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School Board Follow-Up April 27, 2020



#### Introduction

- On December 5, 2019, the School Board directed the Interim Superintendent to complete several design studies and accompanying cost estimates to support development of the FY 2021-30 CIP.
- For each project two estimates were prepared: one from a professional cost estimator and one from a construction manager. The two estimates were reconciled prior to completion.
- This document summarizes the design studies and final total project cost estimates.



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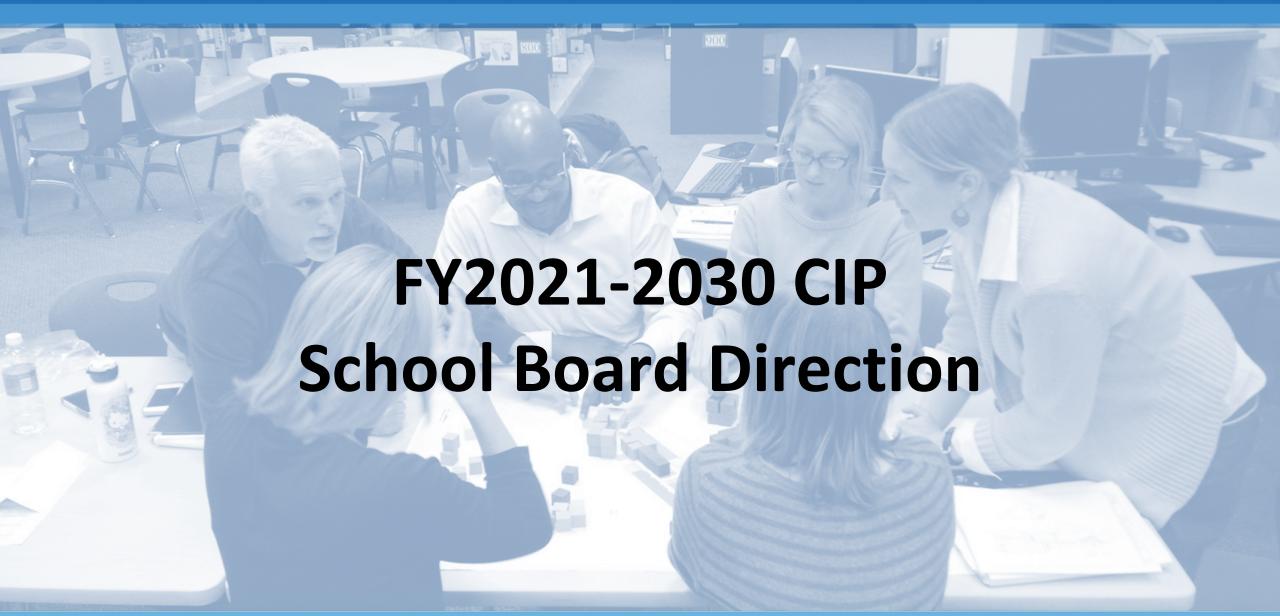
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#### **School Board CIP Direction: Design Studies**

• On December 5, 2019, the School Board directed the Interim Superintendent to conduct the following design studies to support development of the FY 2021-30 CIP.



### **Design Studies: Rosslyn-Ballston Corridor**

Properties/ Sites	Owner	Approx. Seats Added	Recommendation	Recent School CIP Projects Nearby	Estimated Cost of Design Study	
1. Arlington Traditional (ATS)	APS	ES 260-285	Study expansion and/or redevelopment for additional elementary capacity	Ashlawn – renovation and addition McKinley – renovation and addition Reed – new building	\$62,000	
2.The Heights	APS	HS No added seats	Study options to complete the project after the removal of the temporary fire station by developing  • field space OR  • field space over a belowgrade garage	Heights –new building	\$16,000	
3.Quincy St. (formerly Buck)	ACG	ES TBD	<ul> <li>Study repurposing of buildings</li> <li>2 &amp; 4, developing the site for</li> <li>additional elementary capacity OR</li> <li>Facilities and Operations shops from Trades Center</li> </ul>	Hamm – renovation and addition Washington-Liberty – Ed. Center repurposing of office building	\$57,000	



### **Design Studies: Columbia Pike Corridor**

Properties/ Sites	Owner	Approx. Seats Added	Recommendation	Recent School CIP Projects Nearby	Estimated Cost of Design Study
4. Barcroft	APS	ES 265-290	Study expansion and/or redevelopment for additional elementary capacity	Abingdon – renovation and addition A.W. Fleet - new building	\$62,000
5. Campbell	APS	ES 290-315	Study expansion and/or redevelopment for additional elementary capacity	Abingdon– renovation and addition	\$72,000
6. Career Center	APS	HS 800+	<ul> <li>March 2020 – Adopt concept design for expansion including:</li> <li>Additional 250 Arlington Tech seats for a total of 600 seats by Sept. 2021</li> <li>Creation of 800 new high school seats by Sept. 2025</li> <li>Parking garage with field on top June – adopt FY2021-30 CIP, include funds for expansion projects</li> </ul>	A.W. Fleet - new building	N/A



### **Design Studies: Columbia Pike Corridor**

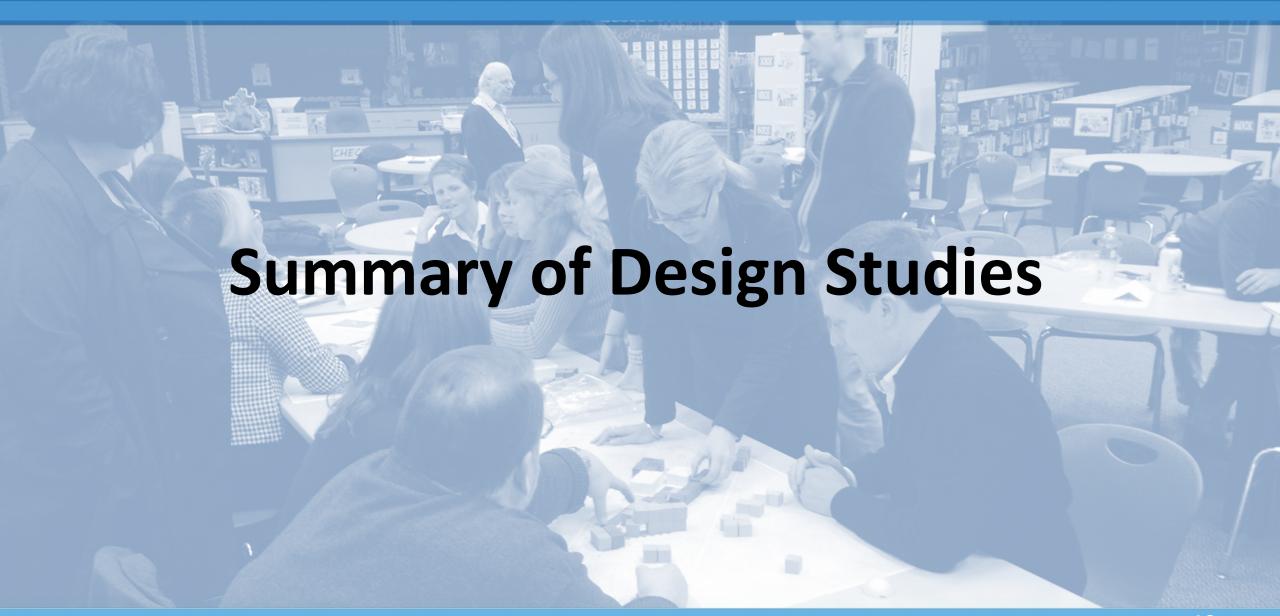
Properties/ Sites	Owner	Approx. Seats Added	Recommendation	Recent School CIP Projects Nearby	Estimated Cost of Design Study
7. Kenmore/ Carlin Springs	APS		Study parking for 65 to 80 school buses with an emergency exit road to Manchester St. or 5th Rd. S.	Ashlawn – renovation and addition	\$11,500
8. Randolph	APS	ES 240-265	Study expansion and/or redevelopment for additional elementary capacity	Abingdon- renovation and addition A.W. Fleet - new building	\$57,000
9. Virginia Hospital Center Property (VHC)	ACG	ES 500-600	Study provision of temporary swing space using relocatable classrooms for 500+ seats to facilitate redevelopment or expansion of smaller elementary schools		\$27,500



### **Design Studies: Additional Capital Investments**

Properties/ Sites	Owne r	Approx. Seats Added	Recommendation	Recent School CIP Projects Nearby	Estimated Cost of Design Study
10. Fields	APS/ ACG	N/A	Study conversion of existing field space to synthetic turf		\$4,000
11. Minor Construction/ Major Maintenance (MC/MM)	APS	N/A	Adopt a CIP that includes funds for the upkeep and maintenance of all facilities		N/A
12. Trades Center	APS	N/A	Study partial demolition, regrading & repaving for bus fleet		\$27,500
13. New elementary school	TBD	750	New elementary school on a site to be determined	TBD	\$12,500
14. Middle school addition/ renovation	TBD	300 - 500	Middle school addition/renovation at location to be determined	TBD	\$12,500







#### **Summary of Design Studies**

- For each project two estimates were prepared: one from a professional cost estimator and one from a construction manager.
- The two estimates were reconciled prior to completion to ensure similar assumptions were used as the basis of each estimate.
- Current dollars were used as the estimate baseline; values must be escalated depending on the project's completion date on a compounded basis.
  - 5% per year escalation for the first four years (2020-2024)
  - 4% per year escalation for year five and onward



## Arlington Public Schools Summary: Rosslyn-Ballston Corridor

	Project Summary												
			Number eats	ed Seats	New	ship		oject Cost in Millions ars, Excludes Escalation)					
#		Name and Scenario	Existing Num of Seats of Seats Proposed Number of Se		Potential Number of N Seats	Site Ownership	A/E Estimate	CMA Estimate	Difference (A/E - CMA)				
		Rosslyn-Ballston Corridor											
1		Arlington Traditional (ATS)											
	Α	Addition & Renovation	465	750	285	APS	\$ 51.31	\$ 52.06	\$ (0.75)				
	В	Replacement	465	750	285	APS	\$ 67.52	\$ 73.62	\$ (6.10)				
2		The Heights											
	Α	Field	N/A	N/A	N/A	APS	\$ 4.23	\$ 4.23	\$ -				
	В	Field & Underground Parking	N/A	N/A	N/A	APS	\$ 14.66	\$ 14.85	\$ (0.19)				
3		Quincy Site											
	Α	Elementary School Use	-	390	390	ACG	\$ 30.22	\$ 27.21	\$ 3.01				
	В	Facilities & Operation Use	N/A	N/A	N/A	ACG	\$ 9.96	\$ 9.23	\$ 0.73				



## Arlington Public Schools Summary: Columbia Pike Corridor

			Pr	oject Sumr	mary				
			mber .s	seats	al New	ship		oject Cost in irs, Excludes	
#		Name and Scenario	Existing Number of Seats Proposed Number of Seats		Potential Number of New Seats	Site Ownership	A/E Estimate	CMA Estimate	Difference (A/E - CMA)
		Columbia Pike Corridor							
4		Barcroft							
	Α	Addition & Renovation	460	765	305	APS	\$ 52.51	\$ 49.15	\$ 3.36
	В	Replacement	460	775	315	APS	\$ 58.71	\$ 60.50	\$ (1.79)
5		Campbell							
	Α	Addition & Renovation	436	750	314	APS	\$ 58.79	\$ 55.24	\$ 3.55
	В	Replacement	436	750	314	APS	\$ 70.09	\$ 72.63	\$ (2.54)
6		Career Center							
				Exclu	ided				
7		Kenmore							
	Α	Bus Parking	N/A	N/A	N/A	APS	\$ 1.89	\$ 2.10	\$ (0.21)
8		Randolph							
	Α	Addition & Renovation	484	750	266	APS & ACG	\$ 39.38	\$ 37.34	\$ 2.04
	В	Replacement	484	750	266	APS	\$ 69.75	\$ 74.74	\$ (4.99)
9		Virginia Hospital Site							
	Α	Temp. Elementary School	-	564	564	ACG	\$ 19.98	\$ 18.72	\$ 1.26



# Arlington Public Schools Summary: Additional Capital Investments

	Project Summary											
			mber s	d Seats	New	ship		oject Cost in rs, Excludes				
#		Name and Scenario	Existing Number of Seats Proposed Number of Seats		Potential Number of New Seats	Site Ownership	A/E Estimate	CMA Estimate	Difference (A/E - CMA)			
		Additional Capital Investments										
10		Fields										
		Excluded										
11		MC/MM										
				Exclu	ided							
12		Trades Center										
	Α	Expand Bus Parking	N/A	N/A	N/A	APS	\$ 6.29	\$ 4.69	\$ 1.60			
13		New Elementary School (location TBD)										
	Α	School with Surface Parking	-	750	750	TBD	\$ 67.65	\$ 63.47	\$ 4.18			
	В	School with Standalone Parking Garage	-	750	750	TBD	\$ 76.77	\$ 73.26	\$ 3.51			
	С	School with Underground Parking Garage	-	750	750	TBD	\$ 74.15	\$ 79.55	\$ (5.40)			
14		Middle School Addition / Renovation (locat	ion TBD)									
	Α	Gunston Addition & Renovation	992	1,540	548	APS	\$ 49.80	\$ 44.98	\$ 4.82			
	В	Kenmore Addition & Renovation	1,045	1,570	525	APS	\$ 19.66	\$ 17.83	\$ 1.83			







## Arlington Public Schools Arlington Traditional School: Summary

			Pr	oject Sumr	nary					
			nber s	ed Seats	II New	ship		Total Project Cost in M 20 Dollars, Excludes Es		
#		Name and Scenario	Existing Num of Seats	Proposed Number of Se	Potentia Number of I Seats	Site Owner	A/E	Estilliate	CMA Estimate	Difference (A/E - CMA)
1		Arlington Traditional (ATS)								
	Α	Addition & Renovation	465	750	285	APS	\$ 5	1.31	\$ 52.06	\$ (0.75)
	В	Replacement	465	750	285	APS	\$ 6	7.52	\$ 73.62	\$ (6.10)



### **Arlington Traditional School: Addition + Renovation**



**Existing Site Plan** 

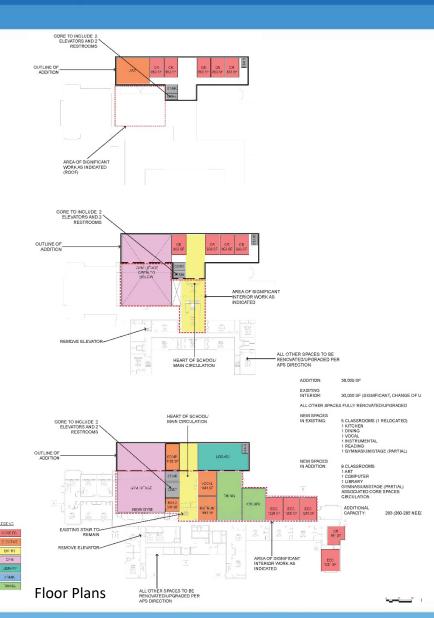
**Proposed Site Plan** 







**Aerial Views** 





### **Arlington Traditional School: Replacement**



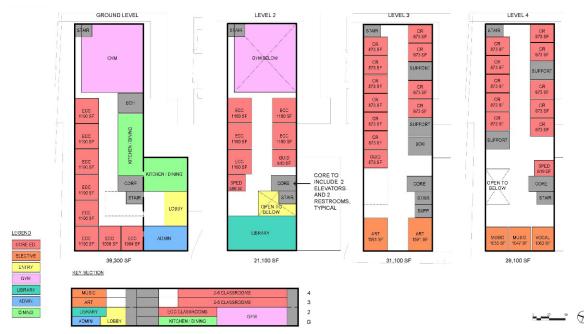
**Existing Site Plan** 



**Proposed Site Plan** 



Aerial Views (existing building ghosted for context)



Floor Plans







### The Heights Building

- New design studies were not prepared for The Heights Building. Cost estimates were based on preliminary construction documents prepared during the design phase of The Heights Building project.
- Two scenarios were estimated: (1) constructing artificial turf field space and (2) constructing field space above a below grade parking garage per original design.

	Project Summary										
			mber ts	ed Seats	New	ship		oject Cost in ars, Excludes			
#		Name and Scenario	Existing Nur of Seats	Proposed Number of Se	Potentia Number of I Seats	Site Owner	A/E Estimate	CMA Estimate	Difference (A/E - CMA)		
2		The Heights									
	Α	Field	N/A	N/A	N/A	APS	\$ 4.23	\$ 4.23	\$ -		
	В	Field & Underground Parking	N/A	N/A	N/A	APS	\$ 14.66	\$ 14.85	\$ (0.19)		







## Arlington Public Schools Quincy (Buck) Site: Summary

			Pr	oject Sumr	mary				
			Existing Number of Seats Of Se				oject Cost in irs, Excludes		
#		Name and Scenario	Nu	ropose ber of	Poten umber Sea	Site Owner	A/E Estimate	CMA Estimate	Difference (A/E - CMA)
3		Quincy Site							
	Α	Elementary School Use	-	390	390	ACG	\$ 30.22	\$ 27.21	\$ 3.01
	В	Facilities & Operation Use	N/A	N/A	N/A	ACG	\$ 9.96	\$ 9.23	\$ 0.73

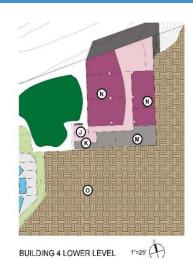


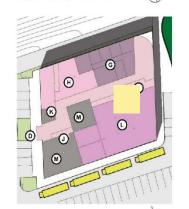
#### Quincy (Buck) Site: Elementary School Use (Buildings 2 and 4)



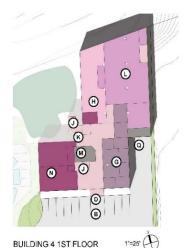


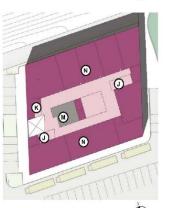




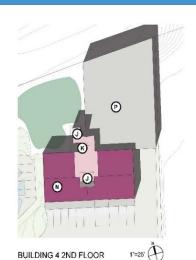


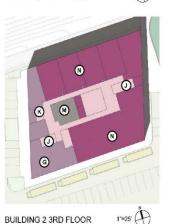






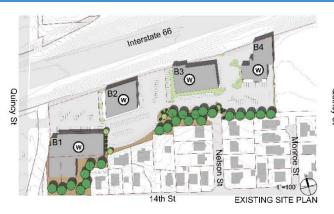






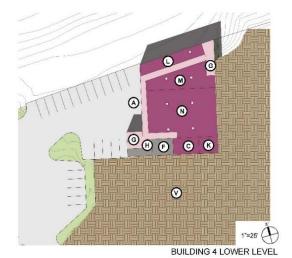


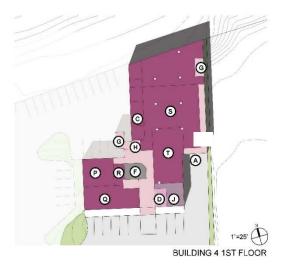
#### Quincy (Buck) Site: Trade Offices/Shops Use (Building 4)

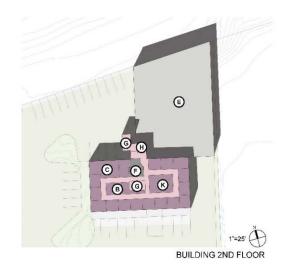












- Service Entrance
- (B) Cubicles
- C Offices

- F Building Services

- G Stair
- (H) Elevator
- Break Room
- (K) General Storage
- (L) Plumbing Storage M Roofing Storage

- Grounds Storage
- Low Voltage Storage
- Locks Storage

Carpentry Storage

- (U) HVAC Shop and Storage
- **Existing Building**
- Required Parking







## Arlington Public Schools Barcroft: Summary

	Project Summary											
			Existing Number of Seats of Seats Number of Seats Number of Seats Potential Number of New Seats	_ ž	rship	Total Project Cost in Million (2020 Dollars, Excludes Escala						
#		Name and Scenario	Nu	Propose umber of	Poter umber Sea	Site Owner	!	A/E Estimate	CMA	Estimate	Difference	(A/E - CMA)
4		Barcroft										
	Α	Addition & Renovation	460	765	305	APS	\$	52.51	\$	49.15	\$	3.36
	В	Replacement	460	775	315	APS	\$	58.71	\$	60.50	\$	(1.79)



#### **Barcroft: Addition + Renovation**









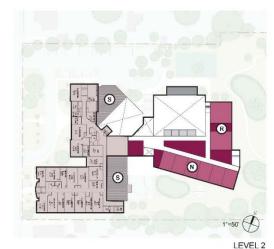


**EXISTING CONDITIONS** 









LEVEL 1

- Existing Play Fields
- (B) Existing Barcroft Elementary School
- C Existing Drop-off
- (D) Existing Parking
- (E) Main Entrance
- PROPOSED SITE PLAN F Expanded Parking & Drop-off

- New School Entrance
- (H) Service
- Courtyard
- (K) Early Childhood Play Area
- Outdoor Education
- M Outdoor Play Area (K-5)

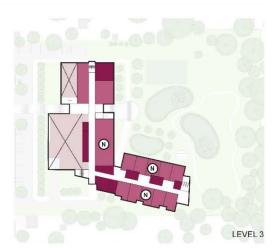
- N Instruction
- P Gymnasium
- (a) Music
- R Art
- S Roc
- T Ball Court



### **Barcroft: Replacement**

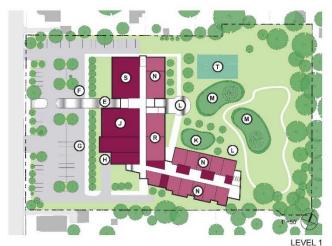


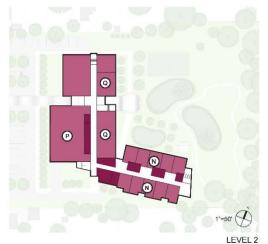




1"=100" EXISTING SITE PLAN





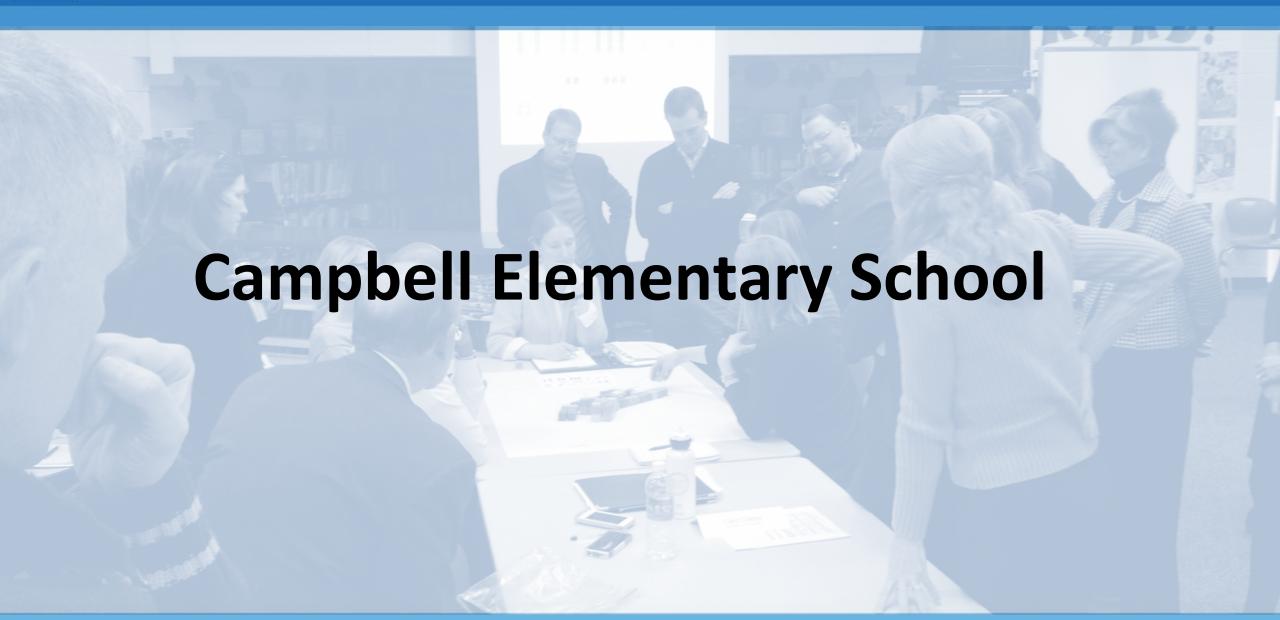


- A Existing Play Fields
- B Existing Barcroft Elementary School
- C Existing Drop-off
- Existing Parking
- (E) Main Entrance New Bus Drop-off
- PROPOSED SITE PLAN

- New Car Drop-off
- (H) Service
- Dining
- K Early Childhood Play Area
- Outdoor Education
- M Outdoor Play Area (K-5)

- N Instruction
- (P) Gymnasium
- Music
- R Art
- S Admin (T) Ball Court







## Arlington Public Schools Campbell: Summary

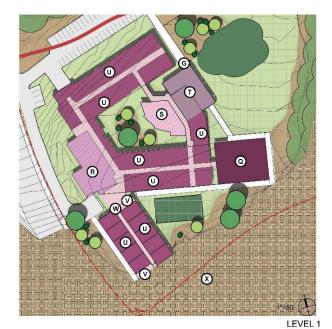
			Pr	oject Sumr	nary					
			mber ts	seats	New	ship	Total Project Cost in Millions (2020 Dollars, Excludes Escalation)			
#		Name and Scenario	Existing Nur of Seat	Proposed Number of Se	Potentia Number of Seats	Site Owner	!	A/E Estimate	CMA Estimate	Difference (A/E - CMA)
5		Campbell								
	Α	Addition & Renovation	436	750	314	APS	\$	58.79	\$ 55.24	\$ 3.55
	В	Replacement	436	750	314	APS	\$	70.09	\$ 72.63	\$ (2.54)



### Arlington Public Schools Campbell: Addition + Renovation



**AERIAL VIEW** 



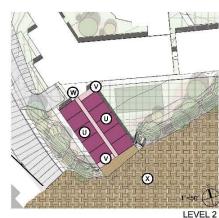
© The Road

7th Road

T=100

EXISTING SITE PLAN









- A Existing Campbell ES
- B Existing Parent Drop-off
- © Existing Bus Loop
- Existing Main Entrance
- E Existing Forested Area
- F Parent Drop-off

- G School Entrance
- (H) Bus Drop-off
- J Entry for Bus Riders 3rd Floor
- K Early Childhood Play Area
- L Upper grades Play Area
- M Contractor Lay Down / Prep Area

- N Service
- (P) Expanded Parking Lot
- (Q) Gym
- R Dining Commons
- (S) Library
- Admin Suite

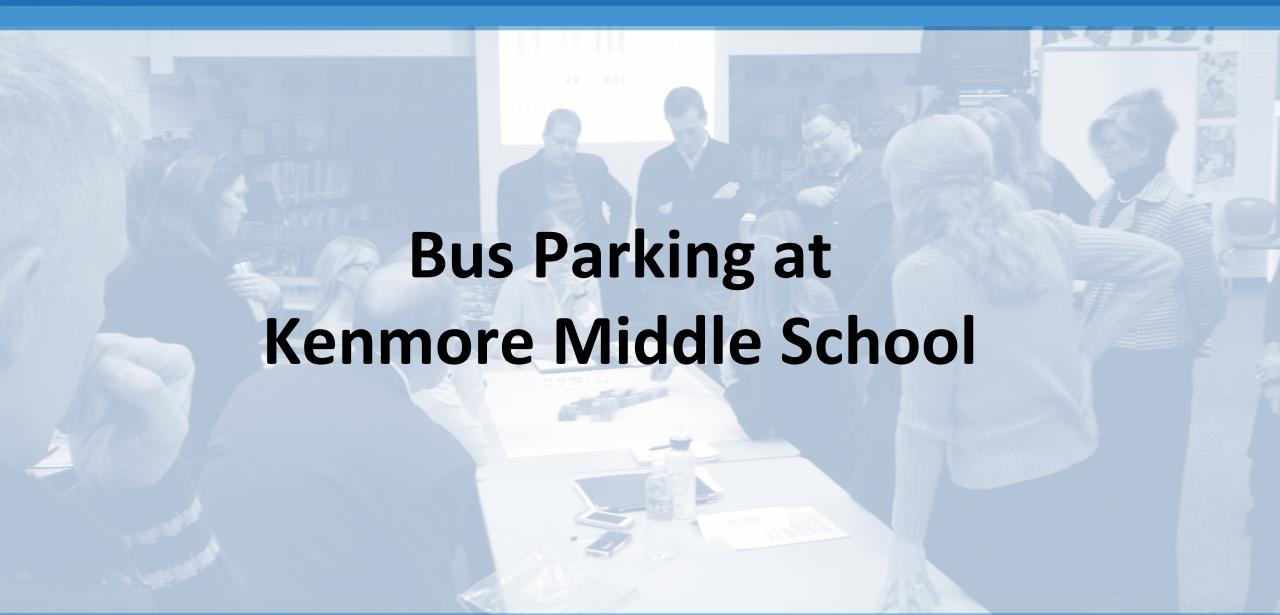
- Educational Spaces
- ♥ Stairs
- W Elevator
- Unexcavated
- RPA Boundary Line
- 2



## Arlington Public Schools Campbell: Replacement







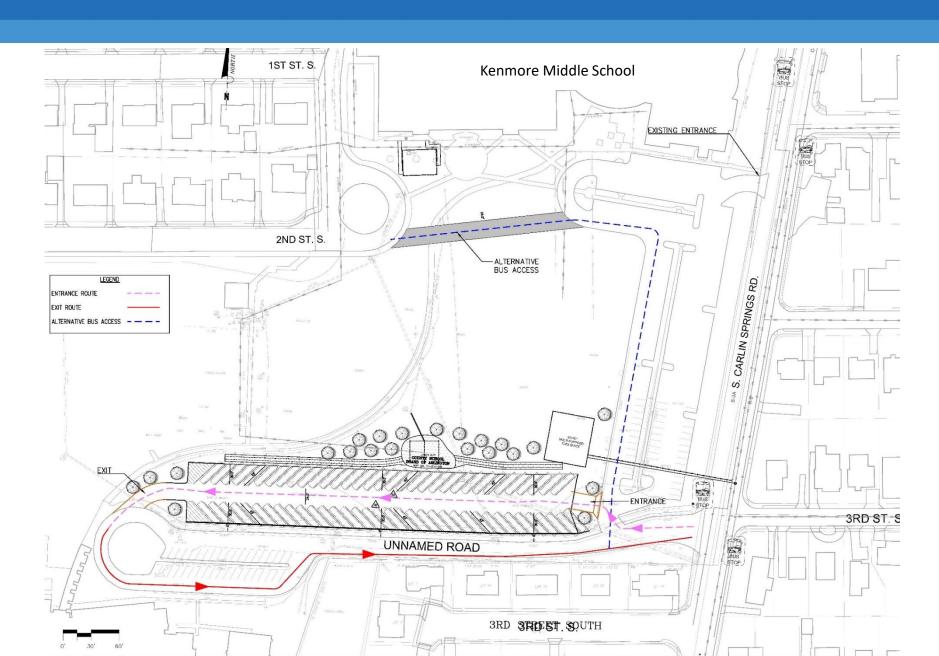


# Arlington Public Schools Bus Parking at Kenmore: Summary

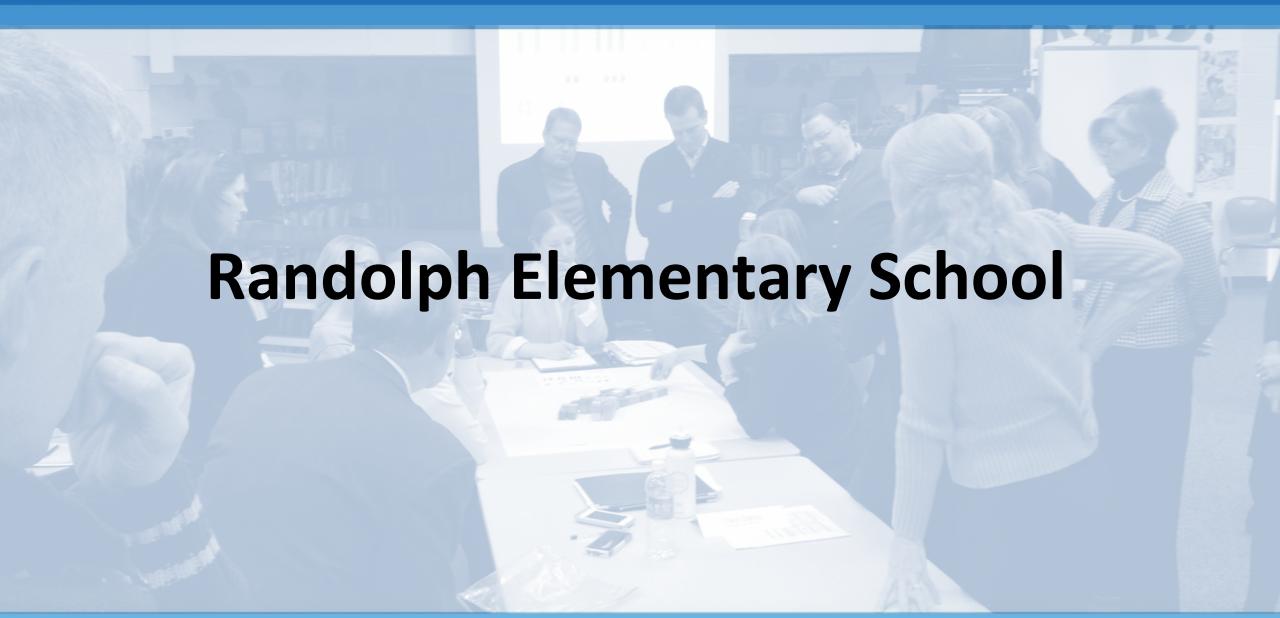
			Pr	oject Sumr	mary					
			mber s	ed Seats	I New	ship	Total Project Cost in Millions (2020 Dollars, Excludes Escalation)			
#		Name and Scenario	Existing Num of Seats	Proposed Number of Se	Potentia Number of I Seats	Site Owners	A/E Estimate	CMA Estimate	Difference (A/E - CMA)	
•	7	Kenmore								
	Α	Bus Parking	N/A	N/A	N/A	APS	\$ 1.89	\$ 2.10	\$ (0.21)	



### **Bus Parking at Kenmore (66 Buses)**









# Arlington Public Schools Randolph Elementary School: Summary

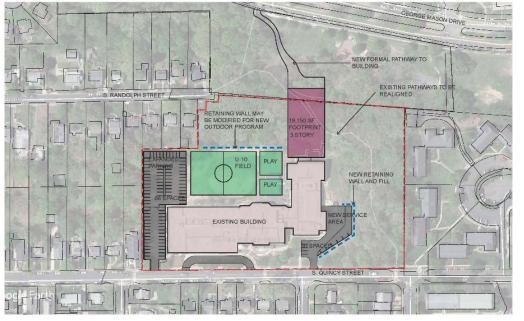
	Project Summary										
			mber ts	ed Seats	l New	hip		oject Cost in rs, Excludes			
#		Name and Scenario	Existing Num of Seats Proposed Number of Se	Potentia Number of Seats	Site Owner	A/E Estimate	CMA Estimate	Difference (A/E - CMA)			
8		Randolph									
	Α	Addition & Renovation	484	750	266	APS & ACG	\$ 39.38	\$ 37.34	\$ 2.04		
	В	Replacement	484	750	266	APS	\$ 69.75	\$ 74.74	\$ (4.99)		



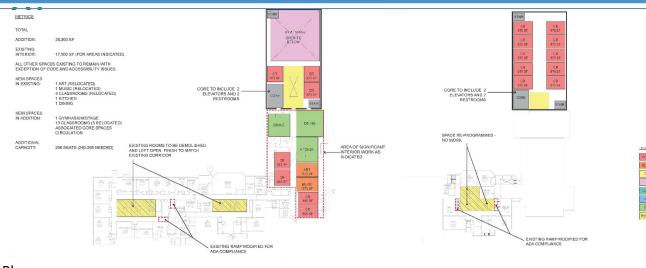
## Arlington Public Schools Randolph: Addition + Renovation



**Existing Site Plan** 



Proposed Site Plan



Floor Plans

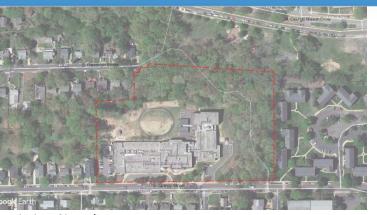


**Aerial Views** 

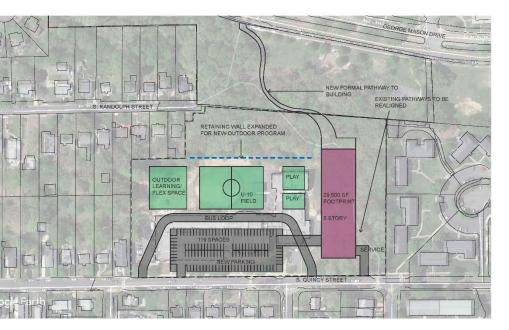


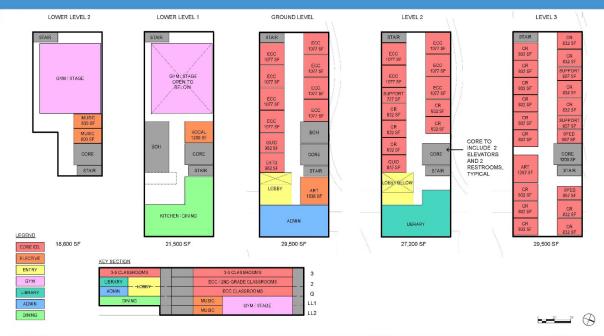


# Arlington Public Schools Randolph: Replacement



**Existing Site Plan** 





Floor Plans





Aerial Views (existing building ghosted for context)



# Virginia Hospital Center Temporary Swing Space for Elementary School



## Arlington Public Schools Virginia Hospital Site: Summary

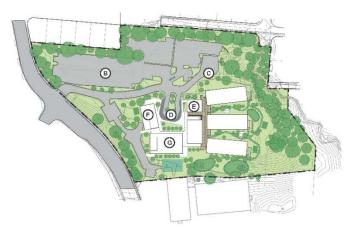
	Project Summary										
#			nber s	Seats	Potential Number of New Seats	Site Ownership	Total Project Cost in Million (2020 Dollars, Excludes Escala				
		Name and Scenario	Existing Nurr of Seats	Proposed Number of Sc			A/E Estimate	CMA Estimate	Difference (A/E - CMA)		
9		Virginia Hospital Site									
	Α	Temp. Elementary School	-	564	564	ACG	\$ 19.98	\$ 18.72	\$ 1.26		



## Arlington Public Schools Virginia Hospital Site: ES Relocatable Classroom Village









PROPOSED SITE PLAN





G Gynmasium

H Service

(K) Early Childhood Play Area

M Outdoor Play Area (K-5)

(L) Outdoor Education

Media

- Existing Medical Building footprint (to be demolished)
- (B) Existing Parking to Remain
- © Bus Drop-off
- O Car Drop-off
- (E) Main Entrance & Admin
- F Dining









- N Instruction
- P Ball Court





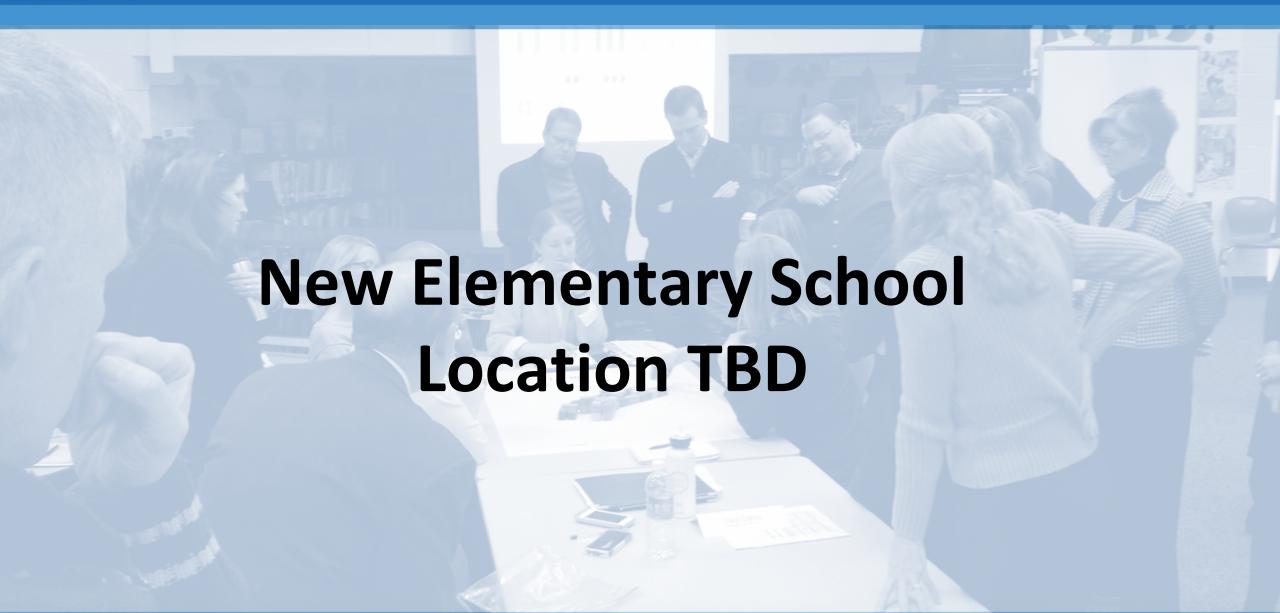


## **Trades Center: Expand Bus Parking**

- Study of partial demolition, regrading, and repaving to expand bus parking at the Trades Center.
- Study being completed in coordination with overall Trades Center redevelopment master plan underway by Arlington County.

	Project Summary									
			nber s	ed Seats	I New	ship	Total Project Cost in Millions (2020 Dollars, Excludes Escalation)			
#		Name and Scenario		Owne	A/E Estimate	CMA Estimate	Difference (A/E - CMA)			
12	2	Trades Center								
	A	Expand Bus Parking	N/A	N/A	N/A	APS	\$ 6.29	\$ 4.69	\$ 1.60	







## **New Elementary School (Location TBD)**

**New School Capacity: 750** 

- New Elementary School project was based on a hypothetical site.
- No formal design studies were completed. Three scenarios were estimated: (1)
  new school with surface parking, (2) new school with standalone parking garage on
  the same site, and (3) new school with underground parking beneath the school
  building.

	Project Summary										
			nber	ed Seats	l New	dius	Total Project Cost in Millions (2020 Dollars, Excludes Escalation)				
#		Name and Scenario	Existing Num of Seats	Proposed Number of Se	Potentia Number of I Seats	Site Owner	A/E Estimate	CMA Estimate	Difference (A/E - CMA)		
13		New Elementary School (location TBD)									
	Α	School with Surface Parking	-	750	750	TBD	\$ 67.65	\$ 63.47	\$ 4.18		
	В	School with Standalone Parking Garage	-	750	750	TBD	\$ 76.77	\$ 73.26	\$ 3.51		
	С	School with Underground Parking Garage	-	750	750	TBD	\$ 74.15	\$ 79.55	\$ (5.40)		







# Arlington Public Schools Middle School: Summary

	Project Summary									
		Name and Scenario	nber s	pose	Potential Number of New Seats	Site Ownership	Total Project Cost in Millions (2020 Dollars, Excludes Escalation)			
#			Existing Num of Seats				A/E Estimate	CMA Estimate	Difference (A/E - CMA)	
14	ļ	Middle School Addition / Renovation (local	tion TBD)							
	Α	Gunston Addition & Renovation	992	1,540	548	APS	\$ 49.80	\$ 44.98	\$ 4.82	
	В	Kenmore Addition & Renovation	1,045	1,570	525	APS	\$ 19.66	\$ 17.83	\$ 1.83	



## **Gunston Middle School: Addition + Renovation**





## **Kenmore Middle School: Addition**







**AERIAL VIEW** 

**EXISTING CONDITIONS** 



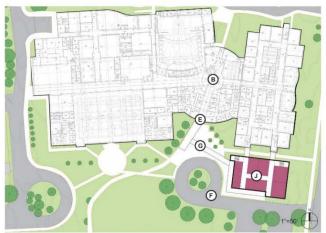
EXISTING SITE PLAN

PROPOSED SITE PLAN





- Existing Play Fields B Existing Kenmore Middle School
- C Existing Drop-off
- (D) Existing Parking
- (E) Main Entrance
- (F) New Drop-off





- New Canopy
- (H) Service
- Instruction
- (K) Covered Walkway



