

PROJECT MINUTES

Project: New Peebles Elementary School Project No.: 15041
 Prepared by: Joel Seeley Meeting Date: 10/19/2017
 Re: School Building Committee Meeting Meeting No: 49
 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	School Committee	Voting Member
	Natasha Scarpato	Member at Large	Voting Member
	Donna Buckley	Member at Large	Voting Member
✓	Richard A. Lavoie	Finance Committee	Voting Member
✓	William Meier	Building Trade Expert	Voting Member
	Erika Fitzpatrick	School Committee	Voting Member
✓	Frederick H. Howe	Member at Large, Vice-Chairman School Building Committee	Voting Member
✓	Steven M. Lamarche	Superintendent of Schools, BPS	Voting Member
✓	Jordan Geist	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	
✓	Bill Beatrice	FAI, Architect	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
49.1	Record	Call to Order, 6:30 PM with Roll-Call attendance.
49.2	Record	A motion was made by F. Howe and seconded by P. Meier to approve the 9/28/2017 School Building Committee meeting minutes. No discussion, motion passed unanimous by Roll-Call vote.
49.3	Record	J. Seeley distributed and reviewed the Project Budget Status Report, dated 9/30/2017, attached.
49.4	Record	J. Seeley distributed and reviewed the Comm-Tract Fiber Relocation Services proposal, dated 9/25/2017 in the amount of \$12,545.00, attached. A motion was made by S. Lamarche and seconded by P. Meier to approve the Comm-Tract Fiber Relocation Services proposal, dated 9/25/2017 and recommend signature by S. Lamarche. No discussion, motion passed unanimous by Roll-Call vote.
49.5	Record	Warrant No. 23 was reviewed. A motion was made by R. Lavoie and seconded by P. Meier to approve Warrant No. 23. No discussion, motion passed unanimous by Roll-Call vote.
49.6	Cape Light Compact	J. Seeley contacted Cape Light Compact for clarification on Performance Lighting, ECM No. 2, demand reduction, which showed the same reduction in winter as in summer, even though the school is less occupied in the summer. Cape Light Compact indicated they will correct in the 100% Construction Document review memo.
49.7	Record	J. Seeley distributed and reviewed the MSBA 90% Construction Document review comments, attached.
49.8	J. Potter	J. Potter issued a press release on the project status to the Enterprise and Courier and will issue to the Cape Cod Times.
49.9	J. Potter	J. Potter will provide a project status update at the Special Town Meeting.
49.10	K. Kovacs	K. Kovacs to identify the location of the two existing bookcases in the library to be repurposed in the new school.
49.11	Record	J. Seeley distributed and reviewed the list of Plan Holders, attached and provided an overview of the Pre-Bid Meeting held on 10/19/2017.
49.12	J. Seeley J. Potter K. Kovacs	Old or New Business: 1. S. Lamarche asked if J. Potter, K. Kovacs and J. Seeley can provide a project status update to the School Committee at an upcoming meeting? <i>J. Potter, J. Seeley and K. Kovacs to coordinate which meeting and let the Committee know the date.</i>
49.13	Record	Next SBC Meeting: November 9, 2017 at 6:30 pm at the Bourne Veteran's Memorial Community Center.
49.14	Record	A Motion was made by P. Meier and seconded by F. Howe to adjourn the meeting. No discussion, motion passed unanimous by Roll-Call vote.

Project: New Pebbles Elementary School

Meeting Date: 10/19/2017

Meeting No.: 49

Page No.: 3

Attachments: Agenda, Project Budget Status Report, Comm-Tract Fiber Relocation Services proposal, MSBA 90% Construction Document review comments, list of Plan Holders

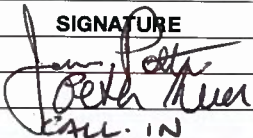
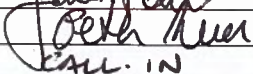
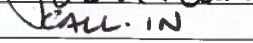


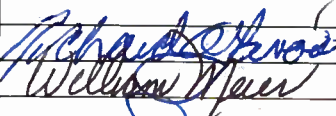















The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

PROJECT MEETING SIGN-IN SHEET

Project: Peebles Elementary School Feasibility Study
 Prepared by: Joel Seeley
 Re: School Building Committee Meeting
 Location: Veterans Memorial Community Center

Project No.: 15041
 Meeting Date: 10/19/2017
 Meeting No: 49
 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	Board of Selectmen
	Christopher Hyldburg	chrish@alpha-1.com	School Committee
	Natasha Scarpato	scarpato4@comcast.net	Member-At-Large
	Donna Buckley	d.j.buckley23@gmail.com	Member-At-Large
	Richard A. Lavoie	Rich.Lavoie@gmail.com	Finance Committee
	William Meier	Dusty22752@aol.com	Building Trade Expert
	Erika Fitzpatrick	efitzpatrick@bourneps.org	School Committee
	Frederick H. Howe	rickhowe9@gmail.com	Member-At-Large
	Steven M. Lamarche	slamarche@bourneps.org	Superintendent of Schools, BPS, MCPPO
	Jordan Geist	jgeist@bourneps.org	Director of Business Services, BPS
	Thomas M. Guerino	tguerino@townofbourne.com	Town Administrator
	Paul O'Keefe	mmachief@gmail.com	Local Official Resp. for Building Maintenance
	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
	Bill Beatrice	bbeatrice@flansburgh.com	Flansburgh Architects
	Michael Cimorelli	mcimorelli@flansburgh.com	Flansburgh Architects
	Joel Seeley	jseeley@smma.com	SMMA

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Agenda

Project:	New Peebles Elementary School	Project No.:	15041
Re:	School Building Committee Meeting	Meeting Date:	10/19/2017
Meeting Location:	Veterans Memorial Community Center	Meeting Time:	6:30 PM
Prepared by:	Joel Seeley	Meeting No.:	48
Distribution:	Committee Members (MF)		

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Review MSBA 90% CD Comments
5. Bidding Progress Check-in
6. New or Old Business
7. Public Comments
8. Next Meeting: November 9, 2017
9. Adjourn

Symmes Maini & McKee Associates, Inc. (SMMA) Bourne School District Bourne Peebles Elementary School BUDGET SUMMARY BUDGET TRACKING FORM as of: 9/30/2017		Original PS&B Budget 11/2/2016	Budget Revisions	Current Budget	Contract Amount	Expended	(B - C) Remaining Contract Amount	Additional Projected Amount	(A - B - E) Budget Balance
Propay code #	Name	A	B	C	D	E			
	Feasibility Study Agreement								
1	0001-0000 OPM Feasibility Study	125,000.00		125,000.00	117,100.00	117,100.00	-	-	7,900.00
2	0002-0000 A&E Feasibility Study	365,000.00	19,125.00	384,125.00	384,125.00	374,875.00	9,250.00	-	-
3	0003-0000 Environmental and Site	140,000.00		140,000.00	77,803.00	75,053.00	2,750.00	-	62,197.00
4	0004-0000 Other	120,000.00	(19,125.00)	100,875.00	10,672.13	672.13	10,000.00	-	90,202.87
	Feasibility Study Agreement Subtotal	\$ 750,000.00	\$ -	\$ 750,000.00	\$ 589,700.13	\$ 567,700.13	\$ 22,000.00	\$ -	\$ 160,299.87
	Administration								
6	0101-0000 Legal Fees	50,000.00		50,000.00	-	-	-	-	50,000.00
	Owner's Project Manager								
7	0102-0400 > Design Development	50,000.00		50,000.00	50,000.00	50,000.00	-	-	-
8	0102-0500 > Construction Contract Documents	90,000.00		90,000.00	90,000.00	74,700.00	15,300.00	-	-
9	0102-0600 > Bidding	50,000.00		50,000.00	50,000.00	-	50,000.00	-	-
10	0102-0700 > Construction Contract Administration	800,000.00		800,000.00	800,000.00	-	800,000.00	-	-
11	0102-0800 > Closeout	54,863.00		54,863.00	54,863.00	-	54,863.00	-	-
12	0102-0900 > Extra Services	40,000.00		40,000.00	-	-	-	-	40,000.00
13	0102-1000 > Reimbursable & Other Services	15,000.00		15,000.00	3,190.00	-	3,190.00	-	11,810.00
14	0102-1100 > Cost Estimates	50,000.00		50,000.00	41,745.00	41,745.00	-	-	8,255.00
15	0103-0000 Advertising	5,000.00		5,000.00	235.84	235.84	-	-	4,764.16
16	0104-0000 Permitting	50,000.00		50,000.00	82.50	82.50	-	-	49,917.50
17	0105-0000 Owner's Insurance	20,000.00		20,000.00	-	-	-	-	20,000.00
18	0199-0000 Other Administrative Costs	20,000.00		20,000.00	8,800.00	-	8,800.00	-	11,200.00
	Administration Subtotal	\$ 1,294,863.00	\$ -	\$ 1,294,863.00	\$ 1,098,916.34	\$ 166,763.34	\$ 932,153.00	\$ -	\$ 195,946.66
	Architecture and Engineering								
	Basic Services								
21	0201-0400 > Design Development	530,000.00		530,000.00	530,000.00	530,000.00	-	-	-
22	0201-0500 > Construction Contract Documents	1,060,000.00		1,060,000.00	1,060,000.00	890,400.00	169,600.00	-	-
23	0201-0600 > Bidding	130,000.00		130,000.00	130,000.00	-	130,000.00	-	-
24	0201-0700 > Construction Contract Administration	874,000.00		874,000.00	874,000.00	-	874,000.00	-	-
25	0201-0800 > Closeout	132,037.00		132,037.00	132,037.00	-	132,037.00	-	-
26	0201-9900 > Other Basic Services	-		-	-	-	-	-	-
27		BASIC SERVICES SUBTOTAL	\$ -	\$ 2,726,037.00	\$ 2,726,037.00	\$ 1,420,400.00	\$ 1,305,637.00	\$ -	\$ -
	Reimbursable Services								
28	0203-0100 > Construction Testing	40,000.00		40,000.00	-	-	-	-	40,000.00
29	0203-0200 > Printing (over minimum)	20,000.00		20,000.00	-	-	-	-	20,000.00
30	0203-9900 > Other Reimbursable Costs	100,000.00		100,000.00	6,047.00	1,650.00	4,397.00	-	93,953.00
31	0204-0200 > Hazardous Materials	100,000.00		100,000.00	-	-	-	-	100,000.00
32	0204-0300 > Geotech & Geo-Env.	80,000.00		80,000.00	4,455.00	-	4,455.00	-	75,545.00
33	0204-0400 > Site Survey	60,000.00		60,000.00	19,580.00	19,580.00	-	-	40,420.00
34	0204-0500 > Wetlands	5,000.00		5,000.00	-	-	-	-	5,000.00
35	0204-1200 > Traffic Studies	40,000.00		40,000.00	-	-	-	-	40,000.00
	Architectural and Engineering Subtotal	\$ 3,171,037.00	\$ -	\$ 3,171,037.00	\$ 2,756,119.00	\$ 1,441,630.00	\$ 1,314,489.00	\$ -	\$ 414,918.00

Symmes Maini & McKee Associates, Inc. (SMMA) Bourne School District Bourne Peebles Elementary School BUDGET SUMMARY BUDGET TRACKING FORM as of: 9/30/2017			Original PS&B Budget 11/2/2016	Budget Revisions	Current Budget	Contract Amount	Expended	(B - C) Remaining Contract Amount	Additional Projected Amount	(A - B - E) Budget Balance
CM @ Risk Preconstruction Services										
36	0501-0000	Pre-Construction Services	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	0502-0001	Construction Budget	\$ 30,910,366.00		\$ 30,910,366.00	\$ -	\$ -	\$ -	\$ -	\$ 30,910,366.00
89	CSI Code	CSI Description								
89	0502-0010	CM Fee			-	-	-	-	-	-
89	0502-0020	Bonds and Insurances			-	-	-	-	-	-
89	0502-0030	Total GMP Construction Contingency			-	-	-	-	-	-
89	0502-0100	CM Staffing			-	-	-	-	-	-
89	0502-0100	GC's			-	-	-	-	-	-
89	0502-0100	Division 1 - General Requirements			-	-	-	-	-	-
89	0502-0200	Division 2 - Existing Conditions			-	-	-	-	-	-
89	0502-0300	Division 3 - Concrete			-	-	-	-	-	-
89	0502-0400	Division 4 - Masonry			-	-	-	-	-	-
89	0502-0500	Division 5 - Metals			-	-	-	-	-	-
89	0502-0600	Division 6 - Wood, Plastics and Composites			-	-	-	-	-	-
89	0502-0700	Division 7 - Thermal & Moisture Protection			-	-	-	-	-	-
89	0502-0800	Division 8 - Openings			-	-	-	-	-	-
89	0502-0900	Division 9 - Finishes			-	-	-	-	-	-
89	0502-1000	Division 10 - Specialties			-	-	-	-	-	-
89	0502-1100	Division 11 - Equipment			-	-	-	-	-	-
89	0502-1200	Division 12 - Furnishings			-	-	-	-	-	-
89	0502-1300	Division 13 - Special Construction			-	-	-	-	-	-
89	0502-1400	Division 14 - Conveying Systems			-	-	-	-	-	-
89	0502-2100	Division 21 - Fire Suppression			-	-	-	-	-	-
89	0502-2200	Division 22 - Plumbing			-	-	-	-	-	-
89	0502-2300	Division 23 - HVAC			-	-	-	-	-	-
89	0502-2500	Division 25 - Integrated Automation			-	-	-	-	-	-
89	0502-2600	Division 26 - Electrical			-	-	-	-	-	-
89	0502-2700	Division 27 - Communications			-	-	-	-	-	-
89	0502-2800	Division 28 - Electronic Safety & Security			-	-	-	-	-	-
89	0502-3100	Division 31 - Earthwork			-	-	-	-	-	-
89	0502-3200	Division 32 - Exterior Improvements			-	-	-	-	-	-
89	0502-3300	Division 33 - Utilities			-	-	-	-	-	-
89	0502-9900	Retainage			-	-	-	-	-	-
89	0508-0000	Change Orders			-	-	-	-	-	-
89		Construction Budget Subtotal	\$ 30,910,366.00	\$ -	\$ 30,910,366.00	\$ -	\$ -	\$ -	\$ -	\$ 30,910,366.00
		Alternates								
90	0506-0000	Ineligible Work (Maint Bldg, Press Box, Concession and Restroom)	-		-	-	-	-	-	-
90	0506-0000	Retainage for Alternates/Ineligible Work	-		-	-	-	-	-	-
		Alternates Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	0600-0000	Miscellaneous Project Costs								
94	0601-0000	Utility Company Fees	84,000.00		84,000.00	-	-	-	-	84,000.00
95	0602-0000	Testing Services	100,000.00		100,000.00	-	-	-	-	100,000.00
96	0603-0000	Swing Space / Modulars	-		-	-	-	-	-	-
97	0699-0000	Other Project Costs (Mailing & Moving)	40,000.00		40,000.00	-	-	-	-	40,000.00
	0600-0000	Miscellaneous Project Costs Subtotal	\$ 224,000.00	\$ -	\$ 224,000.00	\$ -	\$ -	\$ -	\$ -	\$ 224,000.00
	0700-0000	Furnishings and Equipment								
99	0701-0000	Furnishings	690,000.00		690,000.00	-	-	-	-	690,000.00
	0702-0000	Equipment								
101	0703-0000	Computer Equipment	690,000.00		690,000.00	-	-	-	-	690,000.00
		Furnishings and Equipment Subtotal	\$ 1,380,000.00	\$ -	\$ 1,380,000.00	\$ -	\$ -	\$ -	\$ -	\$ 1,380,000.00
103	0507-0000	Owner's Construction Contingency	1,545,518.00	-	1,545,518.00	-	-	-	-	1,545,518.00
104	0801-0000	Owners' (soft cost) Contingency	643,257.00		643,257.00	-	-	-	-	643,257.00
		Contingency Subtotal	\$ 2,188,775.00	\$ -	\$ 2,188,775.00	\$ -	\$ -	\$ -	\$ -	\$ 2,188,775.00
		Total Project Budget	\$ 39,919,041.00	\$ -	\$ 39,919,041.00	\$ 4,444,735.47	\$ 2,176,093.47	\$ 2,268,642.00	\$ -	\$ 35,474,305.53



Bourne Public Schools
Scope of Work - Budgetary

Peebles School – Relocation and re-Installation of Fiber Lateral

Prepared by:	Comm-Tract Corp. 235 Summer Road, Bldg. # 4 Boxborough, MA 01719	Contact: Telephone: Email:	Bryan Hopkins (781) 890-5070 x6952 bfhopkins@comm-tract.com
Date:	September 25, 2017		

Bid No.	Bourne – Peebles School Lateral V.01
SPIN:	143008129
ITC 54:	VC 209682
FCC Registration:	0024175408

Bill To: Company: Address: Contact Name: Phone: Fax: Email:	Bourne Public Schools 36 Sandwich Road Bourne, MA 02532 Steven Lamarche (508) 759-0660 slamarche@bourne.k12.ma.us	Ship To: Company: Address: Contact Name: Phone: Fax: Email:	Peebles School Trowbridge Road Bourne, MA 02532 Steven Lamarche (508) 759-0660 slamarche@bourne.k12.ma.us
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Description of Work

Peebles School – Relocation and Re-Installation of Fiber Lateral

- Comm-Tract Corp. will furnish and install (1) 12 Count ADSS ESM fiber cable between the existing Bourne Fiber Optic Municipal Area Network backbone and the new Peebles School. Includes removal of existing lateral on the existing school site.
- Comm-Tract Corp. will furnish and install (1) 12 Fiber FDP and terminate all 12 fibers.
- Comm-Tract Corp. will prep, splice and test the newly placed 12 fiber lateral cable into the backbone as directed by Bourne Schools.
- Includes Police Details
- Includes ADSS hardware and cable tags.



Bourne Public Schools
Scope of Work - Budgetary
Peebles School – Relocation and re-Installation of Fiber Lateral

Quantity	Bill of Materials Description
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	To be provided with submittals on the project
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Bourne Public Schools
Scope of Work - Budgetary
Peebles School – Relocation and re-Installation of Fiber Lateral

Warranty Information - Technical and Compliance Notes:

The Comm-Tract provided warranty and technical compliance with design and installation standards information is provided below as associated with this scope of work.

- Comm-Tract is a certified provider and partner for the Manufacturer, and provides a 25 Year Warranty.
- The 25 Year Warranty commencing on the date of an accepted installation by the Customer covers all Manufacturer's products and materials, and covers the repair, and/or replacement of all installed components including, but not limited to fiber cable, fiber connectors, fiber patch panels, fiber jumpers and patch cords, and other materials as installed.
- The repair and/or replacement of any component in the certified and approved network solution as provided and installed by Comm-Tract under the 25 Year Warranty is provided at no cost to the Customer over the period of the 25 Year Warranty.

- Comm-Tract adheres to the following design and installation standards relative to the scope of work as provided.
- BICSI Design and Installation Applicable Standards
- Telecommunications Industry Association (TIA) Applicable Standards
- Electronics Industry Association (EIA) Applicable Standards

- ANSI/TIA/EIA – 568 Standards
- ANSI/TIA/EIA – 569 Standards
- TIA/EIA 604 Fiber Optic Standards
- TIA-492 Fiber Optic Installation Standards
- TSB-149 Fiber Optic Workmanship Standards
- IEEE 802.3 Standards



Bourne Public Schools
Scope of Work - Budgetary
Peebles School – Relocation and re-Installation of Fiber Lateral

Pricing and Terms	
Customer agrees to the following payment schedule:	
30% Initial Payment upon Delivery of Materials:	\$ 3,763.50
65% Payment upon actual Project Progress:	\$ 8,154.25
5% Final Balance upon Completion:	\$ 627.25

- The Project Price shall be subject to adjustment in the event of any mutually agreed upon written changes made to the Scope of Work.
- Prices are valid for 30-days.
- The Project Price does not include licensing of pole or underground facilities.
- The Project Price includes police details.
- The Project Price does not include permitting is applicable.
- The Project Price does not include any new underground construction.
- The Project Price does not include any applicable taxes as the project is tax exempt.
- The Project Price includes shipping charges.
- The Project Price assumes access to each location is free and clear for installation and all sites are ready for installation under a single deployment. Should a site not be ready, and a second deployment is needed, additional charges will apply.
- Comm-Tract will perform during normal business hours – Monday through Friday, 8:00 a.m. to 5:00 p.m., unless otherwise specified in the Description of Work.
- Customer hereby agrees to the terms and conditions set forth in the Scope of Work by signing below or issuing a Purchase order referencing this Scope of Work.
- This Scope of Work is governed by the terms and conditions of the Commonwealth of Massachusetts ITC 54 blanket contract.

Site Surveys:	Included
Design and Engineering:	Included
Certification and Warranty:	Included
Materials:	Included
Labor:	Included
Total	\$ 12,545.00

Customer Name:	
Authorized Signature:	
Name:	
Date:	

District: Town of Bourne

School: Peebles Elementary School

Submittal: 90% Construction Documents

Submittal Date: September 5, 2017

Review Date: September 6-25, 2017

Reviewed by: Gienapp Design, K. Brown, M. Morkos, P. DeAngelo, G. Brunell and M. McGurl

MSBA REVIEW COMMENTS:

The following comments¹ for the Construction Documents submittal are issued pursuant to a review of the project submittal document dated September 5, 2017, for replacement of Peebles Elementary School, and presented as 90% Construction Documents 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 September 5, 2017.

I. Summary Comments:

- a. *The project is a new school for grades 3 through 5 with a design enrollment of 460 students.*
- b. *The school is 72,680 gross square feet.*
- c. *The total project budget is currently \$35,479,020 with a reconciled construction estimate of \$29,798,523, as provided by the OPM. Compared to the total project budget at PFA of \$39,919,041, with a construction estimate of \$30,910,366.*
- d. *The District has elected to use the DBB procurement method.*

II. OPM deliverables: *Unless specifically stated otherwise, the OPM deliverables are included in the submission with no response from MSBA required.*

- a. Project scope, schedule & budget:
 - *Independent construction cost estimates pursuant to Section 8.1.2.2 of the Contract for Project Management Services, for comparison with the Designer's cost estimate, based upon 90 percent progress documents. There are two OPM cost estimates, both by A.M. Fogarty & Associates. The first is dated August 18, 2017 and the second is dated August 22, 2017. The first estimate is \$29,451,082 and the second is \$29,796,199, a difference of*

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.

\$345,117. It is not clear why both estimates were included. Confirm with the response to these comments. The OPM's cost estimate by AM Fogarty & Associates dated August 22, 2017, indicates the total construction cost as \$29,796,199 prior to the Alternates. This is a difference of \$2,324 (+/- 0.008%) from the Designer's cost estimate, by PM&C dated August 23, 2017. Both of the OPM's estimates list only six (6) Alternates and the Designer's cost estimate carries 7 add Alternates, which both contradict Section A.2 Project Budget that states (8) Alternates. In the response to these comments, indicate what Alternates will be included in the final bid documents and the associated costs.

- Value Engineering recommendations: *It does not appear that value engineering recommendations are included in the submission. The submission indicates the project is within budget. In the response to these comments, confirm if value engineering recommendations are under review and/or are needed.*
- Updated project budget: *The Project Budget is provided in the form of a "Budget Tracking Form", which is included in the submission from the OPM. It appears this form may be out-of-date. It is dated 7/30/2017, which is prior to the most recent cost estimates. In the response to these comments, confirm if the form needs to be updated, and if so, provide an updated form. The form provided indicates a total project budget of \$35,479,020, including a total Owner's contingency of \$643,257, and a Construction contingency of \$1,545,518.*
- Updated project schedule *Included.*
 - OPM is required to provide a complete milestone schedule depicting all key tasks with durations. The schedule is to be updated and submitted to MSBA as often as is required to reflect any changes, including any changes to milestone dates, but must be submitted with each design submittal (DD, 60% CD, 90% CD).
 - As one of the milestones, the schedule is to indicate the date for submission to MSBA of the Design Development, and proposed dates for submission of the 60% and 90% Construction Documents submittals. The schedule is to incorporate 21 day required duration for MSBA review of each submission, and a minimum of 14 days for project team incorporation of MSBA review comments as well as all others into the project documents prior to the due date of the next submission or finalizing project documents for bidding. Thirty five days for each submission is the minimum acceptable duration; if the project team believes additional time is required for any or all of the submissions the durations for these activities are to be increased accordingly.
 - As one of the milestones, the schedule is to state dates of approval for all applicable state reviews, including but not limited to, the Massachusetts Historical Commission, the Massachusetts Commission

against Discrimination, the Secretary of Environmental Affairs, and the Architectural Access Board

- Indicate all required state reviews or permits on the milestone schedule including actual dates of approval which were required in order to maintain the planned bidding and construction schedule and milestones indicated therein.
 - A letter on District letterhead confirming that the Project has undergone all required state reviews or permits and obtained all necessary approvals by any departments or agencies of the Commonwealth required by law to review the Project, including but not limited to, the Massachusetts Historical Commission (M.G.L. c. 9 s. 26 – 27C), the Massachusetts Commission Against Discrimination, the Secretary of Environmental Affairs, and the Architectural Access Board, in accordance with all applicable laws and regulations. Submission of documentation evidencing such reviews and approvals to the MSBA. In accordance with Section 4.12 of the Project Funding Agreement (the “PFA”), the District must obtain such reviews or approvals prior to the solicitation of construction bids. If there are outstanding reviews, provide revisions to the construction bid schedule.
 - Any state reviews or approvals which remain incomplete at the time of the 90% CD submission render the submission out of compliance with Section 4.12 of the PFA, and may result in suspension of reimbursement requests to the District until such time as all required state reviews or approvals are obtained.
- b. A letter confirming that prequalification requirements for the General Contractor and subcontractors have been completed. *A letter and list of prequalified general contractors and subcontractors is included inside the front cover of the project binder.*
- c. Construction documents review for:
- Constructability
 - Operability
 - Bid-ability
 - Clarity
 - Coordination
 - Site access during construction
- d. Commissioning consultant’s review coordination:
- Incorporate CX recommendations: *A copy of the commissioning consultant’s comments are included in the submission. It appears as if 60% CD review comments and earlier comments have been incorporated; however, it does not appear as if the 90% CD comments have been incorporated (the date of the comments is just prior to the submission). In the response to these comments, confirm commissioning review comments have been incorporated and provide a copy of the updated comment sheets.*

III. Designer deliverables: *Unless specifically stated otherwise, the Designer deliverables are included in the submission with no response from MSBA required.*

1. General requirements:

- a. Submit updated work plan: *The submission indicates the work plan is “on track as shown on the schedule in Section I of this report”; however, there is no specific separate work plan document included. In the response to these comments, provide a copy of the updated work plan document.*
- b. Submit updated environmental permitting assessment, building code analysis, ADA/MAAB analysis, 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 utility connection. *The submission indicates several local officials have been contacted about the project, but there is no official certification that they have been contacted regarding each utility connection. Also, the submission indicates the utility companies have been contacted, but there has been no official certification provided. Provide these certifications with the responses to these comments.*
- c. Submit Structural and energy calculations –
- d. Submit an updated space summary and signed certification that reflects the current design. *Included. Based on the space summary provided, the MSBA notes the following:*

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

- e. Submit a written summary comparing the project design with the final design program, and confirm that there are no variations. If there are variations, the written summary must address the following: *The submission indicates there are no changes of space categories, although there were minor changes within each category in the DD submittal.*
 - Explanation of deviations within the space summary from the Project Funding Agreement: *see comment above.*
 - The submittal must clearly call out deviations to location and surrounding adjacencies through the use of redlines or “clouding”;
 - The explanation should clearly identify the basis of the change identifying both architectural and/or programmatic reasons;
 - If the basis of the change is programmatic, the submittal should include a red-lined version of the educational plan incorporated in the Project Funding Agreement;
 - Regarding DESE approved SPED spaces; *The submission indicates there are no changes to SPED spaces.*
- f. Provide an independent structural design review in compliance with the current edition of The Massachusetts State Building Code (an MSBA requirement for all projects with new construction over 10,000 sf).

2. Drawing Requirements:

- Cover sheet showing a list of all drawings, symbols, abbreviations, notes, locations map. *Symbols and abbreviations are not included in the overall cover sheet; however, they appear to be shown on the first page of the applicable discipline (i.e. architectural symbols are on sheet A0.01). Consider including this information on the overall cover sheet for clarity. This was noted in the previous 60% CD review comments.*
- Site drawings showing the following:
 1. Layout and location of all proposed work with details. *Included.*
 2. Existing and proposed contours including floor elevations, bench marks and boring locations. *The floor elevations are not shown on the site drawings. Consider including floor elevations on site drawings prior to documents being issued for bidding.*
 3. Landscaping and planting.
 4. All utility service lines, systems and structures for electricity, gas, oil, water, steam, telephone, CATV, fire alarm, sanitary and storm drainage.
 5. Contract Limit Line and Storage Area for construction materials.
 6. All existing foundations, obstructions and other physical characteristics of the site.
 7. Site survey.
- Demolition drawings and temporary work required.
- Architectural drawings shall include:
 1. Floor plans of each floor, with dimensions, column locations, floor elevations, door and window designations, partition types, built in furniture and equipment, keyed to other architectural drawings..

2. Large scale floor plans where required.
 3. Roof plans including equipment.
 4. Key plans.
 5. Building Sections.
 6. Building elevations. All building elevations, including hidden elevations, fully developed.
 7. Wall Sections indicating dimensions, flashing, anchorage, reinforcing, coursing, cladding, and all other conditions at wall, roof, foundation, interior floors. *It does not appear as if flashing and reinforcing are shown on the wall sections; however, they are included in the details. Consider adding to wall Sections.*
 8. Exterior details, for roofing, flashing, expansion control and construction joints, waterstops and other details showing all conditions. *Construction joint details are not included in the submission. Consider adding Construction joint details prior to bidding.*
There are some vertical details at the slab and foundation where the grade is shown at the same elevation as the interior slab (e.g. details 1 and 7/A5.01). Review and confirm if the grade is accurately shown and if so, consider whether any additional waterproofing measures should be taken to prevent infiltration of water at the floor line. (It is acknowledged the cavity is grouted solid but that is not likely adequate water infiltration protection.)
It does not appear that all flashings are noted (it appears most are drawn) in some of the exterior details. These may be adequately covered by window details. Review and consider adding additional notation if necessary.
 9. Door, window, entrance, and storefront, schedules, and details.
 10. Vertical circulation plans, Sections and details including stairs, elevators, conveyors, dumbwaiters.
 11. Interior elevations of all significant and typical spaces.
 12. Interior details including casework, paneling surfacing and acoustical treatment.
 13. Reflected ceiling plans coordinated with fire protection, mechanical and electrical drawings, and ceiling details. *Ceiling details do not appear to be included in the submission. This was noted on the previous review in the 60% CD review comments, and the District commented that they would be incorporated in this 90% CD submission. Consider providing these details for clarity.*
 14. Schedules (clearly define new or existing)
 - i. Doors.
 - ii. Equipment, e.g. for services
 - iii. Partitions
 - iv. Finishes
- Structural drawings shall indicate the following:
 1. Soils exploration plans with dates, and water elevation level. *Soil exploration plans are not included with the structural drawings;*

- however, this information is provided within the Geotechnical Data (report), which is included in the Project Manual. Consider including or referencing this information on the structural drawings for clarity.*
2. Foundation plans with bottom grades showing layout of all footings, walls, slabs on grade including reinforcing, grade beams, and columns; include design soil bearing pressures and live loads for each area. *The concrete slab reinforcing is not shown on the foundation plans. Consider including prior to bidding.*
 3. Floor and roof plans of structural systems including framing, grades of finished floors and depressed areas, with locations and dimensions for all openings. Also indicate design floor loads. *The finish floor grades are not shown on the structural plans. Consider including finish floor grades on the structural plans prior to bidding.*
 4. Complete foundation wall elevation and typical Sections, with reinforcing indicating location, dimensions and grades for all footings, steps and wall openings. *Foundation wall elevations are not included in the submission. This was noted in the 60% CD review comments, and the District's response was that all the necessary information can be obtained from the information provided. Please verify in the response to these comments.*
 5. Complete details and section with dimensions for all construction including expansion and construction joints, reinforcing and other embedded items. *Expansion and construction joint details are not included in the submission. Consider including in documents prior to bidding.*
 6. Schedules (with dimensions) for all lintels, beams, joists, and columns. *Joist and beam schedules are not included in the submission. This was previously noted in the 60% CD review comments, and the District's response was that since the building is a steel-framed structure, this information is provided via other means.*
 7. General notes including the following information: class and 28 day strength of concrete for each portion, structural steel and concrete reinforcing design stresses for each type of structural member, concrete cover for each type of structural member, shrinkage and temperature steel requirements, reinforcing laps for main reinforcing and temperature steel; bend point, cutoff, and hook locations for all members, minimum beam and lintel bearing. *Minimum beam and lintel bearing information is not included in the general notes. The minimum lintel bearing (8 inches) is stated in Section 040001; 3.12. Minimum beam bearing does not appear to be provided; confirm whether this is required given the construction conditions.*
- Fire protection drawings shall indicate the following:
 1. Standpipe systems, sprinkler systems, suppression systems, access panels, fire pumps, accessories, and piping. *Some piping and heads are not shown on the fire protection drawings. Consider reviewing and adding any missing information prior to bidding.*
 2. All piping, equipment, fixtures and devices shall be located and sized.

3. Design criteria shall be provided on the drawings in accordance with NFPA requirements.
- Plumbing drawings shall indicate the following:
 1. All work done by the Plumbing Subcontractor, which includes all water, gas, air, vacuum, medical gases, sanitary and storm wastes, and accessories.
 2. Trapping and venting of all plumbing fixtures including floor drains.
 3. Water and gas supply sources, storm and sanitary discharge mains.
 4. All piping sizes shall be indicated on drawings and riser diagrams. Indicate all directions of flow and pitch on piping. *The pitch on the piping is not shown on the plumbing drawings, Consider adding this prior to bidding.*
 5. All accessories, valves, fixtures including all drinking fountains, grease traps for kitchen waste and all necessary panels, identified as to type and size.
 6. All piping and connections required for other trades (e.g., kitchen equipment, HVAC make-up water, etc.)
 7. Acid waste, vents and neutralization systems for laboratories.
 8. Plumbing Legend and/or graphical symbols on the first sheet of the Plumbing Drawings.
 9. Plumbing riser diagrams.
 10. Domestic water booster pumps, boiler feed water, meter location, hose bibbs.
 11. Domestic hot water: storage tanks, piping material, hanger details.
 12. All required access panels. *Access panels are not shown on the plumbing drawings. This was previously noted in the review at 60% CD review comments, and the District's response indicated panels are "provided in the plumbing spec." Although the spec indicates conditions where panels should be used, it does not convey this information graphically. Consider including this information on the drawings for clarity. It is noted that the MEP sections do require the trade to furnish access panels for installation by the appropriate trade.*
 13. Backflow preventors and cleanouts. *Backflow preventors are not shown on the plumbing drawings. Consider adding this prior to bidding.*
 - Heating, Ventilating and Air Conditioning Drawings shall indicate the following:
 1. Large scale plans of all mechanical & electrical spaces showing equipment to scale.
 2. All piping and ductwork systems shall be located and sized. All ductwork shall be shown double line.
 3. All systems shall be sized at all reductions and riser diagrams of piping and duct systems shall be indicated. *Riser diagrams showing the piping and duct systems are not included in the submission. Consider adding prior to bidding.*

4. All directions of flow and pitch on piping, and direction of flow, volumes for duct systems shall be indicated. *The direction of flow and pitch of the piping is not indicated on the HVAC drawings. Consider adding this prior to bidding.*
 5. All equipment shall have sufficient servicing and/or replacement space indicated on drawings. *Service and replacement space for the HVAC equipment is not shown on the drawings. Consider adding prior to bidding.*
 6. All equipment, accessories, valves and dampers with all necessary access panels, identified as to type and size. Access panels, where required for access to valves and dampers shall be indicated on drawings. *Access panels are not shown on the HVAC drawings. This was previously noted in the 60% CD review comments. The District's response is that panels are dependent on field conditions and are the Contractor's responsibility to coordinate. Considering that the building is new construction, suggest providing some graphic direction regarding the access panels for clarity. It is noted that the MEP sections require the trade to furnish access panels for installation by the appropriate trade.*
 7. Cooling system pumps, chillers, cooling towers, air handling units, ductwork system and dampers, fan details, temperature control system, air and hydronic balancing equipment, and schedules shall be indicated.
 8. Cooling tower design shall be indicated on the drawings showing site location, elevations and floor plan of equipment layout and typical flow diagram as related to the total HVAC system.
 9. All fire and smoke dampers, access panels and doors.
 10. Mechanical room designs:
 - i. Vent pipes for safety valves, relief valves, back pressure valves and tanks shall be extended above flat roofs in accordance with all governing authorities.
 - ii. In all designs for boiler and refrigeration plants, include a complete floor plan indicating location of all major mechanical equipment and sufficient service space. *Service and replacement space for the HVAC equipment is not shown on the drawings. Consider adding this prior to bidding.*
 - iii. In designs of new and/or replacement boiler and refrigeration plants, provide a flow diagram detailing steam or hot water distribution systems, return systems, including all existing equipment and their function, as well as any proposed expansions with all necessary instrumentation and controls.
- Electrical Drawings shall indicate the following:
 1. General arrangement: Outline layout of each floor. Typical sections through the structure, floor and ceiling heights and elevations, and type construction, including concrete pads shall be indicated. Indicate interface with other systems. Identify any work by general contractor or other trades. *Electrical sections are not included in the submission.*

This was previously noted in 60% CD review comments, and the District indicated they would be added to the 90% CD submission. Please incorporate prior to bidding.

2. Interior lighting system: Light fixture schedules, circuiting location and mounting heights of all fixtures, receptacle and switch outlets, sizes and types of all lamps, conduits, all other accessories and riser diagrams shall be indicated on drawings. Indicate details and method of supporting electrical fixtures and conduits. Designer shall specify that all electrical lighting fixtures be supported from the building structure, and shall be independent of ducts, pipes, ceilings and their supporting members. Comply with seismic design criteria. *Lighting riser diagrams and mounting heights are not included in the electrical drawings. Please incorporate prior to bidding.*
3. Power system: Locations, types and method of control for all motors, heaters, appliances, controllers, starters, branch circuits, feeder conductors and conduits. Indicate riser diagrams. Show details and indicate method of supporting electrical conduit. For larger projects, thermostats and control wiring are normally covered under the HVAC sub-contract, assure coordination.
4. Fire Alarm, Data, Communications, CATV/CCTV Systems: Locations and types of all devices, outlets and equipment, service connections, wiring diagrams, all other essential details.
5. Services: Location and details of all services, whether overhead or underground, feeder sizes, plans and elevations of switchgear and transformers, metering and service switchboard arrangements, wiring and ground fault diagram and bus ducts.
6. General and sub-stations: Location, size, method of connection and protection of all generators, transformers, exciters, motor generators, switch gear, and associated equipment, current characteristics and equipment capacities. Indicate equipment connections by means of one line and/on wiring diagrams and schedule all major items of equipment and all instruments.
7. Underground work: The size and locations of manholes and types of cables, number, size, and location of ducts, locations, sizes and types of cable supports, fireproofing, duct line profile, and one line diagram of connections.
8. Pole line work: Location, length, treatment and class of poles, guying, cross arms, insulators, circuiting, transformers, protective and switching devices, lightning arresters, special structures, diagrams, current characteristics and grounding.
9. Exterior lighting: Location, size, and type of transformers, luminary, poles, light standards, cables, ducts, and manholes, details of control equipment and connection diagrams.
10. Emergency system details including transfer switch, type of fuel. *The generator fuel type is not indicated on the drawings; however, it is stated in Section 26 0001 Electrical of the Project Manual. Consider including this information on the drawings for clarity.*

11. One line diagram indicating load KVA, and available short circuit amperes at each transformer, switchboard, distribution panel board, branch circuit panel board, and at major pieces of equipment.
12. Riser diagrams for all systems.

3. Project Manual Requirements:

- a. The format for the technical specifications shall be CSI Master format (2004 version) with separate sections for each of class of work required by M.G.L. c. 149 §44F.
- b. List all required filed sub-bids specification sections:
- c. 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 an 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 it is in the public interest to do so. Provide MSBA with a certified copy of the vote of the elected body. For each item of material or equipment, the specifications shall provide for a minimum of three named brands of material or equipment and the words “or equal” or a description of material or equipment which can be met by a minimum of three manufacturers or producers, and the words “or equal”. Proprietary products shall not be specified except as provided by M.G.L. c. 30, § 39M; however, when they are specified, proprietary specifications are subject to the “or equal” provisions of c. 30, § 39M. *No proprietary items listed. It is indicated in the Instructions to Bidders; article 1.14 Proprietary Materials, that there are no proprietary materials. The specification appears to be written accordingly; no proprietary products are specified. (There is one occasion of what appears to be an editing error that results in an erroneous “no substitutions” phrase in Section 230001 HVAC Article 2.30.H.2. Consider verifying and correcting prior to issuing for bid.)* Alternates, if approved in writing by the Owner, shall be properly described and cross-referenced in the project manual and drawings. An alternate proposal sheet shall be prepared by the Designer for insertion into the Contract Form. *There are eight add Alternates listed on the Form for General Bid. These appear to be adequately defined in 012300 Alternates, Article 3.1 Schedule of Alternates. Consider changing the language describing the base bid of each Alternate. Each Alternate uses a phrase similar to, “Base Bid: Do not include the work to add XXX...” Consider whether it would be more clear to simply state, “Base Bid: The Base Bid does not include XXX...”*
It is stated in Section 312500 Erosion and Sedimentation Controls that Alternates are not applicable. Review and confirm if it is not applicable to Alternate No. 2 “adding the parking lot at the tennis court,” as well as those involving additional planting.
- d. Allowances are prohibited pursuant to M.G.L. c. 149, § 44G (A).
- e. Unit price items, if permitted or ordered by the Owner, shall be properly described in the Specifications. *Unit prices are included on the Form for General Bid and are identified in Section 012200 Unit Prices. Consider editing the language in Unit Price No. 2; its title and the Quantity Allowance is stated as if it refers to*

excavation of soil. However, it appears it is intended for the removal of stone within a trench.

See the Additional Comments at the end of these notes for a conflict between unit prices and moisture mitigation specifications.

- f. Staging, scaffolding cutting and patching, refuse collection and disposal, demolition work and cleaning task, allocation policy and proposed language shall be carefully assigned to avoid duplication or omission. *The specifications are consistently written throughout that all filed subcontractors are to provide their own scaffolding and staging. While this is technically allowable, it could result in a duplication of cost in bidding by trades requiring similar staging at similar times (e.g. masonry, windows, sealants, etc). Review and evaluate if any trade should be required to share staging provided by the Construction Manager.*
- g. Describe the extent of the work, the materials and workmanship, and include the work under the proper section. If any portion of the work included in a section of the Specifications is to be performed by a trade covered by another section, there shall be clear and distinct cross-referencing between the sections. Merely to state “by others” is not acceptable.
- h. Specify materials mined or manufactured in Massachusetts first and the United States of America second whenever possible..
- i. Do not use general clauses intended to be all-inclusive in lieu of complete descriptions.
- j. Do not duplicate standard requirements that are contained in the contract form.
- k. Use consistency throughout. The word “will” shall be used to designate what the Owner, Authority, Owner’s Project Manager, or the Designer can be expected to do, and the word “shall” shall be used to designate what is mandatory for the Contractor or subcontractors to do.
- l. Use the same term throughout for the same subject and the term shall be the same as that used on the drawings. *The term “Structural Fill” is used in the description of Unit Prices and other locations (e.g. Section 333000 Sanitary Sewerage Utilities 3.11.B,) but that term is not included in Section 321000 Earthmoving for Utilities and Pavement.*
There also appears to be a number of terms used for soil materials on the civil and landscape drawings that are not the same as those used in Section 321000 Earthmoving for Utilities and Pavement. Consider reviewing and updating the drawings or specifications to allow this cross-reference. Examples include “granular well graded soil/aggregate mixtures”, “stone dust” and “drainage fill”. See the note under additional comments, at the end of this document, related to the Earthmoving section for additional description.
- m. Do not use the term “etc.”
- n. Avoid such terms as “to the satisfaction of the Designer”, “as directed by the Designer”, “as approved” and “as required”.
- o. Specify work in appropriate Sections according to local trade jurisdiction.
- p. Avoid the use of symbols:
- q. In sections for which filed sub-bids are required, refrain from using such terms as “the Contractor,” the “Heating Contractor,” or “the Plumbing Contractor,” but where necessary for clarity refer to the “HVAC Subcontractor,” the “General Contractor” and so on. *Some filed sub bid sections refer to “Contractor” instead of*

the specific trade (Section 090007 Painting). This should be reviewed prior to issuing to bid.

A particular instance where it is likely advantageous to state “General Contractor” is in the second sentence of Article 011200 Responsibility Clarifications 1.3.L in describing responsibilities for trailers, hoisting, ladders, scaffolding, etc. Where it currently states “contractor,” it should be clarified as “general contractor”.

Consider reviewing and updating as appropriate.

Due to the unique requirements and regulations of asbestos abatement, consider if all references in Section 028213 Asbestos Abatement should be distinguished between “general contractor” and “abatement contractor”

- r. Do not give numbers both in words and figures. Numbers less than 10 shall be written in words, 10 and higher numbers shall be written in figures. In expressing dimensions, figures such as 2 in., 16 in., 7 ft., 6 in., shall be used.
- s. Each filed sub-bid section shall detail all labor and materials required by the particular sub-trade and list, by number, those drawings (and only those drawings) indicating work of that sub-trade. In addition, list drawings indicating work of a particular trade that appears on drawings that are not customarily included in the work of the trade, when applicable. *Many of the architectural sections include the complete list of drawings, including those that are not applicable. For instance, Acoustical Tile Ceilings includes all site drawings. Consider reviewing and updating each of the sections to only list those that are applicable.*
- t. Do not specify that a product or system shall require prequalification for use prior to bidding.

4. Estimate and Analysis of Construction Cost: *The submission includes two Designer’s estimates; one is dated August 17, 2017 and the other is dated August 23, 2017. The former shows an estimate of \$29,589,221 and the latter an estimate of \$29,798,523, a difference of \$209,302. It is not clear if there is a specific reason why both were included in the submission and if one is more ‘correct’ than the other. In the responses to these comments, indicate which estimate should be considered the current estimate.*

Additionally, the former shows six (6) Alternates and the latter shows seven (7) Alternates, each of which do not match the number indicated in Section A.2 Project Budget, which states there are eight (8) Alternates (eight are also included in the project manual). In the responses to these comments, indicate what Alternates will be included in the final bid documents and their associated cost.

The following comments are based on the August 17, 2017 estimate.

- The Designer shall furnish a final construction cost estimate, based on and current as of a date no earlier than 90% Construction Documents, including cost estimates for general conditions, overhead and profit, insurance, bonds, and all other items; and allowances expressed as percentage rates for construction contingencies and escalation to the mid-point of the construction period; and other mutually agreed upon contingencies. The final construction cost estimate shall be prepared in Unifomat II Elemental Classification to Level 3 (Sections A-G inclusive), the CSI MasterSpec format to Level 3 and M.G.L. c.149, §44F (filed sub-bid) format and shall be complete with a single line outline specification description for each item with the detailed unit rate or item cost buildup provided as a backup in each case. *The Designer’s estimate, by PM&C, dated August 17, 2017, indicates a total construction*

cost of \$29,589,221. It is indicated on page 2 of the November 2017 estimate, that escalation is to the start of construction. The estimate is not escalated to the midpoint of construction, which appears to be provided for in the project budget. (For comments on the Project Budget, please refer to section II of this review.)

- The date of the estimate shall be a date no earlier than the date of 90% Construction Documents. *The estimate is dated August 17, 2017 and is based on documents dated August 9, 2017.*
- The summary sheets shall be developed, which shall contain the following: *The following are included unless specifically indicated below. For missing or unclear items, provide these items with the responses to these comments.*
 1. The date that the estimate was prepared. (Value Date). *Indicated as August 17, 2017.*
 2. The anticipated bid date. *Bid date indicated as November 28, 2017*
 3. The project and contract number.
 4. The title and location of the project.
 5. The name of the Designer.
 6. The name of the Estimator.
 7. The site cost (including all utilities). *Indicated as \$4,149,333.*
 8. The building cost (including fixed equipment). *This is not specifically indicated.*
 9. The estimated construction cost of each Phase of the work, totaled. *Not included.*
 10. The costs of Item 1 and Item 2 work, as distinguished in the General Contractor's bid forms, shall be individually totaled. *The sub total of direct filed sub- bid cost is \$12,674,186. The specific general contractor's cost is not individually stated.*

5. Additional Findings / Comments:

- a. *There is a discrepancy (or absence) in the specification related to excavation and backfill. Section 312000 is titled Earth Moving for Utilities and Pavement and, it is confirmed that, Article 1.2 Description of Work describes work related only to utilities and paving. In that same Section, Article 1.2.B Related Work, paragraph one states that excavation and soil materials related to the building are specified in Section 312000 Earthwork. However, there is no Earthwork Section. Consequently, there is no specification for excavation and soils related to the building. Consider adding a Section prior to documents being issued for bidding. Consider reviewing the civil, landscape and structural drawings (and possibly others) and updating to coordinate with any specification changed to clarify this issue.*
- b. *There is a conflict and/or inconsistency in the requirements for moisture mitigation. Section 096516 Resilient Sheet Flooring Article 3.2 Preinstallation Testing addresses the issue of moisture mitigation of concrete slabs and in paragraph C states that if the owner determines moisture mitigation is required it shall be provided as specified in Section 090561.13 Moisture Vapor Emission Control and will be paid for under the provisions of unit prices. However, this Section is not included in the specification and there is no unit price for this item. Also, this*

reference in Section 096516 is not consistent with the requirements for moisture mitigation stated in Section 090561 Common Work Results for Flooring Preparation. Consider reviewing these articles and updating the requirements as intended by the design team.

Section 096466 Wood Athletic Flooring, Section 096513 Resilient Base and Accessories, Section 096519 Resilient Tile Flooring, Section 096723 Resinous Flooring and Section 096813 Tile Carpeting, Article 3.2 Pre-installation Testing includes the same language as stated in Section 096516 and needs to be updated to the intended requirements. Each of these Sections, usually in Article 1.2.B Related Requirements, states to refer to Section 033000 “cast in-place concrete for warranty for moisture mitigation through concrete floor slabs”; however, a warranty for moisture mitigation is not included in that Section. Consider coordinating and/or editing to be consistent with other corrections to this issue that are made.

- c. In Section 013100 Project Management and Coordination, Article 1.6 Coordination Drawings, Article A.1, it states to see “BIM/Coordination Supplemental Instructions included as an attachment at the end of this Section for additional requirements”. However, there is no such attachment at the end of the Section. Consider providing the attachment as intended. The other architectural and MEP Sections do not include language referring to BIM coordination or a specific coordinated exchange of information; they are written as if each discipline provides isolated coordination drawings (particularly for non-MEP Sections such as acoustical ceilings). Consider reviewing and updating the language in the technical Sections to be consistent with the Division 1 requirements. Consider adding the requirement to provide BIM coordination drawings in the Description of Work article in each of the Sections that it is applicable (this is included in Section 260001 Electrical 1.4.B.16).*

END.