



2020 School Bond Projects Ordinance Revisions



WHITNEY OAKLEY, ED.D. | SUPERINTENDENT

Agenda

- Introduction
- School Bond Projects Overview
- Rising Costs
- Applying Palacio Model to Existing Projects



SCHOOL BOND PROJECTS OVERVIEW

School Bond Projects Overview



On November 15, 2022, the Guilford County Board of Education (BOE) approved the revision of project ordinances for the design and construction of new and replacement schools bond projects. The original amount of each project ordinance was based on the budget for the project included in the Guilford County Schools Master Facilities Plan issued in 2019.

School Bond Projects Overview (cont'd)

As the selected architectural/engineering firms worked toward completed designs and preparation of final construction documents for six of the projects, cost estimates provided by HICAPS/C2 exceed the original budgets by significant amounts due to the following:

- Inflation
- Logistics (supply chain)
- Labor
- Additional square footage
- Design elements, including expert recommended safety features.

Out of an abundance of caution, the estimated costs also include larger than normal contingencies to hedge against further material cost increases. Actual costs will be available once the Construction Manager at Risk firms (CMARS) finalize the bid process and issue a Guaranteed Maximum Price (GMP) for each project.



Guaranteed Maximum Price (GMP) Schedule

Project	Construction Manager at Risk	Projected GMP
Claxton ES	SAMET	12/22/2022
Kiser MS	Metcon	12/22/2022
Peck K-8	DA Everett / Christman	1/11/2022*
Brooks Global ES	Metcon	1/11/2023*
Foust ES	Barnhill / Holt Brothers	3/3/2023*
New VPA ES	TA Loving / Callis / MEG	4/13/2023*

**subject to change based upon bid outcomes*

School Bond Projects Overview (cont'd)



To ensure the BOE can approve contracts in a timely manner once GMPs are received and avoid potential delays, project ordinances need to be increased to the estimated budgets which include all contingency amounts. These project ordinances will be revised as necessary once GMPs are received.

Revised Project Ordinance Amounts

PROJECT/SITE NAME	CURRENT PROJECT ORDINANCE AMOUNT	REVISED PROJECT ORDINANCE AMOUNT
Kiser Middle School	\$55,478,632	\$81,667,391
Claxton Elementary School	\$31,333,469	\$50,377,100
Brooks Global Studies	\$22,174,130	\$39,024,760
Peck Expeditionary Learning School	\$41,323,632	\$79,106,877
Foust Gaming & Robotics School	\$31,333,469	\$59,936,861
New Visual & Performing Arts School	\$33,505,256	\$69,375,621

RISING COST



Supply Chain Challenges

Longer Lead Time Items:

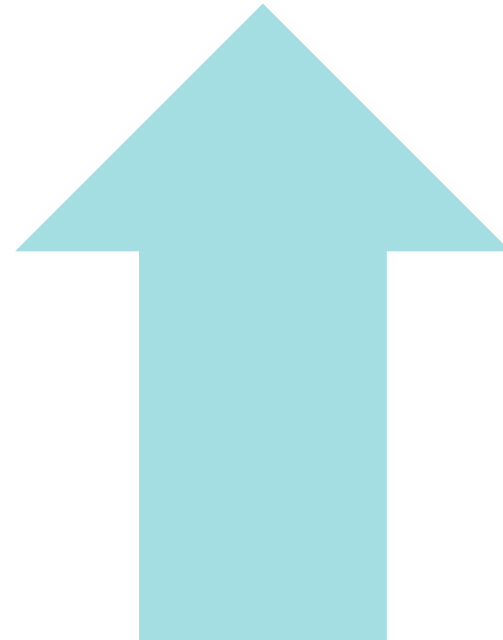
- Drives longer construction durations
- Drives more \$\$\$

Material and Equipment Availability:

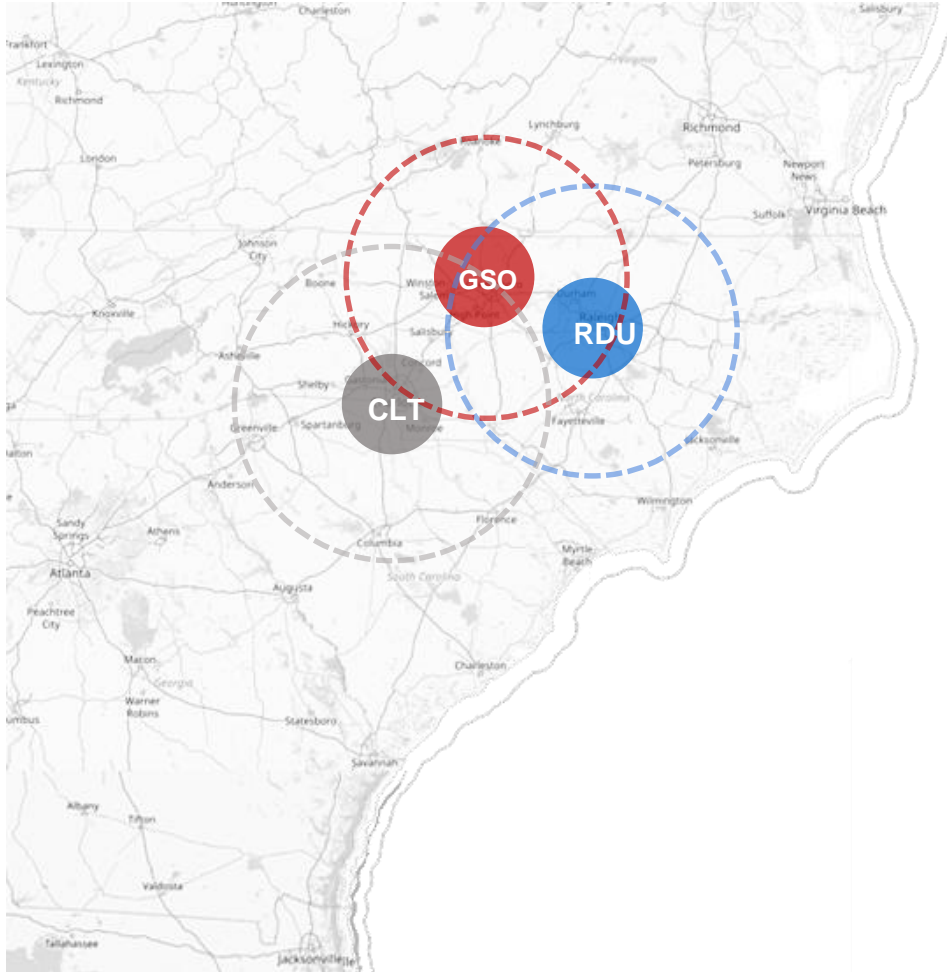
- Steel
- Roofing
- Switchgear, Generators
- Precast
- Ductile Iron Pipe
- Drywall Allocations
- Devices or Equipment Using Electronic Chips
- Glass, etc.

Unanticipated Cost Increases

from Manufacturers, not honoring fixed-price contracts, purchase orders, etc., citing Force Majeure economic conditions.



Other Factors



North Carolina Economic Growth

One of a few leading states

Triad

Unprecedented construction activity:

- Toyota, VinFast
- Boom, Wolfspeed
- School Bond Projects
- Municipal Work
- University Development
- Healthcare construction
- Industrial
- Multi-Unit Residential

Pandemic & Safety Design Modifications



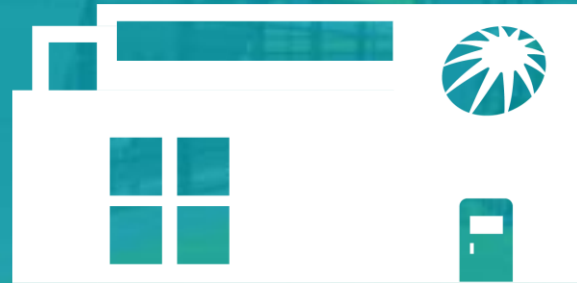
- Student circulation considerations
- Increased fresh air flow
- Size and width of entrances and exits
- Security measures i.e. wing lock down capability, security vestibules, hideaway areas
- Outdoor classrooms/teaching spaces
- Distributed dining/media centers
- Sustainability
- Stainless steel washing stations within restrooms
- Material selection (examples: epoxy flooring and wall coverings to ensure sustainability, durability and infection control measures; laminate vinyl tile, polished concrete)

Palacio Collaborative Model



Palacio Collaborative is a minority-owned full-service construction cost estimating firm headquartered in Atlanta, Georgia that provides quality estimating nationwide in a variety of markets. Primary services include conceptual cost modeling, budget verification, cost management, and value management.

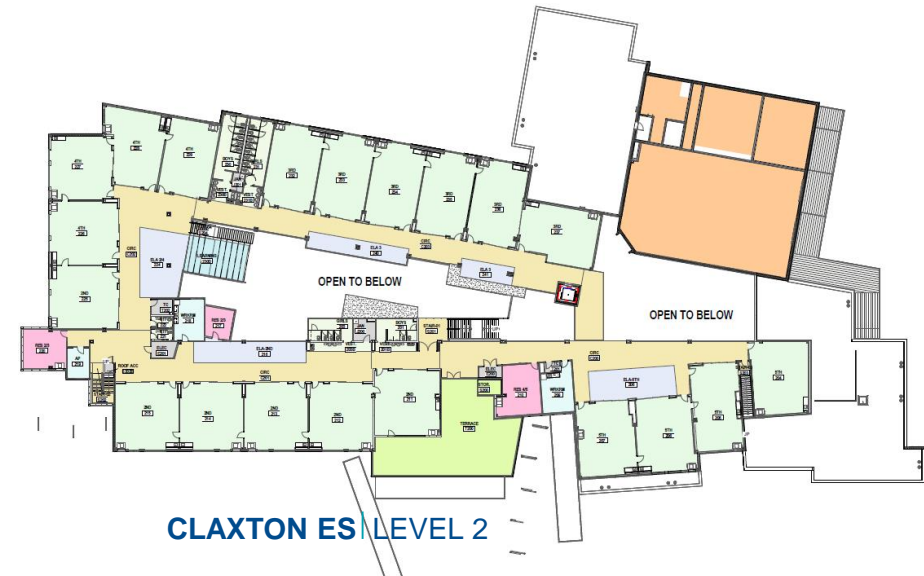
APPLYING THE PALACIO MODEL TO GCS PROJECTS



Claxton ES



CLAXTON ES | LEVEL 1



CLAXTON ES | LEVEL 2

Claxton ES

HICAPS/C2 Estimated Claxton Budget (91,637 sq ft)

\$50,377,100

GCS Master Plan - Claxton Budget (86,972 sq ft)

(\$31,333,469)

Total Increase

\$19,043,631

Description	Increase in \$	% of Increase
Increase in construction costs due to inflation/supply chain/labor	\$10,848,904	57.0%
Increase in construction costs due to additional square footage	\$1,734,634	9.1%
Contingencies - Escalation, design uncertainty, owner design, and CM const	\$4,578,465	24.0%
Design Elements	\$1,881,628	9.9%
Total	\$19,043,631	100.0%

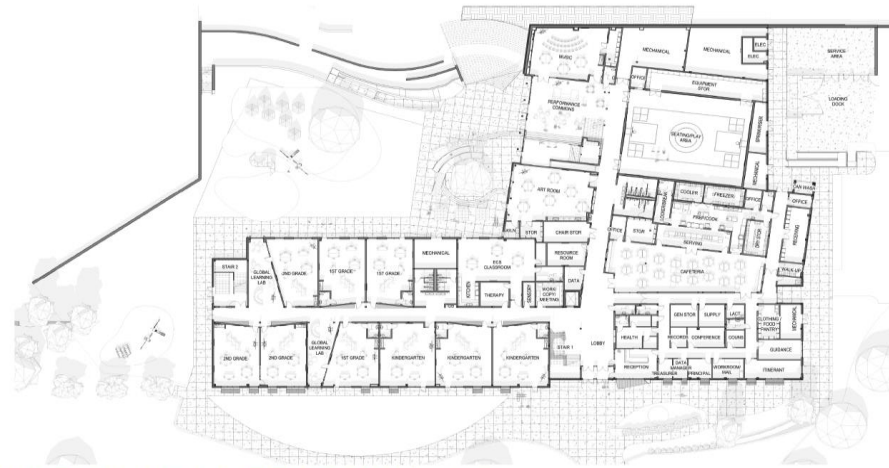
Value Engineering Items for Claxton

Value Engineering Item	Savings
R-30 roof assembly in lieu of R-56 roof assembly	\$400,000.00
Lower site grades to generate “balanced” condition	\$300,000.00
Acoustical treatment-change the tile in ACT-1 to Armstrong A1713	\$48,000.00
Acoustical treatment-change the Tectum Wall budget material to a 2x4 Tectum panel with a custom color	\$62,000.00
Acoustical treatment-change the Tectum Finale PB budget material to a Tectum standard 2x4 lay-in panel with 15/16” grid	\$75,650.00
Acoustical treatment-change the Arktura Soundstar/Softgrid Orbit panels to an Armstrong Feltworks Open Cell Rect	\$40,950.00
Acoustical treatment-change the Arktura Soundstar/Softgrid Orbit panels to an Armstrong Soundscape Shape #5442	\$166,093.00
Reduce curtainwall used overall	\$50,000.00
Switch curtainwall to aluminum storefront by providing structural support	\$75,000.00
Remove composite metal panels and replace with formed metal panels at all possible locations	\$100,000.00
Alternate sliding mall front glass system	\$140,351.00

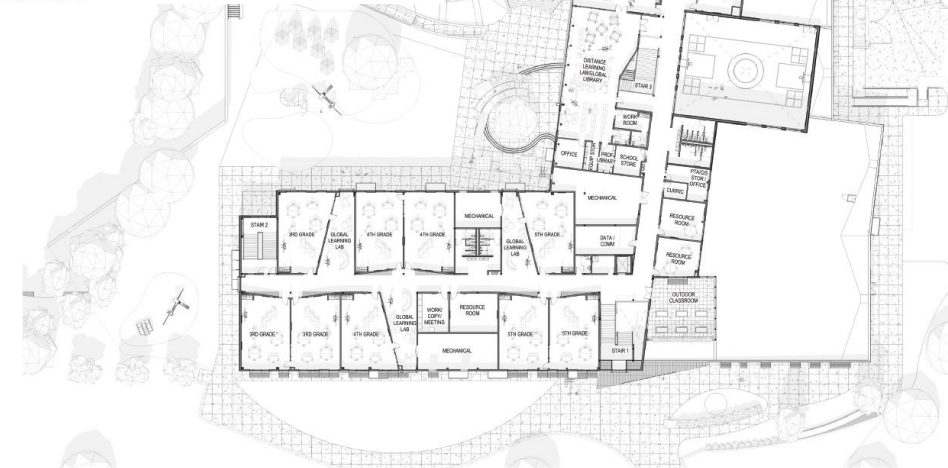
Value Engineering Items for Claxton (cont'd)

Value Engineering Item	Savings
Delete terrace on 1st floor roof	\$203,700.00
Delete walk in enclosure from generator	\$65,000.00
Redesign and square up multi-purpose room	\$285,000.00
Remove sliding mall front system from between classrooms & replace with drywall	\$319,225.00
Replace stone hard flooring with approved equal DD est included quarry tile change to resinous	\$30,000.00
Delete terrace doors	\$3,500.00
Square foot reduction (- 675 sf)	\$145,125.00
Perimeter canopy reduction to only areas above doors. Main and drop off still remain with an additional 1100 sf added back at pre K and EC	\$385,000.00
2"x2" wire mesh hand rail panels in lieu of glass	\$145,825.00
Glazed brick in lieu of metal panel on multi-purpose room	\$85,000.00
Total	\$3,125,419.00

Brooks Global Studies ES



BROOKS GLOBAL STUDIES | LEVEL 1



BROOKS GLOBAL STUDIES | LEVEL 2

Brooks Global Studies ES

HICAPS/C2 Estimated Brooks Budget (72,931 sq ft)

\$39,024,760

GCS Master Plan - Brooks Budget (67,770 sq ft)

(\$22,174,130)

Total Increase

\$16,850,630

Description	Increase in \$	% of Increase
Increase in construction costs due to inflation/supply chain/labor	\$9,144,772	54.3%
Increase in construction costs due to additional square footage	\$1,957,738	11.6%
Contingencies - Escalation, design uncertainty, owner design, and CM const	\$4,709,006	27.9%
Design Elements	\$1,039,114	6.2%
Total	\$16,850,630	100.0%

Value Engineering Items for Brooks Global

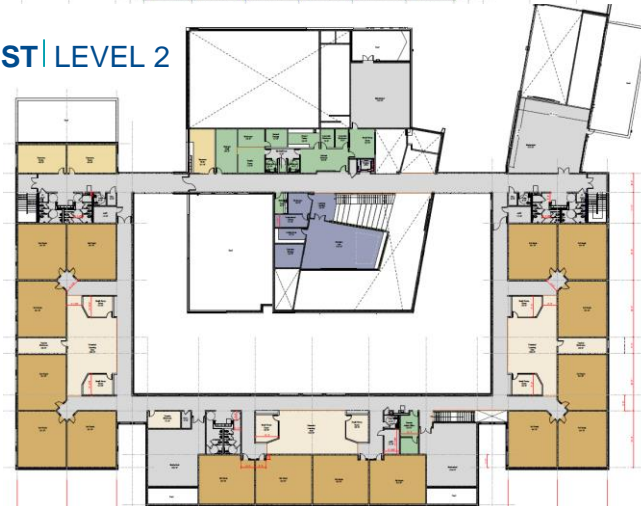
Value Engineering Item	Savings
Terrazzo flooring, base, custom graphics and terrazzo stair treads & landings in lieu of the LVT flooring, base and rubber stair treads.	\$428,000.00
Manually operated operable glass walls at the locations noted in lieu of hollow metal frames, glazing, doors and hardware.	\$356,500.00
Rooftop waterproofing, pedestal pavers and aluminum fencing to create a rooftop learning center in lieu of conventional roofing.	\$61,000.00
3-D "Discovery" sign in lieu of "Vinyl Lettering" on the storefront glass.	\$47,000.00
Manual roller shades & motorized roller shades in lieu of manual mini blinds.	\$78,500.00
Relocate designated outdoor furniture, etc. from the existing Brooks Global campus and install.	\$3,000.00
Wall mounted countertops in the cafeteria seating area as shown.	\$12,000.00
Exterior planters, pebble benches, round concrete benches, dining tables and trash receptacles as shown.	\$36,000.00
Scored concrete in lieu of decorative pavers where shown in the courtyard.	\$27,500.00
Elimination of Level 3	\$1,927,900.00
Technology revisions	\$233,500.00
Ceramic marker boards in lieu of glass	\$6,000.00
Total	\$3,216,900.00

Foust Gaming and Robotics ES

FOUST | LEVEL 1



FOUST | LEVEL 2



Foust Gaming and Robotics ES

HICAPS/C2 Estimated Foust Budget (105,506 sq ft)

\$59,936,861

GCS Master Plan - Foust Budget (86,972 sq ft)

(\$31,333,469)

Total Increase

\$28,603,392

Description	Increase in \$	% of Increase
Increase in construction costs due to inflation/supply chain/labor	\$17,305,094	60.5%
Increase in construction costs due to additional square footage	\$7,737,389	27.0%
Contingencies - Escalation, design uncertainty, owner design, and CM const	\$5,055,531	17.7%
Design Elements	(\$1,494,622)	-5.2%
Total	\$28,603,392	100.0%

Value Engineering Items for Foust G&R ES

Value Engineering Item	Savings
Utility Brick (Black Onyx) in lieu of Norman (Black Manganese)	\$152,164.00
Nichiha fiber cement panel in lieu of metal wall panel	\$448,734.00
Louver System	\$46,829.00
Reduce curtain window wall by 1,950 sf	\$228,246.00
PVC roof in lieu of Green Roof	\$200,000.00
Remove cantilevers at south end of building	\$126,945.00
Corian color group B countertops in lieu of Caesarstone	\$204,836.00
White melamine in lieu of VGS at semi-exposed casework	\$50,331.00
Reduce millwork package by 25%	\$100,000.00
Hollow metal openings in lieu of aluminum entrances	\$92,246.00
Exposed ceilings in lieu of ceiling types, CL 5 & CL 6	\$375,000.00
Porcelain markerboards in lieu of glass markerboards	\$571,902.00
AccuSnap panels in lieu of Filtz felt panels	\$492,767.00
Reduce concrete sidewalk area by 10%	\$16,899.00

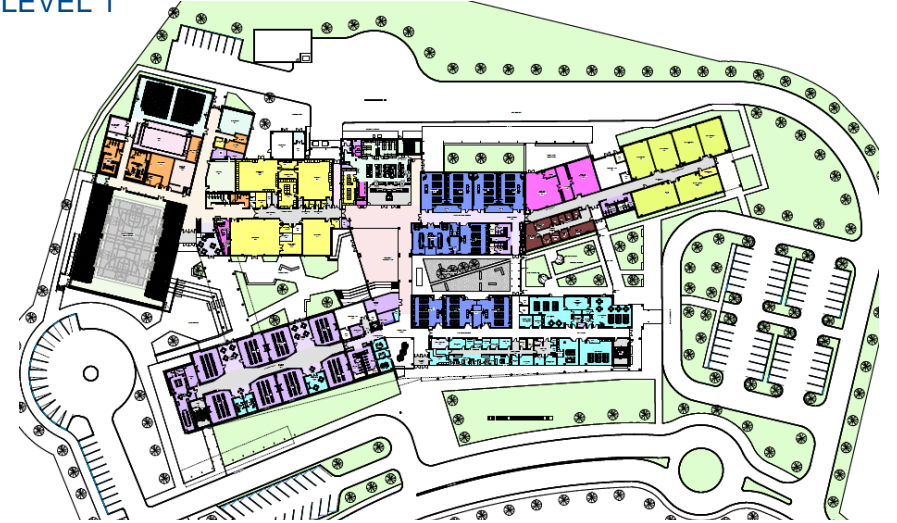
Value Engineering Items for Foust G&R ES (cont'd)

Value Engineering Item	Savings
Consolidate underground detention system	\$32,948.00
Reduce curb & gutter to 24"	\$54,081.00
Reduce lighting package \$ 50,000.00	\$50,000.00
Eliminate (4) classrooms (2) 4th grade & (2) 5th grade	\$380,250.00
Modified to Reduce Gym to activity room w/ platform	\$195,195.00
Owner provided playground equipment	\$438,934.00
Total	\$4,258,307.00

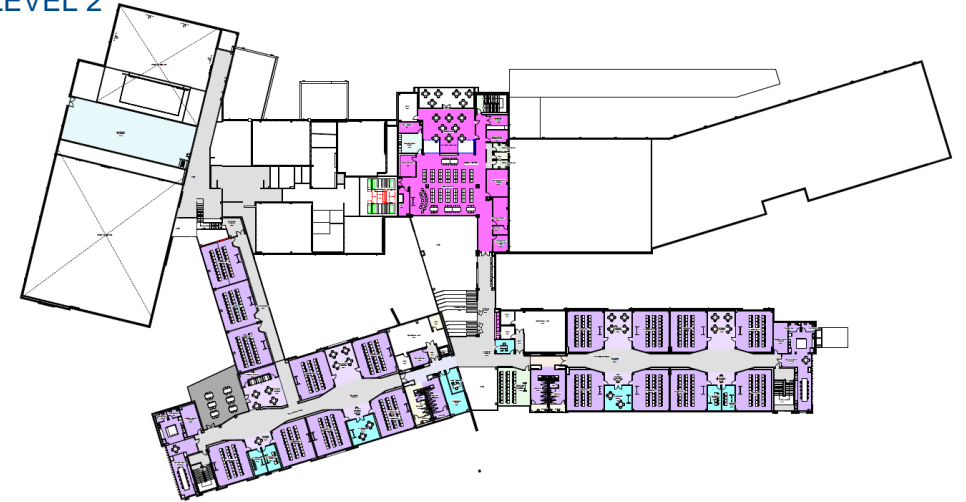
Kiser MS



KISER MS | LEVEL 1



KISER MS | LEVEL 2



Kiser MS

HICAPS/C2 Estimated Kiser Budget (174,990 sq ft)

\$81,667,391

GCS Master Plan - Kiser Budget (163,181 sq ft)

(\$55,478,632)

Total Increase

\$26,188,759

Description	Increase in \$	% of Increase
Increase in construction costs due to inflation/supply chain/labor	\$16,340,566	62.4%
Increase in construction costs due to additional square footage	\$3,735,423	14.3%
Contingencies - Escalation, design uncertainty, owner design, and CM const	\$3,731,873	14.2%
Design Elements	\$2,380,897	9.1%
Total	\$26,188,759	100.0%

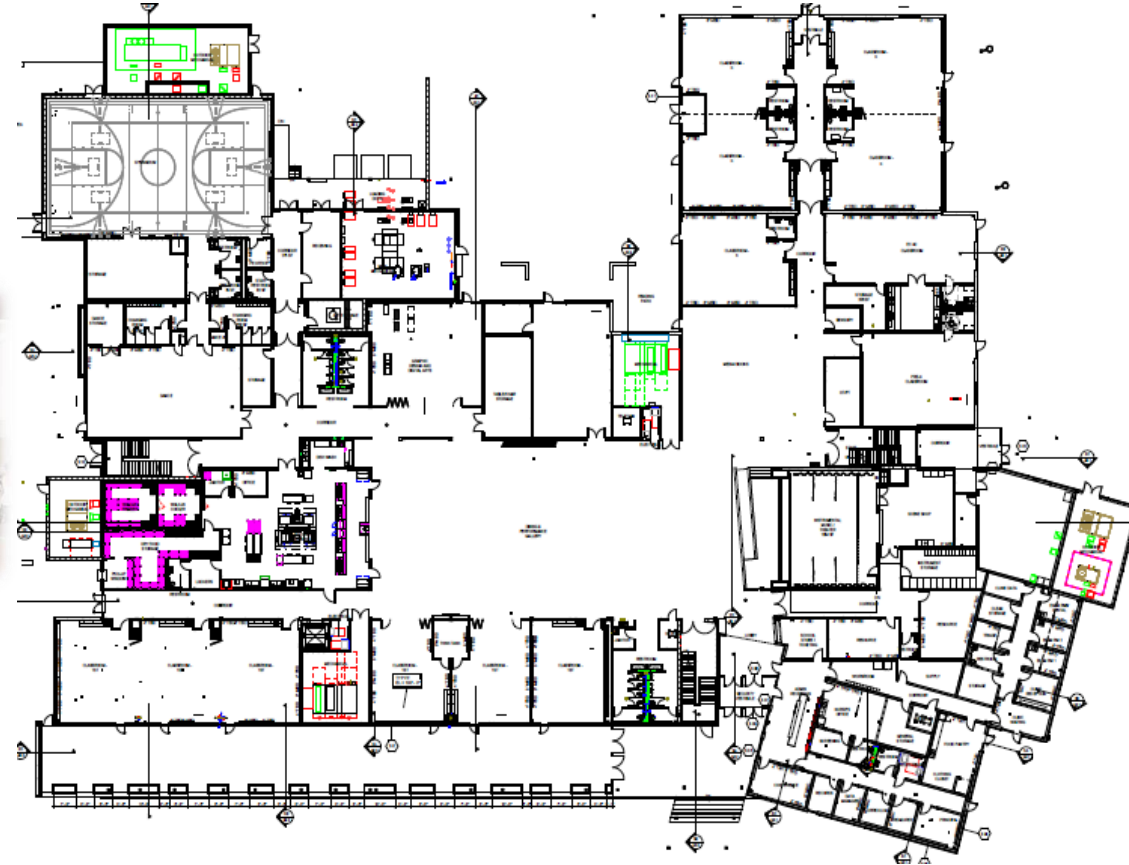
Value Engineering Items for Kiser MS

Value Engineering Item	Savings
Reduce all exterior hardscape by 25%	\$130,000.00
Make the "Kiser Middle" sign on the lawn an ADD ALTERNATE	\$55,000.00
Make the Media Center Outdoor Terrace and Outdoor Learning Terrace ADD ALTERNATES	\$63,000.00
Change lighting in teacher prep rooms and corridor to 2x4 LED's	\$18,000.00
Replace honeycomb pattern ceiling tile in corridors with conventional lay in ceilings	\$36,900.00
Eliminate the vapor mitigation system	\$29,500.00
Change the exterior ACM panels to fiber cement panels	\$120,000.00
Utilize Fiber Cement soffit panels in lieu of ACM soffit panels	\$695,000.00
Deduct the reception counter and add to OFOI costs	\$10,500.00
Change the glass handrails to metal with perforated panels	\$22,400.00
Change the wood gym flooring and the wood stage flooring to resilient athletic flooring	\$112,400.00
Eliminate the Logo Signs on the Exterior and inside the Main Entry (3 Total), include in Owner's FF&E	\$35,400.00
Eliminate allowance for miscellaneous painted graphics, add to Owner's FF&E	\$50,000.00
Eliminate the "café style" booths outside of the restrooms, add to Owner's FF&E	\$17,500.00
Replace the brick pavers in the crosswalks with Stamped Concrete	\$21,750.00
Total	\$1,417,350.00

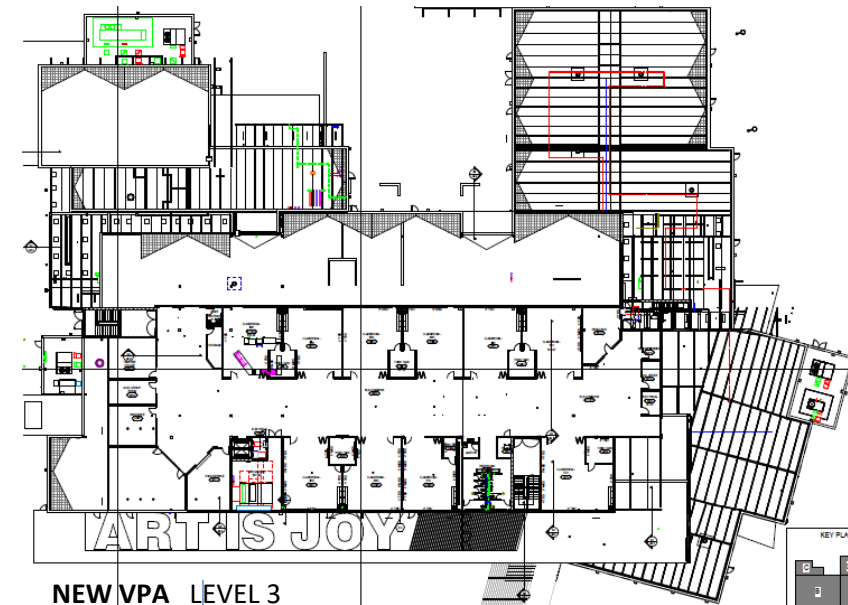
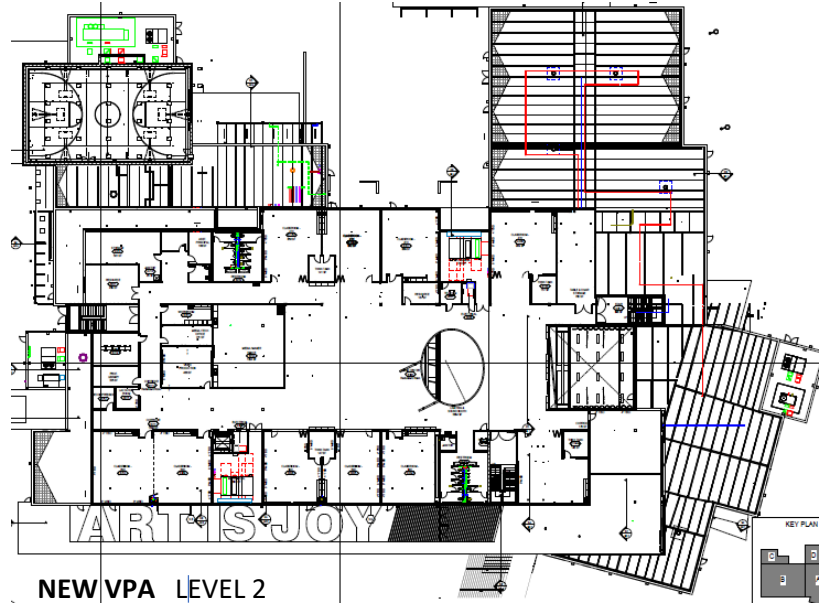
New Visual and Performing Arts ES



NEW VPA LEVEL 1



New Visual and Performing Arts ES



New Visual and Performing Arts ES

HICAPS/C2 Estimated VPA Budget (118,044 sq ft)

\$69,375,621

GCS Master Plan - VPA Budget (100,647 sq ft)

(\$33,505,256)

Total Increase

\$35,870,365

Description	Increase in \$	% of Increase
Increase in construction costs due to inflation/supply chain/labor	\$10,727,491	29.9%
Increase in construction costs due to additional square footage	\$6,004,305	16.7%
Contingencies - Escalation, design uncertainty, owner design, and CM construction	\$9,062,461	25.3%
Design Elements	\$10,076,108	28.1%
Total	\$35,870,365	100.0%

Value Engineering Items for New VPA ES

Value Engineering Item	Savings
Cut sf from gym, dance, storage and locker rooms. Reduce storage and each locker room by one stall (-1,480 sf), Gym (3,582 from 4,209sf) (Dance 1,528 sf from 1,918)	\$423,000.00
Cut ACES storage/office (-250 sf)	\$50,000.00
Cut stage dressing rooms, costume storage and prop storage (890 sf) & tuck into instrument storage	\$275,000.00
Move Visual Arts & Ceramics from the second floor to the first floor & utilize classrooms for graphic/digital arts	\$527,000.00
Move Teacher Workroom on second floor into Media/Maker space (-905 sf)	\$250,000.00
Remove exterior patios, use standard roofing, remove associated railings, doors and reduce glazing (-6,989sf)	\$718,000.00
Total	\$2,243,000.00

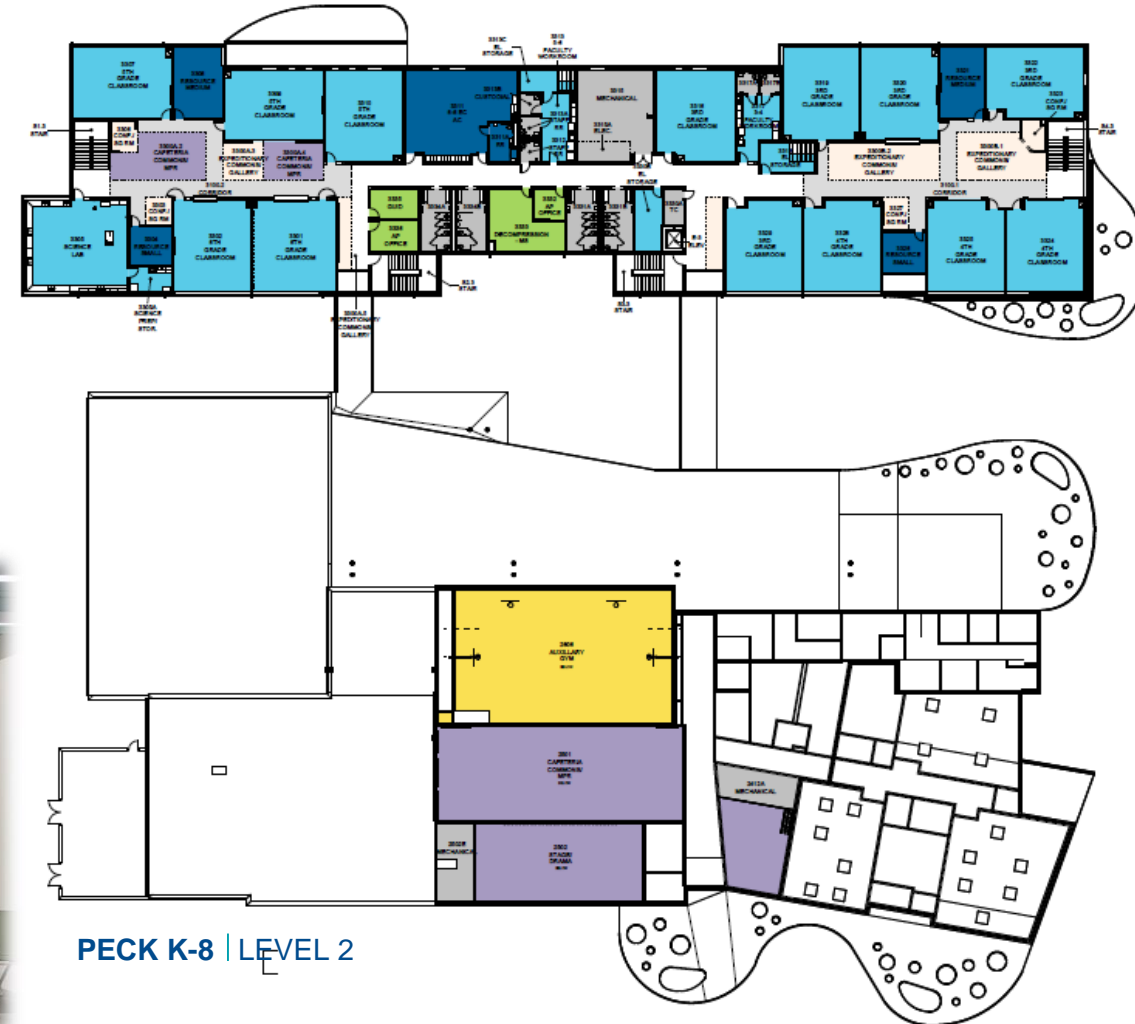
Peck Expeditionary Learning (K-8)



Peck Expeditionary Learning (K-8)



PECK K-8 | GROUND LEVEL



PECK K-8 | LEVEL 2

Peck Expeditionary Learning (K-8)

HICAPS/C2 Estimated Peck Budget (139,584 sq ft)

\$79,106,877

GCS Master Plan - Peck Budget (129,998 sq ft)

(\$41,323,632)

Total Increase

\$37,783,245

Description	Increase in \$	% of Increase
Increase in construction costs due to inflation/supply chain/labor	\$24,548,096	65.0%
Increase in construction costs due to additional square footage	\$3,822,955	10.1%
Contingencies - Escalation, design uncertainty, owner design, and CM const	\$8,372,568	22.2%
Design Elements	\$1,039,626	2.7%
Total	\$37,783,245	100.0%

Value Engineering Items for Peck

Value Engineering Item	Savings
Reduce canopy areas to retain design intent with less area	\$500,000.00
Reduce Bus Drop off covered walk by 50%	\$160,000.00
Delete "PECK" main entrance sign. Make item an add alternate.	\$50,000.00
Reallocate metal shelving scope to FF&E	\$93,000.00
Provide more standard markerboards in lieu of pin mounted glass markerboards	\$185,000.00
Relocate Dance/ Drama and Fitness room spaces (including associated storage spaces) from lower level to stage. Reduce lower level basement footprint.	\$415,000.00
Reduce basketball goal provision in auxiliary gym from 6 to 4	\$20,000.00
Reduce concrete cloud seats by 50%	\$12,500.00
Eliminate all seat walls in courtyard	\$65,500.00
Reduce hardscape and sidewalks by 15%	\$70,000.00

Value Engineering Items for Peck (cont'd)

Value Engineering Item	Savings
Install aluminum composite material in lieu of ATA column covers	\$200,000.00
Alternate gym floor system (Proaction Flex vs. Power Channel)	\$25,000.00
Glass operable partition to traditional (Media Center & Maker Spaces)	\$26,000.00
Reduce ornamental plantings by 40%	\$18,000.00
Eliminate lightning protection	\$142,773.00
Wood ceilings to ACT	\$105,000.00
Reduce size of exterior stair platform at middle level area A back to be similar to area B	\$35,000.00
Eliminate exterior stage area in its entirety	\$25,000.00
Remove wall mounted backless bench from concrete seating stair group A	\$78,000.00
Total	\$2,225,773.00

Next Steps

- **Thursday, January 5** – Guilford County Board of County Commissioners considers revised project ordinances.
- **Tuesday, January 10 (Projected)** – Guilford County Board of Education considers first GMP packages.
- **January/February**– Continued early site work and construction phase starts for schools with approved GMP packages.



Questions & Dialogue

