STRATFORD MIDDLE SCHOOL
RENOVATION AND ADDITION
ARLINGTON PUBLIC SCHOOLS

BLPC #9
AUGUST 3, 2015
SCHEDULE & RECENT MEETINGS
<table>
<thead>
<tr>
<th></th>
<th>BLPC MEETINGS</th>
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<tbody>
<tr>
<td>1</td>
<td>Introductions and Discussion</td>
</tr>
<tr>
<td></td>
<td>April 8, 2015</td>
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<tr>
<td>2</td>
<td>Visioning and Site Planning</td>
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<td></td>
<td>April 20, 2015</td>
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<td>3</td>
<td>Site Planning and Massing</td>
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<td></td>
<td>May 4, 2015</td>
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<td>4</td>
<td>Learning Environments</td>
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<td>May 18, 2015</td>
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<tr>
<td>5</td>
<td>Preliminary Concepts</td>
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<td>June 1, 2015</td>
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<td>6</td>
<td>Concept Development and Value Analysis</td>
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<td></td>
<td>June 15, 2015</td>
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<td>7</td>
<td>Preferred Concept and Conclusions</td>
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<td>June 29, 2015</td>
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<tr>
<td>8</td>
<td>Concept Development, continued</td>
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<td>July 13, 2015</td>
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<td>9</td>
<td>Preferred Concept</td>
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<td></td>
<td>August 3, 2015</td>
</tr>
<tr>
<td>10</td>
<td>Review of Concept Schemes</td>
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<tr>
<td></td>
<td>August 31, 2015</td>
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## Project Schedule

<table>
<thead>
<tr>
<th>2015</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
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<tr>
<td></td>
<td>4/8-#1</td>
<td>5/4-#3</td>
<td>6/1-#5</td>
<td></td>
<td>8/03-#9</td>
<td>9/14-#11</td>
<td>10/13-#13</td>
<td>11/9-#15</td>
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<td>6/29-#7</td>
<td></td>
<td>8/31-#10</td>
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**BLPC (Bi-weekly)**

- **School Board**
  - 4/15-#1
  - 5/14-#2
  - 6/11-#3

- **Work Session**
  - 8/11

- **Concept Info**
  - 9/10

- **SD Info**
  - 11/17

- **SD Action**
  - 12/3

- **Historic Listing Info**
  - 8/13

- **Concept Action**
  - 9/24

- **PFRC (Monthly)**
  - 4/15-#1
  - 5/14-#2
  - 6/11-#3
  - 7/16-#4

- **Annual Meeting**
  - 7/13-#8

- **Convention**
  - 8/11

- **Board Meeting**
  - 9/10

- **SD Meeting**
  - 11/17

- **SD Action**
  - 12/3
HALRB work session - 7/15

- Presented schemes reviewed at BLPC 08
- Reviewed why previously rejected schemes are not preferred
- HALRB expressed concern about all schemes impacting character-defining features and requested design team explore option with Phases 1 & 2 at west end of existing building (“West” Option)

PFRC #4 - 7/16
REVIEW OF OPTIONS
SITE OPTIONS AND BUILDING OPTIONS

Site Options:
• Options with Old Dominion Access
• Fallback option with no Old Dominion Access

Building Options:
• “Link” Option
• “Terrace” Option
• “Hill” Option
• “West” Option
SITE OPTIONS

OBJECTIVES MET BY ALL SITE OPTIONS

All Site Options:

• Provide safe pedestrian and bicycle access, including across Old Dominion
• Improve Vacation Lane to the extent possible for pedestrians, bikers and vehicular traffic
• Provide adequate queuing for buses on Vacation Lane
• Separate modes
• Accommodate parking needs
• Accommodate Stratford Field for soccer and ultimate frisbee program
• Preserve the DPR Stratford Park program
Phase 1: 145 parking spaces
- Entry plaza at Level 1
- Drive for parent drop-off and pick-up; closed to traffic at other times. Entrance from Vacation lane or from Old Dominion
- Signal at Old Dominion
- Field shifted northeast

Phase 2: 188 parking spaces
- Structured parking (2.5 levels) under renovated tennis and basketball courts with connection to Phase 2 addition. Access to garage from 23rd St.
SITE OPTION C2
PROS / CONS

PROS:
• No impact to DPR property in Phase 1
• Adequate queuing for cars
• Provides opportunity for entry plaza proximate to building entry
• All building options (Link, Terrace, Hill, West) are possible with Site Option C2

CONS
• Impact to RPA
• Impact to DPR property in Phase 2
• Adds most impervious surface of all schemes
• Significant tree impact
• Not preferred by fire department for emergency vehicle access
SITE OPTION C3
VACATION LANE TO OLD DOMINION WITH SIGNAL - PHASE 1 + 2

- Phase 1: 155 parking spaces
- Site drive is exit only in both directions with signal at Old Dominion
- Drive closed to traffic when not in use
- Field shifts south

- Phase 2: 195 parking spaces
- Structured parking (2.5 levels) under renovated tennis and basketball courts with connection to Phase 2 addition. Access to garage from 23rd St.
SITE OPTION C3

PROS / CONS

PROS:

- No impact to DPR property in Phase 1
- Adequate queuing for cars
- Provides opportunity for entry plaza proximate to building entry
- Preferred by fire department for emergency vehicle access

CONS

- Impact to RPA
- Impact to DPR property in Phase 2
- Adds some impervious surface
- Moderate tree impact
- Site road in this location limits building options to “Link” site or Phase 2 site as shown
SITE OPTION G2
IN / OUT FROM OLD DOMINION W/ STRUCTURED PARKING

- Phase 1: 188 parking spaces
- Drive for parent drop-off and pick-up; closed to traffic at other times. Entrance from Vacation lane or from Old Dominion
- Structured parking under new addition
- Signal at Old Dominion
- Field shifted northeast

- Phase 2: 188 parking spaces
- Phase 2 site south of Phase 1
SITE OPTION G2

PROS / CONS

PROS:

• Minimal impact to trees,
• Least impervious surface area added
• All building options (Link, Terrace, and West) possible with Site Option G2.

CONS

• Impacts RPA
• Inadequate queuing for cars
• Requires widening of Old Dominion
• Requires structured parking in Phase 1
• Significant impact to DPR property
• Not preferred by fire department for emergency vehicle access
• Soccer field likely location for Phase 2 construction staging/access.
SITE OPTION A1
SITE OPTION WITHOUT OLD DOMINION ACCESS - PHASE 1

- All drop-off and pick-up from Vacation Lane
- Parent drop-off loop at location of existing lower parking lot
- No change to DPR property
- Preserves opportunity for connection to Old Dominion in Phase 2
- Phase 1: 155 parking spaces
SITE OPTION A1

PROS / CONS (PHASE 1)

PROS:

• Minimal overall impact to trees
• All building options (Link, Terrace, Hill and West) possible with Site Option A1.
• Low cost

CONS

• Impacts RPA
• Impacts two prominent trees at existing lower lot
• New drop-off is not proximate to addition
• Adds impervious surface
• Not preferred by fire department for emergency vehicle access
All Phase 1 Building Options:

- Accommodate the Phase 1 program
- Provide quality learning environments
- Create opportunity for a new “heart of school”
- Connect to the existing building circulation network
"LINK" BUILDING

MASSING

PHASE 1:
• 45,000 gsf
• 3 floors at levels 1, 2, and 3 of existing building
• Enclosed atrium between existing building and new addition

PHASE 2:
• 52,000 gsf
• 4 floors (1 floor higher than existing building)
"LINK" BUILDING
PROS / CONS

PROS:

• Efficient layout for both program and circulation.
• Optimal layout for classroom daylighting.
• Atrium is opportunity for “heart of school” and cultural courtyard for community.
• All three levels of addition connect to existing building.

CONS:

• Not recommended by HALRB because of impact to character-defining features
PHASE 1:
- 45,000 gsf
- 2 floors at levels B and 1 of existing building

PHASE 2:
- 52,000 gsf
- 4 floors (1 floor higher than existing building)
“TERRACE” BUILDING

PROS / CONS

PROS:
• Low massing provides opportunities for occupiable rooftop learning environments
• New plaza entry connects to heart of school and new circulation core
• All two levels of addition connect to existing building

CONS:
• Less efficient construction
• Some program areas with limited daylight exposure
• Not recommended by HALRB because of impact to character-defining features
"HILL" BUILDING

MASSING

**PROS:**
- All four levels of addition connect to existing building
- Buried courtyard program preserves green space
- Responds to existing building and site symmetry around central stair tower

**CONS:**
- New building entry required adjacent to existing loading dock
- Phase 2 location on existing green space
“HILL” BUILDING

PROS / CONS

PROS:

• All four levels of addition connect to existing building
• Buried courtyard program preserves green space
• Responds to existing building and site symmetry around central stair tower

CONS:

• New building entry required adjacent to existing loading dock
• Phase 2 location on existing green space
STAKEHOLDER CONCERNS
STAKEHOLDER CONCERNS

- Extent of Vacation Lane improvements
- Old Dominion Access: exit only or full access
- Phase 2 program and building siting
- Difference of interpretation about historic preservation approach
- Comparative cost of schemes
### Construction Cost Comparison

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<tr>
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</thead>
<tbody>
<tr>
<td>TERRACE BUILDING / SITE C2</td>
<td>LOWEST COST</td>
<td>+ $55 M (W/GARAGE)</td>
<td>+ $49 M (W/GARAGE)</td>
</tr>
<tr>
<td>LINK BUILDING / SITE C3 (NO ATRIUM)</td>
<td>LOWEST COST</td>
<td>+ $55 M (W/GARAGE)</td>
<td>+ $49 M (W/GARAGE)</td>
</tr>
<tr>
<td>LINK BUILDING / SITE C3 (W/ATRIUM)</td>
<td>+ $4 M</td>
<td>+ $55 M (W/GARAGE)</td>
<td>+ $49 M (W/GARAGE)</td>
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<tr>
<td>HILL BUILDING / SITE G2</td>
<td>+ $27 M (W/GARAGE)</td>
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<td></td>
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<tr>
<td>LINK BUILDING / SITE A1 (W/ATRIUM)</td>
<td>+ $4 M</td>
<td>+ $55 M (W/GARAGE)</td>
<td>+ $49 M (W/GARAGE)</td>
</tr>
<tr>
<td>WEST BUILDING / SITE A2</td>
<td></td>
<td></td>
<td>+ $44 M (W/GARAGE)</td>
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</table>

Notes:
1. Detailed estimate for C3 option without atrium not yet developed; value for deducting the atrium was extrapolated based on C3 estimate.
2. All costs are construction costs only; soft costs not included
3. Phase 2 scheme for Option G2 not yet costed.
EDUCATION SPECIFICATIONS
PROGRAM DEVELOPMENT SOURCES

• 2004 APS Education Specifications for an 850 student middle school
• Comparison to other APS middle schools
• 2013 Guidelines for School Facilities in Virginia’s Public Schools
• Input from APS staff and educators
• Learning environment trends and developments
Program Comparisons

APS Middle Schools

Kenmore MS
- Locker Room
- Main Gym
- 132130128126
- TLT
- Locker Room
- 133131129127
- Auditorium
- TLT TLT
- 124122
- 120
- 118
- 116
- 114
- Counseling
- TLT TLT
- 110112
- 160
- 156
- 152
- 150
- 155
- 157
- 159
- 108 106
- 105 103 101
- TLT TLT
- TLT
- Open Offices
- Classrooms
- Administration

Swanson MS
- Cafeteria Kitchen

Williamsburg MS
- Basement
- First Floor
- Second Floor

Kenmore MS
- First Floor

Second Floor
## Middle School Space Analysis Comparison

<table>
<thead>
<tr>
<th>School Name</th>
<th>Number of Students</th>
<th>Building SqFt</th>
<th>Cafe SqFt</th>
<th>Gym SqFt</th>
<th>Media SqFt</th>
<th>Theater SqFt</th>
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<tbody>
<tr>
<td>Jefferson</td>
<td>869</td>
<td>219,070</td>
<td>9,340</td>
<td>67,800</td>
<td>3,603</td>
<td>14,100</td>
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<tr>
<td>Gunston</td>
<td>880</td>
<td>209,212</td>
<td>7,720</td>
<td>14,582</td>
<td>5,825</td>
<td>10,825</td>
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<tr>
<td>Kenmore</td>
<td>885</td>
<td>206,188</td>
<td>6,658</td>
<td>12,055</td>
<td>4,480</td>
<td>4,762</td>
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<tr>
<td>Swanson</td>
<td>1,006</td>
<td>132,158</td>
<td>4,560</td>
<td>12,560</td>
<td>3,107</td>
<td>3,762</td>
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<td>Williamsburg</td>
<td>1,075</td>
<td>170,865</td>
<td>6,790</td>
<td>9,055</td>
<td>4,687</td>
<td>4,600</td>
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<td>Existing</td>
<td>691</td>
<td>138,000</td>
<td>4,050</td>
<td>7,100</td>
<td>2,500</td>
<td>3,580</td>
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<tr>
<td>Stratford Phase 1</td>
<td>1,000</td>
<td>182,000</td>
<td>5,650</td>
<td>9,700</td>
<td>4,900</td>
<td>3,580</td>
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<tr>
<td>Stratford Phase 2</td>
<td>1,300</td>
<td>125,000</td>
<td>6,100</td>
<td>12,100</td>
<td>4,900</td>
<td>3,580</td>
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Building SqFt does not include relocatables.
The Jefferson Gym and Theater are shared community facilities.
Areas referenced from APS Building Conditions Surveys.
## PROGRAM SUMMARY

### SPECIAL SPACES - ADDITION THRESHOLDS

<table>
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<tr>
<th>Special Space</th>
<th>Phase 1 (1000 Students)</th>
<th>Phase 2 (1300 Students)</th>
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<tbody>
<tr>
<td>Library - Reading Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gym</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary Gym</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditorium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocal</td>
<td></td>
<td></td>
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<tr>
<td>Band</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orchestra</td>
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Requires addition or expansion
## PROGRAM SUMMARY

### SPECIAL SPACES - ADDITION THRESHOLDS

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<tr>
<th></th>
<th>EXISTING 691 Students</th>
<th>PHASE 1 1000 Students</th>
<th>PHASE 2 1300 Students</th>
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<tr>
<td>Library - Reading Room</td>
<td>2500</td>
<td>4900</td>
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<tr>
<td>Cafeteria</td>
<td>5650</td>
<td>5650</td>
<td>6100</td>
</tr>
<tr>
<td>Gym</td>
<td>7100</td>
<td>7100</td>
<td>10800</td>
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<tr>
<td>Auxiliary Gym</td>
<td>None</td>
<td>2500</td>
<td>7100</td>
</tr>
<tr>
<td>Auditorium</td>
<td>± 425 seats</td>
<td>± 425 seats</td>
<td>± 425 seats</td>
</tr>
<tr>
<td>Vocal</td>
<td>1600</td>
<td>1600</td>
<td>1600</td>
</tr>
<tr>
<td>Band</td>
<td>1900</td>
<td>1900</td>
<td>1900</td>
</tr>
<tr>
<td>Orchestra</td>
<td>None</td>
<td>None</td>
<td>1200</td>
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All numbers unless otherwise noted indicate square foot area.

No Change
OPTION RESPONDING TO HALRB INPUT
SITE OPTION A2 + “WEST” BUILDING

SITE PLAN - PHASE 1 + PHASE 2

- Site Option A2 shown
- Entry terrace from field up to addition level 1
- Three levels of structured parking under building
- 195 parking spaces
- DPR fields reorganized
- Can also work with site options A1 and C3
SITE OPTION A2 + “WEST” BUILDING

 MASSING

• 97,000 gsf
• 5 floors (2 floors higher than existing building)
• All new program at west end of building
• New full size gym on levels 1 and 2
“WEST” BUILDING

PROGRAM - PHASE 1 + PHASE 2

- Shift heart of school towards new addition
- Each grade has a neighborhood adjacent to centralized electives
- Structured parking in Phase 1
- New auxiliary gym and media center in Phase 1
- Cafeteria expands in Phase 2
- New gym in Phase 2
SITE OPTION A2 + “WEST” BUILDING

BUILDING PROS / CONS

PROS:
• Does not block south facade of classroom wing
• Does not interrupt flow from classroom wing to field
• Preserves views of the historic south facades

CONS:
• Arts, music and auditorium program far from new addition
• Structured parking must be built in Phase 1
• Impacts DPR property
A/E TEAM RECOMMENDED OPTION | 4
SITE AND BUILDING RECOMMENDATION: C3/LINK

• Creates best school for the community
• Satisfies the educational and programmatic needs the best of all schemes
• Meets the majority of identified project goals
PROS:

- Expansion of core classrooms fully integrated with existing core classrooms
- Core classroom expansion retains organizational flow of existing school
- Atrium enhances heart of school within historic school precinct
- Program for Phase 2 expansion contains “specials” only
- Parking garage costs occur in Phase 2

CONS:

- Adverse impact to view of south façade – mitigation actions required
- Adverse impact on classroom wing / field relationship – mitigation actions required
"LINK" BUILDING

PROGRAM - PHASE 1 + PHASE 2

- Central heart of school with historic interpretive opportunities
- Quality daylit classrooms = flexible programming
- Phase 1 addition improves circulation
- New auxiliary gym and media center in Phase 1
- Cafeteria expands in Phase 2
- New gym & structured parking in Phase 2
REVISIONS TO “LINK” BUILDING

Previous

Revised
“LINK” BUILDING

EXTERIOR INTERPRETIVE OPPORTUNITIES
ATRIUM PRECEDENTS
ATRIUM PRECEDENTS
QEA transformed Topeka’s historic Monroe Elementary School, associated with the landmark 1954 US Supreme Court decision on segregation, into a dynamic visitor center and regional resource for scholars of desegregation.

After preparing a comprehensive Historic Structure Report to guide the work, QEA restored the building’s masonry exterior and sensitively rehabilitated the interior to provide a backdrop for exhibits to educate visitors about race and the struggle for equality in America.
QEA HISTORIC PRESERVATION EXPERIENCE