HILLSIDE ELEMENTARY SCHOOL

TOWN OF NEEDHAM
NEEDHAM, MASSACHUSETTS

60% CD MSBA COMMENTS & RESPONSE

JUNE 27, 2017

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District: Town of Needham
School: Hillside Elementary School
Submittal: 60% Construction Documents
Submittal Date: May 12, 2017
Review Date: May 16, 2017 – June 6, 2017
Reviewed by: STV Inc., K. Brown, William Cross, Greg Brunell and Richard Hudson

MSBA REVIEW COMMENTS:

The following comments[1] for the Construction Documents submittal are issued pursuant to a review of the project submittal document dated May 12, 2017, for the new construction of Hillside Elementary School, and presented as a 60% Construction Documents submission, as produced by Dore & Whittier Architects Inc., and its consultants. Certain supplemental components from the Owner's Project Manager (OPM) are included. The OPM is a town employee. Documents received at MSBA on May 15, 2017.

I. Summary Comments:

a. *The documentation has been developed to the 60% Construction Document stage and requires typical continued refinement and coordination to the next level of submission.*

b. *The Project Binder is well organized and relatively thorough in its presentation. A number of the OPM and Designer deliverables will require clarification and/or correction for the next submission. Specific review comments are noted below.*

c. *The Proposed Total Project Budget for this phase is within the Project Funding Agreement.*

d. *The 90% CD submittal to MSBA is scheduled for July 5, 2017. Please confirm in response to these comments.*

- **The 90% CD submittal to the MSBA is scheduled for July 12, 2017**

[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.

II. OPM deliverables: Unless specifically stated otherwise, the OPM deliverables are included in the submission and no response from the MSBA is 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 Summary Designer's cost estimate, based upon 60 percent progress documents. *Included. The OPM's cost estimate dated May 9, 2017 was prepared by Daedalus Projects Inc., The total construction cost of $41,980.858 was based on 90,079 gross square feet of project area. Please clarify the minor difference in area from that presented in the Project Binder Tab 7.3.2 Project Design & Final Space Summary. The project area is presented at 90,975 GFA.*
    - **This was a typographic error in the Daedalus Projects Inc. Cost estimate. The project area should have been updated to the 90,975 GFA number. This will be corrected in the 90%CD submission.**
- Value Engineering recommendations. *Three alternates with potential cost savings of between $510,000 (DPI Estimate) and $670,340 (PM&C) have been identified in Tab# 7.2.1B-1. The 60% CD estimate is below the project budget. The Design Team and OPM are recommending the alternates not be considered at this time. It was noted the alternates would be evaluated and prioritized with the PPBC – the District and Town of Needham at the 90% CD stage prior to the issuance of the Bid Documents. Adjustments will be made once the bids are received and reviewed.*
- Updated project budget. *It is the OPM's position that the project budget will not be updated until the construction bids are reviewed and accepted prior to the award of the construction contract. The project budget as of July 13, 2017 has been included in Tab # 7.2.1C-1.*
    - **The date noted above (July 13, 2017) is incorrect. The Project Budget submitted in Tab #7.2.1C-1 of the 60% Submittal to the MSBA was dated May 9, 2017**
- Updated project schedule. *Included in Project Binder Tab #7.2.1., dated May 9, 2017. Comments are as noted below.*
    - 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). *A detailed schedule has been provided indicating construction contract award on October 17, 2017, a construction duration of 424 days, substantial completion on June 3, 2019, occupancy on August 15, 2019 and project closeout/LEED Certification on December 31, 2019. Typically, LEED certification follows issuance of the Commissioning Agent's final certification and report that occurs ten months following the*

building's Substantial Completion, in this case that would be April 2020.Please review and revise the project schedule as appropriate.

- **A copy of the updated Project Schedule is included in Appendix II.a.1. The schedule has been updated to reflect the following changes:**
  - **The LEED Certification is extended to 4/24/2020 to allow for 10-months duration after substantial completion.**
  - **The submission of the 90% CD documents to MSBA has been reset to July 12, 2017, to allow for added review and approval time with PPBC.**
  - **The Project Bid Release date had been reset to 8/16/17 to permit the 35 day review and response period. Potential Addendum dates are also noted in the schedule if needed to incorporate Bid document adjustments to respond to the MSBA documents. The FSB bids are due 9/13/17 and the GC bids are due 9/27/17. Two and one-half weeks of float time are included after receipt of General bids prior to PPBC award on 10/16/17 to allow for final review and confirmation of the winning bid prior to award. Please note that the MSBA review times are designated as calendar days whereas the "durations" in the schedule are noted as working days.**
  - **MAAB waiver has been granted. Copy of the MAAB letter will be included within the 90% Cd submission.**

- As one of the milestones, the schedule is to state submission dates and estimated 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 or planned dates of approval which are required in order to maintain the planned bidding and construction schedule and milestones indicated therein. For required state reviews or permit approvals 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.

- A letter on District letterhead confirming that the Project has undergone review and obtained all necessary state reviews and 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. Attach such letter of documentation evidencing such state reviews and approvals. *The project has received its MHC "approval" letter dated January 14, 2016.*
    - **The Design Team has also submitted a MHC form for the residential home located at 609 Central Ave. This home was purchased in September 2016 (Deed was recorded in Book 34429, Page 443 on 9/1/16) to provide improved bus circulation on site and reduce the traffic on the adjacent neighborhood. A copy of the letter submitted to MHC is included in Appendix II.a.2 of this response. A copy of the MHC response will be sent to the MSBA upon receipt.**
- Identify any state reviews or permits for which approval has not been obtained as of the 60% Construction Documents submission date, and include in the District letter a status update including actions taken to date and actions planned to obtain the required approval(s) in order to comply with PFA Section 4.12. and maintain the projected schedule milestones listed in OPM Deliverables.
- Section 4.12 of the Project Funding Agreement (the "PFA"), executed between the District and the MSBA dated January 17, 2017 requires that each project successfully undergo review and obtain all necessary approvals "prior to the solicitation of construction bids, by any departments or agencies of the Commonwealth required by law to review such projects, including, but not limited to, the Massachusetts Historical Commission, the Massachusetts Commission Against Discrimination, the Secretary of Environmental Affairs, and the Architectural Access Board." As part of the response to these 60% submission review comments, MSBA requires documentation that the District is in compliance with this requirement of the PFA.

b. 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. *The schedule as presented does not meet the minimum required 35 day duration for review periods. The duration for the 60% CD's (Lines 12 & 13) totals 24 days – 14 days for MSBA review and 10 days for responses. The duration for the 90% CD's (Lines 29 &30) totals 24 days – 16 days for MSBA review and 8 days for responses. Consider revising the schedule to meet the minimum requirements noted above in the next submission and clarifying the impact to the overall project activities, durations and end dates.*

- **The updated schedule located in Appendix I.a.1**

c. Construction documents review for: *Included in Project Binder Tab# 7.2.2. Comments are as noted below.*

- Constructability. *A detailed constructability review log has been provided in Tab# 7.2.2A-1. The review of architectural and structural documentation reflects a mix of work in progress and completed items. Several items were added to the list and will require the Design Team's attention prior to the next submission. Please confirm compliance with all review comments as part of the response to these comments.*
  - **Design Team response to the OPM review comments are included in Appendix II.c.1 and II.c.2**

- Operability. *The operability review is included in Tab#7.2.2B-1*
- Bid-ability. *The bid-ability review in Tab# 7.2.2C-1 is presented as a general summary of the process and underscores the importance of completing the development of plans and specifications, completing the contractor pre-qualification process and having the permits in hand. Consider providing a more detailed review in the next submission.*
- Clarity. *The OPM indicates the Design Team has incorporated a clear and logical format as well as an easily cross referenced drawing sequence into the construction documents. The review is in Tab#7.2.2D-1.*
- Coordination. *The coordination review in Tab# 7.2.2E-1 notes the typical ongoing effort from DD through the current 60% CD phase. It also highlights recent plan changes not yet integrated into the documents. They include the Kindergarten exterior doors and the added Gymnasium Storage space. The exterior door change was approved by the local building commission limiting the occupancy of the four rooms to a maximum of 49 persons. Consider coordinating with the Code Summary GC1.00 and Code Plans GC1.10 in the next submission.*
  - **The Code Plans and Summary have been coordinated. The Design Team drawings now incorporate the gymnasium storage space and the revisions to the kindergarten doors.**

- Site access during construction. *A thorough summary of the site access is included in Tab# 7.2.2F-1.*

d. Commissioning consultants' review coordination: *Included in Project Binder Tab# 7.2.3. Rist Frost Shumway Engineering, PC have reviewed the HVAC, Electrical, Plumbing and Fire Protection drawings. Their detailed review comments are dated April 27, 2017. Please note that a statement was made indicating the Building Envelope review had not been completed as of the date of this submission. However, the section did include an enclosure commissioning report prepared by Building Enclosure Associates, Inc., dated May 9, 2017. Designer responses have not been included. Suggest clarifying the status of this review and provide responses in the next submission.*

- **Responses to the building systems and building enclosure commissioning agent comments are included in the Appendix II.d.**

- Incorporate Cx recommendations. *The A/E has provided responses to HVAC items H1- H26. A/E responses to Items H27 - H38 have not been provided. The A/E has provided responses to Electrical items E1- E8. A/E responses to items E9 – E18 have not been provided. The A/E has provided responses to Plumbing items P1- P5. A/E responses to items P6 - P15 have not been provided. Fire Protection comments FP1- FP2 have not been addressed. Consider addressing all open items in the next submission.*
  - **Responses to all items are included in the Appendix II.d.**

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

1. General requirements:

a. Confirmation that the Project team notified the Massachusetts Historical Commission of the Project as early in the planning phase as possible.

b. Confirmation that the Project has undergone review 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. Attachment to such letter of documentation evidencing such reviews and approvals. In accordance with Section 4.12 of the Project Funding Agreement, the District must obtain such reviews or approvals prior to the solicitation of construction bids. Submit updated work plan. *Included in Project Binder Tab# 7.3.1 with comments as noted. A number of key milestones vary from the dates presented in the OPM's Schedule referenced above. Consider Coordinating the dates in the Bidding & Negotiation Phase specifically the Addendum - line items 5.1, 5.3, 5.4 and the General Bids due date - line item 5.9.*

- **An updated WORK PLAN is included in the Appendix III.1.b.**

c. 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 basic design, and utility connection. *Included as noted.*

- *The updated environmental permitting assessment statement in Project Binder Tab# 7.3.1-3 confirms the building and paved areas of the project development respect the 25' and 50' wetland buffers determined under the feasibility study.*
- *The building code analysis was provided in Project Binder Tab# 7.3.6 and on drawings GC1.00 and GC1.10. Please note the total building area (90,367) identified on drawing GC1.00 differs from the total area (90,644) shown in the Project Binder. Suggest Correcting the numbering sequence on pages 7.3.6 -1 through 7.3.6 -15. Clarify and coordinate the discrepancy in area in the next submission.*
  - **The building fire area has been updated on sheet GC1.00 to coordinate with the revised code summary presented in the Project Binder.**

- *An updated MAAB/ADA analysis is provided in Tab# 7.3.6. As noted in Tab# 7.3.1-1 the Design Team will be requesting a variance from MAAB for the exterior stair leading from the parent drop-off zone down to the lower level entrance adjacent to the amphitheater. Please provide a more detailed explanation of the underlying reasons for the variance for the next submission, identifying any impact to the overall occupancy and egress. In addition, this issue was also addressed in the "Bid-Ability" Tab# 7.2.2C-1. It appears the MAAB and the Needham Commission on Disabilities are in support of the variance and the process should be complete prior to the issuance of the bid documents. Please clarify the waiver's final resolution and its impact on the project schedule if any.*
  - **A copy of the cover letter and documentation that was submitted to the MAAB is included in Appendix III.1.c. On June 7, 2017 we received written verification that the request to provide the exterior stairway was granted. We are expecting the written certified notice shortly and will forward a copy to the MSBA upon receipt. The resulting variance will have no impact on building occupancy or egress.**

- *A list of permits and milestones are included in Tab# 7.3.1-1.*

- *The Designer has certified the applicable local, state and utility companies have been contacted regarding the design of the project including utility service connections. The certification is included in Tab# 7.1.1-4.*

d. Submit an updated space summary and signed certification that reflects the current design. *Included in Project Binder Tab# 7.3.2 with the following comments:*

Spaces	PFA Space Summary	DD Space Summary	60% CD Space Summary	90% CD Space Summary	Difference to PFA	Comments
Core Academic Spaces	30,750	30,750	30,750		-	No changes have been made since the PFA Agreement.
Special Education	6,594	6,594	6,610		16	This category increased 16 nsf at 60% CD.
Art and Music	2,546	2,585	2,585		39	This category has increased by 39 nsf at Design Development
Health and Physical Education	6,300	6,314	6,314		14	This category has increased by 14 nsf at Design Development
Media Center	2,605	2,605	2,605		-	No changes have been made since the PFA Agreement.
Dining and Food Service	6,790	6,825	6,825		35	This category has increased by 35 nsf at Design Development
Medical	510	510	510		-	No changes have been made since the PFA Agreement.
Administration and Guidance	2,320	2,320	2,320		-	No changes have been made since the PFA Agreement.
Custodial and Maintenance	2,029	2,029	2,029		-	No changes have been made since the PFA Agreement.
Other	-	-	-		-	No changes have been made since the PFA Agreement.
Total Building Net	**60,444**	**60,532**	**60,548**		104	This category has increased by 104 nsf since the PFA Agreement
Total Gross	**90,702**	**90,702**	**90,975**		273	This category increased 273 gsf at 60% CD
Grossing Factor	**1.50**	**1.50**	**1.50**		-	No changes have been made since the PFA Agreement.

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: *A Project Design and a Final Design Program Comparison are included in Tab#7.3.2.1 and 7.3.2.2. The totals deviate from those submitted for the PSR by approximately 1% on average.*

Alterations to Special Education Spaces are addressed in Project Binder Appendix A. They include the relocation of Speech/Language Office (formerly room #219) and the re-sizing of the Self-Contained ELC, Room #115. If the District wishes to proceed with these changes they will require review and approved by DESE. Please confirm that no further changes to DESE approved spaces are contemplated.

- *If the District chooses not to change from the DESE approved submittal provided in the Schematic Design submittal, it should confirm that the spaces are the same or explain when and how the spaces will be returned to the approved size, configuration and location.*

    - **The District has prepared a letter to the MSBA stating that changes to special education space have occurred since the signing of the Project Funding Agreement but no additional changes are anticipated through the completion of the project. Documentation of the changes were included with the Designer's 60% submission. A copy of the District's letter to the MSBA is included in Appendix III.1.e**

f. Construction cost estimate using the Uniformat II Classification to Level 3, The CSI MasterFormat 6-digit format to Level 3 and MGL c.149 s 44F (filed sub-bid) format. *The 60% Construction Document estimate dated May 8, 2017 prepared by PM & C is included in Project Binder Tab# 7.3.3. The total construction cost is $43,566,619. Two additional estimates are also included in this Tab: an undated Tech Budget Estimate and an FFE Cost Estimate dated May 3, 2017. The Tech Budget totals $783,088.40 which is $224,088.40 over the Technology Procurement Budget of $559,000. Please note the PM& C and Daedalus estimates exclude Division 27 Technology costs. The FFE estimate also excluded in the estimates referenced above totals $710,000. Consider reviewing the Technology and FFE estimates in the context of the overall Total Project Budget for the next submission.*

- **The design team, working with the, OPM has reviewed these FFE and Tech budgets in the context of the overall project. Additional value assessment will be pursued after the construction project bids are received and evaluated.**

g. Updated and expanded Basis of Design narrative description. *Included as noted. The basis of design narratives for the mechanical, electrical, plumbing and fire protection systems are included in Project Binder Tab# 7.3.4. An architectural narrative has not been provided. Please provide with the next submission.*

- **An architectural narrative of the updated and expanded Basis of Design will be included with the 90% Submission to the MSBA**

h. Interior Materials Color Boards with a legend identifying areas and their materials. *A color theory statement and a color board has been included in Project Binder Tab# 7.3.5. A materials legend has not been included. Please provide a coordinated legend on the color board with the next submission.*

- **A coordinated legend on the color board has been included with this response in Appendix III.1.h**

i. Colored interior elevations and perspectives of major and typical spaces. *Perspectives of the main entrance lobby, lower level entrance, media center, cafeteria, extended learning area, typical corridor and kindergarten room have been provided in Tab #7.3.5. Color interior elevations have not been provided. Consider completing the requirements of this section prior to the next submission.*

- **Color interior elevations have been developed for inclusion with the 90% submission**

j. Updated code analysis. *Refer to comments in paragraph III.1.b above.*

- **Refer to the responses in bulleted items to paragraph III.1.c above.**

2. Drawing Requirements (to 60 percent progress level):

- Cover sheet showing a list of all drawings, symbols, abbreviations, notes, locations map. *Included as noted. Drawing CC-L3.02 Plant Details and Plant List are included in the set of documents and not listed in the drawing index. Suggest correcting in the next submission.*
  - **The referenced drawing was erroneously included in the submission set.**

- 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. *Included as noted. Boring locations are included in the Project Manual Division 003100.*
  3. Landscaping and planting. *Included as noted. Suggest coordinating match line references on drawing L1.01. References to enlarged plan numbers 1 & 2 on L1.02 are reversed.*
     - **The match line references will be updated for the next submission.**
  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. *Included as noted. Existing houses to remain temporarily as field trailers during construction have been identified. Storage areas have not been identified. Suggest providing storage location in the next submission.*
     - **Suggested storage areas will be indicated for the next submission.**
  6. All existing foundations, obstructions and other physical characteristics of the site..
  7. Site survey.

8. *Civil/Traffic Drawing Comments as noted:*
    - *Drawing C000: Sedimentation and Erosion Control Note #20 references C4.00 & C4.01 for sediment control details. C400 is titled Civil Drainage Plan and C401 does not exist. Suggest correcting reference to C200 Erosion and Sedimentation Control Plan, Details C600 and C601 for next submission.*
        - **The references noted will be corrected for the next submission.**
    - *Drawing TR-1: Signage type text is unreadable for SP-2 through SP-10 and R7-8P. Suggest correcting for next submission.*
        - **The text for each sign type will be clarified for the next submission.**
    - *Drawing TR-2: Suggest confirming locations of all existing/new traffic signal devices as shown on plan and symbol list and delete new symbols not relevant to this project.*
        - **Symbols, legends, typical details, and abbreviation lists throughout the drawing set in multiple trades often include content that may not specifically be applicable to each project. In many cases, these legends are not pared down in order to prevent unintentional deleting of necessary project specific content, or in the event that the particular symbol or abbreviation may be used later in the project, either in CDs or in CA.**

- 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. *Included as noted.*
        - *Drawing GC1.00: Suggest confirming total building area (90,367). Appears to be in conflict with area shown in updated building code analysis in Project Binder Tab# 7.3.6 (90,644).*
            - **The building area has been coordinated.**
        - *Drawing GC1.10: Suggest confirming location of smoke resistant partition as noted in code legend. It does not appear to be located on plans.*
            - **There are no smoke barriers or partitions on the project. This symbol has been deleted.**

- *Drawing AG0.03: Suggest completing dimensioning of details H6 & H8 and coordinate depth of foundation in next submission.*
    - **Continued development of these details is ongoing and will be reflected in the next submission.**

- *Drawings A1.10, A1.20 & A1.30: Suggest completing room number tags and labels including stairs for next submission.*
    - **Some general or "main space" room tags will be added, but not all room tags will be included. The overall plans are intended more to orient users of the set, whereas the partial plan area sheets provide the technical contract document content.**

- *Drawing A1.50: Suggest completing plan details A13, C5, C7 and G7 for next submission.*
    - **Continued development of these details is ongoing and will be reflected in the next submission.**

- *Drawing A1.52: Suggest completing plan details E14, J11 and delete revision bubble on E4 for next submission.*
    - **Continued development of these details is ongoing and will be reflected in the next submission.**

- *Drawing A1.53: Suggest completing plan details K9 and K13 for next submission.*
    - **Continued development of these details is ongoing and will be reflected in the next submission.**

- *Drawing A1.54: Suggest completing plan details A8, A1, A14, D4, D8 and D11 for next submission.*
    - **Continued development of these details is ongoing and will be reflected in the next submission.**
- *Drawing AQ1.70: Suggest completing labeling of details for next submission.*
    - **Continued development of these details is ongoing and will be reflected in the next submission.**

2. Large scale floor plans where required. *Included as noted. Enlarged plans include the toilet rooms on drawings A1.70 -A1.72, the vestibules, waiting area, instrument storage on A1.73 and stairwells/elevator on A7.11 through A7.13.*
3. Roof plans including equipment. *Included as noted. Consider labeling roof top units on drawings A3.11 & A3.12 in next submission. Coordinate with mechanical drawings M3.11 &M3.12 and structural drawings S1.32 & S1.41.*
    - **Labeling of RTUs will be included in the next submission.**
4. Key plans. *Included*
5. Building Sections. *Included as noted. Suggest completing the cross references on drawings A5.10 – A5.12 to enlarged exterior wall sections.*
    - **Continued development of the building sections is ongoing and will be reflected in the next submission.**

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. *Included as noted. Suggest completing the detailing of exterior wall sections on drawings A6.10 - A6.18 for next submission.*
    - **Continued development of the wall sections is ongoing and will be reflected in the next submission.**

8. Exterior details, for roofing, flashing, expansion control and construction joints, waterstops and other details showing all conditions. *Included as noted. Complete section details on drawings A6.51-A6.62 for the next submission. With specific reference to the large roof overhangs additional detailing and coordination with the structural details is required in this next phase of development.*
    - **Continued development of these details is ongoing and will be reflected in the next submission.**

9. Door, window, entrance, and storefront, schedules, and details.
10. Vertical circulation plans, sections and details including stairs, elevators, conveyors, dumbwaiters. *Included as noted. Conveyors and dumbwaiters are not applicable to this project.*
11. Interior elevations of all significant and typical spaces. *Included.*
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. *Included as noted. Review the plans for overlapping notes and symbols. Consider correcting for next submission.*
    - **Noted; continued development of these sheets is ongoing and will be reflected in the next submission.**

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. *Included in Project Manual Volume 1 Division 003100 with comments as noted. With reference to the geotechnical report, drawing S0.01 Foundation Note #1 specifically identifies the geotechnical report prepared by HML Associates dated December 16, 2016 and revised on April 3, 2017. The geotechnical report included in Volume 1 appears to be an earlier version, dated November 18, 2016 and revised on December 16, 2017. Consider correcting this discrepancy and provide the most up to date document in the next submission.*
        - **The discrepancy will be corrected for the next submission.**

    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.
    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.
    4. Complete foundation wall elevation and typical sections, with reinforcing indicating location, dimensions and grades for all footings, steps and wall openings..
    5. Complete details and section with dimensions for all construction including expansion and construction joints, reinforcing and other embedded items. *Included as noted. Correct in next submission.*
        - *Drawing S0.02: Label detail #7.*
            - **Detail will be labeled for the next submission.**

        - *Drawing S0.04: Complete details #3 and #8.*
            - **Details may not be utilized for the final construction documents. Numbers will be deleted if those spaces are not used.**

- *Drawing S2.01: Label details #1-#12.*
    - **Typical details are labeled to indicate where or how they are applicable, such as for typical deck terminations or lintel schedules. Project and condition specific details are called out on the plans were applicable and as such, labels are not required to convey the condition or applicability.**

- *Drawing S2.02: Label details #1-#11.* **Same as for S2.01.**
- *Drawing S2.03: Label details #1-#3.* **Same as for S2.01.**
- *Drawing S3.01: Label details #1-#12.* **Same as for S2.01.**
- *Drawing S3.02: Label details #1-#12.* **Same as for S2.01.**
- *Drawing S3.03: Complete details #6, 7, 8 &12 and label all details.*
    - **Details are in progress. Additional development will be reflected in the next submission.**

- *Drawing S4.02: Label details #1-#8.* **Same as for S2.01.**

6. Schedules (with dimensions) for all lintels, beams, joists, and columns.
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.

- Fire protection drawings shall indicate the following:
    1. Standpipe systems, sprinkler systems, suppression systems, access panels, fire pumps, accessories, and piping. *Included as noted.*
        - *Drawing FP0.01: Detail #2 Sprinkler Control Assembly is unreadable. Suggest correcting overlapping notes and darken line weight.*
            - **The drawing will be clarified for the next submission.**

        - *Drawing FP0.01: Confirm building area – 90,967. Suggest coordinating area with updated building code analysis in Project Binder Tab # 7.3.6.*
            - **The building area will be corrected and coordinated with the code summary sheets for the next submission.**

- All piping, equipment, fixtures and devices shall be located and sized. *Included as noted. Consider sizing piping and complete the mains and runs on Drawings FP1.11, FP2.11, FP.2.12 and FP3.11 in the next submission.*
    - **Piping sizes are indicated on the riser diagram on sheet FP0.01. Continued development of the plans will be reflected in the next submission.**

2. 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. *Included as noted. Medical gas piping is not applicable to this project.*
    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.
    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. *Not applicable to this project.*
    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.
    13. Backflow preventers, and cleanouts.

- 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. *Included as noted.*
    - *Drawings M2.11, M2.12 and M2.31 – Suggest completing pipe sizing for the next submission.*
        - **Pipe sizing will be completed for the 90% submission.**
    - *Drawing M4.11 – Suggest completing schedules for next submission.*
        - **Schedules will be completed for the 90% submission.**
    - *Drawing M4.12 – Suggest correcting overlapping general notes for next submission.*
        - **The overlapping text will be corrected for the next submission.**
3. All systems shall be sized at all reductions and riser diagrams of piping and duct systems shall be indicated..
4. All directions of flow and pitch on piping, and direction of flow, volumes for duct systems shall be indicated..
5. All equipment shall have sufficient servicing and/or replacement space indicated on drawings..
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..
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. Included as noted. *Cooling towers are not applicable to this project.*
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. *Not included. See note above.*
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..

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. *Included as noted. The proposed systems for this project are all new.*

- 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..
  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.
  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..
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 (to 60 percent progress level):

1. 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. *The format included complies with the requirement.*
2. List all required filed sub-bids specification sections. *Filed sub-bid sections have been listed. Suggest correcting the inconsistencies in the labeling of the Part 1 General paragraph 1.01 required headings in the next submission. A number of sections are labeled "Filed Sub-bid Contract Required" and others are labeled "Filed Sub-bid Required".*
    - **This discrepancy will be corrected for the next submission.**

3. Provide a list identifying all proprietary items (if any) with an affidavit which shall indicate that an elected body of the district (school committee, city or town council, or selectmen, -but not 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. *Not included. Confirm that no proprietary items are considered, or provide the information as described above.*

- **Proprietary items are indicated in Section 01 10 00 Summary. An updated proprietary list will be approved by the Owner prior to the solicitation for bids.**

4. 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. *Division 01 General Requirements Section 01 23 00 Alternates - Three deductive alternates have been listed identified in Project Binder Tab# 7.2.1. They have not been approved to date.*
    - **Approval and prioritization of the bid alternates will be completed prior to solicitation for bids.**

5. Allowances are prohibited pursuant to M.G.L. c. 149, § 44G(A). *Not included.*
6. Unit price items, if permitted or ordered by the Owner, shall be properly described in the Specifications. *Division 0 Procurement and Contracting Requirements Section 00 43 22 Unit Prices Form lists twenty seven items in this section. This section has been coordinated with Division 01 General Requirements Section 01 22 00 – Unit Prices. Please confirm the items listed have been approved by the Owner. The unit priced items are to apply to change order work site related items. How will the unit priced items be applied to bid evaluations in order to prevent an opportunity for submission of excessive pricing? Consider if this is a "best practices" approach to use of unit pricing.*
    - **Unit prices will not be used for the evaluation of bids, only to execute changes during construction or to include a biddable quantity for unknow conditions. The finalized unit price categories will be approved by the Owner prior to solicitation for bids.**

7. 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.
8. 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.

9. Specify materials mined or manufactured in Massachusetts first and the United States of America second whenever possible.
10. Do not use general clauses intended to be all-inclusive in lieu of complete descriptions.
11. Do not duplicate standard requirements that are contained in the contract form.
12. 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.
13. Use the same term throughout for the same subject and the term shall be the same as that used on the drawings.
14. Do not use the term "etc." *The term has been used in approximately 60 locations throughout Volumes 1-3. Consider conducting a word search and correcting for the next submission.*
    - **We will continue to search and delete instances of "etc."**

15. Avoid such terms as "to the satisfaction of the Designer", "as directed by the Designer", "as approved" and "as required". *To the satisfaction of the Designer has been used in 2 locations, as approved in 16 and as required in over 300 locations throughout Volume's 1-3. Consider conducting a word search and correcting in the next submission.*
    - **The terms "as approved" or "as required", when qualified, are considered acceptable terminology, as in "install flashing membrane as required by membrane manufacturer" or "as required by [a referenced standard]". However, every effort will be made to remove the phrases where they terminate a sentence or clause, as in "Provide shims or blocking as required."**

    - **Where possible we've revised the term "to the satisfaction of…" and replaced with more objective requirements of the contract documents.**

16. Specify work in appropriate Sections according to local trade jurisdiction.
17. Avoid the use of symbols.
18. 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.

19. 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.
20. 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..
21. Do not specify that a product or system shall require prequalification for use prior to bidding..

4. Estimate and Analysis of Construction Cost:

a. Estimate and Analysis of Construction Cost. *A summary of the reconciled Design Team and OPM's estimates is included in the Project Binder Tab# 7.2.1.*

b. The Designer shall furnish a construction cost estimate, based on and current as of a date no earlier than 60% 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 construction cost estimate shall be prepared in Uniformat 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..

c. The date of the estimate shall be a date no earlier than 10 working days following the date of 60% Construction Documents.

d. The summary sheets shall be developed, which shall contain the following:

1) The date that the estimate was prepared. (Value Date).
2) The anticipated bid date. *Not included. Provide in next submission.*
   - **The estimate summary sheets will include this information for the next submission.**
3) The project and contract number. *Not included. Provide in next submission.*
   - **The estimate summary sheets will include this information for the next submission.**
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)..
8) The building cost (including fixed equipment)..
9) The estimated construction cost of each Phase of the work, totaled..
10) The costs of Item 1 and Item 2 work, as distinguished in the General Contractor's bid forms, shall be individually totaled..

5. Additional Findings / Comments:

a. *The fonts throughout the entire set of construction documents and more specifically the general notes tend to be small and light. Reducing the sheets to half-size sets may result in unreadable documents. Consider increasing the font size and weight to improve legibility.*
   - **The fonts, notes, and symbols used, when printed at full scale, are legible an in conformance with Massachusetts requirements. If required or requested, a full-scale drawing set could be provided for the next submission.**

END

MHC Letter II.a.1

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Hillside Elementary School

Location / Address: Potential future relocation to 585 Central Ave

City / Town: Needham, Ma

Project Proponent

Name: Town of Needham, c/o Steve Popper, Director of Design and Construction

Address: 500 Dedham Ave

City/Town/Zip/Telephone: Needham, MA 02492 (781) 455-7550 x315

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
Massachusetts School Board Authority	School reimbursement to Town of Needham MSBA Project # 201301990035

Project Description (narrative):

A new K-5 school is proposed on a site that will consist of the former Owen's Poultry Farm (585 Central Ave) and several adjacent residential properties including 559. 567, 573, 597, & 603 Central Ave, 45 Sunset Road and the additional property of 609 Central Ave.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

Yes. All of buildings with the exception of 609 Central Ave have been previously reviewed by MHC and found not to be included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth. A copy of this finding is included with this submittal.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

No, the project does not include the rehabilitation of any existing buildings

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Yes, the attached plans indicate a new, approximately 94,000 sq. ft. elementary school. The addition of the 609 Central Ave property to the site plan allows for improved site circulation and a reduction of bus traffic in the adjacent neighborhood.

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.
To the best of our knowledge there are no historic or archaeological properties known to exist in the proposed project area

What is the total acreage of the project area? 463,003 sq.ft. (10.63 acres)

Woodland	.65 acres	Productive Resources:	
Wetland	4.0 acres	Agriculture	3.4 acres
Floodplain	5.7 acres	Forestry	acres
Open space	9.9 acres	Mining/Extraction	acres
Developed	4.9 acres	Total Project Acreage	10.63 acres

*all figures are estimates

What is the acreage of the proposed new construction? 3.75 acres

What is the present land use of the project area?
609 Central Ave is a single family residential property, the tax assessor's card, site location plan, and photographs of the property are attached to this application

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: _____ Date: _____

Name: _____

Address: _____

City/Town/Zip: _____

Telephone: _____

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

January 14, 2016

Stephen Popper
Director of Design & Construction
Public Facilities Department
Town of Needham
500 Dedham Avenue
Needham, MA 02492

RE: Proposed Hillside School Site, 585 Central Avenue, Needham, MA; MHC# RC.59433

Dear Mr. Popper:

Thank you for submitting a Project Notification Form (PNF) for the project referenced above, which was received at this office on December 28, 2015. The staff of the Massachusetts Historical Commission (MHC) have reviewed the information submitted and have the following comments.

The proposed project consists of the construction of a new elementary school at 585 Central Avenue and the demolition of properties at 559, 567, 573, 597, and 603 Central Avenue and 45 Sunset Road. The information provided indicates that the project will use funding from the Massachusetts School Building Authority (MSBA).

Review of MHC's files indicates that the properties proposed for demolition are not included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth, nor listed in the National and State Registers of Historic Places. No further review by the MHC is required for the MSBA-funded project.

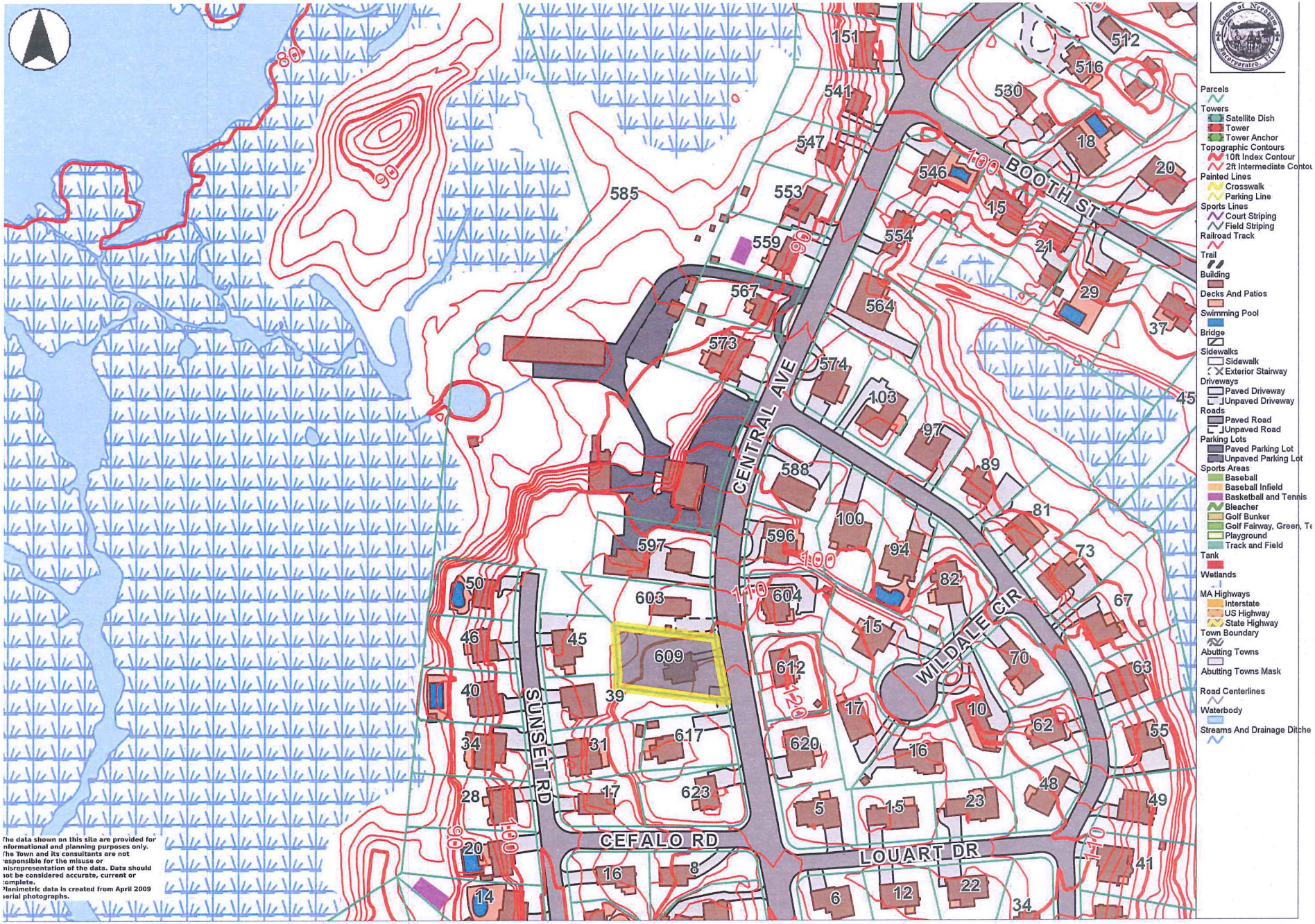
These comments are offered to assist in compliance with Massachusetts General Laws, Chapter 9, Sections 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00). Please do not hesitate to contact Linda Santoro of my staff, should you have any questions.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc



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609 Central Ave

Residential Property Record Card

PARCEL_ID:**199/108.0-0011-0000.0** MAP:**108.0** BLOCK:**0011** LOT:**0000.0** PARCEL ADDRESS:**609 CENTRAL AVE** FY:**2015**

PARCEL INFORMATION

Owner:
FONTECCHIO, LINO & ROSALIE, TRS.
609 CENTRAL AVENUE NOMINEE TRUST
Address:
115 CANTON TERRACE
WESTWOOD MA 02090

Use-Code:	104	Sale Price:	48,350	Book:	11808	Road Type:	T	Inspect Date:	11/22/1999
Tax Class:	T	Sale Date:	09/24/74	Page:	429	Rd Condition:	P	Meas Date:	04/29/1996
Tot Fin Area:	1665	Sale Type:	P	Cert/Doc:		Traffic:	H	Entrance:	C
Tot Land Area:	0.32	Sale Valid:	Y			Water:	PS	Collect Id:	CD
		Grantor:				Sewer:	SW	Inspect Reas:	A
Exempt-B/L%	/	Resid-B/L%	100/100	Comm-B/L%		Indust-B/L%	/	Open Sp-B/L%	/

RESIDENCE INFORMATION

Style:	2F	Tot Rooms:	9	Main Fn Area:	944	Attic:	N
Story Height:	1.75	Bedrooms:	4	Up Fn Area:	721	Bsmt Area:	1016
Roof:	G	Full Baths:	2	Add Fn Area:		Fn Bsmt Area:	
Ext Wall:	BK	Half Baths:		Unfin Area:		Bsmt Grade:	
Masonry Trim:		Ext Bath Fix:	1	Tot Fin Area:	1665		
Foundation:	CN	Bath Qual:	T			RCNLD:	148690
		Kitch Qual:	T	Eff Yr Built:	1999	Mkt Adj:	
Heat Type:	HW	Ext Kitch:		Year Built:	1949	Sound Value:	
Fuel Type:	O			Grade:	AG	Cost Bldg:	148,700
Fireplace:	1	Bsmt Gar Cap:		Condition:	A	Att Str Val1:	
Central AC:	N	Bsmt Gar SF:		Pct Complete:	100	Att Str Val2:	
		Att Gar SF:	220	%Good P/F/E/R:		/65//59	

Porch Type	Porch Area	Porch Grade Factor
E	357	

LAND INFORMATION

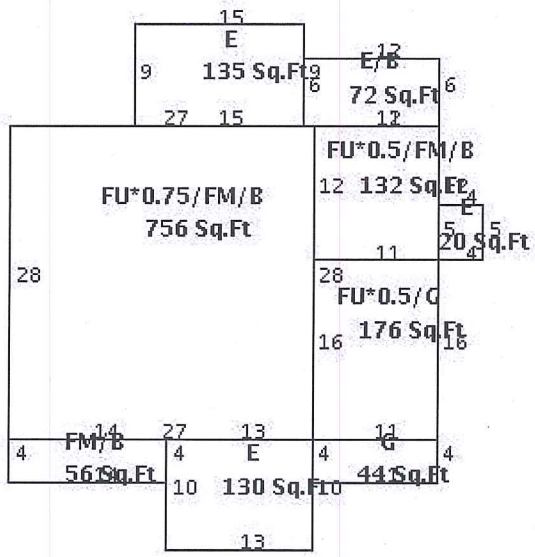
NBHD CODE: 203 **NBHD CLASS: 0** **ZONE: SRB**

Seg	Type	Code	Method	Sq-Ft	Acres	Influ-Y/N	Value	Class
1	P	104	S	10000	0.230		341,955	
2	R	104	A	4049	0.093		6,933	

VALUATION INFORMATION

Current Total:	497,600	Bldg:	148,700	Land:	348,900	MktLnd:	348,900
Prior Total:	495,700	Bldg:	123,100	Land:	372,600	MktLnd:	372,600

SKETCH



PHOTO

609 CENTRAL AVE

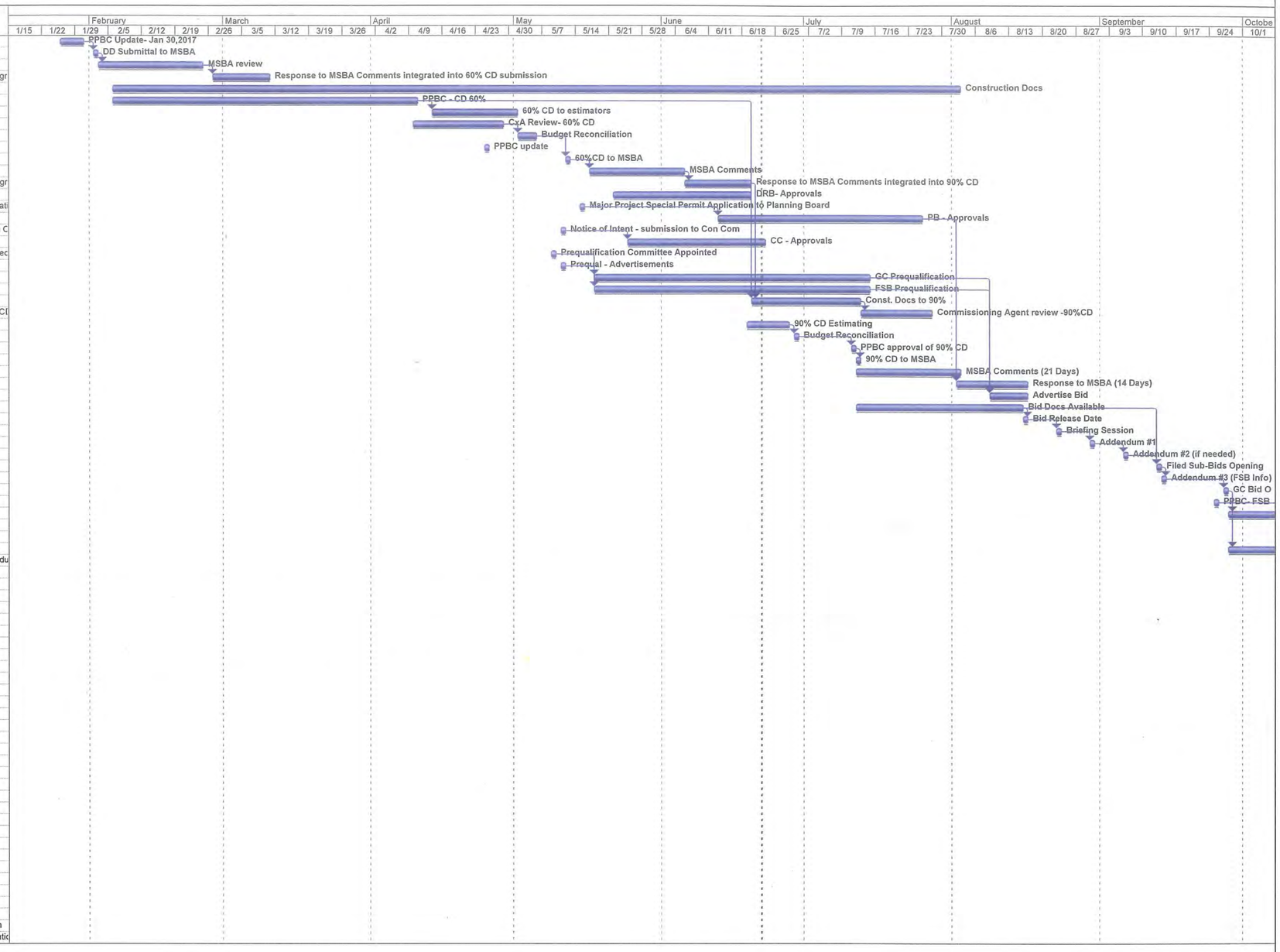
Updated Schedule II.a.2

Hillside Elementary School at Central Ave Project

MSBA # 201301990035

90% Construction Document Schedule
6/12/2017

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Final DD & Presentation to PPBC	3 days	Thu 1/26/17	Mon 1/30/17		PPBC Update- Jan 30,2017
2	Submit of Design Dev. to MSBA	1 day?	Thu 2/2/17	Thu 2/2/17	1	DD Submittal to MSBA
3	MSBA Review of Design Development	16 days	Fri 2/3/17	Fri 2/24/17	2	MSBA review
4	Response to MSBA comments	10 days?	Mon 2/27/17	Fri 3/10/17	3	Response to MSBA Comments integr
5	Accelerated Construction Documents	128 days?	Mon 2/6/17	Wed 8/2/17		Construction Docs
6	Construction Docs to 60%	46 days?	Mon 2/6/17	Mon 4/10/17		PPBC - CD 60%
7	60% CD set to Cost Estimators	12 days?	Fri 4/14/17	Mon 5/1/17	6	60% CD to estimators
8	Commissioning Agent Review- 60% CD	15 days?	Mon 4/10/17	Fri 4/28/17		CxA Review- 60% CD
9	Budget Reconciliation & VE	4 days?	Tue 5/2/17	Fri 5/5/17	8	Budget Reconciliation
10	PPBC Update	1 day?	Tue 4/25/17	Tue 4/25/17		PPBC update
11	60% CD Submit to MSBA	1 day?	Fri 5/12/17	Fri 5/12/17	9	60%CD to MSBA
12	MSBA review of 60%CD	14 days	Wed 5/17/17	Mon 6/5/17	11	MSBA Comments
13	Response to MSBA 60%CD comments	10 days	Tue 6/6/17	Mon 6/19/17	12	Response to MSBA Comments integr
14	Design Review Board & Signage Approval	21 days?	Mon 5/22/17	Mon 6/19/17		DRB- Approvals
15	Submit MPSP Application to PB	1 day?	Mon 5/15/17	Mon 5/15/17		Major Project Special Permit Applicat
16	Planning Board - Approvals	31 days?	Tue 6/13/17	Tue 7/25/17	15	PB - Approvals
17	Submit NOI to Conservation Commission	1 day?	Thu 5/11/17	Thu 5/11/17		Notice of Intent - submission to Con C
18	Conservation Commission - Approvals	21 days?	Thu 5/25/17	Thu 6/22/17	17	CC - Approvals
19	PPBC Appoint Prequalification Committee	1 day?	Tue 5/9/17	Tue 5/9/17		Prequalification Committee Appointed
20	Advertise Prequalification's in CR & NT	1 day?	Thu 5/11/17	Thu 5/11/17		Prequal - Advertisements
21	Prequalification of General Contractors	42 days?	Thu 5/18/17	Fri 7/14/17	20,19	GC Prequalification
22	Prequalification of Filed Sub bidders	42 days?	Thu 5/18/17	Fri 7/14/17	20	FSB Prequalification
23	Construction Docs to 90%	17 days	Tue 6/20/17	Wed 7/12/17	6,13	Const. Docs to 90%
24	Commissioning Agent Review - 90% CD	11 days?	Thu 7/13/17	Thu 7/27/17	23	Commissioning Agent review -90%CD
25	90% CD estimating	7 days	Mon 6/19/17	Tue 6/27/17		90% CD Estimating
26	Budget Reconciliation	1 day	Thu 6/29/17	Thu 6/29/17	25	Budget Reconciliation
27	PPBC CD update	1 day?	Tue 7/11/17	Tue 7/11/17	26	PPBC approval of 90% CD
28	90% CD Submittal to MSBA	1 day?	Wed 7/12/17	Wed 7/12/17	27	90% CD to MSBA
29	MSBA review of 90% CD	16 days	Wed 7/12/17	Wed 8/2/17		MSBA Comments (21 Days)
30	Response to MSBA 90% CD comments	11 days?	Wed 8/2/17	Wed 8/16/17	16	Response to MSBA (14 Days)
31	Advertise Bid in Cent. Reg. & NT	6 days?	Wed 8/9/17	Wed 8/16/17	21,22	Advertise Bid
32	Final Coordination of Bid Documents	25 days?	Wed 7/12/17	Tue 8/15/17		Bid Docs Available
33	Bid Release Date	1 day?	Wed 8/16/17	Wed 8/16/17	32	Bid Release Date
34	Briefing Session - GC & FSB	1 day?	Wed 8/23/17	Wed 8/23/17	33	Briefing Session
35	Addendum #1	1 day?	Wed 8/30/17	Wed 8/30/17	34	Addendum #1
36	Addendum #2	1 day?	Wed 9/6/17	Wed 9/6/17	35	Addendum #2 (if needed)
37	Filed Sub-Bids Opening	1 day?	Wed 9/13/17	Wed 9/13/17	32,36	Filed Sub-Bids Opening
38	Addendum with FSB results	1 day	Thu 9/14/17	Thu 9/14/17	37	Addendum #3 (FSB Info)
39	General Contractor Bids Due	1 day?	Wed 9/27/17	Wed 9/27/17	38	GC Bid Opening
40	PPBC update	1 day?	Mon 9/25/17	Mon 9/25/17		PPBC- FSB Bid Results
41	OPM & DWA review of bids	8 days	Thu 9/28/17	Mon 10/9/17	39	OPM & DWA review of bids
42	MSBA PFA Agreement update	36 days	Mon 10/16/17	Mon 12/4/17		MSBA -PFA Update
43	PPBC Contract Award	1 day?	Mon 10/16/17	Mon 10/16/17	40	PPBC Award of GC
44	Finalization of Construction Contract	13 days	Thu 9/28/17	Mon 10/16/17	39	contract finalization and signatures
45	Contract Notice of Award	1 day?	Tue 10/17/17	Tue 10/17/17	44	Contract Award- Construction Schedu
46	Construction-Schedule to be Finalized by C	432 days	Wed 10/18/17	Thu 6/13/19	45	Substantial Completion
47	Permits	10 days	Wed 10/18/17	Tue 10/31/17	45	Permits
48	Shop Drawings	45 days	Wed 10/18/17	Tue 12/19/17	45	Shop Drawings
49	Mobilize on Site	5 days	Wed 11/1/17	Tue 11/7/17	47	Mobilize on site
50	Site Preparation	25 days	Wed 11/8/17	Tue 12/12/17	49	Site Preparations
51	Site Utilities	30 days	Mon 10/30/17	Fri 12/8/17		Site Utilities
52	Foundations	30 days	Mon 11/27/17	Fri 1/5/18		Foundations
53	Steel Fabrication	40 days	Wed 12/20/17	Tue 2/13/18	48	Steel Fabrication
54	Steel Erection	30 days	Wed 2/14/18	Tue 3/27/18	53,52	Steel Frame
55	Concrete slabs	30 days	Wed 3/28/18	Tue 5/8/18	54	concrete slabs
56	Roof Insulation & Membrane	25 days	Wed 5/9/18	Tue 6/12/18	55	Roof Insulation & Membrane
57	Envelope framing & Exterior walls	50 days	Wed 5/9/18	Tue 7/17/18	55	Wall frame and finish
58	Window frames & Glass	50 days	Mon 4/30/18	Fri 7/6/18		Window Frames and Glazing
59	Interior Partition Framing	20 days	Mon 7/9/18	Fri 8/3/18	58	Interior Partition Framing
60	Rough MEP/FP/Data/Tel/Tech/AV	45 days	Mon 8/6/18	Fri 10/5/18	59	MEP/FP rough
61	Interior Drywall	35 days	Mon 9/17/18	Fri 11/2/18		Interior Drywall
62	Interior Finishes / Painting	45 days	Mon 11/5/18	Fri 1/4/19	61	Interior Finishes
63	Interior Flooring	21 days	Mon 1/7/19	Mon 2/4/19	62	Interior flooring
64	Cabinetry & built-ins	15 days	Tue 2/5/19	Mon 2/25/19	63	Interior
65	Kitchen Equipment Installation	20 days	Mon 3/4/19	Fri 3/29/19		kitchen Equipment
66	Finish MEP/ FP/Data/Tel/Tech/AV	15 days	Tue 2/5/19	Mon 2/25/19	63	Finish MEP
67	Finish Site work, Grading, Planting	50 days	Fri 3/1/19	Thu 5/9/19		Finish Site Work
68	Commissioning of Equipment	60 days	Tue 2/26/19	Mon 5/20/19	66	Construction Commissioning
69	Substantial Completion	1 day?	Fri 6/14/19	Fri 6/14/19	68,46	Substantial Completion
70	Playground Equipment Fencing	60 days	Fri 3/1/19	Thu 5/23/19		Playground Eq & Fencing
71	Punchlist	21 days	Mon 6/17/19	Mon 7/15/19	69	Punchlist
72	Move in & Setup	21 days	Tue 7/16/19	Tue 8/13/19	71	Move in & setup
73	Teacher setup & Training	9 days	Thu 8/15/19	Tue 8/27/19		Teacher setup & training
74	Start of School	1 day?	Wed 8/28/19	Wed 8/28/19		Start of School (TDC)
75	Labor Day Holiday	1 day?	Mon 9/2/19	Mon 9/2/19		Labor Day
76	Winter Commissioning	30 days	Mon 1/20/20	Fri 2/28/20		Winter Commissioning confirmation
77	Project Closeout- LEED Certification	225 days	Mon 6/17/19	Fri 4/24/20	69	Project closeout and LEED Certificatic



Project: 2017.06.12_Hillside School- S
Date: Thu 6/22/17

Task | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Milestone | Rolled Up Progress | Split | External Tasks | Project Summary | Group By Summary | Deadline

Hillside Elementary School at Central Ave Project

MSBA # 201301990035

90% Construction Document Schedule
6/12/2017

ID	Task Name
1	Final DD & Presentation to PPBC
2	Submit of Design Dev. to MSBA
3	MSBA Review of Design Development
4	Response to MSBA comments
5	Accelerated Construction Documents
6	Construction Docs to 60%
7	60% CD set to Cost Estimators
8	Commissioning Agent Review- 60% CD
9	Budget Reconciliation & VE
10	PPBC Update
11	60% CD Submit to MSBA
12	MSBA review of 60%CD
13	Response to MSBA 60%CD comments
14	Design Review Board & Signage Approval
15	Submit MPSP Application to PB
16	Planning Board - Approvals
17	Submit NOI to Conservation Commission
18	Conservation Commission - Approvals
19	PPBC Appoint Prequalification Committee
20	Advertise Prequalification's in CR & NT
21	Prequalification of General Contractors
22	Prequalification of Filed Sub bidders
23	Construction Docs to 90%
24	Commissioning Agent Review - 90% CD
25	90% CD estimating
26	Budget Reconciliation
27	PPBC CD update
28	90% CD Submittal to MSBA
29	MSBA review of 90% CD
30	Response to MSBA 90% CD comments
31	Advertise Bid in Cent. Reg. & NT
32	Final Coordination of Bid Documents
33	Bid Release Date
34	Briefing Session - GC & FSB
35	Addendum #1
36	Addendum #2
37	Filed Sub-Bids Opening
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58	Window frames & Glass
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64	Cabinetry & built-ins
65	Kitchen Equipment Installation
66	Finish MEP/ FP/Data/Tel/Tech/AV
67	Finish Site work, Grading, Planting
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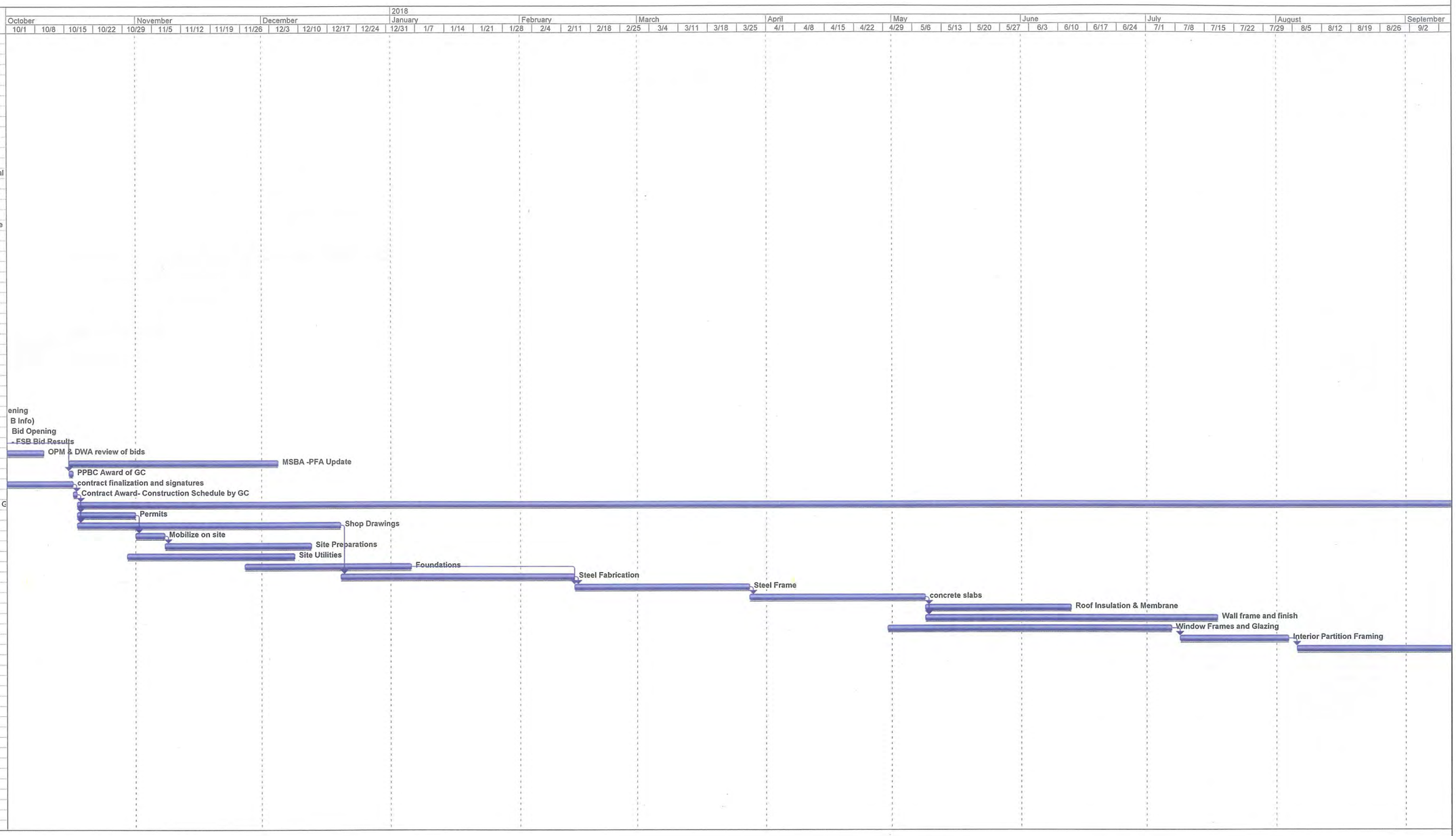
72	Move in & Setup
73	Teacher setup & Training
74	Start of School
75	Labor Day Holiday
76	Winter Commissioning
77	Project Closeout- LEED Certification



Project: 2017.06.12_Hillside School- S
Date: Thu 6/22/17

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

Hillside Elementary School at Central Ave Project
MSBA # 201301990035

90% Construction Document Schedule
6/12/2017

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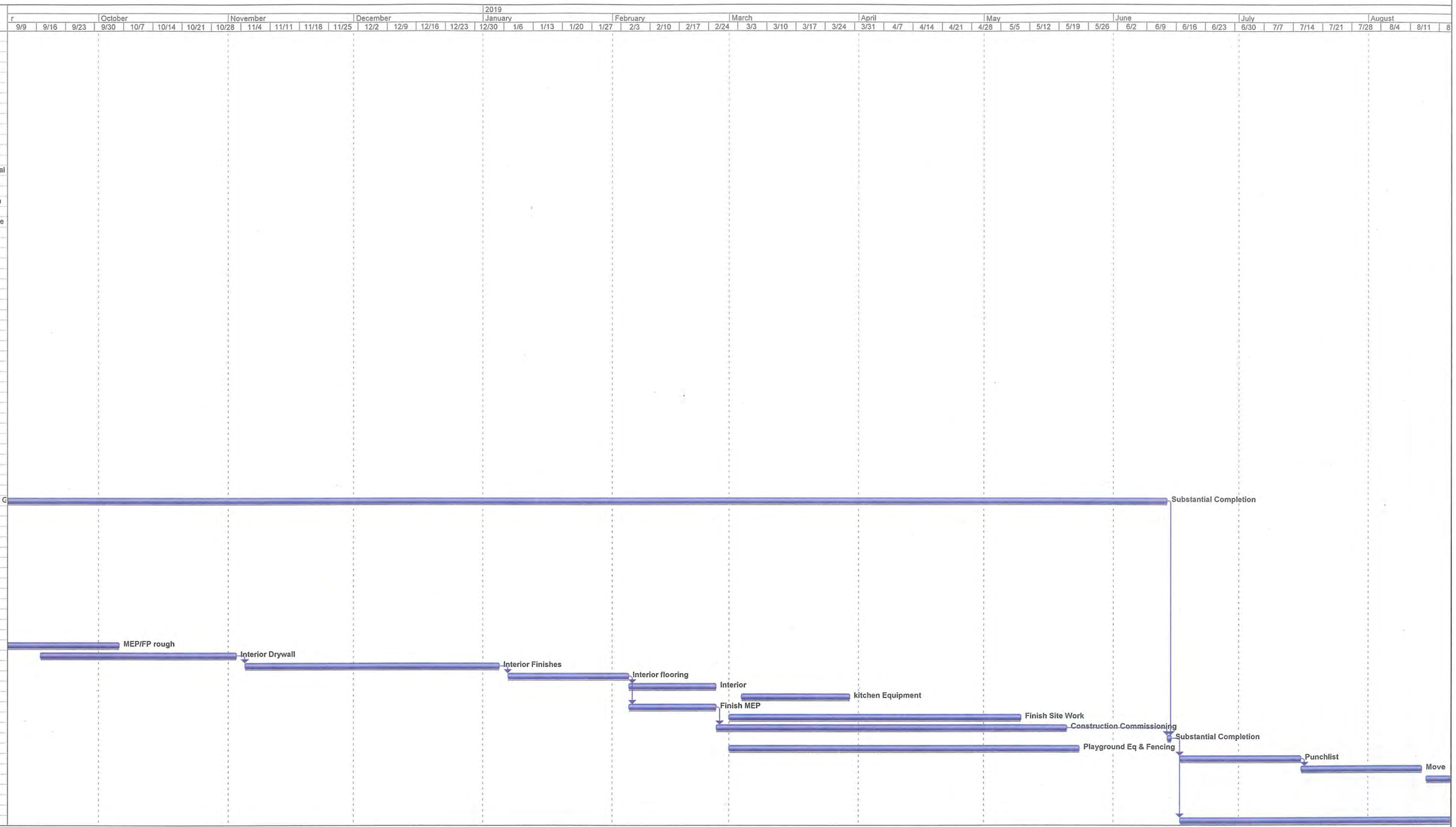

Project: 2017.06.12_Hillside School- S
Date: Thu 6/22/17

Task | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Milestone | Rolled Up Progress | Split | External Tasks | Project Summary | Group By Summary | Deadline

Hillside Elementary School at Central Ave Project
MSBA # 201301990035

90% Construction Document Schedule
6/12/2017

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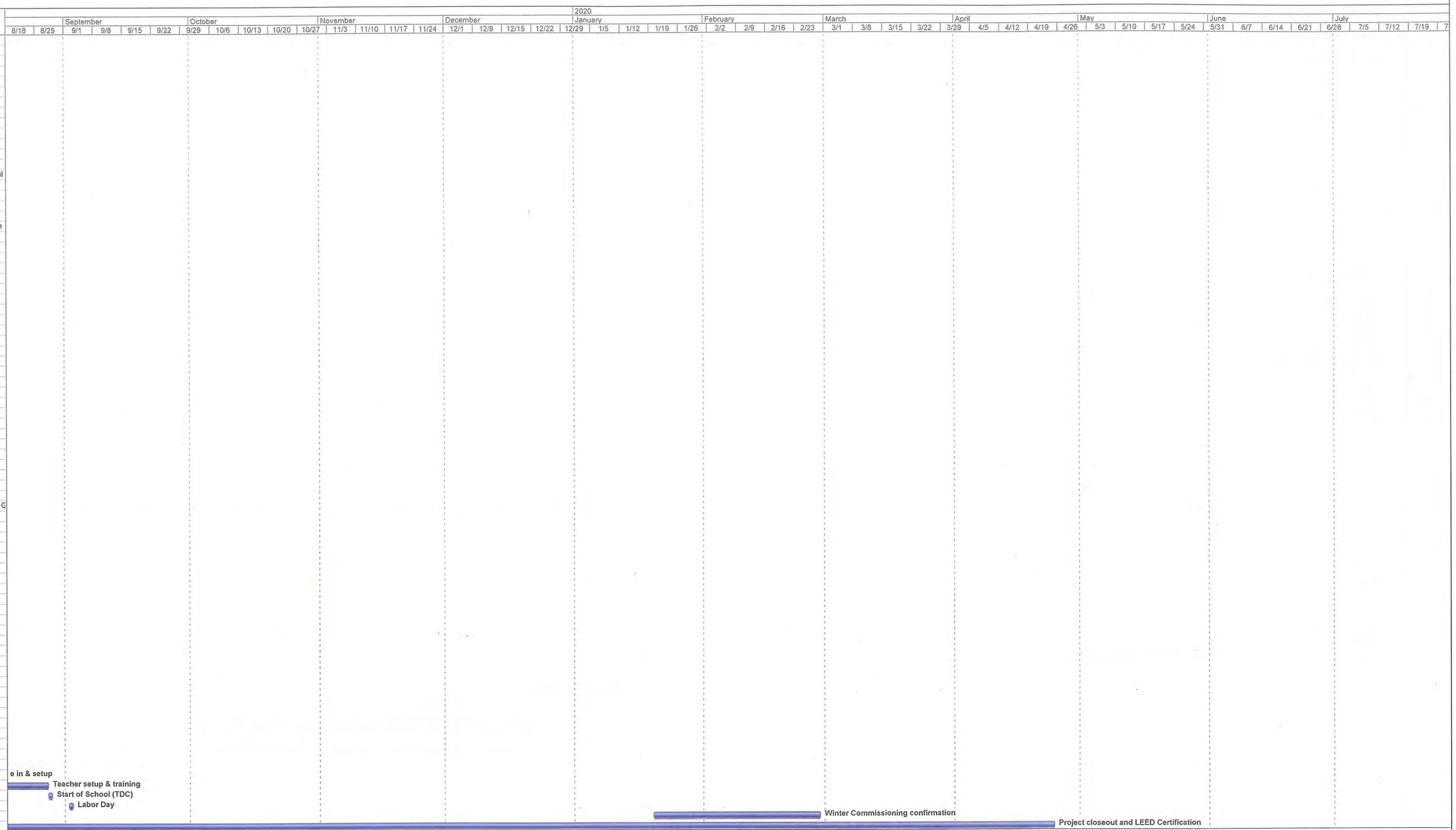

Project: 2017.06.12_Hillside School- S
Date: Thu 6/22/17

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
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OPM Review Comments II.c.1

Hillside Elementary School Project

Drawing Date: 4/14/2017

Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- Pricing Set

Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
DRAWINGS						
Cover Sheet	1	1/25/2017	OPM	The cover sheet should include the MSBA project No. 201301990035 and the Town of Needham Construction Project No. 18PFC 012B	Corrected for DD submission **(5/22) Town Contract and MSBA number added for 90% Pricing Set**	Add Construction Contract ID # 18PFC 012B
GC1.00	2	1/25/2017	OPM	Update Plumbing Fixture Schedule to include three (3) added staff toilets shown on dwgs	Corrected for DD submission	Complete
GC1.00	2.a	5/5/2017	OPM	Plumbing Fixtures -Include Showers on level 1	Showers have been included. Note that the fixture table has been updated to reflect all staff toilets designated as gender neutral as permitted by the newly adopted state plumbing code. Terminology and referecnes have been updated to reflect these new code provisions.	
GC1.00	2.b	5/5/2017	OPM	Accessibility- Note MAAB waiver for exterior stair	A comment related to the application for a varience has been included in the code summary. Once the varience is received, this comment will be updated accordingly.	
GC1.00	3	1/25/2017	OPM	Typo - "groupsin" should read "groupings"	Corrected for DD submission	Complete
GC 1.10	4	1/25/2017	OPM	Coordinate Fire Extinguisher locations with interior design and confirm recess wall cabinet locations and dimensions	FE locations on code plan are for general reference. Cabinet types and specific locations are shown on the floor plans.	Complete
GC 1.10	5	1/25/2017	OPM	show equation to determine occupancy (e.g. Rm size sf/ area per occupant = # Occupants)	Equations will be added in CDs prior to submission for permits	Complete
EX 1.01	6	1/25/2017	OPM	Existing Conditions plan must be updated with underlay showing modified grading and house removal that is now complete	An existing conditions plan will be provided when the updated survey is complete.	In process on 60% CD
CIVIL						
C 0.00	6.a	5/5/2017	OPM	Additional notes needed- (see markups) - R&D all Bit. Conc. Driveways - R&D Extg.Wood fence (45 Sunset) -Remove Extg 18" RCP& replace with 24" RCP 22. Houses at 45 Sunset and 609 Central Ave may be used in lieu of construction Trailer at the beginning of the project. Demolition and removal shall be done per GC's Project Schedule.	Notes and callouts were added to this sheet to R and D pavement, wood fence, 18-dia pipe (replaced with 24-dia pipe) on utility drawing and use 2 houses for construction administration during construction.	Coordinate with ConCom Permit Civil Drawings
C 1.00	7	1/25/2017	OPM	Review and approval req'd by Conservation Officer of Erosion Control and Sedimentation barrier. Locations in wetlands of concern. **Coordinate with Conservation Commission NOI.**	On-going discussions with Conservation about this project. Conservation is aware of erosion control line in wetland given disturbance when the farm was operational. Line will be adjusted after further Conservation discussions.	In Process on 60% CD

Hillside Elementary School Project

Drawing Date: 4/14/2017

Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- Pricing Set

Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
C 1.00	8	1/25/2017	OPM	relocate construction fence along Central Ave to preserve sidewalk & fire hydrant access. May require two stages of fence location. Emergency only access gate from Sunset Rd during construction recommended.	Fencing along Central Ave can be coordinated with DPW depending on what the Town wants to provide for access along the Central Ave project site.	In Process on 60% CD
C 1.00	9	1/25/2017	OPM	General note required for coordination with Field & Trail contractor	Note will be added.	In Process on 60% CD
C 2.00	10	1/25/2017	OPM	Review pervious pavement location and quantity to confirm need with drainage calculations. Eliminate if no longer required.	Pervious pavement has been eliminated for the DD submission.	Complete
C 2.00	11	1/25/2017	OPM	Set up meetings with all utilities to confirm locations, pole installation, capacity, and costs.	Coordination required with MEP and DPW will be provided on next submittal if coordination occurs before due date	Meeting Complete Plan Adjustments in Process
C 2.00	12	1/25/2017	OPM	Site utility Demolition plan required showing removal of water and sewer lines from the Property line to the respective main with capping at the main. Coordinate with note #10	Demo plan can be adjusted per DPW comments	See C0.00
C 3.00	13	1/25/2017	OPM	coordinate Drainage system with modified parking lot 4% max. slope grading in progress	Drainage will be adjusted once revised grading plans are submitted	Complete
C 3.00	14	1/25/2017	OPM	Review if two sewer connections are possible /preferable in Central Ave with Town DPW.	An additional sewer connection may be possible after discussion with DPW. Is this a constrcution coordination concern?	Complete
C4.01	14a	5/5/2017	OPM	Green Screen on construction fence shall be placed on inside face along Central Ave - to avoid wind damage	A note #2 has been added to the super silt fence detail on sheet C6.01 indicating placement of the screen on the inside of the fence.	
C4.03	14a	5/5/2017	OPM	1) Review Water Quality Inlet - Buffer zone with Town Engineer for acceptance of system, 2) Add metal mesh to flaired outlet to stop animal intrusion	SBZ is under review with the Town. SBZ owner met with Town DPW, Con Com Agent and Town PM. Final review after investigation of installed SBZs. Drianage outlet will be connected to the new drain manhole within the drianage easement.	
TRAFFIC						
General Note: Show Project North to right of drawing per Arch. Dwgs.						
TR-1		5/5/2017	OPM	1) Add spot elevations to top and bottom of all HC ramps 2)Show all driveways to confirm no signs block drives 3)Add sign at entry to Glover Rd "No Access- M-F 8:00AM to 9:00AM" (confirm time with Schools & DPW)	1) The spot elevations will be added to all proposed pedestrian ramps 2)Next submission will include all driveways along Central Ave within the limits of the project.	
TR-1 &/or 2		5/5/2017	OPM	Add typical parking stall dimensions for standard, compact and Handicapped parking stalls	The parking dimentions will be added in the next submission.	
TR-4		5/5/2107	OPM	Pedestrian bypass only allowed during sidewalk & curb reconstruction. (See C1.00 notes)	The detail is included to provide a typical set-up for a safe pedestrian bypasss during sidewalk and curb construction only.	
LANDSCAPE						

Hillside Elementary School Project

Drawing Date: 4/14/2017

Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- Pricing Set

Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
General Note: Remove Kindergarten doors -adjust planting accordingly. Update Sensory Garden design. Coordinate with conservation planting and flood storage design. Add note to drawings & Specification: GC shall coordinate access and construction schedule with Field and Trails contractor.						
L 1.01	15	1/25/2017	OPM	Update parking layout to reflect compact spaces, and handicapped space at NW corner of lot. Show crosswalk location(s)	Parking layout will be updated in CDs prior to the next submission	Complete
L 1.01	16	1/25/2017	OPM	relocate shed at service drive per zoning bylaw	The shed will be located per zoning bylaw for the next submission	Complete
L 1.01	17	1/25/2017	OPM	Key both electric plug-in car charging stations	Coorination with Electrical is ongiong - charging station locations will be provided for the next submission.	Complete
L 1.01	18	1/25/2017	OPM	remove proposed Cedar fence along south side of property line. It is redundant with neighbor's fence.	Discussion needed	Complete
L 1.01	19	1/25/2017	OPM	Cross ref. specific architectural Dwg. for bike canopy	Coorination with Architectural for several site elements is ongiong and will be further clarified for the next submission.	Complete
L 1.01	20	1/25/2017	OPM	review brick retaining wall at service drive with owner	Discussion needed	Complete
L 1.01	20a	5/5/2017	OPM	1) Add bollards to protect Generator, gas meter & east side of transformer, 2) Move Site ID Sign to be 30ft back from PL , 3) Add concrete pathway to playing field, 4) add concrete walls at endge of field and basketball hoop with fencing, 5) Add stone dust pathway, 6) add outdoorclassroom,	**(5/22) Addressed in final 60% / 90% submissions**	In Process on 60% CD
L 1.02	20a	5/5/2017	OPM	1) Update sensory Garden details to new design, 2) add sidewalk & path widths and radii for layout, 3) Update grading to reflect flood storage and pond design,	**(5/22) 1 and 3 Addressed in final 60% submission 2 will be done for 90% final or bid docs, always the last thing to be done**	Coordinate with ConCom Permit Civil Drawings
L 2.01	21	1/25/2017	OPM	Confirm re-grading in parking lot with Town Engineer & modify accordingly in Const. Doc. set	Following confirmation with the Town Engineer, the grading of the parking area will be updated for the next submission	Complete
L 2.01	22	1/25/2017	OPM	Review site stair to lower level with MAAB - written approval required.	**(5/22) Varience application submitted**	In Process on 60% CD
L 2.01	23	1/25/2017	OPM	confirm MAAB sidewalk clearance at SW bus gate when it is in open position.	Minimum clear width per MCR 521 Section 22.2 will be provided at the sidewalk adjacet to the bus gate.	Complete
L2.01	23.a	5/5/2017	OPM	1) Add concrete pathway to playing field, 2) add concrete walls at endge of field and basketball hoop with fencing, 3) Add stone dust pathway, 4) add outdoorclassroom, 5) adjust pond cut for added wetland planting. Or add detail to L2.02 sheet	**(5/22) Addressed in final 60% submission**	In Process on 60% CD
L2.02	23.b	5/5/2017	OPM	1) Add fence at top of Amphitheater wall for protection, 2) path at base of stair too tight, 3) Show detail how amphitheater intersects building wall.	**(5/22)details are being worked out, continued into CD phase**	In Process on 60% CD
L 3.01	24	1/25/2017	OPM	1) Add Conservation plantings in buffer zone to meet ConCom mitigation requirements, 2) Extend drawing coverage to include pond, 3) Review trees and bushes size below Pergola, 4) Concern regarding "AG" Acer Glabarium - salt tolerance and western species,	**(5/22)Development and coordination of plantings will continue into CD phase**	In Process on 60% CD
4 / L 4.02	25	1/25/2017	OPM	Wood Screen Fence - recommend adding a horizontal cap to reduce end grain rotting of wood	Will investigate in CDs	Complete

Hillside Elementary School Project

Drawing Date: 4/14/2017

Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- Pricing Set

Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
1/ L 4.03	26	1/25/2017	OPM	Swing Leaf Gate - recommend mid-point leg with wheels to eliminate sagging over time.	Footings will be sized to support cantileverd weight of the swing leaf - wheels can add additional parts requiring maintenance and may not function adequately if the roadway is snowy / icy.	Complete
4/ L 4.03	27	1/25/2017	OPM	Review top light options with LED lighting to reduce night sky excess lighting.	**(5/22) Uplighting of flagpoles is more common and easier to maintain. Uplighting of flagpole is the only uplighting permitted by LEED.**	In Process on 60% CD
10/ L 4.03	28	1/25/2017	OPM	Grade marker for cleanout location required?	Cleanouts will be indicated on as-built documents required for closeout	Complete
L 4.04	29	1/25/2017	OPM	NO details for brick wall at service drive- review design intent with OPM & Town DPW re: snow clearing	wall is removed from project	Complete
L 4.04	30	1/25/2017	OPM	Snow storage diagram required for review with DPW	**(5/22)A sketch indicating areas of potential snow storage can be provided. Final snow removal plan will be the responsibility of DPW.**	In Process on 60% CD
L 4.04	31	1/25/2017	OPM	Review code requirements for railings on top of retaining walls greater than 30" above adjacent finish grade near amphitheater	**(5/22)Discussion of guardrail vs. planting protection required. Guards are required when a 30" vertical drop is within 36" horizontally of a walkway (2015 IBC 1015.2)**	In Process on 60% CD
STRUCTURAL S-1						
General Note: Show Project North to right of drawing per Arch. Dwgs. Remove Kindergarten doors & add additional Gym Storage as noted in the Arch. Drawings						
Review timing of Structural peer review with OPM- Procurement process required. Peer review will be based on 60% CD documents, or 90% Documents?						
S 0.02	S-3	1/25/2017	OPM	Add minimum dimension of rebar off from the edge or face of concrete	Minimum cover dimensions are described in note R8 on sheet S0.01.	Complete
S 0.03	S-4	1/25/2017	OPM	Detail #5 must cross reference A 6.51 detail G-4. Coordinate insulation details / reference	Structural drawings will not refer to specific architectural drawings, but will note "SEE ARCH" where appropriate	Complete
S 0.04	S-5	1/25/2017	OPM	Detail #9 - Confirm detail of RTU concrete pan with acoustic decking in Gym.	Roof deck type will change to composite decking at the gymnasium RTU.	Complete
S 0.05	S-6	1/25/2017	OPM	no comment	No comment - no action	Complete
S 0.06	S-7	1/25/2017	OPM	Coordinate Roof Screen flashing detail with steel details	Flashing details will be described in architectural drawings and coordinated with structural details in CDs	In Process on 60% CD
S 0.07	S-8	1/25/2017	OPM	Added Structural Details to be included in CD's	Correct - development is ongoing	In Process on 60% CD
S 1.11	S-9	1/25/2017	OPM	Cost Estimator notes must be replaced with details of added steel for Construction Document drawings	Notes have been removed for DD submission	In Process on 60% CD
	S-10	1/25/2017		Note door threshold detail at all Level 1 exterior door locations -Detail 5 on (S 0.03)- horizontal dimensions required at door openings for concrete or cross-reference A 0.11 for dimensions- **Delete Kindergarten exterior doors**	Horizontal dimensions will be indicated on Architectural drawings only. General notes in structural drawings will refer to architectural drawings for locations. **(5/24) Doors have been deleted from east side classrooms and will be from west site for 90% submission.**	In Process on 60% CD
S 1.12	S-11	1/25/2017	OPM	Step Footing dimensions required along with BOF and TOW elevations in CD's & sump pit location missing- coordinate with Plumbing (P 1.02)	Typical footing and baseplate elevations are noted in general note 13 on foundation sheets. Specific deviations will be called out as noted in CDs	In Process on 60% CD

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S 1.21	S-12	1/25/2017	OPM	Step Footing dimensions required along with BOF and TOW elevations in CD's.	To be completed in CDs	In Process on 60% CD
S 1.31	S-13	1/25/2017	OPM		No comment - no action	Complete
S 1.32	S-14	1/25/2017	OPM	Coordinate location of RTU pads with Mechanical over Gym / Cafetorium & Administration wing (see M1.32)	To be coordinated in CDs	In Process on 60% CD
S 1.32	S-15	1/25/2017	OPM	Confirm detail of RTU concrete pan with acoustic decking in Gym. Acoustic analysis of mechanical noise in Cafetorium & Gym spaces.	Roof deck type will change to composite decking at the gymnasium RTU. Acoustic consultant reccomendations will be incorporated into structural, architectural, and mechanical system design.	In Process on 60% CD
S 1.41	S-16	1/25/2017	OPM	Coordinate RTU concrete slabs with Mechanical Dwgs	Slabs, curbs, and isolators will be further coordinated in CDs	In Process on 60% CD
S 2.01	S-17	1/25/2017	OPM	Show difference between Detail 1 & 1A ?	The brick shelf width dimension is noted as 7" at detail 1A.	Complete
S3.01	S-18	1/25/2017	OPM	no comment	No comment - no action	Complete
S 4.01	S-19	1/25/2017	OPM	no comment	No comment - no action	Complete
S4.02	S-20	1/25/2017	OPM	no comment	No comment - no action	Complete
ARCHITECTURAL						
General Notes	*The Arch. drawings are ongoing with updates from at 60% CD Pricing set to 60% CD MSBA submission stage and good basis for the 60% CD Cost Estimate*				No Action	In Process on 60% CD
	Coordinate Arch. With Planning and Conservation Commission NOI Submission				**(5/22) Pending result of hearings**	In Process on 60% CD
AG 0.01	A-1	1/25/2017	OPM	Change Owner provided and installed to "Owner provided Contractor installed".	Corrected for DD submission	Complete
	A-1.a	5/5/2017	OPM	Increase size of Project construction sign to 4ft x 8ft and request waiver in Design Review Board Application.	**(5/22) Size revised for 60% submission. Waiver request in progress**	
	A-1.b	5/5/2017	OPM	Add abbreviations to list including defination for 1) BRKS, 2) CFMF, 3)GCO and etc. in Arch details.	**(5/22) BRKS added, CFMF already included, GCOs deleted from project.**	
AG 0.02	A-2	1/25/2017	OPM	If any wall type is "not used" then note it as such.	At this time, all wall types indicated are intended for use on the project.	Complete
	A-3	1/25/2017	OPM	Add note for VB / AIB on detail for X3.14- Natural Stone Veneer Wall.	Corrected for DD submission	Complete
	A-3.a	5/5/2017	OPM	Add STC - sound ratings where required & notes for offsetting of elect. / tel/data boxes	**(5/22) STC ratings for assemblies are typically indicated in specifications. Wall assemblies are designed based on STC, but these ratings are not included in wall assembly notes as they have little contractual meaning when the wall assembly is design by components. Offset of boxes notes are in Electrical drawings and specs, since they are primarily responsible for these penetrations.**	

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
AD 1.01	A-4	1/25/2017	OPM	Update Demolition plan and schedule to current conditions. 609 Central and 45 Sunset Rd to be demolished after temporary use as field office. Update notes re: stone pile, Hatch all paving to be removed, removal of existing farming fence, perimeter cedar fence at end of project. Coordinate with Civil Demolition Drawing.	Demo of both houses and conditional use of 609 Central indicated in note 7. Notation for stone pile updated - background to be updated when survey is completed. No new constuction will be indicated on this sheet. Final limit of work lines and fencing will be updated following development of LA and Civil drawings in CDs.	AD Dwgs -removed from 60% CD set
AD 1.01	A-5	1/25/2017	OPM	Add notes about coordination with Field & trails contractor.	Added for DD submission.	AD Dwgs -removed from 60% CD set
Arch -Plans		5/5/2017		General Plan note: Add dimensions for interior partitions	**(5/22) Noted. Many dimensions added for final 60% submission. Dimensioning is ongoing.**	
A 0.11	A-6	1/25/2017	OPM	minus sign difficult to read-show in parenthesis ( )?	Noted. We will discuss and review if a different notation would improve legibility.	In Process on 60% CD
A 0.12	A-7	1/25/2017	OPM	Add definition for "GCO" on architectural Index. Review elevation of all cleanouts with grading plan. Coordinate location of sump pump pit with Plumbing Plans	Abbreviation to be added in CDs. Ejector pit location has been coordinated for DD submission, however details and specific requirements will continue to be be developed in CDs.	In Process on 60% CD
A 0.21	A-8	1/25/2017	OPM	Note & dimension stair openings. Are recessed floor slabs required in single bathrooms? Turn on gridline dimensions.	Openings and additional dimensions will be added in CDs. Slab depressions not required at single user toilet rooms since these do not have floor drains. Gridline dims included in DD submission.	Complete
A 0.22	A-9	1/25/2017	OPM	Remove reference to "existing Building" in General Notes of Horizontal Control Plans	Noted. We will remove for the next submission.	Complete
A 0.22	A-10	1/25/2017	OPM	Coordinate reference to TOBS vs. TOBKS on AG 0.01	Abbreviations will be clarified for the next submission	Complete
A 0.22	A-11	1/25/2017	OPM	TOS at Platform should read 14'-9 1/2" ? And at foot of ramp at TOS 14'-0"	Spot elevations will be updated for the next submission	Complete
A 0.22	A-12	1/25/2017	OPM	Confirm horizontal clear dimensions at door openings. Add missing dimensions for slab openings and cantilevers.	Additional notation and dimensions will be added in CDs **(5/22) dimensioning is ongoing.**	In Process on 60% CD
A 0.22	A-13	1/25/2017	OPM	Update shear wall locations at Admin area	Corrected fot DD submission	Complete
A 0.22	A-14	1/25/2017	OPM	Coordinate foundation wall at Music Room with A 0.12 & show angle or bends in building geometry.	Additional development is included in the DD submission. This area will require continued development into CDs as it requires substantial coordination between design disciplines (Civil, landscape, structural, and plumbing) **(5/22) Coordination progressing but ongoing.**	In Process on 60% CD
A 0.22	A-15	1/25/2017	OPM	Reduce fractions of an inch in AutoCAD to nearest 1/8"	Tolerance revised for DD submission drawings.	Complete
A 0.31	A-16	1/25/2017	OPM	Add missing dimensions for gridlines, slab openings, stairways, elevator and cantilevers.	Additional notation and dimensions will be added in CDs	In Process on 60% CD
A 1.10	A-17	1/25/2017	OPM	Label missing room numbers for 107,120,121 &133	Most room tags will be removed, rather than added, from overall plans for future submissions. These plans are intended more as overall building maps and not to identify each room.	Complete
A 1.11	A-18	1/25/2017	OPM	Confirm closet capacity in Rm #115 with SPED Teachers. Detail of Art Room#111 display case required in CDs	Noted - we will continue to refine the design of these elements in CDs	Complete

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 1.12	A-19	1/25/2017	OPM	Review privacy shade locations in all ground floor windows for Security Working Group. Wrap column at gridlines 2.15 & A.90 - too slender- add insulation.	Treatment of both columns on grid 2.15 is in development. These will be thermally isolated from the exteior as the design develops. **(5/22) The columns will be sprayed with closed cell polyurethane foam insulaiton.**	In Process on 60% CD
A 1.20	A-20	1/25/2017	OPM	Label missing room numbers for 207,220, 221 & 228 Add note "Gym below" or X in upper Gym	Most room tags will be removed, rather than added, from overall plans for future submissions. These plans are intended more as overall building maps and not to identify each room. Gym open space will be clarified for future submissions	Complete
A 1.21	A-21	1/25/2017	OPM	Review Size of window in Liaison Office 101, 201 & 301.	Noted. We will review in CDs **(5/22) Window sizes revised.**	
A 1.21	A-22	1/25/2017	OPM	Update graphic at standard classroom sinks with counter	Following acceptance of the typical classroom layout (room 227) by the owner, we will populate all general classrooms consistently in CDs.	Complete
A 1.21	A-23	1/25/2017	OPM	STEAM Rm# 211- Move Green screen to west wall? Add tack board to North wall?	Noted - we will continue to refine the design of these elements in CDs	Complete
A 1.22	A-24	1/25/2017	OPM	Add closure screen to General office at entry lobby.	Security grille has been included in the DD submission. See sheets A1.73 and A2.22	Complete
A 1.22	A-25	1/25/2017	OPM	Enlarge windows in Quiet Zone -Rm#263,	Noted - we will continue to refine the design of these elements in CDs	Complete
A 1.22	A-26	1/25/2017	OPM	Review performance lighting requirements in Cafetorium including roll-down grill at Kitchen, size of projection screen, location of projector, size of window on west wall & blackout shades.	Noted - we will continue to refine the design of these elements in CDs	In Process on 60% CD
A 1.22	A-27	1/25/2017	OPM	Review need for oversized louver outside Staff Lunch room/ material / trellis planting	Noted - we will continue to refine the design of these elements in CDs	Complete
A 1.22	A-28	1/25/2017	OPM	Confirm minimum MAAB clearances in Media Center	There are several areas where fixed elements confict with door clearances and refinement of the circulation desk is still in progress. These clearances will be confirmed for the next submission. **(5/22) Elements have been revised to comply with MAAB clearance requirements.**	
A 1.22	A-29	1/25/2017	OPM	Add Glass light to Practice Room- #233B?	The door into this room includes a substantial sidelight and transom in the DD submission drawings.	Complete
A 1.22	A-30	1/25/2017	OPM	resize window at Specialists Office #232 re: stair	Noted. The stair and windows into these spaces is still in development. We will update for the next submission.	Complete
A 1.22	A-31	1/25/2017	OPM	Resize window at Custodial Storage #275A re: bench height, relocate slop sink closer to main door,	Discussion needed. We will continue development in CDs.	Complete
A 1.22	A-32	1/25/2017	OPM	Note "Open to Below" in Gym	Noted. We will include for the next submission	Complete
A 1.30	A-33	1/25/2017	OPM	note areas "open to below" @ entry, Media Ctr & stair. Add keys for Roof headhouse and skylight details	Noted. We will include for the next submission	Complete
A 1.31	A-34	1/25/2017	OPM	Add window at Spanish Classroom - #311? -	Noted - we will review the fenestration in this space in CDs	Complete
A 1.31	A-35	5/5/2017	OPM	Relocate duct near gridline A.40- blocks window	**(5/22) displacement diffuser has been relocated to the corner of the electdical room (SW corner of classroom)**	In Process on 60% CD
A 1.50	A-36	1/25/2017	OPM	Add key dimensions to all details	Development will continue into CDs	In Process on 60% CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 1.50	A-37	1/25/2017	OPM	C-6 & 12 confirm R-value of insulation at corner detail.	Sheet has been revised for DD submission. However, the referenced details include 4" of mineral wool (R16.8) at the main assembly. Perimeter blocking at windows will result in a lower R-value. **(5/22) No action required.**	In Process on 60% CD
A 1.50	A-38	1/25/2017	OPM	C-9 - review detail of glass at floor & ceiling	Aluming closures will be provided a the floor at ceiling. Details will be included in the next submission	Complete
A 1.51	A-39	1/25/2017	OPM	Add Missing sheet to Construction Document set		Complete
A 1.52	A-40	1/25/2017	OPM	Add Missing sheet to Construction Document set		Complete
All bathrooms	A-41	5/5/2017	OPM	Review spec for gypsum vs. cement board backing for all tile wet walls?	All tile walls receive cement backer board.	Complete on- AGO.02 Gypsum Board Schedule
A 1.70	A-42	1/25/2017	OPM	Confirm MAAB & ADA clearance at all handicapped stalls, rotate HC stall doors 90 degrees?	Accecssibility criteria will be reviewed in CDs. Stalls are configured with doors in the opposite corner as water closets as requried by accessibility regulations. **(5/22) Adequate clearances are provided.**	In Process on 60% CD
A 1.70	A-43		OPM	Add critical clearance dimensions to all plans and elevations to confirm accessibility requirements; **Girls Rm #223 - 5ft diameter?**	Noted - additional dimensions will be added in CDs **(5/22) furring wall has been relocated to accommodate 5' turning and will be reflected in the 90% submission.**	In Process on 60% CD
A 1.70	A-44	1/25/2017	OPM	Show base tile on all gypsum board walls	Wall base for each flooring and wall finish type will be developed in CDs.	In Process on 60% CD
A 1.70	A-45	1/25/2017	OPM	D-2 Add full tile surrounding all showers, confirm dimensions of shower, add bench at end of room or door to changing/ shower room?	A bench can be added to the room. Shower surround details are in devleopment. **(5/22) Acrylic shower units are being provided for the shower stalls. Tile surround is not required.**	In Process on 60% CD
A 1.71	A-46	1/25/2017	OPM	D-2 Add full tile surrounding all showers, confirm dimensions of shower, add changing table/wall unit?	A bench can be added to the room. Shower surround details are in devleopment. **(5/22) Acrylic shower units are being provided for the shower stalls. Tile surround is not required.**	In Process on 60% CD
A 1.71	A-47	1/25/2017	OPM	A-3 confirm MAAB access dimensions note on plan- **Girls Rm #138 - 5ft diameter?**; move HC toilets so side bar is on wall?	Accecssibility criteria will be reviewed in CDs. Stalls are configured with doors in the opposite corner as water closets as requried by accessibility regulations. **(5/22) Adquate turning space is provided. Room 138 utilizes the T-turn. HC toilets and grab bars are required to be in the opposite conrer from the door.**	In Process on 60% CD
A 1.72	A-48	1/25/2017	OPM	A-3 confirm MAAB access dimensions note on plan; move HC toilets so side bar is on wall?	Accecssibility criteria will be reviewed in CDs. Stalls are configured with doors in the opposite corner as water closets as requried by accessibility regulations.	In Process on 60% CD
A 1.72	A-49	1/25/2017	OPM	Why does the third floor have "BT" Baby changing tables?	Baby changing stations are provided as these are the most "public" toilet rooms. Visitors and parents may have young children / siblings attending an event that would need access to changing stations.	Complete
A 1.73	A-50	1/25/2017	OPM	Add screen closure at General Office reception area; note lines of floor finish changes / patterns	Added for DD submission.	Complete

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
Reflected Ceiling Plans						
General Notes	A-51		OPM	1) review radiant heat ceiling panel sample, piping, & maintenance issues with Owner; 2) provide OPM with typical room lighting studies for review to confirm lighting design, 3) provide Owner with overview of public address system and speaker locations in all non-classroom spaces	**(5/22) the PA system is included in the project manual and speaker locations indicated on the Technology drawings.**	Items 1& 2 - complete Item #3 in Process on 60% CD
A 2.11	A-52	1/25/2017	OPM	confirm lighting design in north side of Extended Learning Area- No LPS6 key is noted in electrical plan but not included in electrical legend on E 0.02	LPS6 is included in DD submission drawings. Arch. RCPs will be coordinated in CDs. **(5/22) LPS6 is indicated in 60% documents.**	In Process on 60% CD
A 2.11	A-53	1/25/2017	OPM	Coordinate lighting in Stair #3- lay-in recessed fixture not noted on lighting plan	Arch RCPs will be updated to coordinated with Recessed fixtures indicated in electrical drawings. **(5/22) Recessed fixtures are coordinated with electrical plans.**	In Process on 60% CD
A 2.12	A-54	1/25/2017	OPM	Confirm if speakers are required in bathrooms, Spec. offices, & halls for general safety announcements.	Speakers are provided in gang toilet rooms and in learning space / offices, but not individual office-only spaces. We can review this placement in CDs **(5/22) Proposed speaker locations are indicated on the technology and ceiling plans. Speakers are included in gang toilet rooms and offices.**	In Process on 60% CD
A 2.21	A-55	1/25/2017	OPM	Does Ceiling mounted Acoustic baffle obstruct sprinkler cover in Extended learning area?	Sprinklers will be installed in accordance with NFPA 13, specifically Chapter 8 in this situation.	Complete
A 2.21	A-56	1/25/2017	OPM	Speakers missing in STEAM (211) and ELC (215) rooms	Sprinklers will be provided in these spaces for future submissions.	Complete
A 2.22	A-57	1/25/2017	OPM	Share acoustic analysis with OPM to confirm need acoustic panels and sizing. Provide Owner with samples of all ceiling tile types & interior finishes board.	The DD set will be reviewed by the acoustics consultant. The DD submission has incorporated all reccomendations to date with respect to sound isolation and reverberation controls. **(5/26) 60% review provided to OPM. Community Noise report is still in development.**	
A 2.22	A-58	1/25/2017	OPM	Speakers missing in Media Center, main hallway, Quiet Rooms, kitchen area, Gym, Cafetorium	Speakers are provided in all areas noted except quiet zones for the DD submisison. These spaces will require additonal consideration in CDs	Complete
A 2.22	A-59	1/25/2017	OPM	Coordinate all Mechanical piping, sprinklers, roof drains, speakers & exposed ductwork above main entry space.	Coordination of these elements is ongoing. Routing of utilities between the north and south sides of the lobby will occur above the vestibule ceiling. See HVAC and plumbing drawings as examples.	In Process on 60% CD
A 2.22	A-60	1/25/2017	OPM	Show cross section of main entry canopy. RCP should show column support points, roof drainage,	Canopy design will continue to be developed in CDs	Complete
A 2.31	A-61	1/25/2017	OPM	Coordinate stairway lighting with Elect. Ltg Plan E2.31	Lighting type will be updated for future submissions	In Process on 60% CD

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A 2.50	A-62	1/25/2017	OPM	Show typical Radiant Ceiling Panel Detail with maintenance access and plumbing coordination requirements.	Radiant heating panel details are on M4.13. There is no coordination with plumbing as all piping is HVAC piping.	In Process on 60% CD
	A-62.a	5/5/2017	OPM	Detail E-6 - confirm and note STC rating for upper wall	**(5/22) wall type changed to type F5A. STC ratings not typically noted on drawings for wall assemblies.**	New
A 3.10	A-63	1/25/2017	OPM	Coordinate with RTU locations and label SF areas & setbacks of solar ready zones on roof, remove areas that will be shadowed by roof screens and entry hall roof. Provide access routes to roof drains for maintenance. Identify priority location for Solar PV panels	"Solar Ready" zones on 3.10 are code-prescribed areas. Actual PV priority locaitons will be discussed, developed, and analyized for shading in CDs **(5/22) The solar areas were removed at 60% CD because there was indication that this would not be a "code" requirement. However, that provision is back in the draft form of the code now.**	Why is all notation for Solar panels removed on 60% CD?
A 3.11	A-64	1/25/2017	OPM	Coordinate all RTU locations with structural RTU Pads, show maintenance roof pads at all RTU's and primary pathways	To be developed in CDs **(5/22) Locations have been coordinated.**	In Process on 60% CD
A 3.12	A-65	1/25/2017	OPM	Show roof access ladder to roof above main entry. Consider solid panel at ladder location ILO glass.	To be developed in CDs **(5/22) Roof to be scuppered for drainage. No ladder will be proivded**	In Process on 60% CD
A 3.50	A-66	1/25/2017	OPM	Detail K-12 raise the cross support to a minimum of 12" above roof surface and move StStl Clamp ring below cross member to create waterproof seal. Screen Posts are typically bolted and welded to the steel frame, coordinate sequence of work for foam infill.	Detail is diagrammatic but will be developed in CDs. Lower tube is closer to 30" aobve roof deck. Spot elevations will be provided on structural dwgs. In CDs. **(5/22) Details and elevations provided for 60% submission.**	In Process on 60% CD
A 3.50	A-67	1/25/2017	OPM	C-14 hoistway fireproofing gyp should overlap combustible wood blocking	Gyp board will be omitted from this detail. It is not required.	Shaft is rated as 1-HR enclosure?
A 3.50	A-68	1/25/2017	OPM	some notes are being cut off/condensed in C3, F8 & K12	Noted. We will correct for the next submission.	In Process on 60% CD
A 3.50	A-68.a	5/5/2017	OPM	Confirm locations for Lightening rods - or add criteria in specifications	**(5/22) Lightning protection is described in Electrical drawings.**	
ARCHITECTURAL- EXTERIOR ELEVATIONS						
General Notes	A-69		OPM	1) review lighting and Exit sign locations at all exterior doors with curtain wall above; 2) Review location of exterior speakers with Owner;	Noted. We will review in CDs	In Process on 60% CD
A 4.10	A-70	1/25/2017	OPM	Review sizing of windows at Media Center stair, Quiet Dining Room and Service work room with Owner	As noted above we will review and devleop in CDs	Complete
A 4.11	A-71	1/25/2017	OPM	Review detail of curtain wall at level 3 locations with OPM & Owner RE: mullion width, glazing type	Comment is not understood - discussion needed	Complete
A 4.11	A-72	1/25/2017	OPM	Review with OPM & Owner alternative options for the brick patterns. Designer response to Design Review Board comment of materials making a "Dark Building"	Discussion needed	In Process on 60% CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 4.12	A-73	1/25/2017	OPM	Similar notes to A4.11 & A4.12. Detail D-8_ Stairwell #3 door threshold must exit to grade with no step	Correct, there will not be a step at any exterior door. Typical door condition is shown in detail G4 /A6.51	In Process on 60% CD
A 4.13	A-74	1/25/2017	OPM	A-10- Deep Mullion was noted as removed in cost Est.; A-14 -windows at Media Ctr level 2 conflict with stair; H-14-Remove/ relocate exposed foundation drain; H-14 Review window sizes with OPM in Café (too tall), Quiet Dining rooms (enlarge) and Custodial Storage(enlarge to counter height);	A10 - Note will be removed A-14 - as noted above, location and size of windows is in development H14 - Updated for DD submission. Windows sizes & locations require discussion.	A-10 Complete A-14-Complete H14- In progress
A 4.14	A-75	1/25/2017	OPM	C-4-coordinate all MEP with Vestibule windows; Show location of access ladder to Vestibule roof; H-10- confirm approval of signage with DRB.	C-4 - several HVAC and Plumbing vents were relocated during DD - coordination of windows and vent locations is ongoing H-10 - approval will be sought in CDs	In Process on 60% CD
ARCHITECTURAL- BUILDING SECTIONS						
General Notes	A-76	1/25/2017	OPM	1) coordinate MEP above ceiling to confirm clg heights; 2) Confirm RTU height compliance with Zoning code; 3) finalize connections of systems in model;	1. Coorindation ongoing as CDs develop 2. RTU heights are less than 15 feet above the main roof and are in compliance. 3. Closure of the model will develop in CDs	In Process on 60% CD
A 5.10	A-77	1/25/2017	OPM	Ditto General Notes	Section notes not typically provided on section sheets	In Process on 60% CD
A 5.11	A-78	1/25/2017	OPM	A-14 - Show roof trusses , B-ball backboard in Gym; D-14-Coord. height of lighting in extended learning area;	depth will be expanded to show joists in gym and cafeteria D-15 Updated for DD submission	In Process on 60% CD
A 5.12	A-79	1/25/2017	OPM	A-14 - Review depth of footing at entry canopy & provide and access ladder to Vestibule Roof; D-14-Coord. height of lighting in extended learning area;	A-14: depth of footing is to prevent lateral surcharge on building foundation wall. Cooridnation will continue through CDs	In Process on 60% CD
ARCHITECTURAL- WALL SECTIONS						
General Notes	A-80	1/25/2017	OPM	1) Complete interconnections of systems in CD Set; 2) Show floor slab extensions to pick up wall framing; 3) clean up all fascia panels at roof cantilevers. 4) clean up head and sill details on all windows; 5) Coordinate structure at all roof cantilevers; 6) Key in all wall details; 7) Show Misc. metal at all window & door headers	All noted. Development of wall sections will continue into CDs. Significant progress will be evident in the next submission.	Significant Process on 60% CD more needed in 90%
A 6.10	A-81	1/25/2017	OPM	A-14 - provide spandrel glass detail at floor level 3	Typical spandrel details will be included in the next submission	In Process on 60%CD
A 6.11	A-82	1/25/2017	OPM	Ditto General Notes	Wall Section notes not typically provided on wall section sheets	In Process on 60%CD
A 6.12	A-83	1/25/2017	OPM	Ditto General Notes	Wall Section notes not typically provided on wall section sheets	In Process on 60%CD

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Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- Pricing Set

Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 6.13	A-84	1/25/2017	OPM	General - Show relieving angle spacing for three story brick walls, window and door headers; Refine brick detailing with patterns soldier courses & etc. ; A-3 - review sill condition at exit door- MAAB access.	3 story brick veneer will not require relief at the slab edge. A-3: an exterior concrete landing will be provided at all exterior doors.	In Process on 60%CD
A 6.14	A-85	1/25/2017	OPM	A-3 - Show Spandrel Glass Details at floor conditions; A-6 & A-7- Show all expansion joint details at each level; A-11- show closure detail of CMU with steel frame; A-14- Show glazing detail at gym wall, head & sill;	The noted items will be developed in CDs.	Significant Process on 60% CD more needed in 90% CD
A 6.15	A-86	1/25/2017	OPM	A-5 - show footing drain waterproof membrane and compacted backfill; coordinate footings with structural	The noted items will be developed in CDs.	In Process on 60%CD
A 6.16	A-87	1/25/2017	OPM	1) complete wall framing and insulation above vestibule windows with closure of thermal envelope; 2) coordinate structure at all roof cantilevers; 3) coordinate all MEP in Vestibule area; 4) Provide access panel locations in vestibule ceiling; 5) Review window cleaning with PFD-Operations; 6) Confirm spandrel Glass location & rain cover in Nor'easter at main entry; 7) main entry recessed slab detail for walk-off mat? 8) Exterior slab detail at Main entry with insulation;	The noted items will be developed in CDs.	In Process on 60%CD
A 6.17	A-88	1/25/2017	OPM	A-3 - review window height at sill, seat and table height re: maintenance and table damage; Add insulated sill with seating at wall? Confirm sun shade, and blackout shade details at window wall; A-3 & A-6- Coordinate stepped footings with grading plan, elevations and Structural Dwgs.	A3 - Discussion required **(5/22) General configurations have been finalized. Details continue to be developed.** A3 & A6 - coordination of grades & foundations / brickshelves is ongoing in this portion of the building.	In Process on 60%CD
A 6.18	A-89	1/25/2017	OPM	Ditto General Notes	Wall Section notes not typically provided on wall section sheets	Complete
A 6.50	A-90	1/25/2017	OPM	C-14 - Relocate parapet Axon to Roof detail sheet?	"Top of Wall" details include both roof and wall construction interface. Top of Wall conditions are typically noted in A6.5x series.	Complete
A 6.51	A-91	1/25/2017	OPM	Confirm thermal break at concrete wall in all details	Insulation to the exterior face of wall will extend to just below finished grade	In Process on 60%CD
A 6.55	A-92	1/25/2017	OPM	1) Closure & support details and material samples required for MCM panels proposed at edge of soffit. 2) Confirm how roofing terminates with panel. 3)Show corner and return conditions (in 3D). 4) window sill gyp board corner condition needs wood or more durable sill. 5) Add definitions for all abbreviations to master architectural abbreviation list including MCM, CFMF, LGMF, PPT PWD, HSS, MC & Etc.	The noted items will be developed in CDs.	In Process on 60%CD

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A 6.60	A-93	1/25/2017	OPM	Similar to 6.55	The noted items will be developed in CDs.	In Process on 60%CD
A 6.61	A-94	1/25/2017	OPM	Add details for attachment of backlit metal letter sign on top of wood panel, confirm electrical supply conduit, and all related details, and Design Review Board approval.	The noted items will be developed in CDs.	In Process on 60%CD
A 6.62	A-95	5/5/2017	OPM	More details being added	**(5/22) Development will continue through CD phase**	In Process on 60%CD
A 7.11	A-96	1/25/2017	OPM	1) Add key dimensions for room size, 2) Add Rise and run and stair details, 3) confirm Baby changing station in Mom's Rm #228 4) note elevator pit ladder location in plan detail A-9	1. Dimensions added for DD submission 2. Rise / run dimensions provided for DD submission 3. Discusison needed 4. Pit ladder located in plan F3	In Process on 60%CD
A 7.12	A-97	1/25/2017	OPM	1) Add key dimensions for room size, 2) Add Rise and run and stair details,	Added for DD submission	Complete
A 7.13	A-98	1/25/2017	OPM	1) Add key dimensions for room size, 2) Add Rise and run and stair details, 3) confirm headroom clearances at roof ladders, D-4) resolve conflict of windows with stair & provide added storage below stair for office, 5) show larger detail at all roof ladder conditions, and add walking pad to roof membrane at bottom and top	1&2 added for DD submission 3. Roof ships ladders have over 8'-0" headroom clearance measured from stair nosings. 4. This will be further developed in CDs 5. See A7.51 for stair details. Additional details will be added in CDs.	In Process on 60%CD
A 7.50	A-99	1/25/2017	OPM	A-12 - Concrete key or haunch required at base of exterior stair to stop slab settlement. C- 14 - Stage Edge nosing? Where is this detail used?	A-12 to be revised - landscape concrete will not be tied into stair foundations. C-14 - detail deleted for DD submission	In Process on 60%CD
A 7.51	A-100	1/25/2017	OPM	A-5 - is 6" depth for sump pit adequate? D-2- Loading Dock section? Where is this detail used?	A-5: 6" depth is confirmed - just deep enough to drop in a portable sump pump - this elevator does not require a permanent sump pump. D-2 to be deleted for future submissions	Complete
A 8.10		1/25/2017	OPM	1) Confirm Door Security hardware and lockdown protocol with Security working Group; 2) Change Boiler Room Door #133 to a HM from wood for long term durability reasons; 3) Add kick plates to Storage Rms, Janitor Closets and service doors;	1. Discussion / meetings requried 2. Door will be revised for future submissions 3. Refer to hardware specs for kick plates, typically provided at storage and custodial spaces.	In Process on 60%CD
A 8.20		1/25/2017	OPM	Windows W-1 add width dimension for each type; An alternate size may be required for the Media Center windows; W-3 consider using W2 type in Rm 275A raised to 42" AFF. for workbench light and ventilation	Window types will continue to be developed and refined in CDs	In Process on 60%CD

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A 8.30, A 8.31 & A 8.32		1/25/2017	OPM	Curtain Wall Types Details required for curtain wall intersection with floor slabs at 2nd and 3rd floors. Provide details and review interior maintenance issues with PFD-Operations, particularly protection of glass at classroom floor levels. Ground floor condition with 6" base is preferred.	Additonal details included for DD submission. These will continue to be developed throughout CDs	In Process on 60%CD
A 8.40		1/25/2017	OPM	Storefront Types Storefront SF-8 is pushing the limits of Storefront size system, Curtain Wall system may be more appropriate.	Assume reference is for SF-6. The top transom will be eliminated for future submissions.	In Process on 60%CD
A 8.50 A 8.51		1/25/2017	OPM	Door Details Head and Jamb conditions are documents well for DD stage Sill & threshold conditions details missing	Sill & threshold details are in development.	In Process on 60%CD
A 8.60		1/25/2017	OPM	Window Details Typical Head, Jamb and sill conditions are documents well for DD stage - 3D details showing flashing and waterproofing membrane continuity at corner conditions required in CD's	Details will continue to be developed into CDs	In Process on 60%CD
A 8.70		1/25/2017	OPM	Curtain Wall Details Typical Head, Jamb and sill conditions are documented well for DD stage - 3D details showing flashing and waterproofing membrane continuity at corner conditions required in CD's; Confirm R-value for systems all conditions. Confirm insulation and thermal break in details J-3; Add blocking below frame in detail A-9	Details will continue to be developed into CDs Perimeter condition detail R-values will not match wall system R-values. Thermal breaks or low-conductivity materials are provided to prevent bidging, but these will inevitabley result in a lower R-value than at "typical" wall or fenestration systems. Blocking conditons are still in development	In Process on 60%CD
A 8.80		1/25/2017	OPM		No comment - no action	Complete
A 9.01		1/25/2017	OPM	Finish Schedule 1)Provide Owner with complete Interior finish boards & colors for review by Working Groups and PPBC. 2) Add Green Screen walls in selected Small Group Learning areas 3) Add bumper wall guards to gypsum board walls in rooms 264, 272,275, 275A & 277.	1. Materials boards to be presented at an upcoming committee meeting for approvals. 2. Noted - we will include for future submissions 3. Noted - these will be included on AQ plans for future submissions **(5/22) Added to sheet AQ1.22. Note that there are only 4 outside corners in these spaces.**	In Process on 60%CD
A 9.11, A 9.12 A 9.21, A 9.22, A 9.31		1/25/2017	OPM	Finish Floor Plans 1)Provide Owner with complete Interior finish boards & colored floor plans for review by Working Groups and approval by PPBC.	Materials boards to be presented at an upcoming committee meeting for approvals.	In Process on 60%CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 9.50		1/25/2017	OPM	Interior Details Detail 1- provide blocking for cleaning dispensers, confirm mounting heights with PFD-Operations; Detail 6- Add custom graphics per Wellness Instructor; Complete balance of details for CD.	1 - Noted - will incorportae blocking for the next submission 6 - Floor striping will be updated for future submissions	In Process on 60%CD
A 9.70		1/25/2017	OPM	G-10 Add security curtain at front reception desk, per addendum #1; & interior elevations at vestibule, Samples required of wood for cubbies & cabinets, picture rail system ;	Security grilled incorporated for DD submission Materials boardsto be presented at an upcoming committee meeting for approvals.	In Process on 60%CD
A 9.71		1/25/2017	OPM	General to all Interior Elevations - Coordinate locations of all electrical outlets with markerboards, cabinets, glazing, projector walls, tack boards & etc. Provide samples of these materials and acoustic panel fabric and signage system. Key in Room control conditions for each room or room type.	Coordination of the noted elements will continue thoughout CD phase.	In Process on 60%CD
A 9.72		1/25/2017	OPM	F-6 _ redesign windows at media stair to eliminate conflicts with Media Center stair, show handrails. Provide access to storage below stair for Spec. Off. 232	As noted above, these will be developed in CDs	Complete
A 9.73		1/25/2017	OPM	A6- Review need for 2nd score board vs. increased overlook window size. Show 3D rendering of interior of Gym with ductwork for PPBC and Working Group; G11- review window wall design with owner- show alternate with wood sill at 18" AFF; concern is the protection of glass at floor condition; show sunshade and blackout curtain details and systems to Owner for review and approval. J-7 - demonstrate light control system for kitchen area during presentations in Cafetorium; share lighting model with Owner and OPM;	A6 - Discusison regarding scoreboards required. 3D views of the gymnasium will be developed for review and approval G11 - Discussion required J7 - Discussion required **(5/22) Door has been changed to a solid slat coiling door.**	A-6-Only 1 score Bd G-11 - complete J-7 - in progress
A 9.74		1/25/2017	OPM	A-6 - increase size of AWP to align with windows;	Noted. Development and refinement of AWPs will be ongoing into CDs	Complete
A 9.75		1/25/2017	OPM	General note- coordinate all MEP including exit signs in stair wells, entry vestibules, A-4 _ review lighting locations within reach of landings; E-8- Specify finishes and construction system for sloped roof above main entry vestibule. **Review cleaning requirements with PFD-Operations.**	A4 - Noted. Will review lighting locaitons and ensure that they are not within reach range of the landing. E8 - discussion required. Currently this "roof" is intended to be a gypsum assembly with painted finish	Good Progress on 60%CD
A 9.80		1/25/2017	OPM	C-2 - frame details for play structure required; C-6, 8 & 10-Confirm trash receptacle sizes for millwork; A-13 & B-13- confirm Trellis detail with Working Group, D-6 - Show section, shelving, lighting details for case E-5 - Details of Platform and edge condition required.	In general, interior elements and details are indevelopment and will show progress for the next submission	Good Progress on 60%CD
Architectural Partial Equipment Plans						

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AQ1.11 & 1.12, AQ 1.21 &1.22 AQ 1.31				General Note - Equipment Plans have captured Working Group discussions well. Follow-up meeting to reconfirm design details with User groups required to kickoff CD's,	Follow up meetings to be scheduled in early CD phases **(5/22) User meetings commpleted and all room data sheets are signed off.**	Meetings held- Good Progress on 60%CD
				Seating layout needed on Platform (Rm #261) to confirm Cafeteria capacity;	Noted - will provide prior to next submission **(5/22) seating layouts provide adequate seating capacity.**	Good Progress on 60%CD
AQ 1.50 &1.51				Very comprehensive for DD. Reconfirm with Working group required at kickoff for CD	Follow up meetings to be scheduled in early CD phases **(5/22) User meetings commpleted and all room data sheets are signed off.**	Good Progress on 60%CD
AQ 1.71				Add number keys in CDs, review open book shelves with owner - add turn-up at end to hold books & etc.	Follow up meetings to be scheduled in early CD phases **(5/22) Keying and development of details is ongoing.**	Good Progress on 60%CD

OPM Review Comments II.c.1

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DRAWINGS						
Cover Sheet	1	1/25/2017	OPM	The cover sheet should include the MSBA project No. 201301990035 and the Town of Needham Construction Project No. 18PFC 012B	Corrected for DD submission **(5/22) Town Contract and MSBA number added for 90% Pricing Set**	Add Construction Contract ID # 18PFC 012B
GC1.00	2	1/25/2017	OPM	Update Plumbing Fixture Schedule to include three (3) added staff toilets shown on dwgs	Corrected for DD submission	Complete
GC1.00	2.a	5/5/2017	OPM	Plumbing Fixtures -Include Showers on level 1	Showers have been included. Note that the fixture table has been updated to reflect all staff toilets designated as gender neutral as permitted by the newly adopted state plumbing code. Terminology and referecnes have been updated to reflect these new code provisions.	
GC1.00	2.b	5/5/2017	OPM	Accessibility- Note MAAB waiver for exterior stair	A comment related to the application for a varience has been included in the code summary. Once the varience is received, this comment will be updated accordingly.	
GC1.00	3	1/25/2017	OPM	Typo - "groupsin" should read "groupings"	Corrected for DD submission	Complete
GC 1.10	4	1/25/2017	OPM	Coordinate Fire Extinguisher locations with interior design and confirm recess wall cabinet locations and dimensions	FE locations on code plan are for general reference. Cabinet types and specific locations are shown on the floor plans.	Complete
GC 1.10	5	1/25/2017	OPM	show equation to determine occupancy (e.g. Rm size sf/ area per occupant = # Occupants)	Equations will be added in CDs prior to submission for permits	Complete
EX 1.01	6	1/25/2017	OPM	Existing Conditions plan must be updated with underlay showing modified grading and house removal that is now complete	An existing conditions plan will be provided when the updated survey is complete.	In process on 60% CD
CIVIL						
C 0.00	6.a	5/5/2017	OPM	Additional notes needed- (see markups) - R&D all Bit. Conc. Driveways - R&D Extg.Wood fence (45 Sunset) -Remove Extg 18" RCP& replace with 24" RCP 22. Houses at 45 Sunset and 609 Central Ave may be used in lieu of construction Trailer at the beginning of the project. Demolition and removal shall be done per GC's Project Schedule.	Notes and callouts were added to this sheet to R and D pavement, wood fence, 18-dia pipe (replaced with 24-dia pipe) on utility drawing and use 2 houses for construction administration during construction.	Coordinate with ConCom Permit Civil Drawings
C 1.00	7	1/25/2017	OPM	Review and approval req'd by Conservation Officer of Erosion Control and Sedimentation barrier. Locations in wetlands of concern. **Coordinate with Conservation Commission NOI.**	On-going discussions with Conservation about this project. Conservation is aware of erosion control line in wetland given disturbance when the farm was operational. Line will be adjusted after further Conservation discussions.	In Process on 60% CD

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C 1.00	8	1/25/2017	OPM	relocate construction fence along Central Ave to preserve sidewalk & fire hydrant access. May require two stages of fence location. Emergency only access gate from Sunset Rd during construction recommended.	Fencing along Central Ave can be coordinated with DPW depending on what the Town wants to provide for access along the Central Ave project site.	In Process on 60% CD
C 1.00	9	1/25/2017	OPM	General note required for coordination with Field & Trail contractor	Note will be added.	In Process on 60% CD
C 2.00	10	1/25/2017	OPM	Review pervious pavement location and quantity to confirm need with drainage calculations. Eliminate if no longer required.	Pervious pavement has been eliminated for the DD submission.	Complete
C 2.00	11	1/25/2017	OPM	Set up meetings with all utilities to confirm locations, pole installation, capacity, and costs.	Coordination required with MEP and DPW will be provided on next submittal if coordination occurs before due date	Meeting Complete Plan Adjustments in Process
C 2.00	12	1/25/2017	OPM	Site utility Demolition plan required showing removal of water and sewer lines from the Property line to the respective main with capping at the main. Coordinate with note #10	Demo plan can be adjusted per DPW comments	See C0.00
C 3.00	13	1/25/2017	OPM	coordinate Drainage system with modified parking lot 4% max. slope grading in progress	Drainage will be adjusted once revised grading plans are submitted	Complete
C 3.00	14	1/25/2017	OPM	Review if two sewer connections are possible /preferable in Central Ave with Town DPW.	An additional sewer connection may be possible after discussion with DPW. Is this a constrcution coordination concern?	Complete
C4.01	14a	5/5/2017	OPM	Green Screen on construction fence shall be placed on inside face along Central Ave - to avoid wind damage	A note #2 has been added to the super silt fence detail on sheet C6.01 indicating placement of the screen on the inside of the fence.	
C4.03	14a	5/5/2017	OPM	1) Review Water Quality Inlet - Buffer zone with Town Engineer for acceptance of system, 2) Add metal mesh to flaired outlet to stop animal intrusion	SBZ is under review with the Town. SBZ owner met with Town DPW, Con Com Agent and Town PM. Final review after investigation of installed SBZs. Drianage outlet will be connected to the new drain manhole within the drianage easement.	
TRAFFIC						
General Note: Show Project North to right of drawing per Arch. Dwgs.						
TR-1		5/5/2017	OPM	1) Add spot elevations to top and bottom of all HC ramps 2)Show all driveways to confirm no signs block drives 3)Add sign at entry to Glover Rd "No Access- M-F 8:00AM to 9:00AM" (confirm time with Schools & DPW)	1) The spot elevations will be added to all proposed pedestrian ramps 2)Next submission will include all driveways along Central Ave within the limits of the project.	
TR-1 &/or 2		5/5/2017	OPM	Add typical parking stall dimensions for standard, compact and Handicapped parking stalls	The parking dimentions will be added in the next submission.	
TR-4		5/5/2107	OPM	Pedestrian bypass only allowed during sidewalk & curb reconstruction. (See C1.00 notes)	The detail is included to provide a typical set-up for a safe pedestrian bypasss during sidewalk and curb construction only.	
LANDSCAPE						

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General Note: Remove Kindergarten doors -adjust planting accordingly. Update Sensory Garden design. Coordinate with conservation planting and flood storage design. Add note to drawings & Specification: GC shall coordinate access and construction schedule with Field and Trails contractor.						
L 1.01	15	1/25/2017	OPM	Update parking layout to reflect compact spaces, and handicapped space at NW corner of lot. Show crosswalk location(s)	Parking layout will be updated in CDs prior to the next submission	Complete
L 1.01	16	1/25/2017	OPM	relocate shed at service drive per zoning bylaw	The shed will be located per zoning bylaw for the next submission	Complete
L 1.01	17	1/25/2017	OPM	Key both electric plug-in car charging stations	Coorination with Electrical is ongiong - charging station locations will be provided for the next submission.	Complete
L 1.01	18	1/25/2017	OPM	remove proposed Cedar fence along south side of property line. It is redundant with neighbor's fence.	Discussion needed	Complete
L 1.01	19	1/25/2017	OPM	Cross ref. specific architectural Dwg. for bike canopy	Coorination with Architectural for several site elements is ongiong and will be further clarified for the next submission.	Complete
L 1.01	20	1/25/2017	OPM	review brick retaining wall at service drive with owner	Discussion needed	Complete
L 1.01	20a	5/5/2017	OPM	1) Add bollards to protect Generator, gas meter & east side of transformer, 2) Move Site ID Sign to be 30ft back from PL , 3) Add concrete pathway to playing field, 4) add concrete walls at endge of field and basketball hoop with fencing, 5) Add stone dust pathway, 6) add outdoorclassroom,	**(5/22) Addressed in final 60% / 90% submissions**	In Process on 60% CD
L 1.02	20a	5/5/2017	OPM	1) Update sensory Garden details to new design, 2) add sidewalk & path widths and radii for layout, 3) Update grading to reflect flood storage and pond design,	**(5/22) 1 and 3 Addressed in final 60% submission 2 will be done for 90% final or bid docs, always the last thing to be done**	Coordinate with ConCom Permit Civil Drawings
L 2.01	21	1/25/2017	OPM	Confirm re-grading in parking lot with Town Engineer & modify accordingly in Const. Doc. set	Following confirmation with the Town Engineer, the grading of the parking area will be updated for the next submission	Complete
L 2.01	22	1/25/2017	OPM	Review site stair to lower level with MAAB - written approval required.	**(5/22) Varience application submitted**	In Process on 60% CD
L 2.01	23	1/25/2017	OPM	confirm MAAB sidewalk clearance at SW bus gate when it is in open position.	Minimum clear width per MCR 521 Section 22.2 will be provided at the sidewalk adjacet to the bus gate.	Complete
L2.01	23.a	5/5/2017	OPM	1) Add concrete pathway to playing field, 2) add concrete walls at endge of field and basketball hoop with fencing, 3) Add stone dust pathway, 4) add outdoorclassroom, 5) adjust pond cut for added wetland planting. Or add detail to L2.02 sheet	**(5/22) Addressed in final 60% submission**	In Process on 60% CD
L2.02	23.b	5/5/2017	OPM	1) Add fence at top of Amphitheater wall for protection, 2) path at base of stair too tight, 3) Show detail how amphitheater intersects building wall.	**(5/22)details are being worked out, continued into CD phase**	In Process on 60% CD
L 3.01	24	1/25/2017	OPM	1) Add Conservation plantings in buffer zone to meet ConCom mitigation requirements, 2) Extend drawing coverage to include pond, 3) Review trees and bushes size below Pergola, 4) Concern regarding "AG" Acer Glabarium - salt tolerance and western species,	**(5/22)Development and coordination of plantings will continue into CD phase**	In Process on 60% CD
4 / L 4.02	25	1/25/2017	OPM	Wood Screen Fence - recommend adding a horizontal cap to reduce end grain rotting of wood	Will investigate in CDs	Complete

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1/ L 4.03	26	1/25/2017	OPM	Swing Leaf Gate - recommend mid-point leg with wheels to eliminate sagging over time.	Footings will be sized to support cantileverd weight of the swing leaf - wheels can add additional parts requiring maintenance and may not function adequately if the roadway is snowy / icy.	Complete
4/ L 4.03	27	1/25/2017	OPM	Review top light options with LED lighting to reduce night sky excess lighting.	**(5/22) Uplighting of flagpoles is more common and easier to maintain. Uplighting of flagpole is the only uplighting permitted by LEED.**	In Process on 60% CD
10/ L 4.03	28	1/25/2017	OPM	Grade marker for cleanout location required?	Cleanouts will be indicated on as-built documents required for closeout	Complete
L 4.04	29	1/25/2017	OPM	NO details for brick wall at service drive- review design intent with OPM & Town DPW re: snow clearing	wall is removed from project	Complete
L 4.04	30	1/25/2017	OPM	Snow storage diagram required for review with DPW	**(5/22)A sketch indicating areas of potential snow storage can be provided. Final snow removal plan will be the responsibility of DPW.**	In Process on 60% CD
L 4.04	31	1/25/2017	OPM	Review code requirements for railings on top of retaining walls greater than 30" above adjacent finish grade near amphitheater	**(5/22)Discussion of guardrail vs. planting protection required. Guards are required when a 30" vertical drop is within 36" horizontally of a walkway (2015 IBC 1015.2)**	In Process on 60% CD
STRUCTURAL S-1						
General Note: Show Project North to right of drawing per Arch. Dwgs. Remove Kindergarten doors & add additional Gym Storage as noted in the Arch. Drawings						
Review timing of Structural peer review with OPM- Procurement process required. Peer review will be based on 60% CD documents, or 90% Documents?						
S 0.02	S-3	1/25/2017	OPM	Add minimum dimension of rebar off from the edge or face of concrete	Minimum cover dimensions are described in note R8 on sheet S0.01.	Complete
S 0.03	S-4	1/25/2017	OPM	Detail #5 must cross reference A 6.51 detail G-4. Coordinate insulation details / reference	Structural drawings will not refer to specific architectural drawings, but will note "SEE ARCH" where appropriate	Complete
S 0.04	S-5	1/25/2017	OPM	Detail #9 - Confirm detail of RTU concrete pan with acoustic decking in Gym.	Roof deck type will change to composite decking at the gymnasium RTU.	Complete
S 0.05	S-6	1/25/2017	OPM	no comment	No comment - no action	Complete
S 0.06	S-7	1/25/2017	OPM	Coordinate Roof Screen flashing detail with steel details	Flashing details will be described in architectural drawings and coordinated with structural details in CDs	In Process on 60% CD
S 0.07	S-8	1/25/2017	OPM	Added Structural Details to be included in CD's	Correct - development is ongoing	In Process on 60% CD
S 1.11	S-9	1/25/2017	OPM	Cost Estimator notes must be replaced with details of added steel for Construction Document drawings	Notes have been removed for DD submission	In Process on 60% CD
	S-10	1/25/2017		Note door threshold detail at all Level 1 exterior door locations -Detail 5 on (S 0.03)- horizontal dimensions required at door openings for concrete or cross-reference A 0.11 for dimensions- **Delete Kindergarten exterior doors**	Horizontal dimensions will be indicated on Architectural drawings only. General notes in structural drawings will refer to architectural drawings for locations. **(5/24) Doors have been deleted from east side classrooms and will be from west site for 90% submission.**	In Process on 60% CD
S 1.12	S-11	1/25/2017	OPM	Step Footing dimensions required along with BOF and TOW elevations in CD's & sump pit location missing- coordinate with Plumbing (P 1.02)	Typical footing and baseplate elevations are noted in general note 13 on foundation sheets. Specific deviations will be called out as noted in CDs	In Process on 60% CD

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S 1.21	S-12	1/25/2017	OPM	Step Footing dimensions required along with BOF and TOW elevations in CD's.	To be completed in CDs	In Process on 60% CD
S 1.31	S-13	1/25/2017	OPM		No comment - no action	Complete
S 1.32	S-14	1/25/2017	OPM	Coordinate location of RTU pads with Mechanical over Gym / Cafetorium & Administration wing (see M1.32)	To be coordinated in CDs	In Process on 60% CD
S 1.32	S-15	1/25/2017	OPM	Confirm detail of RTU concrete pan with acoustic decking in Gym. Acoustic analysis of mechanical noise in Cafetorium & Gym spaces.	Roof deck type will change to composite decking at the gymnasium RTU. Acoustic consultant reccomendations will be incorporated into structural, architectural, and mechanical system design.	In Process on 60% CD
S 1.41	S-16	1/25/2017	OPM	Coordinate RTU concrete slabs with Mechanical Dwgs	Slabs, curbs, and isolators will be further coordinated in CDs	In Process on 60% CD
S 2.01	S-17	1/25/2017	OPM	Show difference between Detail 1 & 1A ?	The brick shelf width dimension is noted as 7" at detail 1A.	Complete
S3.01	S-18	1/25/2017	OPM	no comment	No comment - no action	Complete
S 4.01	S-19	1/25/2017	OPM	no comment	No comment - no action	Complete
S4.02	S-20	1/25/2017	OPM	no comment	No comment - no action	Complete
ARCHITECTURAL						
General Notes	*The Arch. drawings are ongoing with updates from at 60% CD Pricing set to 60% CD MSBA submission stage and good basis for the 60% CD Cost Estimate*				No Action	In Process on 60% CD
	Coordinate Arch. With Planning and Conservation Commission NOI Submission				**(5/22) Pending result of hearings**	In Process on 60% CD
AG 0.01	A-1	1/25/2017	OPM	Change Owner provided and installed to "Owner provided Contractor installed".	Corrected for DD submission	Complete
	A-1.a	5/5/2017	OPM	Increase size of Project construction sign to 4ft x 8ft and request waiver in Design Review Board Application.	**(5/22) Size revised for 60% submission. Waiver request in progress**	
	A-1.b	5/5/2017	OPM	Add abbreviations to list including defination for 1) BRKS, 2) CFMF, 3)GCO and etc. in Arch details.	**(5/22) BRKS added, CFMF already included, GCOs deleted from project.**	
AG 0.02	A-2	1/25/2017	OPM	If any wall type is "not used" then note it as such.	At this time, all wall types indicated are intended for use on the project.	Complete
	A-3	1/25/2017	OPM	Add note for VB / AIB on detail for X3.14- Natural Stone Veneer Wall.	Corrected for DD submission	Complete
	A-3.a	5/5/2017	OPM	Add STC - sound ratings where required & notes for offsetting of elect. / tel/data boxes	**(5/22) STC ratings for assemblies are typically indicated in specifications. Wall assemblies are designed based on STC, but these ratings are not included in wall assembly notes as they have little contractual meaning when the wall assembly is design by components. Offset of boxes notes are in Electrical drawings and specs, since they are primarily responsible for these penetrations.**	

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
AD 1.01	A-4	1/25/2017	OPM	Update Demolition plan and schedule to current conditions. 609 Central and 45 Sunset Rd to be demolished after temporary use as field office. Update notes re: stone pile, Hatch all paving to be removed, removal of existing farming fence, perimeter cedar fence at end of project. Coordinate with Civil Demolition Drawing.	Demo of both houses and conditional use of 609 Central indicated in note 7. Notation for stone pile updated - background to be updated when survey is completed. No new constuction will be indicated on this sheet. Final limit of work lines and fencing will be updated following development of LA and Civil drawings in CDs.	AD Dwgs -removed from 60% CD set
AD 1.01	A-5	1/25/2017	OPM	Add notes about coordination with Field & trails contractor.	Added for DD submission.	AD Dwgs -removed from 60% CD set
Arch -Plans		5/5/2017		General Plan note: Add dimensions for interior partitions	**(5/22) Noted. Many dimensions added for final 60% submission. Dimensioning is ongoing.**	
A 0.11	A-6	1/25/2017	OPM	minus sign difficult to read-show in parenthesis ( )?	Noted. We will discuss and review if a different notation would improve legibility.	In Process on 60% CD
A 0.12	A-7	1/25/2017	OPM	Add definition for "GCO" on architectural Index. Review elevation of all cleanouts with grading plan. Coordinate location of sump pump pit with Plumbing Plans	Abbreviation to be added in CDs. Ejector pit location has been coordinated for DD submission, however details and specific requirements will continue to be be developed in CDs.	In Process on 60% CD
A 0.21	A-8	1/25/2017	OPM	Note & dimension stair openings. Are recessed floor slabs required in single bathrooms? Turn on gridline dimensions.	Openings and additional dimensions will be added in CDs. Slab depressions not required at single user toilet rooms since these do not have floor drains. Gridline dims included in DD submission.	Complete
A 0.22	A-9	1/25/2017	OPM	Remove reference to "existing Building" in General Notes of Horizontal Control Plans	Noted. We will remove for the next submission.	Complete
A 0.22	A-10	1/25/2017	OPM	Coordinate reference to TOBS vs. TOBKS on AG 0.01	Abbreviations will be clarified for the next submission	Complete
A 0.22	A-11	1/25/2017	OPM	TOS at Platform should read 14'-9 1/2" ? And at foot of ramp at TOS 14'-0"	Spot elevations will be updated for the next submission	Complete
A 0.22	A-12	1/25/2017	OPM	Confirm horizontal clear dimensions at door openings. Add missing dimensions for slab openings and cantilevers.	Additional notation and dimensions will be added in CDs **(5/22) dimensioning is ongoing.**	In Process on 60% CD
A 0.22	A-13	1/25/2017	OPM	Update shear wall locations at Admin area	Corrected fot DD submission	Complete
A 0.22	A-14	1/25/2017	OPM	Coordinate foundation wall at Music Room with A 0.12 & show angle or bends in building geometry.	Additional development is included in the DD submission. This area will require continued development into CDs as it requires substantial coordination between design disciplines (Civil, landscape, structural, and plumbing) **(5/22) Coordination progressing but ongoing.**	In Process on 60% CD
A 0.22	A-15	1/25/2017	OPM	Reduce fractions of an inch in AutoCAD to nearest 1/8"	Tolerance revised for DD submission drawings.	Complete
A 0.31	A-16	1/25/2017	OPM	Add missing dimensions for gridlines, slab openings, stairways, elevator and cantilevers.	Additional notation and dimensions will be added in CDs	In Process on 60% CD
A 1.10	A-17	1/25/2017	OPM	Label missing room numbers for 107,120,121 &133	Most room tags will be removed, rather than added, from overall plans for future submissions. These plans are intended more as overall building maps and not to identify each room.	Complete
A 1.11	A-18	1/25/2017	OPM	Confirm closet capacity in Rm #115 with SPED Teachers. Detail of Art Room#111 display case required in CDs	Noted - we will continue to refine the design of these elements in CDs	Complete

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 1.12	A-19	1/25/2017	OPM	Review privacy shade locations in all ground floor windows for Security Working Group. Wrap column at gridlines 2.15 & A.90 - too slender- add insulation.	Treatment of both columns on grid 2.15 is in development. These will be thermally isolated from the exteior as the design develops. **(5/22) The columns will be sprayed with closed cell polyurethane foam insulaiton.**	In Process on 60% CD
A 1.20	A-20	1/25/2017	OPM	Label missing room numbers for 207,220, 221 & 228 Add note "Gym below" or X in upper Gym	Most room tags will be removed, rather than added, from overall plans for future submissions. These plans are intended more as overall building maps and not to identify each room. Gym open space will be clarified for future submissions	Complete
A 1.21	A-21	1/25/2017	OPM	Review Size of window in Liaison Office 101, 201 & 301.	Noted. We will review in CDs **(5/22) Window sizes revised.**	
A 1.21	A-22	1/25/2017	OPM	Update graphic at standard classroom sinks with counter	Following acceptance of the typical classroom layout (room 227) by the owner, we will populate all general classrooms consistently in CDs.	Complete
A 1.21	A-23	1/25/2017	OPM	STEAM Rm# 211- Move Green screen to west wall? Add tack board to North wall?	Noted - we will continue to refine the design of these elements in CDs	Complete
A 1.22	A-24	1/25/2017	OPM	Add closure screen to General office at entry lobby.	Security grille has been included in the DD submission. See sheets A1.73 and A2.22	Complete
A 1.22	A-25	1/25/2017	OPM	Enlarge windows in Quiet Zone -Rm#263,	Noted - we will continue to refine the design of these elements in CDs	Complete
A 1.22	A-26	1/25/2017	OPM	Review performance lighting requirements in Cafetorium including roll-down grill at Kitchen, size of projection screen, location of projector, size of window on west wall & blackout shades.	Noted - we will continue to refine the design of these elements in CDs	In Process on 60% CD
A 1.22	A-27	1/25/2017	OPM	Review need for oversized louver outside Staff Lunch room/ material / trellis planting	Noted - we will continue to refine the design of these elements in CDs	Complete
A 1.22	A-28	1/25/2017	OPM	Confirm minimum MAAB clearances in Media Center	There are several areas where fixed elements confict with door clearances and refinement of the circulation desk is still in progress. These clearances will be confirmed for the next submission. **(5/22) Elements have been revised to comply with MAAB clearance requirements.**	
A 1.22	A-29	1/25/2017	OPM	Add Glass light to Practice Room- #233B?	The door into this room includes a substantial sidelight and transom in the DD submission drawings.	Complete
A 1.22	A-30	1/25/2017	OPM	resize window at Specialists Office #232 re: stair	Noted. The stair and windows into these spaces is still in development. We will update for the next submission.	Complete
A 1.22	A-31	1/25/2017	OPM	Resize window at Custodial Storage #275A re: bench height, relocate slop sink closer to main door,	Discussion needed. We will continue development in CDs.	Complete
A 1.22	A-32	1/25/2017	OPM	Note "Open to Below" in Gym	Noted. We will include for the next submission	Complete
A 1.30	A-33	1/25/2017	OPM	note areas "open to below" @ entry, Media Ctr & stair. Add keys for Roof headhouse and skylight details	Noted. We will include for the next submission	Complete
A 1.31	A-34	1/25/2017	OPM	Add window at Spanish Classroom - #311? -	Noted - we will review the fenestration in this space in CDs	Complete
A 1.31	A-35	5/5/2017	OPM	Relocate duct near gridline A.40- blocks window	**(5/22) displacement diffuser has been relocated to the corner of the electdical room (SW corner of classroom)**	In Process on 60% CD
A 1.50	A-36	1/25/2017	OPM	Add key dimensions to all details	Development will continue into CDs	In Process on 60% CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 1.50	A-37	1/25/2017	OPM	C-6 & 12 confirm R-value of insulation at corner detail.	Sheet has been revised for DD submission. However, the referenced details include 4" of mineral wool (R16.8) at the main assembly. Perimeter blocking at windows will result in a lower R-value. **(5/22) No action required.**	In Process on 60% CD
A 1.50	A-38	1/25/2017	OPM	C-9 - review detail of glass at floor & ceiling	Aluming closures will be provided a the floor at ceiling. Details will be included in the next submission	Complete
A 1.51	A-39	1/25/2017	OPM	Add Missing sheet to Construction Document set		Complete
A 1.52	A-40	1/25/2017	OPM	Add Missing sheet to Construction Document set		Complete
All bathrooms	A-41	5/5/2017	OPM	Review spec for gypsum vs. cement board backing for all tile wet walls?	All tile walls receive cement backer board.	Complete on- AGO.02 Gypsum Board Schedule
A 1.70	A-42	1/25/2017	OPM	Confirm MAAB & ADA clearance at all handicapped stalls, rotate HC stall doors 90 degrees?	Accecssibility criteria will be reviewed in CDs. Stalls are configured with doors in the opposite corner as water closets as requried by accessibility regulations. **(5/22) Adequate clearances are provided.**	In Process on 60% CD
A 1.70	A-43		OPM	Add critical clearance dimensions to all plans and elevations to confirm accessibility requirements; **Girls Rm #223 - 5ft diameter?**	Noted - additional dimensions will be added in CDs **(5/22) furring wall has been relocated to accommodate 5' turning and will be reflected in the 90% submission.**	In Process on 60% CD
A 1.70	A-44	1/25/2017	OPM	Show base tile on all gypsum board walls	Wall base for each flooring and wall finish type will be developed in CDs.	In Process on 60% CD
A 1.70	A-45	1/25/2017	OPM	D-2 Add full tile surrounding all showers, confirm dimensions of shower, add bench at end of room or door to changing/ shower room?	A bench can be added to the room. Shower surround details are in devleopment. **(5/22) Acrylic shower units are being provided for the shower stalls. Tile surround is not required.**	In Process on 60% CD
A 1.71	A-46	1/25/2017	OPM	D-2 Add full tile surrounding all showers, confirm dimensions of shower, add changing table/wall unit?	A bench can be added to the room. Shower surround details are in devleopment. **(5/22) Acrylic shower units are being provided for the shower stalls. Tile surround is not required.**	In Process on 60% CD
A 1.71	A-47	1/25/2017	OPM	A-3 confirm MAAB access dimensions note on plan- **Girls Rm #138 - 5ft diameter?**; move HC toilets so side bar is on wall?	Accecssibility criteria will be reviewed in CDs. Stalls are configured with doors in the opposite corner as water closets as requried by accessibility regulations. **(5/22) Adquate turning space is provided. Room 138 utilizes the T-turn. HC toilets and grab bars are required to be in the opposite conrer from the door.**	In Process on 60% CD
A 1.72	A-48	1/25/2017	OPM	A-3 confirm MAAB access dimensions note on plan; move HC toilets so side bar is on wall?	Accecssibility criteria will be reviewed in CDs. Stalls are configured with doors in the opposite corner as water closets as requried by accessibility regulations.	In Process on 60% CD
A 1.72	A-49	1/25/2017	OPM	Why does the third floor have "BT" Baby changing tables?	Baby changing stations are provided as these are the most "public" toilet rooms. Visitors and parents may have young children / siblings attending an event that would need access to changing stations.	Complete
A 1.73	A-50	1/25/2017	OPM	Add screen closure at General Office reception area; note lines of floor finish changes / patterns	Added for DD submission.	Complete

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
Reflected Ceiling Plans						
General Notes	A-51		OPM	1) review radiant heat ceiling panel sample, piping, & maintenance issues with Owner; 2) provide OPM with typical room lighting studies for review to confirm lighting design, 3) provide Owner with overview of public address system and speaker locations in all non-classroom spaces	**(5/22) the PA system is included in the project manual and speaker locations indicated on the Technology drawings.**	Items 1& 2 - complete Item #3 in Process on 60% CD
A 2.11	A-52	1/25/2017	OPM	confirm lighting design in north side of Extended Learning Area- No LPS6 key is noted in electrical plan but not included in electrical legend on E 0.02	LPS6 is included in DD submission drawings. Arch. RCPs will be coordinated in CDs. **(5/22) LPS6 is indicated in 60% documents.**	In Process on 60% CD
A 2.11	A-53	1/25/2017	OPM	Coordinate lighting in Stair #3- lay-in recessed fixture not noted on lighting plan	Arch RCPs will be updated to coordinated with Recessed fixtures indicated in electrical drawings. **(5/22) Recessed fixtures are coordinated with electrical plans.**	In Process on 60% CD
A 2.12	A-54	1/25/2017	OPM	Confirm if speakers are required in bathrooms, Spec. offices, & halls for general safety announcements.	Speakers are provided in gang toilet rooms and in learning space / offices, but not individual office-only spaces. We can review this placement in CDs **(5/22) Proposed speaker locations are indicated on the technology and ceiling plans. Speakers are included in gang toilet rooms and offices.**	In Process on 60% CD
A 2.21	A-55	1/25/2017	OPM	Does Ceiling mounted Acoustic baffle obstruct sprinkler cover in Extended learning area?	Sprinklers will be installed in accordance with NFPA 13, specifically Chapter 8 in this situation.	Complete
A 2.21	A-56	1/25/2017	OPM	Speakers missing in STEAM (211) and ELC (215) rooms	Sprinklers will be provided in these spaces for future submissions.	Complete
A 2.22	A-57	1/25/2017	OPM	Share acoustic analysis with OPM to confirm need acoustic panels and sizing. Provide Owner with samples of all ceiling tile types & interior finishes board.	The DD set will be reviewed by the acoustics consultant. The DD submission has incorporated all reccomendations to date with respect to sound isolation and reverberation controls. **(5/26) 60% review provided to OPM. Community Noise report is still in development.**	
A 2.22	A-58	1/25/2017	OPM	Speakers missing in Media Center, main hallway, Quiet Rooms, kitchen area, Gym, Cafetorium	Speakers are provided in all areas noted except quiet zones for the DD submisison. These spaces will require additonal consideration in CDs	Complete
A 2.22	A-59	1/25/2017	OPM	Coordinate all Mechanical piping, sprinklers, roof drains, speakers & exposed ductwork above main entry space.	Coordination of these elements is ongoing. Routing of utilities between the north and south sides of the lobby will occur above the vestibule ceiling. See HVAC and plumbing drawings as examples.	In Process on 60% CD
A 2.22	A-60	1/25/2017	OPM	Show cross section of main entry canopy. RCP should show column support points, roof drainage,	Canopy design will continue to be developed in CDs	Complete
A 2.31	A-61	1/25/2017	OPM	Coordinate stairway lighting with Elect. Ltg Plan E2.31	Lighting type will be updated for future submissions	In Process on 60% CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 2.50	A-62	1/25/2017	OPM	Show typical Radiant Ceiling Panel Detail with maintenance access and plumbing coordination requirements.	Radiant heating panel details are on M4.13. There is no coordination with plumbing as all piping is HVAC piping.	In Process on 60% CD
	A-62.a	5/5/2017	OPM	Detail E-6 - confirm and note STC rating for upper wall	**(5/22) wall type changed to type F5A. STC ratings not typically noted on drawings for wall assemblies.**	New
A 3.10	A-63	1/25/2017	OPM	Coordinate with RTU locations and label SF areas & setbacks of solar ready zones on roof, remove areas that will be shadowed by roof screens and entry hall roof. Provide access routes to roof drains for maintenance. Identify priority location for Solar PV panels	"Solar Ready" zones on 3.10 are code-prescribed areas. Actual PV priority locaitons will be discussed, developed, and analyized for shading in CDs **(5/22) The solar areas were removed at 60% CD because there was indication that this would not be a "code" requirement. However, that provision is back in the draft form of the code now.**	Why is all notation for Solar panels removed on 60% CD?
A 3.11	A-64	1/25/2017	OPM	Coordinate all RTU locations with structural RTU Pads, show maintenance roof pads at all RTU's and primary pathways	To be developed in CDs **(5/22) Locations have been coordinated.**	In Process on 60% CD
A 3.12	A-65	1/25/2017	OPM	Show roof access ladder to roof above main entry. Consider solid panel at ladder location ILO glass.	To be developed in CDs **(5/22) Roof to be scuppered for drainage. No ladder will be proivded**	In Process on 60% CD
A 3.50	A-66	1/25/2017	OPM	Detail K-12 raise the cross support to a minimum of 12" above roof surface and move StStl Clamp ring below cross member to create waterproof seal. Screen Posts are typically bolted and welded to the steel frame, coordinate sequence of work for foam infill.	Detail is diagrammatic but will be developed in CDs. Lower tube is closer to 30" aobve roof deck. Spot elevations will be provided on structural dwgs. In CDs. **(5/22) Details and elevations provided for 60% submission.**	In Process on 60% CD
A 3.50	A-67	1/25/2017	OPM	C-14 hoistway fireproofing gyp should overlap combustible wood blocking	Gyp board will be omitted from this detail. It is not required.	Shaft is rated as 1-HR enclosure?
A 3.50	A-68	1/25/2017	OPM	some notes are being cut off/condensed in C3, F8 & K12	Noted. We will correct for the next submission.	In Process on 60% CD
A 3.50	A-68.a	5/5/2017	OPM	Confirm locations for Lightening rods - or add criteria in specifications	**(5/22) Lightning protection is described in Electrical drawings.**	
ARCHITECTURAL- EXTERIOR ELEVATIONS						
General Notes	A-69		OPM	1) review lighting and Exit sign locations at all exterior doors with curtain wall above; 2) Review location of exterior speakers with Owner;	Noted. We will review in CDs	In Process on 60% CD
A 4.10	A-70	1/25/2017	OPM	Review sizing of windows at Media Center stair, Quiet Dining Room and Service work room with Owner	As noted above we will review and devleop in CDs	Complete
A 4.11	A-71	1/25/2017	OPM	Review detail of curtain wall at level 3 locations with OPM & Owner RE: mullion width, glazing type	Comment is not understood - discussion needed	Complete
A 4.11	A-72	1/25/2017	OPM	Review with OPM & Owner alternative options for the brick patterns. Designer response to Design Review Board comment of materials making a "Dark Building"	Discussion needed	In Process on 60% CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 4.12	A-73	1/25/2017	OPM	Similar notes to A4.11 & A4.12. Detail D-8_ Stairwell #3 door threshold must exit to grade with no step	Correct, there will not be a step at any exterior door. Typical door condition is shown in detail G4 /A6.51	In Process on 60% CD
A 4.13	A-74	1/25/2017	OPM	A-10- Deep Mullion was noted as removed in cost Est.; A-14 -windows at Media Ctr level 2 conflict with stair; H-14-Remove/ relocate exposed foundation drain; H-14 Review window sizes with OPM in Café (too tall), Quiet Dining rooms (enlarge) and Custodial Storage(enlarge to counter height);	A10 - Note will be removed A-14 - as noted above, location and size of windows is in development H14 - Updated for DD submission. Windows sizes & locations require discussion.	A-10 Complete A-14-Complete H14- In progress
A 4.14	A-75	1/25/2017	OPM	C-4-coordinate all MEP with Vestibule windows; Show location of access ladder to Vestibule roof; H-10- confirm approval of signage with DRB.	C-4 - several HVAC and Plumbing vents were relocated during DD - coordination of windows and vent locations is ongoing H-10 - approval will be sought in CDs	In Process on 60% CD
ARCHITECTURAL- BUILDING SECTIONS						
General Notes	A-76	1/25/2017	OPM	1) coordinate MEP above ceiling to confirm clg heights; 2) Confirm RTU height compliance with Zoning code; 3) finalize connections of systems in model;	1. Coorindation ongoing as CDs develop 2. RTU heights are less than 15 feet above the main roof and are in compliance. 3. Closure of the model will develop in CDs	In Process on 60% CD
A 5.10	A-77	1/25/2017	OPM	Ditto General Notes	Section notes not typically provided on section sheets	In Process on 60% CD
A 5.11	A-78	1/25/2017	OPM	A-14 - Show roof trusses , B-ball backboard in Gym; D-14-Coord. height of lighting in extended learning area;	depth will be expanded to show joists in gym and cafeteria D-15 Updated for DD submission	In Process on 60% CD
A 5.12	A-79	1/25/2017	OPM	A-14 - Review depth of footing at entry canopy & provide and access ladder to Vestibule Roof; D-14-Coord. height of lighting in extended learning area;	A-14: depth of footing is to prevent lateral surcharge on building foundation wall. Cooridnation will continue through CDs	In Process on 60% CD
ARCHITECTURAL- WALL SECTIONS						
General Notes	A-80	1/25/2017	OPM	1) Complete interconnections of systems in CD Set; 2) Show floor slab extensions to pick up wall framing; 3) clean up all fascia panels at roof cantilevers. 4) clean up head and sill details on all windows; 5) Coordinate structure at all roof cantilevers; 6) Key in all wall details; 7) Show Misc. metal at all window & door headers	All noted. Development of wall sections will continue into CDs. Significant progress will be evident in the next submission.	Significant Process on 60% CD more needed in 90%
A 6.10	A-81	1/25/2017	OPM	A-14 - provide spandrel glass detail at floor level 3	Typical spandrel details will be included in the next submission	In Process on 60%CD
A 6.11	A-82	1/25/2017	OPM	Ditto General Notes	Wall Section notes not typically provided on wall section sheets	In Process on 60%CD
A 6.12	A-83	1/25/2017	OPM	Ditto General Notes	Wall Section notes not typically provided on wall section sheets	In Process on 60%CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 6.13	A-84	1/25/2017	OPM	General - Show relieving angle spacing for three story brick walls, window and door headers; Refine brick detailing with patterns soldier courses & etc. ; A-3 - review sill condition at exit door- MAAB access.	3 story brick veneer will not require relief at the slab edge. A-3: an exterior concrete landing will be provided at all exterior doors.	In Process on 60%CD
A 6.14	A-85	1/25/2017	OPM	A-3 - Show Spandrel Glass Details at floor conditions; A-6 & A-7- Show all expansion joint details at each level; A-11- show closure detail of CMU with steel frame; A-14- Show glazing detail at gym wall, head & sill;	The noted items will be developed in CDs.	Significant Process on 60% CD more needed in 90% CD
A 6.15	A-86	1/25/2017	OPM	A-5 - show footing drain waterproof membrane and compacted backfill; coordinate footings with structural	The noted items will be developed in CDs.	In Process on 60%CD
A 6.16	A-87	1/25/2017	OPM	1) complete wall framing and insulation above vestibule windows with closure of thermal envelope; 2) coordinate structure at all roof cantilevers; 3) coordinate all MEP in Vestibule area; 4) Provide access panel locations in vestibule ceiling; 5) Review window cleaning with PFD-Operations; 6) Confirm spandrel Glass location & rain cover in Nor'easter at main entry; 7) main entry recessed slab detail for walk-off mat? 8) Exterior slab detail at Main entry with insulation;	The noted items will be developed in CDs.	In Process on 60%CD
A 6.17	A-88	1/25/2017	OPM	A-3 - review window height at sill, seat and table height re: maintenance and table damage; Add insulated sill with seating at wall? Confirm sun shade, and blackout shade details at window wall; A-3 & A-6- Coordinate stepped footings with grading plan, elevations and Structural Dwgs.	A3 - Discussion required **(5/22) General configurations have been finalized. Details continue to be developed.** A3 & A6 - coordination of grades & foundations / brickshelves is ongoing in this portion of the building.	In Process on 60%CD
A 6.18	A-89	1/25/2017	OPM	Ditto General Notes	Wall Section notes not typically provided on wall section sheets	Complete
A 6.50	A-90	1/25/2017	OPM	C-14 - Relocate parapet Axon to Roof detail sheet?	"Top of Wall" details include both roof and wall construction interface. Top of Wall conditions are typically noted in A6.5x series.	Complete
A 6.51	A-91	1/25/2017	OPM	Confirm thermal break at concrete wall in all details	Insulation to the exterior face of wall will extend to just below finished grade	In Process on 60%CD
A 6.55	A-92	1/25/2017	OPM	1) Closure & support details and material samples required for MCM panels proposed at edge of soffit. 2) Confirm how roofing terminates with panel. 3)Show corner and return conditions (in 3D). 4) window sill gyp board corner condition needs wood or more durable sill. 5) Add definitions for all abbreviations to master architectural abbreviation list including MCM, CFMF, LGMF, PPT PWD, HSS, MC & Etc.	The noted items will be developed in CDs.	In Process on 60%CD

Hillside Elementary School Project

Drawing Date: 4/14/2017

Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- Pricing Set

Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 6.60	A-93	1/25/2017	OPM	Similar to 6.55	The noted items will be developed in CDs.	In Process on 60%CD
A 6.61	A-94	1/25/2017	OPM	Add details for attachment of backlit metal letter sign on top of wood panel, confirm electrical supply conduit, and all related details, and Design Review Board approval.	The noted items will be developed in CDs.	In Process on 60%CD
A 6.62	A-95	5/5/2017	OPM	More details being added	**(5/22) Development will continue through CD phase**	In Process on 60%CD
A 7.11	A-96	1/25/2017	OPM	1) Add key dimensions for room size, 2) Add Rise and run and stair details, 3) confirm Baby changing station in Mom's Rm #228 4) note elevator pit ladder location in plan detail A-9	1. Dimensions added for DD submission 2. Rise / run dimensions provided for DD submission 3. Discusison needed 4. Pit ladder located in plan F3	In Process on 60%CD
A 7.12	A-97	1/25/2017	OPM	1) Add key dimensions for room size, 2) Add Rise and run and stair details,	Added for DD submission	Complete
A 7.13	A-98	1/25/2017	OPM	1) Add key dimensions for room size, 2) Add Rise and run and stair details, 3) confirm headroom clearances at roof ladders, D-4) resolve conflict of windows with stair & provide added storage below stair for office, 5) show larger detail at all roof ladder conditions, and add walking pad to roof membrane at bottom and top	1&2 added for DD submission 3. Roof ships ladders have over 8'-0" headroom clearance measured from stair nosings. 4. This will be further developed in CDs 5. See A7.51 for stair details. Additional details will be added in CDs.	In Process on 60%CD
A 7.50	A-99	1/25/2017	OPM	A-12 - Concrete key or haunch required at base of exterior stair to stop slab settlement. C- 14 - Stage Edge nosing? Where is this detail used?	A-12 to be revised - landscape concrete will not be tied into stair foundations. C-14 - detail deleted for DD submission	In Process on 60%CD
A 7.51	A-100	1/25/2017	OPM	A-5 - is 6" depth for sump pit adequate? D-2- Loading Dock section? Where is this detail used?	A-5: 6" depth is confirmed - just deep enough to drop in a portable sump pump - this elevator does not require a permanent sump pump. D-2 to be deleted for future submissions	Complete
A 8.10		1/25/2017	OPM	1) Confirm Door Security hardware and lockdown protocol with Security working Group; 2) Change Boiler Room Door #133 to a HM from wood for long term durability reasons; 3) Add kick plates to Storage Rms, Janitor Closets and service doors;	1. Discussion / meetings requried 2. Door will be revised for future submissions 3. Refer to hardware specs for kick plates, typically provided at storage and custodial spaces.	In Process on 60%CD
A 8.20		1/25/2017	OPM	Windows W-1 add width dimension for each type; An alternate size may be required for the Media Center windows; W-3 consider using W2 type in Rm 275A raised to 42" AFF. for workbench light and ventilation	Window types will continue to be developed and refined in CDs	In Process on 60%CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 8.30, A 8.31 & A 8.32		1/25/2017	OPM	Curtain Wall Types Details required for curtain wall intersection with floor slabs at 2nd and 3rd floors. Provide details and review interior maintenance issues with PFD-Operations, particularly protection of glass at classroom floor levels. Ground floor condition with 6" base is preferred.	Additonal details included for DD submission. These will continue to be developed throughout CDs	In Process on 60%CD
A 8.40		1/25/2017	OPM	Storefront Types Storefront SF-8 is pushing the limits of Storefront size system, Curtain Wall system may be more appropriate.	Assume reference is for SF-6. The top transom will be eliminated for future submissions.	In Process on 60%CD
A 8.50 A 8.51		1/25/2017	OPM	Door Details Head and Jamb conditions are documents well for DD stage Sill & threshold conditions details missing	Sill & threshold details are in development.	In Process on 60%CD
A 8.60		1/25/2017	OPM	Window Details Typical Head, Jamb and sill conditions are documents well for DD stage - 3D details showing flashing and waterproofing membrane continuity at corner conditions required in CD's	Details will continue to be developed into CDs	In Process on 60%CD
A 8.70		1/25/2017	OPM	Curtain Wall Details Typical Head, Jamb and sill conditions are documented well for DD stage - 3D details showing flashing and waterproofing membrane continuity at corner conditions required in CD's; Confirm R-value for systems all conditions. Confirm insulation and thermal break in details J-3; Add blocking below frame in detail A-9	Details will continue to be developed into CDs Perimeter condition detail R-values will not match wall system R-values. Thermal breaks or low-conductivity materials are provided to prevent bidging, but these will inevitabley result in a lower R-value than at "typical" wall or fenestration systems. Blocking conditons are still in development	In Process on 60%CD
A 8.80		1/25/2017	OPM		No comment - no action	Complete
A 9.01		1/25/2017	OPM	Finish Schedule 1)Provide Owner with complete Interior finish boards & colors for review by Working Groups and PPBC. 2) Add Green Screen walls in selected Small Group Learning areas 3) Add bumper wall guards to gypsum board walls in rooms 264, 272,275, 275A & 277.	1. Materials boards to be presented at an upcoming committee meeting for approvals. 2. Noted - we will include for future submissions 3. Noted - these will be included on AQ plans for future submissions **(5/22) Added to sheet AQ1.22. Note that there are only 4 outside corners in these spaces.**	In Process on 60%CD
A 9.11, A 9.12 A 9.21, A 9.22, A 9.31		1/25/2017	OPM	Finish Floor Plans 1)Provide Owner with complete Interior finish boards & colored floor plans for review by Working Groups and approval by PPBC.	Materials boards to be presented at an upcoming committee meeting for approvals.	In Process on 60%CD

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Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
A 9.50		1/25/2017	OPM	Interior Details Detail 1- provide blocking for cleaning dispensers, confirm mounting heights with PFD-Operations; Detail 6- Add custom graphics per Wellness Instructor; Complete balance of details for CD.	1 - Noted - will incorportae blocking for the next submission 6 - Floor striping will be updated for future submissions	In Process on 60%CD
A 9.70		1/25/2017	OPM	G-10 Add security curtain at front reception desk, per addendum #1; & interior elevations at vestibule, Samples required of wood for cubbies & cabinets, picture rail system ;	Security grilled incorporated for DD submission Materials boardsto be presented at an upcoming committee meeting for approvals.	In Process on 60%CD
A 9.71		1/25/2017	OPM	General to all Interior Elevations - Coordinate locations of all electrical outlets with markerboards, cabinets, glazing, projector walls, tack boards & etc. Provide samples of these materials and acoustic panel fabric and signage system. Key in Room control conditions for each room or room type.	Coordination of the noted elements will continue thoughout CD phase.	In Process on 60%CD
A 9.72		1/25/2017	OPM	F-6 _ redesign windows at media stair to eliminate conflicts with Media Center stair, show handrails. Provide access to storage below stair for Spec. Off. 232	As noted above, these will be developed in CDs	Complete
A 9.73		1/25/2017	OPM	A6- Review need for 2nd score board vs. increased overlook window size. Show 3D rendering of interior of Gym with ductwork for PPBC and Working Group; G11- review window wall design with owner- show alternate with wood sill at 18" AFF; concern is the protection of glass at floor condition; show sunshade and blackout curtain details and systems to Owner for review and approval. J-7 - demonstrate light control system for kitchen area during presentations in Cafetorium; share lighting model with Owner and OPM;	A6 - Discusison regarding scoreboards required. 3D views of the gymnasium will be developed for review and approval G11 - Discussion required J7 - Discussion required **(5/22) Door has been changed to a solid slat coiling door.**	A-6-Only 1 score Bd G-11 - complete J-7 - in progress
A 9.74		1/25/2017	OPM	A-6 - increase size of AWP to align with windows;	Noted. Development and refinement of AWPs will be ongoing into CDs	Complete
A 9.75		1/25/2017	OPM	General note- coordinate all MEP including exit signs in stair wells, entry vestibules, A-4 _ review lighting locations within reach of landings; E-8- Specify finishes and construction system for sloped roof above main entry vestibule. **Review cleaning requirements with PFD-Operations.**	A4 - Noted. Will review lighting locaitons and ensure that they are not within reach range of the landing. E8 - discussion required. Currently this "roof" is intended to be a gypsum assembly with painted finish	Good Progress on 60%CD
A 9.80		1/25/2017	OPM	C-2 - frame details for play structure required; C-6, 8 & 10-Confirm trash receptacle sizes for millwork; A-13 & B-13- confirm Trellis detail with Working Group, D-6 - Show section, shelving, lighting details for case E-5 - Details of Platform and edge condition required.	In general, interior elements and details are indevelopment and will show progress for the next submission	Good Progress on 60%CD
Architectural Partial Equipment Plans						

Hillside Elementary School Project

Drawing Date: 4/14/2017

Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- Pricing Set

Dwgs./Spec. No..	Item No.	Date Generated	By	Comment	Design Team Response	Follow Up 60%CD
AQ1.11 & 1.12, AQ 1.21 &1.22 AQ 1.31				General Note - Equipment Plans have captured Working Group discussions well. Follow-up meeting to reconfirm design details with User groups required to kickoff CD's,	Follow up meetings to be scheduled in early CD phases **(5/22) User meetings commpleted and all room data sheets are signed off.**	Meetings held- Good Progress on 60%CD
				Seating layout needed on Platform (Rm #261) to confirm Cafeteria capacity;	Noted - will provide prior to next submission **(5/22) seating layouts provide adequate seating capacity.**	Good Progress on 60%CD
AQ 1.50 &1.51				Very comprehensive for DD. Reconfirm with Working group required at kickoff for CD	Follow up meetings to be scheduled in early CD phases **(5/22) User meetings commpleted and all room data sheets are signed off.**	Good Progress on 60%CD
AQ 1.71				Add number keys in CDs, review open book shelves with owner - add turn-up at end to hold books & etc.	Follow up meetings to be scheduled in early CD phases **(5/22) Keying and development of details is ongoing.**	Good Progress on 60%CD

OPM Review Comments II.c.2

Hillside Elementary School Project

Drawing Date: 5/12/2017

Constructability Review Log MSBA #: 201301990035 *Stage:* 60%CD- MSBA submission

Dwgs./Spec. No..	Item No.	Date Generated	By	District Comments	Design Team Response	Follow Up 60%CD
Food Service	*(Comments from R. Griffin- Director Nutrition Services & T. Gurge - Health Dept)*					
K1.10	K-1	4/26/2017	RG	Item #59 Self Leveling Tray Dispenser - provide 4 (not 2) so an empty dispenser can be inserted when a full dispenser is removed	CMA - Will revise quantity and locate on plan	
K1.10	K-2	4/26/2017	RG	Confirm that two hand sinks are sufficient by code and with Health Department	CMA - Handsinks are located so that they are visible and in a reasonable walking distance to any area in which food is being prepared, cooked, served and in warewashing functions. It is our experience that the two should be adequate coverage for this kitchen but local authority will have the final ruling.	
K1.10	K-3	4/26/2017	RG	Request centering the mobile salad bar and cashier stations between the cold pans on each serving line. Shift opening toward gridline #1.47	CMA - equipment to be shifted within next plan submission as requested	
K1.10	K-4	4/26/2017	RG	Rolling door between Kitchen and Cafetorium should be solid panel not open grill for security and to eliminate light spill into preformance area during events.	DW - door has been changed to solid slat coiling door.	
K1.10	K-5	4/26/2017	RG	Cashier Sta. (#66) electrical outlet and data-port location? Salad Bar (#73) electrical floor outlets -how do you keep them clean & undamaged? Is a data/power column needed?	GGD - A floor box will be provided for the cashier locations. The floor box will be recessed into the floor and have a cover to prevent damage. The salad bar has no power required.	
K1.10	K-6	4/26/2017	RG	Confirm lighting levels in the kitchen area particulary over work areas, pot cleaning area and under hoods - Light layout on E1.22 conflicts with skylight locations - add side wall lights to skylight well?	GGD - Lighting levels in the kitchen will be adjusted around skylights. If necessary, lights will be added to skylight walls. Lighting levels will be confirmed with new layout.	
K1.10	K-7	4/26/2017	RG	Confirm tray rail height is designed for elementary students.	CMA - Specifications to be modified for tray slide height located at 30" AFF. Sections of counters to be included within next plan submission for owner review.	
K1.10	K-8	5/13/2017	TG	Noise level of the Kitchen exhaust fan should be 'whisper quiet'. Eliot School kitchen fan is too loud as a reference.	GGD - There is limited control on kitchen exhaust fans due to required velocities and typical operation. The fan will generally be selected with lowest possible noise. Furthermore, this information is shared with the acoustic consultant and additional measures may be taken per the acoustic consultants direction.	

K1.10	K-9	5/13/2017	TG	Confirm sufficient dish drying rack / shelving is installed near the 3-bay sink and wash area.	CMA - The length of mobile shelf (Item #10 can be increased by 12" - If the owner would like more mobile drying racks, we could located them on the rear side of the UDS. **Owner response required.**	
K1.10	K-10	5/13/2017	TG	Confirm status of Food Permit Plan Review packed with food service equipment spec sheets, and plans. Will these be provided in 90% documents? Or is this a GC / kitchen equipment supplier responsibility?	CMA - To our knowledge the plans are yet to be reviewed with the local health department. Typically the plans are dropped off for review. CMA is willing to participate in any form of health department plan review process requied.	
Electrical				Lighting		
General Note	GN-1			No emergency lighting shown in the following rooms: 134-Adaptive PE, Extended learning areas, 112 - Elec, 212 -Teldata, ,239-IDF, 256-Nurses Rm,261- Platform, & Level-3 classrooms	GGD - Emergency lighting will be added.	
General Note	GN-2			Coordination required in classrooms between ceiling heating panels and RC1 lights at perimiter.	GGD - Locations for heating panels and downlights will be coordinated.	
Plumbing						
P1.12		5/11/2017	JG	Add an eye-wash sink in boiler room near main door.	GGD - The emergency eye-wash will be added to the plans.	
Vol#3 Plmbg 22 00 10-20				2.27 Domenstic Water Sub meter - confirm that flow meter is compativble with BMS software.	GGD - The plumbing spec will indicate the BMS system connection.	
Mechanical				*(comments from PFD-Operations)*		
M1.12		5/11/2017	JG	Provide more space around chilled water pump in corner for maintenance.	GGD - Pumps have shifted further away from the wall. Major equipment will be updated with minimum clearances for future submissions.	
M1.22		5/11/2017	HH	Kitchen ductwork conflicts with kitchen exhaust hood. Supply ductwork interconnecting administraiton offices creates sound leaks between rooms. Acoustic separation required for confidential conversations. Confirm sound attenuation rating for the performance spaces in the Cafetorium and Gym.	GGD - Ductwork shown feeding the exhaust hood should be the only ductwork which may appear to be in conflict on drawing. The REVIT model does not currently indicate any actual conflict of duct vs. kitchen hood. Both items are modeled in the model(s). Space crosstalk shall generally not be a concern. Detail on drawing M4.15 for "Duct Thru Wall" as well as details on the VS drawings for acoustic sealing and specification sections cover acoustic pentration requirements. This will also be reviewed by the Acoustic Consultant. If there is additional requirements, they will be forwarded to the rest of the design team for further review/implementation. Sound attenuators have been included in the cafetorium and the gymnasium and are in line with Acoustic Consultant requirements.	

M2.12		5/11/2017	JG	Is ceiling heater in lower vestibule (Rm #131) sufficient for full stairway? Is a Unit heater required on the side wall near the double door?	GGD - Thermal calculations have been done on the entire school. Substantial heating/cooling equipment is provided in each space as necessary. Vestibule 131 has limited locations where unit heaters may be installed. However, a single unit heater is generally oversized for an entryway to combat typical circulation of air inherant with entry/exit.	
M3.12		5/11/2017	JG	Confirm that Make-up-air-Unit (MAU-1) will not draw in kitchen exhaust. RH-1 unit not identified on schedule. EF-7 missing from schedule. Vent pipes and FA intake pipes for boilers missing. Confirm adequate clearance around CH-1 for proper operations of unit & vibration isolation above music room.	GGD - MAU will not draw in in kitchen exhaust air. It is a 100% supply air device. The MAU serves the make-up air plenum provided on the hood. RH-1 has since been added to schedule. Vent piping is shown in mechanical room and relevant duct drawings. However, this is typically owned under plumbing division 220000. Chiller will be installed on 24" high dunnage with appropriate vibration and seismic per the VS drawings and specification.	
M4.12		5/11/2017	JG	Confirm that all exhaust fans have exterior rated service switch at the unit that does not require lifting the unit from curb to switch off. Exhaust Fans installed on curbs with interior damper will be screw fastened with neoprene gasket - not adhesive fastened. Removal procedures and repair shall be part of all training and O&M manuals.	GGD - Exhaust fan requirements are listed under section 2.15 of the HVAC specification. We will review and update as required. Training for all mechanical equipment is included within the specification and should include the requested information per section 1.23 of the specification among several other references throughout the specification for individual pieces of equipment, ATC training and so forth.	
M4.12		5/11/2017	JG	General Notes: #7, 13, 18,35, 46 text not legible	GGD - This has since been corrected.	
M4.13		5/11/2017	JG	Pipe Hanger details- support shield should be tack welded to hanger to avoid dropping from contraction & expansion. (also note in Spec HVAC 23 00 10-24s. 2.04(E) . Ex Tank add water filter, and softener. Boiler piping to condensate drain should be PVC not copper. Condensate treatment cannisters or tank should have unions on the lines (in and out) for ease of replacement.	GGD - Will review tack welding and update spec/drawing if necessary. Make-up water would be plumbing scope. HVAC water treatment is included in schedules, drawings and specification. Agree, boiler condensate to be PVC.	
M4.14		5/11/2017	JG	1) All pressure guages should have snubbers to protect guages, and small ball valves instead of ground plug valves. No "twist valves." 2) Strainer should have 1" ball valve blow downs.	GGD - 1) Pressure gage installation indicates snubbers required per specification. 2) Drawing detail indicates ball valve.	
M4.16		5/11/2017	JG	Add isolation valves just inside boiler room for hot water and chilled water flow.	GGD - Will review and update.	

M5.12		5/11/2017	JG	The boilers require an emergency shut-down switch located just outside the boiler room with a keyed cover to prevent accidental shutdown. Boiler room alarm should be located above doors in hallway with both sound and visual beacon. Carbon Monoxide (CO) detector in boiler room should provide alarm in the boiler room and also send the alarm to the hallway sound/visual beacon.	GGD - Will review and update as required.	
Furniture Rm #275A Dwg AQ1.22		5/11/2017	JG	<u>Furniture required in Custodians storage room includes:</u> Plan flat files with locking wheels and plan reference space on top. O&M manual lockable shelving unit above 6ft reference desk. Double file cabinets below should be setup with Maintenance filing systems for each piece of equipment.	DWA - The items will be added to the list for FFE procurement.	
General		5/11/2017	JG	Request that all equipment be "open source" "open protocol" & identify at least two local suppliers for replacement equipment.	GGD - This is typical and indicated within the specifications.	
General		5/11/2017	JG	Confirm that all equipment in boiler room will fit through the access doors & confirm route for entry / exit for installation and future replacement.	GGD - Will review equipment clearance requirements for maintenance/replacement purposes.	
Vol #3-HVAC 23 00 10-16		5/11/2017	JG	2.02 Valves- All flanges shall be joined using nut and bolt fasteners so as to be double nutted or contianing a split type lock washer of compatible metal.	GGD - Will review specification and update as necessary.	
Vol #3-HVAC 23 00 10-38		5/11/2017	JG	2.10 - High Efficiency Gas fired condensing Boiler - D. Manufacturers - drop 1. "Lochinvar" and add Hydrotherm. Town has not had good experinece with Lochinvar.	GGD - Hydrotherm does not have a stainless steel heat exchanger, instead using cast iron. They are less efficient than the indicated manufacturers and have less controllability with limited turndown. If Lochinvar is not acceptable, we would recommend a manufacturer such as CAMUS or similar to be the third equal.	
Vol #3-HVAC 23 00 10-38		5/11/2017	JG	2.11 Pumps - A. Add requirement that all pumps shall be laser aligned within 1/100th of an inch during installation. B. 6.- Seal: add "rated for the most extreme demand" at end of sentence.	GGD - Will review and revise.	
Technology						
T 1.11, T1.21, T 1.31		4/28/2017	MM	Add double data drops to A) Extended Learning Areas on each floor at @Gridlines A.60, col at A.50& 2.40, and wall near A.40& 2.40; B) on E & W walls of Small Group rooms; C) at each hallway printer location D) near teachers desk in each classroom show dataq outlets per electrical drawings.	ETD - Data added in Extended Learning Areas and Small Group Rooms. Will coordinate with D+W on printer locations and teacher desk locations.	

T 2.01		4/28/2017	MM	Add USB-C connector to every plate that will run apple adaptor MJ1K2AM/A which has HDMI, USB 3.1 and USBC Power. This is going to require the tech consultant to get a spec to do this since it is new technology. Include as 5th port in plate or replace VGA port if necessary.	ETD - USB-C is included at the AV plates. Please clarify whther or not VGA is wanted on the plate. **Owner response required.**	
General classroom note		4/28/2017	MM	Is it possible to increase conduit size (to 2") for future expansion in both display walls behind the TV and future projector?	ETD - Please note that there are (2) 1.25" conduit at each AV plate. 2" might not fit in tha box. Please confirm that (2) 1.25" are okay. **Owner response required.**	
T 1.12		4/28/2017	MM	Protection is required for all low gym jacks. Are they recessed with cover plates?	ETD - Will review and revise	
General		4/28/2017	MM	ITS department will spec Wireless access to standardize on Aerorhive.	ETD - This is an FFE item to be coordinated with the Owner.	
Academic wing all floors		4/28/2017	MM	Printing spaces outside general classrooms must accommodate 2 printers color and b/w. Add Double network dataports and power at all printer & copier locations.	ETD - Will coordinate locations with D+W. DWA - two printers at each classroom bay are not currently incorporated into the plans based on the school's direction. There is one small convenience printer for each classroom "pod" of 4 classrooms. Refer to the latest architectural equipment plans for locations.	
General Security		4/28/2017	MM	Confirm Video surveillance camera postions on the interior are being wired but only selected cameras are installed? Note locations on drawings & carry unit cost for each added camera in bids.	ETD - Owner needs to provide the locations where they want cameras vs cabling only. Unit costs on bid form will need to be coorinated by D+W. DWA - Owner to review plans and mark which cameras are to be installed under the construction contract and which are wired only. **Owner response required.**	
General		4/28/2017	MM	Digital signage should not be centralized system. Just need TV with same set up classroom secondary AV setup.	ETD - Will review and revise. Owner needs to let us know what product they want at these locations. **Owner response required.**	
General Spec		4/28/2017	MM	IT Department needs the spec on the protection for the interactive projectors in the gym. Add to Tech Spec. Division 27 00 00.	ETD - Will specify once projector spec is finalized.	
T 2.02		4/28/2017	MM	ITS Department will Spec the network hardware (HP) and UPS (APC) equipment.	ETD - If this equipment is to be included in the base bid, we will need this spec ASAP. **Owner response required.**	
T 2.02		4/28/2017	MM	IP network switches should have 3 separate systems for voice, Data & security. Door access switches can share video switches if needed or be independent.	ETD - If this equipment is to be included in the base bid, we will need this spec ASAP. **Owner resposne required.**	
General Security Cameras		4/28/2017	MM	Key Card Access only at selected exterior and Interior doors, per Superintendent's direction. Coordinate on door schedule & Technology plans.	ETD - Will coordinate locations with D+W. DWA - only the specified doors will receive card access. Coordination between security, electrical, and door hardware is underway.	

Needham Cable		4/28/2017	MM	Provide for Needham Cable Network connection in Cafetorium and Gym Space.	ETD - Owner needs to let us know exactly what they need for connaction - fiber, coax, etc. **Owner response required.**	

Responses to Building Systems II.d

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
HVAC								
H1	DD Mechanical Drawings & Specs	In general, the level of development of this documentation is appropriate DD Pricing Set documents.	X			None	Closed	GGD Response 1-27-17: *Agree.*
H2	DD Mechanical Drawings & Specs	RFS review of this documentation indicates the design intent of the SD HVAC Narrative is adequately reflected.	X			None	Closed	GGD Response 1-27-17: *Agree* .
H3	Drawing M1.11	RFS notes that in De-escalation rooms a note has been provided to install an immersion temperature sensor in the return air duct. What is this device intended to do? Is it to take the place of a room temperature sensor? If so, a sequence of operation in the BAS details should be provided.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *It is the intent to keep devices/equipment out of the space in the de-escalation room where an occupant may become destructive. This device may be changed to a wall mounted panel thermostat controlled through the BMS. Similar to how we would expect to see entryway UH's controlled.* RFS 4-27-17 Response: Understood.
H4	Duct/Piping Drawings	Which M drawings will space temperature and CO2 sensors be located on . . . Duct or piping? Currently some of these sensors are shown on both. Many are still missing . . . Typical of DD set docs.	X	X		Mech. Engineer	Open	GGD Response 1-27-17: *This will be updated to show sensors on the piping plans. This will also indicate approximate tie-ins to control valve locations.* RFS 4/27/17 Response: No further process appears to have been made in the 60% CDs. GGD Response 5-5-17: Piping plans will indicate Thermostats and control wiring
H5	Drawing M1.11	Kiln exhaust is shown. Exhaust fan schedule (M4.11) is not yet complete and does not show kiln exhaust fan. As plans progress, ensure sequence of operation is provided for the kiln exhaust system.	X	X		Mech. Engineer	Open	GGD Response 1-27-17: *Sequence will be provided/updated and schedule will be finalized as design progresses.* RFS 4/27/17 Response: Further review to occur at next stage of CD development.GGD Response 5-5-17: Agree
H6	Drawing M1.11	There appears to be an air volume imbalance in Self Contained Rm 115. There is 1600 CFM return but only 425 CFM supply from VAV box?	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *CFM's have since been updated.* RFS 4/27/17 Response: CFM imbalance has been addressed.
H7	Drawing M1.11	No supply air is required for the Kiln room?	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *The space is reliant on make-up air from the adjacent space. It is the intent to keep the space with a significant negative pressure, particularly during kiln operation. The kiln is not expected to run frequently during a normal school year.* RFS 4/27/17 Response: Addressed

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
H8	Drawing M1.12	Main Electric room is transferring air from the gymnasium space. Does this transfer duct require a fire damper in the wall?	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Per the architectural code plan, the Main Electrical room is a 1-hour rated space. Therefore, a firedamper is not required as the duct construction suits this purpose. However, this will be reviewed with Electrical and Plumbing to ensure proper systems are in place.* RFS 4/27/17 Response: Addressed
H9	Drawing M1.21	Consider relocating the supply air duct tap in the riser which is connected to the VAV box serving VP Office 219	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Will review and update.* RFS 4/27/17 Response: Addressed
H10	Drawing M1.22	Consider locating the supply air diffuser and return air register further apart from each other in Custodian Office 271	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *This has been updated.* RFS 4/27/17 Response: Addressed
H11	Drawing M1.32	A H&V-1 unit is indicated. Is this intended to be RTU-9?	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Yes. This has been updated. This drawing now M3.12 and H&V renamed RTU-9.* RFS 4/27/17 Response: Addressed.
H12	Drawing M2.12	References and enlarged Mechanical Room Plan which does not appear to have been created as of yet.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Enlarged Mechanical Room Plan is on drawing M1.12 as Item 2. Note has been updated.* RFS 4/27/17 Response: Addressed.
H13	Drawing M4.11	Mechanical Schedules are only partially complete. This is normal for DD documents. RFS will review in detail in subsequent stages of construction document development	X			Mech. Engineer	Closed	GGD Response 1-27-17: Agree.
H14	Mechanical Drawings & Specs	RFS notes that glycol (35%) has been indicated to be provided for the chilled water system and some heating components (see Unit Heater Schedule). Ensure if glycol is utilized in hot water system that all hot water capacities are based upon glycol and not water. Also, there does not appear to be a specification for glycol/water treatment in the mechanical specifications.	X	X		Mech. Engineer	Open	GGD Response 1-27-17: *This has been updated on plan/schedule. Only the chilled water system will utilize/require glycol at present. Will review further for future submissions and add remove information as necessary.* RFS 4/27/17 Response: RFS recommends adding glycol system requirements to the specifications, equipment schedule and system details as the design progresses. GGD Response 5-5-17: Schedules have been updated for equipment requiring glycol solution. Glycol feeder system

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
H15	Drawing M4.13	The Typical Boiler Piping detail shows a modulating control valve. What is this intended for? Boilers are gas.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *The modulating control valve is utilized as an isolation valve on the HW piping to avoid hot water from traveling in the nonoperational boiler.* RFS 4/27/17 Response: Addressed
H16	Drawing M4.14	Details are provided for Unit Ventilators and Fan Coil Units. It does not appear that this equipment is actually being used. Also, drawing M4.15 provides duplicate details for these same units.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Unit ventilator detail has been removed. Fan Coil Unit remains. This may be included for above ceiling, concealed units in lieu of typical cabinet unit heaters (which can't be concealed)* RFS 4/27/17 Response: Unit ventilators and duplicate details have been removed. Drawing M4.15 has been removed.
H17	Drawing M4.14	RFS notes that the ductless cooling units are to be provided with condensate floats in the drain pan for alarming purposes. The DCU specifications do not appear to require provision of this device.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *This is indicated within the DCU schedule.* RFS 4/27/17 Response: Agree
H18	Drawing M5.11	The sequence of operation for the ductless cooling units and the BAS detail require a BacNet interface. The DCU specifications do not appear to be providing a BacNet interface.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *The BACNet interface is provided by the manufacturer and is indicated on the schedule.* RFS 4/27/17: Agree
H19	Drawings M4.16 & M5.12	The boiler piping schematic on M4.16 does not include automatic boiler isolation valves but M5.12 does show these valves. This appears to be a conflict.	X	X		Mech. Engineer	Open	GGD Response 1-27-17: *One diagram is intended for the HVAC Contractor. The other is furnishings for the ATC Contractor. Not all valves/control etc will necessarily be provided on both drawings.* RFS 4/27/17 Response: RFS recommends drawing number be added to Note 1 on drawing M4.16 to avoid confusion. GGD Response 5-5-17: Note updated.
H20	Drawing M4.16	No DDC temperature sensors are shown on the Hot Water Flow diagram and RFS suggests adding these sensors.	X	X		Mech. Engineer	Open	GGD Response 1-27-17:Will review and update as necessary. RFS 4/27/17 Response: Further review to occur at next stage of CD development. GGD Response 5-5-17: Agree
H21	Drawing M5.11	The ATC Front End Interface diagram shows a weather station. Is this actually to be provided for this project?	X	X		Mech. Engineer	Open	GGD Response 1-27-17: *Will confirm with Arch./OPM.* RFS 4/27/17 Response: Further review to occur at next stage of CD development. GGD Response 5-5-17: Agree

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
H22	Drawing M5.11	The Miscellaneous BMS Control diagram indicates a hi/lo alarm for neutralization tanks and flow switches for science rooms are to be provided. RFS does not believe these devices are part of the project design.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Agree. This has been udpated.* RFS 4/27/17 Response: Addressed.
H23	Drawing M5.13	The diagram associated with the RTU sequence of operations indicates separate cooling and heating coils associated with the Dx portion of the RTU. The RTU specifications do not appear to reflect this requirement.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Modulating hot gas reheat is indicated in section 2.12.C.2.j and 2.12.O.9 of the specification. Controls for hot gas reheat are indicated in section 2.12.Q* RFS 4/27/17 Response: Agreed.
H24	Drawing M5.13	The RTU diagram indicates a manufacturer provided controller for the RTU with interface to the BAS. The RTU specifications state that the unit is to be provided "stripped" of controls and all controls are to be provided by the BAS contractor.	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *Disagree. A unit controller is indicated, however, it does not state that the controller is provided by the manufacturer. The terminal strip for the controller to connect to should be provided by manuf.* RFS 4/27/17 Response: Agreed
H25	Drawing M5.15	Is the kitchen space open to the Cafeteria space? If so, space pressure control may be difficult to properly achieve as required by the sequence of operation.	X	X		Mech. Engineer	Open	GGD Response 1-27-17: *Yes, they are communicating spaces. The kitchen and cafeteria will be pressure neutral during normal occupancy. During kitchen use cooking times, pressure will be utilized based on the dishwasher/hood exhaust and limiting make-up air from the make-up air unit using typical kitchen design practice. The kitchen will always be negative to any adjacent space during cooking times.* RFS 4/27/17 Response: The sequence of operation refers to modulating the units return damper opposite from the outdoor air damper. A return air damper is not shown on the MAU diagram. The sequence also refers to endswitches on these dampers. GGD Response 5-5-17: The sequence for MAU-1 and RTU-9 have been updated.
H26	Drawing M5.15	The VAV diagram shows interface to the lighting control occupancy/motion sensor. Suggest clarifying the intent of this interface. Is this interface to be a hard wired connection to a local occupancy sensor contact or via a BacNet communication interface to the lighting control system?	X	X		Mech. Engineer	Closed	GGD Response 1-27-17: *It is the intent to have control integration via BACNet communication from the lighting control panel. See "Lighting Control Interface" diagram on drawing M5.12 for more information.* RFS 4/27/17 Response: Agree.

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
H27	Legend	A legend has not yet been developed		X		Mech. Engineer		GGD Response 5-5-17: Legend is on drawing M4.12
H28	Drawing M1.22	AC Unit in IDF Room 239 not identified		X		Mech. Engineer		GGD Response 5-5-17: Unit has since been marked DCUe-3
H29	Drawing M1.22	There is a supply VAV in Room 235 identified as CVD 1. Has this been mislabeled?		X		Mech. Engineer		GGD Response 5-5-17: No. CVD stands for Constant Volume Damper. Refer to schedule sheet M4.11for more information.
H30	All Piping Drawings	HW piping not shown for VAVs and some radiant heating panels and unit heaters. Provide gpm requirements for each.		X		Mech. Engineer		GGD Response 5-5-17: VAV's on this project do not have reheat coils. Piping and sizing of piping has since been added. VAV's remain on these sheets for showing interlock with thermostats as duct drawings will not include
H31	All Piping Drawings	Mechanical equipment not yet identified		X		Mech. Engineer		GGD Response 5-5-17: Mechanical equipment has since been tagged. Tags will be provided if further equipment is found to be mislabeled or not labeled.
H32	All Piping Drawings	Should condinsate piping be shown for the DCUs and Induction Units?		X		Mech. Engineer		GGD Response 5-5-17: Yes, condensate piping will be shown in future submissions.
H33	Drawing M2.22	Drawing shows RTU-6 on second floor piping drawing		X		Mech. Engineer		GGD Response 5-5-17: This has been removed/updated to remove RTU-6.
H34	Drawing M3.12	What is the equipment named RH-1 on roof?		X		Mech. Engineer		GGD Response 5-5-17: This is an intake roof hood/louvered penthouse vent for the boiler room. See schedule M4..11.
H35	Drawing M4.11	The Elevator Shaft & Machine room detail is not identified.		X		Mech. Engineer		GGD Response 5-5-17: Elevator shaft/machine room control drawing is shown on M5.12 to show interlock and operation of DCU, damper with fire alarm and temperatures setpoints
H35	Drawing M4.11	Information on equipment schedules not yet complete		X		Mech. Engineer		GGD Response 5-5-17: Understood. Equipment schedules will be filled in and finalized for the next major submittal prior to bid.
H36	Drawing M4.14	There is a detail for VRF Outdoor Equipment. This does not appear part of the project.		X		Mech. Engineer		GGD Response 5-5-17: Nomenclature has been updated to read "HEAT PUMP/VRF OUTDOOR EQUIPMENT SUPPORT SYSTEM". This detail is for the condensing unit for the ductless split systems
H37	Drawing M5.11	Coordinate with Plumbing Sewage Ejector controller, BAS to monitor alarm contact.		X		Mech. Engineer		GGD Response 5-5-17: Will review with plumbing and update BMS as required.

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
H38	Drawing M5.11	Consider adding a monitoring point for the Natural Gas Booster alarm.		X		Mech. Engineer		GGD Response 5-5-17: Will review with plumbing and update BMS as required.

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period DD	60%CD	100%CD	Action by	Item Resolution	A/E Response (1/27/17)
ELECTRICAL								
E-1	DD Electrical Drawings & Specs	In general, the level of development of this documentation is appropriate to DD Pricing documents.	X			None	Closed	
E2	DD Electrical Drawings & Specs	RFS review of this documentation indicates the design intent of the SD Electrical Narrative is adequately reflected.	X			None	Closed	
E3	Drawing E2.12	No power appears to have yet been provided for the duplex sanitary pump system located in Room 134B	X	X		Elec Eng	Open	GGD Response 1-27-17: *Equipment has been tagged on E2.12 and scheduled on E3.05.* RFS 4/27/17 Response: Coordinate power and float control requirments with plumbing engineer. Detail on E3.05 does not match the detail on drawing P0.02 ***GGD Response 5-4-17: Details have been coordinated with the Plumbing Engineer.***
E4	Lighting Drawings	Circuits have not yet been assigned. This is typical of DD documentation and RFS will review in detail in subsequent construction document development stages.	X			Elec Eng	Closed	
E5	Power Drawings	Circuits have not yet been assigned. This is typical of DD documentation and RFS will review in detail in subsequent construction document development stages.	X			Elec Eng	Closed	
E6	Electrical Power Drawings	Suggest providing a location for the emergency generator remote annunciator panel.	X	X		Elec Eng	Closed	GGD Response 1-27-17: *Has been located on E2.22.* RFS 4/27/17 Response: Addressed
E7	Electrical Power Drawings	Suggest providing locations and power for all building automation system (BAS) panels. Ensure the BAS panels are powered from emergency circuits.	X	X		Elec Eng	Open	GGD Response 1-27-17: *The BAS panels are provided by the ATC Contractor. Refer to Specification Section 23 00 01. 2.26. 8.* RFS 4/27/17 Response: RFS recommends specific circuit numbers and location of control panels be provided. ***GGD Response: GGD will allocate space in emergency panels for ATC control panels.***
E8	Drawing E2.22	The receptacle provided in Water Entrance 270 should be GFC	X	X		Elec Eng	Open	GGD Response 1-27-17: *Receptacle has been marked GFI on Drawing E2.22.* RFS 4/27/17 Response: Addressed. ***GGD Response 5-4-17: This item should be marked as closed.***

RFS engineering

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
E-9	Drawing E2.22	Note for equipment power in gym space refers to drawing E2.11. Should that drawing be E2.12?		X		Elec Eng		*GGD Response 5-4-17: Yes, reference to be E2.12.*
E-10	Power Drawings	There are several symbols on the power drawings not shown on the symbol list. These symbols appear to be technology and fire alarm symbols. Should separate drawings be developed for technology type equipment to aviod confusion?		X		Elec Eng		*GGD Response 5-4-17: Technology symbols will be provided on the symbol list for reference. Technology drawings will be provided by Edvance.*
E-11	E2.11 & 2.12	Circuits not shown for exterior receptacles		X		Elec Eng		*GGD Response 5-4-17: Circuiting will be shown for future submissions.*
E-12	E2.22 & 2.31	Power circuits not yet developed		X		Elec Eng		*GGD Response 5-4-17: Circuiting will be shown for future submissions.*
E-13	Drawing E1.11	Will emergency lighting be required for General classrooms Gr 1 5?		X		Elec Eng		*GGD Response 5-4-17: Emergency lighting is not required in classrooms.*
E-14	Lighting Drawings	Power circuits not yet developed		X		Elec Eng		*GGD Response 5-4-17: Circuiting will be shown for future submissions.*
E-15	Lighting Drawings	There are architect notes on the lighting drawings showing ceiling types. Was this the intent?		X		Elec Eng		*GGD Response 5-4-17: RCP Room tags include ceiling type. Standalone notes will not be shown.*
E-16	Drawing E1.12	Consider adding emergency lighting in the main electric room, gym storage room, and boiler room.		X		Elec Eng		*GGD Response 5-4-17: Electrical Room & Boiler Room will have emergency lighting.*
E-17	Drawing E1.31	This drawing mislabeled as Level 3 Area B. This is Area A		X		Elec Eng		*GGD Response 5-4-17: Drawing E1.31 labeled as Area "A"*
E-18	Drawing E2.12	Plumbing Specification indicates a Natural Gas Booster system is to be provided. The Manufacturer suggests a Unintrupted Power Suply (UPS) be provided. Consider adding a UPS to the Natural Gas Booster.		X		Elec Eng		*GGD Response 5-4-17: There is no natural gas booster system.*

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
PLUMBING								
P-1	DD Plumbing Drawings & Specs	In general, the level of development of this documentation is appropriate to DD Pricing Set documents	X			None	Closed	
P2	DD Plumbing Drawings & Specs	RFS review of this documentation indicates the design intent of the SD Plumbing Narrative is adequately reflected.	X			None	Closed	
P3	Drawing P0.02	Suggest providing a remote alarm to the BAS from the duplex sanitary pump station in addition to the local audible alarm	X			Plumb Eng	Open	GGD Response 1-27-17: *Will connect to BAS.* RFS 4/27/17 Response: Specification indicates monitoring alarm point, drawing does not indicate monitoring point.
P4	Drawing P1.12	The water heater piping in the boiler room appears to be schematic in nature at this time and not reflective of desired final piping arrangement.	X			Plumb Eng	Open	GGD Response 1-27-17: *Will continue to develop. Detail for water heater is shown on Drawing P0.02.* RFS 4/27/17 Response: Further review will occur at next stage of CD development.
P5	Drawing P0.02	There does not appear to have been a 140 DegF water line included in the Schematic HW Heater/Storage Tank Piping diagram	X			Plumb Eng	Open	GGD Response 1-27-17: *Will show on detail and include 140 degree F. recirc. pump.* RFS 4/27/17 Response: Further review will occur at next stage of CD development.
P6	Drawing P0.02	Natural Gas Booster not shown on drawing.		X		Plumb Eng		GGD Response 5-1-17: Gas booster not required per letter from gas company dated 12-27-16.
P7	Drawing P0.02	The thermostatic mixing valve shows three lines supplying it, CW, HW & HWR.		X		Plumb Eng		GGD Response 5-1-17: Shown per manufacturer's recommendations.
P8	Drawing P0.02	Coordinate the location and quantity of recirculation pumps with Electrical.		X		Plumb Eng		GGD Response 5-1-17: Will coordinate with Electrical.
P9	Drawing P1.11	The drawing shows a note indicating CW, HW and W&V piping down (Rooms 124 & 126). It appears that this note should be on Level 2.		X		Plumb Eng		GGD Response 5-1-17: Drawing to be revised.
P10	Drawing P1.11	The drawing shows a note indicating CW, HW and W&V piping down (Room 115A). It appears that this note should be on Level 2.		X		Plumb Eng		GGD Response 5-1-17: Drawing to be revised.
P11	Drawing P1.11	Consider adding an expansion loop to the hot water and the hot water return lines in Corridor 100.		X		Plumb Eng		GGD Response 5-1-17: Refer to spec section 2.09/E.

RFS 60% CD Pricing Set MEP Systems Review Tracking Sheet - Needham Hillside Elementary School

4/27/17

Item No.	Reference Document	CxA Comments	Review Period			Action by	Item Resolution	A/E Response (1/27/17)
			DD	60%CD	100%CD			
P12	Drawing P1.11	Coordinate the location of the sanitary piping with the fixtures on the second floor.		X		Plumb Eng		GGD Response 5-1-17: Drawing to be revised.
P13	Drawing P1.12	The line for the 140F hot water does not match the label on the Legend.		X		Plumb Eng		GGD Response 5-1-17: Drawing to be revised.
P14	Drawing P1.20	Coordinate the location of the floor clean out with the kitchen equipment in Room 265.		X		Plumb Eng		GGD Response 5-1-17: Drawing to be revised.
P15	Drawing P1.21	The fixture label (P5) for the drinking fountain does not match the label in the Plumbing Fixture Schedule.		X		Plumb Eng		GGD Response 5-1-17: Drawing to be revised.
FIRE PROTECTION								
FP-1	Drawing FP1.11	Coordinate the location of the Tamper switches and Flow switches with Electrical.		X		FP Eng		GGD Response 5-1-17: Will be coordinated.
FP-2	Drawing FP2.12	Coordinate the location of the Electric Alarm Bell with Electrical.		X		FP Eng		GGD Response 5-1-17: Will be coordinated.

Work Plan III.1.b

Needham Hillside School - Master Schedule

Dore & Whittier Architects, Inc.

OVERALL SCHEDULE	MONTHS		START	END
Design Development	4		Mon 10/03/16	Thu 2/02/17
Construction Documents	6		Fri 2/03/17	Tue 8/15/17
Bidding & Negotiation	3		Wed 8/16/17	Wed 11/01/17
Construction Admin	20		Thu 11/02/17	Fri 6/29/18

JC/PM

Project Start Date: 6/19/2017 (Monday)

Display Week: 1

Fri 11/23/46

WBS	Task	Assigned	Predecessor	Start	End	Cal. Days	Work Days
1	**FEASIBILITY STUDY**			**Mon 10/03/16**	**Mon 10/03/16**	**0**	**1**
2	**SCHEMATIC DESIGN**			**Mon 10/03/16**	**Mon 10/03/16**	**0**	**1**
3	**DESIGN DEVELOPMENT**			**Mon 10/03/16**	**Thu 2/02/17**	**121**	**89**
4	**CONSTRUCTION DOCUMENTS**			**Fri 2/03/17**	**Tue 8/15/17**	**194**	**138**
4.22	Estimating	EST		Mon 6/19/17	Tue 6/27/17	9	7
4.23	Budget Reconciliation & Value Engineering Decisions	PM, JC		Tue 6/27/17	Thu 6/29/17	3	3
4.24	90% Consultant Set DWGS & SPECS due to D&WA	Consult		Mon 7/03/17	Mon 7/03/17	0	1
4.25	90% Submission to MSBA	PM, JC, OPM		Wed 7/12/17	Wed 7/12/17	0	1
4.26	QA review of 90% submisstion	QA, JC, PM		Thu 7/13/17	Wed 7/19/17	7	5
4.27	Consultant Bid Set DWGS & SPECS	Consult		Wed 8/02/17	Wed 8/02/17	0	1
4.28	Checking of Consultant Bid Set Drawings & Specs	JC, PM		Wed 8/02/17	Fri 8/04/17	3	3
4.29	Final Consultant Bid Set DWGS & SPECS	JC, PM		Wed 8/09/17	Fri 8/11/17	3	3
4.30	Receive MSBA 90% CD comments	PM, JC, OPM		Wed 8/02/17	Wed 8/16/17	15	11
4.31	Final Checking of Bid Set DWGS & SPECS	JC		Sun 8/13/17	Mon 8/14/17	2	1
4.32	Bid Set DWGS & SPECS to Printer	JC, SW		Tue 8/15/17	Tue 8/15/17	0	1
4.33	Obtain Owner Phase Authorization	PM		Tue 8/15/17	Tue 8/15/17	0	1
5	**BIDDING & NEGOTIATION**			**Wed 8/16/17**	**Tue 11/14/17**	**91**	**65**
5.1	Addendum	JC		Wed 8/30/17	Wed 8/30/17	0	1
5.2	Submit MSBA 90% comment responses	PM, JC, OPM		Wed 8/16/17	Wed 8/16/17	0	1
5.3	Addendum	JC		Wed 9/06/17	Wed 9/06/17	0	1
5.4	Last Day for Filed Sub Bid Addenda	JC		Fri 9/08/17	Fri 9/08/17	0	1
5.5	MA - Filed Sub Bids Due (2 wks before Gen Bids)			Wed 9/13/17	Wed 9/13/17	0	1
5.6	Addendum - Publish Filed Sub Bids			Mon 9/18/17	Mon 9/18/17	0	1
5.7	Last Day for General Bid Addenda			Sun 9/24/17	Sun 9/24/17	0	0
5.8	General Bids Due			Wed 9/27/17	Wed 9/27/17	0	1
5.9	100 % CD MSBA Submission			Tue 10/10/17	Tue 10/10/17	0	1

MAAB Cover Letter III.1.c

DORE & WHITTIER
ARCHITECTS, INC.

May 24, 2017

The Commonwealth of Massachusetts
Department of Public Safety
Architectural Access Board
One Ashburton Place, Room 1310
Boston, Massachusetts 02108-1618

Project: **Hillside School**
Needham, MA

Subject: Application for Variance

To Whom It May Concern:

Attached please find the AAB Application for a Variance for the Hillside School Project. We are respectfully requesting a variance for 521 CMR 20.2 – Accessible Route, Location and 521 CMR 22.3 – Walkways, Grade.

We have enclosed the following documentation to support our request:

1. Aerial of Existing Conditions
2. Proposed Site Plan
3. Elevation Diagram
4. Access Diagram
5. Variance Area
6. Accessibility Option

General Information:

1. There is a total of 23 feet of elevation change from the highest elevation at Central Street adjacent to the bus drop off roadway to the lowest floor entry level of the proposed building.

2. Entry doors into the building are located at the main floor elevation, 104.00, and at the lower level, elevation 90.00.

3. There is a total of 16 feet of elevation change along the drop off areas located along the sidewalk that parallels the front of the proposed building. This entire length of drop off and all other areas of the site are accessible with the one exception of the stair shown on the drawings for which this variance is requested.

ARCHITECTS
PROJECT MANAGERS

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4. There is accessible parking available in multiple locations of the site.

5. There is an elevation change of 8 feet from the sidewalk to the lower level entry area where the proposed exterior stair is located. An accessible walk is provided north of the stair and will be used as the common path of travel for students who are dropped off or picked up by parents. Both the stair and the accessible path provide access to the entry doors located at the lower level.

6. A ramp can be provided adjacent to the stair. However this would eliminate the propoesed outdoor classroom (seating and chalk board) that will serve as a teaching space for both the amphitheater and the garden program.

Below are the answers to questions requiring more space than allotted on the application.

Question 9. For each variance requested, state in detail the reasons why compliance with the Board's regulations is impractable (use additional sheets if necessary), including but not limited to: the necessary cost of the work required to achieve compliance with the regulations (i.e. written cost estimates), and plans justifying the cost of compliance.

521 CMR 20.2 Accessible Route - Location

The site has significant elevation change. The site and all ammenities are accessible with the exception of the proposed stairway.

1. An accessible walk is proposed to access the lower floor level with accessible parking and drop off areas located to accommodate easy access. (Refer to Access Diagram attached).

2. A ramp installed adjacent to the stair would require considerable length in order to navigate the steep grade change in this area.

3. Due to the steep slope retaining walls would need to be constructed for a ramp in this location.

4. The entire sidwalk that is parallel to the school is accessible. Students and visitors can be dropped off parallel to this walk and access the lower floor. A ramp is located adjacent to the stairway which provides access the upper floor and main entrance lobby.

521 CMR 22.3 Walkways - Grade

The existing site is very steep (refer to Existing conditions diagram attached) in the area of the proposed stairway. The applicants request a waiver to allow the installation of the stair due to the following:

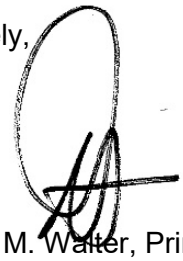
1. A ramp would add additoinal cost to the project budget.
2. Accessible parking has been located at each entry level to the school and the site has been made accessible (refer to Accessability Diagram attached).
3. A ramp would require the removal of the proposed outdoor classroom and chaulk board.

Cost Implications

The construction cost for these items is estimated at approximately $242,500.00 (refer to the attached cost estimate).

Thank you in advance for your consideration of these waivers. Should you require any additional information please do not hesitate to contact me.

Sincerely,



Donald M. Walter, Principal
Dore & Whittier Architects, Inc.

cc:

Enclosures: As noted above
Full Application on CD
Filing Fee - $50.00 (previously sent)

District's Letter to the MSBA III.1.e

NPS COPY

Needham Public Schools
Office of the Superintendent

June 19, 2017

Ms. Mary Pichetti
Director of Capital Planning
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, Massachusetts 02109

Dear Ms. Pichetti,

Since signing the Project Funding Agreement, the District and our Designer have refined several special education spaces. Dore & Whittier included a memorandum to the Department of Elementary and Secondary Education (DESE) (Appendix A) in its 60% Construction Documents submission which provides the details and rationale of those revisions.

The District does not anticipate any further changes to special education spaces and recommends the submittal of the DESE memorandum (Appendix A of the 60% CD submission) to the DESE by the MSBA for review.

Sincerely,

Daniel Gutekanst, Ed.D.
Superintendent of Schools

C: Kate Fitzpatrick, Town Manager
George Kent, Chair Permanent Public Building Committee
Steven Popper, Director of Design and Construction

Interior Finish Color Boards III.1.h

INTERIOR FINISH BOARD

FINISHES LEGEND:

1 - LINOLEUM FLOOR - MAIN FLOOR
2 - LINOLEUM FLOOR - SECONDARY FLOOR
3 - LINOLEUM FLOOR - YELLOW ACCENT
4 - LINOLEUM FLOOR - BLUE ACCENT
5 - LINOLEUM FLOOR - PURPLE ACCENT
6 - LINOLEUM FLOOR - GREEN ACCENT
7 - CARPET TILE - CARPET FLOORING
8 - WALK OF CAPPET - ENTRY CARPET FLR
9 - HEXAGON TILE - DARK BLUE ACCENT
10 - HEXAGON TILE - GREY ACCENT
11 - HEXAGON TILE - MEDIUM BLUE ACCENT
12 - HEXAGON TILE - WHITE ACCENT
13 - HEXAGON TILE - LIGHT BLUE ACCENT
14 - 4X8 TILE - CORRIDOR GREY TILE
15 - 4X8 TILE - CORRIDOR WHITE TILE
16 - EPOXY FLOOR - BATHROOM FLOORING
17 - RUBBER BASE - GREY/BEIGE 4" RUBBER BASE
18 - WOOD VENEER LAMINATE - RECEPTION DESK
19 - CORIAN SURFACE - WHITE TRANS. COUNTER
20 - TACK SURFACE - GREY FINISH
21 - METAL TRIM - STAINLESS STEEL
22 - METAL CEILING TILE - WOOD FINISH
23 - DOOR FINISH - MAPLE WHITE WASH FINISH
24 - PAINT - ADMIN AREA BEIGE ACCENT
25 - PAINT - GENERAL WALL - WHITE ACCENT
26 - PAINT - METAL FRAMES - GREY ACCENT
27 - PAINT - YELLOW ACCENT
28 - PAINT - BLUE ACCENT
29 - PAINT - PURPLE ACCENT
30 - PAINT - GREEN ACCENT
31 - WOOD STAIN FINISH - CASEWORK FINISH