

# TAB B-1

JOHN EATON ELEMENTARY  
3301 LOWELL STREET, NW  
WASHINGTON DC 20008

BZA HEARING  
JUNE 26, 2019



JOHN EATON ELEMENTARY SCHOOL  
MODERNIZATION





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# Areas of Relief Sought

## 2. FAR (Floor Area Ratio)

Floor area ratio limited to .9 = 59,535 sq.ft.

Causes of required relief:

- Existing area of 52,543 was close to the site limit.
- Proposed area of 77,365 exceeds the site limit.
- Additional new spaces are needed to meet the educational space standards.
- Area is required to provide separate gymnasium and cafeteria spaces.
- Increasing individual classroom areas is necessary to meet educational standards.
- Additional student services and administrative spaces are required.

## 2. Retaining Wall Height

Retaining walls in excess of 4 feet require relief.

Causes of required relief:

- Existing site walls exceed the limit, but any modification triggers new relief.
- Due to the site's grade, retaining walls are required to create accessible play areas.
- Shifting the east retaining wall out (within the property line) is required to maintain outdoor play space.

## 3. Recreational Rooftop Areas

Rooftop recreational area are required to have two 10 foot wide paths to the right of way

Causes of required relief:

- Roofs over the gymnasium and stage are integrated with the playground to maximize the play area.
- 10 foot wide paths on the east side would reduce the available field area.
- The 10 foot wide requirement exceeds the reasonable path required for egress from area the size of both the roof sections, so the current configuration does not limit access.



**APPLICABLE CODES:**

- Building:** 12 DCMR A, Building Code Supplement, International Building Code – 2012 Ed.(IBC)
- Electrical:** 12 DCMR C, Electrical Code Supplement, National Electrical Code, (NFPA 70) – 2011 Edition
- Mechanical:** 12 DCMR E, Mechanical Code Supplement, International Mechanical Code – 2012 Ed.
- Plumbing:** 12 DCMR F, Plumbing Code Supplement, International Building Code – 2012 Ed.
- Fire Prevention:** 12 DCMR H, Fire Code Supplement, International Fire Code – 2012 Ed. (IFC)
- Accessibility:** 2010 Americans with Disabilities Act, Standards for Accessible Design (ADA); ICC A117.1, Accessible and Usable Buildings and Facilities – 2009 Ed.
- Other:** National Fire Protection Association (NFPA) Standards, as referenced by the 2012 IBC, including NFPA 10, NFPA 13, NFPA 72, etc.  
  
12 DCMR D, Fuel Gas Code Supplement, International Fuel Gas Code – 2012 Ed.  
  
12 DCMR I, Energy Code Supplement, International Energy Conservation Code – 2012 Ed.  
  
12 DCMR K, Green Construction Code Supplement, International Green Construction Code – 2012 Ed.  
  
DC Law 8-36 District of Columbia Environmental Policy Act of 1989  
  
DCMR Title 11- Zoning Requirements

**ZONING NOTES:**

- Project Name:** John Eaton Elementary School Modernization
- Project Address:** 3301 Lowell Street, NW Washington, DC 20008
- Square:** 2088
- Lot:** 0800, 1
- Zoning Class:** R-1-B
- Lot Area:** 66,150 SF (1.5 Acres)
- Flood Zone:** FEMA Flood Map 1100010012C Zone X - Minimal Flood Hazard

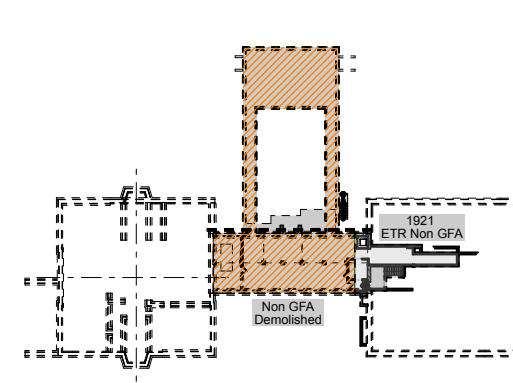
**ZONING NOTES (Continued):**

- Historic District:** Cleveland Park Historic District
- Use:** District of Columbia Public School, Primary education, Pre-K through grade 5 (no change of use).
- GAR:** Not required within R-1B
- Set Backs:** Front yard Section B-315.3, if a lot has more than one street lot line, the owner may choose the lot line that shall determine the application of any front setback requirement.  
  
The front yard is currently considered to be Lowell Street and no changes proposed.

ZONING DATA SUMMARY			
DATA	EXISTING	PROPOSED	ALLOWED / REQUIRED
<b>SETBACKS &amp; BUILDING HEIGHTS - Per C1606.1</b>			
Front Yard Setback (Lowell Street)	9.6' Linear Feet	9.6' Linear Feet	0' Linear Feet / Not Required
Side Yard Setback (Left when gacing the property)	0' Linear Feet	0' Linear Feet	0' Linear Feet / Not Required
Side Yard Setback (Right when gacing the property)	3' Linear Feet	3' Linear Feet	0' Linear Feet / Not Required
Rear Yard Setback (Macomb Street)	94.5' Linear Feet	31.5' Linear Feet	25' Linear Feet*
Building Height (Stories)	3 Stories	3* Stories	4 Stories
Building Height (Feet)	57'-1 1/2"	57'-1 1/2"	60'
* Additional Relief for corner lots available per C-1606.2, but not required for compliance			
<b>AREAS</b>			
Lot Area	66,150 Square feet	66,150 Square feet	-
Gross Floor Area** (GFA) of Entire Building (Sum of all floors)	52,543 Square feet	77,365 Square feet	59,535 Square feet
Floor Area Ratio ** (FAR = GFA / Lot Area)	0.79 FAR	1.17 FAR	0.9 FAR
Building Area	22,181 Square feet	30,147 Square feet	39,090 Square feet
Lot Occupancy (Building Area / Lot Area)	34%	46.30%	60.00%
**GFA Calculated per 304 using Building height measuring point calculated from the average of proposeed grade at the midpoint of the front and rear building facades (Proposed grade is lower than existing in both locations).			
<b>AREAS</b>			
Penhouses (Mechanical)	1 - to be demolished in full 11' high	1 (19' x 23' nom) 10' high	Not required***
Parking (Per C-702 within an R Zone)	0 - No on site parking	0 - No on site parking	Not required***
Bicycle Parking - Short Term (Education public Per C-802.1)	14	14	Not required***
Bicycle Parking - Long Term (Education public Per C-802.1)	0	0	Not required***
Showers (Per C-806.1)	1 Shower (not functioning)	1 Shower	Not required***
	0 Showers	1 Shower	Alternate compliance per zoning 2 minimum or as required for new construction
Loading Dock (Per C-901.1)****	0****	0****	Not required***
Pervious Area (Per C-1609)	15,954 sf	20,245 sf	30% x 66,150 = 19,845 sf
	24.1%	30.6%	30%
***For historic resources, vehicle parking, bicycle parking, and loading requirements are triggered when the addition will result an increase of more than 50% of the existing GFA. Based on the calculations, the additional GFA will be 24,822 sq. ft., which is less than 50% of the GFA of the existing building (50% of 52,543 sq. ft. = 26,271.5 sq. ft.). Accordingly, additional vehicle parking, bicycle parking, and loading are not required. ****Loading Area is provided, but area does not meet requirements of dock.			

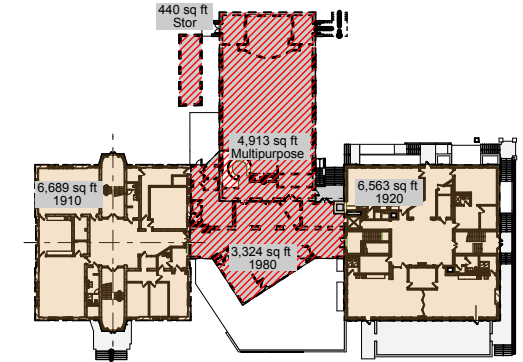






## Lower Level Existing

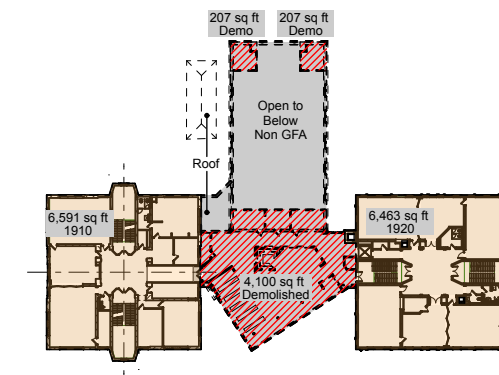
SCALE: 1" = 100'



## 1st FI Existing

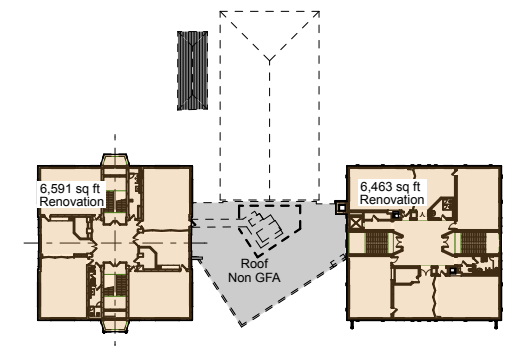
SCALE: 1" = 100'

Existing GFA By Floor Areas			
	Existing to Remain	Demolished	Combined
Level - Basement			
All below average grade - non GFA			
<b>TOTAL - Level 0</b>	-	-	
Level - 1			
1910 Pavilion	6,689 sf		
1920 Pavilion	6,563 sf		
1930 Multipurpose		4,913 sf	
1980 Connector		3,324 sf	
Storage Building		440 sf	
New Construction			
<b>TOTAL - Level 1</b>	<b>13,252 sf</b>	<b>8,677 sf</b>	<b>21,929 sf</b>
Level - 2			
1910 Pavilion	6,591 sf		
1920 Pavilion	6,463 sf		
1930 Multipurpose		414	
1980 Connector		4,100	
New Construction			
<b>TOTAL - Level 2</b>	<b>13,054</b>	<b>4,514</b>	<b>17,568 sf</b>
Level - 3			
1910 Pavilion	6,591 sf		
1920 Pavilion	6,455 sf		
1930 Multipurpose			
1980 Connector			
New Construction			
<b>TOTAL - Level 3</b>	<b>13,046</b>	-	<b>13,046 sf</b>
<b>TOTAL Existing GFA</b>	<b>39,352 sf</b>	<b>13,191</b>	<b>52,543 sf</b>



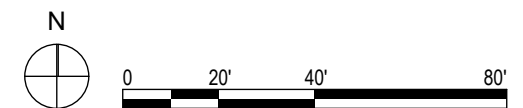
## 2nd FI Existing

SCALE: 1" = 100'



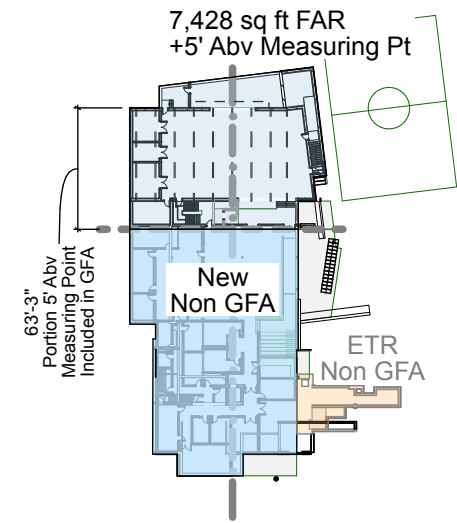
## 3rd FI Existing

SCALE: 1" = 100'



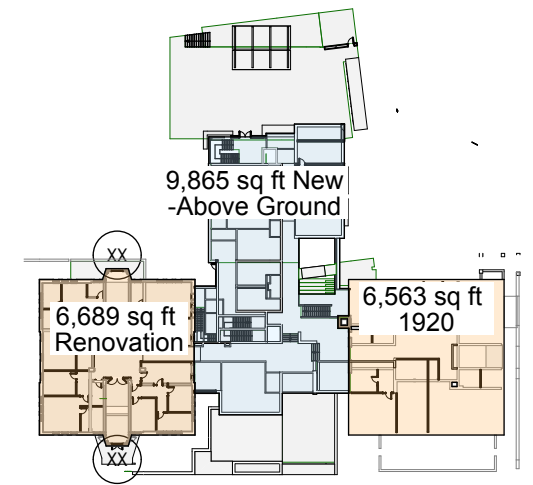
Proposed GFA By Floor Areas			
	Renovation	Proposed Construction	Combined
<b>Level - Basement</b>			
Remainder Below Grade - Non GFA			
New w 5' Above BMP - Contributing to GFA		7,428	
<b>TOTAL - Level 0</b>	-	<b>7,428 sf</b>	
<b>Level - 1</b>			
1910 Pavilion	6,689 sf		
1920 Pavilion	6,563 sf		
1930 Multipurpose			
1980 Connector			
Storage Building			
New Construction		9,865 sf	
<b>TOTAL - Level 1</b>	<b>13,252 sf</b>	<b>9,865 sf</b>	<b>23,117 sf</b>
<b>Level - 2</b>			
1910 Pavilion	6,591 sf		
1920 Pavilion	6,463 sf		
1930 Multipurpose			
1980 Connector			
New Construction		10,060 sf	
<b>TOTAL - Level 2</b>	<b>13,054</b>	<b>10,060 sf</b>	<b>23,114 sf</b>
<b>Level - 3</b>			
1910 Pavilion	6,591 sf		
1920 Pavilion	6,455 sf		
1930 Multipurpose			
1980 Connector			
New Construction		10,660 sf	
<b>TOTAL - Level 3</b>	<b>13,046 sf</b>	<b>10,660 sf</b>	<b>23,706 sf</b>
<b>TOTAL Proposed GFA</b>	<b>39,352 sf</b>	<b>38,013 sf</b>	<b>77,365 sf</b>

\*Includes elevator shafts & stairs. Double ht spaces only counted at the lower level.



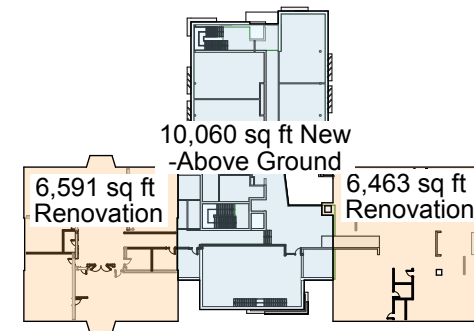
### Lower level

SCALE: 1" =100'



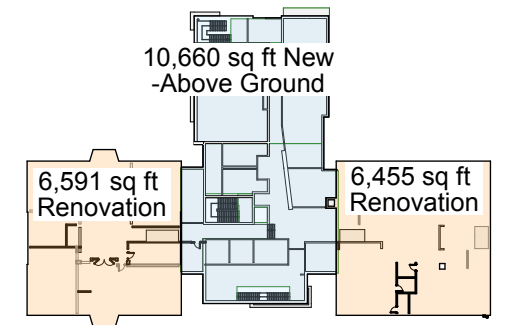
### 1st Floor Plan

SCALE: 1" =100'



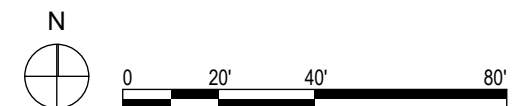
### 2nd Floor Plan

SCALE: 1" =100'

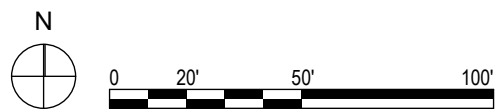


### 3rd Floor Plan

SCALE: 1" =100'



- ① Entry Plaza
- ② Sign Originally from 1920 Connector
- ③ Original School Entry
- ④ Partially Demolished Coal Vault
- ⑤ Loading Dock
- ⑥ Storage Shed
- ⑦ Play Court
- ⑧ Playground
- ⑨ Artificial Turf Field
- ⑩ Early Education Playground
- ⑪ Retaining Wall
- ⑫ Retaining / Planters
- ⑬ Public Garden
- ⑭ Early Education Plaza
- ⑮ Existing Short Term Bike Racks



BZA Submission **Existing Site Plan**

JOHN EATON ELEMENTARY SCHOOL MODERNIZATION

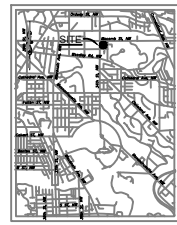
cox graae + spack architects

JUNE 19, 2019

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Structure Table	
Structure Name	Structure Details
4 MHD	RIM = 293.66 15" INV OUT = 289.70 NW
8 MHD	RIM = 292.34 42" INV IN = 281.28 W 15" INV IN = 283.50 S 15" INV IN = 285.61 NE 42" INV OUT = 281.01 E
13 MHD	RIM = 293.47 42" INV IN = 282.93 W 18" INV IN = 285.71 SW 15" INV IN = 285.55 SE 12" INV IN = 289.30 SW 42" INV OUT = 282.70 E
19 MHD	RIM = 294.16 15" INV IN = 290.67 W 15" INV IN = 290.65 S 12" INV IN = 290.65 SW 18" INV OUT = 290.44 NE
24 MHD	RIM = 294.68 15" INV OUT = 291.03 E
26 MHD	RIM = 296.11 15" INV OUT = 294.86 N
28 MHS	RIM = 293.40 12" INV IN = 282.48 W 12" INV OUT = 282.26 E
31 MHS	RIM = 293.96 12" INV IN = 284.34 S 12" INV IN = 282.97 W 12" INV OUT = 282.84 E
35 MHS	RIM = 301.84 12" INV IN = 291.17 S 10" INV IN = 289.45 E 12" INV OUT = 289.06 N
39 MHD	RIM = 301.16 15" INV IN = 291.70 S 10" INV IN = 289.47 E 15" INV OUT = 288.27 N
44 MHD	RIM = 313.14 15" INV IN = 304.04 W 15" INV OUT = 303.91 N
47 MHD	RIM = 313.77 12" INV IN = 305.64 W 10" INV IN = 310.68 NW 10" INV IN = 310.18 SW 15" INV OUT = 305.52 E
52 MHD	RIM = 314.74
53 MHS	RIM = 313.50 10" INV IN = 303.33 W 10" INV IN = 308.44 S 10" INV IN = 308.93 W 12" INV OUT = 303.26 N
58 MHD	RIM = 318.26 12" INV IN = 310.08 W 10" INV IN = 310.54 S 12" INV OUT = 309.88 E
62 MHD	RIM = 320.58 12" INV OUT = 312.95 E
64 MHS	RIM = 323.68 10" INV OUT = 314.85 E
66 MHD	RIM = 325.65 12" INV IN = 321.27 SW 12" INV IN = 322.07 NW 15" INV IN = 316.43 W 15" INV IN = 316.05 S 15" INV OUT = 315.95 N
72 MHS	RIM = 326.30 12" INV IN = 317.04 W 12" INV OUT = 314.44 N
74 MHD	RIM = 313.53 15" INV IN = 304.28 S 12" INV IN = 308.74 W 15" INV OUT = 304.10 N
78 MHD	RIM = 312.11
79 MHD	RIM = 312.69 15" INV IN = 302.83 S 18" INV IN = 303.82 SW 18" INV IN = 303.83 NW 12" INV IN = 304.62 SE 18" INV IN = 308.48 NW 24" INV OUT = 301.75 E
86 MHS	RIM = 313.48 12" INV IN = 302.93 S 12" INV IN = 303.33 W 12" INV OUT = 302.79 N
90 MHS	RIM = 313.19 12" INV IN = 301.83 S 10" INV IN = 301.90 N 12" INV IN = 298.63 W 12" INV OUT = 298.46 E



NOTES:  
 1. HORIZONTAL DATUM: DISTRICT OF COLUMBIA SURVEYOR'S OFFICE MEDIUM  
 2. VERTICAL DATUM: BASED ON DISTRICT OF COLUMBIA DEPARTMENT OF PUBLIC WORKS  
 3. PROPERTY IS ZONED: R-1-B  
 4. THIS IS NOT A REVENUE SURVEY. PROPERTY INFORMATION SHOWN HEREON IS FOR INFORMATION PURPOSE ONLY AND NOT OBTAINED FROM RECORDS AND SHOULD BE CORROBORATED BY THE PROPERTY LINE ENGINEERS FROM OFFICIAL CITY RECORDS. CITY RECORDS MAY NOT NECESSARILY AGREE WITH ACTUAL MEASURED CONDITIONS. ALL PROPERTY LINES REFLECTED ON THIS SURVEY DO NOT CHANGE BY THE OFFICE OF THE SURVEYOR, D.C. THIS SURVEY DOES NOT IMPLY A WARRANTY TO ANY PARTY. THE PROPERTY LINE REFLECTED ON THIS SURVEY IS NOT TO BE USED FOR ANY CONSTRUCTION STAKEOUT PURPOSES. A SURVEY TO MARK MUST BE APPROVED BY THE OFFICE OF THE SURVEYOR PRIOR TO BEGINNING ANY BUILDING DEMOLITION OR CONSTRUCTION OPERATIONS.  
 5. THE UNDERGROUND UTILITIES INDICATED HEREON ARE DERIVED FROM PLANS SUPPLIED BY VARIOUS UTILITY COMPANIES AND LIMITED SUBSURFACE UTILITY ENGINEERING (LSE) QUALITY LEVEL B DESIGNATION. THE LOCATION OF THESE UTILITIES SHOULD BE CONSIDERED APPROXIMATE AND OTHER UTILITIES MAY EXIST WHICH HAVE NO RECORD OR ARE UNDETECTABLE WITH CONVENTIONAL METHODS. NO GUARANTEE OR WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF UTILITY INFORMATION PROVIDED HEREON. UTILITIES LABELED (DATA) ARE SHOWN UPON THIS ACCORDING TO RECORDS.  
 SURVEYOR'S CERTIFICATE:  
 I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THIS SURVEY IS CORRECT AND THAT THE SURVEY WAS CONDUCTED BY A TOTAL STATION FIELD SURVEY MADE ON THE GROUND, THAT THE SURVEY CORRECTLY SHOWS THE HORIZONTAL AND VERTICAL LOCATION OF VISIBLE ABOVE-GROUND IMPROVEMENTS SHOWN HEREON AND THAT UNLESS OTHERWISE SHOWN, PROPERTY MARKERS HAVE NOT BEEN SET WITH THIS SURVEY.

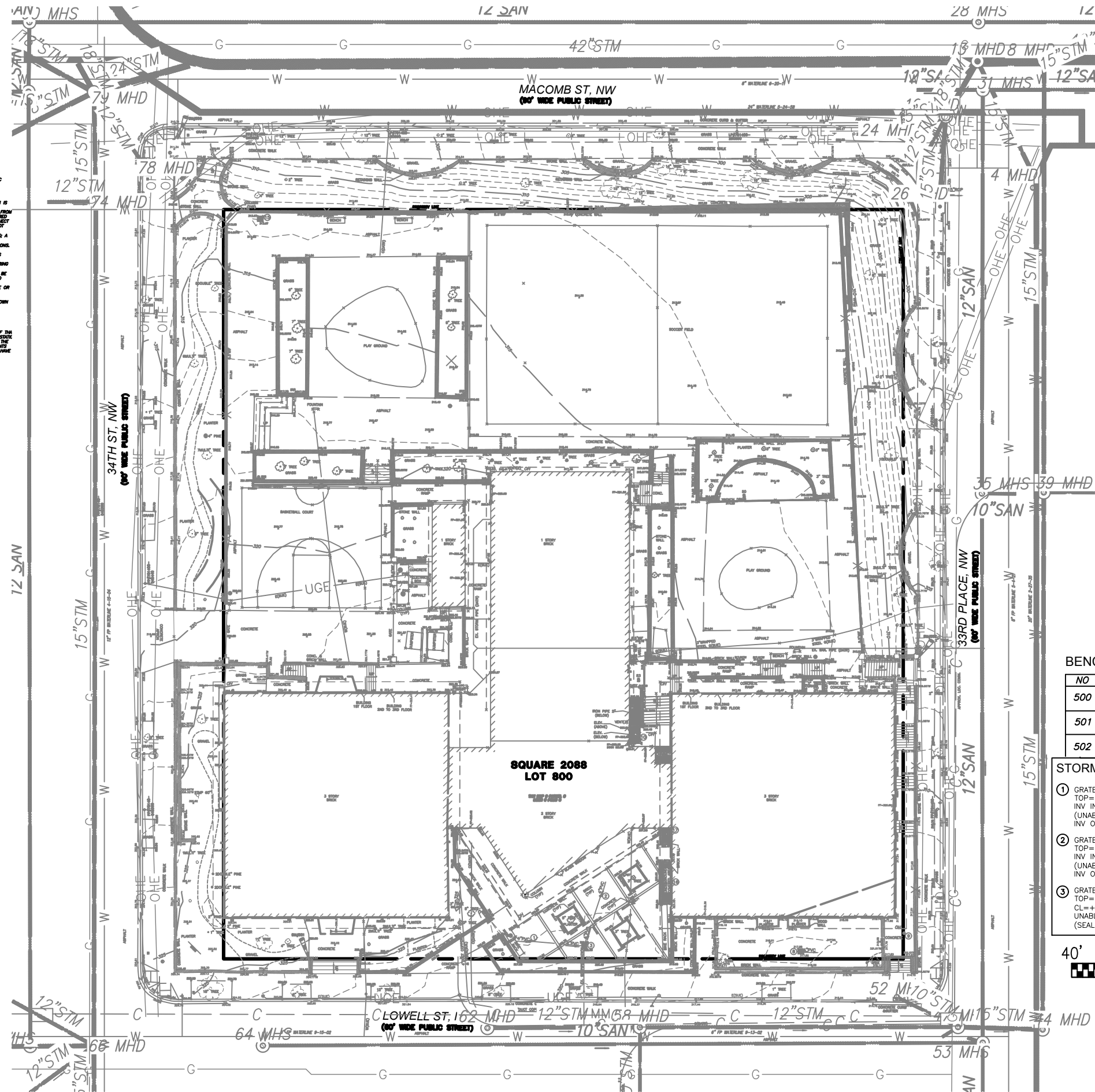
DANIEL S. SCHROEDER  
 LICENSED SURVEYOR  
 DISTRICT OF COLUMBIA LICENSE NO. LS 80088  
 FOR AND BY:

LEGEND:

	BUSH
	TREE
	STAKE
	GRATE INLET
	GRATE INLET SOUND
	STORM MANHOLE
	DRAIN
	ROOF DRAIN
	POST
	SINGLE POST SIGN
	TRAFFIC SIGNAL POLE
	LIGHT POLE
	POWER POLE
	GUY WIRE
	TRASH CAN
	LAMP
	ELECTRIC BOX
	ELECTRIC OUTLET
	GROUND SPOT
	TOP OF WALL ELEVATION
	SANITARY SEWER MANHOLE
	GAS METER
	VENT
	BOLLARD
	TRANSVERSE
	STORM MANHOLE
	HOSE BIBB
	GUY WIRE
	FIRE HYDRANT
	BENCHMARK
	CURB AND GUTTER
	INTERLINE PAINT MARK
	UNDERGROUND CONSTRUCTION PLAN
	OVERHEAD ELECTRIC LINE
	UNDERGROUND GAS PIPE
	OVERHEAD GAS PIPE
	BROUGHT IRON FENCE
	DATA ACCORDING TO RECORDS
	FINISH FLOOR ELEVATION
	SEWER DOOR
	BUILDING
	WALL
	UNDERGROUND AREA

UTILITY INFORMATION:

UTILITY COMPANY	STATUS
VERIDON 12101 Columbia Pike RD-1 Silver Spring, MD 20904	COMPOSITE OF VERIDON PLANS
PEPCO 701 North St. ALE Washington, DC 20008	NO REPLY AT THIS TIME
WASHINGTON GAS 8801 Industrial Road Springfield, VA 22151	COMPOSITE OF WASHINGTON GAS PLANS
DC WATER 2000 Overlook Avenue, S.E. Washington, DC 20002	COMPOSITE OF DC - DWP PLANS ALL 15-18 INVERT, ALL 15-18 INVERT LN 15-18 SEWER



TRAVERSE DATA:

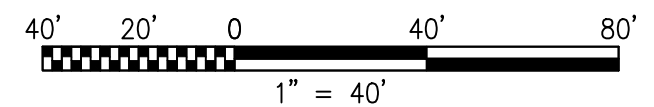
NO	NORTHING	EASTING	ELEV	DESCRIPTION
100	4839.8151	10869.0734	313.24	MAG NAIL
101	4840.1721	11204.3103	293.78	CROSS-CUT
102	4680.9004	11233.9193	300.64	REBAR & CAP
103	4463.9303	11234.2596	313.23	REBAR & CAP
104	4457.1453	11079.6993	318.71	CROSS-CUT
105	4446.6107	10875.0312	326.00	CROSS-CUT

BENCH MARK DATA:

NO	ELEV	DESCRIPTION
500	313.26	CROSS-CUT SET ON SOUTH BOLT OF FIRE HYDRANT
501	325.78	SQUARE CUT ON TOP OF WALL
502	309.88	SQUARE CUT ON TOP OF WALL

STORM SEWER DATA:

① GRATE INLET TOP=323.03 INV IN=322.33 INV OUT=322.30 (UNABLE TO GET CONNECTION)	⑧ GRATE INLET TOP=317.83 INV OUT=+/-316.4	⑯ DRAIN TOP=UNABLE TO GET TOP (COVERED AREA)
② GRATE INLET TOP=323.19 INV IN=322.47 INV OUT=322.46 (UNABLE TO GET CONNECTION)	⑨ DRAIN TOP=317.66 CL=+/-315.8	⑰ DRAIN TOP=320.69 CL=+/-319.6
③ GRATE INLET TOP=322.55 CL=+/-317.9 UNABLE TO GET INVERTS (SEALED COVER)	⑩ DRAIN TOP=307.73 CL=+/-306.4	⑱ GRATE INLET TOP=313.70 CL=+/-308.8 (FULL OF WATER)



**BZA Submission Existing Grading Plan**  
**JOHN EATON ELEMENTARY SCHOOL MODERNIZATION**



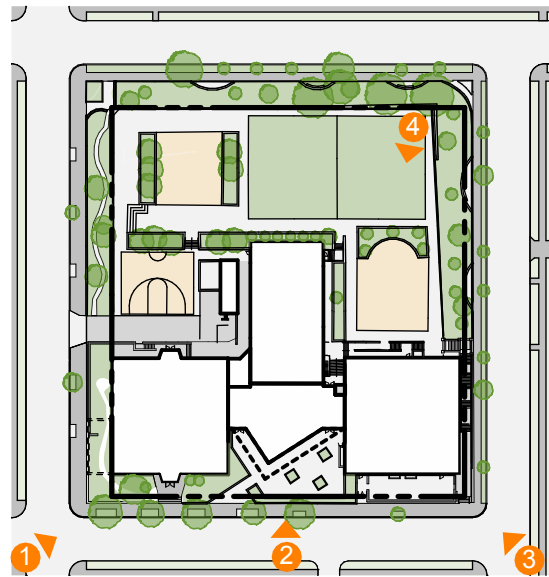




1. South-West Corner



2. South Entry



KeyPlan  
NOT TO SCALE



3. South-East Corner



4. North from Field

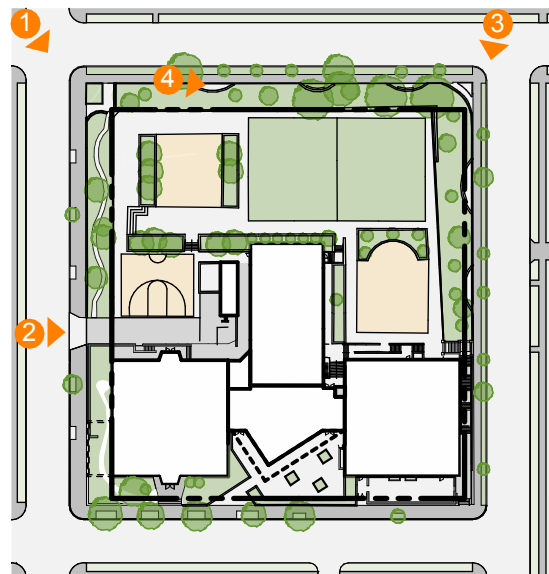




1. North-West Corner



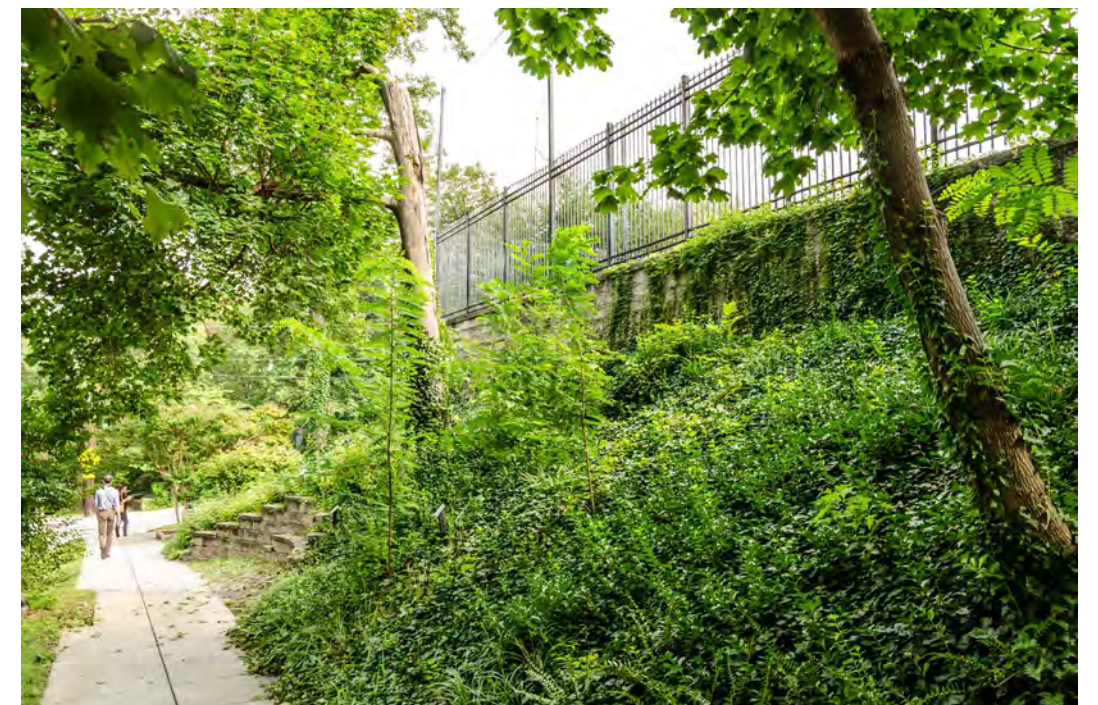
2. Loading Dock



KeyPlan  
NOT TO SCALE



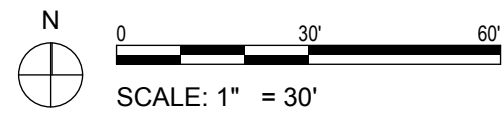
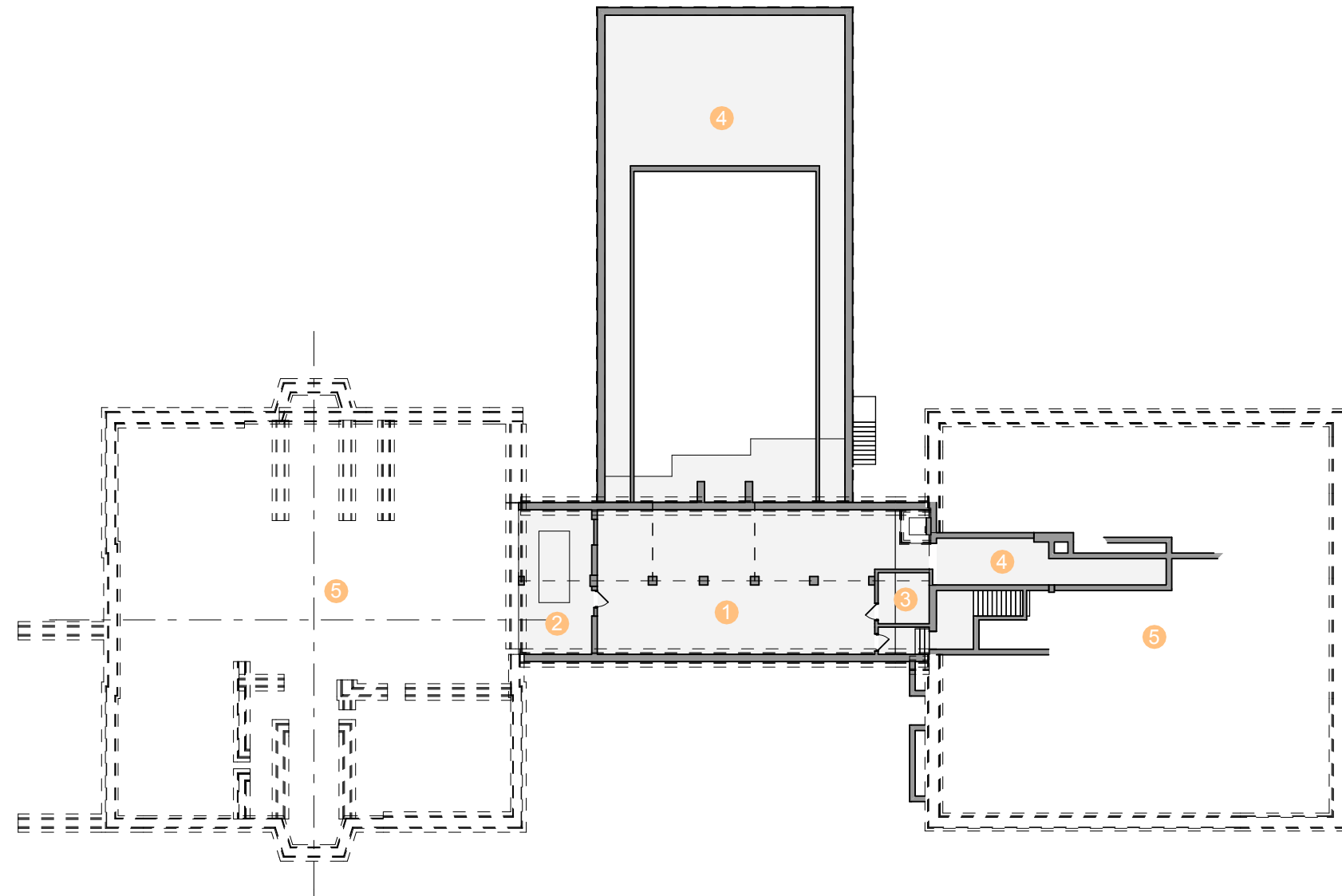
3. North-East Corner



4. North Site Walls

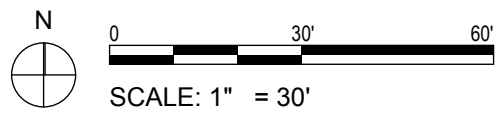


- ① Main Mechanical Room
- ② Main Electrical Room
- ③ Elevator Control Room
- ④ Partial Height Mechanical Tunnel
- ⑤ Un Excavated
- ⑥ Abandoned Coal Vault



Existing Lower Level

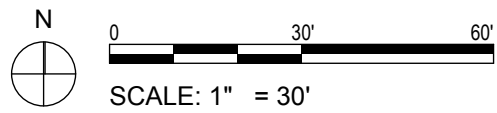
- 1 Entry Plaza
- 2 Administrative Suite
- 3 Kitchen
- 4 Multi-Purpose Room
- 5 Stage
- 6 Early Education Classroom
- 7 Stair
- 8 Circulation
- 9 Storage
- 10 Historic Entry
- 11 Elevator



**BZA Submission Existing 1st Floor Plan**

JOHN EATON ELEMENTARY SCHOOL MODERNIZATION

- ① Library
- ② Administrative Area
- ③ Mechanical Room
- ④ Multi-Purpose Room
- ⑤ Storage
- ⑥ Education Classroom
- ⑦ Stair
- ⑧ Circulation
- ⑨ Storage
- ⑩ Resource Room
- ⑪ Elevator
- ⑫ Specials Classroom
- ⑬ Mechanical / JC
- ⑭ Restroom



**BZA Submission Existing 2nd Floor Plan**

JOHN EATON ELEMENTARY SCHOOL MODERNIZATION

**cox graae + spack architects**

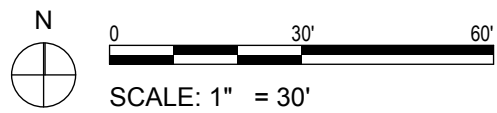
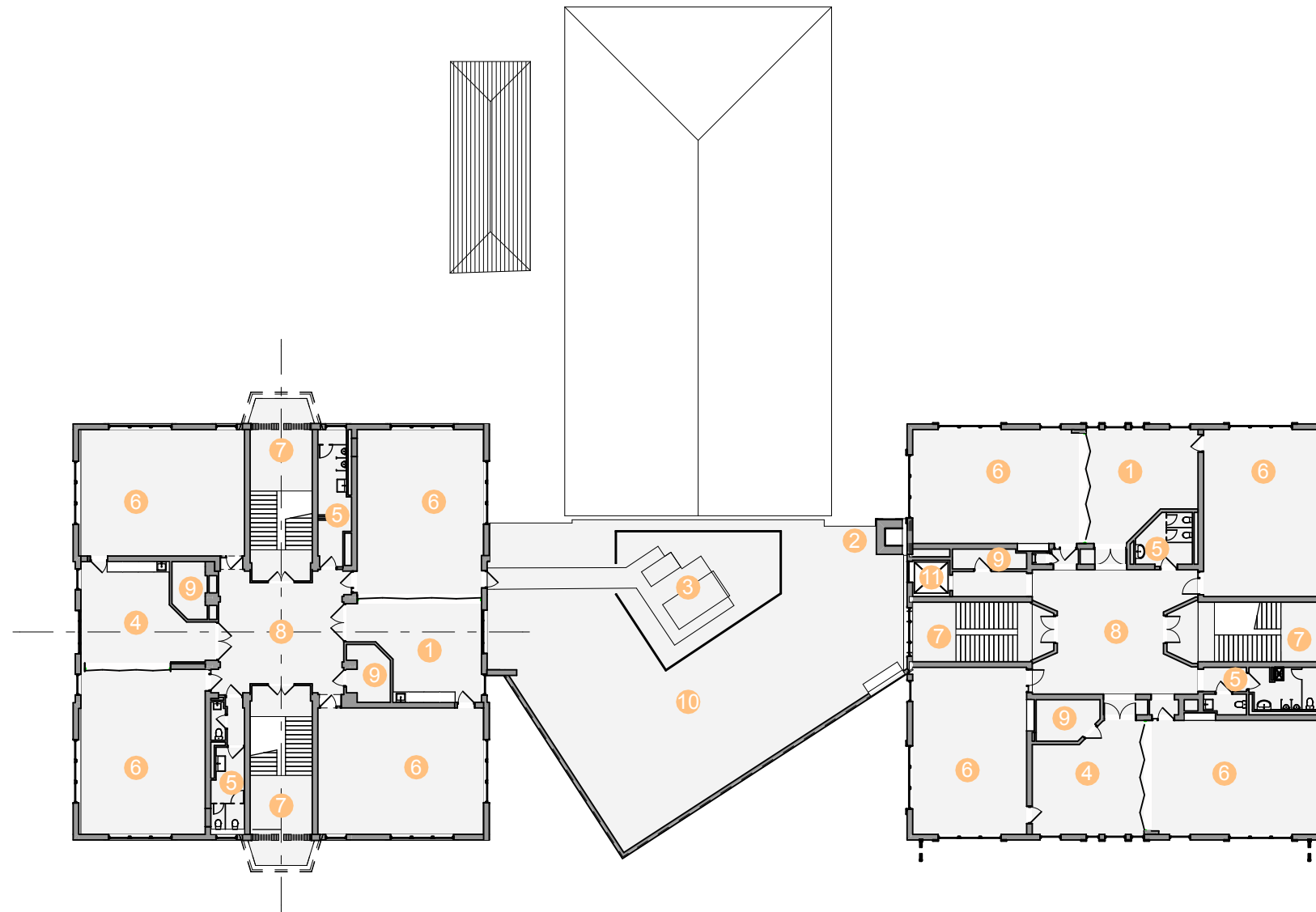
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- ① Specials Classroom
- ② Historic Chimney
- ③ Cooling Tower / Mechanical Enclosure
- ④ Resource Room
- ⑤ Restroom
- ⑥ Primary Education Classroom
- ⑦ Stair
- ⑧ Circulation
- ⑨ Storage
- ⑩ Roof
- ⑪ Elevator



**BZA Submission Existing 3rd Floor Plan**

JOHN EATON ELEMENTARY SCHOOL MODERNIZATION

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- ① Slate Roof
- ② Standing Seam - painted
- ③ Standing Seam - prefinished
- ④ Bitimous flat roof
- ⑤ Historic Roof Ventilator - 19 10
- ⑥ Historic Balcony - 19 10
- ⑦ Cupola - 1930
- ⑧ Chimney with Copper cap - 1923
- ⑨ Mechanical vent - contemporary
- ⑩ Mechanical Enclosure

