3.1.5 Site Development Requirements

A. Site Development Narrative
B. Zoning and Setbacks
C. Site Survey and Wetlands
D. Emergency Vehicle Access
E. Safety and Security

[redacted] A. Site Development Narrative

A . Site Development Narrative

Site Access and Circulation:

- Peebles - The single access and egress driveway to Peebles Elementary School exists north of the school at Trowbridge Road. A new continuous loop road surrounding the building is required. A new connection to the greater campus is desired for emergency vehicles.
- Bournedale: The existing school is served by three access and egress driveways at Ernest Valeri Road. Site circulation works well and any design options shall maintain these access points.

Parking and Paving:

- A separate bus drop-off and pick-up lane will be designated to accommodate the required buses for options. New pavement, curbs, signage, HC access requirements, and pavement markings are anticipated.
- Additional parking spaces are contemplated to accommodate increased student population and improved car circulation.
- A new pedestrian walkway system is required all Peebles design options and modification and additional walkways at all Bournedale design options.
- The amount of new paving and parking must consider the overall design capacity of the site storm water management system

Utilities:

- New perimeter building lighting and site lighting will be required at all Peebles options and additional at all Bournedale options.
- A new or reconstructed building provides opportunities to incorporate sustainable features, i.e. bio-swales, rain gardens, porous pavement, rain water reuse, etc., which may help achieve LEED-Silver points.
- New storm water structures will be required to reduce or eliminate total suspended solids (TSS), infiltrate rooftop run-off, and reduce the overall rate and volume of storm water traveling over the site.
- Loading dock and service area must be improved to better accommodate deliveries at all Peebles options.
- New fire protection water service connections to the building for fire sprinklers will be needed at the Peebles options.
- The existing septic system at Bournedale will need to expand for the increased student population
- The existing Waste Water Treatment Plant on the Peebles campus site can accommodate the design alternatives consider for the site. New connections will be required.

Outdoor play and educational spaces:

- Two separate safe and easily-accessible play areas are required for both project sites. The grouping required at Peebles will be K-1 and 2-4/2-5 depending on the option. The grouping required at Bournedale will be Pre-K-2 and 3-4. It has been discussed with the building committee that grades 3 and 4 can continue to cross the access driveway supervised.
- All play areas must be located the proper distance away form classrooms to limit distraction
- It is desired that an outdoor classroom have electrical, water, and project lay-down areas.
- The existing tennis courts with associated parking are required to be relocated as part of the Peebles design alternatives

Site Limitations

- Wetlands and the flood plain do not extend into the project's limits at the Peebles and Bournedale Elementary School sites. Refer to Section 3.1.5 section C for further detail.
- Bournedale: The existing school building, existing site utilities, existing septic system must be considered in the design of a renovation/addition project to limit disruption to the day-to-day operation of the school

[redacted] B. Zoning and Setbacks

B. Zoning and Setbacks

The Zoning Bylaws require the following setbacks and height limitations:

According to the Town of Bourne Zoning Map, the Peebles Elementary School is located in the R40 Zoning District. According to the Zoning Bylaw, Municipal Uses are allowed in R40 Zoning Districts but must be approved by the Planning Board as part of a Site Plan Review.

Peebles Elementary School, 70 Trowbridge Road

The Dimensional Requirements for the site under an R40 zoning are as follows:

Min. Lot Area of the first Dwelling Unit	40,000 square feet
Minimum Continuous Frontage	125 feet
Front Yard Setback	30 feet
Rear Yard Setback	15 feet
Side Yard Setback	15 feet
Building Height	35 feet
Maximum Building Lot Coverage	20%
Minimum Usable open space	20%

Bournedale Elementary School, 41 Ernest Valeri Road

According to the Zoning Map, the Bournedale Elementary School site is located in the SDD Zoning Overlay District. According to the Zoning Bylaw any use permitted in the R40 Zoning District is allowed in the SDD Overlay District. Municipal Uses are allowed in R40 Zoning Districts but must be approved by the Planning Board as part of a Site Plan Review.

The Dimensional Requirements for the site under an SDD zoning are as follows:

Minimum Lot Area of the First Dwelling Unit	40,000 square feet
Minimum Continuous Frontage	150 feet
Front Yard Setback	40 feet
Rear Yard Setback	25 feet
Side Yard Setback	25 feet
Building Height	40 feet
Maximum Building Lot Coverage	10%
Minimum Usable Open Space	40%

C. Site Survey and Wetlands

C. Site Survey and Wetlands

Site Survey

Nitsch Engineering performed survey work at the Peebles Elementary School and Bournedale Elementary School sites. The purpose of the work is to understand the topography, utilities, property boundaries, and other site related items to aid in the future design of a potential addition or new construction option on these sites. The surveys are appended at the end of this section.

Wetlands

LEC Environmental Consultants, Inc. conducted a wetland resource area analysis at the Peebles Elementary School and Bournedale Elementary School sites. This is the summary from LEC's site evaluation on November 13, 2015 to determine the presence or absence of Wetland Resource Areas protected under the Massachusetts Wetlands Protection Act (M.G.L. c. 131, s. 40), its implementing Regulations (310 CMR 10.00) and/or Town of Bourne Wetland Protection By-Law (Article 3.6) and the Bourne Wetland Regulations (BWR 1.00) at the two school sites.

Peebles Elementary School, 70 Trowbridge Road
No protectable Wetland Resource Areas were observed on the school property as outlined by Nitsch.

North of Trowbridge Road, LEC observed a culvert within the forested upland proximate to the corner of Cotuit Road. It appears that the culvert receives stormwater runoff from Trowbridge Road. However, no protectable Wetland Resource Areas appear to be located within 100 feet of the school property.

Bournedale Elementary School, 41 Ernest Valeri Road
No protectable Wetland Resource Areas were observed on or within 100 feet of the school property as outlined by Nitsch.

LEC did observe multiple stormwater management features scattered around the school property, including a separate gravel-lined swale and basin respectively located east and southeast of the school building/parking lot. Four (4) culverts discharge stormwater into forested upland areas southwest, west, and northwest of the school building. Signs of surficial flow and gully formation are evident downgradient of the two southwesterly culverts before dissipating within the forested upland. Two additional culverts were observed within the interior of the school property.

The wetland resource area analysis reports are appended at the end of this section.

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NOTES

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2.) THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING CONDITIONS AS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY THAT OCCURRED FROM OCTOBER 30 TO NOVEMBER 6, 2015.

3.) HORIZONTAL COORDINATES REFER TO NORTH AMERICAN DATUM OF 1983 (NAD83).

4.) ELEVATION REFERS TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

5.) THE INFORMATION CONTAINED ON THE DISK OR ELECTRONIC DRAWING FILE ACCOMPANYING THIS PLAN MUST BE COMPARED TO THE SEALED AND SIGNED HARD COPY OF THE PLAN TO ENSURE THE ACCURACY OF ALL INFORMATION AND TO ENSURE NO CHANGES, ALTERATIONS, OR MODIFICATIONS HAVE BEEN MADE. RELIANCE SHALL NOT BE MADE ON A DOCUMENT TRANSMITTED BY COMPUTER OR OTHER ELECTRONIC MEANS UNLESS FIRST COMPARED TO THE ORIGINAL SEALED DOCUMENT ISSUED AT THE TIME OF THE SURVEY. DUE TO THE CRITICAL NATURE OF SURVEYING, DATA ACQUISITION, AND AUTOCAD PLAN DEVELOPMENT, IF CRITICAL DIMENSIONAL INFORMATION IS NEEDED AND IS NOT SPECIFICALLY SHOWN ON THE ELECTRONIC DRAWING FILE, PLEASE CONTACT NITSCH ENGINEERING.

6.) FEMA LINES SHOWN HEREON ARE COMPILED FROM FLOOD INSURANCE RATE MAP COMMUNITY NO. 25001C0502J, EFFECTIVE DATE: JULY 16, 2014.

LEGEND

■	CATCH BASIN	CCBB	"CAPE COD" BITUMINOUS CONCRETE BERM
(D)	DRAIN MANHOLE	VGC	VERTICAL GRANITE CURB
(M)	MISCELLANEOUS MANHOLE	WCR	WHEELCHAIR RAMP
(S)	SEWER MANHOLE	LST	LANDSCAPE TIMBER
(T)	TELEPHONE MANHOLE	R=	RIM ELEVATION EQUALS
GSO ○	GAS SHUT-OFF	I=	INVERT ELEVATION EQUALS
WSO ○	WATER SHUT-OFF	TH=	TOP OF HOOD ELEVATION EQUALS
WG ○	WATER GATE	NPV	NO PIPES VISIBLE
	FIRE HYDRANT	TOW=	TOP OF WATER
DS ○	DOWN SPOUT	TW	TOP OF WALL ELEVATION
	UTILITY POLE	CATV	UNDERGROUND CABLE TELEVISION LINE
	LIGHT POLE	D	UNDERGROUND DRAIN LINE
LL	LANDSCAPE LIGHT	E	UNDERGROUND ELECTRIC LINE
HH ▭	HAND HOLE	G	UNDERGROUND GAS LINE
FACB ▭	FIRE ALARM CALL BOX	S	UNDERGROUND SEWER LINE
MP •	METAL POST	T	UNDERGROUND TELEPHONE LINE
PM •	PARKING METER	W	UNDERGROUND WATER LINE
S •	SIGN POST	OHW	OVERHEAD WIRES
12"	DECIDUOUS TREE WITH TRUNK DIAMETER		
12"	CONIFEROUS TREE WITH TRUNK DIAMETER		BENCH MARK
70x52	SPOT ELEVATION		
CLF	CHAIN LINK FENCE		

UTILITY INFORMATION STATEMENT

1. THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY; THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.

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3. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.

4. THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED, IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILATION OF THIS INFORMATION.

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BENCH MARK:
NAIL IN POLE
ELEVATION=77.37(NAVD88)

BENCH MARK:
ON HYDRANT BOLT
ELEVATION=81.94(NADV88)

GRAPHIC SCALE
40 20 0 40 80 60
SCALE: 1"=40'

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F: (617) 338-6472

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PROJECT #	11078.1
FILE:	11078.1_TOPO1.dwg
SCALE:	1"=20'
DATE:	NOV. 6, 2015
PROJECT MANAGER:	JGG
FIELD BOOK:	625
DRAFTED BY:	JNEI
CHECKED BY:	

REV.	COMMENTS / REVISIONS	DATE

EXISTING CONDITIONS

JAMES PEEBLES ELEMENTARY SCHOOL
70 TROWBRIDGE ROAD, BUZZARDS BAY, MASSACHUSETTS 02532

PREPARED FOR:
FLANSBURGH ARCHITECTS
77 NORTH WASHINGTON STREET, BOSTON, MASSACHUSETTS 02114

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LEGEND

▦	CATCH BASIN
Ⓓ	DRAIN MANHOLE
Ⓜ	MISCELLANEOUS MANHOLE
Ⓢ	SEWER MANHOLE
Ⓣ	TELEPHONE MANHOLE
GSO	GAS SHUT-OFF
WSO	WATER SHUT-OFF
WG	WATER GATE
	FIRE HYDRANT
DS	DOWN SPOUT
	UTILITY POLE
	LIGHT POLE
LL	LANDSCAPE LIGHT
HH	HAND HOLE
FACB	FIRE ALARM CALL BOX
MP	METAL POST
PM	PARKING METER
S	SIGN POST
12"	DECIDUOUS TREE WITH TRUNK DIAMETER
12"	CONIFEROUS TREE WITH TRUNK DIAMETER
70x52	SPOT ELEVATION
CLF	CHAIN LINK FENCE
CCBB	"CAPE COD" BITUMINOUS CONCRETE BERM
VGC	VERTICAL GRANITE CURB
WCR	WHEELCHAIR RAMP
LST	LANDSCAPE TIMBER
R=	RIM ELEVATION EQUALS
I=	INVERT ELEVATION EQUALS
TH=	TOP OF HOOD ELEVATION EQUALS
NPV	NO PIPES VISIBLE
TOW=	TOP OF WATER
TW	TOP OF WALL ELEVATION
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G	UNDERGROUND GAS LINE
S	UNDERGROUND SEWER LINE
T	UNDERGROUND TELEPHONE LINE
W	UNDERGROUND WATER LINE
OHW	OVERHEAD WIRES
	BENCH MARK

NORTH AMERICAN DATUM OF 1983 (NAD83)

STREET LINE

STREET LINE

TROWBRIDGE ROAD

EDGE OF WOODS

6" WOOD FENCE

PROPERTY LINE

DIRT

EDGE OF WOODS

6" TWIN

GRASS

R=68.74
I=65.4

R=67.70
A I=65.6
B I=65.1

12"RCP-D

BITUMINOUS CONCRETE

CCBB

BITUMINOUS CONCRETE SIDEWALK

TRANSFORMER ON POLE

SIGN

GYA

12"RCP
INV=58.1

BITUMINOUS CONCRETE SIDEWALK

EDGE OF WOODS

DIRT

GRASS

EDGE OF WOODS

R=80.46
NPV
DIRT=73.0

STREET LINE

STREET LINE

JAMIE G. GAYTON
COMMONWEALTH OF MASSACHUSETTS
NO. 49624
REGISTERED PROFESSIONAL LAND SURVEYOR

DECEMBER 11, 2015

GRAPHIC SCALE

20 0 20 40 60

SCALE: 1"=20'

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FIELD BOOK:	625
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REV.	COMMENTS	DATE
	REVISIONS	

EXISTING CONDITIONS

JAMES PEEBLES ELEMENTARY SCHOOL
70 TROWBRIDGE ROAD, BUZZARDS BAY, MASSACHUSETTS 02532

PREPARED FOR:
FLANSBURGH ARCHITECTS
77 NORTH WASHINGTON STREET, BOSTON, MASSACHUSETTS 02114

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PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

6' CHAIN LINK FENCE

EDGE OF WOODS

EDGE OF WOODS

EDGE OF WOODS

BENCH MARK:
NAIL IN POLE
ELEVATION=77.57(NAVD88)

NORTH AMERICAN DATUM OF 1983 (NAD83)

GARAGE
1 STORY WOOD FRAMED BUILDING

SHED

POSSIBLE UNDERGROUND SEPTIC TANK

R=75.30
A l=72.2
B l=66.8

R=74.61
A l=66.3
B l=66.3
C l=66.3

R=74.82
l=69.6
BOT=61.4

R=74.76
A l=70.7
B l=70.7

R=74.63
A l=65.7
B l=65.7

GRASS

PLANTER BOX

BITUMINOUS CONCRETE

BITUMINOUS CONCRETE SIDEWALK

BITUMINOUS CONCRETE

BITUMINOUS CONCRETE

BITUMINOUS CONCRETE

BITUMINOUS CONCRETE

R=80.05
CONCRETE COVER TO UNDERGROUND PROPANE TANK

STONE WALL

TWO PROPANE TANKS

CONCRETE PAD

METAL FIRE ESCAPE ABOVE

R=76.36
CNO

R=76.02
CNO

R=75.97
CNO

R=76.05
l=71.2
BOT=68.7

R=75.88
TOW=69.5
BOT=67.5

R=75.52
A l=73.3
B l=73.3

R=75.59

R=75.57

HEDGE

METAL SUPPORT COLUMNS FOR OVERHANG (TYPICAL)

JAMES F. PEEBLES ELEMENTARY SCHOOL

1–2 STORY BRICK BUILDING

2 STORY BRICK BUILDING

CONCRETE PAD

CONCRETE PAD

CONCRETE PAD

R=87.07
SECOND RIM
CNO

R=86.77
DIRT=86.1

R=87.06

R=87.06

GAS METER

PLANTERS

R=76.57
A l=71.2
B l=70.8
C l=71.0

R=75.92
A l=70.4
B l=70.4

R=75.81
l=73.3
DIRT=73.6

PLAYGROUND EQUIPMENT IN MULCH

BENCH

BENCH

DIRT DRIVEWAY

D I R T

EDGE OF WOODS

GRASS

GYA

GYA

GYA

8"PVC-S

6"PVC-S

4"PVC-S

6"PVC-D

8"PVC-D

4"PVC-D

6"PVC-S

S-0%4.9

S-0%4.8

DOOR

WM

FA

SIA

MP

FP

COMMONWEALTH OF MASSACHUSETTS
JAMIE G. GAYTON
NO. 49624
REGISTERED
PROFESSIONAL LAND SURVEYOR

DECEMBER 11, 2015

GRAPHIC SCALE

20 0 20 40 60

SCALE: 1"=20'

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P:\11078.1 james peebles elementary\cad\11078.1_topo1.dwg

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NORTH AMERICAN DATUM OF 1983 (NAD83)

COTUIT ROAD

TROWBRIDGE ROAD

SCHOOL ROAD

STREET LINE

EDGE OF WOODS

BITUMINOUS CONCRETE

CCBB

GYA

R=57.39
I=55.9

R=80.46
NPV
DIRT=73.0

DIG SAFE PAINT LINES (UTILITY NOT IDENTIFIED)

G R A S S

D I R T

10' CHAIN LINK FENCE

TENNIS COURTS
BITUMINOUS CONCRETE

SAND VOLLEY BALL COURT

HH

WC

12"CMP-D

R=73.92
A I=68.9
B I=69.5

R=73.64
I=68.1

R=74.25
A I=68.2
B I=68.2
C I=67.9
D I=67.9

R=77.04
I=73.0

R=78.64
CNO

R=78.50
CNO

R=78.59
CNO

R=79.56
A I=74.9
B I=75.0

JAMIE G. GAYTON
NO. 49624
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COMMONWEALTH OF MASSACHUSETTS

DECEMBER 11, 2015

GRAPHIC SCALE

20 0 20 40 60

SCALE: 1"=20'

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JAMES F. PEEBLES ELEMENTARY SCHOOL

1 STORY BRICK BUILDING

PLANTERS

GRASS

METAL SUPPORT COLUMNS FOR OVERHANG (TYPICAL)

CONCRETE PAD

CONCRETE

CONCRETE PAD

PLAYGROUND EQUIPMENT ON RUBBERIZED SURFACE

R=76.04
I=55.8

EDGE OF WOODS

DIRT

NORTH AMERICAN DATUM OF 1983 (NAD83)

10' CHAIN LINK FENCE

TENNIS COURTS
BITUMINOUS CONCRETE

BITUMINOUS CONCRETE

CONCRETE WALL

8' TRIP

LEDGE

R=80.02
A I=65.1
B I=65.1

GRASS

8' CHAIN LINK FENCE

DIRT DRIVEWAY

R=80.24
A I=64.6
B I=64.6

R=87.54

SAND VOLLEY BALL COURT

BENCH MARK:
ON HYDRANT BOLT
ELEVATION=81.94(NADV88)

GRASS

8' CHAIN LINK FENCE

ICV

DIRT

WOODEN BENCHES ON GRAVEL (TYPICAL)

16' CHAIN LINK FENCE BACKSTOP

2 STORY WOOD FRAME BUILDING

SCHOOL ROAD
BITUMINOUS CONCRETE

R=79.58
I=75.5

R=79.56
A I=74.9
B I=75.0

R=79.33
CNO

R=79.04
I=75.2

R=80.27
NPV
BOT=58.8

GRAPHIC SCALE

20 0 20 40 60

SCALE: 1"=20'

COMMONWEALTH OF MASSACHUSETTS
JAMIE G. GAYTON
NO. 49624
REGISTERED
PROFESSIONAL LAND SURVEYOR

DECEMBER 11, 2015

Nitsch Engineering

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PROJECT #	11078.1
FILE:	11078.1_TOPO1.dwg
SCALE:	1"=20'
DATE:	NOV. 6, 2015
PROJECT MANAGER:	JGG
FIELD BOOK:	625
DRAFTED BY:	JNEI
CHECKED BY:	

REV.	COMMENTS	DATE
	REVISIONS	

EXISTING CONDITIONS

JAMES PEEBLES ELEMENTARY SCHOOL
70 TROWBRIDGE ROAD, BUZZARDS BAY, MASSACHUSETTS 02532

PREPARED FOR:
FLANSBURGH ARCHITECTS
77 NORTH WASHINGTON STREET, BOSTON, MASSACHUSETTS 02114

SHEET:
EX-4
OF 4 REV.

S:\11078.1 - James peebles es\survey\cad\11078.1_topo1.dwg

12/15/2015 12:17 PM

UTILITY INFORMATION STATEMENT

1. THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY; THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.

2. THE LOCATIONS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES HAVE BEEN DETERMINED FROM SAID INFORMATION, AND ARE APPROXIMATE ONLY. COMPILED LOCATIONS OF ANY UNDERGROUND STRUCTURES, NOT VISIBLY OBSERVED AND LOCATED, CAN VARY FROM THEIR ACTUAL LOCATIONS.

3. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.

4. THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED, IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILATION OF THIS INFORMATION.

5. IT IS INCUMBENT UPON INDIVIDUALS USING THIS INFORMATION TO UNDERSTAND THAT COMPILING UTILITY INFORMATION IS NOT EXACT, AND IS SUBJECT TO CHANGE BASED UPON VARYING PLAN INFORMATION RECEIVED AND ACTUAL LOCATIONS.

6. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER MATTERS.

7. THE PROPER UTILITY ENGINEERING/COMPANY SHOULD BE CONSULTED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHOULD BE VERIFIED IN THE FIELD (V.I.F.) BEFORE PLANNING FUTURE CONNECTIONS. CONTACT THE DIG SAFE CALL CENTER AT 1-888-344-7233, SEVENTY-TWO HOURS PRIOR TO EXCAVATION, BLASTING, GRADING, AND/OR PAVING.

NOTES

1.) THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF NITSCH ENGINEERING. IT IS ISSUED TO FLANSBURG ARCHITECTS FOR PURPOSES RELATED DIRECTLY AND SOLELY TO NITSCH ENGINEERING'S SCOPE OF SERVICES UNDER CONTRACT WITH FLANSBURG ARCHITECTS FOR BOURNEDALE ELEMENTARY SCHOOL. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT AND PROJECT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN AUTHORIZATION IS GIVEN THEREFOR BY NITSCH ENGINEERING.

2.) THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING CONDITIONS AS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY THAT OCCURRED IN OCTOBER 2015 .

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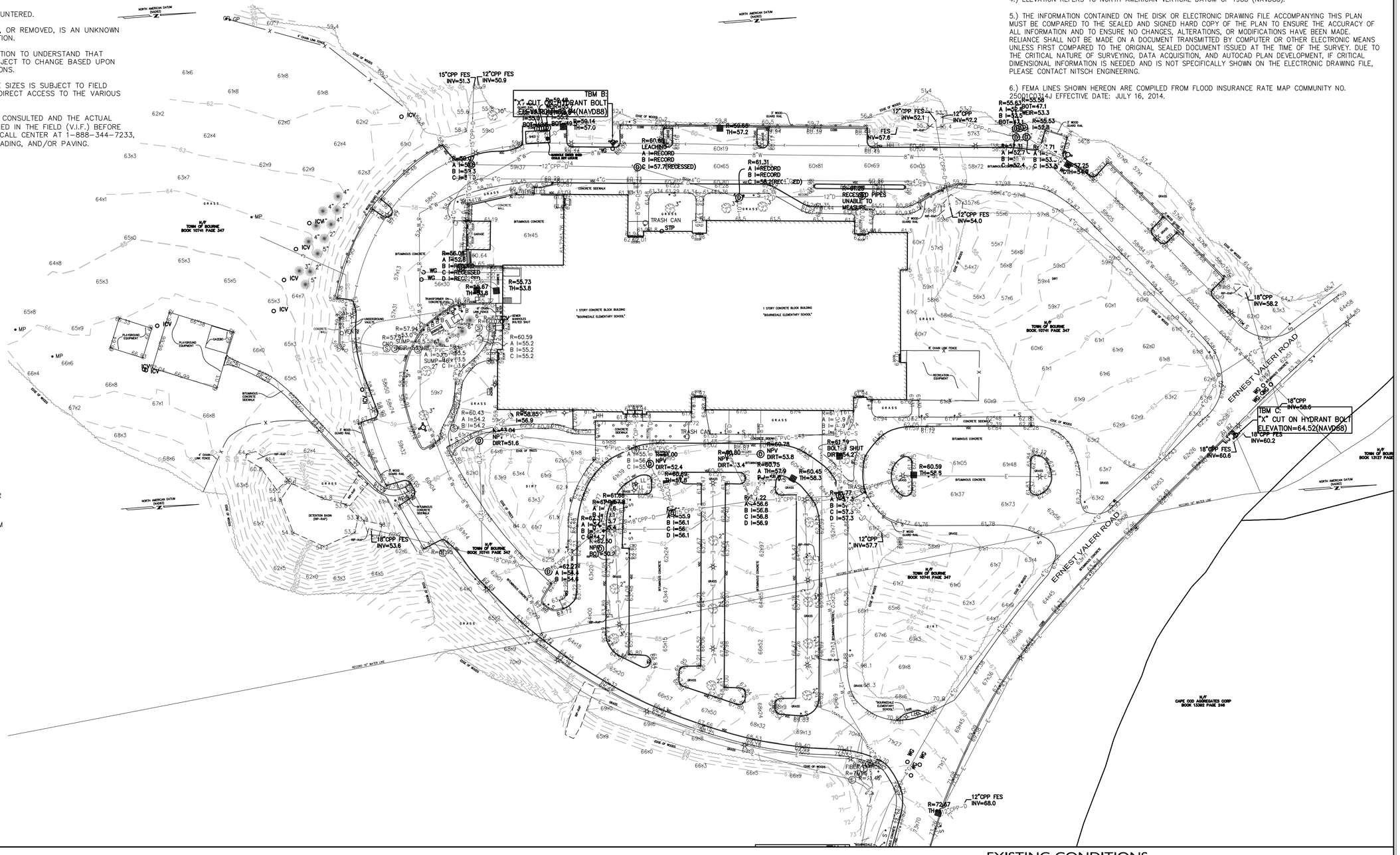
6.) FEMA LINES SHOWN HEREON ARE COMPILED FROM FLOOD INSURANCE RATE MAP COMMUNITY NO. 250160 0014J EFFECTIVE DATE: JULY 16, 2014.

LEGEND

CB	CATCH BASIN
DMH	DRAIN MANHOLE
EMH	ELECTRIC MANHOLE
MMH	MISCELLANEOUS MANHOLE
SMH	SEWER MANHOLE
TMH	TELEPHONE MANHOLE
STP	STAND PIPE
ICV	IRRIGATION CONTROL VALVE
WG	WATER GATE
	FIRE HYDRANT
DS	DOWN SPOUT
	UTILITY POLE
	LIGHT POLE
LL	LANDSCAPE LIGHT
HH	HAND HOLE
TC	TRASH CAN
GP	GATE POST
MP	METAL POST
WP	WOOD POST
S	SIGN POST
12"	DECIDUOUS TREE WITH TRUNK DIAMETER
12"	CONIFEROUS TREE WITH TRUNK DIAMETER
59.37	SPOT ELEVATION
CLF	CHAIN LINK FENCE
CCBB	"CAPE COD" BITUMINOUS CONCRETE BERM
VGC	VERTICAL GRANITE CURB
WCR	WHEELCHAIR RAMP
BOT=	BOTTOM OF STRUCTURE
CIP	CURED-IN-PLACE
CNO	COULD NOT OPEN
CPP	CORRUGATED PLASTIC PIPE
FES	FLARED END SECTION
NPV	NO PIPE VISABLE
PVC	POLYVINYL CHLORIDE
R=	RIM ELEVATION EQUALS
TH	TOP OF HOOD
TW	TOP OF WALL ELEVATION



GRAPHIC SCALE

40 20 0 40 80 120

SCALE: 1"=40'

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PROJECT #	11078.2
FILE:	11078.2_TOP01.dwg
SCALE:	1"=20'
DATE:	NOV. 3, 2015
PROJECT MANAGER:	JGG
FIELD BOOK:	625
DRAFTED BY:	JNEI
CHECKED BY:	

REV.	COMMENTS	DATE
	REVISIONS	

EXISTING CONDITIONS

BOURENDALE ELEMENTARY SCHOOL
41 ERNEST VALERI ROAD, BOURNE, MASSACHUSETTS 02532

PREPARED FOR:
FLANSBURGH ARCHITECTS
77 NORTH WASHINGTON STREET, BOSTON, MASSACHUSETTS 02114

SHEET:
EX-1
OF 4 REV.

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12/11/2015 11:00 AM

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LEGEND

■	CATCH BASIN
(D)	DRAIN MANHOLE
(E)	ELECTRIC MANHOLE
(M)	MISCELLANEOUS MANHOLE
(S)	SEWER MANHOLE
(T)	TELEPHONE MANHOLE
STP	STAND PIPE
ICV	IRRIGATION CONTROL VALVE
WG	WATER GATE
	FIRE HYDRANT
DS	DOWN SPOUT
	UTILITY POLE
	LIGHT POLE
LL	LANDSCAPE LIGHT
HH	HAND HOLE
TC	TRASH CAN
GP	GATE POST
MP	METAL POST
WP	WOOD POST
S	SIGN POST
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12"	CONIFEROUS TREE WITH TRUNK DIAMETER
59x37	SPOT ELEVATION
CLF	CHAIN LINK FENCE
CCBB	"CAPE COD" BITUMINOUS CONCRETE BERM
VGC	VERTICAL GRANITE CURB
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BOT=	BOTTOM OF STRUCTURE
CIP	CURED-IN-PLACE
CNO	COULD NOT OPEN
CPP	CORRUGATED PLASTIC PIPE
FES	FLARED END SECTION
NPV	NO PIPE VISABLE
PVC	POLYVINYL CHLORIDE
R=	RIM ELEVATION EQUALS
TH	TOP OF HOOD
TW	TOP OF WALL ELEVATION

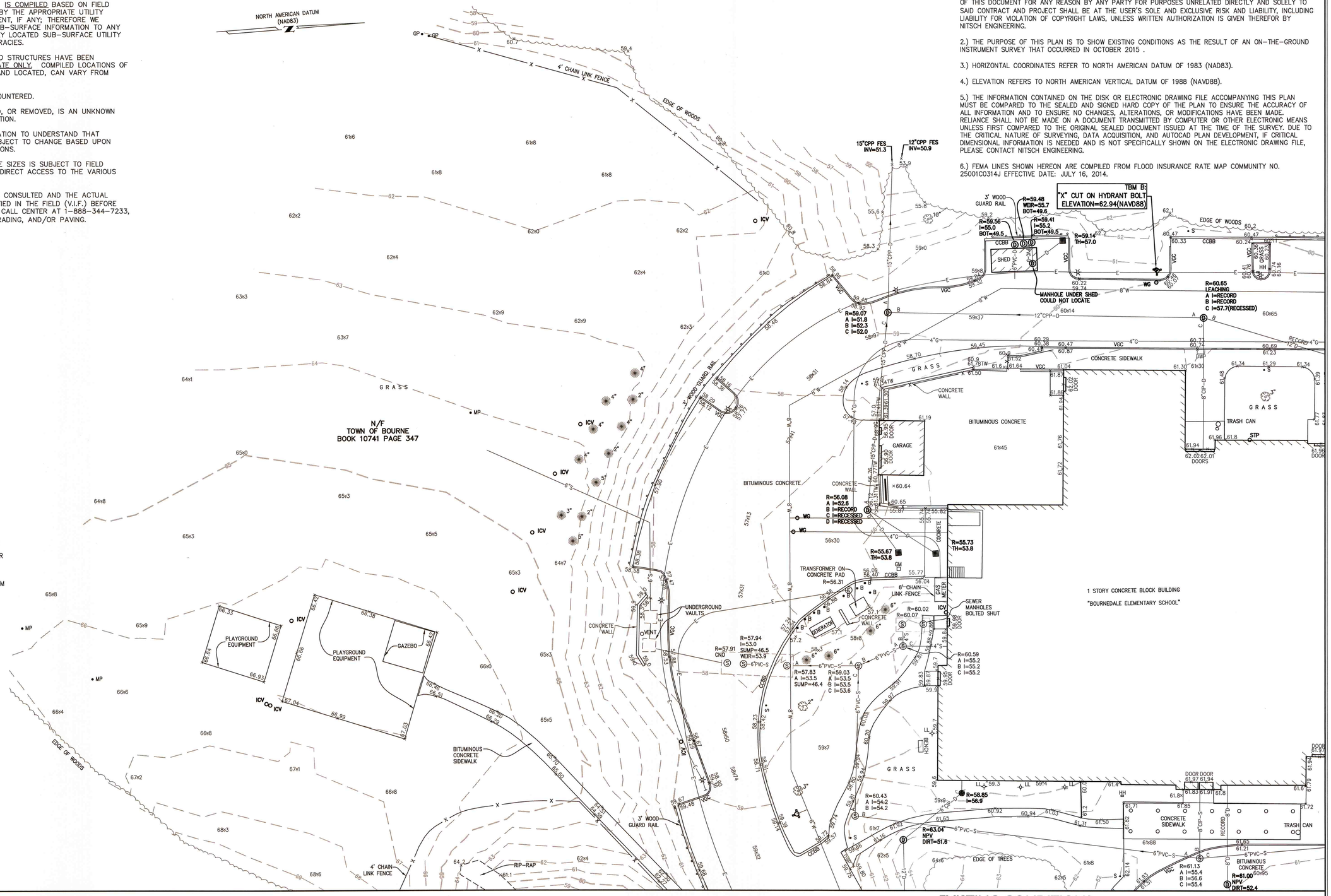
COMMONWEALTH OF MASSACHUSETTS
JAMIE Q. GAYTON
NO. 49624
REGISTERED PROFESSIONAL LAND SURVEYOR

DECEMBER 11, 2015

GRAPHIC SCALE

20 10 0 20 40 60

SCALE: 1"=20'



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PROJECT #	11078.2
FILE:	11078.2_TOPO1.dwg
SCALE:	1"=20'
DATE:	NOV. 3, 2015
PROJECT MANAGER:	JGG
FIELD BOOK:	625
DRAFTED BY:	JNEI
CHECKED BY:	

REV.	COMMENTS	DATE
	REVISIONS	

EXISTING CONDITIONS

BOURENDALE ELEMENTARY SCHOOL
41 ERNEST VALERI ROAD, BOURNE, MASSACHUSETTS 02532

PREPARED FOR:
FLANSBURGH ARCHITECTS
77 NORTH WASHINGTON STREET, BOSTON, MASSACHUSETTS 02114

SHEET:
EX-1
OF 4 REV.

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12/11/2015 11:01 AM

NORTH AMERICAN DATUM (NAD83)

JAMIE G. GAYTON
NO. 49624
REGISTERED
PROFESSIONAL LAND SURVEYOR
COMMONWEALTH OF MASSACHUSETTS

DECEMBER 11, 2015

GRAPHIC SCALE
20 10 0 20 40 60
SCALE: 1"=20'

1 STORY CONCRETE BLOCK BUILDING
"BOURNEDALE ELEMENTARY SCHOOL"

N/F
TOWN OF BOURNE
BOOK 10741 PAGE 347

N/F
TOWN OF BOURNE
BOOK 13127 PAGE 258

ERNEST VALERI ROAD

EDGE OF WOODS

3' WOOD GUARD RAIL

8' CHAIN LINK FENCE

RECREATION EQUIPMENT

RIP-RAP

GRASS

DIRT

BITUMINOUS CONCRETE

CONCRETE SIDEWALK

TRASH CAN

RECORD 16" WATER LINE

R=59.65
TH=57.2

12"CPP FES
INV=52.1

12"CPP
INV=52.2

FES
INV=57.6

R=55.63
A I=52.8
B I=52.5
BOT=47.1

R=55.58
BOT=47.1
WEIR=53.3

R=55.53
I=52.8

R=57.31
A I=52.7
B I=53.1
C I=52.4

R=57.71
A I=52.7
B I=53.3
C I=53.3

R=57.25
TH=54.9

R=61.31
A I=RECORD
B I=RECORD
C I=58.2(RECESSED)

R=61.25
RECESSED PIPES
UNABLE TO
MEASURE

12"CPP FES
INV=54.0

R=61.51
A I=56.9
B I=56.9
C I=56.9

R=61.69
BOLTED SHUT
DIRT=54.2

R=60.80
NPV
DIRT=53.4

R=60.78
NPV
DIRT=53.8

18"CPP
INV=58.2

18"CPP
INV=58.6

18"CPP FES
INV=60.2

18"CPP FES
INV=60.6

TBM C:
"X" CUT ON HYDRANT BOLT
ELEVATION=64.52(NAV88)

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PROJECT #	11078.2
FILE:	11078.2_TOPO1.dwg
SCALE:	1"=20'
DATE:	NOV. 3, 2015
PROJECT MANAGER:	JGG
FIELD BOOK:	625
DRAFTED BY:	JNEI
CHECKED BY:	

REV.	COMMENTS	DATE
	REVISIONS	

EXISTING CONDITIONS

BOURENDALE ELEMENTARY SCHOOL
41 ERNEST VALERI ROAD, BOURNE, MASSACHUSETTS 02532

PREPARED FOR:
FLANSBURGH ARCHITECTS
77 NORTH WASHINGTON STREET, BOSTON, MASSACHUSETTS 02114

SHEET:
EX-2
OF 4 REV.

S:\11078.2 bournedale ele\survey\cad\11078.2_topo1.dwg

12/11/2015 11:51 AM

NORTH AMERICAN DATUM (NAD83)

4' CHAIN-LINK FENCE

EDGE OF WOODS

RIP-RAP

G R A S S

DETENTION BASIN (RIP-RAP)

18"CPP FES INV=53.6

3' WOOD GUARD RAIL

BITUMINOUS CONCRETE SIDEWALK

WP

N/F
TOWN OF BOURNE
BOOK 10741 PAGE 347

EDGE OF TREES

D I R T

BITUMINOUS CONCRETE

CONCRETE SIDEWALK

GRASS

RIP-RAP

8"PVC-S

BITUMINOUS CONCRETE

R=61.13
A I=55.4
B I=56.6
C I=55.4

R=61.00
NPV
DIRT=52.4

R=61.66
TH=57.8

R=62.03
A I=55.6
B I=56.1
C I=55.7
D I=55.4

R=62.37
A I=54.9
B I=55.4
C I=54.7

R=61.36
A I=55.9
B I=56.1
C I=56.1
D I=56.1

R=62.50
NPV
BOT=50.2

R=62.27
A I=54.4
B I=54.6

R=61.95

N/F
BUZZARDS BAY WATER
DISTRICT
BOOK 1160 PAGE 129

RECORD 16" WATER LINE

EDGE OF WOODS

GRASS

RIP-RAP

EDGE OF WOODS

GRAPHIC SCALE

20 10 0 20 40 60

SCALE: 1"=20'

JAMIE G. GAYTON
NO. 49624
COMMONWEALTH OF MASSACHUSETTS
REGISTERED
PROFESSIONAL LAND SURVEYOR

DECEMBER 11, 2015

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PROJECT #	11078.2
FILE:	11078.2_TOP01.dwg
SCALE:	1"=20'
DATE:	NOV. 3, 2015
PROJECT MANAGER:	JGG
FIELD BOOK:	625
DRAFTED BY:	JNEI
CHECKED BY:	

REV.	COMMENTS	DATE
	REVISIONS	

EXISTING CONDITIONS

BOURENDALE ELEMENTARY SCHOOL
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PREPARED FOR:
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SHEET:
EX-3
OF 4 REV.

g:\11078.2_bournedale_ela\survey\cad\11078.2_topo1.dwg

12/11/2015 11:03 AM

R=60.80
NPV
DIRT=53.4

R=60.75
A TH=57.9
B I=56.8

R=60.45
TH=58.3

R=61.22
A I=56.6
B I=56.8
C I=56.8
D I=56.9

R=61.69
BOLTED SHUT
DIRT=54.2

R=61.77
A I=57.3
B I=57.3
C I=57.3
D I=57.3

R=60.59
TH=58.8

12"CPP
INV=57.7

R=72.67
TH=69.4

12"CPP FES
INV=68.0

18"CPP FES
INV=60.6

TBM A:
"X" CUT ON HYBRANT BOLT
ELEVATION=78.22(NAVD88)

R=72.22
R=71.96
FIBER OPTICS
R=71.96
R=71.46

BITUMINOUS CONCRETE

GRASS

DIRT

TRASH CAN

3' WOOD GUARD RAIL

RIP-RAP

EDGE OF WOODS

RECORD 16" WATER LINE

ERNEST VALERI ROAD

"BOURNEDALE ELEMENTARY SCHOOL"

SIGN

N/F
TOWN OF BOURNE
BOOK 10741 PAGE 347

N/F
TOWN OF BOURNE
BOOK 13127 PAGE 258

N/F
CAPE COD AGGREGATES CORP
BOOK 13392 PAGE 246

NORTH AMERICAN DATUM
(NAD83)

COMMONWEALTH OF MASSACHUSETTS
JAMIE G. GAYTON
NO. 49624
REGISTERED
PROFESSIONAL LAND SURVEYOR

DECEMBER 11, 2015

GRAPHIC SCALE

20 10 0 20 40 60

SCALE: 1"=20'

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SHEET:
EX-4
OF 4 REV.

c:\11078.2 bournedale ele\survey\cad\11078.2_topo1.dwg

LEC WETLANDS WILDLIFE WATERWAYS

December 14, 2015

EMAIL [jgayton@nitscheng.com]

Jamie Gayton, PLS
Nitsch Engineering
Two Center Plaza, Suite 430
Boston, MA 02108

Re: Wetland Resource Area Analysis
Peebles Elementary School
70 Trowbridge Road
Map 24, Parcel 31
Bourne, Massachusetts

[LEC File #: NEI\15-361.01]

Dear Jamie:

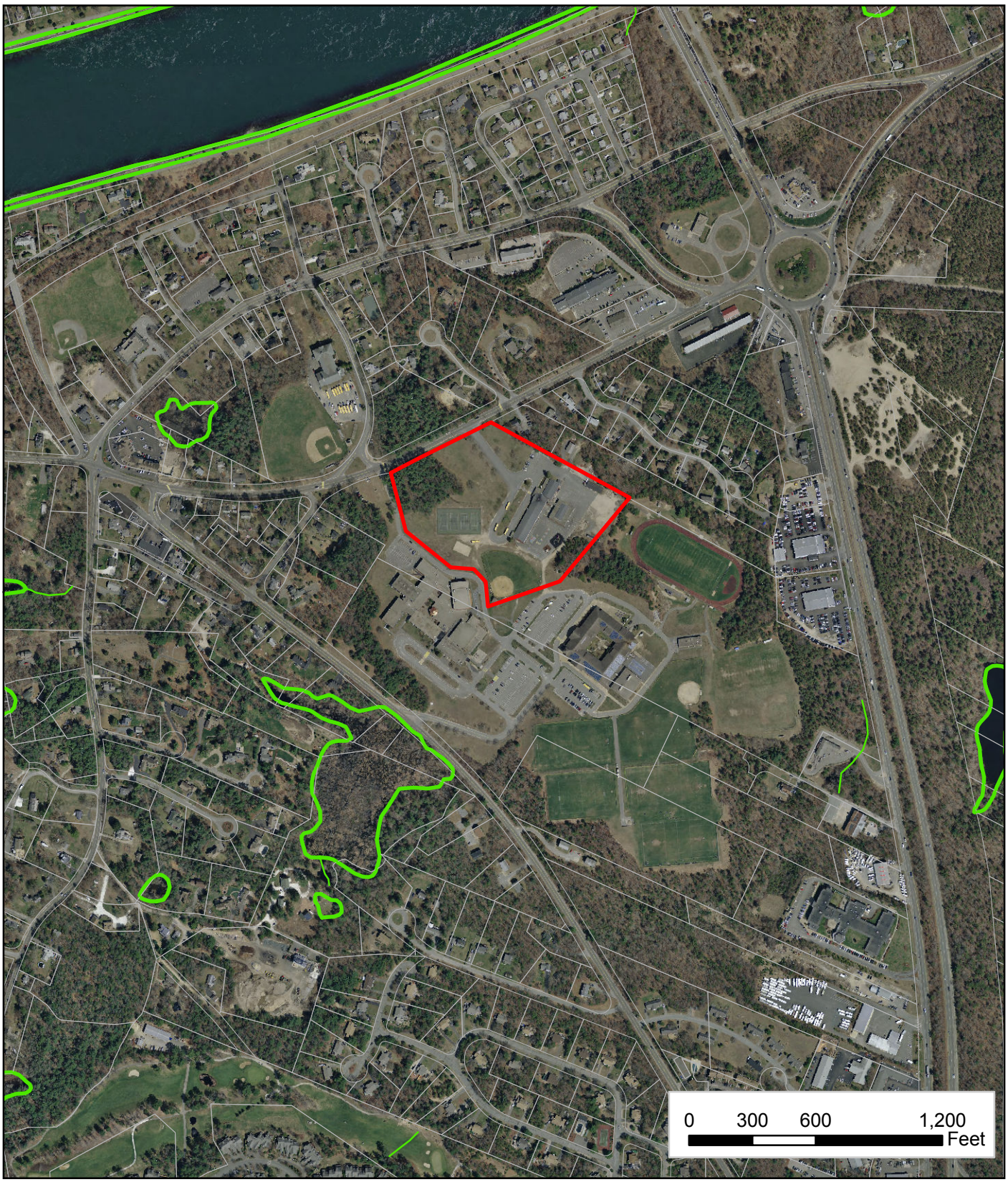
LEC Environmental Consultants, Inc., (LEC) conducted a site evaluation on November 13, 2015, to identify the presence or absence of Wetland Resource Areas protected under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or *Town of Bourne Wetland Protection By-Law* (Article 3.6) and the *Bourne Wetland Regulations* (BWR 1.00) at the Peebles Elementary School. **No** protectable Wetland Resource Areas were observed on or within 100 feet of the school property as outlined on Nitsch Engineering's survey sketch (aerial map).

LEC observed a culvert within the forested upland north of the school property and Trowbridge Road, proximate to the corner of Cotuit Road. The culvert appears to receive stormwater runoff from Trowbridge Road. However, no protectable Wetland Resource Areas were observed to be located within 100 feet of the school property.

Should you have any immediate questions or require additional information, please do not hesitate to contact me at 508-746-9491 or bmadden@lecenvironmental.com.

Sincerely,
LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist



LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Aerial Orthophoto: DEP Wetlands

Bourne Middle School
77 Waterhouse Road
Bourne, Massachusetts

N

December 17, 2015

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
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FEMA FIRM
25001 C 0501 J

Bourne Middle School
77 Waterhouse Road
Bourne, Massachusetts

N

December 17, 2015

LEC WETLANDS WILDLIFE WATERWAYS

December 14, 2015

EMAIL [jgayton@nitscheng.com]

Jamie Gayton, PLS
Nitsch Engineering
Two Center Plaza, Suite 430
Boston, MA 02108

Re: Wetland Resource Area Analysis
Bournedale Elementary School
41 Ernest Valeri Road
Map 20, Parcel 33
Bourne, Massachusetts

[LEC File #: NEI\15-360.01]

Dear Jamie:

LEC Environmental Consultants, Inc., (LEC) conducted a site evaluation on November 13, 2015, to identify the presence or absence of Wetland Resource Areas protected under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or *Town of Bourne Wetland Protection By-Law* (Article 3.6) and the *Bourne Wetland Regulations* (BWR 1.00) at the Bournedale Elementary School. **No** protectable Wetland Resource Areas were observed on or within 100 feet of the school property as outlined on Nitsch Engineering's survey sketch (aerial map).

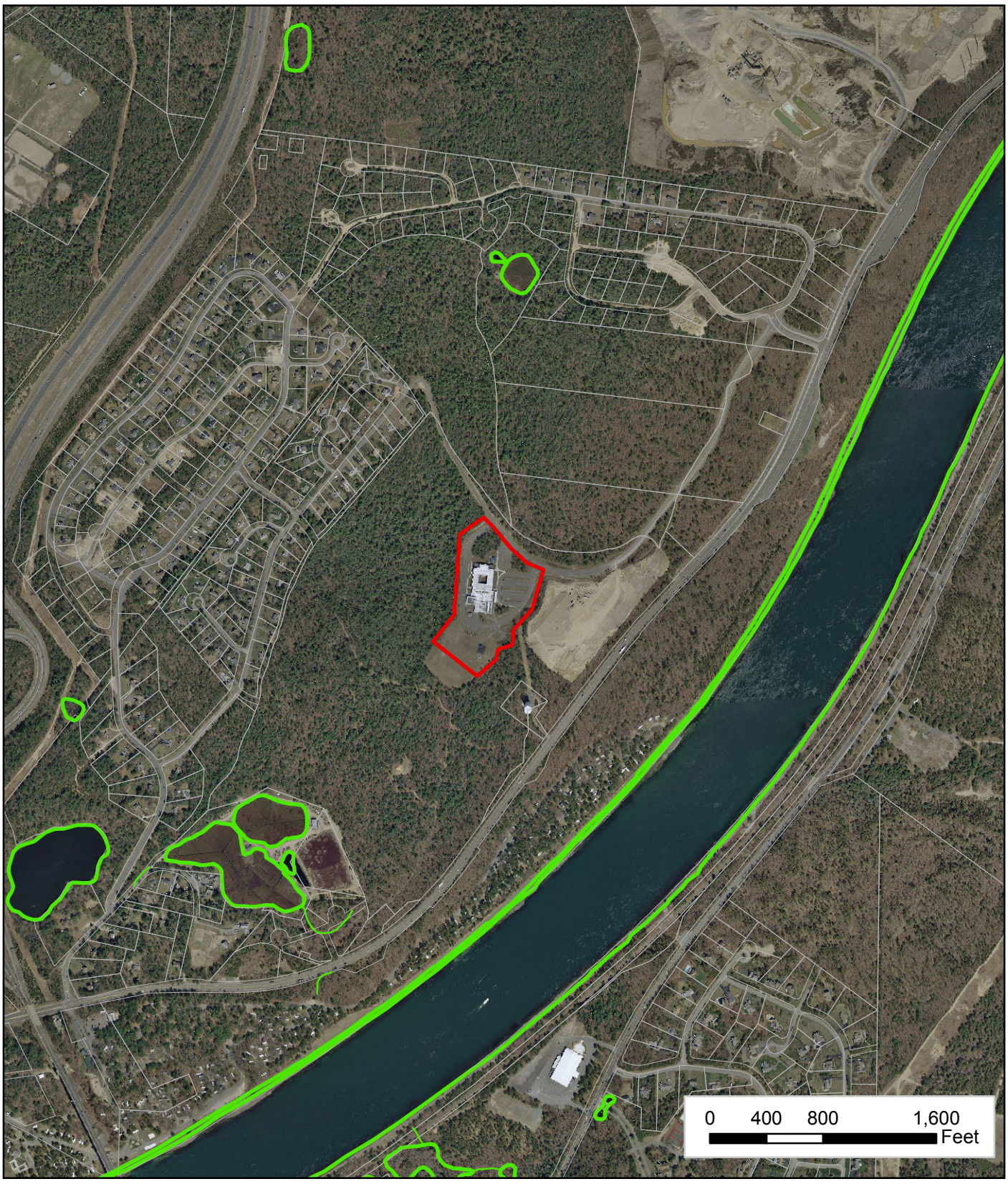
LEC observed multiple stormwater management features scattered around the school property, including a separate gravel-lined swale and basin located east and southeast of the school building/parking lot, respectively. Four (4) culverts discharge stormwater into forested upland areas southwest (2), west, and northwest of the school building. Signs of surficial flow and gully formation are evident downgradient of the two southwesterly culverts before dissipating within the forested upland. Two additional culverts were observed within the interior of the school property. The stormwater management areas (outlets) are not considered to be protectable Wetland Resource Areas.

Should you have any immediate questions or require additional information, please do not hesitate to contact me at 508-746-9491 or bmadden@lecenvironmental.com.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist



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FEMA FIRM
25001 C 0314 J

Bourndale Elementary School
41 Ernest Valeri Road
Bourne, Massachusetts

N

December 17, 2015

[redacted] D. Emergency Vehicle Access

D. Emergency Vehicle Access

Peebles Elementary School, 70 Trowbridge Road

Peebles Elementary School is located to the south of 70 Trowbridge Road. The single access and egress driveway to Peebles Elementary School exists north of the school at Trowbridge Road. The drop off loop in front of the school provides access to the entire north side of the building and clear building access at two different locations. An addition driveway on the east side of the site provides emergency vehicle access to the rear of the building and building access at three different locations. There is not a continuous loop road around the entire existing building.

Any new construction or reno/addition option will provide a clear continuous loop road around the entire school and clear staging and building access points. In these options, there is the opportunity to connect into the overall Middle and High School campus vehicular circulation system for increased accessibility.

Bournedale Elementary School, 41 Ernest Valeri Road

Bournedale Elementary School is located at 41 Ernest Valeri Road to the south of Ernest Valeri Road, and is served by three access and egress driveways at Ernest Valerie Road. The southerly most driveway is the man driveway to the school. The northerly most driveway is signed DO NOT ENTER, and is generally used for teacher/staff and school bus egress. The middle driveway provides access to the Pre School parking and its pick-off and drop-off area.

The existing school has a continuous loop road around the entire facility with multiple building access points. Any reno/addition option maintain this continuous loop road and further define emergency staging and building access points.

E. Safety and Security

A safe, secure, and welcoming learning environment begins with architectural considerations such as clear lines of sight and proper lighting and entry sequence, continues through landscape design with enhanced visibility and keeping intruders easily observable, and extends to the technology designer providing advanced detection, notification, and observation equipment.

The building site security will be the first layer of a graduated security “safe-zone”. This layer will include high-resolution surveillance cameras placed strategically at points of entry and the building perimeter. Audio/visual communication and door release mechanisms will be provided at primary entrances. The goal is to provide situational awareness for administration and to archive general activity. Panic buttons will be provided in strategic locations for staff use in case of an event. Pressing of the Panic Button will put the entire facility in lockdown, release fire alarm held doors, lock all door hardware, notify authorities of a lockdown situation, and annunciate a lockdown notification through the Distributed Communication System.

[redacted] E. Safety and Security

E. Safety and Security

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3.1.6 Preliminary Alternatives

A. Analysis of School District Student School Assignment Practices
B. Tuition Agreements with Adjacent School Districts
C. Rental or Acquisition of Existing Buildings
D. Base Repair Option
E. Renovation/Addition Options
F. New Construction Options
G. Conceptual Cost Estimates
H. Evaluation of Design Alternatives

[redacted] A. Analysis of School District Student School Assignment Practices

A. ANALYSIS OF SCHOOL DISTRICT STUDENT ASSIGNMENT PRACTICES AND AVAILABLE SPACE IN THE OTHER SCHOOLS IN DISTRICT

Bourne is a small rural community that is uniquely known as the access point to and from Cape Cod, MA by crisscrossing the Cape Cod Canal via the Bourne or Sagamore bridges. The Bourne Public Schools (BPS) have over 2,000 students attending Pre-Kindergarten through grade 12. There are two collaborating elementary schools, Peebles Elementary (K-4) and Bournedale Elementary (PreK-4), offering community-based experiences for our youngest students. The Bourne Middle School (5-8) is based on a middle school pedagogy and the Bourne High School (9-12) is rich in tradition with emerging innovative experiences and programs for our oldest students who then enter higher education or the workforce.

Elementary students are assigned to a respective elementary school as determined by the location of the student's residence. Students in grade 1-4 who reside on the north or mainland side of the Cape Cod Canal attend Bournedale Elementary School and students in grade 1-4 who reside on the south or cape side of the Cape Cod Canal attend Peebles Elementary School. This includes members of the armed forces who reside at Joint Base Cape Cod. We have recently opened four sections of full-day kindergarten, 2 at each elementary school and for those selected through our lottery system the aforementioned delineation location is the same. All integrated pre-kindergarten students and half-day kindergarten students attend the Bournedale Elementary School.

All town students in grades 5-8 attend the Bourne Middle School as is the same for high school students in grades 9-12.

Bourne High School has up-to four classrooms that could be considered additional space. This could meet the needs of one elementary grade cluster from the existing Peebles Elementary school during a construction/renovation project.

[redacted] B. Tuition Agreements with Adjacent School Districts

B. TUITION AGREEMENTS WITH ADJACENT SCHOOL DISTRICT

The Bourne Public Schools is a member town of the independent LEA Chapter 74 Upper Cape Cod Technical High School located in the community of Bourne. Other member towns include Sandwich, Marion, Falmouth and Wareham. There are no plans to create or duplicate Chapter 74 programs in the Bourne Public Schools.

Bourne Public Schools continues to participate in the Department of Secondary and Elementary Education's regulatory and MGL c.76 § 12 School Choice Program and accepts students first through twelfth grade. There are currently one hundred and thirty-three school choice students attending Bourne Public Schools.

Lastly, the Bourne Public Schools has a tuition agreement with the Cape Cod Community College for students in grade eleven or twelve to participate in an Early College Experience Program. The cost of the program as listed on page three of the Memorandum of Agreement dated 10.16.2014rev. states:

6. Cost of Program: The cost of the program will be shared between the District and CCCC. The District will be invoiced two times per year (December and June) by the College. The College will receive 90% of per pupil allocated funds per Bourne student and 90% of the school choice allocated funds per school choice student in the Early College Experience Program. This amount shall be invoiced 14 days after the closing of the calendar quarter. The District is authorized to allocate these funds to the College in support of the Early College Experience Program pursuant in accordance with M.G.L. Chapter 71 section 34, 37 A and 38N.

[redacted] C. Rental or Acquisition of Existing Buildings

C. RENTAL OR ACQUISITION OF EXISTING BUILDINGS

The Town of Bourne owns the land and school facilities known as Bourne High School at 75 Waterhouse Road, Bourne Middle School at 77 Waterhouse Road, Peebles Elementary School at 70 Trowbridge Road, Bournedale Elementary School at 41 Ernest Valeri Road and the School Administration Building at 36 Sandwich Road. Additionally, the Bourne Public Schools own and lease Otis Elementary School located on Joint Base Cape Cod. At this time the Cape Cod Collaborative has a lease in good standing for 65-70 students participating in an alternative learning program. The town and district have minimally invested in this facility and much of the space is unusable however fulfills the requirements of the aforementioned alternative learning program.

The town does not have an appropriate or adequate space that could be rented or acquired for the purpose of relocation of students or for school use. In conclusion, a rental or acquisition option is not viable or feasible.

[redacted] D. Base Repair Option

D. BASE REPAIR OPTION

This option is limited to minimum work required to meet current code requirements to be used as a benchmark for comparative analysis of the other alternatives. It has been assumed that none of the walls would be moved in this option and the new educational programmed spaces would not be met.

[redacted] E. Renovation/Addition Options

E. RENOVATION/ADDITION ALTERNATIVES

Five Renovation/Addition alternatives were evaluated at the Peebles Elementary School site and the Bournedale Elementary School site. The following describe the siting, conceptual planning, and initial construction phasing. Renovation/Addition alternative have been narrowed down to two as noted in Section 3.1.6 H of this report.

Option 1G (grades K-4): Renovation/ Addition on Peebles Elementary School site

This option involves extensive renovation to the existing building and two small additions to the upper floor of the existing elementary school. The floor plans for this option locates grades K- 3 on the upper floor and grade 4 on the lower floor. The two levels share a one common corridor that acts as a “main street” connecting the communal functions of the administrative offices, arts and innovation studios, cafeteria, gymnasium, and learning commons.

The upper floor includes an extension to the classroom corridor on the northwest corner of the building and a new gymnasium, administrative offices, and learning commons in the northeast corner. Relocating the cafeteria to the existing gymnasium space on the second floor allows a direct connection to the existing stage. The art rooms, music room, and innovation studio occupy the existing cafeteria space on the ground floor, remaining within the community wing of the building. The two classroom wings contain general classrooms, SPED rooms and informal “team rooms” off of the corridor.

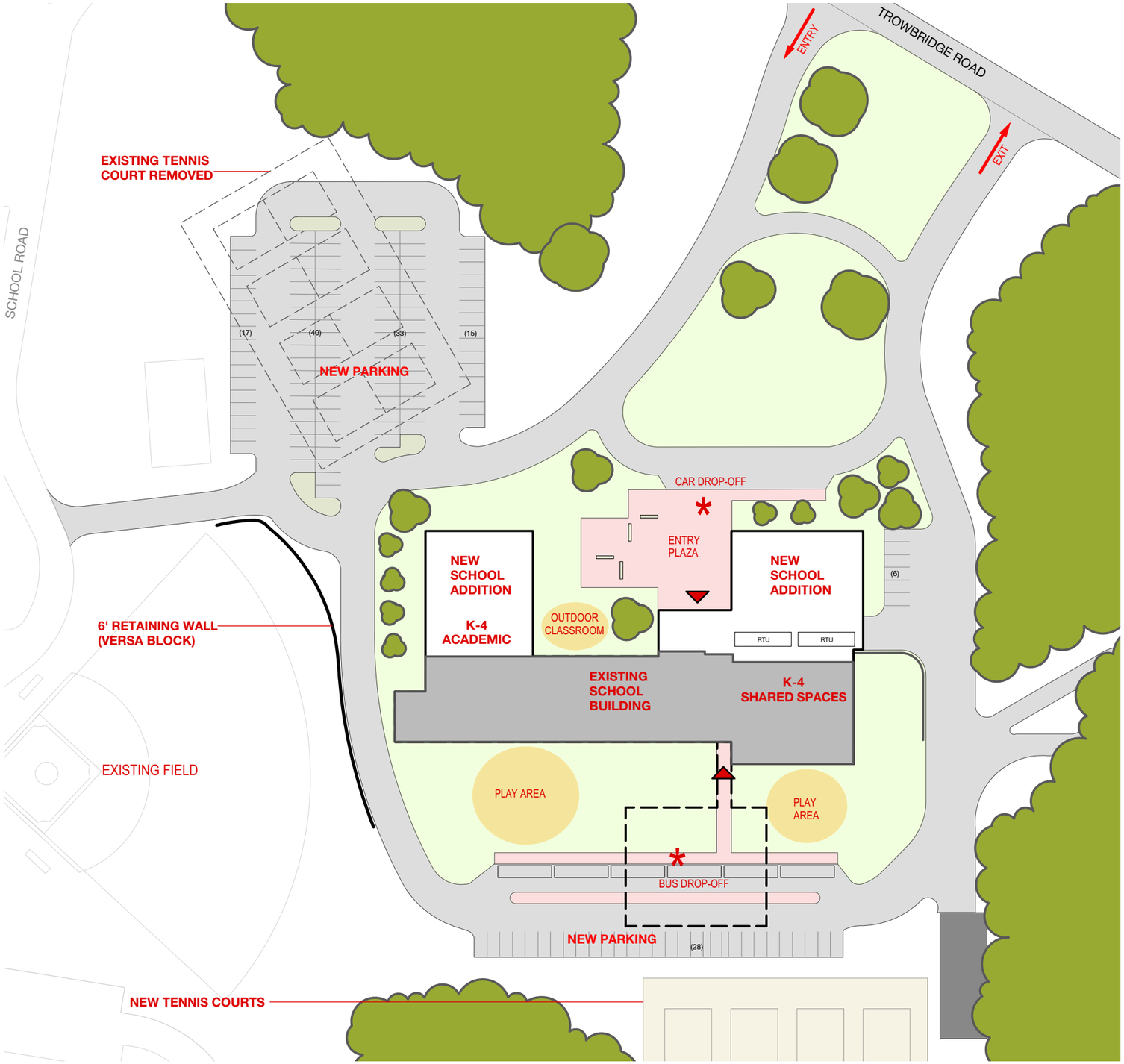
The site plan for option 1G shows separate entry and exit lanes off Trowbridge Road. A loop road surrounds the school for fire truck access and for vehicles dropping off or picking up at the main school entry. Students entering from the car drop-off to the north and bus drop-off to the south both arrive on the “main street” corridor. Parking would be provided west of the upper entry plaza on the location of the existing tennis courts.

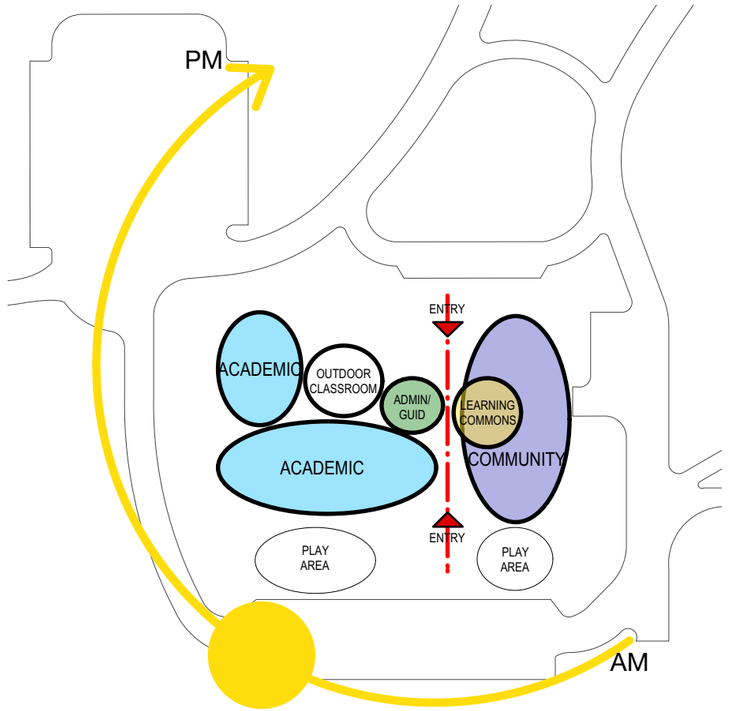
This option is a multi-phase construction project. The existing building would be renovated while occupied, requiring students to move multiple times throughout the duration of construction. The existing tennis courts replaced by a new parking lot would be relocated southeast of the new bus drop-off.

OPTION 1G (K-4)

Addition/Renovation

Square Footage: 57,248sf





Organizational Diagram

0' 20' 40' 80' 160'

Peebles Elementary School

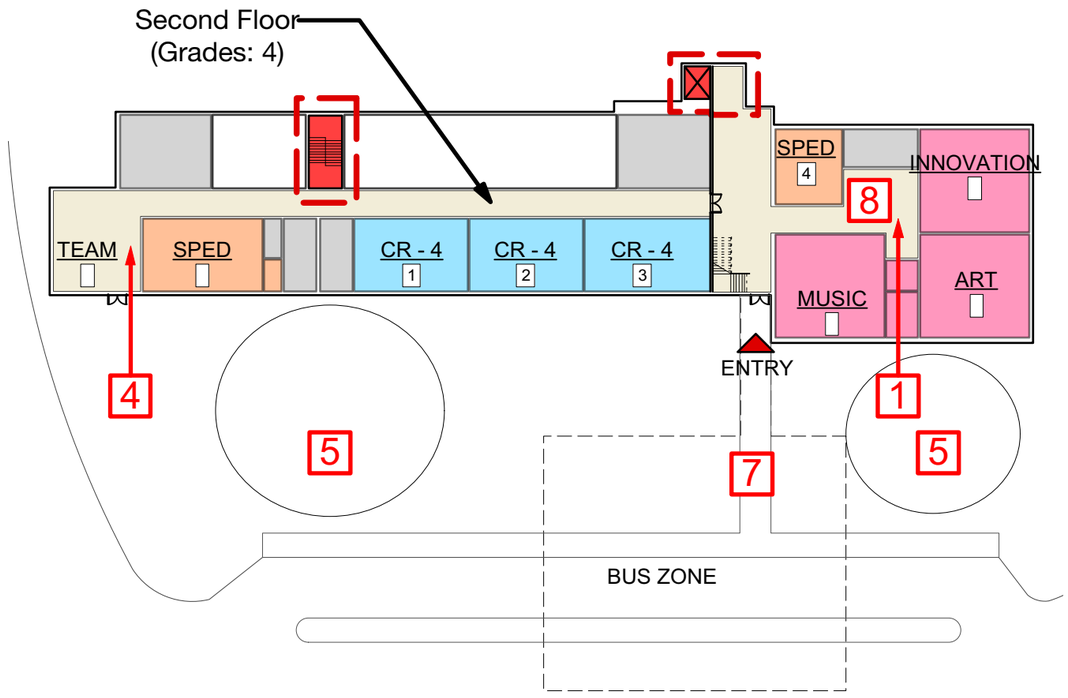
Bourne, Massachusetts

Flansburgh Architects

OPTION 1G (K-4)

Addition/Renovation

Square Footage: 57,248sf



FIRST FLOOR PLAN

KEY — New Addition: - - - - - -

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources (tucked away on lower level)
2. Outdoor Classroom:
   - Adjacent to classroom wing, may limit use do to distraction
3. Community:
   - Larger venue to support greater community events on this side of the canal
4. Academic: Neighborhood collab/display
   -Existing Bldg. has limited opportunity for larger Team Areas
5. Play Area: Remote from gymnasium
6. Campus Resource:
   - Adjacent to Middle School and High School, Historic Village,Canal
7. Separate car and bus drop-off entry locations
8. Potential noise concerns from proximity of gym to admin & Arts/Innovation area to Cafeteria Above

SECOND FLOOR PLAN

0' 25' 50' 100'

Peebles Elementary School
Bourne, Massachusetts

Flansburgh Architects

Option 2A (grades PreK-4): Renovation/Addition on Bournedale Elementary campus

This option combines the Peebles and Bournedale populations for a district-wide PreK-4 school on the Bournedale campus. The floor plans for this option locates grades PreK-2 in the existing building surrounding the courtyard to the north and grades 3 & 4 in a new addition southeast of the existing building. The two academic clusters share centrally located communal functions such as the administrative offices, cafeteria, gymnasium, and learning commons. This option involves minimal renovation to the majority of the existing school with extensive renovation and addition at the gymnasium and cafeteria. The project also adds two new classrooms to the second floor at the north end of the existing building. A new two-story classroom wing abuts the existing building at the east face of the cafeteria, limiting disruption to the existing building during construction.

A new main school entrance located on the north side of the new addition leads into a lobby with administrative offices adjacent and an outdoor classroom south of the entrance. This new lobby is on axis with the existing spine serving community spaces and separates the two academic wings into distinct academies of younger and older students. Similar to the existing classroom wing, the new two-story classroom wing includes general classrooms and SPED rooms surrounding an outdoor classroom. The layout of the addition includes informal “team rooms”; the configuration of the existing classroom wing limits accommodation of these spaces.

The existing cafeteria with adjacent stage grows with an addition to the east. The cafeteria addition has views to the new outdoor classroom and has access to an area south of the school for outdoor dining. The gymnasium expands to a full-size gym with an addition south of the existing space.

The loading dock with service entrance on the south side of the school remains in the existing location with direct access to custodial, storage, mechanical rooms and the kitchen.

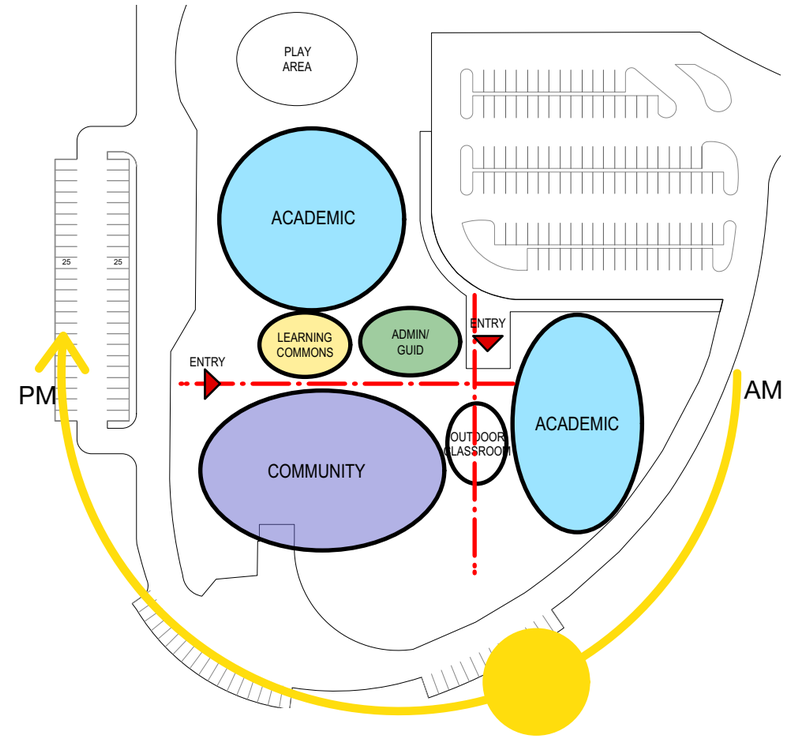
The site plan for option 2A maintains the loop road surrounding the school for fire truck access and for vehicles dropping off or picking up at the main school entry. A new car drop-off would be located on the north facade of the new addition between the two academic wings; the bus drop-off location to the west of the existing school building remains unchanged. Parking would be provided north of the new entry plaza adjacent to the main entrance and could be utilized by staff as well as for sporting events or evening use of the school. Additional parking would be provided west of the existing bus drop-off.

This option is a multi-phase construction project. The addition would be constructed first, allowing swing space during renovations to the existing building. Phasing would require students to move two times in the course of construction, and upon project completion, the Peebles population would be incorporated.

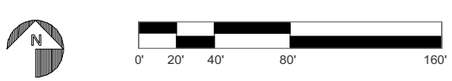
OPTION 2A (PK-4)

Addition/Renovation

Square Footage: 114,593sf



Organizational Diagram



Bournedale Elementary School

Bourne, Massachusetts

Flansburgh Architects

OPTION 2A (PK-4)

Addition/Renovation

Square Footage: 114,593sf

FIRST FLOOR PLAN

SECOND FLOOR PLAN

KEY

New Addition: - - - - - -

1. Arts & Innovation Studio:
   -Grouped with Arts to promote collaboration, shared resources
   -Remote from Learning Commons
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   -Larger venue to support greater community events

4A. Academic: Neighborhood collab/display

4B. Academic: Existing building limits opportunity for Team Areas

5. Play Area: Remote from gymnasium
6. Separate car and bus drop-off entry locations
7. Distinct academic neighborhood:
   Existing Wing: Pk-2, New Addition: 3-4

N

0' 25' 50' 100'

Bournedale Elementary School

Bourne, Massachusetts

Flansburgh Architects

Option 3A (grades PreK-5): Renovation/Addition on Bournedale Elementary campus

This option combines the Peebles, Bournedale, and fifth-grade populations for a district-wide PreK-5 school on the Bournedale campus. A series of additions nearly double the building square footage. The floor plans locate grades PreK-2 in the existing building surrounding the courtyard to the north and grades 3-5 in a new addition southeast of the existing building. The two academic clusters share centrally located communal functions such as the administrative offices, cafeteria, gymnasium, and learning commons. This option involves minimal renovation to the majority of the existing school with extensive renovation and addition at the gymnasium and cafeteria. The project also adds two new classrooms to the second floor at the north end of the existing building. A new two-story classroom wing abuts the existing building at the east face of the cafeteria, limiting disruption to the existing building during construction.

A new main school entrance located on the north side of the new addition leads into a lobby with administrative offices adjacent and an outdoor classroom south of the entrance. This new lobby is on axis with the existing spine serving community spaces and separates the two academic wings into distinct academies of younger and older students. Similar to the existing classroom wing, the new two-story classroom wing includes general classrooms and SPED rooms surrounding an outdoor classroom. The layout of the addition includes informal “team rooms”; the configuration of the existing classroom wing limits accommodation of these spaces.

The existing cafeteria with adjacent stage grows with an addition to the east. The cafeteria addition has views to the new outdoor classroom and has access to an area south of the school for outdoor dining. The gymnasium expands to a full-size gym with an addition south of the existing space.

The loading dock with service entrance on the south side of the school remains in the existing location with direct access to custodial, storage, mechanical rooms and the kitchen.

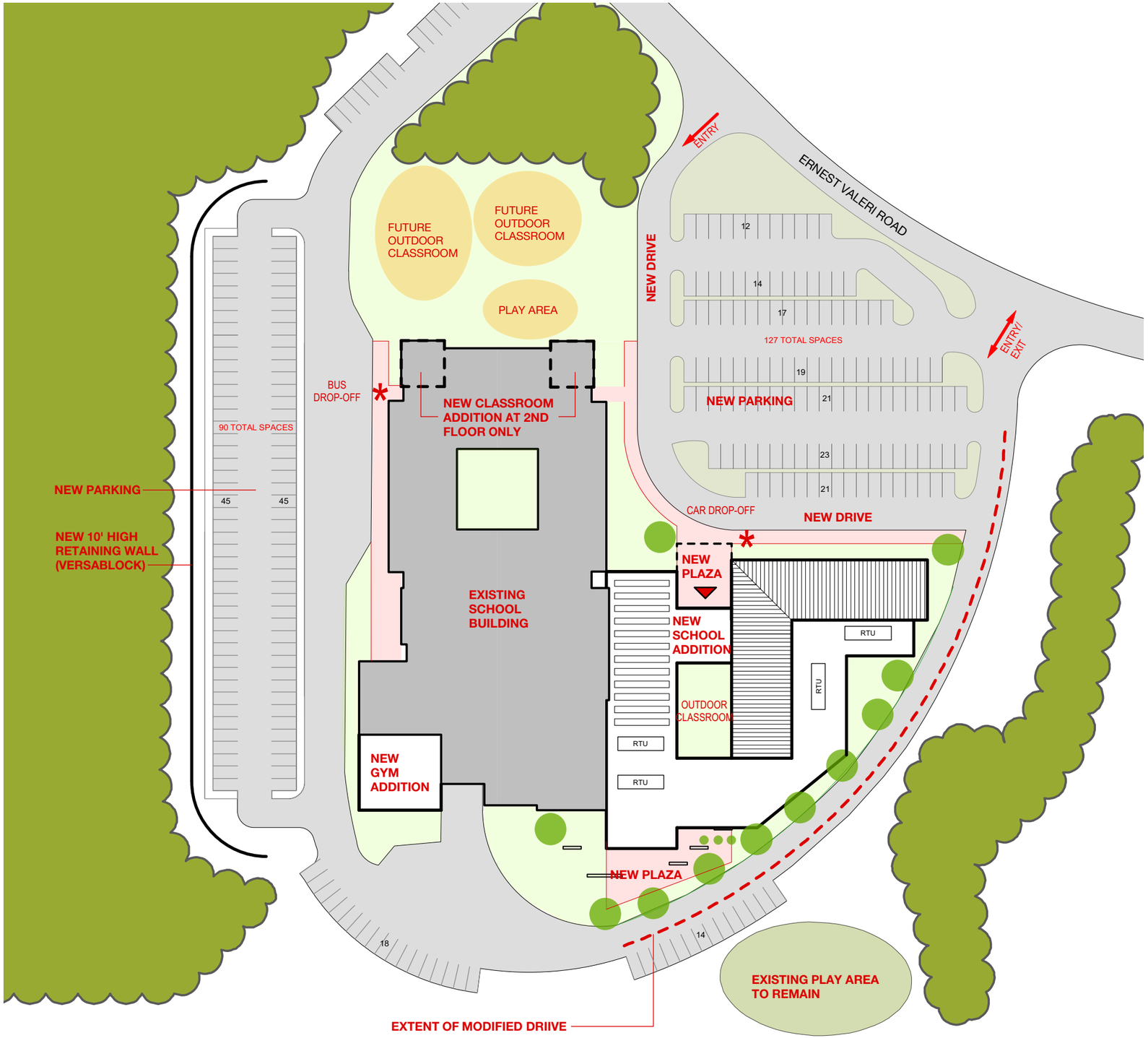
The site plan for option 3A maintains the loop road surrounding the school for fire truck access and for vehicles dropping off or picking up at the main school entry. A new car drop-off would be located on the north facade of the new addition between the two academic wings; the bus drop-off location to the west of the existing school building remains unchanged. Parking would be provided north of the new entry plaza adjacent to the main entrance and could be utilized by staff as well as for sporting events or evening use of the school. Additional parking would be provided west of the existing bus drop-off.

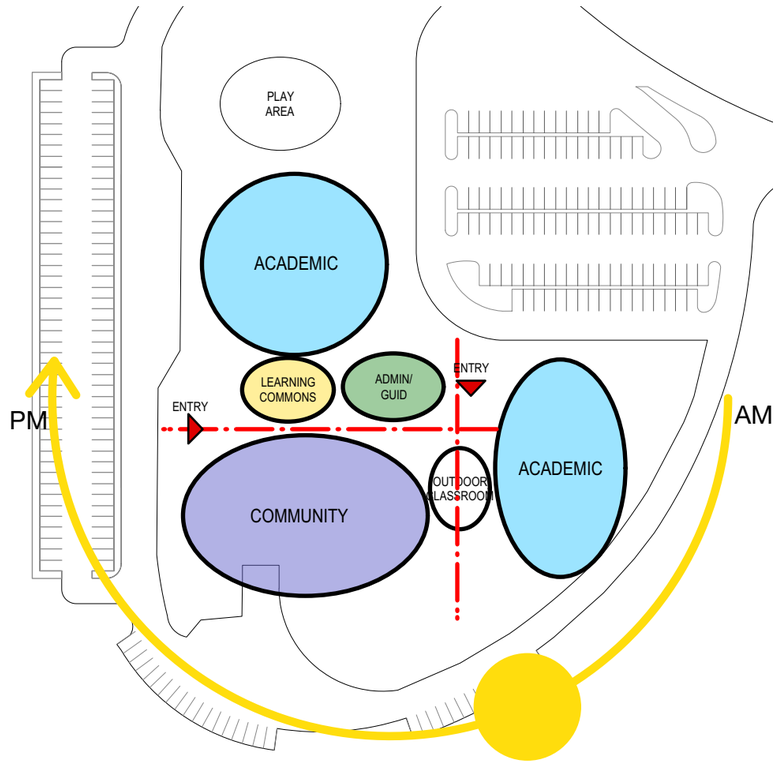
This option is a multi-phase construction project. The addition would be constructed first, allowing swing space during renovations to the existing building. Phasing would require students to move two times in the course of construction, and upon project completion, the Peebles and fifth-grade populations would be incorporated.

OPTION 3A (PK-5)

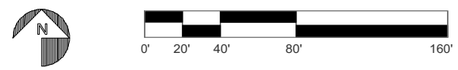
Addition/Renovation

Square Footage: 131,382 sf





Organizational Diagram



Bournedale Elementary School

Bourne, Massachusetts

Flansburgh Architects

OPTION 3A (PK-5)

Addition/Renovation

Square Footage: 131,382 sf

FIRST FLOOR PLAN

SECOND FLOOR PLAN

KEY — New Addition: - - - - - - -

1. Arts & Innovation Studio:
   - Remote from Arts,Music & Learning Commons
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   -Larger venue to support greater community events

4A. Academic: Neighborhood collab/display
4B. Academic: Existing building limits opportunity for Team Areas
5. Play Area: Remote from gymnasium
6. Separate car and bus drop-off entry locations
7. Distinct academic neighborhood:
   Existing Wing: Pk-2, New Addition: 3-4

N

0' 25' 50' 100'

Bournedale Elementary School

Bourne, Massachusetts

Flansburgh Architects

Option 3B (grades PreK-5): Renovation/Addition on Bournedale Elementary campus

This option combines the Peebles, Bournedale, and fifth grade populations for a district-wide PreK-5 school on the Bournedale campus. A series of additions nearly double the building square footage; floor plans for the option follow this section. This option includes the same educational program and grade configuration as option 3A. A shared outdoor classroom separates the lower elementary grades PreK-2 from the upper elementary grades 3-5; both would utilize the new main entrance in the southeast corner of the addition.

Similar to option 3A, this option involves minimal renovation for the majority of the existing school with extensive renovation and addition at the gymnasium, cafeteria and two new classrooms at the north of the existing building. One large addition east of the existing classroom wing houses grades 3-5 and allows for a continuous loop of internal circulation between the existing building and new addition.

The new two-story classroom wing stretching the length of the existing eastern façade includes general classrooms, SPED rooms and informal “team rooms.” A new main entrance is located on the south side of the addition with direct access to the administrative offices leading to the arts suite and community spaces beyond.

The existing cafeteria with adjacent stage grows with an addition to the east. The cafeteria addition faces the new entry plaza and has access to an area south of the school for outdoor dining. The gymnasium expands to a full-size gym with an addition south of the existing space.

The loading dock with service entrance on the south side of the school remains in the existing location with direct access to custodial, storage, mechanical rooms and the kitchen.

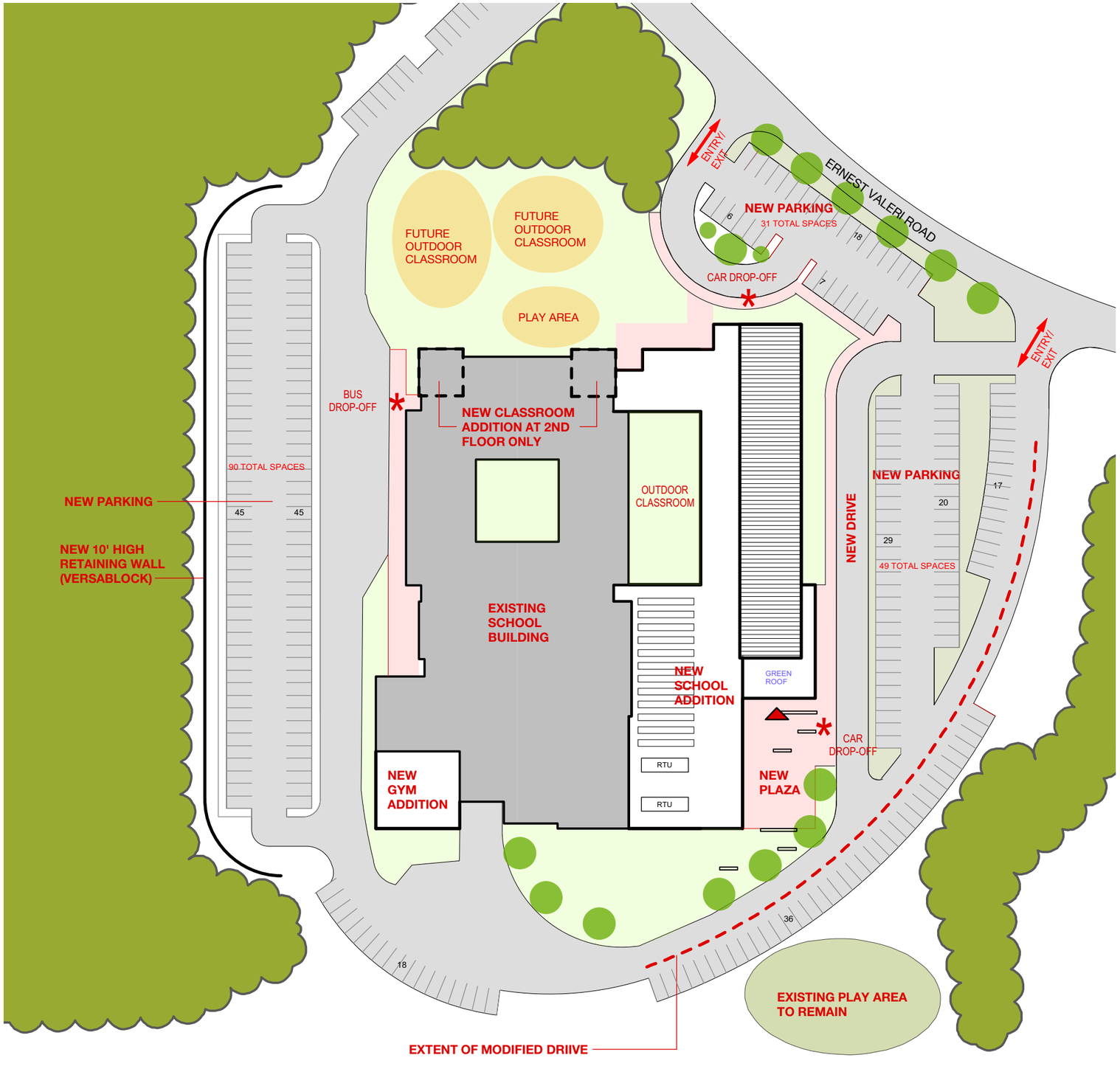
The site plan for option 3B maintains the loop road shown surrounding the school for fire truck access and for vehicles dropping off or picking up at the main school entry. A new car drop-off would be located east of the new addition; the existing bus drop-off location remains to the west of the existing building. Parking would be provided east of the addition and could be utilized by staff as well as for sporting events or evening use of the school. Additional parking would be provided west of the existing bus drop-off.

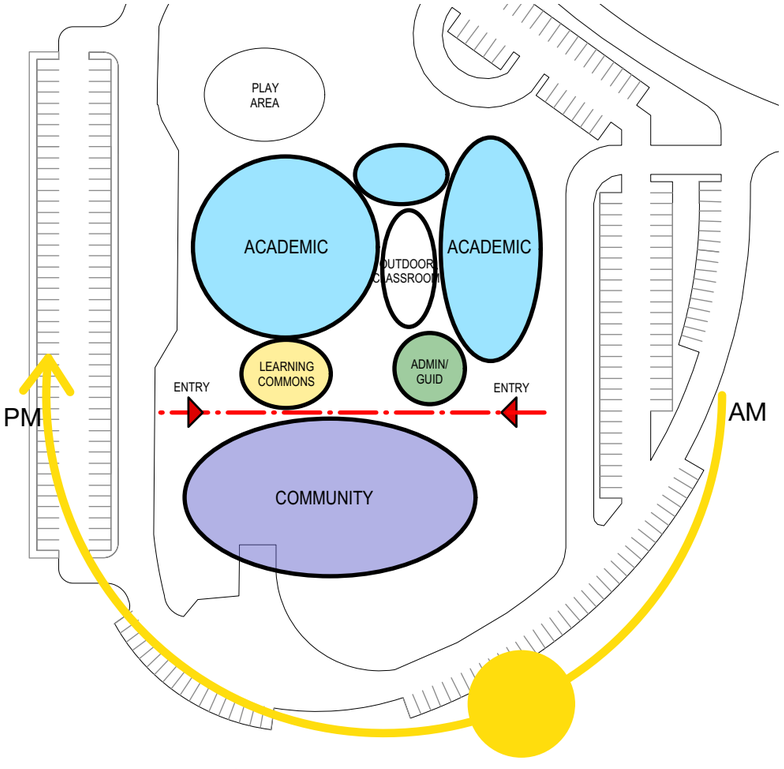
This option is a multi-phase construction project. The addition would be constructed first, allowing swing space during renovations to the existing building. Phasing would require students to move two times in the course of construction, and upon project completion, the Peebles and fifth-grade populations would be incorporated.

OPTION 3B (PK-5)

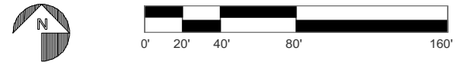
Addition/Renovation

Square Footage: 131,382 sf





Organizational Diagram



Bournedale Elementary School

Bourne, Massachusetts

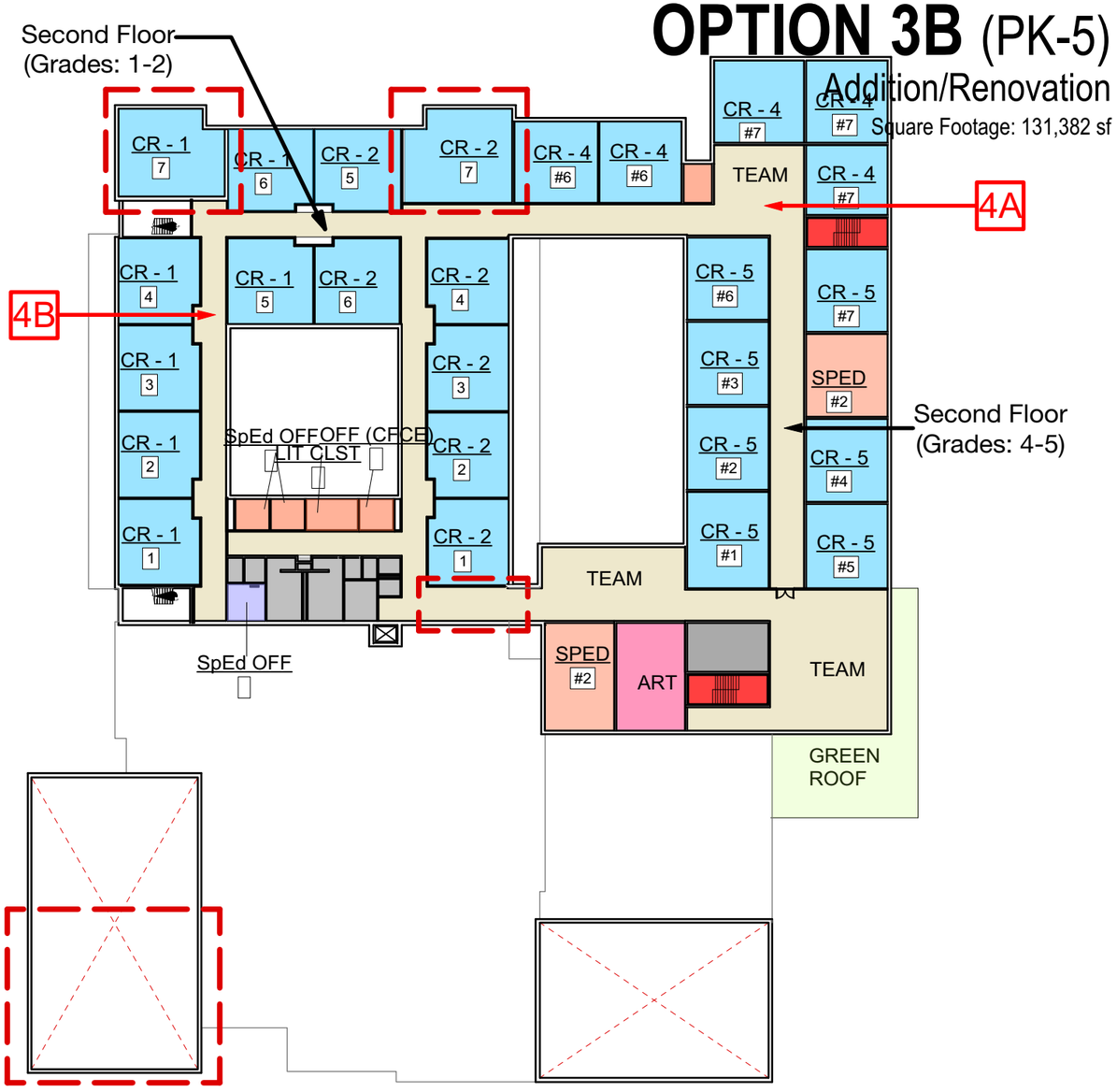
Flansburgh Architects

OPTION 3B (PK-5)

Addition/Renovation

Square Footage: 131,382 sf

FIRST FLOOR PLAN



SECOND FLOOR PLAN

KEY

New Addition:

1. Arts & Innovation Studio:
   -Grouped with Arts to promote collaboration, shared resources
2. Outdoor Classroom:
   - Embedded within classroom wings, may disrupt learning in academic classrooms
3. Community:
   -Larger venue to support greater community events

4A. Academic: Neighborhood collab/display

4B. Academic: Existing building limits opportunity for Team Areas

5. Play Area: Remote from gymnasium
6. Separate car and bus drop-off entry locations

N

0' 25' 50' 100'

Bournedale Elementary School

Bourne, Massachusetts

Flansburgh Architects

Option 4B (grades K-5): Renovation/ Addition on Peebles Elementary School Site

This option involves extensive renovation to the existing building and one large addition to the upper floor of the existing elementary school. The floor plans for this option follow this section and show a two-story building with grades K- 3 + 5 on the upper floor and grade 4 on the lower floor. The two levels share a common corridor that acts as a “main street” connecting the communal functions of the administrative offices, arts studios, cafeteria, gymnasium, and learning commons.

The upper floor addition creates a continuous loop surrounding a large outdoor classroom and includes the new gymnasium, learning commons, and administrative offices. Relocating the cafeteria to the existing gymnasium space on the second floor allows a direct connection to the existing stage. The art rooms, music room, and innovation studio occupy the existing cafeteria space on the ground floor, remaining within the community wing of the building. The two classroom wings contain general classrooms, SPED rooms, and informal “team rooms” off of the corridor.

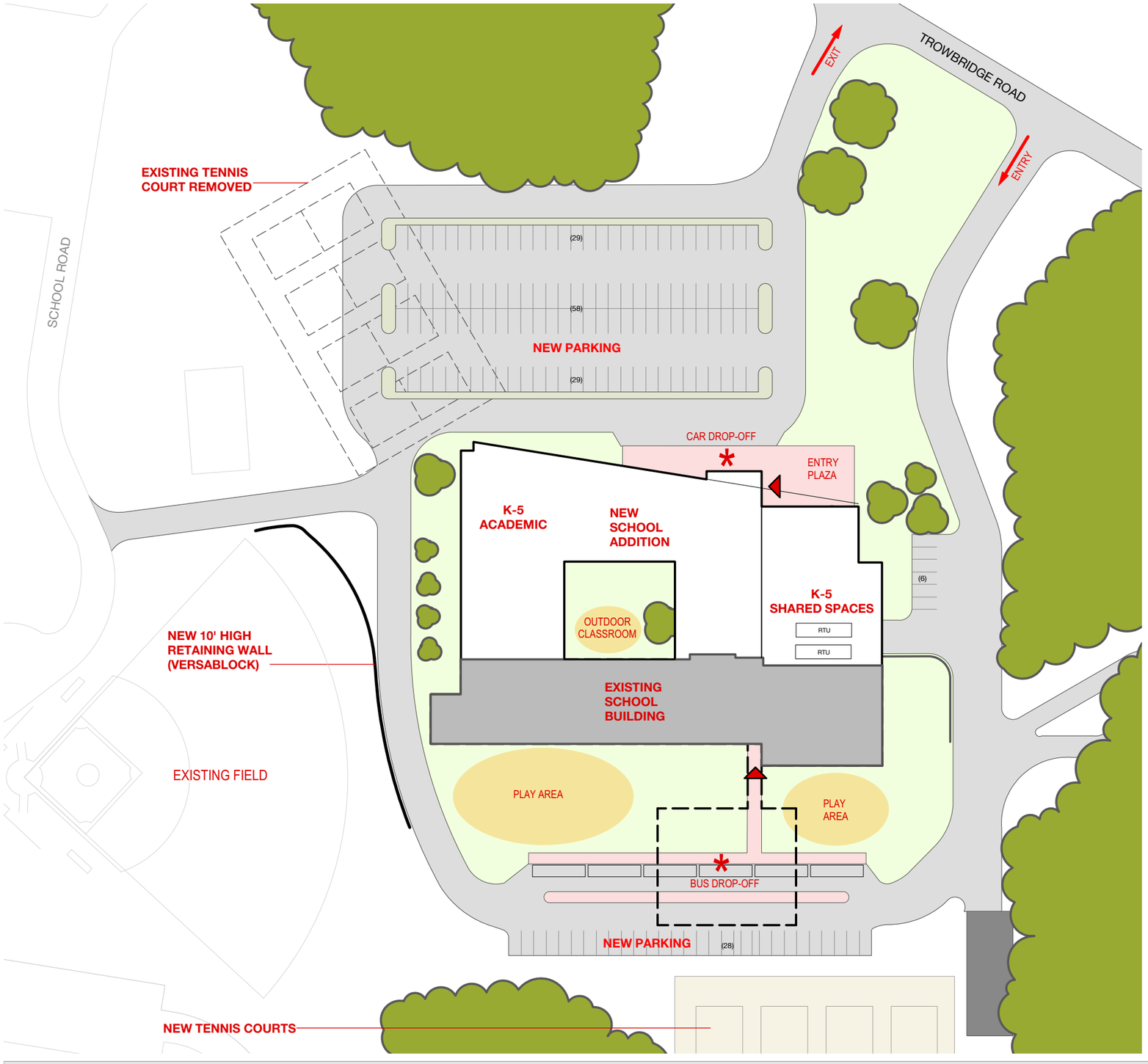
The site plan for option 4B shows separate entry and exit lanes off Trowbridge Road. A loop road surrounds the school for fire truck access and for vehicles dropping off or picking up at the main school entry. Students entering from the car drop-off to the north and bus drop-off to the south both arrive on the “main street” corridor. Parking would be provided west of the upper entry plaza on the location of the existing tennis courts.

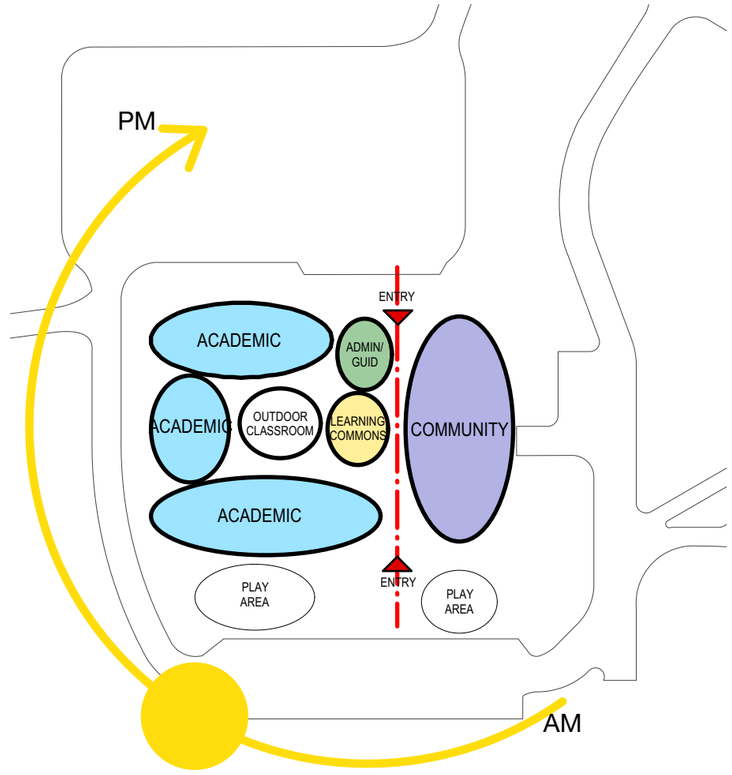
This option is a multi-phase construction project. The existing building would be renovated while occupied, requiring students to move multiple times throughout the duration of construction. The existing tennis courts replaced by a new parking lot would be relocated southeast of the new bus drop-off.

OPTION 4B (K-5)

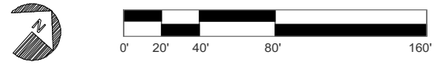
Addition/Renovation

Square Footage: 72,473 sf





Organizational Diagram



Peebles Elementary School

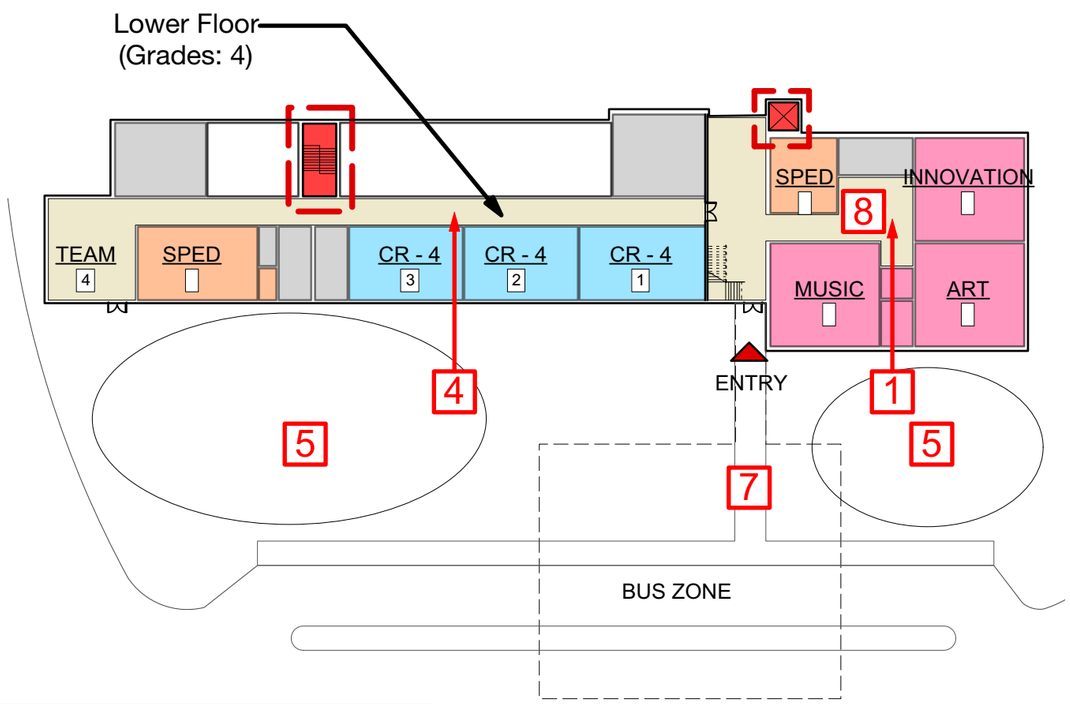
Bourne, Massachusetts

Flansburgh Architects

OPTION 4B (K-5)

Addition/Renovation

Square Footage: 72,473 sf



FIRST FLOOR PLAN

KEY — New Addition: - - - - - -

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources (tucked away on lower level)
2. Outdoor Classroom:
   - Embedded within classroom wings may disrupt learning
3. Community:
   - Larger venue to support greater community events on this side of the canal
4. Academic: Neighborhood collab/display
   -Existing Bldg. has limited opportunity for larger Team Areas
5. Play Area: Remote from gymnasium
6. Campus Resource:
   - Adjacent to Middle School and High School, Historic Village,Canal
7. Separate car and bus drop-off entry locations
8. Potential noise concerns from proximity of gym to admin & Arts/Innovation area to Cafeteria Above

SECOND FLOOR PLAN

0' 25' 50' 100'

Peebles Elementary School

Bourne, Massachusetts

Flansburgh Architects

[redacted] F. New Construction Options

F. NEW CONSTRUCTION ALTERNATIVES

Two new construction alternatives were evaluated at the Peebles Elementary School site. The following describe the siting, conceptual planning, and initial construction phasing.

Option 1A (grades K-4): New Construction on Peebles Elementary School Site

In this option, a new two-story building would be situated west of the existing Peebles building in the area of the existing tennis courts. The floor plans for this option locate grades K & 1 on the first floor with grades 2-4 on the second. The main entry on the northeast side of the building opens to the administrative and guidance offices, with the double height learning commons beyond. Adjacent to the learning commons, a centrally located outdoor classroom space allows natural light into the center of the building and separates the classroom wing from communal spaces of the cafeteria, arts studios, and gymnasium. The two-story classroom wing contains general classrooms, SPED rooms, and informal “team rooms” off of the corridor that encourage group learning opportunities.

The outdoor classroom is positioned centrally within the building, away from the two-story classroom wing to limit noise and distraction to the general classrooms. As a result, this location permits use throughout the school day. The cafeteria has views to the outdoor classroom and access to this area for outdoor dining, art classes, and other exterior class use, weather permitting. The stage and fly loft located between the cafeteria dining space and the gymnasium serves to separate the two spaces acoustically and also allows flexibility for both spaces to access the stage for various school and community events with a proscenium opening to each space.

A loading dock on the northwest side of the school allows direct access to custodial, storage, mechanical rooms, and the kitchen.

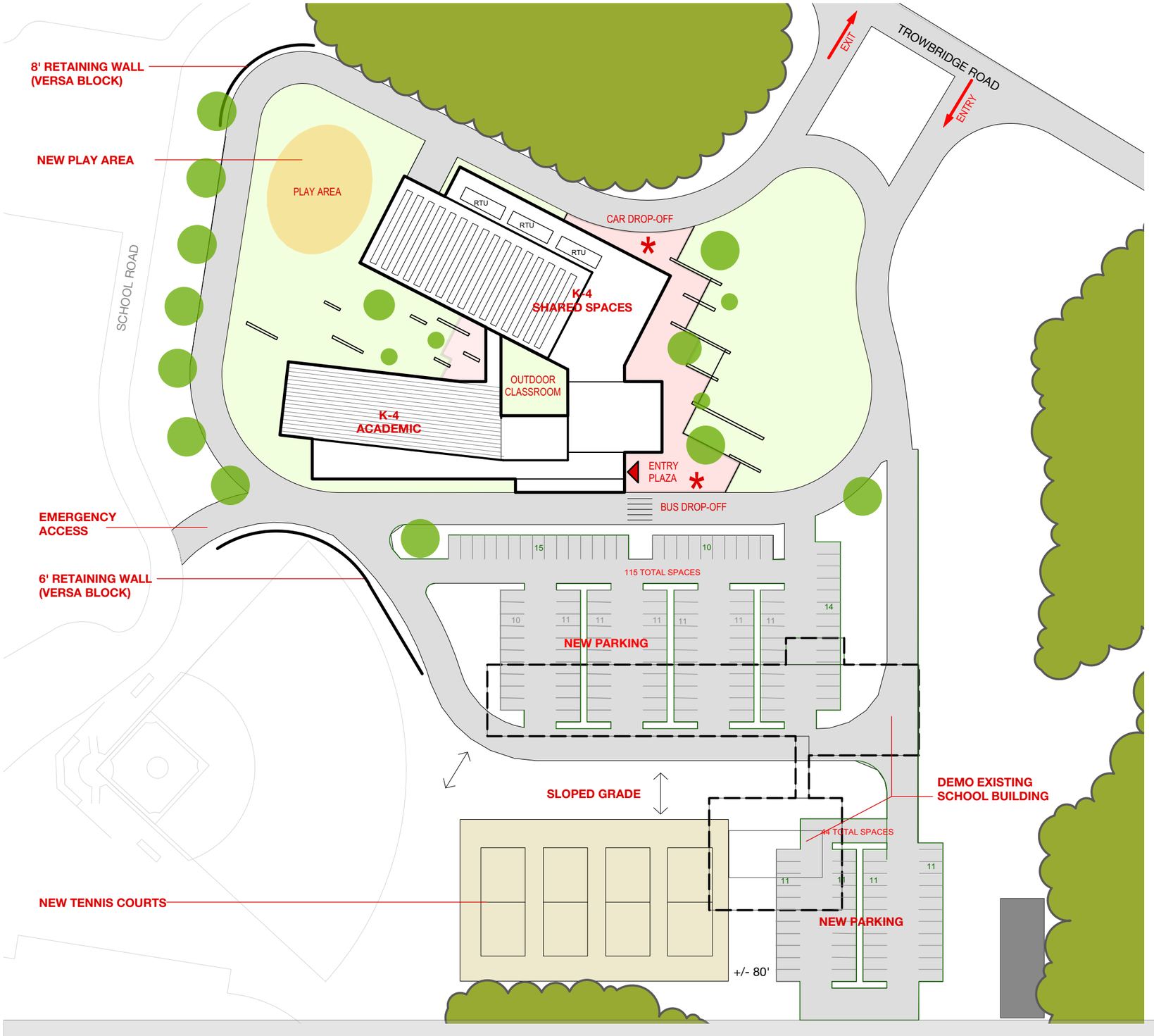
The site plan for option 1A shows separate entry and exit lanes off Trowbridge Road for safety and simplicity of access. A loop road surrounds the school for fire truck access and for vehicles dropping off or picking up at the main school entry. The car drop-off to the north and bus drop-off location to the south share one entry plaza. The parking lot located behind the school and adjacent to the main entrance can be utilized by staff as well as for sporting events or evening use of the school. The existing tennis courts on the west side of the site will be relocated southeast to the existing baseball field.

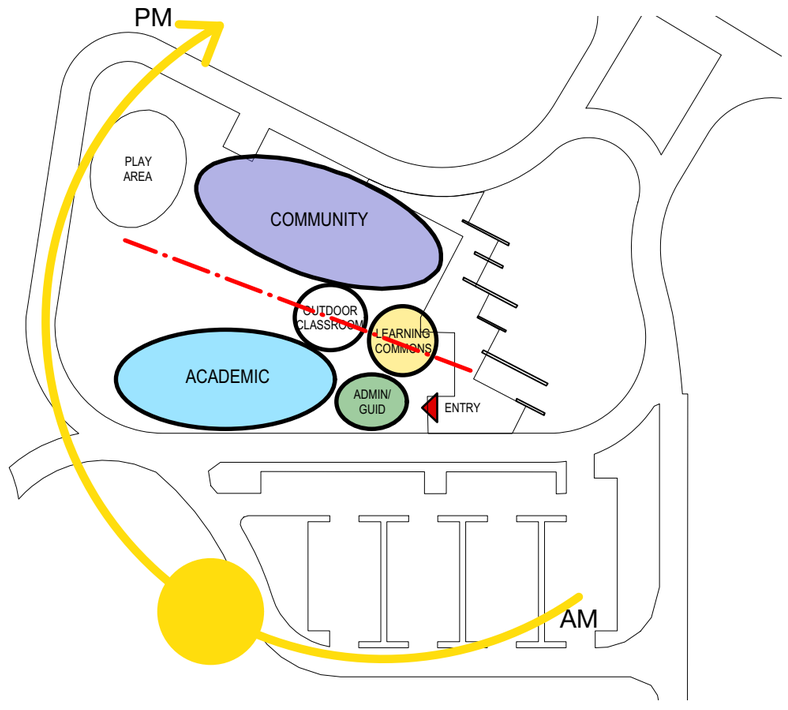
In this single phase building option, once the new building is complete, the entire student population would move out of the existing Peebles Elementary School and into the new facility. The existing Peebles School would then be demolished and new site work completed.

OPTION 1A (K-4)

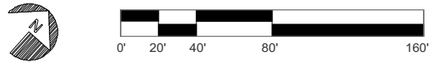
New Construction

Square Footage: 57,248sf





Organizational Diagram



Peebles Elementary School

Bourne, Massachusetts

Flansburgh Architects

OPTION 1A (K-4)

New Construction

Square Footage: 57,248sf

FIRST FLOOR PLAN

KEY

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   - Stage open to gym & cafe to support larger venue to support greater community events on this side of the canal
4. Academic:
   -Neighborhood collab/display
5. Play Area:
   -Adjacent to Gymnasium to limit distraction to academic classrooms
6. Campus Resource:
   - Adjacent to Middle School and High School,Historic Village, Canal
7. Entry Plaza connects separate car and bus zones

SECOND FLOOR PLAN

0' 25' 50' 100'

Peebles Elementary School

Bourne, Massachusetts

Flansburgh Architects

Option 4A (grades K-5): New Construction on Peebles Elementary campus

In this option, a new two-story building would be situated west of the existing Peebles building on the tennis courts. The floor plans for this option locate grades K-2 on the first floor with grades 3-5 on the second. The main entry on the northeast side of the building opens to the administrative and guidance offices, with the double-height learning commons beyond. Adjacent to the learning commons, a centrally located outdoor classroom space allows natural light into the center of the building and separates the classroom wing from communal spaces of the cafeteria, arts studios, and gymnasium. The two-story classroom wing contains general classrooms, SPED rooms, and informal “team rooms” off of the corridor that encourage group learning opportunities.

The outdoor classroom is positioned centrally within the building, away from the two-story classroom wing to limit noise and distraction to the general classrooms. As a result, this location permits use throughout the school day. The cafeteria has views to the outdoor classroom and access to this area for outdoor dining, art classes, and other exterior class use, weather permitting. The stage and fly loft located between the cafeteria dining space and the gymnasium serves to separate the two spaces acoustically and also allows flexibility for both spaces to access the stage for various school and community events with a proscenium opening to each space.

A loading dock on the northwest side of the school allows direct access to custodial, storage, mechanical rooms, and the kitchen.

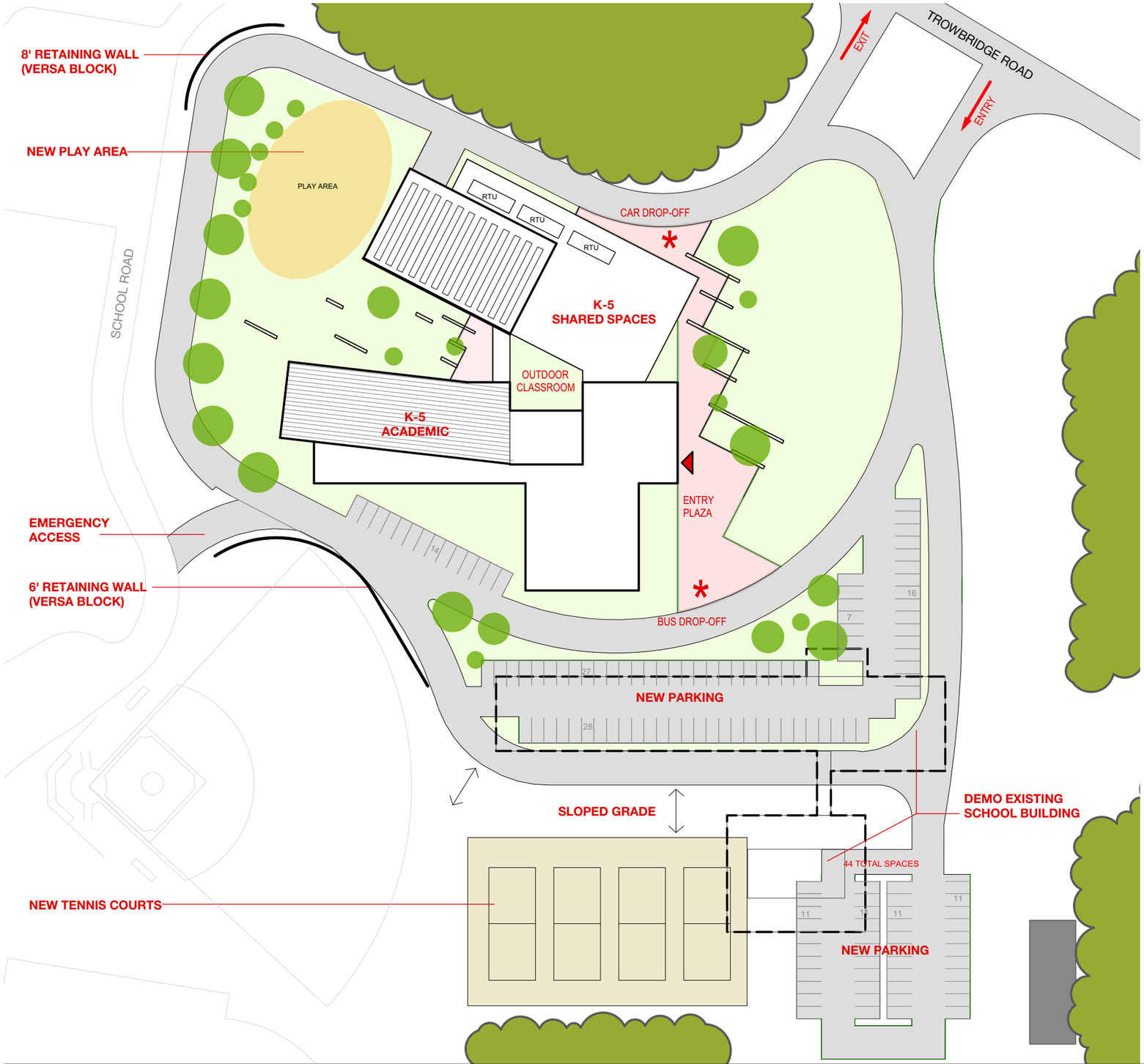
The site plan for option 4A shows separate entry and exit lanes off Trowbridge Road for safety and simplicity of access. A loop road surrounds the school for fire truck access and for vehicles dropping off or picking up at the main school entry. The car drop-off to the north and bus drop-off location to the south share one entry plaza. A large parking lot located behind the school and adjacent to the main entrance can be utilized by staff as well as for sporting events or evening use of the school. The existing tennis courts on the west side of the site would be demolished for the building site and replaced with new tennis courts to the southeast side of the site adjacent to the existing baseball field.

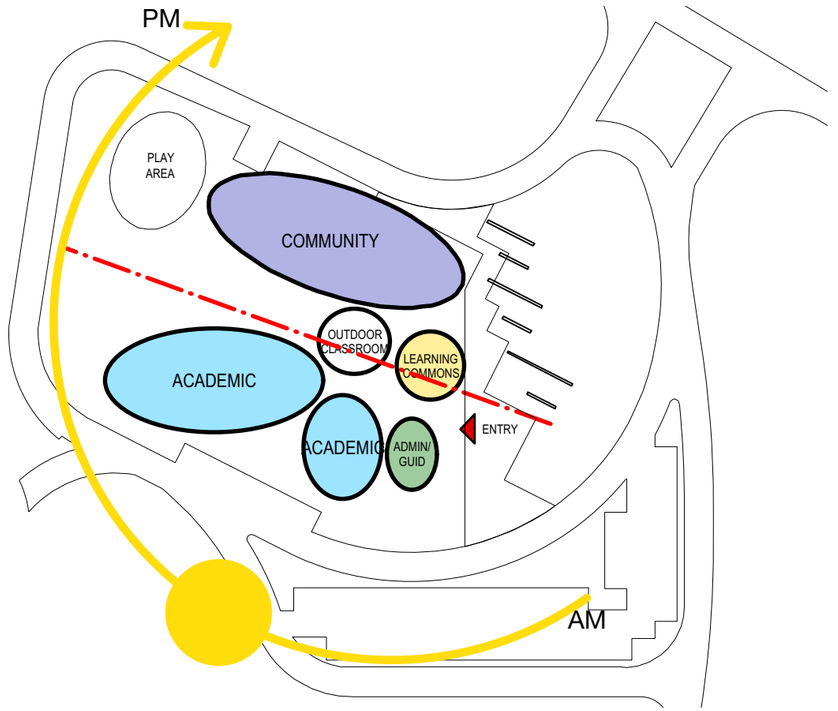
In this single phase building option, once the new building is complete, the entire student population would move out of the existing Peebles Elementary School and into the new facility. The existing Peebles School would then be demolished and new site work completed.

OPTION 4A (K-5)

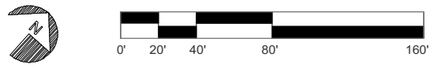
New Construction

Square Footage: 72,473 sf





Organizational Diagram



Peebles Elementary School

Bourne, Massachusetts

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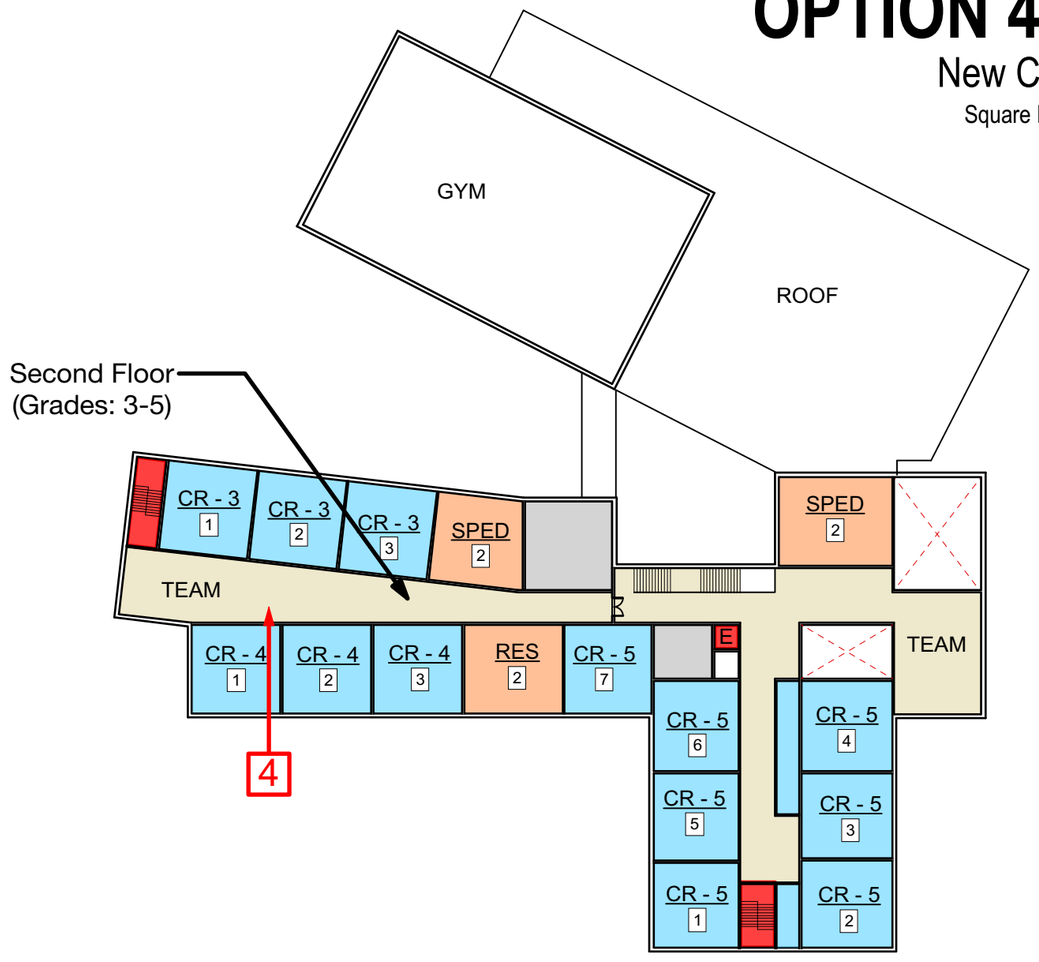
OPTION 4A (K-5)

New Construction

Square Footage: 72,473 sf



FIRST FLOOR PLAN

SECOND FLOOR PLAN

KEY

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   - Stage open to gym & cafe to support larger venue to support greater community events on south side of the canal
4. Academic:
   -Neighborhood collab/display
5. Play Area:
   -Adjacent to Gymnasium to limit distraction to academic classrooms
6. Campus Resource:
   - Adjacent to Middle School and High School,Historic Village, Canal
7. Entry Plaza connects separate car and bus zones

N

0' 25' 50' 100'

Peebles Elementary School

Bourne, Massachusetts

Flansburgh Architects

[redacted] G. Conceptual Cost Estimates

G. CONCEPTUAL COST ESTIMATES

The following are preliminary construction cost estimates of the seven alternatives including five renovations/additions and two new construction plus Option 0, the “Base Repair Option.” The summary pages are included on the following page with further detail in the Appendix. It has been assumed that CM-at-Risk pricing will be used although this decision has not been finalized yet. Also, a design contingency and escalation factor has been included. After the seven cost estimates, there is a summary of the construction costs plus “soft” costs to get to the total project costs for each option.

Feasibility Design Submission

Bourne Elementary Schools
Design Options

Bourne, MA

PM&C LLC
20 Downer Avenue
Hingham, MA 02043
(T) 781-740-8007
(F) 781-740-1012

Prepared for:

Flansburgh Architects

December 9, 2015

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

MAIN CONSTRUCTION COST SUMMARY

	Construction Start		Gross Floor Area	$/sf	Estimated Construction Cost
OPTION 0 - CODE REPAIRS RENOVATION TO PEEBLES ES					
RENOVATION			37,557	$186.54	$7,005,729
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK - Allowance for ADA upgrades only					$250,000
SUB-TOTAL	Sep-17		37,557	$213.75	$8,027,829
ESCALATION TO START - (assumed 4% PA)	7%				$561,948
DESIGN AND PRICING CONTINGENCY	12%				$963,339
SUB-TOTAL	Sep-17		37,557	$254.36	$9,553,116
GENERAL CONDITIONS		16	MTHS	$80,000	$1,280,000
GENERAL REQUIREMENTS	3.00%				$286,593
BONDS	1.25%				$119,414
INSURANCE	1.15%				$109,861
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$238,828
GMP CONTINGENCY	2%				$191,062
PHASING PREMIUM	3%				$286,593
TOTAL OF ALL CONSTRUCTION OPTION 0	Sep-17		37,557	$321.26	**$12,065,467**

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 1A - NEW CONSTRUCTION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			55,000	$8.00	$440,000
NEW BUILDING			57,248	$288.00	$16,487,465
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$2,892,109
SUB-TOTAL	Sep-17		57,248	$359.69	$20,591,674
ESCALATION TO START - (assumed 4% PA)	7%				$1,441,417
DESIGN AND PRICING CONTINGENCY	12%				$2,471,001
SUB-TOTAL	Sep-17		57,248	$428.03	$24,504,092
GENERAL CONDITIONS		26	MTHS	$80,000	$2,080,000
GENERAL REQUIREMENTS	3.00%				$735,123
BONDS	1.25%				$306,301
INSURANCE	1.15%				$281,797
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$612,602
GMP CONTINGENCY	2%				$490,082
TOTAL OF ALL CONSTRUCTION OPTION 1A	Sep-17		57,248	$506.74	**$29,009,997**

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 1G - ADD/RENOVATION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			8,840	$8.00	$70,720
NEW ADDITION			19,691	$326.26	$6,424,334
RENOVATION			37,557	$186.54	$7,005,729
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$2,879,018
SUB-TOTAL	Sep-17		57,248	$299.61	$17,151,901
ESCALATION TO START - (assumed 4% PA)	7%				$1,200,633
DESIGN AND PRICING CONTINGENCY	12%				$2,058,228
SUB-TOTAL	Sep-17		57,248	$356.53	$20,410,762
GENERAL CONDITIONS		30	MTHS	$80,000	$2,400,000
GENERAL REQUIREMENTS	3.00%				$612,323
BONDS	1.25%				$255,135
INSURANCE	1.15%				$234,724
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$510,269
GMP CONTINGENCY	2%				$408,215
PHASING PREMIUM	3%				$612,323
TOTAL OF ALL CONSTRUCTION OPTION 1G	Sep-17		57,248	$444.45	**$25,443,751**

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 2A - ADD/RENOVATION BOURNEDALE ES SITE

DEMOLISH EXISTING BUILDING					NIC
NEW ADDITION			46,493	$288.92	$13,432,806
RENOVATION			68,100	$67.84	$4,619,655
SITEWORK					$3,223,579
SUB-TOTAL	Sep-17		114,593	$185.67	$21,276,040
ESCALATION TO START - (assumed 4% PA)	7%				$1,489,323
DESIGN AND PRICING CONTINGENCY	12%				$2,553,125
SUB-TOTAL	Sep-17		114,593	$220.94	$25,318,488
GENERAL CONDITIONS		26	MTHS	$80,000	$2,080,000
GENERAL REQUIREMENTS	3.00%				$759,555
BONDS	1.25%				$316,481
INSURANCE	1.15%				$291,163
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$632,962
GMP CONTINGENCY	2%				$506,370
PHASING PREMIUM	1.5%				$379,777
TOTAL OF ALL CONSTRUCTION OPTION 2A	Sep-17		114,593	$264.28	**$30,284,796**

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 3A - ADD/RENOVATION BOURNEDALE ES SITE

DEMOLISH EXISTING BUILDING					NIC
NEW ADDITION			63,282	$267.88	$16,952,160
RENOVATION			68,100	$67.84	$4,619,655
SITEWORK					$3,447,402
SUB-TOTAL	Sep-17		131,382	$190.43	$25,019,217
ESCALATION TO START - (assumed 4% PA)	7%				$1,751,345
DESIGN AND PRICING CONTINGENCY	12%				$3,002,306
SUB-TOTAL	Sep-17		131,382	$226.61	$29,772,868
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$893,186
BONDS	1.25%				$372,161
INSURANCE	1.15%				$342,388
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$744,322
GMP CONTINGENCY	2%				$595,457
PHASING PREMIUM	1.5%				$446,593
TOTAL OF ALL CONSTRUCTION OPTION 3A	Sep-17		131,382	$269.50	**$35,406,975**

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 3B - ADD/RENOVATION BOURNEDALE ES SITE

DEMOLISH EXISTING BUILDING					NIC
NEW ADDITION			63,282	$261.20	$16,528,956
RENOVATION			68,100	$67.84	$4,619,655
SITEWORK					$3,398,603
SUB-TOTAL	Sep-17		131,382	$186.84	$24,547,214
ESCALATION TO START - (assumed 4% PA)	7%				$1,718,305
DESIGN AND PRICING CONTINGENCY	12%				$2,945,666
SUB-TOTAL	Sep-17		131,382	$222.34	$29,211,185
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$876,336
BONDS	1.25%				$365,140
INSURANCE	1.15%				$335,929
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$730,280
GMP CONTINGENCY	2%				$584,224
PHASING PREMIUM	1.5%				$438,168
TOTAL OF ALL CONSTRUCTION OPTION 3B	Sep-17		131,382	$264.73	**$34,781,262**

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 4A - NEW CONSTRUCTION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			55,000	$8.00	$440,000
NEW BUILDING			72,473	$265.69	$19,255,087
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$3,046,509
SUB-TOTAL	Sep-17		72,473	$324.45	$23,513,696
ESCALATION TO START - (assumed 4% PA)	7%				$1,645,959
DESIGN AND PRICING CONTINGENCY	12%				$2,821,644
SUB-TOTAL	Sep-17		72,473	$386.09	$27,981,299
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$839,439
BONDS	1.25%				$349,766
INSURANCE	1.15%				$321,785
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$699,532
GMP CONTINGENCY	2%				$559,626
TOTAL OF ALL CONSTRUCTION OPTION 4A	Sep-17		72,473	$455.22	**$32,991,447**

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 4B - ADD/RENOVATION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			8,840	$8.00	$70,720
NEW ADDITION			34,886	$279.29	$9,743,158
RENOVATION			37,557	$248.24	$9,323,106
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$2,954,788
SUB-TOTAL	Sep-17		72,443	$315.61	$22,863,872
ESCALATION TO START - (assumed 4% PA)	7%				$1,600,471
DESIGN AND PRICING CONTINGENCY	12%				$2,743,665
SUB-TOTAL	Sep-17		72,443	$375.58	$27,208,008
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$816,240
BONDS	1.25%				$340,100
INSURANCE	1.15%				$312,892
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$680,200
GMP CONTINGENCY	2%				$544,160
PHASING PREMIUM	3%				$816,240
TOTAL OF ALL CONSTRUCTION OPTION 4B	Sep-17		72,443	$454.95	**$32,957,840**

Assumed CMr procurement

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

	Construction Start	Gross Floor Area	$/sf	Estimated Construction Cost
OPTION 0 - CODE REPAIRS RENOVATION TO PEEBLES ES				
BUILDING (Including all Markups)		37,557	$280.44	$10,532,317
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,158,150
SITEWORK (Including all Markups)				$375,000
TOTAL OF ALL CONSTRUCTION OPTION 1A	Jan-00	57,248	$210.76	**$12,065,467**
OPTION 1A - NEW CONSTRUCTION PEEBLES ES SITE				
BUILDING (Including all Markups)		57,248	$406.08	$23,247,326
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,709,061
SITEWORK (Including all Markups)				$4,053,610
TOTAL OF ALL CONSTRUCTION OPTION 1A	Sep-17	57,248	$506.74	**$29,009,997**
OPTION 1G - ADD/RENOVATION PEEBLES ES SITE				
BUILDING (Including all Markups)		57,248	$344.85	$19,742,193
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,238,945
SITEWORK (Including all Markups)				$4,462,613
TOTAL OF ALL CONSTRUCTION OPTION 1G	Sep-17	57,248	$444.45	**$25,443,751**
OPTION 2A - ADD/RENOVATION BOURNEDALE ES SITE				
BUILDING (Including all Markups)		114,593	$223.70	$25,634,495
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$0
SITEWORK (Including all Markups)				$4,650,301
TOTAL OF ALL CONSTRUCTION OPTION 2A	Sep-17	114,593	$264.28	**$30,284,796**

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 3A - ADD/RENOVATION BOURNEDALE ES SITE				
BUILDING (Including all Markups)		131,382	$233.15	$30,631,977
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$0
SITEWORK (Including all Markups)				$4,774,998
TOTAL OF ALL CONSTRUCTION OPTION 3A	Sep-17	131,382	$269.50	**$35,406,975**
OPTION 3B - ADD/RENOVATION BOURNEDALE ES SITE				
BUILDING (Including all Markups)		131,382	$228.58	$30,031,028
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$0
SITEWORK (Including all Markups)				$4,750,234
TOTAL OF ALL CONSTRUCTION OPTION 3B	Sep-17	131,382	$264.73	**$34,781,262**
OPTION 4A - NEW CONSTRUCTION PEEBLES ES SITE				
BUILDING (Including all Markups)		72,473	$371.96	$26,957,122
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,696,940
SITEWORK (Including all Markups)				$4,337,385
TOTAL OF ALL CONSTRUCTION OPTION 4A	Sep-17	72,473	$455.22	**$32,991,447**
OPTION 4B - ADD/RENOVATION PEEBLES ES SITE				
BUILDING (Including all Markups)		72,443	$378.99	$27,455,420
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,213,661
SITEWORK (Including all Markups)				$4,288,759
TOTAL OF ALL CONSTRUCTION OPTION 4B	Sep-17	72,443	$454.95	**$32,957,840**

Preliminary Cost Models

		Option 1 (K-4) 250 students		Option 2 (PK-4) 725 students	Option 3 (PK-5) 885 students		Option 4 (K-5) 410 students		Base Repair Only
		1A New	1G Add/Reno	2A Add/Reno	3A Add/Reno	3B Add/Reno	4A New	4B Add/Reno	
Gross SF		**57,248 SF**		**114,593 SF**	**131,382 SF**		**72,473 SF**		**55,190 SF**
***Construction Cost $ (Hard Cost)**	Building	$23.25M	$23.15M	$25.63M	$30.63M	$30.03M	$26.96M	$27.46M	$10.53M
	Hazmat/Demo	$1.71M	$1.24M	$0	$0	$0	$1.7M	$1.21M	$1.16M
	Sitework	$4.05M	$4.17M	$4.65M	$4.78M	$4.75M	$4.34M	$4.29M	$.38M
	Total	**$29.01M**	**$28.56M**	**$30.28M**	**$35.41M**	**$34.78M**	**$32.99M**	**$32.96M**	**$12.07M**
Soft Cost $	Fees & Expenses	$5.9M	$5.47M	$5.61M	$6.38M	$6.28M	$6.5M	$6.13M	$2.8M
	FF&E	$.75M	$.75M	$1.02M	$1.5M	$1.5M	$1.23M	$1.23M	$.25M
	Contingencies	$2.32M	$2.57M	$2.42M	$2.83M	$2.78M	$2.64M	$2.97M	$1.68M
Other Town Costs		no cost	no cost	TBD	TBD	TBD	no cost	no cost	no cost
TOTAL		**$37.98M**	**$37.35M**	**$39.34M**	**$46.12M**	**$45.35M**	**$43.36M**	**$43.28M**	**$16.8M**

* Estimated Cost subject to change as project is refined

H. Evaluation of Design Alternatives

H. EVALUATION OF DESIGN ALTERNATIVES

Multiple sessions with stakeholders focused on review of preliminary design options. The core groups evaluating the options included the Educational Working Group, the School Building Committee, and the public in attendance at Community Forum #3. To each group, Flansburgh presented options for the four grade configurations and documented responses to each scheme. Fifteen options were initially considered; with the input of the School Building Committee, the number was reduced first to seven and then to four.

The School Building Committee initially reviewed fifteen site options at the November 19 meeting, evaluating eleven different site locations on the Peebles and Bournedale campuses. Through discussion, four sites were selected for study, and of those four, Flansburgh developed seven options for the four grade configurations in the study.

On November 30, 2015, the Educational Working Group revisited guiding design principles and reviewed design options developed by Flansburgh. Guiding design principles established in workshop two were refined and prioritized to best reflect district goals. Flansburgh introduced seven schemes illustrating four grade configurations comprising the study scope. The participants studied the options in light of previous visioning discussions and goals established and evaluated advantages and disadvantages of each scheme. Comments primarily focused on adjacencies and separation of community/academic uses, interconnected teaching spaces and clear academic neighborhoods, amount of disruption to students during construction, access to outdoor space, site circulation, and consolidation of resources.

At the December 3 meeting, the School Building Committee considered the seven alternatives outlined in this report, including both new construction and addition/renovation options at Peebles and Bournedale sites. Weighing campus resources, student experience at both campuses, flexibility of space utilization, and inclusion of the fifth grade, the committee offered pros and cons for the schemes presented. Preliminary cost models were introduced for consideration.

The December 8 Community Forum introduced the seven options for public comment. Attendees noted the potential traffic impact of very large schools (725 and 885 student options at Bournedale), the added cost of mitigating an unused Peebles building if that site is not selected, the advantage of returning 5th grade to an elementary setting and restoring the middle school to 6th-8th grades, and the strength of community resources available to the Peebles site.

The seven alternatives outlined in this report, along with a “Base Repair” option, were reviewed with the Bourne School Building Committee on December 17, 2015. A matrix was developed with project metrics such as project size, number of students, construction duration, discussion of construction phases, costs, and other factors to compare the options. In addition to the evaluation matrix, a list of Pros and Cons were developed for each option. The options were then scored with 3 points for most favorable, 2 points for acceptable, and 1 point for least favorable. Although this scoring was helpful, it was not the final deciding factor since some criteria had more significance than others.

The school building committee discussed the information summarized by option, their scoring by option, as well as public input, and narrowed the options from 7 down to 4 options. First, the committee agreed to move forward with Options 2A and 4A due to their strengths: appropriate school size, desirable programmatic separations, limited disruption to students during construction, and fulfillment of the district’s educational goals. In particular, it was noted that Option 4A capitalizes on the campus resources shared with the middle and high schools, is well-sited, maintains a community school for families south of the canal, and offers a transition to middle school in a smaller setting of their peers.

After discussion and input from each member of the committee, it was decided that options 3A and 3B accommodating 885 students at Bournedale were not desirable due to their sheer size, potential traffic issues, and the limitations of the site plan. Option 1G renovating the existing Peebles building for 250 students was also discarded due to a longer construction duration, disruptions to students, condition of the

existing building, and a cost that was almost equal to a new school. This left 4 available options. Option 4B was determined to be useful for its site efficiency, inclusion of the 5th grade, and as a point of comparison to new construction, and Option 1A was carried forward as the lowest-cost option and a viable solution for K-4 grades south of the canal despite the small school size.

At this point, the 4 options remaining for further study in the PSR phase are:

Option 1A	New Construction	Grades K-4
Option 2A	Renovation/Addition	Grades PreK-4
Option 4A	New Construction	Grades K-5
Option 4B	Renovation/Addition	Grades K-5

The option metrics, evaluation criteria, and Pros and Cons reviewed for each option are appended to the Local Actions section 3.1.7. in the following meetings:

School Building Committee meeting, November 19, 2015
Educational Working Group meeting, November 30, 2015
School Building Committee meeting, December 3, 2015
Community Forum #3, December 8, 2015
School Building Committee meeting, December 17, 2015

3.1.7 Local Actions and Approvals

A. Local Actions and Approval Letters
B. Building Committee Meeting Notes
C. Public Presentations

LOCAL ACTIONS AND APPROVAL

Attached is the signed local actions and approvals certification letter. Following that are copies of meeting notes of the School Building Committee with agendas and copies of materials presented. Also included are public meeting presentations.

A. Local Actions and Approvals letter.
B. Building Committee meeting notes.
C. Public Presentations

[redacted] A. Local Action and Approval Letter

TOWN OF BOURNE
Town Administrator
24 Perry Avenue
Buzzards Bay, MA 02532
Phone 508-759-0600 x503 – Fax 508-759-0620

THOMAS M. GUERINO
email: tguerino@townofbourne.com

December 18, 2015

Ms. Diane Sullivan
Senior Capital Program Manager
40 Broad Street
Boston, Massachusetts 02109

Dear Ms. Sullivan:

The Town of Bourne School Building Committee ("SBC") has completed its review of the Feasibility Study Preliminary Design Program for the Peebles Elementary School project (the "Project"), and on December 17, 2015 the SBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study related materials to the MSBA for its consideration. A certified copy of the SBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors approved the District to conduct a Feasibility Study on January 14, 2015 the SBC has held nine meetings with the OPM regarding the Project, in compliance with the state Open Meeting Law. These meetings include:

- May 26, 2015, 6:00 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- July 16, 2015, 7:00 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- September 29, 2015, 6:00 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- October 8, 2015, 6:00 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- October 22, 2015, 6:30 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- November 5, 2015, 6:30 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- November 19, 2015, 6:30 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- December 3, 2015, 6:30 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.
- December 17, 2015, 6:30 PM, @ Bourne Veterans Memorial Community Center, see Meeting Minutes attached.

The meeting minutes are attached and outline any information shared or votes taken. The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review and are posted on the Town of Bourne website.

In addition to the SBC meetings listed above, the District held three public community meetings, which were posted in compliance with the state Open Meeting Law, at which the Project was discussed. These meetings include:

- October 26, 2015 @ Peebles Elementary School, the presentation was given by the SBC Members and the project team, see PowerPoint presentation attached.
- November 17, 2015 @ Bournedale Elementary School, the presentation was given by the SBC Members and the project team, see PowerPoint presentation attached.
- December 8, 2015 @ Peebles Elementary School, the presentation was given by the SBC Members and the project team, see PowerPoint presentation attached.

There were notes taken, however no formal meeting minutes or votes resulted from the community meetings. The presentation materials for each meeting are available locally for public review and are posted to the Town of Bourne website.

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 *et seq*.

If you have any questions or require any additional information, please contact Steven Lamarche at (508) 759-0660 or slamarche@bourneps.org.

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: Peter J. Meier

Title: Chief Executive Officer

Date: December 18, 2015

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: Steven Lamarche

Title: Superintendent of Schools

Date: December 18, 2015

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: Christopher Hyldburg

Title: Chairperson of the School Committee

Date: December 18, 2015

[redacted] B. Building Committee Meeting Notes

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	5/26/2015
Re:	School Building Committee Meeting	Meeting No:	1
Location:	Bourne Veteran's Memorial Community Center	Time:	6:00pm
Distribution:	School Building Committee Members, (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	James L. Potter	Chairman, School Building Committee	**Voting Member**
✓	Peter J. Meier	Chairman, Board of Selectmen	**Voting Member**
	Christopher Hyldburg	Chairman, School Committee	**Voting Member**
✓	Laura Scena	Member, School Committee	**Voting Member**
✓	Christine Crane	Former Member, School Committee/Finance Committee	**Voting Member**
	Richard A. Lavoie	Member, Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
✓	Mary Jo Coggeshall	Member at Large	**Voting Member**
	Frederick H. Howe	Board of Health	**Voting Member**
✓	Steven M. Lamarche	Superintendent of Schools, BPS	Non-Voting Member
✓	Edward S. Donoghue	Director of Business Services, BPS	Non-Voting Member
	Thomas M. Guerino	Town Administrator	Non-Voting Member
	Jonathan Nelson	Director of Facilities, BPS	Non-Voting Member
	Elizabeth A. Carpenito	Principal	Non-Voting Member
✓	Kathy Anderson	Elementary/Special Education Secretary	Non-Voting Member
✓	Joel Seeley	SMMA, OPM	Non-Voting Member

Project: Peebles Elementary School Feasibility Study
Meeting Date: 5/26/2015
Meeting No.: 1

Item #	Action	Discussion
1.1	Record	Call to Order, 6:10 PM, meeting opened.
1.2	Record	J. Seeley introduced himself and the firm and provided an overview of the Feasibility Study process, the role of the OPM and the role of the MSBA.
1.3	J. Seeley	J. Seeley distributed and reviewed the draft Request for Designer Services, attached, and reviewed the designer selection process. A motion was made by P. Meier and seconded by L. Scena to approve the draft Request for Designer Services. No discussion, motion passed unanimous. J. Seeley to forward the draft Request for Designer Services to the MSBA for comments after the MSBA OPM Panel meeting on 6/8/15.
1.4	E. Donoghue	J. Potter reviewed the status of the OPM selection process. The MSBA reviewed the evaluation and selection documents submitted by the OPM Selection Committee and determined the fourth ranked firm was to be ranked third, based on the mathematical ranking. E. Donoghue has been in contact with the fourth ranked firm, who has indicated they will provide written confirmation that they will withdraw from the process. Once the confirmation is received, E. Donoghue will forward to the MSBA along with an opinion from Town Counsel.
1.5	Record	Next **SBC Meeting: July 16, 2015** at 7:00 pm at the Bourne Veteran's Memorial Community Center.
1.6	Record	A Motion was made by L. Scena and seconded by C. Crane to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, draft Request for Designer Services

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes.

PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	5/26/2015
Re:	School Building Committee Meeting	Meeting No:	1
Location:	Bourne Community Center, 234 Main Street Buzzards Bay, Massachusetts	Time:	6:00pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	Peter J. Meier	PMeier@townofbourne.com	Chairman, Bourne Board of Selectmen
	Christopher Hyldburg		Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
	Christine Crane	ccrane03@comcast.net	Former Member of School Committee / Fin Com
	Richard A. Lavoie		Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	James L. Potter	Onsetjp@jvro.com	Building Trade Expert
	Mary Jo Coggeshall	mjcoggeshall@gmail.com	~~Former School Committee Chairman~~ At large
	Frederick H. Howe		Bourne Board of Health
	Edward S. Donoghue	EDONOGHUE@BOURNEPS.ORG	Director of Business Services, BPS
	Thomas M. Guerino		Bourne Town Administrator
	Jonathan Nelson		Director of Facilities, BPS
	Steven M. Lamarche	slamarche@bourne.org	Superintendent of BPS
	Elizabeth A. Carpenito		Principal
	Kathy Anderson		Elementary/Special Education Secretary
	Joel Seeley		SMMA

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| CHAPEL HILL, NORTH CAROLINA | PROVIDENCE, RHODE ISLAND

School Building Committee

Notice of Meeting

Tuesday May 26, 2015 at 6PM

Community Building – Conference Room

Meeting Agenda:

1. Call to order
2. Introduction to Joel Seeley of SMMA
3. Joel Seeley will present a draft of the RFS for Designer Services
4. Old Business – Approve meeting minutes from April 2015 as necessary.
5. New Business
6. Next meeting place and time

Submitted by

Jim Potter

Chairman , School Building Committee

REQUEST FOR DESIGNER SERVICES (RFS)

Town of Bourne, Massachusetts
Bourne, Public Schools

Peebles Elementary School

June __, 2015

Invitation: The Town of Bourne, Massachusetts ("Owner") is seeking the services of a qualified "Designer" within the meaning of M.G.L. Chapter 7C, Section 44, to provide professional design and construction administration services for the Peebles Elementary School in Bourne, Massachusetts. Selection of a Designer will be made by the Designer Selection Panel of the Massachusetts School Building Authority ("MSBA") in accordance with the MSBA's Designer Selection Procedures.

The Owner is seeking design services to conduct a Feasibility Study which will include the development and evaluation of potential alternative solutions and continue through the Schematic Design Phase of the preferred alternative initially. Subject to the approval of a Project by the MSBA and further subject to adequate funding authorized by the Owner, the contract between the Owner and the Designer may be amended to include continued designer services through design development, construction contract documents, bidding, award of construction contract(s), construction administration, final closeout and warranty period of the potential Project. A potential Project may include a renovation of the existing school, a renovation of and addition to the existing school and/or new construction.

The estimated construction budget for a potential Project may range from $**20,000,000 to $30,000,000** depending upon the solution that is agreed upon by the Owner and the MSBA and that is ultimately approved by a vote of the MSBA's Board of Directors. The Fee for Basic Services will be negotiated.

Pursuant to M.G.L. Chapter 7C, Section 6, the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO) formerly known as the State Office of Minority and Women Business Assistance (SOMWBA). The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the contract price for combined minority business enterprises (MBE) and women-owned business enterprises (WBE). Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal. Proposed MBE/WBE participation plans that include solely MBE or solely WBE participation, or do not include a reasonable amount of participation by both MBE and WBE firms to meet the combined goal, will not be considered responsive. Applications from MBE and WBE firms as prime designers are encouraged. Where the prime Designer is an SDO certified MBE or WBE, the Designer must bring a reasonable amount of participation by a firm or firms that hold the certification which is not held by the prime Designer on the project.

The minority and women-owned business enterprises must be selected from those categories of work identified in Item F of this RFS or be assigned to tasks required under Basic Services as specifically set forth in the Contract for Designer Services as amended. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their MBE/WBE goals. Consultants to the prime Designer can team within their disciplines in order to meet the MBE/WBE goals but must state this relationship on the organizational chart (Section 6 of the application form).

For additional information on Designer qualifications see Sections E. and F. in this RFS.

A. Background:

The Town of Bourne is a community with a population of 20,430 year round residents that expands to approximately 40,000 in the summer months. Bourne is the gateway to Cape Cod; you must pass through the town to get over the Cape Cod Canal and anywhere else on Cape Cod. The total school district enrollment for the 2014-15 school year is 2,013 students who utilize four school buildings. The Peebles Elementary School (K-4) is located south of Trowbridge Road on the Cape side of the canal. The school is part of the larger Bourne School campus on the south side of the canal that includes Bourne Middle School (5-8), Bourne High School (9-12), a waste water treatment plant that serves all the schools, various athletic facilities and extensive parking facilities for all of the buildings and activities. The entire campus is roughly 80 acres of which the Peebles Elementary School, including the adjacent maintenance area, occupies approximately 8.6 acres. Bournedale Elementary School (PreK-4) is located along Scenic Highway on the north side of the Cape Cod Canal.

B. Project Goals and General Scope:

On or about March 27, 2014, the Owner submitted a Statement of Interest (Attachment A) to the MSBA for Peebles Elementary School. The MSBA is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects. The MSBA's grant program is discretionary, and no city, town, or regional school district has any entitlement to any funds from the MSBA. At the January 14, 2015 Board of Directors meeting, the MSBA voted to issue an invitation to the Owner to conduct a feasibility study for this Statement of Interest to identify and study possible solutions and, through a collaborative process with the MSBA, reach a mutually-agreed upon solution. The MSBA has not approved a Project and the results of this feasibility study may or may not result in an approved Project.

It is anticipated that the feasibility study will review the problems identified in the Statement of Interest at the Peebles Elementary School**.** The original building is a two story structure constructed in 1953. In 1959 a two story permanent addition was constructed that is connected to the original building by a two story curtain wall corridor. Peebles Elementary School currently serves 388 students in grades K-4, consists of 55,191 total sq. ft. and occupies approximately 8.6 acres including the adjacent maintenance facilities. The MSBA study enrollment certification includes three enrollments for further study: 250 students in Grades K-4 at the James F. Peebles Elementary School, 725 students in Grades K-4 at a District-wide elementary school, and 885 students in Grades K-5 at a District-wide elementary school. The district strives to maintain the school in the best condition possible to serve its students and staff. Recent projects have included new epoxy flooring and a new ceiling in the cafeteria, removal of VAT flooring and installation of new flooring throughout many hallways and classrooms. The heating system was upgraded with a conversion to natural gas and the replacement of numerous failed steam traps. The current condition of Peebles Elementary School is poor when assessing many components of the structural integrity of the building along with the mechanical and electrical systems in the building. The building envelope has many areas of failing brick and mortar which allow water penetration throughout the

structure. All the exterior windows are single pane and original to the building. Many components of the mechanical and electrical systems found in the school are original to the building and therefore lack the capacity to offer the electrical service required for 21st century learning opportunities. The interior of the school is maintained well by the maintenance and custodial teams but, there are many issues that cannot be overcome on a daily basis. There are many areas with evidence of structural cracking seen on classroom walls and ceilings. Vinyl Asbestos Tile (VAT) is extremely worn and cracked in many areas. Some areas of intense traffic including doorways and corridors, are worn to the point of failure; exposing the concrete below. The school lacks the proper space to offer special education services in the most desirable environment for the students. A more detailed description of the current condition of Peebles Elementary School can be found in the attached Statement of Interest.

The Feasibility Study shall include a study of all alternatives and contain all information required by 963 CMR 2.10(8) and any other applicable rules, regulations, policies, guidelines and directives of the Authority, including, but not limited to, a final design program, space summary, budget statement for educational objectives, and a proposed total project budget. The Feasibility Study further includes:

1. Developing construction alternatives to support a school building for 250 students in grades K-4 at the Peebles Elementary School site.
2. Developing construction alternatives to support a school building for 725 students in grades K-4 at the Bournedale Elementary School site.
3. Developing construction alternatives to support a school building for 885 students in K-5 at the Bournedale Elementary School site.
4. Performing existing condition assessments of the Peebles Elementary School and site, and the Bournedale Elementary School and site.
5. Assisting the Town in the development of the Educational Program and Space Template for each of the alternative grade configurations.
6. Assisting the Town in understanding the impacts of repurposing the existing Peebles Elementary School as a complement to the 725 and 885 student construction alternatives.
7. Assisting the Town in understanding the impacts to the Bourne Middle School as a complement to the 885 student construction alternative.
8. Assisting the Town in understanding the operational, educational and community impacts and differences between the 250 student construction alternative and the 725/885 construction alternatives.
9. Consolidate all information in an overall Feasibility Matrix, and assist the Town in determining the most educationally and community appropriate, efficient, and cost effective plan.

The Schematic Design shall include, but not be limited to, the information required by the Authority's Feasibility Study Guidelines, including, but not limited to, a site development plan, environmental assessment, geotechnical assessment, geotechnical analysis, code analysis, utility analysis, schematic building floor plans, schematic exterior building elevations, narrative building systems descriptions, LEED-S scorecard, outline specifications, cost estimates, project schedule and proposed total project budget.

A copy of limited as-built drawings will be made available in the procurement documents.

Project objectives under consideration by the Owner include:

- Identification of community concerns that may impact study options.
- Identification of specific milestone requirements and/or constraints of the District; e.g. Town votes, swing space, occupancy issues, grade configurations.
- Life cycle costs of operating the School as it relates to future operational budgets; the Town will require life cycle cost analysis to aide in determining the most appropriate study option.

- U.S. Green Building Council LEED for Schools Ratings System: The Town wishes to utilize guidelines that have proven effective in other MA school projects of similar size and complexity, while also exploring opportunities unique to Bourne (e.g. Bourne being in a high wind zone).
- CM-at-Risk Delivery Method.

C. Scope of Services:

The required scope of services is set forth in the MSBA's standard Contract for Designer Services (Contract), a copy of which is attached hereto and incorporated herein by reference. If the Owner decides to proceed with the Project beyond the Schematic Design Phase and when the project delivery method is decided (Design/Bid/Build or Construction Manager at Risk), the Contract will be amended accordingly. Copies of Designer Services Contract Amendments for Design/Bid/Build and Construction Manager at Risk are also attached hereto and incorporated herein by reference. Unless specifically excluded, the Designer's Basic Services consist of the tasks described in the Contract for Designer Services as amended and this RFS including all investigative work (to the extent provided for in the Contract), feasibility study, schematic design, and, at the Owner's option, design work, preparation of construction documents, bidding period administration, construction administration, and other related work reasonably inferred in the opinion of the Owner and the Authority as being necessary to meet the project's stated scope and goals.

This RFS will be appended to and become part of the Contract for Designer Services. Any Designer selected as a result of this RFS will be required to execute the Contract for Designer Services and applicable amendment that are attached hereto.

Basic Services include, but are not limited to, verification of existing record information including building dimensions, details and general existing conditions, cost estimating, architecture, civil, sanitary, mechanical, electrical, plumbing, fire protection, structural, site planning and landscape architecture, basic local site and environmental permitting, graphics, lighting design, acoustics, data and communication, educational consultants, any specialty consultants for sustainable design (LEED-S), hazardous materials inspection and testing, library/media center and kitchen space, code consultants, accessibility, energy evaluations, detailed cost estimates; preparation of construction documents; bidding and administering the Construction Contract Documents and other design and consulting services incidental and required to fulfill the project goals. Please refer to the Contract and amendments for a complete summary of Basic Services.

Extra and reimbursable expenses are defined in Articles 8 and 9 of the Contract in Attachment B.

D. Project Phases and Work Plan:

Work under this RFS is divided into the Project Phases as listed in Article 7 of the Contract as amended and as may be augmented in this RFS. Each Project Phase will consist of one or more required submissions, and may include site visits, meetings with the Owner, Owner's Project Manager, the Authority and others, and other tasks as described.

The estimated total duration of the Contract for Designer Services from Feasibility Study through the approval of Schematic Design, inclusive of review and approval time, is estimated to be ***56 weeks*** as follows:

Preliminary Program through Final Design Program	***36***	weeks
Schematic Design Phase	***20***	weeks
Design Development through 100% CD	***TBD***	
Bidding	***TBD***	

Construction Administration Phase	***TBD***	weeks
Estimated Total Duration (Exclusive of Completion Phase)	***TBD***	**weeks**

The durations for the Bidding and Construction Administration Phases are estimates only. Actual durations may vary depending upon the agreed upon solution, the extent of required document revisions, the time required for regulatory approvals, and the construction contractor's performance.

Such variances in estimated time will not, in and of themselves, constitute a justification for an increased Fee for Basic Services, nor are they a substitute for the performance time requirements shown below.

The Designer performance times listed in the table below are requirements, not estimates. The Owner, through the Owner's Project Manager will review each submission and, if acceptable, provide notice to the Designer to proceed to the next phase.

The Designer's adherence to the performance times listed below will be part of the Owner's performance evaluation of the Designer's work, which will be conducted at the end of the Project.

	Within/Weeks	
• **Attend a "Kick-Off" meeting**	***2***	Execution of a contract with the Owner
• **Preliminary Program**	***4***	Execution of a contract with the Owner
• **Development of Alternatives**	***14***	Execution of a contract with the Owner
• **Preliminary Evaluation of Alternatives**	***8***	Approval of Alternatives
• **Final Evaluation of Alternatives**	***4***	Approval of Preliminary Evaluation
• **Recommendation of Preferred Solution**	***4***	Approval of Final Evaluation
• **Final Design Program**	***6***	Approval of Preferred Solution
• **Schematic Design**	***20***	Approval of the Final Design Program
• **Design Development**	***TBD***	Approval of the Schematic Design
• **60% Construction Documents**	***TBD***	Approval of Design Development
• **100% Construction Documents**	***TBD***	Approval of Design Development

E. Minimum qualifications:

Selection will be made by the MSBA Designer Selection Panel in accordance with the Authority's Designer Selection Procedures, attached hereto as Attachment E. The Respondent must certify in its cover letter that it meets the following minimum requirements. Any Respondent that fails to include such certification in its response, demonstrating that these criteria have been met, will be rejected without further consideration. To be eligible for selection, the Designer must meet **all** of the following qualifications.

1. Be a qualified Designer within the meaning of M.G.L. Chapter 7C, Section 44, employing a Massachusetts registered Architect responsible for and being in control of the services to be provided pursuant to the Contract.

2. The Massachusetts registered Architect responsible for and in control of the services to be provided has successfully completed the Massachusetts Certified Public Purchasing Official Program seminar "Certification for School Project Designers and Owner's Project Managers" as administered by the Office of the Inspector General of the Commonwealth of Massachusetts, and must maintain certification by completing the "Recertification for School Project Designers and Owner's Project Managers" seminar every three years thereafter. Proof of recertification or registration in the next recertification seminar for which space is available must be provided.

3. Pursuant to M.G.L. Chapter 7C, Section 6, the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO) formerly known as the State Office of Minority and Women Business Assistance (SOMWBA). The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the design contract price for combined minority business enterprises and women-owned business enterprises. Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal.

F. Selection Criteria:

In evaluating proposals, the Owner and Designer Selection Panel will consider the members of the proposed design team. Identify those member(s) of the proposed design team who will be responsible for the following categories of work: (Firm's name, individual's name and professional registration or license number, as applicable, must be listed in the application for each category of work, as well as whether the firm is SDO certified as an MBE and/or WBE).

1. ***Architecture***
2. ***Environmental Permitting***
3. ***Geotechnical Engineering***
4. ***Geo-Environmental Engineering***
5. ***Site Survey***
6. ***Hazardous Materials***
7. ***Civil Engineering***
8. ***Structural Engineering***
9. ***Landscape Architecture***
10. ***Fire Protection Engineering***
11. ***Plumbing Engineering***
12. ***HVAC Engineering***
13. ***Electrical Engineering***
14. ***Data/Communications Consultant***
15. ***Food Service Consultant***
16. ***Acoustical Consultant***
17. ***Specifications Consultant***
18. ***Library/Media Consultant***
19. ***Theatrical Consultant***
20. ***Sustainable/Green Design/Renewable Energy Consultant***
21. ***Cost Estimating***
22. ***Accessibility Consultant***
23. ***Traffic Consultant***
24. ***Furniture, Fixtures and Equipment Consultant***
25. ***Code Consultant***
26. ***Security Consultant***
27. ***Educational Programming Consultant***

**** N.B. –**

Applicants must address each category of work listed above in their application whether it is to be performed by in-house staff or by sub-consultant(s).

The members of the team for each of the categories of work listed above must be identified including the firm's name, individual's name and professional registration or license number, as applicable, as well as whether the firm is SDO certified as an MBE and/or WBE.

Failure to address <u>each</u> category may result in the elimination of the applicant from consideration on this project.

Applicants should not list any consultants other than those for the categories of work listed above.

The minority and women-owned business enterprises must be selected to perform services addressing the categories of work listed above or be assigned to tasks required under Basic Services as specifically set forth in the Contract for Designer Services as amended. Consultants other than those proposed for the categories of work listed above or required to perform Basic Services may not be used for purposes of meeting M/WBE requirements. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their MBE/WBE goals. Consultants to the prime Designer can team within their disciplines in order to meet the MBE/WBE goals but must state this relationship on the organizational chart (Section 6 of the application form).

The Owner and Designer Selection Panel will consider the following additional criteria in evaluating proposals:

1. Prior similar experience best illustrating current qualifications for the specific project, including specific experience with school populations and educational curriculum similar to the Town of Bourne.
2. Past performance of the firm, if any with regard to public, private, DOE-funded, and MSBA funded projects across the Commonwealth, with respect to:
    a. Quality of project design.
    b. Quality, clarity, completeness and accuracy of plans and contract documents.
    c. Ability to meet established program requirements within allotted budget.
    d. Ability to meet schedules including submission of design and contract documents, processing of shop drawings, contractor requisitions and change orders.
    e. Coordination and management of consultants.
    f. Working relationship with contractors, subcontractors, local awarding authority and MSBA staff and local officials.
3. Current workload and ability to undertake the contract based on the number and scope of projects for which the firm is currently under contract.
4. The identity and qualifications of the consultants who will work on the project.
5. The financial stability of the firm.
6. The qualifications of the personnel to be assigned to the project.
7. Geographical proximity of the firm to the project site or willingness of the firm to make site visits and attend local meetings as required by the client.
8. Additional criteria that the MSBA Designer Selection Panel considers relevant to the project.

G. Proposal Requirements

Persons or firms interested in applying must meet the following requirements:

1. **Applicants must have an up-to-date Master File Brochure on file at the Massachusetts School Building Authority.**

2. Applications shall be on "Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated May 2014)" as developed by the Designer Selection Board of the Commonwealth of Massachusetts (http://www.mass.gov/anf/property-mgmt-and-construction/design-and-construction-of-public-bldgs/designer-selection-process/designer-selection-proc-and-evals-for-municipalities/procedures-and-apps-for-municipalities.html). **Applications (one original, twenty-five (25) hard copies, and two (2) digital copies in PDF format on separate compact disks) must be received on or before 2:00 PM, July 15, 2015.** Applications should be printed double-side and bound in such a manner that the pages lie and remain flat when opened. The specific organization and orientation of the proposal is at the applicant's discretion, but it is recommended that the proposal be laid out in such a manner that the reader doesn't need to be constantly rotating the proposal. Applications should not be provided with acetate covers.

3. Applications must be accompanied by a concise cover letter that is a maximum of two pages in length. A copy of the cover letter should be attached to each copy of the application. The cover letter must include the certifications as noted in Section E of this RFS. (A copy of the MCPPO certification should be attached to the cover letter as well as any SDO letters.)

4. Applicants may supplement this proposal with graphic materials and photographs that best demonstrate design capabilities of the team proposed for this project **subject to the page limitations as set forth in the Standard Designer Application Form**.

5. **Responses are to be delivered in person or by certified/express mail. Responses submitted by fax or electronic mail will not be considered.**

   The Owner assumes no responsibility or liability for late delivery or receipt of responses. All responses received after the stated submittal date and time (local time) will be judged to be unacceptable and will be returned un-opened to the sender.

   Proposals shall be addressed to:

   Edward Donoghue
   Director of Business Services
   Bourne Public Schools
   36 Sandwich Road
   Bourne, Massachusetts 02532
   Phone: 508-759-0600 / Email: EDonoghue@bourneps.org

6. Proposals must be clearly identified by marking the package or envelope with the following:

   Bourne Peebles Elementary School Project
   "Name of Applicant"

7. The deadline for receiving questions is July 8, 2015 at 2:00 PM EST. All questions regarding this RFS should be addressed exclusively in writing to:

   Joel G. Seeley
   Symmes Maini & McKee Associates, Inc. (SMMA)
   1000 Massachusetts Avenue
   Cambridge, Massachusetts 02138
   Phone: 617-547-5400 Email: opm@smma.com

8. Procurement Documents
The Procurement Documents (Request for Services) will be available at **procurementdocuments.smma.com** for downloading by the Applicant on or after 2:00pm on June ___, 2015.

H. Pre-Proposal Meeting

All interested parties should attend a briefing session at the Peebles Elementary School scheduled for June ___, 2015 at 9:00 AM.

I. Withdrawal

Applicants may withdraw an application as long as the written request to withdraw is received by the Owner prior to the time and date of the proposal opening.

J. Public Record

All responses and information submitted in response to this RFS are subject to the Massachusetts Public Records Law, M.G.L. c. 66, § 10 and c. 4, § 7(26). Any statements in submitted responses that are inconsistent with the provisions of these statutes shall be disregarded.

K. Waiver/Cure of Minor Informalities, Errors and Omissions

The Owner reserves the right to waive or permit cure of minor informalities, errors or omissions prior to the selection of a Respondent, and to conduct discussions with any qualified Respondents and to take any other measures with respect to this RFS in any manner necessary to serve the best interest of the Owner and its beneficiaries.

L. Rejection of Responses, Modification of RFS

The Owner reserves the right to reject any and all responses if the Owner determines, within its own discretion, that it is in the Owner's best interests to do so. This RFS does not commit the Owner to select any Respondent, award any contract, pay any costs in preparing a response, or procure a contract for any services. The Owner also reserves the right to cancel or modify this RFS in part or in its entirety, or to change the RFS guidelines. A Respondent may not alter the RFS or its components.

M. Additional Information

ATTACHMENTS:

Attachment A: Statement of Interest

Attachment B: Contract for Designer Services - Base Contract for Design Bid Build or CM-at-Risk Project
(http://www.massschoolbuildings.org/sites/default/files/edit-contentfile/Guidelines_Forms/Contracts_Forms/Base%20Contract%20v_02_25.pdf)

Designer Services Contract Amendment for Design/Bid/Build
(http://www.massschoolbuildings.org/sites/default/files/edit-contentfile/Guidelines_Forms/Contracts_Forms/DBB%20v_02_25.pdf)

Designer Services Contract Amendment for CM-at-Risk
(http://www.massschoolbuildings.org/sites/default/files/edit-contentfile/Guidelines_Forms/Contracts_Forms/CM-R%20v_02_25.pdf)

Attachment C: Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated May 2014)
(http://www.mass.gov/anf/property-mgmt-and-construction/design-and-construction-of-public-bldgs/designer-selection-process/designer-selection-proc-and-evals-for-municipalities/procedures-and-apps-for-municipalities.html)

Attachment D: Certifications
(Certificate of Non-Collusion, Certificate of Tax Compliance, and Certificate of Vote)

Attachment E: MSBA's Designer Selection Panel's Procedures

End of Request for Designer Services

ATTACHMENT E

Massachusetts School Building Authority
Designer Selection Procedures

Section 1: Introduction

The following designer selection process has been adopted by the Massachusetts School Building Authority (MSBA) pursuant to Massachusetts General Laws, Chapter 7C, Sections 44 through 58 to serve as the basis for the exemption under Section 46 from the jurisdiction of the Commonwealth's Designer Selection Board for the procurement of designers, and programmers by cities, towns, regional school districts, and independent agricultural and technical schools seeking funding from the MSBA for public school construction projects where the estimated construction cost is equal to or greater than $5,000,000.00 (or other such amount as may be determined from time to time by the Executive Director of the MSBA), except for the MSBA's model schools program. Designer selection for public school construction projects where the estimated construction cost is less than $5,000,000.00 (or other such amount as may be determined from time to time by the Executive Director of the MSBA) shall be conducted pursuant to Massachusetts General Laws, Chapter 7C, Section 54, by the respective city, town, regional school district or independent agricultural and technical school and in accordance with the MSBA's Designer Selection Guidelines.

Section 2: Designer Selection Panel

A. The MSBA Designer Selection Panel (DSP) shall be composed of the following individuals who shall be appointed to the DSP by the MSBA's Executive Director ("Executive Director") in accordance with following procedures:

1. The Executive Director, ex officio, or his/her designee;
2. Three (3) MSBA staff members associated with project management, design and/or construction oversight selected by the Executive Director;
3. One (1) public member selected by the Executive Director;
4. One (1) member who is a Massachusetts registered architect or architect emeritus as recommended by the Boston Society of Architects;
5. Two (2) members who are Massachusetts registered architects or architect emeritus selected by the Executive Director;
6. One (1) member who is a Massachusetts registered engineer as recommended by the American Council of Engineering Companies of Massachusetts;
7. Two (2) members who are Massachusetts registered professional engineers selected by the Executive Director;
8. One (1) member who is a representative of the construction industry as recommended by Associated General Contractors of Massachusetts;

9. One (1) member who is a representative of the construction industry as recommended by the Massachusetts Building Trades Council;

10. Three (3) members who are proposed by the respective city, town, regional school district, independent agricultural and technical school or other public agency that is the Eligible Applicant, as defined in M.G.L. Chapter 70B, Section 2 for the specific project under consideration, one (1) of whom shall be designated by the school committee, district school committee, or board of trustees of the Eligible Applicant, as the case may be; one (1) of whom shall be the superintendent of schools of the Eligible Applicant, ex officio, or his/her designee; and one (1) of whom shall be the chief executive officer of the city or town that is the Eligible Applicant, ex officio, or his/her/its designee or, in all other cases, a member of the School Building Committee designated by the School Building Committee. The appointment of members pursuant to this Section 2(A)(10) shall be subject to the execution of a certification by each such member that the member has read and understands these procedures and the Designer Selection Guidelines.

B. Members proposed or recommended by the societies or associations pursuant to subsections 2(A)(4), 2(A)(6), 2(A)(8), and 2(A)(9) above and the members proposed by the Eligible Applicant pursuant to subsection 2(A)(10) above shall be subject to appointment by the Executive Director who reserves the right, within his/her discretion, not to appoint or to disapprove the appointment of said proposed or recommended members. In considering the appointment of members proposed by the Eligible Applicant pursuant to subsection 2(A)(10), the Executive Director may consider, among other things, the extent to which the three (3) proposed members, as a whole, represent the interests of the Eligible Applicant.

C. The Executive Director shall appoint a chairperson from one of the members appointed to the DSP pursuant to subsections 2(A)(3) through 2(A)(9) above, who is a registered architect, architect emeritus or registered professional engineer and who shall also serve as chairperson of any subcommittee of the DSP.

D. All meetings of the DSP shall be open to the public unless the DSP votes to go into executive session by a roll call vote and announces the purpose of the executive session and whether the DSP will convene in open session at the conclusion of the executive session. Any action taken by the DSP in executive session shall be by a roll call vote.

E. The presence of nine (9) members, no less than four (4) of whom shall be registered architects, architects emeritus or registered professional engineers, shall constitute a quorum. The DSP shall not conduct any business without the presence of a quorum. The affirmative vote of a simple majority of the members present and voting shall be necessary and sufficient for any action taken by the DSP. No vacancy in the membership of the DSP shall impair the right of a quorum to exercise all the rights and duties of the DSP. In the absence of a quorum, the Chairperson may recess a meeting to some other time or until a quorum is obtained.

F. Subject to the discretion of the Executive Director, each member appointed pursuant to subsections 2(A)(2) through 2(A)(9) shall serve for a two-year term provided that every member that is appointed by the Executive Director shall continue to serve until a successor has been appointed to the DSP by the Executive Director. Members representing the Eligible Applicant who are appointed pursuant to subsection 2(A)(10) shall serve only while the DSP

conducts business directly related to the selection of a designer for the project being proposed by that particular Eligible Applicant.

G. The MSBA shall give written notice of the names of the appointed members of the DSP to the Commonwealth's Designer Selection Board.

H. No member of the DSP shall participate in the selection of a designer as a finalist for any project if the member's participation would constitute a conflict of interest or an appearance of conflict in violation of M.G.L. Chapter 268A.

Section 3: Public Notice

A. Each contract for designer services for a project subject to these procedures shall be publicly advertised in a newspaper of general circulation in the area in which the project is located or is to be located and in the Massachusetts Central Register at least two weeks before the deadline for filing applications. The public notice shall contain:

1. A description of the project, including the specific designer services sought, the time period within which the project is to be completed, and, if available, the estimated construction cost;

2. If there is a program for the project, a statement of when and where the program will be available for inspection by applicants, and when and where a briefing session will be held for applicants and if there is not a program for the project, a statement to the effect;

3. The qualifications required of applicants for the projects;

4. The categories of designers' consultants, if any, for which applicants must list the names of consultants which the applicant may choose to use;

5. Whether the fee has been set or will be negotiated, and if the fee has been set, the amount of the fee;

6. The deadline for submission of applications;

7. The person and address from which application forms may be obtained and, when completed, to whom they may be delivered;

8. Any other pertinent information that may be required by law or deemed appropriate by the MSBA.

B. The individual designated by the Eligible Applicant to be in charge of procurement for a project who holds the Massachusetts Certified Public Purchasing Official Program certification shall certify that the public notice and all other documents issued pursuant to the selection of a designer, including, but not limited to, program descriptions and request for services, have been prepared and issued in conformance with these procedures and Massachusetts General Laws, Chapter 7C, Sections 44 through 58.

Section 4: Master File Brochure and Application

A. Prior to filing an application for any project, designers shall first file a Master File Brochure with the DSP containing the following information:

1. Certification that the applicant, if applying to perform design services other than preparation of studies, surveys, soil testing, cost estimates or programs, is a designer as defined in M.G.L. Chapter 7C, Section 44 paragraph (b);

2. The names and addresses of all partners, if a partnership, of all officers, directors and all persons with an ownership interest of more than five per cent in the applicant if not a partnership;

3. The registration number and status of each such person in every jurisdiction in which such person has ever been registered as an architect, landscape architect or engineer;

4. A list of all projects for all public agencies within the Commonwealth for which the applicant has performed or has entered into a contract to perform design services within the five year period immediately preceding the filing of the information required in this section;

5. A list of all current projects for which the applicant is performing or is under contract to perform any design services; and

6. If the applicant is a joint venture, the information required in this section shall be required for each joint venturer, as well as for the joint venture itself.

B. The DSP shall keep a permanent record of the Master File Brochures. Each designer shall update its Master File Brochure on an annual basis and shall make current the lists of projects required under Section 4(A)(4)-(6) with each application filed.

C. An applicant to perform design, programming or feasibility study services on a project must file, in addition to the Master File Brochure, a written application prescribed by the DSP relating to the applicant's experience, ability, and qualifications.

Every application or Master File Brochure filed shall be sworn to under penalties of perjury. Any applicant who has been determined by the DSP to have filed materially false information shall be disqualified by the DSP from further consideration for any project for such time as the DSP determines is appropriate.

Section 5: Selection Criteria

A. Minimum qualifications shall include:

1. Must be a qualified Designer within the meaning of M.G.L. Chapter 7C, Section 44 employing a Massachusetts registered architect or engineer responsible for and being in control of the services to be provided.
2. The Massachusetts registered architect or engineer responsible for and being in control of the services to be provided for the Designer must have successfully completed the Massachusetts Certified Public Purchasing Official Program seminar "Certification for

School Project Designers and Owner's Project Managers," as administered by the Office of the Inspector General of the Commonwealth of Massachusetts, and must maintain certification by completing the "Recertification for School Project Designers and Owner's Project Managers" seminar every three years thereafter. Proof of recertification or registration in the next recertification seminar for which space is available must be provided.

3. Pursuant to M.G.L. Chapter 7C, Section 6, the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO) formerly known as the State Office of Minority and Women Business Assistance (SOMWBA). The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the contract price for combined minority business enterprises (MBE) and women-owned business enterprises (WBE). Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal.

B. Other criteria for selection of finalists shall include:

1. Prior similar experience best illustrating current qualifications for the specific project.

2. Past performance of the firm, if any, with regard to public, private, DOE-funded, and MSBA-funded projects across the Commonwealth, with respect to:

   a) Quality of project design.

   b) Quality, clarity, completeness and accuracy of plans and contract documents.

   c) Ability to meet established program requirements within allotted budget.

   d) Ability to meet schedules including submission of design and contract documents, processing of shop drawings, contractor requisitions and change orders.

   e) Coordination and management of consultants.

   f) Working relationship with contractors, subcontractors, local awarding authority and MSBA staff and local officials.

3. Current workload and ability to undertake the contract based on the number and scope of projects for which the firm is currently under contract.

4. The identity and qualifications of the consultants who will work on the project.

5. The financial stability of the firm.

6. The qualifications of the personnel to be assigned to the project.

7. Geographical proximity of the firm to the project site or willingness of the firm to make site visits and attend local meetings as required by the client.

8. Any other criteria that may be required by law or that the DSP considers relevant to the project.

Section 6: Selection Process

A. Cities, towns, regional school districts, and independent agricultural and technical schools subject to these procedures shall not rank or pre-rank applicants. Rankings shall occur only by vote of the DSP in accordance with these procedures and shall occur only after interviews, if allowed by vote of the DSP, have been concluded by the DSP.

B. In the event that, upon reaching the deadline for submission of applications, three or fewer designer applications are received for a project, the Eligible Applicant may choose to modify the project description, estimated construction cost, program, desired designer qualifications, fee information, or other project information as necessary to attract interested designer applicants and begin the selection process again, starting with re-advertisement pursuant to Section 3: Public Notice. Should the Eligible Applicant choose to proceed with three or fewer designer applications and not re-advertise, the following procedure shall be followed:

    1. The Eligible Applicant designee shall submit a statement that explains why the Eligible Applicant may have received three or less applications for the proposed project, The explanation should include but not necessarily be limited to:

        a. A description of the public advertisement including the names of the publications in which the advertisement was placed and the date(s) in which the advertisement was published.

        b. A description of the pre-proposal conference, if any, including the date, time, and location of the conference and names of attendees and the firms they represent.

    2. The Eligible Applicant designee and/or the OPM shall contact those design firms that attended the pre-proposal conference/walkthrough but did not submit an application and summarize why an application was not submitted for the proposed project.

    3. Legal counsel for the Eligible Applicant (i.e. town counsel or city solicitor) and the individual designated by the Eligible Applicant to be in charge of procurement for a project who holds the Massachusetts Certified Public Purchasing Official Program certification shall certify as to the adequacy and completeness of the procurement activity undertaken by the Eligible Applicant.

    4. At the discretion of the chairperson and with the concurrence of the three DSP members representing the Eligible Applicant, the DSP may forego the initial application review and invite all the designer applicants to appear for an interview before the DSP.

C. The DSP may require any number of applicants to:

    1. Appear for an interview before the DSP;

    2. Present a written proposal to the DSP through the Eligible Applicant; or

    3. Participate in a design competition held by the DSP through the Eligible Applicant.

D. The DSP shall use the following procedures to rank three (3) finalists in order of qualifications from among the applicants for a particular project:

1. Prior to a DSP meeting at which the selection of finalists will be made or discussed, each member of the DSP shall be given a copy of each designer's application for his or her review.

2. At the DSP meeting, the DSP shall consider each application alphabetically or by some other method that may be determined by the chairperson from time to time.

3. When recognized by the chairperson, members of the DSP may comment or ask questions related to the selection process or the applications before the DSP.

4. Any potentially disqualifying deficiencies in an application should be noted in the record of the meeting.

5. After each member of the DSP has been given an opportunity to comment or ask questions, at the direction of the chairperson, each member of the DSP who is present shall utilize a ballot form provided by the MSBA to assign points to his or her top three (3) choices in order of qualifications so that each number one choice shall receive three (3) points, each number two choice shall receive two (2) points, and each number three choice shall receive one (1) point. The completed ballot forms shall be signed by each member and submitted to the DSP Administrator who shall tally the total points awarded to each applicant. The chairperson shall then read aloud the total points awarded to each of the applicants.

6. Once the point totals have been read aloud by the chairperson, the DSP may request interviews of the applicants with the highest point totals by the following procedure: Upon motion of one of the members, duly seconded by one of the other members, the DSP may vote to interview the applicants with the highest point totals.

7. If the DSP does not vote to conduct interviews, the DSP shall then vote to rank three (3) finalists in order of qualifications. If the DSP votes to conduct interviews, the DSP shall defer the ranking of the three (3) finalists until after the interviews have been concluded.

8. If the DSP votes to conduct interviews, the chairperson shall schedule the time and place of the interviews and written notice shall be given to the firms to be interviewed Interviews shall be conducted in open session except that the chairperson may order competing firms, their agents and employees, to leave the meeting room during the interviews of their competitors. The MSBA may, within its discretion, develop standard questions to be answered or topics to be discussed by the applicants in the interview. Once the interviews have been concluded, at the direction of the chairperson, the DSP shall award points to the each of the firms in accordance with the procedures set forth in subsection 6(C)(5). Once the point totals have been read aloud by the chairperson, the DSP shall then vote to rank three (3) finalists in order of qualifications

9. In the event of a tie for the first, second or third highest point totals awarded to applicants by the DSP under Section 6(C)(5) or 6(C)(8), the chairperson shall determine, in his or her complete discretion, the procedure by which the tie shall be broken. The chairperson shall then read aloud the total points awarded to each of the applicants. Once the point totals have been read aloud by the chairperson, the DSP shall then vote to rank three (3) finalists in order of qualifications.

Once the DSP has voted to rank the top three (3) firms in order of qualifications, the MSBA shall transmit a list of the three (3) finalists ranked in order of qualifications to the Eligible Applicant along with a record of the final vote of the DSP on the selection and a written statement explaining the DSP's reasons for its ranking of the finalists.

Section 7: Award of Contract

A. The authority to award a contract for designer services for a project that will receive funding from the MSBA is vested with the Eligible Applicant and subject to the approval of the MSBA.

B. In the selection of a designer when the fee for designer services has been set prior to advertisement, the Eligible Applicant shall appoint a designer from the ranked list transmitted by the MSBA to the Eligible Applicant in the order of qualifications as determined by the DSP. If the Eligible Applicant proposes to select any designer other than the one ranked first by the DSP, it shall file a written justification for the proposed appointment with the DSP and shall not proceed until it has obtained written approval to proceed from the Executive Director.

C. When the fee for designer services is to be negotiated, the Eligible Applicant shall review the list transmitted by the MSBA in the order of qualifications as determined by the DSP and may exclude any designer from the list if a written statement of reasons for the exclusion is filed with the DSP. The Eligible Applicant shall then appoint a designer based upon a successful fee negotiation. The Eligible Applicant shall first negotiate with the first ranked designer remaining on the list. Should the Eligible Applicant be unable to negotiate a satisfactory fee with the first ranked designer within thirty (30) days, negotiations shall be terminated and negotiations undertaken with the remaining designers, one at a time, in the order in which they were ranked by the DSP, until an arrangement is reached. Should the Eligible Applicant be unable to negotiate a successful fee with any designer initially selected by the DSP, the DSP shall recommend additional finalists in accordance with a procedure to be determined by the chairperson of the DSP that is not inconsistent with the procedures set forth in Section 6(B) above. The Eligible Applicant may require a finalist with whom a fee is being negotiated to submit a fee proposal and to provide current cost and pricing data on the basis of which the designer's fee proposal may be evaluated.

Section 8: Continued or Extended Services

A. The Eligible Applicant may appoint a designer to perform continued or extended services that were not contemplated in the original public notice if the following conditions are met:

1. A written statement is filed with the DSP explaining the reasons for the continuation or extension of services;

2. The program for the design services is filed with the DSP;

3. MSBA staff has made a written determination that the request for continued or extended services is otherwise in compliance with the MSBA's regulations, policies, procedures, and guidelines and the provisions of the feasibility study agreement, project scope and budget agreement, and/or project funding agreement, as applicable;

4. The DSP approves the appointment of the designer for continued or extended services and states the reason therefore.

Section 9: Emergency Designer Selection Process

A. If a situation arises in accordance with Chapter 7C, Section 53, which has been declared an "emergency" by the Executive Director, an Eligible Applicant may request an emergency selection of a designer.

B. In consultation with the technical staff of the MSBA, the Eligible Applicant shall prepare a proposed scope of work, an estimate of the cost of construction and a lump sum fee for the designer's services, and submit this, and any other relevant information to the Executive Director.

C. In lieu of public advertisement, the Executive Director or his/her designee will consult with the Eligible Applicant to select three to six qualified firms who have Master File Brochures on file, to solicit to perform this work.

D. The MSBA staff will poll an ad-hoc committee of three members of the DSP to select at least three qualified finalists and forward the names of the finalists to the Eligible Applicant with a written statement explaining the committee's reasons for its choice(s).

E. The Eligible Applicant will select one of the three finalists to perform the work and forward the name of the selected firm to the DSP with a written statement explaining the reasons for its choice.

F. The DSP will immediately notify the Designer Selection Board of the actions taken under the expedited procedures process, in addition to the mandated annual report.

Section 10: Annual Report

A. The DSP shall submit an annual report to the Commonwealth's Designer Selection Board which must contain:

1. A list of all finalists selected by the DSP and awards made by the Eligible Applicants;

2. A summary of the activities and other actions of the DSP, the Eligible Applicants and the MSBA staff relating to activities undertaken pursuant to these procedures; and

3. Any other items which the MSBA deems appropriate.

Section 11: Statutory Representations by the MSBA

A. The projects of the MSBA and the Eligible Applicants are not subject to the jurisdiction of the Division of Capital Asset Management and Maintenance.

B. The DSP procedures substantially incorporate the procedures required of the Commonwealth's Designer Selection Board in M.G.L. Chapter 7C, Section 45 through 53, inclusive, and Section 55.

Section 12: Effective Dates

A. The above designer selection procedures will be effective for all MSBA-funded projects through January 31, 2017.

Respectfully submitted under the penalties of perjury this 21st day of January, 2015

John K. McCarthy, Executive Director
Massachusetts School Building Authority

School Building Committee
Meeting Minutes

Bourne Veterans Memorial Community Center

239 Main St. Buzzards Bay, MA 02532

Meeting No. 2 - July 16, 2015

I. Call to order

Chairman Potter called to order the meeting of the School Building Committee at 7:00 PM on July 16, 2015.

II. Roll call

Each member introduced themselves to its newest member, Dr. William Towne. Dr. Towne shared some of his background with the group.

Members Present: James Potter, Chairman, Selectman, Peter Meier, William Meier, Jonathan Nelson (arrived 7:08 PM), Rick Howe, Edward Donoghue, Liz Carpenito, Superintendent Steven Lamarche, Dr. William Towne, Richard Lavoie and Joel Seeley of SMMA.

Members Excused: Laura Scena and Mary Jo Coggeshall

Documents: Agenda, Peebles Elementary School Project Schedule

III. Agenda Items

1. Approval of Minutes

Mr. Seeley had emailed the members the Minutes from the May 26, 2015 meeting. **Mr. Meier motioned to accept the Minutes of May 26, 2015**. **Mr. Howe seconded.** The Minutes were approved **6-0-3.** Dr. Towne, Mr. Lavoie and Mr. Meier abstained.

2. Approval of Invoices and Commitments

None to Approve

3. Designer Procurement Status

Mr. Seeley explained that since the group's last meeting on May 26, 2015, at which the draft RFS (Request for Services) was reviewed. The RFS was finalized and submitted to the (MSBA) Massachusetts School Building Authority for approval. Mr. Meier, Mr. Donoghue, Superintendent Lamarche

and Mr. Seeley attended the MSBA Owner's Project Manager Review Panel. The panel confirmed SMMA as the OPM. MSBA approved the draft RFS and a public notice was placed in the local newspaper as well as the Central Register for designer selection and the availability of the RFS. It was also available to be downloaded from the SMMA's procurement website. An informational meeting was held at Peebles. Fourteen architects, three engineers and one landscape architect attended. Mr. Donoghue and Mr. Seeley gave them all an overview of the project and provided a tour through Peebles. They then toured Bournedale.

Proposals will be submitted on July 21, 2015. Mr. Seeley will submit them to the MSBA who will then schedule a time to review the submitted proposals with their Designer Selection Panel. (DSP)

Mr. Seeley then offered an explanation of the process. He explained that the hiring of the architect is done at the state level. The MSBA has a Designer Selection Panel of which there are 13 members comprised of MSBA staff, appointees from building trades and the A.G.'s Office. He added that we collect the proposals from the architects at the local level, the state oversees the selection of the architect. Three appointed members from our committee will be the representatives to the DSP. The DSP will then review all of the proposals and numerically rank them. Usually the top two or three are asked to return two weeks later for an interview. Prior to delivering the proposals to the MSBA, Mr. Seeley will contact the references from the amount of firms who submitted proposals.

Mr. Seeley added that this is a very structured process. The proper steps need to be followed accordingly and have been thus far.

August 18th has been tentatively selected as the date to meet with the DSP.

Mr. Seeley then took a few minutes to review the Project Schedule.

Mr. Lavoie asked about the timeline of selecting the architect, if it's before or after the decision is made to rehab or build new. Mr. Seeley stated it would be before. This ensures the architect has the expertise in both new construction and/or renovation and other criteria. Mr. Seeley added that we shouldn't have any preconceived notions yet; the process will unfold those.

Once an architect is hired, they will have to study a renovation only option, a renovation and addition option and a new construction option. We have three alternatives that we've agreed to with MSBA; a K-4 250 student alternative, a K-4 725 student alternative and a K-5 885 student alternative.

The architect will have to understand and develop options meeting those requirements.

There are three reports that MSBA is looking for.

The first report, the Preliminary Design Program (PDP), will reflect a myriad of all options and the implications and costs for them. The report will need to indicate the community's top 3 options. This report is reviewed by MSBA at the staff level.

The second report, the Preferred Schematic Report (PSR), refines those top 3 with the ultimate selection of a top 1. This report is submitted for MSBA Board of Directors approval.

The third report, the Schematic Design report (SD), is the refinement of top 1, with the final cost estimate and final analysis. This also requires MSBA Board of Directors approval. All costs are finalized which will then be presented at Town Meeting, provided MSBA Board of Directors approves the project.

Mr. P. Meier inquired as to the debt exclusion and if it goes down, would there be reimbursement or would the process have to start over again? Mr. Seeley explained that for the communities who don't have a successful Town vote, the MSBA's position is that they will work with the Town. A brief discussion transpired concerning the pending override.

Mr. Potter stated that Town Meeting had voted to move forward with this project. He feels that once an architect is selected and real proposals are narrowed down, that will be the time to engage the community and engaging other boards such as Board of Selectmen and Finance Committee. He feels that keeping the community informed will be the best approach so there aren't any surprises.

Mr. W. Meier inquired as to whether the MSBA has ever rejected an architect? Mr. Seeley advised that all of the architects submitting proposals are recognized for their work in the public school market. Mr. Potter asked for a list of which companies attended the informational session. Mr. Seeley will send to the group a list of those who actually submit a proposal.

4. **Selection of Designer Proposal Review Subcommittee / Selection of DSP Representatives**

Mr. Seeley explained that 3 -5 committee members would need to be selected to form a subcommittee to review the submitted proposals. In addition to the

subcommittee, the group needs to select 3 committee members to represent the group at the DSP Proposal Review Meeting. After a brief discussion, **Mr. Howe motioned to appoint Mr. Lavoie, Dr. Towne and Mr. Donoghue to the subcommittee and Mr. Potter, Mr. Lamarche and Mr. Nelson as the representatives. Mr. Peter Meier seconded.** The motion carried unanimously. Mr. Potter would like to open the subcommittee review meetings up to whoever from the committee wants to attend.

5. **Committee Questions**

   None

6. **Public Comment**

   None

Mr. Potter added that the calculation error with MSBA has been rectified.

7. **Next Meeting Date**

   Open – TBD

   The newly formed subcommittee decided to meet on August 20, 2015 at 7:00 PM at the Veterans Memorial Venter to review the submitted proposals. Mr. Seeley will reschedule the DSP Proposal Review Meeting which was tentatively scheduled for 8/18/15.

IV. Adjournment

Mr. P. Meier motioned to adjourn. Mr. Lavoie seconded. The motion carried unanimously. The meeting adjourned at 7:47 PM

Minutes submitted by: Carol Mitchell

PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	7/16/2015
Re:	School Building Committee Meeting	Meeting No:	2
Location:	Bourne Community Center, 234 Main Street Buzzards Bay, Massachusetts	Time:	7:00pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	James L. Potter	onsetjp@juno.com	Chairman, School Building Committee
	Peter J. Meier	pmeier@townofbourne.com	Chairman, Bourne Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
	William Towne	Wtowne11@comcast.net	Member, Finance Committee
	Richard A. Lavoie	Richl.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	Mary Jo Coggeshall	mjcoggeshall@gmail.com	At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Jonathan Nelson	jnelson@townofbourne.com	Director of Facilities, BPS
	Elizabeth A. Carpenito	ecarpenito@bourneps.org	Principal
	Kathy Anderson	kanderson@bourneps.org	Elementary/Special Education Secretary
	Joel Seeley	jseeley@smma.com	SMMA
Carol Mitchell	Carol Mitchell	cmitos71@gmail.com	Secretary

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AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	7/16/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	7:00 PM
Distribution:	Committee Members (MF)	Meeting No.:	2

1. Call to Order
2. Welcome William Towne to the School Building Committee
3. Approval of Minutes
4. Approval of Invoices and Commitments
5. Designer Procurement Status
6. Selection of Designer Proposal Review Subcommittee
7. Selection of DSP Representatives
8. Committee Questions
9. Public Comments
10. Next Meeting
11. Adjourn

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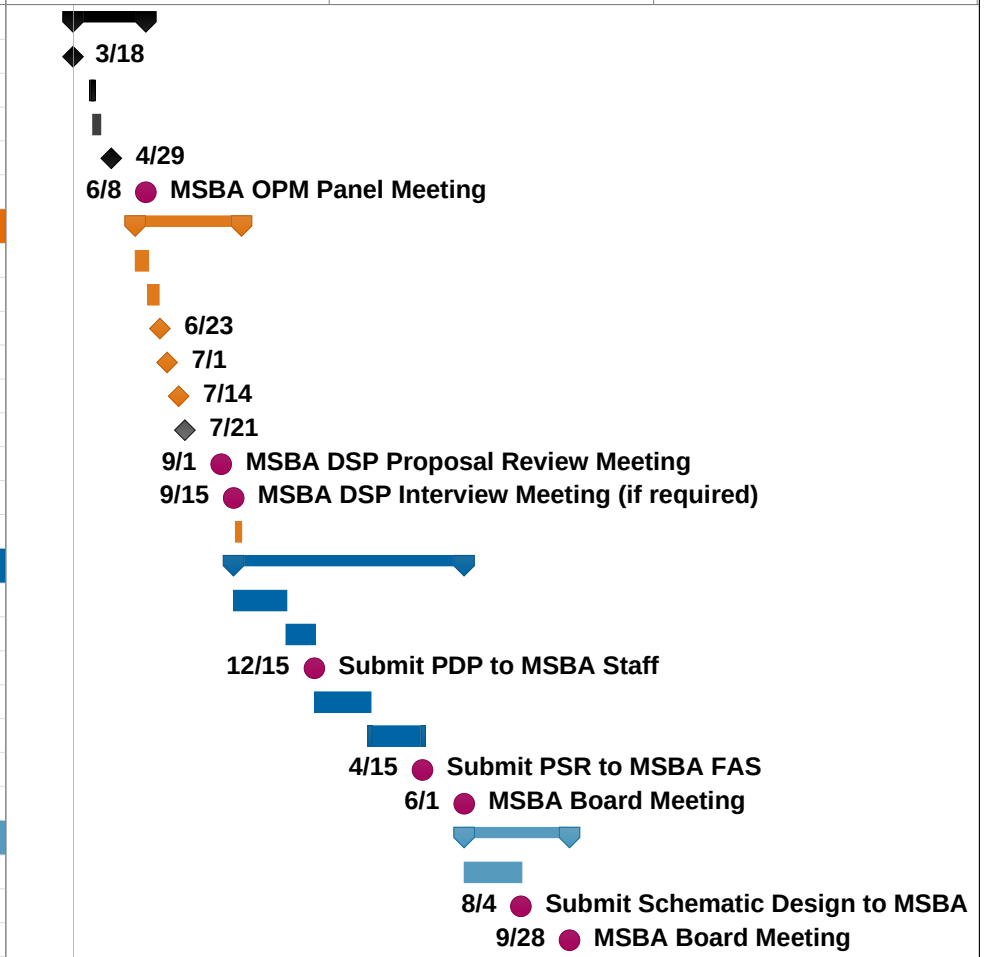
Updated: June 25, 2015

TOWN OF BOURNE, MASSACHUSETTS

PEEBLES ELEMENTARY SCHOOL

PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**RETAIN OPM**	**58 days**	**3/18/2015**	**6/8/2015**
2	Submit OPM Proposals	0 days	3/18/2015	3/18/2015
3	OPM Interview	2 days	4/8/2015	4/9/2015
4	Negotiate OPM Contract	7 days	4/9/2015	4/17/2015
5	Submit Documents to MSBA OPM Panel	0 days	4/29/2015	4/29/2015
6	**MSBA OPM Panel Meeting**	**0 days**	**6/8/2015**	**6/8/2015**
7	**RETAIN DESIGNER**	**86 days**	**5/27/2015**	**9/23/2015**
8	Draft Designer RFS and Submit to MSBA	11 days	5/27/2015	6/10/2015
9	MSBA Approve Draft RFS	9 days	6/10/2015	6/22/2015
10	Submit to Central Register	0 days	6/23/2015	6/23/2015
11	Notice in Central Register	0 days	7/1/2015	7/1/2015
12	Briefing Session	0 days	7/14/2015	7/14/2015
13	Submit Designer Proposals	0 days	7/21/2015	7/21/2015
14	**MSBA DSP Proposal Review Meeting**	**0 days**	**9/1/2015**	**9/1/2015**
15	**MSBA DSP Interview Meeting (if required)**	**0 days**	**9/15/2015**	**9/15/2015**
16	Negotiate Designer Contract	5 days	9/17/2015	9/23/2015
17	**FEASIBILITY STUDY (FS)**	**183 days**	**9/15/2015**	**6/1/2016**
18	Develop Preliminary Design Program (PDP)	44 days	9/15/2015	11/13/2015
19	Community Presentations	22 days	11/13/2015	12/15/2015
20	**Submit PDP to MSBA Staff**	**0 days**	**12/15/2015**	**12/15/2015**
21	Develop Preferred Schematic Report (PSR)	44 days	12/15/2015	2/16/2016
22	Community Presentations	44 days	2/16/2016	4/15/2016
23	**Submit PSR to MSBA FAS**	**0 days**	**4/15/2016**	**4/15/2016**
24	**MSBA Board Meeting**	**0 days**	**6/1/2016**	**6/1/2016**
25	**SCHEMATIC DESIGN (SD)**	**85 days**	**6/1/2016**	**9/28/2016**
26	Develop Schematic Design	47 days	6/1/2016	8/4/2016
27	**Submit Schematic Design to MSBA**	**0 days**	**8/4/2016**	**8/4/2016**
28	**MSBA Board Meeting**	**0 days**	**9/28/2016**	**9/28/2016**
29	**LOCAL VOTES**			
32	**DESIGN AND CONSTRUCTION (TBD)**			



School Building Committee
Meeting Minutes

Bourne Veterans Memorial Community Center

239 Main Street, Buzzards Bay, MA 02532

Meeting No. 3 - September 29, 2015

I. Call to order

Chairman Potter called to order the meeting of the School Building Committee at 6:02 PM on September 29, 2015.

Mr. Seeley announced that Carol Mitchell would be taking the minutes. He asked the representatives from Flansburgh Architects to introduce themselves to the board.

Kent Kovacs -Vice President, Betsy Garcia - Architect, Jorge Cruz - Principal.

II. Roll call

Members Present: Chairman, James Potter, Selectman, Peter Meier, William Meier, Rick Howe, Jonathan Nelson, Kathy Anderson, Edward Donoghue, Elizabeth Carpenito, Steven Lamarche, Laura Scena, Mary Jo Coggeshall, and Richard Lavoie.

Members Excused: Chris Hyldburg and Thomas Guerino

Also Present: Joel Seeley of SMMA, Recording Secretary, Carol Mitchell, Betsy Garcia, Kent Kovacs and Jorge Cruz.

Documents: Agenda, draft Meetings Schedule and Agendas document, Project Schedule, the MSBA notification letter, Flansburgh Architects proposal, Warrant No. 1 and Flansburgh's PowerPoint presentation (link provided below).

III. Agenda Items

1. Approval of Minutes

Mr. Seeley entertained a motion to accept the minutes of the July 16, 2015, meeting. **Mr. Meier motioned to accept the minutes of July 16, 2015**. **Mr. Howe seconded.** The minutes were approved **11-0-1.** Mr. Lavoie abstained.

Before moving on to the next agenda item, Mr. Seeley stated that since the last School Building Committee meeting, he was to have scheduled a meeting of the Designer Proposal Review subcommittee. He deferred the conversation pertaining to this meeting temporarily, but informed the committee that the meeting had occurred.

2. Approval of Invoices and Commitments

Mr. Seeley referred to the Warrant No. 1 document. He stated it is the responsibility of the School Building Committee to approve expenditures relating to this project. He explained that the invoice was for OPM services from April through August 2015.

Mr. Meier motioned to approve Warrant No. 1 in the amount of $7,350.00. Mr. Lavoie seconded. After a brief discussion pertaining to a request for a cash flow analysis and itemizing future statements, the motion passed unanimously. **12-0**.

Mr. Seeley then referred to the Flansburgh proposal. The proposal includes the Feasibility Study and the Schematic Design. The committee will need to vote to accept Flansburgh Architects' proposal and the Town Administrator will need to sign their contracts.

Mr. Seeley then went on to explain the selection process stating that 11 design proposals were received, one dropped out. Two meetings were held at MSBA with the Designer Selection Panel. At the first meeting, all of the proposals were reviewed publicly resulting in three firms that were invited to interview. The firms were; Arrowstreet, Flansburgh Architects and Jonathan Levi. He added that all three were very qualified, capable and provided good interviews. The Designer Selection Panel then ranked them, took a vote and decided that Flansburgh Architects was by far the highest ranked firm.

Mr. Seeley then asked if anyone on the panel would like to share their perceptions of the process. Mr. Lamarche commented that the Town represented three votes out of the fifteen member Designer Selection Panel. He felt any of three prospects would have done an excellent job for the community but Flansburgh was chosen because of their ideas regarding the three probable options; i.e., addition, new construction or renovation. Also, they have the expertise and availability which is demonstrated by the Flansburgh representatives present at this meeting. They have sent a strong message that they are committed to this project. Mr. Lamarche also feels that their experience is a good match for Bourne.

Mr. Nelson commented that Flansburgh did a great presentation; far and above the other candidates. He feels that Flansburgh's experience sets them apart from the others.

Mr. W. Meier questioned how much of the project is done in-house and how much are sub-consultants used? Mr. Cruz replied that Flansburgh does architecture well which is why they use specialty consultants throughout the project. All of the consultants they use specialize in different phases of the project, they've worked with each of them for over ten years and are well trusted. Mr. Meier noticed that many of the architects do this and utilize the same sub-consultants. He is in favor of utilizing sub-consultants. A brief discussion ensued.

Mr. Meier motioned to accept Flansburgh's proposal dated September 22, 2015, and recommend the Town Administrator sign their agreement. Mr. Lavoie seconded. After a brief discussion, the motion passed unanimously. **12-0.**

Mr. Meier and Mr. Lavoie excused themselves (6:20 PM).

Mr. Seeley referred to two documents in the Agenda Packet, the draft Meetings Schedule and Agendas document and the Project Schedule. He summarized the Project Schedule to date explaining that the OPM has been retained and the architect has been retained. The next phase is the Feasibility Study. There are two steps in the Feasibility Phase; the Preliminary Design Program (PDP) and the Preferred Schematic Report (PSR). The submission of the Phase Documents (PDP), the reports, which are the culmination of the work of that phase, will be submitted to MSBA on December 18, 2015. The submission of the PSR to MSBA is April 15, 2016.

The third element of the Feasibility Phase is the Schematic Design which is targeted to be submitted to the MSBA on August 4, 2016.

Mr. Seeley then referred to the draft Meetings Schedule and Agendas document. He stated the committee will need to meet regularly and will also need community input between now and December 18, 2015. He recommends the committee meet every two weeks to build an incremental informational process starting with developing an existing conditions assessment of the two sites, then meeting with staff to discuss educational programming and their educational vision. Additionally, meeting with the community to discuss their vision. Then, blending all of the information together to develop the Preliminary Design Program, which will reflect all viable options and their costs. These will then be evaluated and the top three options will be selected. The PDP will then be submitted to MSBA.

Mr. Seeley anticipates scheduling three community meetings between now and December. He inquired as to whether the committee agrees to meeting

every two weeks. After a brief discussion pertaining to concerns relative to the impending override, the committee decided to meet every other Thursday starting on October 8, 2015, at 6 PM.

3. Designer Introduction

Mr. Seeley introduced Kent Kovacs of Flansburgh Architects who shared a PowerPoint presentation which offered information on the firm's background, experience and completed projects.

He stated there will be three key steps in the initial process.

- Collect Information – information will be gathered from administration, staff and the community to develop a program based on the feedback given.
- Develop Options – Once the information is gathered, options are drafted to either, add on to the existing facility, renovate or build new construction.
- Evaluate Options – Once the options have been developed, costs have been calculated, feedback is heard and pros and cons of all options have been weighed, a preferred option is reached.

Mr. Kovacs continued with the presentation showing various possible options for the project. Once he finished his portion of the presentation, he introduced Jorge Cruz to continue.

Mr. Cruz discussed cost and quality control. He gave some background on the various projects Flansburgh has completed and noted that the projects were completed on time and within budget. Adding that many of the projects, were completed below budget.

He explained the process begins with on-site visits. Exploratory work is conducted, detailed design documents incorporate these findings, bid alternatives are developed then finally, a bid analysis is performed.

There are three cost contingencies used to develop the project.

- Design Contingency
- Owner's Contingency
- Construction Contingency

By utilizing building information management systems, 3D models of the project are created to eliminate conflicts in the field which is a cost control tool.

Mr. Cruz stated the building materials used are scrutinized to ensure a high-quality energy efficient structure. He stated Flansburgh's team will conduct weekly quality control inspections. The School Building Committee will also have the opportunity to visit the site during the construction phase and have any concerns they may have addressed during the construction process.

Once Mr. Cruz completed his portion of the presentation, he introduced Betsy Garcia to discuss the design process.

Ms. Garcia stated their initial goal is to gain a better understanding of the needs, goals and aspirations of the project. Feedback gathered from staff and the community will enable Flansburgh to create models based on the information gathered. This will enable the developers to see what works and what doesn't. She offered possible designs for a renovation of the existing building as well as a new construction design.

Once Ms. Garcia completed her portion of the presentation, Mr. Kovacs explained how the options are evaluated and pros and cons are weighed. A matrix is developed to determine what's important to the owner. In the end, the best option emerges. A similar process is conducted for the design process.

Mr. Kovacs stated Flansburgh Architects will assist in providing 3D animations and brochures to use for community outreach. Community involvement will be key in the development of the project and is a requirement from MSBA.

Mr. Seeley then discussed the time line for gathering information for first visioning meeting which is scheduled for 10/26/15. A brief discussion transpired concerning two interviews scheduled for administration and staff, who should be in attendance at the interviews, and the amount of time needed to conduct them.

Mr. Potter briefly discussed his concerns of the looming 2 ½ override. A brief discussion ensued.

There was discussion concerning when to advertise the October 26th visioning meeting. Mr. Seeley asked Flansburgh to provide poster boards to advertise the event. He also suggests sending information home in the students' backpacks. Ms. Carpenito stated an electronic reminder would also be sent. A brief discussion transpired concerning how many poster boards will be needed and where they'll be placed. Flansburgh will provide seven poster boards to the next committee meeting for distribution.

4. Committee Questions

None

5. Public Comments

None

6. Next Meeting

October 8, 2015 at 6 PM

A brief discussion transpired concerning the time of the meeting being changed from 7 PM to 6 PM. The committee decided to keep the meeting times at 6 PM.

7. Adjournment

Mr. Howe motioned to adjourn the meeting. Ms. Coggeshall seconded. The meeting adjourned at 7:11 PM.

Respectfully submitted: Carol Mitchell

PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	9/29/2015
Re:	School Building Committee Meeting	Meeting No:	3
Location:	Bourne Veterans Memorial Community Center, 234 Main Street, Buzzards Bay, Massachusetts	Time:	6:00pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	James L. Potter	onsetjp@juno.com	Chairman, School Building Committee
	Peter J. Meier	pmeier@townofbourne.com	Chairman, Bourne Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
			Member, Finance Committee
	Richard A. Lavoie	Richl.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
6:30	Mary Jo Coggeshall	mjcoggeshall@gmail.com	At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Jonathan Nelson	jnelson@townofbourne.com	Director of Facilities, Town of Bourne
	Elizabeth A. Carpenito	ecarpenito@bourneps.org	Principal
	Kathy Anderson	kanderson@bourneps.org	Elementary/Special Education Secretary
	Carol Mitchell	Cmit0571@gmail.com	Secretary
	Kent Kovacs	kkovacs@flansburgh.com	Flansburgh Architects
	Betsy Farrell Garcia	bgarcia@flansburgh.com	Flansburgh Architects
	Joel Seeley	jseeley@smma.com	SMMA
	Jorge Cruz	JCRUZ@FLANSBURGH.COM	FLANSBURGH ARCHITECTS
	Betsy Garcia	bgarcia@flansburgh.com	"

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AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	9/29/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:00 PM
Distribution:	Committee Members (MF)	Meeting No.:	3

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Designer Introduction
5. Committee Questions
6. Public Comments
7. Next Meeting
8. Adjourn

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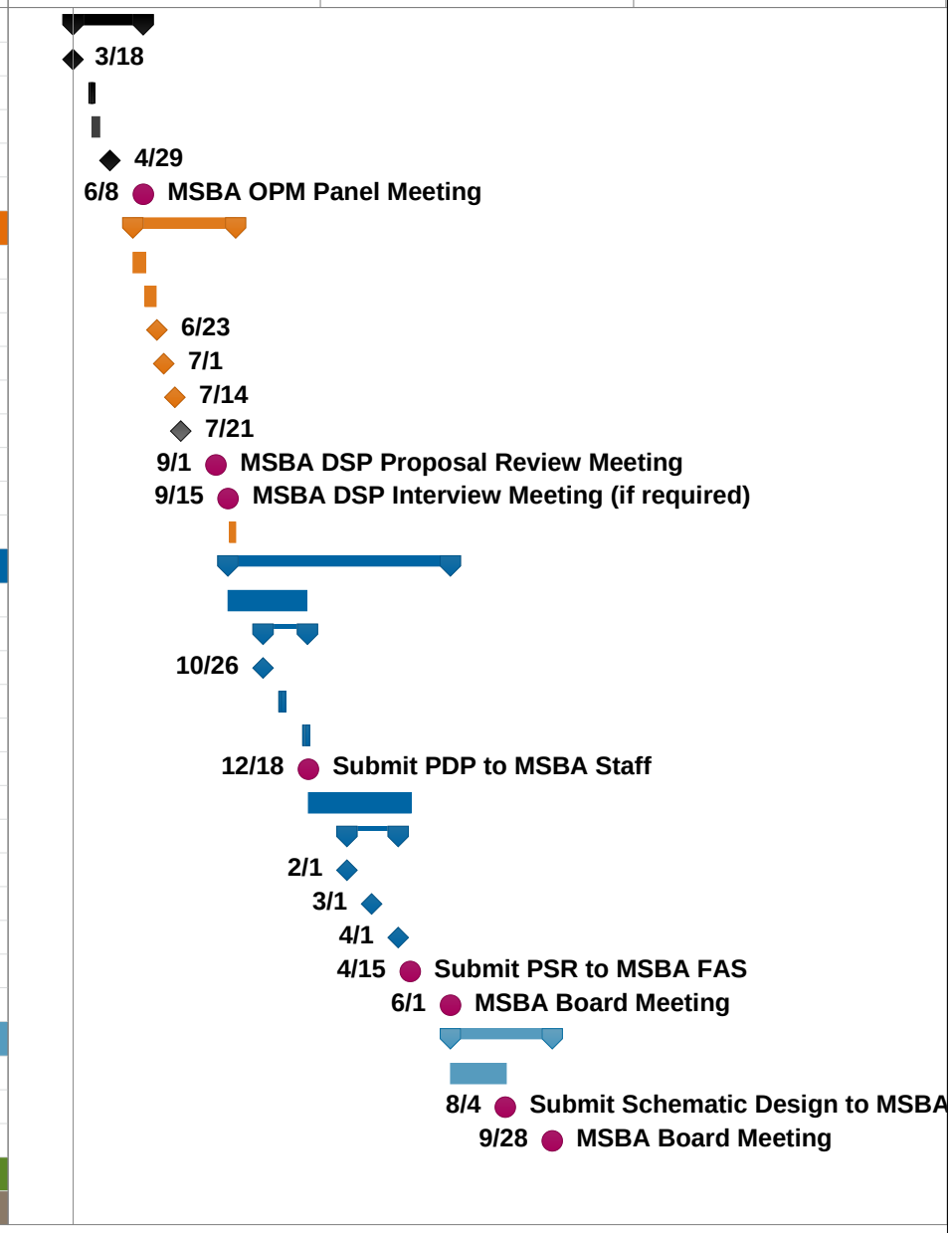
Updated: June 25, 2015
Revised: September 16, 2015

TOWN OF BOURNE, MASSACHUSETTS
PEEBLES ELEMENTARY SCHOOL
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**RETAIN OPM**	**58 days**	**3/18/2015**	**6/8/2015**
2	Submit OPM Proposals	0 days	3/18/2015	3/18/2015
3	OPM Interview	2 days	4/8/2015	4/9/2015
4	Negotiate OPM Contract	7 days	4/9/2015	4/17/2015
5	Submit Documents to MSBA OPM Panel	0 days	4/29/2015	4/29/2015
6	**MSBA OPM Panel Meeting**	**0 days**	**6/8/2015**	**6/8/2015**
7	**RETAIN DESIGNER**	**86 days**	**5/27/2015**	**9/23/2015**
8	Draft Designer RFS and Submit to MSBA	11 days	5/27/2015	6/10/2015
9	MSBA Approve Draft RFS	9 days	6/10/2015	6/22/2015
10	Submit to Central Register	0 days	6/23/2015	6/23/2015
11	Notice in Central Register	0 days	7/1/2015	7/1/2015
12	Briefing Session	0 days	7/14/2015	7/14/2015
13	Submit Designer Proposals	0 days	7/21/2015	7/21/2015
14	**MSBA DSP Proposal Review Meeting**	**0 days**	**9/1/2015**	**9/1/2015**
15	**MSBA DSP Interview Meeting (if required)**	**0 days**	**9/15/2015**	**9/15/2015**
16	Negotiate Designer Contract	5 days	9/17/2015	9/23/2015
17	**FEASIBILITY STUDY (FS)**	**183 days**	**9/15/2015**	**6/1/2016**
18	Develop Preliminary Design Program (PDP)	65 days	9/15/2015	12/15/2015
19	**Community Presentations**	**37 days**	**10/26/2015**	**12/16/2015**
20	Community Forum 1: Visioning	0 days	10/26/2015	10/26/2015
21	Community Forum 2: Existing Conditions	3 days	11/16/2015	11/18/2015
22	Community Forum 3: Options	3 days	12/14/2015	12/16/2015
23	**Submit PDP to MSBA Staff**	**0 days**	**12/18/2015**	**12/18/2015**
24	Develop Preferred Schematic Report (PSR)	84 days	12/18/2015	4/15/2016
25	**Community Presentations**	**44 days**	**2/1/2016**	**4/1/2016**
26	Community Forum 1	0 days	2/1/2016	2/1/2016
27	Community Forum 2	0 days	3/1/2016	3/1/2016
28	Community Forum 3	0 days	4/1/2016	4/1/2016
29	**Submit PSR to MSBA FAS**	**0 days**	**4/15/2016**	**4/15/2016**
30	**MSBA Board Meeting**	**0 days**	**6/1/2016**	**6/1/2016**
31	**SCHEMATIC DESIGN (SD)**	**85 days**	**6/1/2016**	**9/28/2016**
32	Develop Schematic Design	47 days	6/1/2016	8/4/2016
33	**Submit Schematic Design to MSBA**	**0 days**	**8/4/2016**	**8/4/2016**
34	**MSBA Board Meeting**	**0 days**	**9/28/2016**	**9/28/2016**
35	**LOCAL VOTES**			
38	**DESIGN AND CONSTRUCTION (TBD)**			



Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

John K. McCarthy
Executive Director

September 15, 2015

Steven Lamarche, Superintendent of Schools
Bourne Public Schools
24 Perry Avenue
Buzzards Bay, MA 02532-3441

RE: Designer Selection
James F Peebles Elementary School
MSBA ID: 201400360010

Dear Superintendent Lamarche:

On Tuesday, September 15, 2015, the Massachusetts School Building Authority Designer Selection Panel ("DSP") interviewed the finalists for the above-referenced project. The following individuals represented the Town of Bourne on the DSP:

- James Potter, School Building Committee Chair
- Jonathan Nelson, Director of Facilities
- Steven Lamarche, Superintendent of Schools

In accordance with the provisions of Massachusetts General Laws, Chapter 7C, Sections 44 through 58, and the MSBA Designer Selection Procedures, the DSP voted unanimously to rank the finalists, in order of qualifications, as follows for the subject project:

1. Flansburgh Associates, Inc.
2. Jonathan Levi Architects LLC
3. Arrowstreet Inc.

The DSP determined that Flansburgh Associates, Inc. possesses the requisite skills and experience for this project, particularly in light of their extensive experience in the design and construction of schools in Massachusetts.

The Town of Bourne should now take the appropriate local steps necessary to award the contract for designer services to the first-ranked firm and authorize fee and contract negotiations. Please know that the Town of Bourne must use the MSBA's standard contract for designer services, a copy of which can be downloaded from our website, MassSchoolBuildings.org.

Before beginning the contract and fee negotiations, however, and in order to remain eligible for the reimbursement of a portion of the designer services fee, please have your Owner's Project

Manager contact the MSBA Project Manager for this project, Caulen Finch, to discuss the MSBA's guidelines. Upon completion of contract and fee negotiations with the first-ranked firm, please forward a copy of the fully executed contract to Kathryn DeCristofaro, Capital Program Manager, at the MSBA.

Sincerely,

Joseph Buckley, P.E.
Chief Engineer

cc:

Legislative Delegation
James Potter, Bourne School Building Committee Chair
Jonathan Nelson, Bourne Director of Facilities
Kent Kovacs, Flansburgh Associates, Inc.
Jonathan Levi, Jonathan Levi Architects LLC
Laurence Spang, Arrowstreet Inc.
Joel Seeley, OPM, Symmes Maini & McKee Associates, Inc.
Caulen Finch, MSBA Project Manager
File 4.3 Feasibility Study *(R6)*

Flansburgh Architects

September 22, 2015

Mr. Joel Seeley
Symmes Maini & McKee Associates, Inc
1000 Massachusetts Ave.
Cambridge, MA 02138

RE: Bourne Public Schools Feasibility Study and Schematic Design
Designer Services Fee Proposal

Dear Mr. Seeley,

Flansburgh Architects, Inc. is very pleased to be selected by the Designer Selection Panel of the Massachusetts School Building Authority as the Architect for the Bourne Public Schools project. We look forward to working with the Town of Bourne and it's School Building Committee. This will be a priority project for us and we are prepared to start work immediately.

SCOPE OF SERVICES

Our scope of services will include all of the work as described in the Request For Designer Services dated July 1, 2015 as well as the MSBA standard "Contract For Designer Services" for the Feasibility and Schematic Design phases of the work.

We understand that all of the Consultant services listed on page 4 of the RFS are included within our Basic Services. We also understand that Traffic, Geotechnical, Testing, and Surveying are extra services if required as described in Articles 4.11, 8, and 9 of the standard MSBA Contract.

SCHEDULE

We will follow the schedule as stated in the RFS and will prepare a more detailed schedule working with you and the School Building Committee to achieve the desired milestones.

COMPENSATION FOR DESIGNER SERVICES

Basic Services
The compensation for Basic Services shall be a fixed fee as follows.

Feasibility Study	$250,000
Schematic Design	$115,000
	$365,000 Total

This fee fits into the MSBA average A/E fee range for the Study/SD phase of a project of this size and complexity involving 123,500 sf in the two existing schools when compared to other MSBA school projects published on their website. This project also involves three different enrollment scenarios with options required for each.

Flansburgh Architects

If this proposal is acceptable, please let us know and we will prepare the required pages for the MSBA standard Contact for Designer Services.

We appreciate the opportunity to be of service and look forward to working with you and the Town of Bourne. If you have any questions please do not hesitate to contact me.

Sincerely,

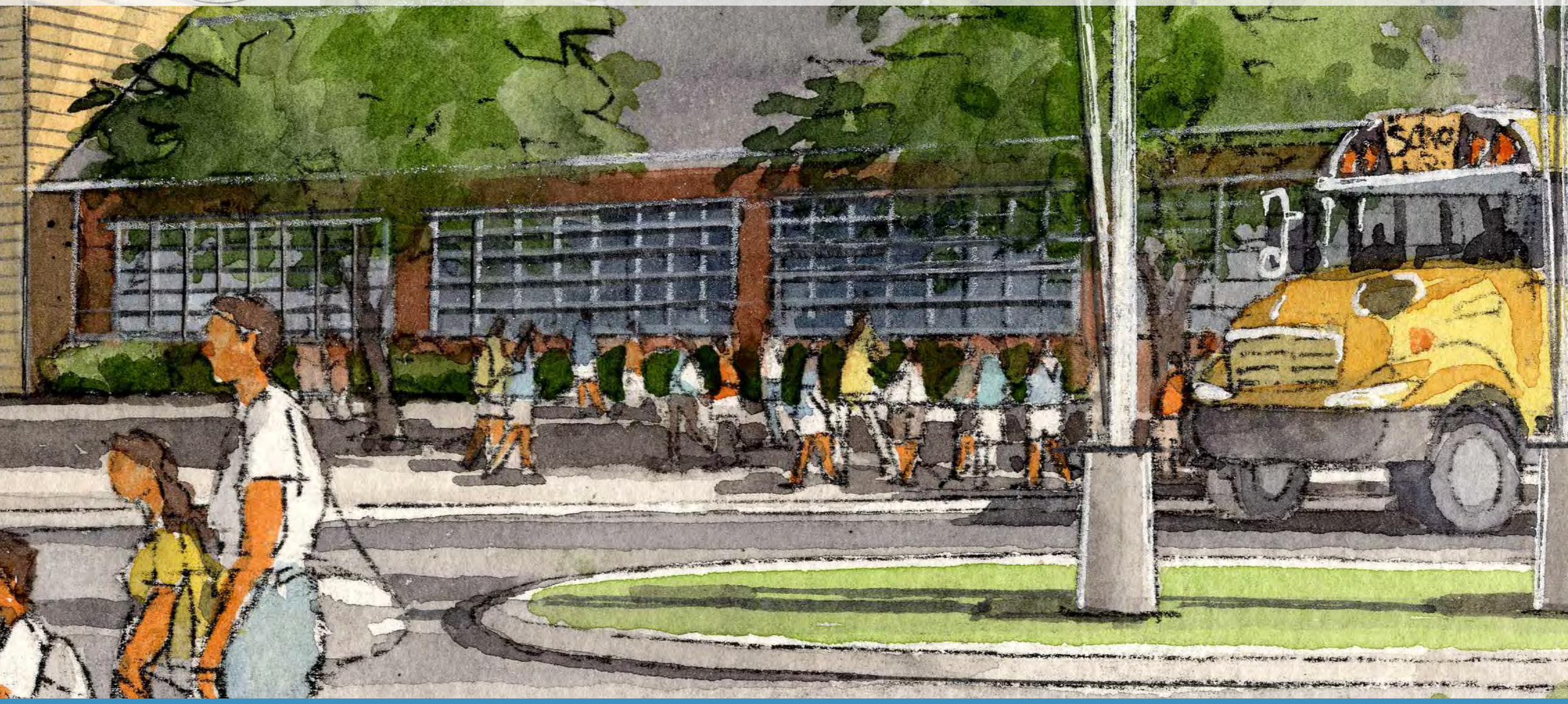
FLANSBURGH ASSOCIATES, INC.

Kent Kovacs, AIA LEED AP
Vice President

Peebles Elementary School

Bourne, Massachusetts

September 15, 2015



Flansburgh Architects

Celebrating Over 50 Years of Designing Schools

Design Team

Kent Kovacs, AIA, LEED - Principal-in-Charge

- Project Leader
- Primary Contact
- Community Outreach

Jorge Cruz, AIA, LEED - Project Manager

- Project Controls/Quality Assurance
- Constructability/Specifications
- Consultant Coordination

Betsy Garcia, AIA, LEED - Project Architect

- Sustainability
- Design Options
- Computer Model/BIM

David Stephen, AIA / M. Ed - Educational Planner

- Program Visioning
- Workshop Facilitation
- Community Outreach

Project Team

Bourne Public Schools
Bourne, MA

Owner's Project Manager
Symmes Maini & McKee Associates

Principal-in-Charge
Kent Kovacs, AIA, LEED AP
MA reg. #50227 / MCPPO Certified

Project Manager
Jorge Cruz, AIA, LEED AP
MCPPO Certified

Project Architect
Library/Media
Betsy Garcia, AIA, LEED AP BC+D
MA reg. #50633 / MCPPO Certified

Site Survey, Civil & Traffic Engineering
Nitsch Engineering (WBE)

Structural Engineering
Boston Building Consultants

Landscape Architecture
Waterman Design Associates

Educational Programming
New Vista Design

Food Service, Laboratory, FF&E Consulting
Tavares Design Associates (MBE)

Geotechnical & Geo-Environmental Engineering
Geotechnical Services Inc.

Theatrical Consulting
Theatre Projects Consultants

Specifications Consulting
Lund Associates

Fire Protection, Plumbing, HVAC, Electrical Engineering
Garcia, Galuska, DeSousa (MBE)

Data/Communications, Security Consulting
Edvance Technology Design

Acoustical Consulting
Acentech

Accessibility & Code Consulting
R W Sullivan Engineering

Environmental Permitting, Hazardous Materials
Fuss & O'Neill EnviroScience

Sustainable/Green Design/ Renewable Energy Consultant
James Carr Architecture & Design

Cost Estimating
Project Management & Cost

Flansburgh Experience

Master Planning

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Flansburgh Experience

Master Planning

Preservation/Renovation

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Flansburgh Experience

Master Planning

Preservation/Renovation

Green Design

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Flansburgh Experience

Master Planning

Preservation/Renovation

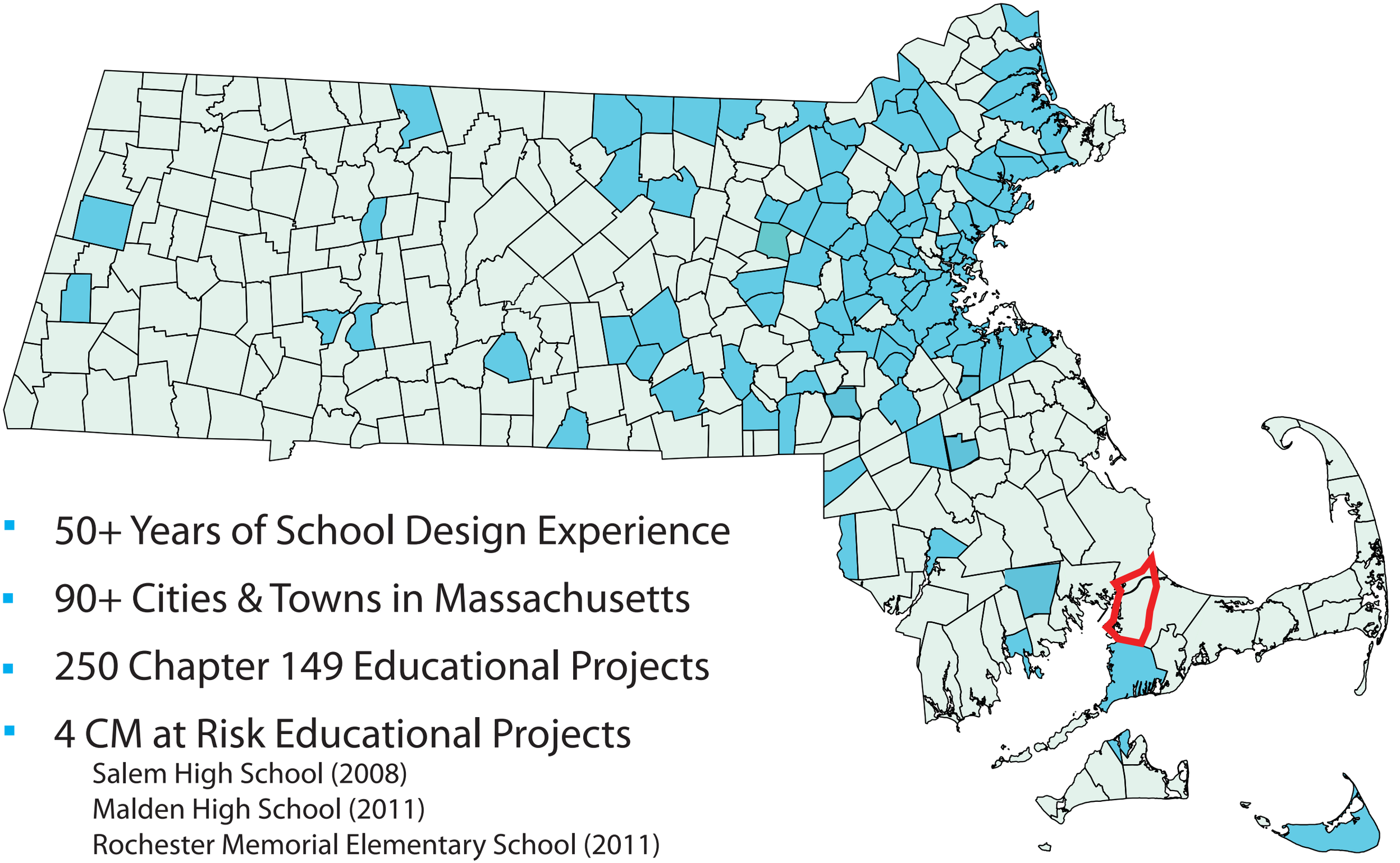
Green Design

Public Schools

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Public Educational Design



- 50+ Years of School Design Experience
- 90+ Cities & Towns in Massachusetts
- 250 Chapter 149 Educational Projects
- 4 CM at Risk Educational Projects
  - Salem High School (2008)
  - Malden High School (2011)
  - Rochester Memorial Elementary School (2011)
  - Holbrook PreK-12 School (2018)

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Public Educational Design

10 Public Elementary Schools in Last 10 Years

7 Public Middle Schools in Last 10 Years

3 Public Middle/High Schools in Last 10 Years

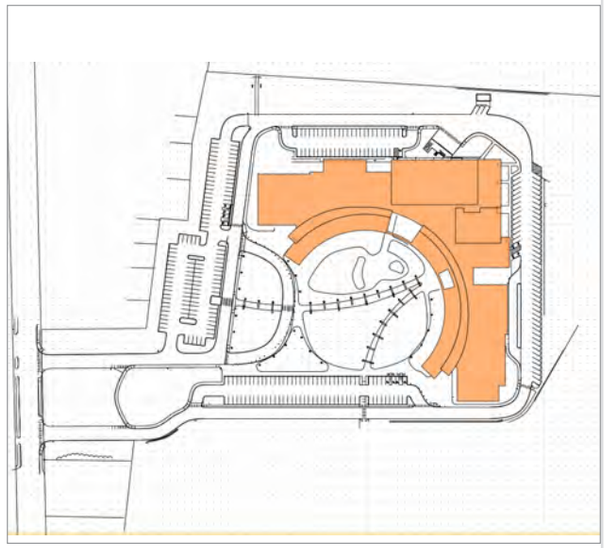
7 Public High Schools in Last 10 Years

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Recent Elementary Schools - MSBA Partnering

Holbrook PreK-12 School
Holbrook, Massachusetts



Facts

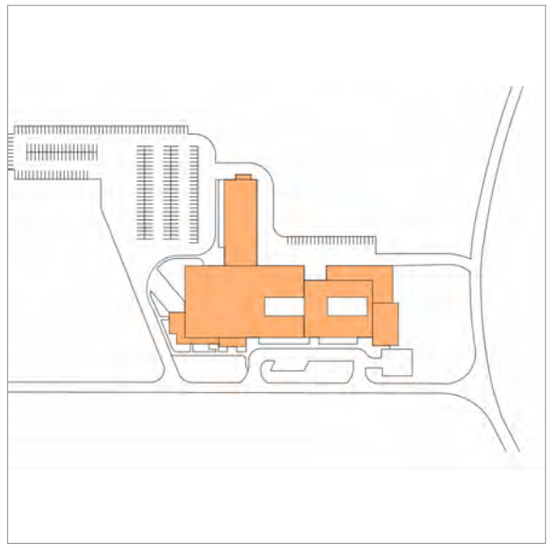
Students	1,095
Area	217,353sf
Construction Cost	$ 79.7 M
Completion Date	2018

Freeman Elementary School
Norfolk, Massachusetts

Facts

Students	575
Area	96,410 sf
Construction Cost	$ 24.5 M
Completion Date	2012

Memorial Elementary School
Rochester, Massachusetts



Facts

Students	604
Area	105,023 sf
Construction Cost	$ 20.5 M
Completion Date	2011

Morey Elementary School
Lowell, Massachusetts

Facts

Students	530
Area	67,365 sf
Construction Cost	$ 16 M
Completion Date	2009

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Our Process - Key Considerations

- Promote a positive educational environment for elementary students.
- Develop alternatives for multiple grade configurations
- Study options to upgrade the existing facility or construct a new school on an existing site.
- Provide a fiscally responsible and innovative solution.
- Gain community support and town approval.

Our Process - Feasibility Model of Success

Workshop #1
Collect Information

PROGRAMMING
VISIONING
EXISTING CONDITIONS
INTERVIEWS
BENCHMARK DATA

Workshop #2
Develop Options

K-4/K-5 CONFIGURATIONS
PROGRAM DIAGRAMS
SITE SELECTION
MODEL BLOCKS

Workshop #3
Evaluate Options

DEVELOP CONSENSUS
SELECT OPTIONS
PHASING
COST ESTIMATES

Preferred Option

21st Century Elementary Learning Environments

Elementary Educational Facilities

Peebles Elementary School | Bourne, MA

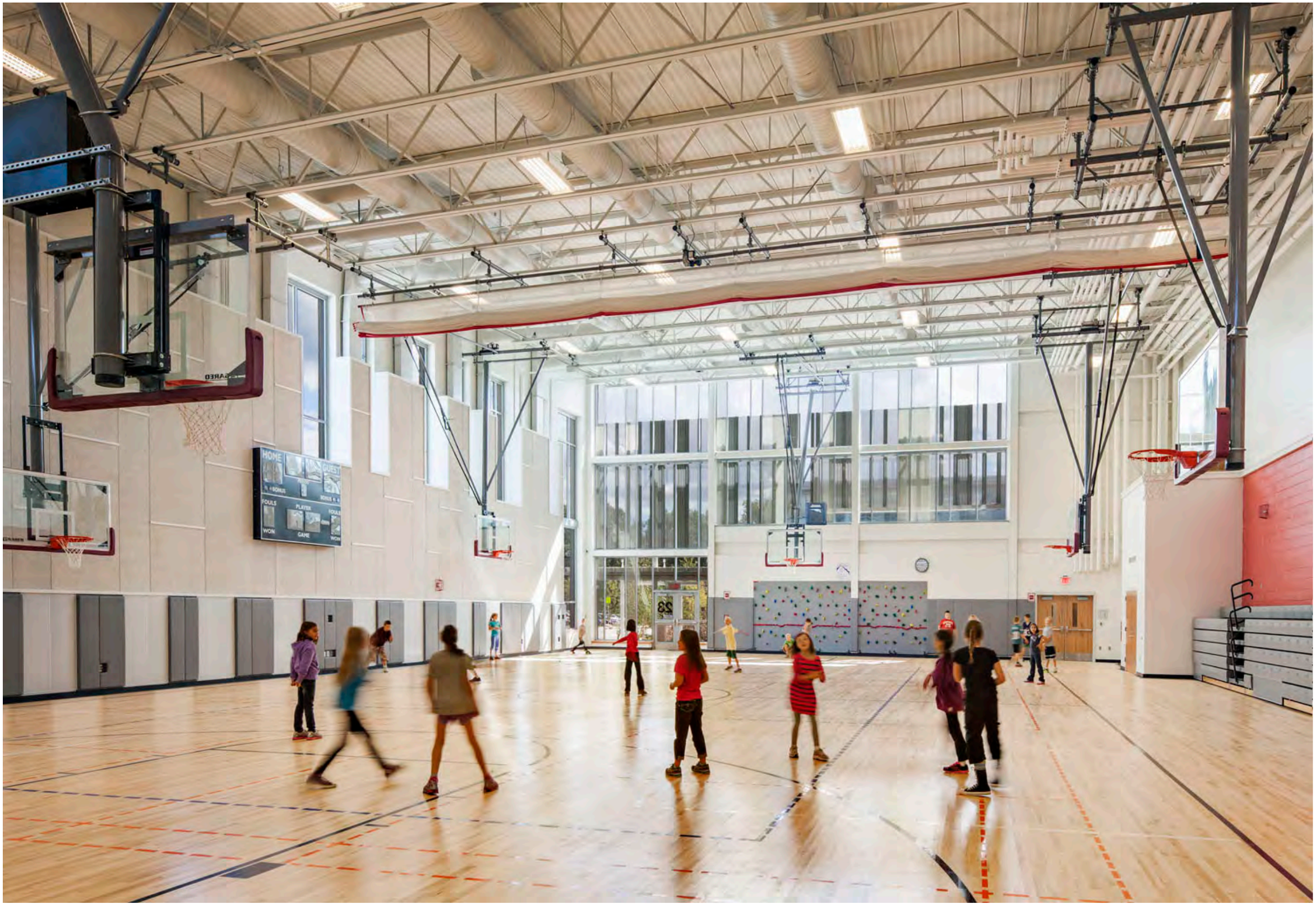
Flansburgh Architects

Elementary Educational Facilities

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Elementary Educational Facilities



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Elementary Educational Facilities

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Learning Environments - Flexible Spaces

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Interior Environment - Color

Peebles Elementary School | Bourne, MA

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Learning Environments - Outdoor Spaces

Peebles Elementary School | Bourne, MA

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Learning Environments - Outdoor Spaces

Peebles Elementary School | Bourne, MA

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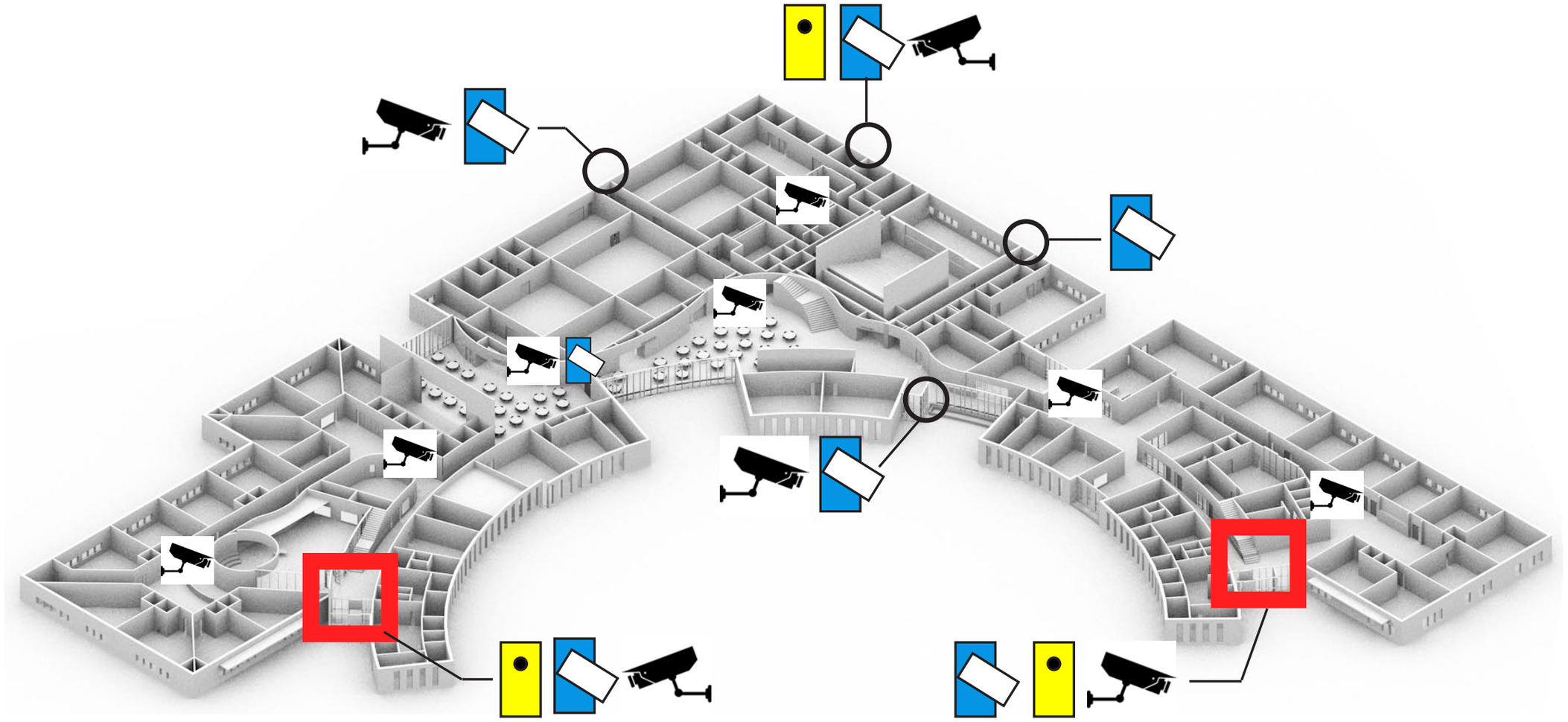
Safety & Security

VIDEO SURVEILLANCE

PROX READER

AiPHONE DEVICE

AiPHONE DEVICE



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Sustainable Design - NE-CHPS / LEED-S

- **2% additional MSBA reimbursement**
- **Saves energy and maximizes daylight**
- **Conserves resources**
- **Creates a healthier, more efficient school**

Recent MA-CHPS/LEED Schools:

West Bridgewater, Sutton, Norfolk, Rochester, Lowell, Holbrook

LEED Silver

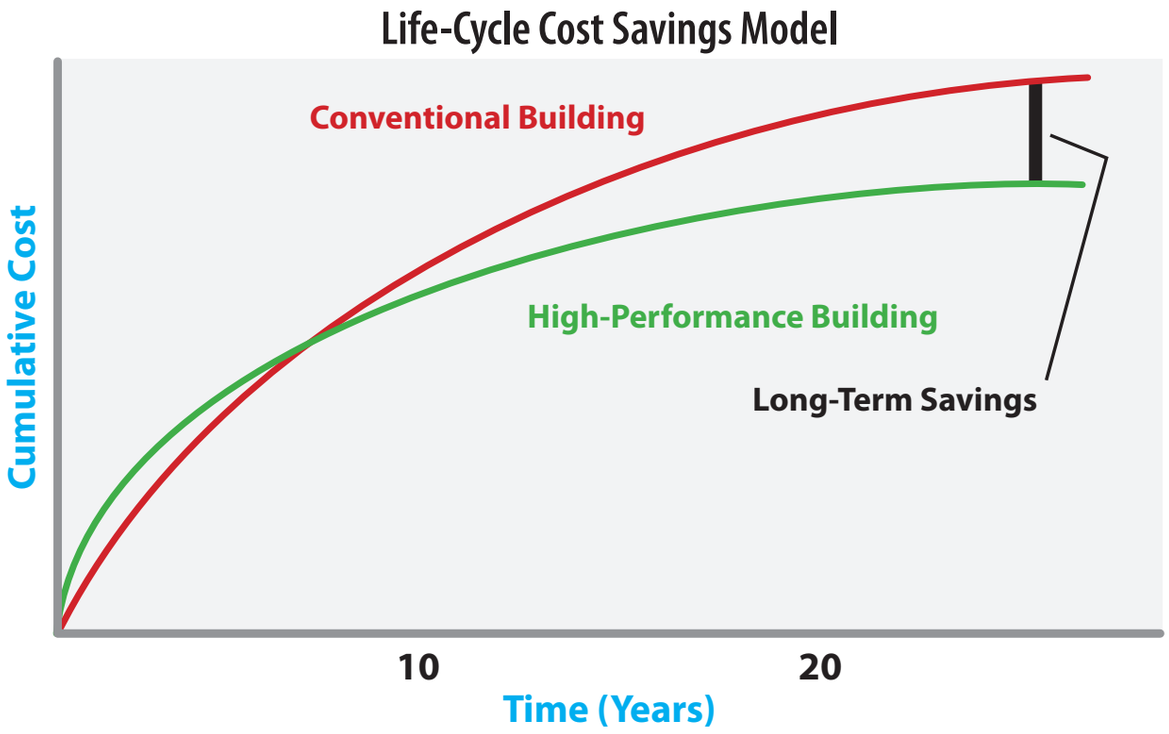
Stanley Elementary School in Waltham

First LEED Certified Public School in Massachusetts

LEED Gold

International College Elementary School in Beirut

First LEED Certified Building in Lebanon



A modest incremental construction cost yields eight times the savings over a 20-year bond structure. - *U.S. Department of Energy, Office of Science*

Net Zero LEED Platinum

Hawaii Preparatory Academy Energy Lab in Kamuela, Hawaii

First Academic Living Building in the World

Peebles Elementary School | Bourne, MA

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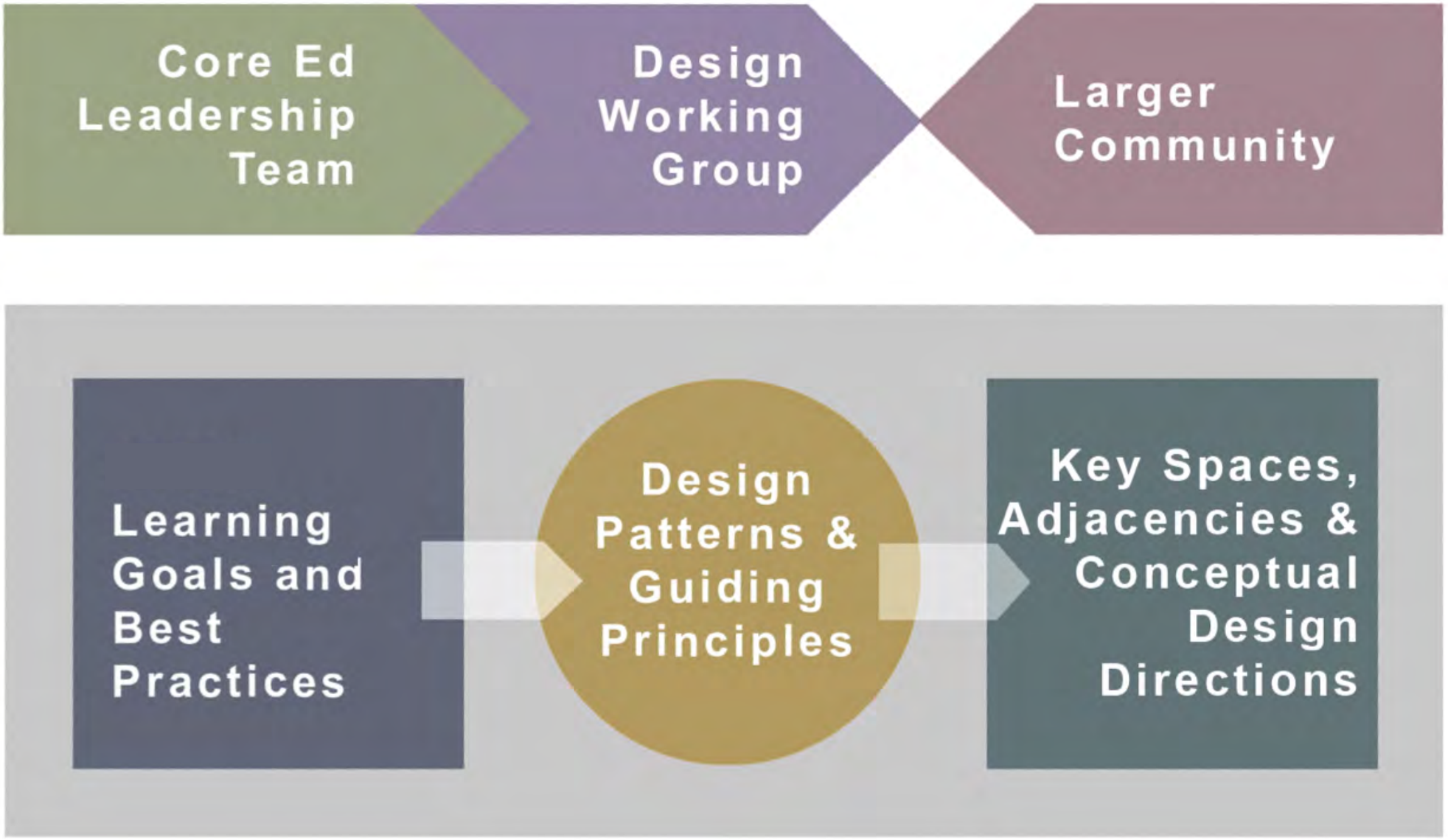
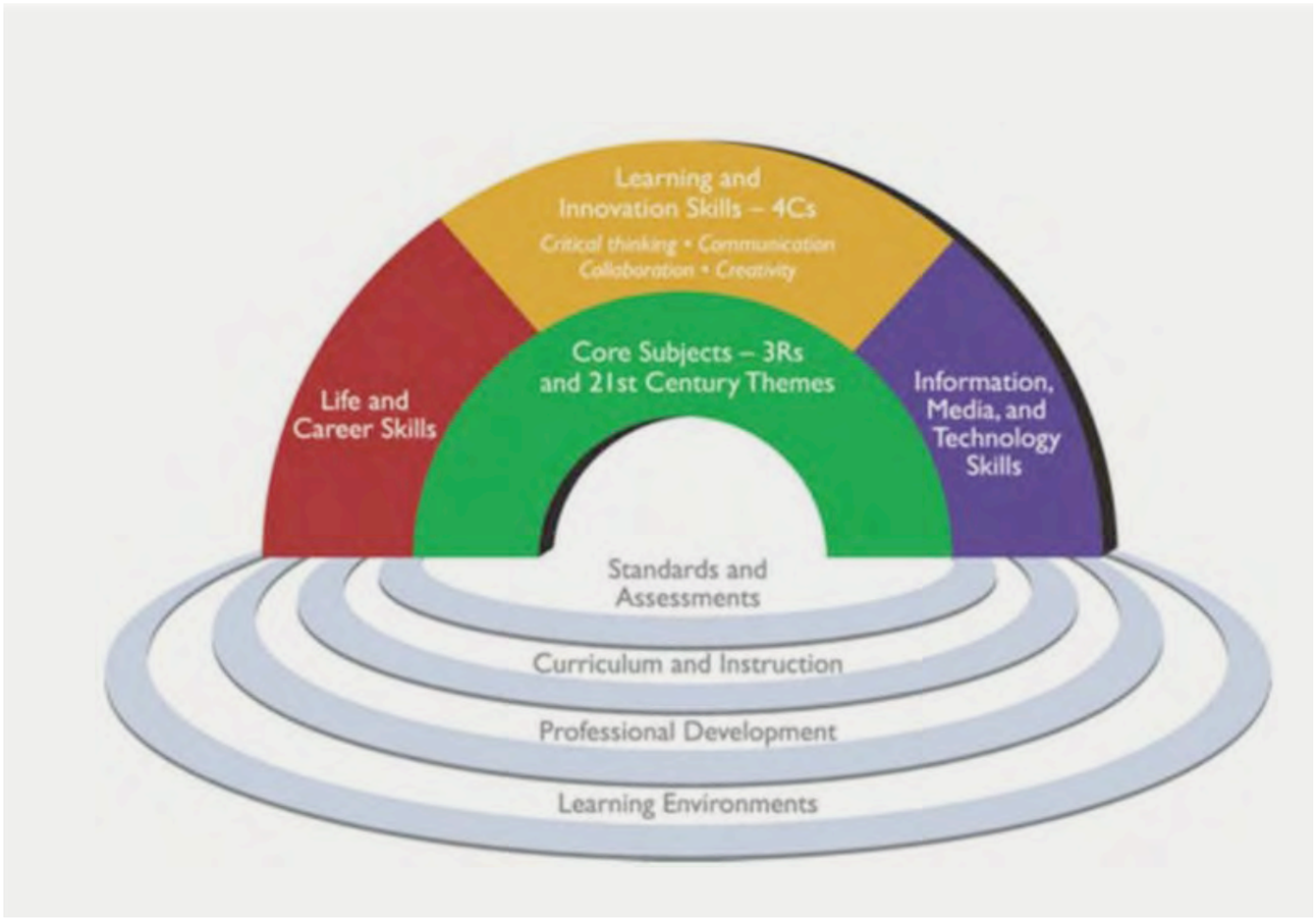
The Visioning Process



Focus on 21st Century Skills

- The 6 R's plus the 4 C's
- Proactive, Life-Long, and Continuous Learning



- Critical Thinking
- Communication
- Collaboration
- Creativity
- Citizenship
- Academic Mindset

Focus on Learning

- High-Performance Work Environments
- Varied and Collaborative
- Flexible and Agile

Peebles Elementary School | Bourne, MA

Flansburgh Architects

21st Century Design Patterns

Ubiquitous Technology

- Tablets
- Smart Boards

Indoor / Outdoor Learning

- Play Area
- Expanded Learning Experience

Media Centers

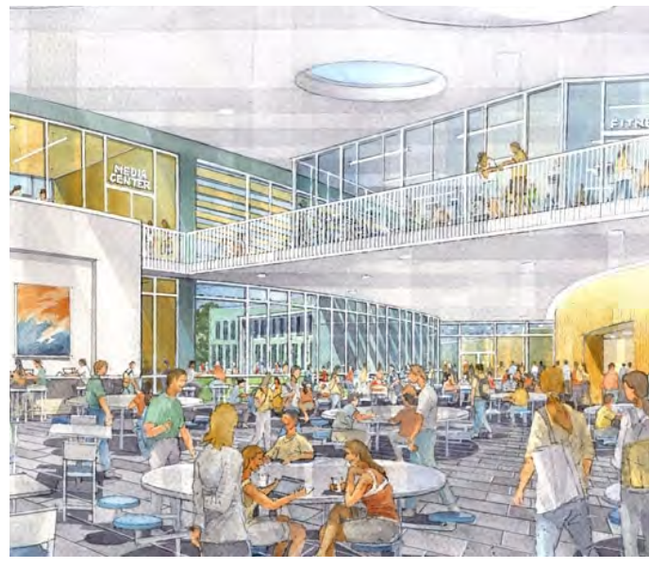
- Virtual Learning
- Flexible Layouts

Collaborative Learning Clusters

- Varied Space Sizes
- Group Presentation Spaces

Varied / Flexible Spaces

- Movable Walls
- Small Group Learning



Streetscapes

- Displays
- Informal Gathering Areas

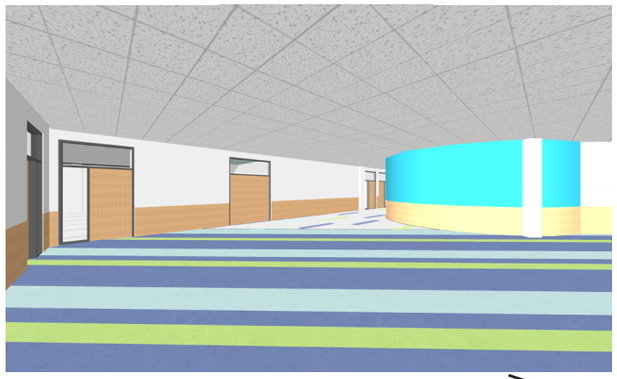
Guiding Principles & Priorities

- Understanding of District's Current Initiatives
- Analysis of Opportunities and Goals
- Translation of Goals into Architectural Priorities

Community Visioning

Faculty interview Session

Guiding Principles & Principles

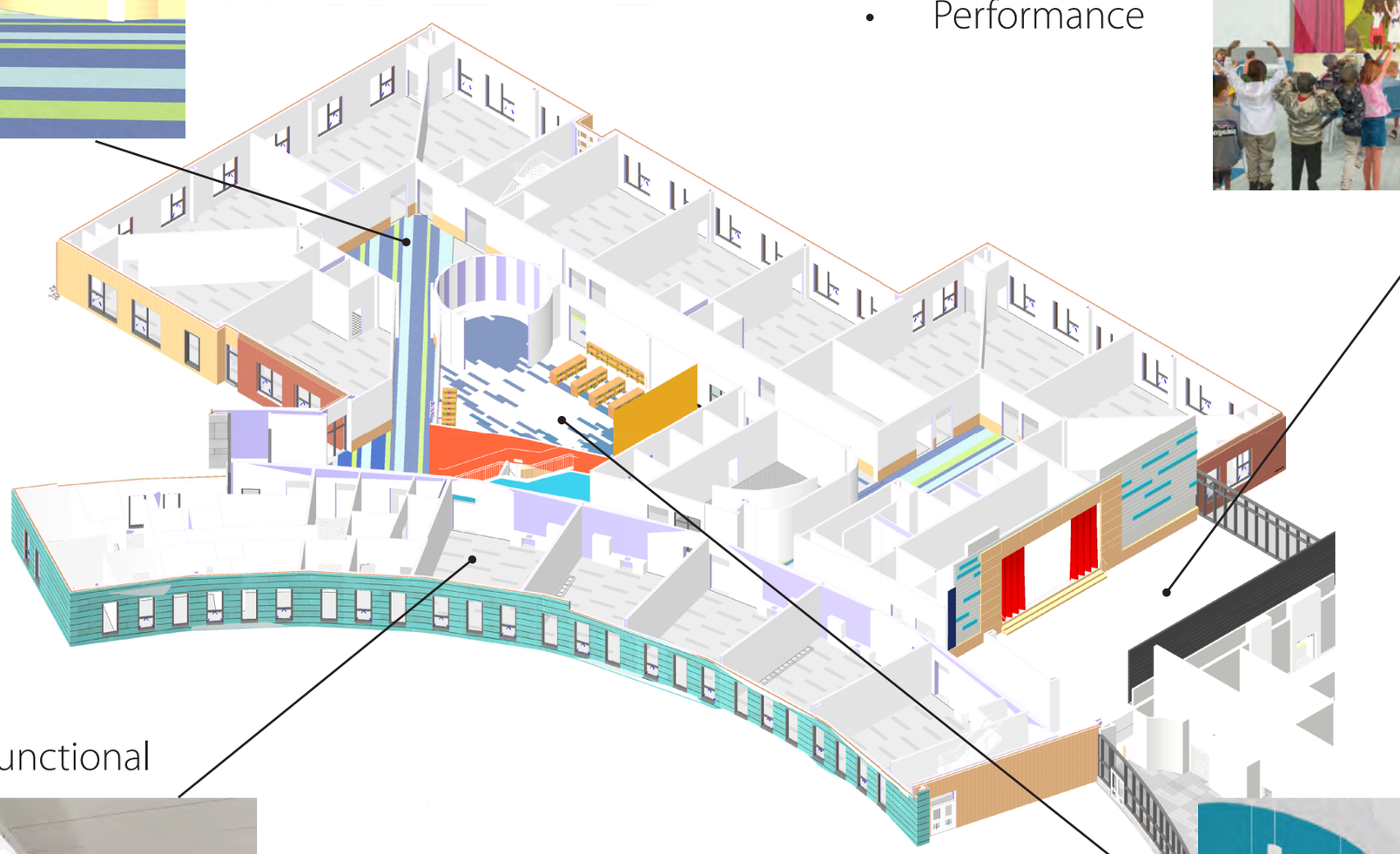


Neighborhood

- Gathering
- Display

Cafeteria

- Gathering
- Community
- Performance



Classrooms

- Flexibility
- Every surface functional

Learning Commons

- Heart of the school
- Sm. and Lg. Group

Elementary School Considerations

Neighborhood Schools (250 enrollment)

Advantages

- Coherent student and family experience
- Vertical alignment
- Cross-grade modeling and interactions
- Small school environment
- Ease of travel (Cape Cod Canal)

Disadvantages

- Potential for differentiation and competition
- Potential of inequality of programs, students, and experience
- Potential cost implications

Elementary School Considerations

Unified Elementary Schools (725 / 885 enrollment)

Advantages

- Equity of Experience and Access
- Thoughtful Grouping and Integration of Students with Differentiated Needs
- Potential Cost Savings
- Greater resources

Disadvantages

- More Transitions for Students and Families
- Larger School Environment
- Challenges in Achieving Vertical Alignment
- Greater Travel Distances (Cape Cod Canal)

Cost Control & Quality Assurance

A Long History of Cost Control

Recent Projects

	EST. W/CONTINGENCY	BID	BID DATE	BID $/SF	ENHANCEMENTS	UNDER BUDGET
Norfolk	$ 27,507,000	$ 24,514,000	11/10	$ 254/SF	$1,008,611	**($ 1,984,389)**
Sutton	$ 45,185,000	$ 41,230,000	6/11	$ 234/SF	$ 473,000	**($ 3,482,000)**
Rochester	$ 21,710,000	$ 20,569,000	2/10	$ 195/SF	$ 938,247	**($ 23,000)**
West Bridgewater	$ 49,728,000	$45,400,000	9/13	$ 328/SF	$ 900,000	**($ 3,428,000)**
						($ 8,917,389)

Previous 5 Years

	EST. CONST. COST	LOW BID	FINAL CONST. COST	UNDER BUDGET
RENOVATION/ADDITION				
Last 5 Year Totals	$113,417,344	$100,566,189	$105,928,709	**($7,488,635)**
NEW CONSTRUCTION				
Last 5 Year Totals	$259,881,351	$241,445,421	$248,536,751	**($11,344,600)**

Cost History with MSBA

Flansburgh Associates, Inc.

Massachusetts School Building Authority
19-Aug-15

Project List

District	School	Scope	Phase	Project Delivery	PFA Budget (millions)	PFA Budget per GSF	PFA Bid (millions)	PFA Bid per GSF	Gross SF	Bid Date	SD Duration (months)	CD Duration (months)
Holbrook	Holbrook Jr Sr High	New Construction	Design Development	CMR	$80.8	$372			217,353	11/25/2015	16.9	13.6
West Bridgewater	West Bridgewater Jr-Sr	New Construction	Construction	DBB	$49.7	$352	$46.3	$328	141,250	9/24/2013	10.9	13.4
Sutton	*Sutton Middle School*	*Addition / Renovation*	*Building Complete*	*DBB*	*$46.4*	*$261*			*179,040*	*5/19/2011*	*9.6*	*11.7*
Norfolk	*Freeman-Kennedy Elementary*	*New Construction*	*Closeout*	*DBB*	*$28.9*	*$300*	*$25.4*	*$263*	*96,410*	*11/4/2010*	*11.4*	*7.3*
Rochester	*Rochester Memorial*	*Addition / Renovation*	*Final Audit Approved*	*CMR*			*$20.6*	*$192*	*107,183*	*6/22/2010*	*8.0*	*6.2*
Malden	*Malden High*	*Addition / Renovation*	*Final Audit Approved*	*CMR*	*$47.0*							
Chelmsford	*Chelmsford High*	*Addition / Renovation*	*Final Audit Approved*									
Lowell	*Charles W Morey*	*New Construction*	*Final Audit Approved*	*DBB*	*$15.8*							
Waltham	*James Fitzgerald Elementary*	*New Construction*	*Final Audit Approved*	*DBB*	*$19.9*							
Waltham	*Henry Whittemore Elementary*	*Addition / Renovation*	*Final Audit Approved*	*DBB*	*$21.9*							

Cost per Square Foot Comparisons

New Construction		2011	2012	2013	2014
All MSBA Projects	No Projects	13	14	11	4
	Minimum	$241.29	$245.27	$293.89	$280.76
	Average	$289.18	$291.38	$336.85	$316.11
	Maximum	$330.09	$375.26	$377.68	$337.52
Flansburgh Associates, Inc.				$327.56	

Addition/Renovation		2011	2012	2013	2014
All MSBA Projects	No Projects	6	6	10	2
	Minimum	$77.63	$21.66	$24.99	$104.06
	Average	$147.26	$170.99	$203.17	$192.06
	Maximum	$227.23	$282.06	$378.64	$280.05
Flansburgh Associates, Inc.				$147.40	

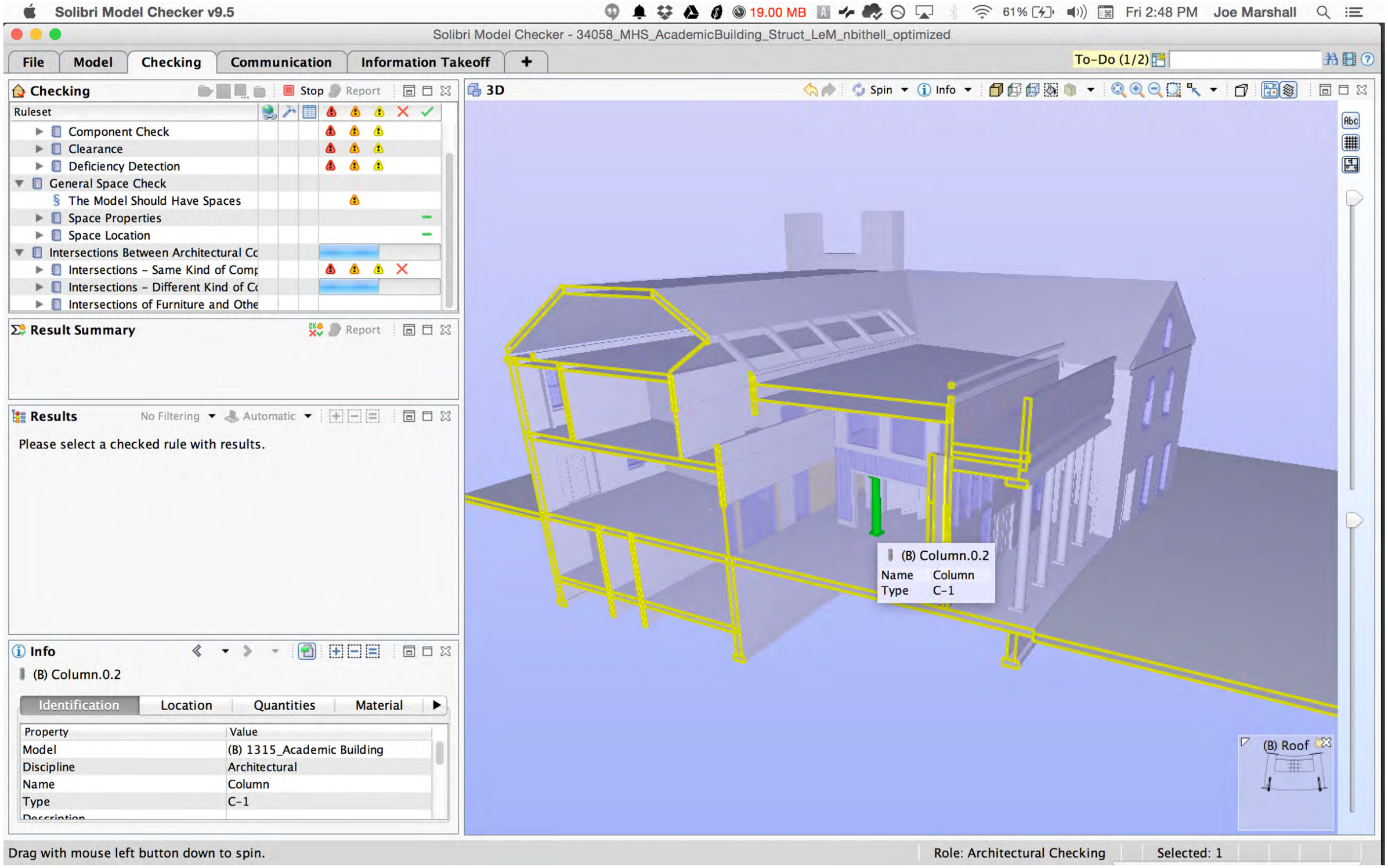
$327.56 **New Construction Cost per SF**

$147.40 **Addition / Renovation Cost per SF**

Cost Control - Our Mutual Goal

- Experience with School Construction
  - Strong Benchmark Data
  - Conservative Design Approach
  - Experienced Consultant Team
- Thorough Site Investigation
- Independent Cost Estimates
- Value Engineering
- Bid Alternates
- Bid Analysis
- Cost Contingencies

BIM Coordination



Quality Control of Building Systems & Materials

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Construction Administration

Site & Building Evaluation

Existing Building & Site Evaluation

Existing Conditions

- Site Work
- Envelope
- Interior
- Mechanical
- Electrical
- Plumbing / Fire Protection

Priority Ratings

- Health & Safety
- Code Compliance
- H.C. Accessibility
- Energy Savings
- Durability
- Operations & Maintenance

1. Gather Information

- Visit All Schools
- Previous Studies
- Regulatory Requirements

2. Analyze Existing Facilities

- Site Characteristics
- Building Deficiencies
- Building Priorities

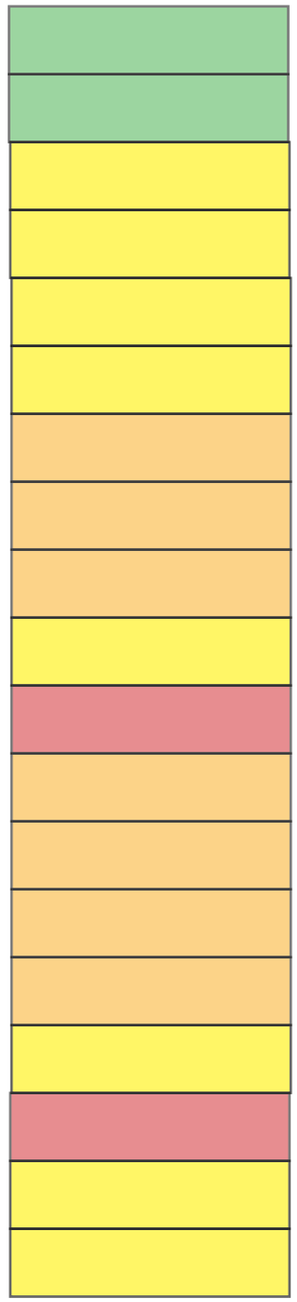
3. Identify Issues

- Recommendations
- Design Opportunities
- Space Needs

Existing Building Evaluation

System	% Cost in a New Building
Substructure	5.0%
Superstructure	16.0%
Exterior Walls	7.0%
Exterior Doors & Windows	5.0%
Roofing	2.5%
Interior Partition Walls	4.0%
Interior Doors	1.5%
Floor Finishes	6.0%
Ceilings	4.5%
Wall Finishes	2.5%
Elevators	0.5%
Built-in Cabinets	1.7%
Window Shades	0.1%
Signs	0.1%
Equipment & Specialties	1.6%
Plumbing	5.0%
Fire Protection	2.0%
HVAC	20.0%
Electrical	15.0%
	100.0%

Existing Building



Key

- Adequate
- Salvageable
- Unusable
- Required But Missing

82% Salvageable

Renovations / Additions

Peebles Elementary School | Bourne, MA

Flansburgh Architects

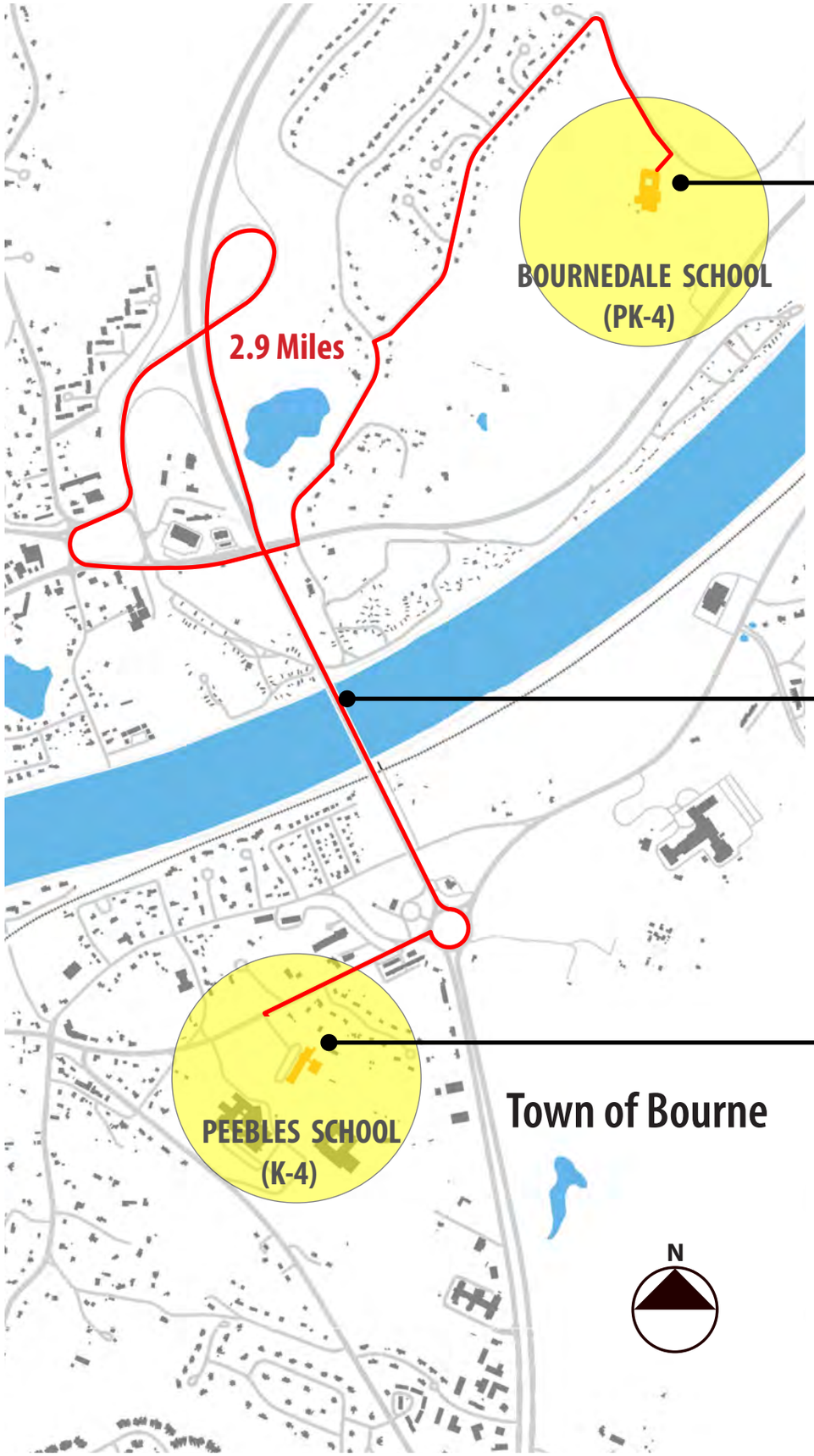
Renovations / Additions

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Site Selection

- Cape Cod Canal
- Neighborhoods
- Property Developments
- Demographics
- Joint Base Military Installation
- Buildable Land
- Traffic
- Utilities
- Topography
- Wetlands
- Wind
- Solar Orientation
- Soils



BOURNEDALE ELEMENTARY SCHOOL
BUILT: 2009
STUDENTS: 435
AREA: 68,124 SF
SITE: approx. 122 acres

BOURNE BRIDGE

PEEBLES ELEMENTARY SCHOOL
BUILT:1953-1959
STUDENTS: 388
AREA: 55,191 SF
SITE: 8.6 acres

Existing Building Evaluation - Peebles Elementary

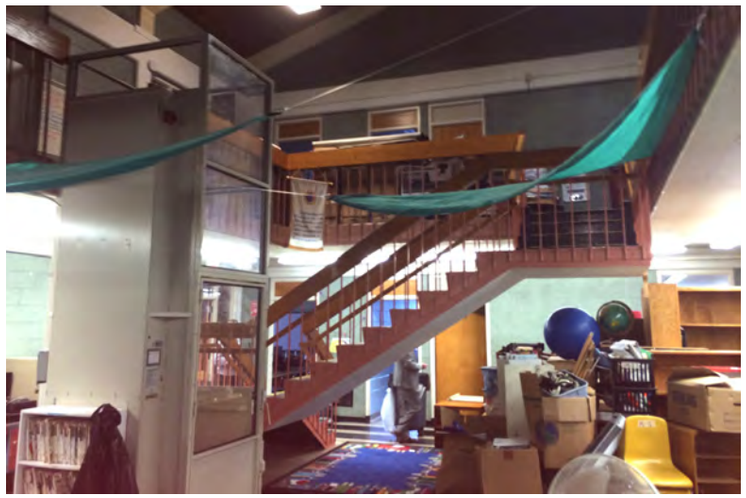
BUILT:1953-1959

Existing Conditions

- Failing exterior building components, i.e., stairs, doors
- Exterior glazing system offers poor thermal performance
- Run-off water flows toward building with water infiltration at lower levels
- Exposed piping and wiring throughout occupied spaces
- Inadequate access to mechanical crawl space making repairs difficult and costly
- Multiple accessibility concerns (two chair rails and one vertical lift)

Space Needs

- Cafeteria is too small for the current use and lacks kitchen support
- The art room and cafeteria share the same space limiting use and availability
- The music room is accessed directly off the gymnasium
- Lack of SPED spaces
- The performance stage is within the gym limiting use and availability
- Insufficient classroom spaces will not support the academic program



21st Century Education

- Current building requires reconfiguration to improve adjacencies
- Adaptability of future teaching methods is limited in the existing building
- Lack of teachers' work and collaborative spaces
- Inadequate flexible and multi-use spaces
- Outdated computer and technology infrastructure

Existing Building Evaluation - Bournedale Elementary

BUILT: 2009

Existing Conditions

- Newer facility with proper thermal envelope
- Displacement ventilation system
- Designed to exceed 2007 energy code
- Insulated glass windows, white roof with PV array

Space Needs

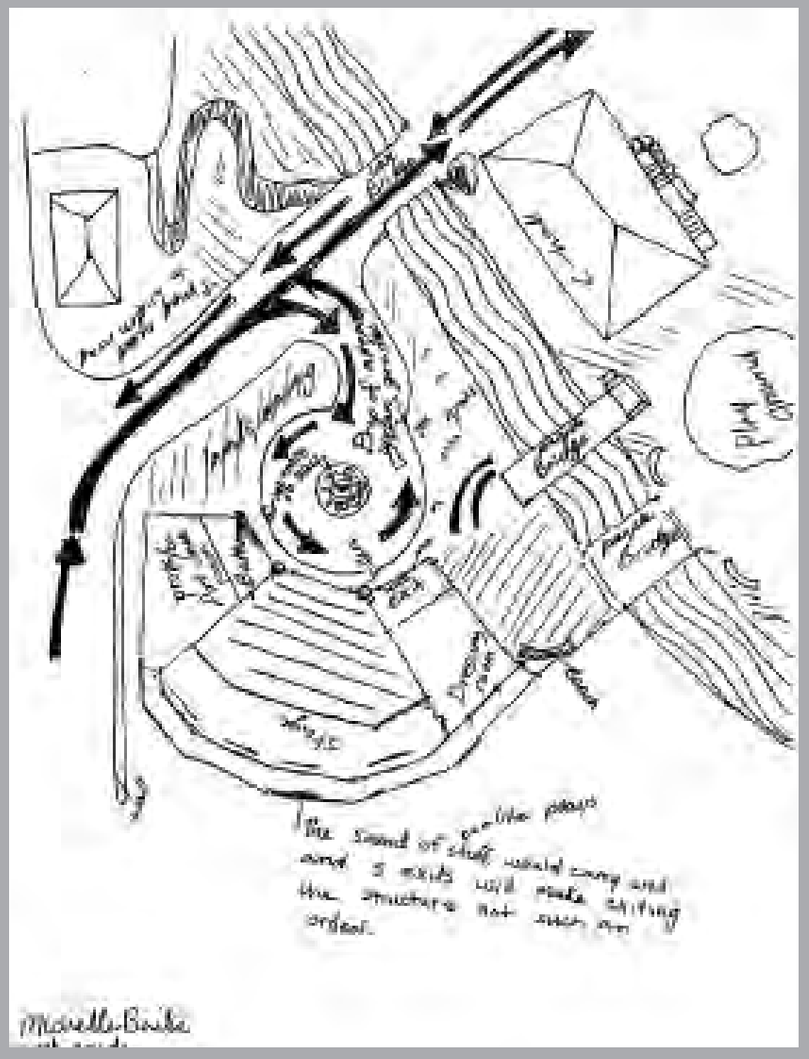
- Gymnasium undersized
- Self-contained SPED classroom undersized
- Music Room is housed on Auditorium platform

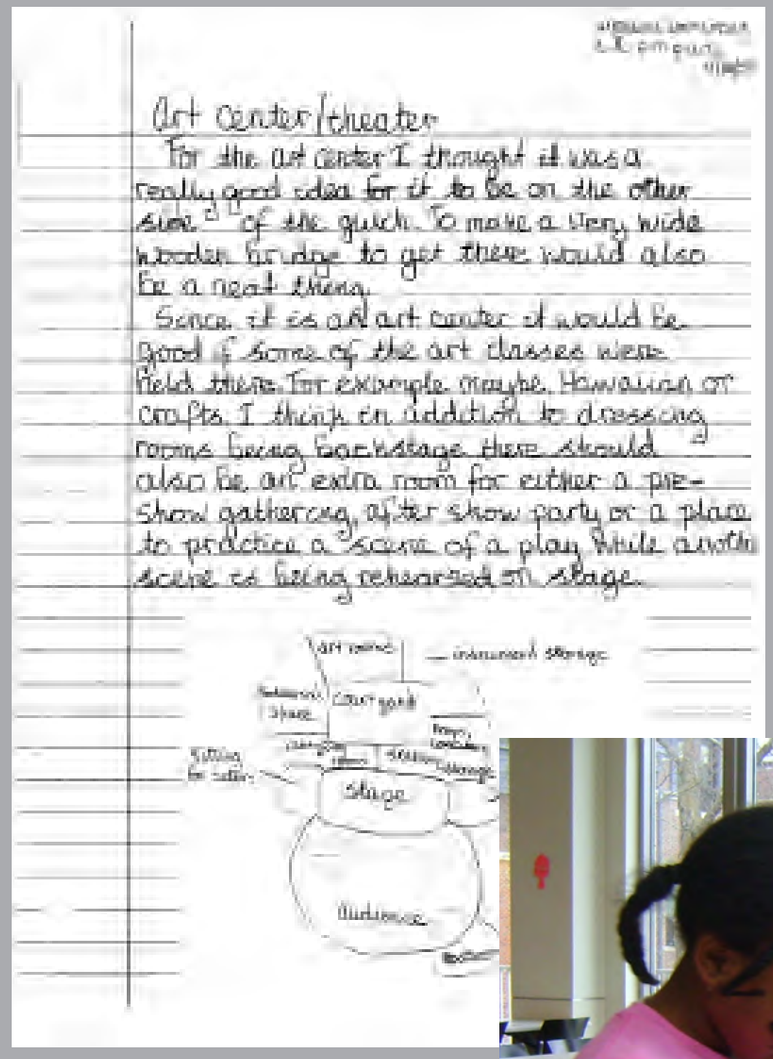
21st Century Education

- Dedicated computer lab
- Limited collaborative spaces

Our Collaborative Process

Our Collaborative Process - Listening





Art center/theater

For the art center I thought it was a really good idea for it to be on the other side of the gulch. To make a very wide wooden bridge to get there would also be a neat thing.

Since it is an art center it would be good if some of the art classes were held there for example maybe Hawaiian or crafts. I think in addition to dressing rooms being backstage there should also be an extra room for either a pre-show gathering, after show party or a place to practice a scene of a play while another scene is being rehearsed on stage.

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Our Collaborative Process - Interactive Models

Sample Program - MSBA Guidelines

PROGRAM	GRADES K-4	GRADES K-4	GRADES K-5
Core Academic	10,950	31,900	37,850
Special Education	3,020	8,050	9,060
Art & Music	2,500	5,075	6,300
Vocations & Technology	0	0	0
Health & Physical Education	6,300	6,300	6,300
Media Center	2,020	3,933	4,653
Auditorium / Drama	0	0	0
Dining & Food Service	4,875	9,185	10,639
Medical	410	610	710
Administration & Guidance	2,015	2,710	3,020
Custodial & Maintenance	1,900	2,325	2,485
Subtotal NSF	**33,990 NSF**	**70,088 NSF**	**81,016 NSF**
Grossing Factor	x 1.32	x 1.5	x 1.5
Total GSF	**45,000 GSF**	**105,125 GSF**	**121,524 GSF**
	250 Students	**725 Students**	**885 Students**

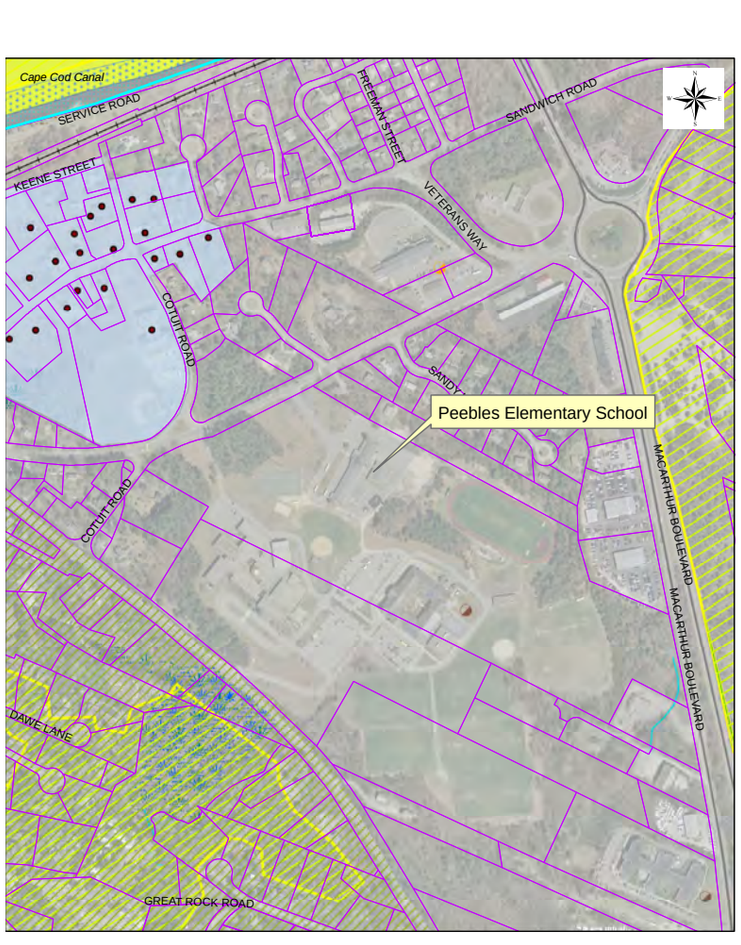
Site Selection - Peebles Elementary

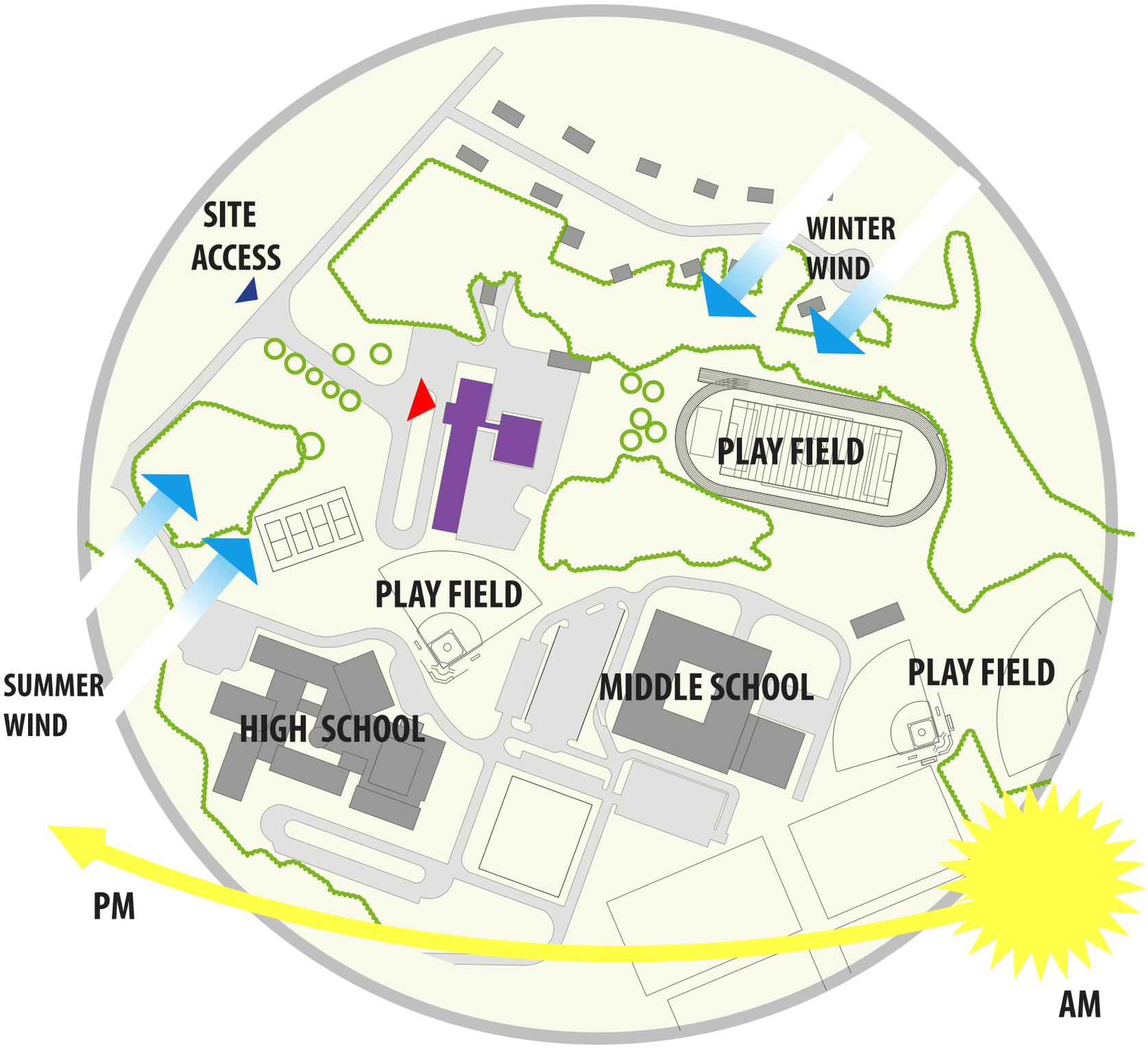
Opportunities

- Shared Site & Infrastructure
- Access to Fields & Play Areas
- Dedicated Access
- Central Campus Location

Challenges

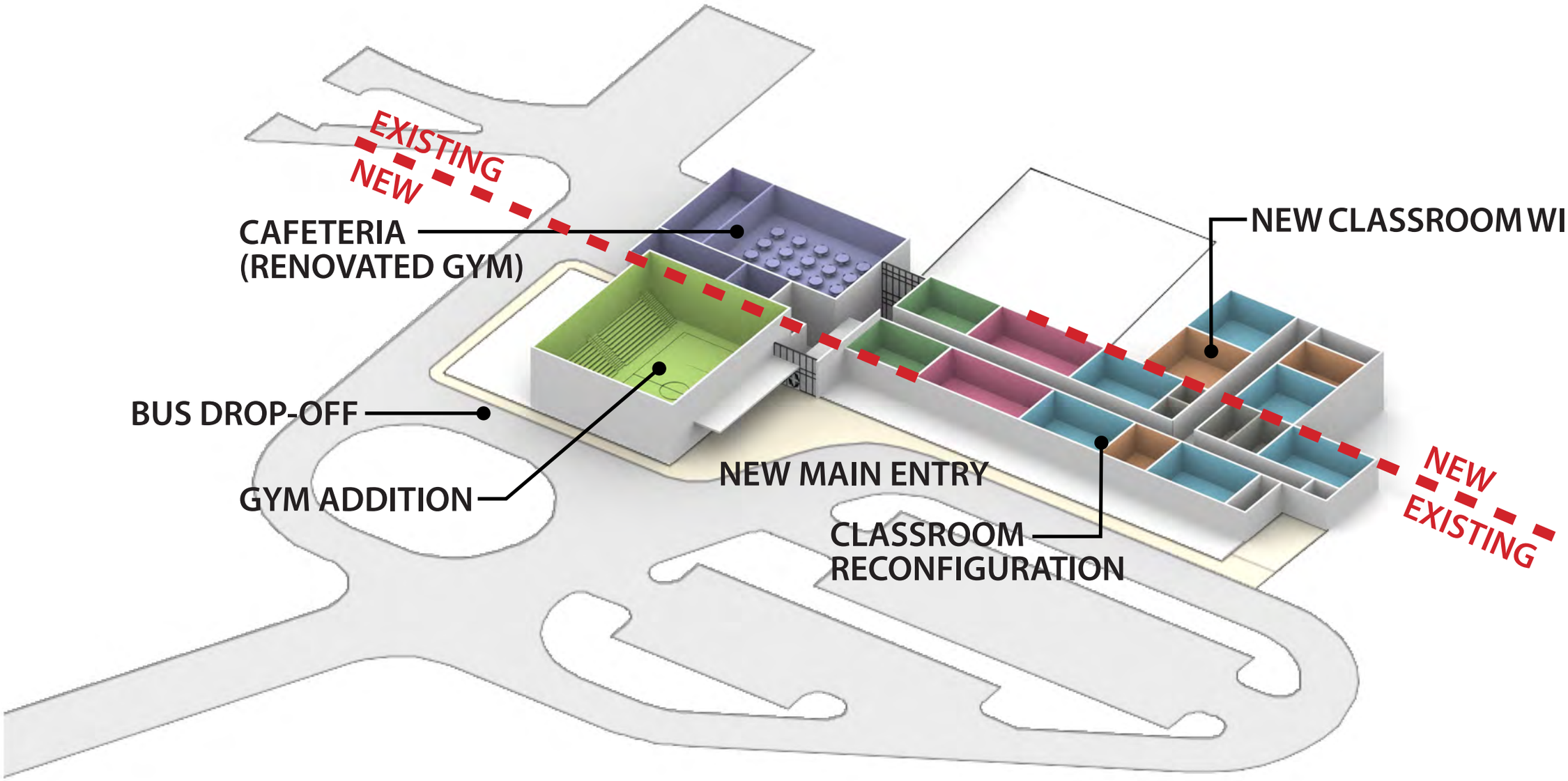
- Buildable Area Limited
- Inefficient Site Circulation





Preliminary Thoughts - Peebles Site (Addition/Renovation)

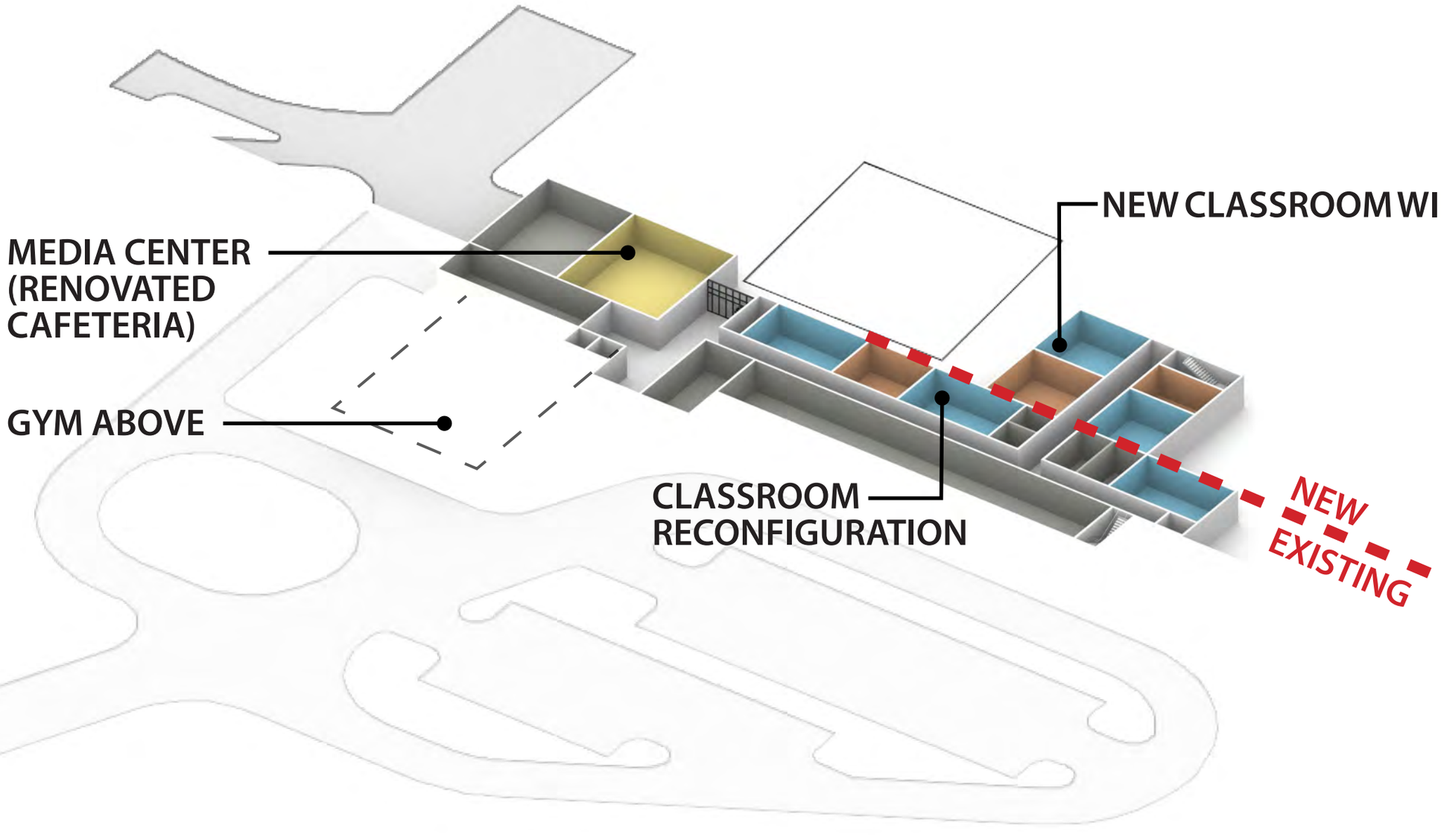
250 Student Option



Second Floor

Preliminary Thoughts - Peebles Site (Addition/Renovation)

250 Student Option



First Floor

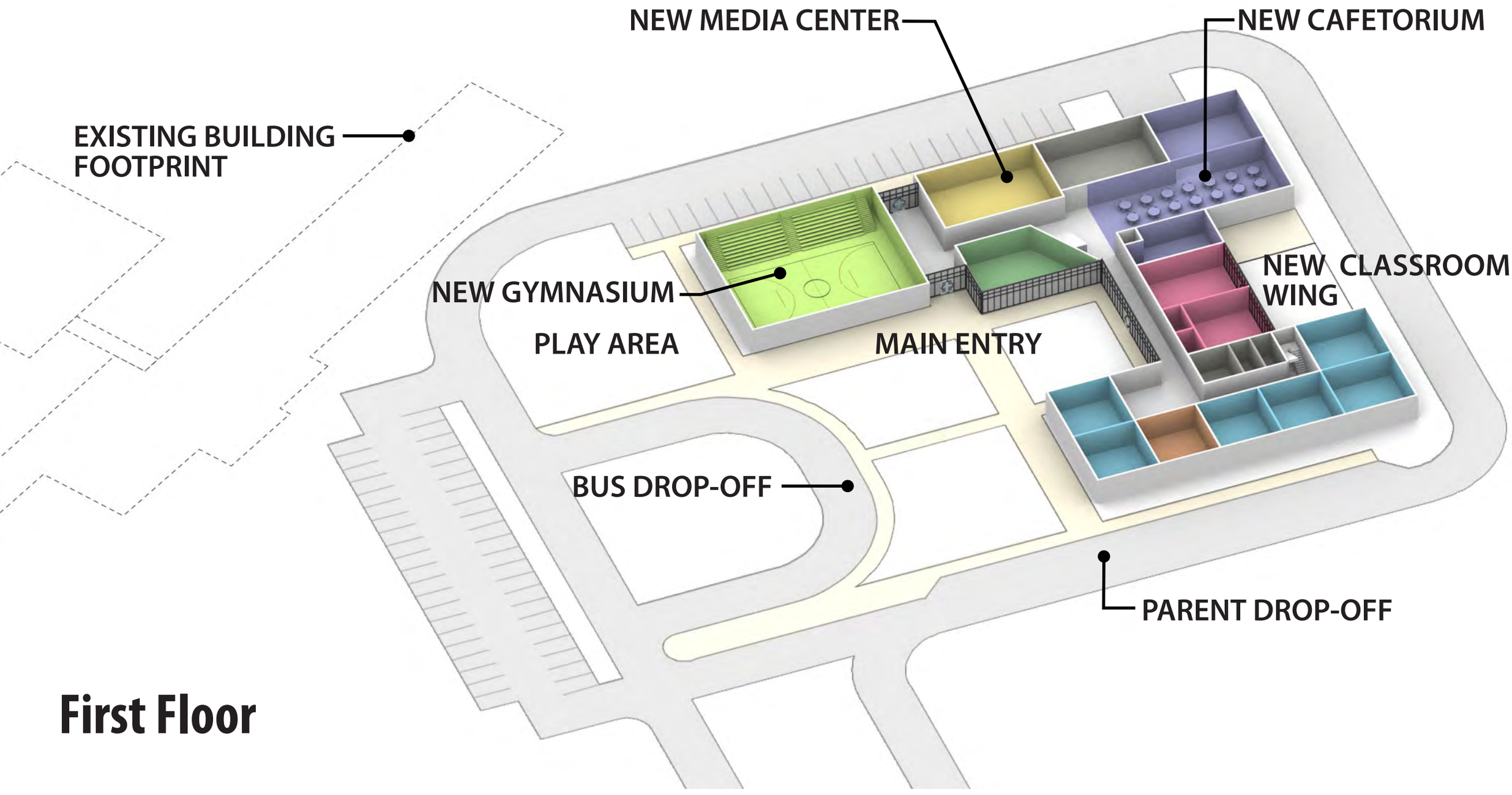
Preliminary Thoughts - Peebles Site (Addition/Renovation)

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Preliminary Thoughts - Peebles Site (New Construction)

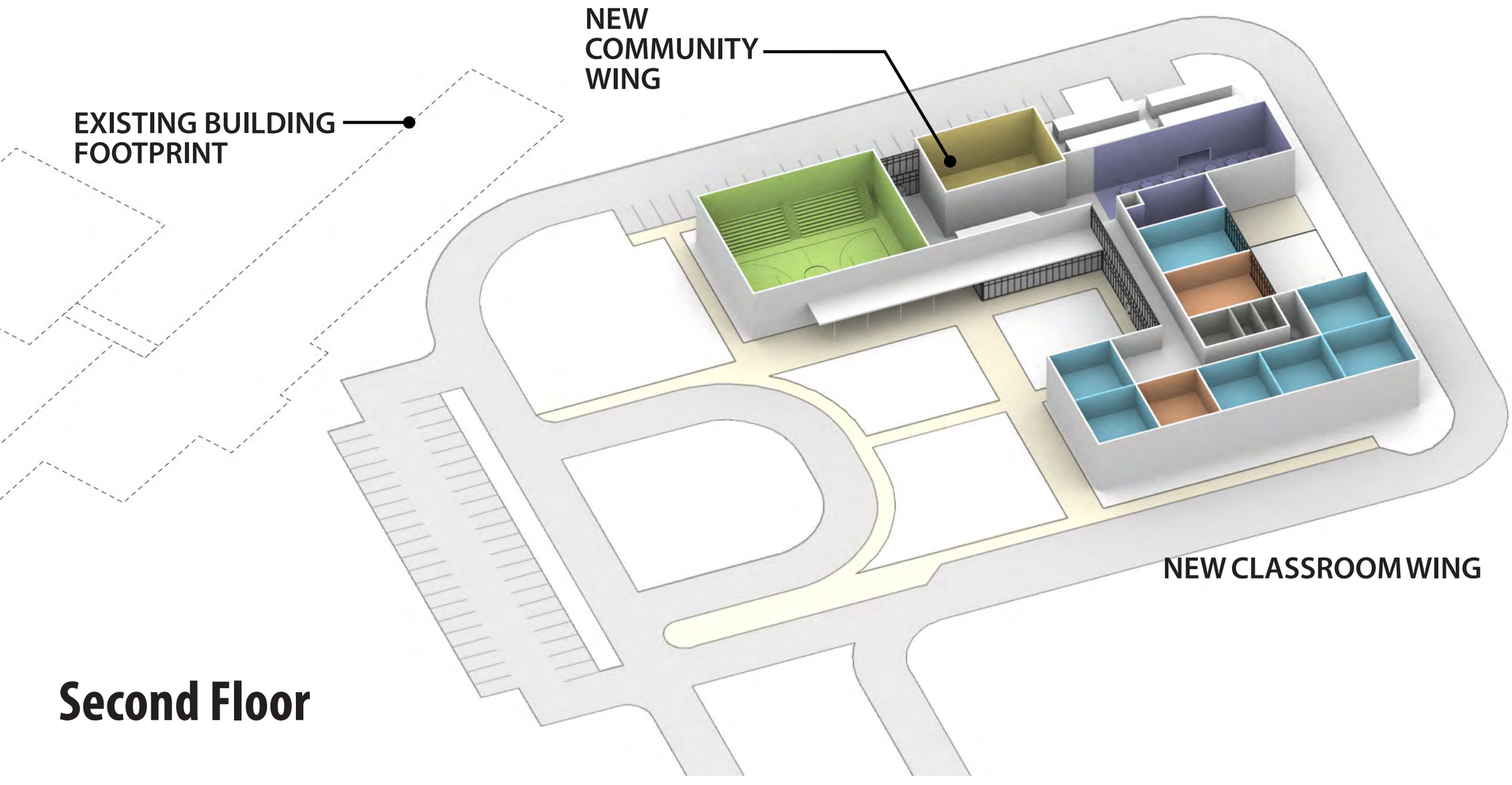
250 Student Option



First Floor

Preliminary Thoughts - Peebles Site (New Construction)

250 Student Option



Second Floor

Preliminary Thoughts - Peebles Site (New Construction)

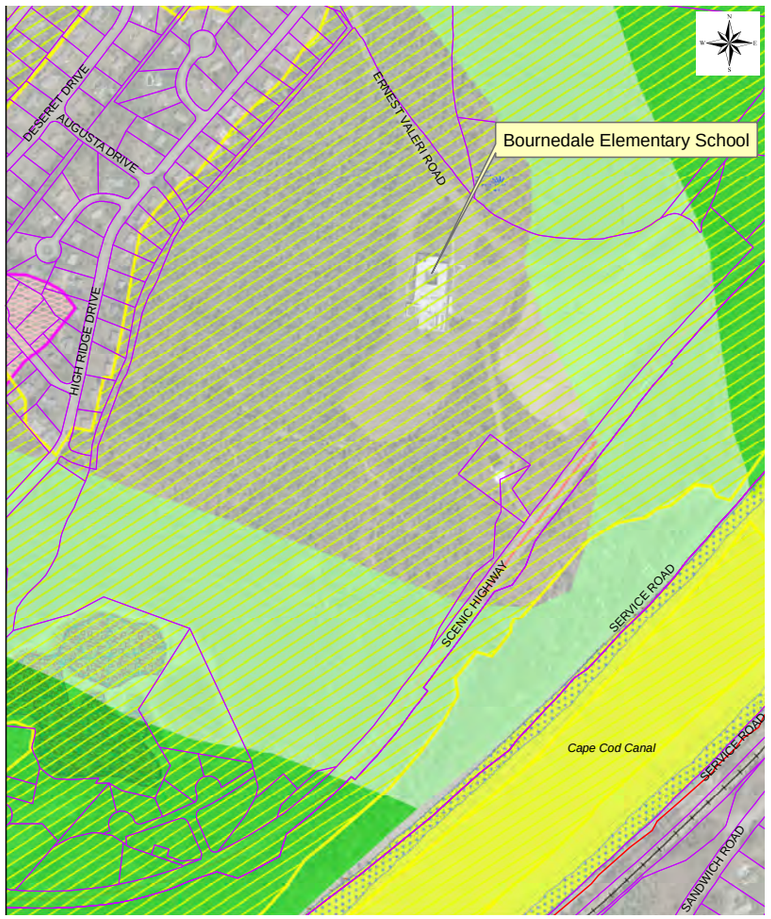
Site Selection - Bournedale Elementary

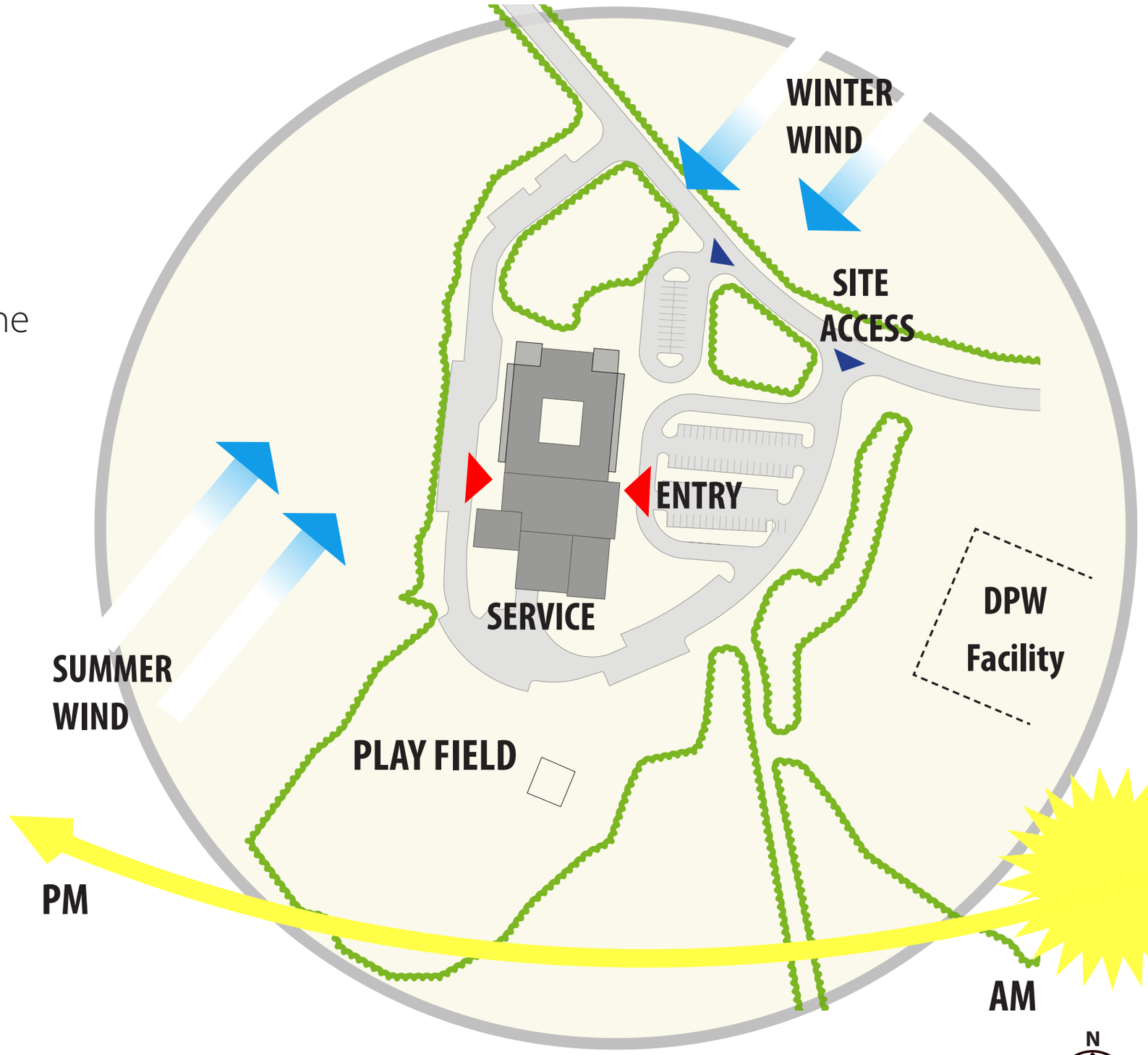
Opportunities

- Large Site (approx. 122 acres)
- Separate Bus & Parent Drop-Off
- Separate PreK Play Area & Drop-Off
- Service Access
- New Infrastructure

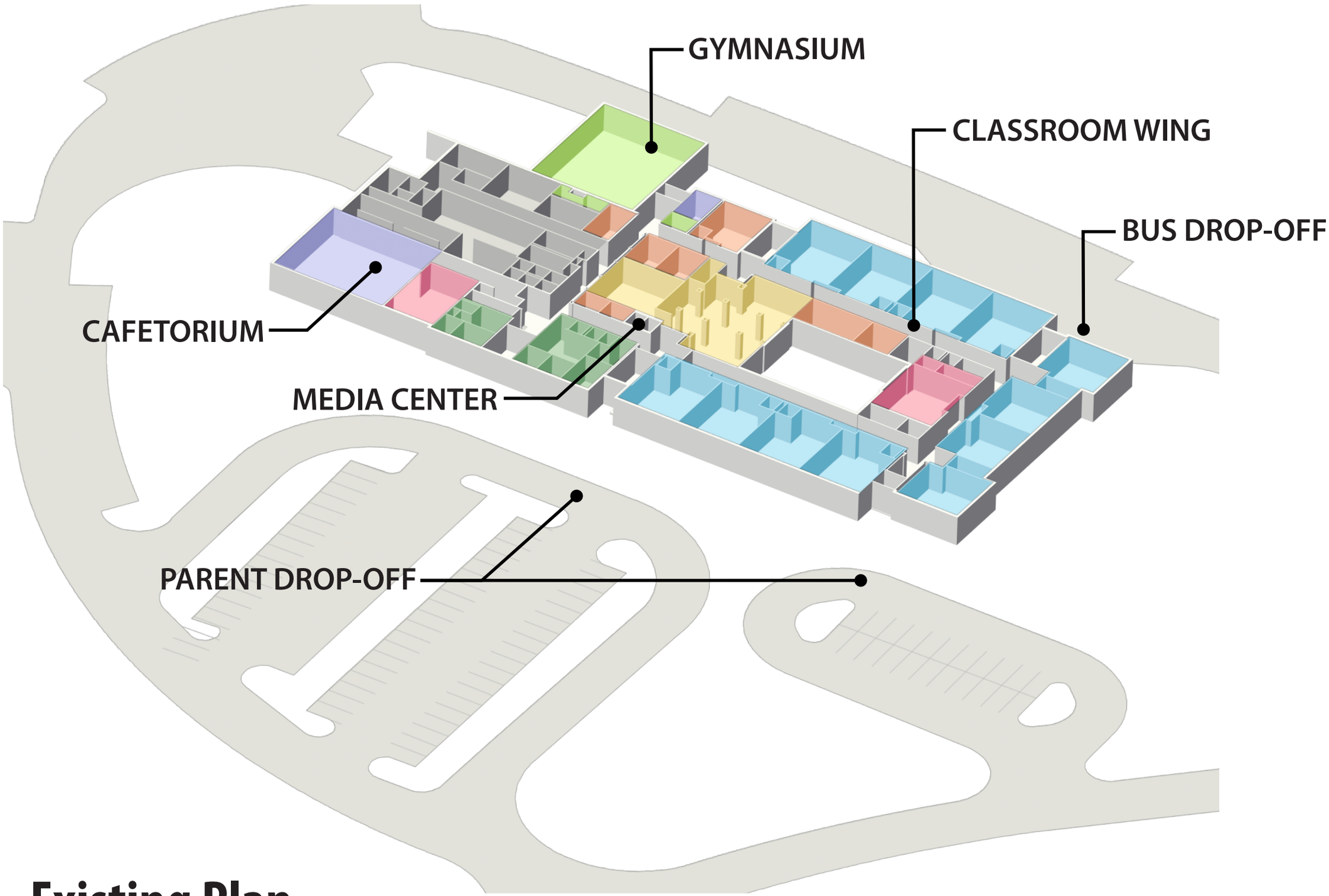
Challenges

- Location Remote from Larger Bourne Schools Campus
- Site Logistics with phasing





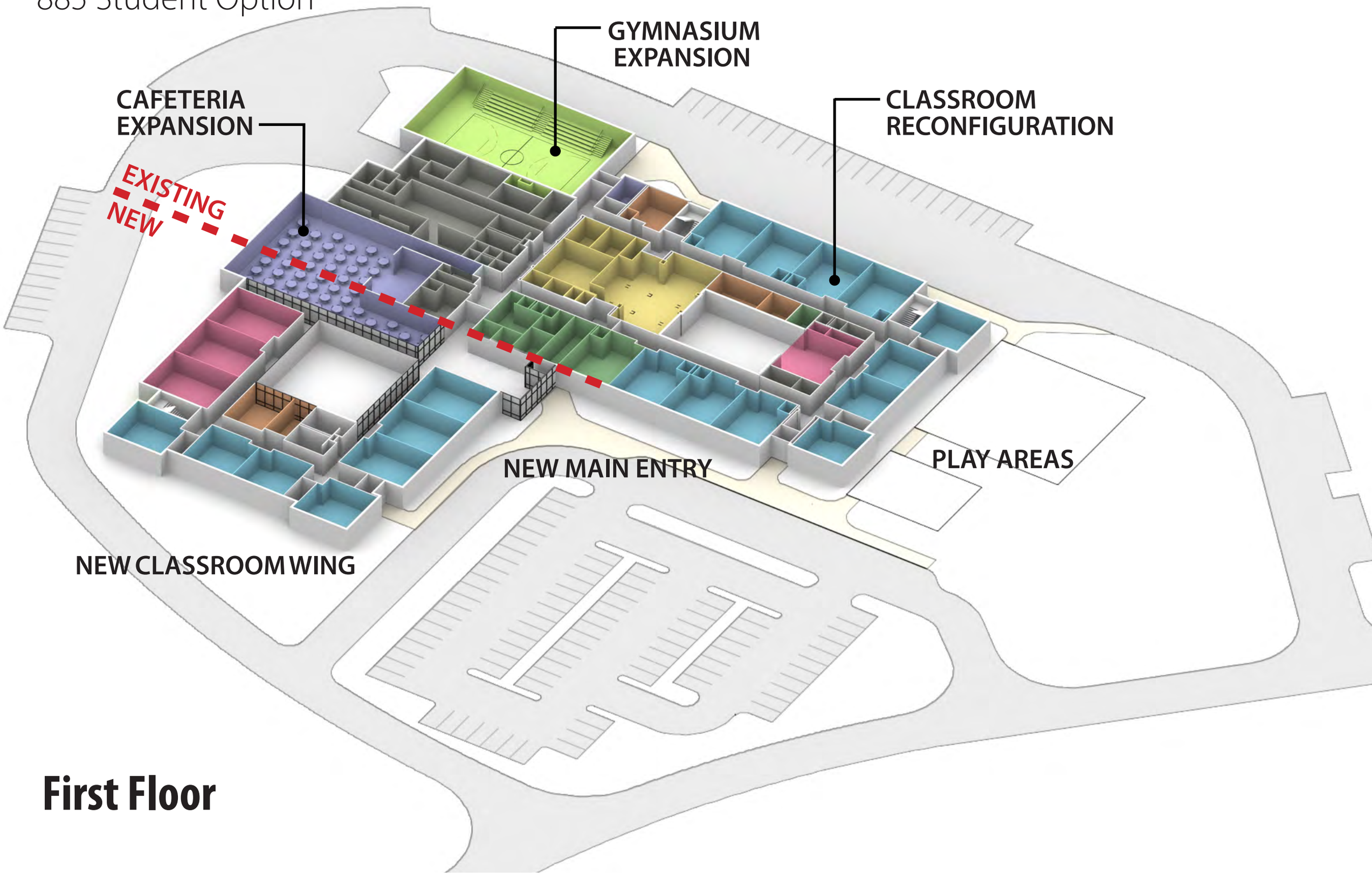
Preliminary Thoughts - Bournedale Site



Existing Plan

Preliminary Thoughts - Bournedale Site Renovation/Addition

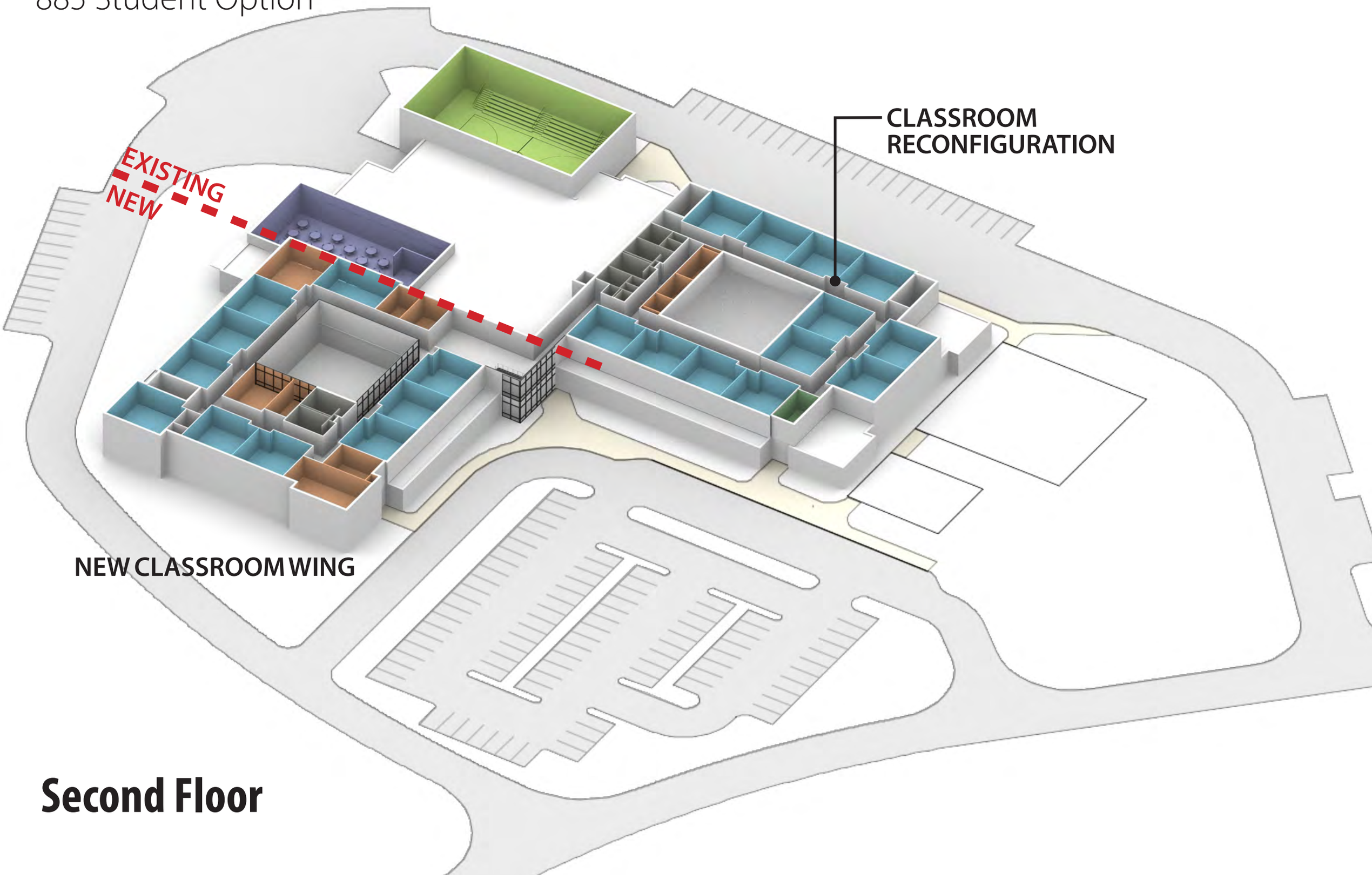
885 Student Option



First Floor

Preliminary Thoughts - Bournedale Site Renovation/Addition

885 Student Option



Second Floor

Peebles Elementary School | Bourne, MA

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Preliminary Thoughts - Bournedale Site Renovation/Addition

Peebles Elementary School | Bourne, MA

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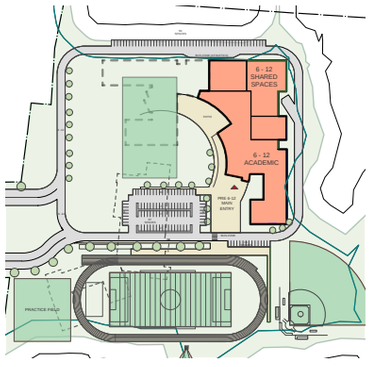
Option Evaluation

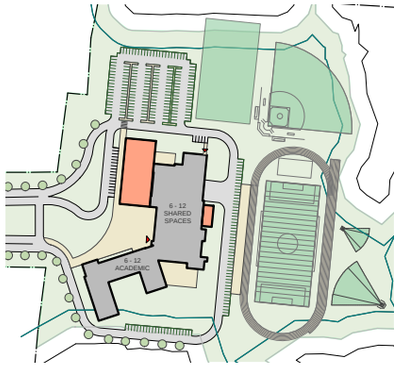
Evaluation of Options (Holbrook PreK-12 Example)

MSBA Reimbursed Projects

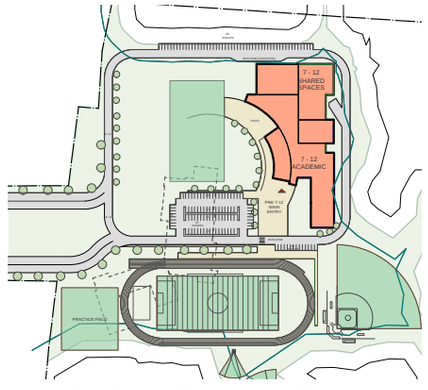
Option 1	Option 2	Option 3	Option 4
Grades 6 to 12 MS/HS	Grades 7 to 12 MS/HS	Grades PK to 12 ES/MS/ HS	Grades PK to 8 ES/MS
490 students	390 students	1,095 students	880 students



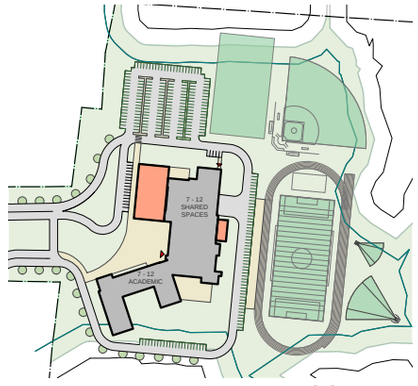
Option 1A (6-12) - New



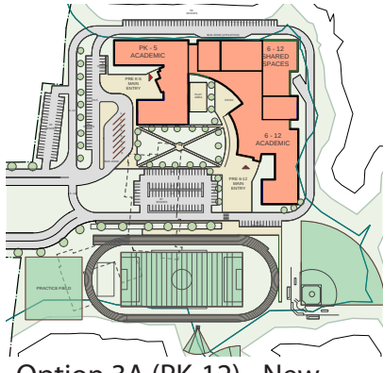
Option 1B (6-12) - Add/Reno



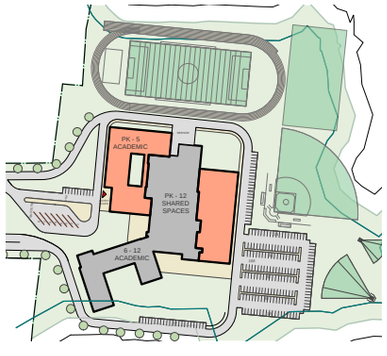
Option 2A (7-12) - New



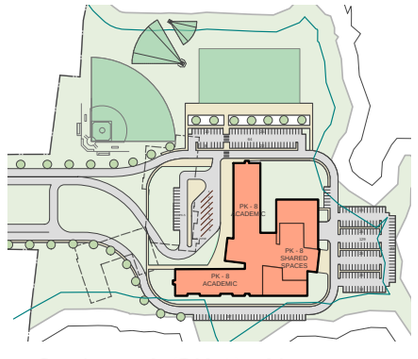
Option 2B (7-12) - Add/Reno



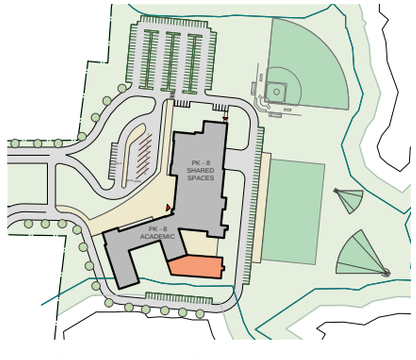
Option 3A (PK-12) - New



Option 3B (PK-12) - Add / Reno



Option 4A (PK-8) - New



Option 4B (PK-8) - Add/ Reno

Evaluation of Options (Grade Configurations)

EVALUATION CRITERIA	OPTIONS K-4 (250 students)	K-4 (725 students)	K-5 (885 students)
Size of School	○	●	○
Grade Separation Issues	◉	◉	●
Operational Savings	○	◉	○
Redistricting Required	●	◉	◉
Least Cost	●	◉	◉
Traffic Impact	●	●	◉
Best Grade Combination	◉	◉	●
Opportunity for Collaboration	◉	●	○
Solves Middle School Overcrowding	○	○	●

● Best

◉ Satisfactory

○ Worst

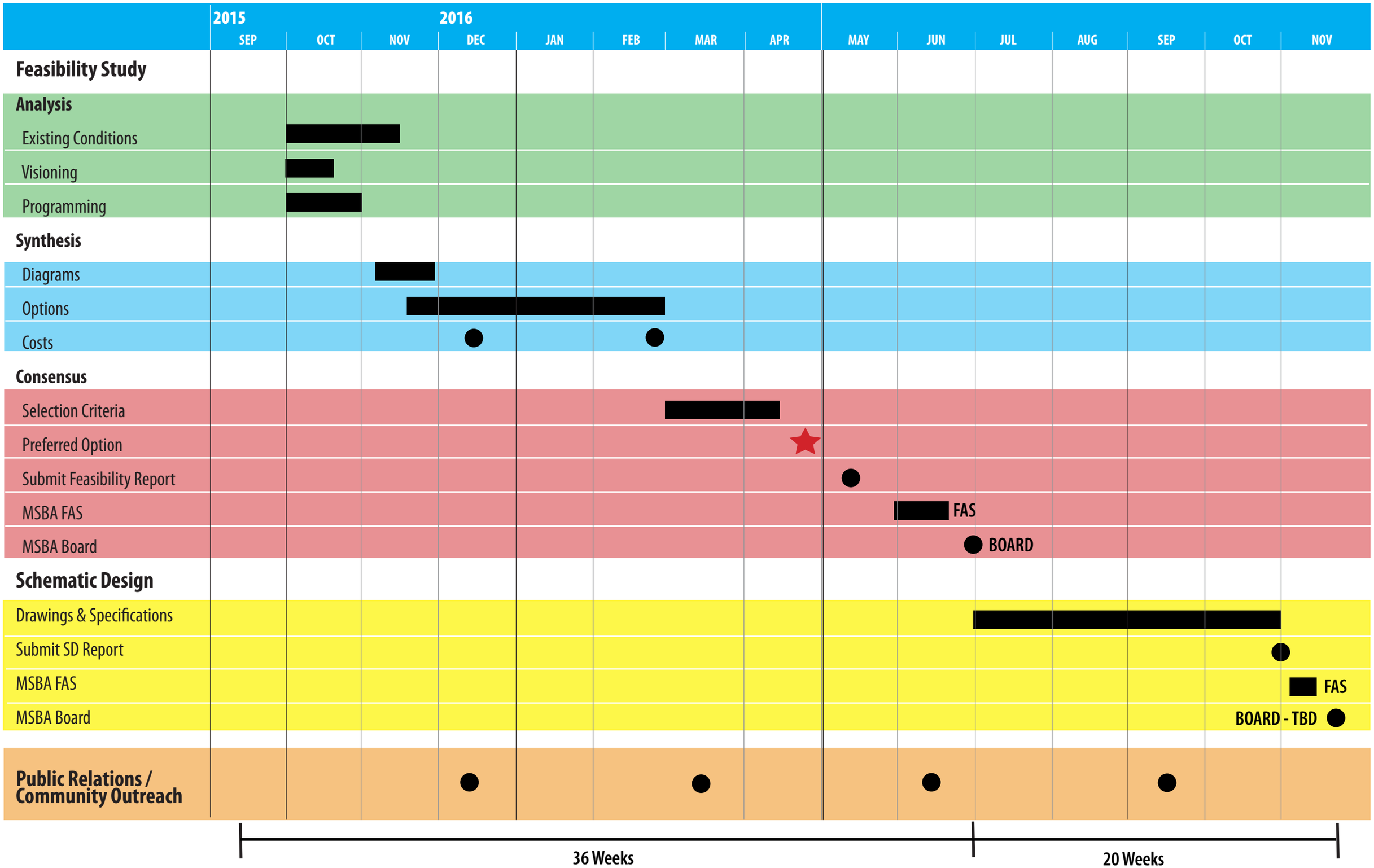
Evaluation Matrix (Design Options)

PRIORITY	EVALUATION CRITERIA	ALTERNATIVES 1	2	3	4	STATUS QUO
1	Meets Educational Program Requirements	◉	◉	◉	●	
2	Limits Disruption to Students	●	●	●	○	
3	Lowest Total Project Cost	○	●	◉	◉	
4	Most Cost Effective	○	◉	◉	◉	
5	Lowest Life-Cycle Costs	○	◉	○	●	
6	Maximum Building Efficiency	◉	◉	○	○	
7	Maximum Score for NE-CHPS	◉	●	◉	●	
8	Most Beneficial Construction Schedule	●	◉	●	◉	
9	Lowest Construction Cost	○	○	◉	◉	
10	Best Site Option for Neighborhood Schools	●	○	◉	○	
11	Least Operating Cost	◉	◉	◉	○	
12	Upgraded Spaces for 21st Century Learning	◉	◉	●	●	
13	Adequate Play & Parking Areas	◉	●	●	●	
14	Least Environmental Impact	●	◉	◉	◉	

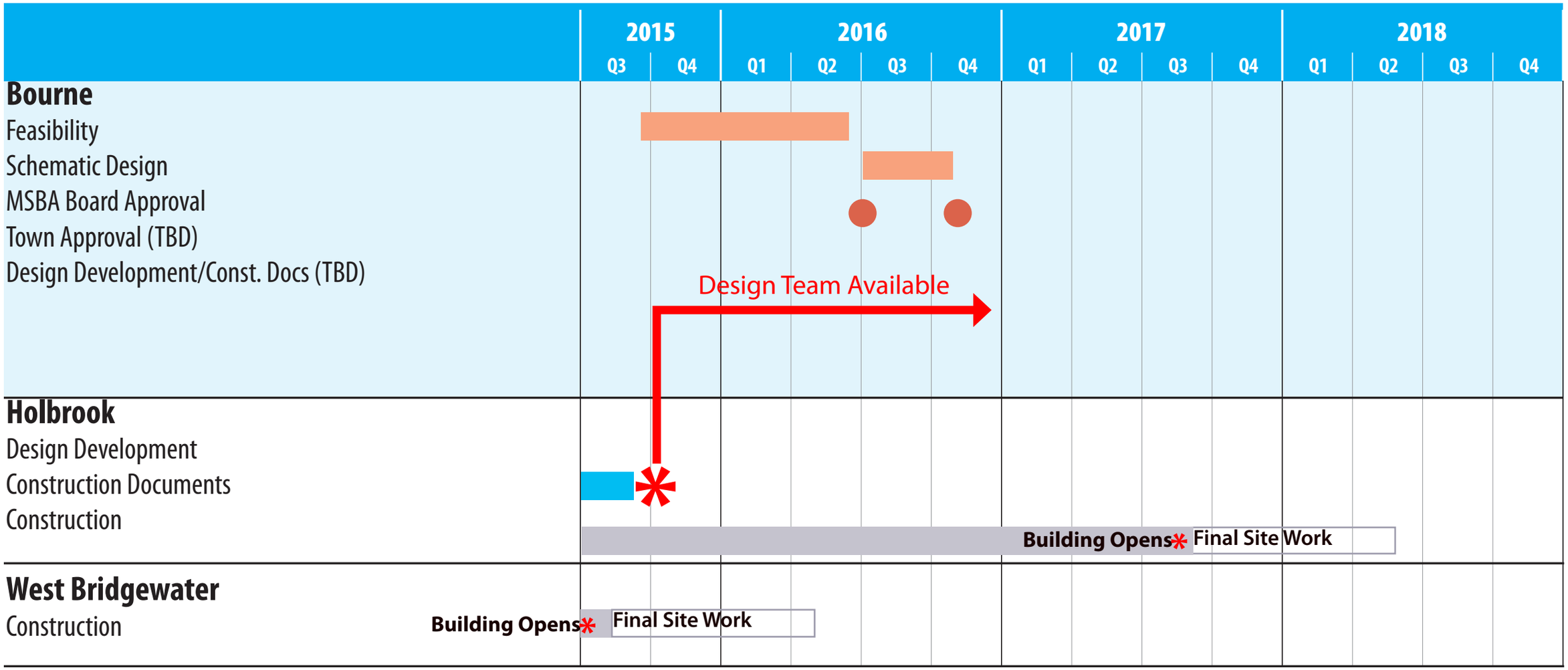
● Best ◉ Satisfactory ○ Worst

Schedule & Work Load

Preliminary Schedule



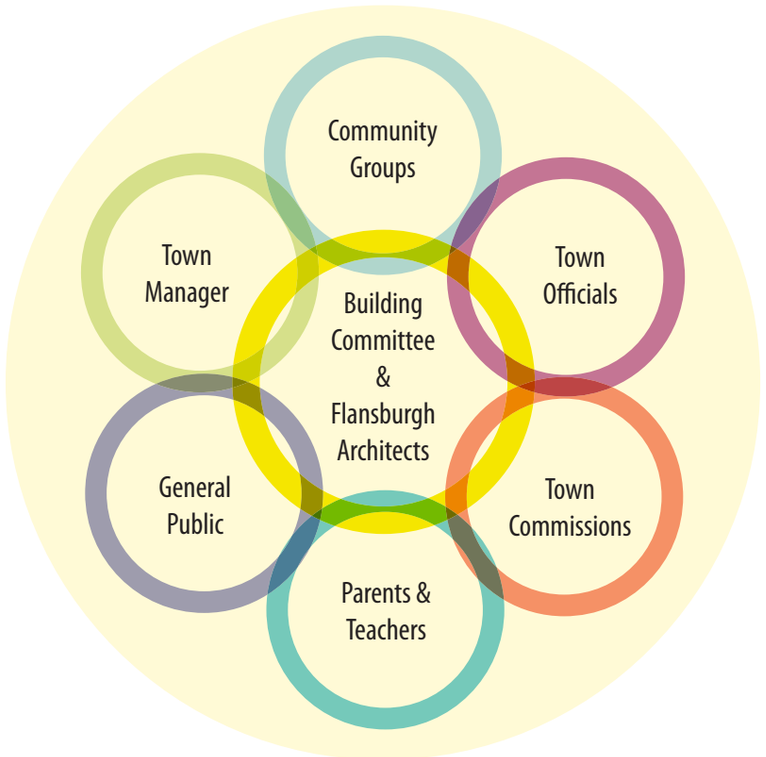
Current MSBA Projects



Community Outreach

Community Outreach

- Public Involvement
- Web Site
- Presentations
- Social Media
- Flyers with FAQs



Deficiencies

The existing 1951 West Bridgewater Middle-Senior High School does not meet current building codes. There are extensive non-compliance issues with handicap accessibility, health and safety regulations.

- The existing school has been placed on "warning" status for accreditation loss due to numerous problems with the "antiquated facility that impedes teaching and learning."
- The classrooms are small and many spaces don't conform to current State guidelines or meet the school's 21st century educational needs.
- Music, Art and Science labs have inadequate spaces and equipment for the specialized programs taught. Many special education spaces are also too small.
- The core facilities (auditorium, media center, gym, and cafeteria) are undersized, overutilized and in need of refurbishment.
- The school lacks a modern security system, access control system, fire alarm and fire suppression system.
- All of the 1951 building systems (mechanical, electrical and plumbing) are outdated, unreliable, inefficient and have outlived their useful life. These systems now require constant repair and attention.
- Parking on the site is limited and disorganized. The parent drop off and bus area creates an unsafe congested condition during pick up and drop off times.
- The roof infrastructure does not meet code and the building envelope is not insulated.

Loss of High School accreditation would have a significant negative impact on the school and could result in lower property values in West Bridgewater.

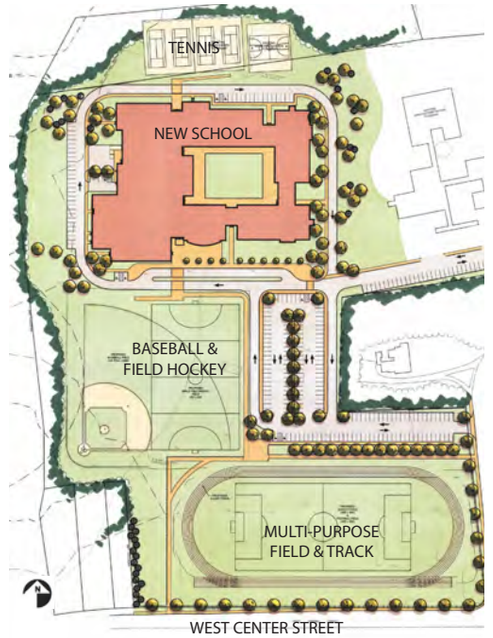
Solution

With funds approved at the 2011 Town Meeting, the Town hired a project manager and an architect to study the needs of the school and community.

- Working with the Town and the Massachusetts School Building Authority (MSBA), the design team developed five different options.
- These options ranged in scope from a phased renovation of the existing school with minimal demolition to a completely new building.
- Due to extensive renovation required to meet code and program space needs, the cost of new construction was determined to be almost the same as a renovation.
- The best long term solution proved to be a new 141,250 sf, 2-story building for 625 students located on the fields behind the existing school building.
- New construction avoids the disruption to students of a multi-phased renovation (with phased roof removal) while the school remains occupied.
- The School Building Committee voted unanimously to proceed to the State with the Schematic Design and a budget of $63.8 million.
- The state reviewed the submitted data and approved the new school project with a $29.4 million reimbursement. The estimated project cost to the Town of West Bridgewater is $34.4 million.
- The tax impact will be $2.25/1000 of assessed residential value. On an average home assessed at $288,000 that is $648/year, which is equal to $54/month and $1.77/day. **Tax impact will decline yearly over the life of the debt obligation** and the first impact on taxes will be in 2015. Contact the Town Treasurer's office with any questions.

Site Plan

The proposed new building will be built behind the existing school and includes many new site amenities.



- Increased parking spaces and a safer traffic flow with separate parent and bus loading zones.
- A new baseball field with field hockey overlay.
- A new synthetic turf, multipurpose field and running track.
- Two refurbished tennis courts and two new courts.

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Sample Flyer

Community Outreach - Public Forums

Holbrook Public School's Visioning Workshop

Date/Time: June 12, 6:00 - 8:00 PM
Join us at a public forum to...

Learn about 21st Century Education

See examples of how dynamic academic programs and school facilities are changing to meet the needs of 21st century teaching and learning.

Share your thoughts

Let us know what is important to you with regard to the future of educational programming and facilities in Holbrook.

Shape your school's future

Contribute to the conversation and make your voice heard as we embark upon the important task of envisioning the future of Holbrook public schools.

Flansburgh Architects newvistadesign

Location: Holbrook Jr/Sr High School cafeteria, 245 S. Franklin St., Holbrook

Community Meeting-Holbrook Public Schools
Feasibility Study Phase

Sponsored by the Permanent School Building Committee
Date/Time: June 26, 7:00 - 9:00 PM
Tour at 6 pm
Join us at a community meeting to discuss...

MSBA process & schedule

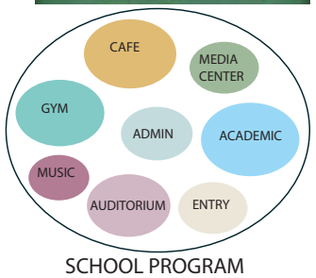
Learn about the partnership with the MSBA & the project schedule

Feasibility study scope

Understand the steps required to develop the feasibility study

Educational programming

We will review the Visioning sessions and the steps taken to develop the program



SCHOOL PROGRAM

Existing school conditions

We will provide an overview of the existing school's building systems as it relates to performance and code compliance

Next Steps:
August 7, 2013 - Community Meeting - 7pm
September 18, 2013 - Community Meeting - 7pm
October 2013 - Submit PDP document to MSBA
December 2013 - Submit PSR document to MSBA
April 2014 - Submit SD documents to MSBA

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Location: Holbrook Jr/Sr High School cafeteria, 245 S. Franklin St., Holbrook

Holbrook Public Schools Design Workshop

Sponsored by the Permanent School Building Committee

Location: Jr-Sr High School Cafeteria

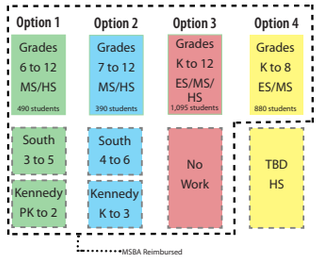
Join us at a public forum to...

Learn about the Space Programs

See the new academic space programs for the schools developed from the visioning sessions on 21st Century teaching and learning.

Share your thoughts on Options

Let us know what you think of the various preliminary Design Options developed for the schools in Holbrook.



Hear about Green Design

Contribute to the conversation and learn about Green Design opportunities for your new or renovated school facilities.

HVAC	ELECTRICAL	WATER
Variable Frequency Drives	Light Sensors	Low-Flow Fixtures
Demand Ventilation	Occupancy Sensors	Water Limiting
Energy Recovery	Daylighting	Rain Water Reclaim
Condensing Boilers	Photovoltaics	
Dehumidification/ Displacement Ventilation		

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Visioning Workshop #1

Programming Workshop #2

Options Workshop #3

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Community Outreach

FAQ's:

1) What is the NEED for the Project?
2) Does the current school meet today's standards?
3) What is the condition of our existing schools?
4) What is the Design?
5) How will the Visioning discussions be incorporated into the design?
6) Will this be a sustainable design ?
7) How can the latest in technology be used in the elementary school?
8) How will the elementary school be separated from the upper school?
9) Will the construction activity disrupt the students in the existing school?
10) Can the school be converted into a regionlized school in the future?
11) How will the design and scale of the project
12) Has the MSBA approved the Project?
13) Were other options considered?
14) What are the advantages and disadvantages of all the options?
15) How will traffic impacted on the street and what is the flow on the campus?
16) What is the Cost?
17) What is the Schedule?
18) What can be done with the other school properties?
19) What are our Neighbors Doing?
20) Are Similar Sized Towns Investing in Their Schools?

Why Flansburgh
Summary

Extensive Public School Experience

- Elementary schools
- CM at Risk on public school projects
- Energy efficient design
- Knowledge of 21st Century education

Success with the MSBA

- Predicting & controlling costs
- Understanding program & facility needs
- Developing creative solutions
- Helping develop a cost-effective approach

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	10/8/2015
Re:	School Building Committee Meeting	Meeting No:	4
Location:	Bourne Veteran's Memorial Community Center	Time:	6:00pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	James L. Potter	Chairman, School Building Committee	**Voting Member**
✓	Peter J. Meier	Board of Selectmen	**Voting Member**
	Christopher Hyldburg	Chairman, School Committee	**Voting Member**
	Laura Scena	Member, School Committee	**Voting Member**
		Finance Committee	
	Richard A. Lavoie	Member, Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
	Mary Jo Coggeshall	Member at Large	**Voting Member**
✓	Frederick H. Howe	Board of Health	**Voting Member**
✓	Steven M. Lamarche	Superintendent of Schools, BPS	**Voting Member**
✓	Edward S. Donoghue	Director of Business Services, BPS	Non-Voting Member
	Thomas M. Guerino	Town Administrator	Non-Voting Member
✓	Jonathan Nelson	Director of Facilities, Town of Bourne	Non-Voting Member
✓	Elizabeth A. Carpenito	Principal	Non-Voting Member
✓	Kathy Anderson	Elementary/Special Education Secretary	Non-Voting Member
✓	Kent Kovacs	FAI, Architect	
	Betsy Farrell Garcia	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
4.1	Record	Call to Order, 6:10 PM, meeting opened.
4.2	Record	A motion was made by F. Howe and seconded by P. Meier to approve the 9/29/15 School Building Committee meeting minutes. No discussion, motion passed unanimous by those attending.
4.3	Record	J. Seeley distributed and reviewed the PDP Phase Meetings Schedule and Agendas, dated 9/25/15 and attached herein.
4.4	Record	J. Seeley distributed and reviewed the Project Budget Status, dated 10/1/15 and attached herein.
4.5	Record	J. Seeley distributed and reviewed the Designer Billing Projection and the OPM Billing Projection, both attached herein.
4.6	Record	J. Seeley distributed and reviewed FSA Budget Revision Request No. 1, dated 10/8/15 adjusting the budget line items of the executed FSA to align with the final negotiated fee amounts for the Designer and OPM, with the balances re-allocated to the Environmental/Site and Other (Owner's Contingency) budget line items. A motion was made by P. Meier and seconded by S. Lamarche to approve FSA Budget Revision Request No. 1, dated 10/8/15. No discussion, motion passed unanimous.
4.7	Record	J. Seeley reviewed FAI Amendment No. 1, dated 10/8/15 for PDP Phase Traffic Assessment and Study in the amount of $16,500.00 to be charged against ProPay Code budget 0003-0000, which has a balance of $140,000.00. The Committee discussed in detail. A motion was made by P. Meier and seconded by W. Meier to approve FAI Amendment No. 1, dated 10/8/15 and recommend signature by T. Guerino. No discussion, motion passed 4 in favor and 1 (J. Potter) against.
4.8	Record	J. Seeley reviewed FAI Amendment No. 2, dated 10/8/15 for PDP Phase Geotechnical Investigation in the amount of $9,900.00 to be charged against ProPay Code budget 0003-0000, which has a balance of $123,500.00. The Committee discussed in detail. A motion was made by P. Meier and seconded by F. Howe to approve FAI Amendment No. 2, dated 10/8/15 and recommend signature by T. Guerino. No discussion, motion passed unanimous.
4.9	Record	J. Seeley reviewed FAI Amendment No. 3, dated 10/8/15 for PDP Phase GeoEnvironmental Services in the amount of $6,380.00 to be charged against ProPay Code budget 0003-0000, which has a balance of $113,600.00. The Committee discussed in detail. A motion was made by P. Meier and seconded by F. Howe to approve FAI Amendment No. 3, dated 10/8/15 and recommend signature by T. Guerino. No discussion, motion passed unanimous.
4.10	Record	J. Seeley reviewed FAI Amendment No. 4, dated 10/8/15 for PDP Phase Topographical Survey Services in the amount of $32,868.00 to be charged against ProPay Code budget 0003-0000, which has a balance of $107,220.00. The Committee discussed in detail.

Item #	Action	Discussion
		A motion was made by P. Meier and seconded by F. Howe to approve FAI Amendment No. 4, dated 10/8/15 and recommend signature by T. Guerino. No discussion, motion passed unanimous.
4.11	J. Seeley	J. Seeley to provide a projection of additional Environmental and Site Consultancies for the PSR and SD Phases.
4.12	J. Seeley	J. Seeley to provide a billing projection for the PDP Phase Environmental and Site Consultancies.
4.13	Record	K. Kovacs distributed and reviewed the Table of Contents for the PDP Phase Report, attached, and described the deliverables required.
4.14	Record	K. Kovacs distributed and reviewed Preliminary Programming, dated 10/8/15 and attached, defining the size, location and type of spaces existing within Peebles ES and Bournedale ES and providing a chart of spaces meeting MSBA guidelines for the 250 K-4, the 725 PreK-4 and the 885 PreK-5 Alternatives. K. Kovacs indicated the chart of spaces is preliminary and will be informed by the 10/16/15 and 10/21/15 educational programming meetings with the school administration, teachers and staff, and the 10/26/15 educational visioning workshop with the Community. Committee Questions: 1. P. Meier requested FAI correct the floor level naming on the Peebles Plan. *K. Kovacs will correct.* 2. S. Lamarche asked what is the process with MSBA for spaces that currently exist, such as the Computer Lab, that are not on the MSBA guideline of spaces? *K. Kovacs indicated that existing spaces that are not on the MSBA guideline will need to be shown thru the detailed Educational Program, as part of the PDP Phase, that they are curriculum driven and core to the program. MSBA will review each on a case by case basis. The approach to these types of issues will be discussed at the MSBA kick-off meeting.*
4.15	K. Kovacs	K. Kovacs distributed and reviewed a draft Poster Board Announcement of the October 26, 2015 Educational Visioning Workshop with the Community, attached. The Committee provided comments. K. Kovacs to update the Poster Board Announcement and deliver seven copies to the School Administration for distribution in Town.
4.16	J. Potter	P. Meier indicated that Committee member attendance is to be recorded. *J. Potter to verify with the Town Moderator on recording procedures and quorum requirements relative to non-voting members.*
4.17	Record	J. Potter emphasized that Committee member attendance is critical to the success of the project and since some members have expressed difficulty in attending 6:00PM meetings while others have expressed difficulty in attending 7:00PM meetings, offered starting the SBC meetings at 6:30PM.

Item #	Action	Discussion
		A motion was made by S. Lamarche and seconded by P. Meier to change the start time of the School Building Committee meetings to 6:30PM. No discussion, motion passed unanimous by those attending Next **SBC Meeting: October 22, 2015 at 6:30 pm** at the Bourne Veteran's Memorial Community Center.
4.18	Record	A Motion was made by S. Lamarche and seconded by W. Meier to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, PDP Phase Meetings Schedule and Agendas, Project Budget Status, Designer Billing Projection, OPM Billing Projection, Table of Contents for the PDP Phase Report, Preliminary Programming, Draft Poster Board Announcement

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes.

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AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	10/8/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:00 PM
Distribution:	Committee Members (MF)	Meeting No.:	4

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Preliminary Discussion of PDP Phase Deliverable
5. Preliminary Discussion of Educational Programming
6. Committee Questions
7. Public Comments
8. Next Meeting
9. Adjourn

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SCHOOL BUILDING COMMITTEE
PEEBLES ELEMENTARY SCHOOL

All meetings held at the

Bourne Veterans Memorial Community Center at 6:00 PM

unless otherwise noted

MEETINGS SCHEDULE AND AGENDAS
September 25, 2015

DATE	AGENDA
Feasibility Study Phase (PDP)	
September 29, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Introduction of Flansburgh Architects (FAI)
	Approval of FAI Proposal
	Discussion of Project Goals
	Discussion of Detailed Schedule
October 8, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Preliminary Discussion of Educational Programming
October 22, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Preliminary Discussion of Existing Conditions
October 26, 2015	COMMUNITY VISIONING WORKSHOP - 6:00 to 9:00 PM - PEEBLES ELEMENTARY SCHOOL CAFETERIA
November 5, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Educational Program Update
	Existing Conditions Update
	Preliminary Discussion of Construction Alternatives
November 19, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Presentation of Construction Alternatives
	Discussion of Sustainable Design Goals
December 3, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Presentation of Refined Construction Alternatives
	Review of Preliminary Cost Model
December 17, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Evaluate Refined Construction Alternatives
	Review Cost Model
	Vote to Submit PDP and Top 3 Alternatives
December 18, 2015	*SUBMIT PDP PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

Peebles Elementary School
Bourne Public Schools

PROJECT MANAGEMENT SMMA

SMMA No. 15041

Project Budget Status

10/1/2015

Feasibility and Schematic Design Phase	MSBA ProPay Code	FSA Agreement 2/6/2015	Budget Revision 10/8/2015	Current Budget	Vendor	Committed	Balance
OPM	0001-0000	$ 120,000.00	$ (15,000.00)	$ 105,000.00	SMMA	$ 105,000.00	$ -
Cost Estimates	0001-0000	$ 20,000.00		$ 20,000.00		$ -	$ 20,000.00
							$ -
DESIGNER	0002-0000	$ 500,000.00	$ (135,000.00)	$ 365,000.00	FAI	$ 365,000.00	$ -
							$ -
Environmental and Site	0003-0000	$ 90,000.00	$ 50,000.00	$ 140,000.00	FAI	$ -	$ 140,000.00
							$ -
Other	0004-0000	$ 20,000.00	$ 100,000.00	$ 120,000.00	**	$ 672.13 **	$ 119,327.87
Total Budget		**$ 750,000.00**		**$ 750,000.00**		**$ 470,672.13**	**$ 279,327.87**

** Spent from Other	Date	Amount
ProjectDog, Inc. - OPM Advertisement	3/18/2015	$ 50.00
Recording Secretary - SBC Minutes	6/24/2015	$ 361.59
Cape Cod Times - Designer Advertisemen	9/23/2015	$ 145.60
Recording Secretary - SBC Minutes	9/23/2015	$ 114.94
		$ 672.13

Feasibility and Schematic Design Study for Peebles Elementary School
Bourne, Massachusetts

PROJECT MANAGEMENT SMMA

BILLING PROJECTION FOR OPM BASIC SERVICES

PHASE	FEASIBILITY DESIGN PHASE									SCHEMATIC DESIGN PHASE			
	2015				2016								
	September	October	November	December	January	February	March	April	May	June	July	August	September
Feasibility Study	$ 7,350.00	$ 7,350.00	$ 7,350.00	$ 7,350.00	$ 7,350.00	$ 7,350.00	$ 7,350.00	$ 7,350.00	$ 7,350.00				
Schematic Design										$ 9,712.50	$ 9,712.50	$ 9,712.50	$ 9,712.50

FLANSBURGH ARCHITECTS
BILLING PROJECTION FOR BASIC SERVICE
BOURNE PUBLIC SCHOOLS

PEEBLES ELEMENTARY	FEASIBILITY DESIGN PHASE								SCHEMATIC DESIGN PHASE			
	Oct-2015	Nov-2015	Dec-2015	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	Jul-2016	Aug-2016	Sep-2016
FEASIBILITY PHASE	$31,250	$31,250	$31,250	$31,250	$31,250	$31,250	$31,250	$31,250				
SCHEMATIC DESIGN									$28,750	$28,750	$28,750	$28,750

PRELIMINARY DESIGN PROGRAM REPORT

Table of Contents

** The bolded numbers 1.1 through 1.6 indicate the tab number for each section located in the binder.*

Peebles Elementary School

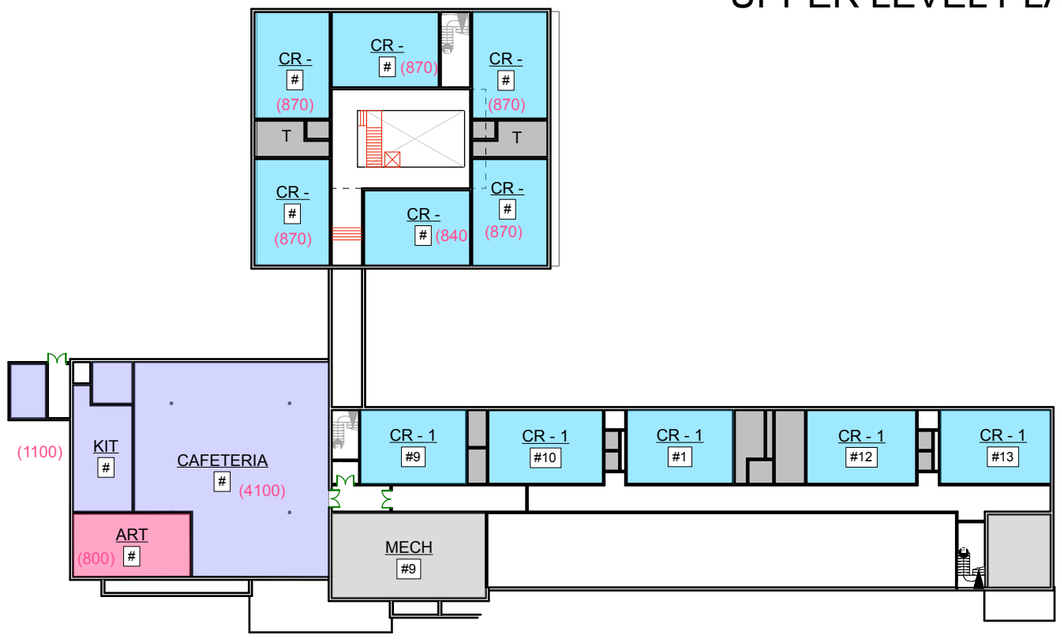
Bourne, Massachusetts

October 8, 2015

PRELIMINARY

PROGRAMMING

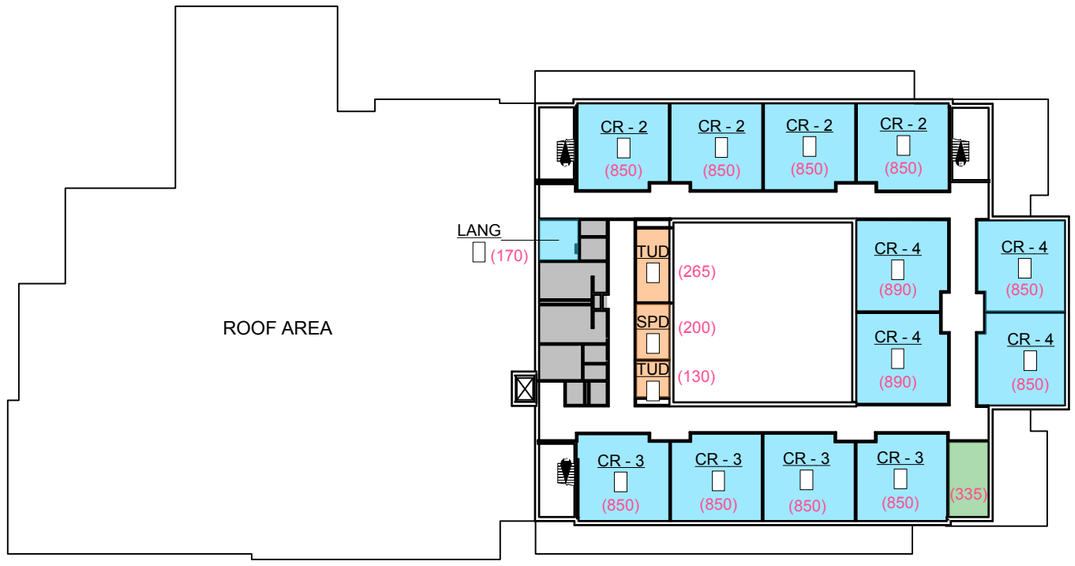
UPPER LEVEL PLAN



LOWER LEVEL PLAN

PEEBLES ELEMENTARY SCHOOL
EXISTING FLOOR PLANS

CORE ACADEMIC	20,300 SF
SPECIAL EDUCATION	935 SF
ART & MUSIC	1,325 SF
PHYSICAL EDUCATION	3,100 SF
MEDIA CENTER	730 SF
COMPUTER	975 SF
DINING	5,550 SF
MEDICAL	260 SF
ADMINISTRATION	1,195 SF
CUSTODIAL	795 SF
TOTAL BUILDING NET AREA:	35,165 SF
TOTAL BUILDING GROSS AREA:	**55,190 SF**



SECOND FLOOR PLAN

FIRST FLOOR PLAN

BOURNEDALE ELEMENTARY SCHOOL
EXISTING FLOOR PLANS

PRE-KINDERGARTEN	3,390 SF
CORE ACADEMIC	22,700 SF
SPECIAL EDUCATION	2,950 SF
ART & MUSIC	2,258 SF
PHYSICAL EDUCATION	3,150 SF
MEDIA CENTER	2,815 SF
COMPUTER	960 SF
DINING	5,015 SF
MEDICAL	491 SF
ADMINISTRATION	1,460 SF
CUSTODIAL	1,158 SF
TOTAL BUILDING NET AREA:	42,947 SF
TOTAL BUILDING GROSS AREA:	**68,100 SF**

Space Comparison - Existing Peebles Elementary - 250 enrollment

PROGRAM	GRADES K-4 (EXISTING)	GRADES K-4 (MSBA)	VARIANCE
Core Academic	20,300	10,950	(9,350)
Special Education	935	3,020	2,085
Art & Music	1,325	2,500	1,175
Health & Physical Education	3,100	6,300	3,200
Media Center	730	2,020	1,290
Technology (computer)	975	0	(975)
Dining & Food Service	5,550	4,875	(675)
Medical	260	410	150
Administration & Guidance	1,195	2,015	820
Custodial & Maintenance	795	1,900	1,105
Subtotal NSF	**35,165 NSF**	**33,990 NSF**	1,175
Grossing Factor	x 1.56	x 1.5	
Total GSF	**55,190 GSF**	**50,985 GSF**	(4,205)
	390 Students	**250 Students**	

Space Comparison - Existing Bournedale Elementary - 725 enrollment

PROGRAM	GRADES K-4 (EXISTING)	GRADES K-4 (MSBA)	VARIANCE
Core Academic (PRE-K)	3,390	0	(3,390)
Core Academic	22,700	31,900	9,200
Special Education	2,950	8,050	5,100
Art & Music	2,258	5,075	2,817
Health & Physical Education	3,150	6,300	3,150
Media Center	2,815	3,933	1,118
Technology (computer)	960	0	(960)
Dining & Food Service	5,015	9,185	4,170
Medical	491	610	119
Administration & Guidance	1,460	2,710	1,250
Custodial & Maintenance	1,158	2,325	1,167
Subtotal NSF	**42,947 NSF**	**70,088 NSF**	27,141
Grossing Factor	x 1.59	x 1.5	
Total GSF	**68,100 GSF**	**105,125 GSF**	**37,025**
	384 Students	**725 Students**	
	51 Students		

Space Comparison - Existing Bournedale Elementary - 885 enrollment

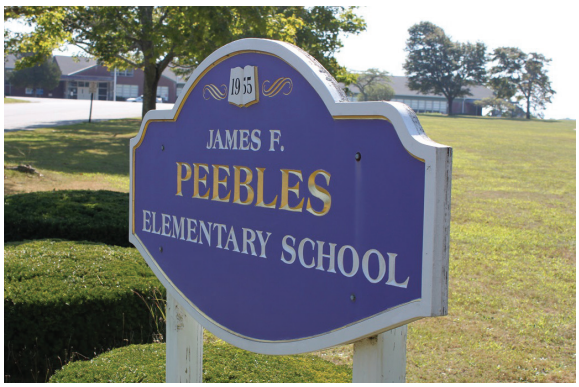
PROGRAM	GRADES K-5 (EXISTING)	GRADES K-5 (MSBA)	VARIANCE
Core Academic (PRE-K)	3,390	0	(3,390)
Core Academic (1-5)	24,400	37,850	13,450
Special Education	2,950	9,060	6,110
Art & Music	2,258	6,300	4,042
Health & Physical Education	3,150	6,300	3,150
Media Center	2,815	4,653	1,838
Technology (computer)	960	0	(960)
Dining & Food Service	5,015	10,639	5,624
Medical	491	710	219
Administration & Guidance	1,460	3,020	1,560
Custodial & Maintenance	1,158	2,485	1,327
Subtotal NSF	**48,047 NSF**	**81,016 NSF**	27,141
Grossing Factor	x 1.42	x 1.5	
Total GSF	**68,100 GSF**	**121,524 GSF**	**53,424**
	574 Students (K-5)	**885 Students**	
	51 Students (PK)		

Bourne Elementary Schools Visioning Workshop

Join us at a community meeting to...

Learn about 21st Century Education

See examples of how dynamic academic programs and school facilities are changing to meet the needs of 21st century teaching and learning.



Share your thoughts

Let us know what is important to you with regard to the future of elementary educational programming and facilities in Bourne.

Shape your District's future

Contribute to the conversation and make your voice heard as we embark upon the important task of envisioning the future of Bourne Elementary Schools.

Location: Peebles Elementary School Cafeteria, 70 Trowbridge Road, Bourne

Date/Time: October 26, 6:00 - 8:00 PM

Child care will be provided at the school

newvistadesign **Flansburgh** Architects

Sponsored by the School Building Committee

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	10/22/2015
Re:	School Building Committee Meeting	Meeting No:	5
Location:	Bourne Veteran's Memorial Community Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	James L. Potter	Chairman, School Building Committee	**Voting Member**
✓	Peter J. Meier	Board of Selectmen	**Voting Member**
✓	Christopher Hyldburg	Chairman, School Committee	**Voting Member**
	Laura Scena	Member, School Committee	**Voting Member**
		Finance Committee	
✓	Richard A. Lavoie	Member, Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
✓	Mary Jo Coggeshall	Member at Large	**Voting Member**
✓	Frederick H. Howe	Board of Health	**Voting Member**
✓	Steven M. Lamarche	Superintendent of Schools, BPS	**Voting Member**
✓	Edward S. Donoghue	Director of Business Services, BPS	Non-Voting Member
	Thomas M. Guerino	Town Administrator	Non-Voting Member
	Jonathan Nelson	Director of Facilities, Town of Bourne	Non-Voting Member
✓	Elizabeth A. Carpenito	Principal, BES	Non-Voting Member
	Kathy Anderson	Elementary/Special Education Secretary	Non-Voting Member
✓	Janey Norton	Principal, PES	
✓	Kent Kovacs	FAI, Architect	
	Betsy Farrell Garcia	FAI, Architect	
✓	Jorge Cruz	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
5.1	Record	Call to Order, 6:30 PM, meeting opened.
5.2	Record	A motion was made by P. Meier and seconded by F. Howe to approve the 10/8/15 School Building Committee meeting minutes. No discussion, motion passed unanimous by those attending, three abstentions.
5.3	Record	J. Seeley distributed and reviewed the Project Budget Status, dated 10/14/15 and attached herein.
5.4	Record	J. Seeley distributed and reviewed the School Building Committee webpage directory on the Town Website http://www.townofbourne.com/school-building-committee
5.5	Record	J. Seeley reviewed the MSBA Kick-Off Meeting Agenda and the Communication and Document Control Plan, attached. The kick-off meeting is scheduled for 10:00am on 10/27/15 at the PES conference room.
5.6	J. Seeley	J. Seeley to provide a projection of additional Environmental and Site Consultancies for the PSR and SD Phases. J. Seeley will determine once the PDP phase is more complete.
5.7	J. Seeley	J. Seeley to provide a billing projection for the PDP Phase Environmental and Site Consultancies.
5.8	Record	K. Kovacs provided the flyer and seven Poster Board Announcements, attached, of the 10/26/15 Community Forum No. 1 - Educational Visioning Workshop, attached, to the School Administration for distribution in Town.
5.9	J. Potter	J. Potter indicated he has been in contact with the Town Moderator relative to the 2010 Town Bi-Law regarding committee member attendance and is awaiting a response.
5.10	Record	J. Potter indicated he has been in contact with the Town Moderator on the question of quorum. Quorum is to be based on the total committee members, not just voting members.
5.11	K. Kovacs	K. Kovacs summarized the 10/16/15 educational meeting with administration and key staff and the 10/21/15 educational interviews with teachers and staff. K. Kovacs will issue formal meeting minutes for the meetings.
5.12	K. Kovacs	J. Cruz presented and reviewed a Powerpoint presentation on the progress findings of the existing conditions survey of BES and PES. The findings for the structural, site, traffic, hazardous materials, geotechnical and geo-environmental are still in process. Committee Questions: 1. F. Howe asked if PES was connected to the campus sewage treatment plant? *K. Kovacs indicated yes, FAI will investigate the capacity of the plant.* 2. J. Potter asked how extensive does the existing building investigation need to be?

Item #	Action	Discussion
		K. Kovacs indicated that the MSBA requires a detailed cost estimate for a Code Upgrade and Repairs-Only Option, to establish the baseline comparison to all options, therefore the existing building investigation needs to be extensive. 3. R. Lavoie asked if FAI is reviewing the PES 1959 wing addition structural issues? *J. Cruz indicated yes, the structural engineer is still reviewing.* 4. W. Meier indicated that the area near the PES may have been a dump years ago. *J. Cruz indicated he will pass on the information to the geo-environmental engineer, who is performing a Phase I analysis of the site.* 5. P. Meier asked if the roof flashing issues on BES would still be under a warranty? *J. Cruz indicated they would probably not be under warranty.* 6. C. Hyldburg asked if roofing is still prone to leaking? *J. Cruz indicated no, there was a time when most roof membranes were EPDM with a glued seams and they were prone to leaking. New rooves are a PVC membrane that have welded seams. The flashing issue on BES is not to be expected, it was a workmanship issue.* 7. P. Meier indicated the Town belongs to the Cape Light Compact, which may provide incentives or rebates for energy upgrades. *K. Kovacs will contact the Cape Light Compact to review.* 8. J. Potter asked if there was a maximum code travel distance for toilet rooms in a school. *J. Cruz indicted the code distance is 300 feet, but the issue is the time it takes a student to walk to the toilet room. A more practical travel distance is much closer than 300 feet.* 9. C. Hyldburg asked if an Innovation Lab, similar to what the PES students use today at the High School, could be provided at the BES under the renovation and addition options? *K. Kovacs indicated this would need to be reviewed with the MSBA on whether they would define the space as an eligible space for reimbursement.* 10. C. Hyldburg asked if the MSBA provides more reimbursement for a renovation and addition project versus a new construction project? *K. Kovacs indicated yes, as a percentage of five points, based on the renovation square feet area to the whole square feet area ratio.* 11. C. Hyldburg asked if the MSBA would participate in reimbursement for renovation costs associated with BES? *J. Cruz indicated yes, if the renovation is required to support the option.* 12. W. Meier indicated that the gas and electrical service at BES may need upgrading to support a renovation and addition. *J. Cruz indicated FAI will review.*

Item #	Action	Discussion
5.13	Record	Next **Community Meeting: October 26, 2015 at 6:00 pm** at the Peebles Elementary School. Next **SBC Meeting: November 5, 2015 at 6:30 pm** at the Bourne Veteran's Memorial Community Center.
5.14	Record	A Motion was made by P. Meier and seconded by R. Lavoie to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, Project Budget Status, School Building Committee Webpage Directory, MSBA Kick-Off Meeting Agenda, Communication and Document Control Plan, Flyer for Community Forum No. 1 - Educational Visioning Workshop, Powerpoint presentation

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes.

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PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	10/22/2015
Re:	School Building Committee Meeting	Meeting No:	5
Location:	Bourne Veterans Memorial Community Center, 234 Main Street, Buzzards Bay, Massachusetts	Time:	6:30pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	James L. Potter	onsetjp@juno.com	Chairman, School Building Committee
	Peter J. Meier	pmeier@townofbourne.com	~~Chairman,~~ Bourne Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
			Member, Finance Committee
	Richard A. Lavoie	Richl.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	Mary Jo Coggeshall	mjcoggeshall@gmail.com	At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Jonathan Nelson	jnelson@townofbourne.com	Director of Facilities, Town of Bourne
	Elizabeth A. Carpenito	ecarpenito@bourneps.org	Principal
	Kathy Anderson	kanderson@bourneps.org	Elementary/Special Education Secretary
	Carol Mitchell	Cmit0571@gmail.com	Secretary
	Kent Kovacs	kkovacs@flansburgh.com	Flansburgh Architects
	Betsy Farrell Garcia	bgarcia@flansburgh.com	Flansburgh Architects
	Joel Seeley	jseeley@smma.com	SMMA
	Tracy Norton	jnorton@bourneps.org	Principal - Peebles

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AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	10/22/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:30 PM
Distribution:	Committee Members (MF)	Meeting No.:	5

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Preliminary Discussion of Existing Conditions
5. Committee Questions
6. Public Comments
7. Next Meeting
8. Adjourn

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Peebles Elementary School
Bourne Public Schools

PROJECT MANAGEMENT SMMA

SMMA No. 15041

Project Budget Status

10/1/2015
Updated: 10/14/2015

Feasibility and Schematic Design Phase	MSBA ProPay Code	FSA Agreement 2/6/2015	Budget Revision 10/8/2015	Current Budget	Vendor	Committed	Balance
OPM	0001-0000	$ 120,000.00	$ (15,000.00)	$ 105,000.00	SMMA	$ 105,000.00	$ -
Cost Estimates	0001-0000	$ 20,000.00		$ 20,000.00		$ -	$ 20,000.00
							$ -
DESIGNER	0002-0000	$ 500,000.00	$ (135,000.00)	$ 365,000.00	FAI	$ 365,000.00	$ -
							$ -
Environmental and Site	0003-0000	$ 90,000.00	$ 50,000.00	$ 140,000.00	FAI	$ 65,648.00	$ 74,352.00
							$ -
Other	0004-0000	$ 20,000.00	$ 100,000.00	$ 120,000.00	**	$ 672.13 **	$ 119,327.87
Total Budget		**$ 750,000.00**		**$ 750,000.00**		**$ 536,320.13**	**$ 213,679.87**

** Spent from Other	Date	Amount
ProjectDog, Inc. - OPM Advertisement	3/18/2015	$ 50.00
Recording Secretary - SBC Minutes	6/24/2015	$ 361.59
Cape Cod Times - Designer Advertisemer	9/23/2015	$ 145.60
Recording Secretary - SBC Minutes	9/23/2015	$ 114.94
		$ 672.13

Environmental & Site Project Budget Status

10/1/2015
Updated: 10/14/2015

Feasibility and Schematic Design Phase	Vendor	Amendment No.	Current Budget	Consultant Fee	Designer Markup	Total Committed	Balance
Environmental and Site							
Traffic Study - PDP	Nitsch Engineering	001	$ 16,500.00	$ 15,000.00	$ 1,500.00	$ 16,500.00	$ -
Topographical Survey - PDP	Nitsch Engineering	004	$ 32,868.00	$ 29,880.00	$ 2,988.00	$ 32,868.00	$ -
Geotechnical Investigation - PDP	Geotechnical Services Inc. (GSI)	002	$ 9,900.00	$ 9,000.00	$ 900.00	$ 9,900.00	$ -
Geo-Environmental Investigation PDP	Fuss & O'Neill	002	$ 6,380.00	$ 5,800.00	$ 580.00	$ 6,380.00	$ -
Uncommitted			$ 74,352.00	$ -	$ -	$ -	$ 74,352.00
		TOTAL	**$ 140,000.00**			**$65,648.00**	**$74,352.00**

Town of
BOURNE
Massachusetts

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- Task Force On Local Pollution
- Transportation Advisory Committee
- Trustees of the Jonathan Bourne Public Library
- Trustees of the Veterans Memorial Community Center
- Wastewater Advisory Subcommittee

- Building Committee and Community Meeting Schedules
- Community Meetings
- Designer Proposal Review Committee
- MSBA Correspondence
- Massachusetts School Building Authority
- Project Schedules
- School Building Committee Meeting Minutes

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Next

Town News

Handbook for the Special Town Meeting

Event Calendar

« October »

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

All upcoming events

Upcoming Meetings

Bourne Housing Authority
October 22, 2015 - 8:00am

Bourne Housing Authority
October 22, 2015 - 8:00am - 9:00am

bourne housing
October 22, 2015 - 8:00am - 9:00am

Massachusetts School Building Authority

Town of Bourne
James F. Peebles Elementary School

Kick-Off Meeting
October 27, 2015 10:00 AM

Objective:

Meeting to introduce the project team and discuss the project goals, procedures, and schedule.

Meeting Agenda:

1. Introductions
2. MSBA Communication Protocol
3. Status of Contracts and Agreements
4. Project Schedule
5. Feasibility Study Submittals *(Module 3)*
    a. Preliminary Design Program (PDP)
    b. Preferred Schematic Report (PSR)
6. Facilities Assessment Subcommittee Presentation (FAS)
7. Getting to a Project Scope and Budget Agreement *(Module 4)*
8. Questions, Comments, Concerns

MEMORANDUM

To:	Bourne School Building Committee	Date:	9/2/2015
From:	Joel G. Seeley	Project No.:	15041
Project:	Peebles Elementary School		
Re:	Communication and Document Control Plan – Feasibility Study / Schematic Design Phase		
Distribution:	(MF)		

This memorandum outlines the project communications and document control procedures for the project. It is meant to be a guideline for all parties to follow throughout the life of the project and will be updated at each phase.

Feasibility Study / Schematic Design Phase

- Parties
  - MSBA
  - Town: School Building Committee, Town Administrator, Superintendent of Schools
  - OPM: SMMA
  - Designer: Flansburgh Architects (FAI)
- Correspondence
  - All correspondence shall be by the same medium i.e. mail or email as original correspondence.
  - All correspondence between the MSBA and the Town shall be copied to the OPM. All correspondence between the MSBA and the OPM shall be copied to the Town.
  - All correspondence between the Town and the Designer shall be through the OPM.
  - All correspondence between the MSBA and the Designer shall be through the OPM.
  - All correspondence to the Designer's Consultants shall be through the Designer.
  - Reports submitted to the MSBA shall be by the OPM with copy to the Town and Designer.
- Document Control
  - The OPM will be responsible to ensure all relevant correspondence i.e. MSBA submissions, project schedules, project budgets, SBC meeting minutes, are posted on the Town's website.
  - The OPM will be responsible to ensure that the Town has a copy of all executed contracts and amendments.
  - The OPM will be responsible to ensure the MSBA has a copy of all executed contracts and amendments.

JGS/sat /P:\2015\15041\00-INFO\0.0 Directory\M_Communication&Documentcontrol.Doc

Peebles Elementary School

Bourne, Massachusetts

October 22, 2015

EXISTING CONDITIONS UPDATE

EXISTING PEEBLES

Peebles Elementary Landscape

- No compliant accessible route from Trowbridge Road to the main building
- Parent drop-off loop and area is inefficient and lacks proper student safety measures
- Safety zone for large playground structure does not meet fall zone height requirements
- Site drainage appears to be poor, with flooding at some entrance doors

MAIN DRIVEWAY

DROP-OFF

PLAY STRUCTURE

DOORS

Peebles Elementary Civil

- Further investigations into the septic system that currently serves the existing school building is required. It may need to be updated for the new flows from the proposed building if they exceed existing flows.

- There is currently a lack in stormwater collection. Most of the site sheet flows to the back area where it just runs off onto existing dirt and grass areas. Increased drywells and underground pipe storage may be required to meet infiltration requirements for MADEP Stormwater Standards

- Fire protection. One hydrant on the site that was located at the top of the front driveway entry from Trowbridge Road. The fire department may want additional hydrants if this site is developed with a new school building. Hydrant flow test should be done to confirm the pressures and volumes in the existing water system

Peebles Elementary Architectural

- Exterior Envelope: Low R-value & masonry repairs required
- Roof System: Must be replaced with proper insulation added
- Window System: Single pane windows throughout, prone to water infiltration. Asbestos in caulk.
- Interior Walls: Repair and paint throughout and add acoustic treatment as needed
- Flooring: Replace all flooring throughout building. New epoxy floor system has been installed at cafeteria
- Ceilings: Replace ceiling throughout to accommodate new lighting and improve acoustics
- Door & Hardware: Systems are in various states of disrepair. Replace and provide for ADA access.
- Regulations: Upgrade as required to meet code

Exterior Masonry

Roof Systems

Floor Tile

Accessibility

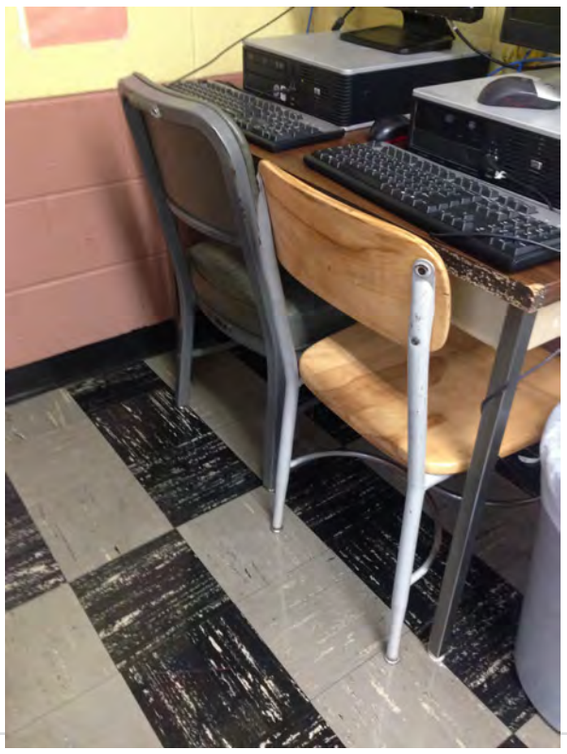
Ceiling Systems

Peebles Elementary Equipment

- Sink locations are not Handicap Accessible
- Student Chairs are many different manufacturers and various ages.
- Kitchen is old with outdated cooking equipment.
- Literacy library is in part of the cafeteria.
- Lack of storage space.

Kitchen

Storage



Furniture

Classroom Sinks

Peebles Elementary Mechanical

- Antiquated mechanical system with poor efficiency
- Lack of controllability results in both under and overheated spaces
- Poor ventilation air
- Classroom unit ventilators are undersized are promote uneven and inconsistent distribution
- Air handling unit in the media center has exceeded its expected maximum service life
- Computer room lacks proper cooling

Air Handling Unit

Cafe Unit Ventilator

Wall Convector

Toilet Exhaust

Peebles Elementary Electrical

- The existing 600-amp main disconnect and fused distribution panel should be replaced
- Interior lighting throughout the school is in fair condition and should be replaced
- Existing exits signs should be replaced and additional signs provided
- A new generator or self-contained battery units should be provided
- All site lighting should be replaced
- Duplex outlets are sparsely located throughout with cords typically running across the floor
- Existing strobes do not meet ADA for intensity. Classrooms do not have ADA horn/strobe units
- A new fire alarm system will be required to meet code

Distribution Panel

Lighting

Outlets

Emergency Devices

Peebles Elementary Fire Protection

- Portions of the building are sprinklered
- The 1959 building is not sprinklered
- The service does not have a backflow prevention device
- The gate valve is not supervised by the fire alarm system

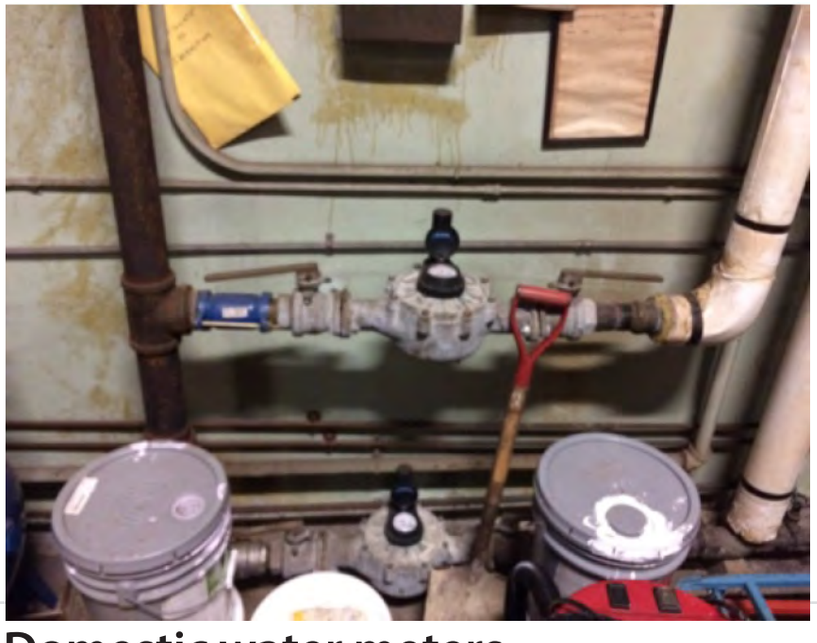
Fire Service & Alarm Valve

Fire Dept. Connection

Exposed Piping w/ Upright Sprinkler

Peebles Elementary Plumbing

- A complete new piping system is recommended
- Plumbing fixtures are in fair condition
- Lack of back flow preventer on the domestic water system
- Wall hydrants on exterior are in poor condition
- Sanitary drainage piping is in fair condition
- The kitchen grease trap appears undersized for the load



Domestic water meters

Water heater

Wall hung fountain

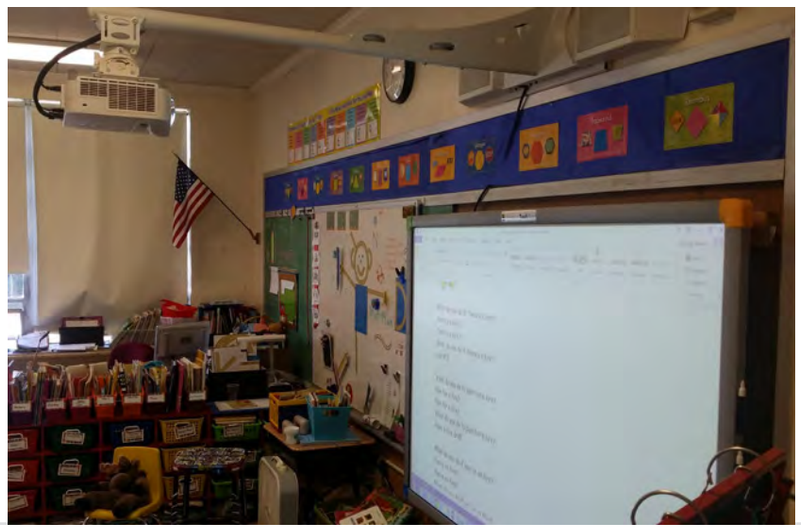
Urinals w/ exposed flush

Peebles Elementary Technology

- Technology Infrastructure: MDF and IDf in a share space in a storage room, No environmental control in equipment rooms, accessibility issues in spline Office area ceiling
- Communications System: Older wall speakers throughout, Older Simplex Master Clock System
- Telephone: Older Nortel System with handsets in classrooms and office
- Security: one CCTV camera at front door, some older motion sensors, Main door intercom
- Classroom Technology: SMART boards w/ ultrashort projection, HP desktop computers, Mobile Chromebook carts were observed (difficult to move around school due to lack of elevator)
- Network: Older and obsolete Procurve HP switch chassis in the closet, Some UPS equipment supporting network switches, 3-4 Enterasys wireless access points throughout
- AV Systems: Older speakers on stage area, No AV in Gym

Tech Closet

Speaker



Smart Board

EXISTING BOURNEDALE

Bournedale Elementary Landscape

- Courtyard pavement does not drain properly and intermittently floods the adjacent hallway through the access door.
- No protective bollards at the flush sidewalk condition at the bus drop-off pick-up area at the rear of the school.
- Site drainage at the accessible spaces near the main entrance appears insufficient
- The school flagpole is not ADA accessible.

Courtyard

Bus Drop-Off

Flagpole

Bournedale Elementary Civil

- The existing school is on Septic so any addition to the school would increase flows to the septic system. Capacity would need to be checked to make sure it is sized to accept the increase in the flow.

- Drainage on this site could be straightforward if the existing detention pond is sized large enough to accept the new runoff flows from the addition and whatever additional impervious area created with the addition. If the detention pond is too small, it should be expanded to increase size and volume to accept and control the new flows.

- There is significant amounts of drainage infrastructure on site that could be used to help control the runoff from any new impervious created by the addition.

- Soils here are also very good and will allow for infiltration to help control runoff. Stormwater on this site should be relatively easy to deal with.

- Existing water infrastructure and hydrants were prevalent behind the building and any new addition would likely require additional hydrant locations. However the water infrastructure on this site seems to be in good condition and should not pose too many issues for an addition on this site. Hydrant flow tests would need to be provided to determine flow and pressures.

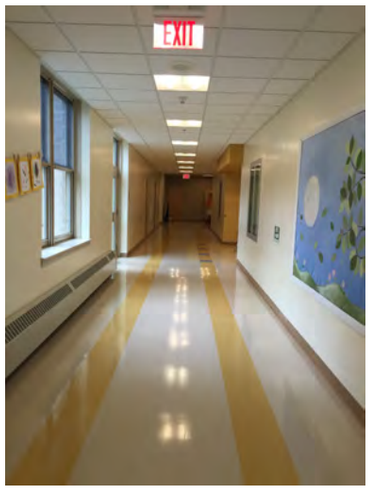
Bournedale Elementary Architectural

- Exterior Envelope: Appears to meet code, analysis of components will be evaluated
- Roof System: Active leaks occur at “roof to wall” intersections, Flashing must be replaced, sealants require repair and replacement, Precast caps have open joints in areas
- Window System: Appears to meet code, analysis of glazing to be confirmed, precast sills require cleaning and sealing
- Interior: Proper acoustic separation required at nurse’s suite/music stage area. Additional corridor wall protection (i.e. wainscoting and corner guards)
- Flooring: VCT lifting up at doorways due to water infiltration
- Door & Hardware: Water enters at exterior sills. New sills and sloping concrete away from entry required. Gym doors require weather gaskets.

Roofing

Window Sills

Sealant



Hallways

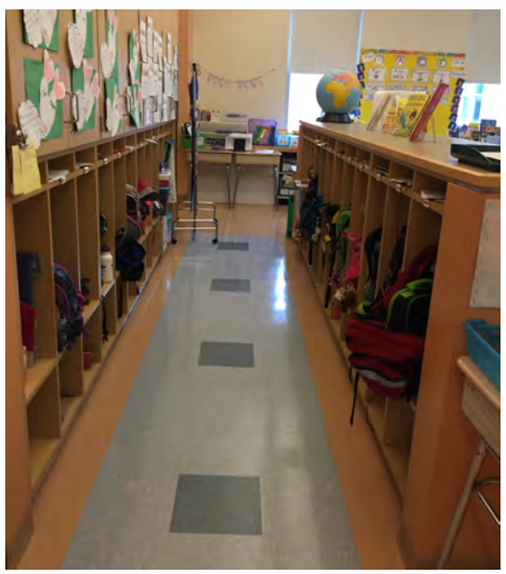
Bournedale Elementary Equipment

- Cafeteria is at capacity
- Lack of storage in kitchen
- Media center has no more space for books
- Classroom cubbies / furniture obstruct supervision and encroach on teaching area

Cafeteria

Kitchen Storage

Media Center



Cubbies

Bournedale Elementary Mechanical

- Heating plant consists of High Efficiency Non Condensing gas fired Boilers. Boilers are approximately 8 years old; expected service life of the boiler is 20-25 years.

- Hot water is distributed to building heating equipment by variable speed pumping distribution system.

- Classrooms served by displacement ventilation dehumidification system that is served by packaged Direct expansion cooling dedicated outdoor air units. The rooftop units are approximately 8 years old and the expected service life is approximately 20 years. Classroom have supplemental hot water fin tube radiation heating.

- The Gymnasium is heated and ventilated by a gas-fired heating and ventilation rooftop unit. The RTU is approximately 8 years old; expected service life of the RTU is 20 years.

- The Administration and Media Center areas are air conditioned by a high efficiency air cooled chiller plant that serves 4-pipe heating and cooling ceiling mounted induction (active chilled beam) units. Ventilation air is provided by packaged rooftop air handling unit that are equipped with gas fired heating and direct expansion cooling. The RTUs, Chiller and induction units are approximately 8 years old.

- The building HVAC systems are controlled by a DDC (direct digital control) building energy management system.

Bournedale Elementary Electrical

- Existing electric service of 1600 Amps would need to be increased.
- Existing lighting system is fluorescent and outdated. New LED lighting and advanced lighting control system would be provided for new addition.
- Fire alarm system would need to be expanded with additional devices and possibly new panel with more capacity.
- Existing generator will not be able to handle the same full array of equipment in the addition as is supported in the existing building.

Bournedale Elementary Plumbing / Fire Protection

- Existing domestic water service is capable of supplying building addition. New cold water main to be provided from water entry to proposed addition.

- New domestic water heater should be provided for addition. Water heater would be condensing high efficiency.

- Existing below grade sanitary piping can be reused where sized appropriately for any added load.

- Natural gas system should have capacity for future additional load. Will need final confirmation with Eversource Energy.

- Existing fire water service is capable of supplying new building addition option. Sprinkler Main can be extending to addition from existing riser or new riser installed in addition.

- Existing sprinkler branch piping can be modified in renovated areas. New quick response heads to be installed in renovated areas.

- Existing sprinklers in non-renovated areas shall remain.

Bournedale Elementary Technology

- Technology Infrastructure: Dedicated MDF and one IDF with sufficient power and environmental conditioning, CAT 6 cabling, ceiling accessibility

- Communications System: PA system appears to be in good working order, Newer integrated master clock system

- Telephone: Newer Vertical VoIP Telephone System with integrated voicemail server

- Security: Modern access control, Intrusion control and video surveillance equipment that is expandable, Cameras were observed in hallways and exterior of building, Video intercom "AIphones"

- Classroom Technology: SMART Technology Smart Boards with standard throw projectors mounted in the ceilings

- Network: Newer Procurve HP switch chassis in the closet for networking, UPS equipment supporting network switches, Enterasys wireless access points throughout

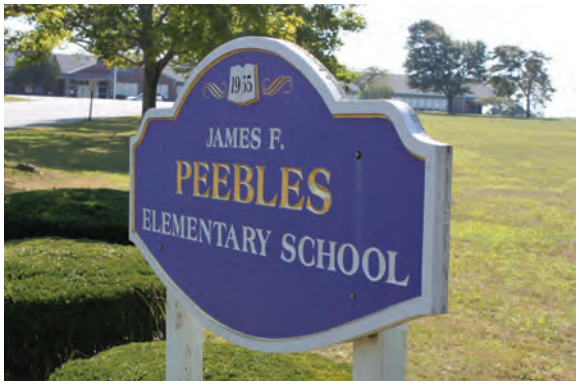
- AV Systems: Large venue AV system in Cafeteria (with stage) and Gym.

Bourne Elementary Schools Visioning Workshop

Join us at a community meeting to...

Learn about 21st Century Education

See examples of how dynamic academic programs and school facilities are changing to meet the needs of 21st century teaching and learning.



Share your thoughts

Let us know what is important to you with regard to the future of elementary educational programming and facilities in Bourne.

Shape your District's future

Contribute to the conversation and make your voice heard as we embark upon the important task of envisioning the future of Bourne Elementary Schools.

Location: Peebles Elementary School Cafeteria, 70 Trowbridge Road, Bourne

Date/Time: October 26, 6:00 - 8:00 PM ***Child care will be provided at the school***

newvistadesign **Flansburgh** Architects

Sponsored by the School Building Committee

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	11/05/2015
Re:	School Building Committee Meeting	Meeting No:	6
Location:	Bourne Veteran's Memorial Community Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	James L. Potter	Chairman, School Building Committee	**Voting Member**
✓	Peter J. Meier	Board of Selectmen	**Voting Member**
	Christopher Hyldburg	Chairman, School Committee	**Voting Member**
	Laura Scena	Member, School Committee	**Voting Member**
		Finance Committee	
	Richard A. Lavoie	Member at Large, Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
✓	Mary Jo Coggeshall	Member at Large	**Voting Member**
✓	Frederick H. Howe	Board of Health	**Voting Member**
	Steven M. Lamarche	Superintendent of Schools, BPS	**Voting Member**
✓	Edward S. Donoghue	Director of Business Services, BPS	Non-Voting Member
	Thomas M. Guerino	Town Administrator	Non-Voting Member
✓	Jonathan Nelson	Director of Facilities, Town of Bourne	Non-Voting Member
✓	Elizabeth A. Carpenito	Principal, BES	Non-Voting Member
✓	Kathy Anderson	Elementary/Special Education Secretary	Non-Voting Member
✓	Janey Norton	Principal, PES	
✓	Kent Kovacs	FAI, Architect	
✓	Betsy Farrell Garcia	FAI, Architect	
	Jorge Cruz	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
6.1	Record	Call to Order, 6:30 PM, meeting opened.
6.2	Record	J. Seeley distributed and reviewed the updated Meetings Schedule and Agendas, attached.
6.3	Record	J. Seeley distributed and reviewed the billing projection for the PDP Phase Environmental and Site Consultancies, attached.
6.4	J. Seeley	J. Seeley distributed and reviewed the meeting minutes of the MSBA Kick-Off Meeting, attached, held on 10/17/15 at the PES conference room. J. Seeley distributed and reviewed a letter from S. Lamarche to MSBA, attached, requesting approval to add a Peebles K-4 with a District –wide 5th grade alternative to review in the Feasibility Study. J. Seeley to follow-up with MSBA for approval.
6.5	J. Seeley K. Kovacs S. Lamarche	J. Seeley distributed and reviewed the PDP Report Submission Table of Contents and responsibility requirements.
6.6	K. Kovacs	K. Kovacs distributed and reviewed the 10/16/15 educational meeting minutes and the 10/21/15 educational meeting minutes, both attached. K. Kovacs indicated a follow-up educational meeting is scheduled for 11/6/15 and for which meeting minutes will be issued.
6.7	J. Seeley	J. Seeley to provide a projection of additional Environmental and Site Consultancies for the PSR and SD Phases. J. Seeley will determine once the PDP phase is more complete.
6.8	J. Potter	J. Potter indicated he has been in contact with the Town Moderator relative to the 2010 Town Bi-Law regarding committee member attendance and is awaiting a response.
6.9	K. Kovacs	K. Kovacs to investigate the capacity of the PES campus sewage treatment plant.
6.10	K. Kovacs	K. Kovacs will contact the Cape Light Compact to review potential incentives or rebates for energy upgrades.
6.11	K. Kovacs	K. Kovacs will review the existing gas and electrical service capacity at BES.
6.12	J. Seeley	Video-taping the SBC meetings for viewing on BourneTV was discussed. Committee Discussion: 1. P. Meier indicated that some SBC meetings might be more important to video tape than others. 2. J. Nelson expressed concern with videotaping the SBC meetings without having the community present in order to understand the detail of the actions being taken. 3. J. Potter indicated he was comfortable with videotaping the SBC meetings for greater transparency to the community.

Item #	Action	Discussion
		4. P. Meier indicated there might be an availability issue with the wired rooms in the Community Center and if the SBC meetings were in an alternate location there may be a cost to video tape. A Motion was made by P. Meier and seconded by F. Howe to table the discussion until the next Committee meeting. Discussion: 1. J. Nelson will confirm if there is a cost to video tape the SBC meetings if they are held in the Community Center. Voted passed unanimously. J. Seeley will place on next meeting's agenda.
6.13	Record	K. Kovacs presented and reviewed a Powerpoint presentation, attached, on the progress findings of the existing conditions survey of BES and PES for structural, site and traffic. Hazardous materials, geotechnical and geo-environmental reviews are still in process.
6.14	K. Kovacs	K. Kovacs presented and reviewed a Powerpoint presentation, attached, on preliminary Alternatives as follows: 1. PES – Renovation/Addition Option 1 2. PES – Renovation/Addition Option 2 3. PES – New Construction Option 1 4. PES – New Construction Option 2 5. PES – New Construction Option 3 6. BES - Renovation/Addition Option 1 7. BES - Renovation/Addition Option 2 8. BES - Renovation/Addition Option 3 9. BES - Renovation/Addition Option 4 Committee Discussion relative to the PES options: 1. FAI to investigate the soccer fields area off Waterhouse Road as a possible site for PES. 2. FAI to investigate the wooded area along Trowbridge Road as a possible site for PES. 3. J. Nelson indicated the Maintenance Shed is aged and could be relocated to another location. K. Kovacs indicated the shed may not be eligible for MSBA reimbursement. 4. M. Coggeshall indicated the Tennis Courts are part of the High School and if they are to be demolished due to building placement, they need to be replicated prior to being demolished. 5. M. Coggeshall indicated the community may react negatively to placement of PES in the soccer fields area off Waterhouse Road, since it places all the students on one area of the site and increases costs to replicate the fields elsewhere. 6. J. Potter indicated the displaced parking near the football field/track complex will need to be replicated. 7. J. Norton indicated any option that needs to demolish the 1959 addition first, in order to construct an addition or new construction, needs to consider the impact to students and teaching.

Item #	Action	Discussion
		8. J. Norton indicated placement of the playground too close to the school or too close to the roadways is problematic. 9. P. Meier indicated the High School access drive off Trowbridge Road is narrow and might not be able to handle increased elementary school traffic. Committee Discussion relative to the BES options: 1. P. Meier indicated that any of the BES options need to address the Nurse Office location relative to the Band Room. 2. P. Meier indicated there may be a memo of understanding between the Selectmen and the School Committee relative to the amount of area of the total Town Parcel dedicated for school use.
6.15	K. Kovacs	K. Kovacs distributed and reviewed a preliminary listing of typical Options Review Criteria, attached, that communities use when evaluating which options are better suited to their needs. The following Criteria were added to the list: 1. How well does the Option reinforce the HS and MS mentoring of the ES students? 2. Does the Option reinforce the benefits of multi-grade facilities? 3. Does the Option maximize Green Design potential? 4. Will the construction impact the students? 5. Will the construction impact the continued use of the existing site facilities? 6. Is the Option accessible to the MS and HS buildings for use? 7. How well does the Option reinforce the campus? 8. How does the Option impact the Operational Cost? K. Kovacs to update the list and forward for review at the next Committee meeting.
6.16	J. Seeley K. Kovacs	K. Kovacs distributed and reviewed a draft of the flyer and Poster Board Announcement, attached, for the 11/17/15 Community Forum No. 2. Committee Discussion: 1. Increase the title font and change to Bourne Elementary Schools Community Workshop 2. Re-order the agenda headings 3. Add address to the Town's Website Project Site 4. Add address to the Project's Email Address 5. Add language emphasizing Community Input is encouraged to be shared K. Kovacs to finalize and email for distribution and deliver seven poster boards to the school administration for distribution in the Town. J. Seeley to forward the project's email address to FAI. J. Seeley to post the flyer on the Town's Website Project Site and email the flyer to BourneTV and request that they post. J. Seeley to post a SBC meeting on 11/17/15 in the event a quorum is present.

Item #	Action	Discussion
6.17	J. Potter	J. Potter indicated the FinCom may be voting R. Lavoie as their appointed member, which would create a vacancy for the Member at Large position. J. Potter will keep the committee updated.
6.18	Record	Next **Community Meeting: November 17, 2015 at 6:00 pm** at the Bourndale Elementary School. Next **SBC Meeting: November 19, 2015 at 6:30 pm** at the Bourne Veteran's Memorial Community Center.
6.19	Record	A Motion was made by P. Meier and seconded by R. Howe to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, Billing projection for the PDP Phase Environmental and Site Consultancies, MSBA Kick-Off Meeting Minutes, Letter from S. Lamarche to MSBA, PDP Report Submission Table of Contents, 10/16/15 educational meeting minutes, 10/21/15 educational meeting minutes, Preliminary listing of typical Options Review Criteria, Draft Flyer for Community Forum No. 2, Powerpoint presentation

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes.

JGS/sat/P:\2015\15041\04-MEETINGS\4.3 Mtg_Notes\3-School Building Committee\06_5November2015\Schoolbuildingcommitteemeeting_5November2015_FINAL.Docx

PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	11/05/2015
Re:	School Building Committee Meeting	Meeting No:	6
Location:	Bourne Veterans Memorial Community Center, 234 Main Street, Buzzards Bay, Massachusetts	Time:	6:30pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	James L. Potter	onsetjp@juno.com	Chairman, School Building Committee
	Peter J. Meier	pmeier@townofbourne.com	~~Chairman~~, Bourne Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
	-		Member, Finance Committee
	Richard A. Lavoie	RichI.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	Mary Jo Coggeshall	mjcoggeshall@gmail.com *	At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS
	~~Thomas~~ M. Guerino	tguerino@townofbourne.com	Town Administrator
	Jonathan Nelson	jnelson@townofbourne.com	Director of Facilities, Town of Bourne
	Elizabeth A. Carpenito	ecarpenito@bourneps.org	Principal
	Kathy Anderson	kanderson@bourneps.org	Elementary/Special Education Secretary
	Kent Kovacs	kkovacs@flansburgh.com	Flansburgh Architects
	Betsy Farrell Garcia	bgarcia@flansburgh.com	Flansburgh Architects
	Joel Seeley	jseeley@smma.com	SMMA
	Janey Nortal	jnortal@bourneps.org	Principal's Assistant - Peebles

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* new email address
mjcoggeshall@bourneps.org

AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	11/5/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:30 PM
Distribution:	Committee Members (MF)	Meeting No.:	6

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Video Recording SBC Meetings
5. Educational Program/Visioning Update
6. Existing Conditions Update
7. Preliminary Discussion of Construction Alternatives
8. Prep for Community Forum No. 2
9. Committee Questions
10. Public Comments
11. Next Meeting
12. Adjourn

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SCHOOL BUILDING COMMITTEE
PEEBLES ELEMENTARY SCHOOL

All meetings held at the
Bourne Veterans Memorial Community Center at 6:30 PM
unless otherwise noted

MEETINGS SCHEDULE AND AGENDAS
September 25, 2015 (updated October 28, 2015)

DATE	AGENDA
Feasibility Study Phase (PDP)	
September 29, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Introduction of Flansburgh Architects (FAI)
	Approval of FAI Proposal
	Discussion of Project Goals
	Discussion of Detailed Schedule
October 8, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Preliminary Discussion of Educational Programming
October 22, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Preliminary Discussion of Existing Conditions
October 26, 2015	COMMUNITY FORUM NO. 1 - EDUCATIONAL VISIONING - 6:00 to 8:00 PM - PEEBLES ELEMENTARY SCHOOL CAFETERIA
November 5, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Educational Program Update
	Existing Conditions Update
	Preliminary Discussion of Construction Alternatives
November 17, 2015	COMMUNITY FORUM NO. 2 - 6:00 to 8:00 PM - BOURNEDALE ELEMENTARY SCHOOL CAFETERIA
November 19, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Presentation of Construction Alternatives
	Discussion of Sustainable Design Goals
December 3, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Presentation of Refined Construction Alternatives
	Review of Preliminary Cost Model
December 8, 2015	COMMUNITY FORUM NO. 3 - 6:00 to 8:00 PM - PEEBLES ELEMENTARY SCHOOL CAFETERIA
December 17, 2015	SCHOOL BUILDING COMMITTEE MEETING
	Evaluate Refined Construction Alternatives
	Review Cost Model
	Vote to Submit PDP and Top 3 Alternatives
December 18, 2015	*SUBMIT PDP PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

FLANSBURGH ARCHITECTS
BILLING PROJECTION FOR BASIC SERVICES AND SITE/ENVIRONMENTAL CONSULTANTS
PEEBLES ELEMENTARY SCHOOL
BOURNE PUBLIC SCHOOLS

BASIC SERVICES

	FEASIBILITY DESIGN PHASE								SCHEMATIC DESIGN PHASE			
	OCT - 2015	NOV - 2015	DEC - 2015	JAN - 2016	FEB - 2016	MAR - 2016	APR - 2016	MAY - 2016	JUN - 2016	JUL - 2016	AUG - 2016	SEP - 2016
FEASIBILITY PHASE	$ 31,250	$ 31,250	$ 31,250	$ 31,250	$ 31,250	$ 31,250	$ 31,250	$ 31,250				
SCHEMATIC DESIGN									$ 28,750	$ 28,750	$ 28,750	$ 28,750

SITE AND ENVIRONMENTAL CONSULTANTS

	FEASIBILITY DESIGN PHASE								SCHEMATIC DESIGN PHASE			
	OCT - 2015	NOV - 2015	DEC - 2015	JAN - 2016	FEB - 2016	MAR - 2016	APR - 2016	MAY - 2016	JUN - 2016	JUL - 2016	AUG - 2016	SEP - 2016
Traffic Study - Amendment No. 1			$ 10,500	$ 6,000								
Geotechnical Engineering - Amendment No. 2			$ 9,900									
GeoEnvironmental - Amendment No. 3			$ 6,380									
Survey - Amendment No. 4			$ 32,780									

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study Bourne, MA	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	10/27/2015
Re:	MSBA Kick-Off Meeting	Meeting No:	1
Location:	Peebles Elementary School Conference Room	Time:	10:00 AM
Distribution:	Attendees, (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	
✓	Steven M. Lamarche	Superintendent, BPS	
✓	Peter Meier	Selectman	
✓	Edward Donoghue	Director of Business Services, BPS	
✓	Christopher Hyldburg	Chair, School Committee	
✓	Jim Potter	Chair, School Building Committee	
✓	Rick Howe	Vice-Chair, School Building Committee	
✓	Kathy Anderson	Administrative Assistant, BES/PES	
✓	Christopher Alles	MSBA	
✓	Christina Forde	MSBA	
✓	Julie Ross	MSBA	
✓	Kent Kovacs	Flansburgh Associates (FAI)	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
1.1	Record	All introduced themselves and described their role in the project. K. DeCristofaro and C. Forde to be copied on all emails.
1.2	J. Seeley	J. Seeley to forward Designer Amendments 1-4 once fully executed.
1.3	J. Seeley	The project schedule was reviewed. C. Forde indicated the 2016 Board meeting dates have been published, J. Seeley to update the schedule to reflect the new dates.
1.4	Record	The Feasibility Study submission requirements were reviewed.
1.5	Record	The FAS meeting was discussed. The final date of the meeting will be monitored as the study progresses.

Item #	Action	Discussion
1.6	Record	The Schematic Design submission requirements were reviewed. The DESE submittal is to be submitted concurrent with the Schematic Design submission.
1.7	K. Kovacs	The requirements for the Educational Program were reviewed. K. Kovacs will forward a draft space template to MSBA for review relative to current educational spaces that are not listed on the template.
1.8	C. Forde	The process of including an additional study option, a non District-wide K-5 option at the Peebles site, was discussed. C. Forde will review with MSBA staff and provide direction to the Town on the process of formally requesting the additional option.
1.9	Record	Meeting adjourned and all toured the Peebles Elementary School.

Attachments: Agenda, Project Schedule

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes.

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MSBA SIGN IN SHEET

DISTRICT: BOURNE

DATE: 6/27/15

Name	Title/Organization	Phone	Email
CHRISTOPHER ALLES	MSBA	617.720.4466	chris.alles@massschoolbuildings.org
Christopher Hyldburg	Bourne school Committee	508-254-1715	chyldburg@gmail.com.
Kathy Anderson	Adm. Asst BES/PES	508-317-3464	Kanderson@bournps.org
EDWARD DONOGHUE	BPS. DIR OF BUS SVCS	508-759-0660	EDONOGHUE@BOURNEPS.ORG.
Peter Meier	Selectmen	508-759-0600	PMeier@townofbourne.com
STEVEN M. LAMARCHE	SUPERINTENDENT BPS	508.759.0660 x33	slamarche@bournps.org
Jim Potter	School Bldg. Comm. Chair	508.566.5425	onsetjp@juno.com
Rick Howe	SBC V. Chair	508.566-4342	RickHowe9@gmail.com
Joel Seeley	SMMA, OPM	617 547 5400	JSEELEY@SMMA.COM
Kent Kovacs	Falmouth	617 970 0331	kkovacs@falmouth.com
CHRISTINA FORDE	MSBA	617.720.4466	CHRISTINA.FORDE@MASSSCHOOLBUILDINGS.ORG
Julie Ross	MSBA	617-276-2762	Julie.Ross@MassSchoolBuildings.org

Massachusetts School Building Authority

Town of Bourne
James F. Peebles Elementary School

Kick-Off Meeting
October 27, 2015 10:00 AM

Objective:

Meeting to introduce the project team and discuss the project goals, procedures, and schedule.

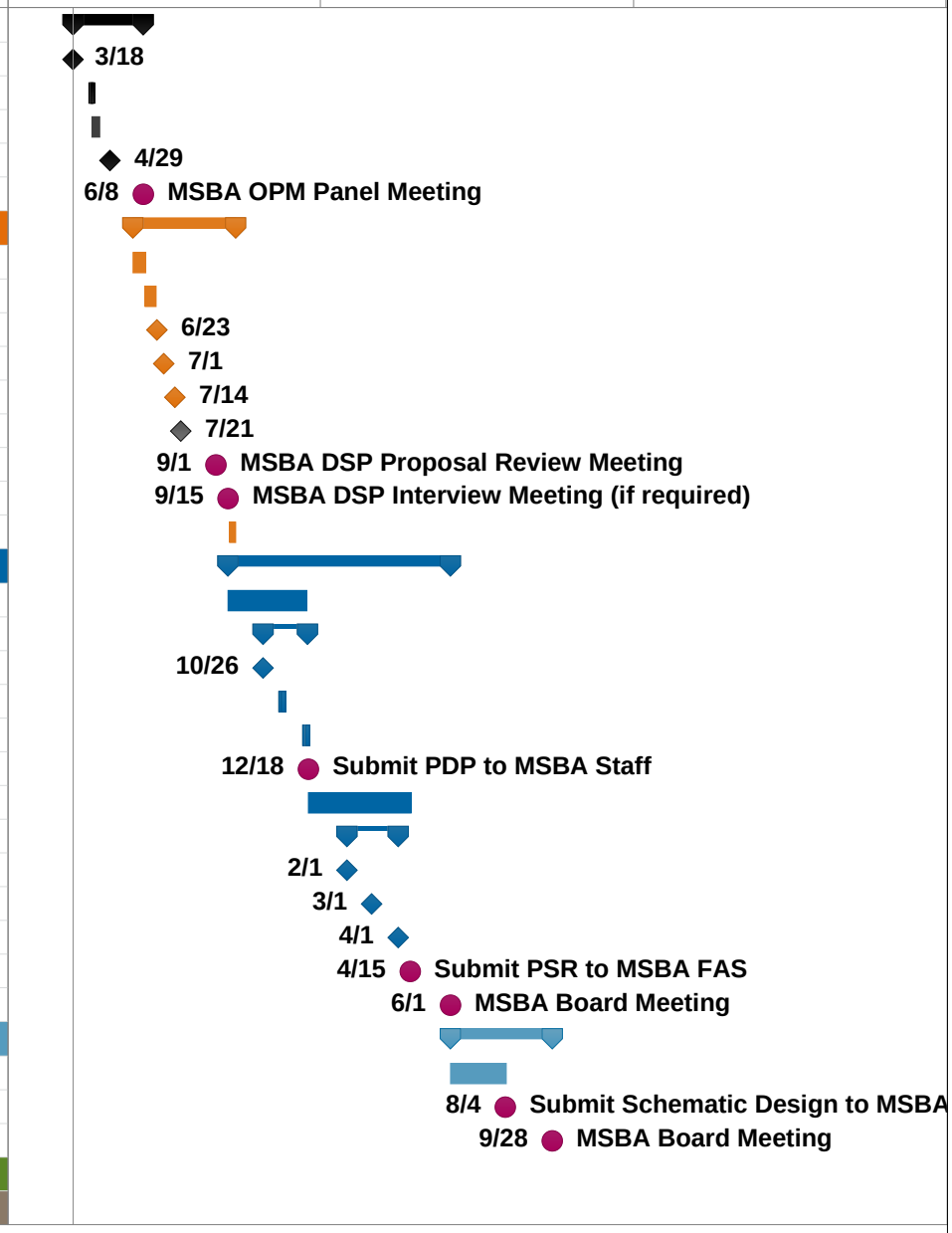
Meeting Agenda:

1. Introductions
2. MSBA Communication Protocol
3. Status of Contracts and Agreements
4. Project Schedule
5. Feasibility Study Submittals *(Module 3)*
    a. Preliminary Design Program (PDP)
    b. Preferred Schematic Report (PSR)
6. Facilities Assessment Subcommittee Presentation (FAS)
7. Getting to a Project Scope and Budget Agreement *(Module 4)*
8. Questions, Comments, Concerns

Updated: June 25, 2015
Revised: September 16, 2015

TOWN OF BOURNE, MASSACHUSETTS
PEEBLES ELEMENTARY SCHOOL
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**RETAIN OPM**	**58 days**	**3/18/2015**	**6/8/2015**
2	Submit OPM Proposals	0 days	3/18/2015	3/18/2015
3	OPM Interview	2 days	4/8/2015	4/9/2015
4	Negotiate OPM Contract	7 days	4/9/2015	4/17/2015
5	Submit Documents to MSBA OPM Panel	0 days	4/29/2015	4/29/2015
6	**MSBA OPM Panel Meeting**	**0 days**	**6/8/2015**	**6/8/2015**
7	**RETAIN DESIGNER**	**86 days**	**5/27/2015**	**9/23/2015**
8	Draft Designer RFS and Submit to MSBA	11 days	5/27/2015	6/10/2015
9	MSBA Approve Draft RFS	9 days	6/10/2015	6/22/2015
10	Submit to Central Register	0 days	6/23/2015	6/23/2015
11	Notice in Central Register	0 days	7/1/2015	7/1/2015
12	Briefing Session	0 days	7/14/2015	7/14/2015
13	Submit Designer Proposals	0 days	7/21/2015	7/21/2015
14	**MSBA DSP Proposal Review Meeting**	**0 days**	**9/1/2015**	**9/1/2015**
15	**MSBA DSP Interview Meeting (if required)**	**0 days**	**9/15/2015**	**9/15/2015**
16	Negotiate Designer Contract	5 days	9/17/2015	9/23/2015
17	**FEASIBILITY STUDY (FS)**	**183 days**	**9/15/2015**	**6/1/2016**
18	Develop Preliminary Design Program (PDP)	65 days	9/15/2015	12/15/2015
19	**Community Presentations**	**37 days**	**10/26/2015**	**12/16/2015**
20	Community Forum 1: Visioning	0 days	10/26/2015	10/26/2015
21	Community Forum 2: Existing Conditions	3 days	11/16/2015	11/18/2015
22	Community Forum 3: Options	3 days	12/14/2015	12/16/2015
23	**Submit PDP to MSBA Staff**	**0 days**	**12/18/2015**	**12/18/2015**
24	Develop Preferred Schematic Report (PSR)	84 days	12/18/2015	4/15/2016
25	**Community Presentations**	**44 days**	**2/1/2016**	**4/1/2016**
26	Community Forum 1	0 days	2/1/2016	2/1/2016
27	Community Forum 2	0 days	3/1/2016	3/1/2016
28	Community Forum 3	0 days	4/1/2016	4/1/2016
29	**Submit PSR to MSBA FAS**	**0 days**	**4/15/2016**	**4/15/2016**
30	**MSBA Board Meeting**	**0 days**	**6/1/2016**	**6/1/2016**
31	**SCHEMATIC DESIGN (SD)**	**85 days**	**6/1/2016**	**9/28/2016**
32	Develop Schematic Design	47 days	6/1/2016	8/4/2016
33	**Submit Schematic Design to MSBA**	**0 days**	**8/4/2016**	**8/4/2016**
34	**MSBA Board Meeting**	**0 days**	**9/28/2016**	**9/28/2016**
35	**LOCAL VOTES**			
38	**DESIGN AND CONSTRUCTION (TBD)**			



Bourne Public Schools

36 Sandwich Road
Bourne, MA 02532
508.759.0660
508.759.1107 (fax)
www.bourneps.org

Steven M. Lamarche
Superintendent
slamarche@bourneps.org

Melissa Coelho
Executive Assistant
mcoelho@bourneps.org

November 3, 2015

Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, MA 02109
www.MassSchoolBuilding.org

Attn: Ms. Christina Forde
Project Manager
Christina.Forde@MassSchoolBuilding.org

RE: Additional Study Enrollment Request

As a result of our community outreach and educational visioning meetings with school staff, parents, community members and our leadership team, I am writing the Massachusetts School Building Authority (MSBA) to request your consideration for an additional fourth design study enrollment for the Peebles School project. This option is for a Peebles School kindergarten through grade 4 and district-wide grade 5.

With that said, we acknowledge and share MSBA's desire to maintain clarity and the integrity of the Study Enrollment Certification for design options which is being evaluated as part of the current feasibility study with Flansburgh Architects. This request is a direct result of our initial feasibility outreach to our educational community. We are collectively aware of Bourne's uniqueness as the only community in the commonwealth split by a canal with two bridges. With that knowledge and at each visioning outreach meeting we heard a strong desire to commit our efforts and explore through the feasibility study an option of a Peebles K-4 with a district-wide 5th grade on the current Peebles School location or known as the south side of the canal adjacent to the Bourne Middle School and Bourne High School.

As part of your consideration, we believe that the emergence of this fourth option is technically within the scope of our original three options as certified on or around December 16, 2014 to include design enrollments for a K-4 Peebles, K-4 district school and a K-5 district school.

In conclusion, we respectfully appreciate your consideration and believe that this fourth option to our study enrollment provides the district and the Bourne community a more efficient means to address space capacity needs throughout future enrollments on the south side of the canal.

With respect,

Steven M. Lamarche

C: Bourne School Building Committee
Joel Seeley, OPM SMMA
Kent Kovacs, Principle-in-Charge Flansburgh Architects

Attachment (1): MSBA Town of Bourne Peebles Elementary School Study Enrollment Certification

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

TOWN OF BOURNE
JAMES F. PEEBLES ELEMENTARY SCHOOL
STUDY ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the proposed project at the James F. Peebles Elementary School, the Town of Bourne hereby acknowledges and agrees that the design of preliminary options which may be evaluated as part of the feasibility study for the proposed project at the James F. Peebles Elementary School shall be based in accordance with the following:

Enrollment for Grades K-5 at a District-wide elementary school	**Enrollment for Grades K-4 at a District-wide elementary school**	**Enrollment for Grades K-4 at the James F. Peebles Elementary School**
885 students	725 students	250 students

The space allowance for each alternative evaluated shall assume no more than the enrollments as detailed in the table above. The Town of Bourne acknowledges and agrees that it has no right or entitlement to any particular study enrollment, square feet per student space allowance, or total square footage referenced in the table above for the preliminary options, and further acknowledges and agrees that it shall not bring any or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the study enrollment of the James F. Peebles Elementary School that it has acknowledged and agreed herein. The Town of Bourne further acknowledges and agrees that the study enrollment presented herein is only applicable to the evaluation of preliminary options conducted as part of the feasibility study for the proposed James F. Peebles Elementary School project. Upon receipt of the District's recommendation of a Preferred Schematic Design for the proposed James F. Peebles Elementary School project, and subject to the MSBA's review of such recommendation, the MSBA shall forward a Design Enrollment Certification with a design enrollment specific to the recommended and approved Preferred Schematic Design, which shall supersede this certification.

The undersigned, for themselves and the Town of Bourne, hereby certify that they have read and understand the contents of this Study Enrollment Certification and that each of the above statements is true, complete and accurate. The undersigned hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the Town of Bourne and to bind the Town of Bourne to its terms.

Chief Executive Officer

12/16/14
Date

Duly Authorized Representative of School Committee

12 . 16 . 14
Date

Superintendent of Schools

12. 16. 2014
Date

Peebles Elementary School Feasibility Study

Bourne, MA

PRELIMINARY DESIGN PROGRAM (PDP) – REQUIREMENTS

REFERENCE	ITEM	RESPONSIBILITY
	➢ **TRANSMITTAL LETTER**	SMMA
	➢ **COVER**	FAI
	➢ **TABLE OF CONTENTS**	FAI
MSBA 3.1.1	➢ **INTRODUCTION** ❑ Summary Overview of: o Statement of Interest o Date of MSBA Invitation o Agreed upon Design Enrollment ❑ Summary of Capital Budget Statement ❑ Project Directory ❑ Project Schedule	 District District District District SMMA SMMA
MSBA 3.1.2	➢ **EDUCATIONAL PROGRAM**	District
MSBA 3.1.3	➢ **INITIAL SPACE SUMMARY** ❑ MSBA Space Summary Template ❑ Scaled Floor Plans of the Existing Facility ❑ Narrative Description of Variances between the District's Proposed Program and the MSBA Guidelines	 FAI FAI FAI
MSBA 3.1.4	➢ **EVALUATION OF EXISTING CONDITIONS** ❑ Site Title ❑ Historic Clearance ❑ Site Evaluation ❑ Building Evaluation ❑ Code Evaluation of Existing Building ❑ MAAB/ADA Evaluation of Existing Building ❑ Structural Evaluation ❑ Systems Evaluation ❑ Determine the need for Geotechnical Evaluation and Soils Exploration ❑ Traffic Evaluation ❑ Phase I Initial Site Investigation ❑ Hazardous Material Assessment	 FAI FAI FAI FAI FAI FAI FAI FAI FAI FAI FAI FAI
MSBA 3.1.5	➢ **SITE DEVELOPMENT REQUIREMENTS** ❑ Site orientation and narrative describing location considerations and issues o Structures and fences o Site access and circulation o Parking and paving o Utilities o Athletic fields and outdoor educational spaces ❑ Accessibility Requirements ❑ Code setbacks and limitations ❑ Zoning setbacks, easements and limitations ❑ Wetlands and/or Flood Restrictions ❑ Emergency vehicle access ❑ Safety and Security Requirements	 FAI FAI FAI FAI FAI FAI FAI

Peebles Elementary School Feasibility Study

Bourne, MA

REFERENCE	ITEM	RESPONSIBILITY
MSBA 3.1.6	➢ **PRELIMINARY EVALUATION OF ALTERNATIVES** – should include:	
	❑ Analysis of school district student school assignment practices and available space in other schools in the district	District
	❑ Tuition agreements with adjacent school districts	District
	❑ Rental or acquisition of existing buildings for school use	District
	❑ Base repair option – to meet minimum code requirements	FAI
	o No Build	
	o Reno/Additions to existing buildings	
	o New building construction	
	<u>Include for each Alternative</u>	
	❑ Description of the Alternative	FAI
	❑ Examination of degree it fulfills Educational Program Requirements	FAI
	❑ Examination of variation from the spaces identified in the Initial Space Summary	FAI
	❑ How it addresses Site and Facility Goals and Objectives	FAI
	❑ Assess impact on Construction Phasing	FAI
	❑ Estimated Preliminary Construction and Project Costs	FAI/SMMA
	<u>Results of Preliminary Alternatives should include:</u>	
	❑ Evaluation Criteria	FAI
	❑ How it did/did not address the criteria	FAI
	❑ Advantages and Disadvantages of each Alternatives	FAI
	❑ Comparative Cost Analysis	FAI/SMMA
	Conclude with a list of three (minimum) Distinct Alternatives	FAI
MSBA 3.1.7	➢ **LOCAL ACTIONS AND APPROVAL CERTIFICATION**	
	❑ Use Template in Module 3 – Appendix 3D	District/SMMA
	➢ **APPENDIX**	
MSBA 3.1.1	❑ Copy of SOI	District
MSBA 3.1.1	❑ Copy of the MSBA Board Action Letter	District
MSBA 3.1.1	❑ Copy of the MSBA Design Enrollment Letter	District

Flansburgh Architects

Meeting Notes

DATE: October 21, 2015

PROJECT: Bourne Public Schools

MEETING: Interviews with Faculty and Staff
- Bournedale Elementary School
- Peebles Elementary School

I. Bournedale Elementary School

Summary:
- Built-in student storage in classroom encroaches on learning space
- Re-appropriation of special education resource rooms as classrooms creates need for additional small group spaces
- Lack of teacher collaboration space
- Lack of outdoor learning areas, difficult access to play areas
- Insufficient number of toilets and lack of distribution throughout building
- Lack of large-format student display areas
- Separate parent / bus drop-off and pickup simplifies queuing

9:00 – 9:30
- **Noreen Baranowski** (Administrative Assistant)
- **Kathy Anderson** (Special Ed Admin Assistant at both Peebles and Bournedale)
- **Alexandra Caldwell** (PK-ILC Special Ed teacher and Interim Director)

What do like about the facility and what would you change?
- Kathy: Secretary at Peebles for 10 years and at Bournedale since 2009:
  - Excellent location of office, lock system, security, and control of who comes in and out
  - Great workspace behind the reception desks
    - Would like a space to put tools like postage meters and three-hole punches
  - Separate parent pick-up in front and bus drop-off in back works very well
    - Need better signage to indicate flow
  - Convenient to have the Special Ed director in the front office near Liz (initially set up for an Assistant Principle, but don't have AP here – "Director of Student Services")
  - Would like a larger foyer system so parents can wait without disrupting what goes in the office
    - Not a lot of privacy with parents in the office which makes it difficult to talk or conduct confidential phone calls
    - Would like to have a table at the entry with a sign in and sign out for parents (early or late), and for teachers by the mailbox area

- Screens would be helpful to see buses as they queue
- Communication system isn't perfect – walky-talkies are difficult (though new ones are better)
- Security server is on cart in conference room – inconvenient, especially during meetings
    - Should be close to Admin Assistant who programs the keyfob system
- A second conference room would be nice
- Mailbox area is congested since close to door. Would prefer to have access to front and back of mailboxes. Peebles office needs two exits out of loop for better flow
- Telephone system cannot be updated easily and is a problem
- Front office is a tight space - two chairs are close together when talking to a parent on the phone
- A board of schedules, phone extensions would be ideal to have, but at Bournedale there is no place within office to locate
- An electronic notice board and/or bulletin board and exhibition of student work in the lobby would be nice
- Portico at front door does not extend to the building. It stops short of the door and kids get wet when it is raining
- The Music Room can be heard from the Nurse's Office – can hear around corners, not through walls
    - The movable wall between cafeteria and music room seems to work well
- At Peebles, Kathy is too close to colleagues and does not have enough privacy
- Kathy would like to be close to Special Ed Administrator
    - With amenities of scanner and copier

- Alexandra: Special Ed and Pre-School needs
    - Now have four preschool classrooms and are in desperate need of an additional space such as a Motor Room for kids with significant motor needs
    - In inclement weather and 4-5 months of the year, students cannot go outside and they currently use skateboards and scooters in the hallways. They have the gym, but it is constantly scheduled for classes, never empty
    - A "want" rather than need would be a Sensory Room attached to the Motor Room
        - Large population of students with autism (10 students)
        - Other districts have an interior room without windows that can be darkened for calm down and chill out. Tapping to activate lights
        - A settling chair (beanbag) and fake fish tank
    - Pre-K would like a space with two-way mirrors into the classroom
        - During observations of students and staff, behavior changes when one knows he or she is being observed
        - Faculty/staff are responsible for evaluations of children transitioning out of early intervention (after age 3). A two-way mirror for someone to observe evaluation would be helpful.
        - Also useful for parents who are anxious to observe
    - Insufficient space for Speech Therapy. The Pre-K Speech Therapist shares an office

with the K-4 Speech Therapist, and the space is not large enough to treat two groups of children at the same time. Smaller separate spaces would be better than one space. A movable wall between the two would be acceptable
    - Need at least one more kindergarten SPED room – currently utilizing for a classroom a room designed as an office, and it does not have a sink or a bathroom
    - Currently have a makeshift "Settling" Room for exclusive time-outs, but it is within another classroom and most often utilized by students outside that classroom
        - Settling room would work better in more of a central location, although it would be preferable not to monitor from hallway.
        - Or could have settling rooms in more classrooms

9:30 – 9:50

- **Lauri Gilbert, Grade 3**
- **Christine Gegg, Admin**

What do like about the facility and what would you change?

- Lack of bathrooms on both the first and second floors
    - I.e. after recess, only one classroom at a time can use the bathroom
- Cubbies take up too much space in the classroom
    - Grades 2-4 don't need them in their classrooms – could be in hallway
    - Although they are half-height, they can create a blind spot – not a good thing to have in a classroom
- Teaching area in 850 SF classroom is cramped because the cubbies take up floor space
    - Even with only 20 students, classrooms are small
    - Do not feel perimeter wall space could be sacrificed to relocate the cubbies
    - Classroms are larger at lower level
- The storage and built-in bookshelves are excellent
- Lauri loves her classroom, storage wall and smartboard
- Doesn't like the set up of where the jacks are – limits location of desk
- Would prefer main door of classrooms to be locked via keyfob rather than manual deadbolt latch in a lockdown
- Glass panels in doors need permanently mounted shades for a lockdown situation – currently mount rolled-up construction paper to back of door and secure with velcro
    - Corners of rooms are too small to hold 20 students in a lockdown
- Closed-in bulletin boards outside of classrooms are great… but they don't need more
- Need space to exhibit student posters and larger work
- Everything falls off the walls – would like some system for hanging and displaying work
    - Wonderful to display student work and see kids interacting with it!
- Consider providing lockers in hallway with doors but no locks
- There is no awning in the rear drop-off area. No protection for loading and unloading of buses
- The only storage room is the one by the elevator. As curriculum materials are changed, faculty discard everything in tiny closet, which is completely full.
- Lately have had to evacuate building a number of times for fire drills. Ideally would have area away from building that could be somewhat protected from the elements. Some kind of

shelter – perhaps integrated as part of fields, playground, or outdoor classroom
- Need more jacks and power outlets in general
- Laptop & iPad carts are stored in the computer lab – require use of elevator to retrieve / return
- Power plugs along a strip would be helpful in the office space
    - Currently have strips plugged into strips
- Office space doesn't offer privacy. Awkward during phone conversations discussing sensitive issues. Privacy panel or sliding glass window would be helpful. Still need to monitor entry/exit of office.
- A conference room on another level would be useful
- The main conference room gets used a lot for IEP meetings, but not common planning
- Maybe mailboxes could be incorporated into a teacher collaboration room
    - A room subdivided for meetings and common planning
    - Common planning time is scheduled only when it fits it into the budget
    - Due to lack of conference room availability, common planning time is held in teachers' room and often disrupted by use of copier or microwave. Workroom space would be ideal.
- Specialists truly need their own space – utilize classrooms of teachers on break
- Assistants (Paraprofessionals) have to share storage space with the teachers that they are most often working with.
    - Need a place to hang up their coats, store pocketbooks or personal items, and check emails – similar to room provided at middle school
- Office area would benefit from improved office layout and consideration of ergonomics
    - The cabinets are oddly sized (more like kitchen cabinets, some are too deep and some are too high) and lack adequate counter space

10:00 – 10:20

- **Gail Casassa, Speech and Language Pathologist**

What do like about the facility and what would you change?
- Gail works with K-4 students and loves this facility.
- Current classroom is optimal
    - She can fit up to 6 students around her table
    - At 280 SF, it is a perfect Speech room but size does not permit working with two groups at the same time
    - If room were larger, different areas could be partitioned off for group use
    - Law requires 4 years or less of age difference between students in same room
    - She sometimes works in classrooms and does observations but mostly pulls out
    - P-K therapist is mostly push-in but also uses office space shared with Gail
    - Peebles therapist and Gail use all the same materials and could share a room
- Few adult bathrooms in building; adults use student restrooms

Desired classroom and school features:
- As a therapist, having an environment that is conducive to attaining therapy targets, ability to decorate the space

- Windows are a nice feature as is access to a sink, convenient for giving students a cup of water (throats get dry).
- Squarish shape of room allows setup that is conducive to having students gather at a half-circle table and interact while also having access to assistive technology for one or two at a time
- Differentiated instruction is often happening within the Speech Therapy room
- Whiteboard and adequate storage space are critical

Important adjacencies with other program spaces

- Adjacency to the Kindergarten classrooms is key, as many of her students are in Kindergarten
- She usually retrieves children from their classrooms; sometimes the 3rd - 4th grade students come to her independently
- Space has two desktop computers. Students also bring iPads

II. Peebles Elementary School

Summary:

- Lack of special education and intervention spaces
- Insufficient office space for specialists and administration
- Poor plan layout requires multiple lifts for accessibility and creates long travel times
- Lack of teacher collaboration space and small group spaces
- Shared closets for student storage permit spread of germs and lice; individual cubbies needed
- Art and music difficult to access and restricted by gym and cafeteria use
- Noise concerns
- Lack of true Media Center, currently housed in circulation space
- Sloping floors, water infiltration, and structural deterioration limit full use of space
- Limited student display areas in corridor
- Challenging drop-off and pickup due to poor site circulation
- Proximity to other schools on campus enables interaction with older students, use of fields and facilities
- Central location permits walking field trips to public library, post office, and canal

12:10-12:30

- **Nicole Tanguay, Grade 4**
- **Donna Buckley, Grade 4**

Desired classroom and school features

- Larger classrooms allow students the space to spread out, create zones for small group work
- Storage needs improvement: both for kids and teachers
    - Need cubbies to separate students' personal items - currently a large closet with hooks
        - If in the classroom they should be along a wall, not freestanding (Bournedale)
    - Teacher cabinets and closets could be better configured
        - Open shelves under window should be enclosed

        - Closets need shelving within – difficult to utilize effectively without shelves
- Bulletin board space in the classrooms is helpful – none in hallway
- Lockable connecting doors between classrooms

Important adjacencies with other program spaces
- Classroom clusters by grade
- Experimenting with team teaching, currently one pair of classes at each elem. school
    - Math/Science + ELA/Social Studies

Use of technology in and outside the classroom
- Computers along side of classroom are difficult to screen from view of rest of class – distracting for rest of students
- Presently have 4-5 desktop units in each classroom
- Smartboards are used regularly, mostly for projection
- Projectors were problematic but have been replaced

Whole school design ideas
- Full-size gym – sometimes there are two classes going in at the same time
    - The recreation department could use it on weekends
- Public access that can be locked off from academic wing
- Playground in an area where the noise does not interrupt student learning
- Breakout rooms where little groups can go and work privately
- Teacher planning space – currently in the conference room
    - Common planning time occurs once a month
- A teacher collaboration room with a sink and storage and microwave
- Copy center and work room(s), close to classrooms
- Cafetorium that you can turn into an auditorium (cafetorium makes more sense than a gymnatorium)

12:30-12:50
- **Meg Girouard, Grade 5 (Middle School)**
- **Jenna DePesa, Grade 5 (Middle School)**
- **Deb Bisnette, Technology**

General thoughts
- At middle school, having a bottom locker is miserable, and top locker is too tall for some kids
- For fifth grade, a standing area for students would be nice – working benches or café tables
- Fifth grade is fully team-taught
- Ceiling tiles are stained from leaks – middle school has had ongoing problems with roofing

Desired classroom and school features
- Storage is excellent – deep closets

- Communicating doors between rooms are used regularly and are frequently left open
- Projects between teamed classes involve sharing materials, ideas
- Would like as many white boards as possible
- They prefer 2-student tables over desks
    - No tablet arm chairs

Important adjacencies with other program spaces

- Middle school is very grade-focused and organized at the moment
    - Dedicated wing for fifth grade is a plus
- There are SPED Rooms in the middle school, but not enough space or enough teachers for the Special Ed population
    - Instructors sometimes use teachers' workroom or the classroom of a teacher on break

Use of technology in and outside the classroom

- Cumbersome to direct the projector from the computer on the desk – easier to control from tablet that projects writing in real-time and allows teacher to move around classroom
- Smartboards are used more for projection than interactively

Whole school design ideas

- Would prefer everything wireless
- Need more electrical outlets and power
- Connectivity – only half of Ethernet ports work
- A sink in the room with a bubbler is convenient – students do not have to leave room for a drink of water
- Bathrooms in the kindergarten and bathrooms throughout
- IT and Tech storage needed
- Security could be improved

12:55-1:15

- **Lisa Niland, Administrative Assistant**
- **Michelle LaFlamme, Administrative Assistant**
- **Donna Beers (Nurse)**

Desired administrative and school features

- Enclosed office space – currently open to hallway and very noisy
- Storage space (with appropriate depth)
- Work surfaces for sorting – have to use front desk for sensitive documents
- Places for private conversations
- Teacher mailboxes located conveniently with access from front and rear: loading and pick-up
- Area for walkie talkies – constantly trying to charge them
- Copy machine that isn't disruptive
- Phones in the classrooms with voice mail
- A bathroom in the office area would be nice

- An area for parent pick-up that is separate from bus drop-off
- A less chaotic drop off sequence – vehicular circulation is problematic
- Playground area: prefer surface other than black shredded tires

- For Nurse's Office
    - Natural light and more places to lie down
    - Close to the admin
        - If a child needs to go home then parents have to sign them out
    - Close to Social Worker and Adjustment Counter – often share responsibilities
    - Would like a washer and dryer

1:15-1:35

- **Erica Amaral, Grade 1**
- **Toni Perry, Grade 1**

General Ideas

- They interact with the MS and HS regularly – student tutors, shared science labs
- They are a community school and enjoy access to town amenities
    - Often take walking field trips to post office, public library, historical society

Desired classroom and school features

- Connecting classrooms conducive for team teaching
- Central learning hub or commons
- Need lots of storage – some of it lockable
- Individual cubbies for kids to prevent spread of germs and head lice – current closets are small
- Love having a door to the outside, but would prefer it lead to a courtyard/closed-in play space rather than to an outdoor space open to public
    - "Mudroom" space would be useful
    - Like immediately adjacent play spaces and outdoor learning space (aren't too concerned about the noise)
    - Bournedale is poised to build an outdoor learning space. Peebles would like one, too
- Individual bathrooms for the kids inside classrooms or connected to classrooms
- Younger grades on the lower floor allows access to exterior

Important technology features

- Regularly use iPads and Elmo projectors
- Sliding Smartboard is convenient
- Multiple teaching walls
- Photocopy machines for each grade grouping would be helpful

Whole school design ideas

- Flexibility needs to be built in – furniture, technology
- Teachers should take their furniture with them

- Mobility
- Teachers create their space as flexible to their teaching style
- Murals on the wall make it homey, not sterile – personalized
- Warm and inviting
- Dream school ideas: Courtyard space that leads to the cafeteria, which is connected to a greenhouse, attached to science space
- Literacy closet (book storage)
- Flex space for parent volunteers
- Break-out spaces
- Grade level clusters
- Consider distributed dining – noise in cafeteria is unbearable

1:40-2:00

- **Larry Kelsch (PE)**
- **Adam Lyon (Music)**

Desired classroom and school features

- Music classroom
    - Would like a large room of 1,000-2,000 SF – students move around a good bit
    - Depending on size of room, would like choral risers built-in with storage underneath
    - Preferably 20' ceilings, absorptive fiberglass
    - Sound panels and diffuser panels (as much sound-proofing as possible)
    - Wood floor finish with area rug
    - Sink
    - Teaching wall with smartboard
    - Built-in shelves for the instruments - xylophones, recorders, and Orff instruments
        - Wall space to hang instruments – would like to add ukeleles
        - High windows allow light while minimizing distractions, operable windows
        - Good ventilation
    - Rectangular shape similar to music room at Bournedale
    - Lockable storage to allow for public access or use after hours
    - Estabrook Elementary School in Lexington is a good precedent
- Gym
    - Need a space separate from music
    - Office space adjacent to gym
    - Small bathroom and sink
    - Fold-up basketball hoops
    - Full-court gym that can accommodate more outside school activities
    - Smartboard
    - Storage – currently use stage for storage but cannot be secured
    - Numbers on floors for lining up students similar to Bournedale (1-25)
    - Lockable storage to allow for public access or use after hours
    - Lighting that doesn't swing when hit

Important adjacencies with other program spaces

- Gym and music tucked away from classrooms
- Stage access from music room
- Door from gym with direct access to fields
- Convenient for gym to be near nurse's office in case of injuries

2:05-2:25

- **Heather Sivil , Special Education**
- **Tina McMichen, Special Education**

General Thoughts

- Advantage of campus location is connection to the MS and HS
- Difficult to utilize one classroom for multiple groups when students have processing issues
- More effective if on every hallway there were 2-3 medium sized rooms (big enough for two groups run by one teacher) for support staff
    - Title One, ELL, Special Ed, tutoring
- High-contrast stair nosings for visually impaired students, railings for accessibility
- Need office where SPED instructors can meet and have access to each other and to materials
- Need a separate bathroom for special needs purposes
- Small group rooms need classroom technology (whiteboards, Smartboards, etc.)
- Need phones in the classroom – often have behavioral issues and need to call for assistance
- Groups of ELL students increase every year
- Mix of pull-out and push-in. Varies from year to year
- Substantially separate are all housed at Bournedale this year
- Natural light a plus
- OT/PT should be near room where students could play and do more activities.
    - Adjacency to gym helpful – could share materials
    - Separation from gym good for privacy
    - OT/PT currently shares space with speech

2:25-2:50

- **Debbie Quinn (Librarian)**
- **Julie Thompson (Learning Coach)**

General Information

- K-2 have story time in library
- 3-4 are using catalogue, sometimes use computers for book reports
- Do not have books online yet

Desired media center and school features

- Enclosed space with doors to limit noise and disruptions from circulation
- Quiet reading areas

- Presentation and conference area
- Book stacks located in the center could create zones on either side for separate quiet reading and storytime rug areas
- Stacks four shelves high and on wheels
- Center in/out access from circulation desk area – not divided from space – easy access
- Display area
- Teaching wall with smartboard
- Dedicated storage closet with shelving
- Student laptop area for Library Catalogue – currently against wall
- Professional reference area for teachers (a nook or alcove for teacher reference area)
- House 7,700 volumes now – would ideally like 8,000. Collection is independent of Bournedale

- Julie is a Learning Coach for teachers
    - Previously a second grade teacher at Peebles
    - Has an office at Bournedale as well
- Neighborhoood cluster organization is helpful
- Need space for faculty meetings
    - Currently occur in a classroom
    - Need a space to meet with teachers
- Would prefer K-2 and 3-5 separation to be able to focus on early childhood
    - Separate wings with shared common resources
- Eureka Math – implementing new math curriculum requires presentation to two groups of teachers

3:10-3:30

Sheila Kosewski – Art

- The Art room is located off of the cafeteria and very noisy during two-hour lunch block
    - Space needs sound-proofing
- Need storage that is enclosed – all storage currently visible, cluttered
- Teaches at both elementary schools
    - At Bournedale has a separate storage closet with shelving – preferably three sides
    - Separate kiln room helpful at Bournedale.
        - Out of the way of kids – in corner of room behind toilet partition now
- When working with clay here there is no space to put student work because every shelf is full of supplies
- At Bournedale, corridor access is limited to one door in/out of the classroom
    - Second door goes out to courtyard – locked doors to corridor prevent egress
    - Separate entry and exit doors best when changing classes
- Large glass sidelight into the hallway provides a distraction. Could be improved by adding shelves at rear to display work into the hallway and buffer some of the view inside
    - Would prefer display area for student work rather than view windows into hall
- Flat storage at Bournedale is ideal for class-by-class storage
- Four sinks are correct amount – T-shaped counter allows access from two sides

- Need adequate space for drying racks – individual compartments for student work
- A demonstration cart for setup of still lives, with space to roll away when not in use
- Wider art tables, with extra ones for supplies and setup. Ideally room for 8 art tables.
- Locate smartboard independent of the white board. Need whiteboard access without sliding smartboard away

Peebles Elementary School

Educational Working Group

Visioning Workshop One

October 16, 2015

Agenda

EXPECTED OUTCOMES: By the end of the session we will have begun to…

- Share **Priority Goals** for the design of Bourne Public School's new elementary school
- Discuss 21st century teaching and learning and identify **21st Century Learning Goals** and initiatives for Bourne Public Schools
- Review Bourne Elementary Schools' most essential **and innovative initiatives and programs**, brainstorm a list of those envisioned and desired, and discuss the implications they hold for the design of the new facility
- Assess Bourne Elementary Schools' **Strengths, Challenges, Opportunities, and Goals** with regard to the development of its academic programs and the design of a new facility
- Explore and prioritize a range of architectural **Design Patterns** that will best support 21st century teaching and learning within the new Bourne Elementary School facility

Time	Activity	Purpose
9:00 – 9:45	***Workshop Goals and Introductions*** • Workshop overview • The Design Process / Creating a Design Guide • Introductions o Priority Goals for the new facility	Introduce participants, and clarify agenda and desired outcomes for this workshop and subsequent workshops. Share some of our Priority Goals for the new facility.
9:45– 10:30	***21st Century Schools*** • Changing Paradigms in Education • Interactive Presentation: 21st Century Teaching and Learning • Videos and discussion	Identify and discuss elements of 21st century teaching and learning as connected to Bourne Elementary Schools' approach to its educational programming.
10:30– 10:45	**BREAK**	

10:45 – 11:30	***21st Century Learning Goals for BPS Elementary Schools*** • Small group review of assorted 21st century learning goals and outcomes and creation of priority listings • Large group prioritization	Ground our thinking about design guidelines and desired building features in a discussion and exploration of 21st century learning goals for Bourne Elementary Schools.
11:30– 12:00	***Peebles and Bournedale Present and Future Educational Priorities*** • Brief presentations of essential and innovative school programs and initiatives presently in practice at Peebles and Bournedale Elementary Schools	Identify present and future educational initiatives and programs at Peebles and Bournedale Elementary School and discuss their effect on the design of the new facility.
12:00– 12:30	**LUNCH**	
12:30– 1:15	***BPS Elementary School SCOG Analysis*** • Brainstorm of Peebles and Bournedale Elementary Schools' Strengths, Challenges, Opportunities, and Goals	Identify what is presently working well within Peebles and Bournedale Elementary Schools, what is challenging, and what opportunities exist with regard to the further development of the academic program and new school facility.
1:15–1:30	**BREAK**	
1:30 –2:45	***21st Century School Facility Design Patterns*** • Presentation and Q&A ***Design Patterns for Bourne Elementary Schools*** • Small group review of assorted facility Design Patterns • Creation of priority listings • Large group prioritization	Ground our thinking about design guidelines and desired building features in a discussion and exploration of new school Design Patterns. Identify priority Design Patterns for Bourne Elementary School.
2:45–3:00	***Closing and Next Steps*** • Next Steps review and Q&A • Blue Sky Ideas (Exit Ticket): What no-holds-barred, over-the-top, budget-is-no-issue idea(s) and/or space(s) would you like to see take shape in the new Bourne Elementary School facility?	Hear from participants about their questions and thoughts. Review next steps for development of our process working together.

Educational Working Group

Visioning Workshop One Notes October 16, 2015

Priority Goals

The following list of priority goals for the design of the new and/or renovated Peebles/Bourne Elementary School was recorded during the participant introduction section of Workshop One, with each participant offering one or more priority goals.

The new or renovated building will:

- facilitate community use of the spaces in the building
- be a resource center for the community
- provide spaces for community gathering
- have spaces for community participations and volunteers
- support family engagement
- be economically feasible
- have the least amount of "movable parts"
- provide built-in cubbies for storage
- have adequate, but not overblown security
- provide a robust and practical technology infrastructure (not like the phone system at the Bournedale Elementary School, which is proprietary and already outdated)
- have a "Maker Space" or maker-like spaces in classrooms
- have safe and efficient (principal-designed) pick-up and drop-off areas
- provide more areas for Special Education "push-in" with varied furniture and areas for students
- locate administrative areas closer to learning areas (classrooms)
- have a Sensory Motor Room (with suspended equipment) in addition to the Occupational Therapy Room
- provide confidential spaces for student evaluations and therapy meetings
- provide safe, acoustically private, and observable spaces for students
- minimize disruptions
- keep in mind the age of students and support their varied needs
- have a bigger cafeteria that can service multiple grades and larger numbers of students
- ideally have an auditorium (or cafetorium that is supported by the MSBA)
- provide a cafeteria that supports 2-3 seatings
- have play areas that are situated away from the building so as to not disrupt learning
- provide a sustainable garden/mini-cranberry bog

- provide as large a gathering spaces for students and teachers as possible
- have pull-out spaces that are distributed throughout the building
- provide two-way mirrors/windows that allow observation of students engaging in normal activity
- have break-out spaces for Title One push-in, with adequate technology and furniture that facilitates flexible groupings
- have safe playground spaces
- provide an outdoor teaching space that enables students to develop and use gross-motor (movement) skills
- have outdoor storage and water access
- provide a recess and play area that is enclosed and well-drained (with some hardtop)
- enhance and support student independence and safety by providing easy and informal student supervision
- have adequate storage for books in and outside of the classroom
- provide professional spaces for teachers to collaborate
- have plenty of natural light
- provide larger teaching spaces
- have meeting areas off of classrooms that facilitate student collaboration
- minimize student travel and reasons to leave classrooms
- provide a Print Center environment with distributed hallway alcoves for printing
- provide child-care spaces for staff that allow high school students to gain child-care experience
- have multiple venues and spaces for the display and exhibition of student work
- provide furniture that can be positioned for maximum visibility of students (unlike the built-in cubbies at the Bournedale Elementary School
- provide more (gender neutral) bathroom spaces for students that need them
- provide a Resource Library for staff and parents

Essential Educational Programs and Initiatives

The following is a listing of the essential academic programs and initiatives that were identified by the Educational Working Group as presently in practice within Bourne Public Schools, and that should be supported by the new and/or renovated Peebles/Bourne Elementary School.

1. **In-District Education of Special Ed Students**
    a. Including students with significant and/or multiple disabilities
    b. In class and substantially separate

2. **Integrated Pre-School Setting**
    a. With a focus on experience-based learning

3. **Full-Day Kindergarten**

4. **Eureka Math Curriculum**
    a. Teaches mathematical reasoning, fluency, and learning in patterns
    b. Kinesthetic element requires motor space such as larger and/or outdoor classroom

5. **Writing Program**
    a. SRSD (Self-Regulated Strategy Developments) for 3rd and 4th grade students emphasizes individual student growth and self-reflection

6. **Center-Based Reading**
    a. "Reading Street" curriculum
    b. AIMS web platform for data analyses (also with SRSD)

7. **Engineering Days**
    a. STEM-focused engineering design process
    b. Requires larger classrooms, more tables and sinks

8. **Non-Traditional Labs**
    a. The Bourne High School Innovation lab has been a huge success, has have the integrated art/engineering programs at the middle school
    b. They would like some kind of Innovation Lab environment at the elementary school, or maybe mini-lab breakout areas

9. **Science and Technology**
    a. Implementing Next Gen Science Standards
    b. Would be great to have a pull-out space for science
    c. Not looking to have traditional computer labs, but some access to larger monitors

10. **Project-Based Learning**
    a. Teachers practice PBL
    b. Would like flexible furniture and classrooms to lots of electrical access and room for display and exhibition of projects

11. **Dynamic Physical Education Programming**
    a. Includes Project Adventure
    b. Bournedale has a climbing wall in the hallway
    c. Outdoor learning and play is important

12. **Professional Development Opportunities**
    a. The district has been working hard to give teachers what they need with regard to PD

13. **The Natural Classroom**
    a. There are plans to build a Natural Classroom at the Bournedale with a stage, tactile activities, play space and garden

14. **"Teacher-Owned" Classrooms**
    a. The districts attempts o minimize teachers on carts
    b. Maximize teachers' ability to create customized and supportive educational environments

Educational Working Group

Visioning Workshop One Notes October 16, 2015

SCOG Analysis

The Educational Working Group conducted a "SCOG Analysis" of what it sees as the current strengths, challenges, opportunities and goals with regard to the Bourne elementary schools' academic program and facilities. The following is a compilation of participants' responses and ideas.

STRENGTHS

- Forward thinking
- Education is a focal point of the community
- Building leadership capacity and stability
- Transparency
- Inclusion opportunities and programming (Special Education)
- Technology-focused
- Good kids
- Parent Involvement
- Open and welcoming climate
- Talented staff
- Skills sets and expertise
- Principals work together (consistency)
- Fiscal creativity
- PLCs – getting feedback from staff
- District alignment (feels more like a district than individual schools)
- School Committee

CHALLENGES

- Response to Intervention (RTI)
- Data collection and analysis
- Social emotional programing and support
- Fiscal challenges
- Parent participation (beyond traditional venues)
- Parent involvement at home
- Union (current leadership's influence on members)
- Resistance to changes
- Silencing of voices that are in agreement
- Transition to student-centered learning environments

OPPORTUNITIES AND GOALS

- Bring people back together to align what we do/align minds
- Implementing RTI (a place for modeling that)
- Parent involvement: new voices and new spaces
- Providing community resources and gathering spaces
- Showcasing student work and inspiring student learning
- A place that supports great teaching and learning
- Create cost saving measures that can be used for programming

Educational Working Group

Visioning Workshop One Notes October 16, 2015

21st Century Learning Goals 1.0

The following set of priority "21st Century Learning Goals" for Bourne elementary school students was developed by the Educational Working Group. Two teams of 3-4 participants each worked to create their own set of Learning Goals, after which each team presented to the larger group. The lists were later merged.

1. Effective Communication

- Collaboration and self-direction
- Oral and Written
- Digital Literacy

2. Critical and Analytical Thinking

- Problem Solving
- Assessing and Synthesizing Information
- Curiosity and Questioning

3. Collaboration

- Empathy
- Diversity and Inclusion

4. Adaptability

- Initiative
- Risk Taking

5. Integrity

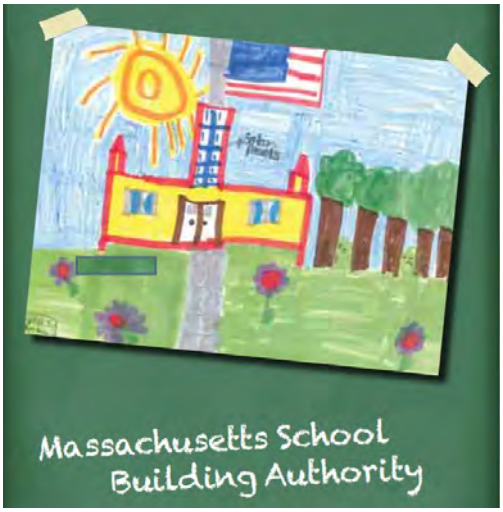
- Ethical Decision Making

6. Self-Discovery

- Inventive Thinking
- Creativity and Exploratio

Bourne Elementary Schools Visioning Workshop

Join us at a community meeting to discuss...

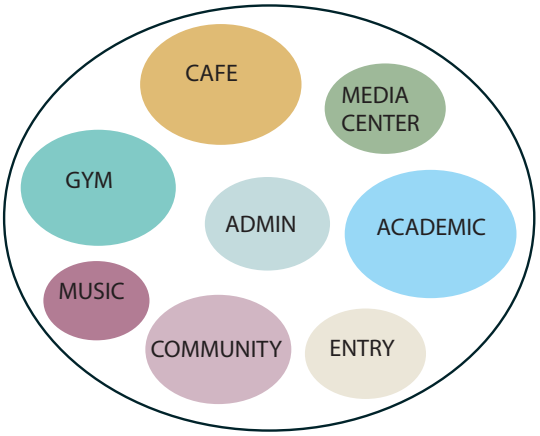


MSBA process & schedule

Learn about the partnership with the MSBA & the project schedule

Feasibility study scope

Understand the steps required to develop the feasibility study



SCHOOL PROGRAM

Educational programming

Review the Visioning sessions and the steps taken to develop the program

Existing school conditions

We will provide an overview of the District's school buildings' systems in relation to performance and code compliance

Location: Bournedale Elementary School Cafeteria, 41 Ernest Valeri Rd, Bourne

Date/Time: November 17, 6:00 - 8:00 PM ***Child care will be provided at the school***

Project Management SMMA **Flansburgh** Architects **Sponsored by the School Building Committee**

School Building Committee Meeting

November 5, 2015

Peebles Elementary School
Feasibility Study

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

- Adaptable spaces that support individual students' learning goals
- The school should stay on this side of the bridge so as to maintain a campus atmosphere and connect to the Middle and High School
- A community space (on this side of the bridge), as this is sorely lacking
- Small group meeting rooms
- Enrichment programs for the gifted and talented
- Elementary school as hub of the community
- Open to community at night and weekends
- Full day kindergarten for all kids
- Outdoor spaces that are safe and enclosed
- Creative space and Maker space for projects
- Facility that supports student exhibitions

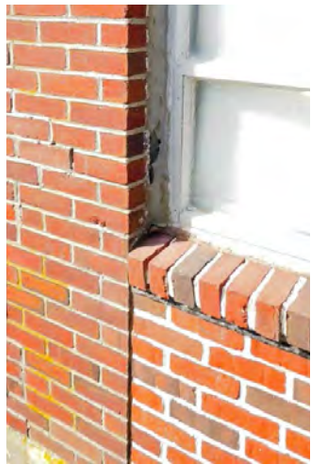
EXISTING CONDITIONS UPDATE

EXISTING PEEBLES

Peebles Elementary Structural

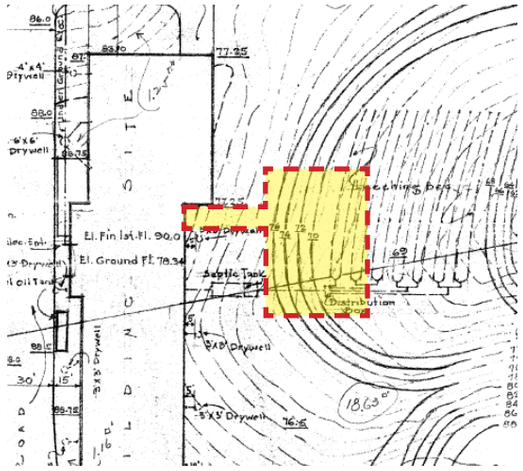
- Masonry is exhibiting distress, bowing outward
- Water infiltration necessitated addition of vinyl siding at spandrel panels
- Corrosion in ungalvanized shelf angles and lintels is causing jacking of masonry
- Brick ties may have disintegrated due to corrosion - Masonry is pulling away from back-up wall
- Noticeable settling at ground floor of addition creates uneven condition at egress stair landings
- Addition was constructed over original septic leaching field, which may not have been well compacted during regrading and construction
- At addition, brick overhangs foundation 1 5/8" and is proud of concrete roof beam

Vinyl Siding at Spandrel



Caulking at Brick

Panels Replaced at Addition



Plan of Leaching Field

EXISTING BOURNEDALE

Bournedale Elementary Structural

- Building is constructed of composite structural steel framing, open web steel joists, steel columns and masonry bearing walls. The building appears in good structural condition.

- In some locations, 8" architectural recessed units were mortared to adjacent units. Cracked mortar should be removed and replaced with sealant.

TRAFFIC ANALYSIS

Traffic Analysis

Completed Tasks:

- Observed and documented parent pick-up and drop-off activities during morning and afternoon
- Conducted parking inventory and occupancy while school was in session
- Performed preliminary travel time evaluation for bus and parental traffic in relation to students relocated from Peebles Elementary to Bournedale Elementary School

Scheduled Tasks:

- Collect Automatic Traffic Recorder counts at four locations adjacent to schools
- Collect turning movement counts at four key intersections at two peak times of day
- Review MassDOT traffic study of Bourne Bridge upon receipt
- Visit sites to observe the traffic operations and physical characteristics of the roadway system
- Document the existing conditions with notes and photographs
- Request accident data for most recent three years available for each intersection from MassDOT

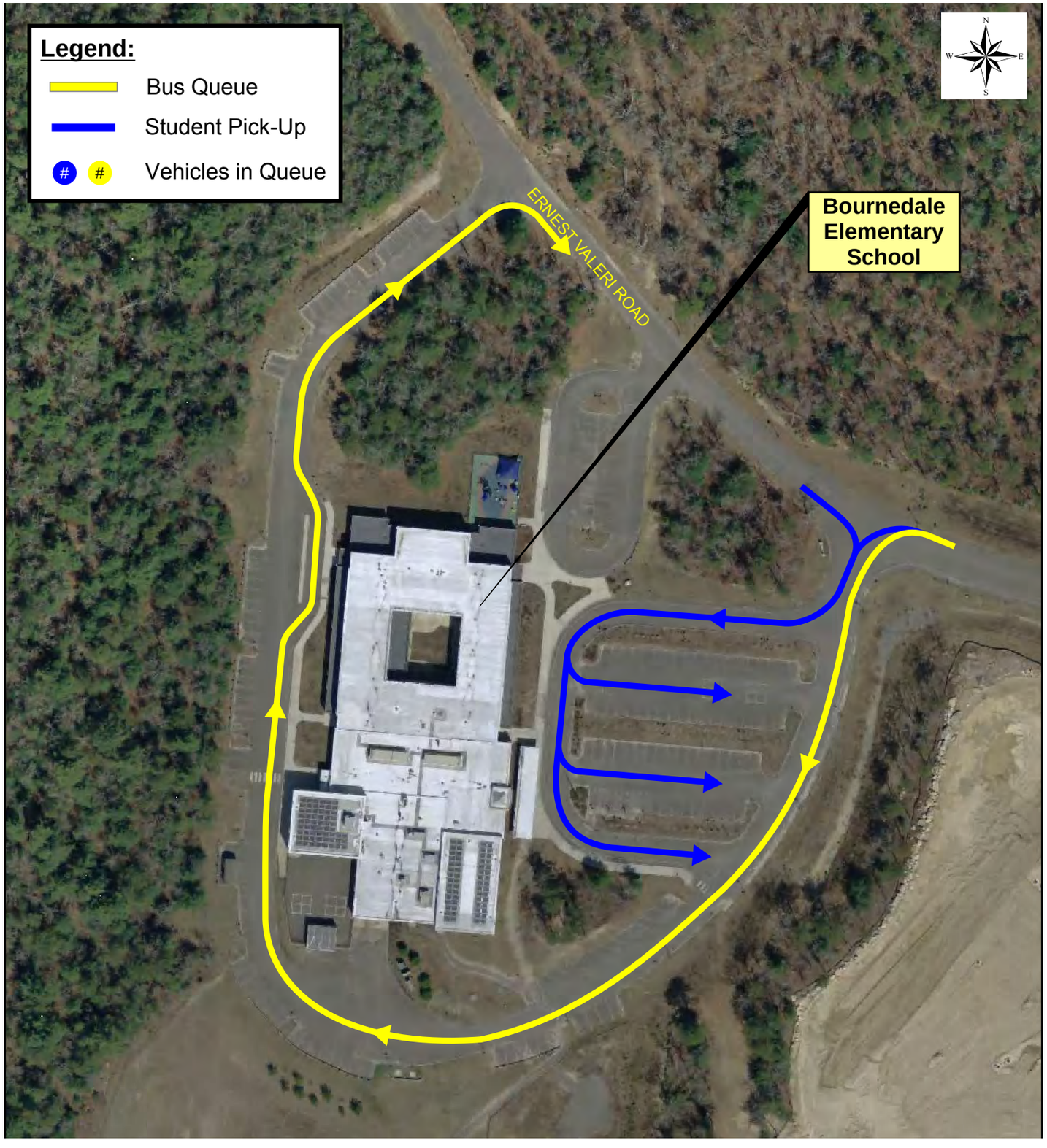
Peebles Elementary

Peebles Elementary

Table 1 – Peebles Pick-Up/Drop-Off Quantity

Type	Parent		Bus	
Time	Drop-Off	Pick-Up	Drop-Off	Pick-Up
8:30 - 8:45	13			
8:45 - 9:00	63		8	
9:00 - 9:15	12			
9:15- 9:30	5			
2:00 - 2:15		2		
2:15 - 2:30		6		
2:30 - 2:45		16		
2:45 - 3:00		29		8
3:00 - 3:15		17		
3:15 - 3:30		3		
Total	93	73	8	8

Bournedale Elementary



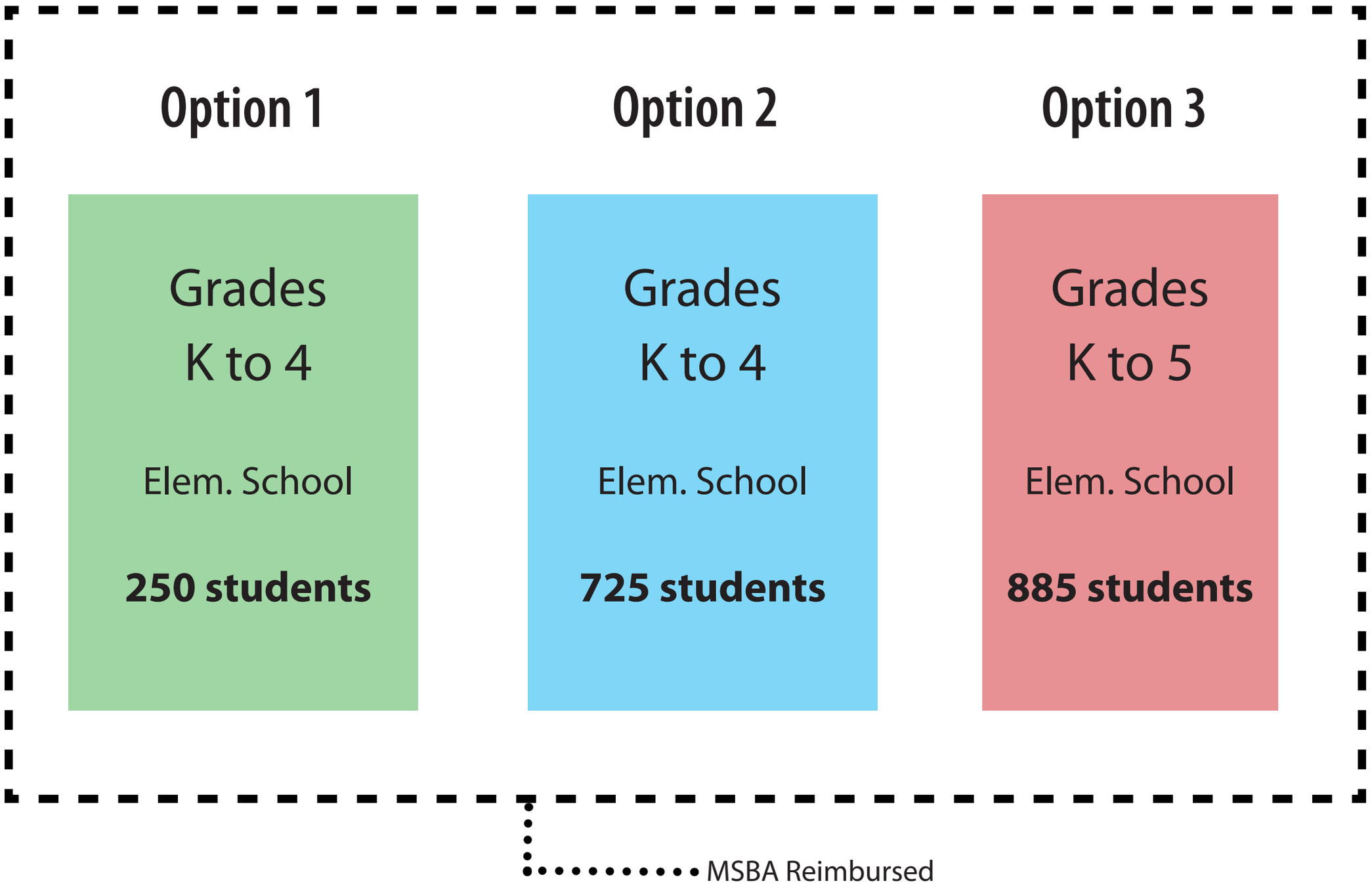
Bournedale Elementary

Table 1 – Bournedale Pick-Up/Drop-Off Quantity

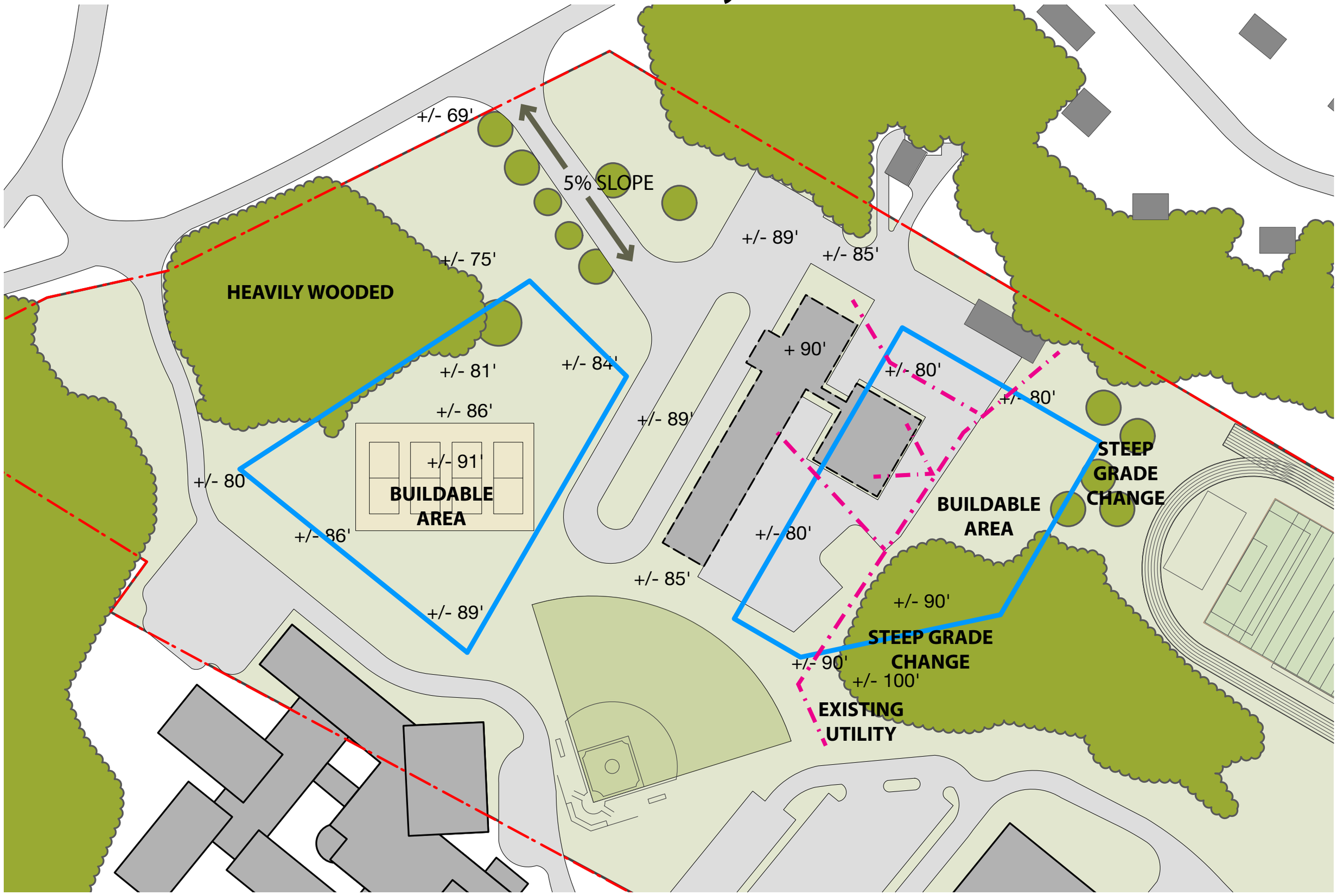
Type		Parent		Bus	
Time		Drop-Off	Pick-Up	Drop-Off	Pick-Up
8:15 - 8:30		1			
8:30 - 8:45		3		4	
8:45 - 9:00		48		7	
9:00 - 9:15		17		2	
9:15- 9:30					
1:45 – 2:00			2		
2:00 - 2:15					
2:15 - 2:30			1		
2:30 - 2:45			7		
2:45 - 3:00			20		4
3:00 – 3:15			23		9
3:15 - 3:30					
Total		69	53	13	13

PRELIMINARY SITE OPTIONS

MSBA Study Scope



Buildable Area: Peebles Elementary



Peebles Addition / Renovation Option 1

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles Addition / Renovation Option 1

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles Addition / Renovation Option 2

Peebles Elementary School | Bourne, MA

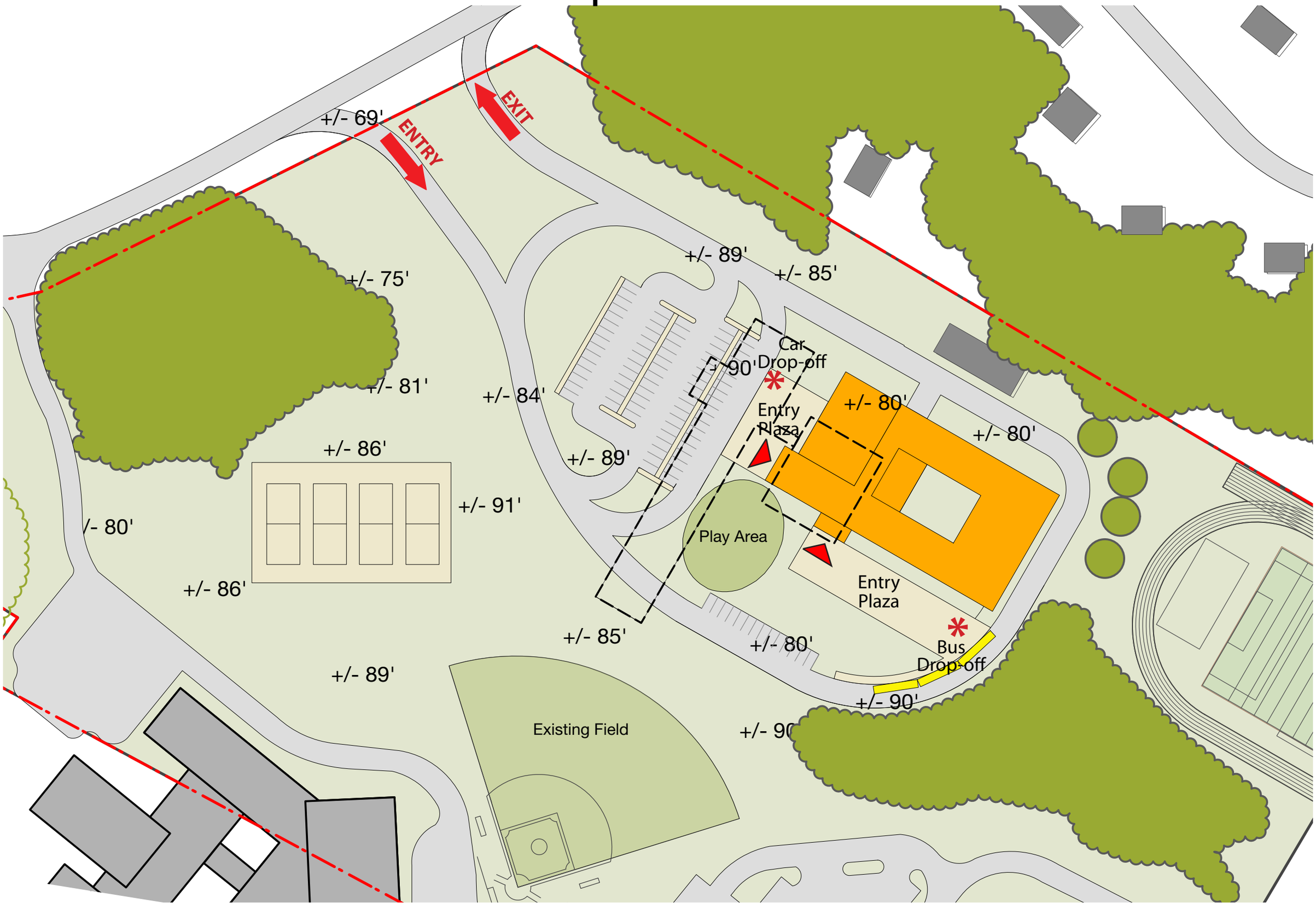
Flansburgh Architects

Peebles Addition / Renovation Option 2

Peebles Elementary School | Bourne, MA

Flansburgh Architects

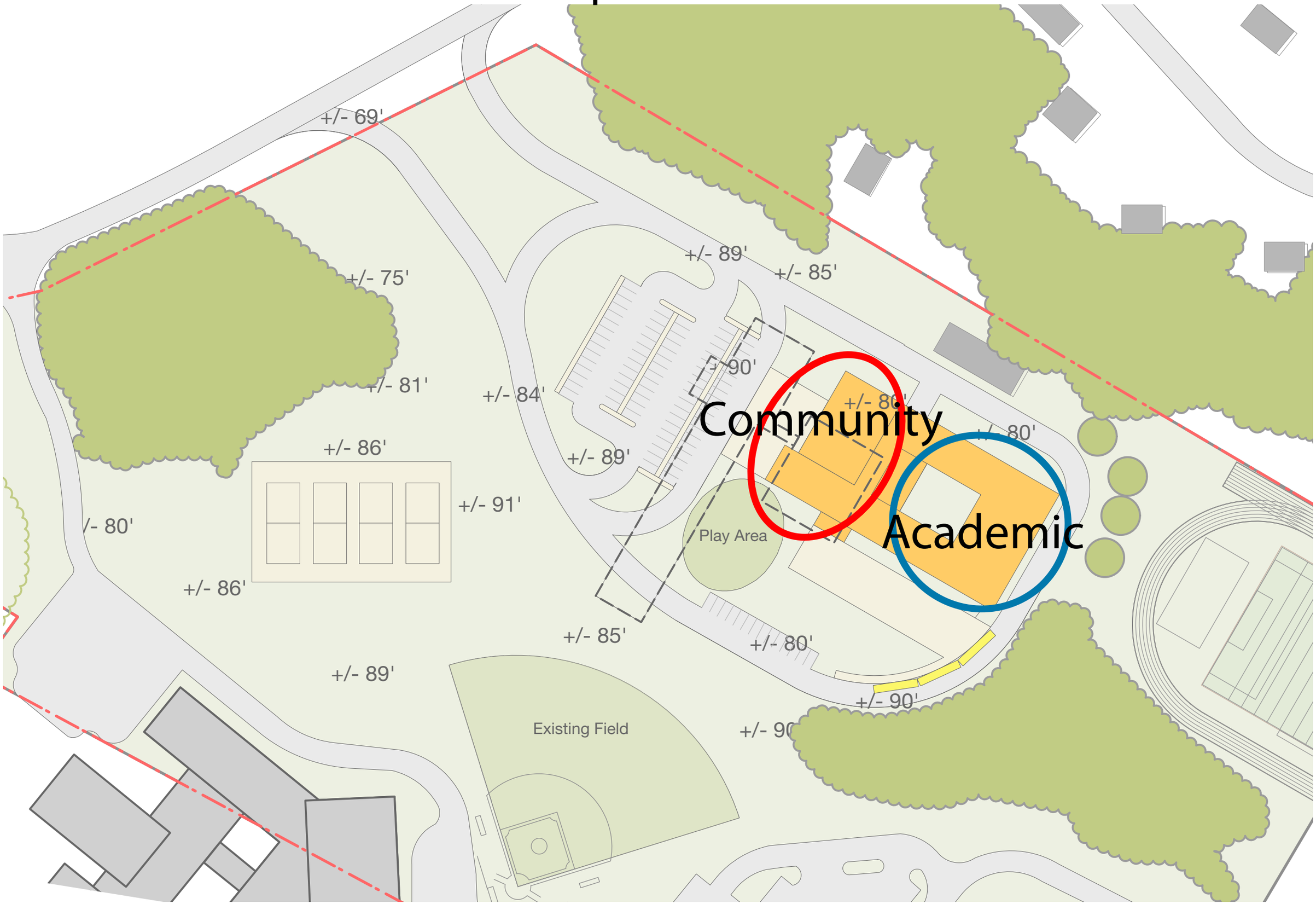
Peebles New Construction Option 1



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles New Construction Option 1



Peebles Elementary School | Bourne, MA

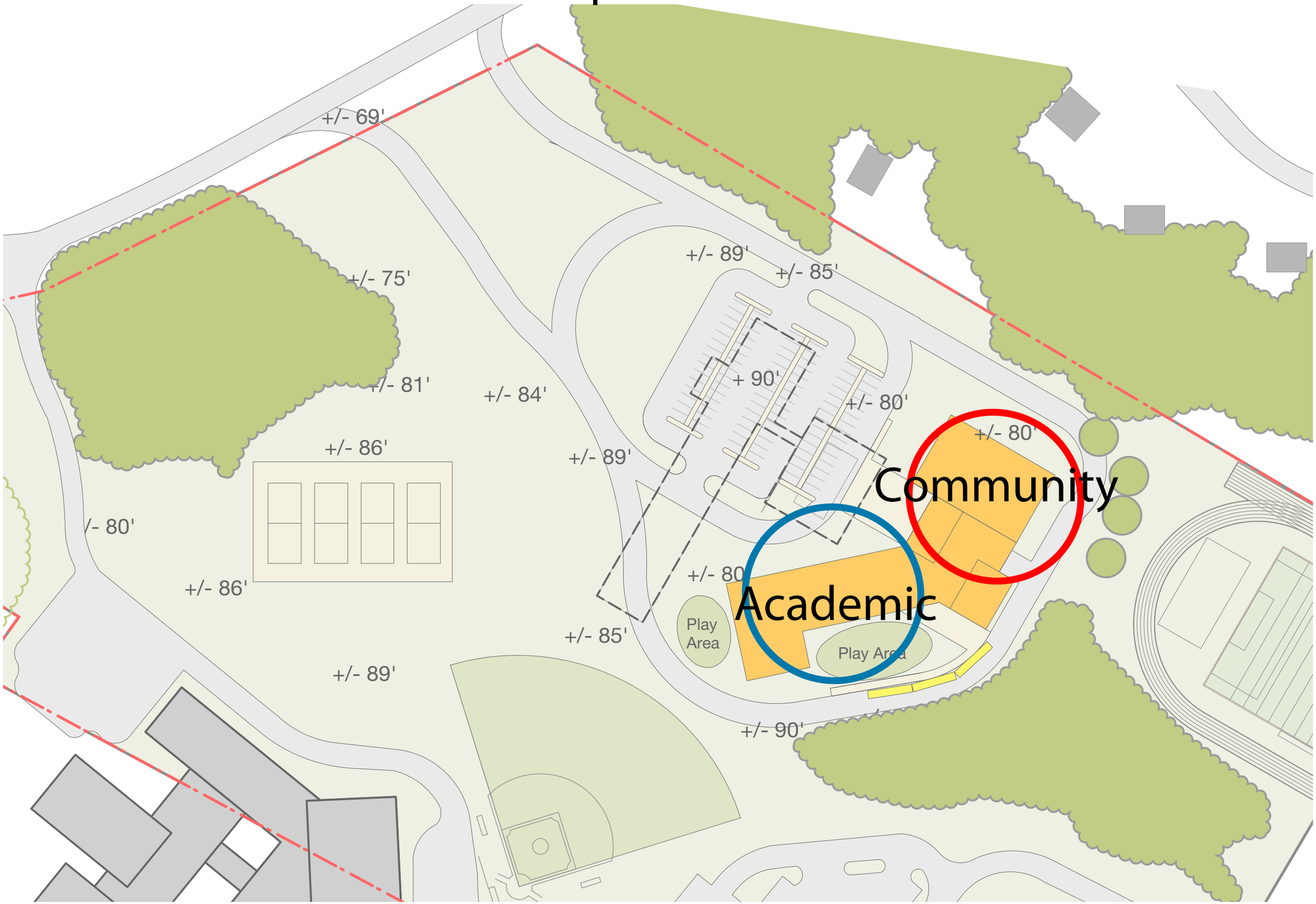
Flansburgh Architects

Peebles New Construction Option 2

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles New Construction Option 2



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles New Construction Option 3

Peebles Elementary School | Bourne, MA

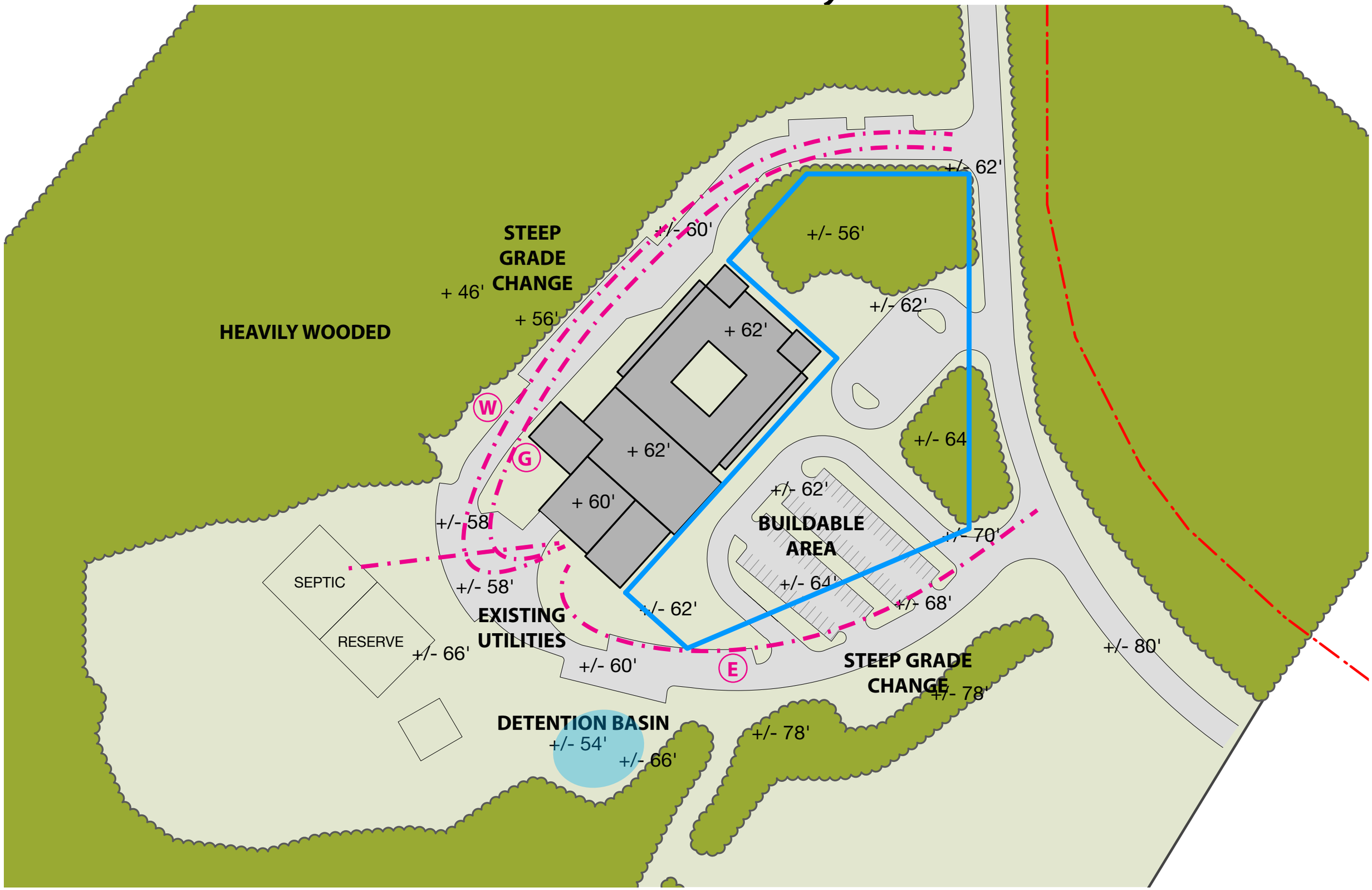
Flansburgh Architects

Peebles New Construction Option 3

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Buildable Area: Bournedale Elementary



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Addition / Renovation Option 1

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Addition / Renovation Option 1

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Addition / Renovation Option 2

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Addition / Renovation Option 2

Bournedale Addition / Renovation Option 3

Bournedale Addition / Renovation Option 3

Peebles Elementary School | Bourne, MA

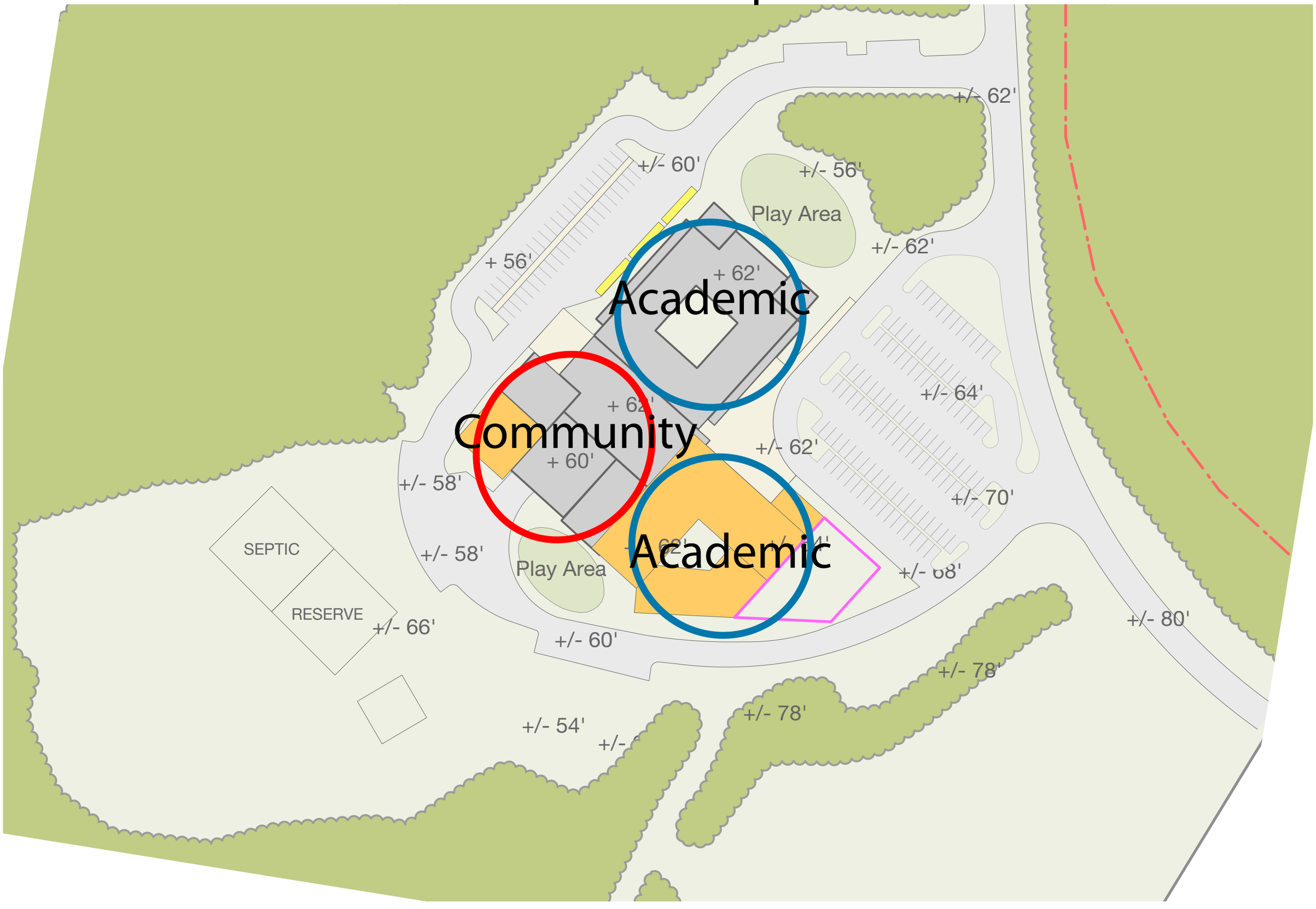
Flansburgh Architects

Bournedale Addition / Renovation Option 4

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Addition / Renovation Option 4



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Typical Evaluation Criteria

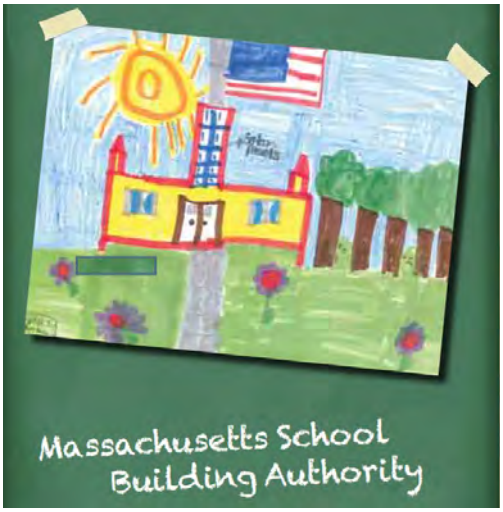
- Size of School
- Grade Separation Issues
- Traffic Impact
- Opportunity for Collaboration
- Separation of Community and Academic Uses
- Limits Disruption to Students
- Most Cost Effective
- Maximum Building Efficiency
- Maximum Score for NE-CHPS / LEED for Schools
- Most Beneficial Construction Schedule
- Best Site Option for Neighborhood Schools
- Adequate Play & Parking Areas
- Least Environmental Impact
- Best Space Adjacencies
- Best Separation of Parent / Bus / Service Circulation

Criteria Specific to Bourne

- Best Resolves Geographic Separation by Canal
- Advantages to Middle School
- Centralized Elementary Resources
- Centralized Campus Resources

Bourne Elementary Schools Visioning Workshop

Join us at a community meeting to discuss...

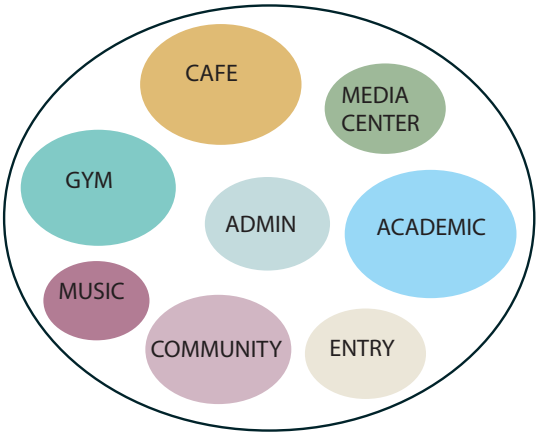


MSBA process & schedule

Learn about the partnership with the MSBA & the project schedule

Feasibility study scope

Understand the steps required to develop the feasibility study



SCHOOL PROGRAM

Educational programming

Review the Visioning sessions and the steps taken to develop the program

Existing school conditions

We will provide an overview of the District's school buildings' systems in relation to performance and code compliance

Location: Bournedale Elementary School Cafeteria, 41 Ernest Valeri Rd, Bourne

Date/Time: November 17, 6:00 - 8:00 PM ***Child care will be provided at the school***

Project Management SMMA **Flansburgh** Architects **Sponsored by the School Building Committee**

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	11/19/2015
Re:	School Building Committee Meeting	Meeting No:	7
Location:	Bourne Veteran's Memorial Community Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	James L. Potter	Chairman, School Building Committee	**Voting Member**
✓	Peter J. Meier	Board of Selectmen	**Voting Member**
✓	Christopher Hyldburg	Chairman, School Committee	**Voting Member**
✓	Laura Scena	Member, School Committee	**Voting Member**
✓	Natasha Scarpato	Member at Large	**Voting Member**
	Richard A. Lavoie	Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
✓	Mary Jo Coggeshall	Member at Large	**Voting Member**
✓	Frederick H. Howe	Board of Health	**Voting Member**
✓	Steven M. Lamarche	Superintendent of Schools, BPS	**Voting Member**
✓	Edward S. Donoghue	Director of Business Services, BPS	Non-Voting Member
	Thomas M. Guerino	Town Administrator	Non-Voting Member
	Jonathan Nelson	Director of Facilities, Town of Bourne	Non-Voting Member
	Elizabeth A. Carpenito	Principal, BES	Non-Voting Member
✓	Kathy Anderson	Elementary/Special Education Secretary	Non-Voting Member
✓	Janey Norton	Principal, PES	
✓	Kent Kovacs	FAI, Architect	
✓	Betsy Farrell Garcia	FAI, Architect	
	Jorge Cruz	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
7.1	Record	Call to Order, 6:30 PM, meeting opened.
7.2	Record	J. Potter introduced N. Scarpato as a new Committee member.
7.3	Record	A motion was made by P. Meier and seconded by F. Howe to approve the 10/22/15 School Building Committee meeting minutes. No discussion, motion passed unanimous by those attending, two abstentions.
7.4	Record	A motion was made by P. Meier and seconded by F. Howe to approve the 11/5/15 School Building Committee meeting minutes. No discussion, motion passed unanimous by those attending, three abstentions.
7.5	Record	Warrant No. 2 was reviewed. A motion was made by P. Meier and seconded by F. Howe to approve Warrant No. 2. No discussion, motion passed unanimous.
7.6	J. Seeley	J. Seeley distributed and reviewed a letter and revised Study Enrollment Certification from MSBA, dated 11/16/15 and attached, agreeing to the request to add a Peebles K-4 with a District-wide 5th grade alternative to review in the Feasibility Study. A motion was made by S. Lamarche and seconded by C. Hyldburg to execute the revised Study Enrollment Certification. No discussion, motion passed unanimous. J. Seeley to forward the executed revised Study Enrollment Certification to MSBA.
7.7	K. Kovacs	K. Kovacs to forward the meeting minutes from the 11/6/15 Educational Program Meeting.
7.8	J. Seeley	J. Seeley to provide a projection of additional Environmental and Site Consultancies for the PSR and SD Phases. J. Seeley will determine once the PDP phase is more complete.
7.9	Record	J. Potter indicated he has heard back from the Town Moderator relative to the 2010 Town Bi-Law regarding committee member attendance. The Committee is to provide a report at the end of June each year to the Moderator and if attendance is a problem it should be noted therein.
7.10	Record	K. Kovacs indicated the PES campus sewage treatment plant has a capacity of 35,400 GPD and has an average usage of 12,000 GPD, therefore there is capacity to accommodate the 250 student or 410 student design options. Committee Discussion: 1. S. Lamarche asked if a new sewage treatment plant would have been required at the PES site, would it have been reimbursable? *J. Seeley indicated MSBA generally does not reimburse for sewage treatment plants.*
7.11	K. Kovacs	K. Kovacs contacted Cape Light Compact to review potential incentives or rebates for energy upgrades. Cape Light has a list of energy efficient elements that they may participate in, provided their requirements are followed. At this early stage, these will be noted and will be more fully vetted in Schematic Design. K. Kovacs to forward the list of the energy efficient elements to the Committee.

Item #	Action	Discussion
7.12	Record	K. Kovacs indicated the existing electrical service capacity at BES is sufficient to accommodate the 725 and 885 student design options.
7.13	K. Kovacs	K. Kovacs indicated the engineers are still reviewing the gas service capacity at BES.
7.14	Record	K. Kovacs indicated the existing sanitary septic field's capacity at BES is sized to accommodate the current student population only and is in-sufficient to accommodate the 725 and 885 student design options. Committee Discussion: 1. S. Lamarche asked if expanding the existing sanitary septic field at the BES site would be reimbursable. *J. Seeley indicated yes, the MSBA generally would reimburse for expanding an existing sanitary septic field, however the 8% site cap may constrain the overall site reimbursement.*
7.15	S. Lamarche P. Meier K. Kovacs	K. Kovacs led a discussion on an overview of Community Forum No. 2, held on 11/17/15 and Community Forum No. 3, scheduled for 12/8/15. Committee Discussion: 1. P. Meier asked if there could be additional advertising for the next Community Forum. *S. Lamarche indicated the School Administration sent out two email notifications, in addition to the seven poster boards distributed in town buildings and the flyers posted and emailed.* *S. Lamarche indicated the School Administration will also send out a text message.* *P. Meier indicated he will contact the Bourne Enterprise* 2. P. Meier indicated there was some concern from the community that the Committee was moving too fast and deciding on an option without community input. *J. Seeley indicated the Committee won't decide on an option in the PDP phase, but will select a minimum of three options to be further studied in the PSR phase. The PSR phase is the phase in which the Committee will need to select the one preferred option and will need the full time scheduled for maximum community input.* 3. N. Scarpato indicated there was a mix-up in the child care coverage. *J. Norton indicated she will coordinate the child care coverage for Community Forum No. 3.* 4. K. Kovacs suggested opening Community Forum No. 3 with a quick tour of the school. 5. K. Kovacs to forward the flyer for Community Forum No. 3 and the seven poster boards for distribution.

Item #	Action	Discussion
7.16	K. Kovacs	K. Kovacs presented and reviewed a Powerpoint presentation, attached, on preliminary design options as follows: 1. PES – New Construction Option 1A 2. PES – New Construction Option 1B 3. PES – New Construction Option 1C 4. PES – New Construction Option 1D 5. PES – New Construction Option 1E 6. PES – Renovation/Addition Option 1F 7. PES – Renovation/Addition Option 1G 8. BES - Renovation/Addition Option 2A 9. BES - Renovation/Addition Option 2B 10. BES - Renovation/Addition Option 2C 11. BES - Renovation/Addition Option 2D 12. BES - Renovation/Addition Option 3A 13. BES - Renovation/Addition Option 3B 14. BES - Renovation/Addition Option 3C 15. BES - Renovation/Addition Option 3D Committee Discussion relative to the PES design options: 1. Option 1A is a good building location. 2. Option 1B site is very steep and the plan will be a split level. 3. Option 1C requires partial demolition of the occupied school inorder to build the new school and is on the downward slope from the entry drive. 4. Option 1D requires building very close to the occupied school and is on the downward slope from the entry drive. 5. Option 1E removes two of the existing soccer fields and in appearance, will be perceived as part of the middle school complex due to its proximity. 6. Option 1F places the majority of the additions behind the existing school. 7. Option 1G can provide for a new building appearance with both additions being placed on the front of the existing school. After discussion the Committee decided to continue to refine and cost estimate Options 1A and 1G. Committee Discussion relative to the BES 725 student design options: 1. Option 2A is a good layout and provides a clear building entry. 2. Option 2B has scattered parking. 3. Option 2C has very long travel distances from the remote academic wing to the community spaces. 4. Option 2D has long travel distances from the remote academic wing to the community spaces. After discussion the Committee decided to continue to refine and cost estimate Option 2A. Committee Discussion relative to the BES 885 student design options:

Item #	Action	Discussion
		1. Option 3A provides a clear building entry. 2. Option 3B is a good option for such a large building with a clearly demarcated line between the community spaces and the academic spaces. 3. Option 3C has very long travel distances from the remote academic wing to the community spaces. 4. Option 3D has long travel distances from the remote academic wing to the community spaces. After discussion the Committee decided to modify the design for Option 3A and continue to refine and cost estimate both Options 3A and 3B.
7.17	K. Kovacs	K. Kovacs presented and reviewed a Powerpoint presentation, attached, on preliminary LEED goals. Committee Discussion: 1. J. Potter asked if FAI can provide information on historical costs against actual savings for LEED elements from their recent projects? *K. Kovacs will provide for Committee review.*
7.18	J. Seeley	Video-taping the SBC meetings for viewing on BourneTV was discussed. A Motion was made by S. Lamarche and seconded by L. Scena to video tape as many of the SBC meetings as possible. No discussion, motion passed unanimous. J. Seeley to coordinate with Bourne TV and the Community Center Director.
7.19	P. Meier J. Seeley	Committee Questions: 1. S. Lamarche asked if the Moderator can provide direction on the process to be followed to fill vacant Committee seats in the future? *P. Meier will follow-up with the Moderator on the process to be followed.* 2. R. Howe discussed the proposed "Technology use during Open Meeting" policy contemplated by the Selectmen and requests the Committee provide feedback to the Selectmen for their deliberation. *J. Seeley to place this topic on the agenda for the next Committee meeting.*
7.20	Record	Next **SBC Meeting: December 3, 2015 at 6:30 pm** at the Bourne Veteran's Memorial Community Center.
7.21	Record	A Motion was made by P. Meier and seconded by R. Howe to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, Letter and revised Study Enrollment Certification from MSBA dated 11/16/15, Powerpoint presentation

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	11/19/2015
Re:	School Building Committee Meeting	Meeting No:	7
Location:	Bourne Veterans Memorial Community Center, 234 Main Street, Buzzards Bay, Massachusetts	Time:	6:30pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	James L. Potter	onsetjp@juno.com	Chairman, School Building Committee
	Peter J. Meier	pmeier@townofbourne.com	Bourne Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
			Member
	Richard A. Lavoie	Richl.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	Mary Jo Coggeshall	mjcoggeshall@bourneps.org	At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Jonathan Nelson	jnelson@townofbourne.com	Director of Facilities, Town of Bourne
	Elizabeth A. Carpenito	ecarpenito@bourneps.org	Principal, BES
	Kathy Anderson	kanderson@bourneps.org	Elementary/Special Education Secretary
	Janey Norton	jnorton@bourneps.org	Principal, PES
	Kent Kovacs	kkovacs@flansburgh.com	Flansburgh Architects
	Betsy Farrell Garcia	bgarcia@flansburgh.com	Flansburgh Architects
	Joel Seeley	jseeley@smma.com	SMMA
	Natasha Scarpato	Scarpato4@comcast.net	Member at large

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AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	11/19/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:30 PM
Distribution:	Committee Members (MF)	Meeting No.:	7

1. Call to Order
2. Approval of Minutes – October 22, 2015 and November 5, 2015
3. Approval of Invoices and Commitments
4. Community Forum No. 2 Recap
5. Educational Program Update
6. Presentation of Construction Alternatives
7. Discussion of Sustainable Design Goals
8. Videotaping SBC Meetings
9. Committee Questions
10. Public Comments
11. Next Meeting – December 3, 2015
12. Adjourn

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Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

John K. McCarthy
Executive Director

November 16, 2015

Mr. Steven Lamarche, Superintendent
Bourne Public Schools
36 Sandwich Road
Bourne, MA 02532

Re: Town of Bourne, James F. Peebles Elementary School

Dear Superintendent Lamarche:

I would like to thank you and your team for continuing to work with the Massachusetts School Building Authority (the "MSBA") towards the most educationally appropriate and cost effective solution for the James F. Peebles Elementary School (the "Proposed Project") in the Town of Bourne (the "District"). This letter is a follow up to previous correspondence regarding the enrollment projections for the Proposed Project, and in particular to your letter dated November 3, 2015, requesting an additional study enrollment recommendation for a potential project serving grades K-4 at the James F. Peebles Elementary School and district-wide grade 5 population.

A detailed explanation of the MSBA's base enrollment projection and adjustments for the Bourne Public Schools, upon which the executed Study Enrollment Certification for the Proposed Project is based, has been provided through previous correspondence. The MSBA's enrollment letter to the District dated December 11, 2014 identified a district-wide K-4 projected enrollment of 725 students and a district-wide K-5 enrollment of 885 students. For planning and study purposes, the MSBA also offered a study enrollment recommendation of 250 students for a potential project serving grades K-4 at the James F. Peebles Elementary School. Attached please find an updated enrollment certification that provides study enrollment recommendations as follows:

- District-wide Grades K-5 in one elementary school: 885 students
- District-wide Grades K-4 in one elementary school: 725 students
- Peebles Elementary School Grades K-4: 250 students
- Peebles Elementary School Grades K-4 and District-wide Grade 5: 410 students

As stated in previous correspondence, the MSBA's study enrollment recommendations assume full utilization of all remaining school facilities. Accordingly, as part of the Feasibility Study, the District will be required to determine the enrollment capacity of each existing facility anticipated to remain in service and provide an educational program

for each proposed configuration. If grade reconfiguration and/or school consolidation has been determined to be the Preferred Solution, the District will also be required to demonstrate in the Preferred Schematic Report that any consolidation and/or reconfiguration proposed as the District's Preferred Solution supports the delivery of its educational program and has been approved by the School Committee and other necessary local officials. Further, the MSBA will require a written plan from the District describing the process for determining local support for potential grade reconfiguration and school closures. Upon approval of the District's Preferred Solution, the MSBA will forward a design enrollment certification that is specific to the grade configuration associated with the approved Preferred Solution.

The MSBA believes that this study enrollment recommendation will position the District to efficiently meet space capacity needs throughout future enrollment variations. Please sign and return the attached certification within 21 calendar days to confirm agreement on this study enrollment. If the District feels that this study enrollment does not meet the needs of the District, please respond to this letter via e-mail to Katie DeCristofaro and propose three meeting/conference call times for which the District can be available to discuss enrollment.

If you have any questions, please do not hesitate to contact me or Katie DeCristofaro (Kathryn.DeCristofaro@MassSchoolBuildings.org) at 617-720-4466.

Sincerely,

Mary Pichetti
Director of Capital Planning

Cc: Legislative Delegation
Stephen F. Mealy, Chair, Bourne Board of Selectmen
Thomas M. Guerino, Bourne Town Administrator
Christopher Hyldburg, Chair, Bourne School Committee
Edward Donoghue, Director of Business Services, Bourne Public Schools
James Potter, Chair, Bourne School Building Committee
Joel Seeley, Owner's Project Manager, Symmes Maini & McKee Associates
Kent Kovacs, Designer, Flansburgh Associates, Inc.
File: 1.2 Enrollment Projections (Region 6)

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

TOWN OF BOURNE
JAMES F. PEEBLES ELEMENTARY SCHOOL
STUDY ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the proposed project at the James F. Peebles Elementary School, the Town of Bourne hereby acknowledges and agrees that the design of preliminary options which may be evaluated as part of the feasibility study for the proposed project at the James F. Peebles Elementary School shall be based in accordance with the following:

Enrollment for Grades K-5 at a District-wide Elementary School	**Enrollment for Grades K-4 at a District-wide Elementary School**	**Enrollment for Grades K-4 at the James F. Peebles Elementary School including District-wide Grade 5**	**Enrollment for Grades K-4 at the James F. Peebles Elementary School**
885 students	725 students	410 students	250 students

The space allowance for each alternative evaluated shall assume no more than the enrollments as detailed in the table above. The Town of Bourne acknowledges and agrees that it has no right or entitlement to any particular study enrollment, square feet per student space allowance, or total square footage referenced in the table above for the preliminary options, and further acknowledges and agrees that it shall not bring any or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the study enrollment of the James F. Peebles Elementary School that it has acknowledged and agreed herein. The Town of Bourne further acknowledges and agrees that the study enrollment presented herein is only applicable to the evaluation of preliminary options conducted as part of the feasibility study for the proposed James F. Peebles Elementary School project. Upon receipt of the District's recommendation of a Preferred Schematic Design for the proposed James F. Peebles Elementary School project, and subject to the MSBA's review of such recommendation, the MSBA shall forward a Design Enrollment Certification with a design enrollment specific to the recommended and approved Preferred Schematic Design, which shall supersede this certification.

The undersigned, for themselves and the Town of Bourne, hereby certify that they have read and understand the contents of this Study Enrollment Certification and that each of the above statements is true, complete and accurate. The undersigned hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the Town of Bourne and to bind the Town of Bourne to its terms.

Chief Executive Officer

Duly Authorized Representative of School Committee

Date

Date

Superintendent of Schools

Date

Peebles Campus

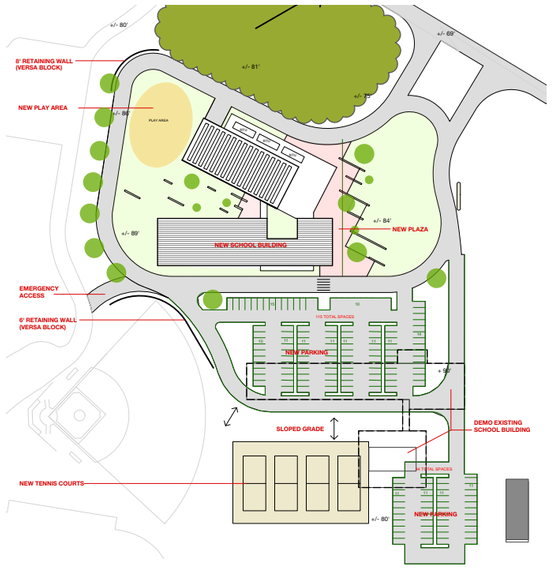
PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

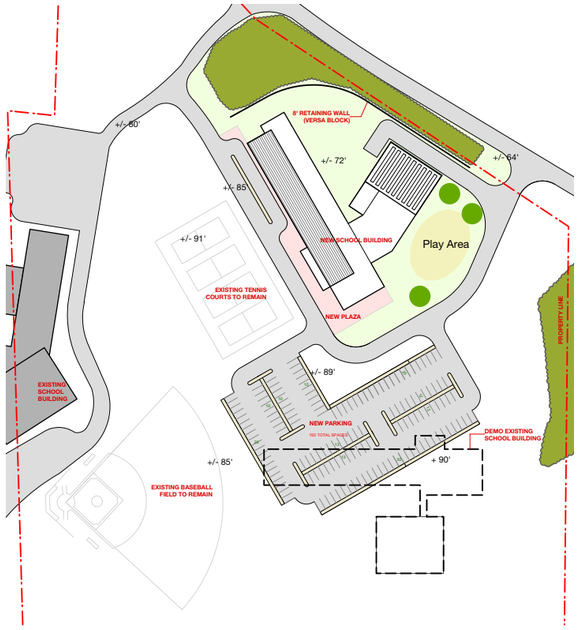
Peebles New Construction Option 1A

New: 57,248 SF



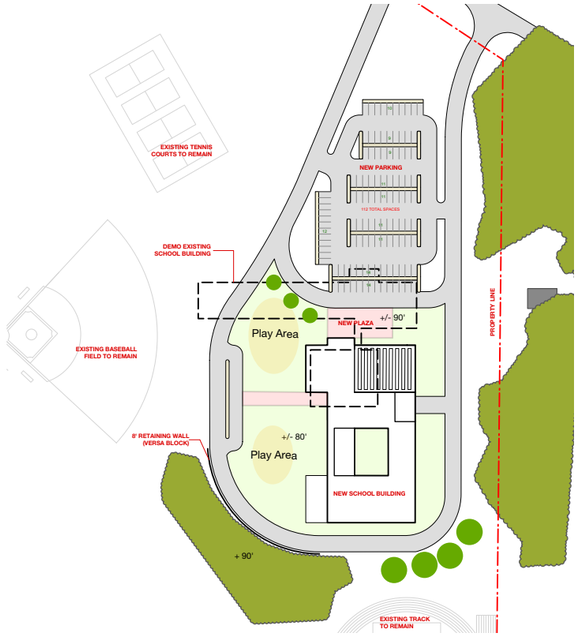
Peebles New Construction Option 1B

New: 57,248 SF



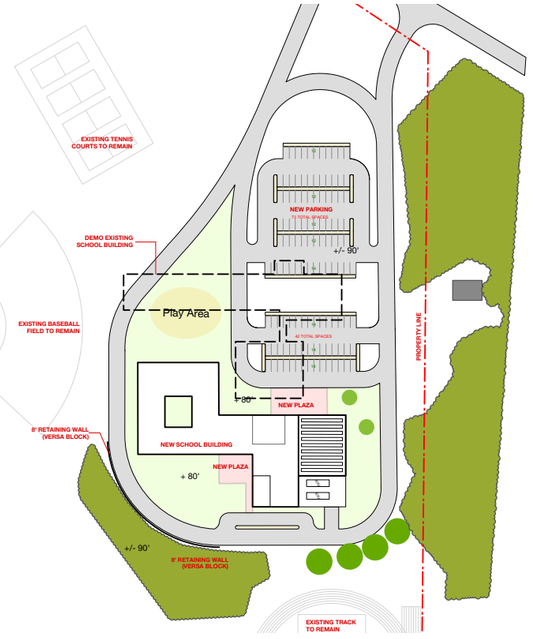
Peebles New Construction Option 1C

New: 57,248 SF



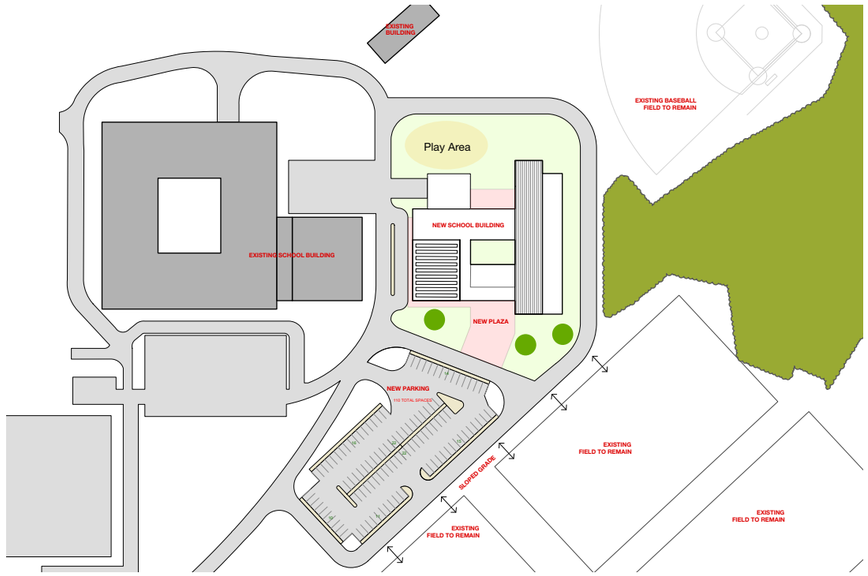
Peebles New Construction Option 1D

New: 57,248 SF



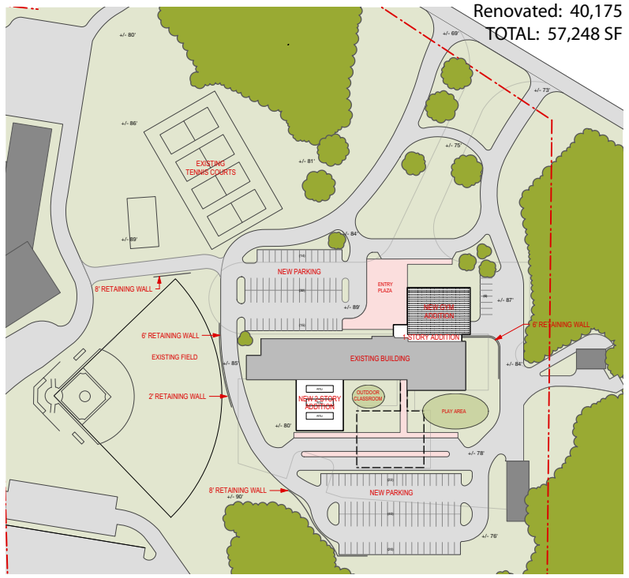
Peebles New Construction Option 1E

New: 57,248 SF



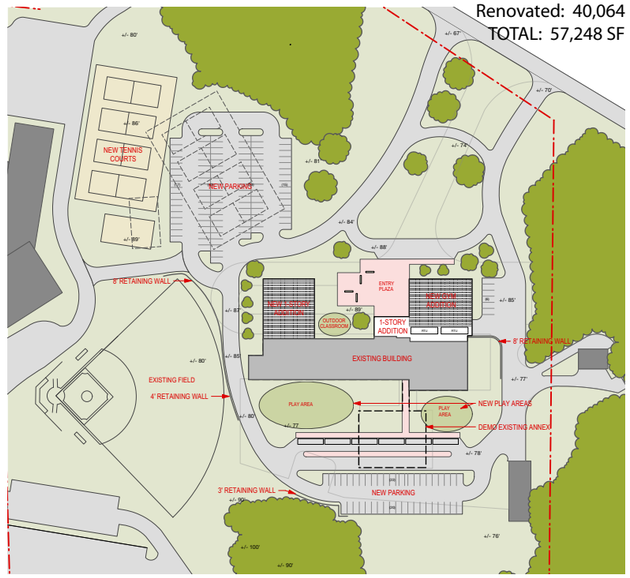
Peebles Addition/Renovation Option 1F

New: 17,073 SF
Renovated: 40,175
TOTAL: 57,248 SF



Peebles Addition/Renovation Option 1G

New: 17,184 SF
Renovated: 40,064
TOTAL: 57,248 SF



Bournedale Campus

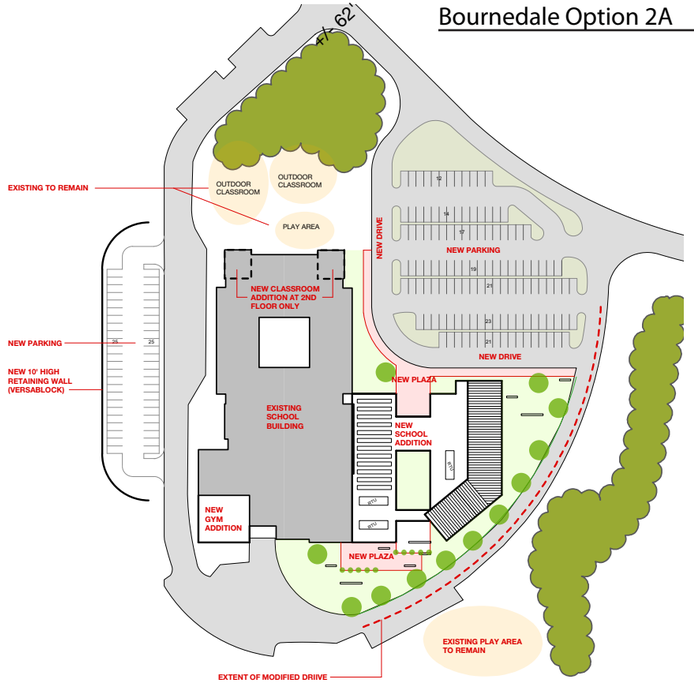
PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

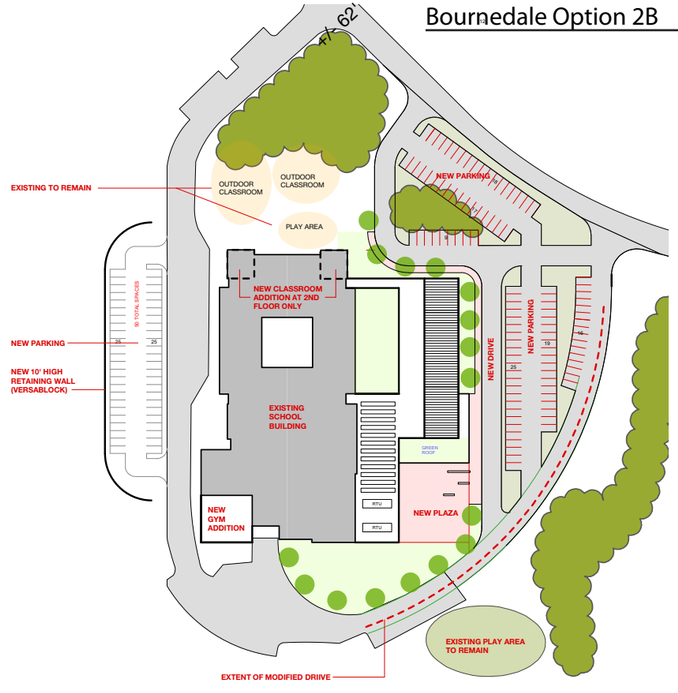
Bournedale Option 2A

New: 46,493 SF
Renovated: 68,100 SF
TOTAL: 114,593 SF



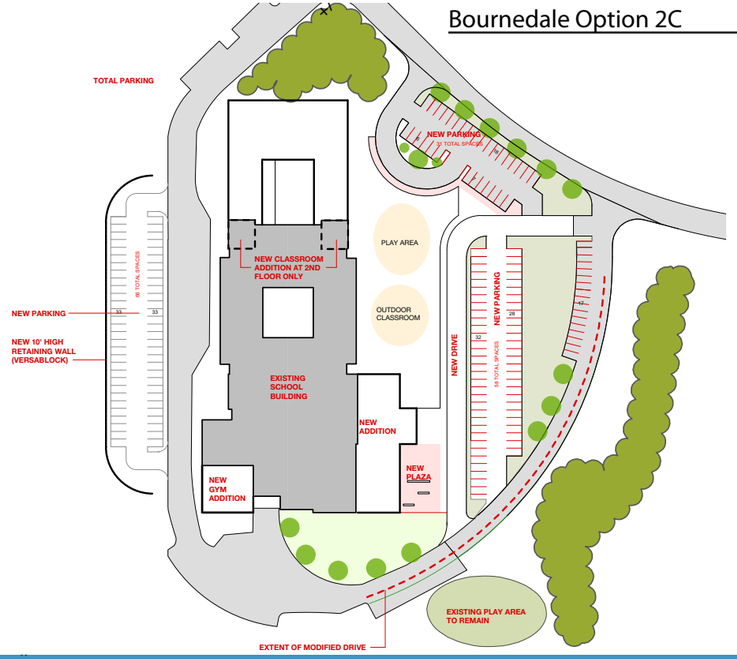
Bournedale Option 2B

New: 46,493 SF
Renovated: 68,100 SF
TOTAL: 114,593 SF



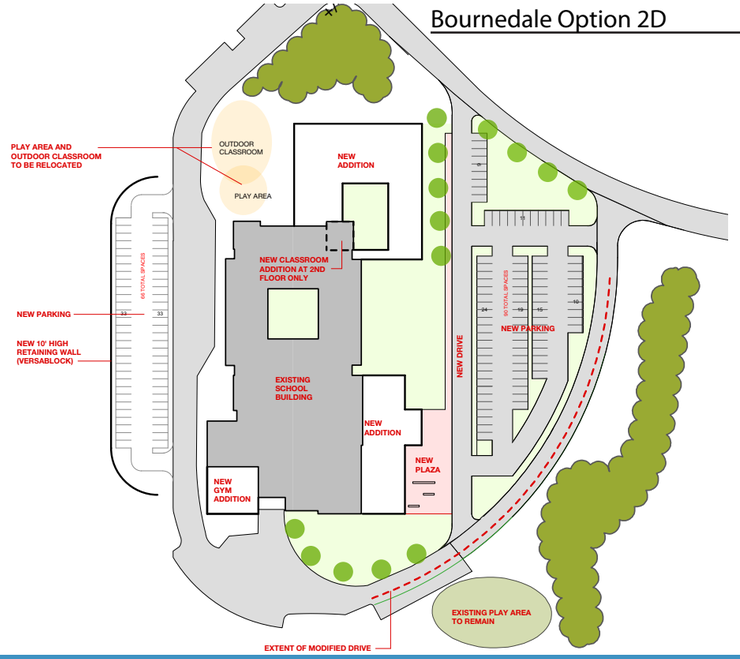
Bournedale Option 2C

New: 46,493 SF
Renovated: 68,100 SF
TOTAL: 114,593 SF



Bournedale Option 2D

New: 46,493 SF
Renovated: 68,100 SF
TOTAL: 114,593 SF



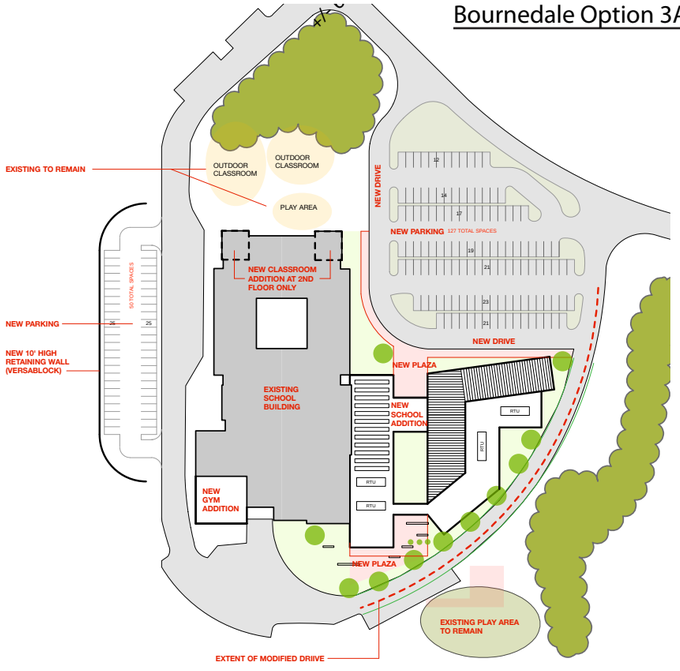
PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

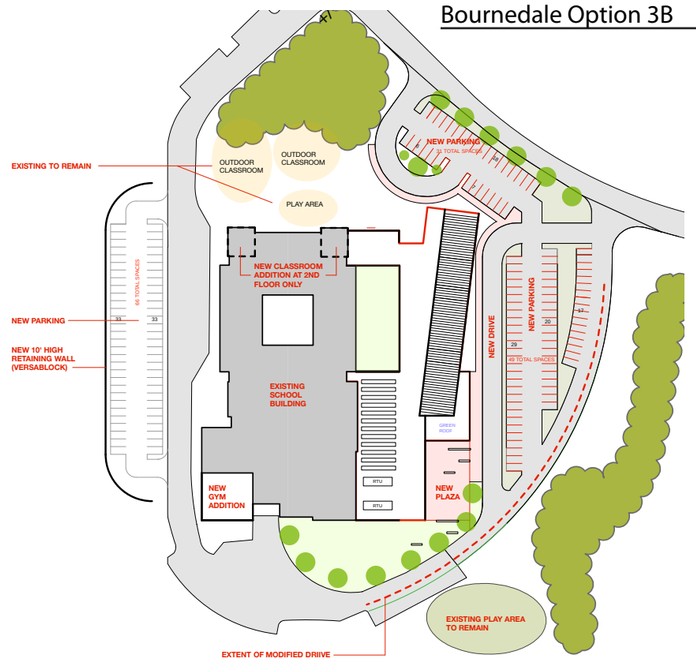
Bournedale Option 3A

New: 63,282 SF
Renovated: 68,100 SF
TOTAL: 131,382 SF



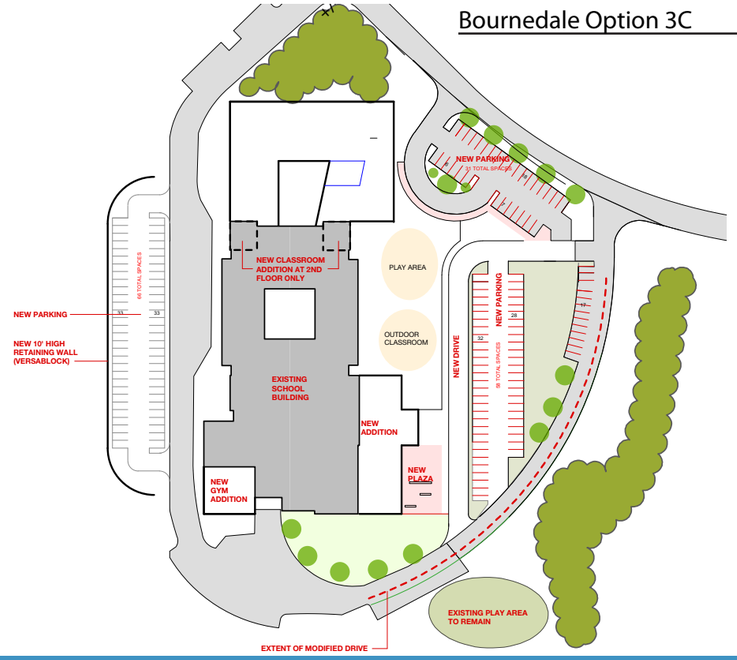
Bournedale Option 3B

New: 63,282 SF
Renovated: 68,100 SF
TOTAL: 131,382 SF



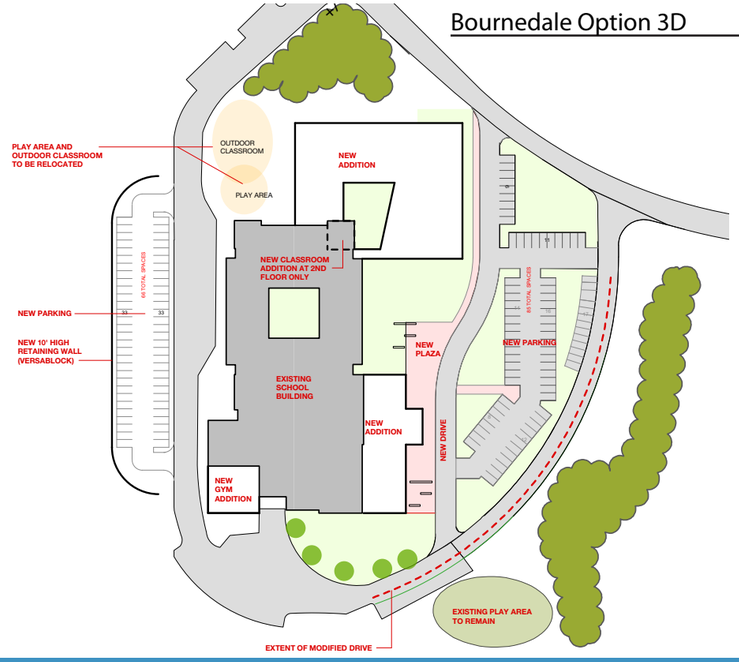
Bournedale Option 3C

New: 63,282 SF
Renovated: 68,100 SF
TOTAL: 131,382 SF



Bournedale Option 3D

New: 63,282 SF
Renovated: 68,100 SF
TOTAL: 131,382 SF



PROJECT MANAGEMENT SMMA
Massachusetts School Building Authority

Flansburgh Architects

School Building Committee Meeting

November 19, 2015

Peebles Elementary School
Feasibility Study

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

COMMUNITY FORUM NO. 2 RECAP

Guiding Principles

- Inquiry-Based Learning
- Flexible and Adaptable Space
- Visible Learning
- A Place You Want to Be
- Collaboration & Connections
- Connections to 21st-Century Learning
- Community Access
- Purposeful Innovation & Creativity
- Future Orientation with Connections to Tradition
- Learning Communities

Design Patterns

- Gathering Spaces
- Varied Spaces / Ubiquitous Learning
- Display & Exhibition Spaces
- Maker Spaces
- Multi-Purpose Spaces
- Collaborative Environments
- Indoor/Outdoor Connections
- Technology & Blended Learning
- Agile Classrooms
- Classroom Neighborhoods
- Effective Storage

PRELIMINARY SITE OPTIONS

MSBA Study Scope

Option 1

Grades
K to 4

Neighborhood
Elementary
School

250 students

Option 2

Grades
PreK to 4

District-wide
Elementary
School

725 students

Option 3

Grades
PreK to 5

District-wide
Elementary
School

885 students

Peebles Campus

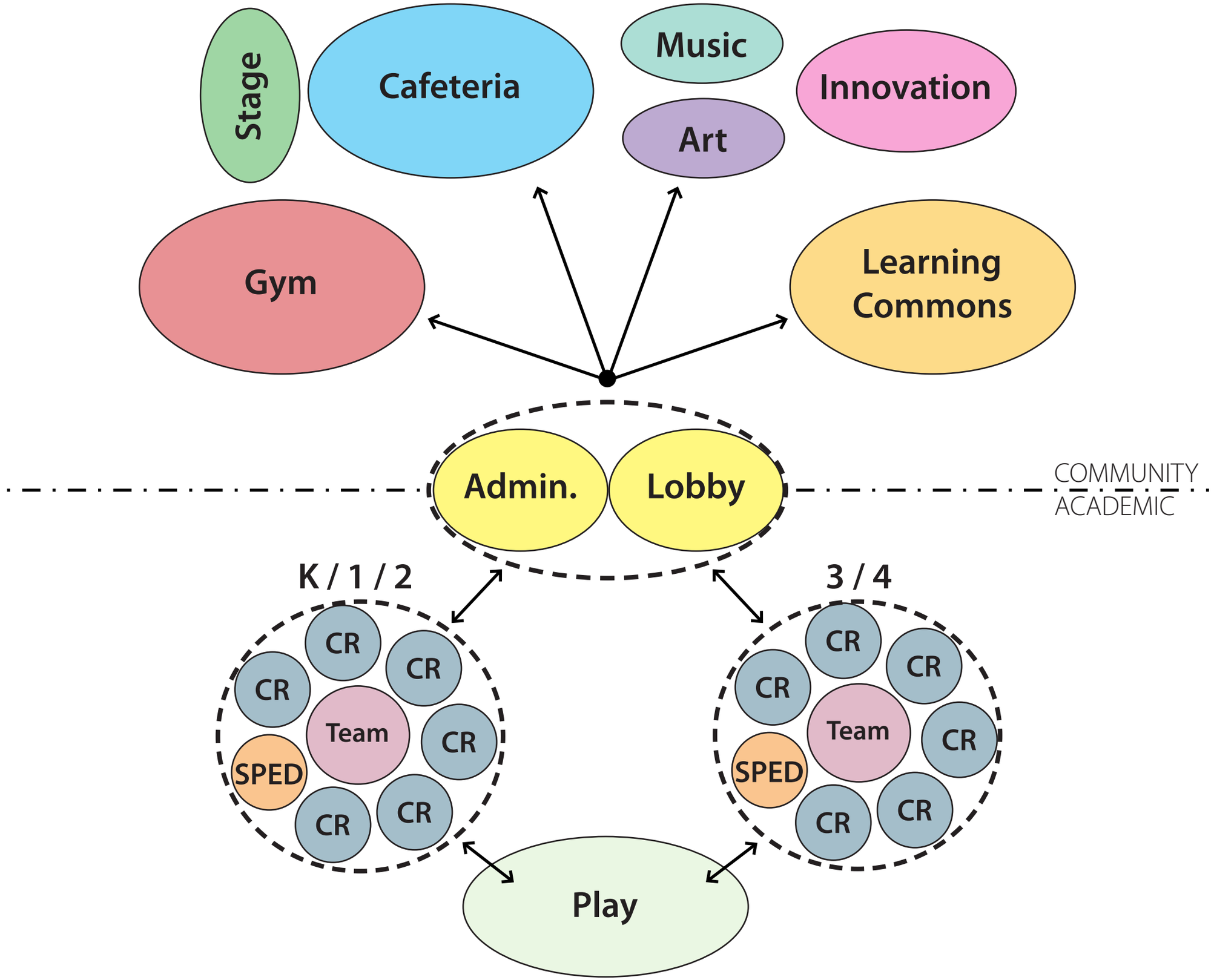
Peebles Elementary School | Bourne, MA

Flansburgh Architects

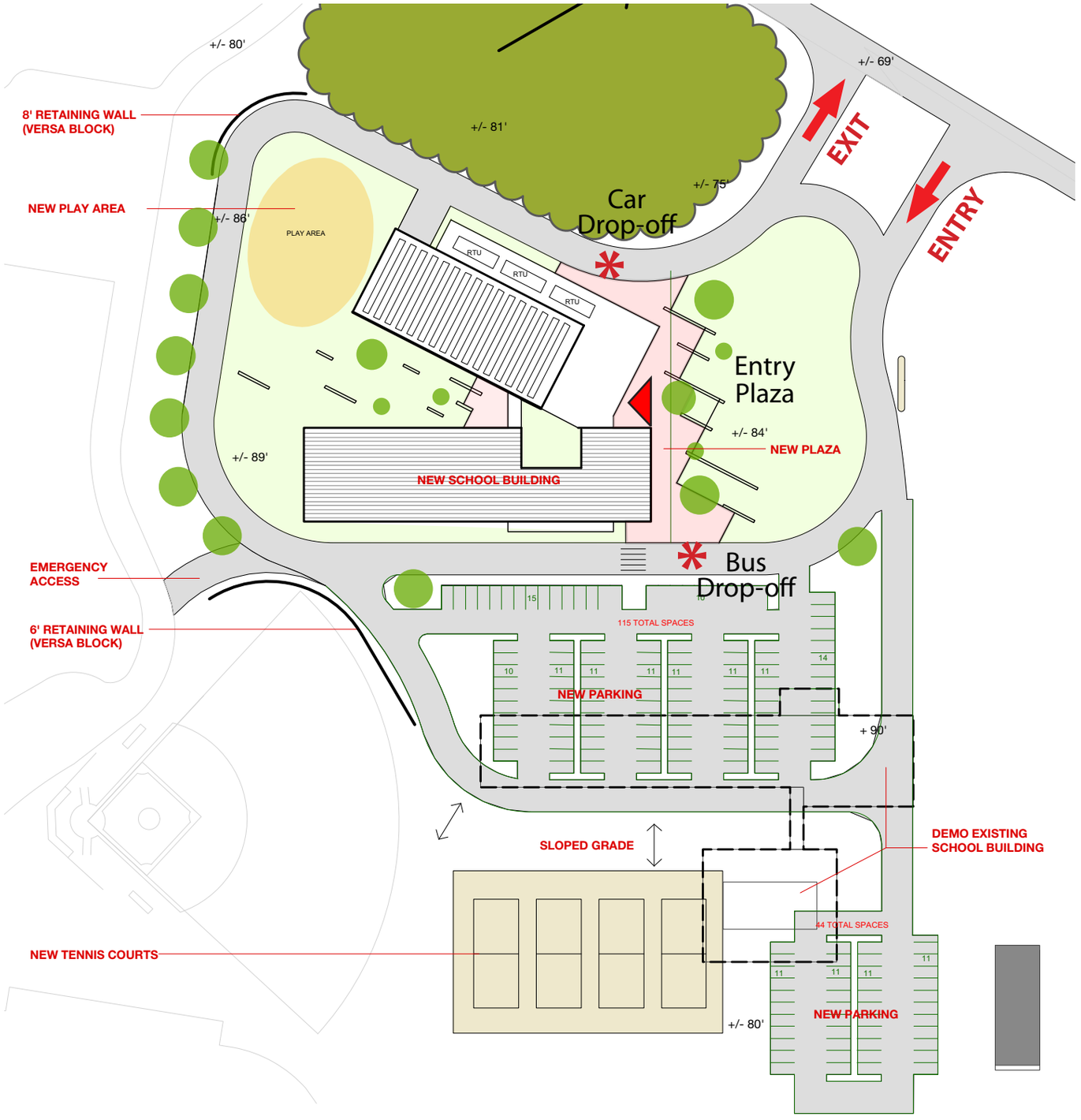
Program Areas - OPTION 1: 250 enrollment

PROGRAM	GRADES K-4
Core Academic	14,400
Special Education	3,020
Art & Music	2,225
Health & Physical Education	6,300
Media Center	2,020
Technology (computer)	1,000
Dining & Food Service	4,875
Medical	410
Administration & Guidance	2,015
Custodial & Maintenance	1,900
Subtotal NSF	**38,165 NSF**
Grossing Factor	x 1.5
Total GSF	**57,248 GSF**
Number of Students	250 Students

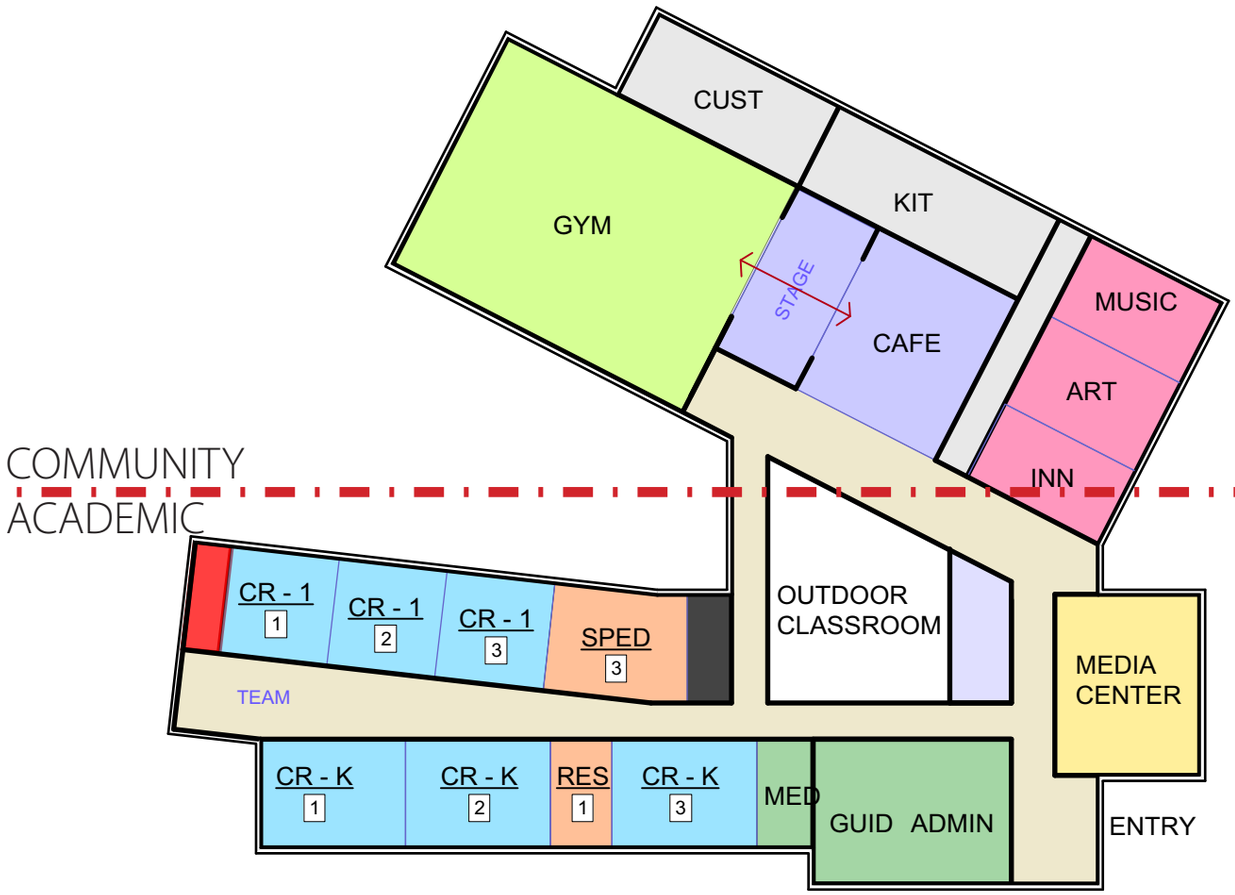
Adjacency Diagram - OPTION 1: 250 enrollment



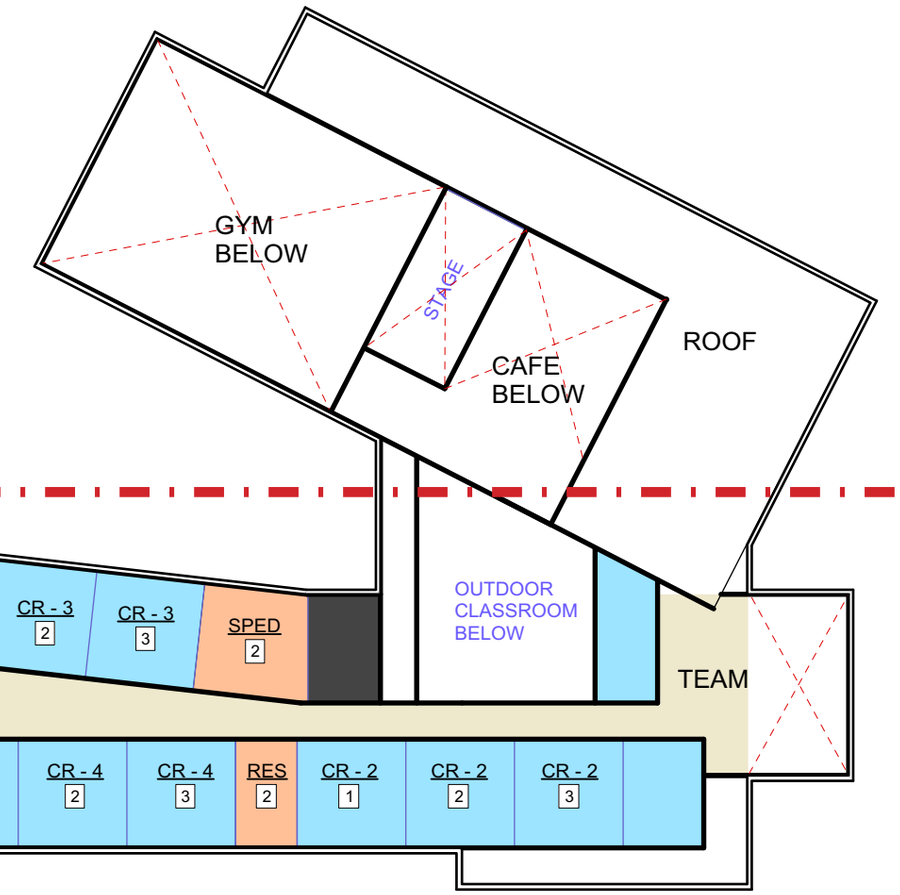
Peebles New Construction Option 1A



Peebles New Construction Option 1A

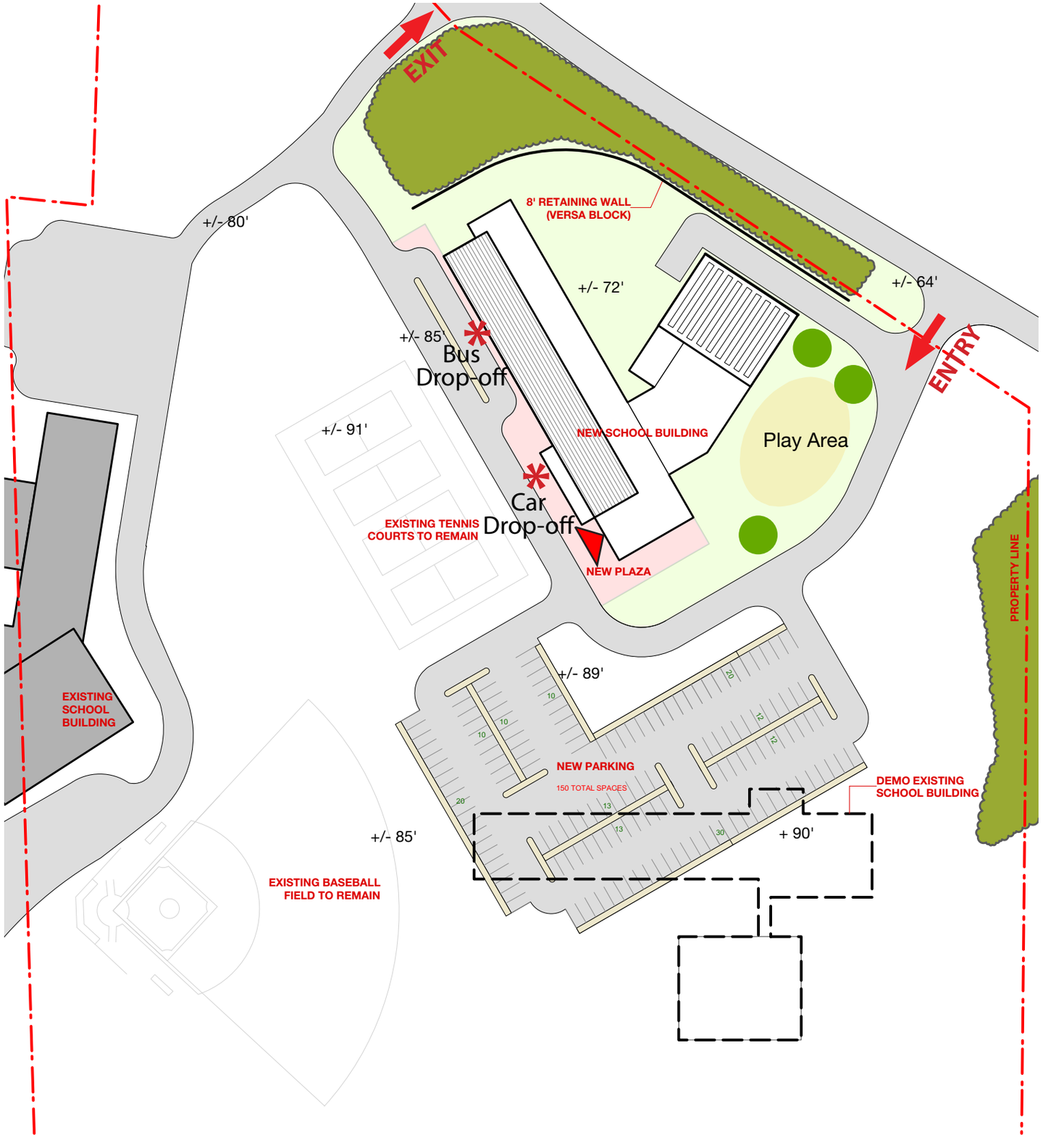


FIRST FLOOR PLAN

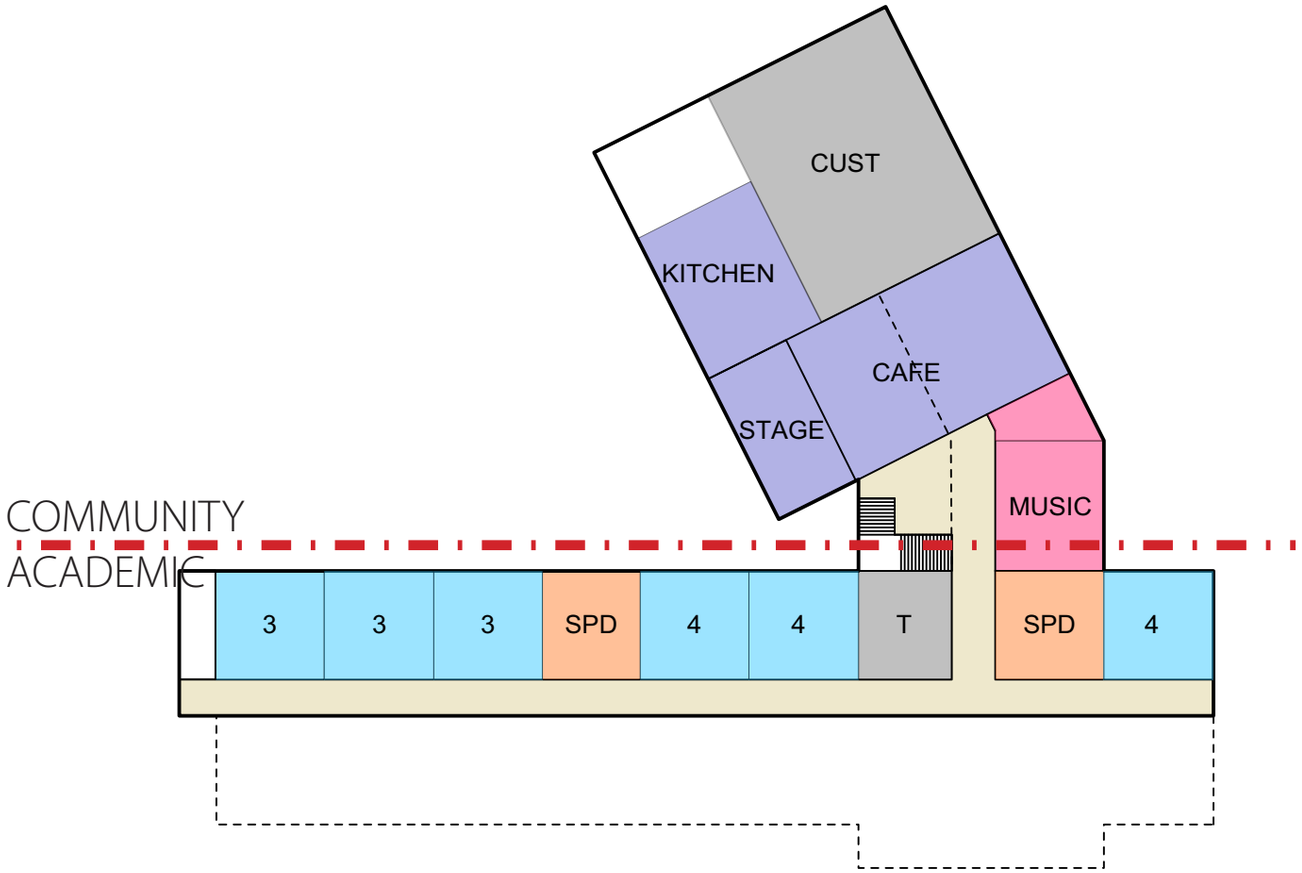


SECOND FLOOR PLAN

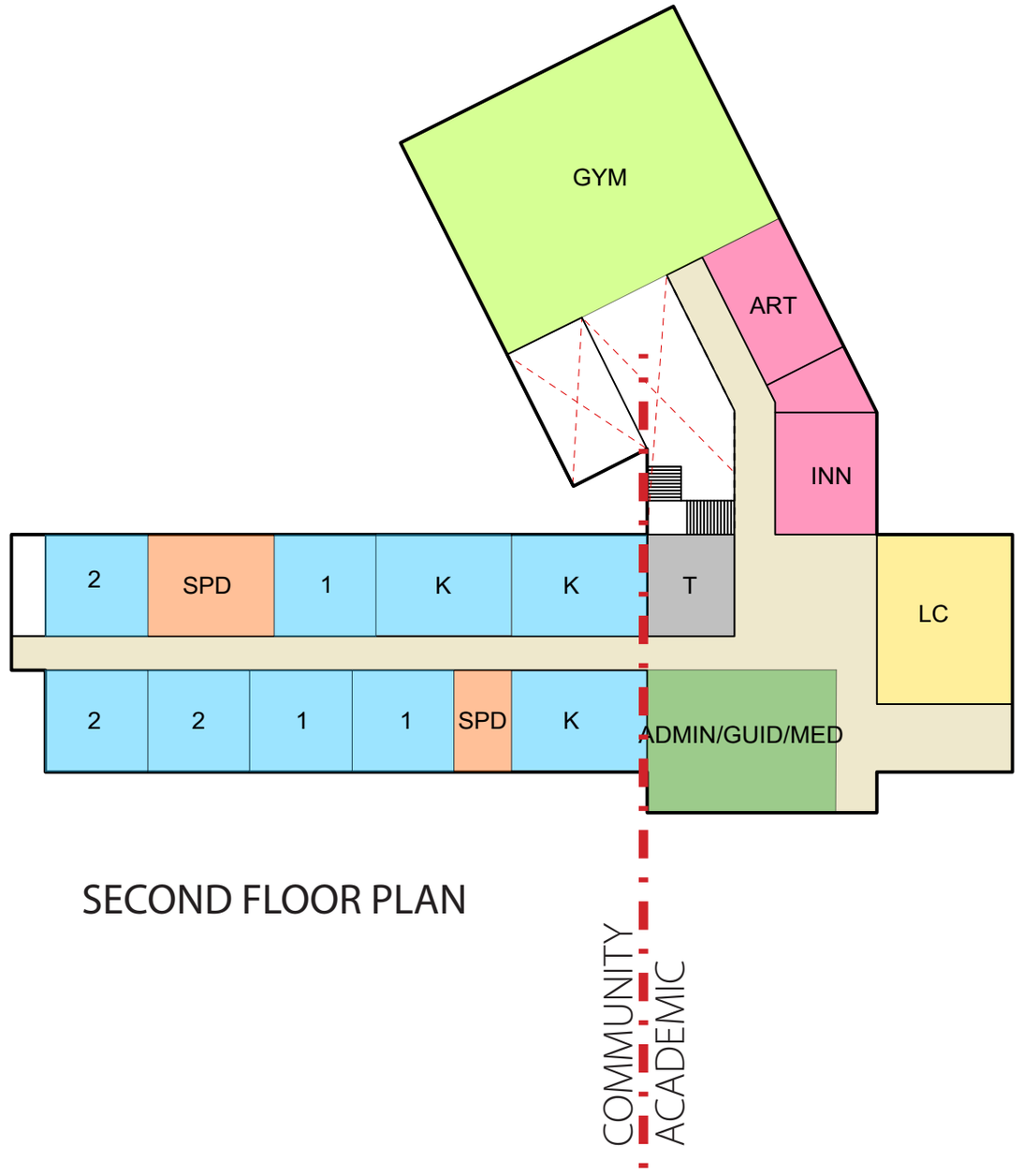
Peebles New Construction Option 1B



Peebles New Construction Option 1B

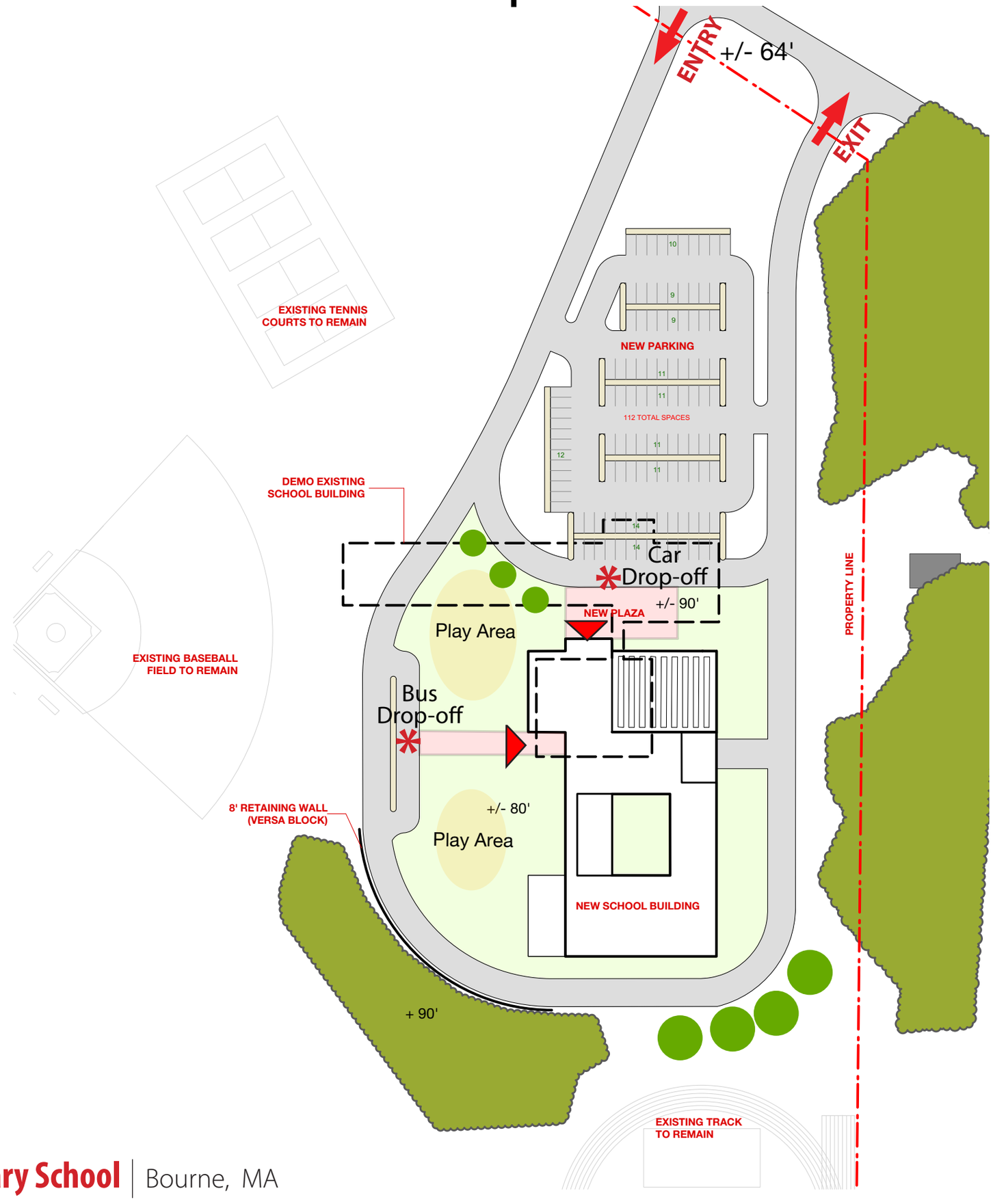


FIRST FLOOR PLAN



SECOND FLOOR PLAN

Peebles New Construction Option 1C



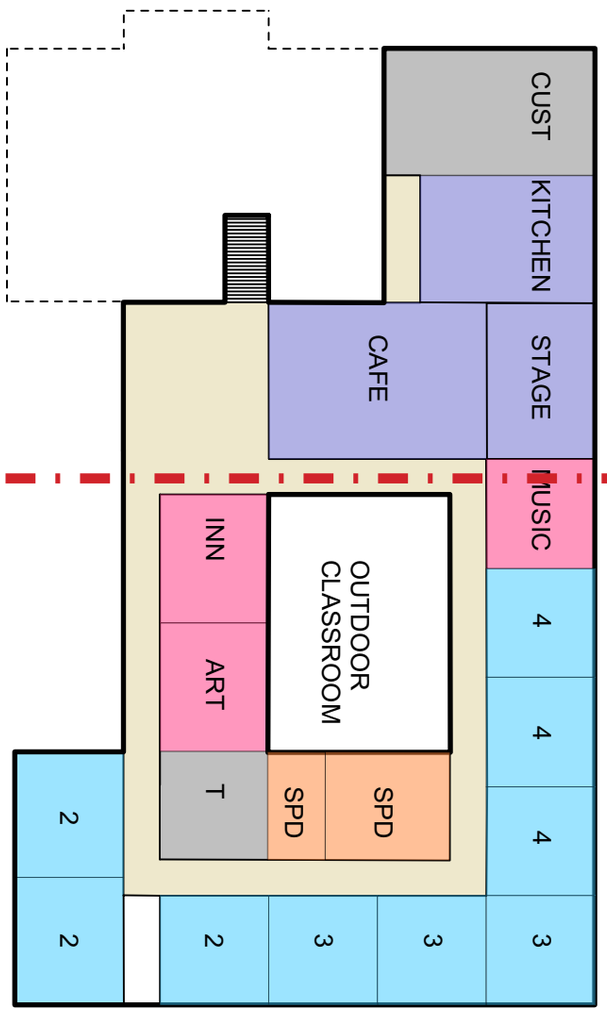
Peebles Elementary School | Bourne, MA

Flansburgh Architects

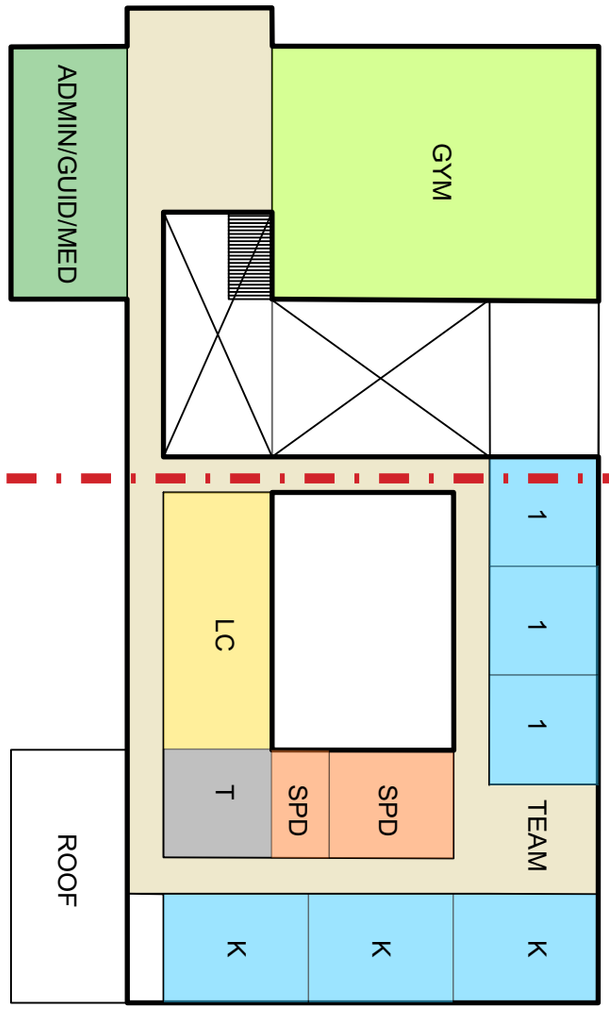
Peebles New Construction Option 1C

COMMUNITY

ACADEMIC

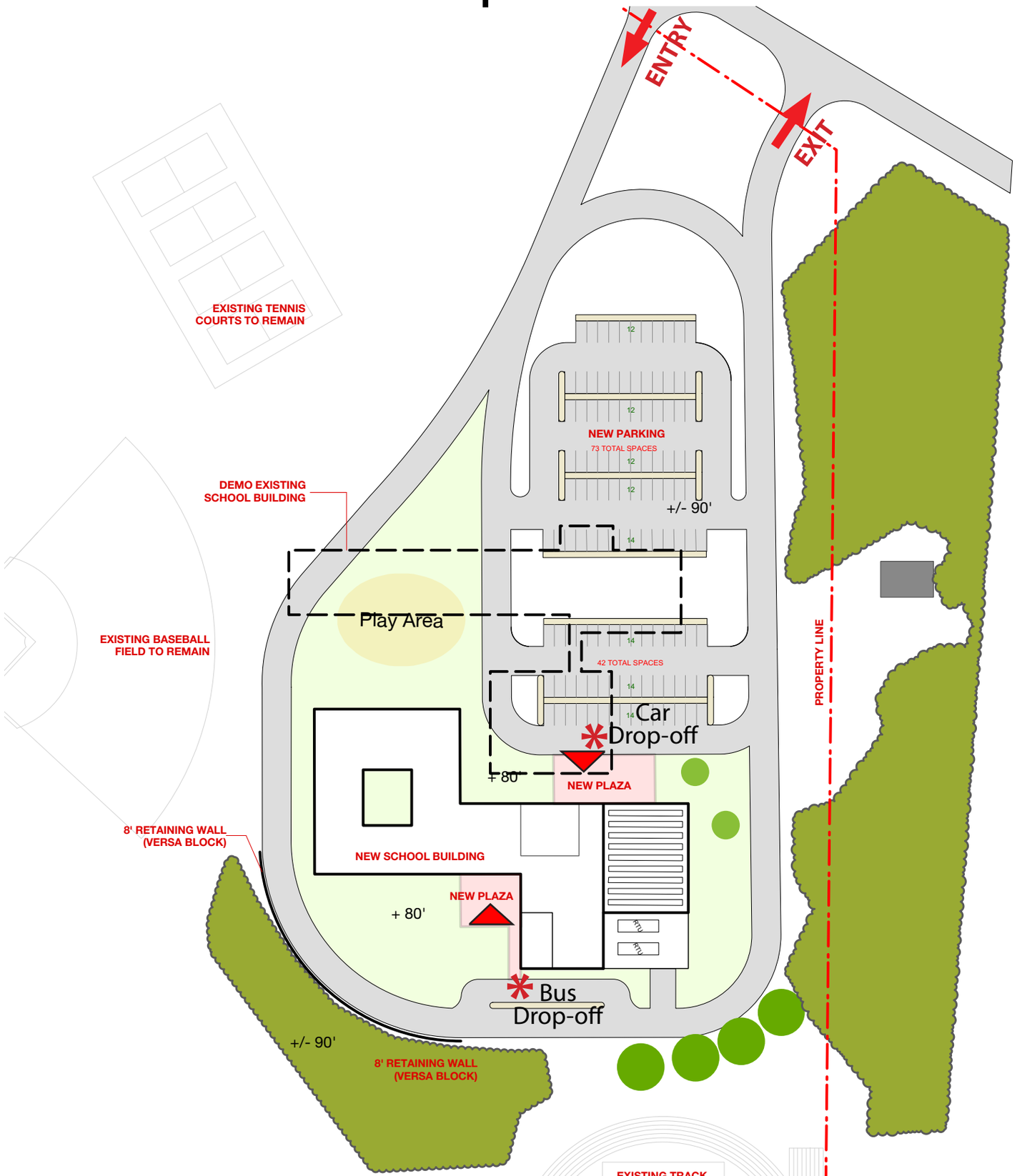


FIRST FLOOR PLAN

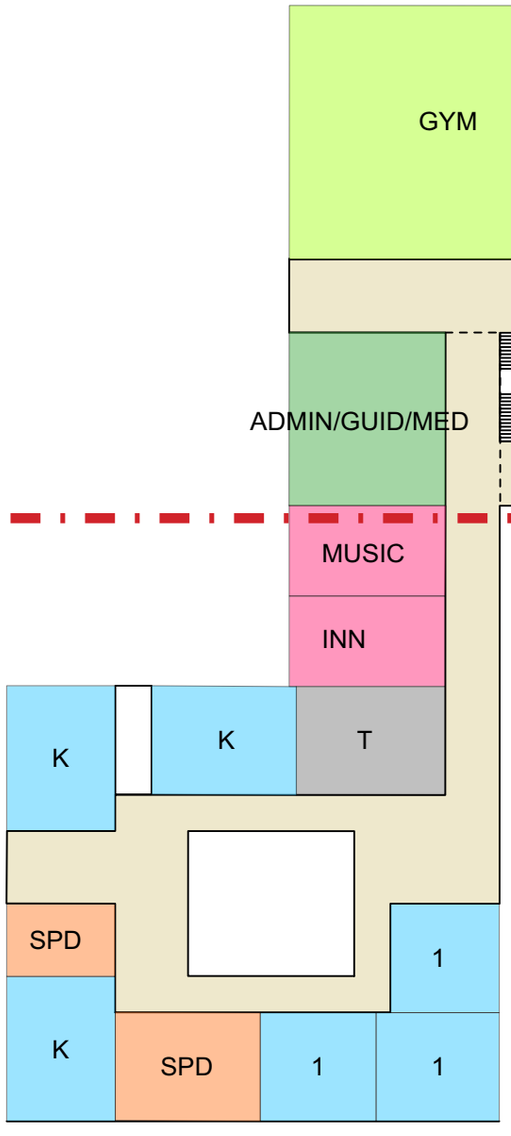


SECOND FLOOR PLAN

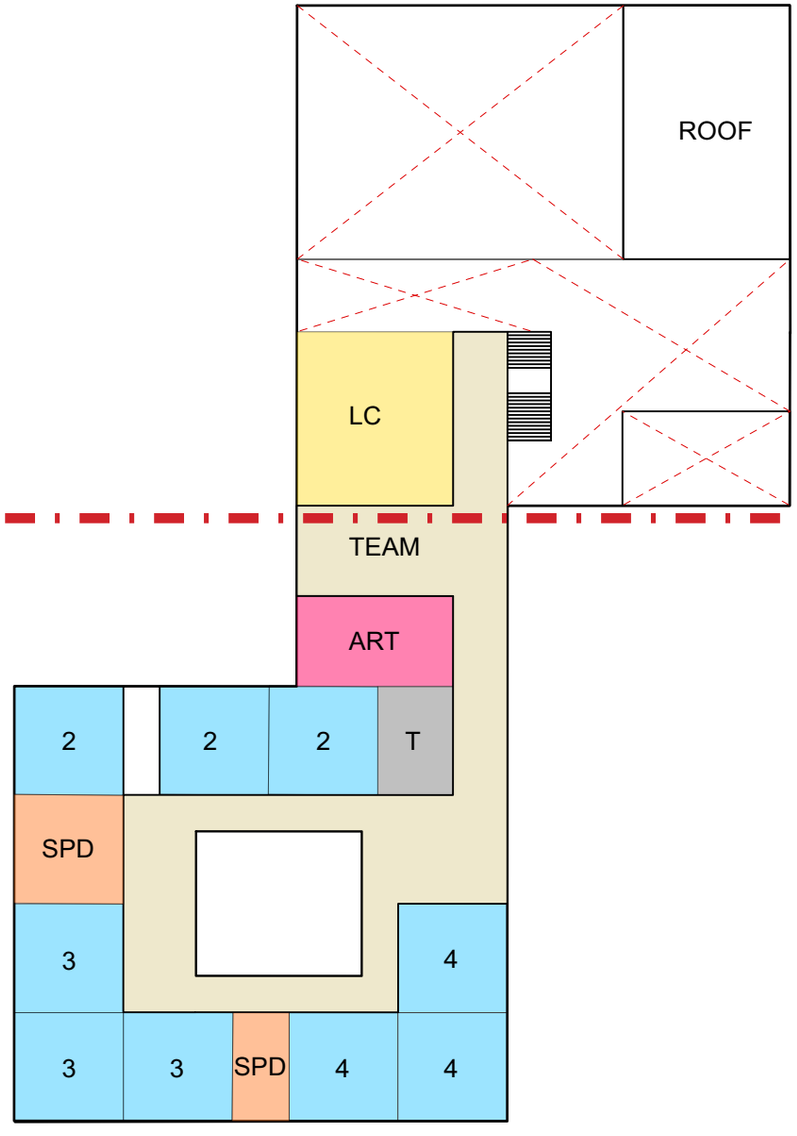
Peebles New Construction Option 1D



Peebles New Construction Option 1D



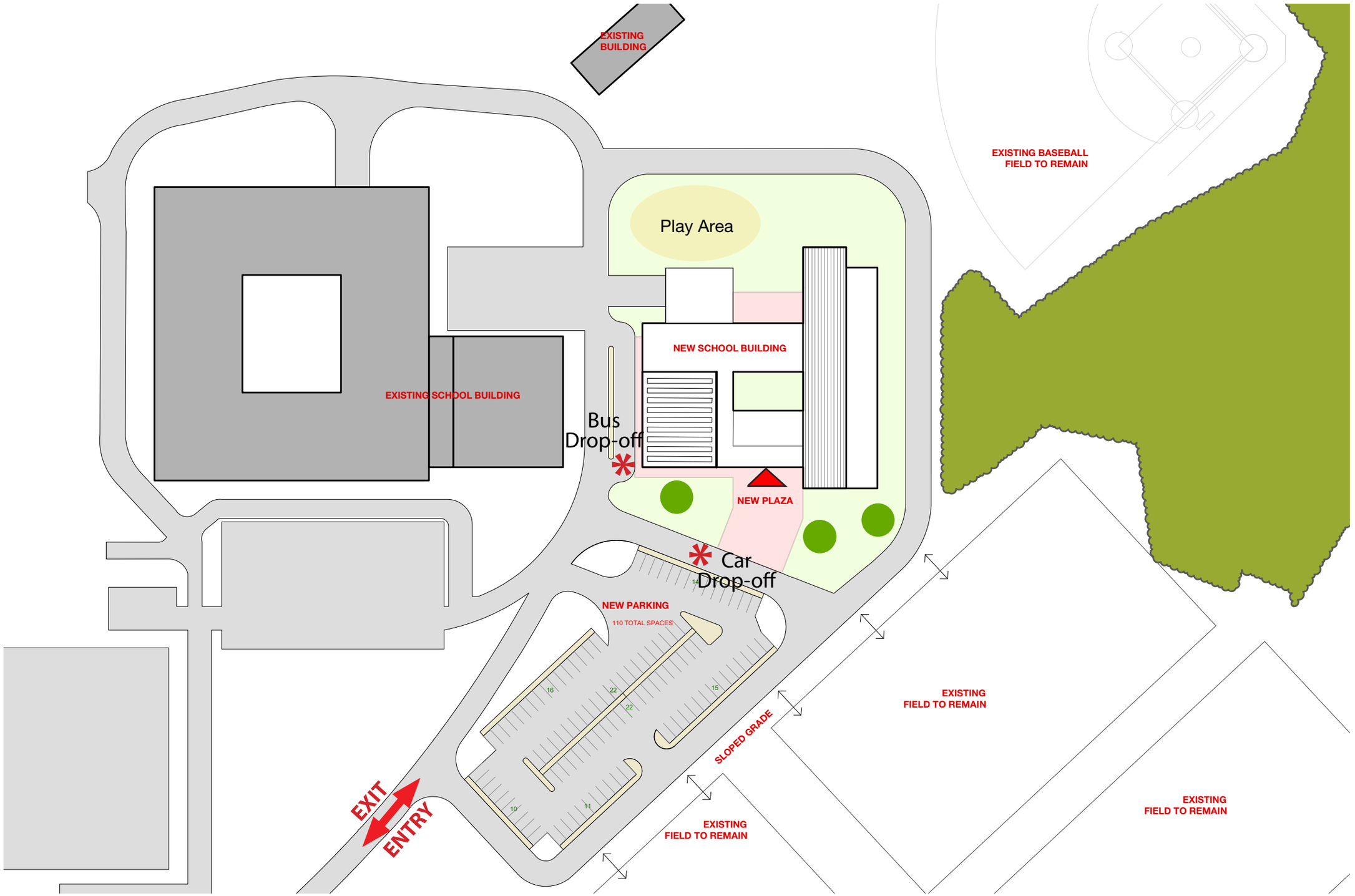
FIRST FLOOR PLAN



SECOND FLOOR PLAN

COMMUNITY
ACADEMIC

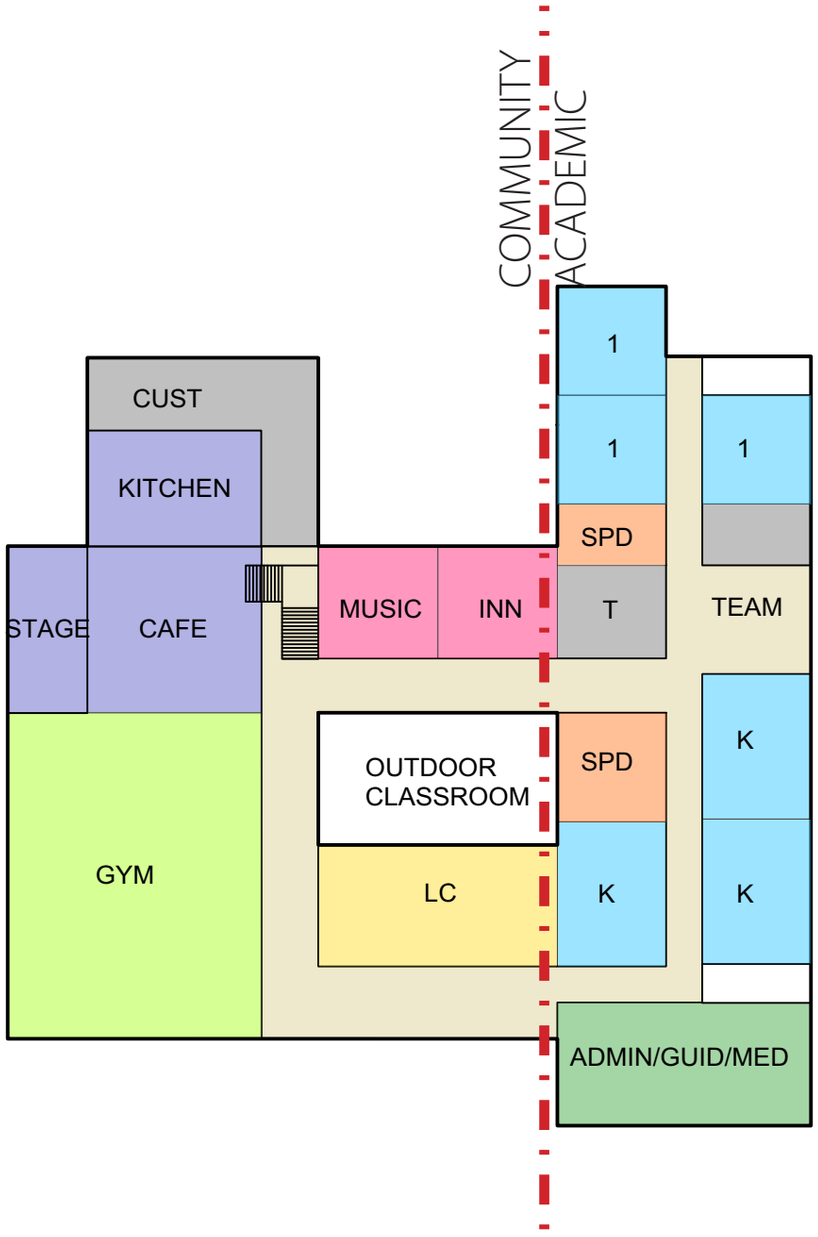
Peebles New Construction Option 1E



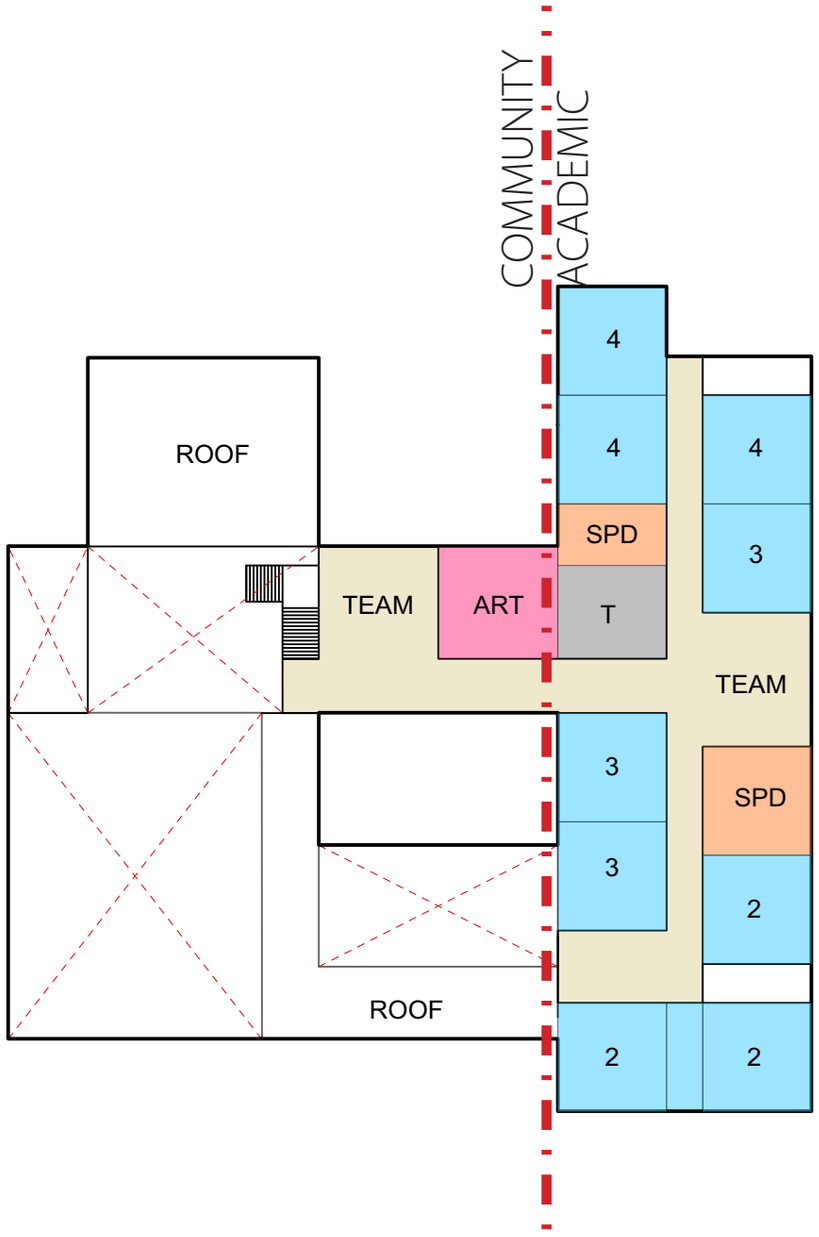
Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles New Construction Option 1E

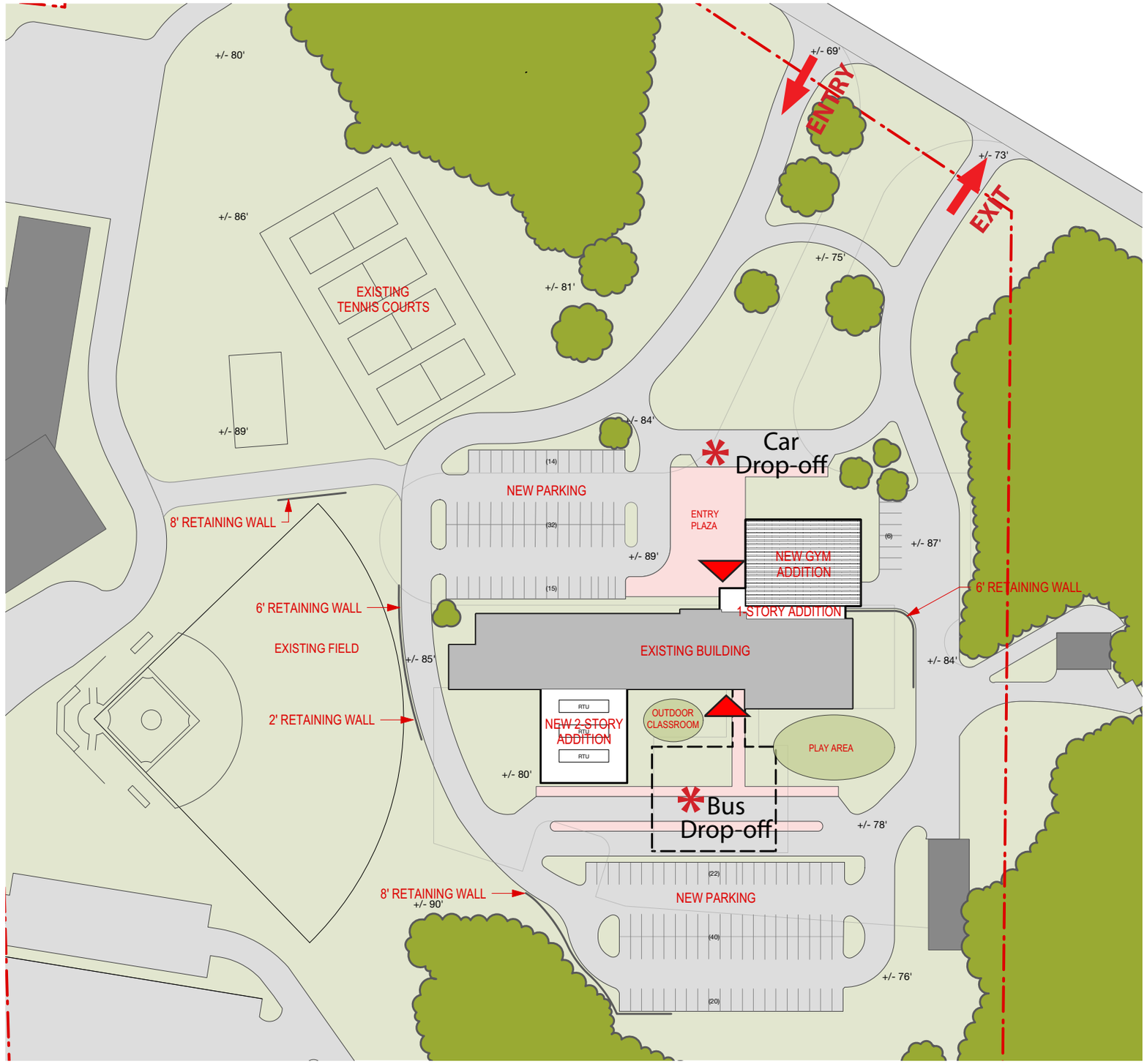


FIRST FLOOR PLAN



SECOND FLOOR PLAN

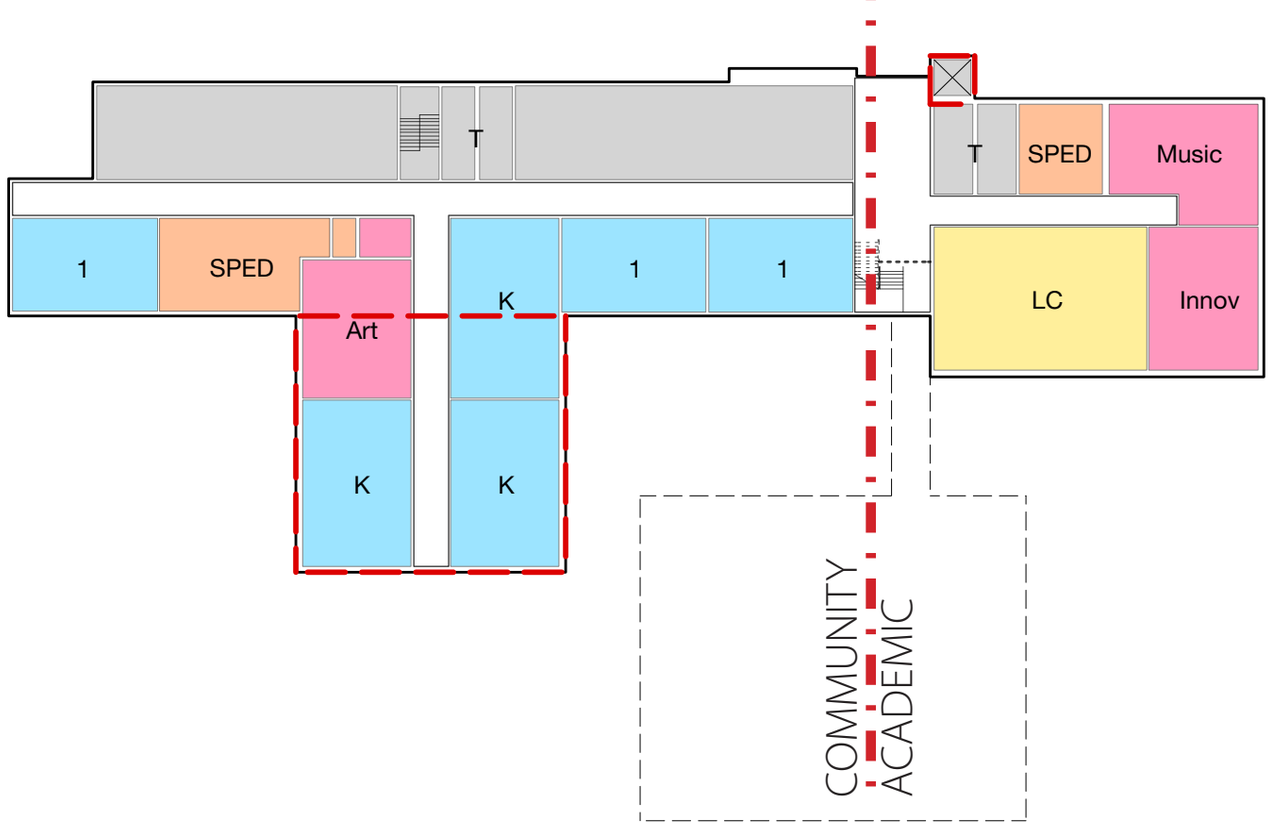
Peebles Addition / Renovation Option 1F



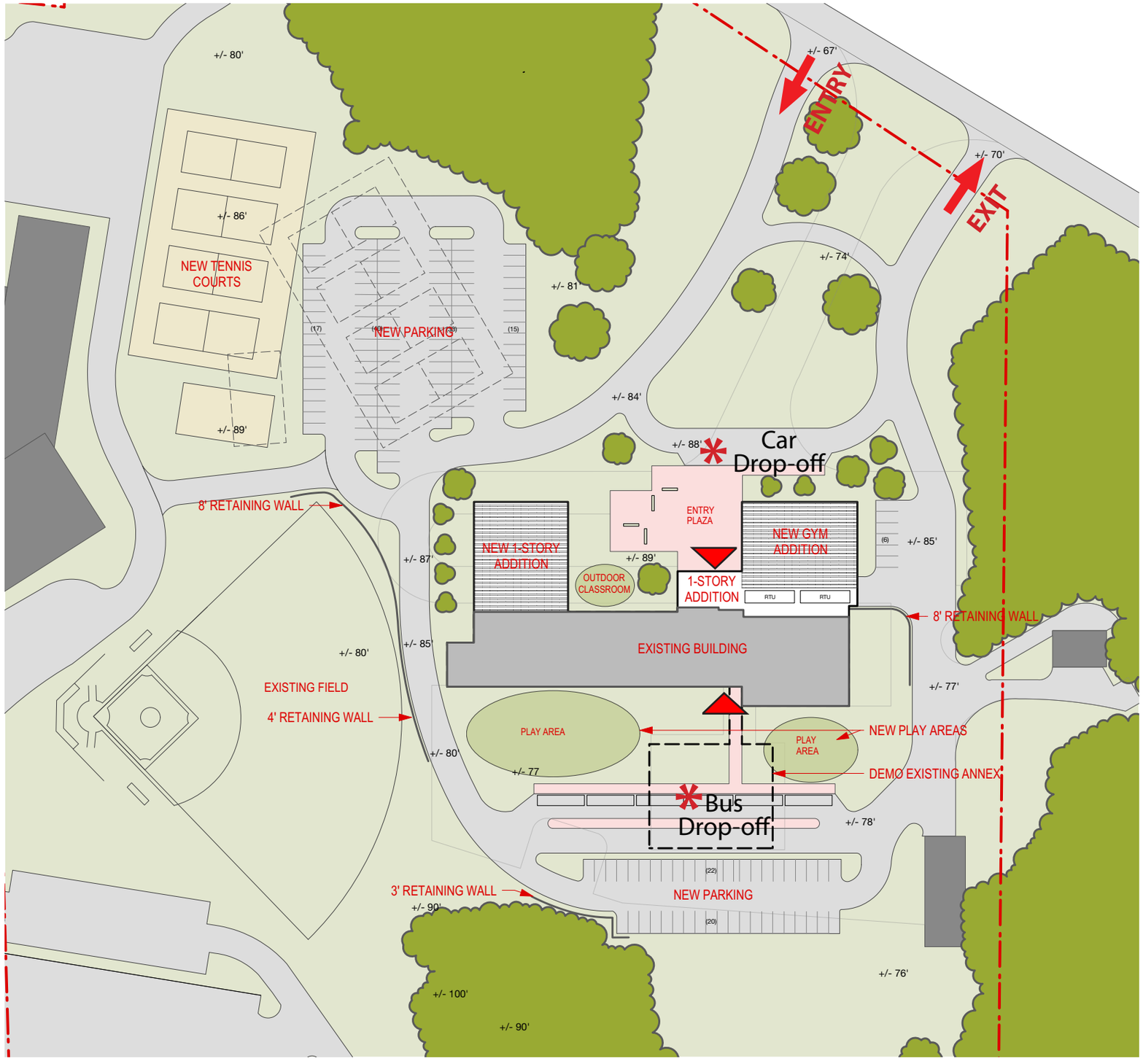
Peebles Addition / Renovation Option 1F

SECOND FLOOR PLAN

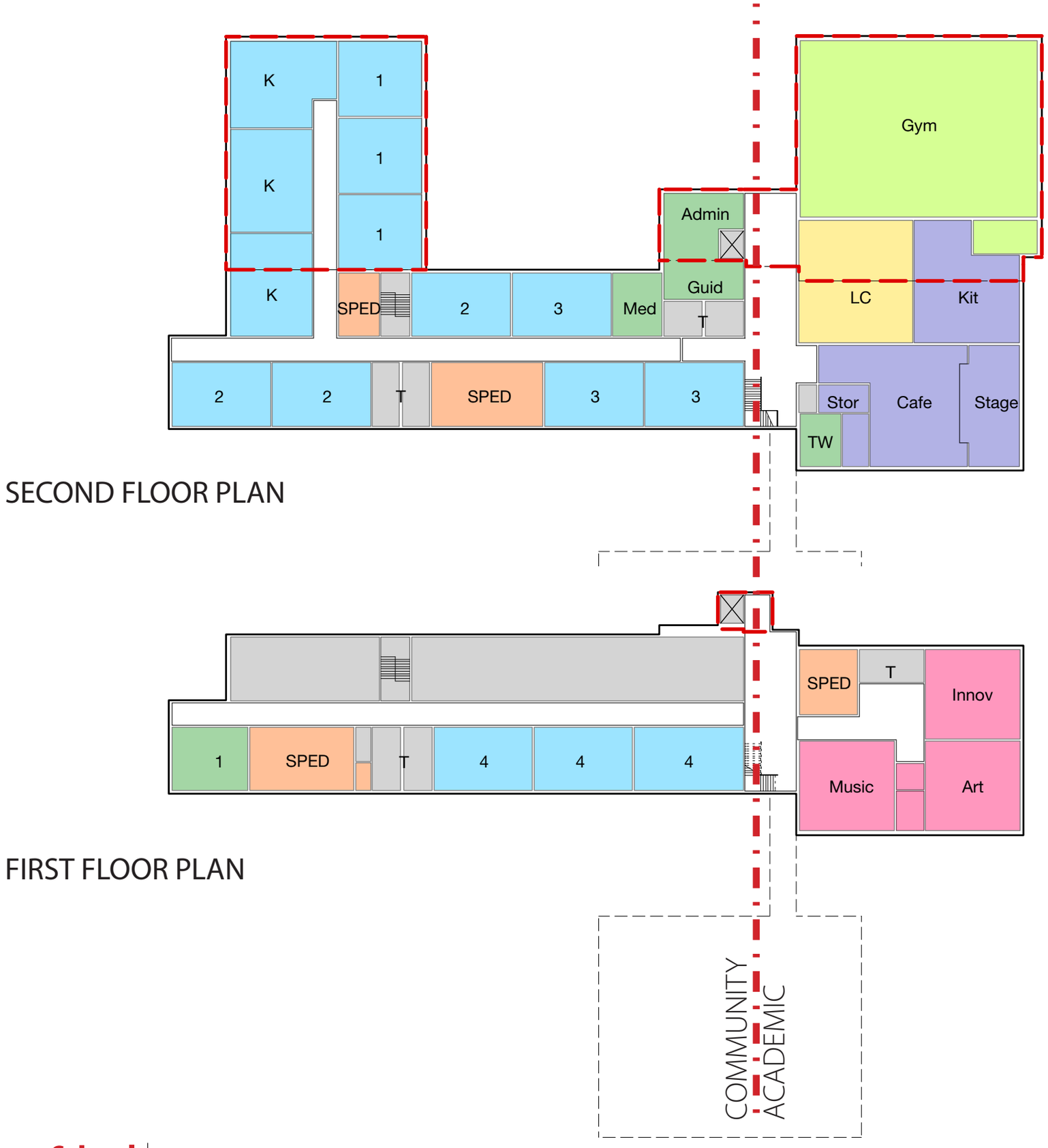
FIRST FLOOR PLAN



Peebles Addition / Renovation Option 1G



Peebles Addition / Renovation Option 1G



SECOND FLOOR PLAN

FIRST FLOOR PLAN

Bournedale Campus

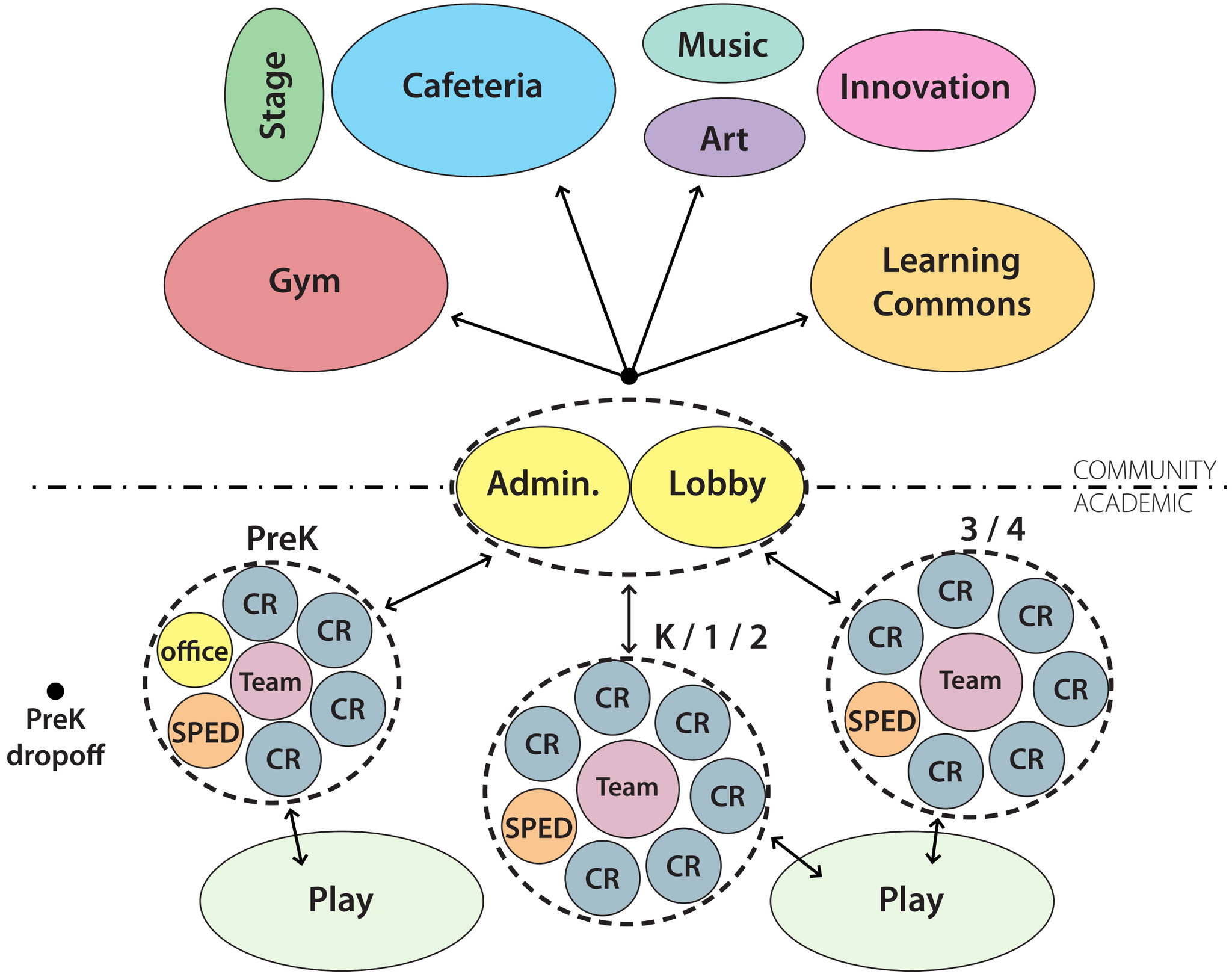
Peebles Elementary School | Bourne, MA

Flansburgh Architects

Program Areas - OPTION 2: 725 enrollment

PROGRAM	GRADES PreK-4
Core Academic	37,090
Special Education	8,050
Art & Music	4,465
Health & Physical Education	6,300
Media Center	3,933
Technology (computer)	1,000
Dining & Food Service	9,185
Medical	610
Administration & Guidance	2,711
Custodial & Maintenance	2,325
Subtotal NSF	**76,395 NSF**
Grossing Factor	x 1.5
Total GSF	**114,593 GSF**
Number of Students	725 Students

Adjacency Diagram - OPTION 2: 725 enrollment



Bournedale Option 2A

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 2A

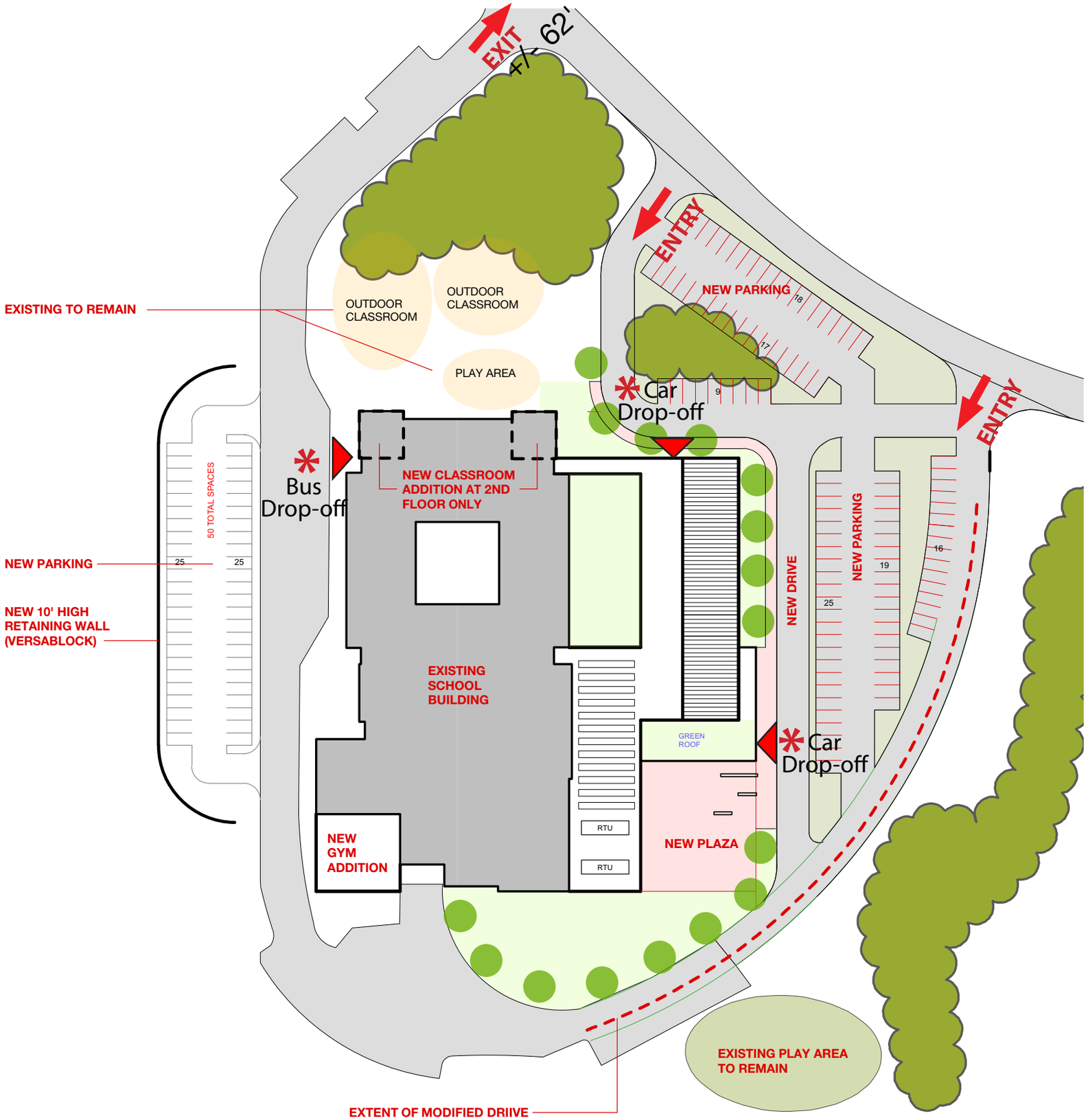
FIRST FLOOR PLAN

SECOND FLOOR PLAN

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 2B

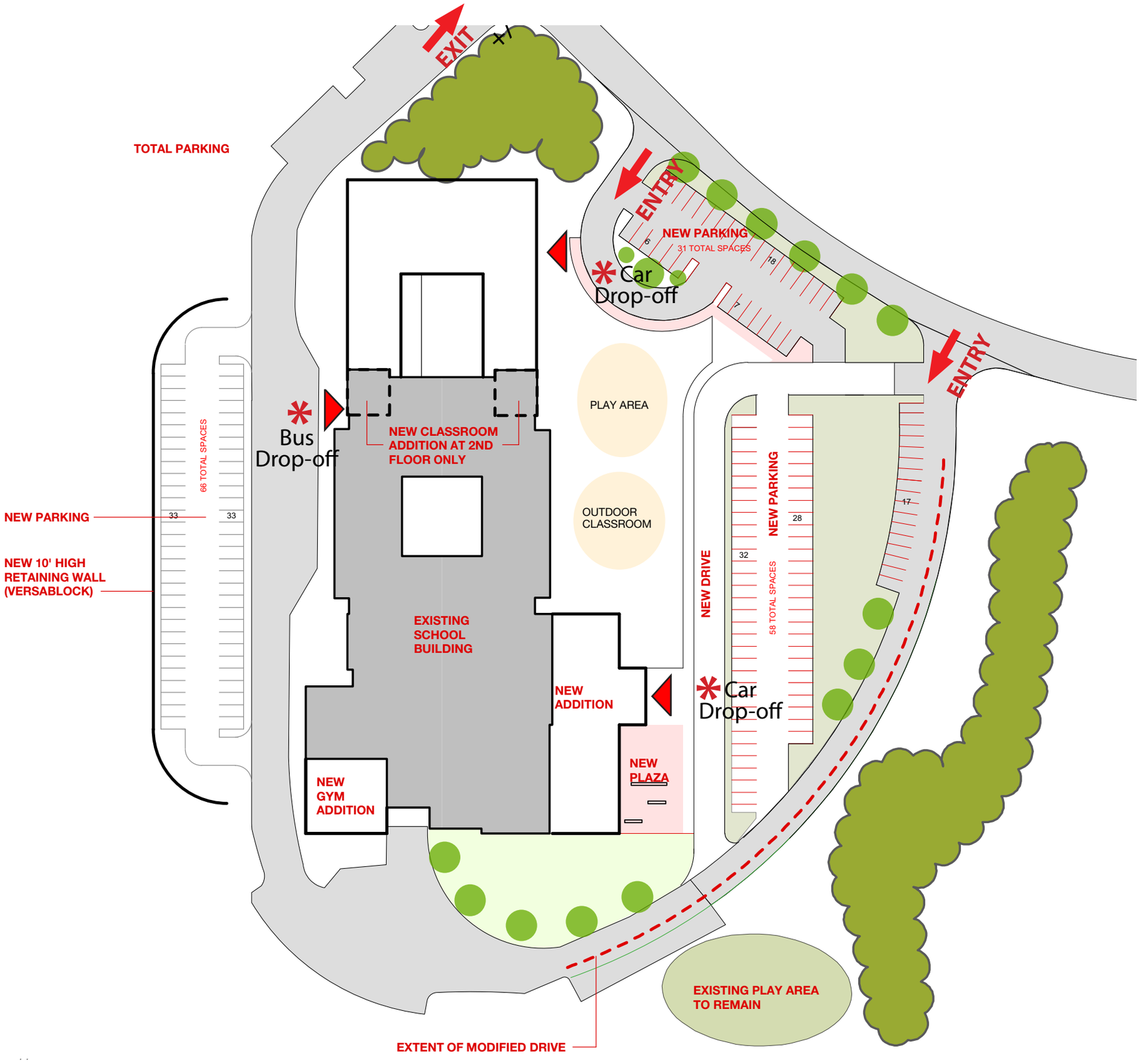


Bournedale Option 2B

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Bournedale Option 2C



Peebles Elementary School | Bourne, MA

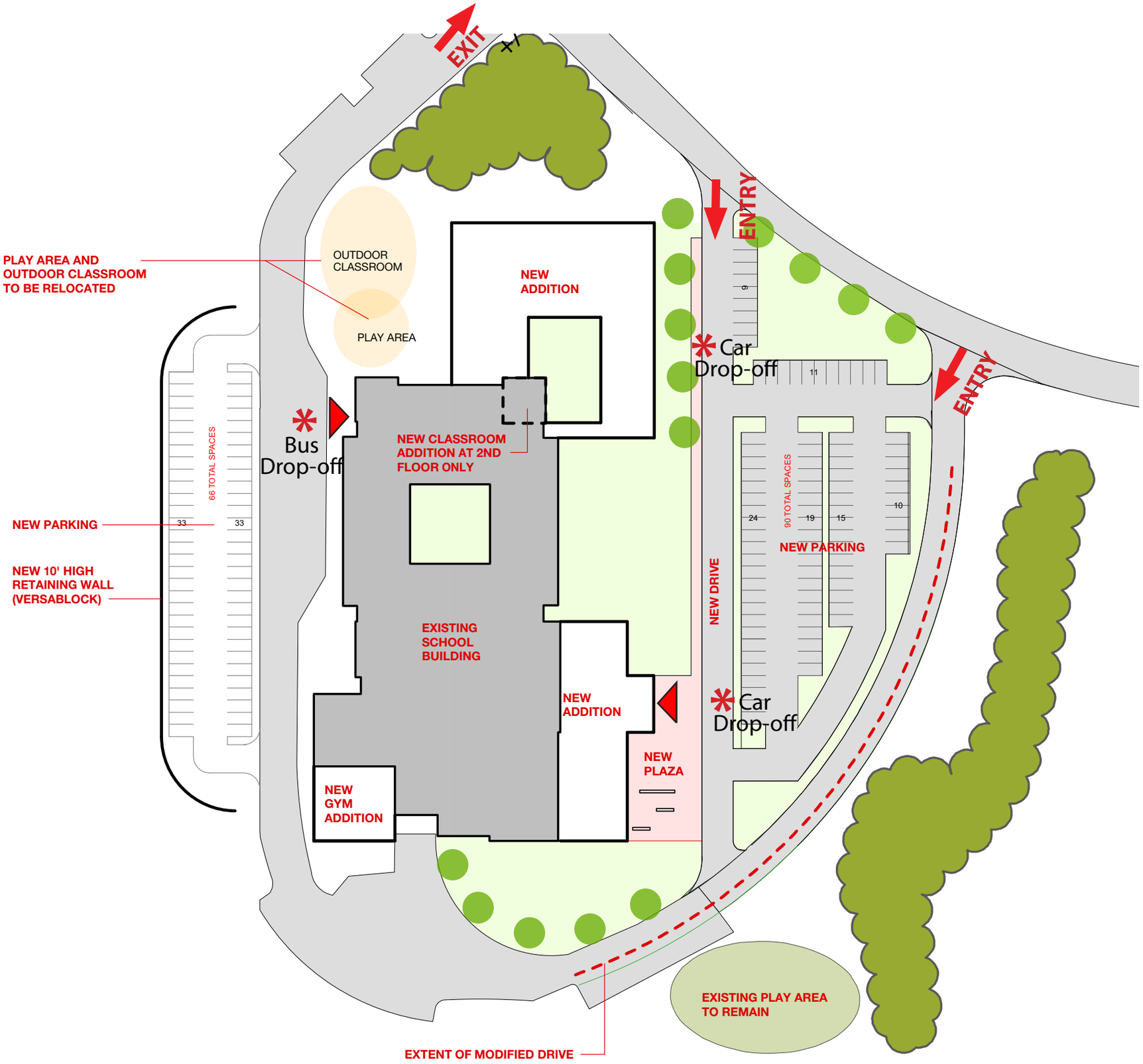
Flansburgh Architects

Bournedale Option 2C

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Bournedale Option 2D



Peebles Elementary School | Bourne, MA

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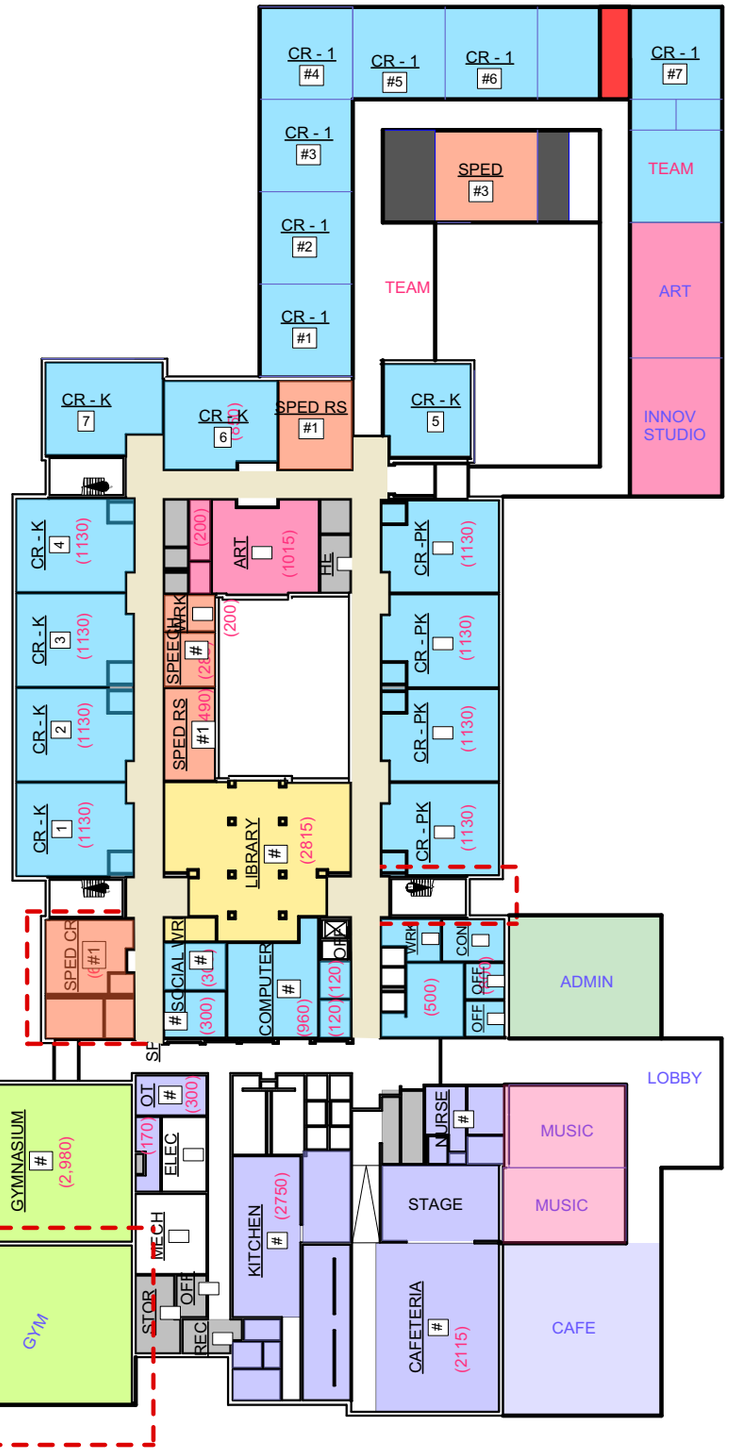
Bournedale Option 2D



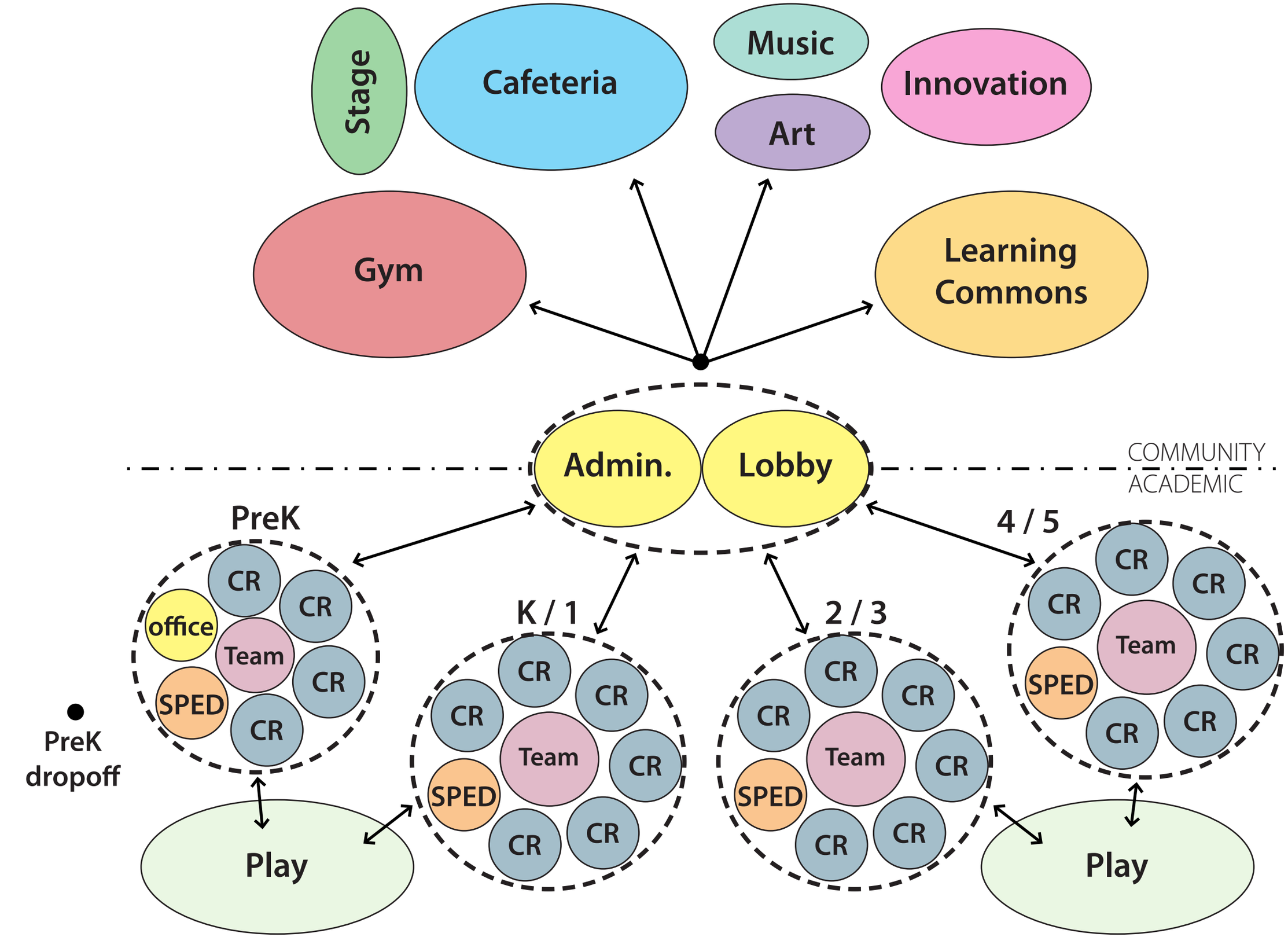
FIRST FLOOR PLAN

SECOND FLOOR PLAN

Program Areas - OPTION 3: 885 enrollment

PROGRAM	GRADES PreK-5
Core Academic	43,390
Special Education	9,060
Art & Music	5,690
Health & Physical Education	6,300
Media Center	4,653
Technology (computer)	1,000
Dining & Food Service	11,204
Medical	710
Administration & Guidance	3,021
Custodial & Maintenance	2,485
Subtotal NSF	**87,513 NSF**
Grossing Factor	x 1.5
Total GSF	**131,382 GSF**
Number of Students	885 Students

Adjacency Diagram - OPTION 3: 885 enrollment



Bournedale Option 3A

Peebles Elementary School | Bourne, MA

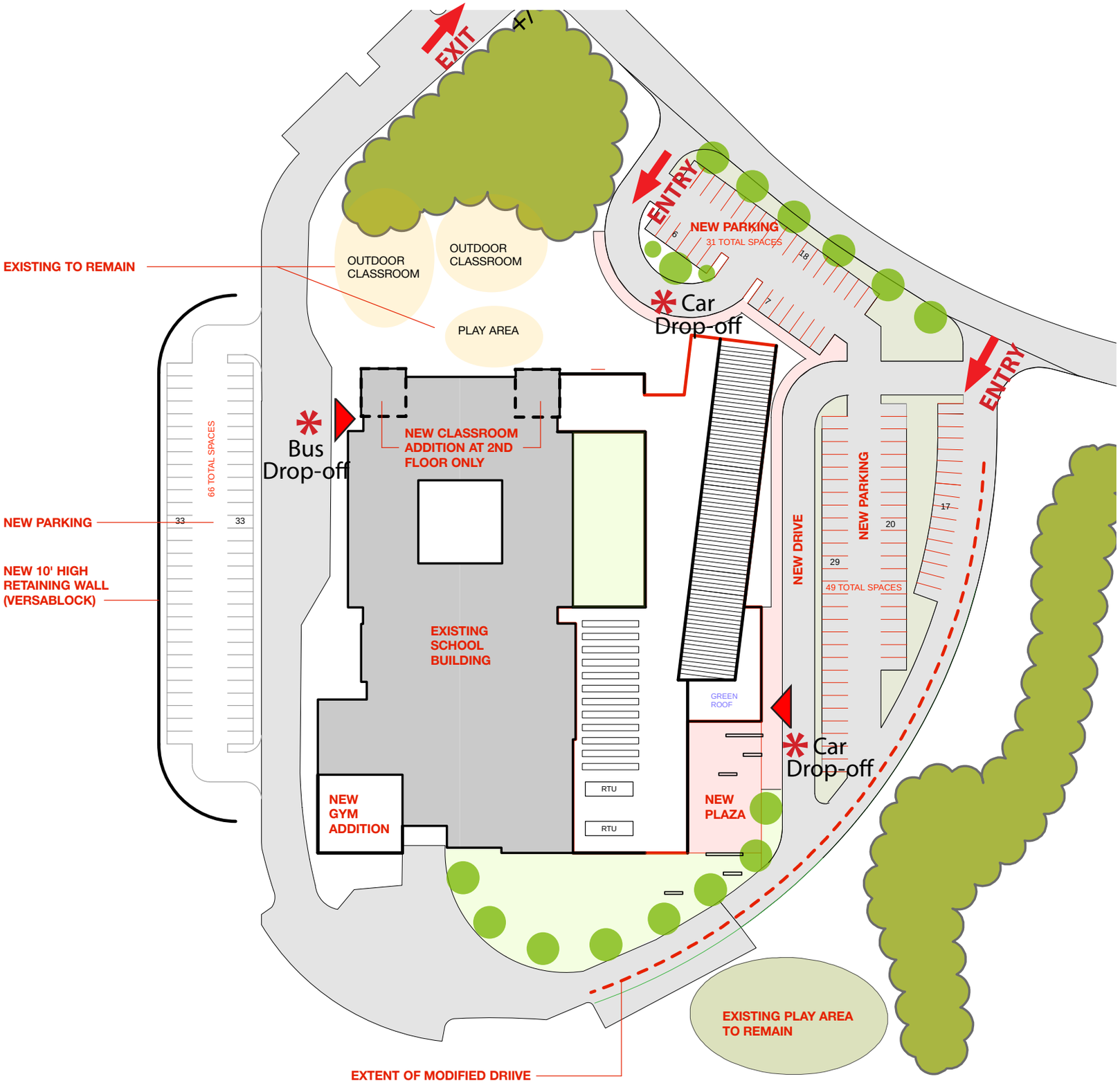
Flansburgh Architects

Bournedale Option 3A

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Bournedale Option 3B

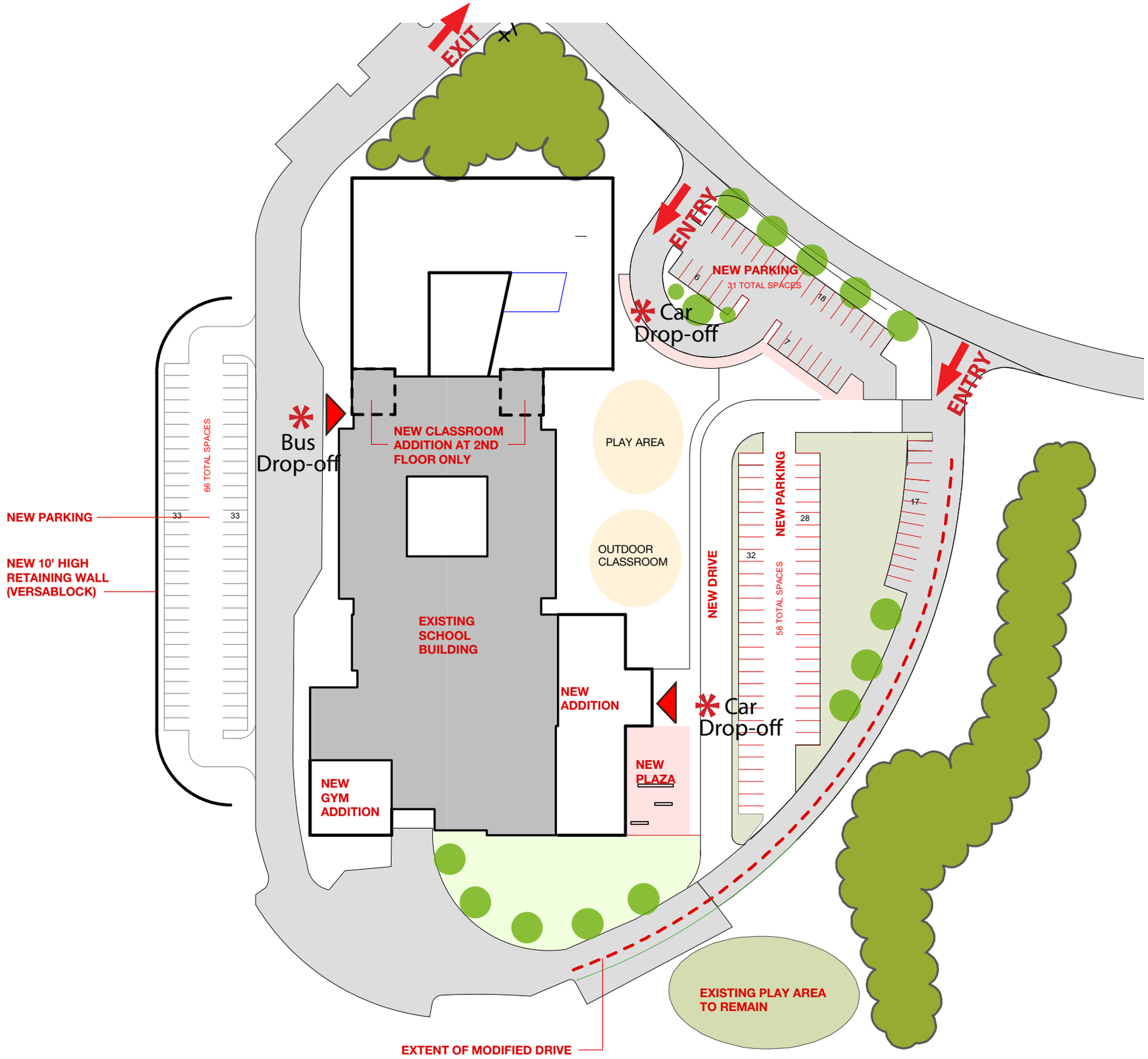


Bournedale Option 3B

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Bournedale Option 3C



Peebles Elementary School | Bourne, MA

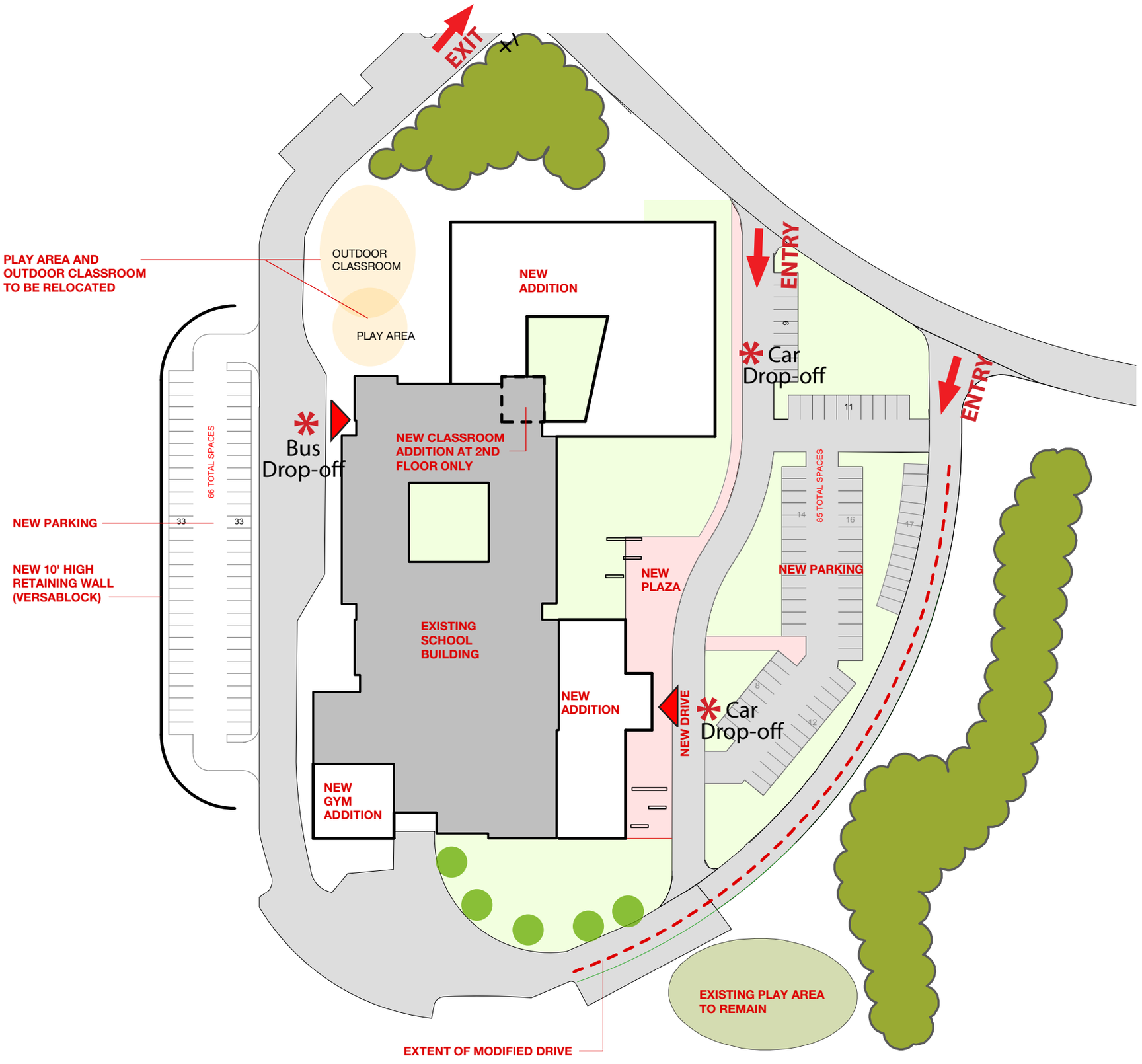
Flansburgh Architects

Bournedale Option 3C

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Bournedale Option 3D



Bournedale Option 3D

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Peebles Elementary School | Bourne, MA

Flansburgh Architects

SUSTAINABLE DESIGN

Sustainable Design

LEED or MA-CHPS programs

2% additional MSBA reimbursement

Achieve LEED Silver or MA-CHPS "leader"

Minimum total points required

Creates a healthier, more efficient School

1. Sustainable Sites

Alternative transportation

Storm water control (Qty & Quality)

Reduce Heat Island effect

Minimize light pollution

Reduce impact on the environment

2. Water Saving Features

Water use reduction

Low flow plumbing fixtures

Sensor operated faucets & toilets

Minimize lawn irrigation

Potential rainwater capture

3. Energy Efficiency

Highly insulated walls and roof

High performance windows

Energy management system

High efficiency boilers & equipment

Renewable energy (PVs, Wind, etc...)

4. Materials and Resources

Recycling program

Construction waste management

Recycled content of materials

Rapidly renewable materials

Certified wood

5. Indoor Environmental Quality

Proper acoustical environments

Fresh and filtered air

Low emitting materials

Lighting and thermal control

Daylighting and views

Summary

Minimize site impact on environment

Water conservation

Energy efficiency

Responsible use of Materials

Healthy indoor environment

Steps Required

Decision to pursue 2% add'l reimb.

Scorecard with points to pursue

Register Project - fee

Document points at each phase

Submissions at CDs & end of Construction

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	12/3/2015
Re:	School Building Committee Meeting	Meeting No:	8
Location:	Bourne Veteran's Memorial Community Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	James L. Potter	Chairman, School Building Committee	**Voting Member**
	Peter J. Meier	Board of Selectmen	**Voting Member**
	Christopher Hyldburg	Chairman, School Committee	**Voting Member**
	Laura Scena	Member, School Committee	**Voting Member**
✓	Natasha Scarpato	Member at Large	**Voting Member**
	Richard A. Lavoie	Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
✓	Mary Jo Coggeshall	Member at Large	**Voting Member**
✓	Frederick H. Howe	Board of Health	**Voting Member**
✓	Steven M. Lamarche	Superintendent of Schools, BPS	**Voting Member**
✓	Edward S. Donoghue	Director of Business Services, BPS	Non-Voting Member
	Thomas M. Guerino	Town Administrator	Non-Voting Member
✓	Jonathan Nelson	Director of Facilities, Town of Bourne	Non-Voting Member
✓	Elizabeth A. Carpenito	Principal, BES	Non-Voting Member
✓	Kathy Anderson	Elementary/Special Education Secretary	Non-Voting Member
✓	Janey Norton	Principal, PES	
✓	Kent Kovacs	FAI, Architect	
✓	Betsy Farrell Garcia	FAI, Architect	
	Jorge Cruz	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
8.1	Record	Call to Order, 6:30 PM, meeting opened.
8.2	Record	A motion was made by F. Howe and seconded by S. Lamarche to approve the 11/19/15 School Building Committee meeting minutes. No discussion, motion passed unanimous by those attending.
8.3	Committee Members	J. Seeley distributed and reviewed a draft of the Committee and Community Meetings Schedule for the PSR Phase. Committee Discussion: 1. S. Lamarche indicated the April 7, 2016 Community Forum No. 6 date conflicts with the High School Spring Production date. 2. Committee Members to review the other proposed dates for approval of the Schedule at the next Committee meeting.
8.4	J. Seeley	J. Seeley distributed and reviewed FSA Amendment No. 1, dated 11/30/15 and attached, from MSBA requesting execution by the Town. J. Seeley will follow-up with T. Guerino for signature and return to MSBA.
8.5	Record	K. Kovacs distributed and reviewed the Educational Program Meeting minutes from the 11/6/15 and 11/30/15 meetings.
8.6	J. Seeley	J. Seeley to provide a projection of additional Environmental and Site Consultancies for the PSR and SD Phases. J. Seeley will determine once the PDP phase is more complete.
8.7	Record	K. Kovacs distributed and reviewed a PES Campus Sewage Treatment Plant Capacity letter, dated 12/2/15 and attached, indicating the plant has a capacity of 35,400 GPD and has an average usage of 12,300 GPD, therefore there can accommodate Options 1A/1G and 4A/4B.
8.8	Record	K. Kovacs distributed and reviewed a pamphlet from Cape Light Compact, attached, indicating a list of qualified improvements for which Cape Light Compact may participate in funding. At this early stage, these will be noted and will be more fully vetted in the Schematic Design phase.
8.9	K. Kovacs	K. Kovacs provided an update on the engineer's review of the gas service moratorium at the PES site. NGrid has been provided with the anticipated gas loads for Options 1A/1G and 4A/4B. The loads appear to be below the current usage, due to the high efficiency boilers being planned for. FAI will provide more information once the engineers receive feedback from NGrid. Committee Discussion: 1. J. Nelson indicated NGrid noted the moratorium related to both sides of the canal on the DPW project, and as a result, the State's DPU became involved. J. Nelson cautioned FAI to ensure all correspondence and discussions with NGrid are in writing with copy to the Committee.

Item #	Action	Discussion
8.10	K. Kovacs	K. Kovacs indicated the engineers are still reviewing the gas service capacity at BES.
8.11	K. Kovacs	K. Kovacs will provide information on historical costs against actual savings for LEED elements from their recent projects for Committee review.
8.12	P. Meier	P. Meier to follow-up with the Moderator on the process to be followed to fill vacant Committee seats in the future.
8.13	J. Seeley	J. Seeley coordinated with Bourne TV and the Community Center Director to have the Committee PDP Phase meetings video-taped. J. Seeley to coordinate with Bourne TV and the Community Center Director to have the Committee PSR Phase meetings video-taped, once the Meetings Schedule is approved.
8.14	K. Kovacs	K. Kovacs presented and reviewed a Powerpoint presentation, attached, on the design options as follows: 1. PES – New Construction Option 1A – 250 students 2. PES – Renovation/Addition Option 1G – 250 students 3. BES - Renovation/Addition Option 2A – 725 students 4. BES - Renovation/Addition Option 3A – 885 students 5. BES - Renovation/Addition Option 3B – 885 students 6. PES – New Construction Option 4A – 410 students 7. PES – Renovation/Addition Option 4B – 410 students Committee Discussion on the Pros and Cons relative to all of the options: 1. J. Potter asked if Options 3A/3B were the only options in which there is 5th grade continuity, ie the 5th grade students don't travel? *J. Norton indicated yes, except for Optons 4A/4B, in which the Peebles 5th grade wouldn't travel, but the Bournedale would.* 2. J. Norton indicated a Pro for Options 1A/1G and 4A/4G is the opportunity for educational mentoring by the MS and HS students. 3. J. Norton indicated a Pro for Options 1A/1G and 4A/4G is the opportunity for the ES students to use the resources in the MS and HS. 4. K. Anderson indicated a Pro for Options 2A, 3A/3B is that all elementary students share the same experience. 5. J. Norton indicated a Con for Options 2A, 3A/3B is that the Peebles elementary students don't have the neighborhood school experience. 6. R. Howe asked how overcrowded is the Middle School? *S. Lamarche indicated the MS is functional, but it isn't being used as constructed, in that there are many uniquely middle school spaces that aren't being used for the middle school due to repurposing to accommodate the enrollments.* 7. S. Lamarche indicated a Pro for Options 2A, 3A/3B is the ability to re-use of some of the base mechanical and electrical systems, since they are relatively new. 8. J. Potter indicated there is a need to define the term "neighborhood school".

Item #	Action	Discussion
		S. Lamarche indicated the Committee should consider defining the term as "a school being on the same side of the canal on which the attending students live". 9. J. Nelson asked if Options 2A, 3A/3B had less site work than Options 1A/1G and 4A/4B? *K. Kovacs indicated there is less utility work, but there is a lot of disturbed site area in Options 2A, 3A/3B which adds to overall sitework scope.* 10. W. Meier asked which Options include the 5th grade? *J. Potter indicated Options 3A/3B and 4A/4B include the 5th grade.* 11. S. Lamarche asked if any Options require a Land Purchase? *K. Kovacs indicated none of the Options require a Land Purchase.* 12. N. Scarpato asked if re-purposing Peebles has been discussed, relative to Options 2A, 3A/3B? *W. Meier indicated the 1959 addition would have to be razed and the original building would require significant investment. S. Lamarche also added nothing has been finalized with respect to re-purposing Peebles relative to Options 2A, 3A/3B.* 13. J. Nelson indicated a Con for Options 2A, 3A/3B would be the added cost to deal with a vacated Peebles and that the Committee should consider the total cost to the Town when evaluating the Options. 14. S. Lamarche asked FAI to qualify that the existing Peebles is safe and sound structurally. *K. Kovacs indicated yes the existing Peebles is safe and sound. The issues relate to triggering current code compliance requirements should the building be renovated or added to.* 15. S. Lamarche indicated a Pro for Options 2A, 3A/3B and 4A/4B is that they are larger buildings, in that they have inherent flexibility do to having more space. 16. J. Potter asked how is a school determined to be too small or too large? *K. Kovacs indicated the MSBA ES space template is set up for an average size school of around 400-500 students. S. Lamarche added that MSBA has approved many sizes, larger or smaller, and that the important take away is that an 885 student school would be the largest school in the Town.* 17. W. Meier indicated a Pro for Options 2A, 3A/3B would be reduced operational costs due to consolidation into one larger school. 18. J. Norton indicated a Con for Options 3A/3B is it is a very large school. 19. J. Potter asked if there are specific 5th grade spaces included in Options 3A/3B and 4A/4B that the middle school does not have? *B. Garcia indicated there are several SPED spaces specific to elementary level students that the middle school does not have available to them.*

Item #	Action	Discussion
		20. J. Nelson indicated a Pro for Options 2A, 3A/3B is that they would be a single building that fixes the current issues at Bournedale versus two separate buildings, one new and one five years old. K. Kovacs to include the above Pros and Cons in the Evaluation Matrix and update for the next Committee meeting.
8.15	K. Kovacs	K. Kovacs distributed and reviewed the Preliminary Cost Models, attached, for the design options as follows: 1. PES – New Construction Option 1A – 250 students - $37.98 million 2. PES – Renovation/Addition Option 1G – 250 students - $37.35 million 3. BES - Renovation/Addition Option 2A – 725 students - $39.34 million 4. BES - Renovation/Addition Option 3A – 885 students - $46.12 million 5. BES - Renovation/Addition Option 3B – 885 students - $45.35 million 6. PES – New Construction Option 4A – 410 students - $43.36 million 7. PES – Renovation/Addition Option 4B – 410 students - $43.28 million Committee Discussion: 1. J. Potter asked if the costs for hazardous material abatement is included? *K. Kovacs indicated yes, the costs for hazardous material abatement is included.* 2. J. Potter asked if the costs reflect achieving LEED Silver? *K. Kovacs indicated yes, LEED Silver is the baseline to achieve for the additional 2% reimbursement from MSBA.* 3. S. Lamarche asked the Committee to make sure to understand the emotional and cultural value of keeping the existing Peebles school and renovating versus razing and constructing new from the Peebles community perspective. *K. Kovacs to emphasize the question at Community Forum No. 3.*
8.16	Committee Members	K. Kovacs distributed and reviewed the Evaluation Criteria Matrix, attached. Each Committee member to fill in their ranking, 1 to 3, on the Evaluation Criteria Matrix for each criteria for each Option for the next Committee meeting.
8.17	J. Seeley J. Potter	A Motion was made by S. Lamarche and seconded by N. Scarpato to defer the topic "Technology use during Open Meeting" to the next Committee meeting. No discussion, voted unanimously. J. Seeley to place the topic "Technology use during Open Meeting" on the agenda for the next Committee meeting. J. Potter will send the draft Policy to the Committee members.
8.18	Record	Prep Community Forum No. 3, scheduled for 12/8/15, was discussed. Committee Discussion: 1. K. Kovacs asked if a quick tour of the school should be undertaken at the start of the forum? *The Committee agreed a quick tour would be beneficial.* 2. S. Lamarche suggested refreshments similar to Community Forum No. 2.

Item #	Action	Discussion
		3. S. Lamarche indicated the School Administration will send out a text message advertising the forum, in addition to the email notifications. 4. P. Meier will contact the Bourne Enterprise to advertise the forum.
8.19	Record	New Business 1. S. Lamarche asked how the Committee felt about video-taping the Committee meetings? *J. Potter indicated he felt the transparent process was important and that this is a Town Study and the Town needs to be involved in arriving at a solution that is best for the Town.*
8.20		Community Questions: 1. Will Life Cycle Costing be utilized in the Study process? *K. Kovacs indicated yes for building systems selection, but this will occur in the Schematic Design Phase.* 2. Has the Town determined from a Town Planning perspective whether a single elementary school on the Land-side is the best long term solution, relative to demographics and property taxes? *J. Nelson indicated no, but this is the type of intangible information that should be discussed at the community meetings.*
8.21	Record	Next **SBC Meeting: December 17, 2015 at 6:30 pm** at the Bourne Veteran's Memorial Community Center.
8.22	Record	A Motion was made by S. Lamarche and seconded by N. Scarpato to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, FSA Amendment No. 1, Educational Program Meeting minutes, dated 11/6/15 and 11/30/15, PES Campus Sewage Treatment Plant Capacity letter, dated 12/2/15, pamphlet from Cape Light Compact, Preliminary Cost Models, Evaluation Criteria Matrix, Powerpoint presentation

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	12/3/2015
Re:	School Building Committee Meeting	Meeting No:	8
Location:	Bourne Veterans Memorial Community Center, 234 Main Street, Buzzards Bay, Massachusetts	Time:	6:30pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	James L. Potter	onsetjp@juno.com	Chairman, School Building Committee
	Peter J. Meier	pmeier@townofbourne.com	Bourne Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
	Natasha Scarpato	scarpato4@comcast.net	Member-At-Large
	Richard A. Lavoie	Richl.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	Mary Jo Coggeshall	mjcoggeshall@bourneps.org	At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Jonathan Nelson	jnelson@townofbourne.com	Director of Facilities, Town of Bourne
	Elizabeth A. Carpenito	ecarpenito@bourneps.org	Principal, BES
	Kathy Anderson	kanderson@bourneps.org	Elementary/Special Education Secretary
	Janey Norton	jnorton@bourneps.org	Principal, PES
	Kent Kovacs	kkovacs@flansburgh.com	Flansburgh Architects
	Betsy Farrell Garcia	bgarcia@flansburgh.com	Flansburgh Architects
	Joel Seeley	jseeley@smma.com	SMMA

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AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	12/3/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:30 PM
Distribution:	Committee Members (MF)	Meeting No.:	8

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. PSR Phase Schedule
5. Educational Program Update
6. Presentation of Refined Construction Alternatives
7. Review of Preliminary Cost Models
8. Technology Use During Open Meeting Policy
9. Preparation for Community Forum No. 3
10. Old or New Business
11. Public Comments
12. Next Meeting – December 17, 2015
13. Adjourn

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SCHOOL BUILDING COMMITTEE
PEEBLES ELEMENTARY SCHOOL

All meetings held at the
Bourne Veterans Memorial Community Center at 6:30 PM
unless otherwise noted

MEETINGS SCHEDULE AND AGENDAS
November 25, 2015

DATE	AGENDA
Feasibility Study Phase (PSR)	
January 7, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Preferred Alternative Goals
	Prepare for Community Forum
January 21, 2016	COMMUNITY FORUM NO. 4 - 6:00 to 8:00 PM - BOURNEDALE ELEMENTARY SCHOOL CAFETERIA
February 4, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Community Forum Comments
	Structural Narrative Review
	MEP Systems Narrative Review
	Update on Construction Alternatives
	Review MSBA Comments on PDP Submission
February 18, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives
	Prepare for Community Forum
March 3, 2016	COMMUNITY FORUM NO. 5 - 6:00 to 8:00 PM - PEEBLES ELEMENTARY SCHOOL CAFETERIA
March 17, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Community Forum Comments
	Update on Sustainable Design Goals
	Update on Construction Alternatives
March 31, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Cost Models
	Preliminary Discussion of One Preferred Construction Alternative
	Prepare for Community Forum
April 7, 2016	COMMUNITY FORUM NO. 6 - 6:00 to 8:00 PM - BOURNEDALE ELEMENTARY SCHOOL CAFETERIA
April 14, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Vote to Decide One Preferred Construction Alternative
	Vote to Submit Preferred Schematic Report to MSBA
April 15, 2016	*SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

John K. McCarthy
Executive Director

November 30, 2015

Via US mail (with enclosures) and email (with attachments) to:

Mr. Thomas Guerino, Town Administrator
Town of Bourne
24 Perry Avenue
Buzzards Bay, MA 02532-3441
Email: TGuerino@townofbourne.com

RE: First Amendment to the Feasibility Study Agreement
James F. Peebles Elementary School (MSBA Project No. 201400360010)

Dear Mr. Guerino:

Attached please find the First Amendment to the Feasibility Study Agreement between the Massachusetts School Building Authority ("Authority") and the Town of Bourne ("Town") for the Proposed Project at the James F. Peebles Elementary School. The purpose of the Amendment is to include an additional study enrollment/grade configuration for the project. The Town must return three (3) signed originals of the Amendment to my attention as soon as possible. Please make sure that the Amendment is signed by a duly authorized Town officer. One fully executed original will be returned to the Town.

If you have any questions, please contact either Katie DeCristofaro or me at the MSBA.

Very Truly Yours,

George F. Driscoll, Jr. (ed)

George F. Driscoll, Jr.
Deputy General Counsel

cc: Legislative Delegation
Stephen F. Mealy, Chair, Bourne Board of Selectmen
Christopher Hyldburg, Chair, Bourne School Committee
Steven Lamarche, Superintendent, Bourne Public Schools
Edward Donoghue, Director of Business Services, Bourne Public Schools
James Potter, Chair, Bourne School Building Committee
Joel Seeley, Owner's Project Manager, Symmes Maini & McKee Associates
Kent Kovacs, Designer, Flansburgh Associates, Inc.
File: 1.2 Enrollment Projections (Region 6)

MSBA Project No.: 201400360010
District: Bourne

FIRST AMENDMENT
TO THE FEASIBILITY STUDY AGREEMENT
BETWEEN THE TOWN OF BOURNE AND THE
MASSACHUSETTS SCHOOL BUILDING AUTHORITY

Effective as of _____, 2015, ("Effective Date"), this First Amendment to the Feasibility Study Agreement between the Town of Bourne ("Town") and the Massachusetts School Building Authority ("Authority"), including all Exhibits and other documents attached hereto and incorporated by reference herein ("Amendment"), hereby amends the Feasibility Study Agreement between the Town and the Authority for the Proposed Project involving the James F. Peebles Elementary School (hereinafter "Agreement"), as more particularly described below. This Amendment contains all of the terms and conditions agreed upon by the Town and the Authority (collectively, "Parties") as amendments to the original Agreement. No other understandings or representations, oral or otherwise, regarding amendments to the original Agreement shall be deemed to exist or bind the Parties.

The Agreement is hereby amended as follows:

1. Exhibit B to the Agreement is deleted in its entirety. Inserted in place thereof is a new Exhibit B which is attached hereto and incorporated by reference herein.

All other terms and conditions of the original Agreement, including Exhibits attached thereto or incorporated by reference therein, that are not hereby deleted or otherwise amended shall remain in full force and effect. The Town warrants and represents that it has read and understands this Amendment. The Town further warrants and represents that its undersigned officer or representative has full legal authority to enter into this Amendment on behalf of the Town and to bind the Town to its terms and conditions.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment in duplicate originals by their duly authorized officers or representatives.

MASSACHUSETTS SCHOOL BUILDING AUTHORITY
By,

_____ _____
John K. McCarthy Signature Date
Executive Director

TOWN OF BOURNE

By,

_____ _____
Name Signature Date

_____
Title

As of November 24, 2015

EXHIBIT B

SCOPE OF THE FEASIBILITY STUDY

Town of Bourne
James F. Peebles Elementary School

The Scope of the Feasibility Study conducted under this Agreement, which is attached hereto and incorporated by reference herein, shall consist of the development of a feasibility study/schematic design for evaluation of a renovation of the existing school, a renovation of and addition to the existing school, and/or new construction for the James F. Peebles Elementary School in the Town of Bourne (the "District"). Pursuant to the Massachusetts School Building Authority's (the "MSBA") regulations, 963 CMR 2.06, the space allowance for the potential project shall meet all applicable MSBA regulations and guidelines.

The Feasibility Study shall contain all information required by 963 CMR 2.10(8) and any other applicable rules, regulations, policies, guidelines and directives of the MSBA including, but not limited to, a final design program, space summary, budget statement for preferred educational objectives, and a proposed total project budget. The Feasibility Study for this proposed project will examine the following four options: to consolidate the District's grades K-5 population at a District-wide elementary school, which for purposes of the design shall be based on no more than a total of 885 students; to consolidate the District's grades K-4 population at a District-wide elementary school, which for purposes of the design shall be based on no more than 725 students; to consolidate the District's grade 5 population at the James F. Peebles Elementary School and maintain the current facility's grades K-4 population, which for purposes of the design shall be based on no more than a total of 410 students; and to maintain the current James F. Peebles Elementary School grade configuration of grades K-4, which for the purposes of the design shall be based on no more than 250 students. The District will prepare and submit to the MSBA the educational space template for both options for review and acceptance. Upon acceptance of the educational space summary, the District will commence with the evaluation of alternatives. The Schematic Designs that are developed pursuant to this Agreement shall be based upon the final design program which shall be subject to the written approval of the MSBA. The Schematic Design shall include, but not be limited to, the information required by the MSBA's Feasibility Study Guidelines, including, but not limited to, a site development plan, environmental assessment, geotechnical assessment, geotechnical analysis, code analysis, utility analysis, schematic building floor plans, schematic exterior building elevations, narrative building systems descriptions, MA-CHPS scorecard or LEED for Schools checklist, outline specifications, cost estimates, project schedule and proposed total project budget.

In conducting the Feasibility Study and developing the Schematic Design, the District shall, in a sufficient and timely manner as determined by the MSBA, initiate such notification procedures, undertake such review processes, and obtain such determinations and approvals as may be required by 963 CMR 2.03(2)(h) & (i), including, but not limited to, such procedures, reviews, determinations, and approvals as may be required by the Massachusetts Historical Commission ("MHC") and/or the Massachusetts Environmental Policy Act ("MEPA"). At its earliest opportunity, the District shall seek a written determination from MHC as to whether MHC intends to undertake a review of the Proposed Project.

The District shall be responsible for conducting such geotechnical evaluations, site investigations, soils explorations and environmental assessments as are reasonable and necessary to determine whether any significant environmental, geotechnical or other physical conditions exist that may have an impact upon eventual construction on the proposed site. The MSBA may require the District to fully fund certain environmental or geotechnical site testing beyond initial investigatory costs. The MSBA shall bear no responsibility or liability of any sort for the results of any geotechnical evaluations or site testing, soils explorations, environmental assessments, nor for any site remediation, clean-up, or other site remediation services.

The development of the Schematic Design shall be subject to continuing review by the MSBA in accordance with the provisions of this Agreement, the Schedule of Deliverables contained herein, the MSBA's Feasibility Study guidelines and any other applicable rule, regulation, policy, guideline or directive of the MSBA. The District shall be responsible for submitting to the MSBA all documentation that is required to complete the Feasibility Study and Schematic Design and to support the preparation of a Project Scope and Budget Agreement.

Educational Working Group

Visioning Workshop Two Notes November 6, 2015

Key Spaces and Adjacencies

The following consolidated Key Spaces and Adjacencies were identified by the Educational Working Group for the new and/or renovated Peebles Elementary School/Bourne Elementary.

- Special Education
  - Breakout spaces (interspersed)
  - 2-3 self-contained classrooms with bathrooms and changing space
  - Therapy rooms (OT, PT, Speech)
- Music and Performance Space
  - Acoustically sound
  - Near stage
- Media Center
- Cafeteria
- Outdoor Spaces (Innovation Break Out)
- Gym
- Teacher Work Room
  - Teacher dining
  - Print-center model
  - Dividing wall or two spaces

Educational Working Group

Visioning Workshop Two Notes November 6, 2015

Adjacency Diagram

Educational Working Group

Visioning Workshop One

October 16, 2015

Agenda

EXPECTED OUTCOMES: By the end of the session we will have begun to…

- Share **Priority Goals** for the design of Bourne Public School's new elementary school
- Discuss 21st century teaching and learning and identify **21st Century Learning Goals** and initiatives for Bourne Public Schools
- Review Bourne Elementary Schools' most essential **and innovative initiatives and programs**, brainstorm a list of those envisioned and desired, and discuss the implications they hold for the design of the new facility
- Assess Bourne Elementary Schools' **Strengths, Challenges, Opportunities, and Goals** with regard to the development of its academic programs and the design of a new facility
- Explore and prioritize a range of architectural **Design Patterns** that will best support 21st century teaching and learning within the new Bourne Elementary School facility

Time	Activity	Purpose
9:00 – 9:45	***Workshop Goals and Introductions*** • Workshop overview • The Design Process / Creating a Design Guide • Introductions o Priority Goals for the new facility	Introduce participants, and clarify agenda and desired outcomes for this workshop and subsequent workshops. Share some of our Priority Goals for the new facility.
9:45– 10:30	***21st Century Schools*** • Changing Paradigms in Education • Interactive Presentation: 21st Century Teaching and Learning • Videos and discussion	Identify and discuss elements of 21st century teaching and learning as connected to Bourne Elementary Schools' approach to its educational programming.
10:30– 10:45	**BREAK**	

10:45 – 11:30	***21st Century Learning Goals for BPS Elementary Schools*** • Small group review of assorted 21st century learning goals and outcomes and creation of priority listings • Large group prioritization	Ground our thinking about design guidelines and desired building features in a discussion and exploration of 21st century learning goals for Bourne Elementary Schools.
11:30– 12:00	***Peebles and Bournedale Present and Future Educational Priorities*** • Brief presentations of essential and innovative school programs and initiatives presently in practice at Peebles and Bournedale Elementary Schools	Identify present and future educational initiatives and programs at Peebles and Bournedale Elementary School and discuss their effect on the design of the new facility.
12:00– 12:30	**LUNCH**	
12:30– 1:15	***BPS Elementary School SCOG Analysis*** • Brainstorm of Peebles and Bournedale Elementary Schools' Strengths, Challenges, Opportunities, and Goals	Identify what is presently working well within Peebles and Bournedale Elementary Schools, what is challenging, and what opportunities exist with regard to the further development of the academic program and new school facility.
1:15–1:30	**BREAK**	
1:30 –2:45	***21st Century School Facility Design Patterns*** • Presentation and Q&A ***Design Patterns for Bourne Elementary Schools*** • Small group review of assorted facility Design Patterns • Creation of priority listings • Large group prioritization	Ground our thinking about design guidelines and desired building features in a discussion and exploration of new school Design Patterns. Identify priority Design Patterns for Bourne Elementary School.
2:45–3:00	***Closing and Next Steps*** • Next Steps review and Q&A • Blue Sky Ideas (Exit Ticket): What no-holds-barred, over-the-top, budget-is-no-issue idea(s) and/or space(s) would you like to see take shape in the new Bourne Elementary School facility?	Hear from participants about their questions and thoughts. Review next steps for development of our process working together.

Peebles Elementary School

Design Working Group

Visioning Workshop Two

November 6, 2015

Agenda

EXPECTED OUTCOMES: By the end of the session we will have begun to…

- Review **Priority Goals**, **SCOG Analyses** and **Learning Goals** for the design of Bourne Public School's new elementary school
- Explore and prioritize a range of architectural **Design Patterns** that support 21st century teaching and learning
- Understand the role that **Guiding Principles** play in setting facility design priorities and intent
- Create a set of **Guiding Principles and priorities for design** of Bourne Public School's new elementary school
- Generate a listing of **Key Spaces and Blue Sky Ideas** for the new facility
- Engage in a **Bubble Diagramming Activity** to identify important spaces and adjacencies within the new school
- Begun to identify **Pros and Cons of Consolidation** and community talking points

Time	Activity	Purpose
8:00 – 8:45	***Workshop Goals and WS One Debrief*** • Introduction of new members • Review of: o Design Priorities o SCOG Analysis o Learning Goals What strikes us? What's missing?	Review today's agenda and debrief the September 30th workshop activities and discuss key themes and takeaways.
8:45– 9:45	***21st Century School Facility Design Patterns*** • Presentation and Q&A ***Design Patterns for Bourne Elementary School*** • Small group review of assorted facility Design Patterns • Creation of priority listings • Large group prioritization •	Ground our thinking about design guidelines and desired building features in a discussion and exploration of new school Design Patterns. Identify priority Design Patterns for Bourne Public School's new elementary school.
9:45– 10:00	**BREAK**	

10:00 – 11:15	***Guiding Principles for Design*** • Presentation and Q&A • Small group review of assorted Guiding Principles and creation of priority listings • Large group sharing and prioritization	Explore the connections between Guiding Principles and school design solutions. Translate our Bourne Public Schools elementary school Design Patterns into a listing of priority Guiding Principles for design of the new and/or renovated building.
11:15 – 12:00	***Key Spaces and Adjacencies*** • Individual reflection • Small group discussion Large group discussion of key spaces and desired adjacencies	Share practical and creative design ideas that will help us reach our learning goals, implement desired Design Patterns, and put our newly brainstormed Guiding Principles into practice.
12:00– 12:30	**LUNCH**	
12:30– 1:45	***Either: Bubble Diagramming*** • Individual and small group diagramming of key spaces and/or desired adjacencies within the new school • Large group sharing ***Or: Consolidation Pros and Cons*** • Small group discussion and recording of pros and cons of consolidation • Large group sharing	Identify important adjacencies and design ideas that can be explored further in the conceptual design process. Identify pros, cons and talking points for the consolidation discussion.
1:45 –2:00	***Closing and Next Steps*** • Next Steps review and Q&A	Hear from participants about their questions and thoughts. Review next steps for development of our process working together.

Peebles Elementary School

Design Working Group

Visioning Workshop Three

November 30, 2015

Agenda

EXPECTED OUTCOMES: By the end of the session we will have begun to…

- Review **Design Patterns**, **Guiding Principles, Key Spaces and Adjacencies** for the design of Bourne Public School's new elementary school
- Review preliminary **Design Options** developed by Flansburgh
- Develop a listing of Pros and Cons of current design options as cross-walked to desired **Design Patterns** and **Guiding Principles**
- Discuss **Next Steps** and recommendations

Time	Activity	Purpose
8:30 – 9:30	***Workshop Goals and WS Two Debrief*** • Discussion of community conversations and the District's latest thinking with regard to the new school design • Review of: o Design Patterns o Guiding Principles o Key Spaces and Adjacencies What strikes us? What's missing?	Review today's agenda and debrief the November 6 workshop activities and discuss key themes and takeaways.
9:30– 10:00	***Conceptual Design Options*** • Presentation by Flansburgh	Review design options developed thus far
10:00– 10:15	**BREAK**	
10:15 – 11:45	***Conceptual Design Pros and Cons*** • Review pros and cons of current design options	Evaluate current design options with regard to how well they embody desired Design Patterns and previously articulated Guiding Principles
11:45 – 12:30	***Next Steps and Recommendations*** • Review next steps in the design process • Articulate recommendations moving forward	Get on the same page with regard to next steps, priorities and recommendations.

Educational Working Group

Visioning Workshop Three Notes November 30, 2015

Guiding Design Principles 2.0

The following consolidated list of "Guiding Design Principles 2.0" for design of the new and/or renovated Peebles Elementary School/Bourne Elementary incorporates feedback from the Educational Working Group on the Guiding Design Principles 1.0 listing and articulates a set of Guiding Principles that reflects the group's best thinking.

1. Community Connected

- **A Place You Want to Be**
- **Future Orientation with Connections to Tradition**
- **Community Access**

2. Purposefully Innovative and Creative

- **Visible Learning**
- **Flexible and Adaptable Learning Environments**

3. Collaborative and Interconnected

- **Learning Communities**

4. Connections to 21st Century Learning

- **Inquiry-Based Learning**
- **Teacher as Designer**

Educational Working Group

Visioning Workshop Three Notes November 30, 2015

Design Option 1A – 250 Student, New Construction K-4 at Peebles Site

Pros

- Good community access
- Can be built in front of existing building with minimal disruption
- A modern, 21st century school building for the community
- Clear articulation between community and academic wings
- Good location of Special Ed
- The stage in the middle offers a lot of flexibility
- The Outdoor Classroom provides a beautiful and enclosed focal point to the building
- Good outdoor access (promotes garden work)
- Innovation Studio along the main path of travel
- Proximity of Art and Innovation Studio provides options (could be a movable and/or transparent wall)
- Team spaces promote interconnection
- Nice to have collaborative working space right across from media lab
- Location of admin keeps noise away from office

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Cons

- A very small school
- Does not alleviate space pressure on the middle school
- Does not relocate the 5th grade within an elementary school

Educational Working Group

Visioning Workshop Three Notes November 30, 2015

Design Option 1G – 250 Student, Addition/Renovation, K-4 at Peebles Site

Pros

- The existing addition (the most deficient part of the building) gets demolished
- Flexibility in site design
- Modernizing the facility (aesthetically and physically)
- The building gets a new face
- A reconstructed and safer parent and bus dropr off
- Maintains community and academic separation
- Existing classrooms are adequately sized
- Keeps the recess area
- Connects future orientation with tradition

Cons

- A very small school
- Does not alleviate space pressure on the middle school
- Does not relocate the 5th grade within an elementary school
- Gym too close to admin suite – too noisy
- Innovation Lab is tucked away on lower level
- Visible learning is a challenge
- Cafeteria, stage and kitchen are directly above Innovation, Music and Art, could be a noise problem
- Connections to outdoor space is not as secure (everything is open to landscape)
- Does not do a good job of providing classroom neighborhoods or promoting collaboration

Educational Working Group

Visioning Workshop Three Notes November 30, 2015

Design Option 2A – 725 Student, Addition/Renovation, PK-4 at Bournedale Site

Pros

- Sits well on site
- Creates new face
- Works out well to locate parking area near woods
- New entry lobby and courtyard classroom provide nice buffer for noise and allows controlled use of outdoor space
- Main entry is inviting to the community
- Love admin suite (admin space grows)
- Provides two music rooms
- Provides transition between lower and upper grades (PKr K/1,2/3/4) –older and younger sections of building
- Nice to have all the grades and resources together
- Leans toward collaborative and interconnected learning communities
- Lots of flexible spaces throughout the building
- Gym addition
- Outdoor classroom space (each section can have their own courtyard)
- Maintains existing structure and facility
- Minimal disruption to learning
- Having medical with admin space close together
- All grades are together going up – creates a more equitable experience
- Team spaces in new addition
- A place you want to be

Cons

- Very large school
- Does not alleviate space pressure on the middle school
- Does not relocate the 5th grade within an elementary school
- Requires phasing
- A disruption to one elementary school and not the other (Peebles stays in tact during construction)
- An empty Peebles building (anyone who uses it inherits the same mess)
- Peebles families lose their neighborhood school

FIRST FLOOR PLAN (SCOPE OF WORK)

SECOND FLOOR PLAN (SCOPE OF WORK)

Educational Working Group

Visioning Workshop Three Notes

November 30, 2015

Design Option 3A – 885 Student, Addition/Renovation, PK-5 at Bournedale Site

Pros

- Alleviates transition issue for 5th grade students
- Alleviates crowding in middle school
- You get more for your dollar
- Continuity in learning PKr 5 – the early years
- Varied learning spaces throughout the building
- Sits well on site
- Creates new face
- Works out well to locate parking area near woods
- New entry lobby and courtyard classroom provide nice buffer for noise and allows controlled use of outdoor space
- Main entry is inviting to the community
- Good admin suite (admin space grows)
- Provides two music rooms
- Provides transition between lower and upper grades (PKr K/1,2/3/4) – older and younger sections of building
- Nice to have all the grades and resources together
- Leans toward collaborative and interconnected learning communities
- Lots of flexible spaces throughout the building
- Gym addition
- Outdoor classroom space (each section can have their own courtyard)
- Maintains existing structure and facility
- Minimal disruption to learning
- Having medical with admin space close together
- All grades are together going up – creates a more equitable experience
- Team spaces in new addition
- A place you want to be

Cons

- Existing building section will not provide team areas or as much display
- Not a clear line between academic and community space
- Requires phasing
- Its very big (from 68k – 144k SF)
- 4th grade classrooms are separated by floor level in this iteration
- A disruption to one elementary school and not the other (Peebles stays in tact during construction)
- An empty Peebles building (anyone who uses it inherits the same mess)
- Peebles families lose their neighborhood school

Educational Working Group

Visioning Workshop Three Notes November 30, 2015

Design Option 3B – 885 Student, Addition/Renovation, PK-5 at Bournedale Site

Pros

- Alleviates transition issue for 5th grade students
- Alleviates crowding in middle school
- You get more for your dollar
- Continuity in learning PK-5 – the early years
- Varied learning spaces throughout the building
- Sits well on site and creates new face for building
- A more direct entry sequence with more on display
- Visual learning with Innovation Studio right near entry
- Art rooms are distributed
- A satellite Learning Commons would get incorporated into the new area
- Gardening courtyard is incorporated into the envelope of the building (but flanked by classrooms)
- New entry lobby and courtyard classroom provide nice buffer for noise and allows controlled use of outdoor space
- Main entry is inviting to the community
- Love admin suite (admin space grows)
- Provides two music rooms
- Provides transition between lower and upper grades (PK-K/1,2/3/4) – older and younger sections of building
- Nice to have all the grades and resources together

- Leans toward collaborative and interconnected learning communities
- Lots of flexible spaces throughout the building
- Gym addition
- Outdoor classroom space (each section can have their own courtyard)
- Maintains existing structure and facility
- Minimal disruption to learning
- Having medical with admin space close together
- All grades are together going up – creates a more equitable experience
- Team spaces in new addition
- A place you want to be

Cons

- Very large school
- Existing building section will not provide team areas or as much display
- Not a clear line between academic and community space
- Music Room needs buffer
- Requires phasing
- Its very big (from 68k – 144k SF)
- 4th grade classrooms are separated by floor level in this iteration
- A disruption to one elementary school and not the other (Peebles stays in tact during construction)
- An empty Peebles building (anyone who uses it inherits the same mess)
- Peebles families lose their neighborhood school

Educational Working Group

Visioning Workshop Three Notes

November 30, 2015

Design Option 4A – 410 Student, New Construction K-5 at Peebles Site

Pros

- Alleviates transition issue for 5th grade students
- A larger school than the 250 option
- Creates a K-4 community school on the Cape side of the bridge
- Best alternative for maintaining village and neighborhood schools
- Grade 5 could be school within its own wing – bring 5th grade together as a group and creates an upper elementary experience that prepares them for the middle school
- Good community access
- Can be built in front of existing building with minimal disruption
- A modern, 21st century school building for the community
- Clear articulation between community and academic wings
- Good location of Special Ed
- The stage in the middle offers a lot of flexibility
- The Outdoor Classroom provides a beautiful and enclosed focal point to the building
- Good outdoor access (promotes garden work)
- Innovation Studio along the main path of travel
- Proximity of Art and Innovation Studio provides options (could be a movable and/or transparent wall)
- Team spaces promote interconnection
- Nice to have collaborative working space right across from media lab
- Location of admin keeps noise away from office
- Tying 5th grade to the elementary school is more developmentally appropriate

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Cons

- One year transition for Bournedale 5th graders could be challenging
- All 5th graders will be located at Peebles (can be pro or con)
- Inequality of Peebles and Bournedale experience

Educational Working Group

Visioning Workshop Three Notes November 30, 2015

Design Option 1G – 410 Student, Addition/Renovation, K-5 at Peebles Site

Pros

- The existing addition (the most deficient part of the building) gets demolished
- Flexibility in site design
- Modernizing the facility (aesthetically and physically)
- The building gets a new face
- The courtyard is nice, but it backs up to classrooms, which can be noisy
- Main Street connects gym and cafeteria
- Maintains a campus feel (similarity in structure) to MS and HS
- A reconstructed and safer parent and bus dropr off
- Maintains community and academic separation
- Existing classrooms are adequately sized
- Keeps the recess area
- Connects future orientation with tradition

Cons

- One year transition for Bournedale 5th graders could be challenging
- All 5th graders will be located at Peebles (can be pro or con)
- Inequity of Peebles and Bournedale experience
- Requires more vetting with the community
- Considerable disruption during construction (potentially to all three schools)
- Gym too close to admin suite – too noisy
- Innovation Lab is tucked away on lower level
- Visible learning is a challenge in older building
- No innovative use of hallways
- Cafeteria, stage and kitchen are directly above Innovation, Music and Art, could be a noise problem
- Connections to outdoor space is not as secure (everything is open to landscape)
- Does not do a good job of providing classroom neighborhoods or promoting collaboration

Flansburgh Architects

December 2, 2015

Mr. Joel G. Seeley AIA
Symmes Maini & McKee
1000 Massachusetts Ave.
Cambridge, MA 02138

RE: Bourne Public Schools
Peebles Site Waste Water Treatment Plant Letter

Dear Joel,

The design team contacted the DEP Southwest regional office for information regarding the existing Waste Water Treatment Plant on the school campus of the Elementary, Middle, and High Schools. The following information describing the system was provided:

1. The system currently takes flows from all three schools on the site (Peebles, Middle, and High Schools)

2. They are currently in the process of renewing the permit for the WWTP.

3. The system is designed for 35,400 gallons per day of flow from the entire site.

4. The design population for the ENTIRE SITE (all three schools) was 2,860 people which included 880 for Peebles, 1100 for the Middle School, and 880 for the High School

5. The highest flow they have ever seen to the WWTP is 12,300 gallons in one day, significantly less than the design flow.

6. As long as the Peebles site does not anticipate a population of more than 880 people, then the current permit does not need to be modified.

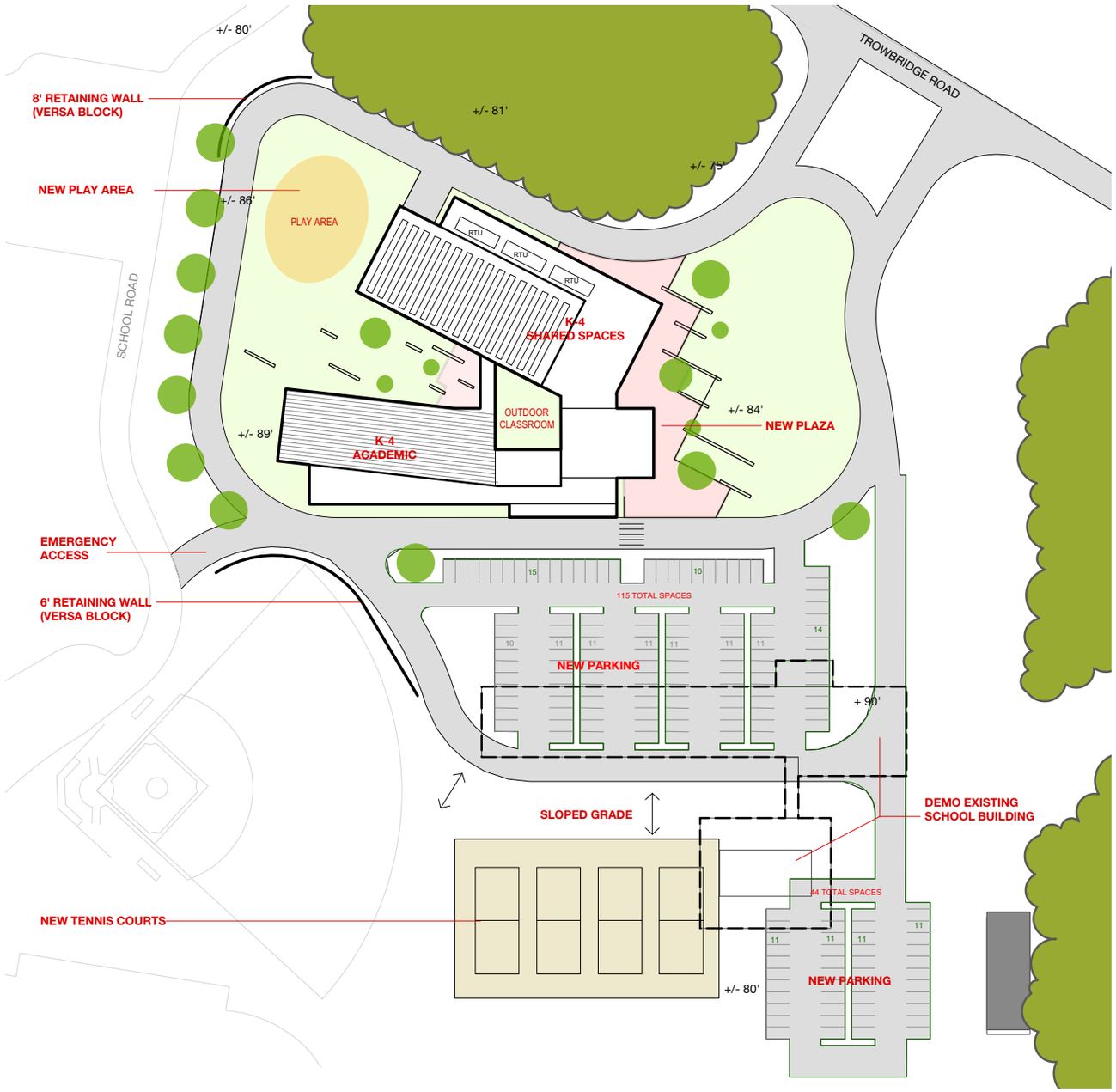
Based on this information, the WWTP system can accommodate the current design options being considered for this site.

Sincerely,

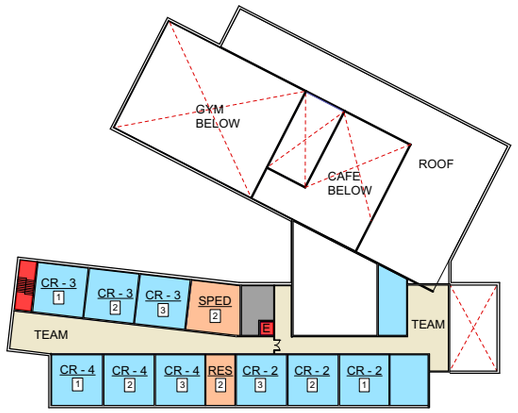
FLANSBURGH ASSOCIATES, INC.

Kent D. Kovacs, AIA LEED AP
Principal

Peebles New Construction Option 1A (250 students)



FIRST FLOOR PLAN



SECOND FLOOR PLAN

COSTS:

Construction Cost	$29.01 M
Soft Cost	$ 8.97 M
TOTAL COST	**$37.98 M**

SQUARE FOOTAGE:

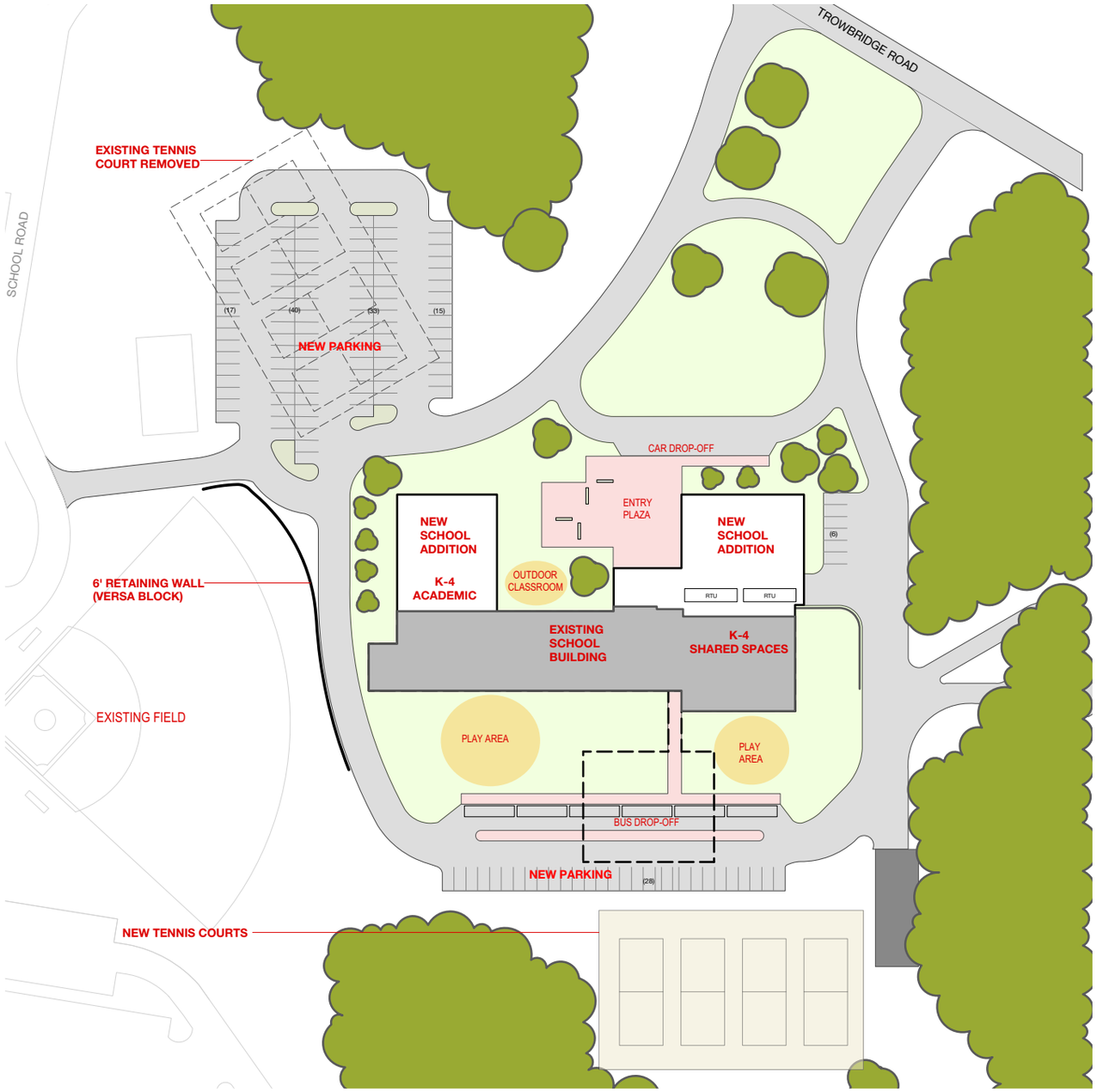
New	57,248 SF
Renovated	0 SF
TOTAL	**57,248 SF**

PROJECT MANAGEMENT SMMA

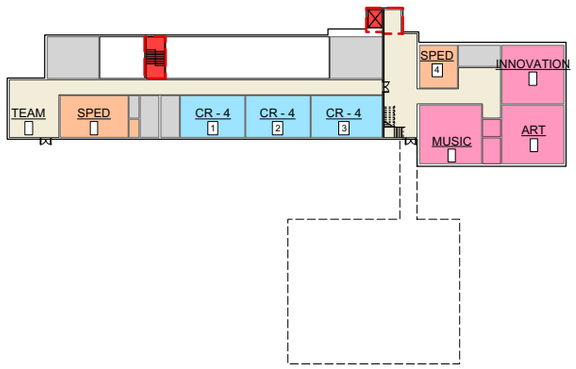
Massachusetts School Building Authority

Flansburgh Architects

Peebles Addition/Renovation Option 1G (250 students)



FIRST FLOOR PLAN



SECOND FLOOR PLAN

COSTS:

Construction Cost	$28.56 M
Soft Cost	$ 8.79 M
TOTAL COST	**$37.35 M**

SQUARE FOOTAGE:

New	19,691 SF
Renovated	37,557 SF
TOTAL	**57,248 SF**

Bournedale Option 2A (725 students)

FIRST FLOOR PLAN

SECOND FLOOR PLAN

COSTS:

Construction Cost	$30.28 M
Soft Cost	$ 9.05 M
TOTAL COST	**$39.34 M**

SQUARE FOOTAGE:

New	46,493 SF
Renovated	15,800 (extensive)
	52,300 (minimal)
TOTAL	**114,593 SF**

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

Bournedale Option 3A (885 students)

FIRST FLOOR PLAN

SECOND FLOOR PLAN

COSTS:

Construction Cost	$35.41 M
Soft Cost	$10.71 M
TOTAL COST	**$46.12 M**

SQUARE FOOTAGE:

New	63,282 SF
Renovated	15,800 (extensive)
	52,300 (minimal)
TOTAL	**131,282 SF**

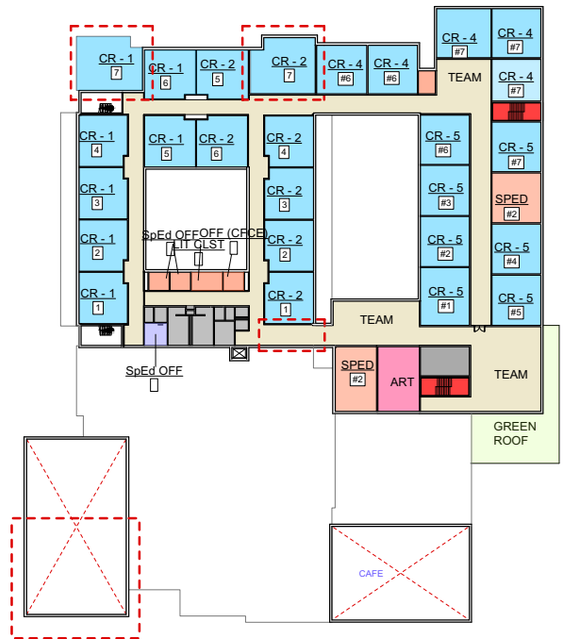
PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

Bournedale Option 3B (885 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

COSTS:

Construction Cost	$34.78 M
Soft Cost	$10.57 M
TOTAL COST	**$45.35 M**

SQUARE FOOTAGE:

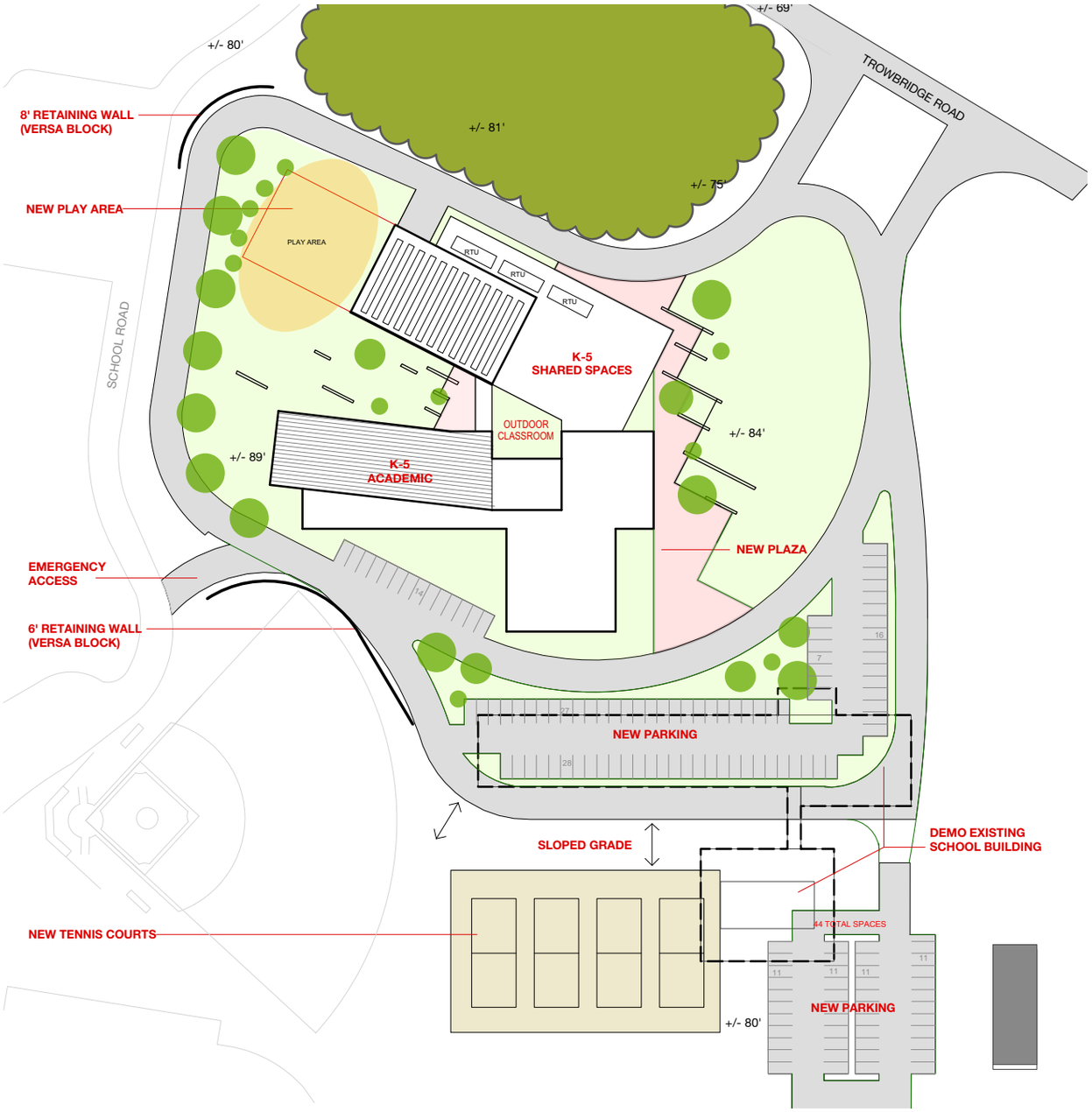
New	63,282 SF
Renovated	15,800 (extensive)
	52,300 (minimal)
TOTAL	**131,282 SF**

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

Peebles New Construction Option 4A (410 students)



FIRST FLOOR PLAN

SECOND FLOOR PLAN

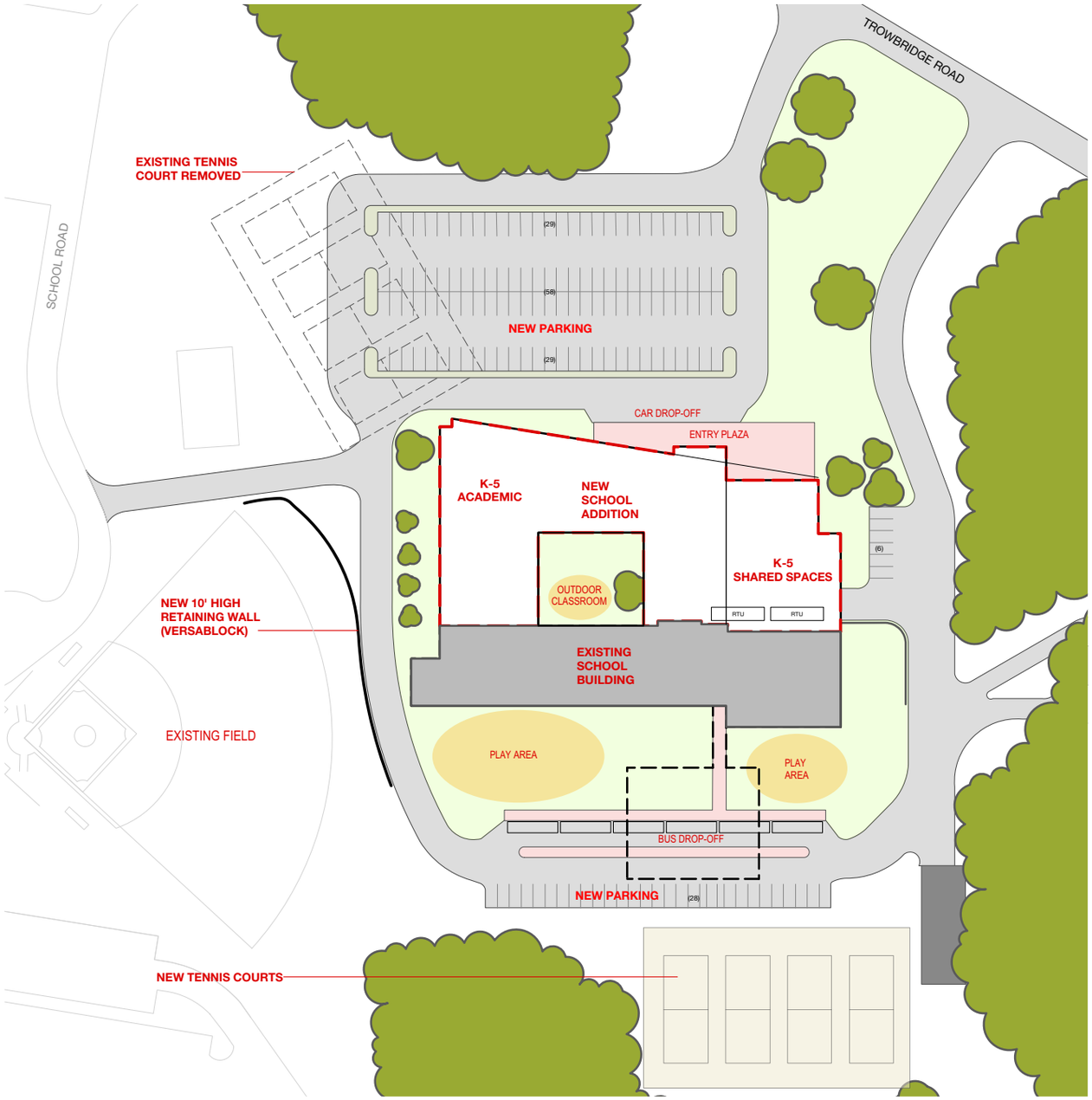
COSTS:

Construction Cost	$32.99 M
Soft Cost	$10.37 M
TOTAL COST	**$43.36 M**

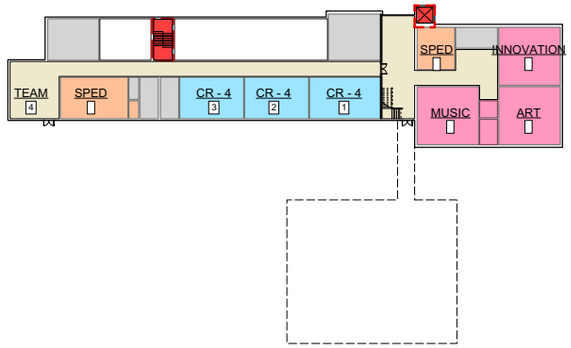
SQUARE FOOTAGE:

New	72,473 SF
Renovated	0 SF
TOTAL	**72,473 SF**

Peebles Addition/Renovation Option 4B (410 students)



FIRST FLOOR PLAN



SECOND FLOOR PLAN

COSTS:

Construction Cost	$32.96 M
Soft Cost	$10.32 M
TOTAL COST	**$43.28 M**

SQUARE FOOTAGE:

New	34,916 SF
Renovated	37,557 SF
TOTAL	**72,473 SF**

Preliminary Cost Models

		Option 1 (K-4) 250 students		Option 2 (PK-4) 725 students	Option 3 (PK-5) 885 students		Option 4 (K-5) 410 students	
		1A New	1G Add/Reno	2A Add/Reno	3A Add/Reno	3B Add/Reno	4A New	4B Add/Reno
Gross SF		57,248 SF		114,593 SF	131,382 SF		72,473 SF	
*Construction Cost $ (Hard Cost)	Building	$23.25M	$23.15M	$25.63M	$30.63M	$30.03M	$26.96M	$27.46M
	Hazmat/Demo	$1.71M	$1.24M	$0	$0	$0	$1.7M	$1.21M
	Sitework	$4.05M	$4.17M	$4.65M	$4.78M	$4.75M	$4.34M	$4.29M
	Total	$29.01M	$28.56M	$30.28M	$35.41M	$34.78M	$32.99M	$32.96M
Soft Cost $	Fees & Expenses	$5.9M	$5.47M	$5.61M	$6.38M	$6.28M	$6.5M	$6.13M
	FF&E	$.75M	$.75M	$1.02M	$1.5M	$1.5M	$1.23M	$1.23M
	Contingencies	$2.32M	$2.57M	$2.42M	$2.83M	$2.78M	$2.64M	$2.97M
TOTAL		$37.98M	$37.35M	$39.34M	$46.12M	$45.35M	$43.36M	$43.28M

* Estimated Cost subject to change as project is refined

	Evaluation Criteria	Option 1A (250 students)	Option 1G (250 students)	Option 2A (725 students)	Option 3A (885 students)	Option 3B (885 students)	Option 4A (410 students)	Option 4B (410 students)
1	Size of School							
2	Grade Separation Issues							
3	Reinforces Campus Feel							
4	Opportunity for Collaboration & Mentoring							
5	District-wide Culture and Advantages							
6	Traffic Impact							
7	Separation of Community / Academic Uses							
8	Creation of Community Space							
9	Limits Disruption to Students							
10	Cost Effectiveness: Operation / Construction							
11	Maximum Building Efficiency							
12	Least Environmental Impact							
13	Most Beneficial Construction Schedule							
14	Best Site Option for Neighborhood Schools							
15	Adequate Play & Parking Areas							
16	Continued Use of Athletic Resources							
17	Maximum Score for NE-CHPS / LEED							
18	Best Space Adjacencies							
19	Best Separation of Parent / Bus / Service Circulation							
20	Resolves Geographic Separation by Canal							
21	Centralized Elementary Resources							
22	Centralized Campus Resources							
23	Advantages to Middle School							
24	Maximize MSBA Reimbursement							

Ranking: 3 for most favorable, 2 for acceptable, 1 for least favorable

School Building Committee Meeting

December 3, 2015

Peebles Elementary School
Feasibility Study

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

Flansburgh Architects

EDUCATIONAL PLANNING UPDATE

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Guiding Design Principles

1. Community Connected

- A Place You Want to Be
- Future Orientation with Connections to Tradition
- Community Access

2. Purposefully Innovative & Creative

- Visible Learning
- Flexible and Adaptable Learning Environments

3. Collaborative & Interconnected

- Learning Communities

4. Connections to 21st-Century Learning

- Inquiry-Based Learning
- Teacher as Designer

MSBA Study Scope

Option 1

Grades
K to 4

Neighborhood Elementary School

250 students

Option 2

Grades
PreK to 4

District-wide Elementary School

725 students

Option 3

Grades
PreK to 5

District-wide Elementary School

885 students

Option 4

Grades
K to 5

Neighborhood Elem. School with District-wide 5th grade

410 students

Peebles Campus

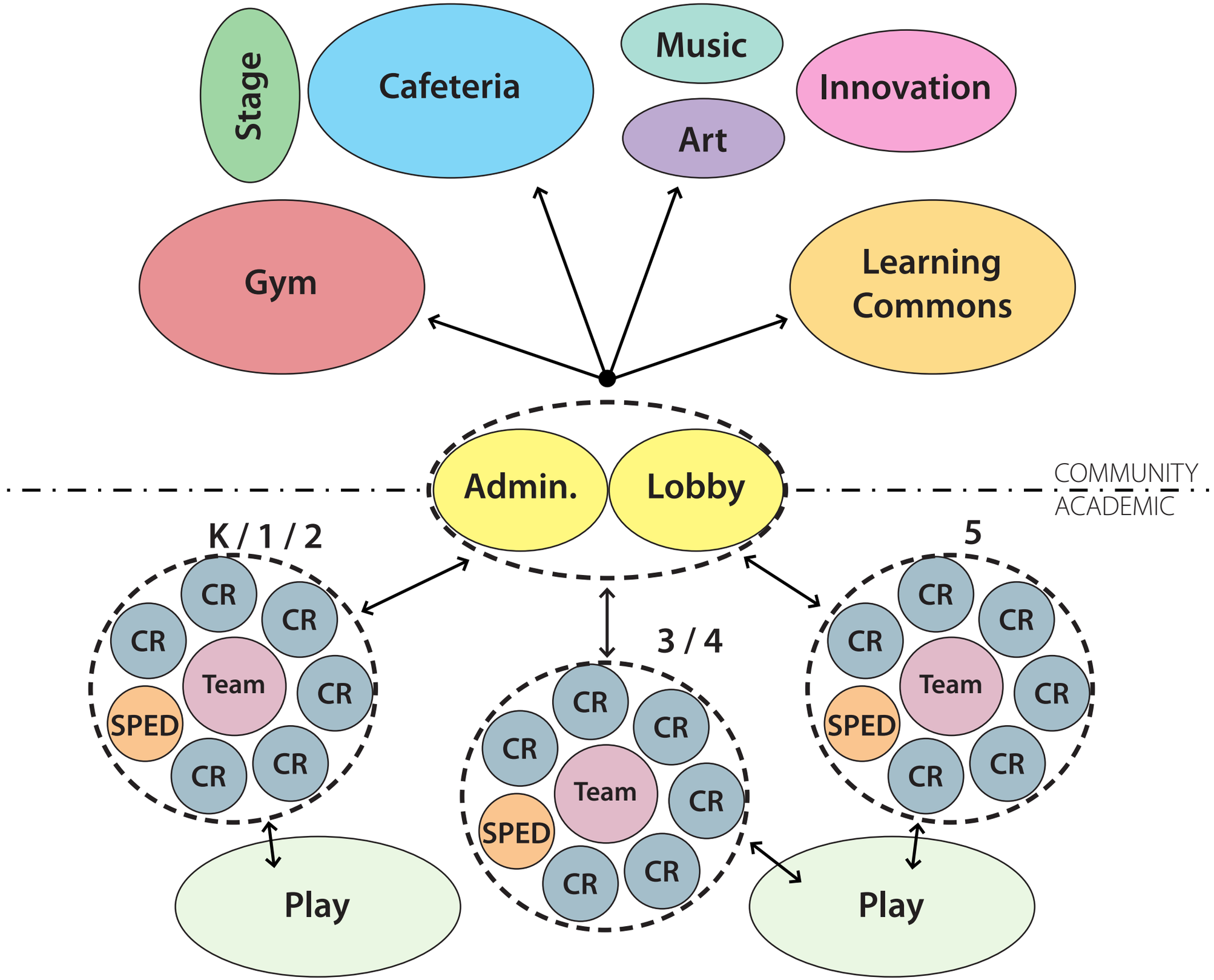
Peebles Elementary School | Bourne, MA

Flansburgh Architects

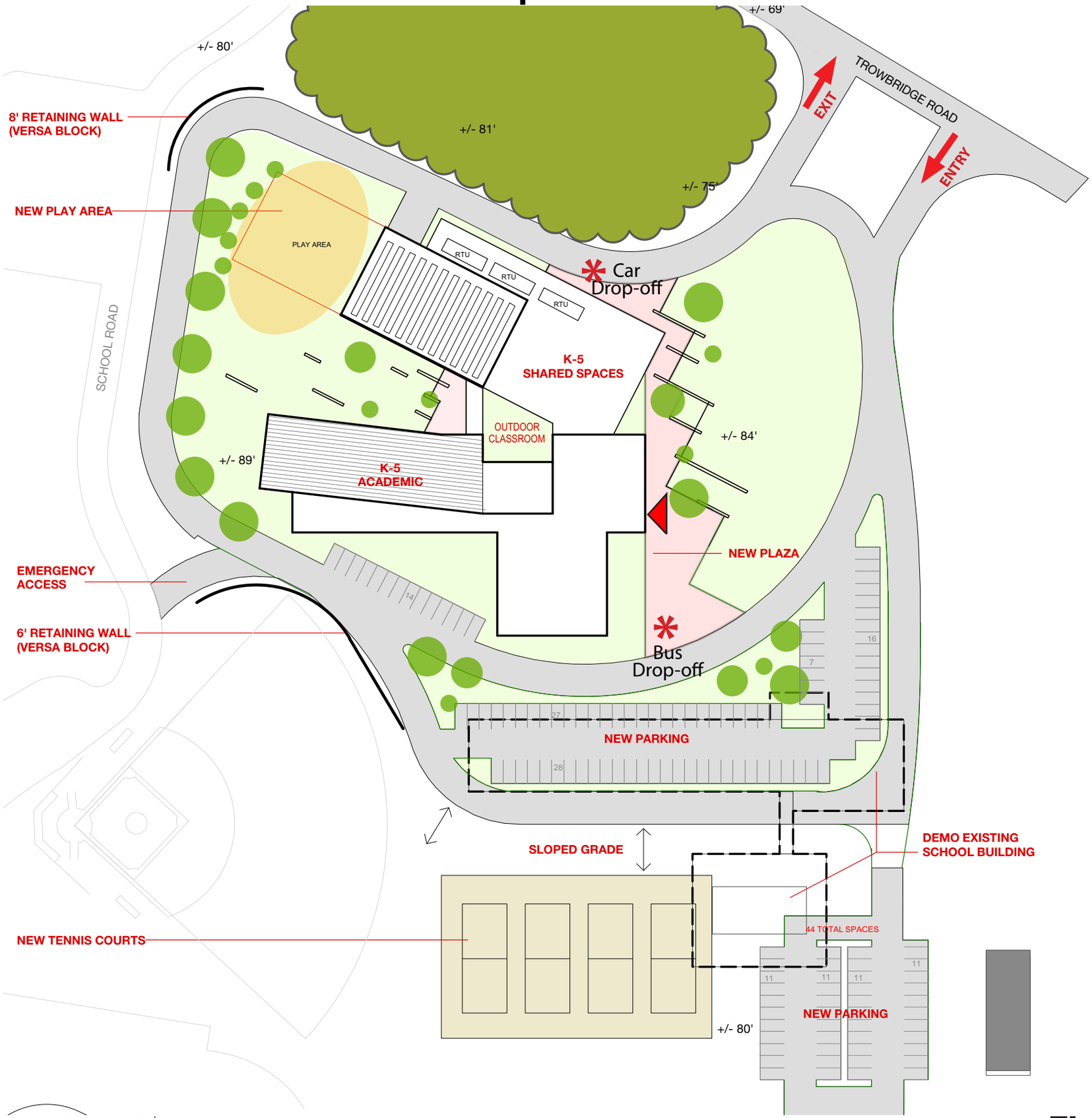
Program Areas - OPTION 4: 410 enrollment

PROGRAM	GRADES K-5
Core Academic	20,700
Special Education	4,530
Art & Music	2,300
Health & Physical Education	6,300
Media Center	2,515
Technology (computer)	1,000
Dining & Food Service	6,325
Medical	510
Administration & Guidance	2,125
Custodial & Maintenance	2,010
Subtotal NSF	**48,315 NSF**
Grossing Factor	x 1.5
Total GSF	**72,473 GSF**
Number of Students	410 Students

Adjacency Diagram - **OPTION 4: 410 enrollment**



Peebles New Construction Option 4A (410 students)

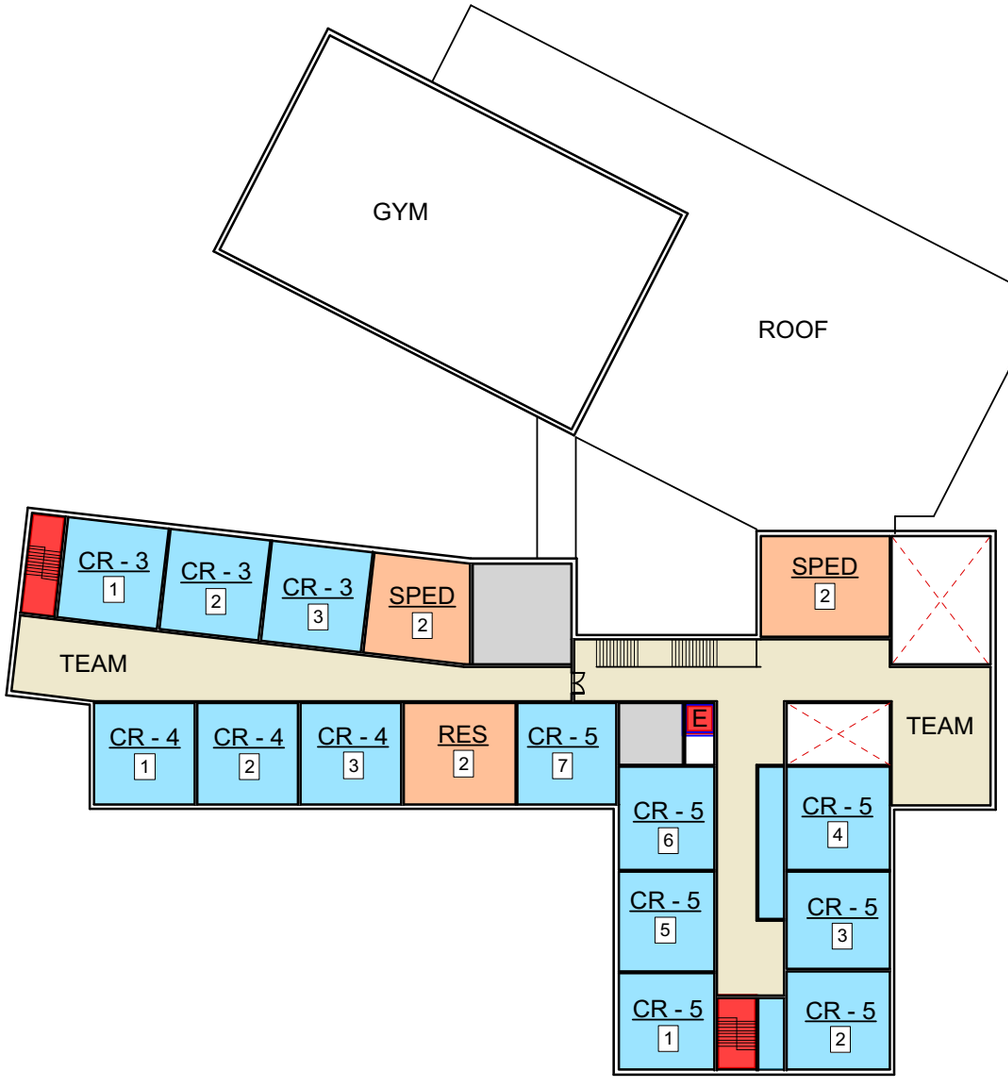


Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles New Construction Option 4A (410 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

Peebles New Construction Option 4A (410 students)

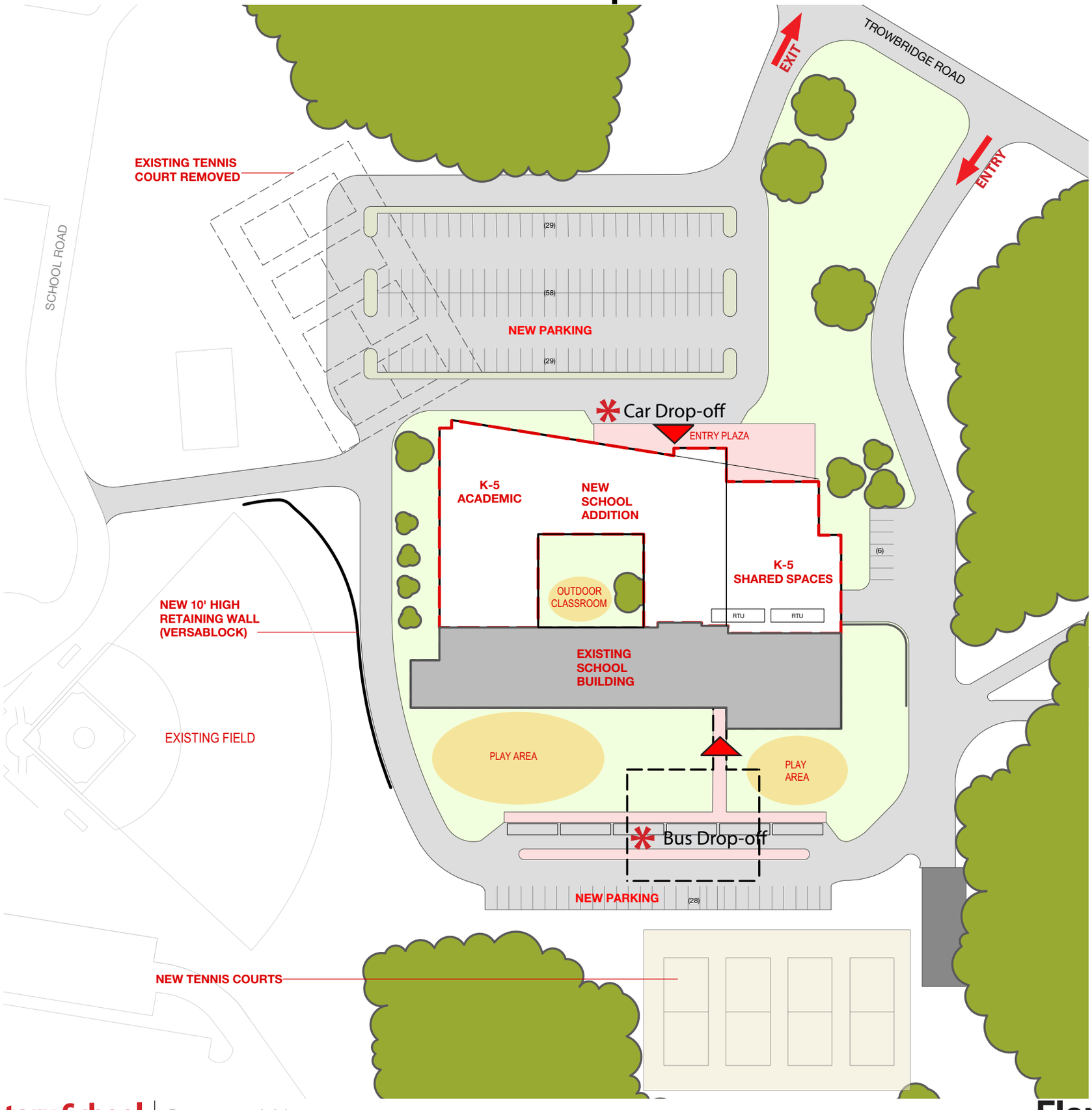
Pros:

- Alleviates transition issue for 5th grade students; relieves space demand in middle school
- Maintains K-4 neighborhood school on Cape side of bridge and campus connectivity
- 5th grade in own wing creates upper elementary experience as preparation for middle school
- New Construction alternative with least disruption to students during construction
- Clear Articulation between Community and Academic wings; good community access
- Team Spaces promote interconnection
- Outdoor Classroom a beautiful, enclosed focal point for building; good access encourages use.
- Innovation Studio located along main axis; proximity to Art and to Media Center offers flexibility and opportunity for collaboration.
- Well-located Special Education spaces, Admin, and Gym; Stage between Gym and Caf offers flexibility
- Allows flexibility in building and site design

Cons:

- One-year transition for Bournedale 5th graders could be challenging
- Dynamics between K-4 students and 5th graders, with 5th grade representing 40% of population

Peebles Addition / Renovation Option 4B (410 students)

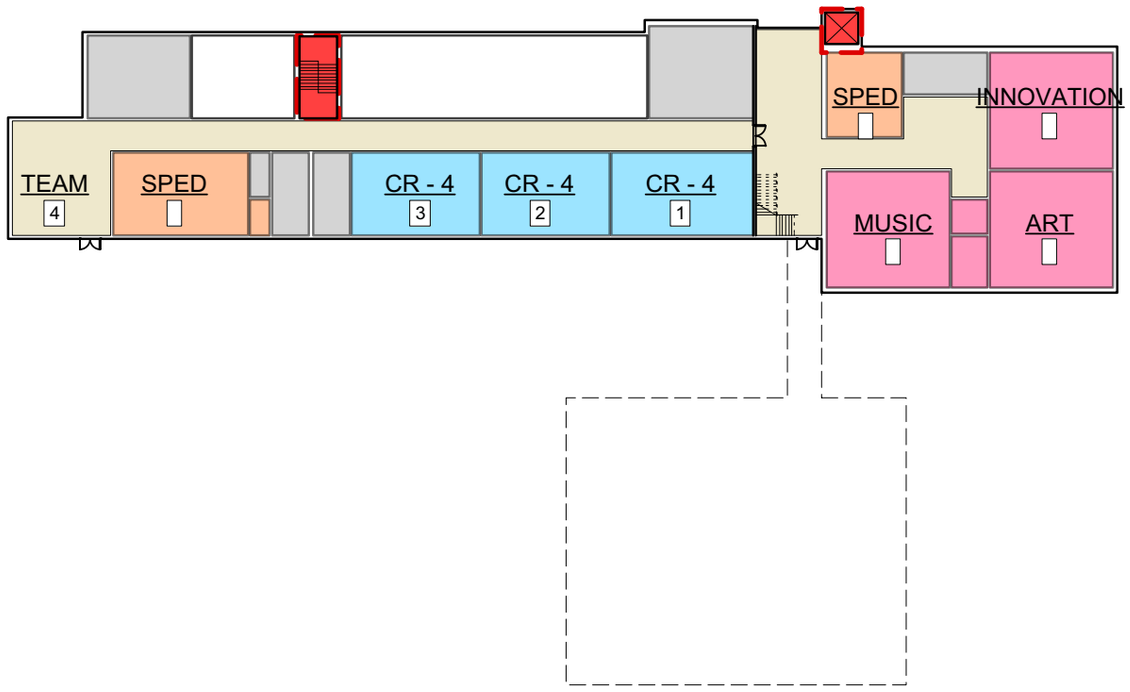


Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles Addition / Renovation Option 4B (410 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

ACADEMIC
COMMUNITY

Peebles Addition / Renovation Option 4B (410 students)

Pros:

- Modernizes Peebles aesthetically and physically; provides new face of building
- Eliminates Annex, most deficient part of building
- Well-size courtyard provides secure outdoor access
- Main street connects community spaces
- Maintains clear articulation between Community and Academic Wings
- Reconstructed and safer parent and bus drop-offs

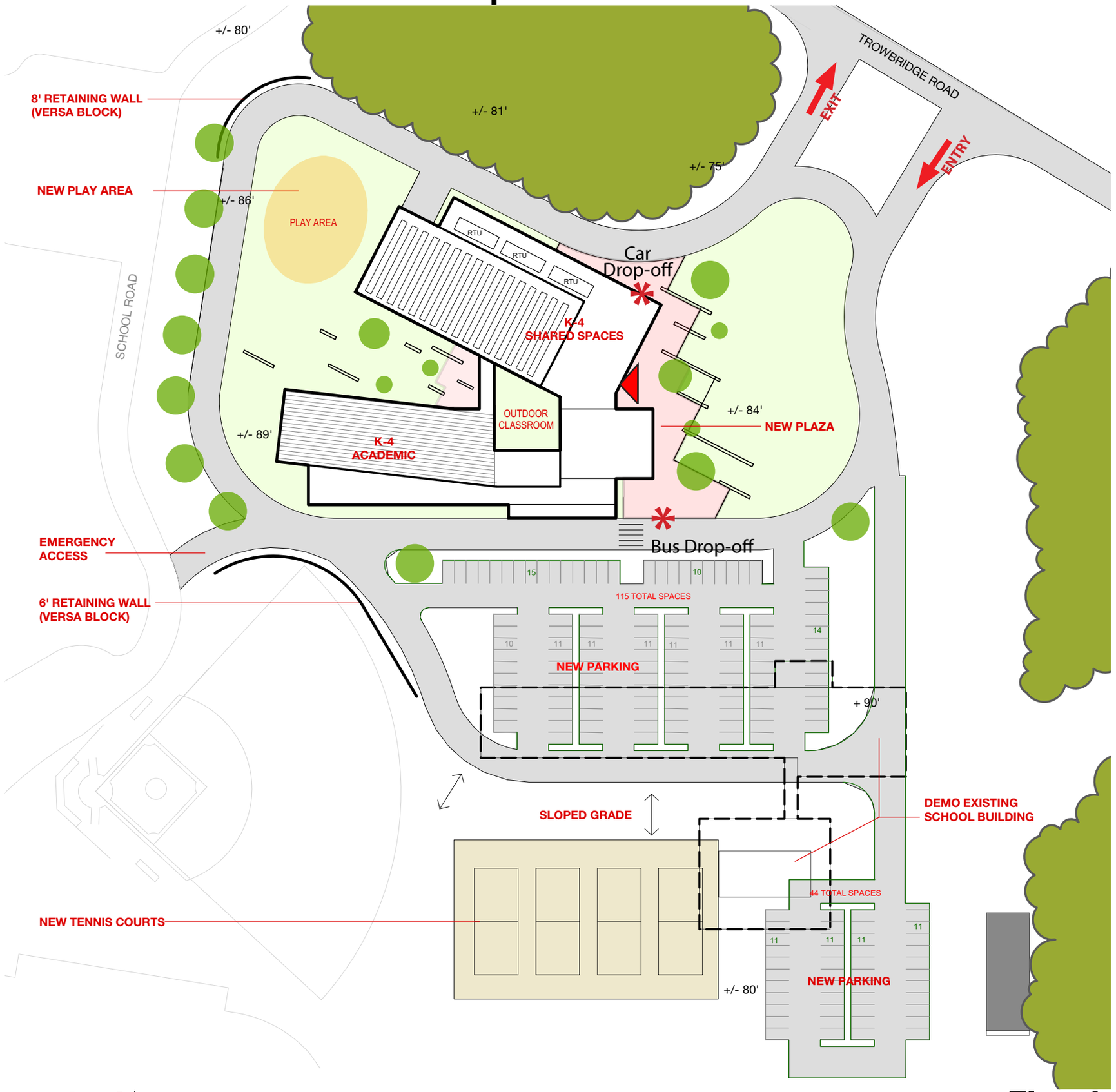
Cons:

- One-year transition for Bournedale 5th graders could be challenging
- Visible Learning, Classroom Neighborhoods, and Collaboration difficult in older building
- Innovation Lab tucked away on lower level
- Considerable disruption during construction
- Requires extensive phasing
- Potential noise issues from proximity of Gym to Admin suite and from Cafeteria to learning spaces below

Program Areas - OPTION 1: 250 enrollment

PROGRAM	GRADES K-4
Core Academic	14,400
Special Education	3,020
Art & Music	2,225
Health & Physical Education	6,300
Media Center	2,020
Technology (computer)	1,000
Dining & Food Service	4,875
Medical	410
Administration & Guidance	2,015
Custodial & Maintenance	1,900
Subtotal NSF	**38,165 NSF**
Grossing Factor	x 1.5
Total GSF	**57,248 GSF**
Number of Students	250 Students

Peebles New Construction Option 1A (250 students)

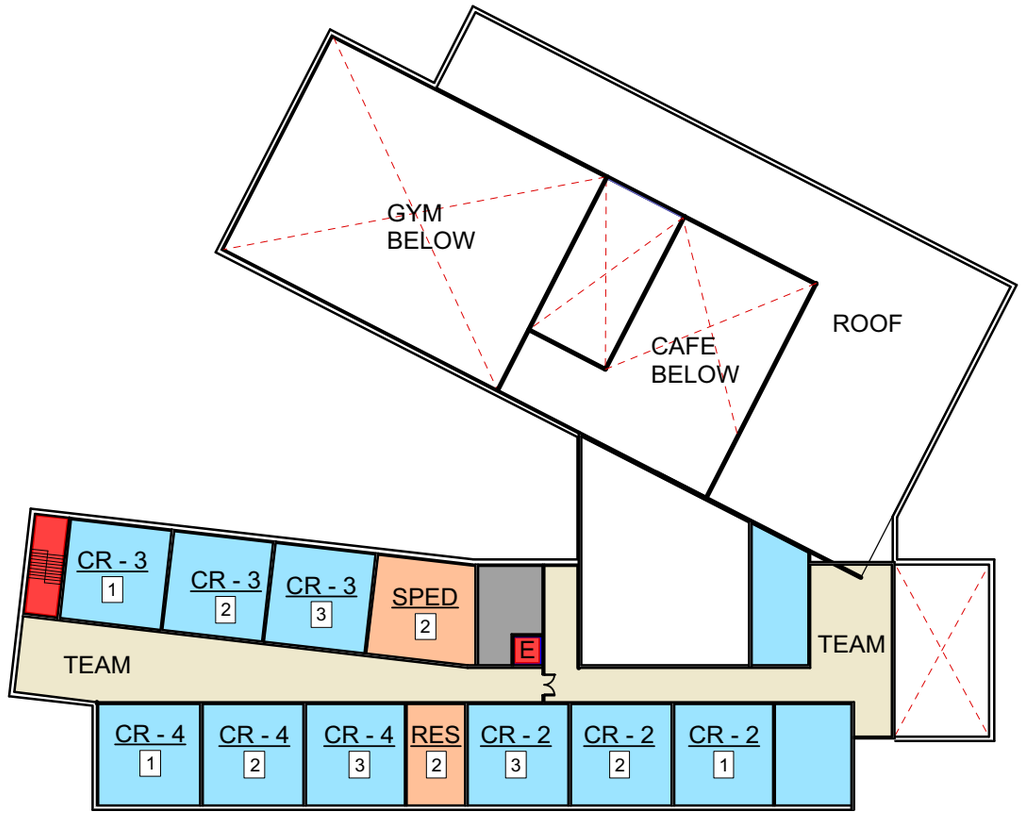


Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles New Construction Option 1A (250 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

Peebles New Construction Option 1A (250 students)

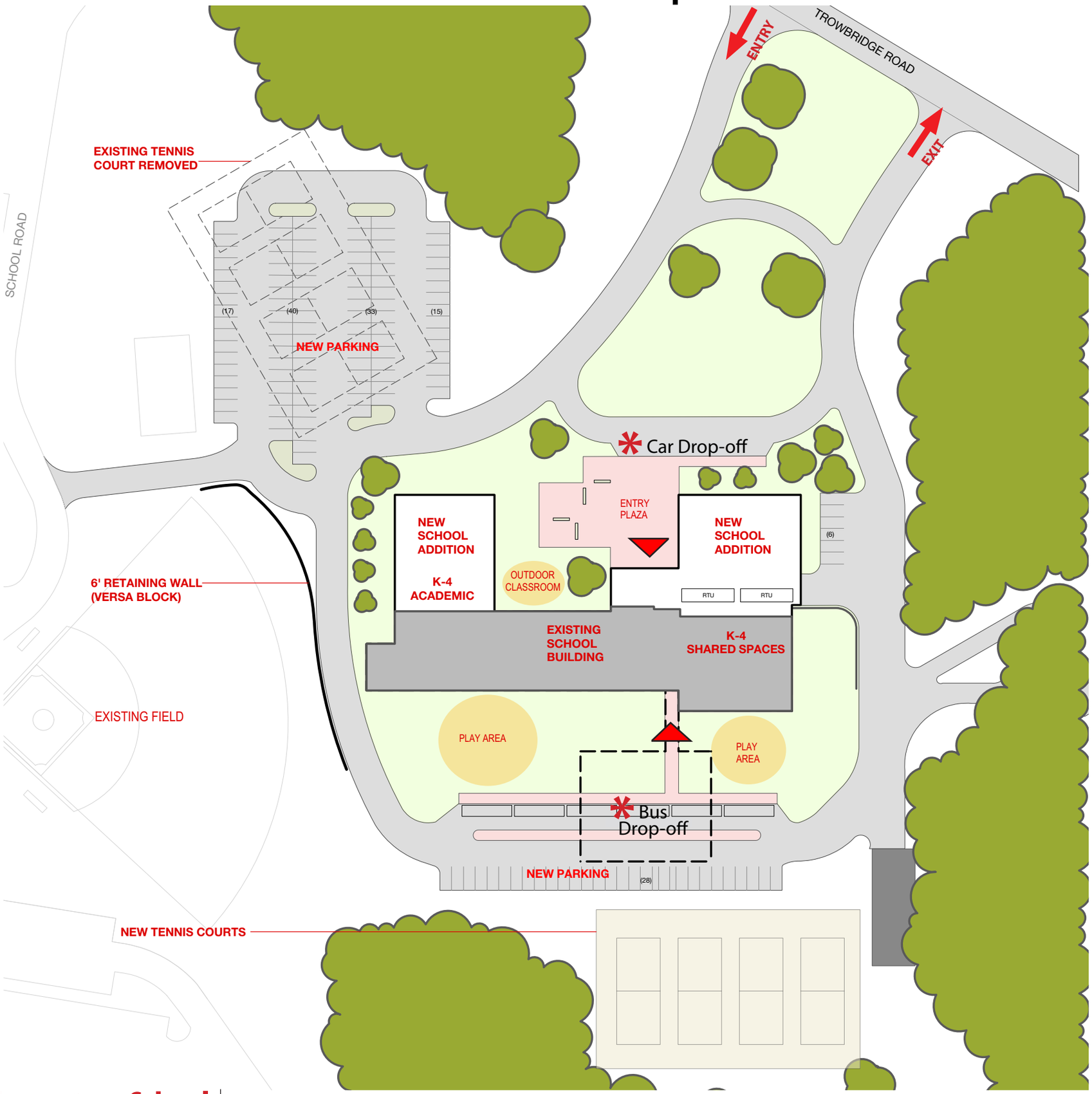
Pros:

- New Construction alternative with least disruption to students during construction
- Clear Articulation between Community and Academic wings; good community access
- Team Spaces promote interconnection
- Outdoor Classroom a beautiful, enclosed focal point for building; good access encourages use.
- Innovation Studio located along main axis; proximity to Art and to Media Center offers flexibility and opportunity for collaboration.
- Allows flexibility in building and site design

Cons:

- Very small school
- Does not alleviate space demand in Middle School
- Does not relocate 5th grade within elementary school setting

Peebles Addition / Renovation Option 1G (250 students)



Peebles Elementary School | Bourne, MA

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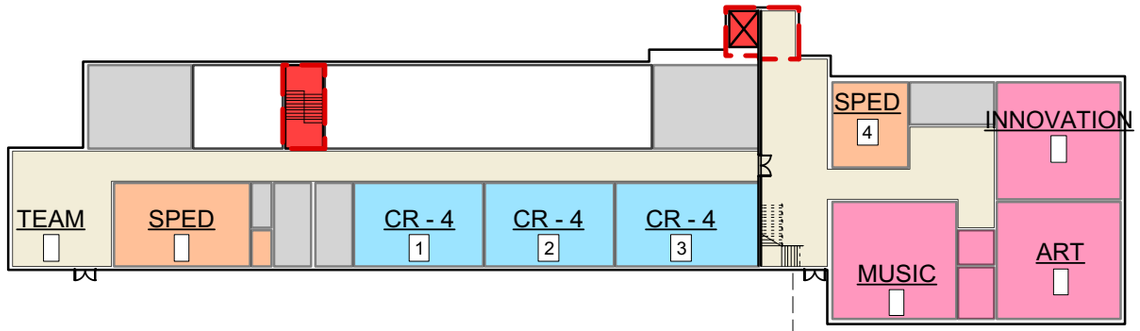
Peebles Addition / Renovation Option 1G (250 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

Peebles Elementary School | Bourne, MA

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Peebles Addition / Renovation Option 1G (250 students)

Pros:

- Modernizes Peebles aesthetically and physically; provides new face of building
- Eliminates Annex, most deficient part of building
- Maintains clear articulation between Community and Academic Wings
- Reconstructed and safer parent and bus drop-offs

Cons:

- Very small school
- Does not alleviate space demand in Middle School or relocate 5th grade within elementary school
- Layout does not permit Classroom Neighborhoods or promote Collaboration
- Requires extensive phasing
- Lack of secure outdoor classroom
- Potential noise issues from proximity of Gym to Admin suite and from Cafeteria to learning spaces below

Bournedale Campus

Peebles Elementary School | Bourne, MA

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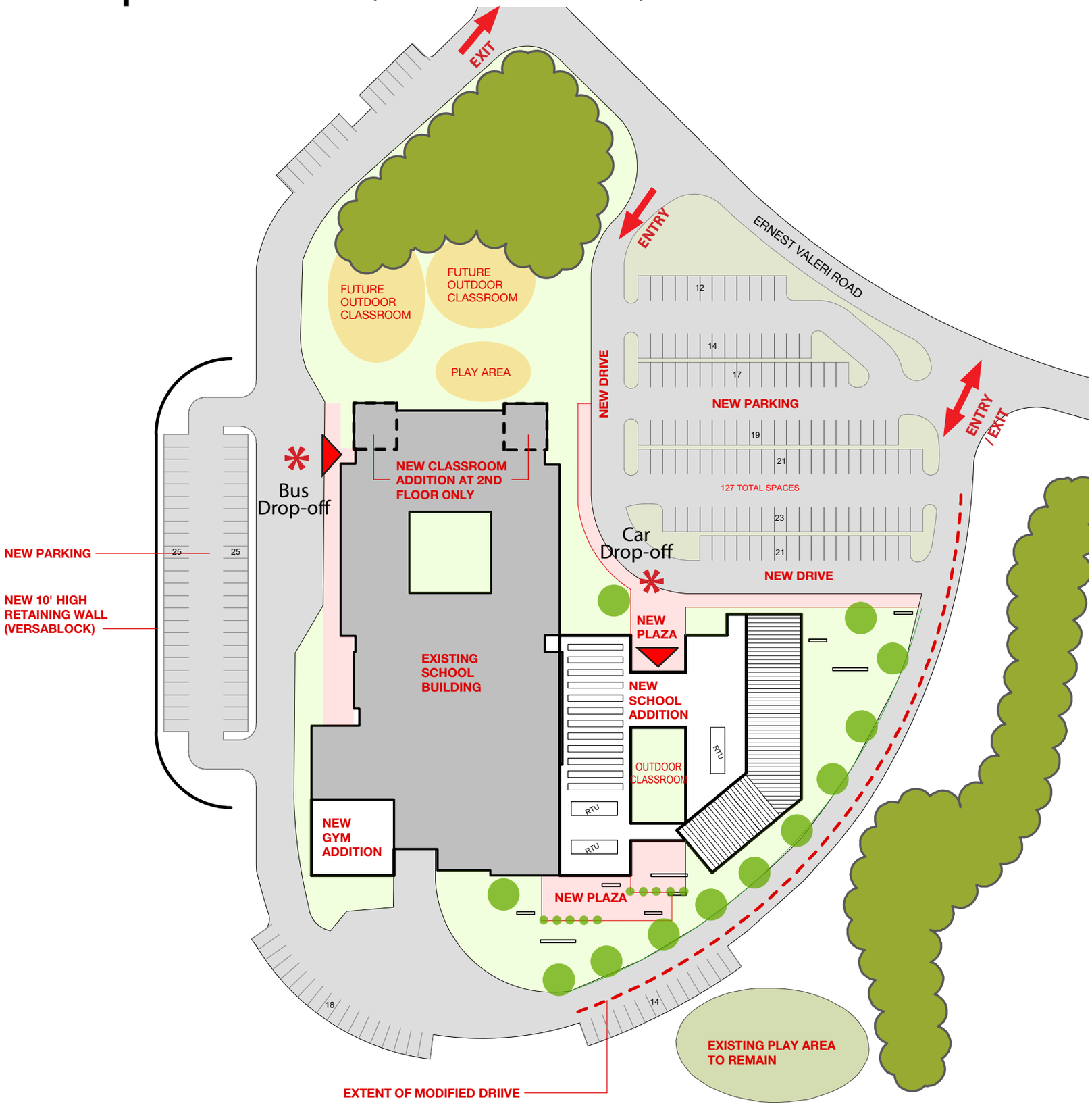
Program Areas - OPTION 2: 725 enrollment

PROGRAM	GRADES PreK-4
Core Academic	37,090
Special Education	8,050
Art & Music	4,465
Health & Physical Education	6,300
Media Center	3,933
Technology (computer)	1,000
Dining & Food Service	9,185
Medical	610
Administration & Guidance	2,711
Custodial & Maintenance	2,325
Subtotal NSF	**76,395 NSF**
Grossing Factor	x 1.5
Total GSF	**114,593 GSF**
Number of Students	725 Students

Bournedale Option 2A (725 students)



Peebles Elementary School | Bourne, MA

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Bournedale Option 2A (725 students)

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Peebles Elementary School | Bourne, MA

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Bournedale Option 2A (725 students)

Pros:

- Consolidates K-4 grades and resources; creates equitable student experience
- Collaborative and interconnected learning communities
- Distinct academic communities for lower and upper grades
- Well-sited; entry is inviting to community
- Maintains existing structure and facility with minimal disruption to learning
- New entry lobby and courtyard provide buffer for noise and secure use of outdoor classroom

Cons:

- Large school
- Does not alleviate space pressure on Middle School or relocate 5th grade within elementary school
- Requires phasing, although minimal
- Loss of neighborhood school for Peebles families
- Creates empty Peebles building requiring significant upgrades for future use

Program Areas - OPTION 3: 885 enrollment

PROGRAM	GRADES PreK-5
Core Academic	43,390
Special Education	9,060
Art & Music	5,690
Health & Physical Education	6,300
Media Center	4,653
Technology (computer)	1,000
Dining & Food Service	11,204
Medical	710
Administration & Guidance	3,021
Custodial & Maintenance	2,485
Subtotal NSF	**87,513 NSF**
Grossing Factor	x 1.5
Total GSF	**131,382 GSF**
Number of Students	885 Students

Bournedale Option 3A (885 students)

Peebles Elementary School | Bourne, MA

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Bournedale Option 3A (885 students)

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 3A (885 students)

Pros:

- Alleviates transition issue for 5th grade students; relieves space demand in middle school
- Consolidates grades and resources; creates equitable student experience
- Continuity in learning throughout PreK-5 years
- Collaborative and interconnected learning communities; varied learning spaces throughout
- Distinct academic communities for lower and upper grades
- Well-sited; entry is inviting to community
- Maintains existing structure and facility with minimal disruption to learning
- New entry lobby and courtyard provide buffer for noise and secure use of outdoor classroom

Cons:

- Very large school
- Requires phasing, although minimal
- Loss of neighborhood school for Peebles families
- Existing building does not provide team areas or as much display
- Creates empty Peebles building requiring significant upgrades for future use

Bournedale Option 3B (885 students)

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 3B (885 students)

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Bournedale Option 3B (885 students)

Pros:

- Alleviates transition issue for 5th grade students; relieves space demand in middle school
- Consolidates grades and resources; creates equitable student experience & continuity in early years
- Collaborative and interconnected learning communities; varied learning spaces throughout
- More direct entry sequence with clear Community / Academic separation
- Visible learning with Innovation Studio near Entry
- Art rooms and Learning Commons space distributed throughout plan
- Well-sited; provides new face to building

Cons:

- Very large school
- Requires phasing, although minimal; construction affects entire length of building
- Loss of neighborhood school for Peebles families
- Courtyard embedded within classroom wings may disrupt learning
- Existing building does not provide team areas or as much display
- Creates empty Peebles building requiring significant upgrades for future use

	Evaluation Criteria	Option 1A (250 students)	Option 1G (250 students)	Option 2A (725 students)	Option 3A (885 students)	Option 3B (885 students)	Option 4A (410 students)	Option 4B (410 students)
1	Size of School							
2	Grade Separation Issues							
3	Reinforces Campus Feel							
4	Opportunity for Collaboration & Mentoring							
5	District-wide Culture and Advantages							
6	Traffic Impact							
7	Separation of Community / Academic Uses							
8	Creation of Community Space							
9	Limits Disruption to Students							
10	Cost Effectiveness: Operation / Construction							
11	Maximum Building Efficiency							
12	Least Environmental Impact							
13	Most Beneficial Construction Schedule							
14	Best Site Option for Neighborhood Schools							
15	Adequate Play & Parking Areas							
16	Continued Use of Athletic Resources							
17	Maximum Score for NE-CHPS / LEED							
18	Best Space Adjacencies							
19	Best Separation of Parent / Bus / Service Circulation							
20	Resolves Geographic Separation by Canal							
21	Centralized Elementary Resources							
22	Centralized Campus Resources							
23	Advantages to Middle School							
24	Maximize MSBA Reimbursement							

Ranking: 3 for most favorable, 2 for acceptable, 1 for least favorable

Bourne Elementary Schools
Community Workshop

Join us at a community meeting on December 8th to share your thoughts on the school project

Review the design alternatives

Consider the design alternatives developed from the visioning workshops on 21st Century teaching and learning.

Share your thoughts on Options

Tell us what you think of the option comparisons and which designs meet the educational needs in the best way.

Learn about preliminary costs

Review preliminary cost estimates for construction and total project costs of the design alternatives.

Grades K to 4	Grades K to 5	Grades PreK to 4	Grades PreK to 5
Neighborhood Elementary School	Neighborhood Elem. School with District-wide 5th grade	District-wide Elementary School	District-wide Elementary School
250 students	**410 students**	**725 students**	**885 students**

Design Options

Peebles Elementary School Site

Bournedale Elementary School Site

#1		#2		#3		#4	
New	Reno	New	Reno	New	Reno	New	Reno

Option Comparisons

Location: Peebles Elementary School Cafeteria, 70 Trowbridge Road, Bourne

Date/Time: December 8th, 6:00 - 8:00 PM

Town Website: http://www.townofbourne.com/school-building-committee **Project Email:** sbc@townofbourne.com

CHILD CARE WILL BE PROVIDED AT THE SCHOOL

Project Management SMMA **Flansburgh Architects** **Sponsored by the School Building Committee**

Commercial & Industrial Energy Efficiency Program

The Commercial & Industrial Energy Efficiency Program offers an opportunity to achieve substantial savings. Small and large businesses as well as municipalities can utilize a range of incentives, rebates, assistance and training. This is your chance to upgrade your facility and operations, and receive incentives from the fund that you contribute toward on your monthly electric bill.

- For small businesses, our vendor will conduct a free energy assessment and will install qualified energy measures for you. The Compact will cover up to 80% of the costs.
- For larger businesses, and small businesses that prefer to use their own vendor, the program will cover up to 50% of qualifying retrofit project costs in existing facilities.
- The program also will cover up to 75% of added costs for selecting higher efficiency equipment as part of a major renovation or new building project.

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If you are looking for options to retrofit your existing building/equipment, contact Cape Light Compact today at 1-800-797-6699 for a **Free Energy Assessment**. Or if you are already planning a major renovation or new building project, or even replacing failed equipment, contact us to see what incentives are available.

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"The energy savings are phenomenal."
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Jeff Ehart, CEO, Cape Cod Commercial Linen Service

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- High Efficiency Lighting (Interior and Exterior)
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- Programmable Thermostats
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ALSO

- Custom Approaches to Maximize Efficiency and Savings
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Start Saving Today!

For more information on the Compact's programs or to determine what you may be eligible for, call 800-797-6699 or visit www.capelightcompact.org

What people are saying . . .

"We had a great experience. Not only did the project deliver substantial savings, but we got to work with very professional staff who really knew their stuff and were a pleasure to work with."
Clark Guinn, Sea Crest Beach Hotel, Falmouth

"Conservation is one of the four pillars of our business. We've done several projects with the Compact over the years with results that have really helped to improve our operations."
Todd Marcus, Cape Cod Beer, Hyannis

"This program is a real asset to Cape Cod and the Vineyard. They've really helped us along the way to save energy and money. Plus, we've dramatically shrunk the carbon footprint of our administrative operations."
Jim Wolf, Cape Air, Hyannis

Cover photo: Massachusetts Maritime Academy's LEED Platinum Certified American Bureau of Shipping Information Commons Building was a 2012 participant of the Compact's program. Photo credit: Richard Mandelkorn

Cape Light Compact

Cape Light Compact is an award-winning energy services organization operated by the 21 towns and two counties on Cape Cod and Martha's Vineyard. The Compact's mission is to serve its 200,000 customers through the delivery of proven energy efficiency programs, effective consumer advocacy, competitive electricity supply and green power options.

Cape Light Compact
Superior Courthouse
P.O. BOX 427, Barnstable, MA 02630
(800) 797-6699
www.capelightcompact.org

Cape Light Compact

Working Together Toward A Smarter Energy Future

Commercial and Industrial Programs

PROJECT MINUTES

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	12/17/2015
Re:	School Building Committee Meeting	Meeting No:	9
Location:	Bourne Veteran's Memorial Community Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	James L. Potter	Chairman, School Building Committee	**Voting Member**
	Peter J. Meier	Board of Selectmen	**Voting Member**
	Christopher Hyldburg	Chairman, School Committee	**Voting Member**
	Laura Scena	Member, School Committee	**Voting Member**
✓	Natasha Scarpato	Member at Large	**Voting Member**
✓	Richard A. Lavoie	Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
✓	Mary Jo Coggeshall	Member at Large	**Voting Member**
✓	Frederick H. Howe	Board of Health	**Voting Member**
✓	Steven M. Lamarche	Superintendent of Schools, BPS	**Voting Member**
✓	Edward S. Donoghue	Director of Business Services, BPS	Non-Voting Member
	Thomas M. Guerino	Town Administrator	Non-Voting Member
✓	Jonathan Nelson	Director of Facilities, Town of Bourne	Non-Voting Member
✓	Elizabeth A. Carpenito	Principal, BES	Non-Voting Member
	Kathy Anderson	Elementary/Special Education Secretary	Non-Voting Member
✓	Janey Norton	Principal, PES	
✓	Kent Kovacs	FAI, Architect	
✓	Betsy Farrell Garcia	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
9.1	Record	Call to Order, 6:30 PM, meeting opened.
9.2	Record	A motion was made by S. Lamarche and seconded by F. Howe to approve the 12/3/15 School Building Committee meeting minutes. No discussion, motion passed unanimous by those attending, two abstentions.
9.3	Record	Warrant No. 3 was reviewed. A motion was made by R. Lavoie and seconded by F. Howe to approve Warrant No. 3. No discussion, motion passed unanimous.
9.4	J. Seeley	J. Seeley distributed and reviewed the updated Committee and Community Meetings Schedule for the PSR Phase, attached. The Committee approves the schedule. J. Seeley to coordinate with Bourne TV and the Community Center Director to have the Committee PSR Phase meetings video-taped.
9.5	Record	J. Seeley distributed and reviewed the fully executed FSA Amendment No. 1, dated 11/30/15 and attached.
9.6	K. Kovacs	J. Seeley indicated that additional Traffic Consultancy may be required, funded out of the Environmental and Site Consultancies budget, for the PSR Phase to assist the Committee in evaluating the final alternatives. K. Kovacs will review the scope with the Committee once the final options for the PSR Phase are selected.
9.7	K. Kovacs	K. Kovacs to provide an update on the engineer's review of the gas service moratorium at the PES site once the engineers receive feedback from NGrid.
9.8	Record	K. Kovacs indicated the engineers have confirmed with NGRID that there is sufficient gas service capacity at BES.
9.9	Record	K. Kovacs distributed and reviewed a pamphlet on Green Building Costs and Financial Benefits, attached, providing information on historical costs against actual savings for LEED elements.
9.10	P. Meier	P. Meier to follow-up with the Moderator on the process to be followed to fill vacant Committee seats in the future.
9.11	Record	K. Kovacs distributed and reviewed summary reports, attached, on the findings contained in the Geotechnical Report, the Hazardous Material Report, the Geo-Environmental Report and the Traffic Report, previously transmitted to the Committee. Committee Discussion: 1. S. Lamarche asked if the geotechnical findings ie: good draining and bearing soils, were consistent for both the Peebles and Bournedale sites? *K. Kovacs indicated yes, both sites were consistent, though some boulders should be anticipated at the Bourndedale site*. 2. J. Norton asked if the additional Traffic Consultancy in the PSR phase would include an analysis of the impact of bridge traffic Options 2A and 3A/3B? *K. Kovacs indicated yes it could. The specific scope will be determined with the Committee at the start of the PSR phase.*

Item #	Action	Discussion
		3. J. Norton asked where is the existing underground fuel oil tank located at Peebles? *K. Kovacs indicated the tank is located in the front landscaped island.* 4. R. Lavoie asked if soil testing at the tank was performed by the geo-environmental consultant? *K. Kovacs indicated soil testing would occur in a future phase.*
9.12	Record	K. Kovacs led a discussion on an overview of Community Forum No. 3, held on 12/8/15. Committee Discussion: 1. J. Norton indicated the tour was beneficial for those community members attending that had not routinely been in the school. 2. N. Scarpato indicated the discussion and feedback was good, but could be improved, maybe break into small discussion groups similar to Community Forum No. 1. 3. E. Carpenito indicated there appeared to be a lot more community members who currently do not have children in the schools, in attendance. 4. S. Lamarche indicated there has been a steady progression of information sharing and discussion with the community. 5. N. Scarpato indicated the child care process was well done.
9.13	Record	K. Kovacs led a discussion on the Evaluation Criteria Matrix for each criteria for each Option. The Committee each expressed their views on each option and listed their individual rankings of each criteria for each option. B. Garcia recorded each ranking in the Evaluation Criteria Matrix, attached. Options reviewed were: 1. PES – New Construction Option 1A – 250 students 2. PES – Renovation/Addition Option 1G – 250 students 3. BES - Renovation/Addition Option 2A – 725 students 4. BES - Renovation/Addition Option 3A – 885 students 5. BES - Renovation/Addition Option 3B – 885 students 6. PES – New Construction Option 4A – 410 students 7. PES – Renovation/Addition Option 4B – 410 students Committee discussion: 1. R. Lavoie expressed that the original Bournedale design was based on a Pods-type layout and when the Bids came in, was significantly overbudget. R. Lavoie expressed concern that the new options need to have an efficient and cost-effective layout. *K. Kovacs indicated the layouts will be refined as the process continues. At the PDP level, the plans are responding to the educational program and site conditions and will be further refined at each phase.* 2. R. Lavoie indicated the last two schools built in Bourne had cost concerns and that this project needs to be cost effective, getting the most value for the town.

Item #	Action	Discussion
		J. Potter indicated that there will be several phases to go thru to get to an efficient and cost effective plan for the preferred solution. At the PDP phase, the committee needs to get to the top 3 or 4 options for further study. 3. R. Lavoie asked if the Middle School was overcrowded today? *S. Lamarche indicated the MS is functional, but it isn't being used as constructed, in that there are many uniquely middle school spaces that aren't being used for the middle school due to repurposing to accommodate the enrollments.* 4. M. Coggeshall asked if the construction durations were the same for Options 2A and 3A/3B? *J. Seeley indicated the construction duration for Options 3A/3B was a few months longer than for Option 2A, shown on the project schedule attached.* A Motion was made by S. Lamarche and seconded by N. Scarpato to select the following options to further develop in the PSR Phase: 1. BES - Renovation/Addition Option 2A – 725 students 2. PES – New Construction Option 4A – 410 students No discussion, voted unanimously. A Motion was made by F. Howe and seconded by N. Scarpato to select the following additional option to further develop in the PSR Phase: 1. PES – Renovation/Addition Option 4B – 410 students No discussion, vote passed with one opposed. A Motion was made by S. Lamarche and seconded by N. Scarpato to select the following additional option to further develop in the PSR Phase: 1. PES – New Construction Option 1A – 250 students No discussion, vote passed with one opposed.
9.14	Record	A Motion was made by F. Howe and seconded by R. Lavoie to approve the PDP Submittal and authorize submission to the MSBA. No discussion, voted unanimously.
9.15	J. Potter	A Motion was made by S. Lamarche and seconded by F. Howe to authorize J. Potter, as Chair of the Committee, to write a letter to the Selectmen indicating the Committee does not support the "Technology use during Open Meeting" policy in whole. No discussion, voted unanimously. J. Potter will send the letter to the Selectmen.
9.16		Community Questions: *1.* A community member wished to emphasize and support R. Lavoie's expression that the original Bournedale design was based on a Pods-type layout and when the Bids came in, was significantly overbudget and that the new options need to have an efficient and cost-effective layout.

Item #	Action	Discussion
9.17	Record	Next **SBC Meeting: January 7, 2016 at 6:30 pm** at the Bourne Veteran's Memorial Community Center.
9.18	Record	A Motion was made by R. Lavoie and seconded by F. Howe to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, Committee and Community Meetings Schedule, Executed FSA Amendment No. 1, Green Building Costs and Financial Benefits, Summary reports for Geotechnical Report, Hazardous Material Report, Geo-Environmental Report and Traffic Report, Evaluation Criteria Matrix

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

JGS/sat/P:\2015\15041\04-MEETINGS\4.3 Mtg_Notes\3-School Building Committee\09_17December2015\Schoolbuildingcommitteemeeting_17December2015_FINAL.Docx

PROJECT MEETING SIGN-IN SHEET

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	12/17/2015
Re:	School Building Committee Meeting	Meeting No:	9
Location:	Bourne Veterans Memorial Community Center, 234 Main Street, Buzzards Bay, Massachusetts	Time:	6:30pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	James L. Potter	onsetjp@juno.com	Chairman, School Building Committee
	Peter J. Meier	pmeier@townofbourne.com	Bourne Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	Chairman, Bourne School Committee
	Laura Scena	laurascena@yahoo.com	Member, School Committee
	Natasha Scarpato	scarpato4@comcast.net	Member-At-Large
	Richard A. Lavoie	Richl.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	Mary Jo Coggeshall	mjcoggeshall@bourneps.org	At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Jonathan Nelson	jnelson@townofbourne.com	Director of Facilities, Town of Bourne
	Elizabeth A. Carpenito	ecarpenito@bourneps.org	Principal, BES
	Kathy Anderson	kanderson@bourneps.org	Elementary/Special Education Secretary
	Janey Norton	jnorton@bourneps.org	Principal, PES
	Kent Kovacs	kkovacs@flansburgh.com	Flansburgh Architects
	Betsy Farrell Garcia	bgarcia@flansburgh.com	Flansburgh Architects
	Joel Seeley	jseeley@smma.com	SMMA

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AGENDA

Project:	Peebles Elementary School Feasibility Study	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	12/17/2015
Meeting Location:	Bourne Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:30 PM
Distribution:	Committee Members (MF)	Meeting No.:	9

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. PSR Phase Schedule
5. Community Forum No. 3 Recap
6. Review of Construction Alternatives
7. Selection of Top 3-4 Construction Alternatives
8. Vote to Approve and Submit PDP
9. Technology Use During Open Meeting Policy
10. Old or New Business
11. Public Comments
12. Next Meeting – January 7, 2016
13. Adjourn

JGS/sat/P:\2015\15041\04-MEETINGS\4.2 Agendas\3-School Building Committee\9_17December2015\Agenda_17December2015.Docx

SCHOOL BUILDING COMMITTEE
PEEBLES ELEMENTARY SCHOOL

All meetings held at the
Bourne Veterans Memorial Community Center at 6:30 PM
unless otherwise noted

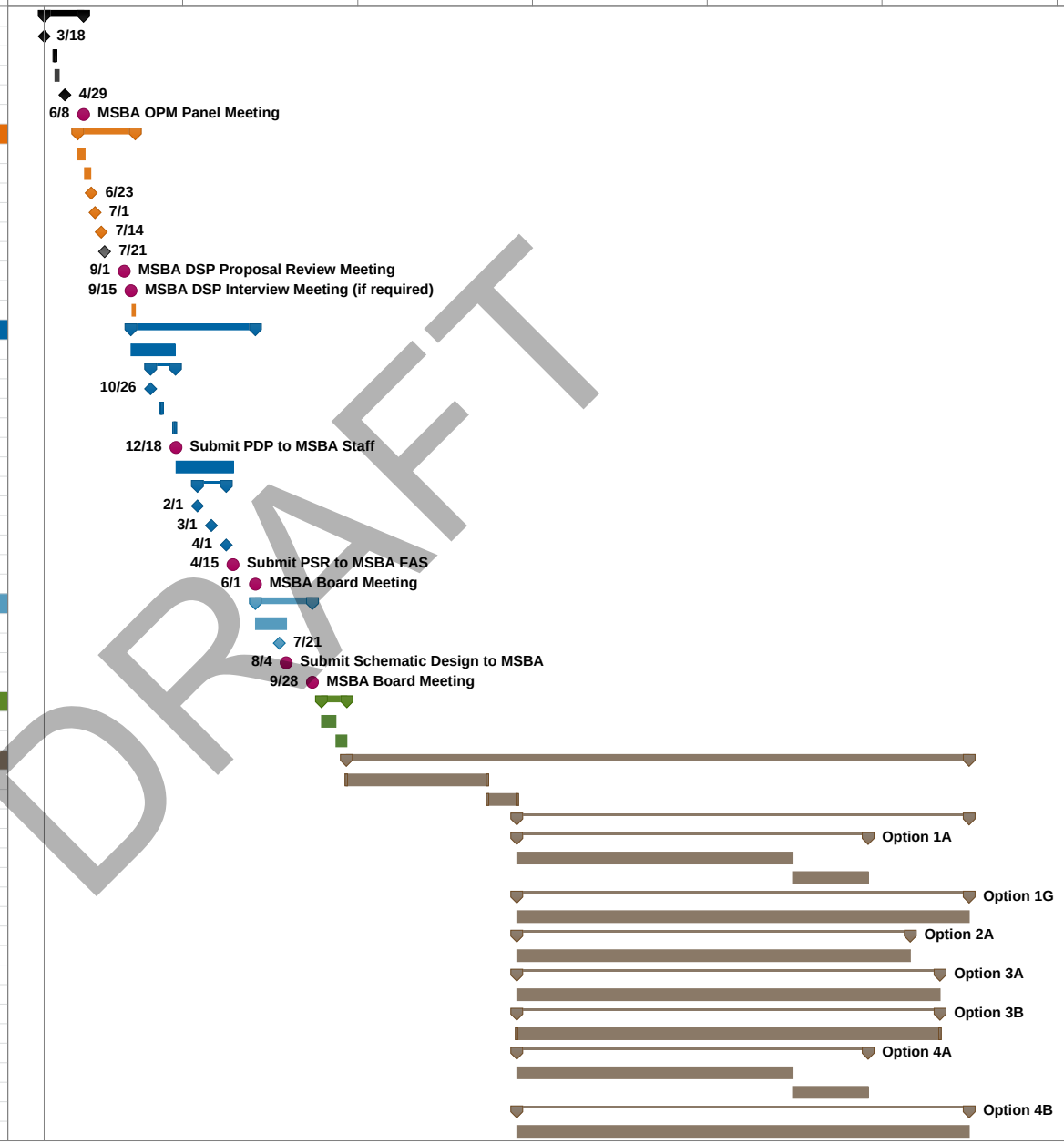
MEETINGS SCHEDULE AND AGENDAS
November 25, 2015 ***Updated December 17, 2015***

DATE	AGENDA
Feasibility Study Phase (PSR)	
January 7, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Preferred Alternative Goals
	Prepare for Community Forum
January 21, 2016	COMMUNITY FORUM NO. 4 - 6:00 to 8:00 PM - BOURNEDALE ELEMENTARY SCHOOL CAFETERIA
February 4, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Community Forum Comments
	Structural Narrative Review
	MEP Systems Narrative Review
	Update on Construction Alternatives
	Review MSBA Comments on PDP Submission
February 18, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives
	Prepare for Community Forum
March 3, 2016	COMMUNITY FORUM NO. 5 - 6:00 to 8:00 PM - PEEBLES ELEMENTARY SCHOOL CAFETERIA
March 17, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Community Forum Comments
	Update on Sustainable Design Goals
	Update on Construction Alternatives
March 31, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Review Cost Models
	Preliminary Discussion of One Preferred Construction Alternative
	Prepare for Community Forum
April 6, 2016	COMMUNITY FORUM NO. 6 - 6:00 to 8:00 PM - BOURNEDALE ELEMENTARY SCHOOL CAFETERIA
April 14, 2016	SCHOOL BUILDING COMMITTEE MEETING
	Vote to Decide One Preferred Construction Alternative
	Vote to Submit Preferred Schematic Report to MSBA
April 15, 2016	*SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

Updated: June 25, 2015
Revised: December 4, 2015

TOWN OF BOURNE, MASSACHUSETTS
PEEBLES ELEMENTARY SCHOOL
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**RETAIN OPM**	**58 days**	**3/18/2015**	**6/8/2015**
2	Submit OPM Proposals	0 days	3/18/2015	3/18/2015
3	OPM Interview	2 days	4/8/2015	4/9/2015
4	Negotiate OPM Contract	7 days	4/9/2015	4/17/2015
5	Submit Documents to MSBA OPM Panel	0 days	4/29/2015	4/29/2015
6	**MSBA OPM Panel Meeting**	**0 days**	**6/8/2015**	**6/8/2015**
7	**RETAIN DESIGNER**	**86 days**	**5/27/2015**	**9/23/2015**
8	Draft Designer RFS and Submit to MSBA	11 days	5/27/2015	6/10/2015
9	MSBA Approve Draft RFS	9 days	6/10/2015	6/22/2015
10	Submit to Central Register	0 days	6/23/2015	6/23/2015
11	Notice in Central Register	0 days	7/1/2015	7/1/2015
12	Briefing Session	0 days	7/14/2015	7/14/2015
13	Submit Designer Proposals	0 days	7/21/2015	7/21/2015
14	**MSBA DSP Proposal Review Meeting**	**0 days**	**9/1/2015**	**9/1/2015**
15	**MSBA DSP Interview Meeting (if required)**	**0 days**	**9/15/2015**	**9/15/2015**
16	Negotiate Designer Contract	5 days	9/17/2015	9/23/2015
17	**FEASIBILITY STUDY (FS)**	**183 days**	**9/15/2015**	**6/1/2016**
18	Develop Preliminary Design Program (PDP)	65 days	9/15/2015	12/15/2015
19	**Community Presentations**	37 days	10/26/2015	12/16/2015
20	Community Forum 1: Visioning	0 days	10/26/2015	10/26/2015
21	Community Forum 2: Existing Conditions	3 days	11/16/2015	11/18/2015
22	Community Forum 3: Options	3 days	12/14/2015	12/16/2015
23	**Submit PDP to MSBA Staff**	**0 days**	**12/18/2015**	**12/18/2015**
24	Develop Preferred Schematic Report (PSR)	84 days	12/18/2015	4/15/2016
25	**Community Presentations**	**44 days**	**2/1/2016**	**4/1/2016**
26	Community Forum 1	0 days	2/1/2016	2/1/2016
27	Community Forum 2	0 days	3/1/2016	3/1/2016
28	Community Forum 3	0 days	4/1/2016	4/1/2016
29	**Submit PSR to MSBA FAS**	**0 days**	**4/15/2016**	**4/15/2016**
30	**MSBA Board Meeting**	**0 days**	**6/1/2016**	**6/1/2016**
31	**SCHEMATIC DESIGN (SD)**	**85 days**	**6/1/2016**	**9/28/2016**
32	Develop Schematic Design	47 days	6/1/2016	8/4/2016
33	Submit Final Budget to MSBA	0 days	7/21/2016	7/21/2016
34	**Submit Schematic Design to MSBA**	**0 days**	**8/4/2016**	**8/4/2016**
35	**MSBA Board Meeting**	**0 days**	**9/28/2016**	**9/28/2016**
36	**LOCAL VOTES**	**39 days**	**10/17/2016**	**12/8/2016**
37	Local Voting	22 days	10/17/2016	11/15/2016
38	Debt Exclusion Votes	17 days	11/16/2016	12/8/2016
39	**DESIGN AND CONSTRUCTION (TBD)**	**929 days**	**12/8/2016**	**6/30/2020**
40	Design Documentation	211 days	12/8/2016	9/28/2017
41	Bidding and Award	44 days	9/29/2017	11/29/2017
42	**Construction**	**675 days**	**11/29/2017**	**6/30/2020**
43	**Option 1A**	**524 days**	**11/29/2017**	**12/2/2019**
44	Building	413 days	11/29/2017	6/28/2019
45	Demo / Site Work	112 days	6/28/2019	12/2/2019
46	**Option 1G**	**675 days**	**11/29/2017**	**6/30/2020**
47	Phased Renovation and Additions	675 days	11/29/2017	6/30/2020
48	**Option 2A**	**588 days**	**11/29/2017**	**2/28/2020**
49	Phased Renovation and Additions	588 days	11/29/2017	2/28/2020
50	**Option 3A**	**632 days**	**11/29/2017**	**4/30/2020**
51	Phased Renovation and Additions	632 days	11/29/2017	4/30/2020
52	**Option 3B**	**632 days**	**11/29/2017**	**4/30/2020**
53	Phased Renovation and Additions	632 days	11/29/2017	4/30/2020
54	**Option 4A**	**524 days**	**11/29/2017**	**12/2/2019**
55	Building	413 days	11/29/2017	6/28/2019
56	Demo / Site Work	112 days	6/28/2019	12/2/2019
57	**Option 4B**	**675 days**	**11/29/2017**	**6/30/2020**
58	Phased Renovation and Additions	675 days	11/29/2017	6/30/2020



Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

Maureen G. Valente
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

December 14, 2015

Mr. Thomas M. Guerino, Town Administrator
Town of Bourne
Bourne Town Hall, Room 101
24 Perry Avenue
Buzzards Bay, MA 02532

Re: Town of Bourne, James F. Peebles Elementary School

Dear Mr. Guerino:

Enclosed for your records, please find a copy of the fully-executed First Amendment to the Feasibility Study Agreement and Exhibit B for the James F. Peebles Elementary School project in the Town of Bourne.

Please feel free to contact me if you have any questions.

Sincerely,

K. DeCristofaro

Kathryn DeCristofaro
Capital Program Manager

Cc: Legislative Delegation
Stephen F. Mealy, Chair, Bourne Board of Selectmen
Christopher Hyldburg, Chair, Bourne School Committee
Steven Lamarche, Superintendent, Bourne Public Schools
Edward Donoghue, Director of Business Services, Bourne Public Schools
James Potter, Chair, Bourne School Building Committee
Joel Seeley, Owner's Project Manager, Symmes Maini & McKee Associates
Kent Kovacs, Designer, Flansburgh Associates
File: 10.2 Letters (Region 6)

MSBA Project No.: 201400360010
District: Bourne

FIRST AMENDMENT TO THE FEASIBILITY STUDY AGREEMENT BETWEEN THE TOWN OF BOURNE AND THE MASSACHUSETTS SCHOOL BUILDING AUTHORITY

Effective as of December 10, 2015, ("Effective Date"), this First Amendment to the Feasibility Study Agreement between the Town of Bourne ("Town") and the Massachusetts School Building Authority ("Authority"), including all Exhibits and other documents attached hereto and incorporated by reference herein ("Amendment"), hereby amends the Feasibility Study Agreement between the Town and the Authority for the Proposed Project involving the James F. Peebles Elementary School (hereinafter "Agreement"), as more particularly described below. This Amendment contains all of the terms and conditions agreed upon by the Town and the Authority (collectively, "Parties") as amendments to the original Agreement. No other understandings or representations, oral or otherwise, regarding amendments to the original Agreement shall be deemed to exist or bind the Parties.

The Agreement is hereby amended as follows:

1. Exhibit B to the Agreement is deleted in its entirety. Inserted in place thereof is a new Exhibit B which is attached hereto and incorporated by reference herein.

All other terms and conditions of the original Agreement, including Exhibits attached thereto or incorporated by reference therein, that are not hereby deleted or otherwise amended shall remain in full force and effect. The Town warrants and represents that it has read and understands this Amendment. The Town further warrants and represents that its undersigned officer or representative has full legal authority to enter into this Amendment on behalf of the Town and to bind the Town to its terms and conditions.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment in duplicate originals by their duly authorized officers or representatives.

MASSACHUSETTS SCHOOL BUILDING AUTHORITY
By,

John K. McCarthy
Executive Director

12/10/15
Signature Date

TOWN OF BOURNE

By,

Name

12-1-15
Signature Date

Title

As of November 24, 2015

EXHIBIT B

SCOPE OF THE FEASIBILITY STUDY

Town of Bourne
James F. Peebles Elementary School

The Scope of the Feasibility Study conducted under this Agreement, which is attached hereto and incorporated by reference herein, shall consist of the development of a feasibility study/schematic design for evaluation of a renovation of the existing school, a renovation of and addition to the existing school, and/or new construction for the James F. Peebles Elementary School in the Town of Bourne (the "District"). Pursuant to the Massachusetts School Building Authority's (the "MSBA") regulations, 963 CMR 2.06, the space allowance for the potential project shall meet all applicable MSBA regulations and guidelines.

The Feasibility Study shall contain all information required by 963 CMR 2.10(8) and any other applicable rules, regulations, policies, guidelines and directives of the MSBA including, but not limited to, a final design program, space summary, budget statement for preferred educational objectives, and a proposed total project budget. The Feasibility Study for this proposed project will examine the following four options: to consolidate the District's grades K-5 population at a District-wide elementary school, which for purposes of the design shall be based on no more than a total of 885 students; to consolidate the District's grades K-4 population at a District-wide elementary school, which for purposes of the design shall be based on no more than 725 students; to consolidate the District's grade 5 population at the James F. Peebles Elementary School and maintain the current facility's grades K-4 population, which for purposes of the design shall be based on no more than a total of 410 students; and to maintain the current James F. Peebles Elementary School grade configuration of grades K-4, which for the purposes of the design shall be based on no more than 250 students. The District will prepare and submit to the MSBA the educational space template for both options for review and acceptance. Upon acceptance of the educational space summary, the District will commence with the evaluation of alternatives. The Schematic Designs that are developed pursuant to this Agreement shall be based upon the final design program which shall be subject to the written approval of the MSBA. The Schematic Design shall include, but not be limited to, the information required by the MSBA's Feasibility Study Guidelines, including, but not limited to, a site development plan, environmental assessment, geotechnical assessment, geotechnical analysis, code analysis, utility analysis, schematic building floor plans, schematic exterior building elevations, narrative building systems descriptions, MA-CHPS scorecard or LEED for Schools checklist, outline specifications, cost estimates, project schedule and proposed total project budget.

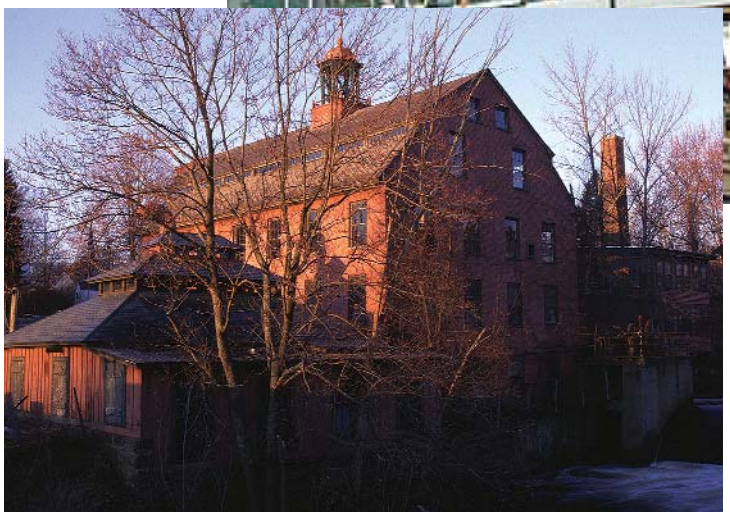
In conducting the Feasibility Study and developing the Schematic Design, the District shall, in a sufficient and timely manner as determined by the MSBA, initiate such notification procedures, undertake such review processes, and obtain such determinations and approvals as may be required by 963 CMR 2.03(2)(h) & (i), including, but not limited to, such procedures, reviews, determinations, and approvals as may be required by the Massachusetts Historical Commission ("MHC") and/or the Massachusetts Environmental Policy Act ("MEPA"). At its earliest opportunity, the District shall seek a written determination from MHC as to whether MHC intends to undertake a review of the Proposed Project.

The District shall be responsible for conducting such geotechnical evaluations, site investigations, soils explorations and environmental assessments as are reasonable and necessary to determine whether any significant environmental, geotechnical or other physical conditions exist that may have an impact upon eventual construction on the proposed site. The MSBA may require the District to fully fund certain environmental or geotechnical site testing beyond initial investigatory costs. The MSBA shall bear no responsibility or liability of any sort for the results of any geotechnical evaluations or site testing, soils explorations, environmental assessments, nor for any site remediation, clean-up, or other site remediation services.

The development of the Schematic Design shall be subject to continuing review by the MSBA in accordance with the provisions of this Agreement, the Schedule of Deliverables contained herein, the MSBA's Feasibility Study guidelines and any other applicable rule, regulation, policy, guideline or directive of the MSBA. The District shall be responsible for submitting to the MSBA all documentation that is required to complete the Feasibility Study and Schematic Design and to support the preparation of a Project Scope and Budget Agreement.

Green Building Costs and Financial Benefits

by Gregory H. Kats



Green Building Costs and Financial Benefits

by Gregory H. Kats

Sponsors

Barr Foundation
Environmental Business Council of New England, Inc.
Equity Office Properties
Massachusetts Technology Collaborative
Massport

In co-operation with

The City of Boston Green Buildings Task Force
Greater Boston Real Estate Board
Boston Society of Architects
Western Massachusetts AIA
Green Roundtable & Developers Roundtable
Northeast Sustainable Energy Association
Greater Boston Chamber of Commerce
Real Estate Finance Association
Health Care without Harm
Springfield Chamber of Commerce
New Ecology Inc.

The Massachusetts Technology Collaborative is the state's development agency for renewable energy and the innovation economy. The agency administers the Renewable Energy Trust, which is maximizing the benefits of clean energy and helping to create jobs for the Commonwealth by stimulating new supply and demand for green power. The Trust was created in 1998 through the electric restructuring law and is funded through a monthly surcharge on electric utility bills. For more information, please visit the agency's website www.masstech.org.

Captions for cover photos (top to bottom)

The J.F. Williams Federal Building in Boston includes 30 kW of solar photovoltaics and a 75 kW cogeneration system. Through an MTC grant, a data acquisition system has been installed at the site to monitor the production and savings of these systems.

Artists for Humanity is building a new facility in the Fort Point Channel district of Boston to house its arts education programs. The building has been designed to reduce energy use by 65% and to include significant daylighting and other green building features. Up to 100% of remaining energy needs will be met by the installation of 45 kW of solar photovoltaics funded by MTC.

In its redevelopment of an historic mill building as a mixed-use office and commercial facility, Alternatives Unlimited has focused on the design of green building and energy efficiency features that will best meet occupant needs. The capstone of this project will be the restoration of a hydropower system in Whitinsville's Mumford River adjacent to the mill to provide the facility's electricity.

Green Building Costs and Financial Benefits

Greg Kats, Capital E

Introduction

Massachusetts is a leading state in the rapidly growing green building movement. Buildings consume 70% of the nation's electricity and a large part of the materials, water and waste used and generated in our economy. Buildings have traditionally been viewed as a relatively static sector of the economy experiencing relatively little change in technology or resource consumption patterns. To date there has been a widespread perception that green buildings—though more attractive from an environmental and health perspective—are substantially more costly than conventional design and may not be justified from a cost benefits perspective. This perception has been the single largest obstacle to the more widespread adoption of green design.

The Woods Hole Research Center received a total of $500,000 in MTC awards to install 26.4 kW of solar photovoltaics and a 100 kW wind turbine at the site of its new headquarters. Combined with innovative energy efficiency measures and high-performance design, these renewables will help Woods Hole achieve its goal of a "Zero Energy" facility, producing more energy than it consumes. Pictured here, the Ordway Building.

This paper reviews a major recent report on the issue of green building costs benefits, "The Costs and Benefits of Green Buildings," Kats[1] et al., October 2003 [2] (the Report). Led by Capital E, the Report was prepared in partnership with the US Green Building Council and California's Sustainable Building Task Force for 40+ California state agencies.

What are green buildings?

"Green" or "sustainable" buildings use key resources like energy, water, materials, and land more efficiently than buildings that are just built to code. With more natural light and better air quality, green buildings typically contribute to improved employee and student health, comfort, and productivity. The United States Green Building Council (USGBC), a national non-profit membership organization, developed the Leadership in Energy and Environmental Design (LEED) System™ to provide a guideline and rating system for green buildings.

It is generally recognized that buildings consume a large portion of water, wood, energy, and other resources used in the economy. For example, US buildings alone are responsible for more CO_2. emissions than those of any other entire country in the world except China.[3] If building green is cost effective, a broad shift to green construction offers a potentially promising way to help address a range of challenges facing Massachusetts, including:

- Address growing costs of transmission and distribution congestion. The growth of Time of Use rates (TOU) by Massachusetts utilities, and the creation of congestion pricing in the form of locational marginal pricing [4] allows building owners to capture some of the benefits associated with lower overall and lower peak energy use in green buildings

1 The author is founding Principal of Capital E, a national clean technology deployment and strategy firm. Mr. Kats served from 1996 to 2001as the Director of Financing for the $1.1 billion dollar Office of Energy Efficiency and Renewable Energy at the US Department of Energy - the largest clean technology R&D and deployment program in the US. He is Chair of the Energy And Atmosphere Technical Advisory Group for LEED and serves on the LEED Steering Committee.

2 "The Costs and Benefits of Green Buildings", A Report to California's Sustainable Building Task Force, October 20003. Principal author Greg Kats, For full text and summary slides see www.cap-e.com

3 Kinzey et al., "The Federal Buildings Research and Development Program: A Sharp Tool for Climate Policy," 2002 ACEEE proceedings, Section 9.21.

4 see: http://www.iso-ne.com/iso_news/SMD_Reference_Guide/02_Locational_Marginal_Pricing_(LMP).pdf

- Reduce or slow rise in electricity and gas prices through expanded green construction and building retrofits and reduced energy demand [5]
- Help cut pollution from fossil fuels (Massachusetts fuel mix includes 28% coal as of 1999 - US DOE) including fine particulates in urban areas
- Help Massachusetts meet EPA mandated emissions reductions targets
- Improve quality of educational environment and improve school test scores
- Enhance competitiveness by providing work and living environments characterized by superior health and comfort and work environments

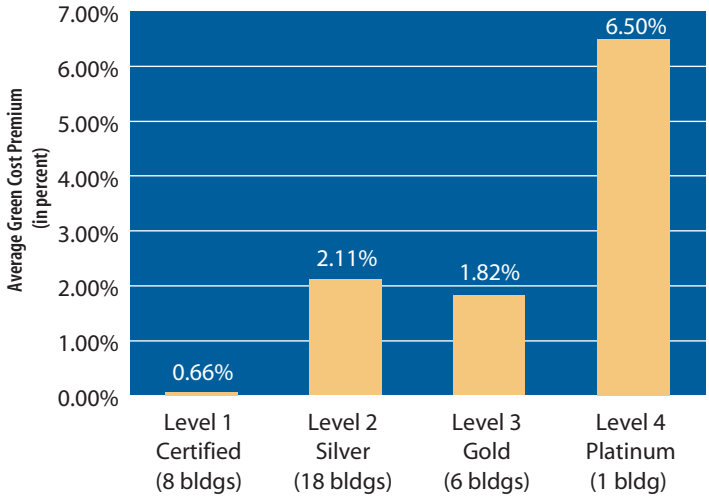
How much more do green buildings cost?

Green buildings are commonly perceived to be a lot more expensive than conventional buildings and often not worth the extra cost. For example, an early 2003 article in the New York Times was entitled "Not Building Green Is Called a Matter of Economics."

In order to determine the cost of building green compared to conventional design, several dozen building representatives and architects were contacted to secure the cost of 33 green buildings from across the United States compared to conventional designs for those same buildings. The average premium for these green buildings is slightly less than 2%, or $3-5/ft^2, substantially lower than is commonly perceived (See Figure 1). The majority of this cost is due to the increased architectural and engineering (A&E) design time, modeling costs and time necessary to integrate sustainable building practices into projects. Generally, the earlier green building features are incorporated into the design process, the lower the cost.

The cost of green design has dropped in the last few years as the number of green buildings has risen. The trend of declining costs associated with increased experience in green building construction has been experienced in Pennsylvania, as well as in Portland and Seattle. Portland's three reported and completed LEED Silver buildings were finished in 1995, 1997, and 2000. They incurred cost premiums of 2%, 1% and 0% respectively. Seattle has seen the cost of LEED Silver buildings drop from 3-4% several years ago to 1-2% today.

Figure 1
Average Green Cost Premium vs. Level of Green Certification for Offices and Schools



Source: USGBC, Capital E Analysis

Green buildings financial benefits

Green Buildings provide financial benefits that conventional buildings do not. These benefits include energy and water savings, reduced waste, improved indoor environmental quality, greater employee comfort/productivity, reduced employee health costs and lower operations and maintenance costs. This paper will focus on two of these benefits: lower energy costs, and health and productivity benefits.

5 See for example, "Impacts of Energy Efficiency and Renewable Energy on Natural Gas Markets", Elliott et al., ACEEE, Sept, 2003. See: http://aceee.org

Energy

Energy is a substantial and widely recognized cost of building operations that can be reduced through energy efficiency and related measures that are part of green building design. The average annual cost of energy in Massachusetts buildings is approximately $2.00/ft^2. On average, green buildings use 30% less energy than conventional buildings—a reduction, for a 100,000 ft^2 state office building, worth $60,000 per year, with a 20-year present value of expected energy savings at a 5% real discount rate worth about three quarters of a million dollars.

A detailed review of 60 LEED rated buildings, demonstrates that green buildings, when compared to conventional buildings, are:

- On average 25-30% more energy efficient
- Characterized by even lower electricity peak consumption
- More likely to generate renewable energy on-site
- More likely to purchase grid power generated from renewable energy sources (green power and/or tradable renewable certificates)

Figure 2
Reduced Energy Use in Green Buildings as Compared with Conventional Buildings

	Certified	Silver	Gold	Average
Energy Efficiency (above standard code)	18%	30%	37%	28%
On-Site Renewable Energy	0%	0%	4%	2%
Green Power	10%	0%	7%	6%
Total	28%	30%	48%	36%

Source: USGBC, Capital E Analysis

Green building energy savings primarily come from reduced electricity purchases and secondarily from reduced peak energy demand. On average, green buildings are 28% more efficient than conventional buildings and generate 2% of their power on-site from photovoltaics (PV). (See Figure 2.) The financial benefits of 30% reduced consumption at an electricity price of $0.08/kWh are about $0.30/ft^2/yr, with a 20-year NPV of over $5/ft^2, equal to or more than the average additional cost associated with building green.

The Genzyme Corporation's recently completed office in Cambridge is a world-class example of green building construction, including advanced daylighting and thermal technologies. In addition to a photovoltaic installation funded by MTC, one of the most prominent features is a combined heliostat and reflective panel system designed to channel daylight deep into the 8-story building.

The environmental and health costs associated with air pollution caused by non-renewable electric power generation and on-site fossil fuel use are generally externalized (not considered) when making investment decisions. The larger Report this paper draws from quantifies two of these benefits: the value of peak power reduction and the value of emissions reductions associated with the energy strategies integrated into green building design. The Report calculates these additional financial benefits are equal to about one third of that provided by energy savings alone.

Productivity and health

There is growing recognition of the large health and productivity costs imposed by poor indoor environmental quality (IEQ) in commercial buildings—estimated variously at up to hundreds of billions of dollars per year. This is not surprising as people spend 90% of their time indoors, and the concentration of pollutants indoors is typically higher than outdoors, sometimes by as much as 10 or even 100 times.[6]

The relationship between worker comfort/productivity and building design/operation is complicated. There are thousands of studies, reports and articles on the subject that find significantly reduced illness symptoms, reduced absenteeism and increases in perceived productivity over workers in a group that lacked these features.[7] For example, two studies of over 11,000 workers in 107 European buildings analyzed the health effect of worker-controlled temperature and ventilation. The Report relies in large part on recent meta-studies that have screened tens or hundreds of other studies and have evaluated and synthesized their findings.

Following are some relevant attributes common in green buildings that promote healthier work environments:

- On average 25-30% more energy efficient
- Much lower source emissions from measures such as better siting (e.g., avoiding locating air intakes next to outlets, such as parking garages, and avoiding recirculation), and better building material source controls (e.g., required attention to storage). Certified and Silver level green buildings achieved 55% and Gold level LEED buildings achieved 88% of possible LEED credits for use of the following:[8] less toxic materials, low-emitting adhesives & sealants, paints, carpets, and composite woods, and indoor chemical & pollutant source control.

Urban Edge is developing a pioneering example of green building opportunities in affordable housing. Through an MTC grant, the non-profit will install 63 kW of solar photovoltaics at the new Egleston Crossing development in Jamaica Plain and Roxbury. This installation, in combination with multiple energy efficiency measures, will reduce the project's electricity needs by 50%.

- Significantly better lighting quality including: more daylighting (half of 21 LEED green buildings reviewed provide daylighting to at least 75% of building space[9]), better daylight harvesting and use of shading, greater occupancy control over light levels and less glare
- Generally improved thermal comfort and better ventilation—especially in buildings that use underfloor air for space conditioning
- Commissioning, use of measurement and verification, and CO_2 monitoring to ensure better performance of systems such as ventilation, heating and air conditioning

Measuring the exact financial impact of healthier, more comfortable and greener buildings is

6 US Environmental Protection Agency, "Indoor Air Quality," January 6, 2003. Available at: http://www.epa.gov/iaq/.

7 Judith Heerwagen, "Sustainable Design Can Be an Asset to the Bottom Line - expanded internet edition," Environmental Design & Construction, Posted 07/15/02. Available at: http://www.edcmag.com/CDA/ArticleInformation/features/BNP__Features__Item/0,4120,80724,00.html.

8 Capital E analysis of USGBC data (based on analysis of points actually achieved in building performance data submitted to USGBC), November and December 2002. For more detail on achievable reductions from some of these indoor emissions sources, please see: Hodgson AT. "Common Indoor Sources of Volatile Organic Compounds: Emissions Rates and Techniques for Reducing Consumer Exposures." University of California, Lawrence Berkeley National Laboratory. 1999.

Prepared for California Air Resources Board.

Available at: http://www.arb.ca.gov/research/apr/past/indoor.htm#Toxic%20Air%20Contaminants.

9 Capital E analysis of USGBC data, November and December 2002.

difficult. The costs of poor indoor environmental and air quality—including higher absenteeism and increased respiratory ailments, allergies and asthma—are hard to measure and have generally been "hidden" in sick days, lower productivity, unemployment insurance and medical costs.

However, four of the attributes associated with green building design—increased ventilation control, increased temperature control, increased lighting control and increased daylighting—have been positively and significantly correlated with increased productivity. Increases in tenant control over ventilation, temperature and lighting each provide measured benefits from 0.5% up to 34%, with average measured workforce productivity gains of 7.1% with lighting control, 1.8% with ventilation control, and 1.2% with thermal control. Additionally, significant measured improvements have been found with increased daylighting.

There are also quantifiable green building gains in attracting and retaining a committed workforce—an aspect beyond the scope of the Report. Attracting and retaining the best employees can be linked to the quality of benefits that workers receive, including the physical, environmental and technological workplace. Green buildings are designed to be healthier and more enjoyable working environments. Workplace qualities that improve the environment of knowledge workers may also reduce stress and lead to longer lives for multi-disciplinary teams.

LEED rated buildings all address some combination of measures that help reduce the pollutants that cause sickness and increase health care costs; improve quality of lighting and increase use of daylighting; and increase tenant control and comfort. LEED Green buildings consistently include a range of material, design and operation measures that directly improve human health and productivity. Gold and Platinum level LEED buildings are more comprehensive in applying IEQ-related measures and therefore should be viewed as providing larger productivity and health benefits than Certified or Silver level green buildings.

Given the studies and data reviewed above, the Report recommends attributing a 1% productivity and health gain to Certified and Silver level buildings and a 1.5% gain to Gold and Platinum level buildings. These percentages are at the low end of the range of productivity gains for each of the individual specific building measures—ventilation, thermal control, light control and daylighting—analyzed above. They are consistent with or well below the range of additional studies reviewed in the Report.

The Blackstone Valley Vocational Regional School District is planning an ambitious 80,000 square foot addition to accommodate four new vocational programs, and will renovate the existing building which has some systems that date back to the 1960's. Daylighting will be accomplished in this project by using light tube technology, which will save over 500 kW a year. Other efficiency measures include efficient air conditioning equipment and variable speed drives for the air handling unit. The school will also incorporate photovoltaic panels mounted on the roof and a solar thermal domestic water preheating system.

A 1% increase in productivity (equal to about 5 minutes per working day) is equal to $600 to $700 per employee per year, or $3/ft^2 per year. A 1.5 % increase in productivity (or a little over 7 minutes each working day) is equal to about $1000 per year, or $4 to $5/ft^2 per year. Over 20 years and at a 5% real discount rate, the present value of the productivity benefits is about $35/ft^2 for Certified and Silver level buildings, and $55/ft^2 for Gold and Platinum level buildings. The relatively large impact of productivity and health gains reflects the fact that the direct and indirect cost of employees is far larger than the cost of construction or energy. Consequently, even small changes in productivity and health translate into large financial benefits. Assuming a longer building operational life, such as 30 or 40 years, would result in substantially larger benefits.

It is worth noting that:

- Nearly one-fifth of Massachusetts' population spend their day inside schools
- Only 43% of high-volume chemicals have been tested for potential human toxicity, and only 7% have been tested for their effect on children's development [10]
- Asthma is the leading cause of admission of urban children into hospitals and the leading cause of days absent from school [11]

Green building improvements—especially for new buildings—appear to be very cost effective compared with other available measures to enhance student performance. Under the recently adopted Federal Education Bill, schools and states stand to lose billions of dollars in federal funding if students do not perform well on annual standardized tests. School and university systems should consider adopting whole building green design at the LEED Gold level or corresponding MASS-CHP scoring as a standard requirement in new school design and school retrofits.

The MITRE Corporation is developing a new state-of-the-art campus center at its Bedford facility to be built according to a comprehensive energy plan and green building standards. With assistance from an MTC grant, the project will incorporate 16.5 kW of rooftop photovoltaics and 12.5 kW of advanced semi-transparent solar photovoltaic panes installed on a covered walkway.

10 Philip Landrigan et al, "Environmental Pollutants and Disease in American Children: Estimates of morbidity, Mortality, and Costs of Lead Poisoning, Asthma, Cancer and Developmental Disabilities," Environmental Health Perspectives, Volume 110, Number 7, July 2002.

Available at: http://ehpnet1.niehs.nih.gov/docs/2002/110p721-728landrigan/abstract.html.

11 Ibid.

Overall costs and financial benefits

Green Buildings provide financial benefits that conventional buildings do not. As indicated in Figure 3 below, the Report concluded that financial benefits of green design are between $50 and $70 per square foot in a LEED building, over 10 times the additional cost associated with building green. The financial benefits are in lower energy, waste and water costs, lower environmental and emissions costs, and lower operational and maintenance costs and increased productivity and health.

Massachusetts already has established national leadership in green buildings, including achieving the first gold rated federal building (at EPA's Chelmsford Lab), and is well positioned to build on this. Doing so will involve developing policies that allow green buildings to capture the financial value of benefits associated with green design. Although this issue is beyond the scope of this paper, two disparate examples are worth noting:

- Accelerated permissioning for the Manulife Financial Headquarters building in South Boston [12] resulting from the perceived benefits associated from its green design suggests one way to make these links more clearly.
- An expected shift from zonal to nodal pricing system for load and generation pricing is a step towards allowing more accurate mapping of real cost into price signals that might allow green buildings to better capture the financial benefits resulting from green construction.

The benefits of building green include cost savings from reduced energy, water, and waste; lower operations and maintenance costs; and enhanced occupant productivity and health. As Figure 3 indicates, the total financial benefits of green buildings are over ten times the average initial investment required to design and construct a green building. Despite data limitations and the need for additional research in various areas, the data demonstrates that building green is cost-effective today, particularly for those projects which start "green" design early in the process.

Figure 3
Financial Benefits of Green Buildings
Summary of Findings (per ft^2)

Category	20-year Net Present Value
Energy Savings	$5.80
Emissions Savings	$1.20
Water Savings	$0.50
Operations and Maintenance Savings	$8.50
Productivity and Health Benefits	$36.90 to $55.30
Subtotal	$52.90 to $71.30
Average Extra Cost of Building Green	(-3.00 to -$5.00)
Total 20-year Net Benefit	$50 to $65

Source: Capital E Analysis

12 See: http://www.bankerandtradesman.com/pub/4_91/commercial/185123-1.html

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Limited Hazardous Building Materials Inspection Report

Fuss & O'Neill EnviroScience, LLC. conducted a Limited Hazardous Building Materials Inspection at the Peebles Elementary School located at 70 Trowbridge Road in Bourne, Massachusetts (the "Site").

Purpose: To perform a lead-based paint (LBP) screening, an inventory of fluorescent light ballasts and mercury-containing equipment, a quantification of presumed polychlorinated biphenyl (PCB)–containing source building materials, and a limited asbestos inspection as part of a feasibility study that anticipates demolishing the Site building.

Tasks Performed: The following areas of focus were evaluated and reviewed as part of this inspection: Review of previously performed Limited Hazardous Building Material Inspection Reports, LBP Screening, Inventory of Fluorescent Light Ballasts and Mercury-Containing Equipment, Quantification of Presumed PCB-Containing Source Building Materials, Asbestos Inspection (mostly visual). Destructive investigative techniques were conducted at the Site building to access materials associated with the brick veneer and ceramic tiles only.

Findings – Peebles School:

- LBP was found associated with Window Supports and Ceramic Wall Tiles.
- Several materials are presumed to contain PCBs including: Window Caulking and Glazing Compound.
- Fluorescent Light Ballasts and Mercury-Containing Equipment were quantified in a previous report.
- Multiple samples were determined to be asbestos-containing materials (ACM) including: Caulking, Glazing Compound, Dampproofing, Plaster Skim Coat, Insulations, Floor Tiles, Boiler Components, Duct Vibration Isolators, Cement Panels, and Soil.

Conclusion:
If disturbed by demolition activities, LBP-coated building components should be segregated from the general demolition waste stream, and be analyzed to determine proper off-site disposal.

Identified PCB-containing materials should be presumed to contain regulated concentrations of PCBs until analysis indicates otherwise. These materials should be removed and disposed at an EPA-approved facility.

DEHP-containing fluorescent light ballasts must be segregated for proper packaging, transporting and disposal. While mercury-containing equipment and fluorescent lamps must be recycled, reclaimed, or disposed as hazardous waste prior to disturbance.

Prior to disturbance ACM that would likely be impacted by the proposed demolition activities must first be abated by a Commonwealth of Massachusetts Department of Labor Standards (MADLS)-licensed Asbestos Abatement Contractor. This is a requirement of MADLS, Commonwealth of Massachusetts Department of Environmental Protection (MassDEP), and the United States Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations governing asbestos abatement.

Due to the date of construction, the Bournedale Elementary School possesses a letter from the architect (Kaestle Boos Associates, Inc.) dated August 11, 2011 stating that "no asbestos-containing building materials were specified for use in, nor to the best of our knowledge installed in, the construction of the Bournedale Elementary School." This letter satisfies the EPA Asbestos Hazard Emergency Response Act (AHERA) regulations governing asbestos in schools; however, prior to renovation or demolition, EPA NESHAP regulations still apply. This regulation requires a thorough asbestos inspection of all areas that will be impacted during renovation or demolition. Once a scope of work is defined, a supplemental inspection should be performed to ensure NESHAP requirements are met.

Geotechnical Engineering Summary

Geotechnical Services Inc. performed geotechnical engineering services associated with the Peebles and Bournedale Elementary School sites in Bourne.

Purpose:
The purpose of the work is provide information on the subsurface soil conditions to determine bearing capacity, foundation design, and other subsurface related information to aid in the future design of a potential addition or new construction option on these sites.

Peebles Elementary School Site

Tasks Performed:

- A total of four test borings were drilled on site and identified as borings B-1 to B-4. The borings were drilled to depths ranging from approximately 18.5-ft to 22-ft below the existing grade.
- Standard Penetration Tests (SPTs) were performed and split-spoon soil samples were retrieved generally at the ground surface and subsequently at 5-ft intervals.
- The finalized logs for the test borings were compiled.

Findings:

- Topsoil was encountered in all the test borings except boring B-4. The thickness of the topsoil encountered varies from about 3-in. to 8-in.
- The naturally deposited Sand Deposits were encountered in all the borings. The Sand Deposits generally consist of medium dense to dense, brown, fine to medium SAND with varying amounts of gravel, coarse sand and silt.
- Very large boulders were observed in the vicinity of boring B-3 and along the hillside in an area just south of the paved area behind the existing school.
- Groundwater levels were measured within each borehole which varied from about 7 to 8-ft below grade at the time the borings were completed.

Conclusion / Recommendations:

1. It is anticipated that the foundations for any new construction will bear upon the Sand Deposits. The naturally deposited Sand Deposits are suitable foundation bearing material (referred to herein as the "bearing strata"). Boulders and bedrock may be encountered and may require rock excavation via drilling and blasting.
2. Building walls, columns and other structural elements be supported by reinforced concrete spread or strip footings bearing directly on the bearing strata.
3. Bottoms of exterior footings bearing on compacted Structural Fill, Crushed Stone or on the undisturbed (prepared) bearing strata should be positioned at least 4-ft below the lowest adjacent ground (finished grade) exposed to freezing temperatures.
4. A permanent foundation perimeter drainage should be provided to collect and drain any infiltrating surface or seepage water which might otherwise become trapped against below-grade walls and seep into the building or exert hydro-static pressures on the walls.
5. Other construction related recommendations, i.e., excavation, compacted, drainage, protection, structural and common fill material, etc. are standard measures the design team will consider in the design of the project.

Bournedale Elementary School Site

Tasks Performed:

- A total of five test borings were drilled on site identified as borings B-1 to B-5. The borings were drilled to depths ranging from approximately 7-ft (Boring B-3) to 22-ft (Boring B-4) below the existing grade.
- Standard Penetration Tests (SPTs) were performed and split-spoon soil samples were retrieved generally at the ground surface and subsequently at 5-ft intervals.

- The finalized logs for the test borings were compiled.

Findings:

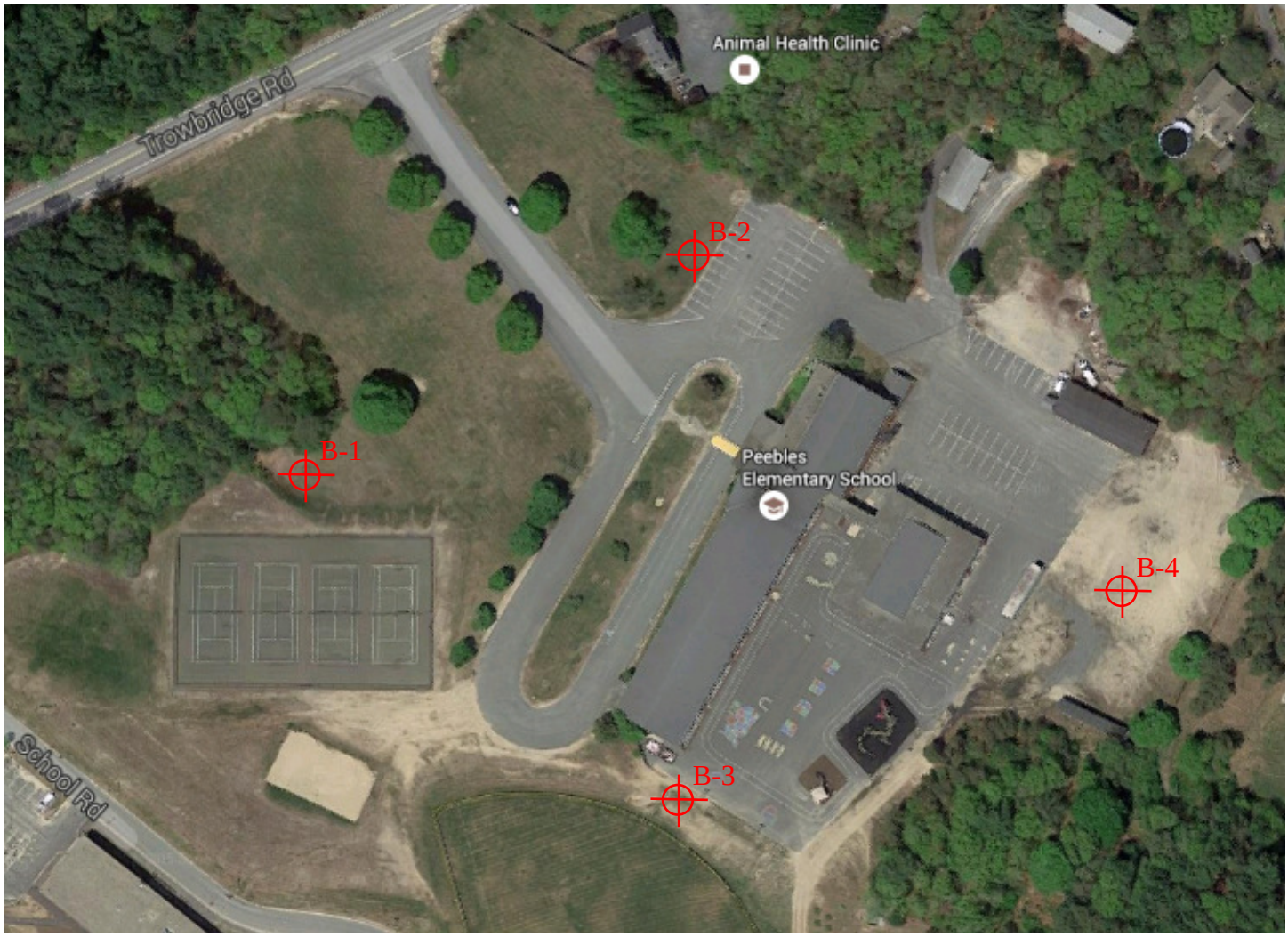
- Topsoil was encountered in all the test borings. The thickness of the topsoil encountered varies from about 7-in. to 8-in.
- The naturally deposited Sand Deposits were encountered in all the borings. The Sand Deposits generally consist of medium dense to very dense, brown, fine to medium SAND with varying amounts of gravel, coarse sand and silt.
- Refusal was encountered in all the test boring expect boring B-4 at depths ranging from 7-ft (boring B-3) to 17-ft (boring B-5). The refusal is likely due to cobbles, boulders or bedrock.

  Groundwater levels were measured within each borehole varied from about 8 to 12-ft below grade at the time the borings were completed.

Conclusion:

1. It is anticipated that the foundations for any new construction will bear upon the Sand Deposits. The naturally deposited Sand Deposits are suitable foundation bearing material (referred to herein as the "bearing strata"). Boulders and bedrock may be encountered and may require rock excavation via drilling and blasting.
2. Building walls, columns and other structural elements be supported by reinforced concrete spread or strip footings bearing directly on the bearing strata.
3. Bottoms of exterior footings bearing on compacted Structural Fill, Crushed Stone or on the undisturbed (prepared) bearing strata should be positioned at least 4-ft below the lowest adjacent ground (finished grade) exposed to freezing temperatures.
4. A permanent foundation perimeter drainage should be provided to collect and drain any infiltrating surface or seepage water which might otherwise become trapped against below-grade walls and seep into the building or exert hydro-static pressures on the walls.
5. Other construction related recommendations, i.e., excavation, compacted, drainage, protection, structural and common fill material, etc. are standard measures the design team will consider in the design of the project.

N



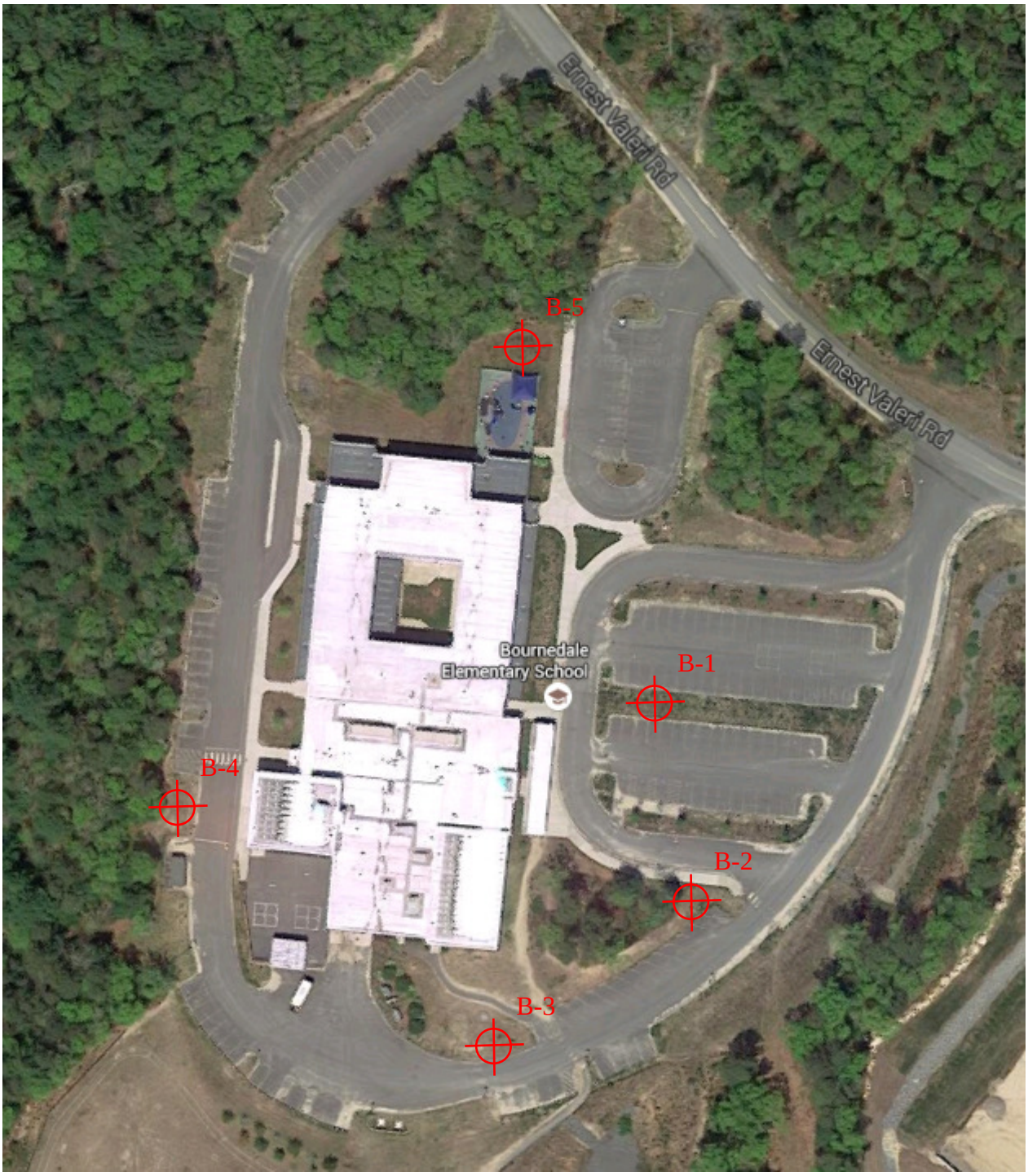
NOT TO SCALE

LEGEND:

B-1 TEST BORING I.D. AND APPROXIMATE LOCATION

FIGURE 2–EXPLORATION LOCATION PLAN

PEEBLES ELEMENTARY SCHOOL
BUZZARDS BAY, MA
GSI PROJECT NO. 215256



NOT TO SCALE

LEGEND:

B-1

TEST BORING I.D.AND APPROXIMATE LOCATION

FIGURE 2–EXPLORATION LOCATION PLAN

BOURNEDALE ELEMENTARY SCHOOL
BOURNE, MA
GSI PROJECT NO. 215257

Traffic Summary

Nitsch Engineering conducted traffic analysis at work at the Peebles and Bournedale Elementary School sites in Bourne.

Purpose: To prepare a qualitative assessment of safety, traffic circulation, and traffic access/egress, associated with the feasibility study. Nitsch Engineering also conducted parental pick-up and drop-off counts as part of their site observation.
The proposed design alternatives were evaluated as part of this study to gain understanding on the potential traffic issues unique to the sites being considered.

Traffic counts were taken at the following two major intersections:

- Route 6 at Nightingale Road
- Route 6 at Edge Hill Road

In addition, Automatic Traffic Recorder (ATR) counts were taken at Trowbridge Road and Ernest Valerie Road.

Findings
(Peebles):

- A total of eight buses drop off students at the school
- A total of 93 parental drop-off vehicles were observed
- A total of a 106 vehicles enter the site between 8:30am and 9:30am. 59 vehicles entering the site were travelling eastbound on Trowbridge Road while 47 vehicles were traveling westbound.
- A total of 73 parental pick-up vehicles were observed during afternoon dismissal between 2:00pm and 3:30pm. 47 vehicles entering the site were travelling eastbound on Trowbridge Road while 18 vehicles were traveling westbound.
- There were a total of 66 parking spaces counted with an overall utilization of 78% at the time observed

(Bournedale):

- A total of thirteen buses drop off students at the school
- A total of 69 parental drop-offs were observed during the morning.
- A total of a 128 vehicles enter the site between 8:15 AM through 9:30 AM. 128 vehicles entering the site were travelling westbound on Ernest Valerie Road while 4 vehicles were traveling eastbound.
- 60 vehicles entering the site between 2:30pm and 3:30pm. 59 vehicles entering were travelling westbound on Ernest Valerie Road while 4 vehicles were traveling eastbound.
- A total of 53 parental pick-up vehicles were observed during afternoon dismissal.
- There were a total of 137 parking spaces counted with an overall utilization of 58% at the time observed
- Design Option 3 (PK-5) established a total of 177 vehicles at drop-off and 113 vehicles at pick-up

Conclusion:

1. The Design options at the Peebles School site (Options 1 and 4) will have very little or no impact on Trowbridge Road traffic.
2. Design Option 3 (PK-5) established 258 additional entering/exits trips during the morning and 202 entering/exits trips during the afternoon
3. Design Option 3 (PK-5) established a total of 177 vehicles at drop-off and 113 vehicles at pick-up
4. The intersections at Route 6 at Nightingale will minor increase in traffic volume
5. The intersections at Route 6 at Edge Hill Road will minor increase in traffic volume

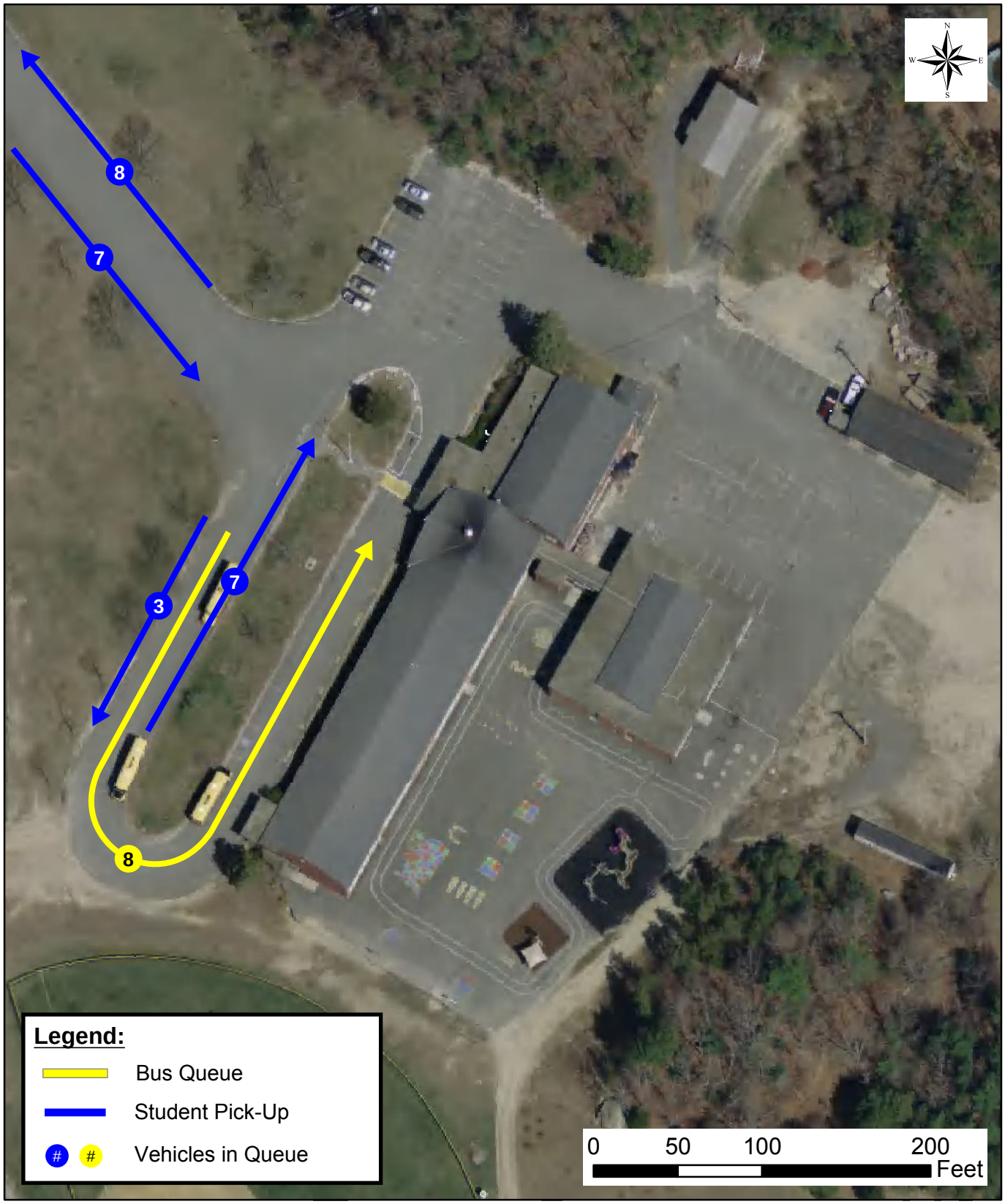


Figure 5: Peebles Elementary School Site Circulation
Peebles Elementary School
Bourne, Massachusetts

Data Source: MassGIS
Nitsch Project #11078

Nitsch Engineering

Figure 6: Peebles Elementary Parking Utilization
Peebles Elementary School
Bourne, Massachusetts

Data Source: MassGIS
Nitsch Project #11078

Nitsch Engineering

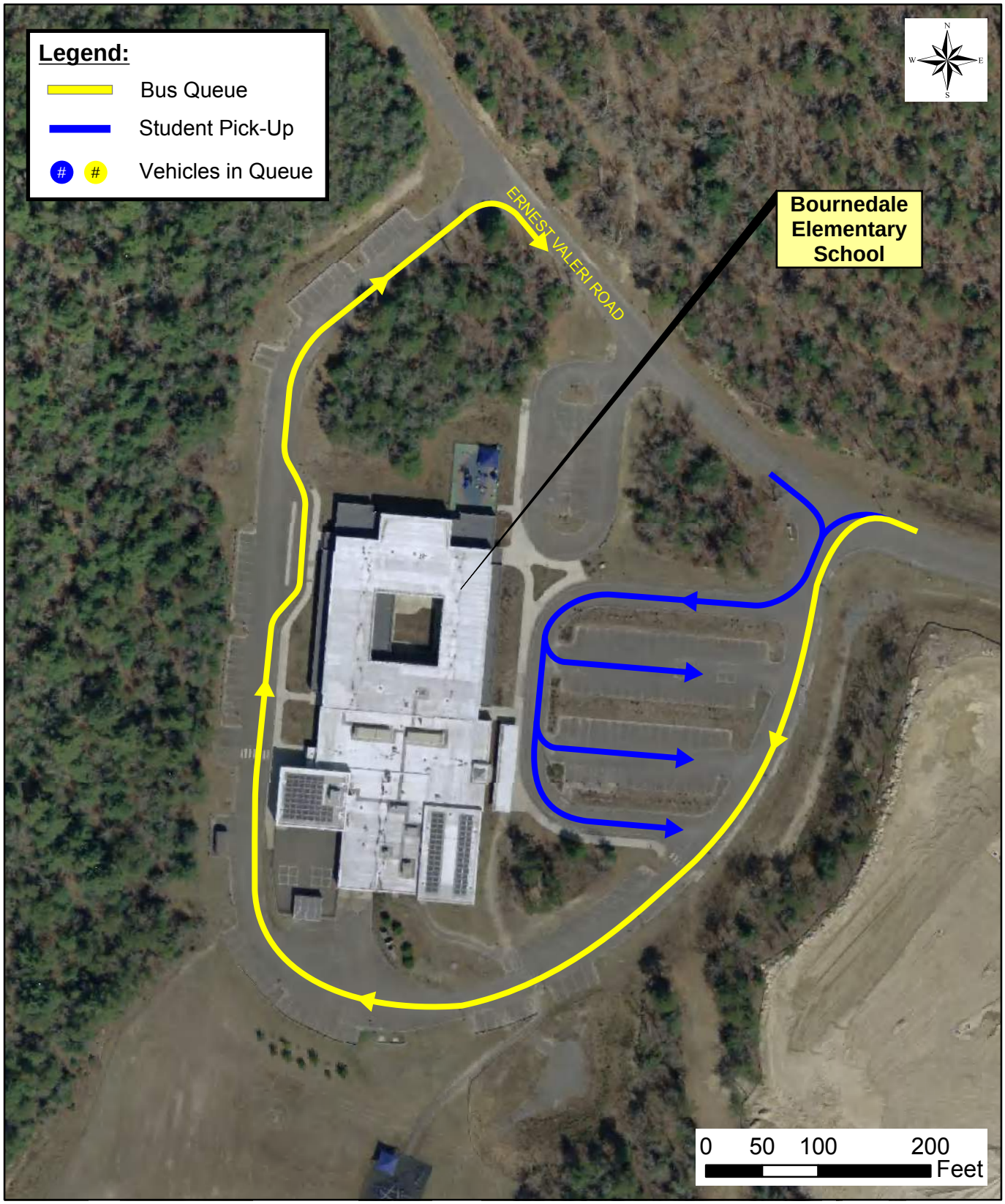


Figure 7: Bournedale Elementary School Site Circulation
Peebles Elementary School
Bourne, Massachusetts

Data Source: MassGIS
Nitsch Project #11078

Nitsch Engineering

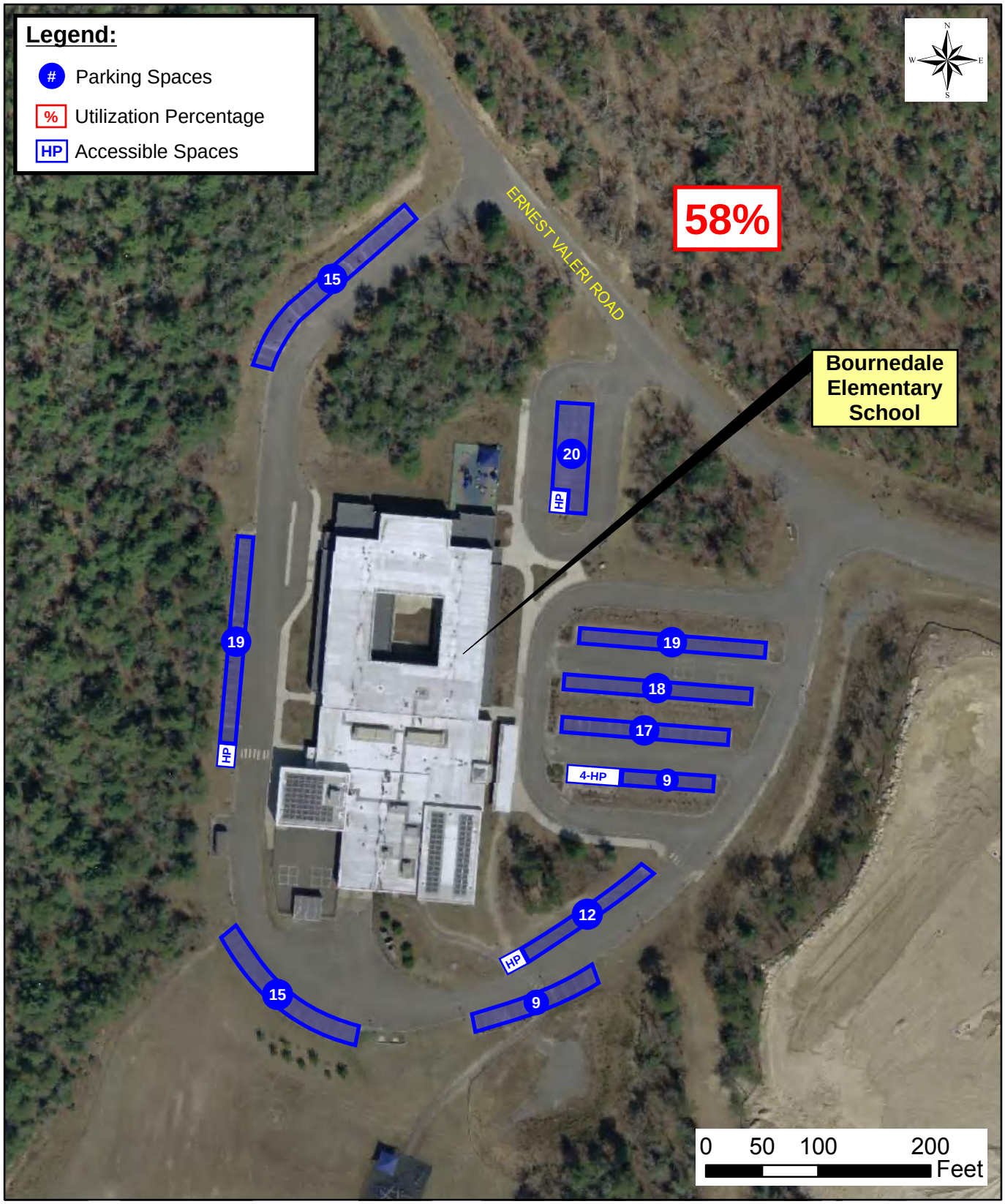


Figure 8: Bournedale Elementary Parking Utilization
Peebles Elementary School
Bourne, Massachusetts

Data Source: MassGIS
Nitsch Project #11078

Nitsch Engineering

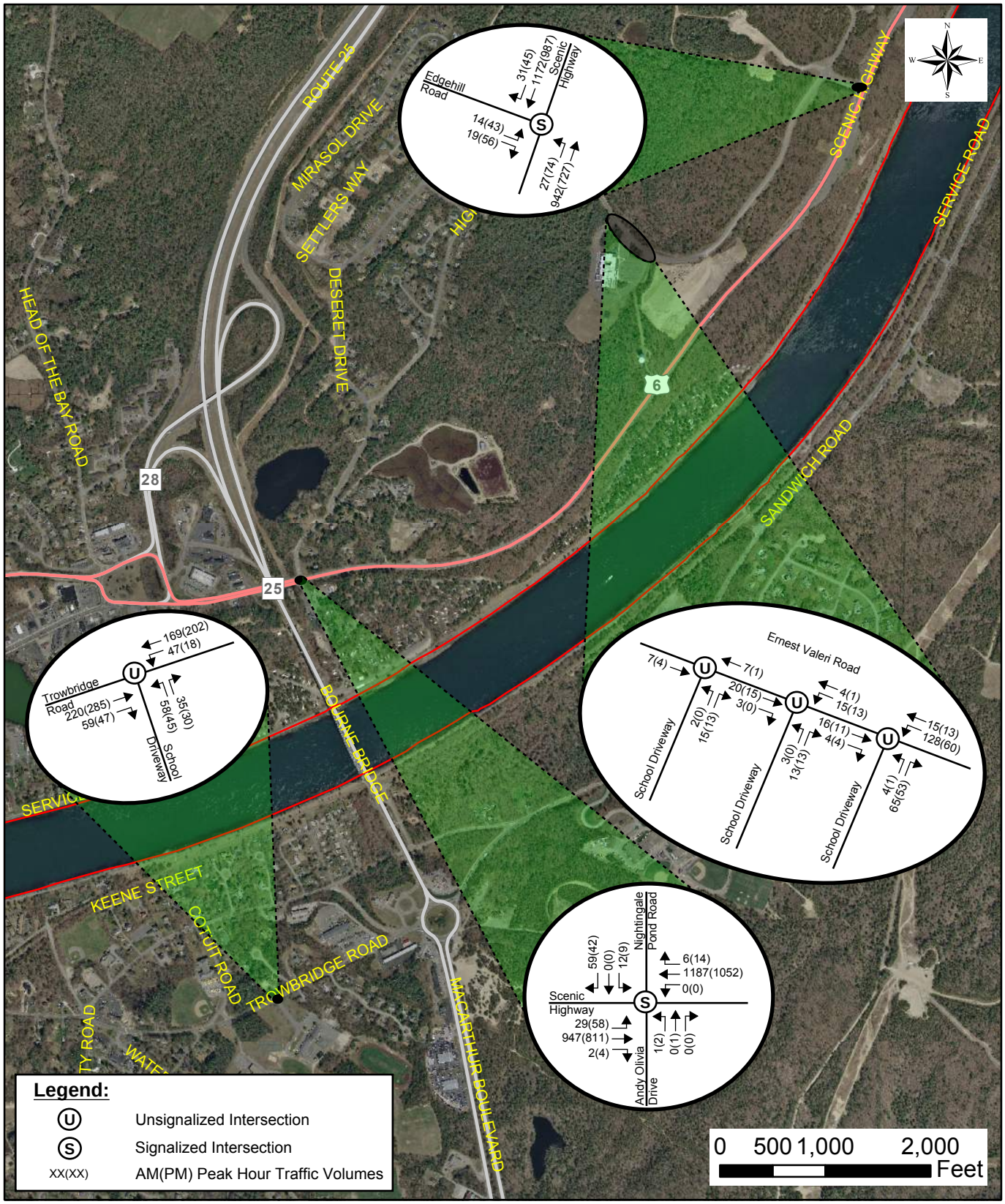


Figure 9: 2015 Existing Traffic Volumes

Peebles Elementary School
Bourne, Massachusetts

Data Source: MassGIS
Nitsch Project #11078

Nitsch Engineering

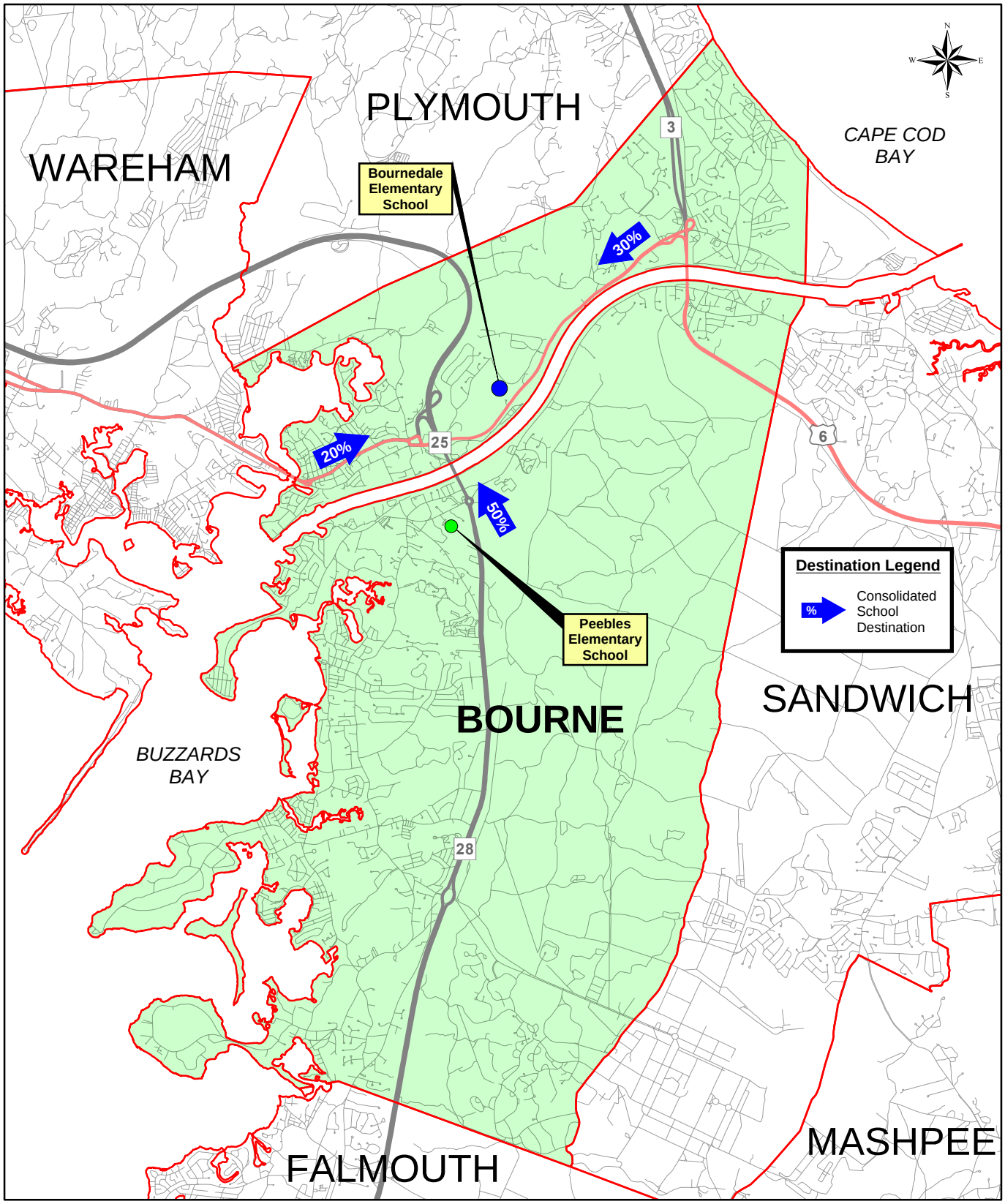


Figure 11: Regional Trip Distribution
Peebles Elementary School
Bourne, Massachusetts

Data Source: MassGIS
Nitsch Project #11078

Nitsch Engineering

Environmental Site Assessment (Phase I)

Fuss & O'Neil Inc. conducted the Phase I Environmental Site Assessment associated with the Peebles and Bournedale Elementary School sites in Bourne.

Purpose: To identify recognized environmental conditions (RECs) present at the site with a focus on hazardous substances and/or petroleum products.

Tasks Performed: The following areas of focus were evaluated and reviewed as part of this study: Site history in regards to previous use and development, various area maps, town records from various departments, interviews and site walkthroughs with school facilities department, owner's site questionnaire, and general hydrological information

Findings (Peebles):

- There is a 10,000-gallon fuel underground storage tank (UST) serving the back-up boiler
- There were documents related to an oil spill in 1995 in connection with the underground tank system. Additional documents, which were requested from the Fire Department, but have not been delivered, may complete the review on this item.
- A spill of 17 gallons of diesel fuel occurred when refueling a bus on site and a solution was achieved
- The nearby Camp Edwards is on the USEPA National Priorities list identifying groundwater contamination. The impact area was studied on the maps and none of the impact area plumes migrated toward the site.
- Nearby businesses, i.e. gas stations, did have incidents and solutions were achieved

Conclusion:

1. There is one identified recognized environmental condition (REC) associated with the subject site. The REC is the currently unresolved history of spills associated with the UST system. This REC item may be re-designated as a "historical REC" (i.e. a closed case addressed to the satisfaction of state environmental standards)_ in this evaluation at a later date pending review of Fire Dept. documentation

2. There are no offsite concerns based on records addressing nearby businesses, i.e. gas stations, Camp Edwards distance from the site, and local hydrological conditions. These conditions should not have a negative impact on the site.

Findings (Bournedale):

- The 2009 Bournedale Elementary School project was greenfield construction
- There are no target sites nearby that would negatively impact the school site
- The eastern portion of the site is located within and adjacent to a medium-yield aquifer. The aquifer map is along the property line and outside proposed project limits.

Conclusion:

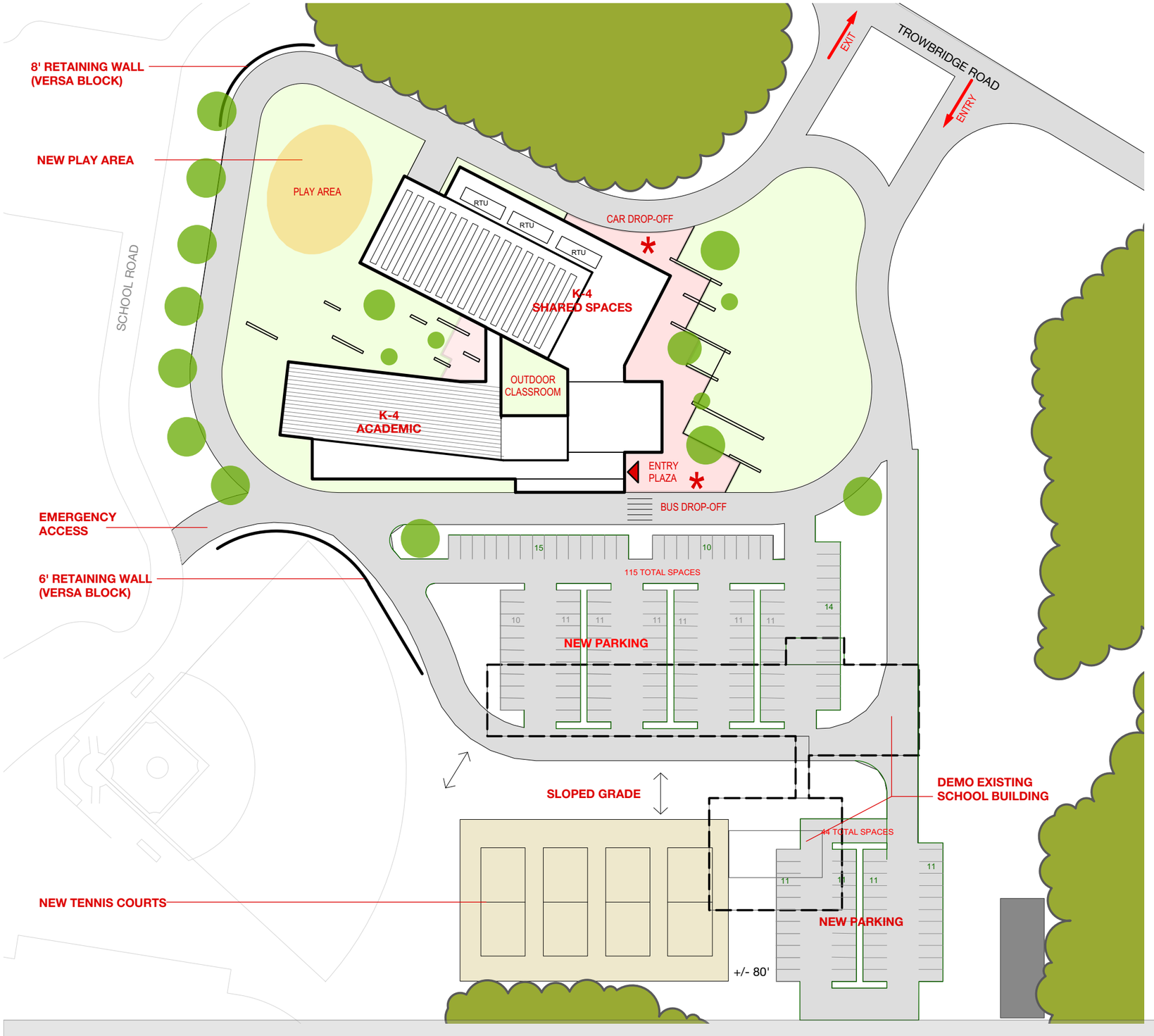
1. There are no identified recognized environmental conditions (REC) associated with the subject site.

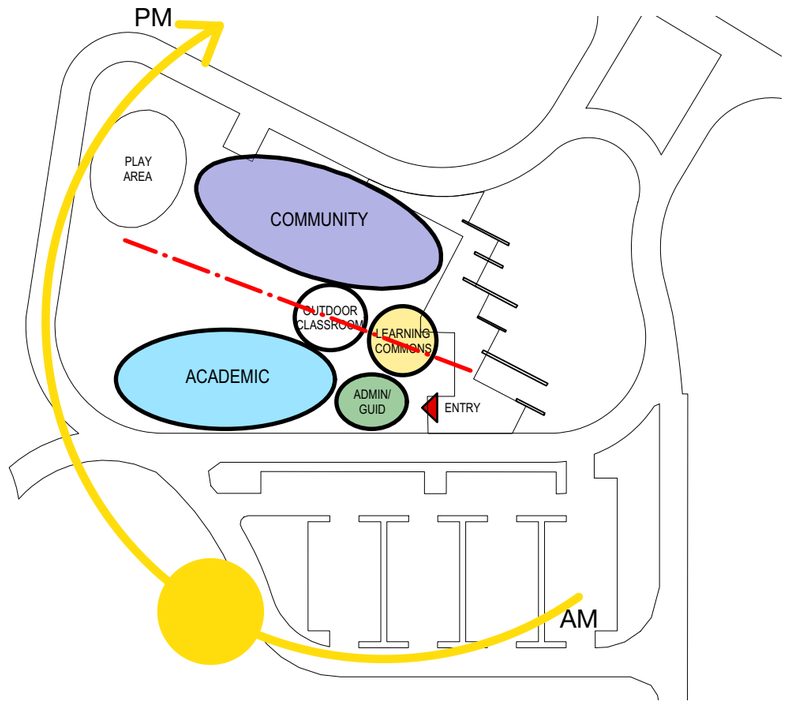
2. There are no offsite concerns based on distance from the site and local hydrological conditions that would have a negative impact on the site.

OPTION 1A (K-4)

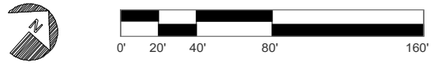
New Construction

Square Footage: 57,248sf





Organizational Diagram



Peebles Elementary School

Bourne, Massachusetts

Flansburgh Architects

OPTION 1A (K-4)

New Construction

Square Footage: 57,248sf

FIRST FLOOR PLAN

KEY

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   - Stage open to gym & cafe to support larger venue to support greater community events on this side of the canal
4. Academic:
   -Neighborhood collab/display
5. Play Area:
   -Adjacent to Gymnasium to limit distraction to academic classrooms
6. Campus Resource:
   - Adjacent to Middle School and High School,Historic Village, Canal
7. Entry Plaza connects separate car and bus zones

SECOND FLOOR PLAN

0' 25' 50' 100'

Peebles Elementary School

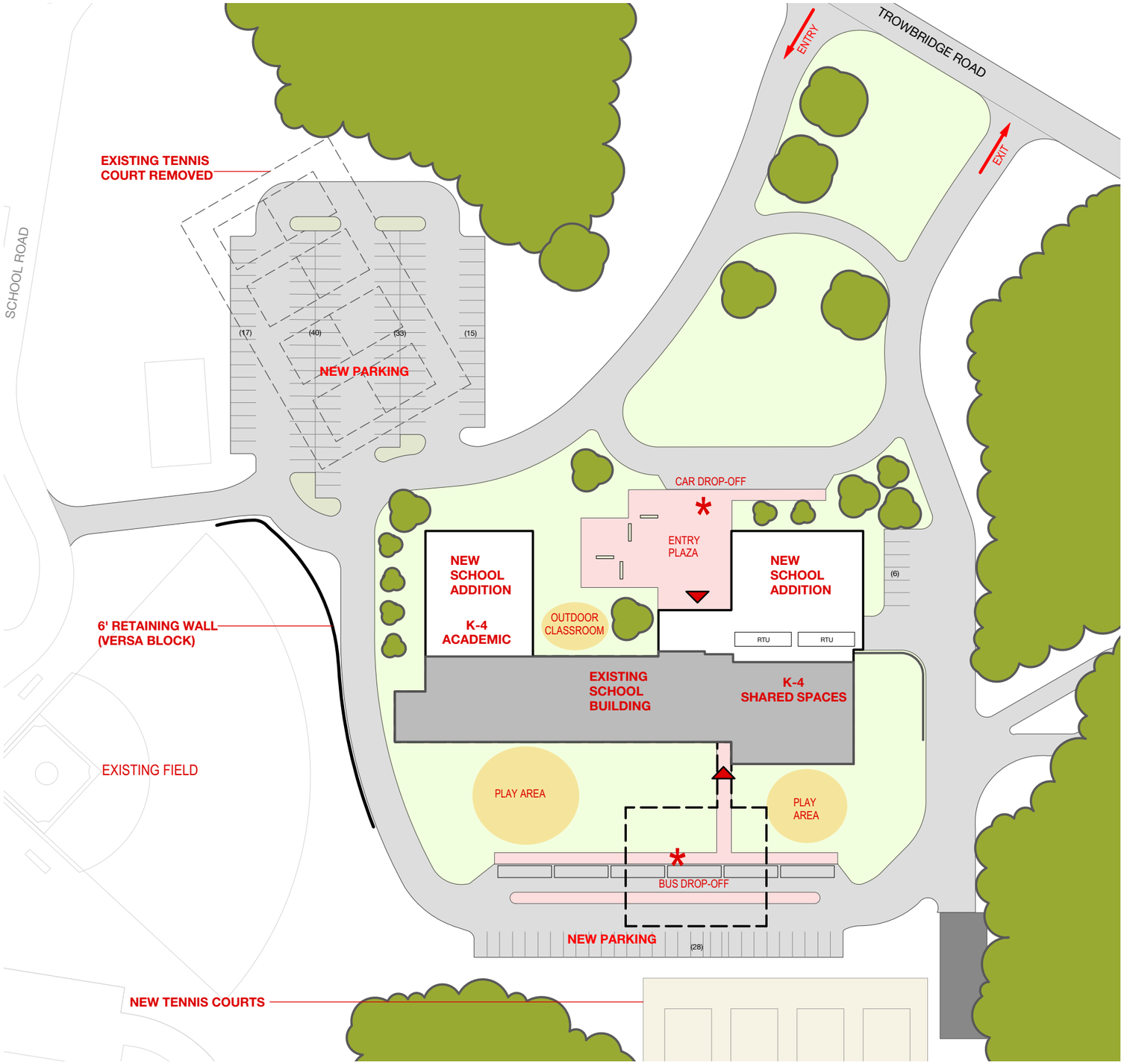
Bourne, Massachusetts

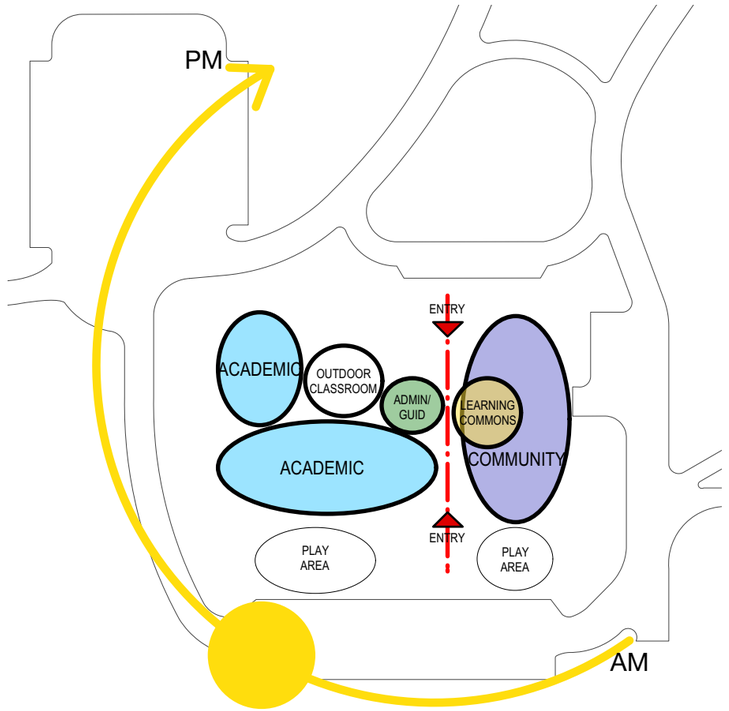
Flansburgh Architects

OPTION 1G (K-4)

Addition/Renovation

Square Footage: 57,248sf





Organizational Diagram

0' 20' 40' 80' 160'

Peebles Elementary School

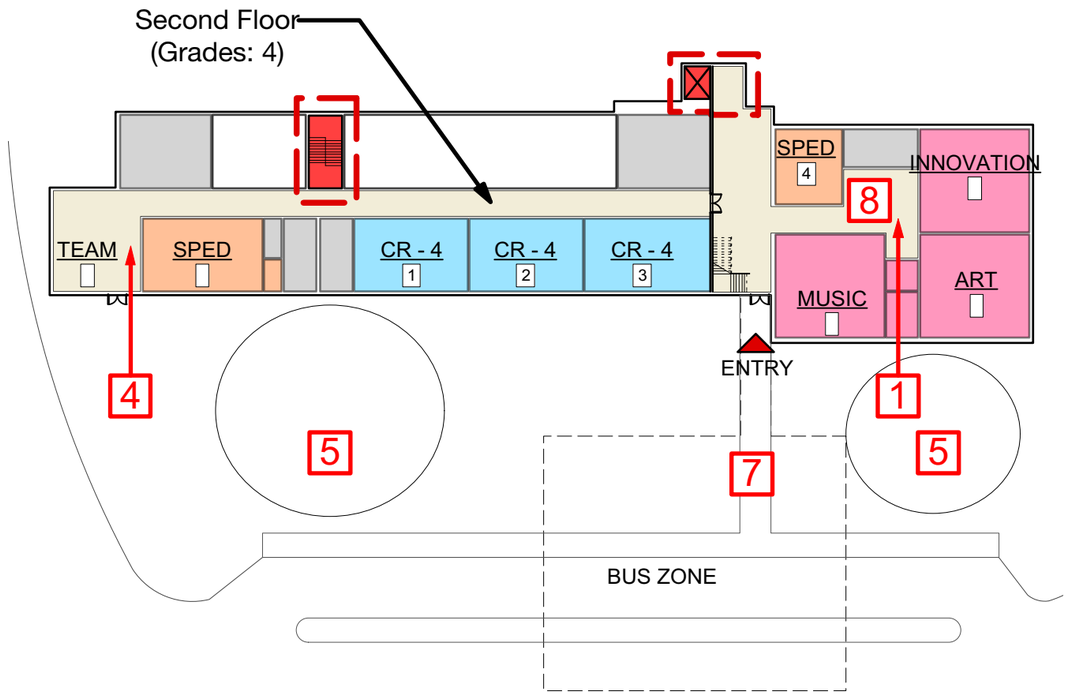
Bourne, Massachusetts

Flansburgh Architects

OPTION 1G (K-4)

Addition/Renovation

Square Footage: 57,248sf



FIRST FLOOR PLAN

KEY — New Addition: - - - - - -

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources (tucked away on lower level)
2. Outdoor Classroom:
   - Adjacent to classroom wing, may limit use do to distraction
3. Community:
   - Larger venue to support greater community events on this side of the canal
4. Academic: Neighborhood collab/display
   -Existing Bldg. has limited opportunity for larger Team Areas
5. Play Area: Remote from gymnasium
6. Campus Resource:
   - Adjacent to Middle School and High School, Historic Village,Canal
7. Separate car and bus drop-off entry locations
8. Potential noise concerns from proximity of gym to admin & Arts/Innovation area to Cafeteria Above

SECOND FLOOR PLAN

0' 25' 50' 100'

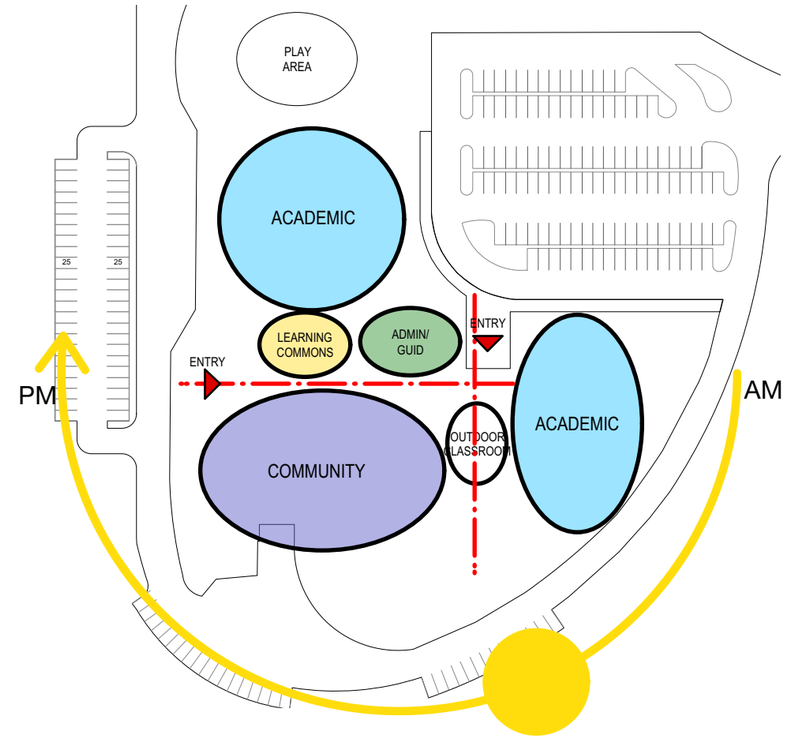
Peebles Elementary School
Bourne, Massachusetts

Flansburgh Architects

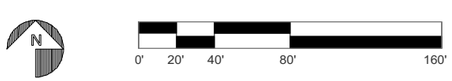
OPTION 2A (PK-4)

Addition/Renovation

Square Footage: 114,593sf



Organizational Diagram



Bournedale Elementary School

Bourne, Massachusetts

Flansburgh Architects

OPTION 2A (PK-4)

Addition/Renovation

Square Footage: 114,593sf

FIRST FLOOR PLAN

SECOND FLOOR PLAN

KEY

New Addition: - - - - - -

1. Arts & Innovation Studio:
   -Grouped with Arts to promote collaboration, shared resources
   -Remote from Learning Commons
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   -Larger venue to support greater community events

4A. Academic: Neighborhood collab/display
4B. Academic: Existing building limits opportunity for Team Areas
5. Play Area: Remote from gymnasium
6. Separate car and bus drop-off entry locations
7. Distinct academic neighborhood:
   Existing Wing: Pk-2, New Addition: 3-4

N

0' 25' 50' 100'

Bournedale Elementary School

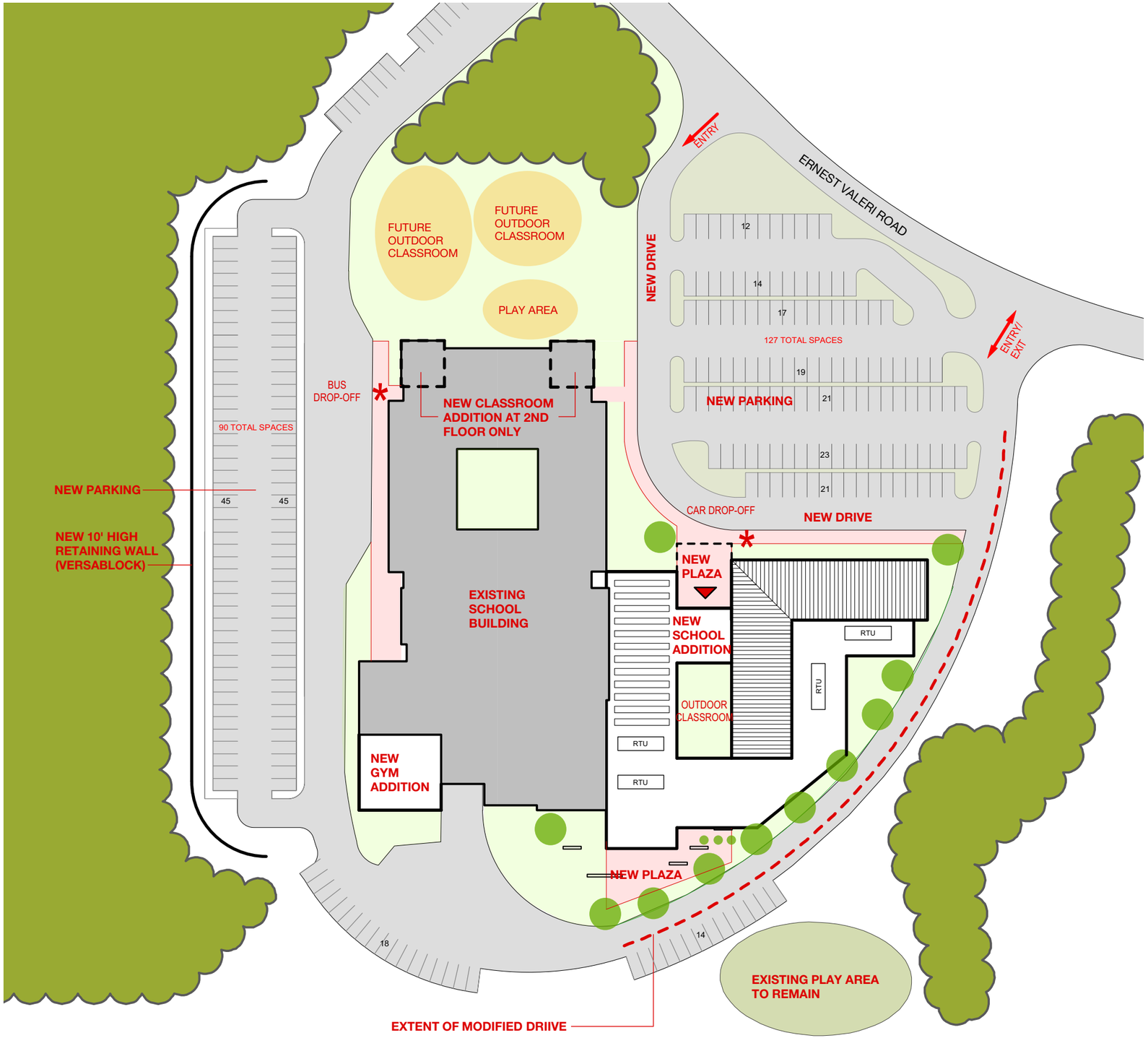
Bourne, Massachusetts

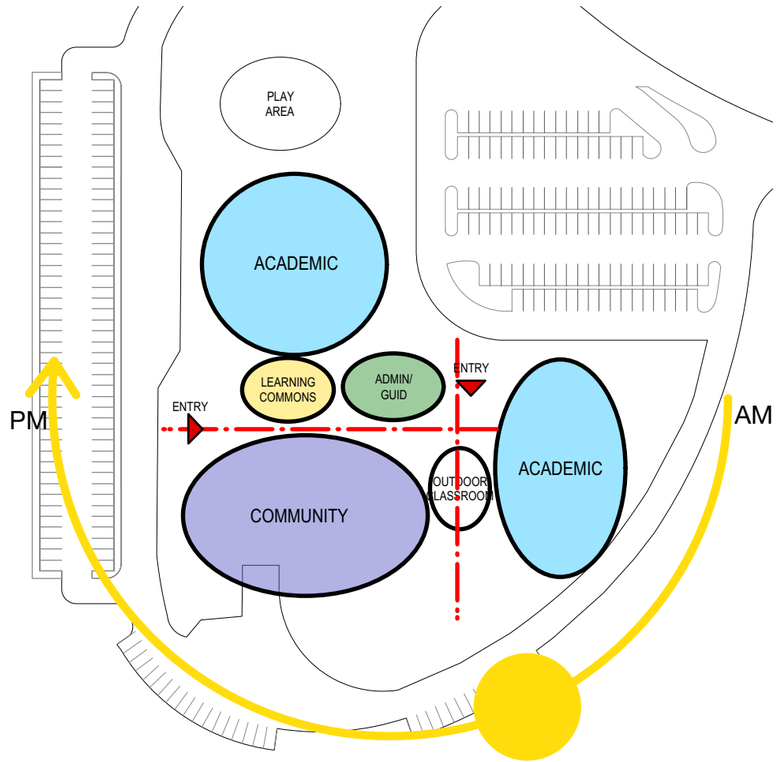
Flansburgh Architects

OPTION 3A (PK-5)

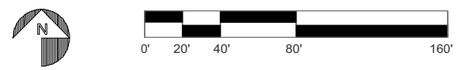
Addition/Renovation

Square Footage: 131,382 sf





Organizational Diagram



Bournedale Elementary School

Bourne, Massachusetts

Flansburgh Architects

OPTION 3A (PK-5)

Addition/Renovation

Square Footage: 131,382 sf

FIRST FLOOR PLAN

SECOND FLOOR PLAN

KEY — New Addition: - - - - - - -

1. Arts & Innovation Studio:
   - Remote from Arts,Music & Learning Commons
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   -Larger venue to support greater community events

4A. Academic: Neighborhood collab/display
4B. Academic: Existing building limits opportunity for Team Areas
5. Play Area: Remote from gymnasium
6. Separate car and bus drop-off entry locations
7. Distinct academic neighborhood:
   Existing Wing: Pk-2, New Addition: 3-4

N

0' 25' 50' 100'

Bournedale Elementary School

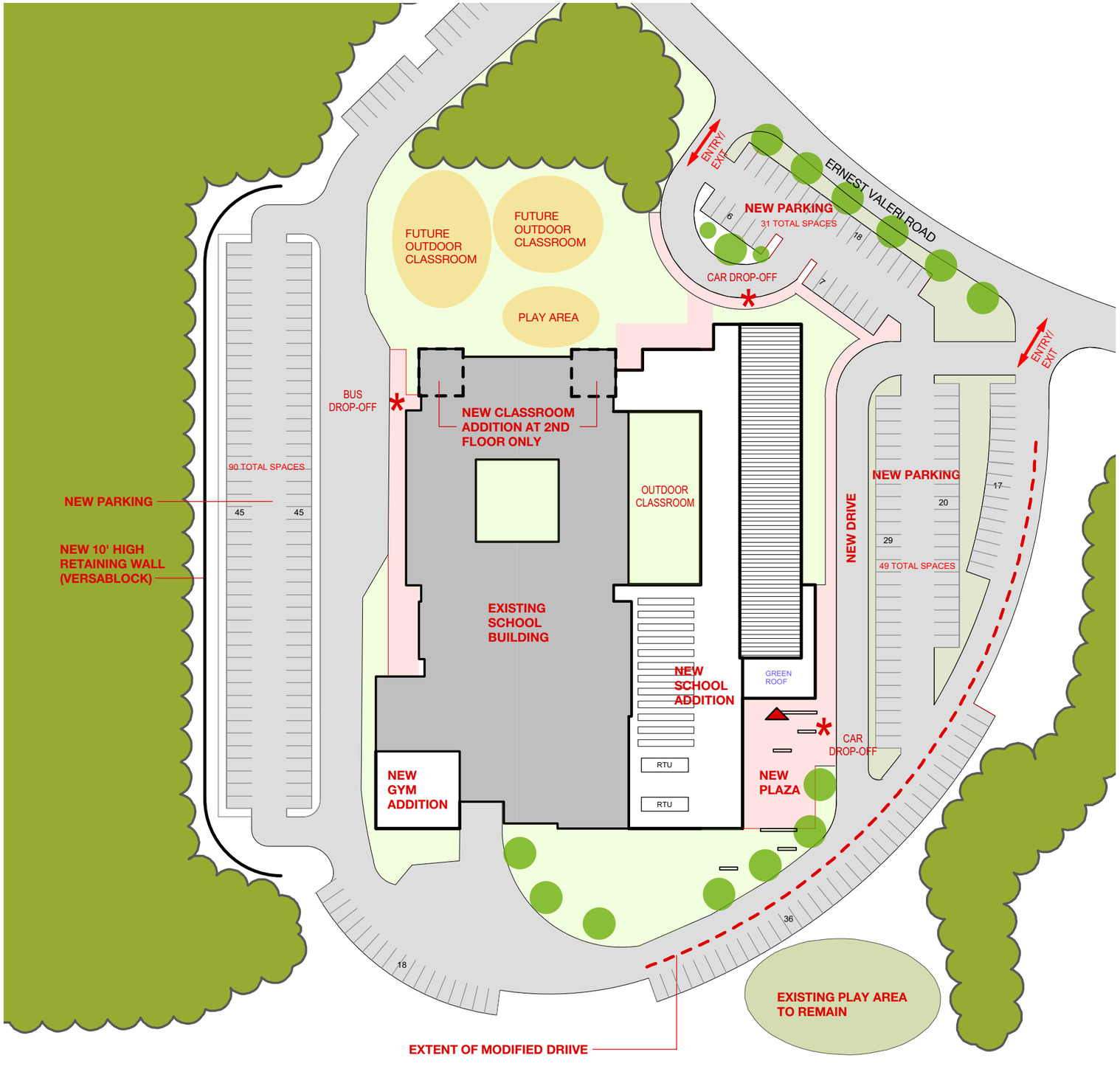
Bourne, Massachusetts

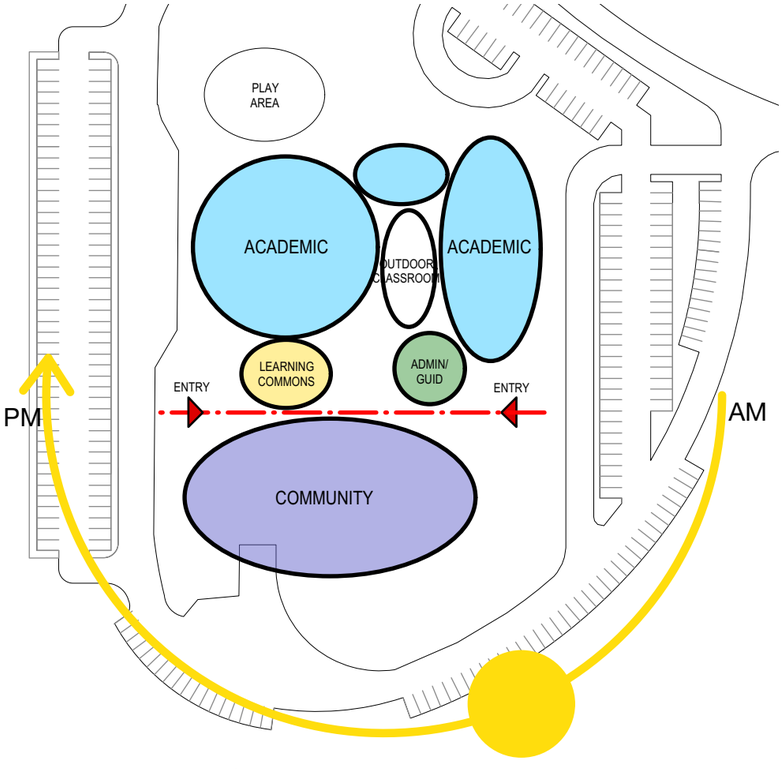
Flansburgh Architects

OPTION 3B (PK-5)

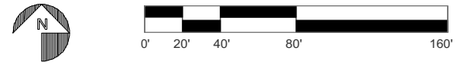
Addition/Renovation

Square Footage: 131,382 sf





Organizational Diagram



Bournedale Elementary School

Bourne, Massachusetts

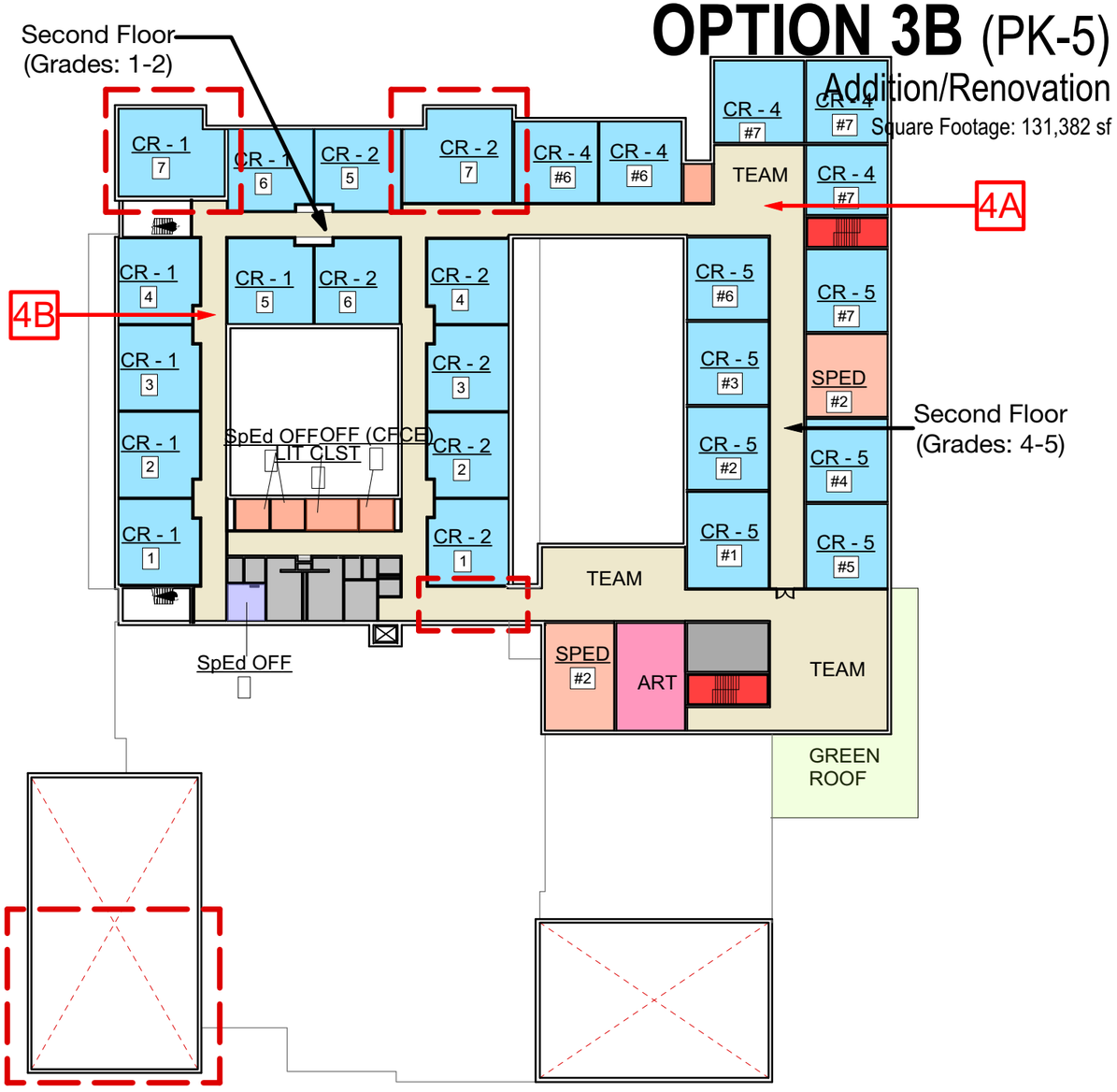
Flansburgh Architects

OPTION 3B (PK-5)

Addition/Renovation

Square Footage: 131,382 sf

FIRST FLOOR PLAN



SECOND FLOOR PLAN

KEY

New Addition:

1. Arts & Innovation Studio:
   -Grouped with Arts to promote collaboration, shared resources
2. Outdoor Classroom:
   - Embedded within classroom wings, may disrupt learning in academic classrooms
3. Community:
   -Larger venue to support greater community events

4A. Academic: Neighborhood collab/display

4B. Academic: Existing building limits opportunity for Team Areas

5. Play Area: Remote from gymnasium
6. Separate car and bus drop-off entry locations

N

0' 25' 50' 100'

Bournedale Elementary School

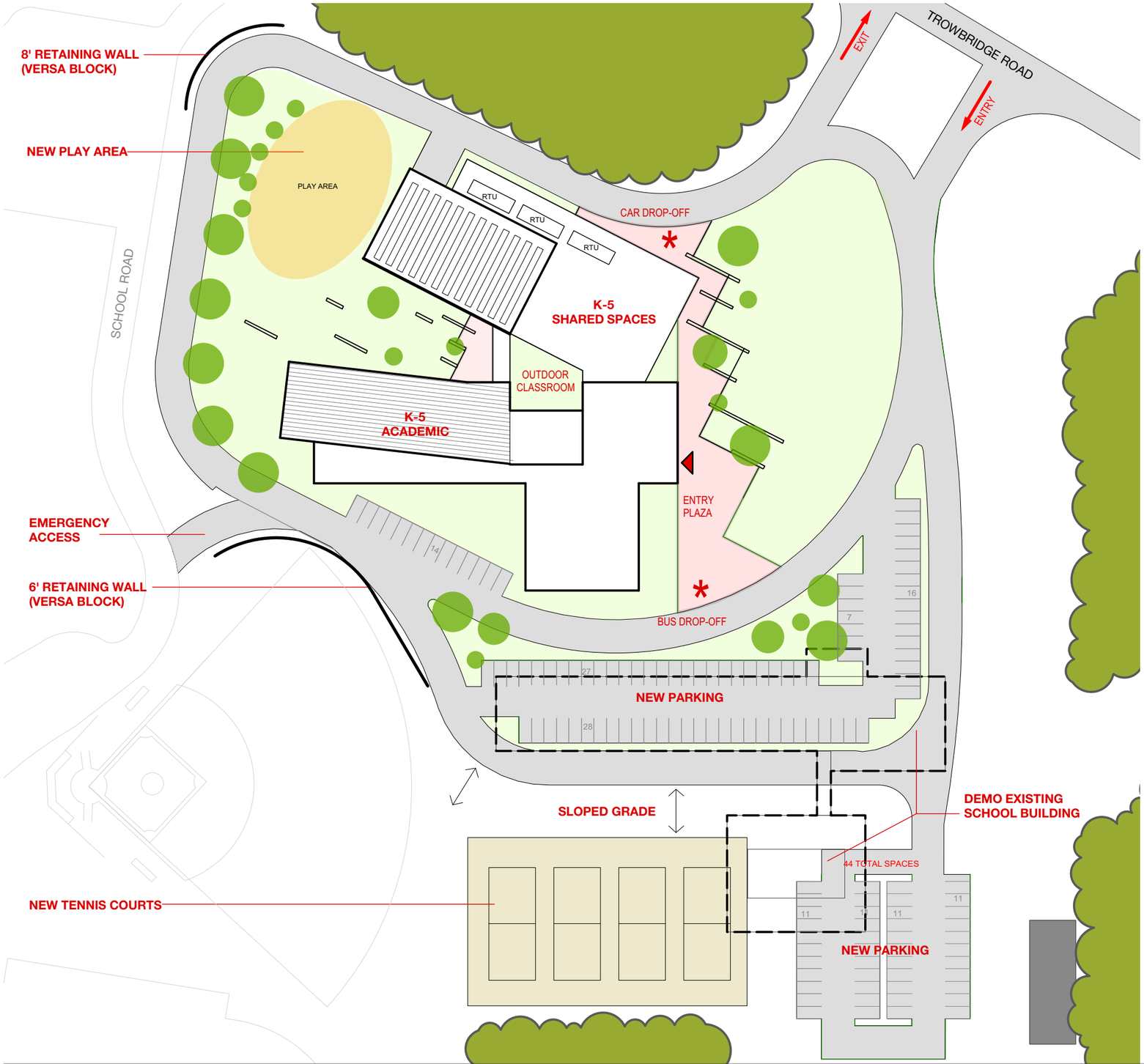
Bourne, Massachusetts

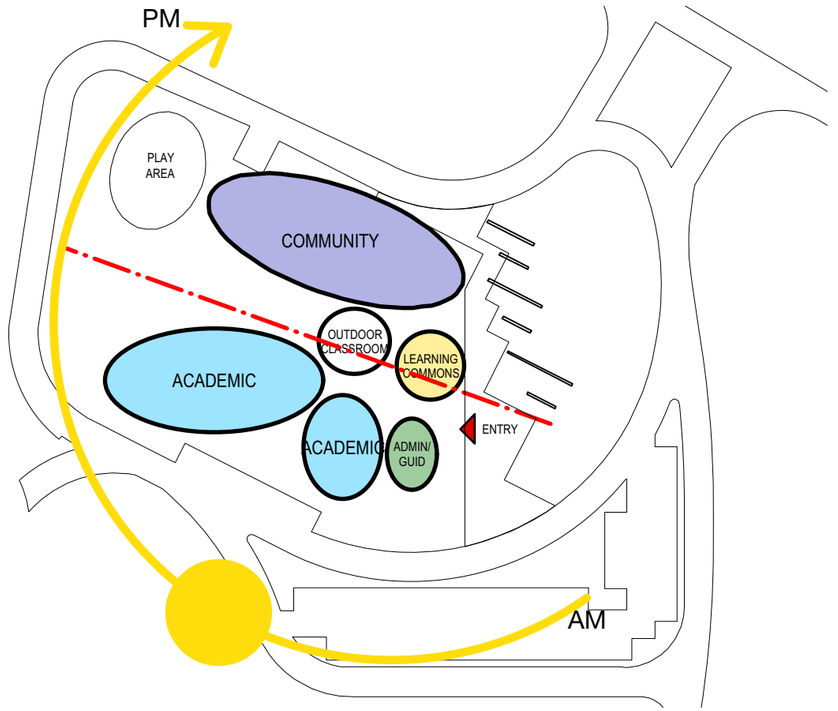
Flansburgh Architects

OPTION 4A (K-5)

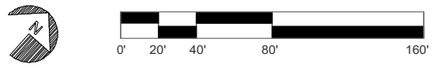
New Construction

Square Footage: 72,473 sf





Organizational Diagram



Peebles Elementary School

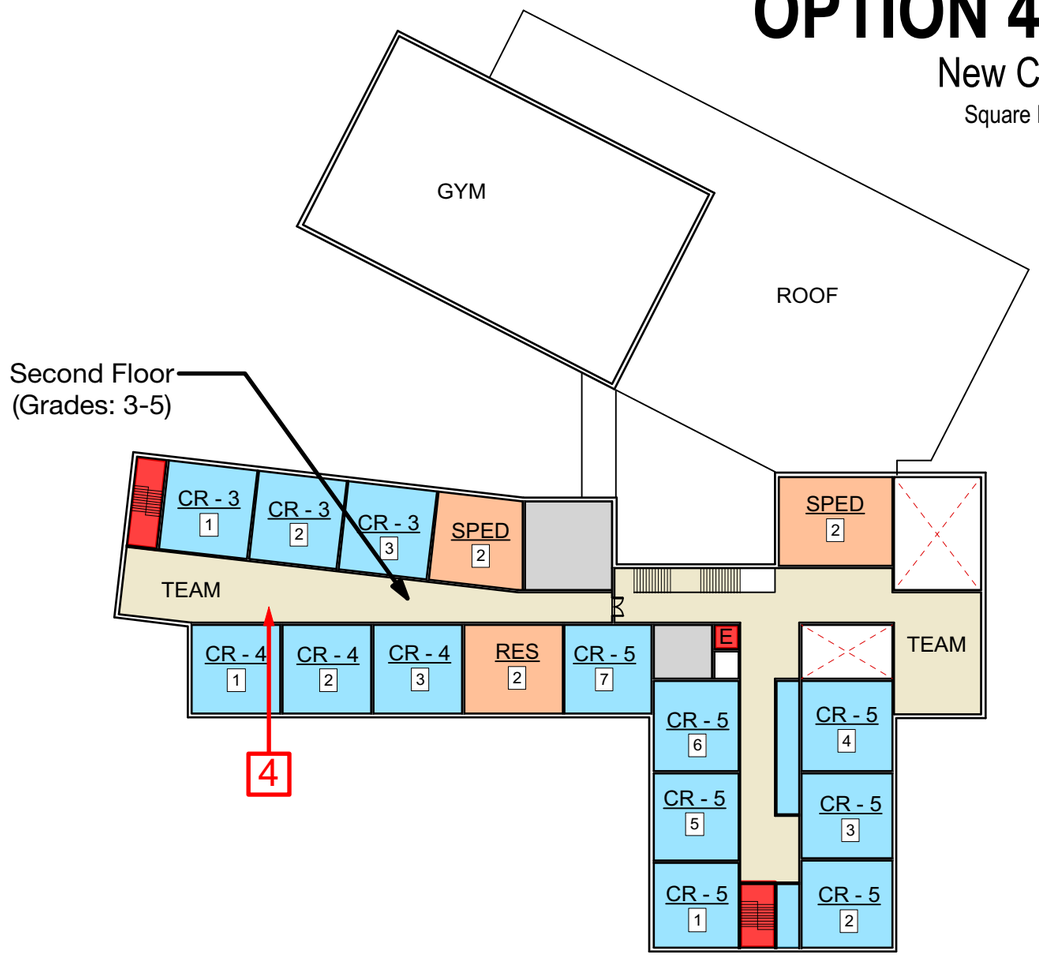
Bourne, Massachusetts

Flansburgh Architects

OPTION 4A (K-5)

New Construction

Square Footage: 72,473 sf



FIRST FLOOR PLAN

SECOND FLOOR PLAN

KEY

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources
2. Outdoor Classroom:
   - Limits distraction to academic classrooms
   -project area with water, power
3. Community:
   - Stage open to gym & cafe to support larger venue to support greater community events on south side of the canal
4. Academic:
   -Neighborhood collab/display
5. Play Area:
   -Adjacent to Gymnasium to limit distraction to academic classrooms
6. Campus Resource:
   - Adjacent to Middle School and High School,Historic Village, Canal
7. Entry Plaza connects separate car and bus zones

N

0' 25' 50' 100'

Peebles Elementary School

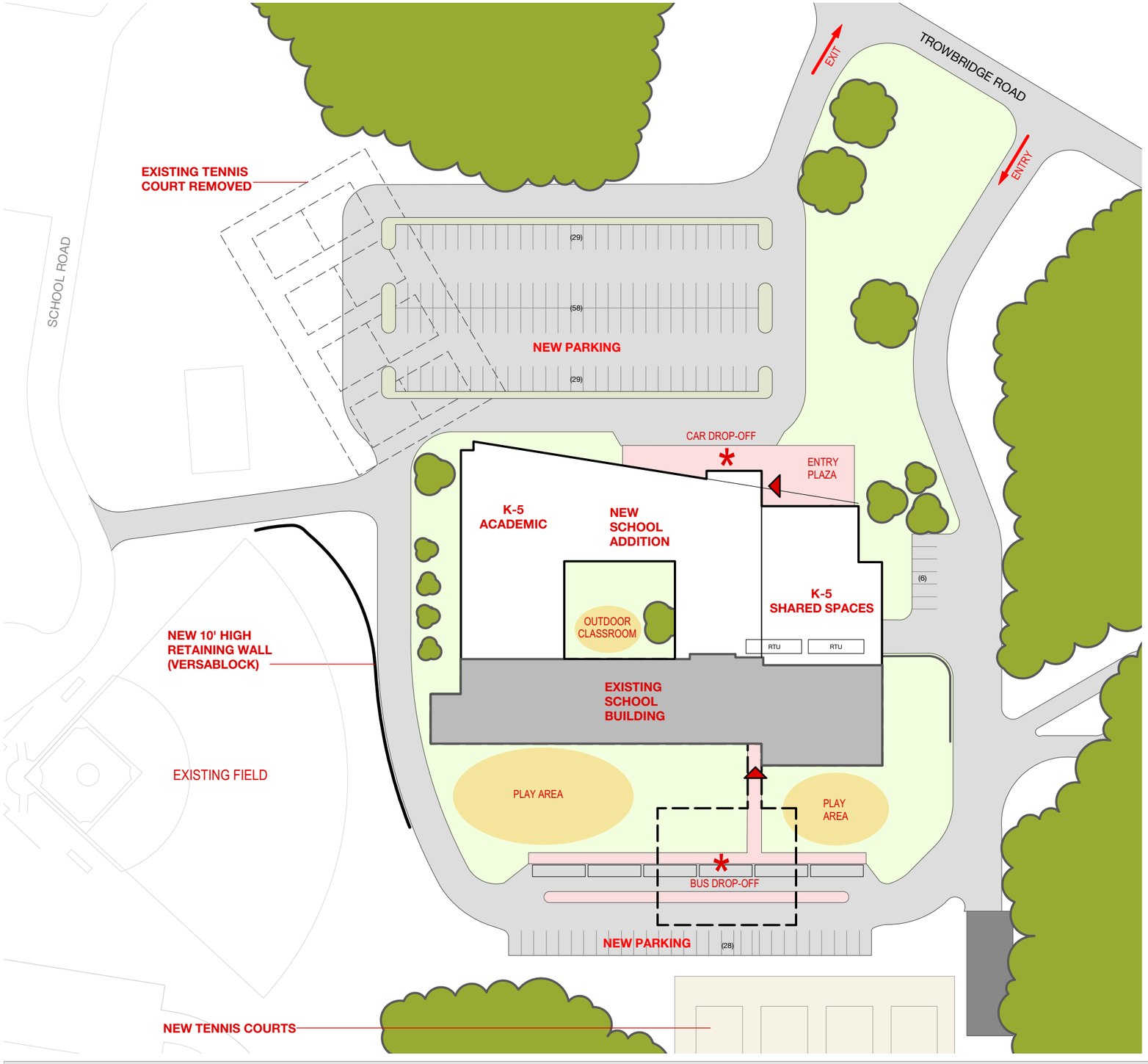
Bourne, Massachusetts

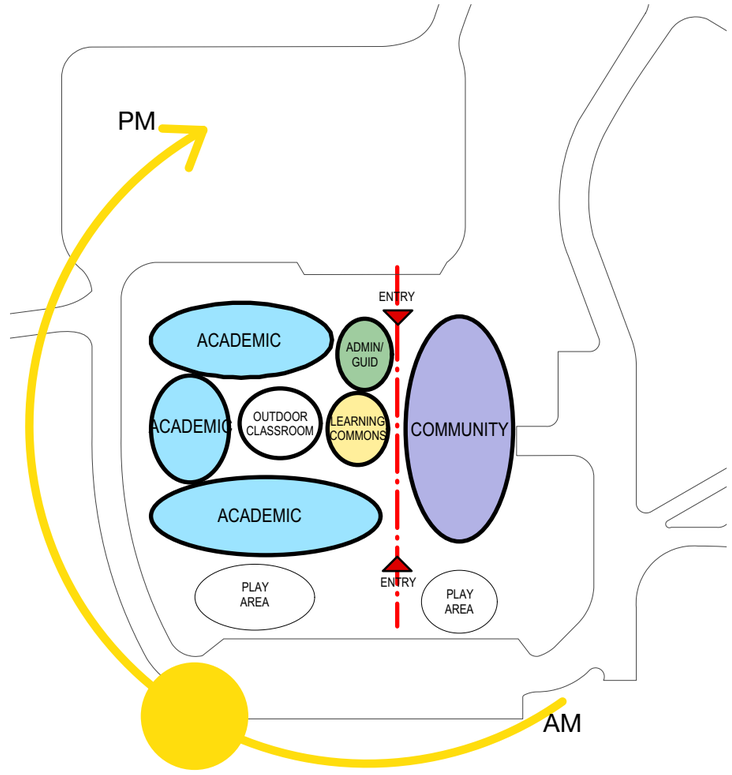
Flansburgh Architects

OPTION 4B (K-5)

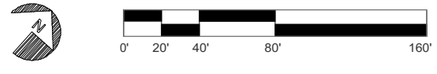
Addition/Renovation

Square Footage: 72,473 sf





Organizational Diagram



Peebles Elementary School

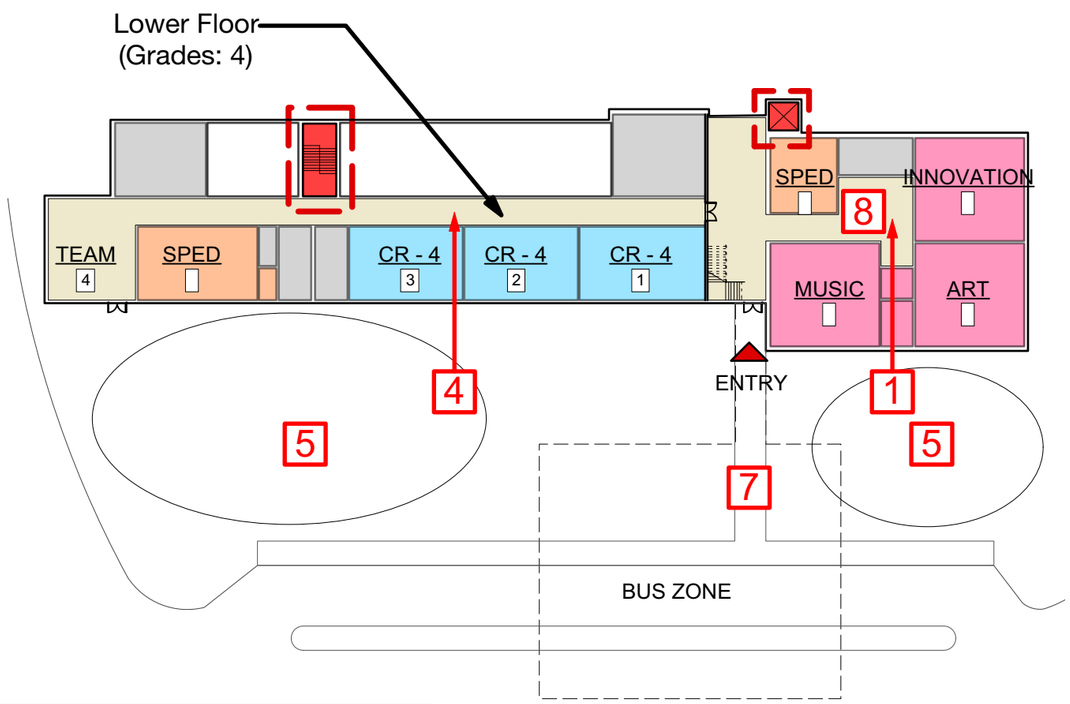
Bourne, Massachusetts

Flansburgh Architects

OPTION 4B (K-5)

Addition/Renovation

Square Footage: 72,473 sf



FIRST FLOOR PLAN

KEY — New Addition: - - - - - -

1. Arts & Innovation Studio:
   -Grouped with Arts,Music,Makers Space & Learning Commons to promote collaboration, shared resources (tucked away on lower level)
2. Outdoor Classroom:
   - Embedded within classroom wings may disrupt learning
3. Community:
   - Larger venue to support greater community events on this side of the canal
4. Academic: Neighborhood collab/display
   -Existing Bldg. has limited opportunity for larger Team Areas
5. Play Area: Remote from gymnasium
6. Campus Resource:
   - Adjacent to Middle School and High School, Historic Village,Canal
7. Separate car and bus drop-off entry locations
8. Potential noise concerns from proximity of gym to admin & Arts/Innovation area to Cafeteria Above

SECOND FLOOR PLAN

0' 25' 50' 100'

Peebles Elementary School

Bourne, Massachusetts

Flansburgh Architects

Preliminary Cost Models

		Option 1 (K-4) 250 students		Option 2 (PK-4) 725 students	Option 3 (PK-5) 885 students		Option 4 (K-5) 410 students		Base Repair Only
		1A New	1G Add/Reno	2A Add/Reno	3A Add/Reno	3B Add/Reno	4A New	4B Add/Reno	
Gross SF		**57,248 SF**		**114,593 SF**	**131,382 SF**		**72,473 SF**		**55,190 SF**
***Construction Cost $ (Hard Cost)**	Building	$23.25M	$23.15M	$25.63M	$30.63M	$30.03M	$26.96M	$27.46M	$10.53M
	Hazmat/Demo	$1.71M	$1.24M	$0	$0	$0	$1.7M	$1.21M	$1.16M
	Sitework	$4.05M	$4.17M	$4.65M	$4.78M	$4.75M	$4.34M	$4.29M	$.38M
	Total	**$29.01M**	**$28.56M**	**$30.28M**	**$35.41M**	**$34.78M**	**$32.99M**	**$32.96M**	**$12.07M**
Soft Cost $	Fees & Expenses	$5.9M	$5.47M	$5.61M	$6.38M	$6.28M	$6.5M	$6.13M	$2.8M
	FF&E	$.75M	$.75M	$1.02M	$1.5M	$1.5M	$1.23M	$1.23M	$.25M
	Contingencies	$2.32M	$2.57M	$2.42M	$2.83M	$2.78M	$2.64M	$2.97M	$1.68M
Other Town Costs		no cost	no cost	TBD	TBD	TBD	no cost	no cost	no cost
TOTAL		**$37.98M**	**$37.35M**	**$39.34M**	**$46.12M**	**$45.35M**	**$43.36M**	**$43.28M**	**$16.8M**

* Estimated Cost subject to change as project is refined

Evaluation Criteria		Option 1A (250 Students)	Option 1G (250 Students)	Option 2A (725 Students)	Option 3A (885 Students)	Option 3B (885 Students)	Option 4A (410 Students)	Option 4B (410 Students)
1	Size of School							
2	Grade Separation Issues							
3	Reinforces Campus Feel							
4	Opportunity for Collaboration & Mentoring							
5	District-wide Culture and Advantages							
6	Traffic Impact							
7	Separation of Community / Academic Uses							
8	Creation of Community Space							
9	Limits Disruption to Students							
10	Cost Effectiveness: Operation / Construction							
11	Maximum Building Efficiency							
12	Least Environmental Impact							
13	Most Beneficial Construction Schedule							
14	Best Site Option for Neighborhood Schools							
15	Adequate Play & Parking Areas							
16	Continued Use of Athletic Resources							
17	Maximum Score for NE-CHPS / LEED							
18	Best Space Adjacencies							
19	Best Separation of Parent / Bus / Service Circulation							
20	Resolves Geographic Separation by Canal							
21	Centralized Elementary Resources							
22	Centralized Campus Resources							
23	Advantages to Middle School							
24	Maximize MSBA Reimbursement							
	TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Ranking:								
	3 for most favorable:	0	0	0	0	0	0	0
	2 for acceptable:	0	0	0	0	0	0	0
	1 for least favorable:	0	0	0	0	0	0	0

Evaluation Criteria	
1	Size of School
2	Grade Separation Issues
3	Reinforces Campus Feel
4	Opportunity for Collaboration & Mentoring
5	District-wide Culture and Advantages
6	Traffic Impact
7	Separation of Community / Academic Uses
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18	Best Space Adjacencies
19	Best Separation of Parent / Bus / Service Circulation
20	Resolves Geographic Separation by Canal
21	Centralized Elementary Resources
22	Centralized Campus Resources
23	Advantages to Middle School
24	Maximize MSBA Reimbursement

	Total Score by Option*						
Committee Member	Option 1A (250 Students)	Option 1G (250 Students)	Option 2A (725 Students)	Option 3A (885 Students)	Option 3B (885 Students)	Option 4A (410 Students)	Option 4B (410 Students)
Natasha Scarpato	39	24	44	38	38	57	41
Mary Jo Coggleshall	47	24	45	40	40	61	49
Janey Norton	58	50	44	41	44	65	46
Elizabeth Carpenito	48	24	65	48	41	65	54
Steven Lamarche	50	41	47	45	45	58	48
Frederick Howe	33	30	43	40	40	54	43
James Potter	54	42	57	54	56	55	42
Edward Donoghue	49	41	41	40	42	54	47
Richard Lavoie	53	24	50	43	43	56	24
William Meier	37	37	55	44	44	53	44
Jonathan Nelson	48	40	42	32	31	59	52
AVERAGE	**47**	**34**	**48**	**42**	**42**	**58**	**45**

Ranking:

3 for most favorable
2 for acceptable
1 for least favorable

** Committee members ranked each of the 24 evaluation critera with a 3, 2, or 1 and totaled these rankings by option.*

[redacted] C. Public Presentations

Community Forum No.1, October 26, 2015
Feasibility Study

Bourne Public Schools
Educational Visioning

PROJECT MANAGEMENT SMMA
Massachusetts School Building Authority

Flansburgh Architects

Agenda

- Introductions
- MSBA Process
- Project Schedule
- Study Scope
- Educational Visioning
- Questions

School Building Committee

James L. Potter	Chairman, School Building Committee
Christopher Hyldburg	Chairman, School Committee
Steven M. Lamarche	Superintendent of Schools, BPS
Peter J. Meier	Chair , Board of Selectmen
Edward S. Donoghue	Director of Business Services, BPS
Thomas M. Guerino	Town Administrator
Jonathan Nelson	Director of Facilities, Town of Bourne
Elizabeth Carpenito	Prinicipal, Bournedale Elementary School
Kathy Anderson	Member, School Building Committee
Mary Jo Coggeshall	Member, School Building Committee
Rick Howe	Board of Health
Richard A. Lavoie	Member, Finance Committee
William Meier	Member, School Building Committee
Laura Scena	Member, School Building Committee

Design Team

Kent Kovacs	Flansburgh Architects
David Stephen	New Vista Designs

Owner's Project Manager

Joel Seeley	Symmes, Maini & McKee

- **MSBA** is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.

- **MSBA** mandates a multi-step rigorous study and approval process

- **MSBA** will fund **43.84%** plus incentives of eligible project cost for an approved project if accepted by the voters of Bourne

MSBA Process

- Existing Conditions
- Visioning
- Programming
- Preliminary options

- Refine top 3 options
- Options detailed
- Cost Estimates

MSBA Board Approval

- Develop selected option
- Consensus

MSBA Board Approval

Local Funding Approval

PDP
Preliminary Design Program

PSR
Preliminary Schematic Report

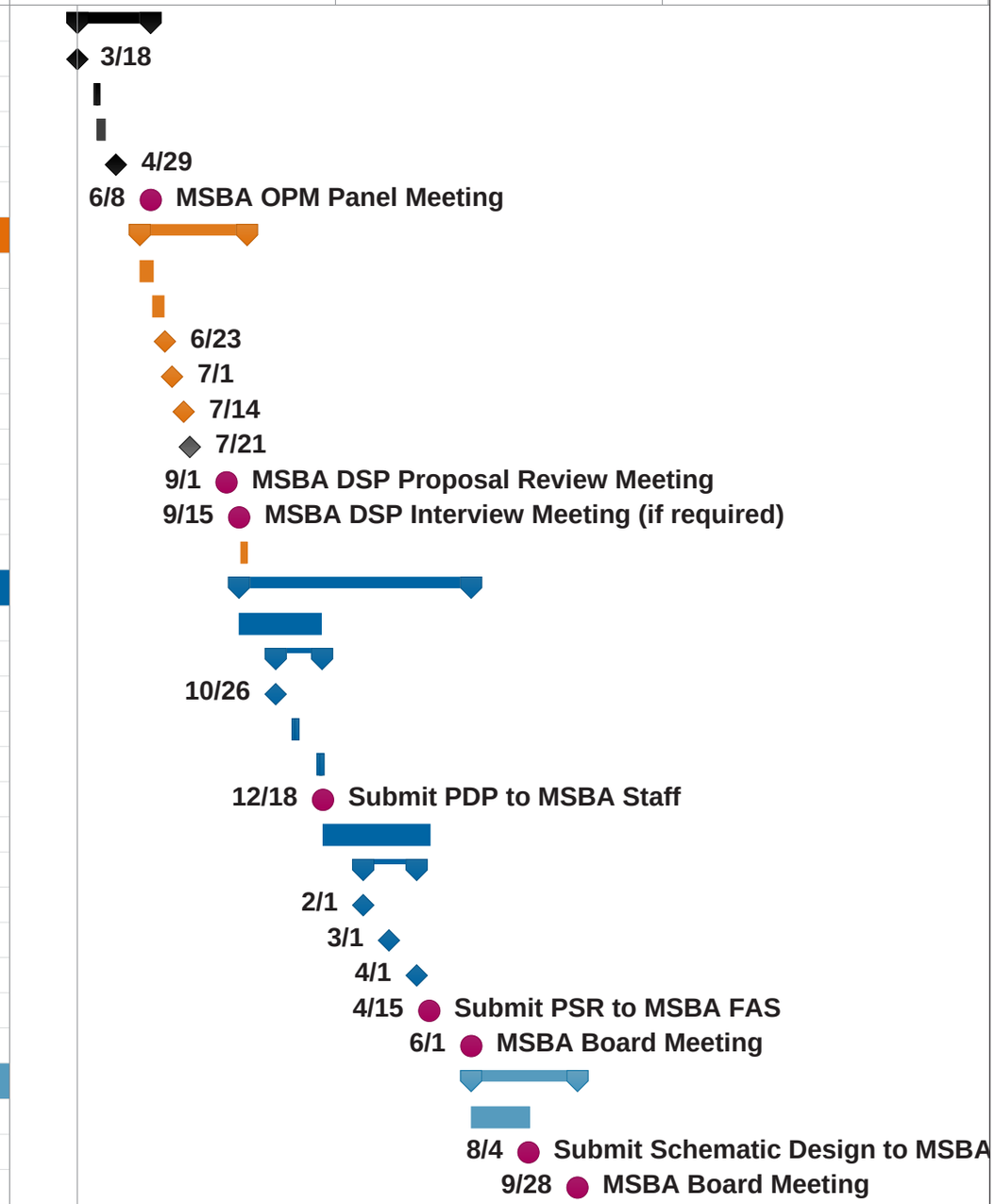
Schematic Design

Project Schedule

Updated: June 25, 2015
Revised: September 16, 2015

TOWN OF BOURNE, MASSACHUSETTS
PEEBLES ELEMENTARY SCHOOL
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**RETAIN OPM**	**58 days**	**3/18/2015**	**6/8/2015**
2	Submit OPM Proposals	0 days	3/18/2015	3/18/2015
3	OPM Interview	2 days	4/8/2015	4/9/2015
4	Negotiate OPM Contract	7 days	4/9/2015	4/17/2015
5	Submit Documents to MSBA OPM Panel	0 days	4/29/2015	4/29/2015
6	**MSBA OPM Panel Meeting**	**0 days**	**6/8/2015**	**6/8/2015**
7	**RETAIN DESIGNER**	**86 days**	**5/27/2015**	**9/23/2015**
8	Draft Designer RFS and Submit to MSBA	11 days	5/27/2015	6/10/2015
9	MSBA Approve Draft RFS	9 days	6/10/2015	6/22/2015
10	Submit to Central Register	0 days	6/23/2015	6/23/2015
11	Notice in Central Register	0 days	7/1/2015	7/1/2015
12	Briefing Session	0 days	7/14/2015	7/14/2015
13	Submit Designer Proposals	0 days	7/21/2015	7/21/2015
14	**MSBA DSP Proposal Review Meeting**	**0 days**	**9/1/2015**	**9/1/2015**
15	**MSBA DSP Interview Meeting (if required)**	**0 days**	**9/15/2015**	**9/15/2015**
16	Negotiate Designer Contract	5 days	9/17/2015	9/23/2015
17	**FEASIBILITY STUDY (FS)**	**183 days**	**9/15/2015**	**6/1/2016**
18	Develop Preliminary Design Program (PDP)	65 days	9/15/2015	12/15/2015
19	**Community Presentations**	**37 days**	**10/26/2015**	**12/16/2015**
20	Community Forum 1: Visioning	0 days	10/26/2015	10/26/2015
21	Community Forum 2: Existing Conditions	3 days	11/16/2015	11/18/2015
22	Community Forum 3: Options	3 days	12/14/2015	12/16/2015
23	**Submit PDP to MSBA Staff**	**0 days**	**12/18/2015**	**12/18/2015**
24	Develop Preferred Schematic Report (PSR)	84 days	12/18/2015	4/15/2016
25	**Community Presentations**	**44 days**	**2/1/2016**	**4/1/2016**
26	Community Forum 1	0 days	2/1/2016	2/1/2016
27	Community Forum 2	0 days	3/1/2016	3/1/2016
28	Community Forum 3	0 days	4/1/2016	4/1/2016
29	**Submit PSR to MSBA FAS**	**0 days**	**4/15/2016**	**4/15/2016**
30	**MSBA Board Meeting**	**0 days**	**6/1/2016**	**6/1/2016**
31	**SCHEMATIC DESIGN (SD)**	**85 days**	**6/1/2016**	**9/28/2016**
32	Develop Schematic Design	47 days	6/1/2016	8/4/2016
33	**Submit Schematic Design to MSBA**	**0 days**	**8/4/2016**	**8/4/2016**
34	**MSBA Board Meeting**	**0 days**	**9/28/2016**	**9/28/2016**
35	**LOCAL VOTES**			
38	**DESIGN AND CONSTRUCTION (TBD)**			



MSBA Study Scope

Option 1

Grades
K to 4

Elem. School

250 students

Option 2

Grades
K to 4

Elem. School

725 students

Option 3

Grades
K to 5

Elem. School

885 students

MSBA Reimbursed

MSBA Study Scope

Bournedale Elementary School

Built: 2009

Students: 435

Area: 68,124 sf

Site: approx 122 Acres

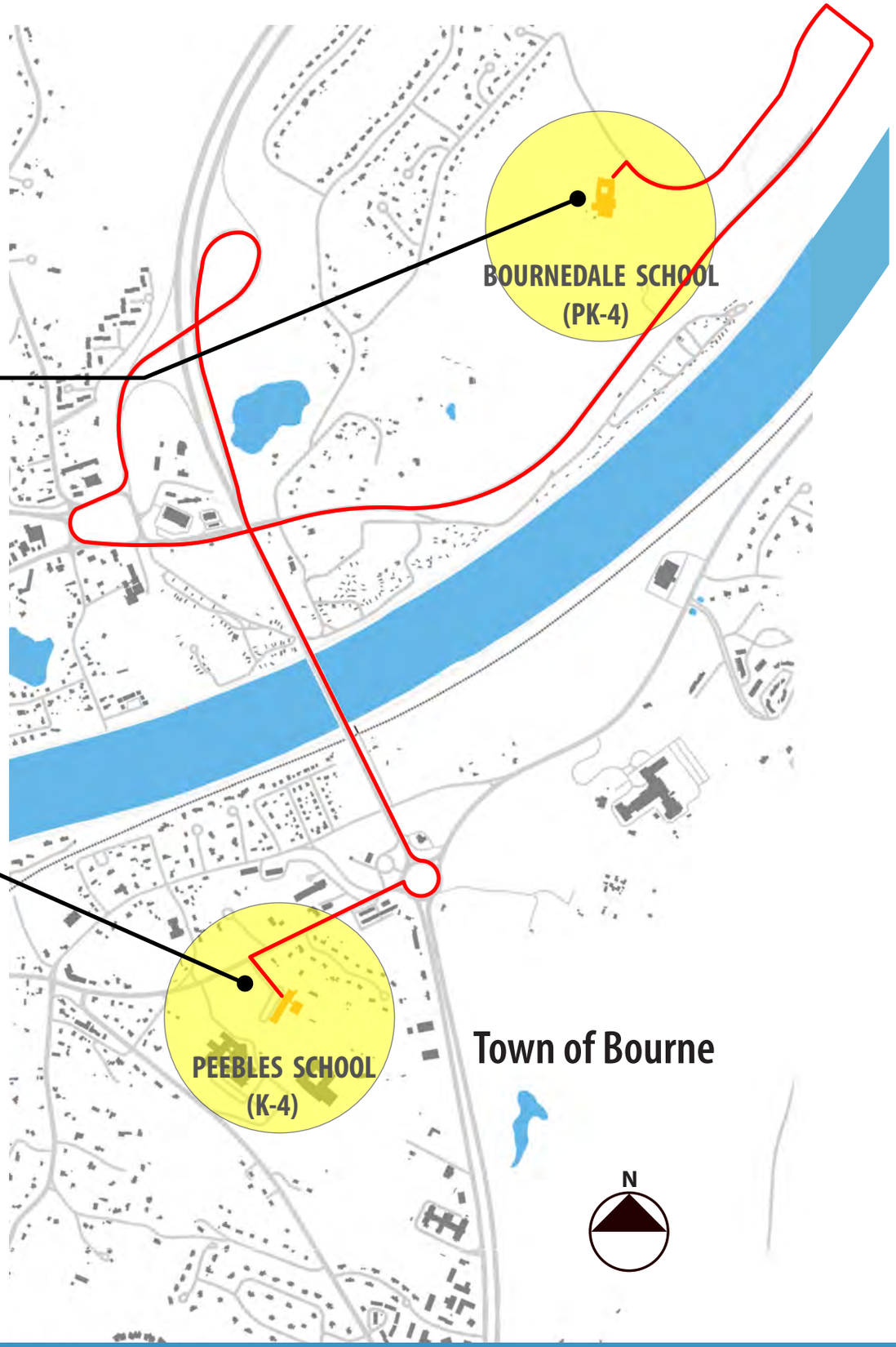
Peebles Elementary School

Built: 1953-1959

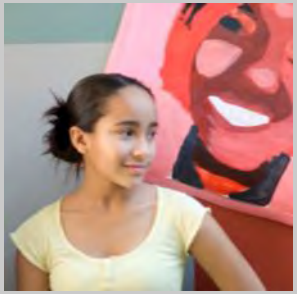
Students: 388

Area: 55,191 sf

Site: 8.6 Acres



Bourne Public Schools
October 26, 2015

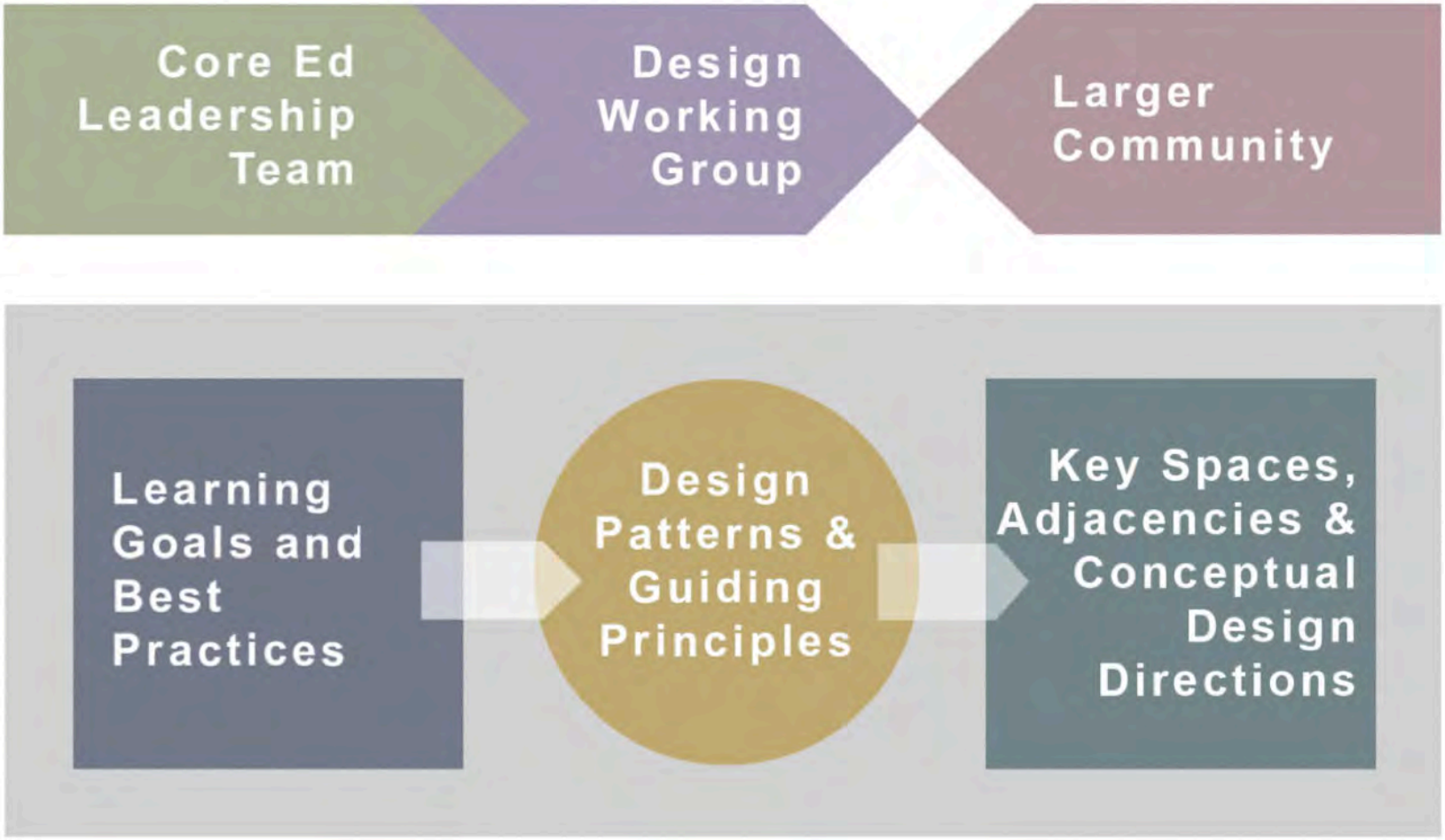




Educational Visioning for Peebles Elementary and BPS

newvistadesign
Envisioning 21st Century Schools
www.newvistadesign.net

Flansburgh Architects

The Visioning Process



Today's Agenda

- Visioning Overview and Priorities
- 21st Century Schools and Learning Goals
- New School Design Patterns
- Next Steps and Q&A

Preparing for the Future *and*
Supporting Present Programming

- Support evolving teaching and learning practices
- Fully wired, 1:1 environments
- Flexible and multi-purpose classrooms and spaces
- Classroom as basic building block, but learning extends beyond classroom walls
- Ubiquitous learning and increased utilization of “between” spaces
- Community access and use

Priority Goals

What are your priority goals for the new Peebles Elementary School and Bourne elementary schools of the future?

What role do 21st century educational paradigms and skills play in our thinking about Bourne elementary schools of the future?

Changing Paradigms

In Education

Ken Robinson/Youtube

Ideas and Best Practices

In 21st Century Teaching and Learning

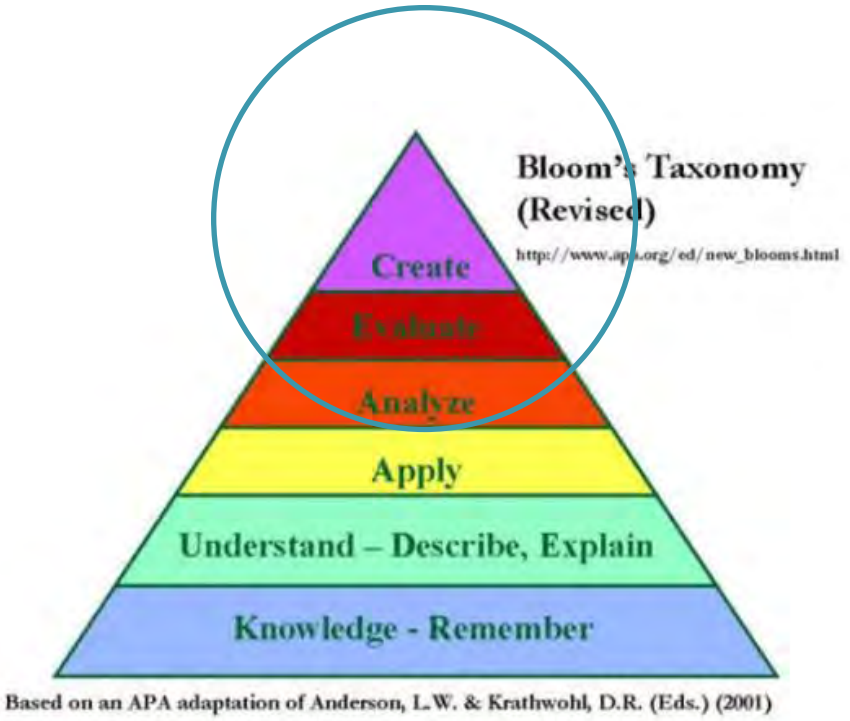
The 6 Rs and Bloom's

The Old 3 R's

- Reading
- wRiting
- aRithmatic

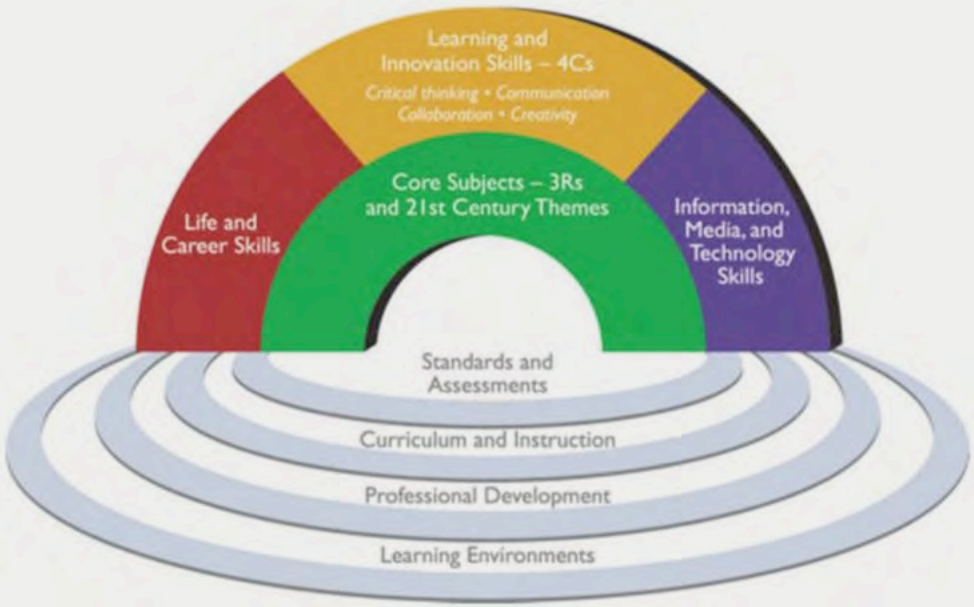
The New 3 R's

- Rigor
- Relevance
- Relationship



Focus on 21st Century Skills

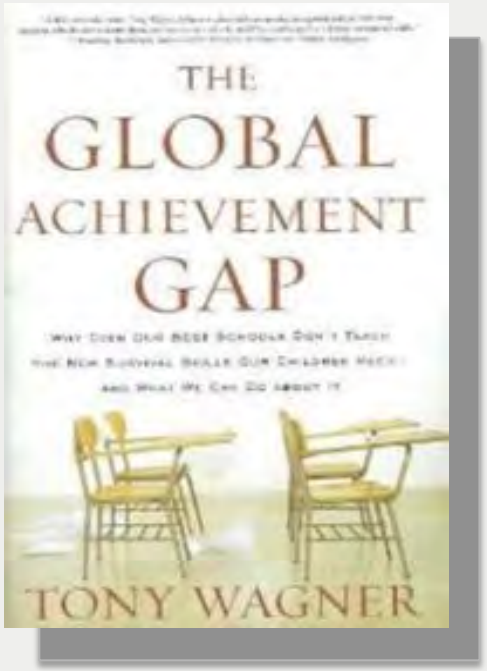
- The 6 R's plus the 4 C's
- Proactive and lifelong Learning



- Critical Thinking
- Communication
- Collaboration
- Creativity
- Citizenship
- Academic Mindset

More Focus on Doing *and* Knowing

The world no longer cares about how much you know, the world cares about what you can do with what you know – *Tony Wagner*



- Critical Thinking and Problem Solving
- Communication, oral and written
- Collaboration and Leadership
- Creativity, Curiosity and Imagination
- Accessing and Analyzing Information
- Initiative and Entrepreneuralism
- Agility and Adaptability

More Focus on Pro-Active Learning

- High-performance work environments
- Varied and collaborative
- Learning to Learn

This is NOT the Open Classroom

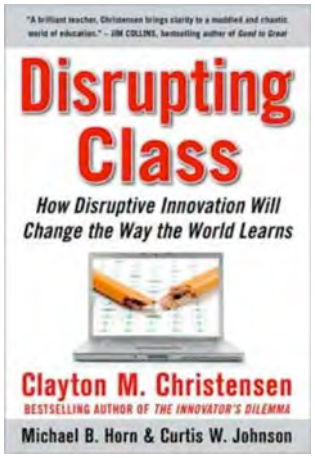
- Blend of traditional, student-centered, blended, and project-based learning
- Work and college readiness
- Set within context of testing and accountability

Focus on Deeper Learning

- **Mastery of Core Academic Content**
- **Critical Thinking and Problem Solving**
- **Collaboration**
- **Effective Communication**
- **Self-Directed Learning**
- **An "Academic/Growth Mindset"**

Blended Learning

- Seamless Technology Integration
- Online and Virtual Delivery
- Production of Technology
- Inquiry- and Project-Based Learning



Personalization

- Student Choice/Differentiated Instruction
- Self-Paced and Small Group
- Student-Centered Learning

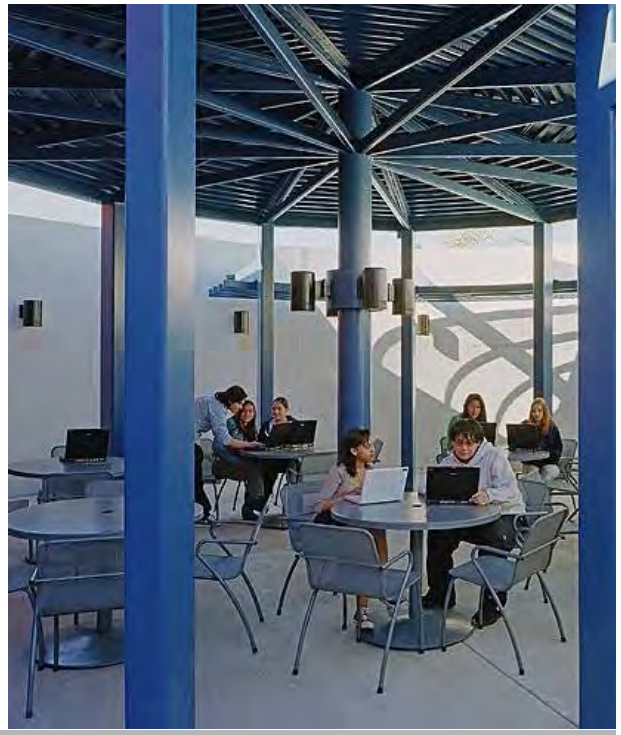
Differentiated Instruction

- *Maximizing each student's growth* by recognizing that students have different ways of learning, different interests, and different ways of responding
- *Offering several different learning experiences* in response to student's needs
- *Varying learning activities and materials*
  - By difficulty, so as to challenge students at different readiness levels
  - By topic, and response to students interests
  - By student's preferred way of learning or expressing themselves

Diane Ravitch: EdSpeak

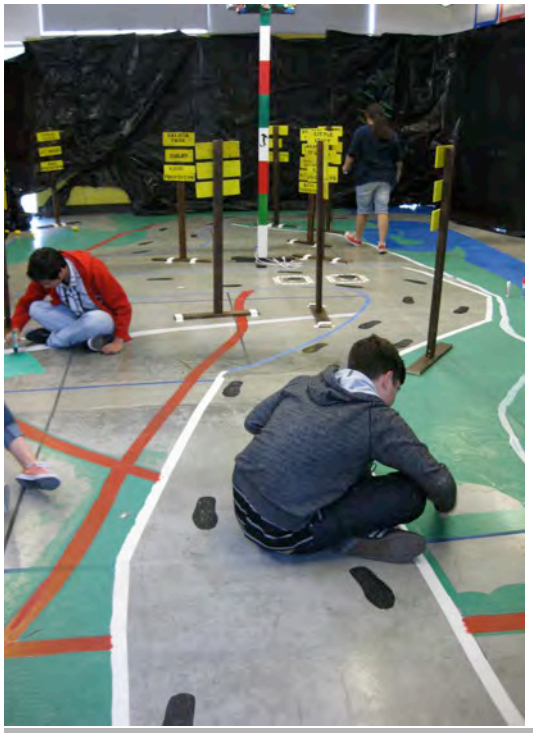
Anytime, Anywhere Learning

- **Flip Classrooms**
- **Virtual Delivery**
- **MOOCs**



Inquiry-Based Instruction

- **Problem and Project-Based**
- **Performance assessment**
- **Product creation**



Common Core and the 4 Cs

Inquiry-Based Continuum

- Comprehensive Schools
- Project-Based Learning
- Expeditionary Learning
- CTE Programs
- STEM and STEAM
- Progressive & Constructivist Programs
- IB Schools
- No Excuses Schools
- Charter Schools

STUDENT PROJECTS

- Classroom
- School-Wide
- After School
- Intersession
- Senior
- Capstone
- ELOs
- Internships
- Community Service

Teaming and Collaboration

- **Meaningful Integration of Disciplines**
- **Cohort Groupings / Reduced Student Load**
- **Teacher and Student Collaboration**

STEM and STEAM

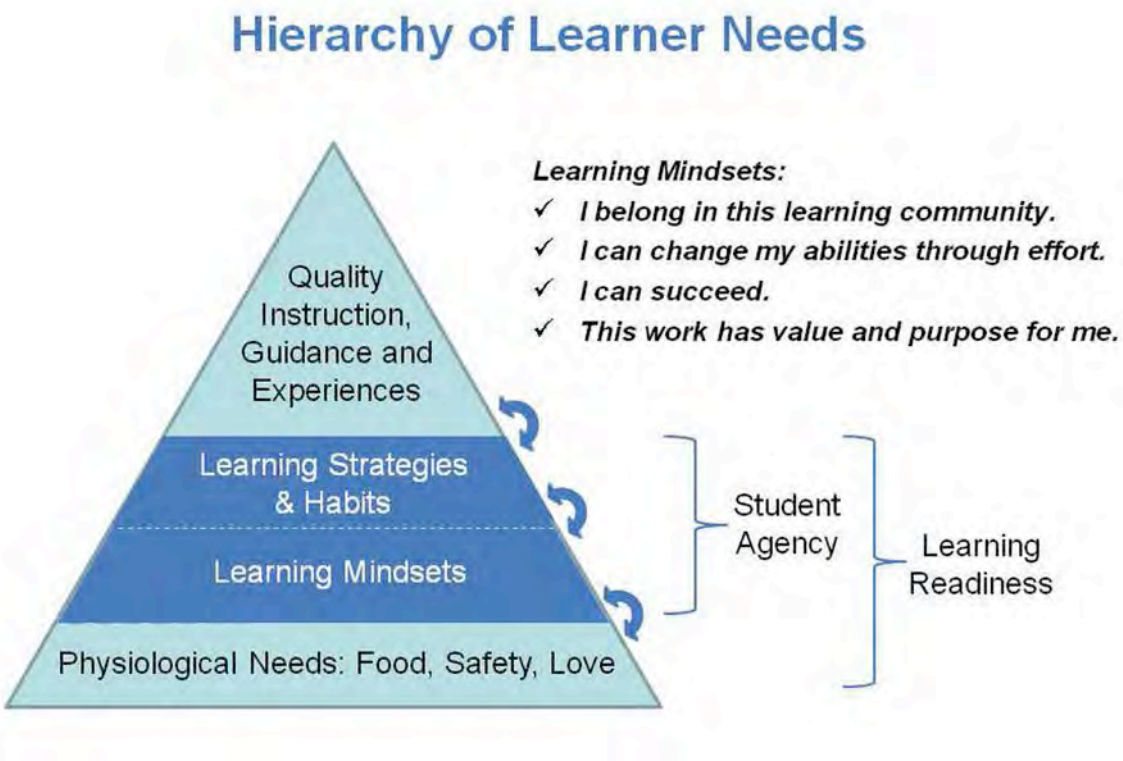
- STEM as meta-discipline
- Art and Humanities as Glue
- Design Thinking Process

Next Gen Science Standards

Design/Engineering Thinking

- **Dewey / Head and Hand Integration**
- **Academic / CTE Integration**
- **Maker Movement**

Academic/Growth Mindset

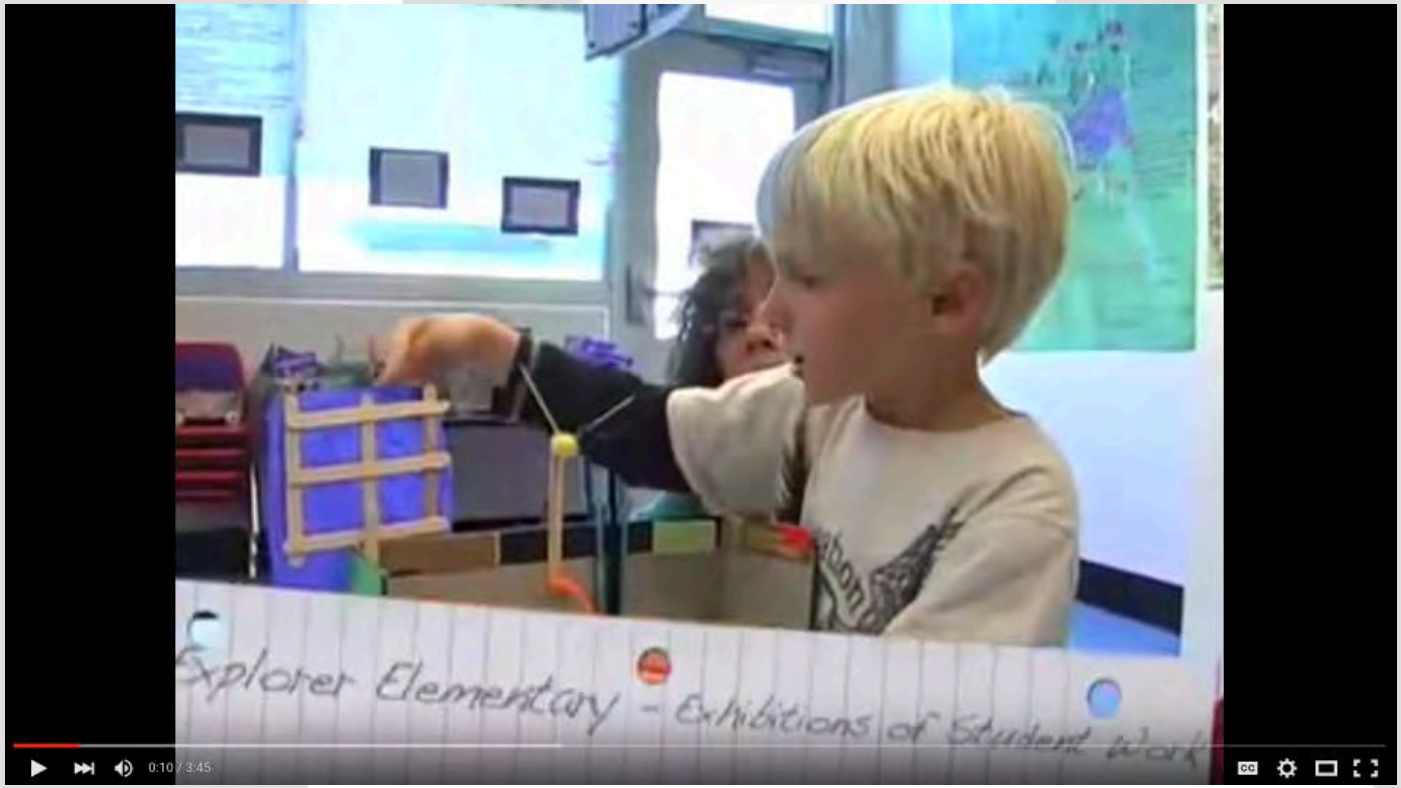


... Grit, perseverance and a passion for long term goals...

Community Partnerships

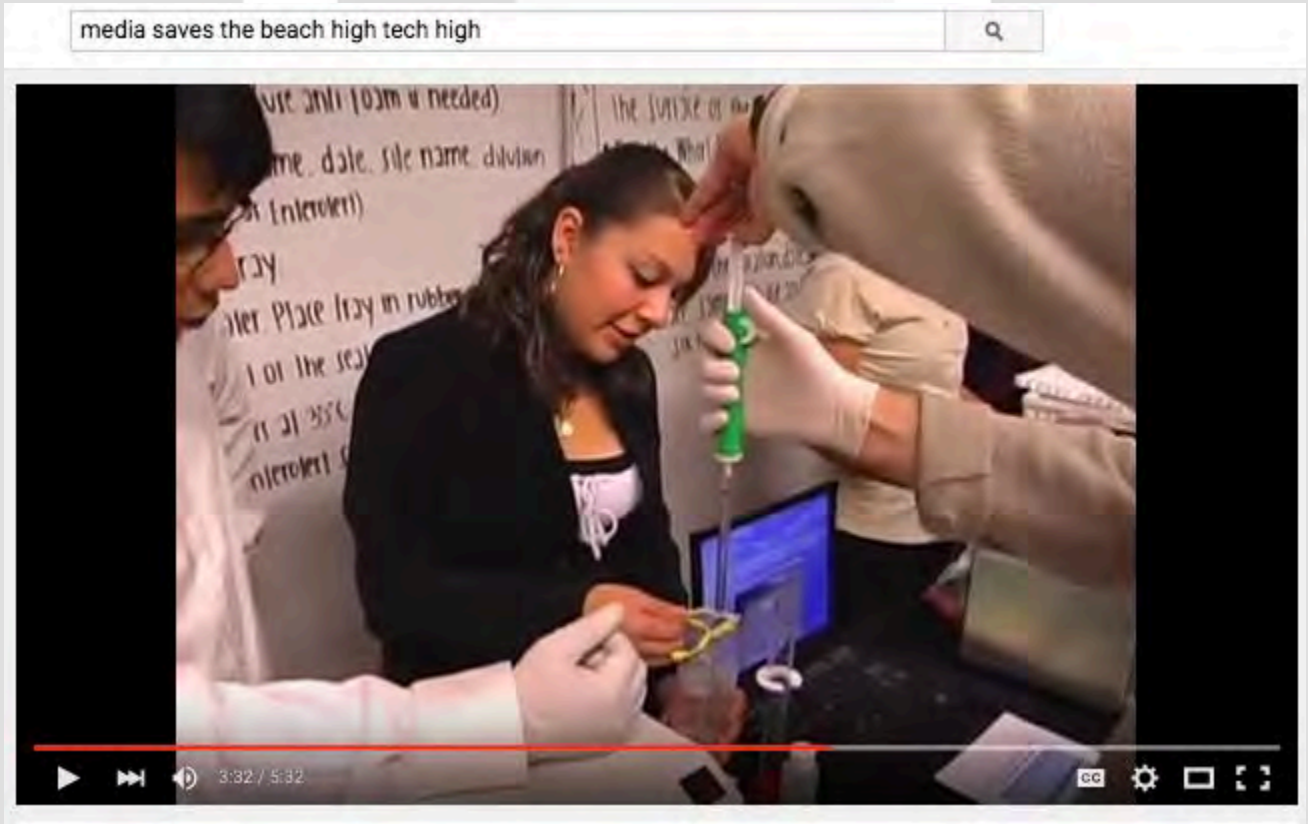
- Permeable School Walls
- Adult-World Connections / Internships
- Leveraged Resources

Explorer Elementary
Exhibitions



What 21st century skills and learning goals do you see as most important for Bourne elementary schools of the future?

Media Saves the Beach

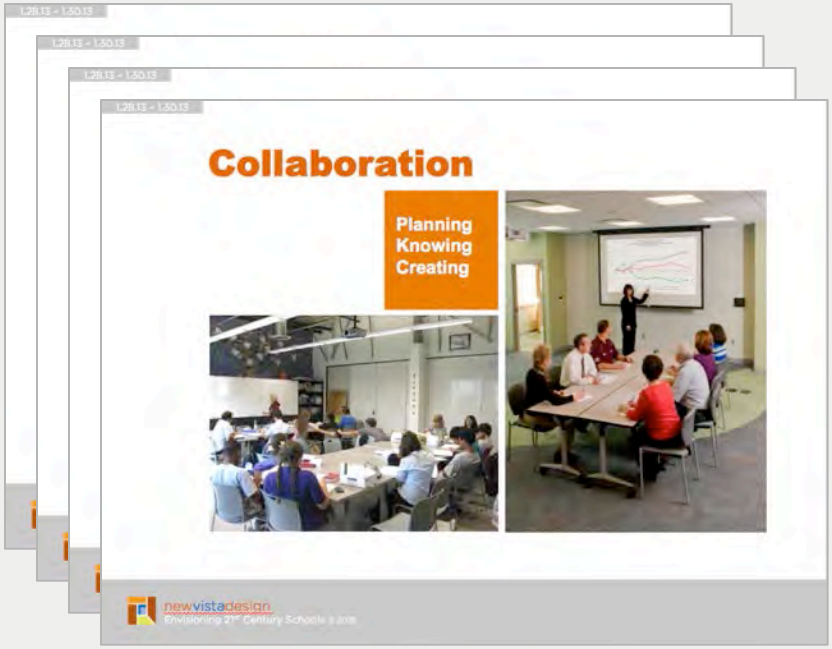


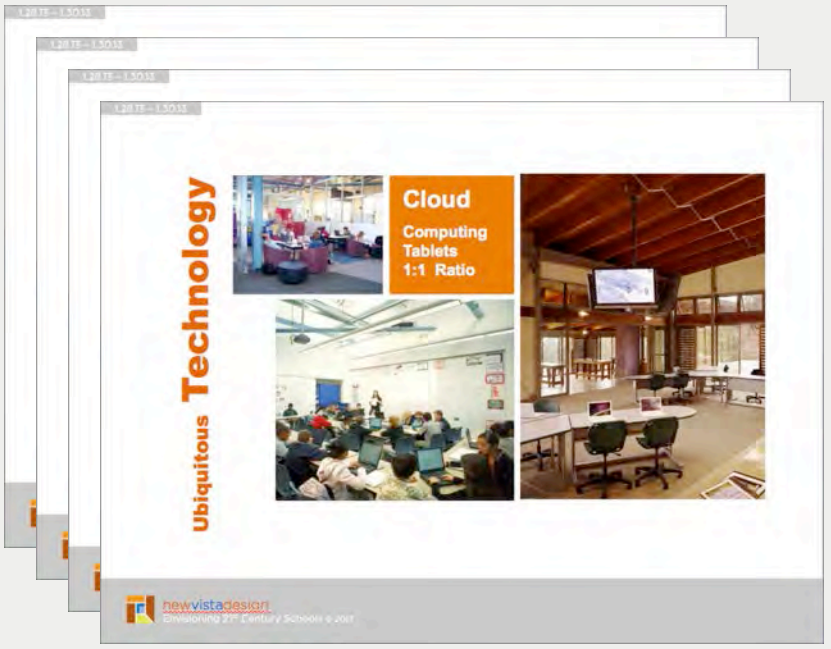
New School

Design Patterns

That Support 21st Century Teaching and Learning

- Facilitate inquiry-based learning – now and tomorrow
- View school as varied, evolving, and high performance environment
- Provide seamless technology integration





New School

Design Patterns

Greeting and Gatekeeping

HTHCV K-8 – Studio E

New School

Design Patterns

Wayfinding and Streetscapes

Explorer Elementary- Carrier Johnson and New Vista

New School

Design Patterns

Seamless Technology and Blended Learning

Linden STEAM K-8

New School

Design Patterns

Ubiquitous Learning
Between Spaces


Groveland Elementary – ATS&R


Westbay Elementary – ATS&R


McAuliffe Elementary - HMFH

New School
Design Patterns

Gathering Spaces
Learning Hubs

McAuliffe Elemenary - HMFH

New School

Design Patterns

Varied Spaces

Freeman Kennedy - Flansburgh

McAuliffe Elementary- HMFH

Groveland Elementary- ATS&R

New School
Design Patterns

Cafetoriums
Multi-Purpose Space

Hamilton Elementary - SHP


McAuliffe Elementary - HMFH

New School

Design Patterns

Visible Learning
and Transparency

QKA Architects

Chula Vista Elementary

New School

Design Patterns

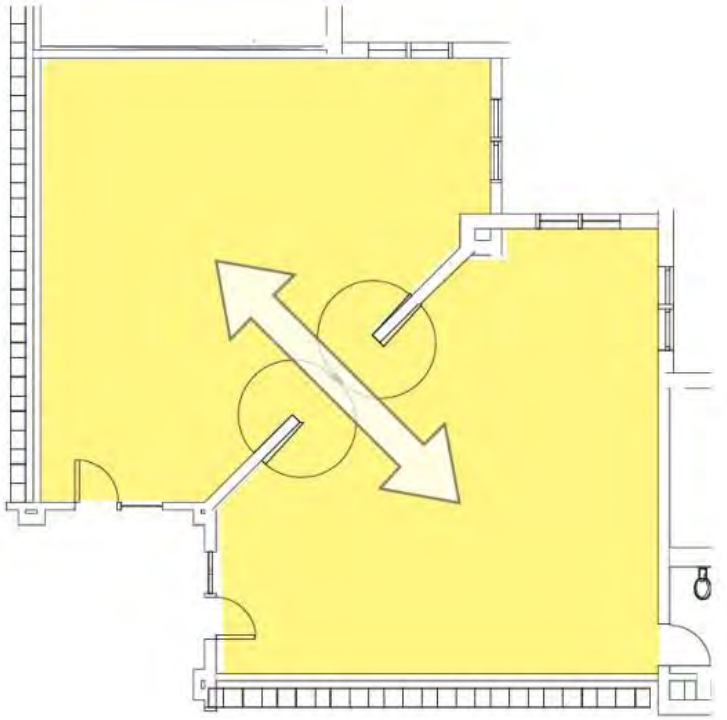
Display and Exhibition

HTHCV K-8 – Studio E

New School

Design Patterns

Clusters of Learning



DSST - klipp Architects and New Vista

New School
Design Patterns

Classroom Neighborhoods

Essex Tech - Design Partnership and New Vista

New School
Design Patterns

Teacher Teaming

High Tech Middle– Carrier Johnson and New Vista

New School

Design Patterns

Agile Classrooms

New School

Design Patterns

Flexible Furniture

New School

Design Patterns

Flexible and Zoned Classrooms

Woodman Park Elementary

Burroughs Elementary - Kodet

New School

Design Patterns

Collaborative Environments

Spangler Elementary - HMC

New School
Design Patterns

Community Access

West Bridgewater 6-12 - Flansburgh and New Vista

New School
Design Patterns

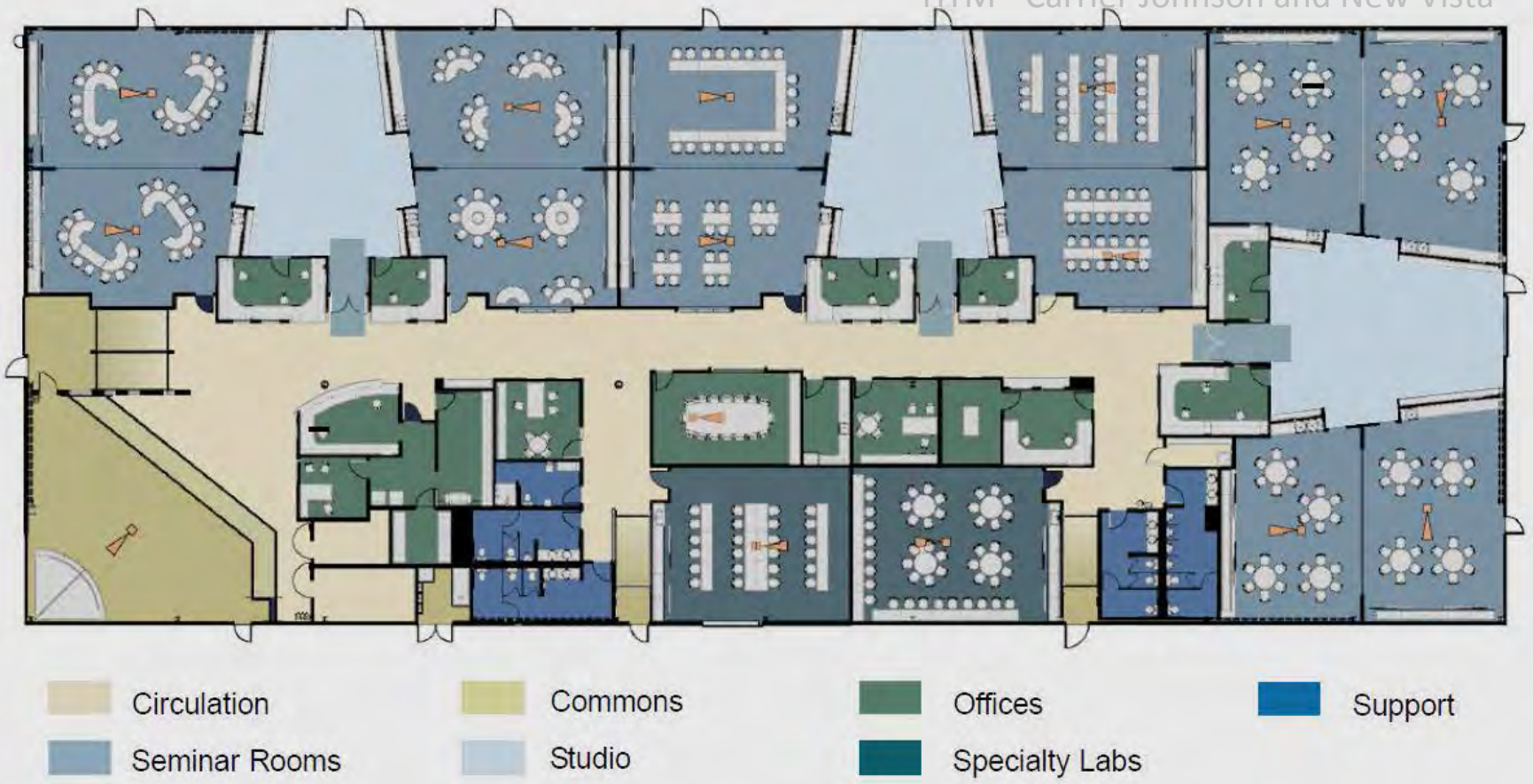
Indoor/Outdoor
Connections

New School

Design Patterns

Distributed Resources

HTM - Carrier Johnson and New Vista



New School

Design Patterns

Maker Spaces
and FAB Labs

King Elementary


Explorer Elementary – Studio E

New School

Design Patterns

Branding and Identity

Da Vinci Schools – Gensler and New Vista

New School
Design Patterns

Building as Teacher

Truman MS – Bassetti and AofA

DSST – klipp and New Vista

Which Design Patterns make most sense for Bourne elementary schools of the future?

Community Forum No.2
November 17, 2015
Feasibility Study

Bourne Elementary Schools
Community Workshop

PROJECT MANAGEMENT SMMA
Massachusetts School Building Authority

Flansburgh Architects

Agenda

- Introductions
- MSBA Process
- Project Schedule
- Educational Visioning
- Study Scope
- Programming
- Existing Conditions Summary
- Questions

School Building Committee

James L. Potter	Chairman, School Building Committee
Christopher Hyldburg	Chairman, School Committee
Steven M. Lamarche	Superintendent of Schools, BPS
Peter J. Meier	Chair, Board of Selectmen
Edward S. Donoghue	Director of Business Services, BPS
Thomas M. Guerino	Town Administrator
Jonathan Nelson	Director of Facilities, Town of Bourne
Elizabeth Carpenito	Prinicipal, Bournedale Elementary School
Kathy Anderson	Member, School Building Committee
Mary Jo Coggeshall	Member, School Building Committee
Rick Howe	Board of Health
Richard A. Lavoie	Member, Finance Committee
William Meier	Member, School Building Committee
Laura Scena	Member, School Building Committee

Design Team

Kent Kovacs	Flansburgh Architects
Jorge Cruz	Flansburgh Architects

Owner's Project Manager

Joel Seeley	Symmes, Maini & McKee

MSBA Process

- **MSBA** is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.

- **MSBA** mandates a multi-step rigorous study and approval process

- **MSBA** will fund **43.84%** plus incentives of eligible project cost for an approved project if accepted by the voters of Bourne

MSBA Process

- Existing Conditions
- Visioning
- Programming
- Preliminary options

PDP
Preliminary Design Program

- Refine top 3 options
- Options detailed
- Cost Estimates

PSR
Preliminary Schematic Report

MSBA Board Approval

- Develop selected option
- Consensus

Schematic Design

MSBA Board Approval

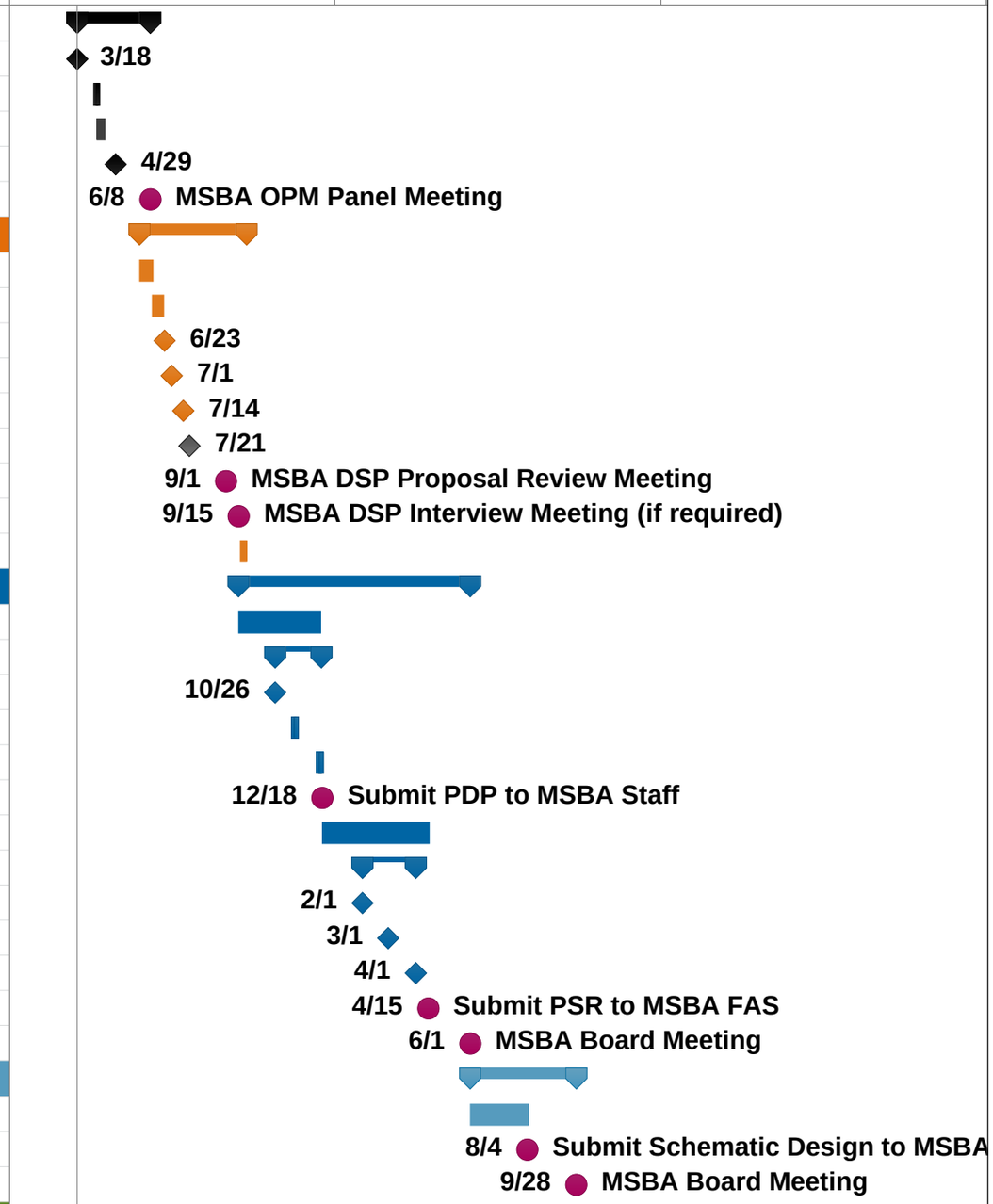
Local Funding Approval

Project Schedule

Updated: June 25, 2015
Revised: September 16, 2015

TOWN OF BOURNE, MASSACHUSETTS
PEEBLES ELEMENTARY SCHOOL
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**RETAIN OPM**	**58 days**	**3/18/2015**	**6/8/2015**
2	Submit OPM Proposals	0 days	3/18/2015	3/18/2015
3	OPM Interview	2 days	4/8/2015	4/9/2015
4	Negotiate OPM Contract	7 days	4/9/2015	4/17/2015
5	Submit Documents to MSBA OPM Panel	0 days	4/29/2015	4/29/2015
6	**MSBA OPM Panel Meeting**	**0 days**	**6/8/2015**	**6/8/2015**
7	**RETAIN DESIGNER**	**86 days**	**5/27/2015**	**9/23/2015**
8	Draft Designer RFS and Submit to MSBA	11 days	5/27/2015	6/10/2015
9	MSBA Approve Draft RFS	9 days	6/10/2015	6/22/2015
10	Submit to Central Register	0 days	6/23/2015	6/23/2015
11	Notice in Central Register	0 days	7/1/2015	7/1/2015
12	Briefing Session	0 days	7/14/2015	7/14/2015
13	Submit Designer Proposals	0 days	7/21/2015	7/21/2015
14	**MSBA DSP Proposal Review Meeting**	**0 days**	**9/1/2015**	**9/1/2015**
15	**MSBA DSP Interview Meeting (if required)**	**0 days**	**9/15/2015**	**9/15/2015**
16	Negotiate Designer Contract	5 days	9/17/2015	9/23/2015
17	**FEASIBILITY STUDY (FS)**	**183 days**	**9/15/2015**	**6/1/2016**
18	Develop Preliminary Design Program (PDP)	65 days	9/15/2015	12/15/2015
19	**Community Presentations**	**37 days**	**10/26/2015**	**12/16/2015**
20	Community Forum 1: Visioning	0 days	10/26/2015	10/26/2015
21	Community Forum 2: Existing Conditions	3 days	11/16/2015	11/18/2015
22	Community Forum 3: Options	3 days	12/14/2015	12/16/2015
23	**Submit PDP to MSBA Staff**	**0 days**	**12/18/2015**	**12/18/2015**
24	Develop Preferred Schematic Report (PSR)	84 days	12/18/2015	4/15/2016
25	**Community Presentations**	**44 days**	**2/1/2016**	**4/1/2016**
26	Community Forum 1	0 days	2/1/2016	2/1/2016
27	Community Forum 2	0 days	3/1/2016	3/1/2016
28	Community Forum 3	0 days	4/1/2016	4/1/2016
29	**Submit PSR to MSBA FAS**	**0 days**	**4/15/2016**	**4/15/2016**
30	**MSBA Board Meeting**	**0 days**	**6/1/2016**	**6/1/2016**
31	**SCHEMATIC DESIGN (SD)**	**85 days**	**6/1/2016**	**9/28/2016**
32	Develop Schematic Design	47 days	6/1/2016	8/4/2016
33	**Submit Schematic Design to MSBA**	**0 days**	**8/4/2016**	**8/4/2016**
34	**MSBA Board Meeting**	**0 days**	**9/28/2016**	**9/28/2016**
35	**LOCAL VOTES**			
38	**DESIGN AND CONSTRUCTION (TBD)**			



EDUCATIONAL VISIONING

Guiding Principles

- Inquiry-Based Learning
- Flexible and Adaptable Space
- Visible Learning
- A Place You Want to Be
- Collaboration & Connections
- Connections to 21st-Century Learning
- Community Access
- Purposeful Innovation & Creativity
- Future Orientation with Connections to Tradition
- Learning Communities

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Design Patterns

- Gathering Spaces
- Varied Spaces / Ubiquitous Learning
- Display & Exhibition Spaces
- Maker Spaces
- Multi-Purpose Spaces
- Collaborative Environments
- Indoor/Outdoor Connections
- Technology & Blended Learning
- Agile Classrooms
- Classroom Neighborhoods
- Effective Storage

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- Classroom Neighborhoods
- Effective Storage

HTHCV K-8 – Studio E

STUDY SCOPE

MSBA Study Scope

Option 1

Grades
K to 4

Neighborhood Elementary School

250 students

Option 2

Grades
K to 5

Neighborhood Elem. School with District-wide 5th grade

410 students

Option 3

Grades
PreK to 4

District-wide Elementary School

725 students

Option 4

Grades
PreK to 5

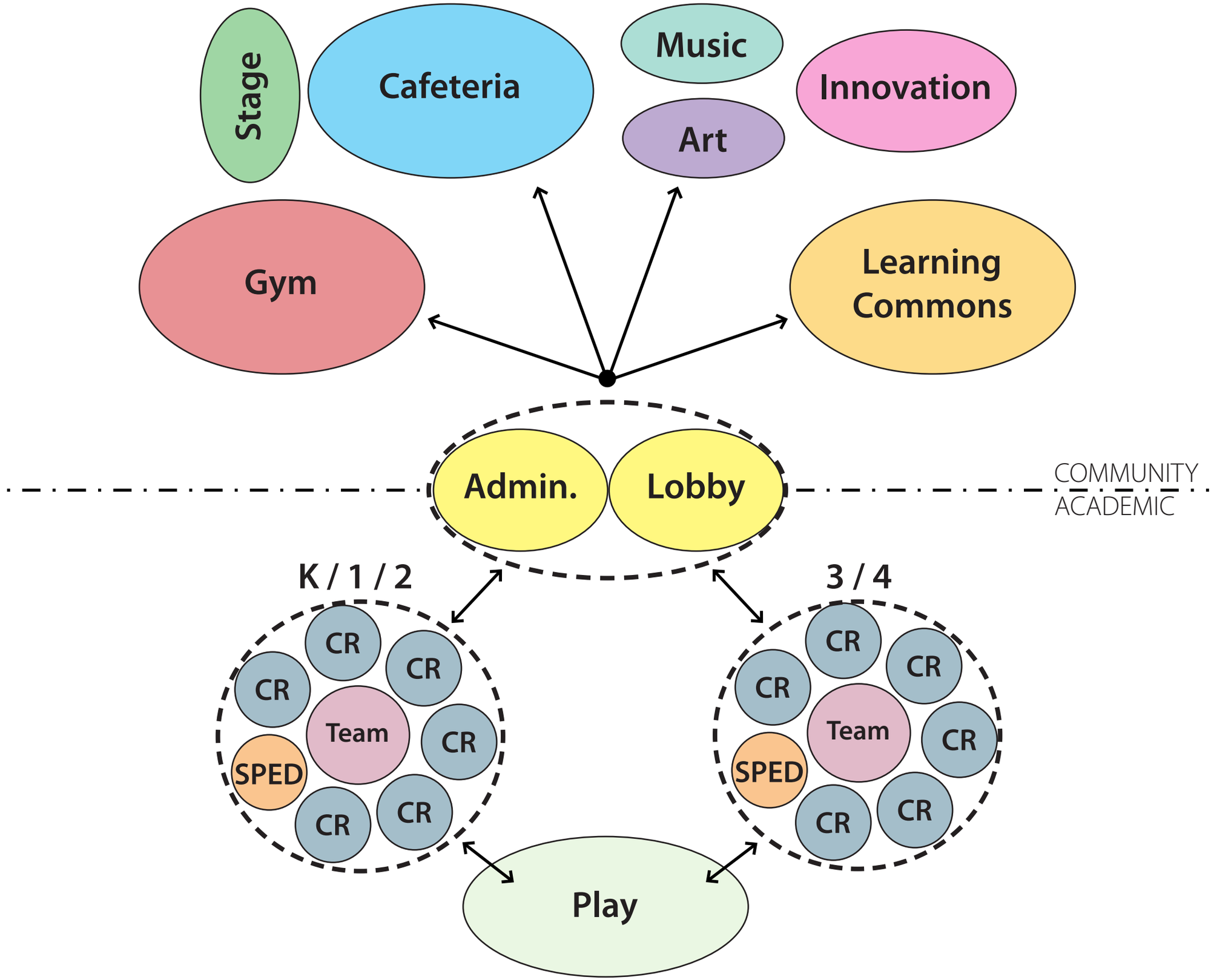
District-wide Elementary School

885 students

Program Areas - OPTION 1: 250 enrollment

PROGRAM	GRADES K-4
Core Academic	14,400
Special Education	3,020
Art & Music	2,225
Health & Physical Education	6,300
Media Center	2,020
Technology (computer)	1,000
Dining & Food Service	4,875
Medical	410
Administration & Guidance	2,015
Custodial & Maintenance	1,900
Subtotal NSF	**38,165 NSF**
Grossing Factor	x 1.5
Total GSF	**57,248 GSF**
Number of Students	250 Students

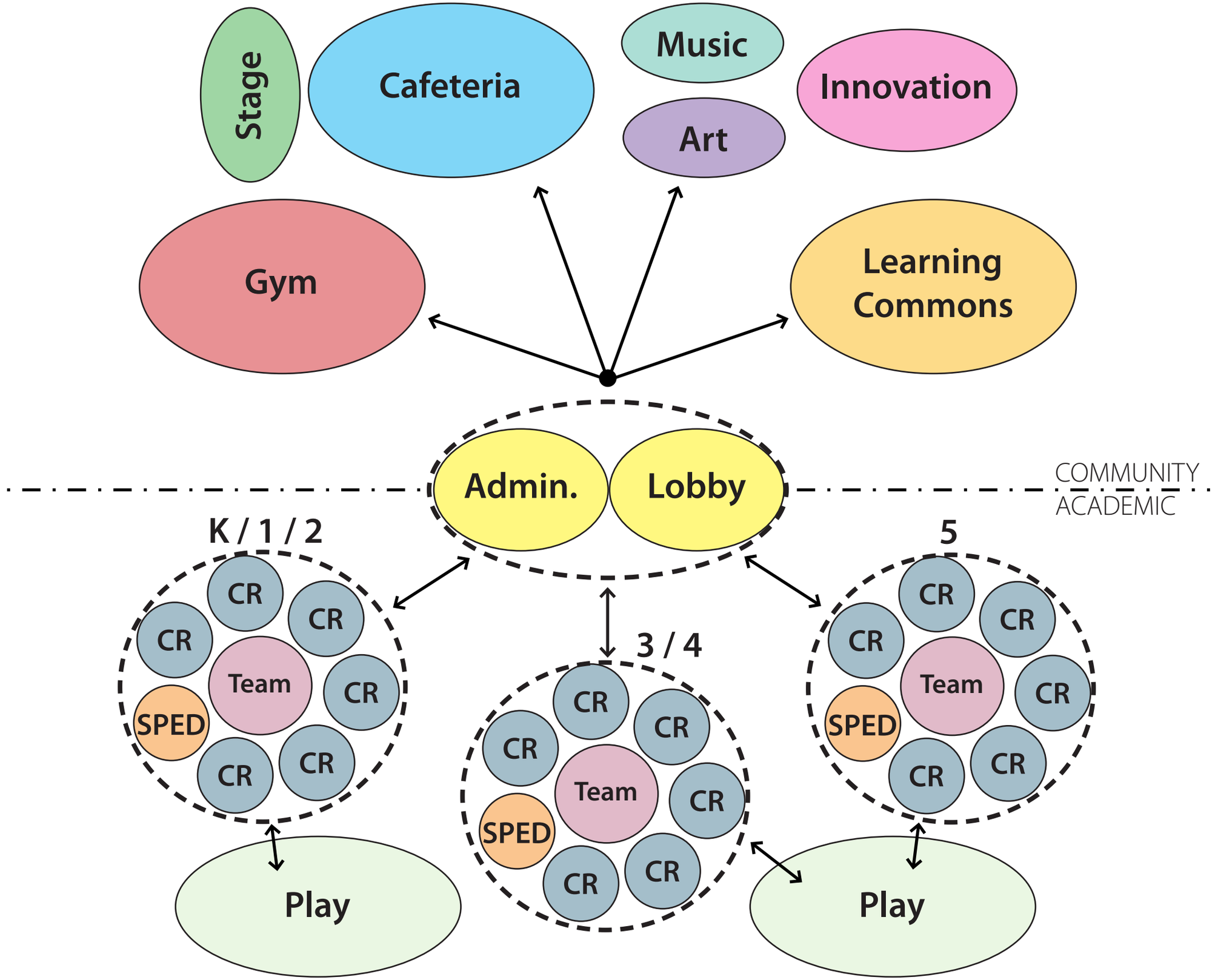
Adjacency Diagram - OPTION 1: 250 enrollment



Program Areas - OPTION 2: 410 enrollment

PROGRAM	GRADES K-5
Core Academic	20,700
Special Education	4,530
Art & Music	2,300
Health & Physical Education	6,300
Media Center	2,515
Technology (computer)	1,000
Dining & Food Service	6,325
Medical	510
Administration & Guidance	2,125
Custodial & Maintenance	2,010
Subtotal NSF	**48,315 NSF**
Grossing Factor	x 1.5
Total GSF	**72,473 GSF**
Number of Students	410 Students

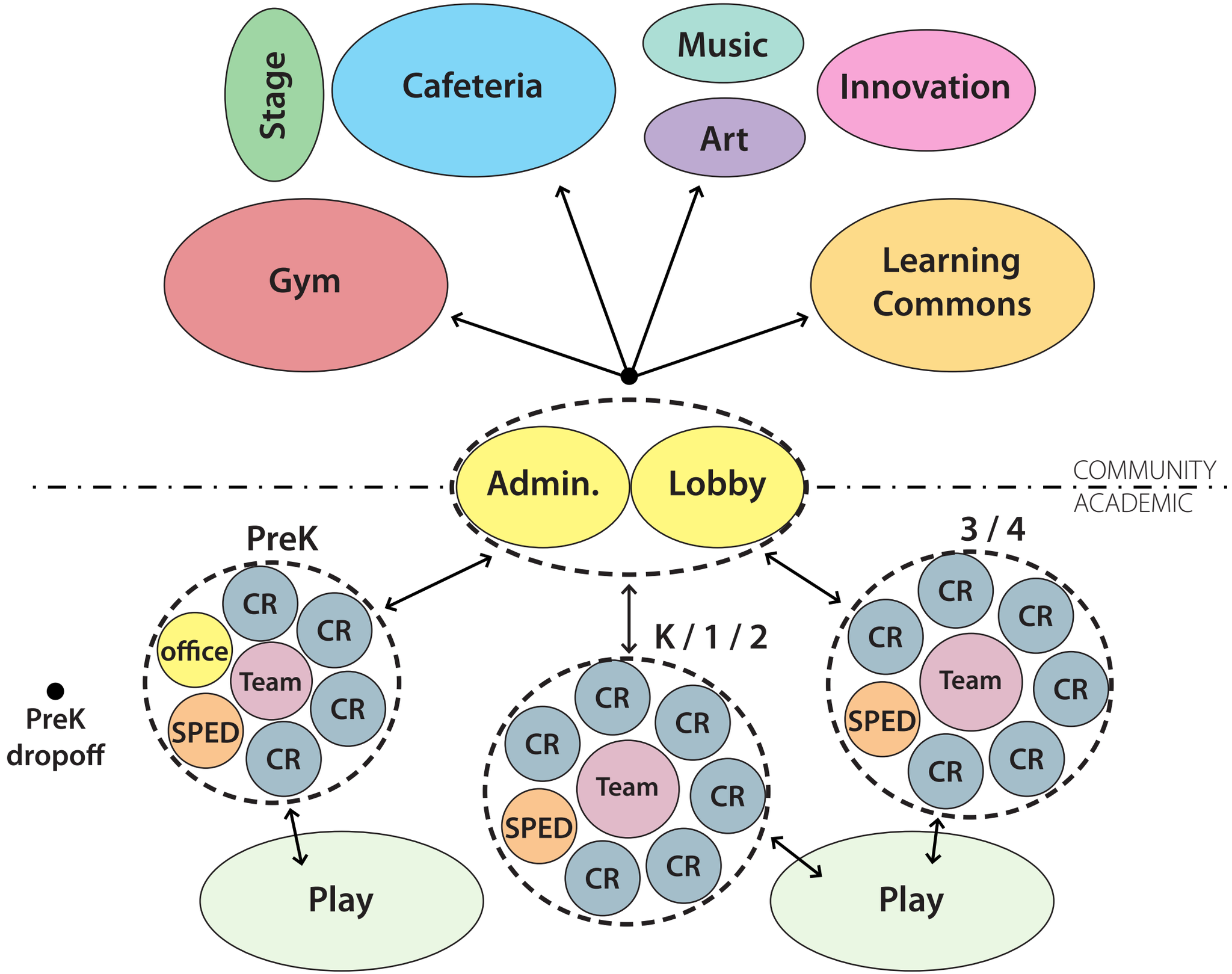
Adjacency Diagram - OPTION 2: 410 enrollment



Program Areas - OPTION 3: 725 enrollment

PROGRAM	GRADES PreK-4
Core Academic	37,090
Special Education	8,050
Art & Music	4,465
Health & Physical Education	6,300
Media Center	3,933
Technology (computer)	1,000
Dining & Food Service	9,185
Medical	610
Administration & Guidance	2,711
Custodial & Maintenance	2,325
Subtotal NSF	**76,395 NSF**
Grossing Factor	x 1.5
Total GSF	**114,593 GSF**
Number of Students	725 Students

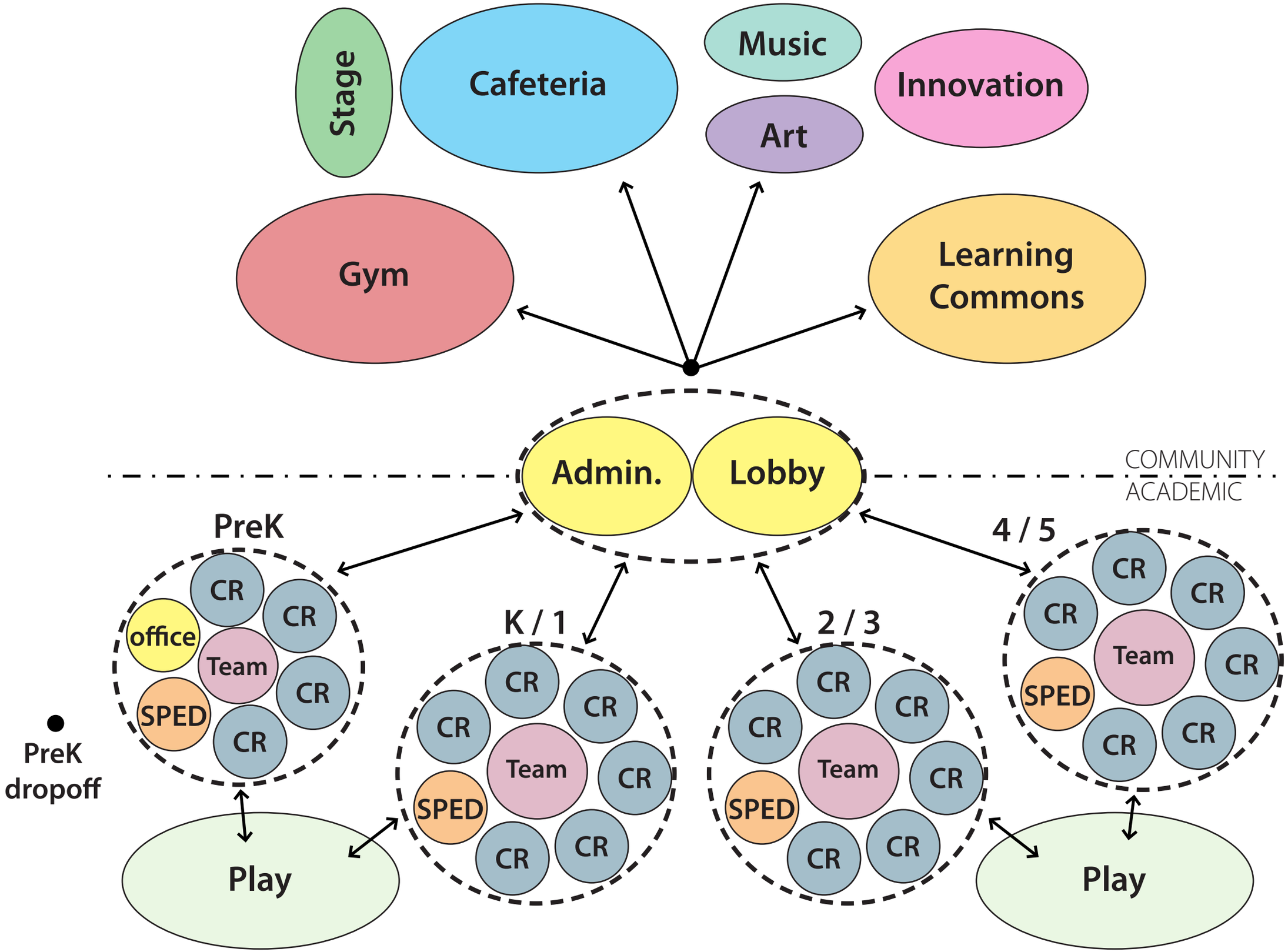
Adjacency Diagram - OPTION 3: 725 enrollment



Program Areas - OPTION 4: 885 enrollment

PROGRAM	GRADES PreK-5
Core Academic	43,390
Special Education	9,060
Art & Music	5,690
Health & Physical Education	6,300
Media Center	4,653
Technology (computer)	1,000
Dining & Food Service	11,204
Medical	710
Administration & Guidance	3,021
Custodial & Maintenance	2,485
Subtotal NSF	**87,513 NSF**
Grossing Factor	x 1.5
Total GSF	**131,382 GSF**
Number of Students	885 Students

Adjacency Diagram - OPTION 4: 885 enrollment



EXISTING CONDITIONS UPDATE

MSBA Study Scope

Bournedale Elementary School

Built: 2009

Students: 435

Area: 68,124 sf

Site: approx 122 Acres

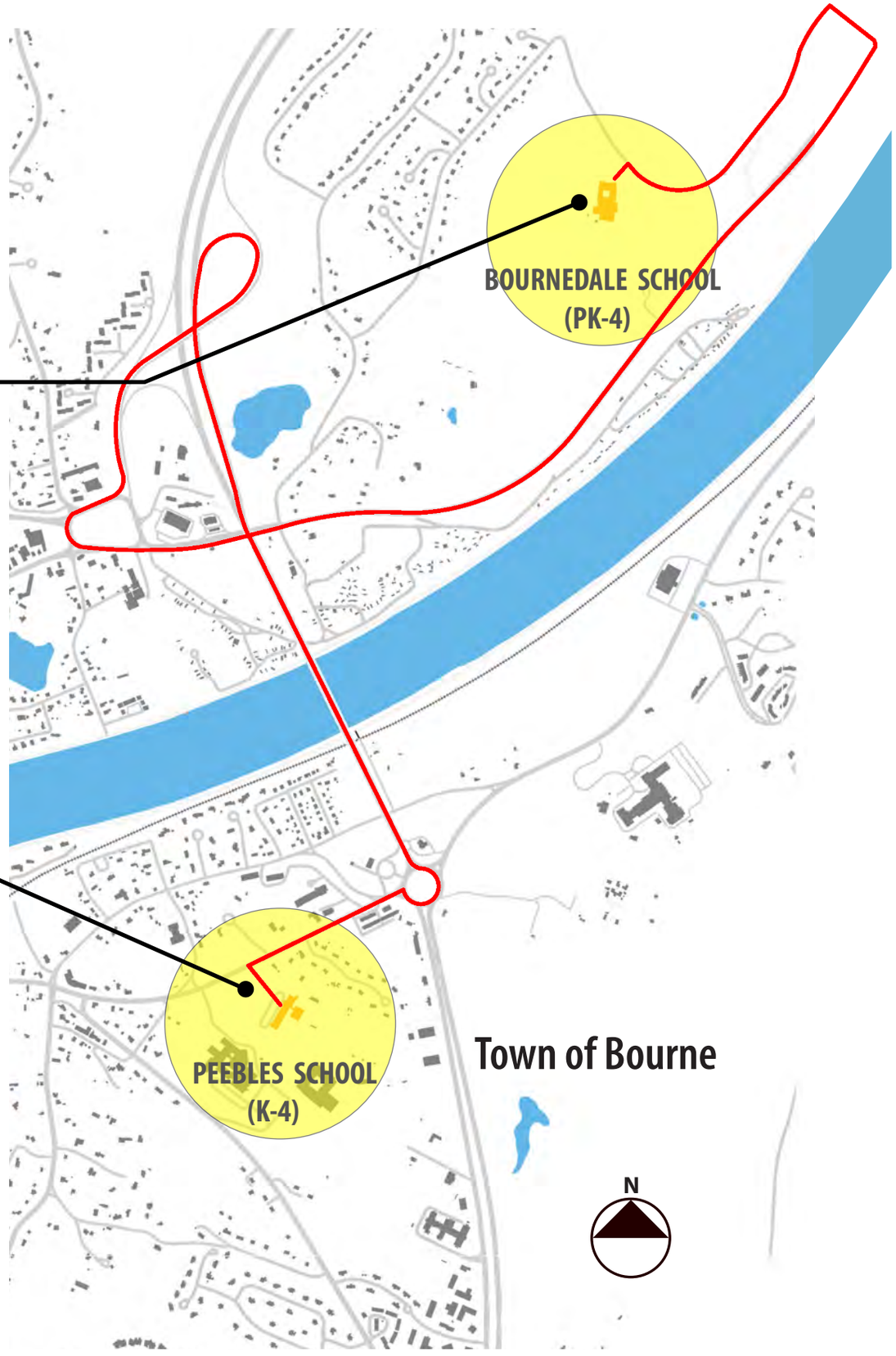
Peebles Elementary School

Built: 1953-1959

Students: 388

Area: 55,191 sf

Site: 8.6 Acres



EXISTING PEEBLES

UPPER LEVEL PLAN

LOWER LEVEL PLAN

PEEBLES ELEMENTARY SCHOOL
EXISTING FLOOR PLANS

CORE ACADEMIC	20,300 SF
SPECIAL EDUCATION	935 SF
ART & MUSIC	1,325 SF
PHYSICAL EDUCATION	3,100 SF
MEDIA CENTER	730 SF
COMPUTER	975 SF
DINING	5,550 SF
MEDICAL	260 SF
ADMINISTRATION	1,195 SF
CUSTODIAL	795 SF
TOTAL BUILDING NET AREA:	35,165 SF
TOTAL BUILDING GROSS AREA:	**55,190 SF**

Peebles Elementary Landscape

- No compliant accessible route from Trowbridge Road to the main building
- Parent drop-off loop and area is inefficient and lacks proper student safety measures
- Safety zone for large playground structure does not meet fall zone height requirements
- Site drainage appears to be poor, with flooding at some entrance doors

MAIN DRIVEWAY

DROP-OFF

PLAY STRUCTURE

DOORS

Peebles Elementary Civil

- Further investigations into the septic system that currently serves the existing school building is required. It may need to be updated for the new flows from the proposed building if they exceed existing flows.

- There is currently a lack in stormwater collection. Most of the site sheet flows to the back area where it just runs off onto existing dirt and grass areas. Increased drywells and underground pipe storage may be required to meet infiltration requirements for MADEP Stormwater Standards

- Fire protection. One hydrant on the site that was located at the top of the front driveway entry from Trowbridge Road. The fire department may want additional hydrants if this site is developed with a new school building. Hydrant flow test should be done to confirm the pressures and volumes in the existing water system

Peebles Elementary Architectural

- Exterior Envelope: Low R-value & masonry repairs required
- Roof System: Must be replaced with proper insulation added
- Window System: Single pane windows throughout, prone to water infiltration.
- Interior Walls: Repair and paint throughout and add acoustic treatment as needed
- Flooring: Replace all flooring throughout building. New epoxy floor system has been installed at cafeteria
- Ceilings: Replace ceiling throughout to accommodate new lighting and improve acoustics
- Door & Hardware: Systems are in various states of disrepair. Replace and provide for ADA access.
- Regulations: Upgrade as required to meet code

Exterior Masonry

Roof Systems

Floor Tile

Accessibility

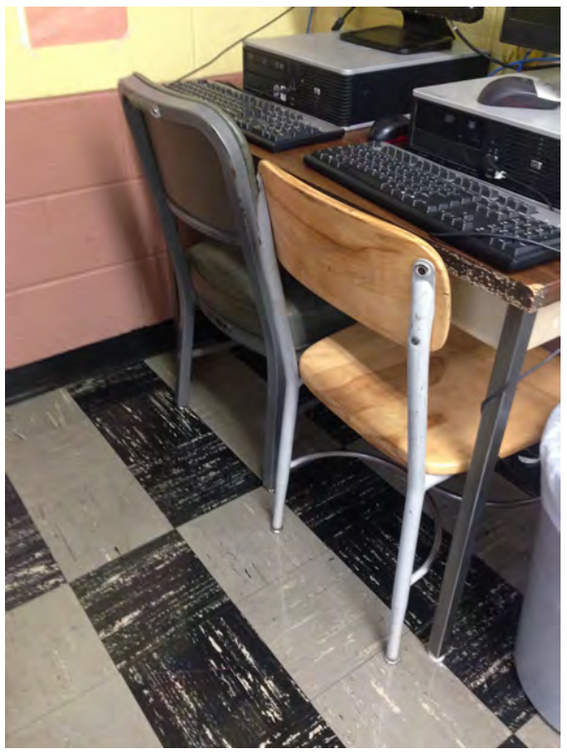
Ceiling Systems

Peebles Elementary Equipment

- Sink locations are not Handicap Accessible
- Student Chairs are many different manufacturers and various ages.
- Kitchen is old with outdated cooking equipment.
- Literacy library is in part of the cafeteria.
- Lack of storage space.

Kitchen

Storage



Furniture

Classroom Sinks

Peebles Elementary Mechanical

- Antiquated mechanical system with poor efficiency
- Lack of controllability results in both under and overheated spaces
- Poor ventilation air
- Classroom unit ventilators are undersized are promote uneven and inconsistent distribution
- Air handling unit in the media center has exceeded its expected maximum service life
- Computer room lacks proper cooling

Air Handling Unit

Cafe Unit Ventilator

Wall Convector

Toilet Exhaust

Peebles Elementary Electrical

- The existing 600-amp main disconnect and fused distribution panel should be replaced
- Interior lighting throughout the school is in fair condition and should be replaced
- Existing exits signs should be replaced and additional signs provided
- A new generator or self-contained battery units should be provided
- All site lighting should be replaced
- Duplex outlets are sparsely located throughout with cords typically running across the floor
- Existing strobes do not meet ADA for intensity. Classrooms do not have ADA horn/strobe units
- A new fire alarm system will be required to meet code

Distribution Panel

Lighting

Outlets

Emergency Devices

Peebles Elementary Fire Protection

- Portions of the building are sprinklered
- The 1959 building is not sprinklered
- The service does not have a backflow prevention device
- The gate valve is not supervised by the fire alarm system

Fire Service & Alarm Valve

Fire Dept. Connection

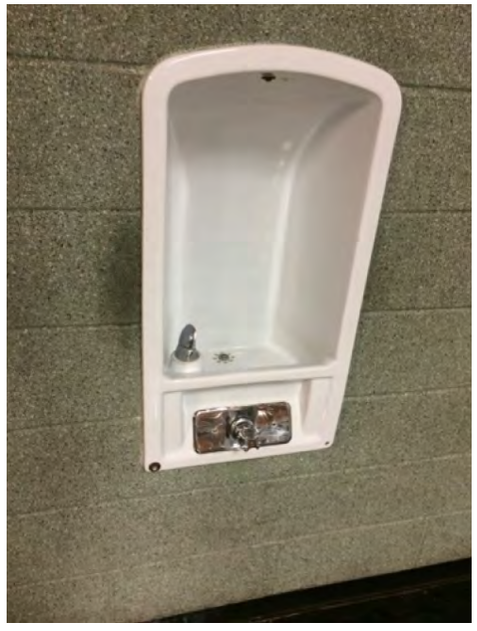
Exposed Piping w/ Upright Sprinkler

Peebles Elementary Plumbing

- A complete new piping system is recommended
- Plumbing fixtures are in fair condition
- Lack of back flow preventer on the domestic water system
- Wall hydrants on exterior are in poor condition
- Sanitary drainage piping is in fair condition
- The kitchen grease trap appears undersized for the load

Domestic water meters

Water heater



Wall hung fountain

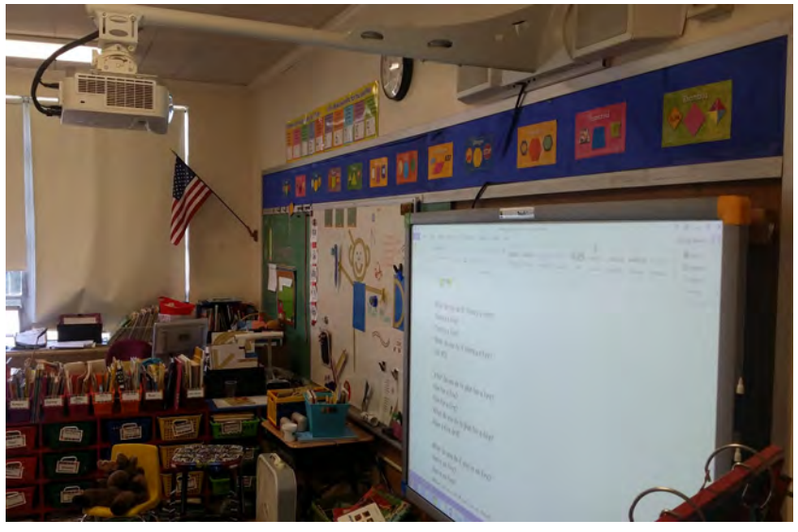
Urinals w/ exposed flush

Peebles Elementary Technology

- Technology Infrastructure: MDF and IDf in a share space in a storage room, No environmental control in equipment rooms, accessibility issues in spline Office area ceiling
- Communications System: Older wall speakers throughout, Older Simplex Master Clock System
- Telephone: Older Nortel System with handsets in classrooms and office
- Security: one CCTV camera at front door, some older motion sensors, Main door intercom
- Classroom Technology: SMART boards w/ ultrashort projection, HP desktop computers, Mobile Chromebook carts were observed (difficult to move around school due to lack of elevator)
- Network: Older and obsolete Procurve HP switch chassis in the closet, Some UPS equipment supporting network switches, 3-4 Enterasys wireless access points throughout
- AV Systems: Older speakers on stage area, No AV in Gym

Tech Closet

Speaker



Smart Board

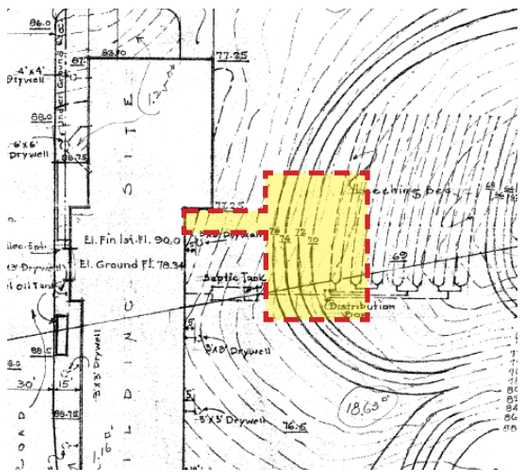
Peebles Elementary Structural

- Masonry is exhibiting distress, bowing outward
- Water infiltration necessitated addition of vinyl siding at spandrel panels
- Corrosion in ungalvanized shelf angles and lintels is causing jacking of masonry
- Brick ties may have disintegrated due to corrosion - Masonry is pulling away from back-up wall
- Noticeable settling at ground floor of addition creates uneven condition at egress stair landings
- Addition was constructed over original septic leaching field, which may not have been well compacted during regrading and construction
- At addition, brick overhangs foundation 1 5/8" and is proud of concrete roof beam

Vinyl Siding at Spandrel

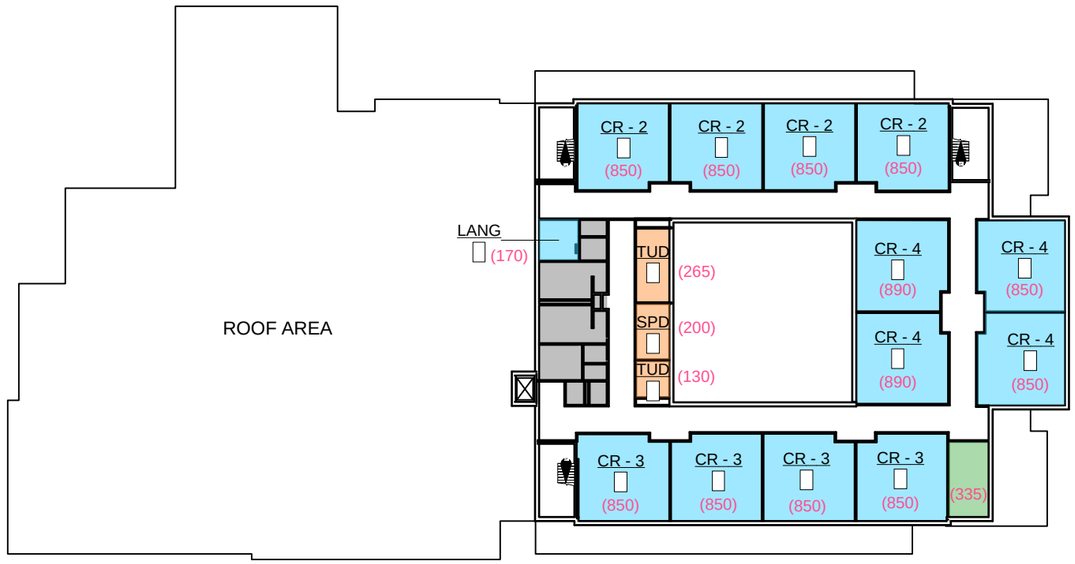
Caulking at Brick

Panels Replaced at Addition



Plan of Leaching Field

EXISTING BOURNEDALE



SECOND FLOOR PLAN

FIRST FLOOR PLAN

BOURNEDALE ELEMENTARY SCHOOL
EXISTING FLOOR PLANS

PRE-KINDERGARTEN	3,390 SF
CORE ACADEMIC	22,700 SF
SPECIAL EDUCATION	2,950 SF
ART & MUSIC	2,258 SF
PHYSICAL EDUCATION	3,150 SF
MEDIA CENTER	2,815 SF
COMPUTER	960 SF
DINING	5,015 SF
MEDICAL	491 SF
ADMINISTRATION	1,460 SF
CUSTODIAL	1,158 SF
TOTAL BUILDING NET AREA:	42,947 SF
TOTAL BUILDING GROSS AREA:	**68,100 SF**

Bournedale Elementary Landscape

- Courtyard pavement does not drain properly and intermittently floods the adjacent hallway through the access door.
- No protective bollards at the flush sidewalk condition at the bus drop-off pick-up area at the rear of the school.
- Site drainage at the accessible spaces near the main entrance appears insufficient
- The school flagpole is not ADA accessible.

Courtyard

Bus Drop-Off

Flagpole

Bournedale Elementary Civil

- The existing school is on Septic so any addition to the school would increase flows to the septic system. Capacity would need to be checked to make sure it is sized to accept the increase in the flow.

- Drainage on this site could be straightforward if the existing detention pond is sized large enough to accept the new runoff flows from the addition and whatever additional impervious area created with the addition. If the detention pond is too small, it should be expanded to increase size and volume to accept and control the new flows.

- There is significant amounts of drainage infrastructure on site that could be used to help control the runoff from any new impervious created by the addition.

- Soils here are also very good and will allow for infiltration to help control runoff. Stormwater on this site should be relatively easy to deal with.

- Existing water infrastructure and hydrants were prevalent behind the building and any new addition would likely require additional hydrant locations. However the water infrastructure on this site seems to be in good condition and should not pose too many issues for an addition on this site. Hydrant flow tests would need to be provided to determine flow and pressures.

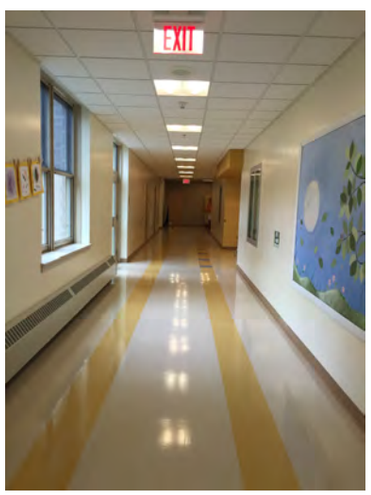
Bournedale Elementary Architectural

- Exterior Envelope: Appears to meet code, analysis of components will be evaluated
- Roof System: Active leaks occur at “roof to wall” intersections, Flashing must be replaced, sealants require repair and replacement, Precast caps have open joints in areas
- Window System: Appears to meet code, analysis of glazing to be confirmed, precast sills require cleaning and sealing
- Interior: Proper acoustic separation required at nurse’s suite/music stage area. Additional corridor wall protection (i.e. wainscoting and corner guards)
- Flooring: VCT lifting up at doorways due to water infiltration
- Door & Hardware: Water enters at exterior sills. New sills and sloping concrete away from entry required. Gym doors require weather gaskets.

Roofing

Window Sills

Sealant



Hallways

Bournedale Elementary Equipment

- Cafeteria is at capacity
- Lack of storage in kitchen
- Media center has no more space for books
- Classroom cubbies / furniture obstruct supervision and encroach on teaching area

Cafeteria

Kitchen Storage

Media Center

Cubbies

Bournedale Elementary Mechanical

- Heating plant consists of High Efficiency Non Condensing gas fired Boilers. Boilers are approximately 8 years old; expected service life of the boiler is 20-25 years.

- Hot water is distributed to building heating equipment by variable speed pumping distribution system.

- Classrooms served by displacement ventilation dehumidification system that is served by packaged Direct expansion cooling dedicated outdoor air units. The rooftop units are approximately 8 years old and the expected service life is approximately 20 years. Classroom have supplemental hot water fin tube radiation heating.

- The Gymnasium is heated and ventilated by a gas-fired heating and ventilation rooftop unit. The RTU is approximately 8 years old; expected service life of the RTU is 20 years.

- The Administration and Media Center areas are air conditioned by a high efficiency air cooled chiller plant that serves 4-pipe heating and cooling ceiling mounted induction (active chilled beam) units. Ventilation air is provided by packaged rooftop air handling unit that are equipped with gas fired heating and direct expansion cooling. The RTUs, Chiller and induction units are approximately 8 years old.

- The building HVAC systems are controlled by a DDC (direct digital control) building energy management system.

Bournedale Elementary Electrical

- Existing electric service of 1600 Amps would need to be increased.
- Existing lighting system is fluorescent and outdated. New LED lighting and advanced lighting control system would be provided for new addition.
- Fire alarm system would need to be expanded with additional devices and possibly new panel with more capacity.
- Existing generator will not be able to handle the same full array of equipment in the addition as is supported in the existing building.

Bournedale Elementary Plumbing / Fire Protection

- Existing domestic water service is capable of supplying building addition. New cold water main to be provided from water entry to proposed addition.

- New domestic water heater should be provided for addition. Water heater would be condensing high efficiency.

- Existing below grade sanitary piping can be reused where sized appropriately for any added load.

- Natural gas system should have capacity for future additional load. Will need final confirmation with Eversource Energy.

- Existing fire water service is capable of supplying new building addition option. Sprinkler Main can be extending to addition from existing riser or new riser installed in addition.

- Existing sprinkler branch piping can be modified in renovated areas. New quick response heads to be installed in renovated areas.

- Existing sprinklers in non-renovated areas shall remain.

Bournedale Elementary Technology

- Technology Infrastructure: Dedicated MDF and one IDF with sufficient power and environmental conditioning, CAT 6 cabling, ceiling accessibility

- Communications System: PA system appears to be in good working order, Newer integrated master clock system

- Telephone: Newer Vertical VoIP Telephone System with integrated voicemail server

- Security: Modern access control, Intrusion control and video surveillance equipment that is expandable, Cameras were observed in hallways and exterior of building, Video intercom "AIphones"

- Classroom Technology: SMART Technology Smart Boards with standard throw projectors mounted in the ceilings

- Network: Newer Procurve HP switch chassis in the closet for networking, UPS equipment supporting network switches, Enterasys wireless access points throughout

- AV Systems: Large venue AV system in Cafeteria (with stage) and Gym.

Bournedale Elementary Structural

- Building is constructed of composite structural steel framing, open web steel joists, steel columns and masonry bearing walls. The building appears in good structural condition.

- In some locations, 8" architectural recessed units were mortared to adjacent units. Cracked mortar should be removed and replaced with sealant.

Questions?

Space Comparison - Existing Peebles Elementary - 250 enrollment

PROGRAM	GRADES K-4 (EXISTING)	GRADES K-4 (MSBA)	VARIANCE
Core Academic	20,300	14,400	(10,950)
Special Education	935	3,020	2,085
Art & Music	1,325	2,225	1,100
Health & Physical Education	3,100	6,300	3,200
Media Center	730	2,020	1,230
Technology (computer)	975	1,000	(25)
Dining & Food Service	5,550	4,875	(675)
Medical	260	410	150
Administration & Guidance	1,195	2,015	820
Custodial & Maintenance	795	1,900	1,105
Subtotal NSF	**35,165 NSF**	**38,165 NSF**	3,000
Grossing Factor	x 1.56	x 1.5	
Total GSF	**55,190 GSF**	**57,248 GSF**	(2,058)
	390 Students	**250 Students**	

Space Comparison - Existing Peebles Elementary - 410 enrollment

PROGRAM	GRADES K-5 (EXISTING)	GRADES K-5 (MSBA)	VARIANCE
Core Academic	22,000	20,700	(1,300)
Special Education	935	4,530	3,595
Art & Music	1,325	2,300	975
Health & Physical Education	3,100	6,300	3,200
Media Center	730	2,515	1,785
Technology (computer)	975	1,000	25
Dining & Food Service	5,550	6,325	775
Medical	260	510	250
Administration & Guidance	1,195	2,125	930
Custodial & Maintenance	795	2,010	1,215
Subtotal NSF	**36,865 NSF**	**48,315 NSF**	**11,450**
Grossing Factor	x 1.56	x 1.5	
Total GSF	**57,510 GSF**	**72,473 GSF**	**14,963**
	580 Students	**410 Students**	

Space Comparison - Existing Bournedale Elementary - 725 enrollment

PROGRAM	GRADES PreK-4 (EXISTING)	GRADES PreK-4 (MSBA)	VARIANCE
Core Academic (PRE-K)	3,390	0	(3,390)
Core Academic	22,700	37,090	14,390
Special Education	2,950	8,050	5,100
Art & Music	2,258	4,465	2,207
Health & Physical Education	3,150	6,300	3,150
Media Center	2,815	3,933	1,118
Technology (computer)	960	1,000	(40)
Dining & Food Service	5,015	9,185	4,170
Medical	491	610	119
Administration & Guidance	1,460	2,711	1,251
Custodial & Maintenance	1,158	2,325	1,167
Subtotal NSF	**42,947 NSF**	**76,395 NSF**	**33,448**
Grossing Factor	x 1.59	x 1.5	
Total GSF	**68,100 GSF**	**114,593 GSF**	**46,493**
	384 Students (K-4)	**725 Students**	
	51 Students (PreK)		

Space Comparison - Existing Bournedale Elementary - 885 enrollment

PROGRAM	GRADES PreK-5 (EXISTING)	GRADES PreK-5 (MSBA)	VARIANCE
Core Academic (PRE-K)	3,390	0	(3,390)
Core Academic (1-5)	24,400	43,390	18,990
Special Education	2,950	9,060	6,100
Art & Music	2,258	5,690	3,432
Health & Physical Education	3,150	6,300	3,150
Media Center	2,815	4,653	1,838
Technology (computer)	960	1,000	(40)
Dining & Food Service	5,015	11,204	6,189
Medical	491	710	219
Administration & Guidance	1,460	3,021	1,561
Custodial & Maintenance	1,158	2,485	1,327
Subtotal NSF	**48,047 NSF**	**87,513 NSF**	**39,466**
Grossing Factor	x 1.42	x 1.5	
Total GSF	**68,100 GSF**	**131,382 GSF**	**63,282**
	574 Students (K-5)	**885 Students**	
	51 Students (PreK)		

Community Forum No.3
December 8, 2015
Feasibility Study

Bourne Elementary Schools
Community Workshop

PROJECT MANAGEMENT SMMA
Massachusetts School Building Authority

Flansburgh Architects

Agenda

- Introductions
- MSBA Process
- Project Schedule
- Educational Visioning
- Existing Conditions Summary
- Study Scope
- Design Options
- Questions

School Building Committee

James L. Potter	Chairman, School Building Committee
Christopher Hyldburg	Chairman, School Committee
Steven M. Lamarche	Superintendent of Schools, BPS
Peter J. Meier	Chair, Board of Selectmen
Edward S. Donoghue	Director of Business Services, BPS
Thomas M. Guerino	Town Administrator
Jonathan Nelson	Director of Facilities, Town of Bourne
Elizabeth Carpenito	Prinicipal, Bournedale Elementary School
Kathy Anderson	Member, School Building Committee
Mary Jo Coggeshall	Member, School Building Committee
Rick Howe	Board of Health
Richard A. Lavoie	Member, Finance Committee
William Meier	Member, School Building Committee
Laura Scena	Member, School Building Committee

Design Team

Kent Kovacs

Flansburgh Architects

Owner's Project Manager

Joel Seeley

Symmes, Maini & McKee

MSBA Process

- **MSBA** is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.

- **MSBA** mandates a multi-step rigorous study and approval process

- **MSBA** will fund **43.84%** plus incentives of eligible project cost for an approved project if accepted by the voters of Bourne

MSBA Process

- Existing Conditions
- Visioning
- Programming
- Preliminary options

PDP
Preliminary Design Program

- Refine top 3 options
- Options detailed
- Cost Estimates

PSR
Preliminary Schematic Report

MSBA Board Approval

- Develop selected option
- Consensus

Schematic Design

MSBA Board Approval

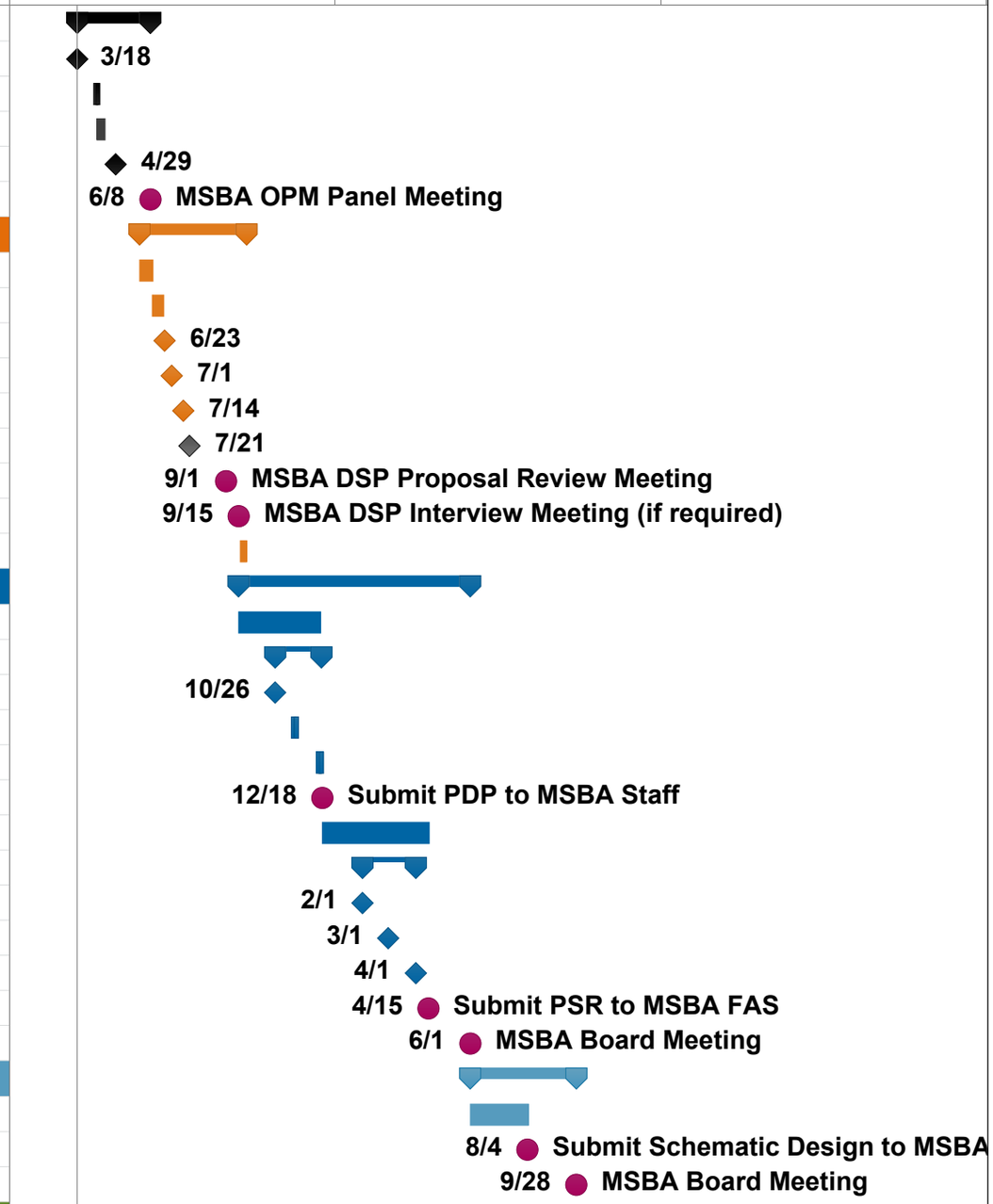
Local Funding Approval

Project Schedule

Updated: June 25, 2015
Revised: September 16, 2015

TOWN OF BOURNE, MASSACHUSETTS
PEEBLES ELEMENTARY SCHOOL
PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish
1	**RETAIN OPM**	**58 days**	**3/18/2015**	**6/8/2015**
2	Submit OPM Proposals	0 days	3/18/2015	3/18/2015
3	OPM Interview	2 days	4/8/2015	4/9/2015
4	Negotiate OPM Contract	7 days	4/9/2015	4/17/2015
5	Submit Documents to MSBA OPM Panel	0 days	4/29/2015	4/29/2015
6	**MSBA OPM Panel Meeting**	**0 days**	**6/8/2015**	**6/8/2015**
7	**RETAIN DESIGNER**	**86 days**	**5/27/2015**	**9/23/2015**
8	Draft Designer RFS and Submit to MSBA	11 days	5/27/2015	6/10/2015
9	MSBA Approve Draft RFS	9 days	6/10/2015	6/22/2015
10	Submit to Central Register	0 days	6/23/2015	6/23/2015
11	Notice in Central Register	0 days	7/1/2015	7/1/2015
12	Briefing Session	0 days	7/14/2015	7/14/2015
13	Submit Designer Proposals	0 days	7/21/2015	7/21/2015
14	**MSBA DSP Proposal Review Meeting**	**0 days**	**9/1/2015**	**9/1/2015**
15	**MSBA DSP Interview Meeting (if required)**	**0 days**	**9/15/2015**	**9/15/2015**
16	Negotiate Designer Contract	5 days	9/17/2015	9/23/2015
17	**FEASIBILITY STUDY (FS)**	**183 days**	**9/15/2015**	**6/1/2016**
18	Develop Preliminary Design Program (PDP)	65 days	9/15/2015	12/15/2015
19	**Community Presentations**	**37 days**	**10/26/2015**	**12/16/2015**
20	Community Forum 1: Visioning	0 days	10/26/2015	10/26/2015
21	Community Forum 2: Existing Conditions	3 days	11/16/2015	11/18/2015
22	Community Forum 3: Options	3 days	12/14/2015	12/16/2015
23	**Submit PDP to MSBA Staff**	**0 days**	**12/18/2015**	**12/18/2015**
24	Develop Preferred Schematic Report (PSR)	84 days	12/18/2015	4/15/2016
25	**Community Presentations**	**44 days**	**2/1/2016**	**4/1/2016**
26	Community Forum 1	0 days	2/1/2016	2/1/2016
27	Community Forum 2	0 days	3/1/2016	3/1/2016
28	Community Forum 3	0 days	4/1/2016	4/1/2016
29	**Submit PSR to MSBA FAS**	**0 days**	**4/15/2016**	**4/15/2016**
30	**MSBA Board Meeting**	**0 days**	**6/1/2016**	**6/1/2016**
31	**SCHEMATIC DESIGN (SD)**	**85 days**	**6/1/2016**	**9/28/2016**
32	Develop Schematic Design	47 days	6/1/2016	8/4/2016
33	**Submit Schematic Design to MSBA**	**0 days**	**8/4/2016**	**8/4/2016**
34	**MSBA Board Meeting**	**0 days**	**9/28/2016**	**9/28/2016**
35	**LOCAL VOTES**			
38	**DESIGN AND CONSTRUCTION (TBD)**			



STUDY SCOPE

MSBA Study Scope

Option 1	Option 2	Option 3	Option 4
Grades K to 4	Grades PreK to 4	Grades PreK to 5	Grades K to 5
Neighborhood Elementary School	District-wide Elementary School	District-wide Elementary School	Neighborhood Elem. School with District-wide 5th grade
250 students	**725 students**	**885 students**	**410 students**

MSBA Study Scope

Bournedale Elementary School

Built: 2009

Students: 435

Area: 68,124 sf

Site: approx 122 Acres

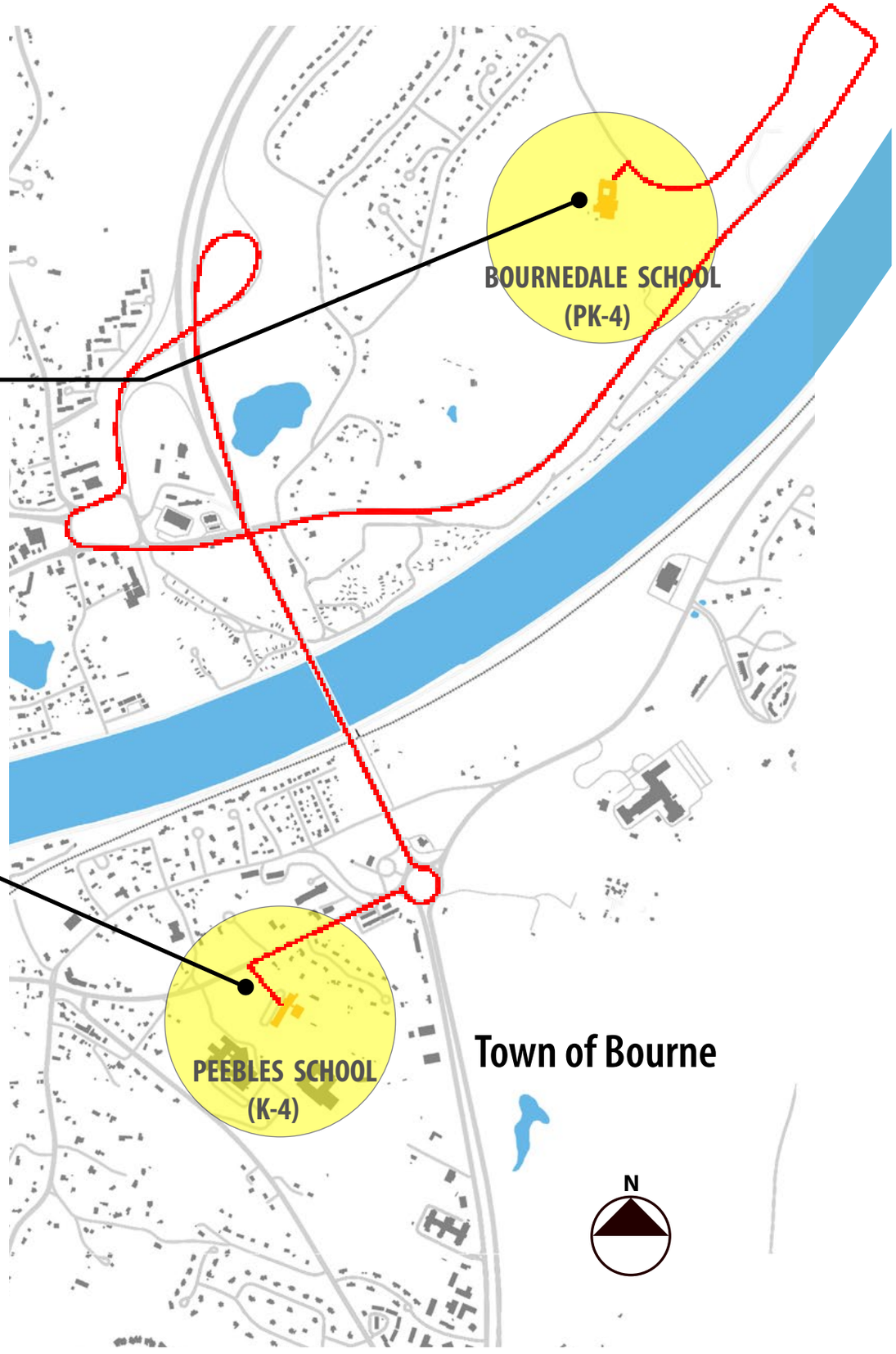
Peebles Elementary School

Built: 1953-1959

Students: 388

Area: 55,191 sf

Site: 8.6 Acres



BOURNEDALE

PEEBLES

OPTION 1

PK-4

CAPE COD CANAL

K-4

MIDDLE SCHOOL
5-8

HIGH SCHOOL
9-12

BOURNEDALE

PEEBLES

CAPE COD CANAL

OPTION 1

PK-4

K-4

MIDDLE SCHOOL
5-8

HIGH SCHOOL
9-12

OPTION 2

PK-4

MIDDLE SCHOOL
5-8

HIGH SCHOOL
9-12

BOURNEDALE

PEEBLES

CAPE COD CANAL

OPTION 1

PK-4

K-4

MIDDLE SCHOOL
5-8

HIGH SCHOOL
9-12

OPTION 2

PK-4

MIDDLE SCHOOL
5-8

HIGH SCHOOL
9-12

OPTION 3

PK-5

MIDDLE SCHOOL
6-8

HIGH SCHOOL
9-12

BOURNEDALE		PEEBLES	
OPTION 1	PK-4	K-4	MIDDLE SCHOOL 5-8 HIGH SCHOOL 9-12
OPTION 2	PK-4		MIDDLE SCHOOL 5-8 HIGH SCHOOL 9-12
OPTION 3	PK-5		MIDDLE SCHOOL 6-8 HIGH SCHOOL 9-12
OPTION 4	PK-4	K-5	MIDDLE SCHOOL 6-8 HIGH SCHOOL 9-12

CAPE COD CANAL

EDUCATIONAL PLANNING UPDATE

Guiding Design Principles

1. **Community Connected**
   - A Place You Want to Be
   - Future Orientation with Connections to Tradition
   - Community Access

2. **Purposefully Innovative & Creative**
   - Visible Learning
   - Flexible and Adaptable Learning Environments

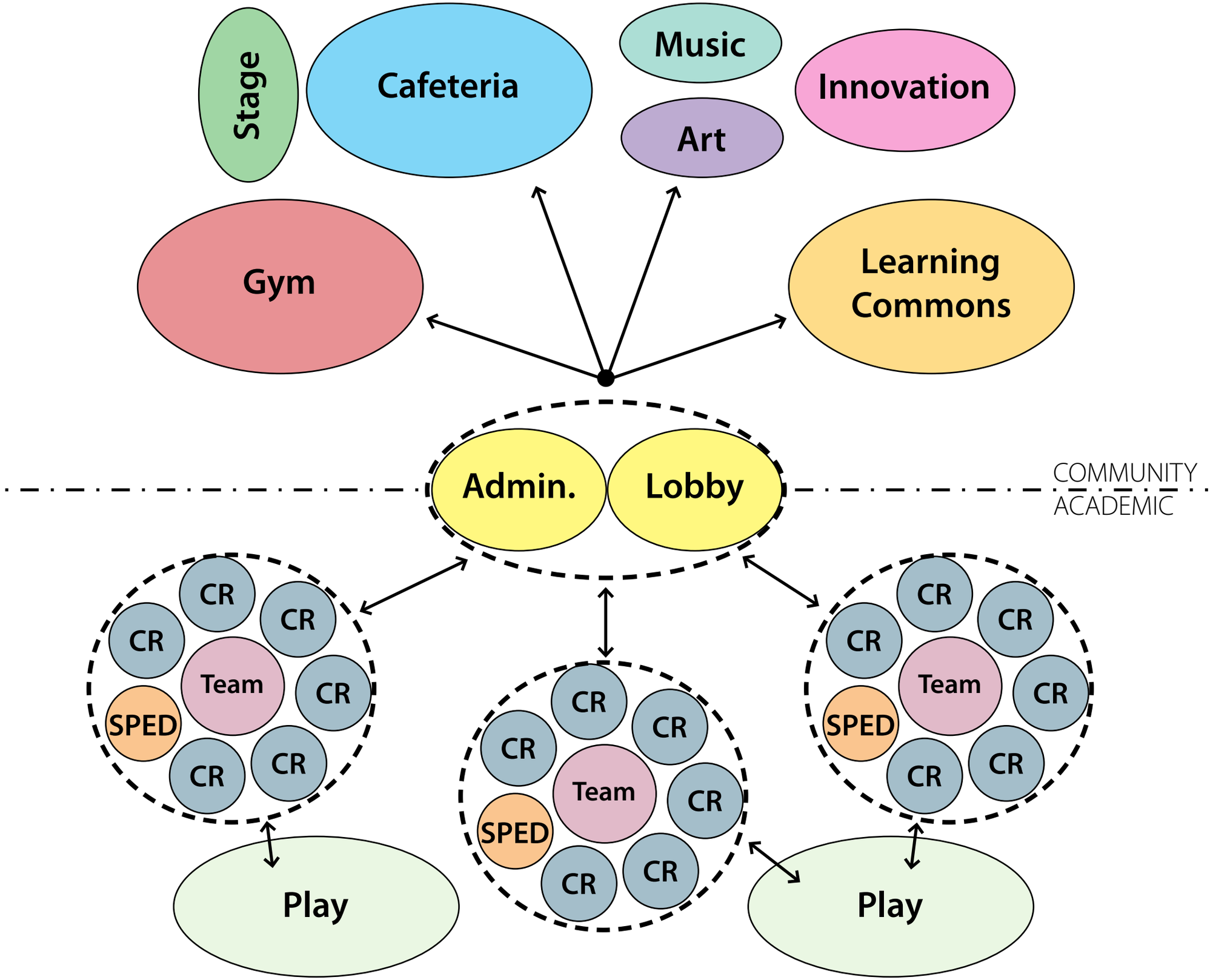
3. **Collaborative & Interconnected**
   - Learning Communities

4. **Connections to 21st-Century Learning**
   - Inquiry-Based Learning
   - Teacher as Designer

Design Patterns

- Gathering Spaces
- Varied Spaces / Ubiquitous Learning
- Display & Exhibition Spaces
- Maker Spaces
- Multi-Purpose Spaces
- Collaborative Environments
- Indoor/Outdoor Connections
- Technology & Blended Learning
- Agile Classrooms
- Classroom Neighborhoods
- Effective Storage

Adjacency Diagram



EXISTING CONDITIONS UPDATE

Peebles Elementary School Existing Conditions

Year Built: 1953,1959 ***(62 yrs. old)***

Site Poor drainage, traffic, and HC accessibility

Exterior Cracks, leaks, and lack of insulation

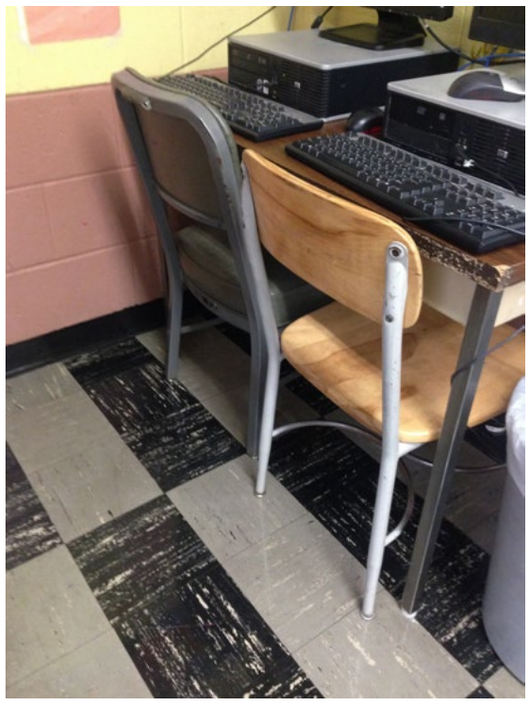
Interior Worn out, broken, and needs replacement

MEP systems Antiquated, inefficient, & poor temperature control

Cafe Unit Ventilator

Vinyl Siding at Spandrel

Storage



Furniture

Bournedale Elementary School Existing Conditions

Year Built: 2009 ***(7 yrs. old)***

Site Good site circulation and proper drainage

Exterior Exterior envelope is in good condition. Leaks at roof to wall intersection

Interior Finishes are in good condition. Acoustics need to be inproved in limited spaces

MEP systems Systems are functioning properly and have continued life expectancy

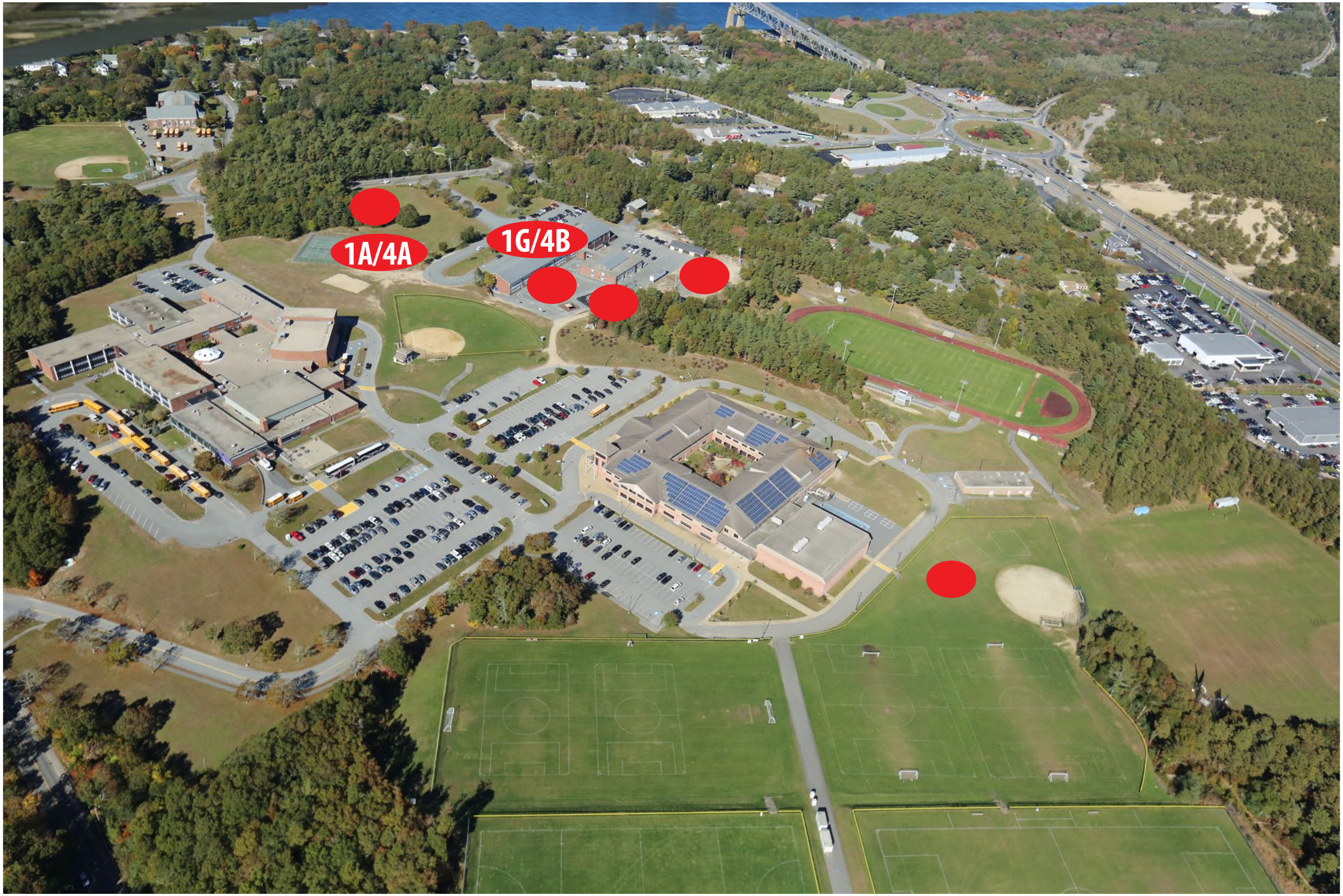
Window Sills

Roofing

Cubbies

DESIGN OPTIONS

Peebles Campus



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Campus

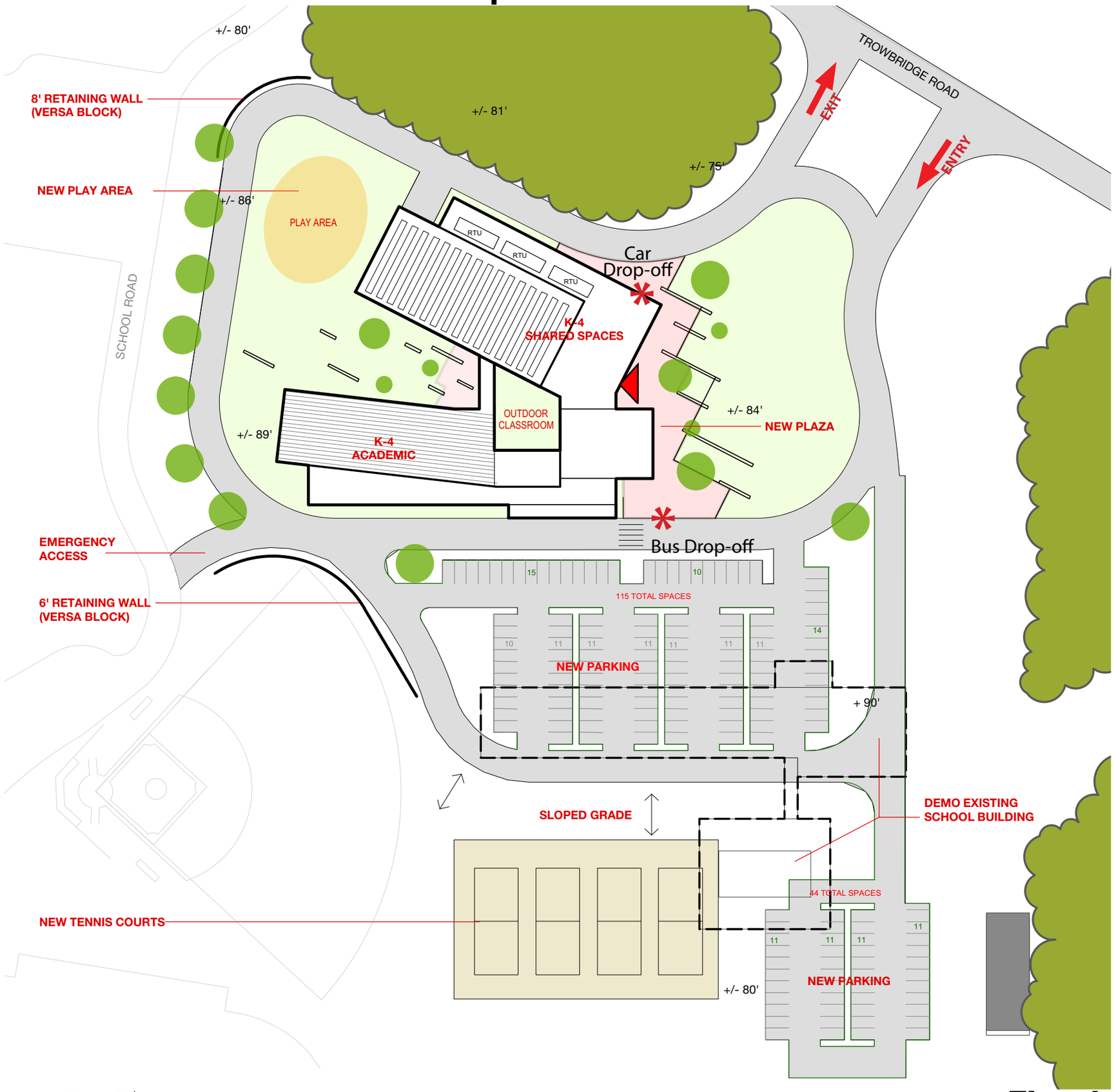
Peebles Elementary School | Bourne, MA

Flansburgh Architects

Program Areas - OPTION 1: 250 enrollment

PROGRAM	GRADES K-4
Core Academic	14,400
Special Education	3,020
Art & Music	2,225
Health & Physical Education	6,300
Media Center	2,020
Technology (computer)	1,000
Dining & Food Service	4,875
Medical	410
Administration & Guidance	2,015
Custodial & Maintenance	1,900
Subtotal NSF	**38,165 NSF**
Grossing Factor	x 1.5
Total GSF	**57,248 GSF**
Number of Students	250 Students

Peebles New Construction Option 1A (250 students)



Peebles Elementary School | Bourne, MA

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Peebles New Construction Option 1A (250 students)

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Peebles New Construction Option 1A (250 students)

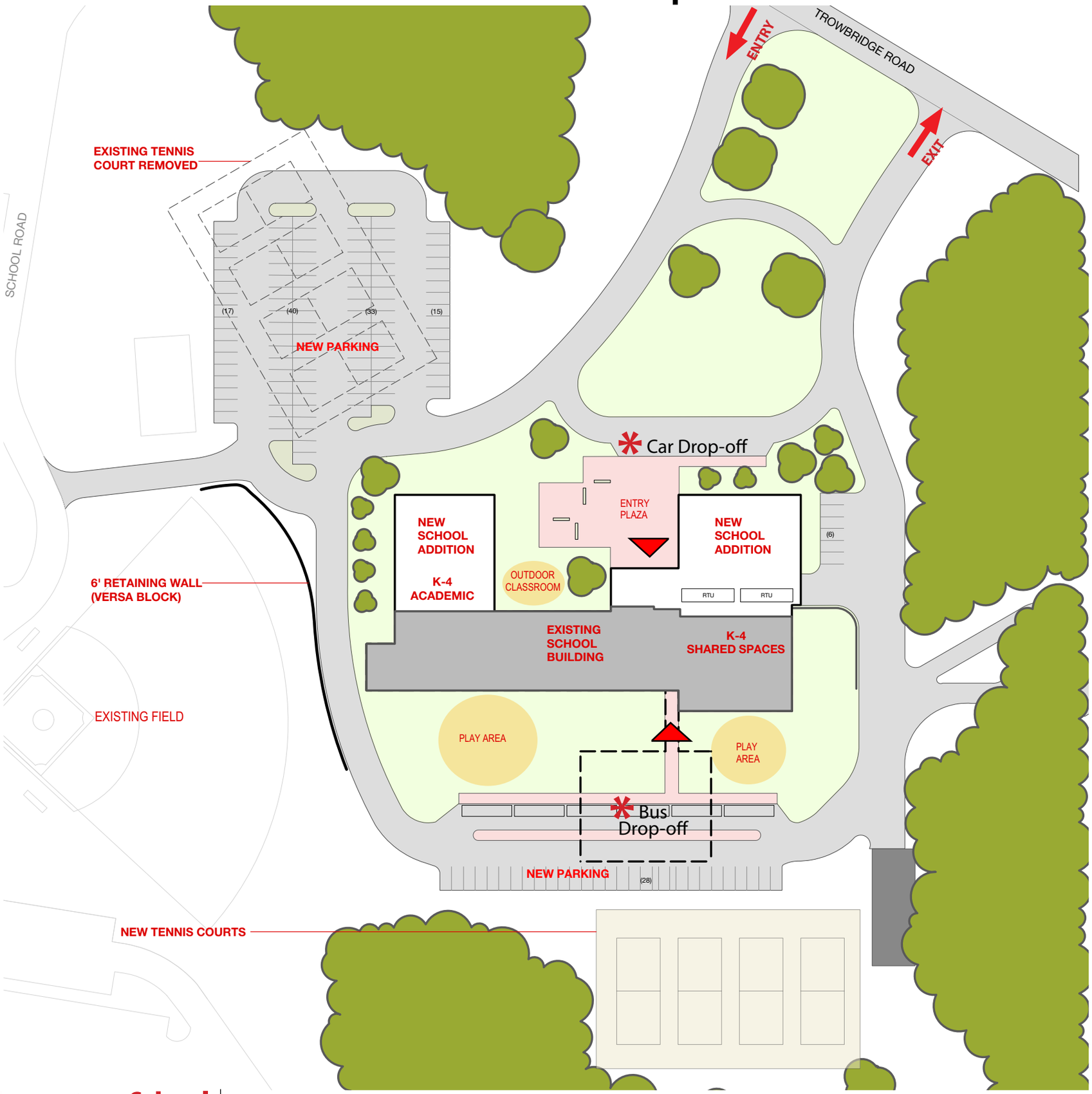
Pros:

- New Construction alternative with least disruption to students during construction
- Clear Articulation between Community and Academic wings; good community access
- Team Spaces promote interconnection
- Outdoor Classroom a beautiful, enclosed focal point for building; good access encourages use.
- Innovation Studio located along main axis; proximity to Art and to Media Center offers flexibility and opportunity for collaboration.
- Allows flexibility in building and site design

Cons:

- Very small school
- Does not alleviate space demand in Middle School
- Does not relocate 5th grade within elementary school setting

Peebles Addition / Renovation Option 1G (250 students)



Peebles Elementary School | Bourne, MA

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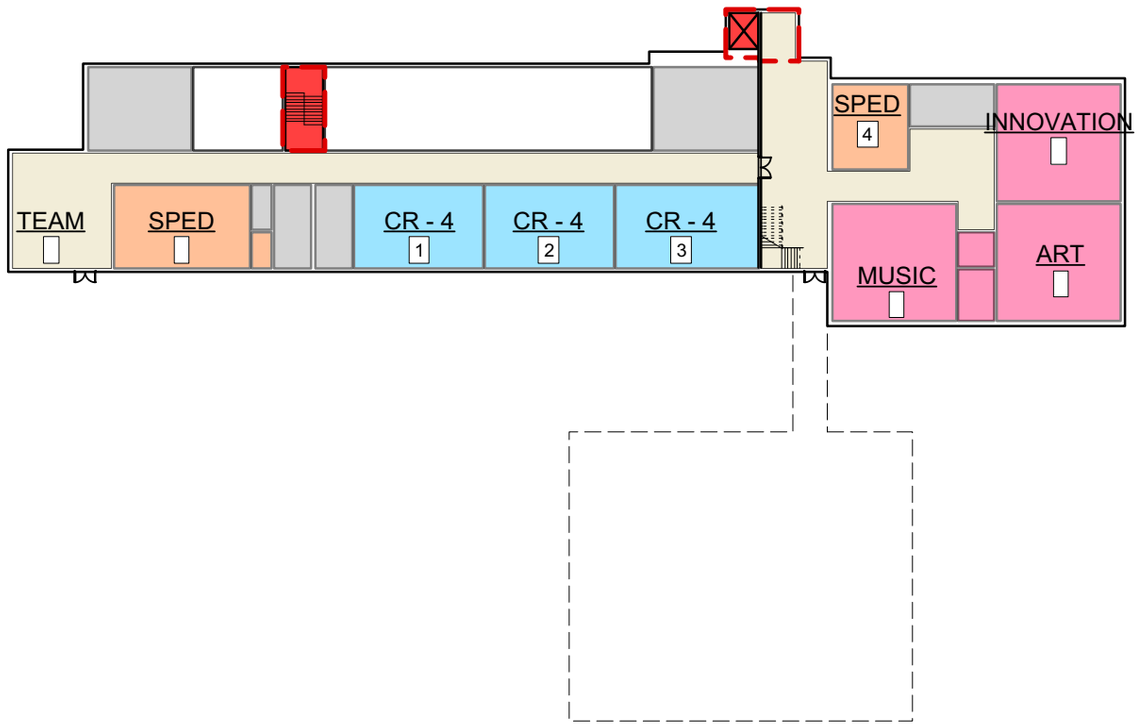
Peebles Addition / Renovation Option 1G (250 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles Addition / Renovation Option 1G (250 students)

Pros:

- Modernizes Peebles aesthetically and physically; provides new face of building
- Eliminates Annex, most deficient part of building
- Maintains clear articulation between Community and Academic Wings
- Reconstructed and safer parent and bus drop-offs

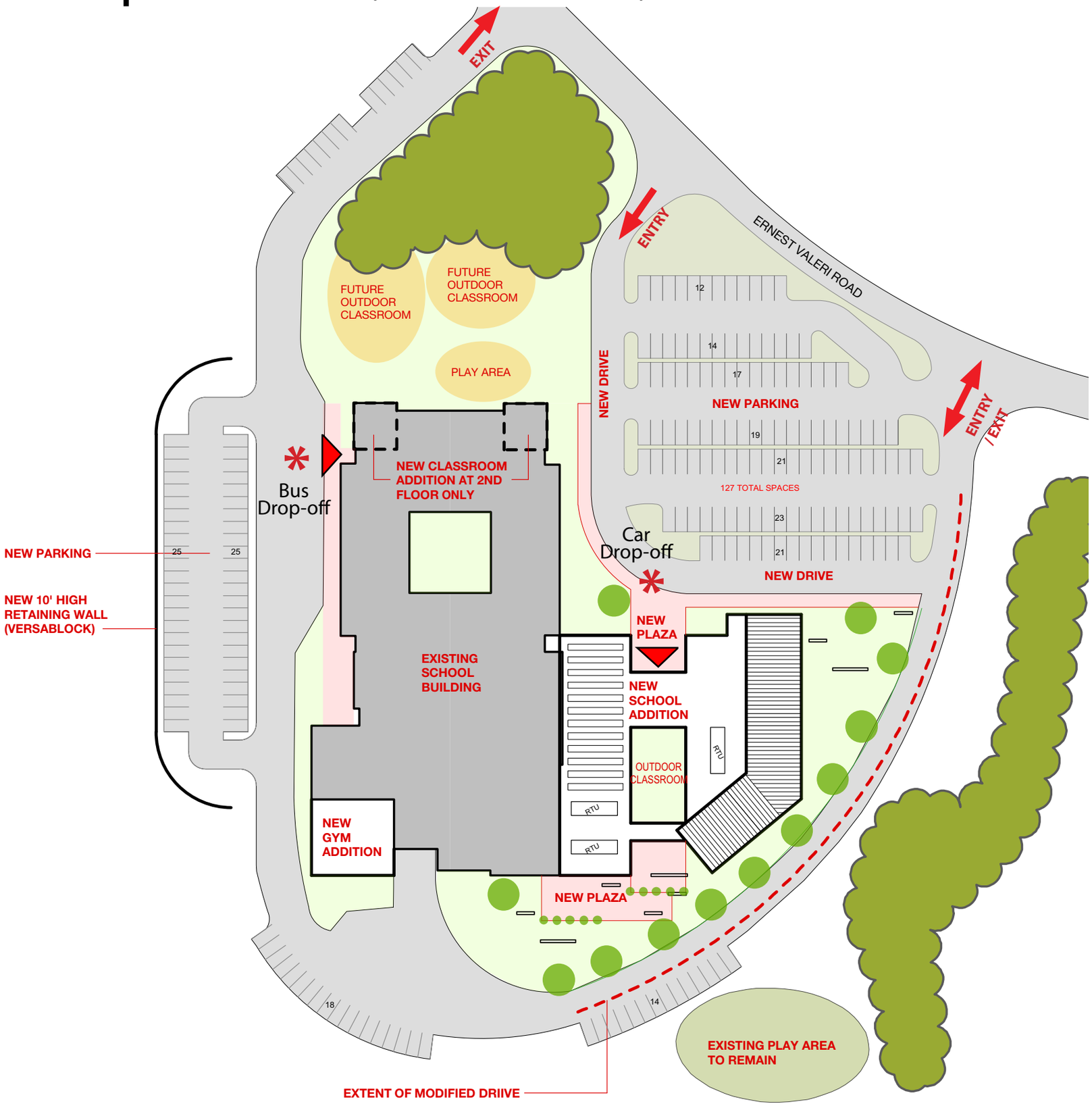
Cons:

- Very small school
- Does not alleviate space demand in Middle School or relocate 5th grade within elementary school
- Layout does not permit Classroom Neighborhoods or promote Collaboration
- Requires extensive phasing
- Lack of secure outdoor classroom
- Potential noise issues from proximity of Gym to Admin suite and from Cafeteria to learning spaces below

Program Areas - OPTION 2: 725 enrollment

PROGRAM	GRADES PreK-4
Core Academic	37,090
Special Education	8,050
Art & Music	4,465
Health & Physical Education	6,300
Media Center	3,933
Technology (computer)	1,000
Dining & Food Service	9,185
Medical	610
Administration & Guidance	2,711
Custodial & Maintenance	2,325
Subtotal NSF	**76,395 NSF**
Grossing Factor	x 1.5
Total GSF	**114,593 GSF**
Number of Students	725 Students

Bournedale Option 2A (725 students)



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 2A (725 students)

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 2A (725 students)

Pros:

- Consolidates K-4 grades and resources; creates equitable student experience
- Collaborative and interconnected learning communities
- Distinct academic communities for lower and upper grades
- Well-sited; entry is inviting to community
- Maintains existing structure and facility with minimal disruption to learning
- New entry lobby and courtyard provide buffer for noise and secure use of outdoor classroom

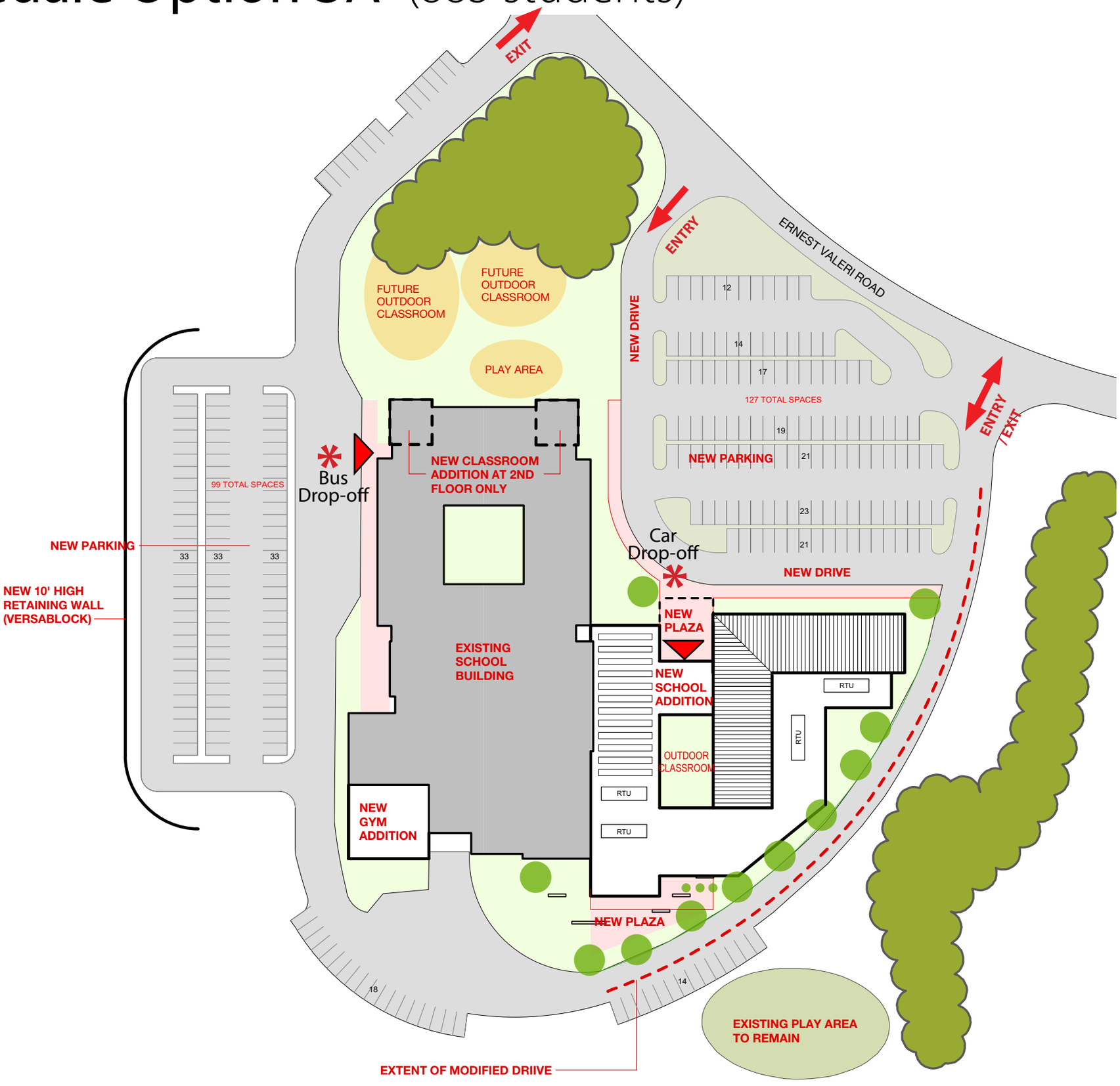
Cons:

- Large school
- Does not alleviate space pressure on Middle School or relocate 5th grade within elementary school
- Requires phasing, although minimal
- Loss of neighborhood school for Peebles families
- Creates empty Peebles building requiring significant upgrades for future use

Program Areas - OPTION 3: 885 enrollment

PROGRAM	GRADES PreK-5
Core Academic	43,390
Special Education	9,060
Art & Music	5,690
Health & Physical Education	6,300
Media Center	4,653
Technology (computer)	1,000
Dining & Food Service	11,204
Medical	710
Administration & Guidance	3,021
Custodial & Maintenance	2,485
Subtotal NSF	**87,513 NSF**
Grossing Factor	x 1.5
Total GSF	**131,382 GSF**
Number of Students	885 Students

Bournedale Option 3A (885 students)



Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 3A (885 students)

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 3A (885 students)

Pros:

- Alleviates transition issue for 5th grade students; relieves space demand in middle school
- Consolidates grades and resources; creates equitable student experience
- Continuity in learning throughout PreK-5 years
- Collaborative and interconnected learning communities; varied learning spaces throughout
- Distinct academic communities for lower and upper grades
- Well-sited; entry is inviting to community
- Maintains existing structure and facility with minimal disruption to learning
- New entry lobby and courtyard provide buffer for noise and secure use of outdoor classroom

Cons:

- Very large school
- Requires phasing, although minimal
- Loss of neighborhood school for Peebles families
- Existing building does not provide team areas or as much display
- Creates empty Peebles building requiring significant upgrades for future use

Bournedale Option 3B (885 students)

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Bournedale Option 3B (885 students)

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Bournedale Option 3B (885 students)

Pros:

- Alleviates transition issue for 5th grade students; relieves space demand in middle school
- Consolidates grades and resources; creates equitable student experience & continuity in early years
- Collaborative and interconnected learning communities; varied learning spaces throughout
- More direct entry sequence with clear Community / Academic separation
- Visible learning with Innovation Studio near Entry
- Art rooms and Learning Commons space distributed throughout plan
- Well-sited; provides new face to building

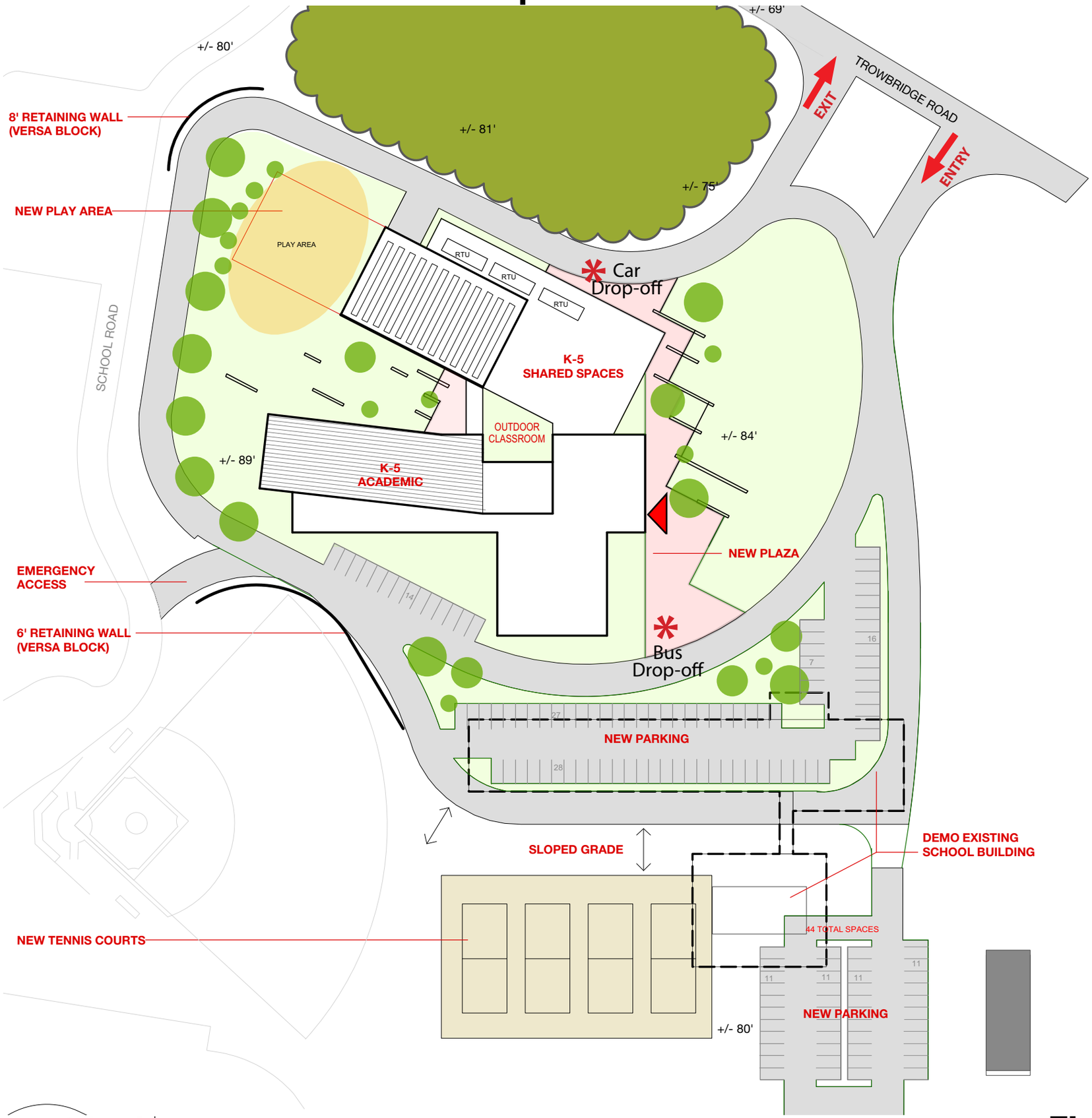
Cons:

- Very large school
- Requires phasing, although minimal; construction affects entire length of building
- Loss of neighborhood school for Peebles families
- Courtyard embedded within classroom wings may disrupt learning
- Existing building does not provide team areas or as much display
- Creates empty Peebles building requiring significant upgrades for future use

Program Areas - OPTION 4: 410 enrollment

PROGRAM	GRADES K-5
Core Academic	20,700
Special Education	4,530
Art & Music	2,300
Health & Physical Education	6,300
Media Center	2,515
Technology (computer)	1,000
Dining & Food Service	6,325
Medical	510
Administration & Guidance	2,125
Custodial & Maintenance	2,010
Subtotal NSF	**48,315 NSF**
Grossing Factor	x 1.5
Total GSF	**72,473 GSF**
Number of Students	410 Students

Peebles New Construction Option 4A (410 students)

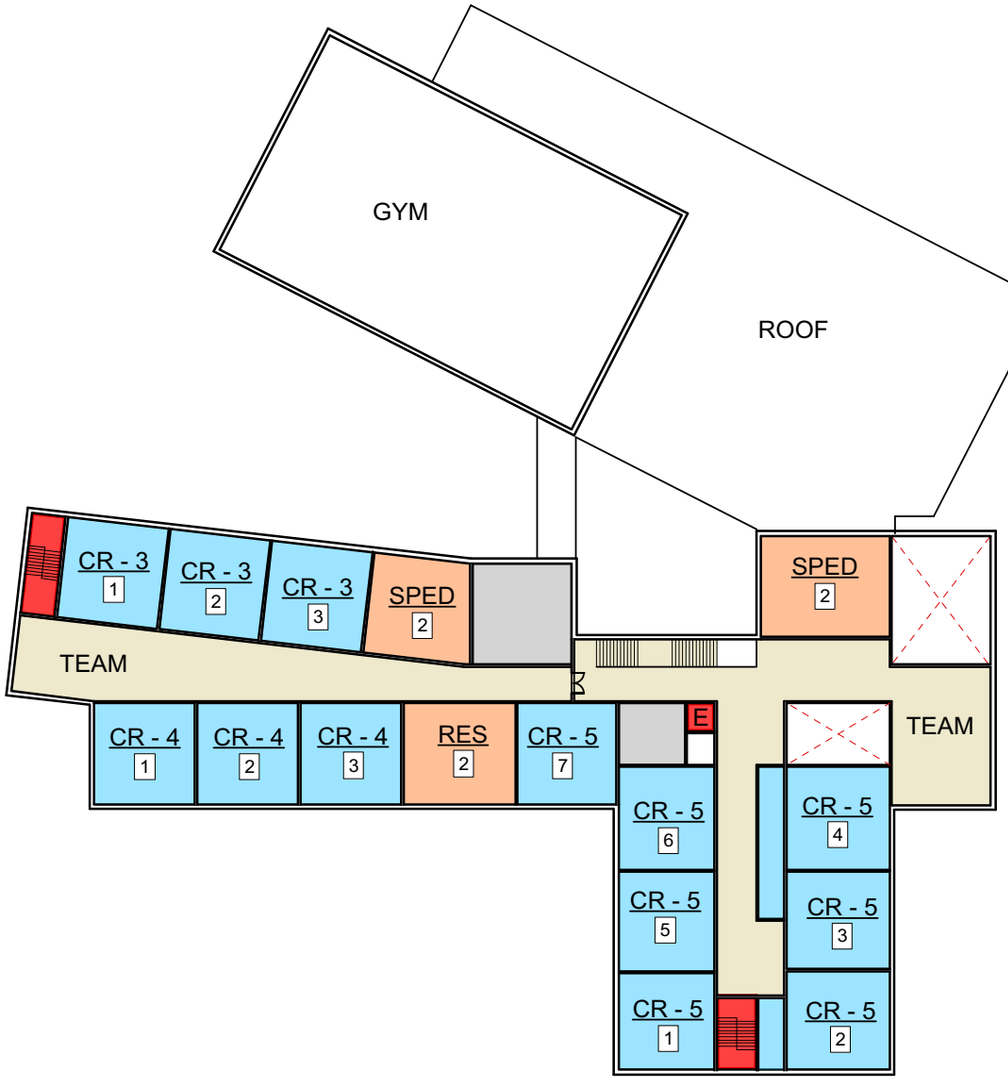


Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles New Construction Option 4A (410 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

Peebles New Construction Option 4A (410 students)

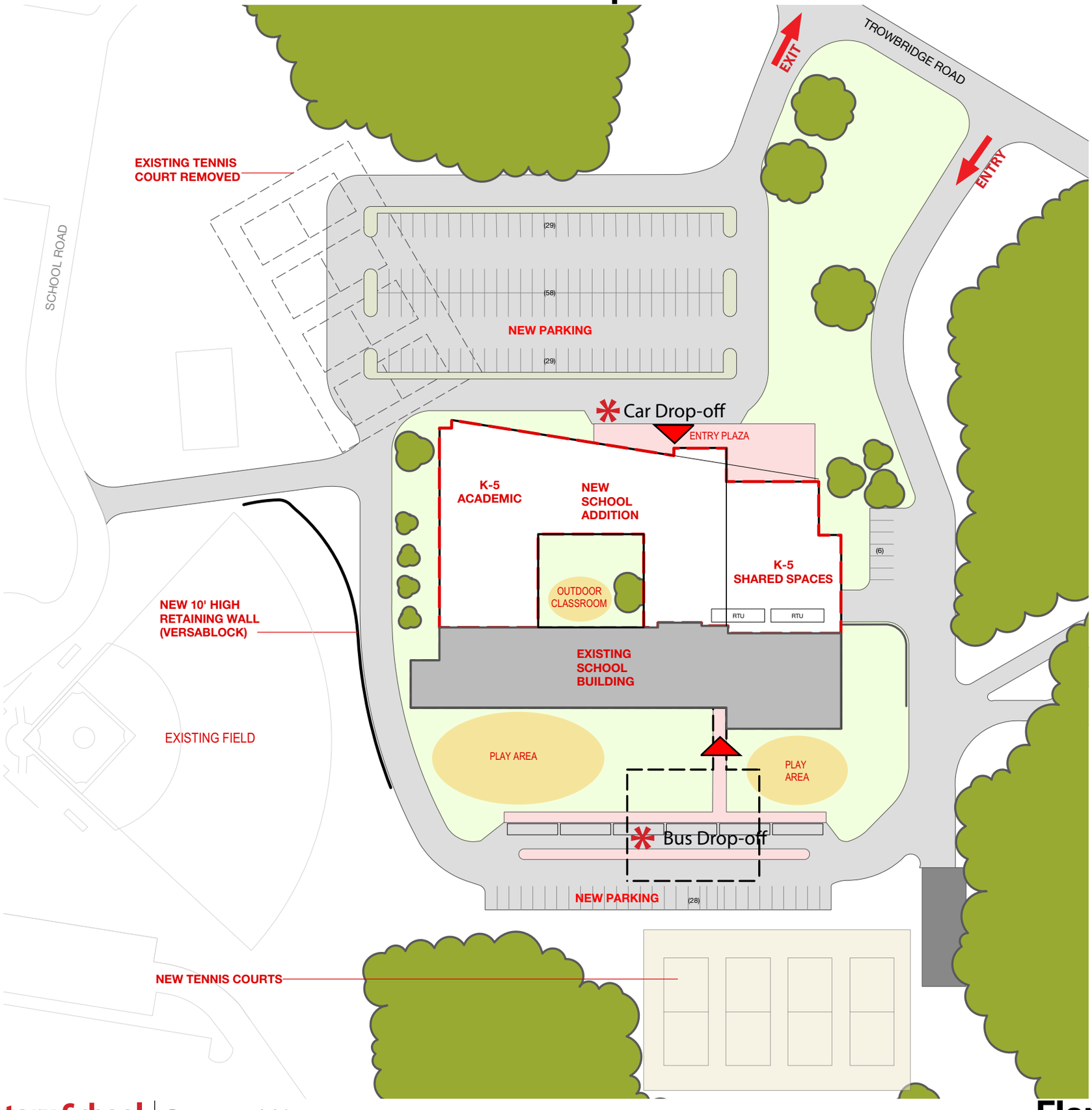
Pros:

- Alleviates transition issue for 5th grade students; relieves space demand in middle school
- Maintains K-4 neighborhood school on Cape side of bridge and campus connectivity
- 5th grade in own wing creates upper elementary experience as preparation for middle school
- New Construction alternative with least disruption to students during construction
- Clear Articulation between Community and Academic wings; good community access
- Team Spaces promote interconnection
- Outdoor Classroom a beautiful, enclosed focal point for building; good access encourages use.
- Innovation Studio located along main axis; proximity to Art and to Media Center offers flexibility and opportunity for collaboration.
- Well-located Special Education spaces, Admin, and Gym; Stage between Gym and Caf offers flexibility
- Allows flexibility in building and site design

Cons:

- One-year transition for Bournedale 5th graders could be challenging
- Dynamics between K-4 students and 5th graders, with 5th grade representing 40% of population

Peebles Addition / Renovation Option 4B (410 students)

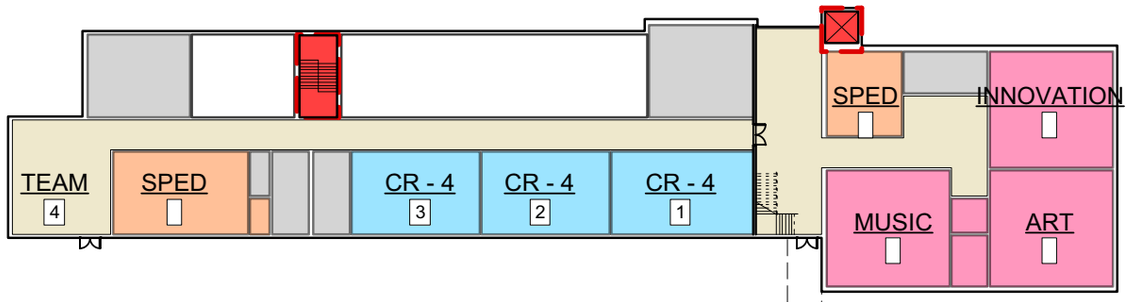


Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles Addition / Renovation Option 4B (410 students)

FIRST FLOOR PLAN



SECOND FLOOR PLAN

Peebles Elementary School | Bourne, MA

Flansburgh Architects

Peebles Addition / Renovation Option 4B (410 students)

Pros:

- Modernizes Peebles aesthetically and physically; provides new face of building
- Eliminates Annex, most deficient part of building
- Well-size courtyard provides secure outdoor access
- Main street connects community spaces
- Maintains clear articulation between Community and Academic Wings
- Reconstructed and safer parent and bus drop-offs

Cons:

- One-year transition for Bournedale 5th graders could be challenging
- Visible Learning, Classroom Neighborhoods, and Collaboration difficult in older building
- Innovation Lab tucked away on lower level
- Considerable disruption during construction
- Requires extensive phasing
- Potential noise issues from proximity of Gym to Admin suite and from Cafeteria to learning spaces below

PRELIMINARY COST MODELS

Preliminary Cost Models

		Option 1 (K-4) 250 students		Option 2 (PK-4) 725 students	Option 3 (PK-5) 885 students		Option 4 (K-5) 410 students	
		1A New	1G Add/Reno	2A Add/Reno	3A Add/Reno	3B Add/Reno	4A New	4B Add/Reno
Gross SF		57,248 SF		114,593 SF	131,382 SF		72,473 SF	
*Construction Cost $ (Hard Cost)	Building	$23.25M	$23.15M	$25.63M	$30.63M	$30.03M	$26.96M	$27.46M
	Hazmat/Demo	$1.71M	$1.24M	$0	$0	$0	$1.7M	$1.21M
	Sitework	$4.05M	$4.17M	$4.65M	$4.78M	$4.75M	$4.34M	$4.29M
	Total	$29.01M	$28.56M	$30.28M	$35.41M	$34.78M	$32.99M	$32.96M
Soft Cost $	Fees & Expenses	$5.9M	$5.47M	$5.61M	$6.38M	$6.28M	$6.5M	$6.13M
	FF&E	$.75M	$.75M	$1.02M	$1.5M	$1.5M	$1.23M	$1.23M
	Contingencies	$2.32M	$2.57M	$2.42M	$2.83M	$2.78M	$2.64M	$2.97M
Other Town Costs		no cost	no cost	TBD	TBD	TBD	no cost	no cost
TOTAL		$37.98M	$37.35M	$39.34M	$46.12M	$45.35M	$43.36M	$43.28M

Questions?

	Evaluation Criteria	Option 1A (250 students)	Option 1G (250 students)	Option 2A (725 students)	Option 3A (885 students)	Option 3B (885 students)	Option 4A (410 students)	Option 4B (410 students)
1	Size of School							
2	Grade Separation Issues							
3	Reinforces Campus Feel							
4	Opportunity for Collaboration & Mentoring							
5	District-wide Culture and Advantages							
6	Traffic Impact							
7	Separation of Community / Academic Uses							
8	Creation of Community Space							
9	Limits Disruption to Students							
10	Cost Effectiveness: Operation / Construction							
11	Maximum Building Efficiency							
12	Least Environmental Impact							
13	Most Beneficial Construction Schedule							
14	Best Site Option for Neighborhood Schools							
15	Adequate Play & Parking Areas							
16	Continued Use of Athletic Resources							
17	Maximum Score for NE-CHPS / LEED							
18	Best Space Adjacencies							
19	Best Separation of Parent / Bus / Service Circulation							
20	Resolves Geographic Separation by Canal							
21	Centralized Elementary Resources							
22	Centralized Campus Resources							
23	Advantages to Middle School							
24	Maximize MSBA Reimbursement							

Ranking: 3 for most favorable, 2 for acceptable, 1 for least favorable

Appendix

A. Copy of Statement of Interest
B. Copy of MSBA Board Action Letter
C. Copy of MSBA Enrollment Letter
D. Cost Estimate Details

[redacted] A. Copy of Statement of Interest

Massachusetts School Building Authority

School District Bourne

District Contact Edward Donoghue TEL: (508) 759-0660

Name of School James F Peebles Elem

Submission Date 1/9/2012

SOI CERTIFICATION

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

- The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.
- The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.
- The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for a portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.
- The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students.
- After the district completes and submits this SOI electronically, the district must sign the required certifications and submit one signed hard copy of the SOI to the MSBA, with all of the required documentation described under the "Vote" tab, on or before the deadline.
- The district will schedule and hold a meeting at which the School Committee voted, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI.
- The district will schedule and hold a meeting at which the City Council/Board of Aldermen, Board of Selectmen/equivalent governing body voted, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI.
- On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The MSBA's vote template, which contains specific reference to the school and the priorities for which the SOI is being submitted, will be used, and the minutes will be signed by the Chair.
- The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline.
- The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation and certification signatures in a format acceptable to the MSBA.

LOCAL CHIEF EXECUTIVE OFFICER/DISTRICT SUPERINTENDENT/SCHOOL COMMITTEE CHAIR (E.g., Mayor, Town Manager, Board of Selectmen)

Chief Executive Officer	School Committee Chair	Superintendent of Schools
(print name)	(print name)	(print name)
(signature)	(signature)	(signature)
Date	Date	Date

Massachusetts School Building Authority

School District Bourne

District Contact Edward Donoghue TEL: (508) 759-0660

Name of School James F Peebles Elem

Submission Date 1/9/2012

Note

The following Priorities have been included in the Statement of Interest:

1. ė Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
2. ė Elimination of existing severe overcrowding.
3. ė Prevention of the loss of accreditation.
4. ė Prevention of severe overcrowding expected to result from increased enrollments.
5. ė Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
6. ė Short term enrollment growth.
7. þ Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
8. ė Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

Potential Project Scope: Potential New School

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI:

District Goal for School: Please explain the educational goals of any potential project at this school

The goal of this project is to replace the existing Peebles Elementary School with an improved facility that will ensure that the children of Bourne are provided their education in an atmosphere where the shortcomings of a building will not adversely affect their educational experience on a daily basis. The lack of adequate space and a suitable learning environment in many cases may shortchange the students who attend the school. If the goal of replacing Peebles is able to be accomplished then the issues and facility challenges outlined below would be addressed and rectified. Library: A problem for the school is that the library is used almost exclusively for signing out books. There is no room for classes to complete research based assignments using computers as the library is housed in a space that was previously a classroom. The technology in this area is severely lacking as well. In addition, there is room for only one class at a time thereby restricting the time for research by whole classes. The music and art programs are compromised due to the limitations of the current building. Music: The music room is currently located in a girls' locker room which is located adjacent to the gym. During inclement weather, classes in the music room are impeded due to the noise created in the gymnasium. There is no direct access to this room forcing students to enter through a copy room or the gymnasium. Art: The art program is housed in a partitioned room located inside the cafeteria. This location creates difficult conditions for the teacher and students during the lunch time hours of 11:00 AM – 1:00 PM. In addition, storage of materials and projects are sometimes compromised as this room was not designed for this purpose. Accessibility: Due to the age and

structure of the building, access to all areas of the building are cumbersome at best. In order for a student in a wheelchair to reach the cafeteria, they must navigate a series of two stair lifts and an elevator. In at least one case, it impedes the travel of the other students as the stair lift blocks access to the stairs. This has a negative impact on all children as time on learning is decreased due to the time needed for travel. 21st Century Learning: The overall infrastructure of Peebles limits the accessibility that parents have to their child's teacher as there is no capability for direct phone services such as voicemail for the teachers. As technology changes and advances, it becomes increasingly difficult for staff to adapt and to make the changes. In addition, lighting and heating issues continue to plague the building. Space Limitations: The lack of a quality acoustically designed auditorium with seats limits the students' access to performances and whole school assemblies. Currently, students must walk to the high school to attend school performances. In addition, performance demonstrations are limited. When any type of school performance does take place, it displaces the physical education teacher and depending on weather could force the physical education lesson to take place in a classroom or hallway. The lack of areas designed for flexible and small group space to provide Tier II and III interventions is also a concern. All of these problems have a direct impact on the students currently attending Peebles Elementary School.

District's Proposed Schedule: What is the District's proposed schedule to achieve the goal(s) stated above?

12/7/2011 - School Committee scheduled to vote on the Statement of Interest. 12/12/2011 - Proposed School Committee presentation of SOI to Town Capital Outlay Committee for support. 12/13/2011 - SOI presented to Board of Selectman for vote. 1/6/2012 - SOI is submitted to MSBA. 2013 - SOI is submitted to Town Meeting for approval. 2013 - Formation of a School Building Committee.

Is this part of a larger facilities plan? YES

If "YES", please provide the following:

Facilities Plan Date: 3/10/2009

Planning Firm: The Cecil Group, Inc.

Please provide an overview of the plan including as much detail as necessary to describe the plan, its goals and how the school facility that is the subject of this SOI fits into that plan:

The Cecil Group conducted site visits to all town owned facilities to determine the character and condition of Bourne's municipal buildings. The Cecil Group visited each site and toured each building identified by the Capital Outlay Committee, and prepared a Facility Assessment of each building. The facilities were evaluated based on their structural, architectural, mechanical and electrical condition and their location within the context of the Bourne community. These evaluations were used to determine the physical improvements that would be necessary to accommodate continued use, any possible expansion or change in use. Additionally, historical buildings were evaluated with special consideration given to their unique architectural character. No invasive or facility tests were performed during these assessments. The Cecil Group also distributed questionnaires to each municipal department that requesting information on how each department's facilities and spaces accommodated the department's needs. These questionnaires were used to help determine the current and future space needs of each department as well as critical relationships between town departments and facilities. The questionnaires provided every municipal department an opportunity to have their specific facility needs and issues incorporated into this facilities plan. In addition to surveying the department needs through the questionnaires, The Cecil Group conducted multiple interviews with various department heads and town representatives. These interviews were used to gain an expanded understanding of space needs, functional requirements, existing facilities constraints, and desired relationship proximities. These interviews were particularly helpful in obtaining feedback and evaluations from the department heads regarding potential facility alternatives. Throughout this process The Cecil Group has worked closely with the Capital Outlay Committee. The Cecil Group has met with the committee at regular intervals and worked closely with its members as municipal facilities have been evaluated and renovation and relocation options assessed. The Capital Outlay Committee has provided The Cecil Group with the constructive feedback and critical insight throughout the evaluation and alternative analysis process. The information gathered by The Cecil Group, through facilities evaluations, department questionnaires, interviews with department heads, and continuous work with the Capital Outlay Committee, has been analyzed and evaluated. The findings of these assessments clearly demonstrate a need for new, renovated and reorganized space within Bourne's municipal buildings. The Peebles Elementary School The Peebles School is in fair condition. The facility has maintenance requirements, including heating system upgrades, electrical system upgrades, and building envelope repair requirements. Additionally the school has critical space

requirements, which have required the use of modular classrooms to handle the current student enrollment. The Peebles School has an excellent civic location and is situated directly adjacent to Bourne's Middle School and the High School.

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 21 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 25 students per teacher

Is there overcrowding at the school facility? NO

If "YES", please describe in detail, including specific examples of the overcrowding.

Has the district had any recent teacher layoffs or reductions? NO

If "YES", how many teaching positions were affected? 0
At which schools in the district?
Please describe the types of teacher positions that were eliminated (e.g., art, math, science, physical education, etc.).

Has the district had any recent staff layoffs or reductions? NO

If "YES", how many staff positions were affected? 0
At which schools in the district?
Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

Please provide a description of the program modifications as a consequence of these teacher and/or staff reductions,including the impact on district class sizes and curriculum.

Does Not Apply

Please provide a detailed description of your most recent budget approval process including a description of any budget reductions and the impact of those reductions on the district's school facilities, class sizes, and educational program.

The purpose of the Bourne school budget development process is to estimate the funds required to operate the district's educational and support programs. Budget development begins with the formulation and distribution of individual school and department budget preparation materials and the synthesis of these into the annual Superintendent's recommended budget. The budget incorporates the Bourne School Committee's requests/input and the district's long range plans to provide an excellent education to the children of Bourne. The Superintendent submits the budget documents to the Budget Sub Committee in February/March. The School Committee's Finance Sub-Committee conducts public budget hearings to thoroughly review the document. In late March, the School Committee votes on the budget document. Once approved, the budget is presented to the Town's Finance Committee and Board of Selectman for review and support. For FY12 the budget required to maintain a level service budget was $22,671,550 an increase of over 9% from the FY11 school budget of $20,730,000. The town finances did support the 9% growth in the school budget. During a lengthy 2-3 months process of examining all budget line items for potential reduction and integrating many costs savings measures the final school budget for FY12 is $20,052,000. This actually represents a year to year budget reduction of 3.27% or $678,000. The school district was able to absorb this significant drop in funding and still maintain all educational programs and have little impact on class sizes. The following costs saving initiatives were implemented to achieve the required savings: -Vendor changes resulted in significant SPED transportation savings. - Collaborative purchasing opportunities for custodial/office/school supplies were very successful. -Conversion of heating plants from oil to natural gas provided significant reductions in fuel line items. - Staff retirements provided reduced payroll expenses.

General Description

BRIEF BUILDING HISTORY: Please provide a detailed description of when the original building was built, and the date(s) and project scopes(s) of any additions and renovations (maximum of 5000 characters).

The original building a two story structure built into the earth was constructed in 1953. In 1959 a two story permanent addition was constructed that is connected to the original building by a two story curtain wall corridor.

TOTAL BUILDING SQUARE FOOTAGE: Please provide the original building square footage PLUS the square footage of any additions.

38389

SITE DESCRIPTION: Please provide a detailed description of the current site and any known existing conditions that would impact a potential project at the site (maximum of 5000 characters).

The Peebles Elememtary School is located south of Trowbridge Road on the Cape side of the canal. The school is part of the larger Bourne School campus that includes Bourne High School, Bourne Middle School, a waste water treatment plant that serves all the schools, various athletic facilties and extensive parking facilities for all of the buildings and activities.The entire campus is roughly 80 acres of which the Peebles School, including the adjacent maintenance area, occupies approximatley 8.6 acres.
There is suitable land avaiable on this site to construct a new school.

BUILDING ENVELOPE: Please provide a detailed description of the building envelope, types of construction materials used, and any known problems or existing conditions (maximum of 5000 characters).

A large portion of both existing buildings is brick masonry unit (CMU) backup. The 1953's brick masonry is laid in a running pattern while the 1959 building has a Flemish bond. Evidence exist that a large portion of the brick mortar on the 1953 building was repaired and re-pointed. However, the mortar in the repaired areas was not matched well to the existing. The areas of re-pointing are very obvious and unsightly. There is evidence of effloresence, exhibited by the white chalky staining on several areas of masonry. This indicates that water infiltration still exists. These problems were not remedied with the masonry repairs. All exterior sealant joints are past their useful life expectancy and should be removed and replaced.
Signs of masonry stress cracks exist and needs to be repaired and/or replaced. Some cracks have developed due to a lack of proper expansion joints at the corners of masonry walls.
There is, however, a much more serious masonry failure occurring on the 1959 building. Severe cracks and spalling have occurred on both sides of the doorway to egress stairway in the 1959 building. These cracks have translated completely through the assembly to the interior, causing water infiltration and efflorescence in the stairway.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS ? YES
Year of Last Major Repair or Replacement: 1995
Description of Last Major Repair or Replacement:
The exterior walls on the south side of 1953 building were separating from the structure and had to be reattached.

Has there been a Major Repair or Replacement of the ROOF? YES
Year of Last Major Repair or Replacement: 1998
Type Of ROOF: Asphalt Shingles
Description of Last Major Repair or Replacement:
The roof on the original 1953 building was replaced.

Has there been a Major Repair or Replacement of the WINDOWS? NO
Year of Last Major Repair or Replacement: 0
Type Of WINDOWS:
Description of Last Major Repair or Replacement:

MECHANICAL and ELECTRICAL SYSTEMS: Please provide a detailed description of the current mechanical and electrical systems and any known problems or existing conditions (maximum of 5000 characters).

A feasability study update report from 2009 reviewed the current condition of the mechanical & electrical systems and highlighted numerous issues.
Boiler Room
Boiler #1 is original to the building and in excess of 50 years old, has extensive surface contamination and does appear to have reached its maximum serviceable life.
Slight surface contamination on shells of boiler #2 and on mud drums.
Blown down receiver appears to have been abandoned in place and as it presently exists boilers are not blown down which could prematurely cause failure of #2 boiler.
Combustion air handling unit is extremely antiquated.
Possibly asbestos insulation on breeching.
Must confirm that a liner is in place in masonry chimney.
Steam piping is in excess of 50 years old and has reached its maximum serviceable life.
Many sections of condensate piping and feed water piping in boiler room not insulated.
Trench which circulates throughout the building to house steam and condensate piping has a dirt floor with no vapor barrier and does not appear to be properly ventilated.
Extensive surface contamination on hot water heating pumps serving 1959 addition.
Automatic temperature control system is extremely antiquated and in need of replacement.
Electrical
Electrical Distribution System
The existing electrical service consists of a 600 AMP, 120/208 volt, 3Ø, 4 wire main disconnect switch manufactured by Square D. The service is fed underground from a utility pole.
The existing 600 AMP service is located in the boiler room. Service consists of main disconnect switch and one (1) distribution fused switch panel board.
Existing lighting and power panels are circuit breaker type and are rated at 120/208 volt, 3Ø, 4 wire. Panel boards are provided throughout the school.
Interior Lighting System
Existing classroom, corridor, kitchen, cafeteria and office lighting consists of 1’ x 4’ surface mounted prismatic fluorescent fixtures. Lighting in the boiler room consists of surface incandescent fixtures. Toilet rooms have incandescent surface mounted fixtures.
Lighting in the gym consists of HID low bay fixtures and 12” square incandescent fixtures. Stage lighting consists of pendant mounted incandescent fixtures.
Computer classroom lighting consists of pendant mounted louvered fluorescent fixtures. Upper media center/library consists of pendant mounted prismatic fluorescent fixtures.

Has there been a Major Repair or Replacement of the BOILERS? YES
Year of Last Major Repair or Replacement: 1998
Description of Last Major Repair or Replacement:
One of the two original boilers was replaced. The original boiler remaining is an H.B. Smth cast iron boiler installed in 1953.

Has there been a Major Repair or Replacement of the HVAC SYSTEM ? NO
Year of Last Major Repair or Replacement: 0
Description of Last Major Repair or Replacement:

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? NO
Year of Last Major Repair or Replacement: 0
Description of Last Major Repair or Replacement:

BUILDING INTERIOR: Please provide a detailed description of the current building interior including a description of the flooring systems, finishes, ceilings, lighting, etc. (maximum of 5000 characters).

A feasability study update report from 2009 noted numerous interior shortcomings in the building, many are listed below.
•Evidence of minor cracking in classrooms
•Separation is occurring in several areas where masonry walls are pulling away from columns and beams – this requires immediate attention.
•Peeling paint
•Masonry failure occurring in the egress stair in the 1959 building
•Interior doors and hardware are showing their age (1953 building); veneer ply's are splitting off.
•The doors do not carry any U.L. fire ratings; therefore, all must be replaced that require rated separations. Most corridor doors still have single pan plate glass vision lites and are serious hazard to students if damaged.
•Panic hardware is outdated and does not comply with current codes.
•Typically, all ceilings exhibit some extent of staining, which can be attributed to various roof leaks. The ceiling system in the lower level of the 1953 building is painted plaster. Some areas have been poorly patched and are in need of repair.
•Vinyl Asbestos Tile (VAT) is extremely worn and cracked in many areas. Some areas of intense traffic including doorways and corridors, are worn to the point of failure; exposing the concrete below.
•Some VAT patching has occurred, although the underlying problems, including cracking, continue to translate through the patched floor.
•The toilet rooms in the 1953 building have ceramic tile and are very worn. Areas of the tile appear to be sinking and collecting dirt, while other areas exhibit cracks.
•Soffits over the toilets continue to peel, despite attempts to repair and re-paint.
•New toilet partitions were installed; however, they do not comply with handicap accessibility regulations.
•Although efforts were made, there are no handicapped toilet facilities that comply with current regulations. Also, there are an insufficient number of fixtures to support the occupancy load of the building.
•Toilet room sinks need to be replaced to comply with handicap accessibility code regulations; floor pedal controls are not permitted. In general, all toilet rooms are showing their age and need to be replaced in their entirety.
•New partitions are needed in the 1959 building toilet rooms and modified to allow for handicap accessibility.
•The lights in the 1959 building are original and should be updated with new energy-saving fixtures.
•Extensive wear of the treads and steel stringers will need to be repaired as well as the handrails, as they do not meet MAAB accessibility code. The guardrails at the landings will also need replacement to meet the proper height requirements.

PROGRAMS and OPERATIONS: Please provide a detailed description of the current programs offered and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc. (maximum of 5000 characters).

Peebles houses grades one through four. There is a Special Education Program as well as Title I services. Currently, we are not able to offer full day kindergarten due to the current enrollment in the building. Therefore, all kindergarten classes are held across town at the other elementary school with a morning and afternoon session. Title I services interrupt the use of the one computer lab as we are not able to maintain more than one lab of computers. All grades for Special Education are housed in one room. This can make for difficult conditions as three or four lessons may be occurring simultaneously as there are different grade levels in the room at the same time. Due to the location of the music room, a former girls' locker room off the gymnasium, music instruction is compromised. There is no space for a practice room and the storage area is the former shower stalls. This creates acoustical conditions which are not ideal for any music instruction, vocal or instrumental. The location of the art room, a partitioned room within the cafeteria, creates its own set of problems with the noise level during the 11 AM – 1 PM lunch time. In addition, since the room was not designed as a classroom, the storage area in the room consists of shelving and metal storage closets. There is limited space to store student projects and nearly all materials are stored in the open classroom.

CORE EDUCATIONAL SPACES: Please provide a detailed description of the Core Educational Spaces within the facility, a description of the number and sizes (in square feet) of classrooms, a description of science rooms/labs including ages and most recent updates, and a description of the media center/library (maximum of 5000 characters).

In the original building there are thirteen core classrooms. The eight rooms upstairs are all approximately 865 sq. ft. This consists of four fourth grade classrooms, a special education room, a Title I room, a computer lab, and a room for Title I. In

the lower level, there are five classrooms. All five classrooms house our first grade students. Four of the classrooms are approximately 486 sq. ft. The remaining classroom is approximately 432 sq. ft. The addition has two floors. There are six classrooms on each level. All classrooms in the addition are approximately 891 sq. ft. On the first floor, four classrooms house second graders, one classroom is used for our substantially separate population, and the OT/PT and School Psychologist share a room. The second floor houses four third grade classrooms, the library, and the foreign language room. The original building houses a set of lavatories on each level. In addition, the lower level includes two sets of individual bathrooms used by the first grade classrooms. There are no science labs in the building. The media center is currently housed in one of the classrooms listed in the addition. Therefore, it is approximately 891 sq. ft. It was formerly a classroom and as such has limited space for classes to complete research based assignments or for any type of storytelling activities. The library is used almost exclusively for checking books in and out.

CAPACITY and UTILIZATION: Please provide a detailed description of the current capacity and utilization of the school facility. If the school is overcrowded, please describe steps taken by the administration to address capacity issues. Please also describe in detail any spaces that have been converted from their intended use to be used as classroom space (maximum of 5000 characters).

The capacity of the building is in the range of 450 students. Currently there are 353 enrolled students. All classrooms are currently in use. Our reasoning for a new building is not related to current space issues with the exception of housing a full day kindergarten. If we were to house kindergarten, our media center, OT/PT services, as well as some Special Education and Title I services would need to be housed in areas that are not suited for educational purposes. Under our current set up, all services are carried out in a classroom setting.

MAINTENANCE and CAPITAL REPAIR: Please provide a detailed description of the district's current maintenance practices, its capital repair program, and the maintenance program in place at the facility that is the subject of this SOI. Please include specific examples of capital repair projects undertaken in the past, including any override or debt exclusion votes that were necessary (maximum of 5000 characters).

The district is currently in the process of developing a formalized short-term and long-term maintenance plan for all of our buildings. The past practice has been that the administration will review all capital expenditure requests for each facility on an annual basis. The administration with the review and approval of the school committee would then request funding for the selected projects through the Town's Capital Outlay Committee and the Town Meeting for approval. The most recent capital project funded for Peebles was the conversion of boiler installed in 1998 from oil to natural gas which will be completed in FY12.

Priority 7

Please provide a detailed description of the programs not currently available due to facility constraints, the state or local requirement for such programs, and the facility limitations precluding the programs from being offered.

The Peebles Elementary School is in need of replacement to ensure the Bourne Public Schools' mission of connecting students to their success. Due to the limitations of the current building, there are many educational dilemmas which the school has tried to overcome.

Library: A problem for the school is that the library is used almost exclusively for signing out books. There is no room for classes to complete research based assignments using computers as the library is housed in a space that was previously a classroom. The technology in this area is severely lacking as well. In addition, there is room for only one class at a time thereby restricting the time for research by whole classes.

The music and art programs are compromised due to the limitations of the current building.

Music: The music room is currently located in a girls' locker room which is located adjacent to the gym. During inclement weather, classes in the music room are impeded due to the noise created in the gymnasium. There is no direct access to this room forcing students to enter through a copy room or the gymnasium.

Art: The art program is housed in a partitioned room located inside the cafeteria. This location creates difficult conditions for the teacher and students during the lunch time hours of 11:00 AM – 1:00 PM. In addition, storage of materials and projects are sometimes compromised as this room was not designed for this purpose.

Accessibility: Due to the age and structure of the building, access to all areas of the building are cumbersome at best. In order for a student in a wheelchair to reach the cafeteria, they must navigate a series of two stair lifts and an elevator. In at least one case, it impedes the travel of the other students as the stair lift blocks access to the stairs. This has a negative impact on all children as time on learning is decreased due to the time needed for travel.

21st Century Learning: The overall infrastructure of Peebles limits the accessibility that parents have to their child's teacher as there is no capability for direct phone services such as voicemail for the teachers. As technology changes and advances, it becomes increasingly difficult for staff to adapt and to make the changes. In addition, lighting and heating issues continue to plague the building.

Space Limitations: The lack of a quality acoustically designed auditorium with seats limits the students' access to performances and whole school assemblies. Currently, students must walk to the high school to attend school performances. In addition, performance demonstrations are limited. When any type of school performance does take place, it displaces the physical education teacher and depending on weather could force the physical education lesson to take place in a classroom or hallway. The lack of areas designed for flexible and small group space to provide Tier II and III interventions is also a concern.

All of these problems have a direct impact on the students currently attending Peebles Elementary School.

Priority 7

Please describe the measures the district has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

Currently, the district only maintains a half day program for the kindergarten students. They are divided by their home school for transportation reasons. A goal of the current school committee is to develop a plan to institute full day kindergarten. As for the town's fifth grade population, they have remained at the middle school. This creates its own set of complications due to the age differential of the students. It also creates space issues within the middle school. At this time, there is little that can be done to rectify this situation. Some of the other issues associated with the limitations at Peebles are handled internally by building administration and staff. Using some open areas, cafeteria space, and hallways, they are able to complete Response to Intervention. The lack of an auditorium is sometimes overcome by using the high school auditorium. This can sometimes create a scheduling conflict as the high school auditorium is used as a classroom for the performing arts department. Some students in art and music are better equipped to handle the continuous noise from either the lunchroom or the gym. Both instructors do their best to overcome this restricting environment to make it tolerable for the students.

Priority 7

Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

In terms of the district, the limitations of the Peebles Elementary School create distinct district wide concerns. The first is the absence of a full day kindergarten program. Currently, the district houses a half day kindergarten program at the town's other elementary school. The half day program is a direct result of issues related to space and design at Peebles Elementary School. The second problem of district concern is the location of fifth grade students at the Bourne Middle School. By building a new elementary school, both problems could be tackled simultaneously. By changing the current structure of the elementary schools, the future construction of the new Peebles Elementary School would be able to house the upper elementary students allowing the town's second elementary school to maintain a full-time kindergarten. In addition, it would afford the district the opportunity to keep its fifth grade students in an elementary configuration. This would also help to insure that fifth grade students connect to their success.

Vote

Vote of Municipal Governing Body YES: 5 NO: 0 Date: 12/13/2011

Vote of School Committee YES: 6 NO: 0 Date: 12/7/2011

Vote of Regional School Committee YES: NO: Date:

Required Form of Vote

The following Form of Vote should be used by both the City Council/Board of Aldermen, Board of Selectmen/equivalent governing body AND the School Committee in voting to approve this Statement of Interest.

If a regional school district, the regional school committee should use the following Form of Vote.

Resolved: Having convened in an open meeting on _____, the

_____ *[City Council/Board of Aldermen, Board of Selectmen/Equivalent Governing Body, School Committee]* of _____*[City/Town/School District]*, in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated _____ for the _____*[Name of School]* located at

_____*[Address]* which describes and explains the following deficiencies and the priority category(s) for which

_____*[Name of City/Town/District]* may be invited to apply to the Massachusetts School Building Authority in the future

_____

_____

_____

_____

_____

_____*[Insert a description of the priority(s) checked off on the Statement of Interest and a brief description of the deficiency described therein for each priority];* and hereby further specifically acknowledges that by submitting this Statement of Interest, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the _____ *[Name of City/Town/District]* to filing an application for funding with the Massachusetts School Building Authority.

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

LOCAL CHIEF EXECUTIVE OFFICER/DISTRICT SUPERINTENDENT/SCHOOL COMMITTEE CHAIR (E.g., Mayor, Town Manager, Board of Selectmen)

Chief Executive Officer	**School Committee Chair**	**Superintendent of Schools**
(print name)	(print name)	(print name)
(signature)	(signature)	(signature)
Date	Date	Date

[redacted] B. Copy of MSBA Board Action Letter

Massachusetts School Building Authority

Steven Grossman
Chairman, State Treasurer

John K. McCarthy
Executive Director

January 14, 2015

Mr. Thomas M. Guerino, Town Administrator
Bourne Town Hall
24 Perry Avenue, Room 101
Buzzards Bay, MA 02532-3441

Re: Town of Bourne, James F. Peebles Elementary School

Dear Mr. Guerino:

I am pleased to report that the Board of the Massachusetts School Building Authority (the "MSBA") has voted to invite the Town of Bourne (the "Town") to collaborate with the MSBA in conducting a Feasibility Study for the James F. Peebles Elementary School. The Board's vote follows the Town's timely completion of all of the requirements of the MSBA's Eligibility Period.

I do want to emphasize that this invitation to collaborate on a Feasibility Study is ***not*** approval of a project, but is strictly an invitation to the Town to work with the MSBA to explore potential solutions to the problems that have been identified. Moving forward in the MSBA's process requires collaboration with the MSBA, and communities that "get ahead" of the MSBA without MSBA approval will not be eligible for grant funding. To qualify for any funding from the MSBA, local communities must follow the MSBA's statute, regulations, and policies which require MSBA collaboration and approval at each step of the process.

During the Feasibility Study phase, the Town and the MSBA will collaborate pursuant to the terms of the Feasibility Study Agreement to find the most fiscally responsible and educationally appropriate solution to the problems identified at the James F. Peebles Elementary School. The Feasibility Study, which will be conducted pursuant to the MSBA's regulations and policies, requires the Town to work with the MSBA on the procurement of an Owner's Project Manager and Designer, which will help bring the Town's Feasibility Study to fruition.

We will be contacting you soon to discuss these next steps in more detail. In the meantime, however, I wanted to share with you the Board's decision and provide a brief overview of what this means for the Town of Bourne.

I look forward to continuing to work with you as part of the MSBA's grant program. As always, feel free to contact me or my staff at (617) 720-4466 should you have any questions.

Sincerely,

John K. McCarthy
Executive Director

Cc: Legislative Delegation
Peter J. Meier, Chair, Bourne Board of Selectmen
Christopher Hyldburg, Chair, Bourne School Committee
Steven Lamarche, Superintendent, Bourne Public Schools
Edward Donoghue, Director of Business Services, Bourne Public Schools
File: 10.2 Letters (Region 6)

[redacted] C. Copy of MSBA Enrollment Letter

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

TOWN OF BOURNE
JAMES F. PEEBLES ELEMENTARY SCHOOL
STUDY ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the proposed project at the James F. Peebles Elementary School, the Town of Bourne hereby acknowledges and agrees that the design of preliminary options which may be evaluated as part of the feasibility study for the proposed project at the James F. Peebles Elementary School shall be based in accordance with the following:

Enrollment for Grades K-5 at a District-wide elementary school	Enrollment for Grades K-4 at a District-wide elementary school	Enrollment for Grades K-4 at the James F. Peebles Elementary School
885 students	725 students	250 students

The space allowance for each alternative evaluated shall assume no more than the enrollments as detailed in the table above. The Town of Bourne acknowledges and agrees that it has no right or entitlement to any particular study enrollment, square feet per student space allowance, or total square footage referenced in the table above for the preliminary options, and further acknowledges and agrees that it shall not bring any or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the study enrollment of the James F. Peebles Elementary School that it has acknowledged and agreed herein. The Town of Bourne further acknowledges and agrees that the study enrollment presented herein is only applicable to the evaluation of preliminary options conducted as part of the feasibility study for the proposed James F. Peebles Elementary School project. Upon receipt of the District's recommendation of a Preferred Schematic Design for the proposed James F. Peebles Elementary School project, and subject to the MSBA's review of such recommendation, the MSBA shall forward a Design Enrollment Certification with a design enrollment specific to the recommended and approved Preferred Schematic Design, which shall supersede this certification.

The undersigned, for themselves and the Town of Bourne, hereby certify that they have read and understand the contents of this Study Enrollment Certification and that each of the above statements is true, complete and accurate. The undersigned hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the Town of Bourne and to bind the Town of Bourne to its terms.

Chief Executive Officer

Duly Authorized Representative of School Committee

12/16/14
Date

12-16-14
Date

Superintendent of Schools

12.16.2014
Date

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

TOWN OF BOURNE
JAMES F. PEEBLES ELEMENTARY SCHOOL
STUDY ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the proposed project at the James F. Peebles Elementary School, the Town of Bourne hereby acknowledges and agrees that the design of preliminary options which may be evaluated as part of the feasibility study for the proposed project at the James F. Peebles Elementary School shall be based in accordance with the following:

Enrollment for Grades K-5 at a District-wide Elementary School	Enrollment for Grades K-4 at a District-wide Elementary School	Enrollment for Grades K-4 at the James F. Peebles Elementary School including District-wide Grade 5	Enrollment for Grades K-4 at the James F. Peebles Elementary School
885 students	725 students	410 students	250 students

The space allowance for each alternative evaluated shall assume no more than the enrollments as detailed in the table above. The Town of Bourne acknowledges and agrees that it has no right or entitlement to any particular study enrollment, square feet per student space allowance, or total square footage referenced in the table above for the preliminary options, and further acknowledges and agrees that it shall not bring any or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the study enrollment of the James F. Peebles Elementary School that it has acknowledged and agreed herein. The Town of Bourne further acknowledges and agrees that the study enrollment presented herein is only applicable to the evaluation of preliminary options conducted as part of the feasibility study for the proposed James F. Peebles Elementary School project. Upon receipt of the District's recommendation of a Preferred Schematic Design for the proposed James F. Peebles Elementary School project, and subject to the MSBA's review of such recommendation, the MSBA shall forward a Design Enrollment Certification with a design enrollment specific to the recommended and approved Preferred Schematic Design, which shall supersede this certification.

The undersigned, for themselves and the Town of Bourne, hereby certify that they have read and understand the contents of this Study Enrollment Certification and that each of the above statements is true, complete and accurate. The undersigned hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the Town of Bourne and to bind the Town of Bourne to its terms.

Chief Executive Officer

11/18/2015

Date

Duly Authorized Representative of School Committee

Nov 18, 2015

Date

Superintendent of Schools

11.18.2015

Date

[redacted] D. Cost Estimate Details

Feasibility Design Submission

Bourne Elementary Schools
Design Options

Bourne, MA

PM&C LLC
20 Downer Avenue
Hingham, MA 02043
(T) 781-740-8007
(F) 781-740-1012

Prepared for:

Flansburgh Architects

December 9, 2015

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

MAIN CONSTRUCTION COST SUMMARY

	Construction Start		Gross Floor Area	$/sf	Estimated Construction Cost
OPTION 0 - CODE REPAIRS RENOVATION TO PEEBLES ES					
RENOVATION			37,557	$186.54	$7,005,729
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK - Allowance for ADA upgrades only					$250,000
SUB-TOTAL	Sep-17		37,557	$213.75	$8,027,829
ESCALATION TO START - (assumed 4% PA)	7%				$561,948
DESIGN AND PRICING CONTINGENCY	12%				$963,339
SUB-TOTAL	Sep-17		37,557	$254.36	$9,553,116
GENERAL CONDITIONS		16	MTHS	$80,000	$1,280,000
GENERAL REQUIREMENTS	3.00%				$286,593
BONDS	1.25%				$119,414
INSURANCE	1.15%				$109,861
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$238,828
GMP CONTINGENCY	2%				$191,062
PHASING PREMIUM	3%				$286,593
TOTAL OF ALL CONSTRUCTION OPTION 0	Sep-17		37,557	$321.26	**$12,065,467**

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 1A - NEW CONSTRUCTION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			55,000	$8.00	$440,000
NEW BUILDING			57,248	$288.00	$16,487,465
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$2,892,109
SUB-TOTAL	Sep-17		57,248	$359.69	$20,591,674
ESCALATION TO START - (assumed 4% PA)	7%				$1,441,417
DESIGN AND PRICING CONTINGENCY	12%				$2,471,001
SUB-TOTAL	Sep-17		57,248	$428.03	$24,504,092
GENERAL CONDITIONS		26	MTHS	$80,000	$2,080,000
GENERAL REQUIREMENTS	3.00%				$735,123
BONDS	1.25%				$306,301
INSURANCE	1.15%				$281,797
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$612,602
GMP CONTINGENCY	2%				$490,082
TOTAL OF ALL CONSTRUCTION OPTION 1A	Sep-17		57,248	$506.74	**$29,009,997**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 1G - ADD/RENOVATION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			8,840	$8.00	$70,720
NEW ADDITION			19,691	$326.26	$6,424,334
RENOVATION			37,557	$186.54	$7,005,729
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$2,879,018
SUB-TOTAL	Sep-17		57,248	$299.61	$17,151,901
ESCALATION TO START - (assumed 4% PA)	7%				$1,200,633
DESIGN AND PRICING CONTINGENCY	12%				$2,058,228
SUB-TOTAL	Sep-17		57,248	$356.53	$20,410,762
GENERAL CONDITIONS		30	MTHS	$80,000	$2,400,000
GENERAL REQUIREMENTS	3.00%				$612,323
BONDS	1.25%				$255,135
INSURANCE	1.15%				$234,724
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$510,269
GMP CONTINGENCY	2%				$408,215
PHASING PREMIUM	3%				$612,323
TOTAL OF ALL CONSTRUCTION OPTION 1G	Sep-17		57,248	$444.45	**$25,443,751**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 2A - ADD/RENOVATION BOURNEDALE ES SITE

DEMOLISH EXISTING BUILDING					NIC
NEW ADDITION			46,493	$288.92	$13,432,806
RENOVATION			68,100	$67.84	$4,619,655
SITEWORK					$3,223,579
SUB-TOTAL	Sep-17		114,593	$185.67	$21,276,040
ESCALATION TO START - (assumed 4% PA)	7%				$1,489,323
DESIGN AND PRICING CONTINGENCY	12%				$2,553,125
SUB-TOTAL	Sep-17		114,593	$220.94	$25,318,488
GENERAL CONDITIONS		26	MTHS	$80,000	$2,080,000
GENERAL REQUIREMENTS	3.00%				$759,555
BONDS	1.25%				$316,481
INSURANCE	1.15%				$291,163
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$632,962
GMP CONTINGENCY	2%				$506,370
PHASING PREMIUM	1.5%				$379,777
TOTAL OF ALL CONSTRUCTION OPTION 2A	Sep-17		114,593	$264.28	**$30,284,796**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 3A - ADD/RENOVATION BOURNEDALE ES SITE

DEMOLISH EXISTING BUILDING					NIC
NEW ADDITION			63,282	$267.88	$16,952,160
RENOVATION			68,100	$67.84	$4,619,655
SITEWORK					$3,447,402
SUB-TOTAL	Sep-17		131,382	$190.43	$25,019,217
ESCALATION TO START - (assumed 4% PA)	7%				$1,751,345
DESIGN AND PRICING CONTINGENCY	12%				$3,002,306
SUB-TOTAL	Sep-17		131,382	$226.61	$29,772,868
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$893,186
BONDS	1.25%				$372,161
INSURANCE	1.15%				$342,388
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$744,322
GMP CONTINGENCY	2%				$595,457
PHASING PREMIUM	1.5%				$446,593
TOTAL OF ALL CONSTRUCTION OPTION 3A	Sep-17		131,382	$269.50	**$35,406,975**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 3B - ADD/RENOVATION BOURNEDALE ES SITE

DEMOLISH EXISTING BUILDING					NIC
NEW ADDITION			63,282	$261.20	$16,528,956
RENOVATION			68,100	$67.84	$4,619,655
SITEWORK					$3,398,603
SUB-TOTAL	Sep-17		131,382	$186.84	$24,547,214
ESCALATION TO START - (assumed 4% PA)	7%				$1,718,305
DESIGN AND PRICING CONTINGENCY	12%				$2,945,666
SUB-TOTAL	Sep-17		131,382	$222.34	$29,211,185
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$876,336
BONDS	1.25%				$365,140
INSURANCE	1.15%				$335,929
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$730,280
GMP CONTINGENCY	2%				$584,224
PHASING PREMIUM	1.5%				$438,168
TOTAL OF ALL CONSTRUCTION OPTION 3B	Sep-17		131,382	$264.73	**$34,781,262**

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

OPTION 4A - NEW CONSTRUCTION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			55,000	$8.00	$440,000
NEW BUILDING			72,473	$265.69	$19,255,087
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$3,046,509
SUB-TOTAL	Sep-17		72,473	$324.45	$23,513,696
ESCALATION TO START - (assumed 4% PA)	7%				$1,645,959
DESIGN AND PRICING CONTINGENCY	12%				$2,821,644
SUB-TOTAL	Sep-17		72,473	$386.09	$27,981,299
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$839,439
BONDS	1.25%				$349,766
INSURANCE	1.15%				$321,785
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$699,532
GMP CONTINGENCY	2%				$559,626
TOTAL OF ALL CONSTRUCTION OPTION 4A	Sep-17		72,473	$455.22	**$32,991,447**

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OPTION 4B - ADD/RENOVATION PEEBLES ES SITE

DEMOLISH EXISTING BUILDING			8,840	$8.00	$70,720
NEW ADDITION			34,886	$279.29	$9,743,158
RENOVATION			37,557	$248.24	$9,323,106
REMOVE HAZARDOUS MATERIALS - Allowance					$772,100
SITEWORK					$2,954,788
SUB-TOTAL	Sep-17		72,443	$315.61	$22,863,872
ESCALATION TO START - (assumed 4% PA)	7%				$1,600,471
DESIGN AND PRICING CONTINGENCY	12%				$2,743,665
SUB-TOTAL	Sep-17		72,443	$375.58	$27,208,008
GENERAL CONDITIONS		28	MTHS	$80,000	$2,240,000
GENERAL REQUIREMENTS	3.00%				$816,240
BONDS	1.25%				$340,100
INSURANCE	1.15%				$312,892
PERMIT					NIC
OVERHEAD AND FEE	2.5%				$680,200
GMP CONTINGENCY	2%				$544,160
PHASING PREMIUM	3%				$816,240
TOTAL OF ALL CONSTRUCTION OPTION 4B	Sep-17		72,443	$454.95	**$32,957,840**

Assumed CMr procurement

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This Feasibility cost estimate was produced from drawings, outline specifications and other documentation prepared by Flansburgh Architects and their design team dated November 23, 2015. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, construction manager's overhead, fee and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under Chapter 149a of the Massachusetts General Laws to pre-qualified construction managers, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

- Land acquisition, feasibility, and financing costs
- All professional fees and insurance
- Site or existing conditions surveys investigations costs, including to determine subsoil conditions
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items as indicated in the estimate
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction contingency

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	Construction Start	Gross Floor Area	$/sf	Estimated Construction Cost
OPTION 0 - CODE REPAIRS RENOVATION TO PEEBLES ES				
BUILDING (Including all Markups)		37,557	$280.44	$10,532,317
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,158,150
SITEWORK (Including all Markups)				$375,000
TOTAL OF ALL CONSTRUCTION OPTION 1A	Jan-00	57,248	$210.76	**$12,065,467**
OPTION 1A - NEW CONSTRUCTION PEEBLES ES SITE				
BUILDING (Including all Markups)		57,248	$406.08	$23,247,326
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,709,061
SITEWORK (Including all Markups)				$4,053,610
TOTAL OF ALL CONSTRUCTION OPTION 1A	Sep-17	57,248	$506.74	**$29,009,997**
OPTION 1G - ADD/RENOVATION PEEBLES ES SITE				
BUILDING (Including all Markups)		57,248	$344.85	$19,742,193
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,238,945
SITEWORK (Including all Markups)				$4,462,613
TOTAL OF ALL CONSTRUCTION OPTION 1G	Sep-17	57,248	$444.45	**$25,443,751**
OPTION 2A - ADD/RENOVATION BOURNEDALE ES SITE				
BUILDING (Including all Markups)		114,593	$223.70	$25,634,495
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$0
SITEWORK (Including all Markups)				$4,650,301
TOTAL OF ALL CONSTRUCTION OPTION 2A	Sep-17	114,593	$264.28	**$30,284,796**

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OPTION 3A - ADD/RENOVATION BOURNEDALE ES SITE				
BUILDING (Including all Markups)		131,382	$233.15	$30,631,977
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$0
SITEWORK (Including all Markups)				$4,774,998
TOTAL OF ALL CONSTRUCTION OPTION 3A	Sep-17	131,382	$269.50	**$35,406,975**
OPTION 3B - ADD/RENOVATION BOURNEDALE ES SITE				
BUILDING (Including all Markups)		131,382	$228.58	$30,031,028
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$0
SITEWORK (Including all Markups)				$4,750,234
TOTAL OF ALL CONSTRUCTION OPTION 3B	Sep-17	131,382	$264.73	**$34,781,262**
OPTION 4A - NEW CONSTRUCTION PEEBLES ES SITE				
BUILDING (Including all Markups)		72,473	$371.96	$26,957,122
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,696,940
SITEWORK (Including all Markups)				$4,337,385
TOTAL OF ALL CONSTRUCTION OPTION 4A	Sep-17	72,473	$455.22	**$32,991,447**
OPTION 4B - ADD/RENOVATION PEEBLES ES SITE				
BUILDING (Including all Markups)		72,443	$378.99	$27,455,420
HAZMAT REMOVALS/DEMOLITION (Including all Markups)				$1,213,661
SITEWORK (Including all Markups)				$4,288,759
TOTAL OF ALL CONSTRUCTION OPTION 4B	Sep-17	72,443	$454.95	**$32,957,840**

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CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 0 - CODE REQUIRED RENOVATION						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$0			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$61,659	**$61,659**	$1.64	0.9%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$76,250			
	B1020	Roof Construction	$100,000	**$176,250**	$4.69	2.5%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$95,088			
	B2020	Windows	$826,825			
	B2030	Exterior Doors	$29,901	**$951,814**	$25.34	13.6%
B30	**ROOFING**					
	B3010	Roof Coverings	$1,164,460			
	B3020	Roof Openings	$2,500	**$1,166,960**	$31.07	16.7%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$75,114			
	C1020	Interior Doors	$112,671			
	C1030	Specialties/Millwork	$98,566	**$286,351**	$7.62	4.1%
C20	**STAIRCASES**					
	C2010	Stair Construction	$10,000			
	C2020	Stair Finishes	$7,330	**$17,330**	$0.46	0.2%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$187,785			
	C3020	Floor Finishes	$262,899			
	C3030	Ceiling Finishes	$262,899	**$713,583**	$19.00	10.2%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$450,684	**$450,684**	$12.00	6.4%

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CONSTRUCTION COST SUMMARY

OPTION 0 - CODE REQUIRED RENOVATION

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$1,352,052	**$1,352,052**	$36.00	19.3%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$225,342	**$225,342**	$6.00	3.2%
D50	**ELECTRICAL**					
	D5010	Complete System	$1,126,710	**$1,126,710**	$30.00	16.1%
E10	**EQUIPMENT**					
	E10	Equipment	$0	**$0**	$0.00	0.0%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$279,222			
	E2020	Movable Furnishings	NIC	**$279,222**	$7.43	4.0%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$197,772			
	F2020	Hazardous Components Abatement	$0	**$197,772**	$5.27	2.8%
	TOTAL DIRECT COST (Trade Costs)			***$7,005,729***	*$186.54*	*100.0%*

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 0 - CODE REQUIRED RENOVATION							
	GROSS FLOOR AREA CALCULATION						
	First Floor			20,553			
	Second Floor			17,004			
	TOTAL GROSS FLOOR AREA (GFA)				**37,557** ***sf***		
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL					-	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	Allowance for patching of existing slabs disturbed by new work	**20,553**	sf	3.00	61,659		
	SUBTOTAL					61,659	
	TOTAL - FOUNDATIONS						**$61,659**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
B1010	**FLOOR CONSTRUCTION**						
	Allowance for gym floor joist seismic connections	**75**	loc	750.00	56,250		
	New penetrations to existing structure	**1**	ls	15,000.00	15,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					76,250	
B1020	**ROOF CONSTRUCTION**						
	Allowance for snow drift upgrades	**1**	ls	100,000.00	100,000		
	SUBTOTAL					100,000	
	TOTAL - SUPERSTRUCTURE						**$176,250**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*11,886*	sf				
	Interior skin						
	Allowance to insulate exterior	**11,886**	sf	8.00	95,088		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 0 - CODE REQUIRED RENOVATION							
	Exterior skin						
	Allowance to remove and replace existing brickwork	**11,886**	sf	45.00	NIC		
	Miscellaneous						
	New lintels and relieving angles	**11,886**	sf	10.00	NIC		
	Staging to exterior wall	**19,810**	sf	3.00	NIC		
	SUBTOTAL					95,088	
B2020	**WINDOWS**	*7,924*	sf				
	Curtainwall replace existing	**2,694**	sf	120.00	323,280		
	Premium for sunscreen and light shelf elements	**1**	ls	25,000.00	25,000		
	Windows/storefront replace existing	**5,230**	sf	85.00	444,550		
	Backer rod & double sealant	**2,615**	lf	9.00	23,535		
	Wood blocking at openings	**2,615**	lf	4.00	10,460		
	SUBTOTAL					826,825	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door	**2**	pr	8,000.00	16,000		
	HM doors, frames and hardware- Double	**1**	pr	3,600.00	3,600		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**77**	lf	9.00	693		
	Wood blocking at openings	**77**	lf	4.00	308		
	SUBTOTAL					29,901	
	TOTAL - EXTERIOR CLOSURE						**$951,814**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	Remove existing roof down to insulation	**24,664**	sf	3.00	73,992		
	New standing seam metal roofing	**24,664**	sf	26.00	641,264		
	Insulation; nailable	**24,664**	sf	11.00	271,304		
	1/2" dens-deck protection board	**24,664**	sf	2.00	49,328		
	Reinforced vapor barrier	**24,664**	sf	1.00	24,664		
	Rough blocking	**973**	lf	6.00	5,838		
	Miscellaneous Roofing						
	Roof fascia/cornice	**973**	lf	90.00	87,570		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	7,500.00	7,500		
	SUBTOTAL					1,164,460	
B3020	**ROOF OPENINGS**						
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					2,500	
	TOTAL - ROOFING						**$1,166,960**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Allowance to modify existing partitions	**37,557**	sf	2.00	75,114		
	SUBTOTAL					75,114	
C1020	**INTERIOR DOORS**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 0 - CODE REQUIRED RENOVATION							
	Allowance for ADA upgrades to doors and hardware	**37,557**	gsf	3.00	112,671		
	SUBTOTAL					112,671	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**37,557**	gsf	0.80	30,046		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**37,557**	sf	1.00	NIC		
	Room Signs	**37,557**	gsf	0.40	15,023		
	Fire extinguisher cabinets	**13**	ea	350.00	4,550		
	Corridor Lockers	**37,557**	gsf	1.00	NIC		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Miscellaneous metals throughout building	**37,557**	sf	0.50	18,779		
	Miscellaneous sealants throughout building	**37,557**	sf	0.75	28,168		
	SUBTOTAL					98,566	
	TOTAL - INTERIOR CONSTRUCTION						**$286,351**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Metal pan stair; egress stair; modify existing	**1**	flt	10,000.00	10,000		
	Concrete fill to stairs	**1**	flt	2,000.00	NIC		
	SUBTOTAL					10,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**1**	flt	3,000.00	3,000		
	Rubber tile at stairs - landings	**150**	sf	12.00	1,800		
	Rubber tile at stairs - treads & risers	**115**	lft	22.00	2,530		
	SUBTOTAL					7,330	
	TOTAL - STAIRCASES						**$17,330**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**37,557**	gsf	5.00	187,785		
	SUBTOTAL					187,785	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**37,557**	gsf	7.00	262,899		
	SUBTOTAL					262,899	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**37,557**	sf	7.00	262,899		
	SUBTOTAL					262,899	
	TOTAL - INTERIOR FINISHES						**$713,583**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	New elevator; 2 stop	**1**	ea	90,000.00	NIC		
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 0 - CODE REQUIRED RENOVATION							
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**37,557**	gsf	12.00	450,684		
	SUBTOTAL					450,684	
	TOTAL - PLUMBING						**$450,684**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**37,557**	gsf	36.00	1,352,052		
	SUBTOTAL					1,352,052	
	TOTAL - HVAC						**$1,352,052**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**37,557**	gsf	6.00	225,342		
	SUBTOTAL					225,342	
	TOTAL - FIRE PROTECTION						**$225,342**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**37,557**	gsf	30.00	1,126,710		
	SUBTOTAL					1,126,710	
	TOTAL - ELECTRICAL						**$1,126,710**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	ETR		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	ETR		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	ETR		
	Volleyball net and standards	**1**	ea	2,000.00	ETR		
	Telescoping bleachers	**1**	ls	25,000.00	ETR		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	150,000.00	ETR		
	Stage lighting and dimming	**1**	ls	75,000.00	ETR		
	Food Service equipment	**1**	ls	350,000.00	ETR		
	Electrically operated projection screens	**1**	loc	10,000.00	ETR		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					-	
	TOTAL - EQUIPMENT						
E20	***FURNISHINGS***						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**5,230**	sf	6.00	31,380		

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 0 - CODE REQUIRED RENOVATION							
	Counters, base cabinets, tall storage in classrooms and other rooms	**37,557**	gsf	6.00	225,342		
	SUBTOTAL					279,222	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$279,222**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	Extensive demolition of renovation areas; finishes, doors, MEP systems, casework and specialties	**37,557**	sf	4.00	150,228		
	Demo of exterior windows	**7,924**	sf	6.00	47,544		
	Demo of roof included in Divisions above						
	See main summary for demolition of existing buildings						
	SUBTOTAL					197,772	
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$197,772**

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GFA 57,248

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 1A - NEW ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$772,960			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$547,900	**$1,320,860**	$23.07	8.0%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$638,351			
	B1020	Roof Construction	$1,249,975	**$1,888,326**	$32.99	11.5%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$1,771,604			
	B2020	Windows	$1,617,061			
	B2030	Exterior Doors	$58,541	**$3,447,206**	$60.22	20.9%
B30	**ROOFING**					
	B3010	Roof Coverings	$910,113			
	B3020	Roof Openings	$12,500	**$922,613**	$16.12	5.6%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$1,085,059			
	C1020	Interior Doors	$228,992			
	C1030	Specialties/Millwork	$442,151	**$1,756,202**	$30.68	10.7%
C20	**STAIRCASES**					
	C2010	Stair Construction	$104,000			
	C2020	Stair Finishes	$14,660	**$118,660**	$2.07	0.7%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$286,240			
	C3020	Floor Finishes	$400,736			
	C3030	Ceiling Finishes	$400,736	**$1,087,712**	$19.00	6.6%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$90,000	**$90,000**	$1.57	0.5%
D20	**PLUMBING**					
	D20	Plumbing	$686,976	**$686,976**	$12.00	4.2%

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CONSTRUCTION COST SUMMARY

OPTION 1A - NEW ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$2,060,928	**$2,060,928**	$36.00	12.5%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$257,616	**$257,616**	$4.50	1.6%
D50	**ELECTRICAL**					
	D5010	Complete System	$1,717,440	**$1,717,440**	$30.00	10.4%
E10	**EQUIPMENT**					
	E10	Equipment	$706,200	**$706,200**	$12.34	4.3%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$426,726			
	E2020	Movable Furnishings	NIC	**$426,726**	$7.45	2.6%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$0			
	F2020	Hazardous Components Abatement	$0	**$0**	$0.00	0.0%
	TOTAL DIRECT COST (Trade Costs)			***$16,487,465***	*$288.00*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1A - NEW ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			40,137			
	Second Floor			17,111			
	TOTAL GROSS FLOOR AREA (GFA)					**57,248**	***sf***
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Strip footings - 3'-0" x 2'-0"						
	Excavation	**1,804**	cy	12.00	21,648		
	Store on site for reuse	**1,804**	cy	14.00	25,256		
	Backfill with new fill	**1,479**	cy	16.00	23,664		
	Formwork	**5,568**	sf	11.00	61,248		
	Re-bar, 10#/lf	**13,920**	lbs	1.20	16,704		
	Concrete material; 3,000 psi	**325**	cy	125.00	40,625		
	Placing concrete	**325**	cy	55.00	17,875		
	Foundation walls at exterior - 16" thick						
	Formwork	**11,136**	sf	12.50	139,200		
	Re-bar, 4#/sf	**22,272**	lbs	1.20	26,726		
	Concrete material; 4,000 psi	**253**	cy	135.00	34,155		
	Placing concrete	**253**	cy	65.00	16,445		
	Dampproofing foundation wall and footing	**8,352**	sf	1.90	NIC		
	Insulation to foundation walls; 2" thick	**5,568**	sf	2.50	13,920		
	Form shelf	**1,392**	lf	8.00	11,136		
	Thickened slab at interior load bearing walls						
	Excavation	**162**	cy	12.00	1,944		
	Store on site for reuse	**162**	cy	14.00	2,268		
	Backfill with new fill	**147**	cy	16.00	2,352		
	Formwork	**250**	sf	11.00	2,750		
	Re-bar, 10#/lf	**1,250**	lbs	1.20	1,500		
	Concrete material; 3,000 psi	**15**	cy	125.00	1,875		
	Placing concrete	**15**	cy	55.00	825		
	Exterior column footings, typical, 8' x 8' x 2'-0"						
	Excavation	**744**	cy	15.00	11,160		
	Store on site for reuse	**744**	cy	14.00	10,416		
	Backfill with new fill	**525**	cy	16.00	8,400		
	Formwork	**2,816**	sf	11.00	30,976		
	Re-bar,150/cy	**32,850**	lbs	1.20	39,420		
	Concrete material; 3,000 psi	**219**	cy	125.00	27,375		
	Placing concrete	**219**	cy	55.00	12,045		
	Set anchor bolts grout plates	**44**	ea	150.00	6,600		
	Interior column footings, typical, 9' x 9' x 2'-0"						
	Excavation	**734**	cy	15.00	11,010		
	Store on site for reuse	**734**	cy	14.00	10,276		
	Backfill with new fill	**501**	cy	16.00	8,016		
	Formwork	**2,664**	sf	11.00	29,304		
	Re-bar,150/cy	**27,750**	lbs	1.20	33,300		
	Concrete material; 3,000 psi	**233**	cy	125.00	29,125		
	Placing concrete	**233**	cy	55.00	12,815		
	Set anchor bolts grout plates	**37**	ea	150.00	5,550		
	Perimeter drainage system per geotech	**1,392**	lf	18.00	25,056		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1A - NEW ELEMENTARY SCHOOL							
	SUBTOTAL					772,960	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	New Slab on grade, 5" thick						
	Structural gravel fill, 8"	**992**	cy	30.00	29,760		
	Base course, 8" gravel	**992**	cy	35.00	34,720		
	Rigid insulation	**40,137**	sf	2.25	90,308		
	Vapor barrier	**40,137**	sf	0.75	30,103		
	Under slab drainage -allow	**40,137**	sf	2.50	100,343		
	Mesh reinforcing 15% lap	**46,158**	sf	0.80	36,926		
	Concrete - 5" thick	**656**	cy	125.00	82,000		
	Placing concrete	**656**	cy	45.00	29,520		
	Finishing and curing concrete	**40,137**	sf	1.50	60,206		
	Control joints - saw cut	**40,137**	sf	0.10	4,014		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	25,000		
	New loading dock - allow	**1**	ls	20,000.00	20,000		
	Equipment pads - allow	**1**	ls	5,000.00	5,000		
	SUBTOTAL					547,900	
	TOTAL - FOUNDATIONS						**$1,320,860**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
		12	lbs/sf				
B1010	**FLOOR CONSTRUCTION**	352	tns				
	Floor Structure - Steel:						
	Steel beams and columns; 13/SF	**111**	tns	3,400.00	377,400		
	Shear studs	**3,422**	ea	2.50	8,555		
	Floor Structure						
	3" Metal floor Deck	**17,111**	sf	4.00	68,444		
	WWF reinforcement	**19,678**	sf	0.80	15,742		
	Concrete Fill to metal deck; 5 1/4" Light weight	**273**	cy	170.00	46,410		
	Place and finish concrete	**17,111**	sf	2.00	34,222		
	Misc. perimeter angles	**1,392**	lf	25.00	34,800		
	Miscellaneous						
	Fire proofing to columns and beams	**17,111**	sf	2.50	42,778		
	Fire stopping floors	**2**	flrs	5,000.00	10,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1A - NEW ELEMENTARY SCHOOL							
	SUBTOTAL					638,351	
B1020	**ROOF CONSTRUCTION**						
	Roof Structure - Steel:						
	Steel beams/Joists; 12#/SF	**241**	tns	3,400.00	819,400		
	Roof Structure						
	3" Metal floor Deck @ roof	**28,837**	sf	4.00	115,348		
	Acoustic deck at gym, 3", type NA	**11,300**	sf	7.00	79,100		
	Roof Structure @ Mech Equipment/Low roof						
	WWF reinforcement	**9,315**	sf	0.80	7,452		
	Concrete Fill to metal deck; 5 1/4" Light weight	**129**	cy	170.00	21,930		
	Place and finish concrete	**8,100**	sf	3.00	24,300		
	Miscellaneous						
	Canopy framing - allow	**1**	ls	30,000.00	30,000		
	Roof screen framing - allow	**1,100**	sf	20.00	22,000		
	Fire proofing to columns, beams and deck	**40,137**	sf	3.25	130,445		
	SUBTOTAL					1,249,975	
	TOTAL - SUPERSTRUCTURE						**$1,888,326**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*23,008*	sf				
	Interior skin						
	8" metal stud backup	**18,724**	sf	8.00	149,792		
	Batt insulation in stud	**18,724**	sf	2.25	42,129		
	2 1/2" Rigid Insulation	**18,724**	sf	3.00	56,172		
	Air barrier	**18,724**	sf	6.00	112,344		
	Air barrier/flashing at windows	**3,341**	lf	7.00	23,387		
	Gypsum Sheathing	**18,724**	sf	2.75	51,491		
	Drywall lining to interior face of stud backup	**18,724**	sf	3.00	56,172		
	Interior skin @ Gym and stage						
	8" CMU backup	**4,284**	sf	22.00	94,248		
	2 1/2" Rigid Insulation	**4,284**	sf	3.00	12,852		
	Air barrier	**4,284**	sf	6.00	25,704		
	Premium for GF block	**4,284**	sf	5.00	21,420		
	Exterior skin						
	Brick veneer	**15,185**	sf	35.00	531,475		
	Metal panels	**7,823**	sf	60.00	469,380		
	Miscellaneous						
	Aluminum sign at main entrance	**1**	ls	10,000.00	10,000		
	Staging to exterior wall	**38,346**	sf	3.00	115,038		
	SUBTOTAL					1,771,604	
B2020	**WINDOWS**	*15,338*	sf				
	Curtainwall	**5,215**	sf	120.00	625,800		
	Premium for sunscreen and light shelf elements	**1**	ls	50,000.00	50,000		
	Windows/storefront	**10,123**	sf	85.00	860,455		
	Louvers (allowance)	**250**	sf	60.00	15,000		
	Backer rod & double sealant	**5,062**	lf	9.00	45,558		
	Wood blocking at openings	**5,062**	lf	4.00	20,248		
	SUBTOTAL					1,617,061	
B2030	**EXTERIOR DOORS**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1A - NEW ELEMENTARY SCHOOL							
	Glazed entrance doors including frame and hardware; double door	**5**	pr	8,000.00	40,000		
	HM doors, frames and hardware- Double	**2**	pr	3,600.00	7,200		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**157**	lf	9.00	1,413		
	Wood blocking at openings	**157**	lf	4.00	628		
	SUBTOTAL					58,541	
	TOTAL - EXTERIOR CLOSURE						**$3,447,206**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	PVC roof membrane fully adhered	**40,137**	sf	7.50	301,028		
	Insulation	**40,137**	sf	6.00	240,822		
	1/2" dens-deck protection board	**40,137**	sf	2.00	80,274		
	Reinforced vapor barrier	**40,137**	sf	1.00	40,137		
	Rough blocking	**1,587**	lf	6.00	9,522		
	Miscellaneous Roofing						
	Canopies - allow	**300**	sf	75.00	22,500		
	Roof screens - allow	**1,100**	sf	50.00	55,000		
	Roof fascia/cornice	**1,587**	lf	90.00	142,830		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	15,000.00	15,000		
	SUBTOTAL					910,113	
B3020	**ROOF OPENINGS**						
	Skylights, allow	**1**	ls	10,000.00	10,000		
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					12,500	
	TOTAL - ROOFING						**$922,613**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Reinforced masonry shear walls at Gymnasium & Stage	**6,870**	sf	23.00	158,010		
	Stairs/Elevator; 2 HR rated	**4,438**	sf	16.00	71,008		
	Corridors; GWB with 2 lyrs corridor side	**14,098**	sf	15.55	219,224		
	Demising; Metal stud w/ 2 layers gwb	**8,526**	sf	17.35	147,926		
	Partitions at Admin spaces, back of house etc.	**1,680**	sf	15.85	26,628		
	Sealants & caulking at partitions	**35,612**	sf	0.50	17,806		
	Rough blocking to partitions	**2,739**	lf	3.00	8,217		
	Glazed partitions/borrowed lights - allowance	**1**	ls	150,000.00	150,000		
	Miscellaneous partitions not yet shown	**57,248**	gsf	5.00	286,240		
	SUBTOTAL					1,085,059	
C1020	**INTERIOR DOORS**						
	Allowance for specialty doors, doors and hardware	**57,248**	gsf	4.00	228,992		
	SUBTOTAL					228,992	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**57,248**	gsf	0.80	45,798		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1A - NEW ELEMENTARY SCHOOL							
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**57,248**	sf	1.00	57,248		
	Building directory	**1**	loc	3,000.00	3,000		
	Bronze dedication plaque	**1**	loc	2,500.00	2,500		
	Room Signs	**57,248**	gsf	0.40	22,899		
	Fire extinguisher cabinets	**19**	ea	350.00	6,650		
	Corridor Lockers	**57,248**	gsf	1.00	57,248		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	20,000		
	Library shelving				F,F & E		
	Display cases	**1**	ls	30,000.00	30,000		
	Guardrail at open to below spaces	**170**	lf	300.00	51,000		
	Miscellaneous metals throughout building	**57,248**	sf	1.00	57,248		
	Miscellaneous sealants throughout building	**57,248**	sf	1.25	71,560		
	SUBTOTAL					442,151	
	TOTAL - INTERIOR CONSTRUCTION						**$1,756,202**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Feature stair including rails and finishes	**1**	flt	60,000.00	60,000		
	Stage stairs, wood	**2**	flts	5,000.00	10,000		
	Metal pan stair; egress stair	**1**	flt	30,000.00	30,000		
	Concrete fill to stairs	**2**	flt	2,000.00	4,000		
	SUBTOTAL					104,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**2**	flt	3,000.00	6,000		
	Rubber tile at stairs - landings	**300**	sf	12.00	3,600		
	Rubber tile at stairs - treads & risers	**230**	lft	22.00	5,060		
	SUBTOTAL					14,660	
	TOTAL - STAIRCASES						**$118,660**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**57,248**	gsf	5.00	286,240		
	SUBTOTAL					286,240	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**57,248**	gsf	7.00	400,736		
	SUBTOTAL					400,736	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**57,248**	sf	7.00	400,736		
	SUBTOTAL					400,736	
	TOTAL - INTERIOR FINISHES						**$1,087,712**
D10	***CONVEYING SYSTEMS***						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1A - NEW ELEMENTARY SCHOOL							
D1010	**ELEVATOR**						
	New elevator; 2 stop	**1**	ea	90,000.00	90,000		
	SUBTOTAL					90,000	
	TOTAL - CONVEYING SYSTEMS						**$90,000**
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**57,248**	gsf	12.00	686,976		
	SUBTOTAL					686,976	
	TOTAL - PLUMBING						**$686,976**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**57,248**	gsf	36.00	2,060,928		
	SUBTOTAL					2,060,928	
	TOTAL - HVAC						**$2,060,928**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**57,248**	gsf	4.50	257,616		
	SUBTOTAL					257,616	
	TOTAL - FIRE PROTECTION						**$257,616**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**57,248**	gsf	30.00	1,717,440		
	SUBTOTAL					1,717,440	
	TOTAL - ELECTRICAL						**$1,717,440**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	10,000		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	39,200		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	45,000		
	Volleyball net and standards	**1**	ea	2,000.00	2,000		
	Telescoping bleachers	**1**	ls	25,000.00	25,000		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	150,000.00	150,000		
	Stage lighting and dimming	**1**	ls	75,000.00	75,000		
	Food Service equipment	**1**	ls	350,000.00	350,000		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					706,200	
	TOTAL - EQUIPMENT						**$706,200**
E20	***FURNISHINGS***						

PM&C

Bourne Elementary Schools 09-Dec-15
Design Options
Bourne, MA

Feasibility Design Submission GFA 57,248

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1A - NEW ELEMENTARY SCHOOL							
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**10,123**	sf	6.00	60,738		
	Counters, base cabinets, tall storage in classrooms and other rooms	**57,248**	gsf	6.00	343,488		
	SUBTOTAL					426,726	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$426,726**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL						
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 1A							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence	**2,900**	lf	14.00	40,600		
	Pavement/curbing removal - grind up asphalt to reuse	**116,200**	sf	0.80	92,960		
	Remove and dispose walkways	**1**	ls	10,000.00	10,000		
	Remove and dispose tennis courts	**25,600**	sf	2.00	51,200		
	Tree removal	**1**	ls	20,000.00	20,000		
	Misc. Tree Protection	**1**	ls	5,000.00	5,000		
	Remove and dispose of existing drainage structures and utilities	**1**	ls	40,000.00	40,000		
	SUBTOTAL					$259,760	
	Site Earthwork						
	Construction entrances/wheel washes (allowance)	**1**	loc	15,000.00	15,000		
	Strip topsoil, store on site for reuse	**7,444**	cy	8.00	59,552		
	Cut/fill	**33,333**	cy	6.00	199,998		
	Fine grading	**27,169**	sy	0.50	13,585		
	Silt fence/erosion control (allowance)	**2,900**	lf	12.00	34,800		
	Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
	Hazardous Waste Remediation						
	Removal of UST and propane tanks	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$382,935	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots						
	Bituminous concrete paving	*100,821*					
	gravel base; 12" thick	**3,734**	cy	35.00	130,690		
	bituminous concrete; 4" thick	**11,202**	sy	25.00	280,050		
	6"x18" granite curb	**6,876**	lf	32.00	220,032		
	Single solid lines, 4" thick	**159**	space	25.00	3,975		
	Wheelchair Parking	**10**	space	75.00	750		
	Crosswalk Hatching	**2**	loc	900.00	1,800		
	Other road markings	**1**	ls	7,500.00	7,500		
	HC curb cuts	**4**	loc	1,100.00	4,400		
	New entrance sign	**1**	ls	10,000.00	10,000		
	New traffic signs	**1**	ls	5,000.00	5,000		
	SUBTOTAL					$664,197	
	Pedestrian paving						
	Bituminous concrete paving	*10,000*	sf				
	gravel base; 12" thick	**370**	cy	35.00	12,950		
	bituminous concrete; 3" thick	**1,111**	sy	28.00	31,108		
	Concrete Pavers						
	Concrete pavers						
	Precast concrete pavers	**9,500**	sf	16.00	152,000		
	gravel base; 8" thick	**236**	cy	35.00	8,260		
	dry pack; 2" thick	**56**	cy	22.00	1,232		
	concrete base; 4" thick	**9,500**	sf	5.00	47,500		
	Site Improvements						
	Bicycle racks	**10**	ea	800.00	8,000		
	45' Flag pole	**1**	loc	7,500.00	7,500		
	Flag pole base	**1**	loc	1,500.00	1,500		
	Ornamental trash/recycling receptacles	**10**	ea	800.00	8,000		
	Seating walls	**1**	ls	75,000.00	75,000		
	Segmented block retaining walls	**2,112**	sf	55.00	116,160		
	Dumpster enclosure	**100**	lf	60.00	6,000		
	Play surface	**2,000**	sf	16.00	32,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 1A							
	Track surface	**4,000**	sf	8.00	32,000		
	Play equipment	**1**	ls	120,000.00	120,000		
	Other sitework improvements	**1**	ls	25,000.00	25,000		
	Tennis Courts	*24,200*					
	Gravel base - 12" thick	**896**	cy	35.00	31,360		
	Tennis court surface - color coated acrylic over asphalt	**2,689**	sy	42.00	112,938		
	Nets and posts	**4**	courts	900.00	3,600		
	Vinyl CL Fencing; 10'	**643**	lf	55.00	35,365		
	Gate, single	**2**	ea	1,200.00	2,400		
	Landscaping & Plantings:						
	Spread existing amended topsoil @ seeded areas	**1,852**	cy	22.00	40,744		
	New seeded areas - L&S	**100,000**	sf	0.20	20,000		
	Trees	**17**	ea	1,000.00	17,000		
	Shrubs/plantings and Groundcover	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$997,617	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	New fire DI piping; 8"	**260**	lf	80.00	20,800		
	New fire DI piping; 6"	**260**	lf	70.00	18,200		
	New fire hydrant	**2**	loc	2,600.00	5,200		
	FD connection	**1**	loc	2,000.00	2,000		
	Gate valves	**4**	loc	750.00	3,000		
	Connect to existing line (Wet Taps)	**1**	loc	5,000.00	5,000		
	Sanitary sewer						
	8" sewer	**300**	lf	48.00	14,400		
	Connect to existing	**1**	loc	1,500.00	1,500		
	6,000 gal grease trap	**1**	loc	12,000.00	12,000		
	SMH	**3**	loc	4,000.00	12,000		
	Storm Sewer						
	Allowance for stormwater management	**1**	ls	350,000.00	350,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**250**	lf	25.00	6,250		
	New telecom service	**250**	lf	25.00	6,250		
	SUBTOTAL					$456,600	
G40	**SITE ELECTRICAL**						
	Power						
	Tap main power source	**1**	ea	3,000.00	3,000		
	Primary ductbank	**250**	lf	65.00	16,250		
	Primary cabling				Utility company		
	Pad mounted transformer				Utility company		
	Transformer pad	**1**	ea	3,000.00	3,000		
	Secondary ductbank						
	Secondary ductbank cabling	**50**	lf	300.00	15,000		
	Generator ductbank						
	Generator ductbank	**50**	lf	250.00	12,500		
	Communications						
	Communications ductbank	**250**	lf	85.00	21,250		
	Site Lighting/Power						
	Site lighting, roadway, parking, pathways and landscaping	**1**	ls	60,000.00	60,000		
	SUBTOTAL					$131,000	
SUBTOTAL SITE DEVELOPMENT OPTION 1A							**$2,892,109**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 19,691

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$421,491			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$287,547	**$709,038**	$36.01	11.0%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$41,137			
	B1020	Roof Construction	$669,427	**$710,564**	$36.09	11.1%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$760,473			
	B2020	Windows	$634,174			
	B2030	Exterior Doors	$58,541	**$1,453,188**	$73.80	22.6%
B30	**ROOFING**					
	B3010	Roof Coverings	$482,808			
	B3020	Roof Openings	$12,500	**$495,308**	$25.15	7.7%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$387,137			
	C1020	Interior Doors	$78,764			
	C1030	Specialties/Millwork	$167,266	**$633,167**	$32.16	9.9%
C20	**STAIRCASES**					
	C2010	Stair Construction	$42,000			
	C2020	Stair Finishes	$7,330	**$49,330**	$2.51	0.8%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$98,455			
	C3020	Floor Finishes	$137,837			
	C3030	Ceiling Finishes	$137,837	**$374,129**	$19.00	5.8%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$90,000	**$90,000**	$4.57	1.4%
D20	**PLUMBING**					
	D20	Plumbing	$236,292	**$236,292**	$12.00	3.7%

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 19,691

CONSTRUCTION COST SUMMARY

OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$708,876	**$708,876**	$36.00	11.0%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$88,610	**$88,610**	$4.50	1.4%
D50	**ELECTRICAL**					
	D5010	Complete System	$590,730	**$590,730**	$30.00	9.2%
E10	**EQUIPMENT**					
	E10	Equipment	$121,200	**$121,200**	$6.16	1.9%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$163,902			
	E2020	Movable Furnishings	NIC	**$163,902**	$8.32	2.6%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$0			
	F2020	Hazardous Components Abatement	$0	**$0**	$0.00	0.0%
	TOTAL DIRECT COST (Trade Costs)			***$6,424,334***	*$326.26*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			19,151			
	Second Floor			540			
	TOTAL GROSS FLOOR AREA (GFA)					**19,691**	***sf***
	A10 FOUNDATIONS						
A1010	**STANDARD FOUNDATIONS**						
	Strip footings - 3'-0" x 2'-0"						
	Excavation	**811**	cy	12.00	9,732		
	Store on site for reuse	**811**	cy	14.00	11,354		
	Backfill with new fill	**665**	cy	16.00	10,640		
	Formwork	**2,504**	sf	11.00	27,544		
	Re-bar, 10#/lf	**6,260**	lbs	1.20	7,512		
	Concrete material; 3,000 psi	**146**	cy	125.00	18,250		
	Placing concrete	**146**	cy	55.00	8,030		
	Foundation walls at exterior - 16" thick						
	Formwork	**5,008**	sf	12.50	62,600		
	Re-bar, 4#/sf	**10,016**	lbs	1.20	12,019		
	Concrete material; 4,000 psi	**114**	cy	135.00	15,390		
	Placing concrete	**114**	cy	65.00	7,410		
	Dampproofing foundation wall and footing	**3,756**	sf	1.90	NIC		
	Insulation to foundation walls; 2" thick	**2,504**	sf	2.50	6,260		
	Form shelf	**626**	lf	8.00	5,008		
	Thickened slab at interior load bearing walls						
	Excavation	**136**	cy	12.00	1,632		
	Store on site for reuse	**136**	cy	14.00	1,904		
	Backfill with new fill	**124**	cy	16.00	1,984		
	Formwork	**210**	sf	11.00	2,310		
	Re-bar, 10#/lf	**1,050**	lbs	1.20	1,260		
	Concrete material; 3,000 psi	**12**	cy	125.00	1,500		
	Placing concrete	**12**	cy	55.00	660		
	Exterior column footings, typical, 8' x 8' x 2'-0"						
	Excavation	**473**	cy	15.00	7,095		
	Store on site for reuse	**473**	cy	14.00	6,622		
	Backfill with new fill	**334**	cy	16.00	5,344		
	Formwork	**1,792**	sf	11.00	19,712		
	Re-bar,150/cy	**20,850**	lbs	1.20	25,020		
	Concrete material; 3,000 psi	**139**	cy	125.00	17,375		
	Placing concrete	**139**	cy	55.00	7,645		
	Set anchor bolts grout plates	**28**	ea	150.00	4,200		
	Interior column footings, typical, 9' x 9' x 2'-0"						
	Excavation	**159**	cy	15.00	2,385		
	Store on site for reuse	**159**	cy	14.00	2,226		
	Backfill with new fill	**109**	cy	16.00	1,744		
	Formwork	**576**	sf	11.00	6,336		
	Re-bar,150/cy	**6,000**	lbs	1.20	7,200		
	Concrete material; 3,000 psi	**50**	cy	125.00	6,250		
	Placing concrete	**50**	cy	55.00	2,750		
	Set anchor bolts grout plates	**8**	ea	150.00	1,200		
	Perimeter drainage system per geotech	**626**	lf	18.00	11,268		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for foundations against existing building	**218**	lf	340.00	74,120		
	SUBTOTAL					421,491	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	New Slab on grade, 5" thick						
	Structural gravel fill, 8"	**473**	cy	30.00	14,190		
	Base course, 8" gravel	**473**	cy	35.00	16,555		
	Rigid insulation	**19,151**	sf	2.25	43,090		
	Vapor barrier	**19,151**	sf	0.75	14,363		
	Under slab drainage -allow	**19,151**	sf	2.50	47,878		
	Mesh reinforcing 15% lap	**22,024**	sf	0.80	17,619		
	Concrete - 5" thick	**313**	cy	125.00	39,125		
	Placing concrete	**313**	cy	45.00	14,085		
	Finishing and curing concrete	**19,151**	sf	1.50	28,727		
	Control joints - saw cut	**19,151**	sf	0.10	1,915		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	25,000		
	New loading dock - allow	**1**	ls	20,000.00	20,000		
	Equipment pads - allow	**1**	ls	5,000.00	5,000		
	SUBTOTAL					287,547	
	TOTAL - FOUNDATIONS						**$709,038**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
		12	lbs/sf				
B1010	**FLOOR CONSTRUCTION**	119	tns				
	Floor Structure - Steel:						
	Steel beams and columns; 13/SF	**4**	tns	3,400.00	13,600		
	Shear studs	**108**	ea	2.50	270		
	Floor Structure						
	3" Metal floor Deck	**540**	sf	4.00	2,160		
	WWF reinforcement	**621**	sf	0.80	497		
	Concrete Fill to metal deck; 5 1/4" Light weight	**9**	cy	170.00	1,530		
	Place and finish concrete	**540**	sf	2.00	1,080		
	Misc. perimeter angles	**626**	lf	25.00	15,650		
	Miscellaneous						
	Fire proofing to columns and beams	**540**	sf	2.50	1,350		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL							
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					41,137	
B1020	**ROOF CONSTRUCTION**						
	Roof Structure - Steel:						
	Steel beams/Joists; 12#/SF	**115**	tns	3,400.00	391,000		
	Roof Structure						
	3" Metal floor Deck @ roof	**7,851**	sf	4.00	31,404		
	Acoustic deck at gym, 3", type NA	**11,300**	sf	7.00	79,100		
	Roof Structure @ Mech Equipment/Low roof						
	WWF reinforcement	**9,315**	sf	0.80	7,452		
	Concrete Fill to metal deck; 5 1/4" Light weight	**129**	cy	170.00	21,930		
	Place and finish concrete	**8,100**	sf	3.00	24,300		
	Miscellaneous						
	Canopy framing - allow	**1**	ls	30,000.00	30,000		
	Roof screen framing - allow	**1,100**	sf	20.00	22,000		
	Fire proofing to columns, beams and deck	**19,151**	sf	3.25	62,241		
	SUBTOTAL					669,427	
	TOTAL - SUPERSTRUCTURE						**$710,564**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*9,320*	sf				
	Interior skin						
	8" metal stud backup	**4,091**	sf	8.00	32,728		
	Batt insulation in stud	**4,091**	sf	2.25	9,205		
	2 1/2" Rigid Insulation	**4,091**	sf	3.00	12,273		
	Air barrier	**4,091**	sf	6.00	24,546		
	Air barrier/flashing at windows	**1,279**	lf	7.00	8,953		
	Gypsum Sheathing	**4,091**	sf	2.75	11,250		
	Drywall lining to interior face of stud backup	**4,091**	sf	3.00	12,273		
	Interior skin @ Gym and stage						
	8" CMU backup	**5,229**	sf	22.00	115,038		
	2 1/2" Rigid Insulation	**5,229**	sf	3.00	15,687		
	Air barrier	**5,229**	sf	6.00	31,374		
	Premium for GF block	**5,229**	sf	5.00	26,145		
	Exterior skin						
	Brick veneer	**6,151**	sf	35.00	215,285		
	Metal panels	**3,169**	sf	60.00	190,140		
	Miscellaneous						
	Aluminum sign at main entrance	**1**	ls	10,000.00	10,000		
	Staging to exterior wall	**15,192**	sf	3.00	45,576		
	SUBTOTAL					760,473	
B2020	**WINDOWS**	*5,872*	sf				
	Curtainwall	**1,996**	sf	120.00	239,520		
	Premium for sunscreen and light shelf elements	**1**	ls	25,000.00	25,000		
	Windows/storefront	**3,876**	sf	85.00	329,460		
	Louvers (allowance)	**250**	sf	60.00	15,000		
	Backer rod & double sealant	**1,938**	lf	9.00	17,442		
	Wood blocking at openings	**1,938**	lf	4.00	7,752		
	SUBTOTAL					634,174	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL							
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door	**5**	pr	8,000.00	40,000		
	HM doors, frames and hardware- Double	**2**	pr	3,600.00	7,200		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**157**	lf	9.00	1,413		
	Wood blocking at openings	**157**	lf	4.00	628		
	SUBTOTAL					58,541	
	TOTAL - EXTERIOR CLOSURE						**$1,453,188**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	PVC roof membrane fully adhered	**19,151**	sf	7.50	143,633		
	Insulation	**19,151**	sf	6.00	114,906		
	1/2" dens-deck protection board	**19,151**	sf	2.00	38,302		
	Reinforced vapor barrier	**19,151**	sf	1.00	19,151		
	Rough blocking	**821**	lf	6.00	4,926		
	Miscellaneous Roofing						
	Canopies - allow	**300**	sf	75.00	22,500		
	Roof screens - allow	**1,100**	sf	50.00	55,000		
	Roof fascia/cornice	**821**	lf	90.00	73,890		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	7,500.00	7,500		
	SUBTOTAL					482,808	
B3020	**ROOF OPENINGS**						
	Skylights, allow	**1**	ls	10,000.00	10,000		
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					12,500	
	TOTAL - ROOFING						**$495,308**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Reinforced masonry shear walls at Gymnasium & Stage	**3,120**	sf	23.00	71,760		
	Stairs/Elevator; 2 HR rated	**910**	sf	16.00	14,560		
	Corridors; GWB with 2 lyrs corridor side	**2,744**	sf	15.55	42,669		
	Demising; Metal stud w/ 2 layers gwb	**3,640**	sf	17.35	63,154		
	Partitions at Admin spaces, back of house etc.	**840**	sf	15.85	13,314		
	Sealants & caulking at partitions	**11,254**	sf	0.50	5,627		
	Rough blocking to partitions	**866**	lf	3.00	2,598		
	Glazed partitions/borrowed lights - allowance	**1**	ls	75,000.00	75,000		
	Miscellaneous partitions not yet shown	**19,691**	gsf	5.00	98,455		
	SUBTOTAL					387,137	
C1020	**INTERIOR DOORS**						
	Allowance for specialty doors, doors and hardware	**19,691**	gsf	4.00	78,764		
	SUBTOTAL					78,764	
C1030	**SPECIALTIES / MILLWORK**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL							
	Toilet Partitions and accessories	**19,691**	gsf	0.80	15,753		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**19,691**	sf	1.00	19,691		
	Building directory	**1**	loc	3,000.00	3,000		
	Bronze dedication plaque	**1**	loc	2,500.00	2,500		
	Room Signs	**19,691**	gsf	0.40	7,876		
	Fire extinguisher cabinets	**7**	ea	350.00	2,450		
	Corridor Lockers	**19,691**	gsf	1.00	19,691		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	20,000		
	Library shelving				F,F & E		
	Display cases	**1**	ls	15,000.00	15,000		
	Miscellaneous metals throughout building	**19,691**	sf	1.00	19,691		
	Miscellaneous sealants throughout building	**19,691**	sf	1.25	24,614		
	SUBTOTAL					167,266	
	TOTAL - INTERIOR CONSTRUCTION						**$633,167**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Stage stairs, wood	**2**	flts	5,000.00	10,000		
	Metal pan stair; egress stair	**1**	flt	30,000.00	30,000		
	Concrete fill to stairs	**1**	flt	2,000.00	2,000		
	SUBTOTAL					42,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**1**	flt	3,000.00	3,000		
	Rubber tile at stairs - landings	**150**	sf	12.00	1,800		
	Rubber tile at stairs - treads & risers	**115**	lft	22.00	2,530		
	SUBTOTAL					7,330	
	TOTAL - STAIRCASES						**$49,330**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**19,691**	gsf	5.00	98,455		
	SUBTOTAL					98,455	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**19,691**	gsf	7.00	137,837		
	SUBTOTAL					137,837	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**19,691**	sf	7.00	137,837		
	SUBTOTAL					137,837	
	TOTAL - INTERIOR FINISHES						**$374,129**
D10	***CONVEYING SYSTEMS***						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL							
D1010	**ELEVATOR**						
	New elevator; 2 stop	**1**	ea	90,000.00	90,000		
	SUBTOTAL					90,000	
	TOTAL - CONVEYING SYSTEMS						**$90,000**
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**19,691**	gsf	12.00	236,292		
	SUBTOTAL					236,292	
	TOTAL - PLUMBING						**$236,292**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**19,691**	gsf	36.00	708,876		
	SUBTOTAL					708,876	
	TOTAL - HVAC						**$708,876**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**19,691**	gsf	4.50	88,610		
	SUBTOTAL					88,610	
	TOTAL - FIRE PROTECTION						**$88,610**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**19,691**	gsf	30.00	590,730		
	SUBTOTAL					590,730	
	TOTAL - ELECTRICAL						**$590,730**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	10,000		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	39,200		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	45,000		
	Volleyball net and standards	**1**	ea	2,000.00	2,000		
	Telescoping bleachers	**1**	ls	25,000.00	25,000		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	150,000.00	In Reno		
	Stage lighting and dimming	**1**	ls	75,000.00	In Reno		
	Food Service equipment	**1**	ls	350,000.00	In Reno		
	Electrically operated projection screens	**1**	loc	10,000.00	In Reno		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					121,200	
	TOTAL - EQUIPMENT						**$121,200**
E20	***FURNISHINGS***						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 1G - NEW ADDITION TO ELEMENTARY SCHOOL							
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**3,876**	sf	6.00	23,256		
	Counters, base cabinets, tall storage in classrooms and other rooms	**19,691**	gsf	6.00	118,146		
	SUBTOTAL					163,902	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$163,902**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL						
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 1G							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence	**2,900**	lf	14.00	40,600		
	Pavement/curbing removal - grind up asphalt to reuse	**116,200**	sf	0.80	92,960		
	Remove and dispose walkways	**1**	ls	10,000.00	10,000		
	Remove and dispose tennis courts	**25,600**	sf	2.00	51,200		
	Tree removal	**1**	ls	20,000.00	20,000		
	Misc. Tree Protection	**1**	ls	5,000.00	5,000		
	Remove and dispose of existing drainage structures and utilities	**1**	ls	40,000.00	40,000		
	SUBTOTAL					$259,760	
	Site Earthwork						
	Construction entrances/wheel washes (allowance)	**1**	loc	15,000.00	15,000		
	Strip topsoil, store on site for reuse	**7,444**	cy	8.00	59,552		
	Cut/fill	**33,333**	cy	6.00	199,998		
	Fine grading	**27,291**	sy	0.50	13,646		
	Silt fence/erosion control (allowance)	**2,900**	lf	12.00	34,800		
	Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
	Hazardous Waste Remediation						
	Removal of UST and propane tanks	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$382,996	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots						
	Bituminous concrete paving	*103,421*					
	gravel base; 12" thick	**3,830**	cy	35.00	134,050		
	bituminous concrete; 4" thick	**11,491**	sy	25.00	287,275		
	6"x18" granite curb	**6,014**	lf	32.00	192,448		
	Single solid lines, 4" thick	**159**	space	25.00	3,975		
	Wheelchair Parking	**10**	space	75.00	750		
	Crosswalk Hatching	**2**	loc	900.00	1,800		
	Other road markings	**1**	ls	7,500.00	7,500		
	HC curb cuts	**4**	loc	1,100.00	4,400		
	New entrance sign	**1**	ls	10,000.00	10,000		
	New traffic signs	**1**	ls	5,000.00	5,000		
	SUBTOTAL					$647,198	
	Pedestrian paving						
	Bituminous concrete paving	*10,000*	sf				
	gravel base; 12" thick	**370**	cy	35.00	12,950		
	bituminous concrete; 3" thick	**1,111**	sy	28.00	31,108		
	Concrete Pavers						
	Concrete pavers						
	Precast concrete pavers	**8,000**	sf	16.00	128,000		
	gravel base; 8" thick	**199**	cy	35.00	6,965		
	dry pack; 2" thick	**47**	cy	22.00	1,034		
	concrete base; 4" thick	**8,000**	sf	5.00	40,000		
	Site Improvements						
	Bicycle racks	**10**	ea	800.00	8,000		
	45' Flag pole	**1**	loc	7,500.00	7,500		
	Flag pole base	**1**	loc	1,500.00	1,500		
	Ornamental trash/recycling receptacles	**10**	ea	800.00	8,000		
	Seating walls	**1**	ls	75,000.00	75,000		
	Segmented block retaining walls	**3,000**	sf	55.00	165,000		
	Dumpster enclosure	**100**	lf	60.00	6,000		
	Play surface	**2,000**	sf	16.00	32,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 1G							
	Track surface	**4,000**	sf	5.00	20,000		
	Play equipment	**1**	ls	120,000.00	120,000		
	Other sitework improvements	**1**	ls	25,000.00	25,000		
	Tennis Courts	*24,200*					
	Gravel base - 12" thick	**896**	cy	35.00	31,360		
	Tennis court surface - color coated acrylic over asphalt	**2,689**	sy	42.00	112,938		
	Nets and posts	**4**	courts	900.00	3,600		
	Vinyl CL Fencing; 10'	**643**	lf	55.00	35,365		
	Gate, single	**2**	ea	1,200.00	2,400		
	Landscaping & Plantings:						
	Spread existing amended topsoil @ seeded areas	**1,852**	cy	22.00	40,744		
	New seeded areas - L&S	**100,000**	sf	0.20	20,000		
	Trees	**17**	ea	1,000.00	17,000		
	Shrubs/plantings and Groundcover	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$1,001,464	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	New fire DI piping; 8"	**260**	lf	80.00	20,800		
	New fire DI piping; 6"	**260**	lf	70.00	18,200		
	New fire hydrant	**2**	loc	2,600.00	5,200		
	FD connection	**1**	loc	2,000.00	2,000		
	Gate valves	**4**	loc	750.00	3,000		
	Connect to existing line (Wet Taps)	**1**	loc	5,000.00	5,000		
	Sanitary sewer						
	8" sewer	**300**	lf	48.00	14,400		
	Connect to existing	**1**	loc	1,500.00	1,500		
	6,000 gal grease trap	**1**	loc	12,000.00	12,000		
	SMH	**3**	loc	4,000.00	12,000		
	Storm Sewer						
	Allowance for stormwater management	**1**	ls	350,000.00	350,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**250**	lf	25.00	6,250		
	New telecom service	**250**	lf	25.00	6,250		
	SUBTOTAL					$456,600	
G40	**SITE ELECTRICAL**						
	Power						
	Tap main power source	**1**	ea	3,000.00	3,000		
	Primary ductbank	**250**	lf	65.00	16,250		
	Primary cabling				Utility company		
	Pad mounted transformer				Utility company		
	Transformer pad	**1**	ea	3,000.00	3,000		
	Secondary ductbank						
	Secondary ductbank cabling	**50**	lf	300.00	15,000		
	Generator ductbank						
	Generator ductbank	**50**	lf	250.00	12,500		
	Communications						
	Communications ductbank	**250**	lf	85.00	21,250		
	Site Lighting/Power						
	Site lighting, roadway, parking, pathways and landscaping	**1**	ls	60,000.00	60,000		
	SUBTOTAL					$131,000	
SUBTOTAL SITE DEVELOPMENT OPTION 1G							**$2,879,018**

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Bourne Elementary Schools
Design Options
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Feasibility Design Submission

GFA 46,493

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$604,683			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$379,456	**$984,139**	$21.17	7.3%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$752,516			
	B1020	Roof Construction	$872,764	**$1,625,280**	$34.96	12.1%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$1,466,152			
	B2020	Windows	$1,356,173			
	B2030	Exterior Doors	$58,541	**$2,880,866**	$61.96	21.4%
B30	**ROOFING**					
	B3010	Roof Coverings	$829,620			
	B3020	Roof Openings	$12,500	**$842,120**	$18.11	6.3%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$981,733			
	C1020	Interior Doors	$185,972			
	C1030	Specialties/Millwork	$331,136	**$1,498,841**	$32.24	11.2%
C20	**STAIRCASES**					
	C2010	Stair Construction	$42,000			
	C2020	Stair Finishes	$7,330	**$49,330**	$1.06	0.4%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$232,465			
	C3020	Floor Finishes	$325,451			
	C3030	Ceiling Finishes	$325,451	**$883,367**	$19.00	6.6%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$557,916	**$557,916**	$12.00	4.2%

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CONSTRUCTION COST SUMMARY

OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$1,673,748	**$1,673,748**	$36.00	12.5%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$209,219	**$209,219**	$4.50	1.6%
D50	**ELECTRICAL**					
	D5010	Complete System	$1,394,790	**$1,394,790**	$30.00	10.4%
E10	**EQUIPMENT**					
	E10	Equipment	$481,200	**$481,200**	$10.35	3.6%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$351,990			
	E2020	Movable Furnishings	NIC	**$351,990**	$7.57	2.6%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$0			
	F2020	Hazardous Components Abatement	$0	**$0**	$0.00	0.0%
	TOTAL DIRECT COST (Trade Costs)			***$13,432,806***	*$288.92*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			26,563			
	Second Floor			19,930			
	TOTAL GROSS FLOOR AREA (GFA)					**46,493**	***sf***
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Strip footings - 3'-0" x 2'-0"						
	Excavation	**1,231**	cy	12.00	14,772		
	Store on site for reuse	**1,231**	cy	14.00	17,234		
	Backfill with new fill	**1,009**	cy	16.00	16,144		
	Formwork	**3,800**	sf	11.00	41,800		
	Re-bar, 10#/lf	**9,500**	lbs	1.20	11,400		
	Concrete material; 3,000 psi	**222**	cy	125.00	27,750		
	Placing concrete	**222**	cy	55.00	12,210		
	Foundation walls at exterior - 16" thick						
	Formwork	**7,600**	sf	12.50	95,000		
	Re-bar, 4#/sf	**15,200**	lbs	1.20	18,240		
	Concrete material; 4,000 psi	**172**	cy	135.00	23,220		
	Placing concrete	**172**	cy	65.00	11,180		
	Dampproofing foundation wall and footing	**5,700**	sf	1.90	NIC		
	Insulation to foundation walls; 2" thick	**3,800**	sf	2.50	9,500		
	Form shelf	**950**	lf	8.00	7,600		
	Thickened slab at interior load bearing walls						
	Excavation	**130**	cy	12.00	1,560		
	Store on site for reuse	**130**	cy	14.00	1,820		
	Backfill with new fill	**118**	cy	16.00	1,888		
	Formwork	**200**	sf	11.00	2,200		
	Re-bar, 10#/lf	**1,000**	lbs	1.20	1,200		
	Concrete material; 3,000 psi	**12**	cy	125.00	1,500		
	Placing concrete	**12**	cy	55.00	660		
	Exterior column footings, typical, 8' x 8' x 2'-0"						
	Excavation	**659**	cy	15.00	9,885		
	Store on site for reuse	**659**	cy	14.00	9,226		
	Backfill with new fill	**465**	cy	16.00	7,440		
	Formwork	**2,496**	sf	11.00	27,456		
	Re-bar,150/cy	**29,100**	lbs	1.20	34,920		
	Concrete material; 3,000 psi	**194**	cy	125.00	24,250		
	Placing concrete	**194**	cy	55.00	10,670		
	Set anchor bolts grout plates	**39**	ea	150.00	5,850		
	Interior column footings, typical, 9' x 9' x 2'-0"						
	Excavation	**218**	cy	15.00	3,270		
	Store on site for reuse	**218**	cy	14.00	3,052		
	Backfill with new fill	**149**	cy	16.00	2,384		
	Formwork	**792**	sf	11.00	8,712		
	Re-bar,150/cy	**8,250**	lbs	1.20	9,900		
	Concrete material; 3,000 psi	**69**	cy	125.00	8,625		
	Placing concrete	**69**	cy	55.00	3,795		
	Set anchor bolts grout plates	**11**	ea	150.00	1,650		
	Perimeter drainage system per geotech	**950**	lf	18.00	17,100		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for foundations against existing building	**293**	lf	340.00	99,620		
	SUBTOTAL					604,683	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	New Slab on grade, 5" thick						
	Structural gravel fill, 8"	**656**	cy	30.00	19,680		
	Base course, 8" gravel	**656**	cy	35.00	22,960		
	Rigid insulation	**26,563**	sf	2.25	59,767		
	Vapor barrier	**26,563**	sf	0.75	19,922		
	Under slab drainage -allow	**26,563**	sf	2.50	66,408		
	Mesh reinforcing 15% lap	**30,547**	sf	0.80	24,438		
	Concrete - 5" thick	**434**	cy	125.00	54,250		
	Placing concrete	**434**	cy	45.00	19,530		
	Finishing and curing concrete	**26,563**	sf	1.50	39,845		
	Control joints - saw cut	**26,563**	sf	0.10	2,656		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	25,000		
	New loading dock - allow	**1**	ls	20,000.00	20,000		
	Equipment pads - allow	**1**	ls	5,000.00	5,000		
	SUBTOTAL					379,456	
	TOTAL - FOUNDATIONS						**$984,139**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
		12	lbs/sf				
B1010	**FLOOR CONSTRUCTION**	289	tns				
	Floor Structure - Steel:						
	Steel beams and columns; 13/SF	**130**	tns	3,400.00	442,000		
	Shear studs	**3,986**	ea	2.50	9,965		
	Floor Structure						
	3" Metal floor Deck	**19,930**	sf	4.00	79,720		
	WWF reinforcement	**22,920**	sf	0.80	18,336		
	Concrete Fill to metal deck; 5 1/4" Light weight	**318**	cy	170.00	54,060		
	Place and finish concrete	**19,930**	sf	2.00	39,860		
	Misc. perimeter angles	**950**	lf	25.00	23,750		
	Miscellaneous						
	Fire proofing to columns and beams	**19,930**	sf	2.50	49,825		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL							
	Reinforce existing roof for new floor	**1**	ls	30,000.00	30,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					752,516	
B1020	**ROOF CONSTRUCTION**						
	Roof Structure - Steel:						
	Steel beams/Joists; 12#/SF	**159**	tns	3,400.00	540,600		
	Roof Structure						
	3" Metal floor Deck @ roof	**15,263**	sf	4.00	61,052		
	Acoustic deck at gym, 3", type NA	**11,300**	sf	7.00	79,100		
	Roof Structure @ Mech Equipment/Low roof						
	WWF reinforcement	**9,315**	sf	0.80	7,452		
	Concrete Fill to metal deck; 5 1/4" Light weight	**129**	cy	170.00	21,930		
	Place and finish concrete	**8,100**	sf	3.00	24,300		
	Miscellaneous						
	Canopy framing - allow	**1**	ls	30,000.00	30,000		
	Roof screen framing - allow	**1,100**	sf	20.00	22,000		
	Fire proofing to columns, beams and deck	**26,563**	sf	3.25	86,330		
	SUBTOTAL					872,764	
	TOTAL - SUPERSTRUCTURE						**$1,625,280**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*19,140*	sf				
	Interior skin						
	8" metal stud backup	**16,422**	sf	8.00	131,376		
	Batt insulation in stud	**16,422**	sf	2.25	36,950		
	2 1/2" Rigid Insulation	**16,422**	sf	3.00	49,266		
	Air barrier	**16,422**	sf	6.00	98,532		
	Air barrier/flashing at windows	**2,779**	lf	7.00	19,453		
	Gypsum Sheathing	**16,422**	sf	2.75	45,161		
	Drywall lining to interior face of stud backup	**16,422**	sf	3.00	49,266		
	Interior skin @ Gym and stage						
	8" CMU backup	**2,718**	sf	22.00	59,796		
	2 1/2" Rigid Insulation	**2,718**	sf	3.00	8,154		
	Air barrier	**2,718**	sf	6.00	16,308		
	Premium for GF block	**2,718**	sf	5.00	13,590		
	Exterior skin						
	Brick veneer	**12,632**	sf	35.00	442,120		
	Metal panels	**6,508**	sf	60.00	390,480		
	Miscellaneous						
	Aluminum sign at main entrance	**1**	ls	10,000.00	10,000		
	Staging to exterior wall	**31,900**	sf	3.00	95,700		
	SUBTOTAL					1,466,152	
B2020	**WINDOWS**	*12,760*	sf				
	Curtainwall	**4,338**	sf	120.00	520,560		
	Premium for sunscreen and light shelf elements	**1**	ls	50,000.00	50,000		
	Windows/storefront	**8,422**	sf	85.00	715,870		
	Louvers (allowance)	**250**	sf	60.00	15,000		
	Backer rod & double sealant	**4,211**	lf	9.00	37,899		
	Wood blocking at openings	**4,211**	lf	4.00	16,844		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL							
	SUBTOTAL					1,356,173	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door	**5**	pr	8,000.00	40,000		
	HM doors, frames and hardware- Double	**2**	pr	3,600.00	7,200		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**157**	lf	9.00	1,413		
	Wood blocking at openings	**157**	lf	4.00	628		
	SUBTOTAL					58,541	
	TOTAL - EXTERIOR CLOSURE						**$2,880,866**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	PVC roof membrane fully adhered	**26,563**	sf	7.50	199,223		
	Insulation	**26,563**	sf	6.00	159,378		
	1/2" dens-deck protection board	**26,563**	sf	2.00	53,126		
	Reinforced vapor barrier	**26,563**	sf	1.00	26,563		
	Rough blocking	**1,400**	lf	6.00	8,400		
	Miscellaneous Roofing						
	Premium for green roof	**1,233**	sf	30.00	36,990		
	Premium for sloped roof	**6,222**	sf	20.00	124,440		
	Canopies - allow	**300**	sf	75.00	22,500		
	Roof screens - allow	**1,100**	sf	50.00	55,000		
	Roof fascia/cornice	**1,400**	lf	90.00	126,000		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	15,000.00	15,000		
	SUBTOTAL					829,620	
B3020	**ROOF OPENINGS**						
	Skylights, allow	**1**	ls	10,000.00	10,000		
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					12,500	
	TOTAL - ROOFING						**$842,120**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Reinforced masonry shear walls at Gymnasium & Stage	**2,910**	sf	23.00	66,930		
	Stairs/Elevator; 2 HR rated	**3,220**	sf	16.00	51,520		
	Corridors; GWB with 2 lyrs corridor side	**18,088**	sf	15.55	281,268		
	Demising; Metal stud w/ 2 layers gwb	**7,210**	sf	17.35	125,094		
	Partitions at Admin spaces, back of house etc.	**2,170**	sf	15.85	34,395		
	Partitions at existing exterior wall	**6,034**	sf	15.00	90,510		
	Sealants & caulking at partitions	**33,598**	sf	0.50	16,799		
	Rough blocking to partitions	**2,584**	lf	3.00	7,752		
	Glazed partitions/borrowed lights - allowance	**1**	ls	75,000.00	75,000		
	Miscellaneous partitions not yet shown	**46,493**	gsf	5.00	232,465		
	SUBTOTAL					981,733	
C1020	**INTERIOR DOORS**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for specialty doors, doors and hardware	**46,493**	gsf	4.00	185,972		
	SUBTOTAL					185,972	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**46,493**	gsf	0.80	37,194		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**46,493**	sf	1.00	46,493		
	Building directory	**1**	loc	3,000.00	3,000		
	Bronze dedication plaque	**1**	loc	2,500.00	2,500		
	Room Signs	**46,493**	gsf	0.40	18,597		
	Fire extinguisher cabinets	**15**	ea	350.00	5,250		
	Corridor Lockers	**46,493**	gsf	1.00	46,493		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	20,000		
	Library shelving				F,F & E		
	Display cases	**1**	ls	30,000.00	30,000		
	Miscellaneous metals throughout building	**46,493**	sf	1.00	46,493		
	Miscellaneous sealants throughout building	**46,493**	sf	1.25	58,116		
	SUBTOTAL					331,136	
	TOTAL - INTERIOR CONSTRUCTION						**$1,498,841**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Stage stairs, wood	**2**	flts	5,000.00	10,000		
	Metal pan stair; egress stair	**1**	flt	30,000.00	30,000		
	Concrete fill to stairs	**1**	flt	2,000.00	2,000		
	SUBTOTAL					42,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**1**	flt	3,000.00	3,000		
	Rubber tile at stairs - landings	**150**	sf	12.00	1,800		
	Rubber tile at stairs - treads & risers	**115**	lft	22.00	2,530		
	SUBTOTAL					7,330	
	TOTAL - STAIRCASES						**$49,330**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**46,493**	gsf	5.00	232,465		
	SUBTOTAL					232,465	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**46,493**	gsf	7.00	325,451		
	SUBTOTAL					325,451	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**46,493**	sf	7.00	325,451		
	SUBTOTAL					325,451	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL							
	TOTAL - INTERIOR FINISHES						**$883,367**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**46,493**	gsf	12.00	557,916		
	SUBTOTAL					557,916	
	TOTAL - PLUMBING						**$557,916**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**46,493**	gsf	36.00	1,673,748		
	SUBTOTAL					1,673,748	
	TOTAL - HVAC						**$1,673,748**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**46,493**	gsf	4.50	209,219		
	SUBTOTAL					209,219	
	TOTAL - FIRE PROTECTION						**$209,219**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**46,493**	gsf	30.00	1,394,790		
	SUBTOTAL					1,394,790	
	TOTAL - ELECTRICAL						**$1,394,790**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	10,000		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	39,200		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	45,000		
	Volleyball net and standards	**1**	ea	2,000.00	2,000		
	Telescoping bleachers	**1**	ls	25,000.00	25,000		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls		In Reno		
	Stage lighting and dimming	**1**	ls		In Reno		
	Food Service equipment	**1**	ls	350,000.00	350,000		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					481,200	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - NEW ADDITION TO ELEMENTARY SCHOOL							
	TOTAL - EQUIPMENT						**$481,200**
	E20 FURNISHINGS						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**8,422**	sf	6.00	50,532		
	Counters, base cabinets, tall storage in classrooms and other rooms	**46,493**	gsf	6.00	278,958		
	SUBTOTAL					351,990	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$351,990**
	F10 SPECIAL CONSTRUCTION						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
	F20 SELECTIVE BUILDING DEMOLITION						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL						
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 68,100

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$0			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$99,290	**$99,290**	$1.46	2.1%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$20,000			
	B1020	Roof Construction	$0	**$20,000**	$0.29	0.4%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$5,600			
	B2020	Windows	$0			
	B2030	Exterior Doors	$0	**$5,600**	$0.08	0.1%
B30	**ROOFING**					
	B3010	Roof Coverings	$200,000			
	B3020	Roof Openings	$0	**$200,000**	$2.94	4.3%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$389,000			
	C1020	Interior Doors	$167,800			
	C1030	Specialties/Millwork	$304,855	**$861,655**	$12.65	18.7%
C20	**STAIRCASES**					
	C2010	Stair Construction	$0			
	C2020	Stair Finishes	$14,660	**$14,660**	$0.22	0.3%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$157,450			
	C3020	Floor Finishes	$215,200			
	C3030	Ceiling Finishes	$162,900	**$535,550**	$7.86	11.6%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$189,600	**$189,600**	$2.78	4.1%

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Bourne Elementary Schools
Design Options
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GFA 68,100

CONSTRUCTION COST SUMMARY

OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$1,196,400	**$1,196,400**	$17.57	25.9%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$136,200	**$136,200**	$2.00	2.9%
D50	**ELECTRICAL**					
	D5010	Complete System	$892,400	**$892,400**	$13.10	19.3%
E10	**EQUIPMENT**					
	E10	Equipment	$120,000	**$120,000**	$1.76	2.6%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$117,300			
	E2020	Movable Furnishings	NIC	**$117,300**	$1.72	2.5%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$231,000			
	F2020	Hazardous Components Abatement	$0	**$231,000**	$3.39	5.0%
	TOTAL DIRECT COST (Trade Costs)			***$4,619,655***	*$67.84*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			49,645			
	Second Floor			18,455			
	TOTAL GROSS FLOOR AREA (GFA)				**68,100** ***sf***		
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Allowance for miscellaneous foundation work for seismic upgrades	**49,645**	sf	5.00	Assumed Not Required		
	SUBTOTAL					-	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	Allowance for patching of existing slabs disturbed by new work	**49,645**	sf	2.00	99,290		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	In Addition		
	New loading dock - allow	**1**	ls	20,000.00	In Addition		
	Equipment pads - allow	**1**	ls	5,000.00	In Addition		
	SUBTOTAL					99,290	
	TOTAL - FOUNDATIONS						**$99,290**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
B1010	**FLOOR CONSTRUCTION**						
	Allowance for seismic upgrades	**49,645**	sf	8.00	Assumed Not Required		
	New penetrations to existing structure	**1**	ls	15,000.00	15,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					20,000	
B1020	**ROOF CONSTRUCTION**						
	Allowance for seismic upgrades	**18,455**	sf	8.00	Assumed Not Required		
	SUBTOTAL					-	
	TOTAL - SUPERSTRUCTURE						**$20,000**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL							
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**						
	Miscellaneous						
	Demolition/ create opes/ tie in at existing exterior closure @ connection to new additions	**224**	sf	25.00	5,600		
	SUBTOTAL					5,600	
B2020	**WINDOWS**						
	Curtainwall replace existing		sf	120.00	ETR		
	Windows/storefront replace existing		sf	85.00	ETR		
	Backer rod & double sealant		lf	9.00	ETR		
	Wood blocking at openings		lf	4.00	ETR		
	SUBTOTAL					-	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door		pr	8,000.00	ETR		
	HM doors, frames and hardware- Double		pr	3,600.00	ETR		
	HM doors, frames and hardware- Single		ea	1,800.00	ETR		
	Coiling door at Loading dock		ls	7,500.00	ETR		
	Backer rod & double sealant		lf	9.00	ETR		
	Wood blocking at openings		lf	4.00	ETR		
	SUBTOTAL					-	
	TOTAL - EXTERIOR CLOSURE						**$5,600**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	Remove existing roof membrane down to insulation	**49,645**	sf	3.00	ETR		
	PVC roof membrane fully adhered	**49,645**	sf	7.50	ETR		
	Insulation	**49,645**	sf	6.00	ETR		
	1/2" dens-deck protection board	**49,645**	sf	2.00	ETR		
	Reinforced vapor barrier	**49,645**	sf	1.00	ETR		
	Rough blocking	**1**	lf	6.00	ETR		
	Miscellaneous Roofing						
	Repair existing roofing	**1**	ls	200,000.00	200,000		
	Roof ladders	**1**	ls	3,000.00	ETR		
	Walk pads	**1**	ls	7,500.00	ETR		
	SUBTOTAL					200,000	
B3020	**ROOF OPENINGS**						
	Roof hatch	**1**	loc	2,500.00	ETR		
	SUBTOTAL					-	
	TOTAL - ROOFING						**$200,000**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Allowance to modify/replace existing partitions at extensive renovation	**15,800**	sf	18.00	284,400		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL							
	Allowance for minor patching at existing partitions at minimal renovation	**52,300**	sf	2.00	104,600		
	SUBTOTAL					389,000	
C1020	**INTERIOR DOORS**						
	Allowance for specialty doors, doors and hardware	**15,800**	gsf	4.00	63,200		
	Allowance for ADA hardware at minimal renovation areas	**52,300**	gsf	2.00	104,600		
	SUBTOTAL					167,800	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**15,800**	gsf	0.80	12,640		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**15,800**	sf	1.00	15,800		
	Building directory	**1**	loc	3,000.00	In Addition		
	Bronze dedication plaque	**1**	loc	2,500.00	In Addition		
	Room Signs	**68,100**	gsf	0.40	27,240		
	Fire extinguisher cabinets	**23**	ea	350.00	8,050		
	Corridor Lockers	**68,100**	gsf	1.00	ETR		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	In Addition		
	Reception desk in Media - allowance	**1**	ls	20,000	In Addition		
	Library shelving				F,F & E		
	Student cubbies in classrooms	**24**	rms	6,000.00	144,000		
	Display cases	**1**	ls	15,000.00	ETR		
	Miscellaneous metals throughout building	**68,100**	sf	0.75	51,075		
	Miscellaneous sealants throughout building	**68,100**	sf	0.50	34,050		
	SUBTOTAL					304,855	
	TOTAL - INTERIOR CONSTRUCTION						**$861,655**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Metal pan stair; egress stair; modify existing	**2**	flt	10,000.00	Assumed Not Required		
	Concrete fill to stairs	**2**	flt	2,000.00	NIC		
	SUBTOTAL					-	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**2**	flt	3,000.00	6,000		
	Rubber tile at stairs - landings	**300**	sf	12.00	3,600		
	Rubber tile at stairs - treads & risers	**230**	lft	22.00	5,060		
	SUBTOTAL					14,660	
	TOTAL - STAIRCASES						**$14,660**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes at extensive renovation	**15,800**	gsf	5.00	79,000		
	Allowance for painting at minor renovation	**52,300**	gsf	1.50	78,450		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL							
	SUBTOTAL					157,450	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes at extensive renovation	**15,800**	gsf	7.00	110,600		
	Allowance for floor finishes at minor renovation	**52,300**	gsf	2.00	104,600		
	SUBTOTAL					215,200	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes at extensive renovation	**15,800**	sf	7.00	110,600		
	Allowance for ceiling finishes at minor renovation	**52,300**	gsf	1.00	52,300		
	SUBTOTAL					162,900	
	TOTAL - INTERIOR FINISHES						**$535,550**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system at extensive renovation	**15,800**	gsf	12.00	189,600		
	Plumbing; assume no work at minor renovation	**52,300**	gsf				
	SUBTOTAL					189,600	
	TOTAL - PLUMBING						**$189,600**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system at extensive renovation	**15,800**	gsf	36.00	568,800		
	HVAC modifications at minor renovation	**52,300**	gsf	12.00	627,600		
	SUBTOTAL					1,196,400	
	TOTAL - HVAC						**$1,196,400**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system; modify existing	**68,100**	gsf	2.00	136,200		
	SUBTOTAL					136,200	
	TOTAL - FIRE PROTECTION						**$136,200**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete at extensive renovation	**15,800**	gsf	30.00	474,000		
	Electrical modifications at minor renovation	**52,300**	gsf	8.00	418,400		
	SUBTOTAL					892,400	
	TOTAL - ELECTRICAL						**$892,400**
E10	***EQUIPMENT***						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL							
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	In Addition		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	In Addition		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	In Addition		
	Volleyball net and standards	**1**	ea	2,000.00	In Addition		
	Telescoping bleachers	**1**	ls	25,000.00	In Addition		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	75,000.00	75,000		
	Stage lighting and dimming	**1**	ls	35,000.00	35,000		
	Food Service equipment	**1**	ls	350,000.00	In Addition		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					120,000	
	TOTAL - EQUIPMENT						**$120,000**
E20	***FURNISHINGS***						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades		sf	6.00	ETR		
	Counters, base cabinets, tall storage in classrooms and other rooms at extensive renovations	**15,800**	gsf	6.00	94,800		
	SUBTOTAL					117,300	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$117,300**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	Extensive demolition of renovation areas; finishes, doors, MEP systems, casework and specialties at extensive renovations	**15,800**	sf	8.00	126,400		
	Minor demolition of renovation areas; finishes, doors, MEP systems, casework and specialties at minor renovations	**52,300**	sf	2.00	104,600		
	Demo of exterior windows		sf	6.00	ETR		
	Demo of roof included in Divisions above				ETR		
	SUBTOTAL					231,000	
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$231,000**

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CSI CODE	*DESCRIPTION*	*QTY*	*UNIT*	*UNIT COST*	*EST'D COST*	*SUB TOTAL*	TOTAL COST

OPTION 2A - RENOVATION TO ELEMENTARY SCHOOL

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 2A							
G	***SITEWORK***						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence	**2,150**	lf	14.00	30,100		
	Pavement/curbing removal - grind up asphalt to reuse	**130,900**	sf	0.80	104,720		
	Remove and dispose walkways	**1**	ls	10,000.00	10,000		
	Tree removal	**1**	ls	20,000.00	20,000		
	Misc. Tree Protection	**1**	ls	5,000.00	5,000		
	Remove and dispose of existing drainage structures and utilities	**1**	ls	40,000.00	40,000		
	SUBTOTAL					$209,820	
	Site Earthwork						
	Construction entrances/wheel washes (allowance)	**1**	loc	15,000.00	15,000		
	Strip topsoil, store on site for reuse	**2,481**	cy	8.00	19,848		
	Cut/fill	**18,519**	cy	6.00	111,114		
	Fine grading	**30,513**	sy	0.50	15,257		
	Silt fence/erosion control (allowance)	**2,150**	lf	12.00	25,800		
	Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
	Hazardous Waste Remediation						
	No items in this section						
	SUBTOTAL					$197,019	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots						
	Bituminous concrete paving	*134,814*					
	gravel base; 12" thick	**4,993**	cy	35.00	174,755		
	bituminous concrete; 4" thick	**14,979**	sy	25.00	374,475		
	6"x18" granite curb	**7,384**	lf	32.00	236,288		
	Single solid lines, 4" thick	**213**	space	25.00	5,325		
	Wheelchair Parking	**10**	space	75.00	750		
	Crosswalk Hatching	**2**	loc	900.00	1,800		
	Other road markings	**1**	ls	7,500.00	7,500		
	HC curb cuts	**4**	loc	1,100.00	4,400		
	New entrance sign	**1**	ls	10,000.00	10,000		
	New traffic signs	**1**	ls	5,000.00	5,000		
	SUBTOTAL					$820,293	
	Pedestrian paving						
	Bituminous concrete paving	*10,000*	sf				
	gravel base; 12" thick	**370**	cy	35.00	12,950		
	bituminous concrete; 3" thick	**1,111**	sy	28.00	31,108		
	Concrete Pavers						
	Concrete pavers						
	Precast concrete pavers	**5,606**	sf	16.00	89,696		
	gravel base; 8" thick	**139**	cy	35.00	4,865		
	dry pack; 2" thick	**33**	cy	22.00	726		
	concrete base; 4" thick	**5,606**	sf	5.00	28,030		
	Site Improvements						
	Bicycle racks	**10**	ea	800.00	8,000		
	45' Flag pole	**1**	loc	7,500.00	7,500		
	Flag pole base	**1**	loc	1,500.00	1,500		
	Ornamental trash/recycling receptacles	**10**	ea	800.00	8,000		
	Seating walls	**1**	ls	75,000.00	75,000		
	Segmented block retaining walls	**3,890**	sf	55.00	213,950		
	Dumpster enclosure	**100**	lf	60.00	6,000		
	Play surface	**4,166**	sf	16.00	66,656		
	Track surface	**8,334**	sf	8.00	66,672		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 2A							
	Play equipment	**1**	ls	180,000.00	180,000		
	Other sitework improvements	**1**	ls	25,000.00	25,000		
	Tennis Courts	*24,200*					
	Gravel base - 12" thick	**896**	cy	35.00	NIC		
	Tennis court surface - color coated acrylic over asphalt	**2,689**	sy	42.00	NIC		
	Nets and posts	**4**	courts	900.00	NIC		
	Vinyl CL Fencing; 10'	**643**	lf	55.00	NIC		
	Gate, single	**2**	ea	1,200.00	NIC		
	Landscaping & Plantings:						
	Spread existing amended topsoil @ seeded areas	**1,852**	cy	22.00	40,744		
	New seeded areas - L&S	**100,000**	sf	0.20	20,000		
	Trees	**12**	ea	1,000.00	12,000		
	Shrubs/plantings and Groundcover	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$948,397	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	New fire DI piping; 8"	**660**	lf	80.00	52,800		
	New fire DI piping; 6"	**660**	lf	70.00	46,200		
	New fire hydrant	**2**	loc	2,600.00	5,200		
	FD connection	**1**	loc	2,000.00	2,000		
	Gate valves	**4**	loc	750.00	3,000		
	Connect to existing line (Wet Taps)	**1**	loc	5,000.00	5,000		
	Sanitary sewer						
	8" sewer	**700**	lf	48.00	33,600		
	Connect to existing	**1**	loc	1,500.00	1,500		
	6,000 gal grease trap	**1**	loc	12,000.00	12,000		
	SMH	**5**	loc	4,000.00	20,000		
	Increase septic reserve by 25%	**2,025**	sf	50.00	101,250		
	Storm Sewer						
	Allowance for stormwater management	**1**	ls	500,000.00	500,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**660**	lf	25.00	16,500		
	New telecom service	**660**	lf	25.00	16,500		
	SUBTOTAL					$815,550	
G40	**SITE ELECTRICAL**						
	Power						
	Tap main power source	**1**	ea	3,000.00	3,000		
	Primary ductbank	**660**	lf	65.00	42,900		
	Primary cabling				Utility company		
	Pad mounted transformer				Utility company		
	Transformer pad	**1**	ea	3,000.00	3,000		
	Secondary ductbank						
	Secondary ductbank cabling	**50**	lf	300.00	15,000		
	Generator ductbank						
	Generator ductbank	**50**	lf	250.00	12,500		
	Communications						
	Communications ductbank	**660**	lf	85.00	56,100		
	Site Lighting/Power						
	Site lighting, roadway, parking, pathways and landscaping	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$232,500	
SUBTOTAL SITE DEVELOPMENT OPTION 2A							**$3,223,579**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 63,282

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$676,910			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$456,858	**$1,133,768**	$17.92	6.7%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$1,116,938			
	B1020	Roof Construction	$1,047,211	**$2,164,149**	$34.20	12.8%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$1,653,335			
	B2020	Windows	$1,525,589			
	B2030	Exterior Doors	$58,541	**$3,237,465**	$51.16	19.1%
B30	**ROOFING**					
	B3010	Roof Coverings	$1,006,256			
	B3020	Roof Openings	$12,500	**$1,018,756**	$16.10	6.0%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$1,307,155			
	C1020	Interior Doors	$253,128			
	C1030	Specialties/Millwork	$424,738	**$1,985,021**	$31.37	11.7%
C20	**STAIRCASES**					
	C2010	Stair Construction	$42,000			
	C2020	Stair Finishes	$7,330	**$49,330**	$0.78	0.3%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$316,410			
	C3020	Floor Finishes	$442,974			
	C3030	Ceiling Finishes	$442,974	**$1,202,358**	$19.00	7.1%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$759,384	**$759,384**	$12.00	4.5%

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 63,282

CONSTRUCTION COST SUMMARY

OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$2,278,152	**$2,278,152**	$36.00	13.4%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$284,769	**$284,769**	$4.50	1.7%
D50	**ELECTRICAL**					
	D5010	Complete System	$1,898,460	**$1,898,460**	$30.00	11.2%
E10	**EQUIPMENT**					
	E10	Equipment	$481,200	**$481,200**	$7.60	2.8%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$459,348			
	E2020	Movable Furnishings	NIC	**$459,348**	$7.26	2.7%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$0			
	F2020	Hazardous Components Abatement	$0	**$0**	$0.00	0.0%
	TOTAL DIRECT COST (Trade Costs)			***$16,952,160***	*$267.88*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			32,804			
	Second Floor			30,478			
	TOTAL GROSS FLOOR AREA (GFA)					**63,282**	***sf***
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Strip footings - 3'-0" x 2'-0"						
	Excavation	**1,233**	cy	12.00	14,796		
	Store on site for reuse	**1,233**	cy	14.00	17,262		
	Backfill with new fill	**1,011**	cy	16.00	16,176		
	Formwork	**3,804**	sf	11.00	41,844		
	Re-bar, 10#/lf	**9,510**	lbs	1.20	11,412		
	Concrete material; 3,000 psi	**222**	cy	125.00	27,750		
	Placing concrete	**222**	cy	55.00	12,210		
	Foundation walls at exterior - 16" thick						
	Formwork	**7,608**	sf	12.50	95,100		
	Re-bar, 4#/sf	**15,216**	lbs	1.20	18,259		
	Concrete material; 4,000 psi	**173**	cy	135.00	23,355		
	Placing concrete	**173**	cy	65.00	11,245		
	Dampproofing foundation wall and footing	**5,706**	sf	1.90	NIC		
	Insulation to foundation walls; 2" thick	**3,804**	sf	2.50	9,510		
	Form shelf	**951**	lf	8.00	7,608		
	Thickened slab at interior load bearing walls						
	Excavation	**130**	cy	12.00	1,560		
	Store on site for reuse	**130**	cy	14.00	1,820		
	Backfill with new fill	**118**	cy	16.00	1,888		
	Formwork	**200**	sf	11.00	2,200		
	Re-bar, 10#/lf	**1,000**	lbs	1.20	1,200		
	Concrete material; 3,000 psi	**12**	cy	125.00	1,500		
	Placing concrete	**12**	cy	55.00	660		
	Exterior column footings, typical, 8' x 8' x 2'-0"						
	Excavation	**828**	cy	15.00	12,420		
	Store on site for reuse	**828**	cy	14.00	11,592		
	Backfill with new fill	**584**	cy	16.00	9,344		
	Formwork	**3,136**	sf	11.00	34,496		
	Re-bar,150/cy	**36,600**	lbs	1.20	43,920		
	Concrete material; 3,000 psi	**244**	cy	125.00	30,500		
	Placing concrete	**244**	cy	55.00	13,420		
	Set anchor bolts grout plates	**49**	ea	150.00	7,350		
	Interior column footings, typical, 9' x 9' x 2'-0"						
	Excavation	**417**	cy	15.00	6,255		
	Store on site for reuse	**417**	cy	14.00	5,838		
	Backfill with new fill	**285**	cy	16.00	4,560		
	Formwork	**1,512**	sf	11.00	16,632		
	Re-bar,150/cy	**15,750**	lbs	1.20	18,900		
	Concrete material; 3,000 psi	**132**	cy	125.00	16,500		
	Placing concrete	**132**	cy	55.00	7,260		
	Set anchor bolts grout plates	**21**	ea	150.00	3,150		
	Perimeter drainage system per geotech	**951**	lf	18.00	17,118		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for foundations against existing building	**295**	lf	340.00	100,300		
	SUBTOTAL					676,910	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	New Slab on grade, 5" thick						
	Structural gravel fill, 8"	**810**	cy	30.00	24,300		
	Base course, 8" gravel	**810**	cy	35.00	28,350		
	Rigid insulation	**32,804**	sf	2.25	73,809		
	Vapor barrier	**32,804**	sf	0.75	24,603		
	Under slab drainage -allow	**32,804**	sf	2.50	82,010		
	Mesh reinforcing 15% lap	**37,725**	sf	0.80	30,180		
	Concrete - 5" thick	**536**	cy	125.00	67,000		
	Placing concrete	**536**	cy	45.00	24,120		
	Finishing and curing concrete	**32,804**	sf	1.50	49,206		
	Control joints - saw cut	**32,804**	sf	0.10	3,280		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	25,000		
	New loading dock - allow	**1**	ls	20,000.00	20,000		
	Equipment pads - allow	**1**	ls	5,000.00	5,000		
	SUBTOTAL					456,858	
	TOTAL - FOUNDATIONS						**$1,133,768**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
		12	lbs/sf				
B1010	**FLOOR CONSTRUCTION**	395	tns				
	Floor Structure - Steel:						
	Steel beams and columns; 13/SF	**198**	tns	3,400.00	673,200		
	Shear studs	**6,096**	ea	2.50	15,240		
	Floor Structure						
	3" Metal floor Deck	**30,478**	sf	4.00	121,912		
	WWF reinforcement	**35,050**	sf	0.80	28,040		
	Concrete Fill to metal deck; 5 1/4" Light weight	**486**	cy	170.00	82,620		
	Place and finish concrete	**30,478**	sf	2.00	60,956		
	Misc. perimeter angles	**951**	lf	25.00	23,775		
	Miscellaneous						
	Fire proofing to columns and beams	**30,478**	sf	2.50	76,195		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL							
	Reinforce existing roof for new floor	**1**	ls	30,000.00	30,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					1,116,938	
B1020	**ROOF CONSTRUCTION**						
	Roof Structure - Steel:						
	Steel beams/Joists; 12#/SF	**197**	tns	3,400.00	669,800		
	Roof Structure						
	3" Metal floor Deck @ roof	**21,504**	sf	4.00	86,016		
	Acoustic deck at gym, 3", type NA	**11,300**	sf	7.00	79,100		
	Roof Structure @ Mech Equipment/Low roof						
	WWF reinforcement	**9,315**	sf	0.80	7,452		
	Concrete Fill to metal deck; 5 1/4" Light weight	**129**	cy	170.00	21,930		
	Place and finish concrete	**8,100**	sf	3.00	24,300		
	Miscellaneous						
	Canopy framing - allow	**1**	ls	30,000.00	30,000		
	Roof screen framing - allow	**1,100**	sf	20.00	22,000		
	Fire proofing to columns, beams and deck	**32,804**	sf	3.25	106,613		
	SUBTOTAL					1,047,211	
	TOTAL - SUPERSTRUCTURE						**$2,164,149**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*21,652*	sf				
	Interior skin						
	8" metal stud backup	**18,934**	sf	8.00	151,472		
	Batt insulation in stud	**18,934**	sf	2.25	42,602		
	2 1/2" Rigid Insulation	**18,934**	sf	3.00	56,802		
	Air barrier	**18,934**	sf	6.00	113,604		
	Air barrier/flashing at windows	**3,144**	lf	7.00	22,008		
	Gypsum Sheathing	**18,934**	sf	2.75	52,069		
	Drywall lining to interior face of stud backup	**18,934**	sf	3.00	56,802		
	Interior skin @ Gym and stage						
	8" CMU backup	**2,718**	sf	22.00	59,796		
	2 1/2" Rigid Insulation	**2,718**	sf	3.00	8,154		
	Air barrier	**2,718**	sf	6.00	16,308		
	Premium for GF block	**2,718**	sf	5.00	13,590		
	Exterior skin						
	Brick veneer	**14,290**	sf	35.00	500,150		
	Metal panels	**7,362**	sf	60.00	441,720		
	Miscellaneous						
	Aluminum sign at main entrance	**1**	ls	10,000.00	10,000		
	Staging to exterior wall	**36,086**	sf	3.00	108,258		
	SUBTOTAL					1,653,335	
B2020	**WINDOWS**	*14,434*	sf				
	Curtainwall	**4,908**	sf	120.00	588,960		
	Premium for sunscreen and light shelf elements	**1**	ls	50,000.00	50,000		
	Windows/storefront	**9,526**	sf	85.00	809,710		
	Louvers (allowance)	**250**	sf	60.00	15,000		
	Backer rod & double sealant	**4,763**	lf	9.00	42,867		
	Wood blocking at openings	**4,763**	lf	4.00	19,052		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL							
	SUBTOTAL					1,525,589	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door	**5**	pr	8,000.00	40,000		
	HM doors, frames and hardware- Double	**2**	pr	3,600.00	7,200		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**157**	lf	9.00	1,413		
	Wood blocking at openings	**157**	lf	4.00	628		
	SUBTOTAL					58,541	
	TOTAL - EXTERIOR CLOSURE						**$3,237,465**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	PVC roof membrane fully adhered	**32,804**	sf	7.50	246,030		
	Insulation	**32,804**	sf	6.00	196,824		
	1/2" dens-deck protection board	**32,804**	sf	2.00	65,608		
	Reinforced vapor barrier	**32,804**	sf	1.00	32,804		
	Rough blocking	**1,235**	lf	6.00	7,410		
	Miscellaneous Roofing						
	Premium for green roof	**1,233**	sf	30.00	36,990		
	Premium for sloped roof	**10,697**	sf	20.00	213,940		
	Canopies - allow	**300**	sf	75.00	22,500		
	Roof screens - allow	**1,100**	sf	50.00	55,000		
	Roof fascia/cornice	**1,235**	lf	90.00	111,150		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	15,000.00	15,000		
	SUBTOTAL					1,006,256	
B3020	**ROOF OPENINGS**						
	Skylights, allow	**1**	ls	10,000.00	10,000		
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					12,500	
	TOTAL - ROOFING						**$1,018,756**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Reinforced masonry shear walls at Gymnasium & Stage	**2,910**	sf	23.00	66,930		
	Stairs/Elevator; 2 HR rated	**3,220**	sf	16.00	51,520		
	Corridors; GWB with 2 lyrs corridor side	**24,066**	sf	15.55	374,226		
	Demising; Metal stud w/ 2 layers gwb	**14,784**	sf	17.35	256,502		
	Partitions at Admin spaces, back of house etc.	**2,744**	sf	15.85	43,492		
	Partitions at existing exterior wall	**5,880**	sf	15.00	88,200		
	Sealants & caulking at partitions	**47,724**	sf	0.50	23,862		
	Rough blocking to partitions	**3,671**	lf	3.00	11,013		
	Glazed partitions/borrowed lights - allowance	**1**	ls	75,000.00	75,000		
	Miscellaneous partitions not yet shown	**63,282**	gsf	5.00	316,410		
	SUBTOTAL					1,307,155	
C1020	**INTERIOR DOORS**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for specialty doors, doors and hardware	**63,282**	gsf	4.00	253,128		
	SUBTOTAL					253,128	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**63,282**	gsf	0.80	50,626		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**63,282**	sf	1.00	63,282		
	Building directory	**1**	loc	3,000.00	3,000		
	Bronze dedication plaque	**1**	loc	2,500.00	2,500		
	Room Signs	**63,282**	gsf	0.40	25,313		
	Fire extinguisher cabinets	**21**	ea	350.00	7,350		
	Corridor Lockers	**63,282**	gsf	1.00	63,282		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	20,000		
	Library shelving				F,F & E		
	Display cases	**1**	ls	30,000.00	30,000		
	Miscellaneous metals throughout building	**63,282**	sf	1.00	63,282		
	Miscellaneous sealants throughout building	**63,282**	sf	1.25	79,103		
	SUBTOTAL					424,738	
	TOTAL - INTERIOR CONSTRUCTION						**$1,985,021**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Stage stairs, wood	**2**	flts	5,000.00	10,000		
	Metal pan stair; egress stair	**1**	flt	30,000.00	30,000		
	Concrete fill to stairs	**1**	flt	2,000.00	2,000		
	SUBTOTAL					42,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**1**	flt	3,000.00	3,000		
	Rubber tile at stairs - landings	**150**	sf	12.00	1,800		
	Rubber tile at stairs - treads & risers	**115**	lft	22.00	2,530		
	SUBTOTAL					7,330	
	TOTAL - STAIRCASES						**$49,330**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**63,282**	gsf	5.00	316,410		
	SUBTOTAL					316,410	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**63,282**	gsf	7.00	442,974		
	SUBTOTAL					442,974	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**63,282**	sf	7.00	442,974		
	SUBTOTAL					442,974	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL							
	TOTAL - INTERIOR FINISHES						**$1,202,358**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**63,282**	gsf	12.00	759,384		
	SUBTOTAL					759,384	
	TOTAL - PLUMBING						**$759,384**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**63,282**	gsf	36.00	2,278,152		
	SUBTOTAL					2,278,152	
	TOTAL - HVAC						**$2,278,152**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**63,282**	gsf	4.50	284,769		
	SUBTOTAL					284,769	
	TOTAL - FIRE PROTECTION						**$284,769**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**63,282**	gsf	30.00	1,898,460		
	SUBTOTAL					1,898,460	
	TOTAL - ELECTRICAL						**$1,898,460**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	10,000		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	39,200		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	45,000		
	Volleyball net and standards	**1**	ea	2,000.00	2,000		
	Telescoping bleachers	**1**	ls	25,000.00	25,000		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls		In Reno		
	Stage lighting and dimming	**1**	ls		In Reno		
	Food Service equipment	**1**	ls	350,000.00	350,000		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					481,200	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - NEW ADDITION TO ELEMENTARY SCHOOL							
	TOTAL - EQUIPMENT						**$481,200**
	E20 FURNISHINGS						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**9,526**	sf	6.00	57,156		
	Counters, base cabinets, tall storage in classrooms and other rooms	**63,282**	gsf	6.00	379,692		
	SUBTOTAL					459,348	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$459,348**
	F10 SPECIAL CONSTRUCTION						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
	F20 SELECTIVE BUILDING DEMOLITION						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL						
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						

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Bourne Elementary Schools
Design Options
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Feasibility Design Submission

GFA 68,100

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 3A - RENOVATION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$0			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$99,290	**$99,290**	$1.46	2.1%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$20,000			
	B1020	Roof Construction	$0	**$20,000**	$0.29	0.4%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$5,600			
	B2020	Windows	$0			
	B2030	Exterior Doors	$0	**$5,600**	$0.08	0.1%
B30	**ROOFING**					
	B3010	Roof Coverings	$200,000			
	B3020	Roof Openings	$0	**$200,000**	$2.94	4.3%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$389,000			
	C1020	Interior Doors	$167,800			
	C1030	Specialties/Millwork	$304,855	**$861,655**	$12.65	18.7%
C20	**STAIRCASES**					
	C2010	Stair Construction	$0			
	C2020	Stair Finishes	$14,660	**$14,660**	$0.22	0.3%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$157,450			
	C3020	Floor Finishes	$215,200			
	C3030	Ceiling Finishes	$162,900	**$535,550**	$7.86	11.6%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$189,600	**$189,600**	$2.78	4.1%

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CONSTRUCTION COST SUMMARY

OPTION 3A - RENOVATION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$1,196,400	**$1,196,400**	$17.57	25.9%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$136,200	**$136,200**	$2.00	2.9%
D50	**ELECTRICAL**					
	D5010	Complete System	$892,400	**$892,400**	$13.10	19.3%
E10	**EQUIPMENT**					
	E10	Equipment	$120,000	**$120,000**	$1.76	2.6%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$117,300			
	E2020	Movable Furnishings	NIC	**$117,300**	$1.72	2.5%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$231,000			
	F2020	Hazardous Components Abatement	$0	**$231,000**	$3.39	5.0%
	TOTAL DIRECT COST (Trade Costs)			***$4,619,655***	*$67.84*	*100.0%*

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - RENOVATION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			49,645			
	Second Floor			18,455			
	TOTAL GROSS FLOOR AREA (GFA)				**68,100** ***sf***		
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Allowance for miscellaneous foundation work for seismic upgrades	**49,645**	sf	5.00	Assumed Not Required		
	SUBTOTAL					-	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	Allowance for patching of existing slabs disturbed by new work	**49,645**	sf	2.00	99,290		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	In Addition		
	New loading dock - allow	**1**	ls	20,000.00	In Addition		
	Equipment pads - allow	**1**	ls	5,000.00	In Addition		
	SUBTOTAL					99,290	
	TOTAL - FOUNDATIONS						**$99,290**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
B1010	**FLOOR CONSTRUCTION**						
	Allowance for seismic upgrades	**49,645**	sf	8.00	Assumed Not Required		
	New penetrations to existing structure	**1**	ls	15,000.00	15,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					20,000	
B1020	**ROOF CONSTRUCTION**						
	Allowance for seismic upgrades	**18,455**	sf	8.00	Assumed Not Required		
	SUBTOTAL					-	
	TOTAL - SUPERSTRUCTURE						**$20,000**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - RENOVATION TO ELEMENTARY SCHOOL							
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**						
	Miscellaneous						
	Demolition/ create opes/ tie in at existing exterior closure @ connection to new additions	**224**	sf	25.00	5,600		
	SUBTOTAL					5,600	
B2020	**WINDOWS**						
	Curtainwall replace existing		sf	120.00	ETR		
	Windows/storefront replace existing		sf	85.00	ETR		
	Backer rod & double sealant		lf	9.00	ETR		
	Wood blocking at openings		lf	4.00	ETR		
	SUBTOTAL					-	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door		pr	8,000.00	ETR		
	HM doors, frames and hardware- Double		pr	3,600.00	ETR		
	HM doors, frames and hardware- Single		ea	1,800.00	ETR		
	Coiling door at Loading dock		ls	7,500.00	ETR		
	Backer rod & double sealant		lf	9.00	ETR		
	Wood blocking at openings		lf	4.00	ETR		
	SUBTOTAL					-	
	TOTAL - EXTERIOR CLOSURE						**$5,600**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	Remove existing roof membrane down to insulation	**49,645**	sf	3.00	ETR		
	PVC roof membrane fully adhered	**49,645**	sf	7.50	ETR		
	Insulation	**49,645**	sf	6.00	ETR		
	1/2" dens-deck protection board	**49,645**	sf	2.00	ETR		
	Reinforced vapor barrier	**49,645**	sf	1.00	ETR		
	Rough blocking	**1**	lf	6.00	ETR		
	Miscellaneous Roofing						
	Repair existing roofing	**1**	ls	200,000.00	200,000		
	Roof ladders	**1**	ls	3,000.00	ETR		
	Walk pads	**1**	ls	7,500.00	ETR		
	SUBTOTAL					200,000	
B3020	**ROOF OPENINGS**						
	Roof hatch	**1**	loc	2,500.00	ETR		
	SUBTOTAL					-	
	TOTAL - ROOFING						**$200,000**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Allowance to modify/replace existing partitions at extensive renovation	**15,800**	sf	18.00	284,400		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - RENOVATION TO ELEMENTARY SCHOOL							
	Allowance for minor patching at existing partitions at minimal renovation	**52,300**	sf	2.00	104,600		
	SUBTOTAL					389,000	
C1020	**INTERIOR DOORS**						
	Allowance for specialty doors, doors and hardware	**15,800**	gsf	4.00	63,200		
	Allowance for ADA hardware at minimal renovation areas	**52,300**	gsf	2.00	104,600		
	SUBTOTAL					167,800	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**15,800**	gsf	0.80	12,640		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**15,800**	sf	1.00	15,800		
	Building directory	**1**	loc	3,000.00	In Addition		
	Bronze dedication plaque	**1**	loc	2,500.00	In Addition		
	Room Signs	**68,100**	gsf	0.40	27,240		
	Fire extinguisher cabinets	**23**	ea	350.00	8,050		
	Corridor Lockers	**68,100**	gsf	1.00	ETR		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	In Addition		
	Reception desk in Media - allowance	**1**	ls	20,000	In Addition		
	Library shelving				F,F & E		
	Student cubbies in classrooms	**24**	rms	6,000.00	144,000		
	Display cases	**1**	ls	15,000.00	ETR		
	Miscellaneous metals throughout building	**68,100**	sf	0.75	51,075		
	Miscellaneous sealants throughout building	**68,100**	sf	0.50	34,050		
	SUBTOTAL					304,855	
	TOTAL - INTERIOR CONSTRUCTION						**$861,655**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Metal pan stair; egress stair; modify existing	**2**	flt	10,000.00	Assumed Not Required		
	Concrete fill to stairs	**2**	flt	2,000.00	NIC		
	SUBTOTAL					-	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**2**	flt	3,000.00	6,000		
	Rubber tile at stairs - landings	**300**	sf	12.00	3,600		
	Rubber tile at stairs - treads & risers	**230**	lft	22.00	5,060		
	SUBTOTAL					14,660	
	TOTAL - STAIRCASES						**$14,660**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes at extensive renovation	**15,800**	gsf	5.00	79,000		
	Allowance for painting at minor renovation	**52,300**	gsf	1.50	78,450		
	SUBTOTAL					157,450	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - RENOVATION TO ELEMENTARY SCHOOL							
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes at extensive renovation	**15,800**	gsf	7.00	110,600		
	Allowance for floor finishes at minor renovation	**52,300**	gsf	2.00	104,600		
	SUBTOTAL					215,200	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes at extensive renovation	**15,800**	sf	7.00	110,600		
	Allowance for ceiling finishes at minor renovation	**52,300**	gsf	1.00	52,300		
	SUBTOTAL					162,900	
	TOTAL - INTERIOR FINISHES						**$535,550**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system at extensive renovation	**15,800**	gsf	12.00	189,600		
	Plumbing; assume no work at minor renovation	**52,300**	gsf				
	SUBTOTAL					189,600	
	TOTAL - PLUMBING						**$189,600**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system at extensive renovation	**15,800**	gsf	36.00	568,800		
	HVAC modifications at minor renovation	**52,300**	gsf	12.00	627,600		
	SUBTOTAL					1,196,400	
	TOTAL - HVAC						**$1,196,400**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system; modify existing	**68,100**	gsf	2.00	136,200		
	SUBTOTAL					136,200	
	TOTAL - FIRE PROTECTION						**$136,200**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete at extensive renovation	**15,800**	gsf	30.00	474,000		
	Electrical modifications at minor renovation	**52,300**	gsf	8.00	418,400		
	SUBTOTAL					892,400	
	TOTAL - ELECTRICAL						**$892,400**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3A - RENOVATION TO ELEMENTARY SCHOOL							
	Gym wall pads	**1**	ls	10,000.00	In Addition		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	In Addition		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	In Addition		
	Volleyball net and standards	**1**	ea	2,000.00	In Addition		
	Telescoping bleachers	**1**	ls	25,000.00	In Addition		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	75,000.00	75,000		
	Stage lighting and dimming	**1**	ls	35,000.00	35,000		
	Food Service equipment	**1**	ls	350,000.00	In Addition		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					120,000	
	TOTAL - EQUIPMENT						**$120,000**
E20	***FURNISHINGS***						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades		sf	6.00	ETR		
	Counters, base cabinets, tall storage in classrooms and other rooms at extensive renovations	**15,800**	gsf	6.00	94,800		
	SUBTOTAL					117,300	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$117,300**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	Extensive demolition of renovation areas; finishes, doors, MEP systems, casework and specialties at extensive renovations	**15,800**	sf	8.00	126,400		
	Minor demolition of renovation areas; finishes, doors, MEP systems, casework and specialties at minor renovations	**52,300**	sf	2.00	104,600		
	Demo of exterior windows		sf	6.00	ETR		
	Demo of roof included in Divisions above				ETR		
	SUBTOTAL					231,000	
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$231,000**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 3A							
G	***SITEWORK***						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence	**2,150**	lf	14.00	30,100		
	Pavement/curbing removal - grind up asphalt to reuse	**130,900**	sf	0.80	104,720		
	Remove and dispose walkways	**1**	ls	10,000.00	10,000		
	Tree removal	**1**	ls	20,000.00	20,000		
	Misc. Tree Protection	**1**	ls	5,000.00	5,000		
	Remove and dispose of existing drainage structures and utilities	**1**	ls	40,000.00	40,000		
	SUBTOTAL					$209,820	
	Site Earthwork						
	Construction entrances/wheel washes (allowance)	**1**	loc	15,000.00	15,000		
	Strip topsoil, store on site for reuse	**2,481**	cy	8.00	19,848		
	Cut/fill	**18,519**	cy	6.00	111,114		
	Fine grading	**32,450**	sy	0.50	16,225		
	Silt fence/erosion control (allowance)	**2,150**	lf	12.00	25,800		
	Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
	Hazardous Waste Remediation						
	No items in this section						
	SUBTOTAL					$197,987	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots						
	Bituminous concrete paving	*152,244*					
	gravel base; 12" thick	**5,639**	cy	35.00	197,365		
	bituminous concrete; 4" thick	**16,916**	sy	25.00	422,900		
	6"x18" granite curb	**8,973**	lf	32.00	287,136		
	Single solid lines, 4" thick	**213**	space	25.00	5,325		
	Wheelchair Parking	**10**	space	75.00	750		
	Crosswalk Hatching	**2**	loc	900.00	1,800		
	Other road markings	**1**	ls	7,500.00	7,500		
	HC curb cuts	**4**	loc	1,100.00	4,400		
	New entrance sign	**1**	ls	10,000.00	10,000		
	New traffic signs	**1**	ls	5,000.00	5,000		
	SUBTOTAL					$942,176	
	Pedestrian paving						
	Bituminous concrete paving	*10,000*	sf				
	gravel base; 12" thick	**370**	cy	35.00	12,950		
	bituminous concrete; 3" thick	**1,111**	sy	28.00	31,108		
	Concrete Pavers						
	Concrete pavers						
	Precast concrete pavers	**5,606**	sf	16.00	89,696		
	gravel base; 8" thick	**139**	cy	35.00	4,865		
	dry pack; 2" thick	**33**	cy	22.00	726		
	concrete base; 4" thick	**5,606**	sf	5.00	28,030		
	Site Improvements						
	Bicycle racks	**10**	ea	800.00	8,000		
	45' Flag pole	**1**	loc	7,500.00	7,500		
	Flag pole base	**1**	loc	1,500.00	1,500		
	Ornamental trash/recycling receptacles	**10**	ea	800.00	8,000		
	Seating walls	**1**	ls	75,000.00	75,000		
	Segmented block retaining walls	**3,400**	sf	55.00	187,000		
	Dumpster enclosure	**100**	lf	60.00	6,000		
	Play surface	**5,000**	sf	16.00	80,000		
	Track surface	**10,000**	sf	8.00	80,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 3A							
	Play equipment	**1**	ls	180,000.00	180,000		
	Other sitework improvements	**1**	ls	25,000.00	25,000		
	Tennis Courts	*24,200*					
	Gravel base - 12" thick	**896**	cy	35.00	NIC		
	Tennis court surface - color coated acrylic over asphalt	**2,689**	sy	42.00	NIC		
	Nets and posts	**4**	courts	900.00	NIC		
	Vinyl CL Fencing; 10'	**643**	lf	55.00	NIC		
	Gate, single	**2**	ea	1,200.00	NIC		
	Landscaping & Plantings:						
	Spread existing amended topsoil @ seeded areas	**1,852**	cy	22.00	40,744		
	New seeded areas - L&S	**100,000**	sf	0.20	20,000		
	Trees	**12**	ea	1,000.00	12,000		
	Shrubs/plantings and Groundcover	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$948,119	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	New fire DI piping; 8"	**660**	lf	80.00	52,800		
	New fire DI piping; 6"	**660**	lf	70.00	46,200		
	New fire hydrant	**2**	loc	2,600.00	5,200		
	FD connection	**1**	loc	2,000.00	2,000		
	Gate valves	**4**	loc	750.00	3,000		
	Connect to existing line (Wet Taps)	**1**	loc	5,000.00	5,000		
	Sanitary sewer						
	8" sewer	**700**	lf	48.00	33,600		
	Connect to existing	**1**	loc	1,500.00	1,500		
	6,000 gal grease trap	**1**	loc	12,000.00	12,000		
	SMH	**5**	loc	4,000.00	20,000		
	Increase septic reserve by 50%	**4,050**	sf	50.00	202,500		
	Storm Sewer						
	Allowance for stormwater management	**1**	ls	500,000.00	500,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**660**	lf	25.00	16,500		
	New telecom service	**660**	lf	25.00	16,500		
	SUBTOTAL					$916,800	
G40	**SITE ELECTRICAL**						
	Power						
	Tap main power source	**1**	ea	3,000.00	3,000		
	Primary ductbank	**660**	lf	65.00	42,900		
	Primary cabling				Utility company		
	Pad mounted transformer				Utility company		
	Transformer pad	**1**	ea	3,000.00	3,000		
	Secondary ductbank						
	Secondary ductbank cabling	**50**	lf	300.00	15,000		
	Generator ductbank						
	Generator ductbank	**50**	lf	250.00	12,500		
	Communications						
	Communications ductbank	**660**	lf	85.00	56,100		
	Site Lighting/Power						
	Site lighting, roadway, parking, pathways and landscaping	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$232,500	
SUBTOTAL SITE DEVELOPMENT OPTION 3A							**$3,447,402**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

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Feasibility Design Submission

GFA 63,282

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$713,132			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$529,883	**$1,243,015**	$19.64	7.5%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$915,383			
	B1020	Roof Construction	$1,208,892	**$2,124,275**	$33.57	12.9%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$1,407,944			
	B2020	Windows	$1,303,457			
	B2030	Exterior Doors	$58,541	**$2,769,942**	$43.77	16.8%
B30	**ROOFING**					
	B3010	Roof Coverings	$1,113,712			
	B3020	Roof Openings	$12,500	**$1,126,212**	$17.80	6.8%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$1,183,333			
	C1020	Interior Doors	$253,128			
	C1030	Specialties/Millwork	$424,738	**$1,861,199**	$29.41	11.3%
C20	**STAIRCASES**					
	C2010	Stair Construction	$42,000			
	C2020	Stair Finishes	$7,330	**$49,330**	$0.78	0.3%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$316,410			
	C3020	Floor Finishes	$442,974			
	C3030	Ceiling Finishes	$442,974	**$1,202,358**	$19.00	7.3%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$759,384	**$759,384**	$12.00	4.6%

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 63,282

CONSTRUCTION COST SUMMARY

OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$2,278,152	**$2,278,152**	$36.00	13.8%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$284,769	**$284,769**	$4.50	1.7%
D50	**ELECTRICAL**					
	D5010	Complete System	$1,898,460	**$1,898,460**	$30.00	11.5%
E10	**EQUIPMENT**					
	E10	Equipment	$481,200	**$481,200**	$7.60	2.9%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$450,660			
	E2020	Movable Furnishings	NIC	**$450,660**	$7.12	2.7%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$0			
	F2020	Hazardous Components Abatement	$0	**$0**	$0.00	0.0%
	TOTAL DIRECT COST (Trade Costs)			***$16,528,956***	*$261.20*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			38,691			
	Second Floor			24,591			
	TOTAL GROSS FLOOR AREA (GFA)					**63,282**	***sf***
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Strip footings - 3'-0" x 2'-0"						
	Excavation	**1,338**	cy	12.00	16,056		
	Store on site for reuse	**1,338**	cy	14.00	18,732		
	Backfill with new fill	**1,097**	cy	16.00	17,552		
	Formwork	**4,128**	sf	11.00	45,408		
	Re-bar, 10#/lf	**10,320**	lbs	1.20	12,384		
	Concrete material; 3,000 psi	**241**	cy	125.00	30,125		
	Placing concrete	**241**	cy	55.00	13,255		
	Foundation walls at exterior - 16" thick						
	Formwork	**8,256**	sf	12.50	103,200		
	Re-bar, 4#/sf	**16,512**	lbs	1.20	19,814		
	Concrete material; 4,000 psi	**187**	cy	135.00	25,245		
	Placing concrete	**187**	cy	65.00	12,155		
	Dampproofing foundation wall and footing	**6,192**	sf	1.90	NIC		
	Insulation to foundation walls; 2" thick	**4,128**	sf	2.50	10,320		
	Form shelf	**1,032**	lf	8.00	8,256		
	Thickened slab at interior load bearing walls						
	Excavation	**130**	cy	12.00	1,560		
	Store on site for reuse	**130**	cy	14.00	1,820		
	Backfill with new fill	**118**	cy	16.00	1,888		
	Formwork	**200**	sf	11.00	2,200		
	Re-bar, 10#/lf	**1,000**	lbs	1.20	1,200		
	Concrete material; 3,000 psi	**12**	cy	125.00	1,500		
	Placing concrete	**12**	cy	55.00	660		
	Exterior column footings, typical, 8' x 8' x 2'-0"						
	Excavation	**761**	cy	15.00	11,415		
	Store on site for reuse	**761**	cy	14.00	10,654		
	Backfill with new fill	**537**	cy	16.00	8,592		
	Formwork	**2,880**	sf	11.00	31,680		
	Re-bar,150/cy	**33,600**	lbs	1.20	40,320		
	Concrete material; 3,000 psi	**224**	cy	125.00	28,000		
	Placing concrete	**224**	cy	55.00	12,320		
	Set anchor bolts grout plates	**45**	ea	150.00	6,750		
	Interior column footings, typical, 9' x 9' x 2'-0"						
	Excavation	**417**	cy	15.00	6,255		
	Store on site for reuse	**417**	cy	14.00	5,838		
	Backfill with new fill	**285**	cy	16.00	4,560		
	Formwork	**1,512**	sf	11.00	16,632		
	Re-bar,150/cy	**15,750**	lbs	1.20	18,900		
	Concrete material; 3,000 psi	**132**	cy	125.00	16,500		
	Placing concrete	**132**	cy	55.00	7,260		
	Set anchor bolts grout plates	**21**	ea	150.00	3,150		
	Perimeter drainage system per geotech	**1,032**	lf	18.00	18,576		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for foundations against existing building	**360**	lf	340.00	122,400		
	SUBTOTAL					713,132	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	New Slab on grade, 5" thick						
	Structural gravel fill, 8"	**956**	cy	30.00	28,680		
	Base course, 8" gravel	**956**	cy	35.00	33,460		
	Rigid insulation	**38,691**	sf	2.25	87,055		
	Vapor barrier	**38,691**	sf	0.75	29,018		
	Under slab drainage -allow	**38,691**	sf	2.50	96,728		
	Mesh reinforcing 15% lap	**44,495**	sf	0.80	35,596		
	Concrete - 5" thick	**632**	cy	125.00	79,000		
	Placing concrete	**632**	cy	45.00	28,440		
	Finishing and curing concrete	**38,691**	sf	1.50	58,037		
	Control joints - saw cut	**38,691**	sf	0.10	3,869		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	25,000		
	New loading dock - allow	**1**	ls	20,000.00	20,000		
	Equipment pads - allow	**1**	ls	5,000.00	5,000		
	SUBTOTAL					529,883	
	TOTAL - FOUNDATIONS						**$1,243,015**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
		12	lbs/sf				
B1010	**FLOOR CONSTRUCTION**	392	tns				
	Floor Structure - Steel:						
	Steel beams and columns; 13/SF	**160**	tns	3,400.00	544,000		
	Shear studs	**4,918**	ea	2.50	12,295		
	Floor Structure						
	3" Metal floor Deck	**24,591**	sf	4.00	98,364		
	WWF reinforcement	**28,280**	sf	0.80	22,624		
	Concrete Fill to metal deck; 5 1/4" Light weight	**392**	cy	170.00	66,640		
	Place and finish concrete	**24,591**	sf	2.00	49,182		
	Misc. perimeter angles	**1,032**	lf	25.00	25,800		
	Miscellaneous						
	Fire proofing to columns and beams	**24,591**	sf	2.50	61,478		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL							
	Reinforce existing roof for new floor	**1**	ls	30,000.00	30,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					915,383	
B1020	**ROOF CONSTRUCTION**						
	Roof Structure - Steel:						
	Steel beams/Joists; 12#/SF	**232**	tns	3,400.00	788,800		
	Roof Structure						
	3" Metal floor Deck @ roof	**27,391**	sf	4.00	109,564		
	Acoustic deck at gym, 3", type NA	**11,300**	sf	7.00	79,100		
	Roof Structure @ Mech Equipment/Low roof						
	WWF reinforcement	**9,315**	sf	0.80	7,452		
	Concrete Fill to metal deck; 5 1/4" Light weight	**129**	cy	170.00	21,930		
	Place and finish concrete	**8,100**	sf	3.00	24,300		
	Miscellaneous						
	Canopy framing - allow	**1**	ls	30,000.00	30,000		
	Roof screen framing - allow	**1,100**	sf	20.00	22,000		
	Fire proofing to columns, beams and deck	**38,691**	sf	3.25	125,746		
	SUBTOTAL					1,208,892	
	TOTAL - SUPERSTRUCTURE						**$2,124,275**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*18,359*	sf				
	Interior skin						
	8" metal stud backup	**15,641**	sf	8.00	125,128		
	Batt insulation in stud	**15,641**	sf	2.25	35,192		
	2 1/2" Rigid Insulation	**15,641**	sf	3.00	46,923		
	Air barrier	**15,641**	sf	6.00	93,846		
	Air barrier/flashing at windows	**2,666**	lf	7.00	18,662		
	Gypsum Sheathing	**15,641**	sf	2.75	43,013		
	Drywall lining to interior face of stud backup	**15,641**	sf	3.00	46,923		
	Interior skin @ Gym and stage						
	8" CMU backup	**2,718**	sf	22.00	59,796		
	2 1/2" Rigid Insulation	**2,718**	sf	3.00	8,154		
	Air barrier	**2,718**	sf	6.00	16,308		
	Premium for GF block	**2,718**	sf	5.00	13,590		
	Exterior skin						
	Brick veneer	**12,117**	sf	35.00	424,095		
	Metal panels	**6,242**	sf	60.00	374,520		
	Miscellaneous						
	Aluminum sign at main entrance	**1**	ls	10,000.00	10,000		
	Staging to exterior wall	**30,598**	sf	3.00	91,794		
	SUBTOTAL					1,407,944	
B2020	**WINDOWS**	*12,239*	sf				
	Curtainwall	**4,161**	sf	120.00	499,320		
	Premium for sunscreen and light shelf elements	**1**	ls	50,000.00	50,000		
	Windows/storefront	**8,078**	sf	85.00	686,630		
	Louvers (allowance)	**250**	sf	60.00	15,000		
	Backer rod & double sealant	**4,039**	lf	9.00	36,351		
	Wood blocking at openings	**4,039**	lf	4.00	16,156		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL							
	SUBTOTAL					1,303,457	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door	**5**	pr	8,000.00	40,000		
	HM doors, frames and hardware- Double	**2**	pr	3,600.00	7,200		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**157**	lf	9.00	1,413		
	Wood blocking at openings	**157**	lf	4.00	628		
	SUBTOTAL					58,541	
	TOTAL - EXTERIOR CLOSURE						**$2,769,942**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	PVC roof membrane fully adhered	**38,691**	sf	7.50	290,183		
	Insulation	**38,691**	sf	6.00	232,146		
	1/2" dens-deck protection board	**38,691**	sf	2.00	77,382		
	Reinforced vapor barrier	**38,691**	sf	1.00	38,691		
	Rough blocking	**1,300**	lf	6.00	7,800		
	Miscellaneous Roofing						
	Premium for green roof	**1,233**	sf	30.00	36,990		
	Premium for sloped roof	**10,901**	sf	20.00	218,020		
	Canopies - allow	**300**	sf	75.00	22,500		
	Roof screens - allow	**1,100**	sf	50.00	55,000		
	Roof fascia/cornice	**1,300**	lf	90.00	117,000		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	15,000.00	15,000		
	SUBTOTAL					1,113,712	
B3020	**ROOF OPENINGS**						
	Skylights, allow	**1**	ls	10,000.00	10,000		
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					12,500	
	TOTAL - ROOFING						**$1,126,212**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Reinforced masonry shear walls at Gymnasium & Stage	**2,910**	sf	23.00	66,930		
	Stairs/Elevator; 2 HR rated	**3,220**	sf	16.00	51,520		
	Corridors; GWB with 2 lyrs corridor side	**21,518**	sf	15.55	334,605		
	Demising; Metal stud w/ 2 layers gwb	**10,892**	sf	17.35	188,976		
	Partitions at Admin spaces, back of house etc.	**2,744**	sf	15.85	43,492		
	Partitions at existing exterior wall	**5,082**	sf	15.00	76,230		
	Sealants & caulking at partitions	**41,284**	sf	0.50	20,642		
	Rough blocking to partitions	**3,176**	lf	3.00	9,528		
	Glazed partitions/borrowed lights - allowance	**1**	ls	75,000.00	75,000		
	Miscellaneous partitions not yet shown	**63,282**	gsf	5.00	316,410		
	SUBTOTAL					1,183,333	
C1020	**INTERIOR DOORS**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for specialty doors, doors and hardware	**63,282**	gsf	4.00	253,128		
	SUBTOTAL					253,128	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**63,282**	gsf	0.80	50,626		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**63,282**	sf	1.00	63,282		
	Building directory	**1**	loc	3,000.00	3,000		
	Bronze dedication plaque	**1**	loc	2,500.00	2,500		
	Room Signs	**63,282**	gsf	0.40	25,313		
	Fire extinguisher cabinets	**21**	ea	350.00	7,350		
	Corridor Lockers	**63,282**	gsf	1.00	63,282		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	20,000		
	Library shelving				F,F & E		
	Display cases	**1**	ls	30,000.00	30,000		
	Miscellaneous metals throughout building	**63,282**	sf	1.00	63,282		
	Miscellaneous sealants throughout building	**63,282**	sf	1.25	79,103		
	SUBTOTAL					424,738	
	TOTAL - INTERIOR CONSTRUCTION						**$1,861,199**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Stage stairs, wood	**2**	flts	5,000.00	10,000		
	Metal pan stair; egress stair	**1**	flt	30,000.00	30,000		
	Concrete fill to stairs	**1**	flt	2,000.00	2,000		
	SUBTOTAL					42,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**1**	flt	3,000.00	3,000		
	Rubber tile at stairs - landings	**150**	sf	12.00	1,800		
	Rubber tile at stairs - treads & risers	**115**	lft	22.00	2,530		
	SUBTOTAL					7,330	
	TOTAL - STAIRCASES						**$49,330**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**63,282**	gsf	5.00	316,410		
	SUBTOTAL					316,410	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**63,282**	gsf	7.00	442,974		
	SUBTOTAL					442,974	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**63,282**	sf	7.00	442,974		
	SUBTOTAL					442,974	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL							
	TOTAL - INTERIOR FINISHES						**$1,202,358**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**63,282**	gsf	12.00	759,384		
	SUBTOTAL					759,384	
	TOTAL - PLUMBING						**$759,384**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**63,282**	gsf	36.00	2,278,152		
	SUBTOTAL					2,278,152	
	TOTAL - HVAC						**$2,278,152**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**63,282**	gsf	4.50	284,769		
	SUBTOTAL					284,769	
	TOTAL - FIRE PROTECTION						**$284,769**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**63,282**	gsf	30.00	1,898,460		
	SUBTOTAL					1,898,460	
	TOTAL - ELECTRICAL						**$1,898,460**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	10,000		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	39,200		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	45,000		
	Volleyball net and standards	**1**	ea	2,000.00	2,000		
	Telescoping bleachers	**1**	ls	25,000.00	25,000		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls		In Reno		
	Stage lighting and dimming	**1**	ls		In Reno		
	Food Service equipment	**1**	ls	350,000.00	350,000		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					481,200	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - NEW ADDITION TO ELEMENTARY SCHOOL							
	TOTAL - EQUIPMENT						**$481,200**
	E20 FURNISHINGS						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**8,078**	sf	6.00	48,468		
	Counters, base cabinets, tall storage in classrooms and other rooms	**63,282**	gsf	6.00	379,692		
	SUBTOTAL					450,660	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$450,660**
	F10 SPECIAL CONSTRUCTION						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
	F20 SELECTIVE BUILDING DEMOLITION						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL						
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						

PM&C

Bourne Elementary Schools
Design Options
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Feasibility Design Submission

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CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$0			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$99,290	**$99,290**	$1.46	2.1%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$20,000			
	B1020	Roof Construction	$0	**$20,000**	$0.29	0.4%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$5,600			
	B2020	Windows	$0			
	B2030	Exterior Doors	$0	**$5,600**	$0.08	0.1%
B30	**ROOFING**					
	B3010	Roof Coverings	$200,000			
	B3020	Roof Openings	$0	**$200,000**	$2.94	4.3%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$389,000			
	C1020	Interior Doors	$167,800			
	C1030	Specialties/Millwork	$304,855	**$861,655**	$12.65	18.7%
C20	**STAIRCASES**					
	C2010	Stair Construction	$0			
	C2020	Stair Finishes	$14,660	**$14,660**	$0.22	0.3%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$157,450			
	C3020	Floor Finishes	$215,200			
	C3030	Ceiling Finishes	$162,900	**$535,550**	$7.86	11.6%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$189,600	**$189,600**	$2.78	4.1%

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CONSTRUCTION COST SUMMARY

OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$1,196,400	**$1,196,400**	$17.57	25.9%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$136,200	**$136,200**	$2.00	2.9%
D50	**ELECTRICAL**					
	D5010	Complete System	$892,400	**$892,400**	$13.10	19.3%
E10	**EQUIPMENT**					
	E10	Equipment	$120,000	**$120,000**	$1.76	2.6%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$117,300			
	E2020	Movable Furnishings	NIC	**$117,300**	$1.72	2.5%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$231,000			
	F2020	Hazardous Components Abatement	$0	**$231,000**	$3.39	5.0%
	TOTAL DIRECT COST (Trade Costs)			***$4,619,655***	*$67.84*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			49,645			
	Second Floor			18,455			
	TOTAL GROSS FLOOR AREA (GFA)				**68,100** ***sf***		
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Allowance for miscellaneous foundation work for seismic upgrades	**49,645**	sf	5.00	Assumed Not Required		
	SUBTOTAL					-	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	Allowance for patching of existing slabs disturbed by new work	**49,645**	sf	2.00	99,290		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	In Addition		
	New loading dock - allow	**1**	ls	20,000.00	In Addition		
	Equipment pads - allow	**1**	ls	5,000.00	In Addition		
	SUBTOTAL					99,290	
	TOTAL - FOUNDATIONS						**$99,290**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
B1010	**FLOOR CONSTRUCTION**						
	Allowance for seismic upgrades	**49,645**	sf	8.00	Assumed Not Required		
	New penetrations to existing structure	**1**	ls	15,000.00	15,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					20,000	
B1020	**ROOF CONSTRUCTION**						
	Allowance for seismic upgrades	**18,455**	sf	8.00	Assumed Not Required		
	SUBTOTAL					-	
	TOTAL - SUPERSTRUCTURE						**$20,000**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL						
	B20 EXTERIOR CLOSURE						
B2010	**EXTERIOR WALLS**						
	Miscellaneous						
	Demolition/ create opes/ tie in at existing exterior closure @ connection to new additions	**224**	sf	25.00	5,600		
	SUBTOTAL					5,600	
B2020	**WINDOWS**						
	Curtainwall replace existing		sf	120.00	ETR		
	Windows/storefront replace existing		sf	85.00	ETR		
	Backer rod & double sealant		lf	9.00	ETR		
	Wood blocking at openings		lf	4.00	ETR		
	SUBTOTAL					-	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door		pr	8,000.00	ETR		
	HM doors, frames and hardware- Double		pr	3,600.00	ETR		
	HM doors, frames and hardware- Single		ea	1,800.00	ETR		
	Coiling door at Loading dock		ls	7,500.00	ETR		
	Backer rod & double sealant		lf	9.00	ETR		
	Wood blocking at openings		lf	4.00	ETR		
	SUBTOTAL					-	
	TOTAL - EXTERIOR CLOSURE						**$5,600**
	B30 ROOFING						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	Remove existing roof membrane down to insulation	**49,645**	sf	3.00	ETR		
	PVC roof membrane fully adhered	**49,645**	sf	7.50	ETR		
	Insulation	**49,645**	sf	6.00	ETR		
	1/2" dens-deck protection board	**49,645**	sf	2.00	ETR		
	Reinforced vapor barrier	**49,645**	sf	1.00	ETR		
	Rough blocking	**1**	lf	6.00	ETR		
	Miscellaneous Roofing						
	Repair existing roofing	**1**	ls	200,000.00	200,000		
	Roof ladders	**1**	ls	3,000.00	ETR		
	Walk pads	**1**	ls	7,500.00	ETR		
	SUBTOTAL					200,000	
B3020	**ROOF OPENINGS**						
	Roof hatch	**1**	loc	2,500.00	ETR		
	SUBTOTAL					-	
	TOTAL - ROOFING						**$200,000**
	C10 INTERIOR CONSTRUCTION						
C1010	**PARTITIONS**						
	Allowance to modify/replace existing partitions at extensive renovation	**15,800**	sf	18.00	284,400		

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Bourne Elementary Schools 09-Dec-15
Design Options
Bourne, MA

Feasibility Design Submission GFA 68,100

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL							
111		Allowance for minor patching at existing partitions at minimal renovation	**52,300**	sf	2.00	104,600		
112		SUBTOTAL					389,000	
113								
114	**C1020**	**INTERIOR DOORS**						
115		Allowance for specialty doors, doors and hardware	**15,800**	gsf	4.00	63,200		
116		Allowance for ADA hardware at minimal renovation areas	**52,300**	gsf	2.00	104,600		
117		SUBTOTAL					167,800	
118								
119	**C1030**	**SPECIALTIES / MILLWORK**						
120		Toilet Partitions and accessories	**15,800**	gsf	0.80	12,640		
121		Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
122		Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**15,800**	sf	1.00	15,800		
123		Building directory	**1**	loc	3,000.00	In Addition		
124		Bronze dedication plaque	**1**	loc	2,500.00	In Addition		
125		Room Signs	**68,100**	gsf	0.40	27,240		
126		Fire extinguisher cabinets	**23**	ea	350.00	8,050		
127		Corridor Lockers	**68,100**	gsf	1.00	ETR		
128		Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
129		Shelving in storage rooms	**1**	ls	10,000.00	10,000		
130		Staff mailboxes/casework	**1**	ls	5,000.00	In Addition		
131		Reception desk in Media - allowance	**1**	ls	20,000	In Addition		
132		Library shelving				F,F & E		
133		Student cubbies in classrooms	**24**	rms	6,000.00	144,000		
134		Display cases	**1**	ls	15,000.00	ETR		
135		Miscellaneous metals throughout building	**68,100**	sf	0.75	51,075		
136		Miscellaneous sealants throughout building	**68,100**	sf	0.50	34,050		
137		SUBTOTAL					304,855	
138								
139		***TOTAL - INTERIOR CONSTRUCTION***						**$861,655**
140								
141								
142	***C20***	***STAIRCASES***						
143								
144	**C2010**	**STAIR CONSTRUCTION**						
145		Metal pan stair; egress stair; modify existing	**2**	flt	10,000.00	Assumed Not Required		
146		Concrete fill to stairs	**2**	flt	2,000.00	NIC		
147		SUBTOTAL					-	
148								
149	**C2020**	**STAIR FINISHES**						
150		High performance coating to stairs including all railings etc.	**2**	flt	3,000.00	6,000		
151		Rubber tile at stairs - landings	**300**	sf	12.00	3,600		
152		Rubber tile at stairs - treads & risers	**230**	lft	22.00	5,060		
153		SUBTOTAL					14,660	
154								
155		***TOTAL - STAIRCASES***						**$14,660**
156								
157								
158	***C30***	***INTERIOR FINISHES***						
159								
160	**C3010**	**WALL FINISHES**						
161		Allowance for wall finishes at extensive renovation	**15,800**	gsf	5.00	79,000		
162		Allowance for painting at minor renovation	**52,300**	gsf	1.50	78,450		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL							
	SUBTOTAL					157,450	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes at extensive renovation	**15,800**	gsf	7.00	110,600		
	Allowance for floor finishes at minor renovation	**52,300**	gsf	2.00	104,600		
	SUBTOTAL					215,200	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes at extensive renovation	**15,800**	sf	7.00	110,600		
	Allowance for ceiling finishes at minor renovation	**52,300**	gsf	1.00	52,300		
	SUBTOTAL					162,900	
	TOTAL - INTERIOR FINISHES						**$535,550**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system at extensive renovation	**15,800**	gsf	12.00	189,600		
	Plumbing; assume no work at minor renovation	**52,300**	gsf				
	SUBTOTAL					189,600	
	TOTAL - PLUMBING						**$189,600**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system at extensive renovation	**15,800**	gsf	36.00	568,800		
	HVAC modifications at minor renovation	**52,300**	gsf	12.00	627,600		
	SUBTOTAL					1,196,400	
	TOTAL - HVAC						**$1,196,400**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system; modify existing	**68,100**	gsf	2.00	136,200		
	SUBTOTAL					136,200	
	TOTAL - FIRE PROTECTION						**$136,200**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete at extensive renovation	**15,800**	gsf	30.00	474,000		
	Electrical modifications at minor renovation	**52,300**	gsf	8.00	418,400		
	SUBTOTAL					892,400	
	TOTAL - ELECTRICAL						**$892,400**
E10	***EQUIPMENT***						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL							
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	In Addition		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	In Addition		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	In Addition		
	Volleyball net and standards	**1**	ea	2,000.00	In Addition		
	Telescoping bleachers	**1**	ls	25,000.00	In Addition		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	75,000.00	75,000		
	Stage lighting and dimming	**1**	ls	35,000.00	35,000		
	Food Service equipment	**1**	ls	350,000.00	In Addition		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					120,000	
	TOTAL - EQUIPMENT						**$120,000**
E20	***FURNISHINGS***						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades		sf	6.00	ETR		
	Counters, base cabinets, tall storage in classrooms and other rooms at extensive renovations	**15,800**	gsf	6.00	94,800		
	SUBTOTAL					117,300	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$117,300**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	Extensive demolition of renovation areas; finishes, doors, MEP systems, casework and specialties at extensive renovations	**15,800**	sf	8.00	126,400		
	Minor demolition of renovation areas; finishes, doors, MEP systems, casework and specialties at minor renovations	**52,300**	sf	2.00	104,600		
	Demo of exterior windows		sf	6.00	ETR		
	Demo of roof included in Divisions above				ETR		
	SUBTOTAL					231,000	
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$231,000**

CSI CODE	*DESCRIPTION*	*QTY*	*UNIT*	*UNIT COST*	*EST'D COST*	*SUB TOTAL*	TOTAL COST

OPTION 3B - RENOVATION TO ELEMENTARY SCHOOL

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 3B							
G	***SITEWORK***						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence	**2,150**	lf	14.00	30,100		
	Pavement/curbing removal - grind up asphalt to reuse	**130,900**	sf	0.80	104,720		
	Remove and dispose walkways	**1**	ls	10,000.00	10,000		
	Tree removal	**1**	ls	20,000.00	20,000		
	Misc. Tree Protection	**1**	ls	5,000.00	5,000		
	Remove and dispose of existing drainage structures and utilities	**1**	ls	40,000.00	40,000		
	SUBTOTAL					$209,820	
	Site Earthwork						
	Construction entrances/wheel washes (allowance)	**1**	loc	15,000.00	15,000		
	Strip topsoil, store on site for reuse	**2,481**	cy	8.00	19,848		
	Cut/fill	**18,519**	cy	6.00	111,114		
	Fine grading	**31,775**	sy	0.50	15,888		
	Silt fence/erosion control (allowance)	**2,150**	lf	12.00	25,800		
	Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
	Hazardous Waste Remediation						
	No items in this section						
	SUBTOTAL					$197,650	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots						
	Bituminous concrete paving	*146,169*					
	gravel base; 12" thick	**5,414**	cy	35.00	189,490		
	bituminous concrete; 4" thick	**16,241**	sy	25.00	406,025		
	6"x18" granite curb	**8,232**	lf	32.00	263,424		
	Single solid lines, 4" thick	**213**	space	25.00	5,325		
	Wheelchair Parking	**10**	space	75.00	750		
	Crosswalk Hatching	**2**	loc	900.00	1,800		
	Other road markings	**1**	ls	7,500.00	7,500		
	HC curb cuts	**4**	loc	1,100.00	4,400		
	New entrance sign	**1**	ls	10,000.00	10,000		
	New traffic signs	**1**	ls	5,000.00	5,000		
	SUBTOTAL					$893,714	
	Pedestrian paving						
	Bituminous concrete paving	*10,000*	sf				
	gravel base; 12" thick	**370**	cy	35.00	12,950		
	bituminous concrete; 3" thick	**1,111**	sy	28.00	31,108		
	Concrete Pavers						
	Concrete pavers						
	Precast concrete pavers	**5,606**	sf	16.00	89,696		
	gravel base; 8" thick	**139**	cy	35.00	4,865		
	dry pack; 2" thick	**33**	cy	22.00	726		
	concrete base; 4" thick	**5,606**	sf	5.00	28,030		
	Site Improvements						
	Bicycle racks	**10**	ea	800.00	8,000		
	45' Flag pole	**1**	loc	7,500.00	7,500		
	Flag pole base	**1**	loc	1,500.00	1,500		
	Ornamental trash/recycling receptacles	**10**	ea	800.00	8,000		
	Seating walls	**1**	ls	75,000.00	75,000		
	Segmented block retaining walls	**3,400**	sf	55.00	187,000		
	Dumpster enclosure	**100**	lf	60.00	6,000		
	Play surface	**5,000**	sf	16.00	80,000		
	Track surface	**10,000**	sf	8.00	80,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 3B							
	Play equipment	**1**	ls	180,000.00	180,000		
	Other sitework improvements	**1**	ls	25,000.00	25,000		
	Tennis Courts	*24,200*					
	Gravel base - 12" thick	**896**	cy	35.00	NIC		
	Tennis court surface - color coated acrylic over asphalt	**2,689**	sy	42.00	NIC		
	Nets and posts	**4**	courts	900.00	NIC		
	Vinyl CL Fencing; 10'	**643**	lf	55.00	NIC		
	Gate, single	**2**	ea	1,200.00	NIC		
	Landscaping & Plantings:						
	Spread existing amended topsoil @ seeded areas	**1,852**	cy	22.00	40,744		
	New seeded areas - L&S	**100,000**	sf	0.20	20,000		
	Trees	**12**	ea	1,000.00	12,000		
	Shrubs/plantings and Groundcover	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$948,119	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	New fire DI piping; 8"	**660**	lf	80.00	52,800		
	New fire DI piping; 6"	**660**	lf	70.00	46,200		
	New fire hydrant	**2**	loc	2,600.00	5,200		
	FD connection	**1**	loc	2,000.00	2,000		
	Gate valves	**4**	loc	750.00	3,000		
	Connect to existing line (Wet Taps)	**1**	loc	5,000.00	5,000		
	Sanitary sewer						
	8" sewer	**700**	lf	48.00	33,600		
	Connect to existing	**1**	loc	1,500.00	1,500		
	6,000 gal grease trap	**1**	loc	12,000.00	12,000		
	SMH	**5**	loc	4,000.00	20,000		
	Increase septic reserve by 50%	**4,050**	sf	50.00	202,500		
	Storm Sewer						
	Allowance for stormwater management	**1**	ls	500,000.00	500,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**660**	lf	25.00	16,500		
	New telecom service	**660**	lf	25.00	16,500		
	SUBTOTAL					$916,800	
G40	**SITE ELECTRICAL**						
	Power						
	Tap main power source	**1**	ea	3,000.00	3,000		
	Primary ductbank	**660**	lf	65.00	42,900		
	Primary cabling				Utility company		
	Pad mounted transformer				Utility company		
	Transformer pad	**1**	ea	3,000.00	3,000		
	Secondary ductbank						
	Secondary ductbank cabling	**50**	lf	300.00	15,000		
	Generator ductbank						
	Generator ductbank	**50**	lf	250.00	12,500		
	Communications						
	Communications ductbank	**660**	lf	85.00	56,100		
	Site Lighting/Power						
	Site lighting, roadway, parking, pathways and landscaping	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$232,500	
SUBTOTAL SITE DEVELOPMENT OPTION 3B							**$3,398,603**

PM&C

Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 72,473

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 4A - NEW ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$809,723			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$637,547	**$1,447,270**	$19.97	7.5%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$919,211			
	B1020	Roof Construction	$1,448,622	**$2,367,833**	$32.67	12.3%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$1,782,179			
	B2020	Windows	$1,626,779			
	B2030	Exterior Doors	$58,541	**$3,467,499**	$47.85	18.0%
B30	**ROOFING**					
	B3010	Roof Coverings	$1,037,826			
	B3020	Roof Openings	$12,500	**$1,050,326**	$14.49	5.5%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$1,314,566			
	C1020	Interior Doors	$289,892			
	C1030	Specialties/Millwork	$528,377	**$2,132,835**	$29.43	11.1%
C20	**STAIRCASES**					
	C2010	Stair Construction	$104,000			
	C2020	Stair Finishes	$14,660	**$118,660**	$1.64	0.6%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$362,365			
	C3020	Floor Finishes	$507,311			
	C3030	Ceiling Finishes	$507,311	**$1,376,987**	$19.00	7.2%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$90,000	**$90,000**	$1.24	0.5%
D20	**PLUMBING**					
	D20	Plumbing	$869,676	**$869,676**	$12.00	4.5%

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 72,473

CONSTRUCTION COST SUMMARY

OPTION 4A - NEW ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$2,609,028	**$2,609,028**	$36.00	13.5%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$326,129	**$326,129**	$4.50	1.7%
D50	**ELECTRICAL**					
	D5010	Complete System	$2,174,190	**$2,174,190**	$30.00	11.3%
E10	**EQUIPMENT**					
	E10	Equipment	$706,200	**$706,200**	$9.74	3.7%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$518,454			
	E2020	Movable Furnishings	NIC	**$518,454**	$7.15	2.7%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$0			
	F2020	Hazardous Components Abatement	$0	**$0**	$0.00	0.0%
	TOTAL DIRECT COST (Trade Costs)			***$19,255,087***	*$265.69*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4A - NEW ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			47,371			
	Second Floor			25,102			
	TOTAL GROSS FLOOR AREA (GFA)					**72,473**	***sf***
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Strip footings - 3'-0" x 2'-0"						
	Excavation	**1,970**	cy	12.00	23,640		
	Store on site for reuse	**1,970**	cy	14.00	27,580		
	Backfill with new fill	**1,615**	cy	16.00	25,840		
	Formwork	**6,080**	sf	11.00	66,880		
	Re-bar, 10#/lf	**15,200**	lbs	1.20	18,240		
	Concrete material; 3,000 psi	**355**	cy	125.00	44,375		
	Placing concrete	**355**	cy	55.00	19,525		
	Foundation walls at exterior - 16" thick						
	Formwork	**12,160**	sf	12.50	152,000		
	Re-bar, 4#/sf	**24,320**	lbs	1.20	29,184		
	Concrete material; 4,000 psi	**276**	cy	135.00	37,260		
	Placing concrete	**276**	cy	65.00	17,940		
	Dampproofing foundation wall and footing	**9,120**	sf	1.90	NIC		
	Insulation to foundation walls; 2" thick	**6,080**	sf	2.50	15,200		
	Form shelf	**1,520**	lf	8.00	12,160		
	Thickened slab at interior load bearing walls						
	Excavation	**162**	cy	12.00	1,944		
	Store on site for reuse	**162**	cy	14.00	2,268		
	Backfill with new fill	**147**	cy	16.00	2,352		
	Formwork	**250**	sf	11.00	2,750		
	Re-bar, 10#/lf	**1,250**	lbs	1.20	1,500		
	Concrete material; 3,000 psi	**15**	cy	125.00	1,875		
	Placing concrete	**15**	cy	55.00	825		
	Exterior column footings, typical, 8' x 8' x 2'-0"						
	Excavation	**862**	cy	15.00	12,930		
	Store on site for reuse	**862**	cy	14.00	12,068		
	Backfill with new fill	**608**	cy	16.00	9,728		
	Formwork	**3,264**	sf	11.00	35,904		
	Re-bar,150/cy	**38,100**	lbs	1.20	45,720		
	Concrete material; 3,000 psi	**254**	cy	125.00	31,750		
	Placing concrete	**254**	cy	55.00	13,970		
	Set anchor bolts grout plates	**51**	ea	150.00	7,650		
	Interior column footings, typical, 9' x 9' x 2'-0"						
	Excavation	**575**	cy	15.00	8,625		
	Store on site for reuse	**575**	cy	14.00	8,050		
	Backfill with new fill	**392**	cy	16.00	6,272		
	Formwork	**2,088**	sf	11.00	22,968		
	Re-bar,150/cy	**21,750**	lbs	1.20	26,100		
	Concrete material; 3,000 psi	**183**	cy	125.00	22,875		
	Placing concrete	**183**	cy	55.00	10,065		
	Set anchor bolts grout plates	**29**	ea	150.00	4,350		
	Perimeter drainage system per geotech	**1,520**	lf	18.00	27,360		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4A - NEW ELEMENTARY SCHOOL							
	SUBTOTAL					809,723	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	New Slab on grade, 5" thick						
	Structural gravel fill, 8"	**1,170**	cy	30.00	35,100		
	Base course, 8" gravel	**1,170**	cy	35.00	40,950		
	Rigid insulation	**47,371**	sf	2.25	106,585		
	Vapor barrier	**47,371**	sf	0.75	35,528		
	Under slab drainage -allow	**47,371**	sf	2.50	118,428		
	Mesh reinforcing 15% lap	**54,477**	sf	0.80	43,582		
	Concrete - 5" thick	**774**	cy	125.00	96,750		
	Placing concrete	**774**	cy	45.00	34,830		
	Finishing and curing concrete	**47,371**	sf	1.50	71,057		
	Control joints - saw cut	**47,371**	sf	0.10	4,737		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	25,000		
	New loading dock - allow	**1**	ls	20,000.00	20,000		
	Equipment pads - allow	**1**	ls	5,000.00	5,000		
	SUBTOTAL					637,547	
	TOTAL - FOUNDATIONS						**$1,447,270**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
		12	lbs/sf				
B1010	**FLOOR CONSTRUCTION**	447	tns				
	Floor Structure - Steel:						
	Steel beams and columns; 13/SF	**163**	tns	3,400.00	554,200		
	Shear studs	**5,020**	ea	2.50	12,550		
	Floor Structure						
	3" Metal floor Deck	**25,102**	sf	4.00	100,408		
	WWF reinforcement	**28,867**	sf	0.80	23,094		
	Concrete Fill to metal deck; 5 1/4" Light weight	**400**	cy	170.00	68,000		
	Place and finish concrete	**25,102**	sf	2.00	50,204		
	Misc. perimeter angles	**1,520**	lf	25.00	38,000		
	Miscellaneous						
	Fire proofing to columns and beams	**25,102**	sf	2.50	62,755		
	Fire stopping floors	**2**	flrs	5,000.00	10,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4A - NEW ELEMENTARY SCHOOL							
	SUBTOTAL					919,211	
B1020	**ROOF CONSTRUCTION**						
	Roof Structure - Steel:						
	Steel beams/Joists; 12#/SF	**284**	tns	3,400.00	965,600		
	Roof Structure						
	3" Metal floor Deck @ roof	**36,071**	sf	4.00	144,284		
	Acoustic deck at gym, 3", type NA	**11,300**	sf	7.00	79,100		
	Roof Structure @ Mech Equipment/Low roof						
	WWF reinforcement	**9,315**	sf	0.80	7,452		
	Concrete Fill to metal deck; 5 1/4" Light weight	**129**	cy	170.00	21,930		
	Place and finish concrete	**8,100**	sf	3.00	24,300		
	Miscellaneous						
	Canopy framing - allow	**1**	ls	30,000.00	30,000		
	Roof screen framing - allow	**1,100**	sf	20.00	22,000		
	Fire proofing to columns, beams and deck	**47,371**	sf	3.25	153,956		
	SUBTOTAL					1,448,622	
	TOTAL - SUPERSTRUCTURE						**$2,367,833**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*23,150*	sf				
	Interior skin						
	8" metal stud backup	**18,866**	sf	8.00	150,928		
	Batt insulation in stud	**18,866**	sf	2.25	42,449		
	2 1/2" Rigid Insulation	**18,866**	sf	3.00	56,598		
	Air barrier	**18,866**	sf	6.00	113,196		
	Air barrier/flashing at windows	**3,361**	lf	7.00	23,527		
	Gypsum Sheathing	**18,866**	sf	2.75	51,882		
	Drywall lining to interior face of stud backup	**18,866**	sf	3.00	56,598		
	Interior skin @ Gym and stage						
	8" CMU backup	**4,284**	sf	22.00	94,248		
	2 1/2" Rigid Insulation	**4,284**	sf	3.00	12,852		
	Air barrier	**4,284**	sf	6.00	25,704		
	Premium for GF block	**4,284**	sf	5.00	21,420		
	Exterior skin						
	Brick veneer	**15,279**	sf	35.00	534,765		
	Metal panels	**7,871**	sf	60.00	472,260		
	Miscellaneous						
	Aluminum sign at main entrance	**1**	ls	10,000.00	10,000		
	Staging to exterior wall	**38,584**	sf	3.00	115,752		
	SUBTOTAL					1,782,179	
B2020	**WINDOWS**	*15,434*	sf				
	Curtainwall	**5,248**	sf	120.00	629,760		
	Premium for sunscreen and light shelf elements	**1**	ls	50,000.00	50,000		
	Windows/storefront	**10,186**	sf	85.00	865,810		
	Louvers (allowance)	**250**	sf	60.00	15,000		
	Backer rod & double sealant	**5,093**	lf	9.00	45,837		
	Wood blocking at openings	**5,093**	lf	4.00	20,372		
	SUBTOTAL					1,626,779	
B2030	**EXTERIOR DOORS**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4A - NEW ELEMENTARY SCHOOL							
	Glazed entrance doors including frame and hardware; double door	**5**	pr	8,000.00	40,000		
	HM doors, frames and hardware- Double	**2**	pr	3,600.00	7,200		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**157**	lf	9.00	1,413		
	Wood blocking at openings	**157**	lf	4.00	628		
	SUBTOTAL					58,541	
	TOTAL - EXTERIOR CLOSURE						**$3,467,499**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	PVC roof membrane fully adhered	**47,371**	sf	7.50	355,283		
	Insulation	**47,371**	sf	6.00	284,226		
	1/2" dens-deck protection board	**47,371**	sf	2.00	94,742		
	Reinforced vapor barrier	**47,371**	sf	1.00	47,371		
	Rough blocking	**1,674**	lf	6.00	10,044		
	Miscellaneous Roofing						
	Canopies - allow	**300**	sf	75.00	22,500		
	Roof screens - allow	**1,100**	sf	50.00	55,000		
	Roof fascia/cornice	**1,674**	lf	90.00	150,660		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	15,000.00	15,000		
	SUBTOTAL					1,037,826	
B3020	**ROOF OPENINGS**						
	Skylights, allow	**1**	ls	10,000.00	10,000		
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					12,500	
	TOTAL - ROOFING						**$1,050,326**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Reinforced masonry shear walls at Gymnasium & Stage	**6,870**	sf	23.00	158,010		
	Stairs/Elevator; 2 HR rated	**4,438**	sf	16.00	71,008		
	Corridors; GWB with 2 lyrs corridor side	**18,466**	sf	15.55	287,146		
	Demising; Metal stud w/ 2 layers gwb	**13,076**	sf	17.35	226,869		
	Partitions at Admin spaces, back of house etc.	**1,680**	sf	15.85	26,628		
	Sealants & caulking at partitions	**44,530**	sf	0.50	22,265		
	Rough blocking to partitions	**3,425**	lf	3.00	10,275		
	Glazed partitions/borrowed lights - allowance	**1**	ls	150,000.00	150,000		
	Miscellaneous partitions not yet shown	**72,473**	gsf	5.00	362,365		
	SUBTOTAL					1,314,566	
C1020	**INTERIOR DOORS**						
	Allowance for specialty doors, doors and hardware	**72,473**	gsf	4.00	289,892		
	SUBTOTAL					289,892	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**72,473**	gsf	0.80	57,978		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4A - NEW ELEMENTARY SCHOOL							
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**72,473**	sf	1.00	72,473		
	Building directory	**1**	loc	3,000.00	3,000		
	Bronze dedication plaque	**1**	loc	2,500.00	2,500		
	Room Signs	**72,473**	gsf	0.40	28,989		
	Fire extinguisher cabinets	**24**	ea	350.00	8,400		
	Corridor Lockers	**72,473**	gsf	1.00	72,473		
	Team room lockers; allowance	**1**	ls	30,000.00	30,000		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	20,000		
	Library shelving				F,F & E		
	Display cases	**1**	ls	30,000.00	30,000		
	Guardrail at open to below spaces	**75**	lf	300.00	22,500		
	Miscellaneous metals throughout building	**72,473**	sf	1.00	72,473		
	Miscellaneous sealants throughout building	**72,473**	sf	1.25	90,591		
	SUBTOTAL					528,377	
	TOTAL - INTERIOR CONSTRUCTION						**$2,132,835**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Feature stair including rails and finishes	**1**	flt	60,000.00	60,000		
	Stage stairs, wood	**2**	flts	5,000.00	10,000		
	Metal pan stair; egress stair	**1**	flt	30,000.00	30,000		
	Concrete fill to stairs	**2**	flt	2,000.00	4,000		
	SUBTOTAL					104,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**2**	flt	3,000.00	6,000		
	Rubber tile at stairs - landings	**300**	sf	12.00	3,600		
	Rubber tile at stairs - treads & risers	**230**	lft	22.00	5,060		
	SUBTOTAL					14,660	
	TOTAL - STAIRCASES						**$118,660**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**72,473**	gsf	5.00	362,365		
	SUBTOTAL					362,365	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**72,473**	gsf	7.00	507,311		
	SUBTOTAL					507,311	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**72,473**	sf	7.00	507,311		
	SUBTOTAL					507,311	
	TOTAL - INTERIOR FINISHES						**$1,376,987**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4A - NEW ELEMENTARY SCHOOL							
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	New elevator; 2 stop	**1**	ea	90,000.00	90,000		
	SUBTOTAL					90,000	
	TOTAL - CONVEYING SYSTEMS						**$90,000**
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**72,473**	gsf	12.00	869,676		
	SUBTOTAL					869,676	
	TOTAL - PLUMBING						**$869,676**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**72,473**	gsf	36.00	2,609,028		
	SUBTOTAL					2,609,028	
	TOTAL - HVAC						**$2,609,028**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**72,473**	gsf	4.50	326,129		
	SUBTOTAL					326,129	
	TOTAL - FIRE PROTECTION						**$326,129**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**72,473**	gsf	30.00	2,174,190		
	SUBTOTAL					2,174,190	
	TOTAL - ELECTRICAL						**$2,174,190**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	10,000		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	39,200		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	45,000		
	Volleyball net and standards	**1**	ea	2,000.00	2,000		
	Telescoping bleachers	**1**	ls	25,000.00	25,000		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	150,000.00	150,000		
	Stage lighting and dimming	**1**	ls	75,000.00	75,000		
	Food Service equipment	**1**	ls	350,000.00	350,000		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					706,200	
	TOTAL - EQUIPMENT						**$706,200**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4A - NEW ELEMENTARY SCHOOL							
E20	***FURNISHINGS***						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**10,186**	sf	6.00	61,116		
	Counters, base cabinets, tall storage in classrooms and other rooms	**72,473**	gsf	6.00	434,838		
	SUBTOTAL					518,454	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$518,454**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL						
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK OPTION 4A						
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence	**2,900**	lf	14.00	40,600		
	Pavement/curbing removal - grind up asphalt to reuse	**116,200**	sf	0.80	92,960		
	Remove and dispose walkways	**1**	ls	10,000.00	10,000		
	Remove and dispose tennis courts	**25,600**	sf	2.00	51,200		
	Tree removal	**1**	ls	20,000.00	20,000		
	Misc. Tree Protection	**1**	ls	5,000.00	5,000		
	Remove and dispose of existing drainage structures and utilities	**1**	ls	40,000.00	40,000		
	SUBTOTAL					$259,760	
	Site Earthwork						
	Construction entrances/wheel washes (allowance)	**1**	loc	15,000.00	15,000		
	Strip topsoil, store on site for reuse	**7,444**	cy	8.00	59,552		
	Cut/fill	**33,333**	cy	6.00	199,998		
	Fine grading	**28,947**	sy	0.50	14,474		
	Silt fence/erosion control (allowance)	**2,900**	lf	12.00	34,800		
	Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
	Hazardous Waste Remediation						
	Removal of UST and propane tanks	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$383,824	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots						
	Bituminous concrete paving	*115,827*					
	gravel base; 12" thick	**4,290**	cy	35.00	150,150		
	bituminous concrete; 4" thick	**12,870**	sy	25.00	321,750		
	6"x18" granite curb	**7,760**	lf	32.00	248,320		
	Single solid lines, 4" thick	**135**	space	25.00	3,375		
	Wheelchair Parking	**10**	space	75.00	750		
	Crosswalk Hatching	**2**	loc	900.00	1,800		
	Other road markings	**1**	ls	7,500.00	7,500		
	HC curb cuts	**4**	loc	1,100.00	4,400		
	New entrance sign	**1**	ls	10,000.00	10,000		
	New traffic signs	**1**	ls	5,000.00	5,000		
	SUBTOTAL					$753,045	
	Pedestrian paving						
	Bituminous concrete paving	*10,000*	sf				
	gravel base; 12" thick	**370**	cy	35.00	12,950		
	bituminous concrete; 3" thick	**1,111**	sy	28.00	31,108		
	Concrete Pavers						
	Concrete pavers						
	Precast concrete pavers	**10,500**	sf	16.00	168,000		
	gravel base; 8" thick	**261**	cy	35.00	9,135		
	dry pack; 2" thick	**62**	cy	22.00	1,364		
	concrete base; 4" thick	**10,500**	sf	5.00	52,500		
	Site Improvements						
	Bicycle racks	**10**	ea	800.00	8,000		
	45' Flag pole	**1**	loc	7,500.00	7,500		
	Flag pole base	**1**	loc	1,500.00	1,500		
	Ornamental trash/recycling receptacles	**10**	ea	800.00	8,000		
	Seating walls	**1**	ls	75,000.00	75,000		
	Segmented block retaining walls	**2,112**	sf	55.00	116,160		
	Dumpster enclosure	**100**	lf	60.00	6,000		
	Play surface	**3,333**	sf	16.00	53,328		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 4A							
	Track surface	**6,666**	sf	8.00	53,328		
	Play equipment	**1**	ls	120,000.00	120,000		
	Other sitework improvements	**1**	ls	25,000.00	25,000		
	Tennis Courts	***24,200***					
	Gravel base - 12" thick	**896**	cy	35.00	31,360		
	Tennis court surface - color coated acrylic over asphalt	**2,689**	sy	42.00	112,938		
	Nets and posts	**4**	courts	900.00	3,600		
	Vinyl CL Fencing; 10'	**643**	lf	55.00	35,365		
	Gate, single	**2**	ea	1,200.00	2,400		
	Landscaping & Plantings:						
	Spread existing amended topsoil @ seeded areas	**1,852**	cy	22.00	40,744		
	New seeded areas - L&S	**100,000**	sf	0.20	20,000		
	Trees	**17**	ea	1,000.00	17,000		
	Shrubs/plantings and Groundcover	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$1,062,280	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	New fire DI piping; 8"	**260**	lf	80.00	20,800		
	New fire DI piping; 6"	**260**	lf	70.00	18,200		
	New fire hydrant	**2**	loc	2,600.00	5,200		
	FD connection	**1**	loc	2,000.00	2,000		
	Gate valves	**4**	loc	750.00	3,000		
	Connect to existing line (Wet Taps)	**1**	loc	5,000.00	5,000		
	Sanitary sewer						
	8" sewer	**300**	lf	48.00	14,400		
	Connect to existing	**1**	loc	1,500.00	1,500		
	6,000 gal grease trap	**1**	loc	12,000.00	12,000		
	SMH	**3**	loc	4,000.00	12,000		
	Storm Sewer						
	Allowance for stormwater management	**1**	ls	350,000.00	350,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**250**	lf	25.00	6,250		
	New telecom service	**250**	lf	25.00	6,250		
	SUBTOTAL					$456,600	
G40	**SITE ELECTRICAL**						
	Power						
	Tap main power source	**1**	ea	3,000.00	3,000		
	Primary ductbank	**250**	lf	65.00	16,250		
	Primary cabling				Utility company		
	Pad mounted transformer				Utility company		
	Transformer pad	**1**	ea	3,000.00	3,000		
	Secondary ductbank						
	Secondary ductbank cabling	**50**	lf	300.00	15,000		
	Generator ductbank						
	Generator ductbank	**50**	lf	250.00	12,500		
	Communications						
	Communications ductbank	**250**	lf	85.00	21,250		
	Site Lighting/Power						
	Site lighting, roadway, parking, pathways and landscaping	**1**	ls	60,000.00	60,000		
	SUBTOTAL					$131,000	
SUBTOTAL SITE DEVELOPMENT OPTION 4A							**$3,046,509**

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 34,886

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$579,426			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$475,946	**$1,055,372**	$30.25	10.8%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$46,312			
	B1020	Roof Construction	$1,088,991	**$1,135,303**	$32.54	11.7%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$852,642			
	B2020	Windows	$764,108			
	B2030	Exterior Doors	$58,541	**$1,675,291**	$48.02	17.2%
B30	**ROOFING**					
	B3010	Roof Coverings	$763,861			
	B3020	Roof Openings	$12,500	**$776,361**	$22.25	8.0%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$647,845			
	C1020	Interior Doors	$139,544			
	C1030	Specialties/Millwork	$251,829	**$1,039,218**	$29.79	10.7%
C20	**STAIRCASES**					
	C2010	Stair Construction	$42,000			
	C2020	Stair Finishes	$7,330	**$49,330**	$1.41	0.5%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$174,430			
	C3020	Floor Finishes	$244,202			
	C3030	Ceiling Finishes	$244,202	**$662,834**	$19.00	6.8%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$90,000	**$90,000**	$2.58	0.9%
D20	**PLUMBING**					
	D20	Plumbing	$418,632	**$418,632**	$12.00	4.3%

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Bourne Elementary Schools
Design Options
Bourne, MA

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Feasibility Design Submission

GFA 34,886

CONSTRUCTION COST SUMMARY

OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$1,255,896	**$1,255,896**	$36.00	12.9%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$156,987	**$156,987**	$4.50	1.6%
D50	**ELECTRICAL**					
	D5010	Complete System	$1,046,580	**$1,046,580**	$30.00	10.7%
E10	**EQUIPMENT**					
	E10	Equipment	$121,200	**$121,200**	$3.47	1.2%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$260,154			
	E2020	Movable Furnishings	NIC	**$260,154**	$7.46	2.7%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$0			
	F2020	Hazardous Components Abatement	$0	**$0**	$0.00	0.0%
	TOTAL DIRECT COST (Trade Costs)			***$9,743,158***	*$279.29*	*100.0%*

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			34,346			
	Second Floor			540			
	TOTAL GROSS FLOOR AREA (GFA)					**34,886**	***sf***
A10	***FOUNDATIONS***						
A1010	**STANDARD FOUNDATIONS**						
	Strip footings - 3'-0" x 2'-0"						
	Excavation	**1,080**	cy	12.00	12,960		
	Store on site for reuse	**1,080**	cy	14.00	15,120		
	Backfill with new fill	**886**	cy	16.00	14,176		
	Formwork	**3,332**	sf	11.00	36,652		
	Re-bar, 10#/lf	**8,330**	lbs	1.20	9,996		
	Concrete material; 3,000 psi	**194**	cy	125.00	24,250		
	Placing concrete	**194**	cy	55.00	10,670		
	Foundation walls at exterior - 16" thick						
	Formwork	**6,664**	sf	12.50	83,300		
	Re-bar, 4#/sf	**13,328**	lbs	1.20	15,994		
	Concrete material; 4,000 psi	**151**	cy	135.00	20,385		
	Placing concrete	**151**	cy	65.00	9,815		
	Dampproofing foundation wall and footing	**4,998**	sf	1.90	NIC		
	Insulation to foundation walls; 2" thick	**3,332**	sf	2.50	8,330		
	Form shelf	**833**	lf	8.00	6,664		
	Thickened slab at interior load bearing walls						
	Excavation	**136**	cy	12.00	1,632		
	Store on site for reuse	**136**	cy	14.00	1,904		
	Backfill with new fill	**124**	cy	16.00	1,984		
	Formwork	**210**	sf	11.00	2,310		
	Re-bar, 10#/lf	**1,050**	lbs	1.20	1,260		
	Concrete material; 3,000 psi	**12**	cy	125.00	1,500		
	Placing concrete	**12**	cy	55.00	660		
	Exterior column footings, typical, 8' x 8' x 2'-0"						
	Excavation	**626**	cy	15.00	9,390		
	Store on site for reuse	**626**	cy	14.00	8,764		
	Backfill with new fill	**442**	cy	16.00	7,072		
	Formwork	**2,368**	sf	11.00	26,048		
	Re-bar,150/cy	**27,600**	lbs	1.20	33,120		
	Concrete material; 3,000 psi	**184**	cy	125.00	23,000		
	Placing concrete	**184**	cy	55.00	10,120		
	Set anchor bolts grout plates	**37**	ea	150.00	5,550		
	Interior column footings, typical, 9' x 9' x 2'-0"						
	Excavation	**456**	cy	15.00	6,840		
	Store on site for reuse	**456**	cy	14.00	6,384		
	Backfill with new fill	**311**	cy	16.00	4,976		
	Formwork	**1,656**	sf	11.00	18,216		
	Re-bar,150/cy	**17,250**	lbs	1.20	20,700		
	Concrete material; 3,000 psi	**145**	cy	125.00	18,125		
	Placing concrete	**145**	cy	55.00	7,975		
	Set anchor bolts grout plates	**23**	ea	150.00	3,450		
	Perimeter drainage system per geotech	**833**	lf	18.00	14,994		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL							
	Allowance for foundations against existing building	**221**	lf	340.00	75,140		
	SUBTOTAL					579,426	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	New Slab on grade, 5" thick						
	Structural gravel fill, 8"	**848**	cy	30.00	25,440		
	Base course, 8" gravel	**848**	cy	35.00	29,680		
	Rigid insulation	**34,346**	sf	2.25	77,279		
	Vapor barrier	**34,346**	sf	0.75	25,760		
	Under slab drainage -allow	**34,346**	sf	2.50	85,865		
	Mesh reinforcing 15% lap	**39,498**	sf	0.80	31,598		
	Concrete - 5" thick	**561**	cy	125.00	70,125		
	Placing concrete	**561**	cy	45.00	25,245		
	Finishing and curing concrete	**34,346**	sf	1.50	51,519		
	Control joints - saw cut	**34,346**	sf	0.10	3,435		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	25,000		
	New loading dock - allow	**1**	ls	20,000.00	20,000		
	Equipment pads - allow	**1**	ls	5,000.00	5,000		
	SUBTOTAL					475,946	
	TOTAL - FOUNDATIONS						**$1,055,372**
A20	***BASEMENT CONSTRUCTION***						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
B10	***SUPERSTRUCTURE***						
		12	lbs/sf				
B1010	**FLOOR CONSTRUCTION**	210	tns				
	Floor Structure - Steel:						
	Steel beams and columns; 13/SF	**4**	tns	3,400.00	13,600		
	Shear studs	**108**	ea	2.50	270		
	Floor Structure						
	3" Metal floor Deck	**540**	sf	4.00	2,160		
	WWF reinforcement	**621**	sf	0.80	497		
	Concrete Fill to metal deck; 5 1/4" Light weight	**9**	cy	170.00	1,530		
	Place and finish concrete	**540**	sf	2.00	1,080		
	Misc. perimeter angles	**833**	lf	25.00	20,825		
	Miscellaneous						
	Fire proofing to columns and beams	**540**	sf	2.50	1,350		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL							
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					46,312	
B1020	**ROOF CONSTRUCTION**						
	Roof Structure - Steel:						
	Steel beams/Joists; 12#/SF	**206**	tns	3,400.00	700,400		
	Roof Structure						
	3" Metal floor Deck @ roof	**23,046**	sf	4.00	92,184		
	Acoustic deck at gym, 3", type NA	**11,300**	sf	7.00	79,100		
	Roof Structure @ Mech Equipment/Low roof						
	WWF reinforcement	**9,315**	sf	0.80	7,452		
	Concrete Fill to metal deck; 5 1/4" Light weight	**129**	cy	170.00	21,930		
	Place and finish concrete	**8,100**	sf	3.00	24,300		
	Miscellaneous						
	Canopy framing - allow	**1**	ls	30,000.00	30,000		
	Roof screen framing - allow	**1,100**	sf	20.00	22,000		
	Fire proofing to columns, beams and deck	**34,346**	sf	3.25	111,625		
	SUBTOTAL					1,088,991	
	TOTAL - SUPERSTRUCTURE						**$1,135,303**
B20	***EXTERIOR CLOSURE***						
B2010	**EXTERIOR WALLS**	*10,734*	sf				
	Interior skin						
	8" metal stud backup	**6,846**	sf	8.00	54,768		
	Batt insulation in stud	**6,846**	sf	2.25	15,404		
	2 1/2" Rigid Insulation	**6,846**	sf	3.00	20,538		
	Air barrier	**6,846**	sf	6.00	41,076		
	Air barrier/flashing at windows	**1,559**	lf	7.00	10,913		
	Gypsum Sheathing	**6,846**	sf	2.75	18,827		
	Drywall lining to interior face of stud backup	**6,846**	sf	3.00	20,538		
	Interior skin @ Gym and stage						
	8" CMU backup	**3,888**	sf	22.00	85,536		
	2 1/2" Rigid Insulation	**3,888**	sf	3.00	11,664		
	Air barrier	**3,888**	sf	6.00	23,328		
	Premium for GF block	**3,888**	sf	5.00	19,440		
	Exterior skin						
	Brick veneer	**7,084**	sf	35.00	247,940		
	Metal panels	**3,650**	sf	60.00	219,000		
	Miscellaneous						
	Aluminum sign at main entrance	**1**	ls	10,000.00	10,000		
	Staging to exterior wall	**17,890**	sf	3.00	53,670		
	SUBTOTAL					852,642	
B2020	**WINDOWS**	*7,156*	sf				
	Curtainwall	**2,433**	sf	120.00	291,960		
	Premium for sunscreen and light shelf elements	**1**	ls	25,000.00	25,000		
	Windows/storefront	**4,723**	sf	85.00	401,455		
	Louvers (allowance)	**250**	sf	60.00	15,000		
	Backer rod & double sealant	**2,361**	lf	9.00	21,249		
	Wood blocking at openings	**2,361**	lf	4.00	9,444		
	SUBTOTAL					764,108	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL							
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door	**5**	pr	8,000.00	40,000		
	HM doors, frames and hardware- Double	**2**	pr	3,600.00	7,200		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**157**	lf	9.00	1,413		
	Wood blocking at openings	**157**	lf	4.00	628		
	SUBTOTAL					58,541	
	TOTAL - EXTERIOR CLOSURE						**$1,675,291**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	PVC roof membrane fully adhered	**34,346**	sf	7.50	257,595		
	Insulation	**34,346**	sf	6.00	206,076		
	1/2" dens-deck protection board	**34,346**	sf	2.00	68,692		
	Reinforced vapor barrier	**34,346**	sf	1.00	34,346		
	Rough blocking	**1,137**	lf	6.00	6,822		
	Miscellaneous Roofing						
	Canopies - allow	**300**	sf	75.00	22,500		
	Roof screens - allow	**1,100**	sf	50.00	55,000		
	Roof fascia/cornice	**1,137**	lf	90.00	102,330		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	7,500.00	7,500		
	SUBTOTAL					763,861	
B3020	**ROOF OPENINGS**						
	Skylights, allow	**1**	ls	10,000.00	10,000		
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					12,500	
	TOTAL - ROOFING						**$776,361**
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Reinforced masonry shear walls at Gymnasium & Stage	**3,120**	sf	23.00	71,760		
	Stairs/Elevator; 2 HR rated	**910**	sf	16.00	14,560		
	Corridors; GWB with 2 lyrs corridor side	**9,478**	sf	15.55	147,383		
	Demising; Metal stud w/ 2 layers gwb	**7,434**	sf	17.35	128,980		
	Partitions at Admin spaces, back of house etc.	**1,232**	sf	15.85	19,527		
	Sealants & caulking at partitions	**22,174**	sf	0.50	11,087		
	Rough blocking to partitions	**1,706**	lf	3.00	5,118		
	Glazed partitions/borrowed lights - allowance	**1**	ls	75,000.00	75,000		
	Miscellaneous partitions not yet shown	**34,886**	gsf	5.00	174,430		
	SUBTOTAL					647,845	
C1020	**INTERIOR DOORS**						
	Allowance for specialty doors, doors and hardware	**34,886**	gsf	4.00	139,544		
	SUBTOTAL					139,544	
C1030	**SPECIALTIES / MILLWORK**						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL							
	Toilet Partitions and accessories	**34,886**	gsf	0.80	27,909		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**34,886**	sf	1.00	34,886		
	Building directory	**1**	loc	3,000.00	3,000		
	Bronze dedication plaque	**1**	loc	2,500.00	2,500		
	Room Signs	**34,886**	gsf	0.40	13,954		
	Fire extinguisher cabinets	**12**	ea	350.00	4,200		
	Corridor Lockers	**34,886**	gsf	1.00	34,886		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	20,000		
	Library shelving				F,F & E		
	Display cases	**1**	ls	15,000.00	15,000		
	Miscellaneous metals throughout building	**34,886**	sf	1.00	34,886		
	Miscellaneous sealants throughout building	**34,886**	sf	1.25	43,608		
	SUBTOTAL					251,829	
	TOTAL - INTERIOR CONSTRUCTION						**$1,039,218**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Stage stairs, wood	**2**	flts	5,000.00	10,000		
	Metal pan stair; egress stair	**1**	flt	30,000.00	30,000		
	Concrete fill to stairs	**1**	flt	2,000.00	2,000		
	SUBTOTAL					42,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**1**	flt	3,000.00	3,000		
	Rubber tile at stairs - landings	**150**	sf	12.00	1,800		
	Rubber tile at stairs - treads & risers	**115**	lft	22.00	2,530		
	SUBTOTAL					7,330	
	TOTAL - STAIRCASES						**$49,330**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**34,886**	gsf	5.00	174,430		
	SUBTOTAL					174,430	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**34,886**	gsf	7.00	244,202		
	SUBTOTAL					244,202	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**34,886**	sf	7.00	244,202		
	SUBTOTAL					244,202	
	TOTAL - INTERIOR FINISHES						**$662,834**
D10	***CONVEYING SYSTEMS***						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL							
D1010	**ELEVATOR**						
	New elevator; 2 stop	**1**	ea	90,000.00	90,000		
	SUBTOTAL					90,000	
	TOTAL - CONVEYING SYSTEMS						**$90,000**
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**34,886**	gsf	12.00	418,632		
	SUBTOTAL					418,632	
	TOTAL - PLUMBING						**$418,632**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**34,886**	gsf	36.00	1,255,896		
	SUBTOTAL					1,255,896	
	TOTAL - HVAC						**$1,255,896**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**34,886**	gsf	4.50	156,987		
	SUBTOTAL					156,987	
	TOTAL - FIRE PROTECTION						**$156,987**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**34,886**	gsf	30.00	1,046,580		
	SUBTOTAL					1,046,580	
	TOTAL - ELECTRICAL						**$1,046,580**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	10,000		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	39,200		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	45,000		
	Volleyball net and standards	**1**	ea	2,000.00	2,000		
	Telescoping bleachers	**1**	ls	25,000.00	25,000		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	150,000.00	In Reno		
	Stage lighting and dimming	**1**	ls	75,000.00	In Reno		
	Food Service equipment	**1**	ls	350,000.00	In Reno		
	Electrically operated projection screens	**1**	loc	10,000.00	In Reno		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					121,200	
	TOTAL - EQUIPMENT						**$121,200**
E20	***FURNISHINGS***						

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Bourne Elementary Schools 09-Dec-15
Design Options
Bourne, MA

Feasibility Design Submission GFA 34,886

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - NEW ADDITION TO ELEMENTARY SCHOOL							
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**4,723**	sf	6.00	28,338		
	Counters, base cabinets, tall storage in classrooms and other rooms	**34,886**	gsf	6.00	209,316		
	SUBTOTAL					260,154	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$260,154**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL						
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 37,557

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
OPTION 4B - RENOVATION TO ELEMENTARY SCHOOL						
A10	**FOUNDATIONS**					
	A1010	Standard Foundations	$0			
	A1020	Special Foundations	$0			
	A1030	Lowest Floor Construction	$61,659	**$61,659**	$1.64	0.7%
A20	**BASEMENT CONSTRUCTION**					
	A2010	Basement Excavation	$0			
	A2020	Basement Walls	$0	**$0**	$0.00	0.0%
B10	**SUPERSTRUCTURE**					
	B1010	Upper Floor Construction	$76,250			
	B1020	Roof Construction	$100,000	**$176,250**	$4.69	1.9%
B20	**EXTERIOR CLOSURE**					
	B2010	Exterior Walls	$896,098			
	B2020	Windows	$826,825			
	B2030	Exterior Doors	$29,901	**$1,752,824**	$46.67	18.8%
B30	**ROOFING**					
	B3010	Roof Coverings	$1,164,460			
	B3020	Roof Openings	$2,500	**$1,166,960**	$31.07	12.5%
C10	**INTERIOR CONSTRUCTION**					
	C1010	Partitions	$676,026			
	C1020	Interior Doors	$150,228			
	C1030	Specialties/Millwork	$241,236	**$1,067,490**	$28.42	11.4%
C20	**STAIRCASES**					
	C2010	Stair Construction	$10,000			
	C2020	Stair Finishes	$7,330	**$17,330**	$0.46	0.2%
C30	**INTERIOR FINISHES**					
	C3010	Wall Finishes	$187,785			
	C3020	Floor Finishes	$262,899			
	C3030	Ceiling Finishes	$262,899	**$713,583**	$19.00	7.7%
D10	**CONVEYING SYSTEMS**					
	D1010	Elevator	$0	**$0**	$0.00	0.0%
D20	**PLUMBING**					
	D20	Plumbing	$450,684	**$450,684**	$12.00	4.8%

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Bourne Elementary Schools
Design Options
Bourne, MA

09-Dec-15

Feasibility Design Submission

GFA 37,557

CONSTRUCTION COST SUMMARY

OPTION 4B - RENOVATION TO ELEMENTARY SCHOOL

	BUILDING SYSTEM		*SUB-TOTAL*	*TOTAL*	*$/SF*	*%*
D30	**HVAC**					
	D30	HVAC	$1,352,052	**$1,352,052**	$36.00	14.5%
D40	**FIRE PROTECTION**					
	D40	Fire Protection	$225,342	**$225,342**	$6.00	2.4%
D50	**ELECTRICAL**					
	D5010	Complete System	$1,126,710	**$1,126,710**	$30.00	12.1%
E10	**EQUIPMENT**					
	E10	Equipment	$585,000	**$585,000**	$15.58	6.3%
E20	**FURNISHINGS**					
	E2010	Fixed Furnishings	$279,222			
	E2020	Movable Furnishings	NIC	**$279,222**	$7.43	3.0%
F10	**SPECIAL CONSTRUCTION**					
	F10	Special Construction	$0	**$0**	$0.00	0.0%
F20	**HAZMAT REMOVALS**					
	F2010	Building Elements Demolition	$348,000			
	F2020	Hazardous Components Abatement	$0	**$348,000**	$9.27	3.7%
	TOTAL DIRECT COST (Trade Costs)			***$9,323,106***	*$248.24*	*100.0%*

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Bourne Elementary Schools
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - RENOVATION TO ELEMENTARY SCHOOL							
	GROSS FLOOR AREA CALCULATION						
	First Floor			20,553			
	Second Floor			17,004			
	TOTAL GROSS FLOOR AREA (GFA)				**37,557** ***sf***		
	A10 FOUNDATIONS						
A1010	**STANDARD FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL					-	
A1020	**SPECIAL FOUNDATIONS**						
	No Work in this section						
	SUBTOTAL						
A1030	**LOWEST FLOOR CONSTRUCTION**						
	Allowance for patching of existing slabs disturbed by new work	**20,553**	sf	3.00	61,659		
	Miscellaneous						
	New Elevator pits	**1**	ea	25,000.00	In Addition		
	New loading dock - allow	**1**	ls	20,000.00	In Addition		
	Equipment pads - allow	**1**	ls	5,000.00	In Addition		
	SUBTOTAL					61,659	
	TOTAL - FOUNDATIONS						**$61,659**
	A20 BASEMENT CONSTRUCTION						
A2010	**BASEMENT EXCAVATION**						
	No items in this section						
	SUBTOTAL					-	
A2020	**BASEMENT WALLS**						
	No items in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						
	B10 SUPERSTRUCTURE						
B1010	**FLOOR CONSTRUCTION**						
	Allowance for gym floor joist seismic connections	**75**	loc	750.00	56,250		
	New penetrations to existing structure	**1**	ls	15,000.00	15,000		
	Fire stopping floors	**1**	flrs	5,000.00	5,000		
	SUBTOTAL					76,250	
B1020	**ROOF CONSTRUCTION**						
	Allowance for snow drift upgrades	**1**	ls	100,000.00	100,000		
	SUBTOTAL					100,000	
	TOTAL - SUPERSTRUCTURE						**$176,250**
	B20 EXTERIOR CLOSURE						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - RENOVATION TO ELEMENTARY SCHOOL							
B2010	**EXTERIOR WALLS**	*11,886*	sf				
	Interior skin						
	Allowance to insulate exterior	**11,886**	sf	8.00	95,088		
	Exterior skin						
	Allowance to remove and replace existing brickwork	**11,886**	sf	45.00	534,870		
	Miscellaneous						
	New lintels and relieving angles	**11,886**	sf	10.00	118,860		
	Demolition/ create opes/ tie in at existing exterior closure @ connection to new additions	**3,514**	sf	25.00	87,850		
	Staging to exterior wall	**19,810**	sf	3.00	59,430		
	SUBTOTAL					896,098	
B2020	**WINDOWS**	*7,924*	sf				
	Curtainwall replace existing	**2,694**	sf	120.00	323,280		
	Premium for sunscreen and light shelf elements	**1**	ls	25,000.00	25,000		
	Windows/storefront replace existing	**5,230**	sf	85.00	444,550		
	Backer rod & double sealant	**2,615**	lf	9.00	23,535		
	Wood blocking at openings	**2,615**	lf	4.00	10,460		
	SUBTOTAL					826,825	
B2030	**EXTERIOR DOORS**						
	Glazed entrance doors including frame and hardware; double door	**2**	pr	8,000.00	16,000		
	HM doors, frames and hardware- Double	**1**	pr	3,600.00	3,600		
	HM doors, frames and hardware- Single	**1**	ea	1,800.00	1,800		
	Coiling door at Loading dock	**1**	ls	7,500.00	7,500		
	Backer rod & double sealant	**77**	lf	9.00	693		
	Wood blocking at openings	**77**	lf	4.00	308		
	SUBTOTAL					29,901	
	TOTAL - EXTERIOR CLOSURE						**$1,752,824**
B30	***ROOFING***						
B3010	**ROOF COVERINGS**						
	Flat roofing						
	Remove existing roof membrane down to insulation	**24,664**	sf	3.00	73,992		
	New standing seam metal roofing	**24,664**	sf	26.00	641,264		
	Insulation; nailable	**24,664**	sf	11.00	271,304		
	1/2" dens-deck protection board	**24,664**	sf	2.00	49,328		
	Reinforced vapor barrier	**24,664**	sf	1.00	24,664		
	Rough blocking	**973**	lf	6.00	5,838		
	Miscellaneous Roofing						
	Roof fascia/cornice	**973**	lf	90.00	87,570		
	Roof ladders	**1**	ls	3,000.00	3,000		
	Walk pads	**1**	ls	7,500.00	7,500		
	SUBTOTAL					1,164,460	
B3020	**ROOF OPENINGS**						
	Roof hatch	**1**	loc	2,500.00	2,500		
	SUBTOTAL					2,500	
	TOTAL - ROOFING						**$1,166,960**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - RENOVATION TO ELEMENTARY SCHOOL							
C10	***INTERIOR CONSTRUCTION***						
C1010	**PARTITIONS**						
	Allowance to modify/replace existing partitions	**37,557**	sf	18.00	676,026		
	SUBTOTAL					676,026	
C1020	**INTERIOR DOORS**						
	Allowance for specialty doors, doors and hardware	**37,557**	gsf	4.00	150,228		
	SUBTOTAL					150,228	
C1030	**SPECIALTIES / MILLWORK**						
	Toilet Partitions and accessories	**37,557**	gsf	0.80	30,046		
	Backer panels in electrical closets	**1**	ls	1,000.00	1,000		
	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms; 20' tackboard w/ 8' markerboard in each Educational space	**37,557**	sf	1.00	37,557		
	Building directory	**1**	loc	3,000.00	In Addition		
	Bronze dedication plaque	**1**	loc	2,500.00	In Addition		
	Room Signs	**37,557**	gsf	0.40	15,023		
	Fire extinguisher cabinets	**13**	ea	350.00	4,550		
	Corridor Lockers	**37,557**	gsf	1.00	37,557		
	Janitors Closet Accessories	**1**	ls	1,000.00	1,000		
	Shelving in storage rooms	**1**	ls	10,000.00	10,000		
	Staff mailboxes/casework	**1**	ls	5,000.00	5,000		
	Reception desk in Media - allowance	**1**	ls	20,000	In Addition		
	Library shelving				F,F & E		
	Display cases	**1**	ls	15,000.00	15,000		
	Miscellaneous metals throughout building	**37,557**	sf	1.00	37,557		
	Miscellaneous sealants throughout building	**37,557**	sf	1.25	46,946		
	SUBTOTAL					241,236	
	TOTAL - INTERIOR CONSTRUCTION						**$1,067,490**
C20	***STAIRCASES***						
C2010	**STAIR CONSTRUCTION**						
	Metal pan stair; egress stair; modify existing	**1**	flt	10,000.00	10,000		
	Concrete fill to stairs	**1**	flt	2,000.00	NIC		
	SUBTOTAL					10,000	
C2020	**STAIR FINISHES**						
	High performance coating to stairs including all railings etc.	**1**	flt	3,000.00	3,000		
	Rubber tile at stairs - landings	**150**	sf	12.00	1,800		
	Rubber tile at stairs - treads & risers	**115**	lft	22.00	2,530		
	SUBTOTAL					7,330	
	TOTAL - STAIRCASES						**$17,330**
C30	***INTERIOR FINISHES***						
C3010	**WALL FINISHES**						
	Allowance for wall finishes	**37,557**	gsf	5.00	187,785		
	SUBTOTAL					187,785	
C3020	**FLOOR FINISHES**						
	Allowance for floor finishes	**37,557**	gsf	7.00	262,899		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - RENOVATION TO ELEMENTARY SCHOOL							
	SUBTOTAL					262,899	
C3030	**CEILING FINISHES**						
	Allowance for ceiling finishes	**37,557**	sf	7.00	262,899		
	SUBTOTAL					262,899	
	TOTAL - INTERIOR FINISHES						**$713,583**
D10	***CONVEYING SYSTEMS***						
D1010	**ELEVATOR**						
	New elevator; 2 stop	**1**	ea	90,000.00	In Addition		
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						
D20	***PLUMBING***						
D20	**PLUMBING, GENERALLY**						
	Plumbing; complete system	**37,557**	gsf	12.00	450,684		
	SUBTOTAL					450,684	
	TOTAL - PLUMBING						**$450,684**
D30	***HVAC***						
D30	**HVAC, GENERALLY**						
	HVAC complete system	**37,557**	gsf	36.00	1,352,052		
	SUBTOTAL					1,352,052	
	TOTAL - HVAC						**$1,352,052**
D40	***FIRE PROTECTION***						
D40	**FIRE PROTECTION, GENERALLY**						
	Sprinkler system	**37,557**	gsf	6.00	225,342		
	SUBTOTAL					225,342	
	TOTAL - FIRE PROTECTION						**$225,342**
D50	***ELECTRICAL***						
D5010	**COMPLETE ELECTRICAL SYSTEM**						
	Electrical system; complete	**37,557**	gsf	30.00	1,126,710		
	SUBTOTAL					1,126,710	
	TOTAL - ELECTRICAL						**$1,126,710**
E10	***EQUIPMENT***						
E10	**EQUIPMENT, GENERALLY**						
	Gym wall pads	**1**	ls	10,000.00	In Addition		
	Basketball backstops; swing up; electric operated	**4**	ea	9,800.00	In Addition		
	Gymnasium dividing net; electrically operated	**1**	loc	45,000.00	In Addition		
	Volleyball net and standards	**1**	ea	2,000.00	In Addition		
	Telescoping bleachers	**1**	ls	25,000.00	In Addition		
	Theatrical Equipment Stage curtains, rigging and controls	**1**	ls	150,000.00	150,000		
	Stage lighting and dimming	**1**	ls	75,000.00	75,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION 4B - RENOVATION TO ELEMENTARY SCHOOL							
	Food Service equipment	**1**	ls	350,000.00	350,000		
	Electrically operated projection screens	**1**	loc	10,000.00	10,000		
	AV Equipment (including Smartboards, Projectors, LED monitors, Digital information displays etc.)				FF+E		
	SUBTOTAL					585,000	
	TOTAL - EQUIPMENT						**$585,000**
E20	***FURNISHINGS***						
E2010	**FIXED FURNISHINGS**						
	Entry mats & frames - recessed with carpet/rubber strips	**500**	sf	45.00	22,500		
	Manual operated roller shades	**5,230**	sf	6.00	31,380		
	Counters, base cabinets, tall storage in classrooms and other rooms	**37,557**	gsf	6.00	225,342		
	SUBTOTAL					279,222	
E2020	**MOVABLE FURNISHINGS**						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$279,222**
F10	***SPECIAL CONSTRUCTION***						
F10	**SPECIAL CONSTRUCTION**						
	No Work in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	***SELECTIVE BUILDING DEMOLITION***						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	Extensive demolition of renovation areas; finishes, doors, MEP systems, casework and specialties	**37,557**	sf	8.00	300,456		
	Demo of exterior windows	**7,924**	sf	6.00	47,544		
	Demo of roof included in Divisions above						
	See main summary for demolition of existing buildings						
	SUBTOTAL					348,000	
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$348,000**

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 4B							
G	***SITEWORK***						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence	**2,900**	lf	14.00	40,600		
	Pavement/curbing removal - grind up asphalt to reuse	**116,200**	sf	0.80	92,960		
	Remove and dispose walkways	**1**	ls	10,000.00	10,000		
	Remove and dispose tennis courts	**25,600**	sf	2.00	51,200		
	Tree removal	**1**	ls	20,000.00	20,000		
	Misc. Tree Protection	**1**	ls	5,000.00	5,000		
	Remove and dispose of existing drainage structures and utilities	**1**	ls	40,000.00	40,000		
	SUBTOTAL					$259,760	
	Site Earthwork						
	Construction entrances/wheel washes (allowance)	**1**	loc	15,000.00	15,000		
	Strip topsoil, store on site for reuse	**7,444**	cy	8.00	59,552		
	Cut/fill	**33,333**	cy	6.00	199,998		
	Fine grading	**28,485**	sy	0.50	14,243		
	Silt fence/erosion control (allowance)	**2,900**	lf	12.00	34,800		
	Erosion Control monitoring & maintenance	**1**	ls	10,000.00	10,000		
	Hazardous Waste Remediation						
	Removal of UST and propane tanks	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$383,593	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots						
	Bituminous concrete paving	*114,163*					
	gravel base; 12" thick	**4,228**	cy	35.00	147,980		
	bituminous concrete; 4" thick	**12,685**	sy	25.00	317,125		
	6"x18" granite curb	**5,919**	lf	32.00	189,408		
	Single solid lines, 4" thick	**150**	space	25.00	3,750		
	Wheelchair Parking	**10**	space	75.00	750		
	Crosswalk Hatching	**2**	loc	900.00	1,800		
	Other road markings	**1**	ls	7,500.00	7,500		
	HC curb cuts	**4**	loc	1,100.00	4,400		
	New entrance sign	**1**	ls	10,000.00	10,000		
	New traffic signs	**1**	ls	5,000.00	5,000		
	SUBTOTAL					$687,713	
	Pedestrian paving						
	Bituminous concrete paving	*10,000*	sf				
	gravel base; 12" thick	**370**	cy	35.00	12,950		
	bituminous concrete; 3" thick	**1,111**	sy	28.00	31,108		
	Concrete Pavers						
	Concrete pavers						
	Precast concrete pavers	**8,000**	sf	16.00	128,000		
	gravel base; 8" thick	**199**	cy	35.00	6,965		
	dry pack; 2" thick	**47**	cy	22.00	1,034		
	concrete base; 4" thick	**8,000**	sf	5.00	40,000		
	Site Improvements						
	Bicycle racks	**10**	ea	800.00	8,000		
	45' Flag pole	**1**	loc	7,500.00	7,500		
	Flag pole base	**1**	loc	1,500.00	1,500		
	Ornamental trash/recycling receptacles	**10**	ea	800.00	8,000		
	Seating walls	**1**	ls	75,000.00	75,000		
	Segmented block retaining walls	**3,000**	sf	55.00	165,000		
	Dumpster enclosure	**100**	lf	60.00	6,000		
	Play surface	**3,333**	sf	16.00	53,328		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION 4B							
	Track surface	**6,666**	sf	5.00	33,330		
	Play equipment	**1**	ls	120,000.00	120,000		
	Other sitework improvements	**1**	ls	25,000.00	25,000		
	Tennis Courts	*24,200*					
	Gravel base - 12" thick	**896**	cy	35.00	31,360		
	Tennis court surface - color coated acrylic over asphalt	**2,689**	sy	42.00	112,938		
	Nets and posts	**4**	courts	900.00	3,600		
	Vinyl CL Fencing; 10'	**643**	lf	55.00	35,365		
	Gate, single	**2**	ea	1,200.00	2,400		
	Landscaping & Plantings:						
	Spread existing amended topsoil @ seeded areas	**1,852**	cy	22.00	40,744		
	New seeded areas - L&S	**100,000**	sf	0.20	20,000		
	Trees	**17**	ea	1,000.00	17,000		
	Shrubs/plantings and Groundcover	**1**	ls	50,000.00	50,000		
	SUBTOTAL					$1,036,122	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	New fire DI piping; 8"	**260**	lf	80.00	20,800		
	New fire DI piping; 6"	**260**	lf	70.00	18,200		
	New fire hydrant	**2**	loc	2,600.00	5,200		
	FD connection	**1**	loc	2,000.00	2,000		
	Gate valves	**4**	loc	750.00	3,000		
	Connect to existing line (Wet Taps)	**1**	loc	5,000.00	5,000		
	Sanitary sewer						
	8" sewer	**300**	lf	48.00	14,400		
	Connect to existing	**1**	loc	1,500.00	1,500		
	6,000 gal grease trap	**1**	loc	12,000.00	12,000		
	SMH	**3**	loc	4,000.00	12,000		
	Storm Sewer						
	Allowance for stormwater management	**1**	ls	350,000.00	350,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**250**	lf	25.00	6,250		
	New telecom service	**250**	lf	25.00	6,250		
	SUBTOTAL					$456,600	
G40	**SITE ELECTRICAL**						
	Power						
	Tap main power source	**1**	ea	3,000.00	3,000		
	Primary ductbank	**250**	lf	65.00	16,250		
	Primary cabling				Utility company		
	Pad mounted transformer				Utility company		
	Transformer pad	**1**	ea	3,000.00	3,000		
	Secondary ductbank						
	Secondary ductbank cabling	**50**	lf	300.00	15,000		
	Generator ductbank						
	Generator ductbank	**50**	lf	250.00	12,500		
	Communications						
	Communications ductbank	**250**	lf	85.00	21,250		
	Site Lighting/Power						
	Site lighting, roadway, parking, pathways and landscaping	**1**	ls	60,000.00	60,000		
	SUBTOTAL					$131,000	
SUBTOTAL SITE DEVELOPMENT OPTION 4B							**$2,954,788**