# OPM SUBMITTAL REVIEW & COORDINATION MSBA DESIGN DEVELOPMENT REVIEW

MSBA Design Dev. Review

DD REVIEW W/ DESIGNER COMMENTS

68.2.1 – **04**a

#### APPENDIX 6A MODULE 6 – DESIGN DEVELOPMENT REVIEW COMMENTS

District: Northeast Metro Regional District School: Northeast Metro Regional Vocational Technical High School Owner's Project Manager: PMA Consultants Designer Firm: DRA Architects Submittal Received Date: August 19, 2022 Review Date: August 29 – September 6, 2022 Reviewed by: Gienapp Architects, K. Brown, L. Deveau

Received: September 12, 2022

**DRA Response:** 9/23/2022

#### **MSBA REVIEW COMMENTS**

The following comments<sup>1</sup> on the Design Development submittal are issued pursuant to a project submittal review document for the proposed project and presented as a Design Development submission in accordance with the MSBA Module 6 Guidelines.

The items listed below are to be included in each project submittal by the design team (OPM and Designer) to the extent that each item applies to the project, or the design team should include an explanation why an item doesn't apply. The project submittal may be rejected by MSBA if all items below are not fully addressed by the project team. Unless specifically stated otherwise in the review comments below, the OPM and Designer deliverables are included in the submission with no further comment from MSBA required.

#### 6A.1 Summary Comments

		Comments
•	Basic Project Information	
	<ul> <li>Enrollment (describe grade configuration, design enrollment and number of PK students if applicable)</li> </ul>	1,600 students grades 9-12
	<ul> <li>GSF area (describe approved GSF in the Project Funding Agreement and as currently proposed)</li> </ul>	PFA: 386,630 GSF, Current: 386,630 GSF
	<ul> <li>Project Type (all new, add/reno, reno)</li> </ul>	New Construction
	<ul> <li>Delivery method (DBB, CMR). If CMR, describe contract status</li> </ul>	CMR, Gilbane

• Project Budget Compliance:

• The Project Funding Agreement ("PFA") has total project budget of \$317,422,620. The submittal notes that the current total project budget is \$317,422,620, and is within budget.

- The PFA has an estimated construction cost of \$243,591,092. The submittal notes that the OPM's current reconciled estimated construction cost is \$244,203,870, and exceeds the PFA budget by \$612,778.
  - The submission indicates that this overage is being addressed through redistribution of Design & Pricing, Owner's and Construction Contingencies as well as potential value management items.

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#### Module 6 Detailed Design – DD

<sup>&</sup>lt;sup>1</sup> The written comments provided by the MSBA are solely for purposes of determining whether the submittal documents, analysis process, proposed planning concept 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 design and its process may meet any 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 design and process meet any applicable professional standard of care or any other standard of care. Project Designers are obligated to implement detailed planning and technical review procedures to effect design criteria coordination, buildability, and technical adequacy of project concepts. Each city, town and regional school district shall be solely responsible for ensuring that its project development concepts comply with all applicable federal, state, and local law provisions. The MSBA recommends that each city, town and regional school district have its legal counsel review its development process and subsequent bid documents 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 planning process or plans and specifications.

• The CMR's current construction cost estimate is \$278,095,795 by (Gilbane). The Designer's current construction cost estimate is \$277,970,850 by (Rider Levitt Bucknall). These amounts are prior to value engineering, the result of which is listed in the previous bulleted item.

#### 6A.2 OPM Deliverables:

	6A.2.1 OPM Submittal Review & Coordination	Comments
•	OPM's written Designer submission review, with recommendations to the Owner for one of the following (choose one):	
	<ul> <li>OPM approves the submission</li> <li>OPM approves the submission partially; reject remainder</li> </ul>	
	<ul> <li>OPM rejects the submission</li> <li>OPM requires additional supporting information</li> </ul>	
•	Coordinate design; include written recommendations to the Owner. Address each of the following items individually, and describe how the OPM evaluated each item.	
	<ul> <li>Technical accuracy, coordination, &amp; clarity</li> </ul>	
	<ul> <li>Efficiency &amp; cost effectiveness</li> </ul>	
	<ul> <li>Operability</li> </ul>	
	<ul> <li>Constructability</li> </ul>	
	• Phasing	Not explicitly addressed. Please include this in the next submission. OPM Response: Acknowledged, the CM is currently working to develop/refine project phasing.
	◦ Bid ability	
	<ul> <li>Site access during construction</li> </ul>	
•	Coordinate Commissioning consultant's review.	
	<ul> <li>Describe the commissioning consultant's review status.</li> </ul>	
	<ul> <li>Include a copy of the commissioning consultant's review &amp; project team's response to each item.</li> </ul>	
	<ul> <li>Describe the consideration and incorporation of commissioning consultant's recommendations into the current submittal.</li> </ul>	
•	Coordinate the District response to the MSBA comments of previous submittals.	
	<ul> <li>Include a copy of the previous MSBA review &amp; District response, including any supplemental submittals and reviews.</li> </ul>	
	<ul> <li>Provide documentation of comments addressed and comment resolution outstanding.</li> </ul>	

	6A.2.2 Project Schedule	Comments
•	The OPM is responsible to submit a project schedule that conforms to the following requirements, whether the schedule is produced by the OPM or the CMR (if	

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pdate	ed January 2021	
	applicable). <i>A schedule that is limited to construction tasks is not acceptable and will be rejected</i> . All schedules should be presented in calendar days.	
•	Update project schedule: At a minimum, the schedule update should provide the same level of detail as was included in Exhibit C of the Project Funding Agreement, expanded and updated to include milestones for Design Development, Bidding, Construction, and Closeout. The updated schedule should include proposed critical path and construction milestone information. In addition to the construction milestones, the schedule must also include the following information as listed in MSBA Module 7, Schedule Activities:	
	<ul> <li>Project Registration date with the US Green Building Council ("USGBC") or Collaboration for High Performance Schools ("CHPS")</li> </ul>	
	<ul> <li>Provisional/Design package submittal date to USGBC or CHPS</li> </ul>	
	<ul> <li>MSBA 50% DCAMM Notification submittal date and MSBA 100% DCAMM Standard Contractor Evaluation Form notification date</li> </ul>	
	<ul> <li>General Contractor/Construction Manager request for final payment</li> </ul>	
	<ul> <li>Commissioning Consultant inspection (substantial completion plus approximately 10 months)</li> <li>Final Commissioning report to MSBA submittal date</li> </ul>	
	<ul> <li>Final Construction package to USGBC/CHPS including the Final Commissioning Report submittal date</li> <li>Anticipated final Green School Program Certification letter from USGBC/CHPS issuance date</li> </ul>	
	<ul> <li>Commissioning Certificate of Completion submittal date to MSBA</li> </ul>	
•	<ul> <li>Final reimbursement request submittal date to MSBA</li> <li>Include application submission and approval dates in the project schedule for the following approvals,</li> </ul>	
	coordinated with the Designer's submittal information. In addition, provide dates for any other state or federal approval not listed below (the following list is not a comprehensive itemization of required state approvals; other requirements may apply, and some items listed below might not be applicable to this project) Indicate "Non-Applicable" on the project schedule where appropriate.	
	<ul> <li>DESE - Special Education approval by Department of Elementary and Secondary Education</li> </ul>	
	<ul> <li>MHC – Project Notification Form and approvals by MA Historical Commission</li> </ul>	
	$_{\odot}$ OIG - Construction Manager at Risk approval by the Office of Inspector General	

Update	ed January 2021	
	<ul> <li>Executive Office of Energy and Environmental Affairs</li> <li>/ EEA:</li> </ul>	
	<ul> <li>MEPA - MA Environmental Policy Act by Energy &amp; Environmental Affairs:</li> </ul>	
	<ul> <li>ENF - Environmental Notification Form</li> </ul>	
	EIR - Environmental Impact Report	
	<ul> <li>Article 97 Land Disposition Policy approval by Energy &amp; Environmental Affairs</li> </ul>	
	<ul> <li>MA DEP - Massachusetts Department of Environmental Protection</li> </ul>	
	<ul> <li>MA DOT - Massachusetts Department of Transportation</li> </ul>	
	$_{\odot}$ MA DPH - Massachusetts Department of Public Health	
	<ul> <li>EPA –NPDES National Pollutant Discharge Elimination System Notice of Intent approval by the US Environmental Protection Agency</li> </ul>	
	<ul> <li>MAAB - Accessibility variances by MA Architectural Access Board</li> </ul>	
•	Indicate all required state reviews or permits on the milestone schedule including actual or planned approval dates which are required in order to maintain the planned bidding and construction schedule and milestones indicated therein. For required state reviews or permits which have not been obtained on schedule, provide a separate (subnetwork) schedule depicting recovery actions to obtain required approvals in order to maintain the bidding and construction schedule.	
•	The schedule is to be updated and submitted to the MSBA with each OPM monthly report and as often as it 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). The schedule shall reflect any variances in the updated schedule relative to the baseline project schedule include with the Project Scope and Budget Agreement.	
•	Indicate the Design Development submission date to the MSBA and proposed 60% and 90% Construction Documents submittals submission dates. The schedule is to incorporate 21 calendar day required duration for the MSBA review of each submission, and a minimum 14 calendar days for the project team incorporation of the MSBA review comments as well as all others into the project documents prior to the next submission or finalizing project documents to make available to bidders. 35 calendar days between each MSBA design submission (DD, 60%, 90%) is the minimum acceptable duration; if the project team believes additional time is required for any or all the submissions the durations for these activities are to be increased accordingly.	

	6A.2.3 Project Scope and Budget	Comments		
•	Develop project scope and budget, cost estimates and			
	reconciliation: • OPM construction cost estimate using the Uniformat II Classification to Level 3, Showing unit rates and quantities; with escalation projected to the mid-point of construction; AND			
	<ul> <li>OPM construction cost estimate using CSI MasterFormat 6-digit format to Level 3 and MGL c.149 s 44F (filed sub-bid) format showing unit rates and quantities; with escalation projected to the mid- point of construction.</li> </ul>			
	<ul> <li>OPM reconciliation of the OPM/CMR and Designer construction cost estimates including a description of the method to derive this reconciliation. Refer to this link for an example of the Cost Estimate Reconciliation Form.</li> </ul>			
	<ul> <li>Updated Cost Estimate Comparison Form. Refer to this link for an example of the Cost Estimate Comparison Form.</li> </ul>			
•	CMR (if applicable)			
	<ul> <li>If the Owner has not yet contracted with a Construction Manager (CM), the OPM must develop a construction cost estimate as described above for comparison with the Designer's cost estimate.</li> </ul>			
	<ul> <li>If the Owner has given the CM a Notice to Proceed, the OPM must review cost estimates provided by the Designer and CM and provide a Designer's and CM's construction cost estimates reconciliation as described above.</li> </ul>			
•	Updated project budget in the total project budget format, based on the reconciled construction cost estimate. If the reconciled estimate is not used for the updated project budget, provide an explanation.	A total project budget form is included. However, it is not on MSBA's template. Please include this on the MSBA's template for the next submission. OPM Response: Acknowledged.		
•	Describe any early-bid packages anticipated scope and schedule. Include any early-bid packages (if applicable) in the submittal to show a complete project. Provide bid tables for a completed sub-bid package.			
•	Value Engineering Recommendations (if any)			
	<ul> <li>Provide the list of potential and accepted Value Engineering recommendations, and associated costs of each item.</li> </ul>	The submission indicates that the construction overage is being addressed through redistribution of Design & Pricing, Owner's and Construction Contingencies as well as potential value management items. At this early stage of design, it would appear premature to reduce contingencies before all value management options have been exhausted. The MSBA will continue to monitor the construction budget for conformance to the PFA throughout the design phase. <b>Team Response:</b> Please see the DD package for a detailed description and justification of the budget shifts that were		
		agreed upon by the entire project team including the Owner,		

	both estimators, and the FFE/Technology consultants.
	Regarding design/pricing contingency: robust cost estimate
	reconciliation and value management processes involved a
	heavy level of scrutinization/understanding of the plans,
	providing the estimators with a greater sense of confidence in
	the development of the plans, and thus confidence in the
	design/pricing contingencies carried. Also please note the
	designer has provided additional value management options
	that have not yet been taken per Owner's direction; but their
	cost is quantified for future phases if needed.
<ul> <li>Provide a copy of the Committee vote for a accepted Value Engineering recommendati</li> </ul>	

# **6A.3 Designer Deliverables**

	6A.3.1 General Requirements	Comments
•	Submit an updated work plan.	
•	Basis of Design narrative description for each of the following disciplines: • Architecture	
	<ul> <li>Structural: narrative must include lateral bracing methods and how earthquake code requirements will be met</li> </ul>	
	∘ Civil	
	○ MEP + FP	
	<ul> <li>Data/Comms./Security</li> </ul>	
•	Building Code Analysis	
•	Provide a list of proprietary items under consideration.	
•	An interior color theory statement describing proposed paint and material selections and colors for typical and special spaces, why they have been selected and how these selections relate to exterior materials and colors. Confirm that color and material selections have been presented to and approved by the District.	Included. The submission does not confirm if color and material selections have been presented to or approved by the District. Please confirm this in the next submission. <b>Design Team Response:</b> Material selections and color concepts have been reviewed with the District. Further meetings expected at next phase of the project.
•	Confirm project registration with CHPS/USGBC.	
•	Structural calculations and required floor loads	
•	Energy model calculations	
•	Life Cycle cost analysis for energy and water consuming devices	
•	Heat gain and loss calculations for Heating, Ventilating and Air Conditioning systems	
•	Calculations showing total electrical load	
•	Security and Visual access requirements:	
	<ul> <li>Confirmation that the persons responsible for District's emergency procedures implementation, and responding emergency medical, fire protection, and police agency representatives have been consulted in</li> </ul>	The submission does not confirm if emergency medical personnel have been consulted. Please address this in the next submission. Design Team Response: The project has been reviewed by first responders.
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	the planning process and any associated requirements have been included in this project.	
	<ul> <li>Identify any other security related items particular to the District and/or the proposed project.</li> </ul>	
	<ul> <li>Verification that the following safety and security related issues have been reviewed and are in accordance with the Districts procedures as noted above:</li> </ul>	
	<ul> <li>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.</li> </ul>	
	<ul> <li>Classroom lockset hardware - confirm hardware functions are compatible with the District's protocols related to lockdown.</li> </ul>	
	<ul> <li>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.</li> </ul>	
	<ul> <li>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; Fire Alarm Control Panels, and provisions for building plans to be delivered to local fire and response agencies.</li> </ul>	
	Facility and Maintenance requirements:	
	<ul> <li>Confirmation that the persons responsible for maintenance have been consulted in the planning process and any associated requirements have been considered for this project. Describe maintenance related items particular to the District and/or the proposed project.</li> </ul>	
	<ul> <li>Verification that at a minimum the following issues have been reviewed:</li> </ul>	
ľ	<ul> <li>Training hours and scheduling</li> </ul>	
ľ	<ul> <li>HVAC systems</li> </ul>	
	<ul> <li>Building Management Systems</li> </ul>	
ľ	<ul> <li>Lighting fixtures and controls</li> </ul>	
ŀ	<ul> <li>Cleaning procedures and materials</li> </ul>	
ľ	<ul> <li>Roof access</li> </ul>	
ŀ	<ul> <li>Mechanical room access</li> </ul>	
_	Quality Control narratives, supporting plans and documents demonstrating:	
	• Ceiling clearances	

Updat	ed January 2021	
	<ul> <li>Coordinate specifications and drawings</li> </ul>	
	◦ Filed sub-bid work	
	◦ Scheduling	
	<ul> <li>Equipment and power</li> </ul>	
	<ul> <li>Existing and new construction</li> </ul>	
	◦ Phasing	

6A.	mary					
<u>Spaces</u>	PFA Space Summary	DD Space Summary	<u>60% CD</u> <u>Space</u> <u>Summary</u>	<u>90% CD</u> <u>Space</u> Summary	Difference to PFA	Comments
Core Academic Spaces	51,990	52,020			30	General classrooms reduced 90 sf; Teacher Planning/Workrooms added 30 sf; Science Classrooms/Labs added 115 sf; Prep Room reduced 15 sf.
Special Education	7,070	7,070			-	No proposed changes
Art and Music	-	-			-	
Vocations & Technology	127,755	127,510			(245)	Tech./Engineering Rooms increased 10 sf; Automotive Collision Rpr reduced 65 sf; Business Office Tech. reduced 5 sf; Carpentry reduced 100 sf; Cosmetology reduced 5 sf; Culinary Arts increased 60 sf; Design & Visual Communications reduced 50 sf; Early Childhood Ed. increased 15 sf; Electrical Tech. reduced 40 sf; Health Assisting reduced 40 sf; HVAC Tech. increased 5 sf; Metal Fab. reduced 30 sf; Plumbing & Pipefitting reduced 5 sf; Biotech. reduced 30 sf; Marketing increased 15 sf; Medical Assisting increased 20 sf.

odated January 2021	1			
Health and Physical Education	25,750	25,535	(215)	Gym reduced 365 sf; PE Alternatives increased 60 sf; Gym Storeroom increased 5 sf; Locker Rooms w/Toilets reduced 325 sf; Phys Ed Storage & Closets increased 420 sf; Athletic Director's Office increased 15 sf.
Media Center	5,455	5,460	5	Media Center/Reading Room increased 5 sf
Auditorium / Drama	10,505	10,540	35	Auditorium increased 30 sf; Stage increased 5 sf.
Dining and Food Service	13,180	13,180	-	Cafeteria/Student Lounge/Break-out increased 20 sf; Chair/Table Storage increased 5 sf; Scramble Serving Area increased 90 sf; Kitchen reduced 115 sf.
Medical	1,340	1,325	(15)	Medical Suite Toilet reduced 5 sf; Nurses' Office reduced 15 sf.
Administration and Guidance	8,655	8,630	(25)	Conference Room reduced 15 sf; Teacher Work Room reduced 10 sf.
Custodial and Maintenance	4,150	4,175	25	Receiving & General Supply increased 14 sf; Storeroom increased 11 sf.
Other	1,900	1,870	(30)	Adult Ed Offices & Storage reduced 5 sf; Superintendent's Office reduced 5 sf; Business Office Suite, HR reduced 20 sf.
Total Building Net	257,750	257,315	(435)	
Non-			· · · ·	
Programmed Vocational Offices	2,560	2,936	376	
Unoccupied MEP/FP	10,280	10,562	282	
Unoccupied Closets, Supply Rooms & Storage	725	774	49	
Toilet Rooms	4,375	4,359	(16)	
Circulation	77,430	69,739	(7,691)	
Remaining	33,510	40,945	7,435	
Total Gross	386,630	386,630	-	
Grossing Factor	1.50	1.50	0	

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Updated space summary and signed certification that reflects the current design	
<ul> <li>Comparison of the current design with the final educational program, and confirmation that there are no variations. If there are variations, the written summary must address the following:</li> </ul>	
<ul> <li>Explanation of deviations within the space summary from the Project Funding Agreement. MSBA will either:</li> <li>MSBA accepts this variation to the approved project with no further action.</li> <li>Prior to the MSBA accepting this variation to the project, the Designer must describe in detail the reason for the change.</li> </ul>	The submission indicates minor deviations of square footages were made to accommodate program layouts and general coordination of MEP/FP and Structural systems. In the response to these review comments, please confirm that all spaces will conform to MSBA's minimum/maximum space guidelines. The MSBA will continue to monitor any areas in excess of the agreed upon GSF at PFA and may consider deviations over guidelines as ineligible at PFA Bid Amendment. Design Team Response: Confirmed & Acknowledged.
<ul> <li>The MSBA considers that deviations included changes in the size of a specific space, program area total nsf, space location, surrounding adjacencies of a space and/or the intended room purpose:         <ul> <li>The submittal must clearly call out deviations to location and surrounding adjacencies using redlines or "clouding".</li> <li>The explanation should clearly identify the basis of the change identifying both architectural and/or programmatic reasons.</li> <li>If the basis of the change is programmatic, the</li> </ul> </li> </ul>	
submittal should include a red-lined version of the educational plan included in the Project Funding Agreement.	
• Regarding DESE approved SPED Spaces:	
<ul> <li>Include a copy of the most recent letter from DESE approving the current proposed SPED spaces</li> </ul>	
$_{\odot}$ Confirm that the DESE approved SPED spaces have	
not deviated, using the definition above; or,	
<ul> <li>If the District wishes to submit a change to its DESE approved submittal, it must a) confirm that all changes to SPED spaces are final; b) provide a new SPED submittal in the original submittal format (described in Module 4 Schematic Design Section 4.1.1 and Mod 4</li> </ul>	
Appendix 4B) clearly noting any changes with clouded floor plans and red-lined narratives and tables; and c) indicate how the project schedule can accommodate a potential DESE resubmittal and approval. Please provide a separate package for changes to DESE	
<ul> <li>approved SPED spaces.</li> <li>If the District chooses not to change from the DESE approved submittal it should explain when and how the spaces will be returned to the approved size, configuration and location.</li> </ul>	

puate	ed January 2021	
•	Regarding DESE Approved Public Day Education Spaces:	
	<ul> <li>Indicate "Not Applicable" if the project does not</li> </ul>	
	<ul> <li>include DESE approved Public Day Education spaces.</li> <li>If applicable, confirm that the DESE approved Public</li> </ul>	
	Day Education spaces have not deviated, using the definition above; or,	
	<ul> <li>If the District wishes to submit a change to its DESE approved submittal, it must a) confirm that all changes to Public Day Education spaces are final; b) provide a new submittal in the original submittal format, noting any changes with clouded floor plans and red-lined narratives and tables; and c) indicate how the project schedule can accommodate a potential DESE resubmittal and approval. Please provide a separate package for changes to Public Day Education Changes</li> </ul>	
	<ul> <li>Education Spaces.</li> <li>If the District chooses not to change from the DESE approved submittal it should confirm that the supervise the supervise supervise supervise supervises.</li> </ul>	
	the spaces are the same or explain when and how the spaces will be returned to the approved size, configuration and location.	
•	Regarding DESE approved Chapter 74 Program Spaces:	
	<ul> <li>Indicate "Not Applicable" if the project does not include DESE approved Chapter 74 Spaces.</li> </ul>	
	<ul> <li>If applicable, confirm that the proposed Chapter 74 spaces conform to the current DESE Chapter 74 manual for Vocational Technical Education Programs.</li> </ul>	
	<ul> <li>Include a copy of the most recent letter from DESE approving the current proposed Chapter 74 Program spaces.</li> </ul>	
	<ul> <li>If applicable, confirm that the DESE approved Chapter 74 Program spaces have not deviated, using the definition above, or;</li> </ul>	<i>In the response to these review comments, please confirm that all vocational Chapter 74 spaces are within Chapter 74 guidelines.</i>
	<ul> <li>If the District wishes to submit a change to its DESE approved submittal, it must a) confirm that all changes to Chapter 74 Program spaces are final; b) provide a new submittal in the original submittal format, noting any changes with clouded floor plans and red-lined narratives and tables; and c) indicate how the project schedule can accommodate a potential DESE resubmittal and approval. Please provide a separate package for changes to the Chapter 74 Programming.</li> </ul>	Design Team Response: Confirmed.
	<ul> <li>If the District chooses not to change from the DESE approved submittal it should explain when and how the spaces will be returned to the approved size, configuration and location.</li> </ul>	

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6A.3.3 Project Approvals

Comments

Jpdate	d January 2021	
•	Describe the status of the following approvals. In	
	addition, provide the status of any other state or	
	federal approval not listed below (the following list is	
	not a comprehensive itemization of required state	
	approvals; other requirements may apply, and some	
	items listed below may not be applicable to this	
	project). Provide a copy of the appropriate application	
	forms and/or approval letters where applicable.	
	Indicate "Not Applicable" where appropriate and	
	describe why each item is not applicable. For each	
	agency approval required for this project, indicate the	
	date when approval was received. All required	
	approvals should have an associated approval date	
	indicated in the 90% CD submission and prior to	
	advertising for bids. Confirm that the required	
	approvals are coordinated with the OPM's project	
	schedule.	
	◦ DESE – Special Education approval by Department of	
	Elementary and Secondary Education	
	<ul> <li>MHC – Project Notification Form and approvals by MA</li> </ul>	
	Historical Commission	
	• OIG - Construction Manager at Risk approval by the	
	Office of Inspector General	
	$\circ$ Executive Office of Energy and Environmental Affairs	
	/ EEA:	
	MEPA - MA Environmental Policy Act by Energy	
	& Environmental Affairs:	
	ENF - Environmental Notification Form	
	EIR - Environmental Impact Report	
	<ul> <li>Article 97 Land Disposition Policy approval by</li> </ul>	
	Energy & Environmental Affairs	
	• MA DEP - Massachusetts Department of	
	Environmental Protection	
	$_{\odot}$ MA DOT - Massachusetts Department of	
	Transportation	
	• MA DPH - Massachusetts Department of Public Health	
	•	
	• EPA – NPDES National Pollutant Discharge Elimination	
	System Notice of Intent approval by the US	
	Environmental Protection Agency (or indicate as "by	
	GC/CMR")	
	$_{\odot}$ MAAB - Accessibility variances by MA Architectural	
	Access Board	
•	Confirmation that the Project has undergone review	
	and obtained all necessary approvals by any	
	departments or Commonwealth agencies required by	
	law to review the Project, including but not limited to	
	the approvals listed above. Attached such	
	• •	
	documentation letters evidencing such reviews and	
	approvals. In accordance with the Project Funding	
	Agreement ("PFA") Section 4.12, the District must	
	obtain such reviews or approvals prior to construction	
	bids solicitation.	

•	For any required state reviews or permits for which approval has not been obtained as of the Design Development submission date, provide a status update including actions taken to date and actions planned to obtain the required state reviews and permit approval(s) in order to comply with the PFA Section 4.12 and maintain the projected schedule milestones listed in the OPM Deliverables.	
•	List all target dates for all local zoning approvals, testing and permits.	
•	Provide a certification that all applicable utility officials have been contacted by the Designer regarding each basic utility connection.	

6A.3.4 Cost Estimates		Comments
•	Designer's construction cost estimate using the Uniformat II Classification to Level 3, Showing unit rates and quantities; with escalation projected to the mid-point of construction AND;	
•	Designer's construction cost estimate using CSI MasterFormat 6-digit format to Level 3 and MGL c.149 s 44F (filed sub-bid) format showing unit rates and quantities; with escalation projected to the mid-point of construction.	

	6A.3.5 Drawings (developed to Design Development progress level)	Comments
•	Half-size drawings only. Confirm that text, symbols, shading and all drawings content are legible.	Due to the current COVID-19 situation, hard copies were not provided. MSBA may request hard copies, at a later date, for record. Design Team Response: Acknowledged
•	If applicable, include early bid package contract documents in the submittal to show a complete project.	Although there are two early bid packages, it appears that copies of them were not included in the submission. Copies of early bid packages should be included in future submissions. Design Team Response: The early bid packages are schedule to be issued following 60% CD submission. When available copies will be provided.
•	Cover Sheet showing a drawing list and a locations map (the project title should be visible when the drawings are rolled)	
•	Sheets containing all symbols, abbreviations and notes applicable to each discipline	
•	Site and Utility drawings should show the following:	
	<ul> <li>Proposed work layout</li> </ul>	A proposed work layout is not included. This should be included in future submissions. Design Team Response: Acknowledged
	<ul> <li>Existing and proposed contours</li> </ul>	
	<ul> <li>Building locations fixed and referenced from main survey baseline</li> </ul>	It appears that the building is not located from a main survey baseline. Suggest including a location reference for clarity.

d January 2021	Design Team Response: Acknowledged
<ul> <li>Floor elevations at each entrance/exit and key exterior grades at perimeter showing drainage away from the building</li> </ul>	
○ Site Benchmarks	
◦ Boring locations	
<ul> <li>Retaining walls</li> </ul>	
<ul> <li>All utilities existing and proposed, indicating location, elevation, composition and size e.g., gas and electric utility providers</li> </ul>	
<ul> <li>Roads, laid out parking areas, walks, recreation areas, terraces and other site improvements</li> </ul>	
$\circ$ Plant materials with preliminary schedule	
Architectural drawings showing the following:	
<ul> <li>Demolition drawings</li> </ul>	Demolition drawings are not included. It is not clear if this is part of the early bid package. Demolition drawing should be included in future submissions.Design Team Response: The existing school will be demolished in its entirety. The Design Team will not be providing any selective demolition drawings.
	For bidding purposes Construction Manager's demolition package will include existing blueprints of the building in addition to the following specification sections:
	Section 022400, Hazardous Materials Report Section 024100, Demolition Section 024113.23, Utility Demolition Section 028213, Asbestos Abatement
	The demolition and abatement sub-contractors shall be required to attend a walkthrough of the existing building prio to bidding.
	Landscape Demo and Site Preparation Plans, which were include in the Design Development Submission, indicate building removal. The Geotechnical Report indicates requirements for below grade existing construction removal.
$_{\odot}$ Mobilization and enabling works	Not included. It is not clear if this is part of the early bid package. This should be included in future submissions. OPM Response: Acknowledged.
$\circ$ Floor Plans (minimum 1/8" = 1'-0" before reduction)	
<ul> <li>Internal partitions; appropriate thickness and dimensions to fix basic organizations; indicate fire rated partitions and smoke partitions</li> </ul>	
<ul> <li>Key plans/overall plans where required</li> </ul>	
<ul> <li>Building perimeter with exterior wall thicknesses and overall dimensions</li> </ul>	
○ Structural grid	
• Mechanical and electrical systems plan requirements	

	<ul> <li>Building core; elevators, stairs, shafts, public toilets, with dimensions</li> </ul>	
	◦ Door swings	
	<ul> <li>Finish floor elevations coordinated with exterior grade elevations at all interior to exterior transitions</li> </ul>	<ul> <li>Not included. This should be reviewed and coordinated for future submissions.</li> <li>Design Team Response: Landscape's Site Grading Plans, provided in the Design Development Submission, indicate spo grade elevations at each exterior door which are set to provide accessibility to finish floor at grade levels. To reduce potential mathematics errors during construction, Architectural drawings set the first floor at elevation 100'-0".</li> <li>A note will be added to Architectural floor plans indicating that the 100'-0" elevation is equal to elevation 164'-0" as shown on Landscape drawings.</li> </ul>
	o Built-in furniture	
	<ul> <li>Kitchen equipment</li> </ul>	
	<ul> <li>Furniture layout concept drawings</li> </ul>	
•	Large scale plans showing key areas e.g., lobby, special spaces. Indicate floor surface materials (minimum $1/4'' = 1'-0''$ before reduction)	Not included. This should be reviewed and included in future submissions. Design Team Response: Large scale plans will be added, as needed, for areas requiring additional detailing.
•	Roof plans showing the following:	
	<ul> <li>Proposed systems type</li> </ul>	
	<ul> <li>Pitch and drainage pattern</li> </ul>	
	<ul> <li>Roof drains, gutters and scuppers</li> </ul>	
	<ul> <li>Skylights, penthouses, major equipment, chimneys</li> </ul>	
	<ul> <li>Roof access and ladders</li> </ul>	
	○ Walk pads	
	<ul> <li>Rooftop Solar Readiness area, PV support and interconnection pathways</li> </ul>	
•	Building sections: One transverse and one longitudinal section. Indicate floor to ceiling heights and floor-to-floor heights. Label all spaces.	Building sections are included. However, floor to ceiling heights are not indicated. This should be updated for the next submission. Design Team Response: Ceiling height elevations are indicated on the Architectural Reflected Ceiling Plans.
•	Building sections updated and coordinated with plans and elevations	
•	Building elevations showing the following:	
	<ul> <li>Full height elevations including roof structures, e.g., mechanical equipment, chimneys, and penthouses</li> </ul>	Rooftop mechanical equipment is not shown on the exterior elevations. Please revise and include in the next submission. Design Team Response: Acknowledged.
	<ul> <li>Floor elevations, floor-to-floor height, and overall height related to benchmarks on site plans</li> </ul>	<ul> <li>Floor elevations are included. However, they are not coordinated with site grading. Please revise and include in the next submission.</li> <li>Design Team Response: To reduce mathematical errors while constructing the building, Architectural drawings set the first floor at elevation 100'-0".</li> </ul>

Jpdate	d January 2021	
		A note will be added to Architectural floor plans indicating that the 100'-0" elevation is equal to elevation 164'-0" as shown on Landscape drawings.
	$_{\odot}$ Windows, storefront, and curtain wall systems	
	<ul> <li>All columns located on a centerline and coordinated with the structural drawings</li> </ul>	
	<ul> <li>Materials indicating major control and expansion joints, and divisions of materials where required</li> </ul>	<ul> <li>Expansion joints, if required, are not included on the elevations. Please revise and include in the next submission.</li> <li>Design Team Response: There is one expansion joint that runs through the building. It is located between column lines Y.9 and AA. Structural Steel and Architectural walls, shown on the Design Development Set, respect this joint. We will add a note to the exterior elevations.</li> </ul>
	$_{\odot}$ 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	<i>Full height wall sections are included. However, the foundation conditions are not shown in the sections.</i> <i>Please revise and include in the next submission.</i> <b>Design Team Response:</b> This is intentional. For foundation wall and footing information, the Contractor is to refer to the Structural Drawings.
•	Interior elevations: Show at all spaces, e.g. library, lobby, and all typical spaces, e.g. classroom	
•	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.	
•	Schedules:	
	◦ Finishes	
	◦ Doors	
	◦ Windows	
	<ul> <li>Equipment schedules; e.g., food service, instructional media</li> </ul>	
	o Partitions	
•	Structural concepts	
	<ul> <li>Framing plans; typical floor framing, roof framing, special framing, show framing at major openings and member sizes</li> </ul>	
	$_{\odot}$ Floor and roof framing design loads	
	<ul> <li>Foundation plan showing sizes and typical component locations</li> </ul>	
	<ul> <li>All columns and beams are identified (with typical sizes shown) on column and beam schedules or on drawings</li> </ul>	
	$_{\odot}$ Preliminary details including floor and roof deck	
	<ul> <li>Details and locations for special and/or incidental structure features; e.g., tunnels, connecting bridges and unique architectural features</li> </ul>	
	<ul> <li>Connection to existing buildings at foundation and at key points at existing structure if applicable</li> </ul>	

	<ul> <li>All construction joint and expansion joint locations coordinated with structural drawings</li> </ul>	<ul> <li>Expansion joints, if required, do not appear to be included. Please review and, if applicable, include in the next submission.</li> <li>Design Team Response: There is one expansion joint that runs through the building. It is located between column lines Y.9 and AA. Structural Steel and Architectural walls, shown on the Design Development Set, respect this joint. We will add notes to future drawings.</li> </ul>
	<ul> <li>Schedules (with dimensions) for all lintels, beams, joists, and columns. Coordinate dimensions of all elements listed in the schedules with dimensions depicted on the plans</li> </ul>	
•	Fire Protection floor plans indicating wet or dry type systems, hose racks or cabinets and fire department tie-ins, including:	
	<ul> <li>Typical sprinkler head layout</li> </ul>	
	$_{\odot}$ Sprinkler piping mains and size	
	○ Sprinkler service location	
	◦ Fire pump where required	
•	Plumbing and sanitary systems:	
	<ul> <li>Floor plans indicating plumbing fixtures and special features rough-in locations, piping systems and principal items equipment approximate locations and sizes</li> </ul>	
•	Heating, Ventilating and Air Conditioning Systems:	
	<ul> <li>Piping systems locations and approximate sizes, air handling systems and principal equipment items such as compressors or cooling towers</li> </ul>	
	<ul> <li>Mechanical rooms and fan rooms space requirements and locations. Indicate shaft requirements</li> </ul>	
	<ul> <li>Adequate ceiling heights exists at worst-case duct intersection</li> </ul>	
	<ul> <li>Ceiling diffusers/registers generally consistent with architectural reflected ceiling plan</li> </ul>	<i>Ceiling diffusers are not shown on the plans. This should be reviewed and included in the next submission.</i> <b>Design Team Response:</b> Acknowledged.
•	Electrical Systems:	
	<ul> <li>All services including those for special purposes shall be located and indicated</li> </ul>	
	<ul> <li>Light fixtures on electrical drawings generally consistent with architectural reflected ceiling plans</li> </ul>	
	<ul> <li>Switchgear and emergency generator</li> </ul>	
	<ul> <li>Electrical equipment locations are coordinated with site paving and grading</li> </ul>	
	<ul> <li>All motorized equipment is generally consistent with electrical drawings</li> </ul>	
	<ul> <li>All power equipment has electrical connections</li> </ul>	
	<ul> <li>Fire alarm system drawings showing all initiation and signaling devices, control panels, annunciator panels, etc.</li> </ul>	

$_{\odot}$ Communications drawings showing chases, major		
equipment locations and any special distribution		
requirements		

6A.3.6 Project Manual (developed to Design Development progress level)		Comments
•	If applicable, include early bid package contract documents in the submittal to show a complete project.	No early bid packages were included in this submission. It appears that early packages will be issued for Early Site Blasting and Foundation & Steel. Please provide this information in the next submission. Design Team Response: Acknowledged.
•	Outline Specifications (Short-Form / Preliminary Project Description; not full-length format) in the current CSI Master spec divisions.	Specifications were provided in Uniformat, and thus do not follow the CSI MasterFormat specification divisions. For future DD submissions, please provide specifications in outline specification format using CSI MasterFormat divisions. Design Team Response: Acknowledged. Prior to the Design Development Submission, the project team reviewed the specification format requirements with MSBA.
•	Geotechnical report including test boring hole locations and dates, soil investigation results including water levels, allowable solid bearing pressure, foundation type and footing and slabs bottom grades.	
•	Site work: clearing, drives, walks, parking areas, fences, excavation, backfill, planting, footings on earth, rock, piles, caissons, proposed bearing pressures, boring logs	
	<ul> <li>Foundation walls; concrete types, reinforcing, waterproofing type and extent</li> </ul>	Below-grade waterproofing types are not specified in the Project Manual. Please provide this information in the next submission. Design Team Response: Acknowledged.
	$_{\odot}$ Footing drains; type, drainage disposal	Information on footing drains is not included in the Project Manual. This should be reviewed and, if necessary, updated for the next submission. Design Team Response: Acknowledged.
	<ul> <li>Exterior Walls: superstructure, type, materials, brick type, alternate cladding, back-up materials, damp proofing material and extent, special features</li> </ul>	
	<ul> <li>Roof types, vapor barrier, insulation, flashings, all materials</li> </ul>	Information on roof type is included. However, types of supplementary components (types of insulation, flashings, etc.) are not specified. Please provide this information in the next submission. Design Team Response: Acknowledged.
	<ul> <li>Flashings; general types, all materials, weights, where each type is to be used</li> </ul>	<i>Flashing materials, weights and locations are not included in the Project Manual. Please provide this information in the next submission.</i> Design Team Response: Acknowledged.
	<ul> <li>Sheet metal; gutters, leaders, other uses, except flashing</li> </ul>	
	<ul> <li>Windows; general types, materials, sub-frames, finish, glazing, screens</li> </ul>	
	<ul> <li>Rough openings for all doors and windows coordinated</li> </ul>	

<ul> <li>Doors, exterior and interior; types and thicknesses and fire rating identified if applicable</li> </ul>	
<ul> <li>Steps, exterior; including platforms and landings' materials</li> </ul>	
<ul> <li>Stairs, interior; including platforms, landings, walls, materials and finishes</li> </ul>	
<ul> <li>Framing; wood, concrete or metal systems in accordance with general design</li> </ul>	
$_{\odot}$ Partitions; materials, thicknesses, finishes	
<ul> <li>Cabinet and casework; types and materials</li> </ul>	
<ul> <li>Food Service Equipment; provided equipment list</li> </ul>	
$_{\odot}$ Furring; lathing, plastering, materials and locations	Information on furring materials and locations is not included in the Project Manual. Please provide this information in the next submission. Design Team Response: Plaster is not anticipated as a material that will be used on the project.
<ul> <li>Insulation thermal; types, thicknesses, application methods and locations</li> </ul>	
<ul> <li>Acoustical treatments; types, thicknesses, application methods and locations</li> </ul>	Acoustical treatment thickness and application method. were not included in the Project Manual. Please include this information in the next submission. Design Team Response: Acknowledged.
<ul> <li>Interior finishes; materials for floors, walls, bases, wainscots, trim, ceilings, ceiling heights</li> </ul>	· · · · ·
$\circ$ Fire protection; standpipe systems, sprinkler systems, fire pumps and accessories	
<ul> <li>Water supply; source; main connection location will be made; type of pipe for service main; load requirements; load factors and pressures</li> </ul>	Information on the water supply is not included in the Project Manual. Please provide this information in the next submission. Design Team Response: Pressures and flows are determined by a flow test and connections are identified on the civil pla- Loads will be included in future submission.
<ul> <li>Sanitary sewers; sewage disposal system, pipe and other materials.</li> </ul>	Information on the sanitary sewer system is not include in the Project Manual. Please provide this information the next submission. Design Team Response: Acknowledged.
<ul> <li>Storm sewers; storm drainage disposal system (institution or local facility), pipe and other materials</li> </ul>	Information on the storm drainage system is not includ in the Project Manual. Please provide this information the next submission. Design Team Response: Acknowledged.
<ul> <li>Gas main; material, size, location. Interface with utility company.</li> </ul>	Information on the gas main is not included in the Project Manual. Please provide this information in the next submission. Design Team Response: Gas Main will be furnished and installed by Wakefield Gas and Light.
<ul> <li>Plumbing; systems such as wastes, vents, hot water, cold water, gas, air, oxygen, vacuum, main supply source, materials for each, water heaters, pumps, thermal insulation fixture quality, all special features</li> </ul>	
<ul> <li>Heating, ventilating and air conditioning; heating type and refrigeration plants, boilers and cooling equipment types and capacities, fuel, burner type, fuel storage, heaters, feed water pumps and heaters,</li> </ul>	

# Massachusetts School Building Authority

thermal insulation, heating medium type, supply and return piping, radiation, unit heaters, radiant heating, principal air conditioning equipment types, special features, supply, return and exhaust ductwork	
<ul> <li>Electrical work; service connection, location, institution or public utility, overhead or underground, transformers including type and location, conduit and wiring types, fixtures types, main switchboard location, 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</li> </ul>	
<ul> <li>Elevators, dumbwaiters and platform lifts; capacities, speed, travel in feet, landings, operation, controls, platform sizes, machine type and location, car and entrance finishes, signals</li> </ul>	<i>Elevator speed, operation, controls, platform size,</i> <i>machine type, car and entrance finishes and signals ar</i> <i>not included in the Project Manual. Please include this</i> <i>information in the next submission.</i> <b>Design Team Response:</b> Acknowledged.
$\circ$ Other built-in equipment, types and materials	
<ul> <li>All "Work by others" specifications coordinated</li> </ul>	The specification submitted is in Uniformat, and thus contained no "work by others" references. For future a submissions, please provide an outline specification us CSI MasterFormat divisions. Design Team Response: Acknowledged.
<ul> <li>Special features</li> </ul>	

	6A.3.7 Project Coordination	Comments
•	All room names and numbers are coordinated between all disciplines.	
•	The structural, mechanical, or other disciplines, do not conflict with architectural plans or specifications.	
•	The finish grade elevations coordinated between all disciplines.	
•	Civil earthwork grading and excavation plans are coordinated with architectural and landscape plans.	
•	Structural dimensions match Architectural drawings.	
•	Column orientation matches Architectural drawings.	
•	Column grid lines match Architectural drawings.	
•	Column and bearing wall locations match Architectural drawings.	
•	Column locations coordinated with all other disciplines.	
•	Seismic detailing coordinates with Architectural drawings.	Seismic bracing locations are shown on architectural floor plans but do not appear to be coordinated. Please review and coordinate for the next submission. Design Team Response: Acknowledged.
•	Beams and columns are not protruding horizontally and vertically into stairwells, and other interior spaces.	It appears that an open shaft is not indicated for stairwells shown on S1-1-3C and S1-1-3D. The structural beam layout at all stairwells should be reviewed and coordinated for the next submission. Design Team Response: Acknowledged.

puate	ed January 2021	It approve that an open shaft is not indicated for
•	Beams and columns are not protruding horizontally and vertically into stairwells, and other interior spaces.	It appears that an open shaft is not indicated for stairwells shown on S1-1-3C and S1-1-3D. The structural beam layout at all stairwells should be reviewed and coordinated for the next submission. Design Team Response: Acknowledged.
•	Verify modular dimensions at vertical masonry construction.	
•	Room wall/floor/ceiling construction coordinated with architectural finishes.	
•	Mechanical equipment power requirements and physical locations, including special information as to who mounts, connects, tests, etc.	
•	Verify potential spatial conflicts in mechanical equipment.	
٠	Equipment plan coordinates with architectural plans.	
•	All kitchen equipment with utility systems indicated.	
•	The Designer confirms that the project continues to comply with the MSBA High School Science Lab Guidelines and/or Recommendations of Best Practices for K-12 STEM learning Spaces.	

MSBA Design Dev. Review

COMMENTS ADDRESSED SINCE DD REVIEW

6B.2.1 – 04b

# 6B.2.1-04b MSBA COMMENTS ADDRESSED SINCE DD REVIEW

The following describes items addressed from MSBA's Review Comments from the previous Design Development Submission. Refer to Section 6B.2.1-04a, within this submittal, for a copy of MSBA's Design Development Review which follow up is addressed below.

#### 6A.2 OPM Deliverables

	MSBA's DD Review Comment	Current Status
Phasing	Not explicitly addressed. Please include this in the next submission.	OPM Response: Acknowledged, the CM is currently working to develop/refine project phasing.

#### 6A.2.2 Project Schedule

MSBA's DD Review Comment	Current Status
No MSBA Comments	

#### 6A.2.3 Project Scope and Budget

	MSBA's DD Review Comment	Current Status
Updated Project Budget Value Engineering	A total project budget form is included. However, it is not on MSBA's template. Please include this on the MSBA's template for the next submission. The submission indicates that the construction overage is being addressed	OPM Response: Acknowledged Team Response: Please see the DD package for a
Lingineering	through redistribution of Design & Pricing, Owner's and Construction Contingencies as well as potential value management items. At this early stage of design, it would appear premature to reduce contingencies before all value management options have been exhausted. The MSBA will continue to monitor the construction budget for conformance to the PFA throughout the design phase.	detailed description/justification of the budget shifts that were agreed upon by the entire project team including the Owner, both estimators, and the FFE/Technology consultants. Regarding design/pricing contingency: robust cost estimate reconciliation and value management processes involved a heavy level of scrutinization/understanding of the plans, providing the estimators with a greater sense of confidence in the development of the plans, and thus confidence in the design/pricing contingencies carried. Also please note the designer has provided

additional value management options that have	
not <u>yet</u> been taken per Owner's direction, but th	neir
cost is quantified for future phases if needed.	

## 6A.3 Designer Deliverables

	MSBA's DD Review Comment	Current Status
Interior Color Theory Statement	Included. The submission does not confirm if color and material selections have been presented to or approved by the District. Please confirm this in the next submission.	Interior Color Theory Statement provided in the 60% documents provides a sampling of the color selections that were made during made during an October 25, 2022 meeting with the district.
Security & Visual Access	The submission does not confirm if emergency medical personnel have been consulted. Please address this in the next submission.	The project has been reviewed by first responders. It is expected that additional meetings will be held in the next phase to review and finalize hardware.

#### 6A.3.2 Space Summary

	MSBA's DD Review Comment	Current Status
Explanation of Deviations within Space Summary	The submission indicates minor deviations of square footages were made to accommodate program layouts and general coordination of MEP/FP and Structural systems. In the response to these review comments, please confirm that all spaces will conform to MSBA's minimum/maximum space guidelines. The MSBA will continue to monitor any areas in excess of the agreed upon GSF at PFA and may consider deviations over guidelines as ineligible at PFA Bid Amendment.	Confirmed and acknowledged.
DESE Approved Chapter 74 Programs	In the response to these review comments, please confirm that all vocational Chapter 74 spaces are within Chapter 74 guidelines.	Our spaces remain in conformance with Chapter 74 Guidelines.

# 6A.3.3 Project Approvals

MSBA's DD Review Comment	Current Status
No MSBA Comments	

#### 6A.3.4 Cost Estimates

MSBA's DD Review Comment	Current Status
No MSBA Comments	

# 6A.3.5 Drawings

	MSBA's DD Review Comment	Current Status
Half-Size Drawings	Due to the current COVID-19 situation, hard copies were not provided. MSBA may request hard copies, at a later date, for record.	
Early Bid Packages	Although there are two early bid packages, it appears that copies of them were not included in the submission. Copies of early bid packages should be included in future submissions.	The first early bid package "Early Site Preparation" has not yet been released for bidding and is currently being reviewed. The second early bid package "Early Structure and Foundations" is still in production. Copies of both will be provided once the packages are complete.
Site & Utility – Proposed Work Layout	A proposed work layout is not included. This should be included in future submissions.	Limit of work lines are shown on both Civil and Landscape drawings
Site & Utility – Building Location Fixed	It appears that the building is not located from a main survey baseline. Suggest including a location reference for clarity.	Notes (General Note #1 on Architectural Plans) are included on both the Structural and Architectural drawings clarifying the relationship between civil sea level elevations and building elevations.
Architectural – Demolition Drawings	Demolition drawings are not included. It is not clear if this is part of the early bid package. Demolition drawings should be included in future submissions.	There is no selective demolition scope for this project. The existing building will be demolished in its entirety. As such no building demolition drawings will be issued.
		For bidding purposes the Construction Manager's demolition package will include existing blueprints of the building in addition to the following specification sections: Section 022400, Hazardous Materials Report Section 024100, Demolition Section 024113.23, Utility Demolition Section 028213, Asbestos Abatement
		The demolition and abatement sub- contractors shall be required to attend a

		walkthrough of the existing building prior to bidding.
		Landscape Demo and Site Preparation Plans indicate the building removal. The Geotechnical Report indicates requirements for below grade existing construction removal.
Architectural – Mobilization	Not included. It is not clear if this is part of the early bid package. This should be included in future submissions.	OPM Response: Acknowledged.
Architectural – Finished Floor Elevation Coordination with Site	Not included. This should be reviewed and coordinated for future submissions.	Landscape's Site Grading Plans indicate spot grade elevations at each exterior door, which are set to provide accessibility to finish floor at grade levels. To reduce potential mathematics errors during const ruction, Architectural drawings set the first floor at elevation 100'-0".
		General Note #1 on the Architectural floor plans indicate that the 100'- 0" elevation is equal to elevation 163.5' mean sea level which coordinates with the Landscape drawings.
Architectural – Large Scale Plans	Not included. This should be reviewed and included in future submissions.	Large scale plans of toilet rooms, stairs, and elevators are included in the 60% set. In addition, large scale plans of the shop classrooms are included for equipment layouts.
Architectural – Building Sections	Building sections are included. However, floor to ceiling heights are not indicated. This should be updated for the next submission.	Ceiling height elevations are noted on the Architectural Reflected Ceiling Plans.
Architectural – Building Elevations	Rooftop mechanical equipment is not shown on the exterior elevations. Please revise and include in the next submission.	The Building Elevations have been updated to show Mechanical Equipment.
	Floor elevations are included. However, they are not coordinated with site grading. Please revise and include in the next submission.	Architectural drawings set the first floor at elevation 100'-0" to reduce potential mathematical errors during construction.
		General Note #1 on the Architectural floor plans (and Structural floor plans) indicate that the 100'-0" elevation is equal to elevation 163.5' mean sea level which coordinates with the Landscape drawings.
	Expansion joints, if required, are not included on the elevations. Please revise and include in the next submission.	Elevations 1/A.2.1.5 and 1/A2.13 denote the 4" expansion joint which runs between column lines Y.9 and AA.
Architectural – Full Height	Full height wall sections are included. However, the foundation conditions are not shown in the sections. Please	Wall Section intentionally do not show foundation wall and footing conditions. All foundation wall and

Wall Sections	revise and include in the next submission.	footing information is found on the Structural drawings.
Structural – Expansion Joint	Expansion joints, if required, do not appear to be included. Please review and, if applicable, include in the next submission.	There is only one 4" expansion joint which runs between column lines Y.9 and AA. This can be seen in the floor plans.
HVAC – Ceiling Diffusers	Ceiling diffusers are not shown on the plans. This should be reviewed and included in the next submission.	Reflected Ceiling Plans have been further developed to include ceiling diffusers.

# 6A.3.6 Project Manual

	MSBA's DD Review Comment	Current Status
Early Bid Package Contract Documents	No early bid packages were included in this submission. It appears that early packages will be issued for Early Site Blasting and Foundation & Steel. Please provide this information in the next submission.	The first early bid package "Early Site Preparation" has not yet been released for bidding and is currently being reviewed. The second early bid package "Early Structure and Foundations" is still in production. Copies of both will be provided once the packages are complete.
Outline Specifications	Specifications were provided in Uniformat, and thus do not follow the CSI MasterFormat specification divisions. For future DD submissions, please provide specifications in outline specification format using CSI MasterFormat divisions.	Acknowledged, current specifications are in the CSI MasterFormat.
Foundation Walls	Below-grade waterproofing types are not specified in the Project Manual. Please provide this information in the next submission.	Refer to Specification Section 070001- Waterproofing, Dampproofing, and Caulking.
Footing Drains	Information on footing drains is not included in the Project Manual. This should be reviewed and, if necessary, updated for the next submission.	While the PVC piping is specified in the Civil sections, it will be duplicated in the plumbing specification for clarity in the next phase.
Roof Types	Information on roof type is included. However, types of supplementary components (types of insulation, flashings, etc.) are not specified. Please provide this information in the next submission.	Refer to Specification Sections 070002, 075400, 076100, 076200, and 077100 for roof related materials.
Flashing	Flashing materials, weights and locations are not included in the Project Manual. Please provide this information in the next submission.	Refer to Specification Section 076200-Sheet Metal Flashings and trim.
Furring	Information on furring materials and locations is not included in the Project Manual. Please provide this information in the next submission.	There is no plastering scope on this project. Refer to Specification Section 092110-Gypsum Board Assemblies for interior wallboard materials.

Acoustical Treatment Water Supply	Acoustical treatment thickness and application methods were not included in the Project Manual. Please include this information in the next submission. Information on the water supply is	Refer to Specification Sections 098120-Sprayed Acoustic Insulation and 098430-Sound Absorbing Panels. Refer to Specification Section 331000-Water Utilities
	not included in the Project Manual. Please provide this information in the next submission.	
Sanitary Sewer	Information on the sanitary sewer system is not included in the Project Manual. Please provide this information in the next submission.	Refer to Specification Section 333000-Sanitary Sewerage Utilities.
Storm Sewer	Information on the storm drainage system is not included in the Project Manual. Please provide this information in the next submission.	Refer to Specification Section 334000-Storm Drainage Utilities.
Gas Main	Information on the gas main is not included in the Project Manual. Please provide this information in the next submission.	The Gas Main will be furnished and installed by Wakefield Gas and Light. Refer to Specification Section 221123-Natrual Gas Piping for any other gas related materials.
Elevators	Elevator speed, operation, controls, platform size, machine type, car and entrance finishes and signals are not included in the Project Manual. Please include this information in the next submission.	Refer to Specification Section 140001-Elevators.
Work by Others	The specification submitted is in Uniformat, and thus contained no "work by others" references. For future DD submissions, please provide an outline specification using CSI MasterFormat divisions.	60% Specifications are formatted using CSI MasterFormat divisions.

# 6A.3.7 Project Coordination

	MSBA's DD Review Comment	Current Status
Seismic	Seismic bracing locations are shown on architectural floor plans but do not appear to be coordinated. Please review and coordinate for the next submission.	Seismic bracing locations have been coordinated and can be seen on Architectural and Structural drawings.
Beams & Columns Protruding at Stairs	It appears that an open shaft is not indicated for stairwells shown on S1-1-3C and S1-1-3D. The structural beam layout at all stairwells should be reviewed and coordinated for the next submission.	Structural drawings have been coordinated with the Architectural stair construction.