction Manager acknowledges and agrees that time is of the essence in achieving Substantial Completion and that a delay in achieving Substantial Completion will result in increased costs to the Owner. In the event that the Construction Manager does not achieve Substantial Completion as stipulated in Article 1, including approved extensions, the Construction Manager and the Construction Manager's surety shall be liable for and shall pay liquidated damages to the Owner. For each calendar day required to achieve Substantial Completion beyond the Substantial Completion Date authorized by this Contract and the Contract Documents, the Construction Manager shall pay to the Owner all direct costs charged to the Owner, plus liquidated damages, and not as a penalty, on account of the Owner's staff expense and on account of student inconvenience, disruption, and dislocation the sum of \$1,000.00 per day.

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§ 6.3.2 Notwithstanding anything to the contrary set forth herein, Adjustments to the Guaranteed Maximum Price on account of changes in the Work subsequent to the execution of the Guaranteed Maximum Price Amendment may be determined by any of the methods listed in Article 7 of AIA Document A201–2017, General Conditions of the Contract for Construction, only be granted by advance written consent and approval Owner.

§ 6.3.3 Adjustments to subcontracts awarded on the basis of a stipulated sum shall be determined in accordance with Article 7 of A201–2017, as they refer to "cost" and "fee," and not by Articles 6 and 7 of this Agreement, may only be granted by advance written approval by Owner. Adjustments to subcontracts awarded with the Owner's prior written consent and approval on the basis of cost plus a fee shall be calculated in accordance with the terms of those subcontracts.

...

§ 6.3.5 If no specific provision is made in Section 6.1.3 for adjustment of the Construction Manager's Fee in the case of changes in the Work, or if the extent of such changes is such, in the aggregate, that application of the adjustment provisions of Section 6.1.3 will cause substantial inequity to the Owner or Construction Manager, the Construction Manager's Fee shall be equitably adjusted on the same basis that was used to establish the Fee for the original Work, and the Guaranteed Maximum Price shall be adjusted accordingly.  
Intentionally deleted.

...

§ 7.1.1 The term Cost "Cost of the Work-Work" shall mean costs necessarily incurred by the Construction Manager in the proper performance of the Work. Such costs shall be at rates not higher than those customarily paid at the place of the Project except with prior consent of the Owner. The Cost of the Work shall include only the items set forth in Sections 7.1 through 7.7.  
this Article 7.

§ 7.1.2 Where, pursuant to the Contract Documents, any cost is subject to the Owner's prior approval, the Construction Manager shall obtain such approval in writing prior to incurring the cost. The Construction Manager has provided the Owner with a detailed itemization of all of the Construction Manager's General Conditions Costs in Attachment 1, which is incorporated herein by reference. Notwithstanding anything to the contrary in this Article 7 and throughout the Contract Documents, the total cost to the Owner for all of the Design-Build's General Conditions Costs shall not exceed \$ (as submitted by the Construction Manager on the bid form, and as further set forth in Attachment 1, unless agreed by written change order) and any amounts appropriated for General Conditions that are unused by the Construction Manager shall be applied as a credit for the benefit of the Owner.

§ 7.1.3 Costs shall be at rates not higher than the standard rates paid at the place of the Project, except with prior approval of the Owner. Where any cost is subject to the Owner's prior approval, the Construction Manager shall obtain the Owner's approval prior to incurring the cost.

§ 7.2 Labor Costs  
Intentionally deleted.

§ 7.2.1 Wages or salaries of construction workers directly employed by the Construction Manager to perform the construction of the Work at the site or, with the Owner's prior approval, at off-site workshops.

**~~§ 7.2.2~~** Wages or salaries of the Construction Manager's supervisory and administrative personnel when stationed at the site and performing Work, with the Owner's prior approval.

**~~§ 7.2.2.1~~** Wages or salaries of the Construction Manager's supervisory and administrative personnel when performing Work and stationed at a location other than the site, but only for that portion of time required for the Work, and limited to the personnel and activities listed below:

*(Identify the personnel, type of activity and, if applicable, any agreed upon percentage of time to be devoted to the Work.)*

**~~§ 7.2.3~~** Wages and salaries of the Construction Manager's supervisory or administrative personnel engaged at factories, workshops or while traveling, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work.

**~~§ 7.2.4~~** Costs paid or incurred by the Construction Manager, as required by law or collective bargaining agreements, for taxes, insurance, contributions, assessments and benefits and, for personnel not covered by collective bargaining agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Sections 7.2.1 through 7.2.3.

**~~§ 7.2.5~~** If agreed rates for labor costs, in lieu of actual costs, are provided in this Agreement, the rates shall remain unchanged throughout the duration of this Agreement, unless the parties execute a Modification.

...

**~~§ 7.5 Costs of Other Materials and Equipment, Temporary Facilities and Related Items~~**Intentionally deleted.

**~~§ 7.5.1~~** Costs of transportation, storage, installation, dismantling, maintenance, and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers that are provided by the Construction Manager at the site and fully consumed in the performance of the Work. Costs of materials, supplies, temporary facilities, machinery, equipment, and tools, that are not fully consumed, shall be based on the cost or value of the item at the time it is first used on the Project site less the value of the item when it is no longer used at the Project site. Costs for items not fully consumed by the Construction Manager shall mean fair market value.

**~~§ 7.5.2~~** Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by the Construction Manager at the site, and the costs of transportation, installation, dismantling, minor repairs, and removal of such temporary facilities, machinery, equipment, and hand tools. Rates and quantities of equipment owned by the Construction Manager, or a related party as defined in Section 7.8, shall be subject to the Owner's prior approval. The total rental cost of any such equipment may not exceed the purchase price of any comparable item.

**~~§ 7.5.3~~** Costs of removal of debris from the site of the Work and its proper and legal disposal.

**~~§ 7.5.4~~** Costs of the Construction Manager's site office, including general office equipment and supplies.

**~~§ 7.5.5~~** Costs of materials and equipment suitably stored off the site at a mutually acceptable location, subject to the Owner's prior approval.

**~~§ 7.6 Miscellaneous Costs~~**Intentionally deleted.

**~~§ 7.6.1~~** Premiums for that portion of insurance and bonds required by the Contract Documents that can be directly attributed to this Contract.

§ 7.6.1.1 Costs for self-insurance, for either full or partial amounts of the coverages required by the Contract Documents, with the Owner's prior approval.

§ 7.6.1.2 Costs for insurance through a captive insurer owned or controlled by the Construction Manager, with the Owner's prior approval.

§ 7.6.2 Sales, use, or similar taxes, imposed by a governmental authority, that are related to the Work and for which the Construction Manager is liable.

§ 7.6.3 Fees and assessments for the building permit, and for other permits, licenses, and inspections, for which the Construction Manager is required by the Contract Documents to pay.

§ 7.6.4 Fees of laboratories for tests required by the Contract Documents; except those related to defective or nonconforming Work for which reimbursement is excluded under Article 13 of AIA Document A201–2017 or by other provisions of the Contract Documents, and which do not fall within the scope of Section 7.7.3.

§ 7.6.5 Royalties and license fees paid for the use of a particular design, process, or product, required by the Contract Documents.

§ 7.6.5.1 The cost of defending suits or claims for infringement of patent rights arising from requirements of the Contract Documents, payments made in accordance with legal judgments against the Construction Manager resulting from such suits or claims, and payments of settlements made with the Owner's consent, unless the Construction Manager had reason to believe that the required design, process, or product was an infringement of a copyright or a patent, and the Construction Manager failed to promptly furnish such information to the Architect as required by Article 3 of AIA Document A201–2017. The costs of legal defenses, judgments, and settlements shall not be included in the Cost of the Work used to calculate the Construction Manager's Fee or subject to the Guaranteed Maximum Price.

§ 7.6.6 Costs for communications services, electronic equipment, and software, directly related to the Work and located at the site, with the Owner's prior approval.

§ 7.6.7 Costs of document reproductions and delivery charges.

§ 7.6.8 Deposits lost for causes other than the Construction Manager's negligence or failure to fulfill a specific responsibility in the Contract Documents.

§ 7.6.9 Legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between the Owner and Construction Manager, reasonably incurred by the Construction Manager after the execution of this Agreement in the performance of the Work and with the Owner's prior approval, which shall not be unreasonably withheld.

§ 7.6.10 Expenses incurred in accordance with the Construction Manager's standard written personnel policy for relocation and temporary living allowances of the Construction Manager's personnel required for the Work, with the Owner's prior approval.

§ 7.6.11 That portion of the reasonable expenses of the Construction Manager's supervisory or administrative personnel incurred while traveling in discharge of duties connected with the Work.

## **§ 7.7 Other Costs and Emergencies**Intentionally deleted.

§ 7.7.1 Other costs incurred in the performance of the Work, with the Owner's prior approval.

§ 7.7.2 Costs incurred in taking action to prevent threatened damage, injury, or loss, in case of an emergency affecting the safety of persons and property, as provided in Article 10 of AIA Document A201–2017.

§ 7.7.3 Costs of repairing or correcting damaged or nonconforming Work executed by the Construction Manager, Subcontractors, or suppliers, provided that such damaged or nonconforming Work was not caused by the negligence of, or failure to fulfill a specific responsibility by, the Construction Manager, and only to the extent that the cost of



repair or correction is not recovered by the Construction Manager from insurance, sureties, Subcontractors, suppliers, or others.

**§ 7.7.4** The costs described in Sections 7.1 through 7.7 shall be included in the Cost of the Work, notwithstanding any provision of AIA Document A201-2017 or other Conditions of the Contract which may require the Construction Manager to pay such costs, unless such costs are excluded by the provisions of Section 7.9.

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Other than those reimbursable costs set forth in Sections 7.3 and 7.4, and Attachment 1, no other Costs of the Work performed by the Construction Manager shall be reimbursable from the Owner to the Construction Manager.

**§ 7.9.1** The Cost of the Work shall not include the items listed below:

- ~~.1 Salaries and other compensation of the Construction Manager's personnel stationed at the Construction Manager's principal office or offices other than the site office, except as specifically provided in Section 7.2, or as may be provided in Article 14;~~
- ~~.2 Bonuses, profit sharing, incentive compensation, and any other discretionary payments, paid to anyone hired by the Construction Manager or paid to any Subcontractor or vendor, unless the Owner has provided prior approval;~~
- ~~.3 Expenses of the Construction Manager's principal office and offices other than the site office;~~
- ~~.4 Overhead and general expenses, except as may be expressly included in Sections 7.1 to 7.7;~~
- ~~.5 The Construction Manager's capital expenses, including interest on the Construction Manager's capital employed for the Work;~~
- ~~.6 Except as provided in Section 7.7.3 of this Agreement, costs due to the negligence of, or failure to fulfill a specific responsibility of the Contract by, the Construction Manager, Subcontractors, and suppliers, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable;~~
- ~~.7 Any cost not specifically and expressly described in Sections 7.1 to 7.7;~~
- ~~.8 Costs, other than costs included in Change Orders approved by the Owner, that would cause the Guaranteed Maximum Price to be exceeded; and~~
- ~~.9 Costs for services incurred during the Preconstruction Phase.~~

...

**§ 9.1** Those portions of the Work that the Construction Manager does not customarily perform with the Construction Manager's own personnel shall be performed under subcontracts or other appropriate agreements with the Construction Manager. The Owner may designate specific persons from whom, or entities from which, the Construction Manager shall obtain bids. The Construction Manager shall obtain bids from Subcontractors, and from suppliers of materials or equipment fabricated especially for the Work, who are qualified to perform that portion of the Work in accordance with the requirements of the Contract Documents. The Construction Manager shall deliver such bids to the Architect and Owner with an indication as to which bids the Construction Manager intends to accept. The Owner then has the right to review the Construction Manager's list of proposed subcontractors and suppliers in consultation with the Architect and, subject to Section 9.1.1, to object to any subcontractor or supplier. Any advice of the Architect, or approval or objection by the Owner, shall not relieve the Construction Manager of its responsibility to perform the Work in accordance with the Contract Documents. ~~The Construction Manager shall not be required to contract with anyone to whom the Construction Manager has reasonable objection.~~

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**§ 9.2** Subcontracts or other agreements shall conform to the applicable payment provisions of this Agreement, and shall not be awarded on the basis of cost plus a fee without the Owner's prior written approval. If a subcontract is awarded on the basis of cost plus a fee, the Construction Manager shall provide in the subcontract for the Owner to receive the same audit rights with regard to the Subcontractor as the Owner receives with regard to the Construction Manager in Article 10. Agreement.



...

The Construction Manager shall keep full and detailed records and accounts related to the Cost of the Work, and exercise such controls, as may be necessary for proper financial management under this Contract and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Construction Manager's records and accounts, including complete documentation supporting accounting entries, books, job cost reports, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, Subcontractor's invoices, purchase orders, vouchers, memoranda, and other data relating to this Contract. The Construction Manager shall preserve these records for a period of ~~three~~ five years after final payment, or for such longer period as may be required by law.

...

§ 11.1.3 Provided that an Application for Payment is received by the Architect not later than the first day of a month, the Owner shall make payment of the amount certified to the ~~Construction Manager-Contractor~~ not later than the Twenty Fifth (25<sup>th</sup>) day of the same month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than thirty ( 30 ) days after the Architect receives the Application for Payment.

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§ 11.1.5.3 When the Construction Manager allocates costs from a contingency to another line item in the schedule of values, the Construction Manager shall submit supporting documentation to the Architect. Contingency allocations will require advance written approval from the Owner prior to their inclusion into Applications for Payment.

...

- ~~.3~~ That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified; and
- ~~.4~~ .3 The Construction Manager's Fee, computed upon the Cost of the Work described in the preceding Sections 11.1.7.1.1 and 11.1.7.1.2 at the rate stated in Section 6.1.2 or, if the Construction Manager's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum fee as the Cost of the Work included in Sections 11.1.7.1.1 and 11.1.7.1.2 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

...

5%

...

Not used

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The Owner, at it's sole discretion, decide to reduce retainage amount to 3% when the cumulative completion of the project exceeds 50% of the total Guaranteed Maximum Price.

...

TBD

...

- .2 the Construction Manager has submitted a final accounting for the Cost of the Work and a final Application for Payment; ~~and~~
- .3 a final Certificate for Payment has been issued by the Architect in accordance with Section ~~11.2.2.2-11.2.2.2~~; and

**§ 11.2.2** Within ~~30 days~~ five (5) years of the Owner's receipt of the Construction Manager's final accounting for the Cost of the Work, the Owner shall conduct an audit of the Cost of the Work or notify the Architect that it will not conduct an audit.

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Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

*(Insert rate of interest agreed upon, if any.)*

Intentionally deleted.

...

[ X ] Litigation in a court of competent jurisdiction

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**§ 13.1.1** If the Owner and the Construction Manager do not reach an agreement on the Guaranteed Maximum Price, the Owner may terminate this Agreement upon not less than seven days' written notice to the Construction Manager, ~~and the Construction Manager may terminate this Agreement, upon not less than seven days' written notice to the Owner.~~ Manager.

**§ 13.1.2** In the event of termination of this Agreement pursuant to Section 13.1.1, the Construction Manager shall be compensated for ~~Preconstruction Phase services~~ 50% of Preconstruction Fees and Work performed prior to receipt of a notice of termination, in accordance with the terms of this Agreement. In no event shall the Construction Manager's compensation under this Section exceed the compensation set forth in Section 5.1.

...

**§ 13.1.5** If the Owner terminates the Contract pursuant to Section 13.1.3 after the commencement of the Construction Phase but prior to the execution of the Guaranteed Maximum Price Amendment, the Owner shall pay to the Construction Manager an amount calculated as follows, which amount shall be in addition to any compensation paid to the Construction Manager under Section 13.1.4:

- ~~1. Take the Cost of the Work incurred by the Construction Manager to the date of termination;~~
- ~~2. Add the Construction Manager's Fee computed upon the Cost of the Work to the date of termination at the rate stated in Section 6.1 or, if the Construction Manager's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed sum Fee as the Cost of the Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion; and~~
- ~~3. Subtract the aggregate of previous payments made by the Owner for Construction Phase services.~~ Intentionally deleted.

**§ 13.1.6** The Owner shall also pay the Construction Manager fair compensation, either by purchase or rental at the election of the Owner, for any equipment owned by the Construction Manager that the Owner elects to retain and that is not otherwise included in the Cost of the Work under Section 13.1.5.1. To the extent that the Owner elects to take legal assignment of subcontracts and purchase orders (including rental agreements), the Construction Manager shall, as a condition of receiving the payments referred to in this Article 13, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Construction Manager, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Construction Manager under such subcontracts or purchase orders. All Subcontracts, purchase orders and rental agreements entered into by the Construction Manager will contain provisions allowing for assignment to the Owner as described above. Intentionally deleted.

**§ 13.1.6.1** If the Owner accepts assignment of subcontracts, purchase orders or rental agreements as described above, the Owner will reimburse or indemnify the Construction Manager for all costs arising under the subcontract, purchase order or rental agreement, if those costs would have been reimbursable as Cost of the Work if the contract had not been terminated. If the Owner chooses not to accept assignment of any subcontract, purchase order or rental agreement that would have constituted a Cost of the Work had this agreement not been terminated, the Construction Manager will

terminate the subcontract, purchase order or rental agreement and the Owner will pay the Construction Manager the costs necessarily incurred by the Construction Manager because of such termination. ~~Intentionally deleted.~~

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Only for the Cost of the Work incurred by the Construction Manager at the time of termination

...

The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017; in such case, the Guaranteed Maximum Price and Contract Time shall be increased as provided in Article 14 of AIA Document A201–2017, except that the term "profit" shall be understood to mean the Construction Manager's Fee as described in Sections 6.1 and 6.3.5 of this Agreement. Notwithstanding anything to the contrary herein or in AIA Document A201-2017, the Work may be suspended by the Owner for up to 90 days due to a pandemic, including a subsequent outbreak of the COVID-19 virus without penalty and without increasing the Guaranteed Maximum Price.

...

§ 14.2.1 The Owner and Construction Manager, respectively, bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 14.2.2 of this Agreement, and in Section 13.2.2 of A201–2017, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

...

§ 14.3.1.1 Commercial General Liability with policy limits of not less than —(\$ —) for each occurrence and —(\$ —) in the aggregate for bodily injury and property damage.

§ 14.3.1.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Construction Manager with policy limits of not less than —(\$ —) per accident for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles, along with any other statutorily required automobile coverage.

§ 14.3.1.3 The Construction Manager may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided that such primary and excess or umbrella liability insurance policies result in the same or greater coverage as the coverages required under Sections 14.3.1.1 and 14.3.1.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ 14.3.1.4 Workers' Compensation at statutory limits and Employers Liability with policy limits not less than —(\$ —) each accident, —(\$ —) each employee, and —(\$ —) policy limit.

§ 14.3.1.5 Professional Liability covering negligent acts, errors and omissions in the performance of professional services, with policy limits of not less than —(\$ —) per claim and —(\$ —) in the aggregate.

#### § 14.3.1.6 Other Insurance

*(List below any other insurance coverage to be provided by the Construction Manager and any applicable limits.)*

#### Coverage

#### Limits

§ 14.3.1.7 ~~Additional Insured Obligations.~~ To the fullest extent permitted by law, the Construction Manager shall cause the primary and excess or umbrella policies for Commercial General Liability and Automobile Liability to include the Owner as an additional insured for claims caused in whole or in part by the Construction Manager's negligent acts or omissions. The additional insured coverage shall be primary and non-contributory to any of the Owner's insurance policies and shall apply to both ongoing and completed operations.

§ 14.3.1.8 The Construction Manager shall provide certificates of insurance to the Owner that evidence compliance with the requirements in this Section 14.3.1.

**§ 14.3.2 Construction Phase**

After execution of the Guaranteed Maximum Price Amendment, the Owner and the Construction Manager shall purchase and maintain insurance as set forth in AIA Document A133™-2019, Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price, Exhibit B, Insurance and Bonds, and elsewhere in the Contract Documents. The Contractor shall purchase and maintain insurance and provide bonds as set forth in Article 11 of AIA Document A201-2017.

(State bonding requirements, if any, and limits of liability for insurance required in Article 11 of AIA Document A201-2017.)

§ 14.3.3 Maryland Code 21-102 - A certificate of authority, or certified copy of a certificate of authority, issued by the Commissioner to a surety insurer shall be accepted as evidence of qualification to become sole surety on a bond, undertaking, recognizance, or other obligation required or allowed by law, or in the charter, ordinances, rules, or regulations of a municipal corporation, board, organization, court, judge, or public officer, without further proof or qualification regarding solvency, credit, or financial sufficiency to act as a surety or bidders may use bonding companies from Treasury approved sureties with an AM Best rating of A- or better rating.

§ 14.3.4 The Contractor shall provide a Performance Bond with a Penal Sum equal to the Contract Sum. The Contractor shall provide a Payment Bond with a Penal Sum equal to the Contract Sum. All bonds shall be written on MD COMAR 21 07 02 10 Bond and will be from a surety company acceptable to the Owner.

§ 14.3.5 The Contractor shall comply with the additional insurance requirements as set forth below:

(a) The Board of Education of Frederick County, Frederick County Council, the State of Maryland and the other entities stipulated by the Owner shall be named as an additional insured on the Contractor policies other than Worker's Compensation.

(b) All policies shall stipulate the Owner is to receive written notice thirty (30) days before cancellation.

(c) The Owner is to receive insurance certificates evidencing the compliance of insurance requirements at least (10) ten days before Work commences.

(d) Insurance policies shall contain a Waiver of Subrogation in favor of the Owner.

(e) General Liability and Umbrella Insurance policies are to be in "Occurrence Form".

(f) Insurance policies shall provide primary coverage to The Board of Education of Frederick County and Frederick County Council and the State of Maryland as additional insureds for loss, injury and damage arising out of or associated with the Work under this agreement as opposed to pro-rata with, concurrent with excess to any other insurance coverages by the Owner other than insurance Worker's Compensation Insurance.

(g) The Contractor shall purchase and maintain all insurance from an insurer acceptable to the Owner and lawfully authorized to do business in Maryland.

§ 14.3.6 The Owner provides and maintains Builder's Risk Protection. The Contractor shall provide coverage for the first \$2,500.00 for damages per occurrence. This provision shall not release the contractor of the obligation to complete the work according to plans and specifications required by the contract, and the contractor his/her Surety shall be obligated to full performance of the contract's undertaking.

§ 14.3.7 The Contractor shall provide insurance pursuant to the requirements set forth below:

**Type of Insurance or Bond**

Part 1 Worker's Compensation Insurance

Part 2 Employers Liability:

Bodily Injury by Accident

**Limit of Liability or Bond Amount**

as required by statute

\$ 500,000.00 each accident

<u>Bodily Injury by Disease</u>	<u>\$ 500,000.00 policy limits</u>
<u>Bodily Injury by Disease</u>	<u>\$ 500,000.00 each employee</u>
<u>Commercial General Liability Insurance, to include, premises, products, completed operations, personal injury and contractual: Aggregate to apply Per Project./Per Location, Occurrence</u>	<u>\$1,000,000.00</u>
<u>Each Occurrence</u>	<u>\$2,000,000.00</u>
<u>General aggregate Limit (Per Site)</u>	<u>\$2,000,000.00 aggregate limit</u>
<u>Products and complete operation</u>	<u>\$1,000,000.00 each occurrence Limit</u>
<u>Personal &amp; advertising injury</u>	<u>\$1,000,000.00</u>
<u>Fire damage</u>	<u>\$ 50,000.00</u>
<u>Medical Expense (Any One Person)</u>	<u>\$ 10,000.00 each occurrence</u>
<u>General Liability insurance shall provide coverage for:</u>	
<u>Completed Operations to meet the Statute of Repose &amp; Statute of Limitations;</u>	
<u>Independent Contractors</u>	
<u>Contractual Liability</u>	
<u>Broad Form Property Damage</u>	
<u>Liability arising from Explosion, Collapse and Underground Damage (X, C, U)</u>	
<u>Additional insured Endorsement (GL2010 11/85)</u>	
<u>Terrorism-Certified &amp; Non Certified</u>	
<u>Option (b1)</u>	
<u>Automobile Liability Insurance, including owned, non-owned and hired vehicles</u>	
<u>Bodily injury liability</u>	<u>\$1,000,000.00 each person</u>
<u>Property damage liability</u>	<u>\$1,000,000.00 each occurrence</u>
<u>Option (b2)</u>	
<u>Combined single limit Bodily injury or property damage liability</u>	<u>\$1,000,000.00 each person</u>
	<u>\$1,000,000.00 each accident</u>
<u>Umbrella Excess Liability (true following form)</u>	<u>\$5,000,000.00 per Occurrence</u>
	<u>\$5,000,000.00 General Aggregate</u>
	<u>\$5,000,000.00 Products &amp; Completed Operations</u>
<u>Any construction contractor providing Mass Grading, Masonry, Structural Steel, Superstructure or foundation concrete, Mechanical or Electrical contractors shall be required to carry the following Umbrella Excess Liability (true following form) minimum limits:</u>	<u>\$8,000,000.00 Each Occurrence</u>
	<u>\$8,000,000.00 General Aggregate</u>
	<u>\$8,000,000.00 Products &amp; Completed Operations</u>
<u>Contractors Pollution Liability for contractors engaged in testing for, monitoring, clean-up, removal, containing, detoxifying, neutralizing, transporting, handling, storage treatment, or disposing of or processing any waste pollutants.</u>	<u>\$2,000,000.00 per Occurrence</u>
	<u>\$2,000,000.00 Aggregate</u>

**§ 14.3.2.1** The Construction Manager shall provide bonds as set forth in AIA Document A133™–2019 Exhibit B, and elsewhere in the Contract Documents.

**§ 14.4** Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

*(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)*

**§ 14.5 Other provisions:**

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- ~~.3~~ ~~AIA Document A133™ 2019, Exhibit B, Insurance and Bonds~~ Intentionally Deleted
- ~~.4~~ AIA Document A201™-2017, General Conditions of the Contract for Construction as amended
- ~~.5~~ Exhibit A Project Description
- ~~.6~~ AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

...

- ~~.6~~ ~~.7~~ Other Exhibits:

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- ~~.7~~ ~~.8~~ Other documents, if any, listed below:

...

Attachment 1 Construction Manager's Reimbursable General Conditions

...

Theresa R. Alban, Ph.D., Superintendent of Schools



## ***Certification of Document's Authenticity***

***AIA® Document D401™ – 2003***

I, Adnan Mamoon, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 12:18:20 ET on 06/30/2020 under Order No. 4323301581 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A133™ – 2019, Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

*(Signed)*

*(Title)*

*(Dated)*

# **AIA® Document A201® – 2017**

## **General Conditions of the Contract for Construction**

### **for the following PROJECT:**

*(Name and location or address)*

Brunswick Elementary Replacement  
CM at Risk Services  
400 Central Avenue  
Brunswick, Maryland 21716  
RFP 21C1

### **THE OWNER:**

*(Name, legal status and address)*

The Board of Education of Frederick County  
191 South East Street  
Frederick, Maryland 21701-5918

### **THE ARCHITECT:**

*(Name, legal status and address)*

GWWO, Inc.  
800 Wyman Park Drive, Suite 300  
Baltimore, MD 21211

### **TABLE OF ARTICLES**

- 1 GENERAL PROVISIONS**
- 2 OWNER**
- 3 CONTRACTOR**
- 4 ARCHITECT**
- 5 SUBCONTRACTORS**
- 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**
- 7 CHANGES IN THE WORK**
- 8 TIME**
- 9 PAYMENTS AND COMPLETION**
- 10 PROTECTION OF PERSONS AND PROPERTY**
- 11 INSURANCE AND BONDS**
- 12 UNCOVERING AND CORRECTION OF WORK**

### **ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

Init.

### 13 MISCELLANEOUS PROVISIONS

### 14 TERMINATION OR SUSPENSION OF THE CONTRACT

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Init.

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## **ARTICLE 1 GENERAL PROVISIONS**

### **§ 1.1 Basic Definitions**

#### **§ 1.1.1 The Contract Documents**

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. As specifically enumerated in the Agreement, the Contract Documents shall include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

#### **§ 1.1.2 The Contract**

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

#### **§ 1.1.3 The Work**

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

#### **§ 1.1.4 The Project**

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

#### **§ 1.1.5 The Drawings**

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

#### **§ 1.1.6 The Specifications**

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

#### **§ 1.1.7 Instruments of Service**

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under the Architect respective professional services agreements with the Owner. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials. As the design progresses and payments to the Architect are made by the Owner the instruments of services become the property of The Board of Education of Frederick County, see 1.5.1 Ownership and Use of Drawings, Specifications and Other Instrument of Service.

#### **§ 1.1.8 Initial Decision Maker**

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2.

### **§ 1.2 Correlation and Intent of the Contract Documents**

**§ 1.2.1** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by



one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:

1. The Agreement
2. Addenda with those or late date having precedence over those of earlier date
3. The Supplementary Conditions
4. The General Conditions of the Contract for Construction
5. The Contract Specifications
6. The Contract Drawings

**§ 1.2.1.1** The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

**§ 1.2.2** Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

**§ 1.2.3** Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

### **§ 1.3 Capitalization**

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

### **§ 1.4 Interpretation**

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

### **§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service**

**§ 1.5.1** The Architect and the Architect's consultants shall be deemed the authors of the respective Instruments of Service, including the Drawings and Specifications, and The Board of Education of Frederick County will own and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and materials or equipment suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

**§ 1.5.2** The Contractor, Subcontractors, Sub-subcontractors, and material and equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner.

### **§ 1.6 Notice**

**§ 1.6.1** Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.



§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

### § 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if included in the AIA B101-2009 Standard Form of Agreement Between Owner and Architect, to establish the protocols for the development, use, transmission, and exchange of digital data.

### § 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, if included in AIA B101-2009 Standard Form of Agreement Between Owner and Architect, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

## ARTICLE 2 OWNER

### § 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. The Architect does not have authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

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*(Paragraphs Deleted)*

**2.1.3 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Fees for trade and specialty permits, including but not limited to, electrical, plumbing, elevator, fire review(s) and inspection, boiler, pressure vessel and fuel burning permits and all reinspections shall be paid by and at the Contractor's expense.**

§ 2.1.4 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.1.5 If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 2.1.6 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project which are known to the Owner, and a legal description of the site if requested by the Contractor. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner and shall exercise proper precautions relating to the safe performance of the Work.

§ 2.1.7 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control

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and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

**§ 2.1.8** Unless otherwise provided in the Contract or Bidding Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

## **§ 2.2 Owner's Right to Stop the Work**

**§ 2.2.1** If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

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### **2.2.2**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a three-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to or waiver of other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

## **ARTICLE 3 CONTRACTOR**

### **§ 3.1 General**

**§ 3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

**§ 3.1.2** The Contractor shall perform the Work in accordance with the Contract Documents.

**§ 3.1.3** The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner or the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

### **§ 3.2 Review of Contract Documents and Field Conditions by Contractor**

**§ 3.2.1** Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents. The Contractor represents that it has received all information it needs concerning the conditions of the Project site. The Contractor represents that it has inspected the location of the Work and has satisfied itself as to the condition thereof or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents. Based upon the foregoing inspections, understandings, agreements and acknowledgements, the Contractor agrees and acknowledges that the Contract Sum is just and reasonable compensation for all the Work and that the Work shall not result in any lateral or vertical movement of any structure due to the Contractor's construction activities. The Contractor shall exercise special care in executing Subsurface Work in proximity of subsurface utilities, improvements and easements.

**§ 3.2.2** Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as

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the information furnished by the Owner pursuant to Section 2.1.6, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report in writing to the Architect and Owner any errors, inconsistencies or omissions discovered by or in the exercise of due diligence should have been discovered or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents. If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency or omission in the Contract Documents without providing written notice to the Owner and Architect, the Contractor shall assume appropriate responsibility for such performance and shall bear the costs for correction.

**§ 3.2.3** The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect in writing any nonconformity discovered by or in the exercise of due diligence should have been discovered or made known to the Contractor as a request for information in such form as the Architect may require.

**§ 3.2.4** If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

### **§ 3.3 Supervision and Construction Procedures**

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as state below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

**§ 3.3.2** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

**§ 3.3.3** The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

### **§ 3.4 Labor and Materials**

**§ 3.4.1** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

**§ 3.4.2** Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

**§ 3.4.3** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

**§ 3.4.4** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner or the Architect or of other Contractors during the performance of the Work or by Tests, inspections or approvals required or performed by persons other than the Contractor, including inspections or approvals performed by the Owner's personnel or by any public authority.

### **§ 3.5 Warranty**

**§ 3.5.1** The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

**§ 3.5.2** The Minimum Warranty period will be two (2) years from the date of substantial completion of the project. The Warranty shall include extended warranty period(s) available from equipment manufacturers and/or extended warranties as required by project specification are required as if individually enumerated herein.

**§ 3.5.2** Notwithstanding any other contract provisions to the contrary, the mechanical system and plumbing system must be completely balanced and such balance reports must be reviewed and accepted by the Engineer before the warranty/guarantee period will begin.

### **§ 3.6 Taxes**

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

### **§ 3.7 Permits, Fees, Notices and Compliance with Laws**

**§ 3.7.1** Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections and reinspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded. Fees for trade and a specialty permit including, but not limited to, electrical, plumbing, elevator, fire review(s), inspections and reinspections, boiler, pressure vessel and fuel burning permits, shall be paid by and at Contractor's expense.

**§ 3.7.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work. Compliance with local governing jurisdiction requirements shall be completed at no additional cost to the Owner.

**§ 3.7.3** If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction. The provisions of this Agreement regarding compensation and damages, including delay damages, shall apply.



### § 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

**§ 3.7.5** If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

### § 3.8 Allowances

**§ 3.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

**§ 3.8.2** Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

**§ 3.8.3** Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

### § 3.9 Superintendent and Project Manager

**§ 3.9.1** The Contractor shall employ a competent superintendent, project manager and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Communications shall be confirmed in writing. The Superintendent and necessary staff members shall be in attendance at the Project site during the performance of the Work including completion of all Punch List items.

**§ 3.9.2** Prior to being assigned to the Project both the Project Manager and Superintendent shall be subject to the approval of the Owner. Once approved, the Superintendent and Project Manager will not be removed from the Project without the Owner's written consent. The Owner reserves and retains the right, as its sole and absolute discretion, to order the Contractor to replace any of the Contractor's employees. In the event the Owner requests Contractor employee's removal, the Contractor shall promptly replace such employees with competent replacements satisfactory to the Owner. The Contractor shall not change the Superintendent or Project Manager without the Owner's consent.

**§ 3.9.3** The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

### **§ 3.10 Contractor's Construction and Submittal Schedules**

**§ 3.10.1** The Contractor, promptly after being awarded the Contract and as a condition precedent to the first Application For Payment, shall prepare submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

**§ 3.10.2** The Contractor shall prepare a preliminary construction and submittal schedule, within 14 days after being awarded the Contract and complete schedules before 60 contract days have elapsed. The Contractors shall update the schedules thereafter as necessary to maintain current construction and submittal schedules, and shall submit the schedules for the Architect's and Owner's review. The Architect's and Owner's review shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. Contractor's Construction Schedule shall be in a Critical Path Method (CPM) and bar chart format, indicating sufficient detail, task(s) (the work) and duration(s) (start and completion) of each major item of the Work, the current status of each major item of Work indicating staffing and equipment to comply with the Contract Substantial Completion Date and any Owner approved extensions. Contractor's shall provide additional detail when requested by the Architect or Owner and update their Proposed Contractor Schedule to be compliant with the Contract Substantial Date(s). Within 7 days of a request by the Architect or Owner, the Contractor shall furnish to the Owner and Architect a Progress Schedule showing the current progress and the completion stage of the Work as compared to the Original Contract Schedule. Project Schedules shall clearly identify any item of Work, which is behind Schedule along with the Contractor's increased manpower and equipment necessary to comply with the Contract Schedule including any time extensions approved by the Owner. Progress Schedule(s) shall be provided in a Critical Path Method (CPM), bar chart format and electronic as requested by the Owner. During the Owner's review, the Owner may choose to advise the Contractor of work that will be performed by the Owner's forces or the Owner's separate Contractor. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals. The Contractor shall provide the Owner and Architect updated schedules as a condition precedent to progress payments. The updated schedules shall be provided by the Contractor as the project progresses and as requested by the Owner or Architect.

**§ 3.10.3** The Contractor shall perform the Work in accordance with the most recent schedules reviewed by the Owner and Architect without objections.

### **§ 3.11 Documents and Samples at the Site**

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed. The Owner may request, and Contractor shall provide, at any time during the course of the Project, Asbuilt Drawings that reflect the then current stage of construction as actually built and submitted to the Owner for its review. If such drawings are not provided, the Owner may withhold progress payment, or at its discretion a portion thereof, until the requested drawings are up to date and provided for the Owner's review.

### **§ 3.12 Shop Drawings, Product Data and Samples**

**§ 3.12.1** Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.



**§ 3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**§ 3.12.3** Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

**§ 3.12.4** Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. The Contractor shall submit shop drawings to the Architect for all structural elements of the Work and all other portions of the work required by the Contract Documents. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

**§ 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

**§ 3.12.6** By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

**§ 3.12.7** The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

**§ 3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

**§ 3.12.10** The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals provided the Owner and Architect have specified to

the Contractor all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents.

The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. Pursuant to the Section 3.12.10, the Architects will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

**§ 3.12.10.1** If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

### **§ 3.13 Use of Site**

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

### **§ 3.14 Cutting and Patching**

**§ 3.14.1** The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, the Contractor's consent to cutting or otherwise altering the Work.

### **§ 3.15 Cleaning Up**

**§ 3.15.1** The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

**§ 3.15.2** If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

### **§ 3.16 Access to Work**

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

### **§ 3.17 Royalties, Patents and Copyrights**

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

### **§ 3.18 Indemnification**

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages,

losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder including but not limited to the contributing negligence of such party to be indemnified. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

**§ 3.18.2** In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

## **ARTICLE 4 ARCHITECT**

### **§ 4.1 General**

**§ 4.1.1** The Architect is the person or entity retained by the Owner pursuant to Section 2.1.4 and identified as such in the Agreement.

**§ 4.1.2** Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

### **§ 4.2 Administration of the Contract**

**§ 4.2.1** The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

**§ 4.2.2** The duties of the Architect shall be governed by the Agreement between the Owner and the Architect, and will review the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents., except as provided in Section 3.3.1. Notwithstanding other provisions in this Agreement to the contrary, for the purpose of effectuating the Architect's duties in this section, the Architect shall be responsible for exercising reasonable care and diligence in observing ongoing Work. No inspection or approval or failure to inspect or approve by the Architect shall relieve the Contractor from complying in all respects with the requirements of the Contract Documents.

**§ 4.2.3** On the basis of the site visits, the Architect will report to the Owner and copy the Contractor about the progress and quality of the portion of the Work completed reporting (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

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**4.2.3.1** Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect, for additional services which may be charges by the Architect for additional site visits made necessary by the fault or neglect of the Contractor.

#### § 4.2.4 Communications

Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Architect about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of reviewing the adequacy of the structural elements of the building and checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences, or procedures. The Architect's review of a specific item shall not indicate approval of an assembly of which the item is a component. Should any local Government authorities require certification or correctness of any structural shop drawings by the Architect of record, the Architect will sign and certify the shop drawings only after the shop drawings have been signed and certified by both the structural engineer and other professional engineer registered in the State of Maryland on behalf of the manufacturer, fabricator, Subcontractor or Contractor. The cost for such additional engineering certification shall be borne by the Contractor.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive, review and forward to the Owner with comments, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10. Architect's inspection and issuance of a certificate for final payment and Owner's payment shall not relieve Contractor of responsibility for defects in the Work.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.



**§ 4.2.12** Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

**§ 4.2.13** The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

**§ 4.2.14** The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

## **ARTICLE 5 SUBCONTRACTORS**

### **§ 5.1 Definitions**

**§ 5.1.1** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

**§ 5.1.2** A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

### **§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work**

**§ 5.2.1** Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

**§ 5.2.2** The Contractor shall not contract or propose to contract with a proposed person, entity or subcontractor unless the Contractor is satisfied that such person, entity or Subcontractor is technically and financially qualified to perform the Work as a Subcontractor in accordance with the Contractor Documents. The Contractor shall not Contract with any entity or persons to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

**§ 5.2.3** If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

**§ 5.2.4** The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

**§ 5.2.5** The Contractor shall not enter into any Subcontract, Contract agreement, purchase order or other arrangement for the furnishing of any portion of the materials, services, equipment or Work with any party or entity as such party or entity is an affiliated entity with which the Contractor has a direct or indirect ownership, control or interest unless such Agreement has been approved by the Owner after full disclosure in writing by the Contractor to the Owner of such affiliation or relationship and all details relating to the proposed arrangements.

### § 5.3 Subcontractual Relations

By appropriate written agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work which the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

### § 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

## ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

### § 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims a delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.



**§ 6.1.4** Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall be deemed to be subject to the same obligations and rights that apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

## **§ 6.2 Mutual Responsibility**

**§ 6.2.1** The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

**§ 6.2.2** If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect and Owner apparent discrepancies or defects in such other construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

**§ 6.2.3** The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

**§ 6.2.4** The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

**§ 6.2.5** The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

## **§ 6.3 Owner's Right to Clean Up**

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

## **ARTICLE 7 CHANGES IN THE WORK**

### **§ 7.1 General**

**§ 7.1.1** Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents. The Contractor agrees that it will incorporate the provisions of Article 7 in its entirety into all agreements with lower tier Contractors. It is further understood and agreed that these Change Order pricing provisions, apply to all types of Contracts, Subcontracts and purchases. The Owner and Owner's accountant shall be afforded access to Contractor's records, books, and correspondence, instructions, drawings, receipts, Subcontracts, purchase orders, vouchers and any other data relating to the Project as necessary to verify the cost of any change, including wages and benefits paid, for which compensation is sought under this Agreement.

**§ 7.1.2** A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone. Verbal notification approving the Contractor to proceed with a change in the work shall be confirmed in a written format via, CCD, Change Order, progress minutes, e-mail or other written correspondence and should be made as soon as practical.

**§ 7.1.3** Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive

or order for a minor change in the Work. A Change Order or Construction Change Directive involving unit costs shall be equitably adjusted in accordance with 7.3.4

## **§ 7.2 Change Orders**

**§ 7.2.1** A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor, and Architect stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time; and
- .4 **Comply with all requirements of 7.2.2 below and 7.3.4.**

No Change Order shall exceed any of the limitations and requirements of the Contract Documents.

**§ 7.2.2** The Contractor shall comply with the following regarding Changes:

(A) A Notice or Request for Change must comply with all of the following:

- .1 specifically and in detail describe the nature and cause of the Claim; and
- .2 specifically reference the detail(s) on the plans and the specification section(s) that are affected; and
- .3 contain an estimate of the increase or decrease in the cost to the Owner; and
- .4 include supporting documentation that satisfactorily justifies to the Owner overhead, profit, insurance, sales or payroll taxes and incorporate a detailed quantity survey of all Work added and deleted; and
- .5 be submitted in a format acceptable to the Owner.

(B) Additive Changes must comply with the following Mark-Up schedule for Overhead, profit and bond:

If the Cost of the proposed change is \$0.00 to \$4,999.99, the total combined overhead, profit and bond must not exceed 20%.

If the Cost of the proposed change is \$5,000.00 to \$14,999.99, the combined overhead, profit and bond must not exceed 15%.

If the Cost of the proposed change is \$15,000.00 to \$24,999.99, the combined overhead, profit and bond must not exceed 10%.

If the Cost of the proposed change is \$25,000.00 to \$49,999.99, the combined overhead, profit and bond must not exceed 7%.

If the Cost of the proposed change is over \$50,000.00, the combined overhead, profit and bond will be negotiated but will not exceed 5%, the cost of the bond shall be clearly indicated in the detailed proposal regardless of the proposed cost.

(C) The Contractors' markup of Subcontractor Work and supplier's material(s) shall not exceed 7% for changes up to \$24,999.99 and the markup shall be negotiated for changes over \$25,000.00 but shall not exceed 5% of the Subcontractor(s) cost of the Work.

(D) Overhead cost shall include all the general conditions, expenses, including but not limited to, all coordination, calculations, engineering, field and office supervision, field and office rent utilities, telephone and communications expenses, office supplies, clean-up, debris expenses, administration and preparation. When both additions and deletions are involved in any one change, the allowance for overhead, profit and bond shall be computed on the net increase, if any, with respect to the change.

(E) For decreases in the Work or credits, the Contract Amount shall be decreased 100% of the Scheduled Value of the deleted Work plus overhead, profit and bond. Contractor and Subcontractor(s) credits shall include credit for overhead, profit and Bond, in the same percentages allowed for additive changes in the above mark-up schedule:

(F) The Contractor's total charge to the Owner for the use of equipment owned in whole or in part by the Contractor, its Owners, directors, officers, shareholders, or affiliated or related persons or entities shall consider the rate agreed upon between the Contractor, Owner and Architect at the beginning of the project less operator and fuel. Reference materials such as "the AED Green Book" should be used to establish market rental rates for equipment. The following shall apply;

- .1 The appropriate duration of hourly rate shall be calculated based on the entire duration the piece of equipment is on the FCPS site (e.g. if the equipment item has been on the project for 30 days or more the hourly rate shall be the monthly rental divided by 176 hours; if on the project for one week the hourly rental shall be the weekly rental divided by 40; if on the project for a day the hourly rental shall be the daily rental divided by 8; if brought to the project for the specific operation the minimal rental period shall apply.) Minimal rental durations will be considered for equipment rented for specific project purposes,

- .2 The Contractor shall not invoice for delivery or removal of the equipment to or from the job site,
  - .3 In no event shall the total payment paid by the Owner on any such piece of equipment exceed fifty percent (50%) of its purchase price.
- (G) Subcontractor(s) shall comply with the requirements specified above for the Contractor regarding Changes.

### **§ 7.3 Construction Change Directives**

**§ 7.3.1** A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

**§ 7.3.2** A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

**§ 7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

**§ 7.3.4** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Wages for construction Workers, including supervisors directly employed to perform the construction of the Work at the site. Unless otherwise agreed by Addendum to this Contract, labor burden shall be limited to: social security, old age and employment, workmen's compensation, health and life insurance benefits, sick leave, holidays, military leave, vacation and pension and savings plan benefits; insurance, and other employee costs approved by the Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Additional costs of supervision and field office personnel directly attributable to the change, provided, however, the Contractor shall provide an itemized breakdown showing quantities, unit costs, hours and rates of labor, and other costs and such detail as may be required to allow the reasonableness of cost to be established. Similar cost information covering Subcontractors' Work shall be included as part of the Contractor's Proposal. Minimum charges for "handling" will not be acceptable. The allowable overhead and profit mark-ups to be included in the total cost to Owner shall be based on paragraph 7.2 and:

.1 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of the costs including labor, materials, and Subcontractors. Labor and materials shall be itemized in the manner prescribed above. Where major costs items are Subcontracts, they shall be itemized also. In no case will a charge involving over \$500.00 be approved without such itemization.

.2 A Change Order must include each of the items listed in this Article 7. In the event that there is no change in the Contract time or Contract amount, it must be noted that no such change is intended. A

Change Order is all-inclusive, that is, a Change Order, must indicate the change in Contract amount, including any overhead and profit. The Contractor cannot later request additional sums for a prior Change Order because it did not include overhead, profit, or similar items. If additional Contract time is indicated on the Change Order and the Contractor intends to claim any costs for time on any basis, the Change Order must include all additional costs, if any, associated with the additional time.

.3 Where both additions and credits are involved in any one Change Order the allowance of overhead and profit shall be figured on the basis of the net increase, if any.

**§ 7.3.5** If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

**§ 7.3.6** Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

**§ 7.3.7** A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

**§ 7.3.8** The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect and the credit shall be as required by Article 7 mark-up schedule. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change per the mark-up schedule.

**§ 7.3.9** Pending final determination of the actual cost of a Construction Change Directive to the Owner, amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change Order indicating the parties' agreement with part or all of such costs. For any portion of such costs that remain in dispute, a Claim may be made in accordance with Article 15.

**§ 7.3.10** When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order otherwise, if Contractor is directed to proceed by Owner, the matter shall be considered a Claim under Article 15. Change Orders may be issued for all or any part of a Construction Change Directive.

#### **§ 7.4 Minor Changes in the Work**

The Architect with the consent of the Owner has the authority to order minor changes in the work not involving adjustment in the Contract Sum or extension the Contract Time and not inconsistent with intent of the Contract Documents. Such changes will be effected by written order signed by the Architect and shall be binding on the Owner and Contractor.

### **ARTICLE 8 TIME**

#### **§ 8.1 Definitions**

**§ 8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

**§ 8.1.2** The date of commencement of the Work is the date established in the Agreement shall be fixed in a Notice to Proceed.

**§ 8.1.3** The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

**§ 8.1.4** The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.



## **§ 8.2 Progress and Completion**

**§ 8.2.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

**§ 8.2.2** The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and the Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

**§ 8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

## **§ 8.3 Delays and Extensions of Time**

**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a Separate Contractor employed by the Owner; or by changes ordered in the Work; or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation and with consent of the Owner; or by other causes that the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine. Contractor waives any and all rights to any increased payments for delay damages, whether by Change Order or otherwise, to include overhead, extended overhead, extended general conditions, or for any other delay-based amounts of any kind or nature, for any delay by reason of the events referred to in the subparagraph or any other event of any kind or nature. Contractor's remedy is limited to an extension of time as set forth herein.

**§ 8.3.2** Claims relating to time shall be made in accordance with applicable provisions of Article 15.

*(Paragraph Deleted)*

## **ARTICLE 9 PAYMENTS AND COMPLETION**

### **§ 9.1 Contract Sum**

**§ 9.1.1** The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

**§ 9.1.2** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

### **§ 9.2 Schedule of Values**

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect and Owner, before the first Application for Payment, a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Architect or Owner may require. This schedule, unless objected to the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. The Schedule of Values shall be revised from time to time as may be necessary and due to the issuance of Change Orders or Construction Change Directives, the Contractor shall revise the Schedule of Values as requested by the Architect or Owner. The Owner reserves the right to request the Contractor to provide additional detail substantiating the Schedule of Values.

**§ 9.2.2** The Contractor shall include a line item in the Schedule of Values for production of project record documents. The minimum value established for the record documents must not be less than 1/2 % of the total Contract value including accepted alternates.

### **§ 9.3 Applications for Payment**

**§ 9.3.1** At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect and Owner an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. Such applications shall be notarized and supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require, such as copies

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of requisitions from Subcontractors and material suppliers, and shall reflect retainage as provided for in the Contract Documents. Applications for Payment shall be based upon the Schedule of Values and shall be in a form and content satisfactory to the Owner. Each Application for Payment shall be accompanied by the following:

- .1 Contractor's application and Cost Certification Statement, AIA Forms 702, 703 and IAC PSCP Form No. 306.4, with attachment "G" Certified Minority Business Enterprise Participation Standard Monthly Contractor's Requisition for Payment" (current form), and;
- .2 A statement from the Contractor that all items of construction for which payment is sought have been incorporated into the Project where properly stored in accordance with the Contract Documents, and;
- .3 The Contractors and applicable Subcontractors Release of Liens and Waivers of Claim and such other documents that the Owner may require after discussion with the Contractor, and;
- .4 Such other documentation that the Owner, Construction Manager, Architect may reasonably require after discussion with contractor.

**§ 9.3.1.1** As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

**§ 9.3.1.2** Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

**§ 9.3.2** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

**§ 9.3.3** The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work.

#### **§ 9.4 Certificates for Payment**

**§ 9.4.1** The Architect will, after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor for such amount as the Architect determines in properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certifications in whole or in part as provided by in Section 9.5.1.

**§ 9.4.2** The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to



substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

### **§ 9.5 Decisions to Withhold Certification**

**§ 9.5.1** The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

**§ 9.5.2** When above reasons for withholding certifications are removed, certification will be made for amounts previously withheld after the Contractor revises and resubmits a current Application for Payment including such amounts that were previously withheld.

**§ 9.5.3** When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

**§ 9.5.4** If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Architect will reflect such payment on its next Certificate for Payment.

**§ 9.5.5** If the Contractor disputes any determination by the Architect or Owner with regard to any Applications for Payment, the Contractor shall nevertheless expeditiously continue to perform the Work and shall make claim as provided in Article 15.

**§ 9.5.6** The Owner shall not be deemed to be in breach of this Contract by reason of the withholding of any payment pursuant to any provision of the Contract Documents provided the Architect has approved the Owner's action, or the Work for which payment is being withheld has been rejected by any governmental authority.

### **§ 9.6 Progress Payments**

**§ 9.6.1** After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

**§ 9.6.2** The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

**§ 9.6.3** The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

**§ 9.6.4** The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

**§ 9.6.5** The Contractor's payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

**§ 9.6.6** A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

**§ 9.6.7** Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

**§ 9.6.8** Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

## **§ 9.7 Failure of Payment**

Subject to other provisions in the Contract Documents, if the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within thirty days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within thirty days after the date established in the Contract Documents, the amount certified by the Architect, then the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's substantiated direct costs of shut-down. Article 9.7 shall not apply to Change Orders that have not received formal approval by the Board of Education of Frederick County, all such Change Orders shall not be included in Applications for Payment until the Contractor received formal notification from the Owner that the Change Order has received formal approval by the Board of Education of Frederick County and the Contractor has completed the Change Order work.

## **§ 9.8 Substantial Completion**

**§ 9.8.1** Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

**§ 9.8.2** When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

**§ 9.8.3** The comprehensive list of items to be completed or corrected ("Contractor's Punch List") prepared by the Contractor shall be submitted to the Owner and the Architect and the Owner shall be notified of inspections and be

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entitled to have an Owner's representative present at such inspections. All items that are disclosed during inspections not complying with the Contract Documents shall be added to the Contractor's Punch List and a copy of the Amended Punch List shall be submitted to the Owner and the Contractor. Any Certificate of Substantial Completion shall then be submitted making reference to the Punch List item, as either being completed to the Architect's satisfaction or shall fix a time within which the Contractor shall complete any remaining items. In the event the Contractor's Punch List is not completed by the date set forth in the Certificate of Substantial Completion, Owner has the option of deducting from balances due the Contractor an amount sufficient to compensate Owner for the cost of completing the Punch List. The amount to be deducted shall be determined in the sole discretion of Owner. Alternatively, Owner at its sole discretion may proceed to engage another Contractor to complete the Punch List Work with the cost thereof to include Owner's administrative costs, which costs shall be calculated in the sole discretion of the Owner, to be deducted from the amount retained and if the amount retained is insufficient, the Contractor is responsible to reimburse Owner the full amount of the uncovered cost. To the extent that multiple inspections may be required to determine whether the Work, or a designated portion thereof has attained Substantial Completion, the Owner shall be entitled to deduct from the Contract Sum any amounts which it must pay to the Architect for additional services for such additional inspections.

**§ 9.8.4** When the Work or designated portion thereof including Record Documents and Maintenance Manuals are substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work provided the Contractor has completed all other contractual requirement stipulated to begin the warranty period or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

**§ 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

### **§ 9.9 Partial Occupancy or Use**

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

**§ 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**§ 9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

### **§ 9.10 Final Completion and Final Payment**

**§ 9.10.1** Upon receipt of the Contractor's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information

and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

**§ 9.10.2** Neither retainage payments nor final payment shall become due until all documents required by the Contract Documents and Article 5 of AIA 101 Standard Form of Agreement Between Owner and Contractor including all (a) Maintenance Manuals, (b) Record Documents, (c) Instruction and Demonstrations have been provided and the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be cancelled or allowed to expire until at least 30 days, prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and, (5) other data establishing payment or satisfaction of obligations such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorney fees.

**§ 9.10.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

**§ 9.10.4** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

**§ 9.10.5** Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

## **ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY**

### **§ 10.1 Safety Precautions and Programs**

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

### **§ 10.2 Safety of Persons and Property**

**§ 10.2.1** The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.



**§ 10.2.2** The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

**§ 10.2.3** The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

**§ 10.2.4** When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall give the Owner reasonable advance notice and exercise utmost care and carry on such activities under supervision of properly qualified personnel.

**§ 10.2.4.1** If the Contract Documents require the Contractor to handle materials or substances that under certain circumstances may be designated as hazardous, the Contractor shall handle such materials in an appropriate manner and shall defend, indemnify, and hold Owner and Architect harmless from and against all claims, liabilities, suits, losses and damages arising out of or relating to such materials.

**§ 10.2.5** The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

**§ 10.2.6** The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

**§ 10.2.7** The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

**§ 10.2.8 Injury or Damage to Person or Property**

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

**§ 10.3 Hazardous Materials and Substances**

**§ 10.3.1** The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

**§ 10.3.2** Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect

will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

**§ 10.3.3** To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

**§ 10.3.4** The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

**§ 10.3.5** The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

**§ 10.3.6** If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

#### **§ 10.4 Emergencies**

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

### **ARTICLE 11 INSURANCE AND BONDS**

#### **§ 11.1 Contractor's Insurance and Bonds**

**§ 11.1.1** The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

**§ 11.1.2** The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

**§ 11.1.3** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

**§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation



or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

## **§ 11.2 Owner's Insurance**

**§ 11.2.1** The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

**§ 11.2.2 Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

**§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

## **§ 11.3 Waivers of Subrogation**

**§ 11.3.1** The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

**§ 11.3.2** If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

#### **§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance**

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

#### **§11.5 Adjustment and Settlement of Insured Loss**

**§ 11.5.1** A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

**§ 11.5.2** Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

### **ARTICLE 12 UNCOVERING AND CORRECTION OF WORK**

#### **§ 12.1 Uncovering of Work**

**§ 12.1.1** If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

**§ 12.1.2** If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs. The cost to repair nonconforming work shall be considered a latent defect and the contractor responsible for the work or as appropriate the damage to the work shall be responsible for the cost to make repairs to said work and return the uncovered work to the condition before the work was uncovered.

#### **§ 12.2 Correction of Work**

##### **§ 12.2.1 Before Substantial Completion**

The Contractor and its surety shall have the right to remedy any defects in the Work on materials which shall appear within a period of two (2) year from the date of Substantial Completion. Upon written notice from the Owner, the Contractor and surety shall promptly provide said remedy after notice from the Owner. If said remedy is not promptly provided, the Owner shall have the right to correct said defects and charge the Contractor and its surety for the same.

##### **§ 12.2.2 After Substantial Completion**

**§ 12.2.2.1** In addition to the Contractor's obligations under Section 3.5, if, within two-years after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously

given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the two-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within five working days after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4. If the Contractor does not proceed with correction of such nonconforming Work within five working days fixed by written notice from the Architect the Owner may remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within three days after written notice, the Owner may upon ten additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Owner's and Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

**§ 12.2.2.2** The two-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

**§ 12.2.2.3** The two-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

**§ 12.2.3** The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

**§ 12.2.4** The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

**§ 12.2.5** Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the two-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

### **§ 12.3 Acceptance of Nonconforming Work**

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## **ARTICLE 13 MISCELLANEOUS PROVISIONS**

### **§ 13.1 Governing Law**

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules.

### **§ 13.2 Successors and Assigns**

**§ 13.2.1** The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

### **§ 13.2.2 WRITTEN NOTICE**

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity, or to an officer of the corporation for which it was intended; or if delivered at, or sent by registered or

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certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice.

### **§ 13.3 Rights and Remedies**

**§ 13.3.1** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

**§ 13.3.2** No action or failure to act by the Owner, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

### **§ 13.4 Tests and Inspections**

**§ 13.4.1** Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

**§ 13.4.2** If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

**§ 13.4.3** If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

**§ 13.4.4** Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

**§ 13.4.5** If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

**§ 13.4.6** Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

**§ 13.4.7** No tests or inspections or results thereof shall constitute an acceptance of any Work not conforming to the requirements of Contract Documents.

### **§ 13.5 Interest**

**§ 13.5.1** Interest payments will not be required for late payments under the terms of this Contract.

### **§ 13.6 TIME LIMITS ON CLAIMS**

**§ 13.6.1** Commencement of Statutory Limitations Period and Statute of Repose shall be in accordance with the laws of the State of Maryland.



## ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

### § 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 120 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or

*(Paragraph Deleted)*

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, under direct or indirect contract with the Contractor, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment as set forth in the provisions of this Agreement regarding termination by the Owner for convenience.

### § 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.



**§ 14.2.5** In the event that is adjusted that the Owner's termination for cause is not justified, then the Termination shall be deemed to be a termination by the Owner for convenience and the Contractor shall be entitled to compensation as only set forth in the provisions of this Agreement regarding termination by Owner for Convenience.

**§ 14.3 Suspension by the Owner for Convenience**

**§ 14.3.1** The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

**§ 14.3.2** The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

**§ 14.4 Termination by the Owner for Convenience**

**§ 14.4.1** The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. At its option the Owner may terminate this Contract in whole or from time to time in part at any time by written notice thereof to the Contractor. Upon any such termination, Contractor agrees to waive any claims for damages, including loss of anticipated profits, on account thereof, and as the sole right and remedy of the Contractor, Owner shall pay Contractor in accordance with 14.4.2 below. The provisions of the Contract, which by their nature survive final acceptance of the Work, shall remain in full force and effect after such termination to include but not limited to warranties and obligations for the correction of Work not confirming to the Contract Documents. Upon receipt of the Termination Notice, Contractor shall, unless the Notice direct otherwise, immediately discontinue the Work and, to the extent specified in the Notice, place no further orders or subcontracts for materials, equipment, services, or facilities and shall promptly make every reasonable effort to procure cancellation of such orders or subcontracts upon terms satisfactory to the Owner and shall thereafter do only such Work and perform such services as may be directed by the Owner as necessary to preserve and protect Work already in progress and to protect materials, plans and equipment on the Site or in transit thereto. Upon such termination, the obligations of the Contractor shall continue as to portions of the Work already performed and as to bona fide obligations assumed by the Contractor prior to the date of termination.

**§ 14.4.2** Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

**§ 14.4.3** Upon Termination for Convenience, the provisions of the Contract, which by their nature, survive any final acceptance of the Work, shall remain in full force and effect after such termination to include but not limited to warranties and obligations for the correction of Work not conforming to the Contract Documents. Upon receipt of the Termination Notice, Contractor shall, unless the Notice directs otherwise, immediately discontinue the Work and, to the extent specified in the Notice, place no future orders or Subcontracts for materials, equipment, services or facilities and shall promptly make every reasonable effort to procure cancellation of such orders or Subcontracts upon terms satisfactory to the Owner and shall thereafter do only such Work and perform such services as may be directed by the Owner as necessary to preserve and protect Work already in progress and to protect materials, plant and equipment on the site or in transit thereto. Upon termination, Contractor shall be entitled to be paid the full cost of all Work properly done by Contractor on account of the portion of Work Performed. If at the date of such termination, Contractor has properly prepared or fabricated off the site any goods for subsequent incorporation in the Work, and if Contractor delivers such goods to the Site or to such other place as the Owner shall reasonably direct, then Contractor shall be paid for such goods or materials. No other payment shall be made by reason of damages or otherwise, including but not limited to loss of anticipated profits, overhead, or any other claim or amount whatsoever.

## ARTICLE 15 CLAIMS AND DISPUTES

### § 15.1 Claims

#### § 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

#### § 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

#### § 15.1.3 Notice of Claims

§ 15.1.3. Claims by the Contractor must be made by written notice to the Owner and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by Contractor must be made within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later. Contractor claim(s) shall not be valid unless made in strict accordance with this subparagraph.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

#### § 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Architect will prepare Change Orders and issue Certificates for Payment in accordance with the decisions of the Initial Decision Maker.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

#### § 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4. A Claim must be processed as defined herein, Article 15 and comply with all requirements of Article 7.

#### § 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. No claim for delay damages of any kind or nature shall be valid and no such damages shall be paid by the Owner except upon Owner's written consent which consent is in the sole and absolute discretion of the Owner. No written consent by Owner to damages for one period of delay, entitle Contractor to damages for any other period of delay. A Claim for additional time must be for adverse weather conditions and the actual conditions must exceed the cumulative monthly adverse weather day totals indicated in 15.1.5.2.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, the time must exceed the time as defined in the schedule below, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, exceeded the schedule below and could not have been reasonably anticipated

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and had an adverse effect on the scheduled construction. The State of Maryland, Department of General Services, Special Provisions Section of Hagerstown, Maryland will be used in the calculation of the monthly anticipated adverse weather delays. The monthly-anticipated adverse weather delays are as follows, in workdays. The Contractor's schedule must reflect these anticipated adverse weather delay days in weather dependent activities:

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
8	7	7	8	8	7	5	6	4	6	5	5

In any event, Contractor's Claim(s) for delay in the performance of the Work due to adverse weather conditions is strictly limited to a Claim for additional for additional time only. In no event shall the Contractor be entitled to monetary damages or any other compensation as a result of a delay in the performance of the Work due to adverse weather conditions.

#### **§ 15.1.7 Waiver of Claims for Consequential Damages**

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

#### **§ 15.2 Initial Decision**

**§ 15.2.1** Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

**§ 15.2.2** The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

**§ 15.2.3** In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

**§ 15.2.4** If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

**§ 15.2.5** The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision

Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be subject to mediation and, if the parties fail to resolve their dispute through mediation the claim shall be resolved by litigation.

**§ 15.2.6** Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

**§ 15.2.6.1** Either party may, within 30 days from the date of an initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue litigation with respect to the initial decision.

**§ 15.2.7** In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

**§ 15.2.8** If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

### **§ 15.3 Mediation**

**§ 15.3.1** Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

**§ 15.3.2** The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

**§ 15.3.3** Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

**§ 15.3.4** The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

### **§ 15.4 Arbitration**

**§ 15.4.1** All disputes and other matters in question between the parties to this Agreement which cannot be resolved by the parties in accordance with the terms of this Agreement shall be referred to legal counsel and resolved in the Circuit Court for Frederick County, Maryland and all parties hereto agree to submit themselves to the jurisdiction of that Court. During any legal proceedings or other dispute resolution proceedings which may be agreed to between the parties, Owner and Contractor shall  
(Paragraph Deleted)

comply with sub-paragraph 4.74.

# **Additions and Deletions Report for**

## **AIA® Document A201® – 2017**

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 12:20:53 ET on 06/30/2020.

### **PAGE 1**

Brunswick Elementary Replacement  
CM at Risk Services  
400 Central Avenue  
Brunswick, Maryland 21716  
RFP 21C1

...

The Board of Education of Frederick County  
191 South East Street  
Frederick, Maryland 21701-5918

...

GWWO, Inc.  
800 Wyman Park Drive, Suite 300  
Baltimore, MD 21211

### **PAGE 10**

#### **ARTICLE 1 GENERAL PROVISIONS**

...

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. ~~Unless~~ As specifically enumerated in the Agreement, the Contract Documents ~~do not shall~~ include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

...

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under ~~their~~ the Architect's respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials. As the design progresses and payments to the Architect are made by the



Owner the instruments of services become the property of The Board of Education of Frederick County, see 1.5.1 Ownership and Use of Drawings, Specifications and Other Instrument of Service.

...

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. ~~The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.~~ 15.2 and certify termination of the Agreement under Section 14.2.2.

## PAGE 11

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:

1. The Agreement
2. Addenda with those or late date having precedence over those of earlier date
3. The Supplementary Conditions
4. The General Conditions of the Contract for Construction
5. The Contract Specifications
6. The Contract Drawings

...

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors ~~and owners of their of~~ the respective Instruments of Service, including the Drawings and Specifications, and The Board of Education of Frederick County will own and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and ~~materials or equipment~~ suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

...

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and material and equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the ~~Owner, Architect, and the Architect's consultants.~~ Owner.

## PAGE 12

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, if included in the AIA B101-2009 Standard Form of Agreement Between Owner and Architect, to establish the protocols for the development, use, transmission, and exchange of digital data.

...

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, if included in AIA B101-2009 Standard Form of Agreement Between Owner and Architect, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

...

**§ 2.1.1** The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. ~~Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative. The Architect does not have authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization.~~

...

## **§ 2.2 Evidence of the Owner's Financial Arrangements**

...

~~**§ 2.2.1** Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.~~

...

~~**§ 2.2.2** Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.~~

...

~~**§ 2.2.3** After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.~~

...

~~**§ 2.2.4** Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is~~

required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

...

## **§ 2.3 Information and Services Required of the Owner**

...

**§ 2.3.1-2.1.3** Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Fees for trade and specialty permits, including but not limited to, electrical, plumbing, elevator, fire review(s) and inspection, boiler, pressure vessel and fuel burning permits and all reinspections shall be paid by and at the Contractor's expense.

...

**§ 2.3.2-2.1.4** The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

...

**§ 2.3.3-2.1.5** If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

...

**§ 2.3.4-2.1.6** The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, Project which are known to the Owner, and a legal description of the site, site if requested by the Contractor. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but and shall exercise proper precautions relating to the safe performance of the Work.

## **PAGE 13**

**§ 2.3.5-2.1.7** The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

...

**§ 2.3.6-2.1.8** Unless otherwise provided in the Contract or Bidding Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

...

## **§ 2.4-2.2 Owner's Right to Stop the Work**

...

**§ 2.2.1** If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or ~~repeatedly~~ fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

...

## **§ 2.5 Owner's Right to Carry Out the Work**

...

### **2.2.2**

...

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ~~ten-day~~ three-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to or waiver of other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

...

**§ 3.1.3** The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner or the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

...

**§ 3.2.1** Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become ~~generally~~ familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents. The Contractor represents that it has received all information it needs concerning the conditions of the Project site. The Contractor represents that it has inspected the location of the Work and has satisfied itself as to the condition thereof or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents. Based upon the foregoing inspections, understandings, agreements and acknowledgements, the Contractor agrees and acknowledges that the Contract Sum is just and reasonable compensation for all the Work and that the Work shall not result in any lateral or vertical movement of any structure due to the Contractor's construction activities. The Contractor shall exercise special care in executing Subsurface Work in proximity of subsurface utilities, improvements and easements.

## **PAGE 14**

**§ 3.2.2** Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section ~~2.3.4,~~ 2.1.6, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor

shall promptly report in writing to the Architect and Owner any errors, inconsistencies or omissions discovered by or in the exercise of due diligence should have been discovered or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents. If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency or omission in the Contract Documents without providing written notice to the Owner and Architect, the Contractor shall assume appropriate responsibility for such performance and shall bear the costs for correction.

...

**§ 3.2.3** The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect in writing any nonconformity discovered by or in the exercise of due diligence should have been discovered or made known to the Contractor as a request for information in such form as the Architect may require.

...

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the ~~Contract~~. Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof ~~and shall be and, except as state below, shall be fully and solely responsible~~ for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

## PAGE 15

**§ 3.4.4** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner or the Architect or of other Contractors during the performance of the Work or by Tests, inspections or approvals required or performed by persons other than the Contractor, including inspections or approvals performed by the Owner's personnel or by any public authority.

...

**§ 3.5.2** All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable. The Minimum Warranty period will be two (2) years from the date of substantial completion of the project. The Warranty shall include extended warranty period(s) available from equipment manufacturers and/or extended warranties as required by project specification are required as if individually enumerated herein.

...

to the Owner, and shall commence in accordance with Section 9.8.4. **§ 3.5.2** Notwithstanding any other contract provisions to the contrary, the mechanical system and plumbing system must be completely balanced and such balance reports must be reviewed and accepted by the Engineer before the warranty/guarantee period will begin.



...

**§ 3.7.1** Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections and reinspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded. Fees for trade and a specialty permit including, but not limited to, electrical, plumbing, elevator, fire review(s), inspections and reinspections, boiler, pressure vessel and fuel burning permits, shall be paid by and at Contractor's expense.

...

**§ 3.7.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work. Compliance with local governing jurisdiction requirements shall be completed at no additional cost to the Owner.

...

**§ 3.7.3** If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction. The provisions of this Agreement regarding compensation and damages, including delay damages, shall apply.

## PAGE 16

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, ~~Contractor in writing~~, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

...

## **§ 3.9 Superintendent and Project Manager**

...

**§ 3.9.1** The Contractor shall employ a competent ~~superintendent~~ superintendent, project manager and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Communications shall be confirmed in writing. The Superintendent and necessary staff members shall be in attendance at the Project site during the performance of the Work including completion of all Punch List items.

...

**§ 3.9.2** ~~The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.~~ Prior to being assigned to the Project both

the Project Manager and Superintendent shall be subject to the approval of the Owner. Once approved, the Superintendent and Project Manager will not be removed from the Project without the Owner's written consent. The Owner reserves and retains the right, as its sole and absolute discretion, to order the Contractor to replace any of the Contractor's employees. In the event the Owner requests Contractor employee's removal, the Contractor shall promptly replace such employees with competent replacements satisfactory to the Owner. The Contractor shall not change the Superintendent or Project Manager without the Owner's consent.

PAGE 17

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

...

§ 3.10.2 The Contractor, promptly after being awarded the Contract, shall prepare a preliminary construction and submittal schedule, within 14 days after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably withheld. The Contractor shall update the schedules thereafter as necessary to maintain current construction and submittal schedules, and shall submit the schedules for the Architect's and Owner's review. The Architect's and Owner's review shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved Contractor's Construction Schedule shall be in a Critical Path Method (CPM) and bar chart format, indicating sufficient detail, task(s) (the work) and duration(s) (start and completion) of each major item of the Work, the current status of each major item of Work indicating staffing and equipment to comply with the Contract Substantial Completion Date and any Owner approved extensions. Contractor shall provide additional detail when requested by the Architect or Owner and update their Proposed Contractor Schedule to be compliant with the Contract Substantial Date(s). Within 7 days of a request by the Architect or Owner, the Contractor shall furnish to the Owner and Architect a Progress Schedule showing the current progress and the completion stage of the Work as compared to the Original Contract Schedule. Project Schedules shall clearly identify any item of Work, which is behind Schedule along with the Contractor's increased manpower and equipment necessary to comply with the Contract Schedule including any time extensions approved by the Owner. Progress Schedule(s) shall be provided in a Critical Path Method (CPM), bar chart format and electronic as requested by the Owner. During the Owner's review, the Owner may choose to advise the Contractor of work that will be performed by the Owner's forces or the Owner's separate Contractor. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals. The Contractor shall provide the Owner and Architect updated schedules as a condition precedent to progress payments. The updated schedules shall be provided by the Contractor as the project progresses and as requested by the Owner or Architect.

...

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect reviewed by the Owner and Architect without objections.

...

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field

changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be ~~in electronic form or paper copy~~, available to the Architect and Owner, and shall be delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed. The Owner may request, and Contractor shall provide, at any time during the course of the Project, Asbuilt Drawings that reflect the then current stage of construction as actually built and submitted to the Owner for its review. If such drawings are not provided, the Owner may withhold progress payment, or at its discretion a portion thereof, until the requested drawings are up to date and provided for the Owner's review.

## PAGE 18

**§ 3.12.4** Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate ~~how the way by which~~ the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. The Contractor shall submit shop drawings to the Architect for all structural elements of the Work and all other portions of the work required by the Contract Documents. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

...

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

## PAGE 19

~~**§ 3.12.10.1**~~ If professional design services or certifications by a design professional related to systems, ~~materials,~~ materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. ~~The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents.~~ The Contractor shall cause such services or certifications to be provided by ~~an appropriately licensed design professional, whose a properly licensed design professional,~~ whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, ~~Drawings~~ and other submittals prepared by such professional. Shop ~~Drawings, Drawings~~ and other submittals related to the ~~Work, Work~~ designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and ~~the Architect~~ shall be entitled to rely upon the ~~adequacy and accuracy of the services, certifications, adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, professionals~~ provided the Owner and Architect have specified to the Contractor ~~the all~~ performance and design criteria that such services must satisfy. ~~Pursuant to this Section 3.12.10, the Architect will review and~~ The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. Pursuant to the Section 3.12.10, the Architects will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

...

**§ 3.12.10.2** ~~3.12.10.1~~ If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

...

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, ~~its~~ the Contractor's consent to cutting or otherwise altering the Work.

## PAGE 20

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified ~~hereunder~~ hereunder including but not limited to the contributing negligence of such party to be indemnified. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

...

**§ 4.1.1** The Architect is the person or entity retained by the Owner pursuant to Section ~~2.3.2~~ 2.1.4 and identified as such in the Agreement.

...

**§ 4.2.2** ~~The Architect will visit~~ duties of the Architect shall be governed by the Agreement between the Owner and the Architect, and will review the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, construction to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. ~~However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents., except as provided in Section 3.3.1. Notwithstanding other provisions in this Agreement to the contrary, for the purpose of effectuating the Architect's duties in this section, the Architect shall be responsible for exercising reasonable care and diligence in observing ongoing Work. No inspection or approval or failure to inspect or approve by the Architect shall relieve the Contractor from complying in all respects with the requirements of the Contract Documents.~~

...

**§ 4.2.3** On the basis of the site visits, the Architect will ~~keep the Owner reasonably informed report to the Owner and copy the Contractor~~ about the progress and quality of the portion of the Work completed, and promptly report to the Owner completed reporting (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be



responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

...

#### § 4.2.4 Communications

...

The ~~Owner and Contractor shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any~~ **4.2.3.1 Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect, for additional services which may be charges by the Architect for additional site visits made necessary by the fault or neglect of the Contractor.**

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#### § 4.2.4 Communications

...

~~direct communications between the Owner and the Contractor otherwise relating to the Project. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Architect about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.~~

...

**§ 4.2.6** The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

...

**§ 4.2.7** The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of reviewing the adequacy of the structural elements of the building and checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions ~~or or, unless otherwise specifically stated by the Architect,~~ of any construction means, methods, techniques, sequences, or procedures. The Architect's approval review of a specific item shall not indicate approval of an assembly of which the item is a component. Should any local Government authorities require certification or correctness of any structural shop drawings by the Architect of record, the Architect will sign and certify the shop drawings only after the shop drawings have been



signed and certified by both the structural engineer and other professional engineer registered in the State of Maryland on behalf of the manufacturer, fabricator, Subcontractor or Contractor. The cost for such additional engineering certification shall be borne by the Contractor.

...

**§ 4.2.9** The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; ~~receive~~ receive, review and forward to the Owner, Owner with comments, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10. Architect's inspection and issuance of a certificate for final payment and Owner's payment shall not relieve Contractor of responsibility for defects in the Work.

...

**§ 4.2.10** If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

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**§ 5.2.1** Unless otherwise stated in the Contract ~~Documents, Documents or the bidding requirements,~~ the Contractor, as soon as practicable after award of the Contract, shall ~~notify the Owner and Architect furnish in writing to the Owner through the Architect the names of~~ the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

...

**§ 5.2.2** The Contractor shall not ~~contract with a proposed person or entity contract or propose to contract with a proposed person, entity or subcontractor unless the Contractor is satisfied that such person, entity or Subcontractor is technically and financially qualified to perform the Work as a Subcontractor in accordance with the Contractor Documents. The Contractor shall not Contract with any entity or persons to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.~~

...

**§ 5.2.5** The Contractor shall not enter into any Subcontract, Contract agreement, purchase order or other arrangement for the furnishing of any portion of the materials, services, equipment or Work with any party or entity as such party or entity is an affiliated entity with which the Contractor has a direct or indirect ownership, control or interest unless such Agreement has been approved by the Owner after full disclosure in writing by the Contractor to the Owner of such affiliation or relationship and all details relating to the proposed arrangements.

## PAGE 23

By appropriate written agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work ~~that which~~ the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the

Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

...

**§ 6.1.1** ~~The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims a delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.~~

#### PAGE 24

**§ 6.1.4** Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall ~~have-be deemed to be subject to~~ the same obligations and rights that apply to the Contractor ~~has~~ under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

...

**§ 6.2.2** If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly ~~notify the Architect of report to the Architect and Owner~~ promptly report to the Architect and Owner apparent discrepancies or defects in ~~the such other~~ construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

...

**§ 7.1.1** Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents. The Contractor agrees that it will incorporate the provisions of Article 7 in its entirety into all agreements with lower tier Contractors. It is further understood and agreed that these Change Order pricing provisions, apply to all types of Contracts, Subcontracts and purchases. The Owner and Owner's accountant shall be afforded access to Contractor's records, books, and correspondence, instructions, drawings, receipts, Subcontracts, purchase orders, vouchers and any other data relating to the Project as necessary to verify the cost of any change, including wages and benefits paid, for which compensation is sought under this Agreement.

...

**§ 7.1.2** A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the

Contractor. An order for a minor change in the Work may be issued by the Architect alone. Verbal notification approving the Contractor to proceed with a change in the work shall be confirmed in a written format via, CCD, Change Order, progress minutes, e-mail or other written correspondence and should be made as soon as practical.

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**§ 7.1.3** Changes in the Work shall be performed under applicable provisions of the Contract Documents. ~~The Contractor shall proceed promptly with changes in the Work, Documents, and the Contractor shall proceed promptly,~~ unless otherwise provided in the Change Order, Construction Change Directive, Directive or order for a minor change in the Work. A Change Order or Construction Change Directive involving unit costs shall be equitably adjusted in accordance with 7.3.4

...

**.3** The extent of the adjustment, if any, in the Contract ~~Time~~Time; and

...

**.4** Comply with all requirements of 7.2.2 below and 7.3.4.

...

No Change Order shall exceed any of the limitations and requirements of the Contract Documents.

...

**§ 7.2.2** The Contractor shall comply with the following regarding Changes:

...

(A) A Notice or Request for Change must comply with all of the following:

...

**.1** specifically and in detail describe the nature and cause of the Claim; and

...

**.2** specifically reference the detail(s) on the plans and the specification section(s) that are affected; and

...

**.3** contain an estimate of the increase or decrease in the cost to the Owner; and

...

**.4** include supporting documentation that satisfactorily justifies to the Owner overhead, profit, insurance, sales or payroll taxes and incorporate a detailed quantity survey of all Work added and deleted; and

...

**.5** be submitted in a format acceptable to the Owner.

...

(B) Additive Changes must comply with the following Mark-Up schedule for Overhead, profit and bond:

...

If the Cost of the proposed change is \$0.00 to \$4,999.99, the total combined overhead, profit and bond must not exceed 20%.

...

If the Cost of the proposed change is \$5,000.00 to \$14,999.99, the combined overhead, profit and bond must not exceed 15%.

...

If the Cost of the proposed change is \$15,000.00 to \$24,999.99, the combined overhead, profit and bond must not exceed 10%.

...

If the Cost of the proposed change is \$25,000.00 to \$49,999.99, the combined overhead, profit and bond must not exceed 7%.

...

If the Cost of the proposed change is over \$50,000.00, the combined overhead, profit and bond will be negotiated but will not exceed 5%, the cost of the bond shall be clearly indicated in the detailed proposal regardless of the proposed cost.

...

(C) The Contractors' markup of Subcontractor Work and supplier's material(s) shall not exceed 7% for changes up to \$24,999.99 and the markup shall be negotiated for changes over \$25,000.00 but shall not exceed 5% of the Subcontractor(s) cost of the Work.

...

(D) Overhead cost shall include all the general conditions, expenses, including but not limited to, all coordination, calculations, engineering, field and office supervision, field and office rent utilities, telephone and communications expenses, office supplies, clean-up, debris expenses, administration and preparation. When both additions and deletions are involved in any one change, the allowance for overhead, profit and bond shall be computed on the net increase, if any, with respect to the change.

...

(E) For decreases in the Work or credits, the Contract Amount shall be decreased 100% of the Scheduled Value of the deleted Work plus overhead, profit and bond. Contractor and Subcontractor(s) credits shall include credit for overhead, profit and Bond, in the same percentages allowed for additive changes in the above mark-up schedule:

...

(F) The Contractor's total charge to the Owner for the use of equipment owned in whole or in part by the Contractor, its Owners, directors, officers, shareholders, or affiliated or related persons or entities shall consider the rate agreed upon between the Contractor, Owner and Architect at the beginning of the project less operator and fuel. Reference materials such as "the AED Green Book" should be used to establish market rental rates for equipment. The following shall apply:

...

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.1 The appropriate duration of hourly rate shall be calculated based on the entire duration the piece of equipment is on the FCPS site (e.g. if the equipment item has been on the project for 30 days or more the hourly rate shall be the monthly rental divided by 176 hours; if on the project for one week the hourly rental shall be the weekly rental divided by 40; if on the project for a day the hourly rental shall be the daily rental divided by 8; if brought to the project for the specific operation the minimal rental period shall apply.) Minimal rental durations will be considered for equipment rented for specific project purposes.

.2 The Contractor shall not invoice for delivery or removal of the equipment to or from the job site,

...

.3 In no event shall the total payment paid by the Owner on any such piece of equipment exceed fifty percent (50%) of its purchase price.

...

(G) Subcontractor(s) shall comply with the requirements specified above for the Contractor regarding Changes.

...

.1 ~~Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation~~ Wages for construction Workers, including supervisors directly employed to perform the construction of the Work at the site. Unless otherwise agreed by Addendum to this Contract, labor burden shall be limited to: social security, old age and employment, workmen's compensation, health and life insurance benefits, sick leave, holidays, military leave, vacation and pension and savings plan benefits; insurance, and other employee costs approved by the Architect;

...

.5 ~~Costs~~ Additional costs of supervision and field office personnel directly attributable to the change, change, provided, however, the Contractor shall provide an itemized breakdown showing quantities, unit costs, hours and rates of labor, and other costs and such detail as may be required to allow the reasonableness of cost to the established. Similar cost information covering Subcontractors' Work shall be included as part of the Contractor's Proposal. Minimum charges for "handling" will not be acceptable. The allowable overhead and profit mark-ups to be included in the total cost to Owner shall be based on paragraph 7.2 and:

...

.1 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of the costs including labor, materials, and Subcontractors. Labor and materials shall be itemized in the manner prescribed above. Where major costs items are Subcontracts, they shall be itemized also. In no case will a charge involving over \$500.00 be approved without such itemization.

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.2 A Change Order must include each of the items listed in this Article 7. In the event that there is no change in the Contract time or Contract amount, it must be noted that no such change is intended. A Change Order is all-inclusive, that is, a Change Order, must indicate the change in Contract amount,



including any overhead and profit. The Contractor cannot later request additional sums for a prior Change Order because it did not include overhead, profit, or similar items. If additional Contract time is indicated on the Change Order and the Contractor intends to claim any costs for time on any basis, the Change Order must include all additional costs, if any, associated with the additional time.

...

.3 Where both additions and credits are involved in any one Change Order the allowance of overhead and profit shall be figured on the basis of the net increase, if any.

...

**§ 7.3.8** The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the ~~Architect~~. Architect and the credit shall be as required by Article 7 mark-up schedule. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that ~~change~~. change per the mark-up schedule.

...

**§ 7.3.9** Pending final determination of the ~~total actual~~ cost of a Construction Change Directive to the Owner, ~~the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change Order indicating the parties' agreement with part or all of such costs. For any portion of such costs that remain in dispute, a Claim may be made in accordance with Article 15.~~

...

**§ 7.3.10** When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. ~~Order otherwise, if Contractor is directed to proceed by Owner, the matter shall be considered a Claim under Article 15.~~ Change Orders may be issued for all or any part of a Construction Change Directive.

...

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time-extension the Contract Time and not inconsistent with intent of the Contract Documents. Such changes will be effected by written order signed by the Architect and shall be binding on the Owner and Contractor.

...

**§ 8.1.2** The date of commencement of the Work is the date established in the ~~Agreement~~. Agreement shall be fixed in a Notice to Proceed.

**§ 8.2.2** The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, ~~commence the Work prematurely~~ commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and the Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

...

**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by ~~(1) an act or neglect of the Owner or Architect, or of an employee of either, or of a Separate Contractor; (2) Contractor employed by the Owner; or by changes ordered in the Work; (3) or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, casualties or other causes beyond the Contractor's control; (4) or by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, with consent of the Owner; or by other causes that the Architect determines may justify delay,~~ then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine. Contractor waives any and all rights to any increased payments for delay damages, whether by Change Order or otherwise, to include overhead, extended overhead, extended general conditions, or for any other delay-based amounts of any kind or nature, for any delay by reason of the events referred to in the subparagraph or any other event of any kind or nature. Contractor's remedy is limited to an extension of time as set forth herein.

...

**§ 8.3.3** ~~This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.~~

...

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect and Owner, before the first Application for Payment, a schedule of values allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by Work and prepared in such form and supported by such data to substantiate its accuracy as the Architect or Owner may require. This schedule, unless objected to the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, The Schedule of Values shall be revised from time to time as may be necessary and due to the issuance of Change Orders or Construction Change Directives, the Contractor shall revised the Schedule of Values as requested by the Architect or Owner. The Owner reserves the right to request the Contractor to provide additional detail substantiating the Schedule of Values.

...

~~shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.~~ **§ 9.2.2 The Contractor shall include a line item in the Schedule of Values for production of project record documents. The minimum value established for the record documents must not be less than 1/2 % of the total Contract value including accepted alternates.**

**§ 9.3.1** At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect and Owner an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. ~~The application shall be notarized, if required, and supported by all~~ Such applications shall be notarized and supported by such data substantiating the Contractor's right to payment ~~that as the Owner or Architect may require, such as copies of requisitions, and releases and~~

~~waivers of liens from Subcontractors and requisitions from Subcontractors and material suppliers, and shall reflect retainage if as provided for in the Contract Documents. Applications for Payment shall be based upon the Schedule of Values and shall be in a form and content satisfactory to the Owner. Each Application for Payment shall be accompanied by the following:~~

...

.1 Contractor's application and Cost Certification Statement, AIA Forms 702, 703 and IAC PSCP Form No. 306.4, with attachment "G" Certified Minority Business Enterprise Participation Standard Monthly Contractor's Requisition for Payment" (current form), and;

...

.2 A statement from the Contractor that all items of construction for which payment is sought have been incorporated into the Project where properly stored in accordance with the Contract Documents, and;

...

.3 The Contractors and applicable Subcontractors Release of Liens and Waivers of Claim and such other documents that the Owner may require after discussion with the Contractor, and;

...

.4 Such other documentation that the Owner, Construction Manager, Architect may reasonably require after discussion with contractor.

...

**§ 9.3.1.2** Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

...

**§ 9.3.3** The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities ~~that making a claim by reason of having~~ provided labor, materials, and equipment relating to the Work.

...

**§ 9.4.1** The Architect will, ~~within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment Contractor for such amount as the Architect determines is properly due, and in properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided~~ certifications in whole or in part as provided by in Section 9.5.1.

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**§ 9.4.2** The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the

Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

...

**§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15 above reasons for withholding certifications are removed, certification will be made for amounts previously withheld after the Contractor revises and resubmits a current Application for Payment including such amounts that were previously withheld.**

...

**§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or ~~supplier~~ material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall Architect will reflect such payment on its next Application Certificate for Payment.**

...

**§ 9.5.5 If the Contractor disputes any determination by the Architect or Owner with regard to any Applications for Payment, the Contractor shall nevertheless expeditiously continue to perform the Work and shall make claim as provided in Article 15.**

...

**§ 9.5.6 The Owner shall not be deemed to be in breach of this Contract by reason of the withholding of any payment pursuant to any provision of the Contract Documents provided the Architect has approved the Owner's action, or the Work for which payment is being withheld has been rejected by any governmental authority.**

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**§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.**

...

**§ 9.6.5 The Contractor's payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.**

...

**§ 9.6.7** Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors ~~or provided by and~~ suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

...

~~If Subject to other provisions in the Contract Documents, if~~ the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within ~~seven-thirty~~ days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within ~~seven-thirty~~ days after the date established in the Contract Documents, the amount certified by the ~~Architect or awarded by binding dispute resolution, Architect,~~ then the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's ~~reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents,~~ substantiated direct costs of shut-down. Article 9.7 shall not apply to Change Orders that have not received formal approval by the Board of Education of Frederick County, all such Change Orders shall not be included in Applications for Payment until the Contractor received formal notification from the Owner that the Change Order has received formal approval by the Board of Education of Frederick County and the Contractor has completed the Change Order work.

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**§ 9.8.3** ~~Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion. The comprehensive list of items to be completed or corrected ("Contractor's Punch List") prepared by the Contractor shall be submitted to the Owner and the Architect and the Owner shall be notified of inspections and be entitled to have an Owner's representative present at such inspections. All items that are disclosed during inspections not complying with the Contract Documents shall be added to the Contractor's Punch List and a copy of the Amended Punch List shall be submitted to the Owner and the Contractor. Any Certificate of Substantial Completion shall then be submitted making reference to the Punch List item, as either being completed to the Architect's satisfaction or shall fix a time within which the Contractor shall complete any remaining items. In the event the Contractor's Punch List is not completed by the date set forth in the Certificate of Substantial Completion, Owner has the option of deducting from balances due the Contractor an amount sufficient to compensate Owner for the cost of completing the Punch List. The amount to be deducted shall be determined in the sole discretion of Owner. Alternatively, Owner at its sole discretion may proceed to engage another Contractor to complete the Punch List Work with the cost thereof to include Owner's administrative costs, which costs shall be calculated in the sole discretion of the Owner, to be deducted from the amount retained and if the amount retained is insufficient, the Contractor is responsible to reimburse Owner the full amount of the uncovered cost. To the extent that multiple inspections may be required to determine whether the Work, or a designated portion thereof has attained Substantial Completion, the Owner shall be entitled to deduct from the Contract Sum any amounts which it must pay to the Architect for additional services for such additional inspections.~~

...

**§ 9.8.4** When the Work or designated portion thereof ~~is including Record Documents and Maintenance Manuals~~ are substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial ~~Completion, Completion,~~ shall establish responsibilities of the Owner and Contractor for



security, maintenance, heat, utilities, damage to the Work and insurance; and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work provided the Contractor has completed all other contractual requirement stipulated to begin the warranty period or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

...

**§ 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

...

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

## PAGE 33

**§ 9.10.1** Upon receipt of the Contractor's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such ~~inspection~~. ~~When inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.~~

...

**§ 9.10.2** Neither retainage payments nor final payment nor any remaining retained percentage shall become due until all documents required by the Contract Documents and Article 5 of AIA 101 Standard Form of Agreement Between Owner and Contractor including all (a) Maintenance Manuals, (b) Record Documents, (c) Instruction and Demonstrations have been provided and the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, effect and will not be cancelled or allowed to expire until at least 30 days, prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, payment and, (5) other data establishing payment or satisfaction of obligations, such as receipts and obligations such as receipts, releases and waivers of liens, claims, security interests, interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by

the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such ~~lien, claim, security interest, or encumbrance~~. ~~If a lien, claim, security interest, or encumbrance~~ lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the ~~lien, claim, security interest, or encumbrance~~, such lien, including all costs and reasonable ~~attorneys' attorney~~ fees.

#### PAGE 34

**§ 10.2.4** When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall give the Owner reasonable advance notice and exercise utmost care and carry on such activities under supervision of properly qualified personnel.

...

**§ 10.2.4.1** If the Contract Documents require the Contractor to handle materials or substances that under certain circumstances may be designated as hazardous, the Contractor shall handle such materials in an appropriate manner and shall defend, indemnify, and hold Owner and Architect harmless from and against all claims, liabilities, suits, losses and damages arising out of or relating to such materials.

...

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

#### PAGE 37

**§ 12.1.2** If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, ~~the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If Work is not in accordance with the Contract Documents, the costs of uncovering the Work, such costs and the cost of correction, shall be at the Contractor's~~ expense correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs. The cost to repair nonconforming work shall be considered a latent defect and the contractor responsible for the work or as appropriate the damage to the work shall be responsible for the cost to make repairs to said work and return the uncovered work to the condition before the work was uncovered.

...

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense. The Contractor and its surety shall have the right to remedy any defects in the Work on materials which shall appear within a period of two (2) year from the date of Substantial Completion. Upon written notice from the Owner, the Contractor and surety shall promptly provide said remedy after notice from the Owner. If said remedy is not promptly provided, the Owner shall have the right to correct said defects and charge the Contractor and its surety for the same.

#### PAGE 38

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within ~~one-year-two-years~~ after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of ~~any an~~ applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so, ~~so~~ unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the ~~one-year-two-year~~ period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within ~~a reasonable time during that period~~ five working days after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section ~~2.5-2.4~~. If the Contractor does not proceed with correction of such nonconforming Work within five working days fixed by written notice from the Architect the Owner may remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within three days after written notice, the Owner may upon ten additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Owner's and Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

...

§ 12.2.2.2 The ~~one-year-two-year~~ period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

...

§ 12.2.2.3 The ~~one-year-two-year~~ period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

...

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the ~~one-year-two-year~~ period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

...

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. ~~If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.~~

...

## § 13.2.2 ~~The Owner may, without consent~~ WRITTEN NOTICE

PAGE 39

~~of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment. Written notice shall be deemed to have been duly served if~~

delivered in person to the individual, to a member of the firm or entity, or to an officer of the corporation for which it was intended; or if delivered at, or sent by registered or certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice.

...

§ 13.4.7 No tests or inspections or results thereof shall constitute an acceptance of any Work not conforming to the requirements of Contract Documents.

...

~~Payments due and unpaid under the Contract Documents~~ § 13.5.1 Interest payments will not be required for late payments under the terms of this Contract.

...

### § 13.6 TIME LIMITS ON CLAIMS

...

~~shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.~~ §

13.6.1 Commencement of Statutory Limitations Period and Statute of Repose shall be in accordance with the laws of the State of Maryland.

## **PAGE 40**

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30-120 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, Work under direct or indirect contract with the Contractor, for any of the following reasons:

...

~~.4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.~~

...

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, under direct or indirect contract with the Contractor, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

...

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

...

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3 set forth in the provisions of this Agreement regarding termination by the Owner for convenience.

...

.1 ~~repeatedly~~ refuses or fails to supply enough properly skilled workers or proper materials;

...

.2 fails to make payment to Subcontractors or suppliers for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;

...

.3 ~~repeatedly~~ disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or

#### PAGE 41

§ 14.2.5 In the event that is adjusted that the Owner's termination for cause is not justified, then the Termination shall be deemed to be a termination by the Owner for convenience and the Contractor shall be entitled to compensation as only set forth in the provisions of this Agreement regarding termination by Owner for Convenience.

...

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. At its option the Owner may terminate this Contract in whole or from time to time in part at any time by written notice thereof to the Contractor. Upon any such termination, Contractor agrees to waive any claims for damages, including loss of anticipated profits, on account thereof, and as the sole right and remedy of the Contractor, Owner shall pay Contractor in accordance with 14.4.2 below. The provisions of the Contract, which by their nature survive final acceptance of the Work, shall remain in full force and effect after such termination to include but not limited to warranties and obligations for the correction of Work not confirming to the Contract Documents. Upon receipt of the Termination Notice, Contractor shall, unless the Notice direct otherwise, immediately discontinue the Work and, to the extent specified in the Notice, place no further orders or subcontracts for materials, equipment, services, or facilities and shall promptly make every reasonable effort to procure cancellation of such orders or subcontracts upon terms satisfactory to the Owner and shall thereafter do only such Work and perform such services as may be directed by the Owner as necessary to preserve and protect Work already in progress and to protect materials, plans and equipment on the Site or in transit thereto. Upon such termination, the obligations of the Contractor shall continue as to portions of the Work already performed and as to bona fide obligations assumed by the Contractor prior to the date of termination.

...

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall

...

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement. Upon Termination for Convenience, the



provisions of the Contract, which by their nature, survive any final acceptance of the Work, shall remain in full force and effect after such termination to include but not limited to warranties and obligations for the correction of Work not conforming to the Contract Documents. Upon receipt of the Termination Notice, Contractor shall, unless the Notice directs otherwise, immediately discontinue the Work and, to the extent specified in the Notice, place no future orders or Subcontracts for materials, equipment, services or facilities and shall promptly make every reasonable effort to procure cancellation of such orders or Subcontracts upon terms satisfactory to the Owner and shall thereafter do only such Work and perform such services as may be directed by the Owner as necessary to preserve and protect Work already in progress and to protect materials, plant and equipment on the site or in transit thereto. Upon termination, Contractor shall be entitled to be paid the full cost of all Work properly done by Contractor on account of the portion of Work Performed. If at the date of such termination, Contractor has properly prepared or fabricated off the site any goods for subsequent incorporation in the Work, and if Contractor delivers such goods to the Site or to such other place as the Owner shall reasonably direct, then Contractor shall be paid for such goods or materials. No other payment shall be made by reason of damages or otherwise, including but not limited to loss of anticipated profits, overhead, or any other claim or amount whatsoever.

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~~§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party.~~ 15.1.3. Claims by the Contractor must be made by written notice to the Owner and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated Contractor must be made within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant Contractor first recognizes the condition giving rise to the Claim, whichever is later. Contractor claim(s) shall not be valid unless made in strict accordance with this subparagraph.

...

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. -The Architect will prepare Change Orders and issue Certificates for Payment in accordance with the decisions of the Initial Decision Maker.

...

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 written notice as provided herein shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4. A Claim must be processed as defined herein, Article 15 and comply with all requirements of Article 7.

...

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary. written notice as provided herein shall be given. No claim for delay damages of any kind or nature shall be valid and no such damages shall be paid by the Owner except upon Owner's written consent which consent is in the sole and absolute discretion of the Owner. No written consent by Owner to damages for one period of delay, entitle Contractor to damages for any other period of delay. A Claim for additional time must be for adverse weather conditions and the actual conditions must exceed the cumulative monthly adverse weather day totals indicated in 15.1.5.2.

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§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, the time must exceed the time as defined in the schedule below, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, exceeded the schedule below and could not have been reasonably anticipated, anticipated and had an adverse effect on the scheduled construction. The State of Maryland, Department of General Services, Special Provisions Section of Hagerstown, Maryland will be used in the calculation of the monthly anticipated adverse weather delays. The monthly-anticipated adverse weather delays are as follows, in workdays. The Contractor's schedule must reflect these anticipated adverse weather delay days in weather dependent activities:

...

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
8	7	7	8	8	7	5	6	4	6	5	5

...

In any event, Contractor's Claim(s) for delay in the performance of the Work due to adverse weather conditions is strictly limited to a Claim for additional for additional time only. In no event shall the Contractor be entitled to monetary damages or any other compensation as a result of a delay in the performance of the Work due to adverse weather conditions.

...

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. ~~If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Claim.~~ Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

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§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be ~~final and binding on the parties but~~ subject to mediation and, if the parties fail to resolve their dispute through mediation, ~~to binding dispute resolution.~~ mediation the claim shall be resolved by litigation.

...

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for ~~mediation.~~ mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, the time required, then both parties waive their rights to mediate or pursue ~~binding dispute resolution proceedings.~~ litigation with respect to the initial decision.

...

§ 15.4.1 ~~If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place~~

where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded. All disputes and other matters in question between the parties to this Agreement which cannot be resolved by the parties in accordance with the terms of this Agreement shall be referred to legal counsel and resolved in the Circuit Court for Frederick County, Maryland and all parties hereto agree to submit themselves to

...

**§ 15.4.1.1** ~~A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.~~ the jurisdiction of that Court. During any legal proceedings or other dispute resolution proceedings

...

**§ 15.4.2** The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. which may be

...

**§ 15.4.3** The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof. agreed to between the parties, Owner and Contractor shall

...

#### **§ 15.4.4 Consolidation or Joinder**

...

**§ 15.4.4.1** Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s). comply with sub-paragraph 4.74.

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**§ 15.4.4.2** Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

...

~~§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.~~



## ***Certification of Document's Authenticity***

***AIA® Document D401™ – 2003***

I, Adnan Mamoon, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 12:20:53 ET on 06/30/2020 under Order No. 4323301581 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A201™ - 2017, General Conditions of the Contract for Construction, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

\_\_\_\_\_  
*(Signed)*

\_\_\_\_\_  
*(Title)*

\_\_\_\_\_  
*(Dated)*