Date: May 13, 2016

FROM: Richard Jackson, Director of Educational Facilities

THROUGH: Clarence E. Stukes, Chief Operating Officer

Dr. Alvin Crawley, Superintendent

TO: The Honorable Karen Graf, Chair, and Members of the Alexandria City School Board

TOPIC: Proposed Patrick Henry Pre-K – 8 School and Recreation Center Site Layout Options

BACKGROUND: As approved in the CIP Budget, ACPS and Recreation, Parks & Cultural Activities staff has moved forward with the development of the Patrick Henry Pre- K-8 School and Recreation Center.

This memo serves to evaluate the current Patrick Henry site design options – A.1 and C.1 (see enclosed Attachment A) – considering several factors as requested by the Board during the May 10 Patrick Henry discussion as follows:

- Safety Regarding Site Traffic Flows
- Pedestrian and Bike Safety
- Adequacy of the Proposed Building for Educational Purposes
- Project Cost
- Outdoor Open Space

In addition, it provides an update on project schedule and a summary of polling conducted during community meetings on the project.

Safety Regarding Site Traffic Flows

ACPS and the City have contracted Wells + Associates for a traffic and parking analysis of the project (see attached memo included herein as Attachment B). Both options have also been evaluated by the ACPS Director of Transportation for accessibility for buses.

A comparison of the options is presented as follows:

Both Option A1 and C1 meet the following criteria with respect to this category:

- Both maintain acceptable Levels of Service for traffic flows and intersection queuing per the requirements of the City of Alexandria
- Both are considered to be acceptable for safe bus access by ACPS's Director of Transportation
- Both bring buses on streets which the City has determined are wide enough to

accommodate two buses passing each other.

- Simply because two buses can pass each other does not mean they should. The residential streets to the west and north of Patrick Henry, including Latham, are too narrow for cars to pass comfortably, evidenced by the slowing of vehicles. Cars use the center of the street to pass parked cars. Two buses would not be able to pass on the north end of Latham or on Peacock given that two cars are not able to with parked cars along the road.

Option A1 provides the following advantages over C1 in this category:

- The greater separation between cars and buses provides slightly better Levels of Service for traffic flows on the streets around the site.

  - Directing all bus traffic back to Taney by requiring the left turn onto Latham (see recommendation below) negates this "advantage." In fact, directing all buses back to Taney will probably cause an increase in congestion at the four-way intersection of Taney/Latham and along Taney.

  A1 requires school staff or traffic personnel to help monitor pedestrian activity at two l ocations while C1 requires it at three locations.

  - The traffic study states the following:
    - "It is likely that both alternatives would require a similar number of traffic control personnel" (p.3)
  - Negatives of A1 are indicated in the study but are excluded from this memo:
    - "Alternative A-1 provides multiple points of access for students to the campus. Alternative C-1 consolidates these points and provides better control of the facility. All personnel would be in close proximity for coordination and/or emergency purposes." (p. 4)
    - "Alternative A-1 requires students from the west to travel the entire frontage of the site to connect to the sidewalk. This could necessitate or result in mid-block crossings to enter the school property." (p.4) This may become more of an issue after redistricting.
    - "The bus driveway location may also encourage pedestrians to cross at the bus access rather than at a controlled crossing. Further, the sidewalk connection on N. Latham Street could necessitate a mid-block crossing that is controlled during peak periods." (p. 4)

Option C1 provides the following advantages over A1 in this category:

- By not having a bus loop off N. Latham Street the project avoids any awkward traffic conditions at the intersection of Latham and Polk Avenue. However, this condition can be managed in a number of ways (i.e.: crossing guards, gated management of the bus loop, restricting turn directions out of the bus loop, etc).

  - Requiring this many accommodations to manage the bus loop suggests that buses are being forced into an inappropriate location. The traffic study states, "Although

access would likely be controlled, this offset [intersection between Latham and Polk] creates the opportunity for more conflicts in this area." (p. 3)

- As noted at the Board meeting, it is difficult to monitor and implement measures like a gate on the bus loop. Poor management would result in additional, unmonitored traffic and parking on the bus lane.

- is a left turn onto Latham from the bus lane with a row of parked cars physically possible? Street parking is necessary there since all residents' vehicles cannot be accommodated in driveways. And requiring left turns only will cause congestion at the Taney/Latham intersection, negating any traffic justification for placing the bus loop on Latham. The left turn accommodation, never mentioned before in any meetings, quite possibly causes as many new problems as it solves. The alternative, allowing buses to turn right, would send them down Peacock and Polk Avenues, which is also unsuitable based on the design of those streets. The better solution is not to send buses down residential streets at all.

Based on this information, the project team believes that Option A1 best meets the project criteria with respect to Site Traffic Flows anticipating that the condition at Polk Avenue would be further studied and accommodated through the design review process.

The conclusion of the traffic study states the following and does not recommend A1:

- "Based on the analyses provided, **both access alternatives would allow the site driveways to operate at acceptable levels of service** during the AM, midday (school), and PM peak hours, with only minor differences in overall delay and queuing. Thus, **while Alternative A-1 (bus driveway on N. Latham Street) splits bus and student traffic, the overall benefit of this design is minor when compared to Alternative C-1 from a delay and queuing perspective." (p. 5)**
- "It is likely that **both alternatives would require a similar number of traffic control personnel** in order to maintain operations during peak periods but varies slightly based on the location of pedestrian crossings and facilities. **While Alternative C-1 consolidates activity on Taney Avenue, it does not present capacity issues at the adjacent intersections** and maintains operations similar to current conditions. **Alternative C-1 would allow for better control of vehicular and pedestrian movements** on the campus and coordination between staff since the driveways are in close proximity to each other." (p. 5)

Pedestrian and Bus Safety

At this time, ACPS and the City are engaging a Safe Routes to School consultant to provide a detailed comparison of the two options. The analysis will include a review of the following aspects of each plan:

- It would be more appropriate to use an independent consultant rather than a group whose representative who has already publicly taken a side in this project.

- Safety of students access the site from all different directions.

68% of students come from the North East of Taney Avenue and are not required to cross either Taney Avenue or any driveways on the site.
32% of students access the site from the South East, crossing Taney but no driveways
0% of students access the site from the South West, crossing North Latham Street

- These percentages will change after redistricting, which is in process and will be completed before the school is done. It is short sighted to only use the current data and more walkers will likely come from the west after redistricting.
- These percentages do not include walkers to/from Polk Elementary and Hammond Middle School, many of whom currently use/cross North Latham Street.
- The percentages also exclude residents within the neighborhood who regularly walk along Latham and the surrounding residential streets. The safety of neighborhood residents should also play an important role in this process.

- Proposed paths of pedestrian and bike travel and a safety assessment of each to consider crossing of streets, intersections, and vehicle and bus driveways entering the site
- Student drop-off and pick-up procedures.
  - It has been stated by school staff at community meetings that the buses drop off students and depart before walkers are allowed to enter the site.

The project team plans to make this analysis available to the Board in advance of the May 19 Board meeting. This will be provided as a comparative table.

Adequacy of the Proposed Building for Educational Purposes

Both options have been reviewed by the project team and ACPS for adequacy from an educational perspective.

Both Option A1 and C1 meet the following criteria with respect to this category:

- Both accommodate all the areas as required by the educational specifications
- Both strategically place the gym, cafeteria, and black box theatre on the first floor separate from the classroom wing to be offered for community use during non- school hours.
- Both provide adequate space for parent drop-off and pick-up
- Both provide direct access from the school building to the outdoor play areas

Option A1 provides the following advantages over C1 in this category:

- The 3-story classroom wing results in placing grades 6-8 on their own floor separate from grades PK-5. This is preferable to ACPS since these grades follow a different daily class schedule, move between rooms more frequently, and require a different approach

to administration of staff and students.

- The location for bus drop-off and pick-up is in a more central location reducing the walking distance to classrooms for students during arrivals and dismissals.
- The location for bus drop-off and pick-up provide for a better separation between students and recreation center users during busy periods.

Option C1 does not provide any advantages over A1 in this category.

- The architect's slide from last week indicated that C1 drop off and pickup was in an ideal central location along the main hallway of the school.
- A major benefit of C1 is that it includes **full emergency access** to the academic wing while A1 provides only "**limited emergency access**" (Limited emergency vehicle access in A1 was presented a con of A1 on the architect's slide from 5/10 but is not considered in this memo).
- "C1 developed" includes much improved access to outdoor play spaces.
- The community has been assured that the rec center users will be completely separated from the students at all times of time, regardless of the site plan.

Based on this information, the project team believes that Option A1 best meets the project criteria with respect to Educational Program Functionality.

Project Cost

At this stage in the project only an initial review of the two options has been performed (see attached Attachment C). A comprehensive estimate of the project to gauge feasibility within the project budget will be performed once a site plan is selected and the architect has developed narratives describing the building systems, structural components, and sitework features. At this time, the project team has observed the following:

Option A1 provides the following advantages over C1 in this category:

- A 3-story classroom wing makes the overall building "footprint" smaller by 5,500 SF (approximately 5%) compared to C1, thereby reducing costs associated with structural foundations, façade, roofing, and treatment of stormwater collected on the building roof.
- The bus loop on A1 is shorter in length thereby reducing costs associated with asphalt paving and treating stormwater runoff collected on paved areas.
- The project team estimates that Option A1 would cost $1.5 - 2 million less than Option C1 based on these differences in the design.

Option C1 does not provide any advantages over A1 in this category.

Based on this information, the project team believes that Option A1 best serves the project requirements with respect to Project Cost.

- The memo seems to indicate that both A1 and C1 are estimated to be within the

approved budget. No comparison of the total cost of each building has been included.

- Attachment D from Forella Group LLC is not conclusive. It indicates that the cost data is preliminary and would need to be validated.
- Additional costs of A1 have not been quantified at this point, including the additional cost of a retaining wall (see slide from 5/10) or additional elevator costs.
- Without adequate information to make a line-by-line comparison, it seems misleading to compare the two plans against each other, **beyond requiring that they both remain in budget.**

Green Space

Throughout the entire community engagement process the project team has heard the importance of providing ample outdoor space for learning and recreation. Providing such space is also very important to ACPS, RPCA, and the City DSUP reviewers for providing an optimal school and recreation center property.

Option A1 provides the following advantages over C1 in this category:

- While both options provide approximately 7.2 acres of open space on the site, A1's largest area of contiguous open space is 4.5 acres compared to 3.9 acres for C1 – an increase of 0.6 acres or 15%.

Option C1 does not provide any advantages over A1 in this category.

- Since all open space is effectively lost in both plans, the analysis should instead be on usable open space.

Based on this information, the project team believes that Option A1 best serves the project requirements with respect to Project Cost.

- This summary statement appears to be for the "Project Cost" section of this memo, not Green Space

Schedule

The recent discussions related to selection of a site plan have taken several weeks longer than anticipated. The project team now intends to submit a Concept II plan for DSUP review in June 2016 and hold public hearings in December 2016. This requires ACPS and the City to select either the A1 or C1 by May 20, 2016. The architect will likely require an acceleration fee of $15,000-25,000 to meet these deadlines for either option, however these costs are very minor compared to costs for accelerating construction activity later in the project timeline. Any further delays in the DSUP submission timeline between now and December will have a direct impact on our June 1, 2017 construction start date and will likely lead to increased construction

costs associated with additional manpower to complete the work by the August 2018 opening.

- Neighbors are more likely to challenge A1 in the DSUP hearings. This could lead to delay.

Community Meetings and Polling

The project team utilized community polling software during meetings held on March 16 and April 6 to gather feedback and input on the design iterations presented at each meeting. The March 16 meeting shared the initial three options (A, B, and C) and asked the community to assess which aspects of the site design were most important (see summary below) and which of the initial three options best served those criteria. A full result of the polling information can be found attached as Attachment D.

Rank	Polling Topic	Meeting *	Online**	Total
1	Amount and Usability of Outdoor Green Space	245	136	381
2	Accommodating Neighborhood Scale	221	151	372
3	Promoting Biking/Walking Through Safe Site Access	234	124	358
4	Optimum Access from Building to Exterior Amenities	213	122	335
5	Distinguishing Physical Presence for School and Rec Center	236	97	333
6	Minimizing Traffic on N Latham St.	172	149	321
7	Minimizing Traffic on Taney Ave.	190	100	290
8	Separating Vehicle Entrances for School and Rec	189	91	280

*60 Attendees at March 16 Community Meeting **34 Respondents to Online Poll SCALE: 1 = Not Important 2 = Slightly Important 3 = Somewhat Important
4 = Very Important 5 = Extremely Important

On April 6 the community was presented with a design iteration titled A.1 which shifted the 3-story classroom wing of Option A to avoid overlap with the existing building while moving the bus loop to come off N. Latham Street to minimize traffic impacts to Taney Ave and better utilize the area north of the school building. The majority of respondents agreed that the A.1 design achieved the balance of the various design priorities (70% of respondents), incorporated community concerns effectively (58% of respondents), and evaluated all potential site layout options (64%). Additional polling data details are included herein as Attachment E.

- Question for Brailsford and Dunleavy: were these scientific polls? Can inferences be made from the results that are statistically accurate about the preferences of the community?

- The message and site plans provided to the **community** involved so many changes,

limited background information, and an incomplete analysis of the trade-offs (see the presentation bullet points) that this polling is unreliable. This has also left many community members confused on the details of any site plan.

- Why was the **Advisory Group's** recommendation not taken? Members of the Advisory Group were chosen to represent all stakeholders, took much time and many meetings to study materials carefully. The Advisory Group recommended Option C1 in its meeting on 4/27: http://www.acpsk12.org/news/?p=2448

- Taking all the feedback into consideration, **Design Review Team**, who had the most information and architectural experience of all groups, recommended C1. Why is this recommendation being overturned now, with no new facts?

- The Design team recommended C1 on Tuesday, May 10, and by Saturday morning, May 14, their recommendation had changed to A1.

ADDITIONAL BOARD REQUESTS:

During the discussion, a request was also made to consider updating the concept design C.1 "developed" with the building from A.1 and the bus loop on the opposite side. Materials specifically regarding "updating the concept C.1 sketch with the building from A.1 and the bus loop on the opposite side" have not been added to the package, however, the design review team has assessed the feasibility of this option.

With regards to a bus loop running parallel to N Latham Street, City reviewers provided the following comments: (1) The intended 12 foot wide "Verge" (combination pedestrian & bicycle travelway) along North Latham Street would conflict with a bus loop service lane and the building setback restrictions if the C.1 concept were changed in the ways recommended; (2) Keeping mind that the bus access lane would need to be a minimum of 200 feet from the intersection of N. Latham and Taney; this approach would greatly reduce the amount of open outdoor space and run counter to the Community's interest in complementing the neighborhood scale and massing- both of which have consistently been communicated to the team as being among the community's highest priority issues throughout the site design process; and (3) It would also run contrary to widely accepted best practices for environmentally sustainable design, the aim of which is to limit the amount of impervious surfaces on any development project site.

- The neighboring residents' highest priority was not massing or green space (although we compromised greatly on those points in all plans) but keeping our residential streets safe by eliminating vehicular access on Latham. This message has been clearly stated.

Given the above considerations, this approach would require a greater area of the site to be paved, which would add significant project costs for paving and associated stormwater management, and reduce the amount of contiguous green space available on the site.

Additionally, School Board members contemplated the interest for adding an auditorium into the design concepts. Staff presented the impact of this request and the School Board reached consensus that an auditorium was not feasible at this time. See Attachment G for additional details.

RECOMMENDATION: Based on an evaluation of the aforementioned factors identified by the School Board, the Superintendent recommends Option A-1 for further development by the design team. Regardless of the site plan selection, the concept submission will be delayed by one month.

- Based on the data above and a full analysis of the attachments provided, A1 is NOT the obvious conclusion.
- The traffic study did NOT conclude that A1 was the better site plan.
- The cost analysis includes no concrete figures. The cost analysis also ignores the delays mentioned by the Project Manager on May 12th if A1 was chosen, which included additional time because A1 has not been as developed as C1 in the process and additional time because residents are more likely to protest A1 at the DSUP hearings.
- We question the quick change in opinion, with no obvious basis for it. The project team recommended C1 on Wednesday, May 4th, Thursday, May 5th, and Tuesday, May 10th, but then changed their recommendation to A1 before the materials were posted on May 14th.