

Norfolk Public Schools

FEASIBILITY STUDY CAREER AND TECHNICAL HIGH SCHOOL



STUDY GOALS

1. Develop the Educational Program for a State of the Art Comprehensive Career & Technical High School
2. Determine Which Existing Site/ High School was the Most Suitable Location
3. Determine the Cost to Convert the High School Selected and the Cost to Build a New High School to House the Program Developed



WALLER
TODD &
SADLER
ARCHITECTS

RRMM and WTS

Architecture & Programming



Ascend Learning CTE

Programming



WPL

Civil Engineering



Stroud Pence

Structural Engineering



JP Harvey

PM& E Engineering



GET Solutions

Geotechnical



Kimley-Horn
and Associates, Inc.

Kimley Horn

Environmental



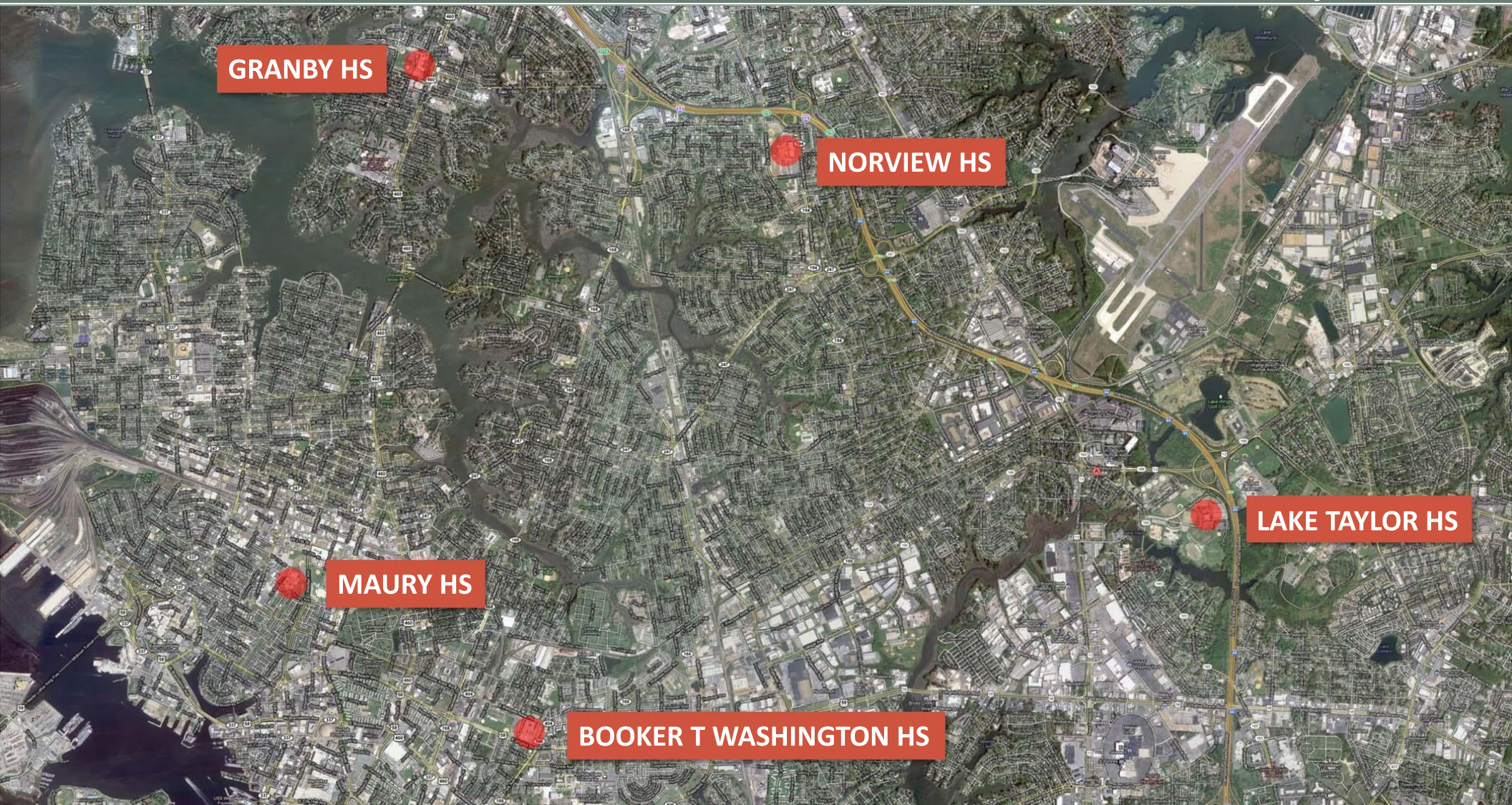
GeoEnvironmental Resources, Inc.
Consulting Engineers

Environmental
Groundwater
Hazardous Materials
Geotechnical
Industrial Hygiene
Natural Resources
Industrial Engineering

GER

Hazardous Materials





Norfolk Polytechnic High School

Site/Facility Suitability Evaluation Matrix

January 2013

- 1—Good or Appropriate
2—OK
3—Bad or Inappropriate

Facility

Factor

Booker T.
Washington

Granby

Lake Taylor

Maury

Norview

Site is adequately sized for renovation and addition(s)

2

3

1

3

3

Site is adequately sized for a new facility

2

3

1

3

3

Proximity to NTC

1

2

1

2

1

Large interior spaces

3

2

3

3

1

Size of existing building

2

2

2

3

3

Current building improvement/renovation needs

1

3

1

3

3

Proximity to the major vehicular arterials

2

2

1

3

1

Potential for construction phasing/renovation and addition(s)

3

3

1

3

3

Potential for construction phasing/new facility

3

3

2

3

3

Relationship to potential STEM school site

2

2

2

2

2

Historic Implications

1

3

2

3

1

Total Points

22

28

17

31

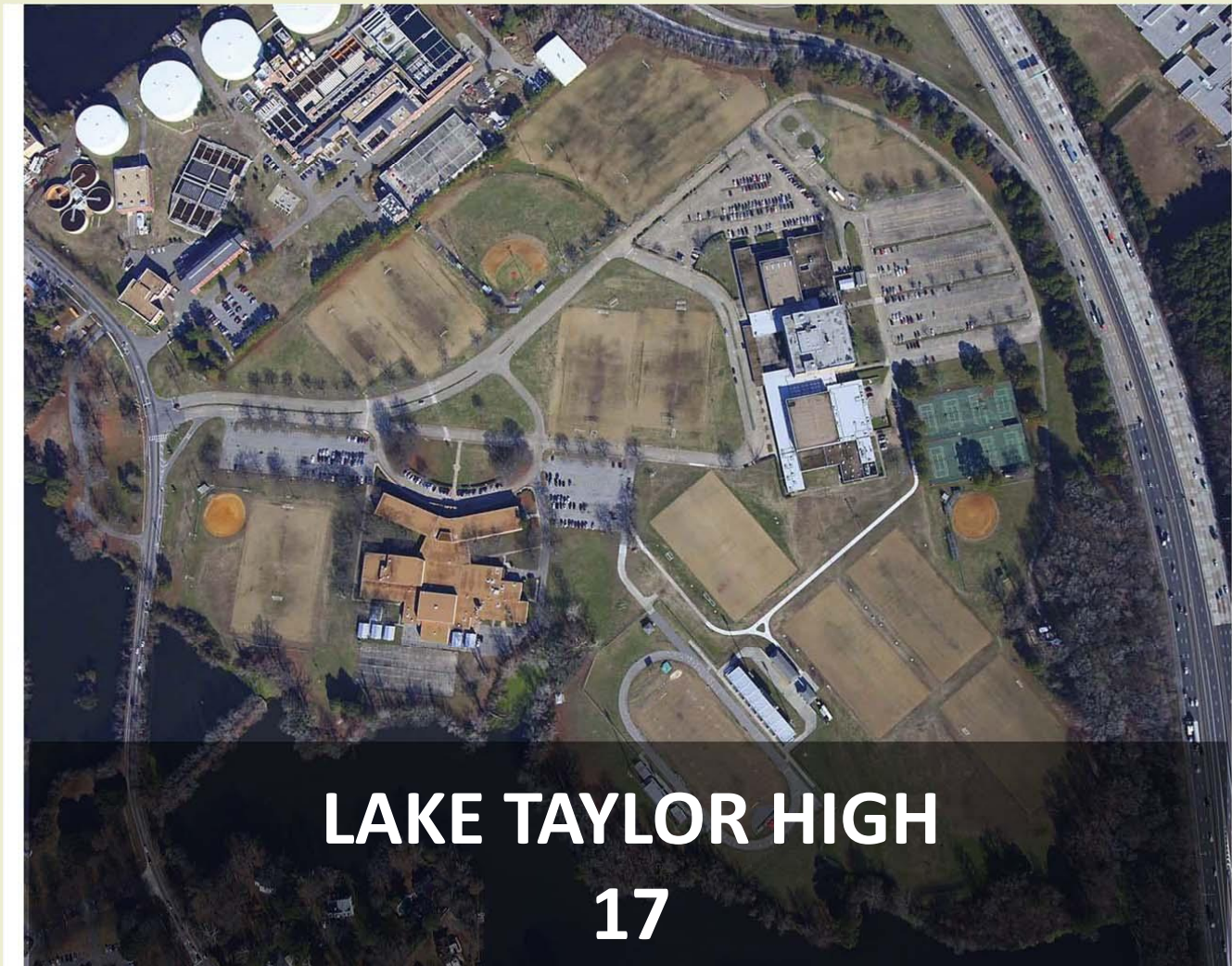
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Norfolk Public Schools
NATIONALLY RECOGNIZED. GLOBALLY COMPETITIVE.







LAKE TAYLOR HIGH
17

- Architectural
- Civil
- Structural
- PM & E
- Hazardous Materials
- Geotechnical
- Environmental

25

ANNIVERSARY

RRMM

ARCHITECTS

Condition Assessment For
Norfolk Public Schools

ARCHITECTURAL ASSESSMENT
General Conditions

Condition Legend

1 - Very Good / New

2 - Good

3 - Fair

4 - Poor

5 - Failing

Red

Repair or replacement recommended within 12 months

Yellow

Repair or replacement recommended within 2 to 3 years

School Name

Lake Taylor High School

Date

Feb-13

Building Code

IBC 2009

Surveyor Name

John Maddux/Raphael Lister

Building Description

Multi-Story Core with One-Story Wings

Date Built

1967

Category	Type / Material	Condition - See Legend	Immediate Repair Needed	Code Concern	Photos Taken	Life Expectancy	Cost to Repair	Cost to Replace	Condition Comments
EXTERIOR / FAÇADE									
• Walls - general	Brick Masonry	2/4			1, 3, 4, 5				Reporting required at south elevation. Brick is cracked and pulling away from shelf angles at southwest corner cooling tower yard enclosure and southwest corner of Cafeteria. Algae is visible on north penthouse face of wall. Efflorescence is visible on south penthouse face of wall. Brick crack repairs are noted at southeast corner of 4-story classroom building. Rusty shelf angles at window heads on north side of building. - See "Concerns" for additional information.
• Walls - interstitial	Painted Metal Panel System	4							Paint is peeling.
• Windows	Mil Finish Aluminum	4/5							Glazing is single pane. Glazing putty is loose on numerous windows.
• Doors and Frames	Painted Hollow metal	3/4		X	2				Heavy paint on doors.
• Soffits above Doors	Painted Plaster	3							
• Signage		3							Signage is limited to text mounted to fourth floor of classroom building.
• Entrance Canopy Fascia	Painted Metal	3							Overall fair condition; some rust visible; minor areas of peeling paint.
• Entrance Canopy Soffit	Painted Metal	3			2				Overall fair condition; some rust visible; minor areas of peeling paint.
• Exterior Louvers	Prefinished Metal/Mil Finished Alum	4			3				Exterior louvers are generally rusty and bent.
• Exterior Sealants		3							Building has numerous sealant filled control joints in the brick walls and around windows. Sealant appears to be in fair condition possibly a recent maintenance repair.

Norfolk Public Schools — General Conditions

1

• Toilets	1" CT	3				30, 33			Tiles cracked or missing in several restrooms. Grout heavily stained.
• Locker Rooms	Sealed Concrete	3				23			Few cracks.

Norfolk Public Schools — General Conditions

2

	fronts								doors
• Locker Rooms	CT	3/4				23			Wall base is quarry tile with individual tiles missing in numerous locations. There is a heavily dentiled metal gate system at the entrance to the locker rooms.
• Shower Rooms	CT	3/4				24			Grout is heavily stained.
• Gym	Ptd Cmu	3/4				21			Stains visible.
• Auxiliary Gym	Ptd Cmu	3							Condition was difficult to assess since the floor was covered with a wrestling mat.

Norfolk Public Schools — General Conditions

3

Comments

reby staining adjacent brick.

visible.

is punctured in numerous areas. underside of fourth floor ceiling slabs are

locations on all roof areas. Moss is growing.

replaced.

ishing is separated from membrane on muls

missing.

od flooring in upstage of

ps, auditorium, cafeteria at the first floor.

ve stairs.

ment and survey.

ing in a few locations.

rooms.

gym stalls have any

25th Anniversary
RRMM
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VISITS WERE MADE

- Polytech High School/ Delaware
- Worchester High School/ Massachusetts
- Newton College & Career Academy/ Georgia
- Rockdale Career Academy/ Georgia
- Norfolk Technical Center

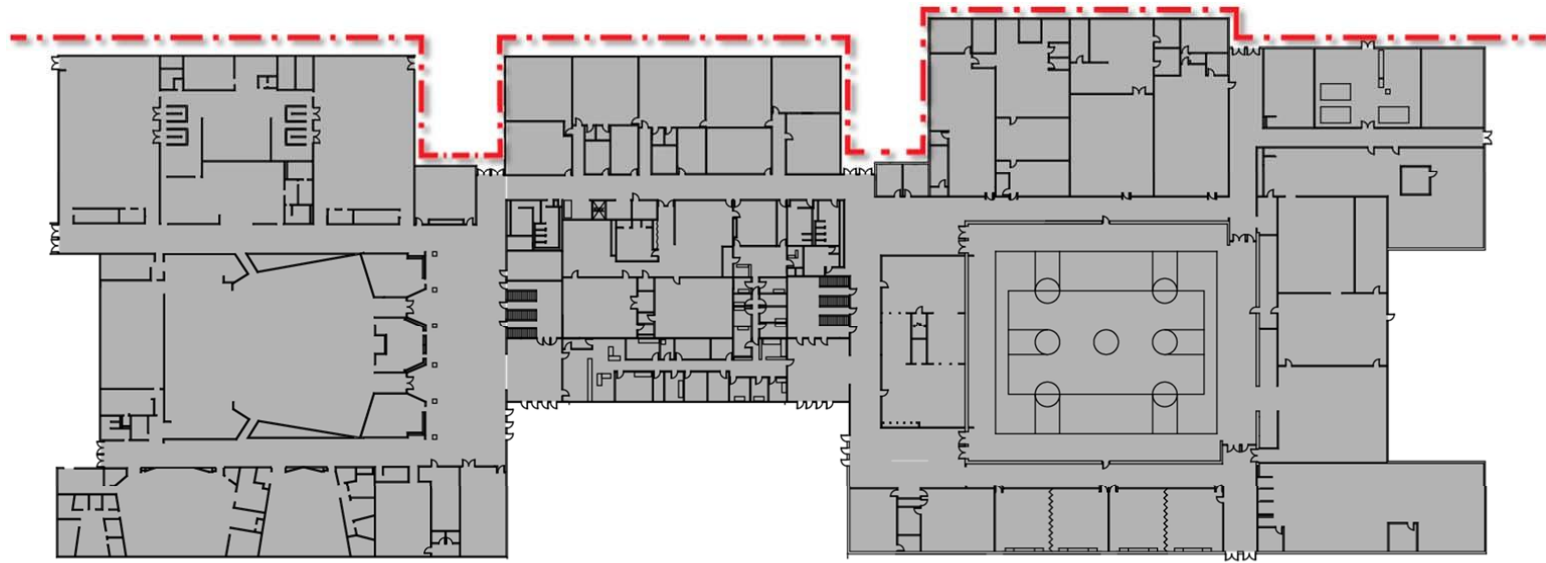




- 1600 Student
- 304,000+/- Square Foot
- Comprehensive
- Four Academies
 - Trades & Industrial Technology
 - Health, Medical, & Human Services
 - Business & Information Technology
 - Engineering, Design & Technology (STEM)









- LEGEND**
- GENERAL CLASSROOMS / SCIENCE LABS / COMPUTER LABS
 - GENERAL ADMINISTRATION / SECURITY
 - BUILDING SERVICES / RESTROOMS / ELEC / MECH
 - CIRCULATION
 - PHYSICAL EDUCATION / ATHLETICS
 - AUDITORIUM / MUSIC / DRAMA / FORUM
 - FACULTY DINING / SERVING LINE / KITCHEN / CAFETERIA
 - MEDIA CENTER
 - TRADES AND INDUSTRY TECHNOLOGY ACADEMY
 - BUSINESS AND INFORMATION TECHNOLOGY ACADEMY
 - HUMAN, HEALTH AND MEDICAL SCIENCES ACADEMY
 - ENGINEERING, DESIGN, AND TECHNOLOGY ACADEMY

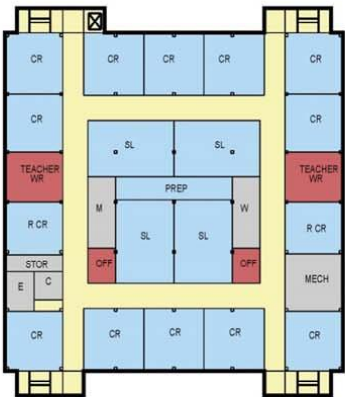




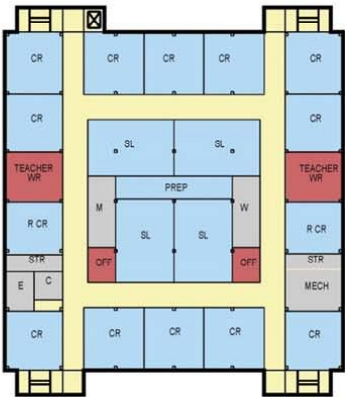
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SECOND FLOOR



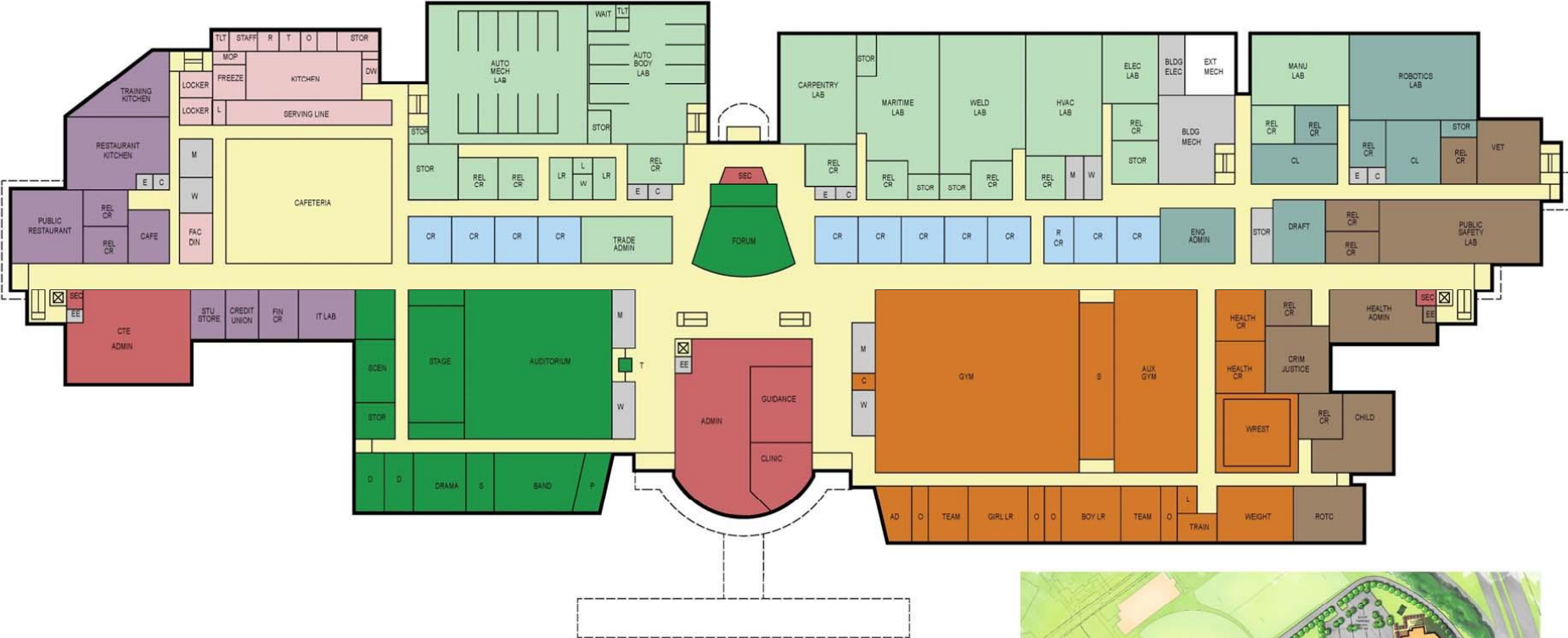
THIRD FLOOR



FOURTH FLOOR





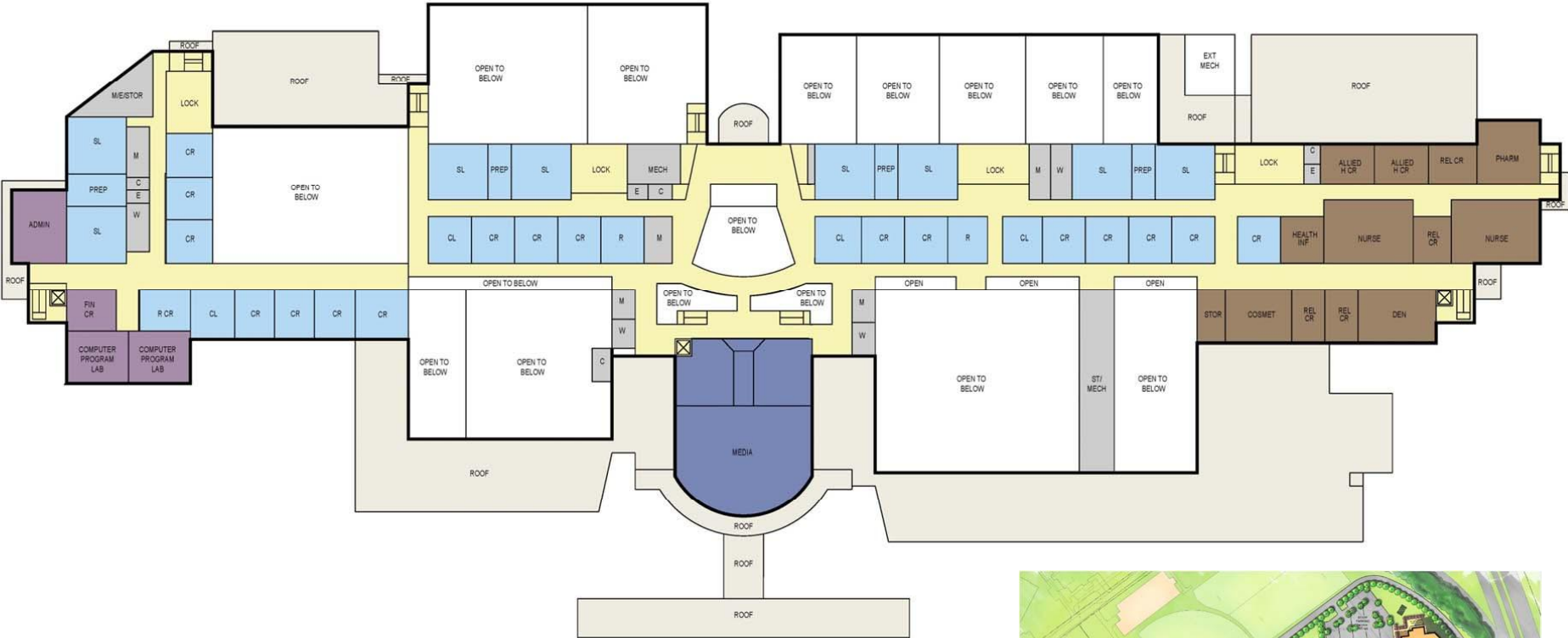


LEGEND

GENERAL CLASSROOMS / SCIENCE LABS / COMPUTER LABS	FACULTY DINING / SERVING LINE / KITCHEN
GENERAL ADMINISTRATION / SECURITY	MEDIA CENTER
BUILDING SERVICES / RESTROOMS / ELEC / MECH	TRADES AND INDUSTRY TECHNOLOGY ACADEMY
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SADLER**
ARCHITECTS



LEGEND

- | | |
|---|---|
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NPS –Career and Technical High School Feasibility Study

Option “A” Cost Model/ Renovations & Additions

Construction Costs (Hard Costs)	Factors	Unit	Costs
Exceptional Site Costs Allowance (signalized entry)	1	LS	\$-00
Exceptional Site Costs Allowance (Turn lanes & off-site imp., etc.)	1	LS	\$-00
Exceptional Site Costs Allowance (building demo.)	1	LS	\$-00
General Site Costs	1	LS	\$3,664,740
New Addition Costs	121,503	\$ 189.70	\$23,049,119
Existing Building Renovation			
Light Renovation (Baseline incl. HVAC, Elec., Plumb)	40,457	\$ 101.92	\$4,123,377
Medium Renovation	53,480	\$ 121.93	\$6,520,816
Heavy Renovation	22,600	\$ 141.94	\$3,207,844
Super Heavy Renovation	104,170	\$ 161.91	\$16,866,165
Special Condition - Modular Farm Allowance (24 mos.)	1	LS	\$3,200,000
Special Condition - Hazmat Removal	1	LS	\$956,231
Special Condition Cost - Selective Demolition	1	LS	\$300,000
Total Construction Cost			\$61,888,293
Construction Contingency	Factors	Unit	Costs
Contingency Factor	8%	PCT	\$4,951,063
Construction Cost Grand Total (w/ Contingency)			\$66,839,356
Miscellaneous Project Costs (Soft Costs)	Factors	Unit	Costs
Site Acquisition	1	LS	\$-00
Surveys (partial topo as needed)	1	LS	\$30,000
Geotechnical Studies (soil borings allowance)	1	LS	\$15,000
Septic Drain Field Design	-00	LS	\$-00
Utility Connection Fees	-00	LS	\$-00
Power and Lighting (Va. Power allowance)	1	LS	\$60,000
City Reviews/Inspections, (Bldg. Permit Incl. in bldg. Costs)	1	LS	\$20,000
Construction Testing and Special Inspections	0.60%	PCT	\$371,330
A/E, Commissioning, Environmental., etc.	11.00%	PCT	\$6,807,712
Technology Allowance (varies per re-use, quality, etc. 3.5%)	3.50%	PCT	\$2,166,090
Loose Furn. & Equip. Allowance (varies per re-use, quality, etc.)	5.00%	PCT	\$3,094,415
Printing, Advertising & Misc. Reproduction	1	LS	\$40,000
Miscellaneous Soft Costs Total			\$12,604,547
Total Project Cost (Today's Dollars)			\$79,443,903
Total Project Cost (with 3% Escalation - 1 year)			\$81,827,220
Total Project Cost (with 3% Escalation - 2 years)			\$84,282,037
Total Project Cost (with 3% Escalation - 3 years)			\$86,810,498



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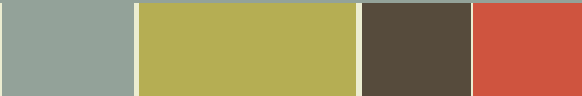
<u>Construction Costs (Hard Costs)</u>	Factors	Unit	Costs
Exceptional Site Costs Allowance (signalized entry)	1	LS	\$-00
Exceptional Site Costs Allowance (Turn lanes & off-site imp., etc.)	1	LS	\$-00
Exceptional Site Costs Allowance (building demo.)	1	LS	\$-00
General Site Costs	1	LS	\$5,914,440
New Building Costs	304,000	\$ 185.00	\$56,240,000
Special Condition Cost - Hazmat Removal	1	LS	\$1,330,565
Special Condition Cost - Exist HS Demolition	1	LS	\$627,240
Total Construction Cost			\$64,112,245

<u>Construction Contingency</u>	Factors	Unit	Costs
Contingency Factor	5%	PCT	\$3,205,612
Construction Cost Grand Total (w/ Contingency)			\$67,317,857

<u>Miscellaneous Project Costs (Soft Costs)</u>	Factors	Unit	Costs
Site Acquisition	1	LS	\$-00
Surveys (partial topo as needed)	1	LS	\$30,000
Geotechnical Studies (soil borings allowance)	1	LS	\$25,000
Septic Drain Field Design	-00	LS	\$-00
Utility Connection Fees	-00	LS	\$-00
Power and Lighting (Va. Power allowance)	1	LS	\$60,000
City Reviews/Inspections, (Bldg. Permit Incl. in bldg. Costs)	1	LS	\$25,000
Construction Testing and Special Inspections	0.70%	PCT	\$448,786
A/E, Commissioning, Environmental., etc.	9.00%	PCT	\$5,770,102
Technology Allowance (varies per re-use, quality, etc.)	3.50%	PCT	\$2,243,929
Loose Furn. & Equip. Allowance (varies per re-use, quality, etc.)	5.00%	PCT	\$3,205,612
Printing, Advertising & Misc. Reproduction	1	LS	\$40,000
Miscellaneous Soft Costs Total			\$11,848,429

Total Project Cost (Today's Dollars)	\$79,166,286
Total Project Cost (with 3% Escalation - 1 year)	\$81,541,274
Total Project Cost (with 3% Escalation - 2 years)	\$83,987,513
Total Project Cost (with 3% Escalation - 3 years)	\$86,507,138

Escalation of one year at 3%. This will vary depending on economy.
These are preliminary numbers only and not detailed estimates.



YEAR	BUILDING ONLY	BUILDING + SITE
2010-11 (3 High Schools)	\$168.28/ SF	\$210.39/ SF
2011-12 (Kellam)	\$174.06/ SF	\$201.10/ SF
2012-13 (Loudon)	\$199.52/ SF	\$224.12/ SF
3 Year Average	\$180.62/ SF	\$211.87/ SF
NPS CTE	\$185.00/ SF	\$204.45/ SF

\$229.61/ SF with Demo & Hazmat

Comparison of Approximate Costs, Today's Dollars

Option A – Renovations & Additions.....\$79,443,903

Option B – New.....\$79,166,286



Norfolk Public Schools

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