PROJECT MINUTES

Project:	New Peebles Elementary School	Project No.:	15041
Prepared by:	Joel Seeley	Meeting Date:	4/13/2017
Re:	School Building Committee Meeting	Meeting No:	37
Location:	Veterans 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**
✓	Natasha Scarpato	Member, School Committee	**Voting Member**
✓	Donna Buckley	Member at Large	**Voting Member**
	Richard A. Lavoie	Finance Committee	**Voting Member**
✓	William Meier	Building Trade Expert	**Voting Member**
		Member at Large	**Voting Member**
✓	Frederick H. Howe	Board of Health, Vice-Chairman School Building Committee	**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
✓	Paul O'Keefe	Local Official Responsible for Building Maintenance	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	
✓	Mike Cimorelli	FAI, Architect	
✓	Bill Beatrice	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
37.1	Record	Call to Order, 6:30 PM, meeting opened.
37.2	Record	A motion was made by P. Meier and seconded by F. Howe to approve the 3/16/17 School Building Committee meeting minutes. No discussion, motion passed unanimous by those attending.
37.3	E. Donoghue	J. Seeley reviewed the National Grid Commercial Gas Agreement application and $2,000 charge, dated 3/28/17, attached. A motion was made by P. Meier and seconded by F. Howe to approve the National Grid Commercial Gas Agreement charge of $2,000. Application to be signed by E. Donoghue. No discussion, motion passed unanimous.
37.4	Record	J. Seeley reviewed FAI Amendment No. 10, dated 4/13/17 for supplemental Land Surveying Services in the amount of $14,080.00, attached. Committee Discussion: 1. C. Hyldburg asked if the cost reflected the scope of the services? *J. Seeley indicated yes, the cost reflected the scope of the services.* 2. F. Howe asked if the 10% markup by FAI was per the contract? *J. Seeley indicated yes.* A motion was made by P. Meier and seconded by F. Howe to approve FAI Amendment No. 10, dated 4/13/17 and recommend signature by T. Guerino. No discussion, motion passed unanimous.
37.5	Record	J. Seeley reviewed FAI Amendment No. 11, dated 4/13/17 for supplemental Geotechnical Consulting Services in the amount of $4,455.00, attached. A motion was made by P. Meier and seconded by F. Howe to approve FAI Amendment No. 11, dated 4/13/17 and recommend signature by T. Guerino. No discussion, motion passed unanimous.
37.6	Record	Warrant No. 17 was reviewed. A motion was made by P. Meier and seconded by F. Howe to approve Warrant No. 17. No discussion, motion passed unanimous.
37.7	Record	J. Seeley indicated the Interior Materials Review tours of Freeman-Centennial School in Norfolk and the West Bridgewater Middle/High School have been scheduled as follows: 1. Freeman-Centennial School tour: 3:30 PM on May 4, 2017 2. West Bridgewater Middle School High School tour: 3:00 PM on May 9, 2017
37.8	Record	K. Kovacs indicated the approximate cost for wiring and equipment to support the Media Center for broadcasting meetings by BATV is approximately $30,000-$50,000. The Committee decided to not provide the wiring and equipment.
37.9	Record	K. Kovacs indicated the CCTV Security system has 20% surplus storage capacity.
37.10	K. Kovacs J. Seeley	J. Seeley distributed and reviewed the MSBA Design Development submission review comments, attached. K. Kovacs and J. Seeley to submit the comments response package to MSBA and the Committee.

Item #	Action	Discussion
37.11	J. Seeley	B. Beatrice provided an update on the Site Permitting. B. Beatrice confirmed the Site Plan Approval process can run concurrently with the ZBA process The applications to the Zoning Board of Appeals and to the Planning Board have been submitted. The Zoning Board of Appeals Hearing is scheduled for May 3, 2017 at 7:00PM at the Town Hall and the Planning Board Hearing is scheduled for May 11, 2017 at 7:00PM at the Community Center. Committee Discussion: 1. S. Lamarche indicated the School Committee has a meeting on May 3, and requested that SBC members attend the hearing. 2. N. Scarpato indicated the SBC has a meeting on May 11. *J. Seeley to coordinate timing of the SBC meeting.* 3. J. Seeley to update the Project Schedule with the permitting dates.
37.12	K. Kovacs	K. Kovacs distributed and reviewed an LVT Comparison Chart, attached. Committee Discussion: 1. J. Potter asked if Armstrong, Tandis and Altro are similar in cost? *K. Kovacs indicated yes, and the DD cost estimate included the Armstrong product.* 2. K. Kovacs to confirm the Static Load Limit for the Armstrong product.
37.13	K. Kovacs	K. Kovacs indicated FAI is still reviewing the Wolf Gordon and Acrovyn wainscoat products.
37.14	K. Kovacs	K. Kovacs indicated the 30" and 36" high locker mockups will be reviewed with the Educational Leadership Team on 4/18/17.
37.15	K. Kovacs	K. Kovacs will provide options on how the students can be involved in the design process, such as student created wall tiles or painted murals for Committee review.
37.16	J. Norton	J. Norton is developing a list of existing memorial items from the existing Peebles School and site that should be incorporated into the new school design.
37.17	K. Kovacs	K. Kovacs the hardware consultant will be meeting with the Educational Leadership team on 4/26/17 to review the door hardware as well as the locking strategy for the connecting doors between classrooms.
37.18	Record	K. Kovacs distributed and reviewed the meeting minutes from the 3/13/17 and 3/30/17 Educational Leadership Meetings, attached.
37.19	K. Kovacs District	J. Seeley distributed and reviewed the updated Educational Meetings Action Items Log, dated 4/13/17 and attached, tracking open issues from the Educational Leadership Meetings, as of the 3/30/17 meeting. K. Kovacs and the District to resolve and record the open items.
37.20	K. Kovacs	K. Kovacs distributed and reviewed the updated Technology Scope Diagram, dated 4/13/17 and attached. K. Kovacs indicated 4-inch deep display cabinets have been provided for paper displays in the corridors. Committee Discussion:

Item #	Action	Discussion
		1. K. Kovacs will indicate the existing re-located Smart Boards, approximately 5, on the plan. 2. K. Kovacs to locate the DAS display, which will show a continuous readout of the building's electric, gas and water usage.
37.21	B. Beatrice	B. Beatrice distributed and reviewed the updated Construction Phasing Diagrams, attached. B. Beatrice indicated FAI studied constructing a portion of the permanent entrance drive in Phase 1 to be used as the temporary bus entry and found that it does not work. Committee Discussion: 1. B. Beatrice indicated the location of off-site temporary teacher and staff parking during Phase 3 will be reviewed at the next Educational Leadership Meeting. 2. B. Beatrice indicated the drive down to the football field in the final design is for emergency access and not designed for ADA access and an alternative ADA access route will be reviewed at the next Educational Leadership Meeting. 3. B. Beatrice indicated the current emergency access to the football field will potentially be impeded during all phases of construction and access options will be reviewed with the Police and Fire Department. 4. B. Beatrice to review access to the Topsoil Stockpile under the Phase 3 construction period.
37.22	M. Cimorelli	M. Cimorelli provided a Building Exterior Design Update, attached. Committee Discussion: 1. J. Potter asked if FAI can study a darker aluminum finish for the window units in the Phenolic Wall Panel Areas? *M. Cimorelli will provide options for the next Committee meeting*. 2. W. Meier asked how do the Polycarbonate panels compare to Kalwall panels? *M. Cimorelli indicated the Polycarbonate panels have better thermal performance and light transmittance qualities than Kalwall panels.* 3. J. Potter asked how much do the Polycarbonate panels cost? *M. Cimorelli will provide for the next Committee meeting.* 4. P. O'Keefe asked FAI to confirm with the roofing manufacturers what are the implications of being Solar PV Ready? *M. Cimorelli will provide for the next Committee meeting.* 5. P. O'Keefe asked if FAI can provide the cost increase to change the roofing membrane from 60 mil to 80 mil thickness? *M. Cimorelli will provide for the next Committee meeting.* 6. P. Meier asked if Cape Light Compact has provided their incentive/rebate review? *M. Cimorelli indicated the Design Development documents were submitted to Cape Light Compact and FAI will follow-up for next Committee meeting.*

Item #	Action	Discussion
		7. J. Potter asked if FAI can bring samples of the Green Roof construction for review? *M. Cimorelli will provide for the next Committee meeting.*
37.23	M. Cimorelli	M. Cimorelli provided a Building Interior Design Update, attached. Committee Discussion: 1. S. Lamarche asked if the exposed wood battens in the gymnasium will be subject to damage? *M. Cimorelli will provide the construction details for the next Committee meeting.* 2. P. O'Keefe asked in what other cafeterias has FAI installed the LVT planks? *M. Cimorelli indicated in a cafeteria at St. John's Prep and in a cafeteria currently under construction in Holbrook. M. Cimorelli will provide additional information for cafeteria installation for the next Committee meeting.*
37.24	J. Potter K. Kovacs P. O'Keefe	Old or New Business: 1. J. Potter will contact the Town Moderator on the Member-at-Large vacancy. 2. J. Potter will provide a brief update to Town Meeting on 5/1/17. FAI will provide a set of presentation boards and automated powerpoint for display in the lobby. 3. S. Lamarche indicated E. Donoghue has taken a position in another community and his last day will be the end of June 2017. S. Lamarche thanked E. Donoghue for all his work for Bourne and this project. The District has commenced the process of retaining a new Business Manager. 4. P. O'Keefe would like to meet with the MEP engineers to review several questions with the Design Development Specification. *K. Kovacs to schedule a meeting with the MEP engineers and P. O'Keefe.*
37.25	Record	Next **SBC Meeting: April 27, 2017 at 6:30 pm** at the Bourne Veteran's Memorial Community Center.
37.26	Record	A Motion was made by P. Meier and seconded by F. Howe to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, National Grid Commercial Gas Agreement, FAI Amendment No. 10, FAI Amendment No. 11, MSBA Design Development Review Comments, LVT Comparison Chart, 3/13/17 and 3/30/17 Educational Leadership Meeting Minutes, Educational Meetings Action Items Log, Updated Technology Scope Diagram, Construction Phasing Diagrams, Building Exterior Design Update, Building Interior Design Update

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:	4/13/2017
Re:	School Building Committee Meeting	Meeting No:	37
Location:	Bourne High School Library Media Center	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
	Natasha Scarpato	scarpato4@comcast.net	Bourne School Committee
	Donna Buckley	d.j.buckley23@gmail.com	Member-At-Large
	Richard A. Lavoie	Richl.Lavoie@gmail.com	Member, Bourne Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
			Member-At-Large
	Frederick H. Howe	rickhowe9@gmail.com	Member-At-Large, Board of Health
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS
	Edward S. Donoghue	EDonoghue@bourneps.org	Director of Business Services, BPS, MCPPO
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Paul O'Keefe	mmachief@gmail.com	Member, Facilities and Maintenance Expert
	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
	BILL BEATRICE	BBEATRICE@FLANSBURGH.COM	
	MIKE CIMOTELLI	MCIMOTELLI@FLANSBURGH.COM	
	Janey Norton		

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1000 MASSACHUSETTS AVENUE
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www.smma.com

AGENDA

Project:	New Peebles Elementary School	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	4/13/2017
Meeting Location:	Veterans Memorial Community Center		
Prepared by:	Joel Seeley	Meeting Time:	6:30 PM
Distribution:	Committee Members (MF)	Meeting No.:	37

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Review MSBA Design Development Submission Comments
5. Review Meeting Actions Log
6. Review Updated Floor Plans and Site Plans
7. Review Updated Exterior Elevations
8. Review Updated Interior Elevations and Materials
9. Site Permitting Update
10. Review Updated Construction Logistics
11. Old or New Business
12. Public Comments
13. Next Meeting: April 27, 2017
14. Adjourn

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CHAPEL HILL, NORTH CAROLINA

PROVIDENCE, RHODE ISLAND

nationalgrid

March 28, 2017

James Peebles Elementary School
70 Trowbridge Rd.
Bourne, MA

Dear Christopher:

RE: 70 Trowbridge Rd, Bourne, MA

It is a pleasure to inform you that your inquiry requesting a letter of availability for clean, reliable, natural gas for the above referenced project is acknowledged.

The request for 5200cfh at 10”wc for the proposed new school at the above address and future abandoning of 6394cfh has been approved by our engineering department. The fee for installing the new 2” gas service is $2000 and will be invoiced after the work order has been created.

If I can be of further assistance to you regarding this matter, please contact me directly at (508)400-5051.

Sincerely,

Patti Weldon
Complex Gas Sales Representative, Cape Cod.

Massachusetts

Commercial Gas Service/Main Agreement - 2017

nationalgrid

Contact Information

Business Name: _____

Premise Address: _____

City, State, Zip: _____

Business Phone: _____

Fax Number: _____

Mailing/Billing: _____

City, State, Zip: _____

Contact Name: _____

Contact Phone: _____

Contact Email: _____

Contractor Name: _____

Contractor Phone: _____

Contractor Email: _____

CHECK ALL THAT APPLY

Surrounding Area Description:

☐ Wetlands/Water ☐ Historic ☐ Nature Preserve

☐ Undeveloped ☐ Urban ☐ N/A

Site Information: (on private property along service route)

☐ Sprinkler ☐ Septic ☐ Trees ☐ Ledge/Rock

☐ Side Walk ☐ Drive Way ☐ Parking Lot

Underground Utilities:

☐ Electric ☐ Phone ☐ Cable ☐ Underground Oil Tank

Customer Installation Expectations:

Planned Natural Gas Equipment Installation Date: _____

Requested Service-Main Installation Date: _____

Estimated Meter Turn on Date: _____

This contract is subject to the **Terms and Conditions on the back of this agreement**. National Grid agrees to install gas service to the above Premise location. I understand that I may cancel this agreement, without obligation, at any time prior to the installation of the gas service line and main. I hereby authorize National Grid to install a natural gas service line to the Premise address listed above.

PAYMENT INFORMATION: Please do not send payment along with this contract. An invoice will be generated upon receipt of this application with the option to pay by check or credit card (Western Union transaction fees will apply). Please note: all invoices must be paid within sixty days.

Customer Contribution Towards Construction Cost: $_____ **Customer to dig & provide backfill (EBBO) Yes** ☐ **No** ☐

Owner/Applicant Signature: _____ **Date:** _____

National Grid Rep Signature: _____ **Date:** _____

National Grid Use Only: **Public Bldg:** Yes ☐ No ☐

Trench Paving: Yes ☐ No ☐ Estimated Length _____

Number of Services:_____ Average Service Length_____

Total Estimated Length: Service_____ Main_____

Intersecting Street:_____

Suite or Unit #	Rate	CFH	ADTH	Meter Size	Delivery Pressure	Margin
TOTAL						

Target Date: _____ **Onyx Cust. ID#:**_____

Work Order: Service _____ **Main** _____

Easement Required: Yes ☐ No ☐

Permits: ☐ Town ☐ State ☐ Conservation ☐ Private Way

Existing Service Information (if applicable)

Acct. #: _____ /_____ **Rate:** _____

CFH: _____ **Service Size:** _____ **Meter Size:** _____

Sales Type:

☐ New Construction
☐ Rehab
☐ Added Load
☐ Off-1-Year
☐ Rate Change

Sales Type:

☐ Conversion
☐ Low Use
☐ Oil
☐ Propane
☐ Electricity

Work Required:

☐ Add Meter
☐ Fitting Work
☐ Main/Svc
☐ New Svc
☐ Relay Svc

Meter Info:

☐ Master Meter
☐ Company Owned
☐ Customer Owned
☐ Outside Meter

Main Info:

☐ On Main
☐ Long Side
☐ Short Side
☐ Off Main

Activity Request:

☐ Eng Analysis
☐ Construction Est.
☐ Sold
☐ Project Managed

_____ LP _____ IP _____ HP Pre-Marked:_____

Notes:

Terms and Conditions of Commercial Gas Service Agreement

1. Applicant agrees to pay National Grid to aid in the construction of the natural gas service line and associated main work required to provide service to the Premises. In the event that the actual service line length exceeds the estimated footage, National Grid may bill the property owner at a rate of (Excess Footage Fee) over the estimated service line length.

2. Once the meter is set, the Applicant becomes the customer of record and National Grid will commence billing the Applicant. The Applicant agrees to pay for gas service pursuant to the applicable rate classification and in accordance with National Grid's Terms and Conditions, as filed from time to time with the Massachusetts Department of Public Utilities.

3. National Grid will take reasonable measures to minimize damage to Applicant's property. For existing structures, National Grid will loam and reseed excavated areas and patch disturbed asphalt. Applicant is responsible for maintaining all reseeded areas.

4. National Grid will install the necessary natural gas distribution system to the site, subject to weather conditions and all federal, state and local codes and permit requirements. In the event that National Grid is unable to obtain the necessary permits to install the gas service line, National Grid shall not be obligated to perform such installation and this Agreement shall be null and void.

5. National Grid's obligation under this Agreement are subject to verification that there is an active natural gas main in close proximity to Applicant's property for which a service connection can be made in a reasonably cost effective manner.

6. (New Construction Only) Applicant shall construct, or cause the construction of all necessary water lines, sewer lines, roads and electrical lines, and will perform other necessary work required to prepare the site for the installation.

7. Applicant shall provide all easements and rights-of-way necessary for National Grid to install natural gas distribution lines required to provide service to the Premises.

8. Applicant represents and warrants that it has provided National Grid with all information known to it connecting environmental contamination or the threat thereof at or in the vicinity of the Premises.

9. Applicant assumes full and complete responsibility for any and all costs associated with any environmental contamination encountered by National Grid during the installation, including but not limited to the costs to clean up or remediate such contamination.

10. In the event that environmental contamination is encountered during the installation, all work shall cease and National Grid shall provide oral and written notice to the Applicant within a reasonable time. Thereafter, National Grid shall have no further obligations under this agreement.

11. Applicant shall, to the fullest extent permitted by law, indemnify, hold harmless and release National Grid, its parent company, affiliates and subsidiaries and their respective directors, officers, employees, agents, servants, representatives, successors and assigns from and against all claims, demands, liabilities or expenses related to environmental contamination at or in the vicinity of the Premises. This indemnity and release provision survives the expiration or termination of the Agreement and extends to the respective successors and assigns of National Grid and Applicant.

12. National Grid shall own the natural gas distribution system up to the outlet side of each individual customer meter.

13. All installations where excavating and back filling are to be performed by Applicant or his/her designee will be performed in compliance with National Grid's specifications, and the installation shall not commence until said trench is inspected and accepted by a representative of National Grid.

14. In the event that the gas equipment identified on the front of this agreement is not installed and in use within six months of the date of installation of the service line, the Applicant agrees to pay National Grid for the cost of installing all gas lines necessary to serve Premises, minus any prior contribution in aid of construction made to National Grid.

15. Prior to the start of the work described on the front of this agreement, Applicant is responsible for marking out any underground facilities on their property that are not marked out as a result of National Grid's notification of the Dig Safe system.

16. This Agreement may be modified only by a writing signed by National Grid and Applicant; any verbal representations or modifications by National Grid employees or others shall be null and void.

17. The laws of the Commonwealth of Massachusetts shall govern this Agreement.

18. In the event that the actual service line length exceeds the estimated footage, National Grid may bill the property owner at a rate of (Excess Footage Fee) over the estimated service line length.

19. If Applicant changes the primary fuel from natural gas to an alternate fuel source during the first five (5) years after billing commences, National Grid reserves the right to reevaluate the financial impact of this change and bill Applicant for a portion of its original investment.

20. If any terms of this Agreement or portions thereof are declared or become invalid or unenforceable, the remainder of this Agreement shall continue in full force and effect.

MEMORANDUM

To:	Peebles Elementary School Building Committee	Date:	4/13/2017
From:	Joel G. Seeley, AIA	Project No.:	15041
Project:	**New Peebles Elementary School**		
Re:	**Designer Amendment No. 10: Land Survey Services**		
Distribution:	(MF)		

DESIGNER AMENDMENT NO. 10: LAND SURVEY SERVICES

FEE: $14,080.00

REASON: Provide Land Surveying Services to provide a plot plan for permitting purposes and gain understanding of the topography, utilities and other site related items related to the area between the Peebles School annex, the football field and the Middle School.

BUDGET AVAILABILITY: This Amendment would be funded out of the Site Survey Budget, ProPay Code 0204-0400, which has the current balance of $60,000.00.

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| CHAPEL HILL, NORTH CAROLINA

| PROVIDENCE, RHODE ISLAND

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. 10

WHEREAS, the Town of Bourne ("Owner") and Flansburgh Associates, Inc., (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the Peebles Elementary School Project (Project Number 201400360010) at the Peebles Elementary School on September 22, 2015.
"Contract"; and

WHEREAS, effective as of April 13, 2017, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:

	Original Contract	**Prior Amendments**	**This Amendment**	**After this Amendment**
Feasibility Study Phase	$ 250,000.00	$ 76,153.00		$ 326,153.00
Schematic Design Phase	$ 115,000.00	$ 20,775.00		$ 135,775.00
Design Development Phase	$	$ 530,000.00	$ 14,080.00	$ 544,080.00
Construction Document Phase	$	$ 1,060,000.00		$ 1,060,000.00
Bidding Phase	$	$ 130,000.00		$ 130,000.00
Construction Phase	$	$ 874,000.00		$ 874,000.00
Completion Phase	$	$ 132,037.00		$ 132,037.00
Total Fee	**$ 365,000.00**	**$2,822,965.00**	**$ 14,080.00**	**$3,202,045.00**

This Amendment is a result of: Providing Land Survey Services
MSBA ProPay Code 0204-0400.

3. The Construction Budget shall be as follows:

Original Budget:	$30,910,366.00
Amended Budget	$30,910,366.00

4. The Project Schedule shall be as follows:

Original Schedule:	Project Completion: November 29, 2019
Amended Schedule	Project Completion: November 29, 2019

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

Thomas M. Guerino
(print name)
Town Administrator, Town of Bourne
(print title)

By _____
(signature)
Date _____

DESIGNER

Kent D. Kovacs, AIA LEED AP
(print name)
Vice President, Flansburgh, Associates, Inc.
(print title)

By _____
(signature)
Date _____

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Flansburgh Architects

April 04, 2017

Mr. Joel G. Seeley AIA
Symmes Maini & McKee
1000 Massachusetts Ave.
Cambridge, MA 02138

RE: Bourne Public Schools
Survey proposal

Dear Joel,

The attached proposal is for additional survey work from Nitsch Engineering at the Peebles Elementary School site. The purpose of the work is to provide a plot plan for permitting purposes as described under Task #1 of the NEI attachment. Task #2, described in the NEI attachment, expands the survey limits to capture the area between the Peebles School annex, the football field and Middle School to gain an understanding of the topography, utilities, and other site related items to aid in the design.

The fee is a reimbursable expense as defined in the primary MSBA contract in articles 4.11 and 9 with a 10% allowable markup.

The fee is as follows:

Survey Task#1 & Task #2: $12,800
Total: $12,800 x 1.1 = $14,080

Please prepare a Contract Amendment for our signature.

Sincerely,

FLANSBURGH ASSOCIATES INC

Kent Kovacs, AIA LEED AP
Vice President

Nitsch Engineering

2 Center Plaza, Suite 430
Boston, MA 02108-1928
T: 617-338-0063
F: 617-338-6472
www.nitscheng.com

March 23, 2017

Mr. Kent Kovacs, AIA
Vice President
Flansburgh Architects
77 Washington Street
Boston, MA 02114

RE: Nitsch Proposal #11078.1P
Peebles Elementary
Additional Services
Land Surveying Services
Bourne, MA

Dear Mr. Kovacs:

Nitsch Engineering is pleased to submit this Additional Services proposal to you (the Client) for professional land surveying services associated with the addition to Peebles Elementary School in Bourne, Massachusetts. This letter summarizes our scope, assumptions, and fee.

SCOPE OF ADDITIONAL SERVICES

TASK #1: PLOT PLAN OF LAND

1. Perform property research at the Town of Bourne (the Town) offices, the Barnstable County Registry of Deeds, and the Massachusetts Land Court for record data on the locus property, abutting properties, and easements within the areas outlined in Survey Sketch "A";

2. Perform a retracement survey of the sidelines of General MacArthur Boulevard and the southwest and southeast sidelines of Parcel 24-31, a 46 Acre parcel in Bourne, Massachusetts within the area outlined in Survey Sketch "A";

3. Perform office calculations to determine the sidelines of General MacArthur Boulevard and the southwest and southeast sidelines of Parcel 24-31 in Bourne, Massachusetts within the area outlined in Survey Sketch "A";

4. Compile abutting property lines and list owner information from available Assessor's Maps and geographic information system (GIS) information;

5. Perform field locations of buildings within the scope limits of Parcel 24-31 in Bourne, Massachusetts;

6. Update the existing conditions plan with new pavement, building, and property line locations;

7. Deliver a certified plot plan at a drawing scale of 1 inch = 100 feet; and

8. Deliver an updated plan in AutoCAD Civil 3D, release 2014 or compatible version, at a scale of 1 inch = 20 feet and on 24-inch x 36-inch sheets utilizing Nitsch Engineering file format, data collection, and drafting standards.

TASK #2: TOPOGRAPHIC AND UTILITY SURVEY

1. Perform records recovery at the Town to recover information about utilities within the Peebles Elementary School site as shown on Survey Sketch "B";

2. Perform review of record plans and information provided by the Town;

SCOPE OF ADDITIONAL SERVICES – continued

3. Perform onsite investigations of utilities utilizing sound connectivity methods;

4. Perform additional topographic survey in the area outlined in Survey Sketch "C"; and

5. Update the survey base plan with newly discovered utility and topographic survey information.

WORK NOT INCLUDED IN THE SCOPE OF SERVICES

1. Performing retracements of property lines dividing private ownerships.

2. Setting lot corners or other monumentation.

3. Performing additional topographic survey or updating the plan in areas other than outlined Scope of Additional Services.

ASSUMPTIONS

1. All filing fees and other associated costs will be paid by the Client.

2. Any revisions requested by the Client or other approving authorities after commencement of the survey will be considered Additional Services.

3. This cost assumes record monumentation is recoverable and Nitsch Engineering will encounter reasonable congruity between field and record data.

COMPENSATION

Compensation for the Additional Services provided will be in accordance with the Standard Contract Terms for Land Surveying Services of Nitsch Engineering's executed agreement with the Client, dated September 25, 2015. The lump-sum cost for these services is as follows:

TASK #1: PLOT PLAN OF LAND	$ 6,800.00
TASK #2: TOPOGRAPHIC AND UTILITY SURVEY	6,000.00
T O T A L	$12,800.00

Costs will not be incurred by Nitsch Engineering beyond this lump-sum amount without prior written approval from the Client.

Should the conditions of this Additional Services proposal meet with your approval, please sign and return the "File Copy" of this Additional Services proposal to us for our files. If Nitsch Engineering is authorized to commence and/or continue providing its services on the project, either verbally or in writing, prior to the full execution of a written contract, such authorization will be deemed an acceptance of this Additional Services proposal, and all such services will be provided and compensated for in accordance with the terms and conditions contained herein as though this Additional Services proposal were fully executed by the Client.

If you have any questions, please call.

Very truly yours,

Nitsch Engineering, Inc.

Jamie G. Gayton, PLS
Project Manager

Approved by:
Alex Diotte for

Denis R. Seguin, PLS
Director of Land Surveying

JGG/aab

Enclosure: "File Copy" of this Additional Services proposal

Q:\11078.1 James Peebles Ele\Contract\11078.1 - Proposal Form - Additional Services - Survey - 2017-03-23.docx

CLIENT AUTHORIZATION

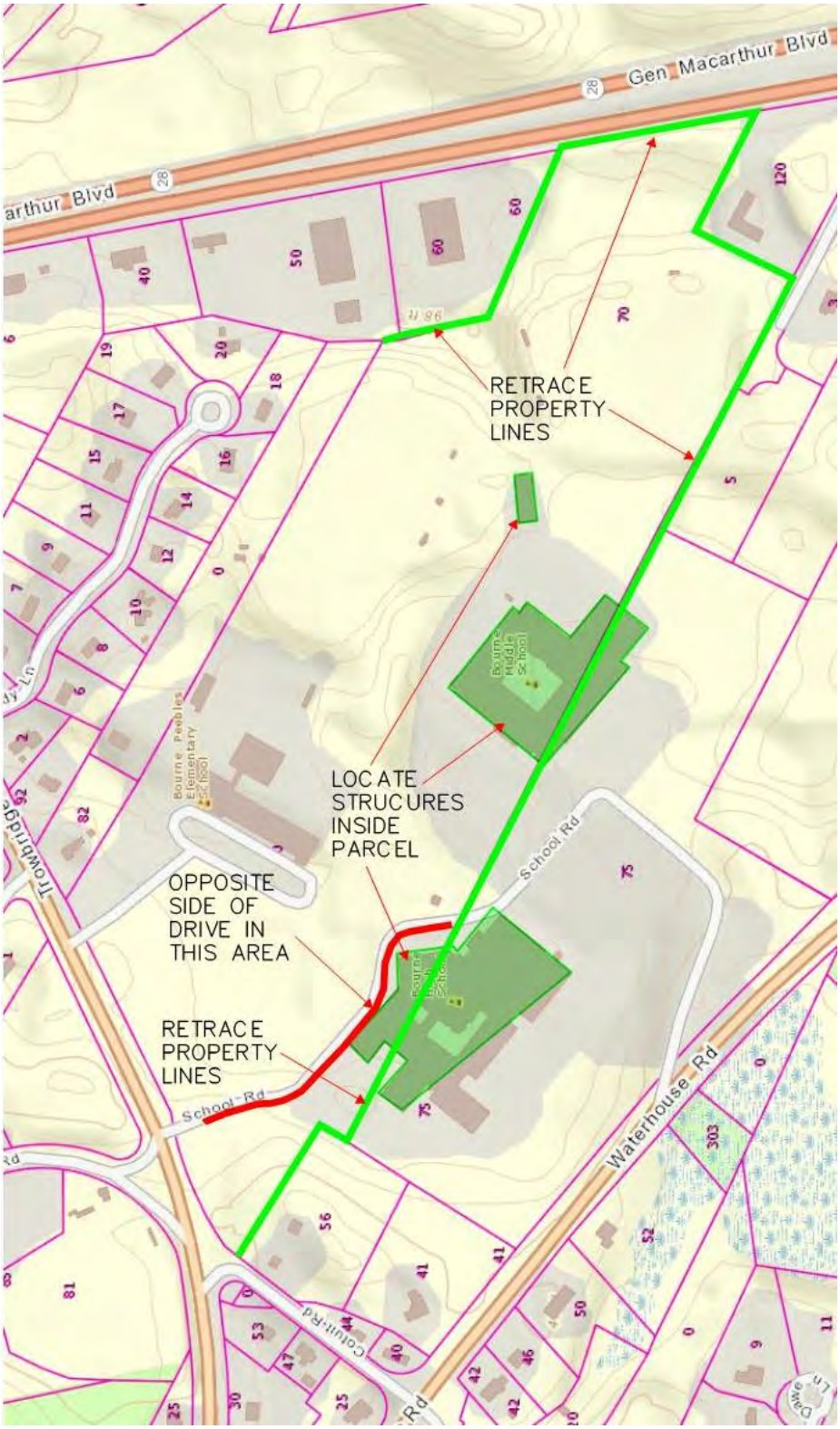
This Additional Services proposal is hereby accepted by the Client as evidenced by the execution hereof, and such a person so executing the same on behalf of the Client does hereby warrant full authority to act for, in the name of, and on behalf of the Client.

Such acceptance provides full authorization for Nitsch Engineering to proceed with providing the Scope of Additional Services under the terms and conditions stated herein.

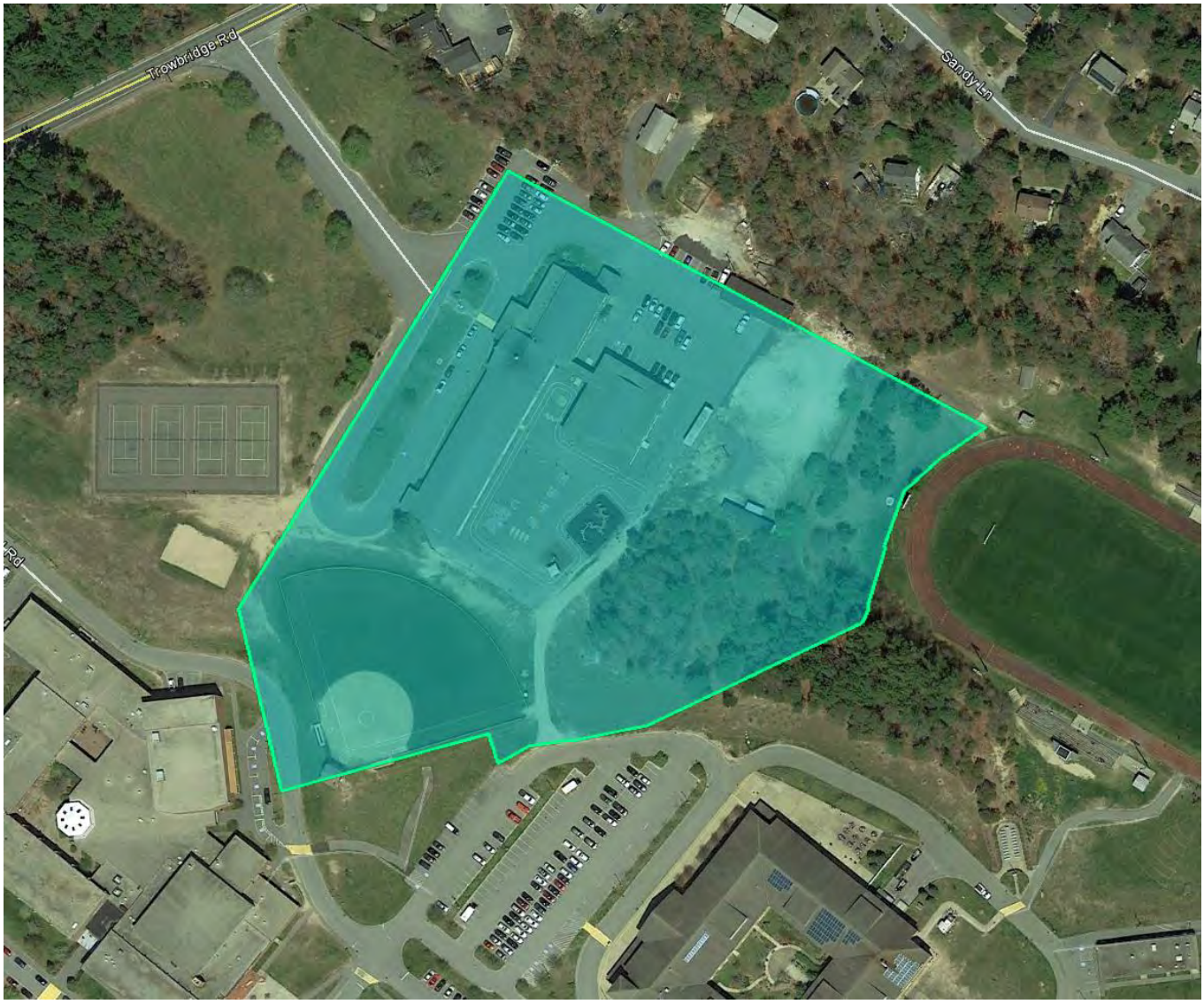
_____ _____
Signature Date

_____
Printed Name and Title

SURVEY SKETCH "A"



SURVEY SKETCH "B"



SURVEY SKETCH "C"

MEMORANDUM

To:	Peebles Elementary School Building Committee	Date:	4/13/2017
From:	Joel G. Seeley, AIA	Project No.:	15041
Project:	**New Peebles Elementary School**		
Re:	**Designer Amendment No. 11: Geotechnical Engineering Services**		
Distribution:	(MF)		

DESIGNER AMENDMENT NO. 11: GEOTECHNICAL ENGINEERING SERVICES

FEE: $4,455.00

REASON: Provide Geotechnical Engineering Services at the Peebles Elementary School site to include subsurface investigation for the planned tennis courts, infiltration design, and collecting topsoil samples to determine its chemical composition.

BUDGET AVAILABILITY: This Amendment would be funded out of the Geotechnical and GeoEnvironmental Budget, ProPay Code 0204-0300, which has the current balance of $80,000.00.

JGS/sat /P:\2015\15041\00-INFO\0.7 Designer Procurement\0.1 Designer Contract\Amendments\Amendment No. 11 - Geotechnical Services\M_Amendment11_Geotechnicalservices_13April2017.Doc

SYMMES MAINI & McKEE ASSOCIATES
1000 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02138
T. 617.547.5400 F. 800.648.4920
www.smma.com

| CHAPEL HILL, NORTH CAROLINA

| PROVIDENCE, RHODE ISLAND

ATTACHMENT F

CONTRACT FOR DESIGNER SERVICES

AMENDMENT NO. 11

WHEREAS, the Town of Bourne ("Owner") and Flansburgh Associates, Inc., (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the Peebles Elementary School Project (Project Number 201400360010) at the Peebles Elementary School on September 22, 2015.
"Contract"; and

WHEREAS, effective as of April 13, 2017, the Parties wish to amend the Contract:

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:

	Original Contract	**Prior Amendments**	**This Amendment**	**After this Amendment**
Feasibility Study Phase	$ 250,000.00	$ 76,153.00		$ 326,153.00
Schematic Design Phase	$ 115,000.00	$ 20,775.00		$ 135,775.00
Design Development Phase	$	$ 544,080.00	$ 4,455.00	$ 548,535.00
Construction Document Phase	$	$ 1,060,000.00		$ 1,060,000.00
Bidding Phase	$	$ 130,000.00		$ 130,000.00
Construction Phase	$	$ 874,000.00		$ 874,000.00
Completion Phase	$	$ 132,037.00		$ 132,037.00
Total Fee	**$ 365,000.00**	**$3,202,045.00**	**$ 4,455.00**	**$3,206,500.00**

This Amendment is a result of: Providing Geotechnical Engineering Services
MSBA ProPay Code 0204-0300.

3. The Construction Budget shall be as follows:

Original Budget:	$30,910,366.00
Amended Budget	$30,910,366.00

4. The Project Schedule shall be as follows:

Original Schedule:	Project Completion: November 29, 2019
Amended Schedule	Project Completion: November 29, 2019

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

Thomas M. Guerino
(print name)
Town Administrator, Town of Bourne
(print title)

By _____
(signature)
Date _____

DESIGNER

Kent D. Kovacs, AIA LEED AP
(print name)
Vice President, Flansburgh, Associates, Inc.
(print title)

By _____
(signature)
Date _____

p:\2015\15041\00-info\0.7 designer procurement\0.1 designer contract\amendments\amendment no. 11 - geotechnical services\amendment no.11 attachment f_13april2017.doc

Flansburgh Architects

April 07, 2017

Mr. Joel G. Seeley AIA
Symmes Maini & McKee
1000 Massachusetts Ave.
Cambridge, MA 02138

RE: Bourne Public Schools
Geotechnical engineering proposal

Dear Joel,

The attached proposal is for additional geotechnical engineering services from Geotechnical Service Inc. at the Peebles Elementary School site. The additional work includes subsurface investigation for the planned tennis courts, infiltration design, and collecting topsoil samples to determine its chemical composition. Refer to proposal for further description of proposed work.

The fee is a reimbursable expense as defined in the primary MSBA contract in articles 4.11 and 9 with a 10% allowable markup.

The fee is as follows:

Geotechnical work: $4,050
Total: $4,050 x 1.1 = $4,455

Please prepare a Contract Amendment for our signature.

Sincerely,

FLANSBURGH ASSOCIATES INC

Kent Kovacs, AIA LEED AP
Vice President

GEOTECHNICAL SERVICES INC.
Geotechnical Engineering · Environmental Studies · Materials Testing · Construction Monitoring

April 4, 2017

Mr. Kent Kovaks
Flansburgh Architects, Inc.
77 North Washington Street
Boston, Massachusetts 02114-1910

Advanced copy via email: kkovacs@flansburgh.com

Re: Proposal for Additional Geotechnical Engineering Services
Peebles Elementary School
Buzzard Bay, MA
GSI Project No. 215256

Dear Mr. Kovaks:

Geotechnical Services, Inc. (GSI) is pleased to submit this proposal for additional geotechnical engineering services for the above-referenced project. The additional services include an additional subsurface investigation for the planned tennis courts, infiltration system design, and collecting and testing topsoil samples to determine its chemical composition.

SCOPE OF WORK

Based on our understanding of the project, GSI proposes to undertake the following tasks:

1. Visit the project site and establish accessible locations for test pits and test borings and mark them with spray paint for Dig-Safe utility clearance (this is a legal requirement). Contact Dig-Safe and obtain Application Number. Dig-Safe is to complete its work within a period of three days upon notification.

2. Conduct a test pit investigation of the project site. The test pits will be excavated in various locations within the project site. We anticipated that the test pits will be advanced to depths of up to 10-ft below surface grade. Conduct infiltration tests within the test pits at target depths using the Guelph Permeameter. We anticipate the test pits and infiltration tests to be completed in one day.

3. Collect up to **twelve (12)** representative topsoil samples and test the samples for the following:

    a. **Routine Soil Analysis:** including pH, exchangeable acidity, extractable nutrients (P, K, Ca, Mg, Fe, Mn, Zn, Cu, B, S), extractable lead (Pb), extractable aluminum (Al), cation exchange capacity, and base saturation, as well as crop specific lime and nutrient recommendations,

    b. **Soil Organic Matter:** Determination of soil organic matter by loss on ignition on samples submitted for routine soil analysis,

    c. **Soluble Salts:** Includes a measure of the electrical conductivity of a 1:2 (soil:water) extract on samples submitted for routine soil analysis,

    d. **Soil Nitrate:** Includes a measure of the soil nitrate using an ion specific electrode on samples submitted for routine soil analysis.

    e. **Comprehensive Particle Size Analysis.**

    Soil samples will be collected, prepared and shipped to the UMass Amherst Soil and Plant Tissue Laboratory for analysis.

4. Prepare an electronic copy (PDF) of a brief engineering data report, which will include the following items as applicable to the project and site:
    A. Test pit logs and records of other explorations, if available, indicating soil and rock conditions and water levels encountered.
    B. Location plan of subsurface explorations.
    C. Test results for the topsoil analysis.
    D. Infiltration Test Results

PROPOSED BUDGET

Our estimated cost for each task outlined above is as follows:

TASK NO.	STAFF ASSIGNMENT	TASK TOTAL
1	Site Visit / Contact Dig Safe	$250
2	Test Pit Investigation, Infiltration Testing, Topsoil Sample Collection (one day)	$2,000
3	Topsoil samples preparation and testing (UMass Soil and Plant Nutrient Testing Laboratory)	$300
4	Geotechnical Data Report	$1500
	TOTAL GEOTECHNICAL SERVICES BUDGET	**$4,050**

Our services will be provided in accordance with the attached Terms and Conditions. If additional services are requested, they will be provided in accordance with the attached Rate Schedule. We will not exceed the estimated budget without your prior written approval.

We trust that you find this proposal consistent with your needs. Should you have any questions with regard to this proposal, please do not hesitate to contact our office. You may formally execute this proposal by signing below and returning it to us for our files.

Very truly yours,
GEOTECHNICAL SERVICES, INC.

Glen V. Zolade, P.E.
Project Manager

Harry K. Wetherbee, P.E.
Principal Engineer

PROPOSAL ACCEPTANCE FORM

This proposal and the Terms and Conditions of engagement are hereby accepted and executed by a duly authorized signatory, who by execution hereof, warrants that he/she has full authority to act for, in the name and on behalf of the client.

(Authorizing Signature) (Typed Name and Title)

(Authorizing Authority) (Date)

GEOTECHNICAL SERVICES, INC.

PROFESSIONAL SERVICES TERMS AND CONDITIONS - Geotechnical Investigations

BILLING AND PAYMENT: CLIENT recognizes that timely payment of GSI's invoices is a material part of the consideration GSI requires to perform the services indicated in this AGREEMENT. CLIENT shall pay GSI for services in accordance with the rates and charges set forth herein.

COLLECTION COSTS: If CLIENT fails to make payment when due and GSI incurs any costs in order to collect overdue sums from CLIENT, the CLIENT agrees that all such collection costs incurred shall immediately become due and payable to GSI. Collection costs shall include, without limitation, legal fees, collection agency fees and expenses, court costs, collection bonds, and reasonable GSI staff fees at standard billing rates for GSI's time in efforts to collect. This obligation of the CLIENT to pay GSI's collection costs shall survive the terms of this agreement or any earlier termination by either party.

SUSPENSION OF SERVICES: If CLIENT fails to make payments when due or otherwise is in breach of this agreement, then GSI may suspend performance of services upon 5 days written notification to CLIENT. GSI shall have no liability whatsoever to CLIENT for any costs or damages as a result of such suspension caused by any breach of this agreement by CLIENT.

HOLDING HARMLESS: CLIENT understands that "holding GSI harmless" as referred to in these Terms and Conditions, would, among other thing require CLIENT to compensate GSI for any time spent or expenses incurred by GSI in defense of any claim for which CLIENT has agreed to indemnify GSI, in accordance with GSI's prevailing fee schedule and expense reimbursement policy relative to recovery of direct project costs.

SAMPLES: Soil, rock, and water samples obtained from the site which have not been consumed in testing become the property of the CLIENT, once the project account has been paid in full. Such samples will be held for thirty (30) days after payment, and will be disposed of thereafter unless delivery to CLIENT is requested in writing. It is CLIENT'S responsibility to select and arrange for disposal procedures which encompass removing the contaminated samples from GSI's custody and transporting them to a disposal site.

DOCUMENTS: All documents generated by GSI in the course of rendering service to CLIENT will remain the property of GSI. CLIENT agrees that all documents and/or plans provided by GSI in connection with services rendered will be utilized solely by CLIENT for their intended purpose. GSI will not intentionally divulge documents or information regarding its services to parties other than CLIENT unless requested in writing by CLIENT.

SUBSURFACE EXPLORATIONS: CLIENT should be aware that some damage to the terrain, vegetation, structures, or equipment on the site may occur in the normal course of work. CLIENT will not hold GSI liable for such damages and will make compensation to GSI if GSI is required to restore the land to its former condition. GSI will take reasonable precautions to limit damage to the site and to any subterranean structures. GSI will not be held liable for damages or injury, including consequential damages such as the loss of use or profit, resulting from interference with subterranean structures which are not called to our attention or are incorrectly located on plans furnished by CLIENT or others in connection with the work to be performed.

FAILURE TO ENCOUNTER HAZARDOUS MATERIALS: CLIENT understands that GSI's failure to discover hazardous materials through appropriate and mutually agreed- upon sampling techniques does not guarantee that hazardous materials do not exist at the site. Accordingly, CLIENT waives any claim against GSI, and agrees to defend, indemnify and save GSI harmless from any claims or liability for injury or loss arising from GSI's failure to detect the presence of hazardous materials through techniques commonly employed for the purpose.

RIGHT OF ENTRY: Unless otherwise agreed, CLIENT will furnish right-of-entry upon the site for GSI or its subcontractors to perform assessments or explorations as deemed necessary by GSI.

STANDARD OF CARE: GSI strives to provide its professional services in accordance with the care and skill ordinarily used by members of GSI's profession practicing under similar circumstances at the same time and in the same locality. GSI makes no warranties, express or implied, under this Agreement.

JURISDICTION/CHOICE OF LAW: The laws of the State of New Hampshire shall govern the rights and obligations of the parties under this Agreement and any disputes arising from this Agreement. Jurisdiction for any legal action arising form this Agreement shall be in the Goffstown District Court or the Hillsborough County Superior Court in the State of New Hampshire.

SCOPE OF SERVICE: GSI's services shall be limited to those expressly set forth in this Agreement. Consultant shall have no other obligations or responsibilities for the Project except as agreed to in writing.

THIRD-PARTY CLAIMS: Owner recognizes that the Contractor and Subcontractors will be solely in control of the Project site and exclusively responsible for construction means, methods, scheduling, sequencing, job-site safety and compliance with all construction documents and directions from Owner or building officials. GSI shall not be responsible for construction related damages, losses, costs, or claims, except only to the extent caused by Consultant's sole negligence.

VALUE ENGINEERING AND MODIFICATIONS: Upon the written request or direction of Client, Consultant shall evaluate and advise Client with respect to proposed or requested changes in materials, products, or equipment. Consultant shall be entitled to rely on the accuracy and completeness of the information provided in conjunction with the requested substitution. Client acknowledges that such changes may result in a reduction in the quality and performance of the project and accepts that risk in recognition of the objectives of the change. Accordingly, Consultant shall not be responsible for errors, omissions, or inconsistencies in information by others or *in any* way resulting from incorporating such substitution into the Project.

HIDDEN CONDITONS: GSI shall notify CLIENT of any hidden conditions encountered by GSI which will affect the scope of GSI's work and/or its compensation under this Agreement. GSI is not responsible or liable for any cost resulting from an increase in the scope of its work or compensation under this Agreement associated with any hidden conditions encountered or discovered by GSI during the prosecution of its work.

MONITORING OF CONSTRUCTION: Should CLIENT for any reason not retain GSI to monitor construction, or should CLIENT unduly restrict GSI's assignment of personnel to monitor construction, or should GSI for any reason not perform construction monitoring during the full period of construction, CLIENT waives any claim against GSI, and agrees to indemnify, defend and save GSI harmless from any claim or liability for injury or loss arising from problems during construction that allegedly result from findings, conclusions, recommendations, plans or specifications developed by GSI.

JOBSITE SAFETY Neither the professional activities of GSI, nor the presence of GSI or his employees or subconsultants at a construction site, shall relieve the General Contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means and methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the Work of construction in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. GSI and his or her personnel have no authority to exercise any control over the construction contractor or other entity or their employees in connection with their work or any health or safety precautions. The Client agrees that the General Contractor is solely responsible for jobsite safety, and warrants that this intent shall be made evident in the Client's agreement with the General Contractor. The Client also agrees that the Client, GSI and GSI's subconsultants shall be indemnified and shall be made additional insured under the General Contractor's general liability policy.

LIMITATION OF LIABILITY: CLIENT agrees to limit GSI's liability to CLIENT and all third parties arising from GSI's professional acts, errors or omissions, such that the total aggregate liability of GSI to all those named shall not exceed $50,000 or GSI's total fee for the services rendered on this project, whichever is greater. CLIENT further agrees to require of all of their subcontractors an identical limitation of GSI's liability for damages suffered by the CLIENT or its subcontractors arising from GSI's professional acts, errors or omissions.

CONSEQUENTIAL DAMAGES: Notwithstanding any other provision of the agreement, neither party shall be liable to the other for any consequential damages resulting incurred due to the fault of the other party, regardless of the matter of this fault or whether it was committed by the CLIENT or GSI, their employees, agents, subconsultants or subcontractors. Consequential damages include, but are not limited to, loss of use and profit.

INDEMNIFICATION: GSI agrees, to the fullest extent permitted by law, to indemnify and hold CLIENT harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) to the extent caused by GSI's negligent acts, errors or omissions in the performance of GSI's professional services under this contract and those of GSI's subconsultants or anyone for whom GSI is legally liable.
CLIENT agrees to the fullest extent permitted by law, to indemnify and hold GSI harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) to the extent caused by CLIENTS negligent acts, errors or omissions and those of CLIENT's subconsultants or anyone for whom CLIENT is legally liable, and arising from the project that is the subject of this agreement.
GSI is not obligated to indemnify CLIENT in any manner whatsoever for CLIENT's own negligence.

GEOTECHNICAL INVESTIGATION: CLIENT understands that the education, experience, expertise, and capabilities of those who provide geotechnical engineering services and those who provide geoenvironmental services differ significantly. Those involved with a geotechnical engineering project may not notice indications of environmental concerns and, if they do, they may not report them. The same applies to personnel involved with geoenvironmental projects, with respect to geotechnical issues. Accordingly, CLIENT shall, to the fullest extent permitted by law, waive any claim against GSI, and indemnify, defend, and hold GSI harmless from any claim or liability for injury or loss arising from GSI alleged failure to report or report fully on environmental issues in instruments of geotechnical service or on geotechnical issues in instruments of geoenvironmental service. CLIENT also shall compensate GSI for any time spent or expenses incurred by GSI in defense of any such claim. Such compensation shall be based upon GSI prevailing fee schedule and expense reimbursement policy. (The term "any claim" used in this provision means "any claim in contract, tort, or statute alleging negligence, errors, omissions, strict liability, statutory liability, breach of contract, breach of warranty, negligent misrepresentation, or other acts giving rise to liability.")

TIME BAR TO LEGAL ACTION: All legal actions by either party against the other for breach of this agreement or any addendum to it, or for failure to perform in accordance with the applicable standard of care, or that are essentially based upon such breach or such failure, shall be barred after two (2) years have passed from the time the claimant knew or should have known of its claim, and under no circumstances shall be initiated after four (4) years have passed from the date by which GSI substantially completes its services. Substantial completion shall be defined to mean completion of monitoring services as called for hereunder, unless GSI's services shall be terminated earlier. After four (4) years have passed from the date of substantial completion, CLIENT agrees to indemnify, defend, and hold GSI harmless from any claim or liability or injury or loss allegedly arising from GSI's failure to perform in accordance with the applicable standard of care. In addition, CLIENT agrees to compensate GSI for any time spent or expenses incurred by GSI in defense of any such claim, with compensation to be based upon GSI's prevailing Rate Schedule and expense reimbursement policy.

GEOTECHNICAL SERVICES, INC. - RATE SCHEDULE, 2016

A. PROFESSIONAL STAFF

Principal Engineer	$125/hr
Professional Engineer	95/hr
Field Engineer	75/hr
Staff Engineer	65/hr
Word Processing	45/hr

B. CONSTRUCTION MONITORING SERVICES

Field Technician	150/½ day 270/full day
Steel Inspector (AWS Visual)	75/hr
Fireproofing Inspector	40/hr

C. LABORATORY TESTING SERVICES

Soils

Sieve Analysis (ASTM C-136 & C-117)	75/ea
Hydrometer Analysis (ASTM D422)	75/ea
Organic Content	100/ea
pH Determination	50/ea
Topsoil Nutrient Analysis	200/ea
Proctor (Standard or Modified)	100/ea
Atterberg Limits	95/ea
California Bearing Ratio	350/ea
Consolidation Testing (Taylor Method)	450/ea
Falling/Constant Head Permeability	250/ea
Triaxial Permeability	325/ea
Unconfined Compressive Test	250/ea

Concrete and Aggregates

Concrete Cylinder Compression	15/ea
Mix Design Review	250/ea
Concrete Core Compression Tests	50/ea
Masonry Prisms	35/ea
Mortar Cubes	35/ea
LA Abrasion	250/ea
Petrographic Analysis	cost + 20%

Asphalt

Density Tests	150/ea
Asphalt Extraction Tests	200/ea
Mix Review	250/ea

D. SUBSURFACE EXPLORATIONS

Subcontractor cost plus 20%

E. EQUIPMENT/MISCELLANEOUS

Transportation of Materials to Lab	30/hr
Nuclear Density Gage	35/day
Photo Ionization Detector	50/day
Vibration Monitor	50/day
Guelph Permeameter	50/day
Groundwater Sampling Pump	50/day
Mileage	0.55/mi
UT Steel Testing Apparatus	100/day
Groundwater Monitor Wells	18/ft
Monitor Well Covers	100/ea
Overtime	50%
Low-Voltage Holiday Detector	35/day
Dry Film Thickness Gage	25/day
Vibration Monitor	50/day
Windsor probe test	100/shot
Swiss Hammer	50/day
Transit	50/day
Coring Rig and Crew	500/day
James Electric Resistivity	75/day
Static Cone Penetrometer	25/day
Dynamic Cone Penetrometer	50/day

- Rates and mileage charges are assessed portal to portal from Weare, NH or Boston, MA.
- Overtime surcharge for technical staff is 50%.
- Markup for reimbursable expenses is 20%.
- A surcharge of 50% applies to all same day service.
- Sundays and Holiday service are surcharged 100%.
- Interest rate of 1% per month may be applied to all overdue accounts.
- Test reports are subject to review by Principal Engineer.

Peebles School Project (Grades 3-5)
DESIGN MEETINGS WITH SCHOOL ADMINISTRATION/STAFF
All meetings held at District Office - 36 Sandwich Road at 9:00 AM - 12:00 AM

DRAFT March 14,2017

Date	Agenda
March 14, 2017 (Wednesday @ 9am) ***completed***	EDUCATIONAL DESIGN MEETING
	• Technology
	•Review of open action log
March 30, 2017 (Thursday @ 9am)	EDUCATIONAL DESIGN MEETING
	•Building System review
April 06, 2017 (Thursday @ 9am)	EDUCATIONAL DESIGN MEETING **at Peebles**
	•Floor Plan and Site Plan review
	•Exterior play structure discussion
April 14, 2017 (Friday@ 9am)	EDUCATIONAL DESIGN MEETING **at Peebles**
	•Interior Elevations Update
May 05, 2017 (Friday @ 9am)	EDUCATIONAL DESIGN MEETING **at Peebles**
	•Landscape review with design and phasing plans
May 18, 2017 (Thursday @ 9am)	EDUCATIONAL DESIGN MEETING at Peebles
	• Furniture plan layout review
May 25,2017	Vote to Submit 60% Construction Documents
Additional meetings as needed	

	Date	Meeting Comment	Party	Resolution
December 14, 2016 Educational Meeting				
1	12/14/2016	**Nurse: The nurse requested a dedicated icemaker. This item will require a decision by the District.**	**District**	**A refrigerator / freezer with ice maker will be provided. A stand alone dedicated ice maker is not required per district's response at the March 13,2017 Educational Design Meeting**
2	12/14/2016	**Music: It was requested after further review to change one practice room into a music office. FAI stated this request would need to be confirmed at the January 5th Academic Leadership team meeting.**	**FAI**	**This item was discussed at the January 5, 2017 Educational meeting and approved. FAI to update plans and space template.**
3	12/14/2016	**Art: It was requested that a minimum of three sinks to be provided with plaster traps.**	**FAI**	**This item has been incorporated into the art room layout**
4	12/14/2016	**Art: A request was made to incorporate a singular peninsula configuration similar to the Bournedale art room for greater access to sinks. FAI to review.**	**FAI**	**This item has been incorporated into the art room layout**
5	12/14/2016	**Art: Student work display areas should be studied both inside the art room and hallway areas. FAI to review.**	**FAI**	**A display case has been provided a node between MC and Art studio. Tackboards have been provided inside the room for pin-up.**
6	12/14/2016	**Art: An office was requested beyond the already submitted MSBA space template. FAI explained the size of the art room and storage may reduce in size to accommodate this request would be discussed at the January 5th Academic Leadership team meeting.**	**FAI**	**This item was discussed at the January 5, 2017 Educational meeting and approved. FAI to update plans and space template.**
7	12/14/2016	**Library: A workroom and office should be incorporated into the overall layout. The workroom will require a sink. The main circulation desk does not need to be adjacent to the workroom and office.**	**FAI**	**The workroom with sink and office has been incorporated into the plan.**
8	12/14/2016	**Library: The main circulation desk should have high counter portion "check-out" with a lower section at standard desk height. A book return area should be incorporated into the desk. District to confirm if a book return slot is required between the hallway and the media center.**	**District**	**A book return slot is not required between the hallway and media center. This item was discussed and deemed unnecessary at the March 13,2017 Educational Design Meeting**
9	12/14/2016	**Library: Fixed bookcases along the perimeter walls with mobile bookcases in the open areas can optimize flexibility. The District should provide FAI with anticipated book volume count to assist in planning bookcases and any required media storage area.**	**District**	

	Date	Meeting Comment	Party	Resolution
10	12/14/2016	**Grade 3: An exterior door was requested from the team room directly to the outdoor garden area. FAI stated this could be accommodated.**	**FAI**	**This item was discussed at the January 5, 2017 Educational meeting and approved. FAI to update plans.**
11	12/14/2016	**Grade 3: It was requested that connecting doors located between classrooms. FAI stated connecting doors were part of the project in the last phase and removed due to cost. This request will be discussed at the January 5th Academic Leadership team meeting.**	**FAI**	**This item was discussed at the January 5, 2017 Educational meeting and discussed and approved at the February 2, 2017 SBC. FAI to update plans.**
12	12/14/2016	**Grade 4: It was requested an additional teacher's toilets be located closer to the 4th grade. After review of the plan, one additional teacher's toilet can be incorporated on the second floor. This provides a total of 2 singular staff toilets on the first floor adjacent to the staff workroom, 2 singular staff toilets on the first floor within the administration suite, and 3 singular staff toilets on the second floor.**	**FAI**	**One singular staff toilet room has been provided within the 4th grade academic wing.**
December 15, 2016 Educational Meeting				
1	12/15/2016	**Physical Education: A water fountain was requested within the gym space. FAI stated this item will be incorporated.**	**FAI**	**The sink has been incorporated into the gymnasium layout.**
2	12/15/2016	**Physical Education: The gym instructor liked the idea of having moveable bleachers for flexibility. FAI to study further.**	**FAI**	**Bleachers will be fixed and justified to the southern wall only per district's response at the March 13, 2017 Educational Design Meeting**
3	12/15/2016	**Physical Education: An office was requested beyond the already submitted MSBA space template. FAI explained the size of storage area will be reduced in size to accommodate and this request will be discussed at the January 5th Academic Leadership team meeting.**	**FAI**	**This item was discussed at the January 5, 2017 Educational meeting and discussed and approved at the February 2, 2017 SBC. FAI to update plans.**
4	12/15/2016	**Physical Education: A request for a toilet and shower may be accommodated in the nearby custodial/kitchen area for shared use. FAI stated this request would need to be confirmed at the January 5th Academic Leadership team meeting.**	**FAI**	**This item was discussed and approved at the January 5, 2017 Educational meeting. FAI to update plans.**

	Date	Meeting Comment	Party	Resolution
5	12/15/2016	Physical Education: The gym instructor was concerned outdoor play area and lawn would be limited to the new construction of the school. FAI stated during construction, the area in front of the existing Peebles (grass area currently used for PE) would be utilized by the contractor. After the final site work phase, there will be lawn area adjacent to the new tennis court. The instructor asked if a stone dust walking/jogging path could be created. FAI to review.	FAI	Outdoor lawn area with a walking / jogging path around the perimeter has been incorporated into the project
6	12/15/2016	Administration: It was mentioned that an additional office would be required to support the administration team for a desired total of five offices. We discussed reducing the conference rooms to accommodate the request. FAI stated this request would need to be confirmed at the January 5th Academic Leadership team meeting.	FAI	This item was discussed and approved at the January 5, 2017 Educational meeting. FAI to update plans.
7	12/15/2016	Administration: Storage strategies were discussed with options for both storage rooms for records and general hallway closets to accommodate office material. FAI to review.	FAI	
8	12/15/2016	Administration: The mail/copy area was discussed with opportunities for a kitchenette as well as a work surface area for assembling documents. FAI to study this area further.	FAI	The office suite Mail/Copy area has a kitchenette counter w/sink and refrigerator on the north side and a continuous working surface on the south side.
9	12/15/2016	Middle School (5th Grade): Connecting doors were requested. FAI stated this request would need to be confirmed at the January 5th Academic Leadership team meeting.	FAI	This item was discussed at the January 5, 2017 Educational meeting and discussed and approved at the February 2, 2017 SBC. FAI to update plans.
10	12/15/2016	Middle School (5th Grade): Teachers asked if fixed desktop computers are planned for each classroom. FAI stated they are not and student use within the classrooms would be laptop or tablet based. District to confirm hardwired fixed desktops computers are not required within the classroom for student use.	District	General classrooms will not have fixed desktop computers for student use per district's response at the March 13, 2017 Educational Design Meeting
11	12/15/2016	Middle School (5th Grade): It was noted that a dedicated space to accommodate two small buses supporting students with needs should be provided. FAI to study location.	FAI	This item was discussed at the January 5, 2017 and January 27,2017 Educational meeting. The dedicated space will be located on the north-side of the building adjacent to the parent pick-up and drop-off.
12	12/15/2016	Computer: The floor plans were reviewed and designed computer areas discussed. There are limited fixed desktop machines in the iStudio (3-4 total) and in the Media Center (10-12 total). The classroom zone of the Media Center may be laptop or tablet based to accommodate 24 students. District to confirm hardwired fixed desktops computer locations.	District	The iStudio will have 6 desktop computer and the Media Center will have 12 desktop computers for student use per district's response at the March 13, 2017 Educational Design Meeting
13	12/15/2016	Innovation Studio: There was a request for an additional open shelving wall that could be concealed with sliding marker boards fixed to the front. FAI will review the request with the furniture consultant.	FAI	The istudio will have one storage and marker board assembly to maximize writing surfaces due to minimal wall surface.

	Date	Meeting Comment	Party	Resolution
14	12/15/2016	**Innovation Studio: The ceiling will remain open to provide the opportunity to hang objects/devices from structure above. The exposed deck and any ductwork will be painted a dark color. Color to be determined. FAI request the District decide if the adjoining art room shall have an exposed ceiling for consistency.**	**FAI**	**The Innovation Studio and Art room ceilings will be painted exposed deck and ductwork. This item was discussed at the February 16,2017 Educational meeting**
15	12/15/2016	**Innovation Studio: Anticipated equipment is as follows: 3D-printer, laser cutting, 3 to 4 fixed computer stations serving equipment. Computers required hard connection to equipment. FAI to review with Technology consultant. District to confirm list of equipment to assist in mechanical ventilation requirements of space.**	**District/FAI**	
16	12/15/2016	**Custodians & Cafeteria: Site Related Items - The existing Peebles does not have a dumpster or compactor. All trash is collected in 50 gallon barrels, stored then loaded into a pickup truck. There may be a garbage truck in the future with the capacity to empty a dumpster. The project will be designed with the loading dock. A dock lift was requested to bring barrels and other materials down to the driveway elevation. FAI stated this is costly and not in the budget. The custodians requested a walking path that would connect the loading dock with the driveway. A dock leveler was also requested that is not currently in to budget. the custodians stated a loading plate would satisfy this need in lieu of a dock leveler. The District should provide the desired dumpster or compactor specifications to assist in designing the loading dock and any power requirements for the compactor.**	**District**	**A compactor is not required as discussed at the March 30, 2017 Facilities meeting. A dumpster will be provided.**
17	12/15/2016	**Custodians & Cafeteria: Site Related Items - The custodians requested a stone dust drive connecting the middle school to the existing storage shed. FAI to evaluate if this connection is possible.**	**FAI**	**A crushed stone access road has been developed and incorporated into the project.**
18	12/15/2016	**Custodians & Cafeteria: Building-Related Items - It was requested that a 4'-0" chase with a full man-door be provided in between the gang toilets. FAI stated this is not a possibility due to space limitations. Access panels will be provided along the chase wall. FAI to follow up with GGD on location and size.**	**FAI**	
19	12/15/2016	**Custodians & Cafeteria: Building-Related Items - One larger continuous sink per gang toilet was requested in lieu of 2 individual sinks in each gang toilet. FAI to follow up with GGD on this item.**	**FAI**	**Confirmed. Current documents indicate this.**
20	12/15/2016	**Custodians & Cafeteria: Building-Related Items - It was requested light fixtures in the egress stairs shall be wall mounted sconces for ease of access in lieu of "hard to reach" ceiling fixtures. FAI to follow up with GGD.**	**FAI**	

	Date	Meeting Comment	Party	Resolution
21	12/15/2016	**Custodians & Cafeteria: Building-Related Items - FAI asked if the Boston Food Bank space, currently in the existing Peebles, should be accommodated into the new layout. The District should confirm if this space is required.**	**District**	**Special space accommodations for the Food Bank are not required in the new kitchen design. The kitchen design, as documented in the Design Development Set, satisfies the kitchen requirements per district's response at the March 13, 2017 Educational Design Meeting**
22	12/15/2016	**Custodians & Cafeteria: Building-Related Items - A student tray and dish window was requested from the main cafeteria. The District should confirm if trays and dishware will continue to be used by students or if disposable type is planned for the future. A future meeting with the kitchen director is required.**	**District**	**These items are required per January 25, 2017 Food service meeting. The tray window and dishwasher has been accommodated in the new kitchen design.**
23	12/15/2016	**Custodians & Cafeteria: Building-Related Items - There was a request for a singular shower, toilets, and washer/dryer to be shared between custodial, kitchen and gym instructor. FAI stated this request would need to be confirmed at the January 5th Academic Leadership team meeting.**	**FAI**	**These items have been incorporated into the project**
24	12/15/2016	**Custodians & Cafeteria: Building-Related Items - A request for electric hand dryers in the gang toilets was requested. This would be total of 8 electric hand dryers. Paper towels can be used in the singular staff and SPED toilets. District to confirm this request.**	**District**	**Electric hand dryers are required at the community-use toilets adjacent to the gymnasium and cafeteria only. This is a total of 2 electric hand dryers. Paper towels will be used at singular staff, SPED toilets and gang toilets serving grades 3, 4 and 5 per district's response at the March 13, 2017 Educational Design Meeting**
25	12/15/2016	**Custodians & Cafeteria: Building-Related Items - There was a request to incorporate floor drains at all gang toilets. FAI to review the request.**	**FAI**	
January 5, 2017 Educational Meeting				
1	1/5/2017	**Gymnasium: The gym instructor like the idea of having moveable bleachers for flexibility. The District stated the target bleacher seat count should be 200. Students can be seated on the floor surface during an all student assembly. The group asked if the bleachers could be justified to one side only to maximize useable space on the opposing side. FAI to study bleacher configurations, both fixed and moveable.**	**FAI**	**Bleachers will be fixed and justified to the southern wall only per district's response at the March 13, 2017 Educational Design Meeting**
2	1/5/2017	**Cafeteria: A requested student tray and dish window from the 12/15/2016 meeting was discussed. The District should confirm if trays and dishware will continue to be used by students or if disposable type is planned for the future. A future meeting with the kitchen director is required.**	**District**	**These items are required per January 25, 2017 Food service meeting. The tray window and dishwasher has been accommodated in the new kitchen design.**

	Date	Meeting Comment	Party	Resolution
3	1/5/2017	**Cafeteria: The requested shower, toilets, and washer/dryer from the 12/15/2016 meeting were discussed. This was acceptable by the group. FAI to study arrangement.**	**FAI**	**These items have been incorporated into the project**
4	1/5/2017	**Academic Wings: The group discussed the connecting doors requested at 12/14/2016 and 12/15/2017 meetings. The leadership team decided the doors should be incorporated into the project. FAI stated this item to be discussed at the January 5th SBC meeting.**	**FAI**	**Connecting doors have been incorporated into the project**
January 26, 2016 Site Design Meeting				
1	1/26/2017	**Site Design: Vehicular circulation for both cars and buses remains largely unchanged from the SD submission. The 24' wide, one-way circulation has been maintained. A crushed stone vehicular access from the Middle School to the maintenance shed has been added for pricing purposes. Cost will determine if the access drive remains in the project.**	**FAI/WDA**	**The crushed stone access drive has been incorporated into the project and is within the project budget.**
2	1/26/2017	**Site Design: Pedestrian circulation from Trowbridge Road and around the perimeter of the building also remains largely unchanged. The width of the sidewalk from Trowbridge Road to the main entrance has been widened to 8' minimum to accommodate shared pedestrian and bike use to allow us to meet the criteria for the LEED Location and Transportation credit for Bicycle Facilities. Additional pedestrian paths to connect the new school to the larger campus have been introduced for pricing purposes. Cost will determine if the paths remain in the project.**	**FAI/WDA**	**A stone dust pathway connecting to the middle school has been incorporated into the project and is within the project budget.**
3	1/26/2017	**Playground Area: Program elements will include at least one play structure for age 5-12 children, the size of which will be determined based on the total square foot area of the designated structure area; a paved free play area with painted pavement striping for games (foursquare, hopscotch, etc.); a student garden area with raised timber planters; and four benches and two trash/recycling receptacles.**	**FAI/WDA**	
January 27, 2017 Food Service Meeting				
1	1/27/2017	**Change the 5 well hot wells to 4 well hot wells**	**FAI/TDA**	**This has been updated on latest plan.**
2	1/27/2017	**Change two of the hot cabinets to cold cabinets. A total of 2 hot and 2 cold cabinets to be provided.**	**FAI/TDA**	**This has been updated on latest plan.**

	Date	Meeting Comment	Party	Resolution
3	1/27/2017	**Add a microwave oven**	**FAI/TDA**	**This has been updated on latest plan.**
4	1/27/2017	**Add a Robo coup, food processor**	**FAI/TDA**	**This has been updated on latest plan.**
5	1/27/2017	**Range to have storage base, not oven base**	**FAI/TDA**	**This has been updated on latest plan.**
6	1/27/2017	**Two flat top condiment carts to be added to the cafeteria space with enclosed base.**	**FAI/TDA**	**This has been updated on latest plan.**
7	1/27/2017	**Remove one section of storage shelving and add two can racks in place.**	**FAI/TDA**	**This has been updated on latest plan.**
8	1/27/2017	**Worktables to have casters**	**FAI/TDA**	**This has been updated on latest plan.**
9	1/27/2017	**Convection ovens to have casters and flexible gas connection.**	**FAI/TDA**	**This has been updated on latest plan.**
10	1/27/2017	**Steamer to be boiler less unit.**	**FAI/TDA**	**This has been updated on latest plan.**
11	1/27/2017	**Add kettles (two trunnion)**	**FAI/TDA**	**This has been updated on latest plan.**
12	1/27/2017	**Remove one double convection oven**	**FAI/TDA**	**This has been updated on latest plan.**

	Date	Meeting Comment	Party	Resolution
13	1/27/2017	**Add pot rack over item FS-21**	**FAI/TDA**	**This has been updated on latest plan.**
14	1/27/2017	**Add over shelves to items FS-14, FS-15 and FS-20**	**FAI/TDA**	**FS-15 is a cold cabinet. FS-14 and FS-20 have overshelves per latest plan.**
15	1/27/2017	**Relocate door into office to kitchen side**	**FAI/TDA**	**This has been updated on latest plan.**
16	1/27/2017	**TDA to update layout and provide cut sheets.**	**FAI/TDA**	**This has been updated within the Design Development submission**
February 15, 2017 MEP/FP Meeting				
1	2/15/2017	**150kw natural gas generator originally proposed to back up life safety/basic systems. 250kw diesel generator carried in estimate set for inclusion of the kitchen load in "shelter" scenario. Natural gas generators 200kw and above triggers a significant increase in cost, therefore diesel was proposed for the 250kw. Generator calculation to be provided.**	**FAI/GGD**	**The 250 kw diesel generator has been incorporated into the cost of the project. This item was discussed at the March 30, 2017 School Facilities meeting. Generator load calculations and a list of items supported by the generator are included.**
2	2/15/2017	**Addressable fire alarm system to be provided. Fire alarm control panel to be located in the Main Electrical Room and the annunciator panel located in the Main Vestibule. System requirements to be confirmed with fire department.**	**FAI/GGD**	**Meeting with Fire Department took place 3/2/17 where system requirements were confirmed.**
3	2/15/2017	**Fire Department Connection was pointed out. This location and other Fire Department related questions will be confirmed at the meeting with Fire Department, scheduled for 2/13/2017.**	**FAI/GGD**	**Locations of fire department connections have been coordaintion with Bourne FD. Two connections will be provided for the building.**
4	2/15/2017	**A plumbing fixture cut package will be provided at 60%CD for review.**	**FAI/GGD**	

	Date	Meeting Comment	Party	Resolution
March 2, 2017 Bourne Police and Fire Department Meetings				
1	3/2/2017	Fire Department connection is 4" Storz type. Provide two connections on building. One connection to be located on north side of building near Classroom wing. Second connection to be located on south side of building adjacent to receiving area. Signage to be provided on the building above each fire department connection.	FAI Veri/Waterman/ GGD	
2	3/2/2017	BDA to be used to amplify Fire Department radio only.	FAI Veri/Waterman/ GGD	
3	3/2/2017	Automatic sprinkler system will be wet type. Three sprinkler zones to be provided - 1) First Floor Classroom Wing, 2) First Floor Assembly areas and 3) Second Floor Classroom wing. All sprinkler zones will have dedicated supervised shutoff valve and flow switch.	FAI Veri/Waterman /GGD	Confirmed. Current documents indicate this.
4	3/2/2017	New addressable fire alarm system will be provided. Alarm transmission is through central station.	FAI Veri/Waterman / GGD	Confirmed with fire department on 3/2/17
5	3/2/2017	Main Electric Room and Main Emergency Electric Room will not be protected with automatic sprinklers. Room will be 2-hour rated. These rooms will have smoke detectors.	FAI Veri/Waterman/ GGD	Confirmed. Current documents indicate this
6	3/2/2017	CO detectors provided in kitchen at cooking island. CO to be provided outside of rooms where natural gas heating equipment is provided. CO detection shall put building into alarm.	FAI Veri/Waterman /GGD	Confirmed with fire department on 3/2/17
7	3/2/2017	Standpipe connects to be provided in Classroom wing. Standpipe to be provided in each stair with a third located near elevator.	FAI Veri/Waterman/ GGD	Confirmed. Current documents indicate this.

	Date	Meeting Comment	Party	Resolution
8	3/2/2017	Reviewed site entry points, parking, bus queues and parent drop-off routes. Nine (9) buses are typically used - in (2) shifts, buses will not be "doubled up." No additional changes were requested. FAI to follow up with District on "Event" parking.	FAI Veri/Waterman	
9	3/2/2017	Width of entry has been increased to 20'-0" as previously requested.	FAI Veri/Waterman	
10	3/2/2017	Precast curbs will be used at the straight runs, granite curbs for the curved sections. Mountable granite curb has been provided for firetrucks to access the rear play area (west elevation.)	FAI Veri/Waterman	
11	3/2/2017	BFD requested gate providing access for firetrucks at rear play area be electrified and tied into the fire alarms system. District to evaluate this request.	District	
12	3/2/2017	Lettering on building shall be 12" tall (building number/school name). All exterior doors shall be numbered (6" tall) located above doors. Pairs of doors are considered one number.	FAI Veri/Waterman	
13	3/2/2017	BFD has requested an 18" border of crushed stone around the base of the building. Veri/Waterman to review and include in base design.	FAI Veri/Waterman	
March 13, 2017 Technology and Security Meeting				
1	3/13/2017	District Fiber will need to be extended/relocated to the new school. The fiber is owned by the District. The Owner's vendor is Comm-tract. Contact is Bryan Hopkins. D. Faria recommended that the Owner continue with Comm-tract for this work and suggested that they be contacted sooner rather than later for a quote for budgeting purposes.	District	

	Date	Meeting Comment	Party	Resolution
2	3/13/2017	Existing Smartboards will be re-purposed where possible and practical. One will be located in the library, near the entrance. District to evaluate, select, and store existing Smartboards for re-use.	District	
3	3/13/2017	A fixed computer station is required in adjacent to Lobby 101 and the Administration suite. Flansburgh to coordinate location.	FAI	
4	3/13/2017	Surveillance camera will be added in the iStudio.	FAI	This item has been incorporated into the project for security and safety purposes
5	3/13/2017	Surveillance camera will be added at the Loading Dock/Emergency Access Area.	FAI	This item has been incorporated into the project for security and safety purposes
6	3/13/2017	Ai Phone will be added outside the library stairs exterior, Office 153, and Office 107	FAI	This item has been incorporated into the project for security and safety purposes
7	3/13/2017	Surveillance camera will be added to Corridor 135.	FAI	This item has been incorporated into the project for security and safety purposes
8	3/13/2017	Surveillance camera will be added in the corridor adjoining the 2nd floor bathrooms	FAI	This item has been incorporated into the project for security and safety purposes
9	3/13/2017	Surveillance camera will be added to cover the tennis courts.	FAI	This item has been incorporated into the project for security and safety purposes

	Date	Meeting Comment	Party	Resolution
March 30, 2017 Site Design and Planning Meeting				
1	3/30/2017	Site: It was discussed that main parking area will have no islands as suggested in the previous meeting by the facilities group. FAI noted that light posts with concrete bases are within the open parking area and should use caution when plowing. FAI to provide a detail on the concrete light pole base.	FAI	
2	3/30/2017	Site: The district discussed relocating the existing portable trailer from the gravel lot to the south of the annex to the south side of the maintenance building. A second storage structure in the gravel area will be relocated by the district - new located TBD. The district to confirm final location and moving date with the Architect. FAI noted both structures must be removed from the gravel lot area by September 2017.	FAI District	
3	3/30/2017	Site: The facilities group asked if the stone dust path, located north to south, along the western edge of the softball field be asphalt in lieu of stone dust for snow maintenance purposes. The circular jogging path adjacent to this walk to remain stone dust. FAI will review potential cost increase and discuss with SBC.	FAI	

Flansburgh Architects

Meeting Notes

DATE:	March 30, 2017
PROJECT:	Bourne Public Schools
PROJECT NO:	Peebles Elementary School– 1514.00
PRESENT:	Steven Lamarche – Superintendent Ed Donoghue – Director of Business Services Ted Buckley – Maintenance / Electrician Rick Dobbins – Maintenance / Grounds Leslie Wing– Facilities Advisor Kent Kovacs – Flansburgh Architects
DISTRIBUTION:	Attendees

A series of discussions took place on Thursday, March 30th regarding the development of the site design and planning for the new Peebles Elementary School.

Site Design

- The group review the driveway precast and granite curbing locations. The planning was acceptable to the group.
- It was discussed that main parking area will have no islands as suggested in previous meeting by the facilities group. FAI noted that light posts with concrete bases are within the open parking area and should use caution when plowing. FAI to provide a detail on the concrete light pole base.
- The district discussed relocating the existing portable trailer from the gravel lot to the south of the annex to the south side of the maintenance building. A second storage structure in the gravel area will be relocated by the district – new located TBD. The district will confirm final location and moving date with the architect. FAI noted both structures must be removed from the gravel lot area by September 2017.
- The facilities group asked if the stone dust path, located north to south, along the western edge of the softball field be asphalt in lieu of stone dust for snow maintenance purposes. The circular jogging path adjacent to this walk to remain stone dust. FAI will review potential cost increase and discuss with the SBC.
- The tennis courts sports lighting or provisions for future sports lighting is not planned for this project.

- The group reviewed the proposed grass and planting areas and discussed maintenance issues. A combination of lawn and meadow mix areas are distributed throughout the site to provide a low maintenance and a very natural landscape in keeping with the area.
- The group review the electrical load letters for the building and generator. There was a discussion of the items connected to the generator and Mr. Buckley noted the diesel fuel source for the generator provides an uninterruptable fuel source in an emergency. FAI to include load letters as part of the meeting minutes.

Building Design

- Larger access panels were requested to access the plumbing chase walls. FAI noted typically one 12" x 12" access panel is located to access shut-off valves.
- The district will not have a trash compactor in the future. It was confirmed there is no need to provide open conduit for electrical wires to support a future trash compactor.
- Rooftop access is through various means. The one-story roof area to the south (adjacent to the large gym sloped roof) is accessed from a ship's ladder and roof hatch located in the custodian storage area. An external ladder from this roof area provides access to the large sloped roof section of the gymnasium and cafeteria. A set of double doors provides from is one-story area provides access AHU-1. AHU-2 is accessed by a ship's ladder in a separate access space directly from the gymnasium. A set of double doors provides access from AHU-2 directly to the one-story roof area located on the north-side of the gymnasium and cafeteria.
- The two-story academic wing is accessed by a ship's ladder and roof hatch adjacent to Stair #1 and Classroom #205. Additional access to this roof section will be by means of a loose ladder from the "green roof" area. This "green roof" area is located opposite the elevator. Full stair access from Stair #1, Stair #2, or Stair #3 to this roof is not required.

GARCIA • GALUSKA • DESOUSA
Consulting Engineers Inc.

370 Faunce Corner Road, Dartmouth, MA 02747-1271

L#55502
J#280 017 00.00

March 6, 2017

Eversource
484 Willow St.
West Yarmouth, MA 02673

Attn: Kathleen White

Re: James F. Peebles Elementary School
70 Trowbridge Road
Bourne, MA 02532

Dear Ms. White:

The Town of Bourne will be constructing a new elementary school consisting of 72,680 SF.

The new incoming service will run underground between the street and the transformer pad. The transformer will be a padmount located in the vicinity as shown on the site plan.

We anticipate secondary metering at the transformer with the transformer supplied by the utility company.

We are proposing two underground secondary services rated at 1,200 Amps, 277/480V, 3∅, 4W.

Attached are PDFs of our proposed Electrical Site Plan and Power Riser Diagram. Please review and send back with any comments you may have.

In addition, we request that you send us the following information:

1. Available short circuit duty at the secondary of the transformer.
2. Anticipated transformer size and impedance.
3. Transformer pad installation requirements.
4. Primary line installation details and the work to be performed by the contractor.
5. Requirements for reduced voltage starting.
6. Metering rate schedule.
7. Metering requirements, including location and hot or cold sequence installation.
8. Anticipated back charges

Our projected breakdown of loads is as follows:

A. HVAC						
	HVAC Equipment			Electrical Rating		kVA
	RTU #1, 2			2 @ 45 Tons	=	120.0
	RTU #3, 4			2 @ 30 Tons	=	88.0
	Exhaust Fans			8 @ ½ HP	=	7.0
				2 @ 3 HP	=	7.0
	Electric Unit Heaters			4 @ 3.0 KW	=	12.0
	Boilers			3 @ 2 HP	=	8.0
	Unit Heaters (HW)			10 @ 1/8 W	=	2.5
				6 @ ¼ W	=	4.5
	Circ. Pumps			2 @ 5 HP	=	12.0
	Circ. Pumps			2 @ 3 HP	=	7.0
	Make-up Air Unit			5 HP	=	6.0
	AHU #1, #2			2 @ 60 HP	=	150.0
	Chiller			60 Tons @ 1.5 kVA	=	75.0
	DCUs			4 @ 4 Tons	=	24.0
				Sub-total	=	523.0

B.Plumbing/ Fire Protection						kVA
	Water Heaters			2 @ ½ HP	=	1.8
	Circular Pumps			2 @ 1/6 HP	=	1.6
				Sub-total	=	3.4

C. Elevator			1 @ 40 HP	=	45.0
D. Exterior Lighting				=	10.0
E. Interior Lighting			72,680 S.F @ 1.0 W/s.f.	=	72.7
F. General Power			72,680 S.F. @ 2.5 W/s.f.	=	181.7

G. Kitchen						kVA
	Dishwsaher/Booster Heater				=	40.0
	Other Equipment				=	60.0
				Sub-total	=	100.0

Connected Load Summary			A.	=	523.0
			B.	=	3.4
			C.	=	45.0
			D.	=	10.0
			E.	=	72.7
			F.	=	181.7
			G.	=	100.0
			Total	=	**935.8 kVA**

935.8 kVA @ 277/480v, 3 Phase, 4 Wire= 1123 Amps

A Standard 1200 Ampere, 277/480V, 3 Phase, 4 Wire service was selected. The main circuit breaker will be solid state and rated 100% of continuous load.

Secondary service will consist of (3) sets of 4 # 600 KCM copper in (3) 4” conduit plus (1) 4” spare.

We intend to participate in the incentive programs that you are offering.

We would like to schedule a site meeting with you and your engineer at your earliest convenience.

Please contact our office should you have any questions or concerns regarding the above.

Very truly yours,

GARCIA • GALUSKA • DESOUSA

Daniel Sarro

DS:ja

Enc.

Cc: William T. Beatrice, AIA, Flansburgh

Peebles Elementary School
Bourne, MA
J#280 014
M#55639/Page 1/March 15, 2017

Peebles Elementary School

Generator Sizing Report

Below is the generator loads which yields a 250KW generator.

Description: Includes all anticipated loads (life safety, elevator, building communications, freeze protection, additional ventilation and lighting, and Kitchen cooking equipment).

Load Breakdown:

Life Safety Equipment:

A. All Exit Signs and Emergency lighting in the areas listed below are fed by Life Safety Emergency Power: ***(required by code).*** In addition to the code required lighting, areas below with an asterisk (*) contain additional lighting for the use of the space during a power outage.

1. Corridors (*)
2. Electrical/Mechanical Rooms (*)
3. Gymnasium, Locker Rooms,
4. Cafeteria/Commons (*)
5. Media Center
6. Lobbies
7. Administration areas(*)
8. Health Suite/Nurses office (*)
9. Toilets (*)
10. Platform
11. Data rooms “Head End room & IDF Closets (*)
12. Kitchen/Servery (*)
13. Exterior Building mounted lights over doors required for egress lighting
14. Where required by code (egress areas)
15. Fire alarm system

Optional Standby Equipment:

A. Equipment listed below is fed by Optional Standby Emergency Power: (condensers providing cooling will be locked out when on emergency power. This will be accomplished using the Building Management System Controls.)

1. Boilers
2. Water Pumps
3. Ventilation Unit serving Cafeteria and Kitchen/Servery
4. Kitchen make-up air unit
5. Ventilation Unit serving Administration areas

6. MDF and IDF Cooling units
7. Elevator
8. Refrigeration
9. Building management system controls
10. Kitchen equipment required for cooking
11. Strategically placed receptacles in the kitchen, administrative area, gymnasium, and cafeteria.

B. Equipment within the Head End and IDF rooms including (served by UPS):

1. Paging/Intercom System (MDF)
2. Security System (IDF/MDF)
3. Telephone System (MDF)
4. Network electronics (IDF/MDF)
5. Servers (MDF)
6. Clock system (MDF)
7. Building Management System (MDF)

Project Summary

Contact Information	
Project:	Bourne Peebles School
Contact:	David Pereira
Spec Ref:	260000
Email:	David_pereira@g-g-d.com

Prepared By	
Name:	David Pereira
Company:	Garcia Galuska DeSousa, Inc.
Phone:	5089985700
Email	david_pereira@g-g-d.com

Environment	
Ambient Temp:	100 F / 38 C
Elevation:	500 ft / 152 m

Engine	
Duty:	Standby
Fuel:	Diesel
U.S. EPA Required:	Yes

Electrical Configuration	
Phase:	Three Phase
Frequency (Hz):	60 Hz
Voltage (Nominal):	480
Voltage (Specific):	480 volts

Generator Configuration	
Application:	
Enclosure Type:	Sound Level 1
Sound (desired):	No Requirement
Fuel Tank:	Sub Base UL 142
Run Time (desired):	48 hr

Electrical Performance

Max Running Load:	100%

Maximum Allowable Transients

Voltage Dip:	30.00%
Frequency Dip:	15 hertz

Maximum Allowable Voltage Distortion (%THVD)

Continuous:	11%
Momentary:	13%

Load Sequence Configuration	
Cyclic #1:	75% After Largest
Cyclic #2:	50% After Largest

Generator and Load Summary

Selected Generator & Alternator

Product Family Method:	Auto Select
Product Family:	SD Diesel (single)
Module Size:	NA
Sizing Method:	Auto Select
Generator:	250 kW, 8.7L Module
Alternator:	250 kW

250 kW Diesel Genset -- Site rated 250 kw
8.7 L Engine with Standard (250 kW) Alternator

Load Level		Transients		Harmonics	
Running:	99%	Fdip (Hz):	2.3	THVD Cont:	10.3%
Peak:	95%	Vdip (%):	8.2%	THVD Peak:	11.6%
Project Limits		Fdip (Hz):	15.0	THVD Cont:	11.0%
Max Loading:	100%	Vdip (%):	30.00 %	THVD Peak:	13.0%

Load Summary -- Connected Load of 248 kW

Running		Transients		Harmonics	
kW:	248	kW (Step):	73.4	kVA:	178.9
kVA:	277	kW (Peak):	248.3	THID Cont:	21.7%
PF:	0.90	kVA (Step):	216.0	THID Peak:	25.0%

Load List		**Starting**		**Running**		**Harmonic Current Distortion**			**Limits**	
Sequence	Description	kW	kVA	kW	kVA	Peak	Cont.	kVA	Vdip	Fdip
Group 1	Motor: Boilers 3 x 2 HP, Code K (8.5 kVA/Hp) 6 Pulse Rectifier VFD Rated torque at start running at 100%	0.5	0.6	6.7	8.5	30.0%	30.0%	8.5	15.0%	5.0 hertz
Group 1	Motor: Water pumps 1 x 5 HP, Code H (6.7 kVA/Hp) 6 Pulse Rectifier VFD Rated torque at start running at 100%	1.2	1.5	5.3	6.4	30.0%	30.0%	6.4	15.0%	5.0 hertz
Group 1	Motor: hot water pump 1 x 3 HP, Code J (7.5 kVA/Hp) 6 Pulse Rectifier VFD Rated torque at start running at 100%	0.7	0.9	3.2	4.0	30.0%	30.0%	4.0	15.0%	5.0 hertz
Group 1	**All loads on (sequence starting)**	**kW**	**kVA**	**kW**	**kVA**	**Peak THID**	**Cont. THID**	**Base KVA**	**Vdip**	**Fdip**
Summary	**15.3 kW Sequence Peak** **15.3 kW Application Peak**	1.2	1.5	15.3	18.9	30.0%	30.0%	18.9	15.0% 72.0 volts	8.3% 5.0 hertz
Group 2	Motor: RTU Cafeteria 1 x 54 Amps, Code G (6 kVA/Hp) 6 Pulse Rectifier VFD Rated torque at start running at 100%	10.9	12.6	41.1	47.3	30.0%	30.0%	47.3	15.0%	5.0 hertz

Load List		Starting		Running		Harmonic Current Distortion			Limits	
Sequence	Description	kW	kVA	kW	kVA	Peak	Cont.	kVA	Vdip	Fdip
Group 2	Motor: RTU Admin 1 x 46 Amps, Code G (6 kVA/Hp) Across the Line Rated torque at start running at 100%	73.4	216.0	33.3	38.3	0.0%	0.0%	0.0	35.0%	15.0 hertz
Group 2	Motor: MAU 1 x 5 HP, Code H (6.7 kVA/Hp) 6 Pulse Rectifier VFD Rated torque at start running at 100%	1.2	1.5	5.3	6.4	30.0%	30.0%	6.4	15.0%	5.0 hertz
Group 2	Office Equipment: misc. receptacles 1 x 4 kW, @ 0.97 PF Harmonics: THID = 45.0%	4.0	4.1	4.0	4.1	45.0%	45.0%	4.1	20.0%	10.0 hertz
Group 2	UPS (Servers): UPS (Servers) #1 1 x 20 kVA at Output Loaded at 100 % 25 % Battery charging Harmoinics: THID = 12.5%	5.2	5.3	25.9	26.7	12.5%	12.5%	26.7	15.0%	3.0 hertz
Group 2	Motor: RTU for Kitchen 1 x 46 Amps, Code G (6 kVA/Hp) 6 Pulse Rectifier VFD Rated torque at start running at 100%	9.1	10.4	35.1	40.3	30.0%	30.0%	40.3	15.0%	5.0 hertz
Group 2	**All loads on (sequence starting)**	**kW**	**kVA**	**kW**	**kVA**	**Peak THID**	**Cont. THID**	**Base KVA**	**Vdip**	**Fdip**
Summary	**184.9 kW Sequence Peak 200.2 kW Application Peak**	73.4	216.0	144.8	163.1	25.9%	25.9%	124.9	15.0% 72.0 volts	8.3% 5.0 hertz
Group 3	AC / Chiller: Ductless split units 4 x 4 Tons w/ 1 Compressor Cooling: 1 kW/ton Reheat: 0 kW/ton	8.5	28.2	16.0	18.8	0.0%	0.0%	0.0	35.0%	15.0 hertz
Group 3	Miscellaneous: refrigeration 1 x 3 kW, @ 1.00 PF Harmonics: THID = 0.0%	3.0	3.0	3.0	3.0	0.0%	0.0%	0.0	35.0%	15.0 hertz
Group 3	Miscellaneous: kitchen equipment 1 x 45 Amps, @ 1.00 PF Harmonics: THID = 0.0%	37.4	37.4	37.4	37.4	0.0%	0.0%	0.0	35.0%	15.0 hertz
Group 3	Elevator-Hydraulic: Elevator-Hydraulic #1 1 x 25 HP, Code G (6 kVA/Hp) 350% Current Limit Soft Starter: Voltage Stepped Rated torque at start running at 100%	17.7	87.0	23.8	27.7	25.0%	0.0%	27.7	20.0%	5.0 hertz
Group 3	**All loads on (sequence starting)**	**kW**	**kVA**	**kW**	**kVA**	**Peak THID**	**Cont. THID**	**Base KVA**	**Vdip**	**Fdip**
Summary	**80.2 kW Sequence Peak 240.3 kW Application Peak**	37.4	87.0	80.2	86.9	25.0%	0.0%	27.7	20.0% 96.0 volts	8.3% 5.0 hertz
Step 1	Lighting: Emergency Lighting 1 x 7.1 kW, @ 0.95 PF Harmonics: THID = 15.0%	7.1	7.5	7.1	7.5	15.0%	15.0%	7.5	25.0%	10.0 hertz

Load List		Starting		Running		Harmonic Current Distortion			Limits	
Sequence	Description	kW	kVA	kW	kVA	Peak	Cont.	kVA	Vdip	Fdip
Step 1	Miscellaneous: Fire alamr system 1 x 1 kW, @ 1.00 PF Harmonics: THID = 0.0%	1.0	1.0	1.0	1.0	0.0%	0.0%	0.0	35.0%	15.0 hertz
Step 1	**All loads on (concurrent starting)**	**kW**	**kVA**	**kW**	**kVA**	**Peak THID**	**Cont. THID**	**Base KVA**	**Vdip**	**Fdip**
Summary	**8.1 kW Sequence Peak** **248.3 kW Application Peak**	8.1	8.5	8.1	8.5	15.0%	15.0%	7.5	25.0% 120.0 volts	16.7% 10.0 hertz

Transient Analysis

Most difficult alternator transient requirements (Vdip)	
Sequence:	Group 2
Load:	RTU Admin
Starting kVA	216.0
Vdip Tolerance:	15.0%
Vdip Expected:	8.2%

Most difficult engine transient requirements (Fdip)	
Sequence:	Group 2
Load:	RTU Admin
Starting kW:	73.4
Fdip Tolerance:	5.0
Fdip Expected:	2.3

Alternator Transient Analysis (Vdip)

Sequence	Allowable Vdip	Expected Vdip	Sequence Starting kVA	Largest Transient Load
Group 1	15.0%	0.1%	1.5	Water pumps
Group 2	15.0%	8.2%	216.0	RTU Admin
Group 3	15.0%	*3.4%	87.0	Elevator-Hydraulic #1
Step 1	15.0%	*0.8%	8.5	Emergency Lighting

Engine Transient Analysis (Fdip)

Sequence	Allowable Fdip	Expected Fdip	Sequence Starting kW	Largest Transient Load
Group 1	5.0	0.0	1.2	Water pumps
Group 2	5.0	2.3	73.4	RTU Admin
Group 3	5.0	1.2	37.4	kitchen equipment
Step 1	5.0	0.3	8.1	Emergency Lighting

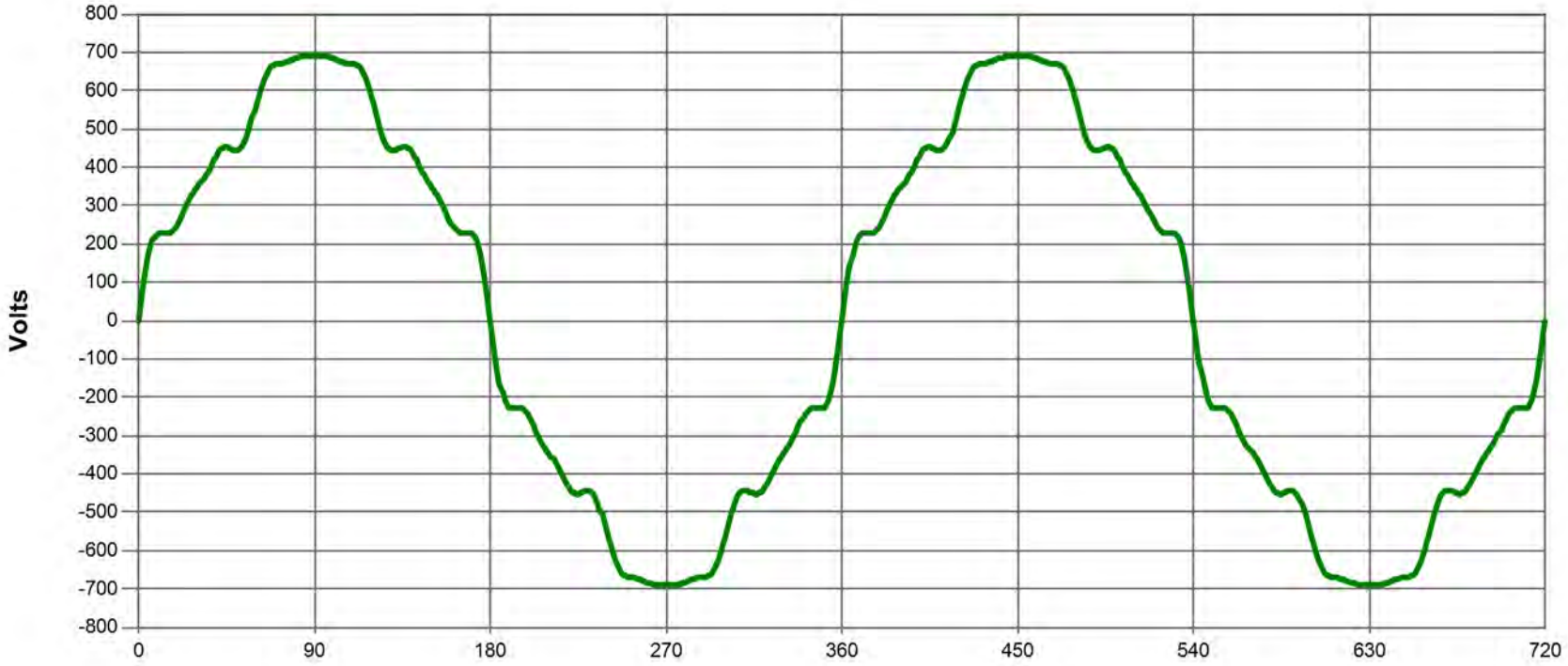
Note: UPS that revert to battery on system transients do not establish a sequence frequency dip limit though they may impact the sizing. The sizing algorithm verifies the engine can accept the UPS within its frequency tolerance.

Harmonic Analysis

Harmonic Profile:	Application Total (running)	Sequence:	(Total)		
kVA Nonlinear Load:	151.3	THID:	21.7%	THVD:	10.3%
kVA Base (all non-linear):	178.9	Selected sequence(s) harmonic alternator loading:			60.5%

Selected Harmonic Current and Voltage Profiles

Profile	3rd	5th	7th	9th	11th	13th	15th	17th	19th
Current	1.4%	18.6%	7.7%	0.1%	5.7%	3.8%	0.0%	2.9%	2.7%
Voltage:	0.3%	6.9%	4.0%	0.1%	4.7%	3.6%	0.0%	1.8%	1.9%

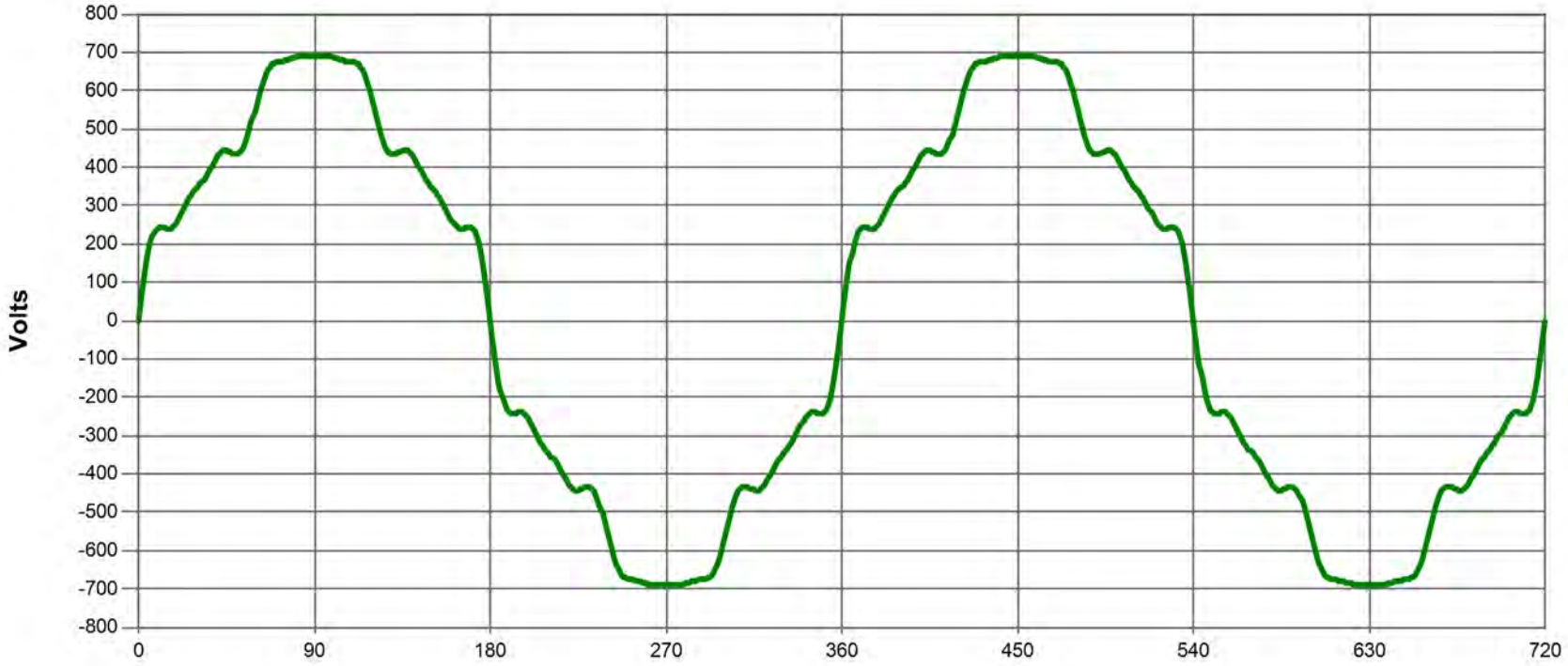


Harmonic Analysis (cont)

Harmonic Profile:	Application Total (peak)	Sequence:	(Total)		
kVA Nonlinear Load:	178.9	THID:	25.0%	THVD:	11.6%
kVA Base (all non-linear):	178.9	Selected sequence(s) harmonic alternator loading:			71.6%

Selected Harmonic Current and Voltage Profiles

Profile	3rd	5th	7th	9th	11th	13th	15th	17th	19th
Current	0.9%	21.6%	9.4%	0.1%	6.1%	3.9%	0.0%	3.0%	2.7%
Voltage:	0.2%	8.0%	4.9%	0.0%	5.0%	3.8%	0.0%	1.9%	1.9%



GARCIA • GALUSKA • DESOUSA
Consulting Engineers Inc.

370 Faunce Corner Road, Dartmouth, MA 02747-1271

L#55504
J#280 014 00.00

March 6, 2017

National Grid
39 Quincy Avenue
Braintree, MA 02184

Attn: Mary Kelley

Re: James Peebles Elementary School
Bourne, MA

Dear Ms. Kelley:

Our office has been retained by Flansburgh Architects, Inc., to prepare documents for Mechanical and Electrical Systems for the new James Peebles Elementary School located at 70 Trowbridge Road in Bourne, MA.

The project consists of the demolition of the existing Peebles Elementary School and construction of a new school building adjacent to the existing building. Our new design includes gas-fired condensing boilers, condensing domestic water heaters, HVAC rooftop units, and Kitchen cooking equipment.

The existing connected load for the existing school to be demolished is 6,394,000 BTUH.

The estimated connected gas loads for the new building are as follows:

Heating Boilers =	3,000,000 BTUH
HVAC Rooftop Units =	1,200,000 BTUH
Water Heater =	400,000 BTUH
Kitchen =	600,000 BTUH
Total Load =	5,200,000 BTUH

Enclosed please find the Site Utility Plan (C-200) which indicates a new gas service from Trowbridge Road and meter located on the south side of the proposed building. We would request an outlet pressure of 10" water column for the building meter.

If you have any questions or comments regarding the above please contact our office at your earliest convenience. We thank you for your cooperation regarding this matter.

Very truly yours,

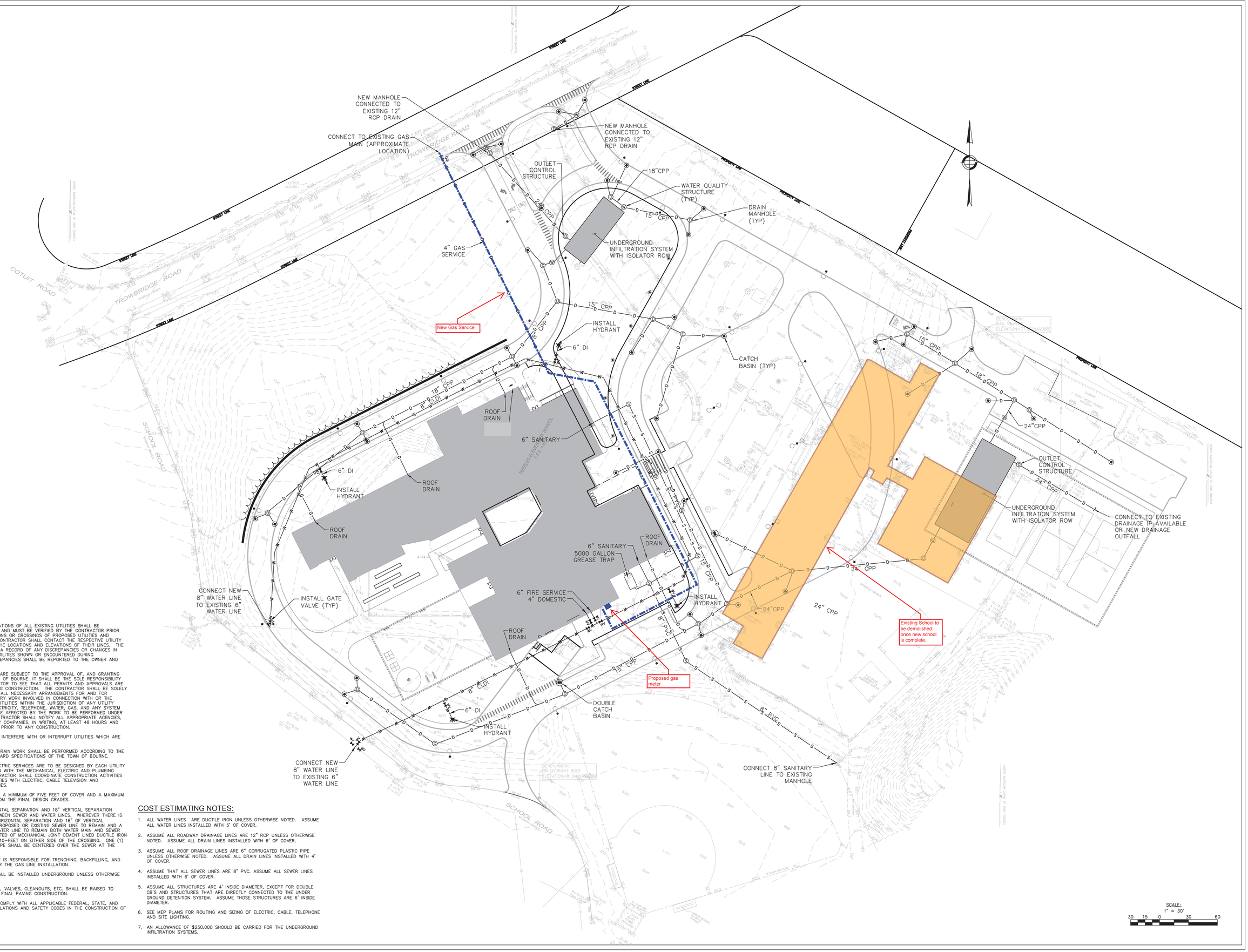
GARCIA • GALUSKA • DESOUSA
Consulting Engineers Inc.

Christopher M. Garcia, P.E.

CMG:jfm

Enc.

Cc: Kent Kovacs, AIA, Flansburgh Architects, Inc.



UTILITY NOTES:

1. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY UTILITY CONNECTIONS OR CROSSINGS OF PROPOSED UTILITIES AND EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THEIR LINES. THE CONTRACTOR SHALL KEEP A RECORD OF ANY DISCREPANCIES OR CHANGES IN THE LOCATIONS OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND NITSCH ENGINEERING.
2. ALL UTILITY CONNECTIONS ARE SUBJECT TO THE APPROVAL OF, AND GRANTING OF PERMITS BY, THE TOWN OF BOURNE. IT SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO SEE THAT ALL PERMITS AND APPROVALS ARE OBTAINED BEFORE STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS FOR AND FOR PERFORMING ANY NECESSARY WORK INVOLVED IN CONNECTION WITH OR THE DISCONTINUANCE OF ANY UTILITIES WITHIN THE JURISDICTION OF ANY UTILITY COMPANIES, SUCH AS ELECTRICITY, TELEPHONE, WATER, GAS, AND ANY SYSTEM OR SYSTEMS WHICH WILL BE AFFECTED BY THE WORK TO BE PERFORMED UNDER THIS CONTRACT. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES, DEPARTMENTS, AND UTILITY COMPANIES, IN WRITING, AT LEAST 48 HOURS AND NOT MORE THAN 30 DAYS PRIOR TO ANY CONSTRUCTION.
3. CONSTRUCTION SHALL NOT INTERFERE WITH OR INTERRUPT UTILITIES WHICH ARE TO REMAIN IN OPERATION.
4. ALL WATER, SEWER, AND DRAIN WORK SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS AND STANDARD SPECIFICATIONS OF THE TOWN OF BOURNE.
5. GAS, TELEPHONE AND ELECTRIC SERVICES ARE TO BE DESIGNED BY EACH UTILITY COMPANY IN COORDINATION WITH THE MECHANICAL, ELECTRIC AND PLUMBING CONSULTANTS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES AND DESIGN OF NEW UTILITIES WITH ELECTRIC, CABLE TELEVISION AND TELECOMMUNICATION UTILITIES.
6. INSTALL WATER LINES WITH A MINIMUM OF FIVE FEET OF COVER AND A MAXIMUM OF SEVEN FEET COVER FROM THE FINAL DESIGN GRADES.
7. MAINTAIN 10 FEET HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION (WATER OVER SEWER) BETWEEN SEWER AND WATER LINES. WHEREVER THERE IS LESS THAN 10 FEET OF HORIZONTAL SEPARATION AND 18" OF VERTICAL SEPARATION BETWEEN A PROPOSED OR EXISTING SEWER LINE TO REMAIN AND A PROPOSED OR EXISTING WATER LINE TO REMAIN BOTH WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT CEMENT LINED DUCTILE IRON PIPE FOR A DISTANCE OF 10-FEET ON EITHER SIDE OF THE CROSSING. ONE (1) FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER AT THE CROSSING.
8. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR TRENCHING, BACKFILLING, AND SURFACE RESTORATION FOR THE GAS LINE INSTALLATION.
9. ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
10. MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL PAVING CONSTRUCTION.
11. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS AND SAFETY CODES IN THE CONSTRUCTION OF ALL IMPROVEMENTS.

COST ESTIMATING NOTES:

1. ALL WATER LINES ARE DUCTILE IRON UNLESS OTHERWISE NOTED. ASSUME ALL WATER LINES INSTALLED WITH 5' OF COVER.
2. ASSUME ALL ROADWAY DRAINAGE LINES ARE 12" RCP UNLESS OTHERWISE NOTED. ASSUME ALL DRAIN LINES INSTALLED WITH 6' OF COVER.
3. ASSUME ALL ROOF DRAINAGE LINES ARE 6" CORRUGATED PLASTIC PIPE UNLESS OTHERWISE NOTED. ASSUME ALL DRAIN LINES INSTALLED WITH 4' OF COVER.
4. ASSUME THAT ALL SEWER LINES ARE 8" PVC. ASSUME ALL SEWER LINES INSTALLED WITH 6' OF COVER.
5. ASSUME ALL STRUCTURES ARE 4' INSIDE DIAMETER, EXCEPT FOR DOUBLE CB'S AND STRUCTURES THAT ARE DIRECTLY CONNECTED TO THE UNDER GROUND DETENTION SYSTEM. ASSUME THOSE STRUCTURES ARE 6' INSIDE DIAMETER.
6. SEE MEP PLANS FOR ROUTING AND SIZING OF ELECTRIC, CABLE, TELEPHONE AND SITE LIGHTING.
7. AN ALLOWANCE OF $250,000 SHOULD BE CARRIED FOR THE UNDERGROUND INFILTRATION SYSTEMS.

Date: 7/29/16
File name: Titleblock v2017.vwx

REVISIONS	ISSUE

Key Plan

Consultants

Symmes Maini McKee
Owner's Project Manager
1000 Massachusetts Avenue
Cabridge, MA 02138

Waterman Associates, Inc.
Landscape
31 East Main Street
Westborough, MA 01581

Boston Building Consultants
Structural Engineer
241 A Street, Suite 220
Boston, MA 02210

Nitsch Engineering, Inc.
Civil/Traffic/Survey Engineers
2 Center Plaza, Suite 430
Boston, MA 02108

Garcia, Galuska and DeSousa
MEP & Fire Protection Engineers
370 Faunce Corner Road
Dartmouth, MA 02747

Edvance Technology Design, Inc
Technology & Data/Communication
3 Summer Street
Chelmsford, MA 01824

Tavares Design Associates
Food Service, Furniture, Equipment & Casework
8 Winchester Place, Suite 301
Winchester, MA 01890

PMC-MA
Cost Estimators
59 South Street
Hingham, MA 02043

Stamp

Flansburgh Architects
77 North Washington Street
Boston, Massachusetts 02114
617.367.2970 tel
617.720.7873 fax
www.faiarchitects.com
Architecture
Master Planning
Space Planning
Interior Design

James F. Peebles Elementary School
70 Trowbridge Rd.Bourne, MA 02532

Sheet Title: SITE UTILITY PLAN

Schematic Design

Drawn By	Project ID
AAG	1514
Reviewed By	Scale
AAG	AS SHOWN
Plot Date	Issue Date
09/26/16	09/26/16

Sheet No.: C-200

Flansburgh Architects

Meeting Notes

DATE:	March 13, 2017
PROJECT:	Bourne Public Schools
PROJECT NO:	Peebles Elementary School – 1514.00
PRESENT:	Steven Lamarche – Superintendent Nik Outchcunis– Computer Systems Specialist Ed Donoghue – Director of Business Services Kent Kovacs – Flansburgh Architects Doug Faria – Edvance Technology Design, Inc
DISTRIBUTION:	Attendees

A series of discussions took place on Monday, March 13th regarding the development of the technology and security planning for the new Peebles Elementary School.

1. District Fiber will need to be extended/relocated to the new school. The fiber is owned by the district. The Owner's vendor is Comm-tract. Contact is Bryan Hopkins. D. Faria recommended that the Owner continue with Comm-tract for this work and suggested that they be contacted sooner rather than later for a quote for budgeting purposes.

2. VoIP head end is located at the Middle School. System is by Mitel. New phones at Peebles will connect to the head at the middle school. Akuity is the current vendor. New phones will be purchased from them during FFE. They are a state contractor.

3. Network switch standard is HP Procurve (Aruba).

4. Wifi equipment standard is Enterasys. Akuity is the current vendor. New APs for Peebles will be purchased from them during FFE. They are a state contractor.

5. Flat panel display will be added to the South wall of the Cafeteria for presentations. This will be an FFE item.

6. Owner will provide installation on the Server/SAN solution.

7. Existing Smartboards will be re-purposed where possible and practical. One will be located in the library, near the entrance. District to evaluate, select, and store existing Smartboards for re-use.

8. Interactive projectors and document cameras will be purchased for classrooms (FFE).
9. Conference will be equipped with flat panel displays (FFE).
10. Projector will be provided in Team Rooms (FFE). No digital messaging in these spaces.
11. Digital messaging will be provided in the Lobby and Cafeteria.
12. Distribution of CATV is not required.
13. Six Chromebooks will be provided per classroom with countertop storage/charging (FFE).
14. There will be a few Chromebook carts with 30 devices each (FFE).
15. Six fixed computer workstations are required in iStudio. Also 3D printer and laser cutter.
16. Teachers will have a desk (fixed location) with desktop computer (perhaps Chromebase) and VoIP phone.
17. A fixed computer station is required in adjacent to Lobby 101 and the administration suite. Flansburgh to coordinate location
18. Surveillance camera will added in the iStudio.
19. Surveillance camera will be added at the Loading Dock/Emergency Access Area.
20. There will be IP connectivity on the AiPhone system.
21. Ai Phone will be added outside the library stairs exterior, Office 153, and Office 107.
22. Surveillance camera will be added to Corridor 135.
23. Surveillance camera will be added in the corridor adjoining the 2nd floor bathrooms.
24. There was a discussion to remove alarm motion sensors from classrooms. They will only be provided in corridors, stairwells and the administration suite.
25. Surveillance camera will be added to cover the tennis courts.

March 29, 2017

Mr. Thomas M. Guerino, Town Administrator
Town of Bourne
Bourne Town Hall
24 Perry Avenue, Room 10
Buzzards Bay, MA 02532

Re: Town of Bourne, James F. Peebles Elementary School

Dear Mr. Guerino:

The Massachusetts School Building Authority (the "MSBA") is forwarding review comments of the Design Development submission for the James F. Peebles Elementary School Project in the Town of Bourne, received by the MSBA on March 7, 2017.

Responses to the attached comments shall be forwarded to Sarah Blache-Schwartz (Sarah.Blache@MassSchoolBuildings.org) through the Owner's Project Manager. Please review and return responses within 21 days of receipt of this letter.

If you have any questions or comments, please do not hesitate to contact Mina Morkos (Mina.Morkos@MassSchoolBuildings.org).

Sincerely,

Mary Pichetti
Director of Capital Planning

Attachment: Design Development Review Comments

Cc: Legislative Delegation
Donald J. Pickard, Chair, Bourne Board of Selectmen
Anne-Marie Siroonian, Chair, Bourne School Committee
Stephen Lamarche, Superintendent, Bourne Public Schools
Edward Donoghue, Director of Business Services, Bourne Public Schools
James L. Potter, Chair, Bourne School Building Committee
Christopher Hyldburg, Member, 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)

District: Town of Bourne
School: James F. Peebles Elementary School
Submittal: Design Development
Submittal Date: March 7, 2017
Review Date: March 8 – March 23, 2017
Reviewed by: STV Inc., K. Brown, M. Morkos, R. Hudson, P. Fowkes

MSBA REVIEW COMMENTS:

The following comments[1] on the Design Development submittal are issued pursuant to a review of the project submittal document dated March 7, 2017, for the replacement of the James F. Peebles Elementary School, and presented as a Design Development submission, as produced by Flansburgh Architects and its consultants. Certain supplemental components from the Owner's Project Manager (OPM) – SMMA, are included. Documents received at MSBA on March 7, 2017.

1) Summary Comments:

- OPM deliverables:
  - *Included*
- Reconciled construction cost estimate including Designer/OPM comparison chart:
  - *Two cost estimates are included; the OPM estimate prepared by A.M. Fogarty, dated February 24, 2017, for a total construction cost of $31,960,945. The designer estimate prepared by PM&C dated February 22, 2017, for a total construction cost of $30,624,766.*
    - *Section 1, tab A.2, indicates a March 1, 2017 cost estimate completed by PM&C and a tracking budget of $30,846,581. Provide a clarification as to what this budget represents as part of the response to these review comments.*
    - *No reconciled cost estimate indicated. Provide a reconciled estimate as part of the response to these review comments.*
    - *Escalation prices on both cost estimates are calculated for fall 2017(construction start). Escalation prices should be to the mid-point*

[1] The written comments provided by the MSBA are solely for purposes of determining whether the proposed plans and specifications, and any other design documents submitted for MSBA review, appear consistent with the MSBA's guidelines and requirements and are not for the purpose of determining whether the proposed plans and specifications meet any other legal requirements imposed by federal, state or local law, including, but not limited to, zoning ordinances and by-laws, environmental regulations, building codes, sanitary codes, safety codes and public procurement laws or for the purpose of determining whether the proposed plans and specifications and any other design documents submitted for MSBA review meet any applicable professional standard of care or any other standard of care. Project designers are obligated to implement detailed technical review procedures to effect coordination of design criteria, buildability, and technical adequacy of construction documents. Each city, town and regional school district shall be solely responsible for ensuring that its plans and specifications comply with all applicable provisions of federal, state, and local law, including, but not limited to, all procurement laws. The MSBA recommends that each city, town and regional school district have its legal counsel review its plans and specifications to ensure that it is in compliance with all provisions of federal, state and local law prior to bidding. The MSBA shall not be responsible for any legal fees or costs of any kind that may be incurred by a city, town or regional school district in relation to MSBA requirements or the preparation and review of the project's plans and specifications.

of construction. Please provide a reconciled cost estimate with the corrected escalation prices as part of the response to these review comments.

- Designer certification of compliance with space summary as agreed upon at Project Scope and Budget agreement, including a list of all variances (if any):
- List of proprietary items (if any), associated District affidavit, and certified copy of vote
    - *Not included; in the District's response to these review comments, please indicate if proprietary items are proposed for this project. Provide an updated list identifying all proprietary items (if any) with an affidavit which shall indicate an elected body of the district (school committee, city or town council, or selectmen, - but not ad ad-hoc building committee) has been presented with proposals for proprietary requirements approval action, has had an opportunity to investigate, or to require staff or consultant investigation upon each item so proposed, and has majority voted in an open public session that is in the public interest to do so. Provide MSBA with a certified copy of the vote of the elected body.*
- Project sign design/specification in compliance with 963 CMR par 2.04 (1) (g)
    - *Provide the necessary information showing that this sign is in conformance with 963 CMR par 2.04 (1) (g) (size and location) with the responses to these comments.*
- Designer response to MSBA comments of previous submittal: *The following items included in MSBA's review comments dated October 17, 2016, have not been responded to and should be included in the response to these review comments:*
    - *MSBA Review Comment 4.1.2 Item #20_c*
    - *MSBA Review Comment 4.1.4 Item #5_c*
    - *Operable windows are still indicated at First Floor locations. See window types W1 & W2 on drawing A6.01).*

2) **OPM deliverables:** *Unless specifically stated otherwise, the OPM deliverables are included in the submission with no response from MSBA required.*
    - Develop project scope, schedule of budget:
        - Prepare independent construction cost estimates. *As indicated in section 1, a reconciled cost estimate was not indicated and the escalation numbers require adjusting to be at mid-point of construction.*
        - Update project budget
        - Update project schedule
    - Coordinate design; make recommendations to the Owner: *A design review comment log is provided dated February 9, 2017. Provide the completed log as the design progresses. Include the updated log as part of the 60% CD submittal.*
        - Technical accuracy
        - Efficiency
        - Coordination
        - Constructability

        - Cost effectiveness
    - Review designer submissions; make recommendations to Owner
        - Approve submission
        - Provide additional supporting information
    - Coordinate the commissioning consultants' review
        - Incorporate Cx recommendations. *Although many of the initial Cx recommendations were addressed, all unanswered recommendations should be addressed with the responses to these comments.*

3) **Designer deliverables:** *Unless specifically stated otherwise, the designer deliverables are included in the submission with no response from MSBA required.*
    - Target dates for all filings and permits
        - Confirmation of project registration with CHPS / USGBC
          Confirmation (and date) of project's registration with CHPS / USGBC should be provided with the responses to these comments.
        - Security and visual access requirements;
            - Confirmation that the persons responsible for implementation of the District's emergency procedures, and responding emergency medical, fire protection, and police agency representatives have been consulted in the planning process and any associated requirements have been included in the project.
            - Identification of any other security related items particular to the District and/or the proposed project.
            - Verification that the following safety and security related issues have been reviewed and are in accordance with the District's procedures as noted above:
                - Main entrance design – describe District protocol for visitor entry and check-in related to the current design for visitors to remain in the vestibule versus a side sub-vestibule;
                - Classroom lockset hardware - confirm hardware functions are compatible with the District's protocols related to lockdown;
                - Classroom / Instructional spaces visibility - confirm that the inclusion of sidelights at entrance locations is compatible with the District's current standards related to visibility from corridors and whether any related vision control option measures are to be incorporated.
                - Alternative entry locations - confirm project includes site and building signage, as may be required by District's emergency procedures, to identify locations where first responders may more directly reach a person needing medical attention; Knox Boxes; and provisions for building plans to be delivered to local fire and response agencies. *This information should be provided with the responses to these comments.*

- Submit updated environmental permitting assessment, building code analysis, ADA/MAAB analysis, zoning, and list of all required testing and permits. Provide a certification that all applicable local, state and utility officials have been contacted by the designer regarding each basic design, and utility connection. *This information should be provided with the responses to these comments.*
- Design Development drawings and specifications for all disciplines:
- Quality Control documents demonstrating:
  The Quality Control documents were not included and should be provided with the responses to these comments.
  - Ceiling clearances
  - Mechanical room and shaft sizes
  - Coordinate specifications and drawings
  - Filed sub-bid work
  - Scheduling
  - Equipment and power
  - Existing and new construction
  - Phasing
- Life Cycle cost analysis for energy and water consuming devices.
- Construction cost estimates in Uniformat II, level 3
  - Showing unit rates and quantities; projected to midpoint of construction
    Although a Uniformat cost estimate is provided in Appendix A, it is unclear if this cost estimate is Uniformat II Level 3 (please confirm as part of the response to these review comments).
- Updated space summary and signed certification that reflects the current design.

Spaces	**PFA Space Summary**	**DD Space Summary**	**60% CD Space Summary**	**90% CD Space Summary**	**Difference to PFA**	**Comments**
Core Academic Spaces	19,900	19,900			-	No net change from PFA
Special Education	5,540	5,540			-	No net change from PFA
Art and Music	2,300	2,300			-	No net change from PFA
Health and Physical Education	6,300	6,300			-	No net change from PFA
Media Center	2,740	2,740			-	No net change from PFA
Dining and Food Service	6,778	6,778			-	No net change from PFA
Medical	510	510			-	No net change from PFA
Administration and Guidance	2,325	2,325			-	No net change from PFA
Custodial and Maintenance	2,060	2,060			-	No net change from PFA
Other	-	-			-	No net change from PFA
Total Building Net	**48,453**	**48,453**	-	-	-	No net change from PFA
Total Gross	**72,680**	**72,680**	-	-	-	No net change from PFA
Grossing Factor	**1.50**	**1.50**	-	-	-	No net change from PFA

- Written summary comparing the project design with the final design program
    - Explanation of deviations within the space summary from the Project Funding Agreement; *No change has been made within any space category since the Project Funding Agreement (although there are limited changes within some categories to address the district's needs as stated in certified letter from the designer and dated March 1, 2017).*

4) Drawing Requirements

- Site and utility drawings
    - Existing and proposed contours and locations of the proposed building or addition(s). Show entry level elevation and key exterior grades at perimeter. Indicate all retaining walls. Include benchmarks of site if survey is available. *A site survey showing benchmarks should be provided with the 60% CD submittal.*
    - All utilities existing and proposed, indicating location, elevation, composition and size e.g., gas and electric utility providers.
    - Roads, laid out parking areas, walks, recreation areas, terraces and other site improvements.
    - Building locations fixed and referenced from main survey baseline, if available. *Building locations fixed and referenced from main survey baseline should be provided with the 60% CD submittal.*
    - Plant materials with preliminary schedule.
    - Cuts of benches, light standards. *Cuts of benches and light standards should be provided with the 60% CD submittal.*
- Building drawings and other graphic and written requirements with floor plans showing: (minimum 1/8" = 1'0")
    - Building perimeter with exterior wall thicknesses and overall dimensions;
    - Structural grid;
    - Plan requirements of mechanical and electrical systems,
    - Building core; elevators, stairs, shafts, public toilets, with dimensions; *Recommend that the elevator, stairs and shafts be provided in greater detail and dimensioned, as part of the 60% CD submittal.*
    - Internal partitions; appropriate thicknesses and dimensions to fix basic organizations; indicate fire rated lines; *Fire rated lines should be provided with the 60% CD submittal.*
    - Door swings;
    - Floor elevations; *Second Floor elevations should be provided with the 60% CD submittal.*
    - Built-in furniture and equipment; *Provide additional dimensioning and details as part of the 60% CD submittal.*
    - Furniture layout concept drawings.
- Large scale plans showing key areas e.g. lobby, special spaces. Indicate surface materials. (minimum scale 1/4" = 1'0") *Although large scale plans of the Gymnasium*

and the Cafeteria have been provided, spaces like the Lobby and Media Center have not and should be provided with the 60% CD submittal.

- Roof plans showing;
  - Proposed systems type;
  - Pitch and drainage pattern; *Portions of the roof are incomplete. An example of this may be seen between column lines S&M and column lines 7&8. Review and provide as part of the 60% CD submittal.*
  - Roof drain, gutters and scuppers; *Although the majority of the roof plan depicts roof drains and gutters, other portions do not. An example of this may be seen between column lines B&J – M&R and column lines 7&8. Review all plans and provide as part of the 60% CD submittal. Since overflow scuppers are not indicated, please consider the use of overflow drains as a precautionary measure.*
  - Skylights, stair halls through roof, penthouses, major equipment, chimneys. ;
- Building sections: One transverse and one longitudinal section. Indicate floor to ceiling heights and floor-to-floor heights. Label all spaces*; Labels, dimensions lines and general drawing items are missing for certain spaces (see sections 1, 4 & 5, on sheet A4.01 for example). Review all plan sheets for missing labels and provide as necessary in the 60% CD submittal.*
- Building elevations showing;
  - Full height elevations including roof structures, e.g., mechanical equipment, chimneys, and penthouses;
  - Floor elevations, floor-to-floor height, and overall height related to benchmarks on site plans; *Provide the overall height related to benchmarks on site plans, as part of the 60% CD submittal.*
  - All fenestration;
  - Column centerlines;
  - Materials indicating major control and expansion joints, and divisions of materials where required;
  - Louver locations;
  - Exterior grades and topographical features in context.
- Full height wall sections for main elevations and at special conditions. Show foundation and perimeter treatment, wall construction including insulation and supporting structure, fenestration and mechanical penetrations, and floor construction.
- Interior elevations: Show at all spaces, e.g. library, lobby, and all typical spaces, e.g. classroom; *Although interior elevations for many of the various spaces have been provided, there are no interior elevations of the Lobby. Provide the missing interior elevations as part of the 60% CD submittal.*
- Reflected ceiling plans: Show prototypical structural, fire protection, mechanical and electrical information for classrooms and major spaces, including lighting layouts with ceiling height and material changes; *Coordination between the Architectural plans and Fire Protection plans is necessary to reflect the extent of the Fire Protection (sprinkler heads). Coordination between Architectural and Electrical plans to show extent of light fixtures not depicted in the Gymnasium and the*

Cafeteria. Exposed ductwork, exposed to view in the Gymnasium should be depicted, as lighting fixtures support may be in conflict. Review and include as part of the 60% CD submittal.

- Schedules;
  - Finish schedule by room types;
  - Door schedule by room types;
  - Window schedule;
  - Equipment schedules, e.g., food service, instructional media.
- An interior color theory statement discussing proposed paint and material selections and colors for typical and special spaces and why they have been selected and, how these selections relate to exterior materials and colors;
- Structural Concepts;
  - Locations and dates of test boring holes and results of soil investigation, including water levels, allowable solid bearing pressure and bottom grades of footing and slabs.
  - Framing plans: typical floor framing, roof framing, special framing, show framing at major openings and sizes of members.
  - Foundation plan showing sizes and locations of typical components.
  - Column locations.
  - Preliminary details including floor and roof deck, statements as to methods of lateral bracing and how requirements of earthquake code will be met.
  - Details for special and/or incidental structural features, e.g. tunnels, connecting bridges and unique architectural features.
  - Connection to existing buildings at foundation and at key points at existing structure if applicable. *N.A.*
- Fire protection: floor plans indicating wet or dry type systems, hose racks or cabinets and fire department tie-ins. Indicate whether a fire pump will be required and, if so, show location within the building. Show typical sprinkler head layout; *complete the sprinkler head layout and locate the fire extinguisher cabinets as part of 60% CD submittal.*
- Plumbing and sanitary systems: floor plans indicating locations of all plumbing fixtures and special features, and approximate location and size of all piping systems and principal items of equipment.
- Heating, Ventilating and Air Conditioning Systems;
  - Heat gain and loss calculations.
  - Show locations and approximate sizes of piping systems, air handling systems and principal items of equipment such as compressors or cooling towers.
  - Indicate space requirements of major equipment and their location in mechanical rooms and fan rooms. Indicate shaft requirements.
- Electrical Systems;
  - Calculations showing total electrical load.
  - All services including those for special purposes shall be located and indicated.

- Lighting shall be indicated as to type, location and intensities in foot-candles for each special and typical space. Provide fixture cuts of typical lighting fixtures, e.g., classrooms. Provide fixture cuts for special lighting applications. *Provide the required cut sheets for typical lighting fixtures and special lighting fixtures as part of the 60% CD submittal.*
- Switchgear and emergency generator.
- Fire alarm system drawings showing all initiation and signaling devices, control panels, annunciator panels, etc.
- Security system drawings.
- Communications drawings showing chases, major equipment locations and any special distribution requirements.

5) Project Manual Requirements:

- Outline Specifications in CSI Master spec Divisions Including:
  - Site work; clearing, drives, walks, parking areas, fences, excavation, backfill, planting:
  - Footings; on earth, rock, piles, caissons, proposed bearing pressures, boring logs:
  - Foundation walls; type of concrete, reinforcing, type and extent of waterproofing:
  - Footing drains; type, disposal of drainage:
  - Exterior walls: superstructure, type, materials, brick type, alternate cladding, back-up materials, dampproofing material and extent, special features.
  - Roofs; type, vapor barrier, insulation, flashings, all materials.
  - Flashings; general types, all materials, weights, where each type is to be used.
  - Sheet metal; gutters, leaders, others uses, except flashing. *Add gutters in the Roof Specialty spec. (07 71 00), as part of the 60% CD submittal.*
  - Windows; general types, materials, section weights, sub-frames, finish, glazing, screens. *Included.*
  - Doors, exterior and interior; types and thicknesses. *Add door thickness to the Flush Wood Door spec. (08 14 16), as part of the 60% CD submittal.*
  - Steps, exterior; including platforms and landings' materials.
  - Stairs, interior; including platforms, landings, walls, materials and finishes.
  - Framing; wood, concrete or metal systems in accordance with general design.
  - Partitions; materials, thicknesses, finishes.
  - Cabinet and casework; types and materials.
  - Food Service Equipment; types and materials.
  - Furring; lathing, plastering, materials and locations.
  - Insulation thermal; types, thicknesses, methods of application and locations. *Provide the general locations where this insulation will be applied, as part of the 60% CD submittal.*
  - Acoustical treatments; types, thicknesses, methods of application and locations. *Provide the general locations and thicknesses (STC) where this insulation will be applied, as part of the responses to these comments.*

- Interior finishes; materials for floors, walls, bases, wainscots, trim, ceilings, ceiling heights.
- Fire protection; standpipe systems, sprinkler systems, fire pumps and accessories.
- Water supply; source; location of main to which connection will be made; type of pipe for service main; load requirements; load factors and pressures. *Provide the load requirements, load factors and pressures, as part of the 60% CD submittal.*
- Sanitary sewers; sewage disposal system, pipe and other materials.
- Storm sewers; storm drainage disposal system (institution or local facility), pipe and other materials.
- Gas main; material, size, location. Interface with utility company.
- Plumbing; systems such as wastes, vents, hot water, cold water, gas, air, oxygen, vacuum, main source of supply, materials for each, water heaters, pumps, thermal insulation fixture quality, all special features. *Provide information pertaining to the water heater, as part of the 60% CD submittal.*
- Heating, ventilating and air conditioning; type of heating and refrigeration plants, type and capacity of boilers and cooling equipment, fuel, type of burners, fuel storage, heaters, feed water pumps and heaters, thermal insulation, type of heating medium, supply and return piping, radiation, unit heaters, radiant heating, principal air conditioning equipment types, special features, supply, return and exhaust ductwork.
- Electric work; service connection, location, institution or public utility, overhead or underground, transformers including type and location, types of conduit and wiring, types of fixtures, location of main switchboard, radio, fire alarm, telephone, public address, emergency lighting and wiring, emergency or other generators, special features, including Master TV, information retrieval and/or data processing system.
- Elevators, dumbwaiters and platform lifts; capacities, speed, travel in feet, landings, operation, controls, platform sizes, machine type and location, car and entrance finishes, signals.
- Other built-in equipment, types and materials.
- Special features.

6) Additional Findings / Comments:

- *If a Dry-Type Transformer (26 00 01_2.14) is specified, verify the need for the Oil Containment Detail (13/E0.04); If not, please remove.*
- *Although indicated in Section III: Appendix C. The Consigli Cost Estimate was not included. Please reorder these appendices accordingly.*
- *The project manual requires updating (i.e. Contracting forms and supplements) as other project names are inserted. (Check other manual sections for completeness).*

- *Drawings borders and printing areas should be reviewed as some drawings are cut-off/printed outside of the sheet limits (ex. C-02, A1.2). Consider reviewing and correcting in the 60% submittal.*

-END

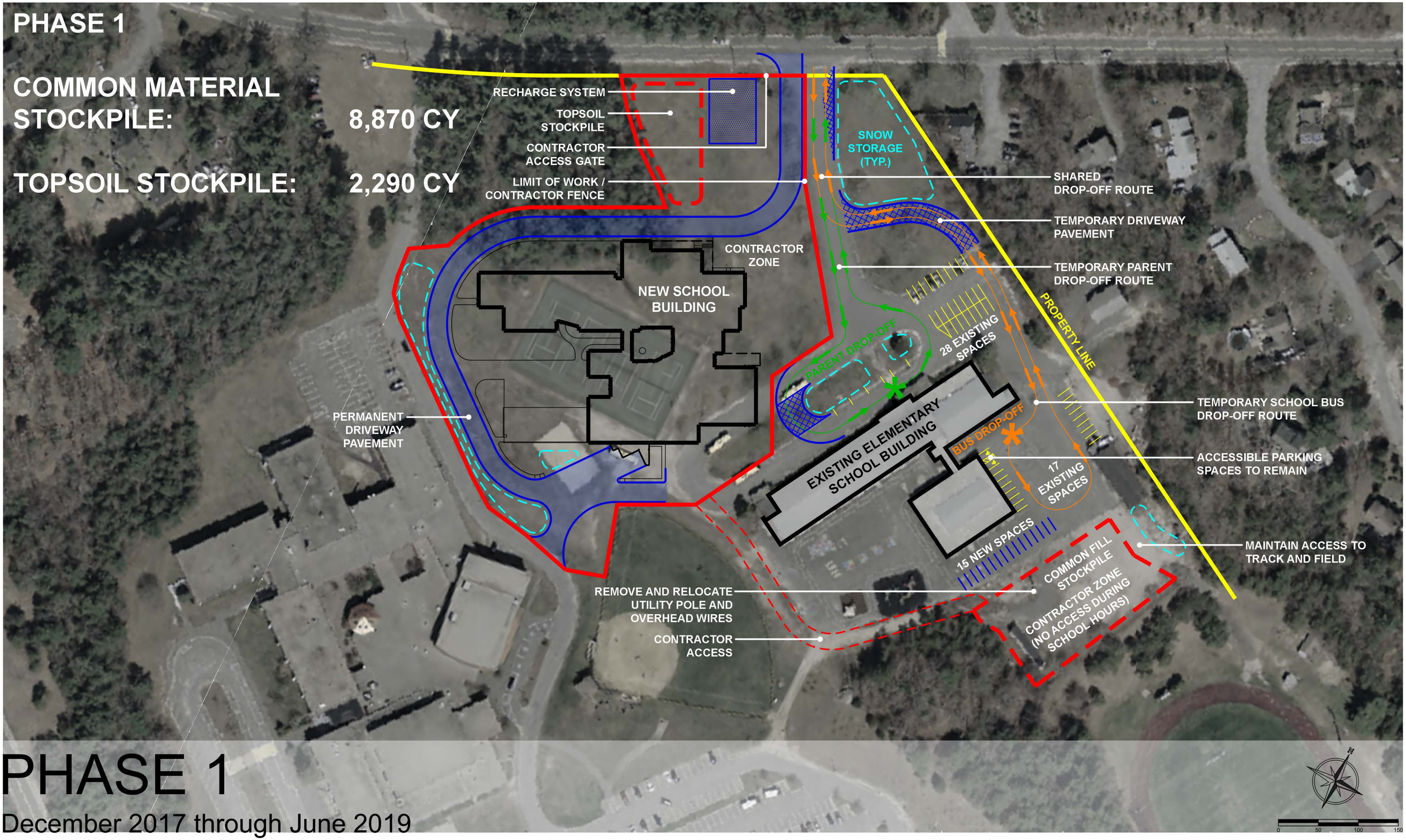
School Building Committee
April 13, 2017

Peebles Elementary School
Design Update

PROJECT MANAGEMENT SMMA
Massachusetts School Building Authority

Flansburgh Architects

Phasing Plans



PHASE 1

December 2017 through June 2019

James F. Peebles Elementary School
Bourne, Massachusetts

FLANSBURGH

PHASE 2

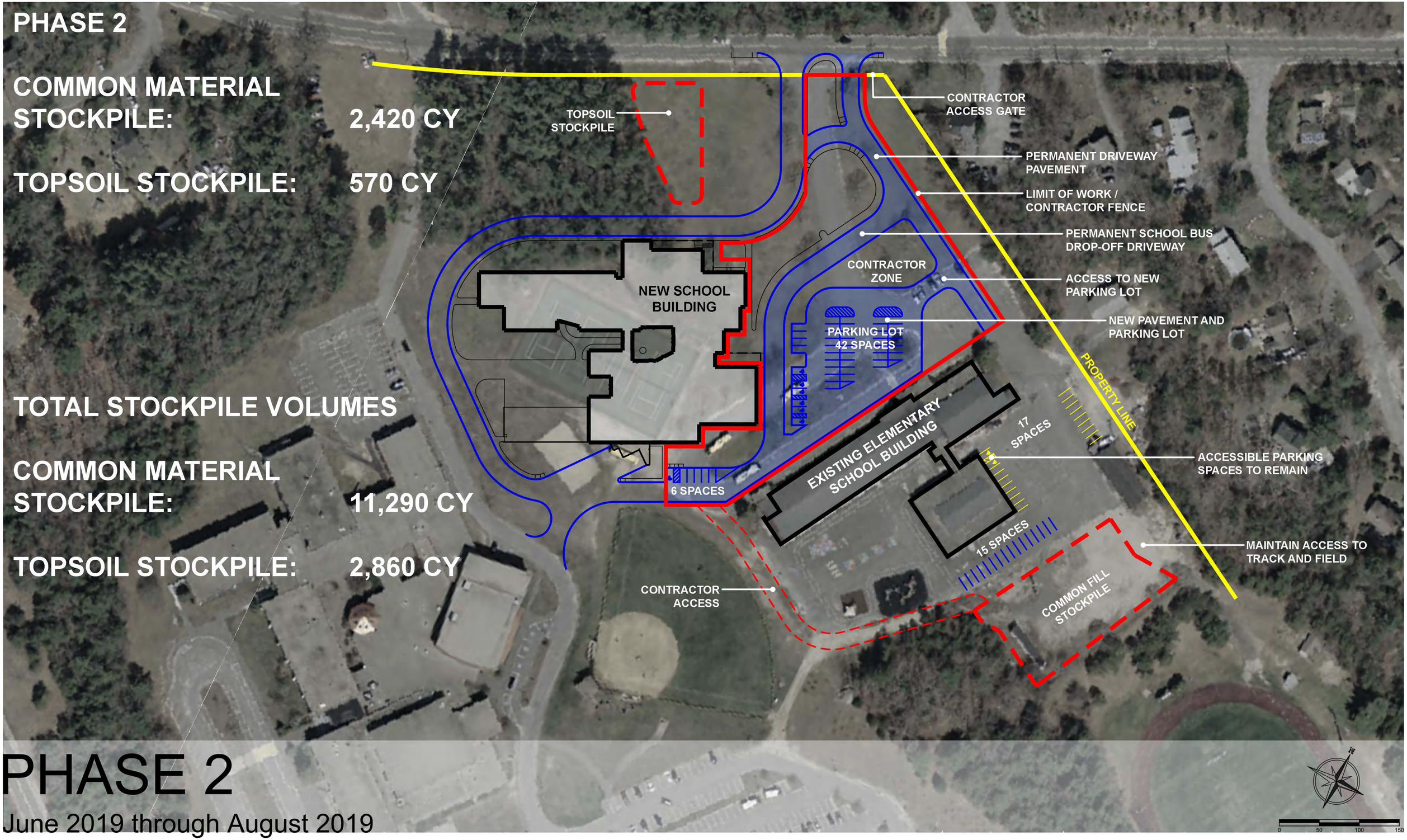
COMMON MATERIAL STOCKPILE: 2,420 CY

TOPSOIL STOCKPILE: 570 CY

TOTAL STOCKPILE VOLUMES

COMMON MATERIAL STOCKPILE: 11,290 CY

TOPSOIL STOCKPILE: 2,860 CY

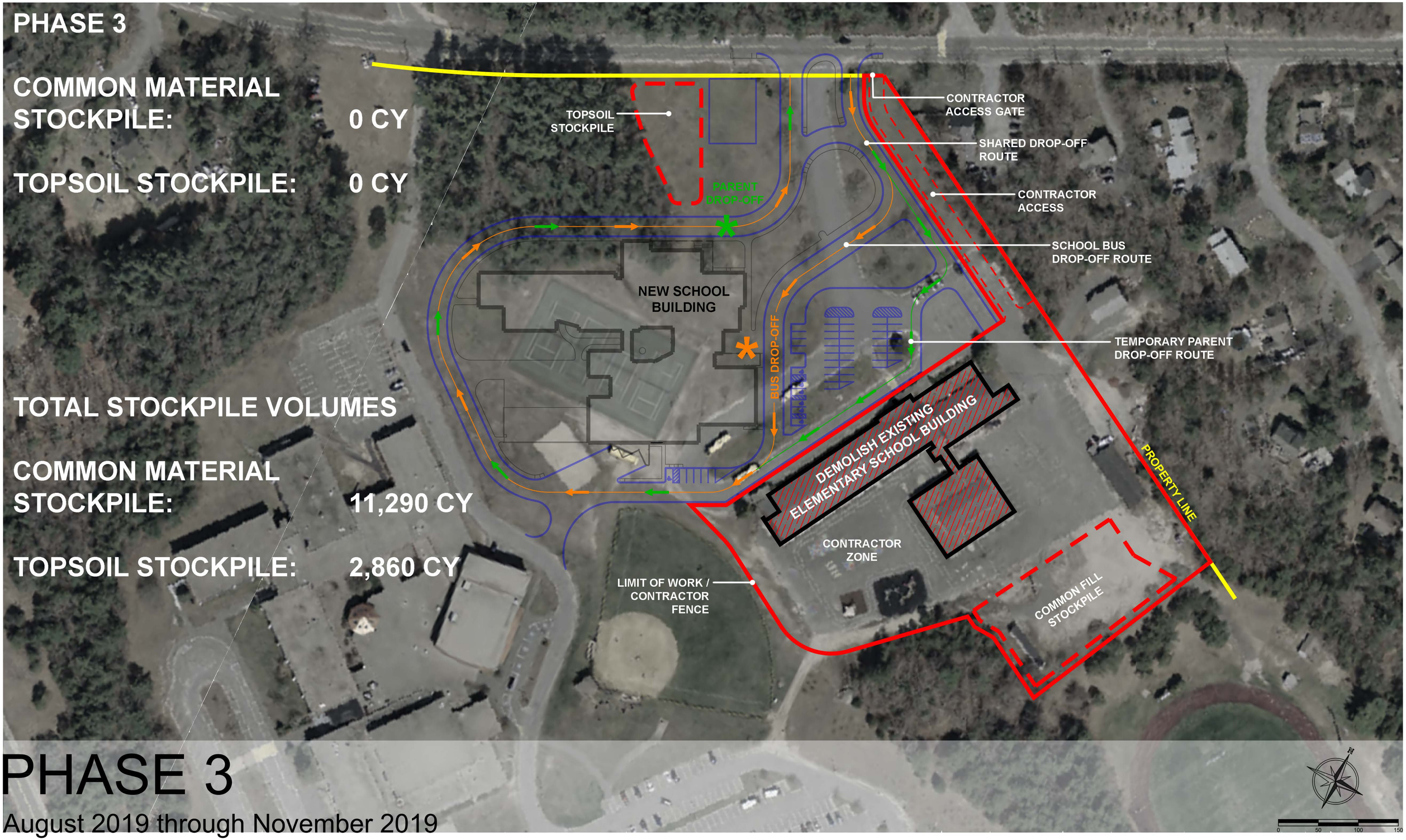


PHASE 2

June 2019 through August 2019

James F. Peebles Elementary School
Bourne, Massachusetts

FLANSBURGH

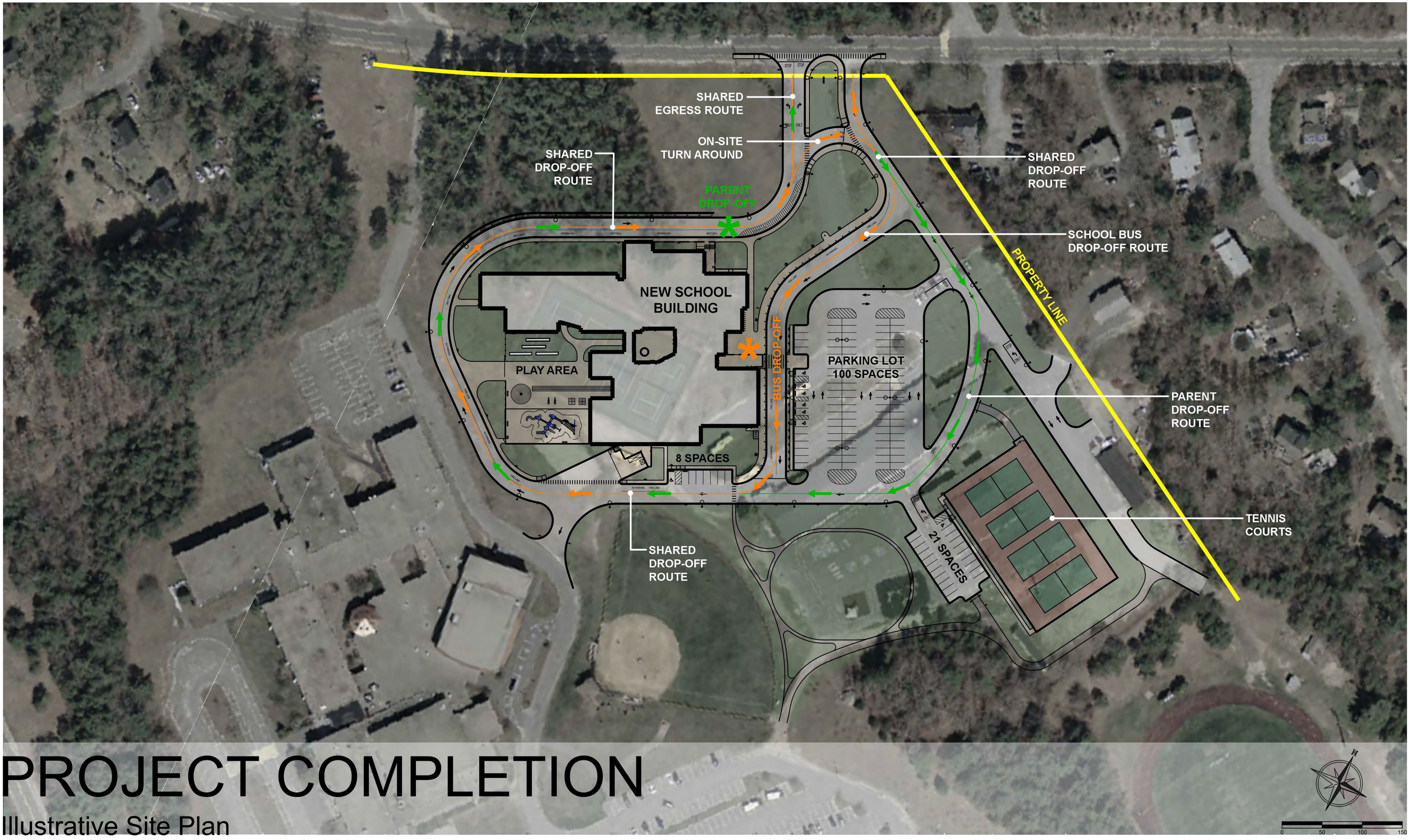


PHASE 3

August 2019 through November 2019

James F. Peebles Elementary School
Bourne, Massachusetts

FLANSBURGH



PROJECT COMPLETION

Illustrative Site Plan

James F. Peebles Elementary School
Bourne, Massachusetts

FLANSBURGH

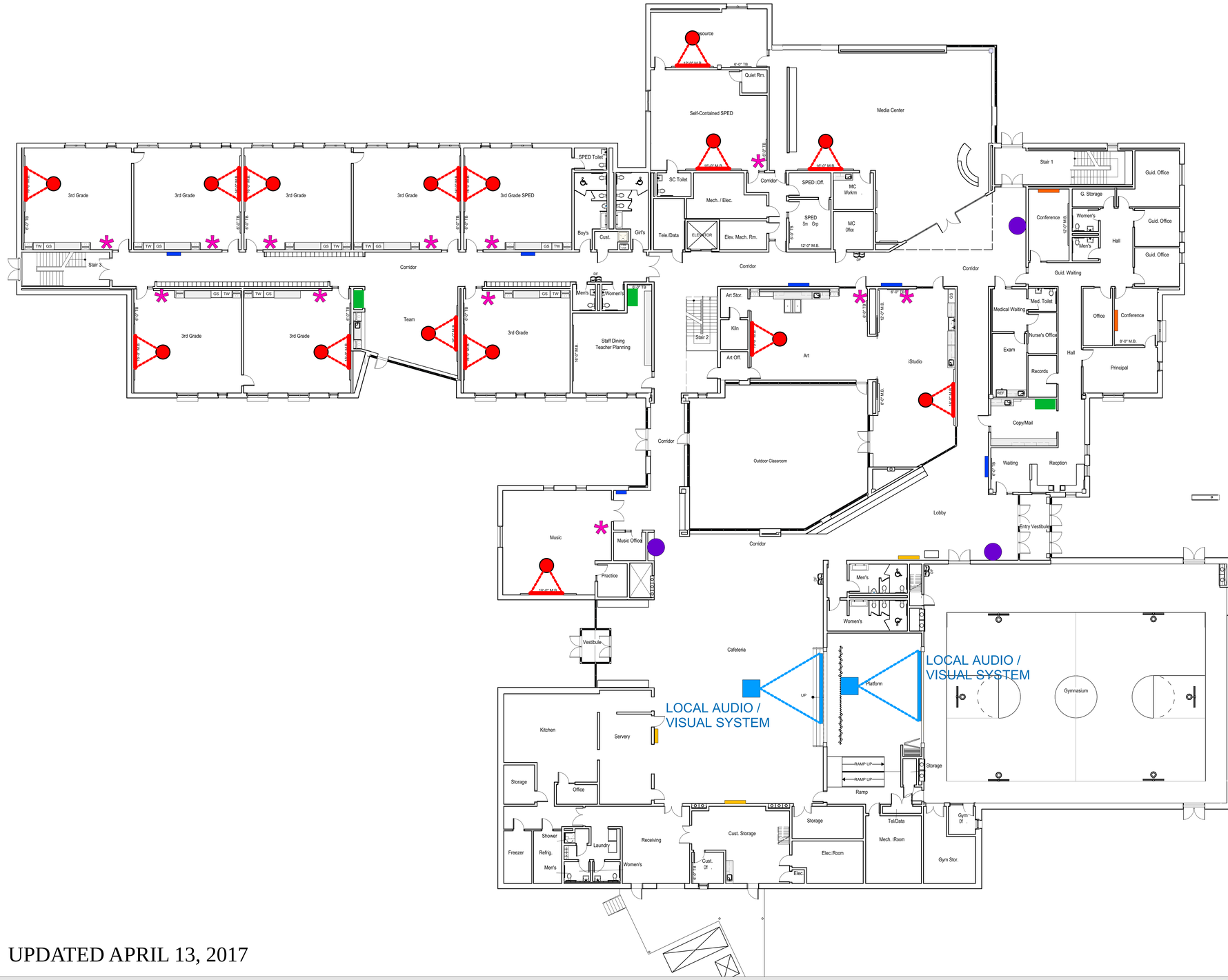
PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

FLANSBURGH

Technology Update

Technology Diagram
First Floor



TECHNOLOGY DIAGRAM KEY

- SHORT THROW PROJECTOR
- MARKER BOARD PROJECTION SURFACE
- STANDARD PROJECTOR
- PROJECTION SCREEN
- MULTI-TASK COPIER
- LED DISPLAY
- TOUCH SCREEN LED DISPLAY
- 4" DEEP DISPLAY CASE
- GLASS ENCLOSED DISPLAY CABINET
- TYPICAL CLASSROOM:
  PA SPEAKER
  CALL BUTTON
  SECONDARY CLOCK
  VoIP HANDSET

0 40 80 FT

UPDATED APRIL 13, 2017

Peebles Elementary School
Bourne, Massachusetts

FLANSBURGH

Technology Diagram
Second Floor

TECHNOLOGY DIAGRAM KEY

- SHORT THROW PROJECTOR
- MARKER BOARD PROJECTION SURFACE
- STANDARD PROJECTOR
- PROJECTION SCREEN
- MULTI-TASK COPIER
- LED DISPLAY
- TOUCH SCREEN LED DISPLAY
- 4" DEEP DISPLAY CASE
- GLASS ENCLOSED DISPLAY CABINET
- TYPICAL CLASSROOM:
  - PA SPEAKER
  - CALL BUTTON
  - SECONDARY CLOCK
  - VoIP HANDSET

N

0 40 80 FT

UPDATED APRIL 13, 2017

Peebles Elementary School
Bourne, Massachusetts

FLANSBURGH

Exterior Building Elevations

WOOD RESIN PANEL

BRICK w/ ARTICULATION

ALUMINUM COMPOSITE PANEL

ALUMINUM COMPOSITE PANEL

WOOD RESIN PANEL

PRECAST BASE

PAINTED STUCCO FINISH

BRICK w/ ARTICULATION

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

FLANSBURGH

PAINTED STUCCO FINISH
INDIVIDUAL ALUMINUM LETTERS
ALUMINUM COMPOSITE PANEL
ALUMINUM COMPOSITE PANEL
WOOD RESIN PANEL
PRECAST BASE
PRECAST WINDOW SILL
BRICK w/ ARTICULATION
ALUMINUM SUN SCREEN

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

FLANSBURGH

BRICK w/ ARTICULATION

ALUMINUM SUN SCREEN

PRECAST WINDOW SILL

BRICK w/ ARTICULATION

ALUMINUM COMPOSITE PANEL

WOOD RESIN PANEL

PRECAST BASE

BRICK w/out ARTICULATION

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

FLANSBURGH

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

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Interior Design

ALUMINUM STOREFRONT

WOOD BATTEN

WOOD VENEER

HUNG ACOUSTIC CLOUDS

PLASTIC LAMINATE WIANSCOTING

LUXURY VINYL TILE FLOORING

PROJECT MANAGEMENT SMMA

Massachusetts School Building Authority

FLANSBURGH

WOOD VENEER

WOOD BATTEN

RETRACTABLE DIVIDER NET

WOOD FIBER ACOUSTIC PANELS

HARDWOOD TRIM FRAME

PAINTED METAL DIFFUSER

WALL PADDING

WOOD SPORTS FLOOR

METAL RETRACTABLE BLEACHERS

PLASTIC LAMINATE WALL PANEL

PROJECT MANAGEMENT SMMA

FLANSBURGH

Massachusetts School Building Authority

Bourne Peebles Elementary School
LVT Comparison

FLANSBURGH

	Warranty	Overall Thickness	Wear Layer Thickness	Wear Layer in mils	Wear Layer Composition	Emissions	Phthalate-Free	Where Made	Static Load Limit (ASTM 970)
Armstrong Natural Creations with Diamond 10	20 years	3.2mm	.5mm	20 mils	Cultured diamond-infused UV cured polyurethane coating	FloorScore Certified	Yes	USA	250 psi
Mannington Spacia	10 years	2.5mm	.55mm	20 mils	Urethane + aluminum oxide	FloorScore	Yes	USA	1000 psi
Amtico Signature Series	20 years	2.5mm	1mm	40 mils	Urethane + aluminum oxide	FloorScore; A+ by a European standard	Yes	USA	1000 psi
Tandus Centiva Venue Series	10 years	3mm	.5mm	20 mils	Clear vinyl	FloorScore	Yes	USA	Passes ASTM 970
Tandus Centiva Contour Series	20 years	3mm	.8mm	32 mils	Clear vinyl	FloorScore	Yes	USA	1500 psi
Forbo Allura .70	10 years	2.5mm	.70mm	28 mils	High performance PUR+	REACH compliant; CHPS Compliant	Yes	Netherlands	1000 psi
Altro Lavencia Plus	20 years	3mm	.55mm	22 mils	Ceramic bead UV-cured polyurethane	FloorScore Certified	Yes	USA/ Canada	1500 psi
Roppe Northern Timbers	10 years	3mm	.70mm	28 mils	Ceramic bead UV-cured polyurethane	FloorScore; CHPS	Yes	USA	2000 psi
Tarkett ID Inspiration	10 years	2.5mm	.70mm	28 mils	Reinforced polyurethane	FloorScore Certified	Yes	USA	Passes ASTM 970
Milliken Wood	12 years	2.5mm	.70mm	28 mils	UV-cured polyurethane	FloorScore Certified; REACH compliant	Yes		Passes ASTM 970
Gerfloor Creation	12 years	2.5mm	.70mm	28 mils	Reinforced polyurethane	FloorScore Certified; REACH compliant		France	850 psi
Flexco Natural Elements Wood	10 years	3mm	.70mm	28 mils	Ceramic bead UV-cured polyurethane	FloorScore; CHPS		USA	2000 psi