CAPITAL IMPROVEMENTS AT
MAMARONECK AVENUE SCHOOL
850 MAMARONECK AVENUE
MAMARONECK, NY 10543

SED #66-07-01-03-0-004-030

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Symbols

GRADE LINE
BORDER LINE, OUTLINE
FIRE SEPARATION WALL
SMOKE COMPARTMENT
CENTER LINE
OBJECT LINE
ELEVATION LINE — EL. X'-X" / T.O. XXX
MATCH LINE — PROPOSED / EXISTING
HIDDEN LINE
DEMOLITION
BREAK LINE
BREAK LINE
BREAK LINE (PIPE)
FRAMING DESIGNATION — 2x10 F.J. @ 16" O.C.
DIMENSION LINE
COLUMN LINE — C1

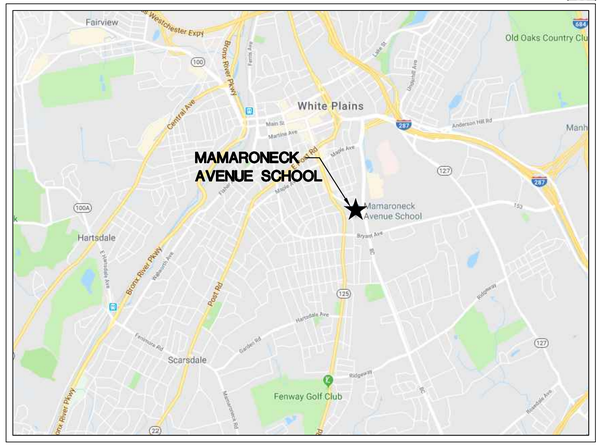
DOOR TAG — D01
WINDOW TAG — W1
CEILING TAG — CT-1
PLUMBING TAG — P-1
EQUIPMENT TAG — E11
WALL TAG — A
DEMOLITION NOTE — 1
CONSTRUCTION NOTE — 1
SLOPE DESIGNATIONS — X 12; SL. X/12
ADA SYMBOL

REVISION CLOUD W/ TAG — 1
ROOM NAME DESIGNATION — ROOM NAME 100 / 100 SF
BLOW UP PLAN DESIGNATION — A-.--
INTERIOR ELEVATION — 2 A2.01 4 / 3
SECTION MARK — A2.01

Drawing Label — A-.-- / -.- = 1'-0"

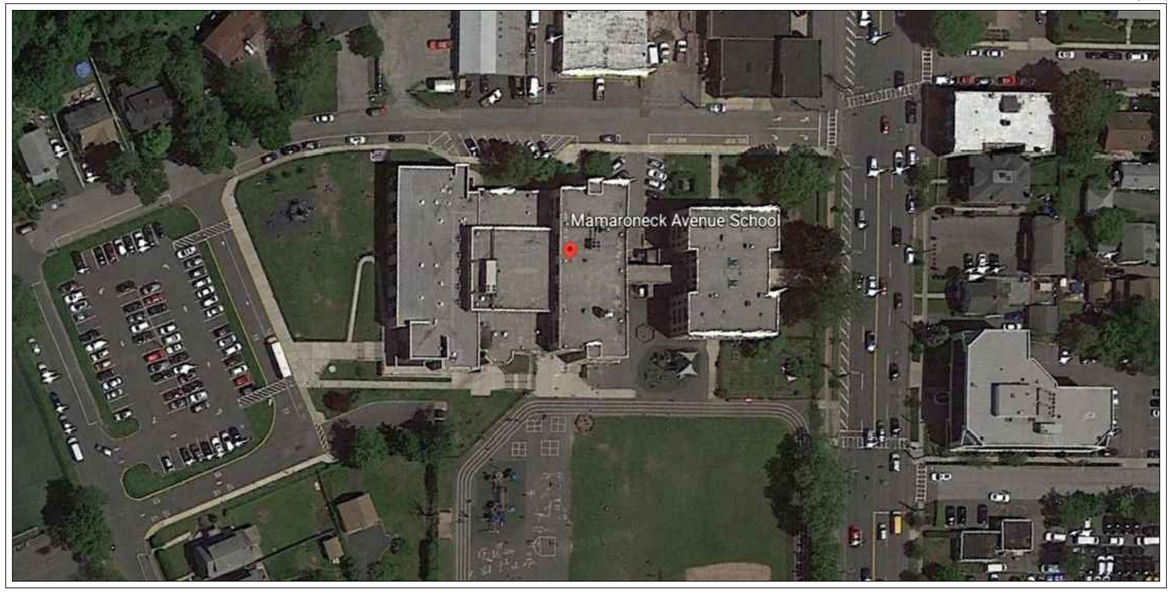
Location Map

NOT TO SCALE



Aerial View

NOT TO SCALE



General Notes

1. ALL WORK SHALL CONFORM TO THE 2015 INTERNATIONAL BUILDING CODE AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. FOR NEW YORK STATE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH THE EXISTING CONDITIONS AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS AND COMMENCING WORK.
3. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL QUESTIONS TO ARCHITECT PRIOR TO COMMENCING WORK.
4. THE CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL NOTES OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
5. IN ALL CASES WHERE A CONFLICT MAY OCCUR SUCH AS BETWEEN ITEMS COVERED BY SPECIFICATIONS, NOTES ON THE DRAWINGS, OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS, THE ARCHITECT SHALL BE NOTIFIED AND WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
6. DETAILS NOTED AS "TYPICAL" (TYP.) SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE.
7. WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL AND SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION.
8. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT WORKMEN, OCCUPANTS AND THE PUBLIC TO BE PROTECTED FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
11. CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM THEIR OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER UPON COMPLETION OF WORK. ANY EXTRA BUILDING MATERIALS SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AS DIRECTED. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF SALVAGED OR EXCESS MATERIALS AT PROJECT COMPLETION. THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
13. , ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
14. CONTRACTOR SHALL COORDINATE SCHEDULING OF WORK WITH THE OWNER'S REQUIREMENTS AND SCHEDULE. CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL NOISE ORDINANCES REQUIREMENTS.
15. CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF THEIR WORK AND TO ENSURE THE OWNER'S FACILITY TO BE OPERATIONAL. IF REQUIRED, THE CONTRACTOR SHALL MAINTAIN UNOBSTRUCTED ACCESS TO ALL UTILITIES AND PUBLIC FACILITIES INCLUDING FIRE HYDRANTS, FIRE ALARM BOXES, POLICE CALL BOXES, STREET LIGHTS, MANHOLES, AMONG OTHERS DURING DEMOLITION AND CONSTRUCTION.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK.
18. THE CONTRACTOR SHALL SUBMIT WHERE REQUIRED, SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL PRIOR TO THE START OF FABRICATION OR PURCHASE OF THOSE ITEMS.
19. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ARCHITECT WITH CERTIFICATES OF INSURANCE, AS SPELLED OUT IN THE SPECIFICATIONS, PRIOR TO STARTING THE WORK.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURES AS NEEDED TO COMPLETE THE NEW WORK.
21. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH EACH MANUFACTURER'S SPECIFIC INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION OF THE ARCHITECT AND THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE KIND AND EQUAL QUALITY.
22. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
23. THE ARCHITECT AND THE OWNER HAVE THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, UNAUTHORIZED OR WORK DONE CONTRARY TO THE THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
24. THE CONTRACTOR SHALL GUARANTEE ALL OF THEIR WORK AND THE WORK OF THEIR SUBCONTRACTORS FOR A PERIOD ONE YEAR AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
25. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
26. THE CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WRECKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.
27. THE ARCHITECT WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS AS WELL AS FAILURE TO OBTAIN AND/OR FOLLOW THE ARCHITECT'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.
28. COLOR, FINISHING & TEXTURE OF ALL FINISH MATERIALS, WHERE NOT INDICATED ON THE DRAWINGS, SHALL BE SELECTED BY OWNER.
29. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AND THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, AND NFPA 70.
30. CONTRACTORS OR ANY SUBCONTRACTORS PERFORMING WORK UNDER THIS CONTRACT SHALL CARRY LIABILITY AND PROPERTY DAMAGE INSURANCE AGAINST ACCIDENTS OF ALL KINDS AND SHALL FURNISH OWNER WITH CERTIFICATE OF INSURANCE.
31. ALL WORK IN THESE DRAWINGS SHALL BE CONSIDERED NEW WORK WHETHER STATED OR NOT EXCEPT WHERE SPECIFICALLY NOTED AS EXISTING.
32. WHERE SPECIFIC PRODUCTS OR MANUFACTURERS ARE INDICATED, IT IS TO BE UNDERSTOOD THAT THIS IS CONSIDERED THE BASIS OF DESIGN, AND "EQUALS" WILL BE APPROVED BY THE ARCHITECT OR ENGINEER UPON SATISFACTORY EVIDENCE THAT THE SUBSTITUTION MEETS OR EXCEEDS THE BASIS OF DESIGN.

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CA0.11	PROPOSED LOWER LEVEL EGRESS PLAN
CA0.12	PROPOSED FIRST FLOOR EGRESS PLAN
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Date	1/10/20
Checked	MJM
Drawn	

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Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

TITLE SHEET & GENERAL NOTES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202T001

T0.01

Code Analysis

Design Building Codes

2015 International Existing Building Code (as adopted by New York State)
2015 International Building Code (as adopted by New York State)
2015 International Mechanical Code (as adopted by New York State)
2015 International Plumbing Code (as adopted by New York State)
2015 Energy Conservation Code (as adopted by New York State)
1998 NYSED Manual of Planning Standards
National Electric Code (NEC)
National Fire Protection Association (NFPA)
ICC/ANSI A117.1 - 2009 American National Standard

2015 International Existing Building Code (as adopted by New York State)

Chapter 5 Classification of Work

Section 504 Alteration-Level 2

504.1 Scope
Level 2 alterations include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

504.2 Application
Level 2 alterations shall comply with the provisions of Chapter 7 for Level 1 alterations as well as the provisions of Chapter 8.

Chapter 7 Alterations - Level 1

Section 701 General

701.1 Scope
Level 1 alterations as described in Section 503 shall comply with the requirements of this chapter. Level 1 alterations to historic buildings shall comply with this chapter, except as modified in Chapter 12.

Section 702 Building Elements and Materials

702.1 Interior Finishes
All newly installed interior wall and ceiling finishes shall comply with Chapter 8 of the International Building Code.

702.2 Interior Floor Finish
New interior floor finish, including new carpeting used as an interior floor finish material, shall comply with Section 804 of the International Building Code.

702.3 Interior Trim
All newly installed interior trim materials shall comply with Section 806 of the International Building Code.

702.6 Materials and Methods
All new work shall comply with the materials and methods requirements in the International Building Code, International Energy Conservation Code, International Mechanical Code, and International Plumbing Code, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 703 Fire Protection

703.1 General
Alterations shall be done in a manner that maintains the level of fire protection provided.

Section 704 Means of Egress

704.1 General
Alterations shall be done in a manner that maintains the level of protection provided for the means of egress.

Section 705 Accessibility

705.1 General
A facility that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the International Building Code unless it is technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent that is technically feasible.

Chapter 8 Alterations - Level 2

Section 801 General

801.1 Scope
Level 2 alterations as described in Section 504 shall comply with the requirements of this chapter.

801.2 Alteration Level 1 Compliance
In addition to the requirements of this chapter, all work shall comply with the requirements of Chapter 7.

803.4 Interior Finish
The interior finish of walls and ceilings in exits and corridors in any work area shall comply with the requirements of the International Building Code.

Section 804 Fire Protection

804.1 Scope
The requirements of this section shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.

804.1.1 Corridor Ratings
Where an approved automatic sprinkler system is installed throughout the story, the required fire-resistance rating for any corridor located on the story shall be permitted to be reduced in accordance with the International Building Code. In order to be considered for a corridor rating reduction, such system shall provide coverage for the stairway landings serving the floor and the intermediate landings immediately below.

804.2 Automatic Sprinkler Systems
Automatic sprinkler systems shall be provided in accordance with the requirements of Sections 804.2.1 through 804.2.5. Installation requirements shall be in accordance with the International Building Code.

804.2.2 Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2
In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where all of the following conditions occur:

1. The work area is required to be provided with automatic sprinkler protection in accordance with the International Building Code as applicable to new construction; and
2. The work area exceeds 50 percent of the floor area.

Exception: If the building does not have sufficient municipal water supply for design of a fire sprinkler system available to the floor without installation of a new fire pump, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the International Building Code.

(Note: The work area does not exceed 50% of the floor area.)

804.4 Fire Alarm and Detection
An approved fire alarm system shall be installed in accordance with Sections 804.4.1 through 804.4.3. Where automatic sprinkler protection is provided in accordance with Section 804.2 and is connected to the building fire alarm system, automatic heat detection shall not be required.

An approved automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances, and equipment shall be approved. The automatic fire detectors shall be smoke detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms, where products of combustion are present during normal operation in sufficient quantity to actuate a smoke detector.

804.4.1 Occupancy Requirements
A fire alarm system shall be installed in accordance with Sections 804.4.1.1 through 804.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the work area shall be provided and automatically activated.

Exceptions:
1. Occupancies with an existing, previously approved fire alarm system.
2. Where selective notification is permitted, alarm-notification appliances shall be automatically activated in the areas selected.

804.4.1.1 Group E
A fire alarm system shall be installed in work areas of Group E occupancies as required by the International Fire Code for existing Group E occupancies.

Chapter 11 Additions

Section 1101 General

1101.1 Scope
An addition to a building or structure shall comply with the International Codes as adopted for new construction without requiring the existing building or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an addition impacts the existing building or structure, that portion shall comply with this code.

1101.2 Creation or Extension of Nonconformity
An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing, or electrical systems.

1101.3 Other Work
Any repair or alteration work within an existing building to which an addition is being made shall comply with the applicable requirements for the work as classified in Chapter 5.

Section 1102 Heights and Areas

1102.1 Height Limitations
No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the International Building Code for new buildings.

1102.2 Area Limitations
No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the International Building Code for new buildings unless fire separation as required by the International Building Code is provided.

1102.3 Fire Protection Systems
Existing fire areas increased by the addition shall comply with Chapter 9 of the International Building Code.

2015 International Building Code (as adopted by New York State)

Chapter 3 Use and Occupancy Classification

Section 305 Educational Group E

Chapter 5 General Building Heights and Areas

Section 504 Building Height and Number of Stories

Table 504.3 allowable building height in feet above grade plane
(Note: see existing / proposed building information below)
Table 504.4 allowable number of stories above grade plane
(Note: see existing / proposed building information below)

Section 506 Building Area

Table 506.2 allowable area factor in square feet
(Note: see existing / proposed building information below)

Mamaroneck Avenue School (MAS) Building (1909) - Type of Construction: IIIB(SM)
Occupancy Classification: E
Allowable Building Height / Stories: 75', Three-story
Existing Building Height / Stories: 51'-1", Three-story, One Basement
(Note: no proposed modification to height / stories)

Allowable area per floor:	43,500 SF
Total allowable area:	130,500 SF
Lower Level (Basement):	7,415 SF (Existing)
1st Floor:	7,415 SF (Existing)
2nd Floor:	7,415 SF (Existing)
3rd Floor:	7,415 SF (Existing)
Total Area:	22,245 SF (Existing) (Note: Basement areas not included per 506.1.3)

Middle Building & Classroom Addition (1929 & 2006) - Type of Construction: IB (NS)
Occupancy Classification: E
Allowable Building Height / Stories Above Grade: 160', Five-story
Existing Building Height / Stories: 57'-1", Four-Story, One Basement

Allowable area per floor:	Unlimited
Total allowable area:	Unlimited
Basement	6,643 SF (Existing)
Lower Level	28,994 SF (Existing); 1,826 SF (Proposed Addition) 30,820 SF (Total Lower Level)
1st Floor:	28,994 SF (Existing); 1,826 SF (Proposed Addition) 30,820 SF (Total 1st Floor)
2nd Floor:	13,465 SF (Existing); 1,863 SF (Proposed Addition) 15,328 SF (Total 2nd Floor)
3rd Floor	8,445 SF (Existing); 1,863 SF (Proposed Addition) 10,308 SF (Total 3rd Floor)
Total Area:	79,898 SF (Existing); 7,378 SF (Proposed Addition) 87,276 SF (Total) (Note: Basement areas not included per 506.1.3)

Chapter 6 Types of Construction

Table 601 Fire-resistance Rating Requirements For Building Elements (Hours)

Type of Construction: IIIB(SM)
Primary structural frame: 0
Bearing walls (Exterior): 2
Bearing walls (Interior): 0
Nonbearing walls and partitions (Exterior) (Per Table 602):
Occupancy group: E
X < 5': 1
5' ≤ X < 10': 1
10' ≤ X < 30': 1
X ≥ 30': 0
Nonbearing walls and partitions (Interior): 0
Floor construction and associated secondary members: 0
Roof construction and associated secondary members: 0

Type of Construction: IB(NS)
Primary structural frame: 2 or 1 (where supporting a roof only)
Bearing walls (Exterior): 2
Bearing walls (Interior): 2 or 1 (where supporting a roof only)
Nonbearing walls and partitions (Exterior) (Per Table 602):
Occupancy group: E
X < 5': 1
5' ≤ X < 10': 1
10' ≤ X < 30': 1
X ≥ 30': 0
Nonbearing walls and partitions (Interior): 0
Floor construction and associated secondary members: 2
Roof construction and associated secondary members: 1 or 0 (where every part of the roof construction is 20 feet or more above any floor immediately below)

Chapter 7 Fire and Smoke Protection Features

Section 703 Fire-Resistance Ratings and Fire Tests

703.2 Fire-Resistance Ratings
The fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E119 or UL 263 or in accordance with Section 703.3. The fire-resistance rating of penetrations and fire-resistant joint systems shall be determined in accordance Sections 714 and 715, respectively.

703.6 Fire-Resistance-Rated Glazing
Fire-resistance-rated glazing, when tested in accordance with ASTM E119 or UL 263 and complying with the requirements of Section 707, shall be permitted.
Fire-resistance-rated glazing shall bear a label marked in accordance with Table 716.3 issued by an agency and shall be permanently identified on the glazing.

Section 705 Exterior Walls

705.5 Fire-Resistance Ratings
Exterior walls shall be fire-resistance-rated in accordance with Tables 601 and 602 and this section. The required fire-resistance rating of exterior walls with a fire separation distance of greater than 10 feet (3048 mm) shall be rated for exposure to fire from the inside. The required fire-resistance rating of exterior walls with a fire separation distance of less than or equal to 10 feet (3048 mm) shall be rated for exposure to fire from both sides.

Table 705.8 Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection

Fire separation distance (feet): 0 to less than 3	
Unprotected, Nonsprinklered:	Not Permitted
Unprotected, Sprinklered:	Not Permitted
Protected:	Not Permitted
Fire separation distance (feet): 3 to less than 5	
Unprotected, Nonsprinklered:	Not Permitted
Unprotected, Sprinklered:	15%
Protected:	15%
Fire separation distance (feet): 5 to less than 10	
Unprotected, Nonsprinklered:	10%
Unprotected, Sprinklered:	25%
Protected:	25%
Fire separation distance (feet): 10 to less than 15	
Unprotected, Nonsprinklered:	15%
Unprotected, Sprinklered:	45%
Protected:	45%
Fire separation distance (feet): 15 to less than 20	
Unprotected, Nonsprinklered:	25%
Unprotected, Sprinklered:	75%
Protected:	75%
Fire separation distance (feet): 20 to less than 25	
Unprotected, Nonsprinklered:	45%
Unprotected, Sprinklered:	No Limit
Protected:	No Limit
Fire separation distance (feet): 25 to less than 30	
Unprotected, Nonsprinklered:	70%
Unprotected, Sprinklered:	No Limit
Protected:	No Limit
Fire separation distance (feet): 30 or greater	
Unprotected, Nonsprinklered:	No Limit
Unprotected, Sprinklered:	No Limit
Protected:	No Limit

Section 706 Fire Walls

706.1 General
Each portion of a building separated by one or more fire walls that comply with the provisions of this section shall be considered a separate building. The extent and location of such fire walls shall provide a complete separation. Where a fire wall separates occupancies that are required to be separated by a fire barrier wall, the most restrictive requirements of each separation shall apply.

706.2 Structural Stability
Fire walls shall be designed and constructed to allow collapse of the structure on either side without collapse of the wall under fire conditions. Fire walls designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section.

Table 706.4 Fire Wall Fire-resistance Ratings
Group: E
Fire-resistance Rating (hours): 3

706.5 Horizontal Continuity
Fire walls shall be continuous from exterior wall to exterior wall and shall extend not less than 18 inches beyond the exterior surface of exterior walls.

Exceptions:
2. Fire walls shall be permitted to terminate at the interior surface of noncombustible exterior sheathing, exterior siding or other noncombustible exterior finishes provided the sheathing, siding or other exterior noncombustible finish extends a horizontal distance of not less than 4 feet on both sides of the fire wall.

706.5.1 Exterior Walls
Where the fire wall intersects exterior walls, the fire-resistance rating and opening protection of the exterior walls shall comply with one of the following:

1. The exterior walls on both sides of the fire wall shall have a 1-hour fire-resistance rating with 3/4-hour protection where opening protection is required by Section 705.8. The fire-resistance rating of the exterior wall shall extend not less than 4 feet (1220 mm) on each side of the intersection of the fire wall to exterior wall. Exterior wall intersections at fire walls that form an angle equal to or greater than 180 degrees (3.14 rad) do not need exterior wall protection.

706.6 Vertical Continuity
Fire walls shall extend from the foundation to a termination point not less than 30 inches above both adjacent roofs.

Exceptions:
3. Walls shall be permitted to terminate at the underside of noncombustible roof sheathing, deck or slabs where both buildings are provided with not less than a Class B roof covering. Openings in the roof shall not be located within 4 feet of the fire wall.
706.8 Openings
Each opening through a fire wall shall be protected in accordance with Section 716.5 and shall not exceed 156 square feet. The aggregate width of openings at any floor level shall not exceed 25 percent of the length of the wall.

Section 707 Fire Barriers

707.3.1 Shaft Enclosures
The fire-resistance rating of the fire barrier separating building areas from a shaft shall comply with Section 713.4.

707.3.4 Exit Passageway
The fire-resistance rating of the fire barrier separating building areas from an exit passageway shall comply with Section 1024.3.

707.3.5 Horizontal Exit
The fire-resistance rating of the separation between building areas connected by a horizontal exit shall comply with Section 1026.1.

707.3.10 Fire Areas
The fire barriers or horizontal assemblies, or both, separating a single occupancy into different fire areas shall have a fire-resistance rating of not less than that indicated in Table 707.3.10. The fire barriers or horizontal assemblies, or both, separating fire areas of mixed occupancies shall have a fire-resistance rating of not less than the highest value indicated in Table 707.3.10 for the occupancies under consideration.

Table 707.3.10 Fire-Resistance Rating Requirements for Fire Barrier Assemblies or Horizontal Assemblies Between Fire Areas
Occupancy Group: E
Fire Resistance Rating (hours): 2

707.5 Continuity
Fire barriers shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above and shall be securely attached thereto. Such fire barriers shall be continuous through concealed space, such as the space above a suspended ceiling. Joints and voids at intersections shall comply with Sections 707.8 and 707.9

707.6 Openings
Openings in a fire barrier shall be protected in accordance with Section 716.
Openings shall be limited to a maximum aggregate width of 25 percent of the length of the wall, and the maximum area of any single opening shall not exceed 156 square feet. Openings in enclosures for exit access stairways and ramps, interior exit stairways and ramps and exit passageways shall also comply with Sections 1019, 1023.4 and 1024.5, respectively.

Exceptions:
1. Openings shall not be limited to 156 square feet where adjoining floor areas are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

707.7 Penetrations
Penetrations of fire barriers shall comply with Section 714.

707.7.1 Prohibited Penetrations
Penetrations into enclosures for exit access stairways and ramps, interior exit stairways and ramps, and exit passageways shall be allowed only where permitted by Sections 1019, 1023.5 and 1024.6, respectively.

707.8 Joints
Joints made in or between fire barriers, and joints made at the intersection of fire barriers with underside of a fire-resistance-rated floor or roof sheathing, slab or deck above, and the exterior vertical wall intersection shall comply with Section 715.

707.10 Ducts and Air Transfer Openings
Penetrations in a fire barrier by ducts and air transfer openings shall comply with Section 717.

Section 708 Fire Partitions

708.1 General
The following wall assemblies shall comply with this section.
3. Corridor walls as required by Section 1020.1.
4. Elevator lobby separation as required by Section 3006.2.

708.4 Continuity
Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire-resistance-rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. In combustible construction where the fire partitions are not required to be continuous to the sheathing, deck or slab, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 718.2 and 718.3 at the partition line. The supporting construction shall be protected to afford the required fire-resistance rating of the wall supported, except for walls separating tenant spaces in covered and open mall buildings, walls separating dwelling units, walls separating sleeping units and corridor walls, in buildings of Type IIB, IIIB and VB construction.

708.6 Openings
Openings in a fire partition shall be protected in accordance with Section 716.

708.7 Penetrations
Penetrations of fire partitions shall comply with Section 714.

708.8 Joints
Joints made in or between fire partitions shall comply with Section 715.

708.9 Ducts and Air Transfer Openings
Penetrations in a fire partition by ducts and air transfer openings shall comply with Section 717.

Section 713 Shaft Enclosures

713.2 Construction
Shaft enclosures shall be constructed as fire barriers in accordance with Section 707 or horizontal assemblies in accordance with Section 711, or both.

713.4 Fire-Resistance Rating
Shaft enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less than 1 hour where connecting less than four stories. The number of stories connected by the shaft enclosure shall include any basements but not any mezzanines. Shaft enclosures shall have a fire-resistance rating not less than the floor assembly penetrated, but need not exceed 2 hours. Shaft enclosures shall meet the requirements of Section 703.2.1.

Section 716 Opening Protectives

716.2 Fire-Resistance-Rated Glazing
Fire-resistance-rated glazing tested as part of a fire-resistance-rated wall or floor/ceiling assembly in accordance with ASTM E119 or UL 263 and labeled in accordance with Section 703.6 shall not otherwise be required to comply with this section where used as part of a wall or floor/ceiling assembly. Fire-resistance-rated glazing shall be permitted in fire door and fire window assemblies where tested and installed in accordance with their listings and where in compliance with the requirements of this section.

716.3 Marking Fire-Rated Glazing Assemblies
Fire Test Standard: ASTM E119 or UL 263; Marking: W; Definition of Marking: Meets wall assembly criteria.

Table 716.5 Opening Fire Protection Assemblies, Ratings and Markings

Type of Assembly:
Fire walls and fire barriers having a required fire-resistance rating > 1 hour
Required Wall Assembly Rating (hours): 3
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 3
Door Vision Panel Size: ASTM E119 (maximum size tested)
Fire Rated Glazing Marking Door Vision Panel: D-H-W-180
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 3
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-180

Type of Assembly:
Fire walls and fire barriers having a required fire-resistance rating > 1 hour
Required Wall Assembly Rating (hours): 2
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1-1/2
Door Vision Panel Size: 100 sq. in.
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-90; >100 sq. in.= D-H-W-90
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 2
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-120

Type of Assembly:
Enclosures for shafts, interior exit stairways and interior exit ramps.
Required Wall Assembly Rating (hours): 2
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1-1/2
Door Vision Panel Size: 100 sq. in.
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-90; > 100 sq. in.= D-H-T-W-90
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 2
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-120

Type of Assembly:
Fire barriers having a required fire-resistance rating of 1 hour: Enclosures for shafts, exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls
Required Wall Assembly Rating (hours): 1
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1
Door Vision Panel Size: 100 sq. in. (except with automatic sprinkler system)
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-60; >100 sq. in.= D-H-T-W-60
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 1
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-60

Type of Assembly: Fire partitions: Corridor walls
Required Wall Assembly Rating (hours): 1
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1/3
Door Vision Panel Size: Maximum size tested
Fire Rated Glazing Marking Door Vision Panel: D-20
Minimum Sidelight/Transom Assembly Rating (hours):
Fire Protection 3/4 (or ASTM E119 maximum size tested)
Fire-Rated Glazing Marking Sidelight/Transom Panel: D-H-OH-45

Type of Assembly: Exterior walls
Required Wall Assembly Rating (hours): 2
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1-1/2
Door Vision Panel Size: 100 sq. in. (or ASTM E119 maximum size tested)
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-90; >100 sq. in.= D-H-W-90
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 2
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-120

716.5.8.2 Elevator, Stairway and Ramp Protectives
Approved fire-protection-rated glazing used in fire door assemblies in elevator, stairway and ramp enclosures shall be so located as to furnish clear vision of the passageway or approach to the elevator, stairway or ramp.

Table 716.6 Fire Window Assembly Fire Protection Ratings
Type of Wall Assembly: Exterior walls
Required Wall Assembly Rating (hours): >1
Minimum Fire Window Assembly Rating (hours): 1-1/2
Fire-rated Glazing Marking: OH-90 or W-XXX (Fire rating in minutes equal to wall assembly rating)

Chapter 8 Interior Finishes

801.2 Interior Wall and Ceiling Finish
The provisions of Section 803 shall limit the allowable fire performance and smoke development of interior wall and ceiling finish materials based on occupancy classification.

Section 803 Wall and Ceiling Finishes

Table 803.11 Interior Wall and Ceiling Finish Requirements by Occupancy

Group E (Sprinklered)	
Interior exit stairways and ramps and exit passageways:	B
Corridors and enclosure for exit access stairways and ramps:	C
Rooms and enclosed spaces:	C
Group E (Nonsprinklered)	
Interior exit stairways and ramps and exit passageways:	A
Corridors and enclosure for exit access stairways and ramps:	B
Rooms and enclosed spaces:	C

Section 805 Combustible Materials in Types I and II Construction

805.1.1 Subfloor Construction
Floor sleepers, bucks and nailing blocks shall not be constructed of combustible materials, unless the space between the fire-resistance rated floor assembly and the flooring is either solidly filled with noncombustible materials or fireblocked in accordance with Section 718, and provided that such open spaces shall not extend under or through permanent partitions or walls.

Chapter 9 Fire Protection Systems

Section 901 General

901.7 Fire Areas
Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with this chapter, such fire areas shall be separated by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, having a fire-resistance rating of not less than that determined in accordance with Section 707.3.10.

Section 903 Automatic Sprinkler Systems

903.2.3 Group E
An automatic sprinkler system shall be provided for Group E occupancies as follows:
1. Throughout all Group E fire areas greater than 12,000 square feet in area.
2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

(Note: MAS (Original) Building 1909 - Fully Sprinklered; Middle Building 1929 - Not Fully Sprinklered (Only above stage of Multi-Purpose Room); 2006 Classroom Addition - Not Sprinklered; - Fire areas of the additions are less than 12,000 SF and do not require an automatic sprinkler system)

Chapter 10 Means of Egress

(Note: See Egress Plans for code analysis of this chapter.)

Chapter 30 Elevators and Conveying Systems

Section 3002 Hoistway Enclosures

3002.1 Hoistway Enclosure Protection
Elevator, dumbwaiter and other hoistway enclosures shall be shaft enclosures complying with Section 713.

3002.3 Emergency Signs
An approved pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exit stairways and not to use the elevators in case of fire. The sign shall read: IN CASE OF FIRE, ELEVATORS ARE OUT OF SERVICE. USE EXIT STAIRS.

3002.4 Elevator Car to Accommodate Ambulance Stretcher
Where elevators are provided in buildings four or more stories above, or four or more stories below, grade plane, not fewer than one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches with not less than 5-inch radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches (76 mm) in height and shall be placed inside on both sides of the hoistway door frame.

Section 3006 Elevator Lobbies and Hoistway Opening Protection

3006.2 Hoistway Opening Protection Required
Elevator hoistway door openings shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and any of the following conditions apply:

1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

3006.3 Hoistway Opening Protection
Where Section 3006.2 requires protection of the elevator hoistway door opening, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by fire partitions in accordance with Section 708. In addition, doors protecting openings in the elevator lobby enclosure walls shall comply with Section 716.5.3 as required for corridor walls. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.

3006.4 Means of Egress
Elevator lobbies shall be provided with at least one means of egress complying with Chapter 10 and other provisions in this code. Egress through an elevator lobby shall be permitted in accordance with Item 1 of Section 1016.2.

Chapter 33 Safeguards During Construction

Section 3302 Construction Safeguards

3302.1 Alterations, Repairs and Additions
Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during alterations, repairs or additions to any building or structure.

Exceptions:
1. Where such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
2. Maintenance of such elements and devices is not required when the existing building is not occupied.

3302.2 Manner of Removal
Waste materials shall be removed in a manner that prevents injury or damage to persons, adjoining properties and public rights-of-way.

3302.3 Fire Safety During Construction
Fire safety during construction shall comply with the applicable requirements of this code and the applicable provisions of Chapter 33 of the International Fire Code.

2015 International Energy Conservation Code (as adopted by New York State)

Chapter 3 [CE] General Requirements

Table C301.1 Climate Zones, Moisture Regimes, and Warm-humid Designations by State, County and Territory

New York - 4A Westchester

Chapter 4 [CE] Commercial Energy Efficiency

C401.2 Application
Commercial buildings shall comply with one of the following compliance paths:

2. Prescriptive Compliance Path: The requirements of Sections C402 through C405. In addition, commercial buildings shall comply with Section C406 and tenant spaces shall comply with Section C406.1.1.

Table C402.1.3 Opaque Thermal Envelope Insulation Component Minimum Requirements, R-value Method

Climate Zone: 4 Except Marine - Group E

Roofs:	Insulation entirely above roof deck	R-30ci
Walls, above grade:	Mass	R-9.5ci
Walls, below grade:	Below-grade wall	R-7.5ci
Slab-on-grade floors:	Unheated slabs	R-10 for 24" below

C402.2.5 Slabs-on-grade perimeter insulation
Where the slab on grade is in contact with the ground, the minimum thermal resistance (R-value) of the insulation around the perimeter of unheated or heated slab-on-grade floors designed in accordance with the R-value method of Section C402.1.3 shall be as specified in Table C402.1.3. The insulation shall be placed on the outside of the foundation or on the inside of the foundation wall. The insulation shall extend downward from the top of the slab for a minimum distance as shown in the table or to the top of the footing, whichever is less, or downward to at least the bottom of the slab and then horizontally to the interior or exterior for the total distance shown in the table. Insulation extending away from the building shall be protected by pavement or by not less than of 10 inches (254 mm) of soil.

Exception: Where the slab-on-grade floor is greater than 24 inches (61 mm) below the finished exterior grade, perimeter insulation is not required.

Table C402.4 Building Envelope Fenestration Maximum U-factor and SHGC Requirements

Climate Zone: 4

Vertical Fenestration - U-factor	
Fixed fenestration:	0.38
Operable fenestration:	0.45
Entrance doors:	0.77
Vertical Fenestration - SHGC	
PF < 0.2:	0.40
0.2 ≤ PF < 0.5:	0.48
PF ≥ 0.5:	0.64

Chapter 5 [CE] Existing Buildings

Section C502 Additions

C502.1 General
Additions to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portion of the existing building or building system to comply with this code. Additions shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with this code if the addition alone complies or if the existing building and addition comply with this code as a single building. Additions shall comply with Section C502.2.

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Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

CODE ANALYSIS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927203CA001

CA0.01

BUILDING AREAS

MAS Building (1909) -Type of Construction: IIIB (SM)

Lower Level (Basement):	7,415 SF
1st Floor:	7,415 SF
2nd Floor:	7,415 SF
3rd Floor:	7,415 SF
Total Area:	29,660 SF (Existing)

Middle Building (1929) - Type of Construction: IB

Basement:	5,061 SF
Lower Level:	18,590 SF
1st Floor:	18,590 SF
2nd Floor:	13,465 SF
3rd Floor:	8,445 SF
Total Area:	64,151 SF (Existing)

Classroom Addition (2006) - Type of Construction: IB

Basement:	1,582 SF
1st Floor:	10,404 SF
2nd Floor:	10,404 SF
Total Area:	22,390 SF

Proposed Addition - Type of Construction: IB

Lower Level:	1,826 SF
1st Floor:	1,826 SF
2nd Floor:	1,863 SF
3rd Floor:	1,863 SF
2nd Floor:	1,826 SF
Total Area:	7,378 SF

Total Building -Type of Construction: IIIB

Basement:	6,643 SF
Lower Level:	38,235 SF
1st Floor:	38,235 SF
2nd Floor:	22,743 SF
3rd Floor:	17,723 SF
Total Area:	123,579 SF

Work Areas

Alteration Level 1: Flooring Replacement (14,943 SF)

Alteration Level 2: Renovated Spaces

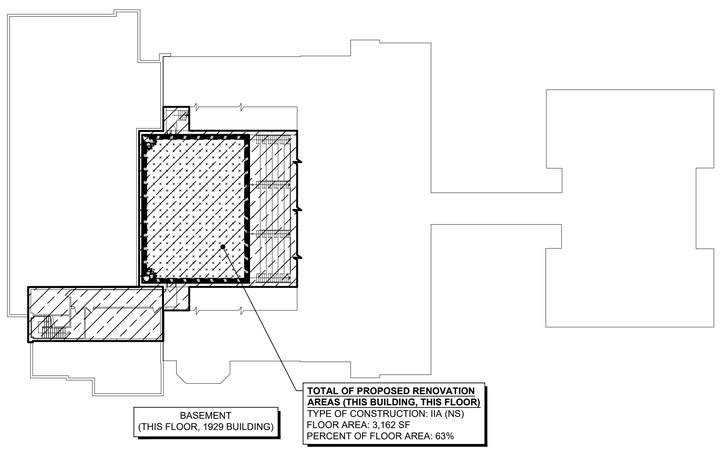
Total Existing Building Area:	116,201 SF
Total Renovation Area:	10,565 SF (9.09% of Floor Area)

GENERAL NOTES:

1. SEE DRAWINGS A2.01 - A2.06 FOR OVERALL PROPOSED FLOOR PLANS FOR RENOVATION AREAS.
2. SEE DRAWINGS A2.10 - A2.14 FOR PROPOSED ADDITION FLOOR PLANS.

Construction Type Legend

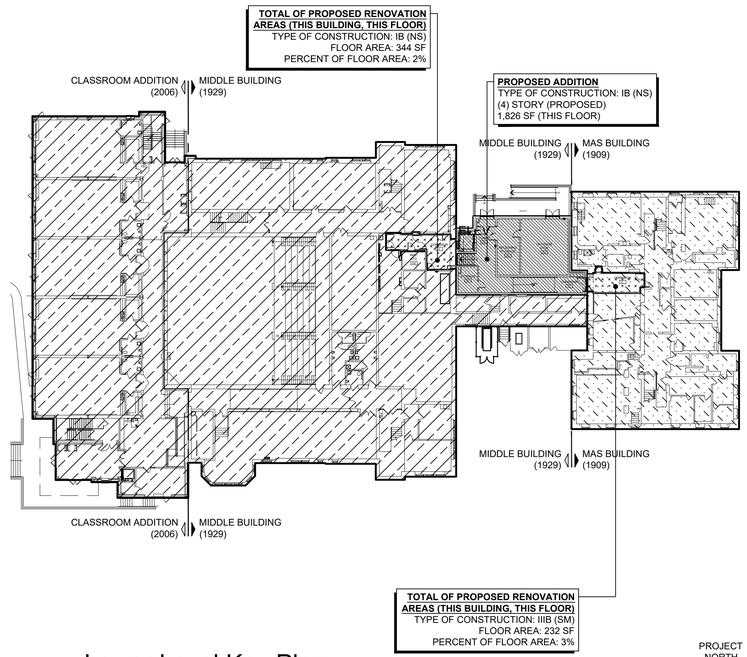
- TYPE IB (NS)
- TYPE IIIB (SM)
- ADDITION AREA
- RENOVATION AREA



1 CA0.02 Basement Key Plan

1/32" = 1'-0"

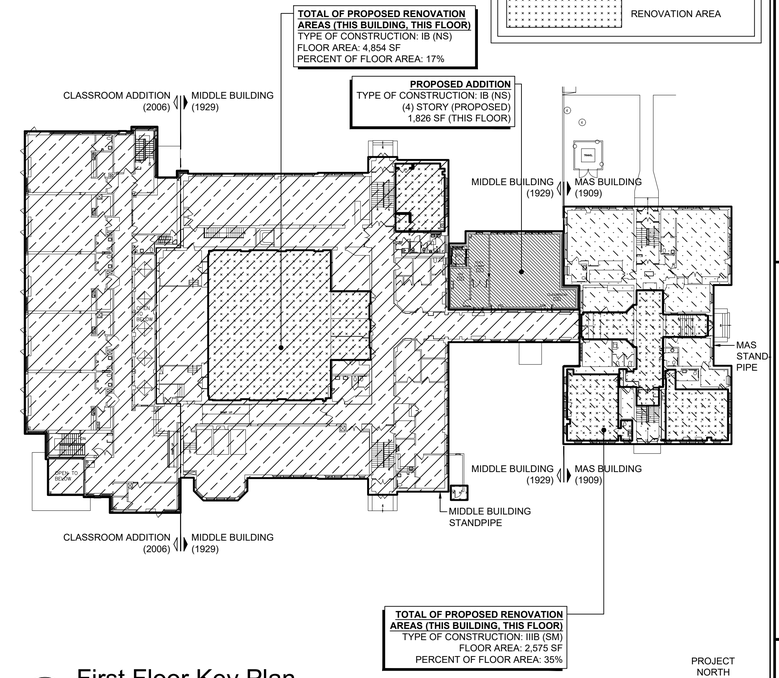
PROJECT NORTH



2 CA0.02 Lower Level Key Plan

1/32" = 1'-0"

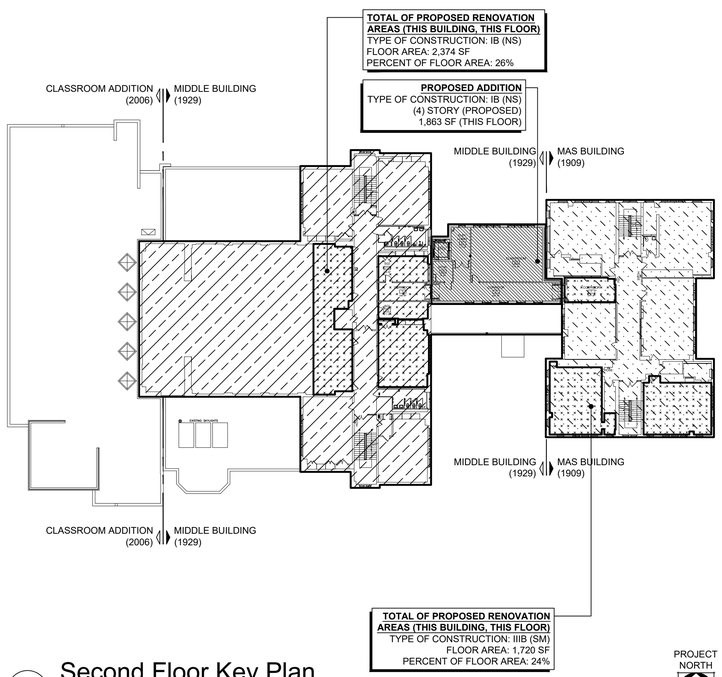
PROJECT NORTH



3 CA0.02 First Floor Key Plan

1/32" = 1'-0"

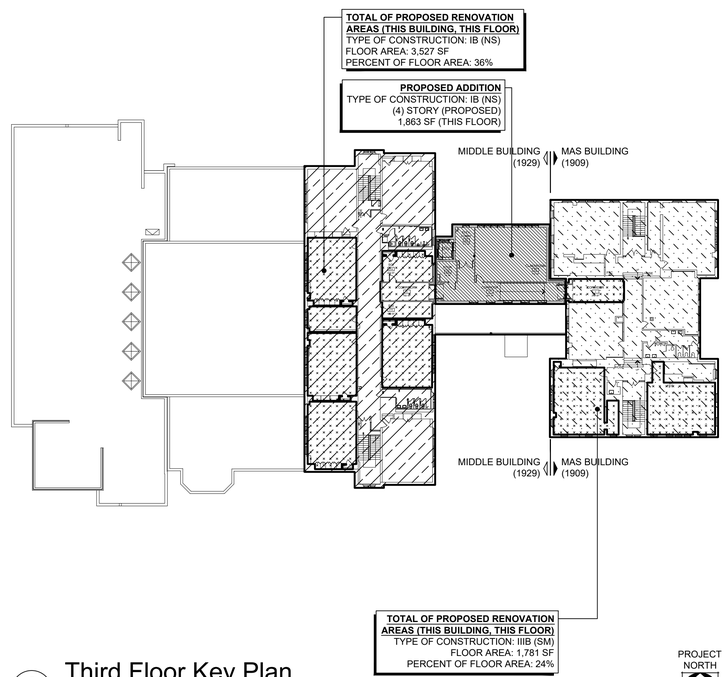
PROJECT NORTH



4 CA0.02 Second Floor Key Plan

1/32" = 1'-0"

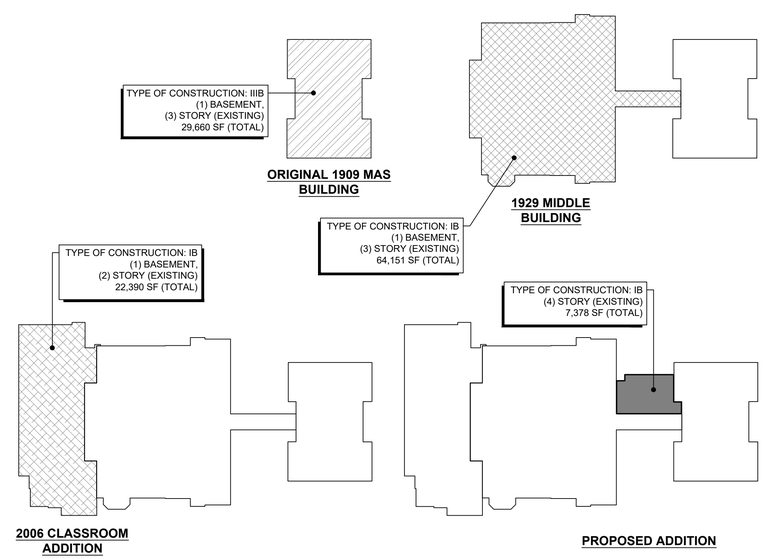
PROJECT NORTH



5 CA0.02 Third Floor Key Plan

1/32" = 1'-0"

PROJECT NORTH



6 CA0.02 Building Evolution Key Plan

1/32" = 1'-0"

PROJECT NORTH

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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

CODE ANALYSIS PLANS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

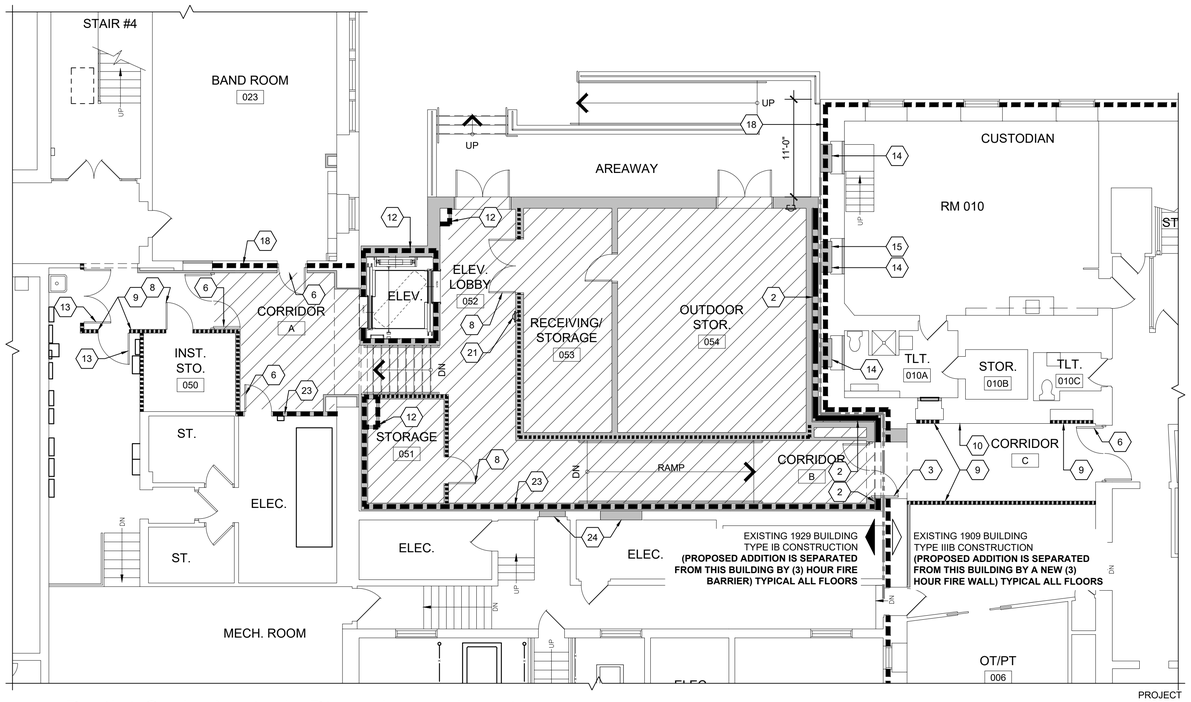
File No. 10927203CA001

CA0.02

Code Analysis Key Notes

SYMBOL INDICATES CODE ANALYSIS KEY NOTE

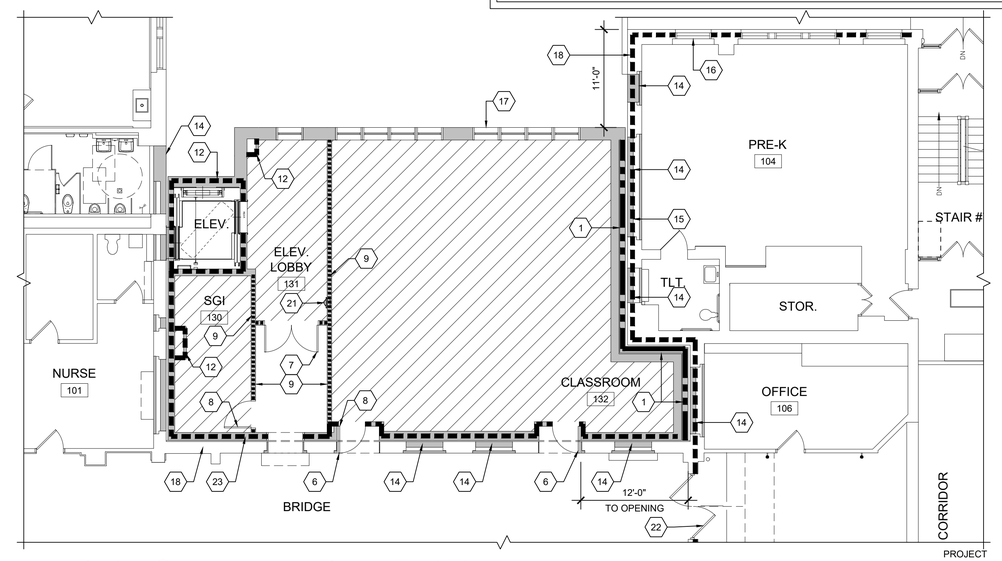
1. **NEW (3) HOUR FIRE BARRIER (EXCEEDS IBC TABLE 707.3.10)**
2. **NEW (3) HOUR FIRE BARRIER. LENGTH THIS FLOOR: 37'-6". OPENINGS THIS FLOOR: 6'-0" (16%). ALLOWED: 25% (PER IBC 706.8)**
3. **NEW (180) MINUTE RATED DOOR IN FIRE BARRIER (PER IBC TABLE 716.5)**
4. NEW FIRE AREA SEPARATED BY (2) HOUR FIRE BARRIER (PER IBC TABLE 707.3.10)
5. NEW PORTION OF (2) HOUR FIRE BARRIER (PER IBC TABLE 707.3.10)
6. NEW (90) MINUTE RATED DOOR IN FIRE BARRIER (PER IBC TABLE 716.5)
7. NEW (60) MINUTE RATED DOOR IN FIRE BARRIER (PER IBC TABLE 716.5)
8. NEW (20) MINUTE RATED DOOR IN FIRE PARTITION (PER IBC TABLE 716.5)
9. NEW PORTION OF (1) HOUR FIRE/SMOKE BARRIER (PER IBC 708.1)
10. EXISTING PORTION OF (1) HOUR FIRE PARTITION (PER IBC 708.1 / TABLE 1020.1)
11. EXISTING PORTION OF (2) HOUR FIRE BARRIER (PER IBC 708.1)
12. NEW PORTION OF (2) HOUR RATED SHAFT ENCLOSURE (PER IBC 713.4)
13. NEW (45) MINUTE RATED DOOR IN FIRE PARTITION (PER IBC TABLE 716.5)
14. NEW PORTION OF EXTERIOR BEARING WALL INFILL TO MATCH EXISTING (2) HOUR FIRE RATING (PER IBC TABLE 601)
15. LOCATION OF EXISTING RESCUE WINDOW.
16. RELOCATED LOCATION OF RESCUE WINDOW.
17. NEW RESCUE WINDOW.
18. **EXISTING MINIMUM (2) HOUR FIRE RATED MASONRY WALL CONSTRUCTION EXTENDING NOT LESS THAN 10'-0" BEYOND NEW CONSTRUCTION (PER IBC TABLE 602)**
19. **ALLOWABLE AREA OF WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE: 5' TO LESS THAN 10' - UNPROTECTED, SPRINKLERED - ALLOWABLE: 25%. PROPOSED: 20%. (PER IBC TABLE 705.8)**
20. **ALLOWABLE AREA OF WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE: 5' TO LESS THAN 10' - UNPROTECTED, SPRINKLERED - ALLOWABLE: 25%. PROPOSED: 11%. (PER IBC TABLE 705.8)**
21. **NEW FIRE EXTINGUISHER CABINET WITH FIRE EXTINGUISHER.**
22. **EXISTING (180) MINUTE RATED DOOR TO REMAIN.**
23. **NEW 2-HOUR FIRE BARRIER.**
24. **INFILL EXISTING OPENING TO MAINTAIN MIN. 2-HOUR FIRE BARRIER (PER IBC TABLE 707.3.10)**



1 CA0.03 Partial Code Analysis Plan - Lower Level

1/8" = 1'-0"

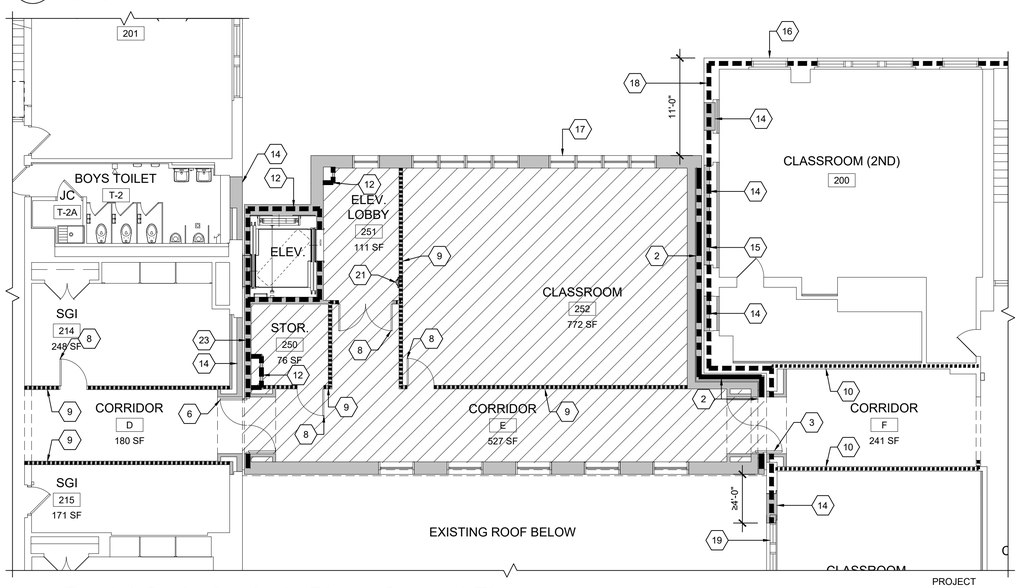
PROJECT NORTH



2 CA0.03 Partial Code Analysis Plan - First Floor

1/8" = 1'-0"

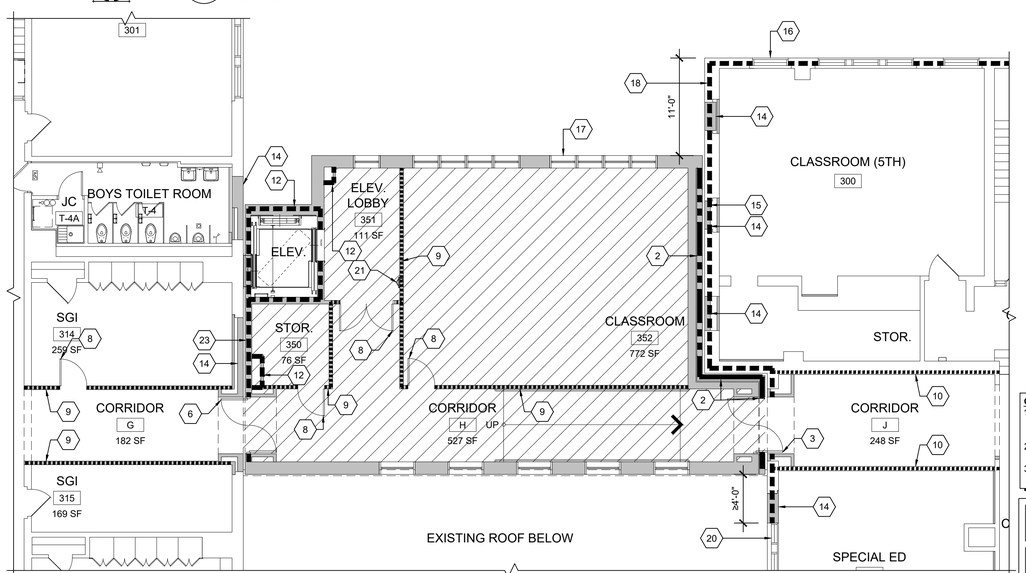
PROJECT NORTH



3 CA0.03 Partial Code Analysis Plan - Second Floor

1/8" = 1'-0"

PROJECT NORTH



4 CA0.03 Partial Code Analysis Plan - Third Floor

1/8" = 1'-0"

PROJECT NORTH

GENERAL NOTES:

1. SEE DRAWINGS A2.01 - A2.06 FOR OVERALL PROPOSED FLOOR PLANS FOR RENOVATION AREAS.
2. SEE DRAWINGS A2.10 - A2.14 FOR PROPOSED ADDITION FLOOR PLANS.
3. SEE DRAWING A8.01 FOR PROPOSED WALL/PARTITION TYPES.

Fire Rating Legend

- (3) HOUR RATED FIRE BARRIER
- (2) HOUR RATED FIRE BARRIER
- (1) HOUR RATED FIRE BARRIER
- NEW FIRE AREA

Date	1/10/20
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Drawn	TT

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

Revisions:

1 ISSUE TO BID 11/23/20

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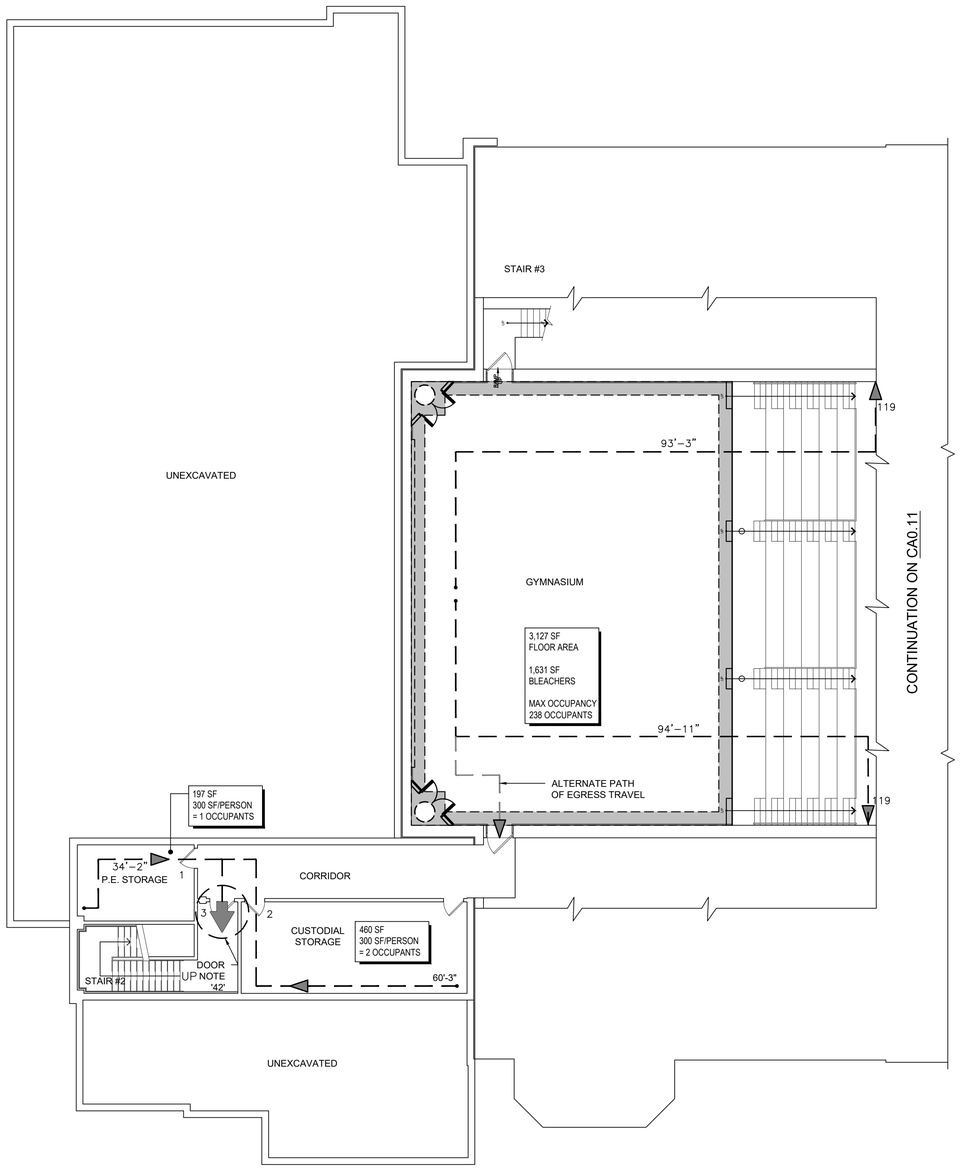


1 CA0.10 Partial Basement Egress Plan

3/32 = 1'-0"

NORTH

Plumbing Fixture Counts

TOTAL FIXTURES PROVIDED

CLASSIFICATION	WATER CLOSETS	URINALS	LAVATORIES	DRINKING FOUNTAINS
GIRLS	15 FIXTURES		11 FIXTURES	5 FIXTURES
BOYS	11 FIXTURES	9 FIXTURES	11 FIXTURES	

Symbol Legend

*ERW	EXISTING RESCUE WINDOW
*NRW	NEW RESCUE WINDOW
	DENOTES ADA ACCESSIBLE ENTRANCE
FEC	DENOTES EXISTING FIRE EXTINGUISHER CABINET
HOSE	DENOTES EXISTING FIRE HOSE REEL
	DENOTES NEW SEMI-RECESSED FIRE EXTINGUISHER CABINET
ATO	AREA OF TEMPORARY OCCUPANCY

Egress Legend

SYMBOL	DESCRIPTION
0'-0" T.D. # # #	TOTAL TRAVEL DISTANCE (T.D.). # OF OCCUPANTS # OCCUPANT CAPACITY OF OPENING
0'-0" C.P. #	COMMON PATH OF TRAVEL (C.P.). # OF OCCUPANTS
	TRAVEL DISTANCE FROM CORRIDOR GROUND FLOOR TO EXTERIOR EXIT: 150' MAX. ALL OTHER FLOORS TO STAIR EXIT: 120' MAX.
	BOUNDARY OF PROPOSED FIRE AREAS. REFER TO CODE ANALYSIS DRAWINGS CA0.03-CA0.05
R.W.	RESCUE WINDOW

DOOR EGRESS NOTES

DOOR NOTE '34'
3'-0" SINGLE LEAF DOOR:
EGRESS CAPACITY
2'-10" CLEAR OPENING
34'/.20" = 170 PEOPLE
DOOR NOTE '42'
3'-8" SINGLE LEAF DOOR:
EGRESS CAPACITY
3'-6" CLEAR OPENING
42'/.20" = 210 PEOPLE
DOOR NOTE '56'
5'-0" DOUBLE LEAF DOOR:
EGRESS CAPACITY
4'-8" CLEAR OPENING
56'/.20" = 280 PEOPLE
DOOR NOTE '64'
5'-8" DOUBLE LEAF DOOR:
EGRESS CAPACITY
5'-8" CLEAR OPENING
64'/.20" = 320 PEOPLE
DOOR NOTE '66'
5'-10" DOUBLE LEAF DOOR:
EGRESS CAPACITY
5'-6" CLEAR OPENING
66'/.20" = 330 PEOPLE
DOOR NOTE '68'
6'-0" DOUBLE LEAF DOOR:
EGRESS CAPACITY
5'-8" CLEAR OPENING
68'/.20" = 340 PEOPLE
DOOR NOTE '80'
7'-0" DOUBLE LEAF DOOR:
EGRESS CAPACITY
6'-8" CLEAR OPENING
80'/.20" = 400 PEOPLE

HALL EGRESS NOTES

HALL NOTE '57'
4'-9" CLEAR OPENING
EGRESS CAPACITY
57"/.20" = 285 PEOPLE
HALL NOTE '86'
7'-2" CLEAR OPENING
EGRESS CAPACITY
86"/.20" = 430 PEOPLE
HALL NOTE '96'
8'-0" CLEAR OPENING
EGRESS CAPACITY
96"/.20" = 480 PEOPLE
HALL NOTE '97'
7'-11" CLEAR OPENING
EGRESS CAPACITY
95"/.20" = 475 PEOPLE
HALL NOTE '100'
8'-4" CLEAR OPENING
EGRESS CAPACITY
100"/.20" = 500 PEOPLE
HALL NOTE '104'
8'-8" CLEAR OPENING
EGRESS CAPACITY
104"/.20" = 520 PEOPLE
HALL NOTE '108'
9'-0" CLEAR OPENING
EGRESS CAPACITY
108"/.20" = 540 PEOPLE
HALL NOTE '114'
9'-6" CLEAR OPENING
EGRESS CAPACITY
114"/.20" = 570 PEOPLE
HALL NOTE '117'
9'-9" CLEAR OPENING
EGRESS CAPACITY
117"/.20" = 585 PEOPLE
HALL NOTE '120'
10'-0" CLEAR OPENING
EGRESS CAPACITY
120"/.20" = 600 PEOPLE
HALL NOTE '121'
10'-1" CLEAR OPENING
EGRESS CAPACITY
121"/.20" = 605 PEOPLE
HALL NOTE '123'
10'-3" CLEAR OPENING
EGRESS CAPACITY
123"/.20" = 615 PEOPLE
HALL NOTE '133'
11'-1" CLEAR OPENING
EGRESS CAPACITY
133"/.20" = 665 PEOPLE
HALL NOTE '138'
11'-6" CLEAR OPENING
EGRESS CAPACITY
138"/.20" = 690 PEOPLE
HALL NOTE '139'
11'-7" CLEAR OPENING
EGRESS CAPACITY
139"/.20" = 695 PEOPLE
HALL NOTE '142'
11'-10" CLEAR OPENING
EGRESS CAPACITY
142"/.20" = 710 PEOPLE
HALL NOTE '143'
11'-11" CLEAR OPENING
EGRESS CAPACITY
143"/.20" = 715 PEOPLE

STAIR EGRESS NOTES

STAIR NOTE '40'
3'-4" CLEAR OPENING
EGRESS CAPACITY
40"/.30" = 133 PEOPLE
STAIR NOTE '41'
3'-5" CLEAR OPENING
EGRESS CAPACITY
41"/.30" = 136 PEOPLE
STAIR NOTE '46'
3'-10" CLEAR OPENING
EGRESS CAPACITY
46"/.30" = 153 PEOPLE
STAIR NOTE '48'
4'-0" CLEAR OPENING
EGRESS CAPACITY
48"/.30" = 160 PEOPLE
STAIR NOTE '50'
4'-2" CLEAR OPENING
EGRESS CAPACITY
50"/.30" = 166 PEOPLE
STAIR NOTE '51'
4'-3" CLEAR OPENING
EGRESS CAPACITY
51"/.30" = 170 PEOPLE
STAIR NOTE '56'
4'-8" CLEAR OPENING
EGRESS CAPACITY
56"/.30" = 186 PEOPLE
ASTAIR NOTE '60'
5'-0" CLEAR OPENING
EGRESS CAPACITY
60"/.30" = 200 PEOPLE
STAIR NOTE '72'
6'-0" CLEAR OPENING
EGRESS CAPACITY
72"/.30" = 240 PEOPLE
STAIR NOTE '90'
7'-6" CLEAR OPENING
EGRESS CAPACITY
90"/.30" = 300 PEOPLE
STAIR NOTE '98'
8'-2" CLEAR OPENING
EGRESS CAPACITY
98"/.30" = 326 PEOPLE

Code Analysis

PER THE 2015 INTERNATIONAL BUILDING CODE (IBC) U.N.O.

USE GROUP CLASSIFICATION "E": EDUCATIONAL

OCCUPANT LOAD
SECTION 1004.1.2 - AREAS WITHOUT FIXED SEATING
OCCUPANCY LOADS WERE CALCULATED USING THE MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT AS INDICATED IN TABLE 1004.1.2.

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

STORAGE & MECHANICAL ROOMS	300	GROSS
ASSEMBLY:		
ASSEMBLY WITH FIXED SEATS	SECTION 1004.4	
CONCENTRATED (CHAIRS ONLY)	7	NET
STANDING SPACE	5	NET
UNCONCENTRATED (TABLES & CHAIRS)	15	NET
BUSINESS AREAS (OFFICES)	100	GROSS
EDUCATIONAL:		
CLASSROOMS	20	NET
SHOPS OR VOCATIONAL ROOMS	50	NET
EXERCISE ROOMS	50	GROSS
KITCHENS, COMMERCIAL	200	GROSS
LIBRARY		
READING ROOM	50	NET
STACKS	100	GROSS
LOCKER ROOMS	50	GROSS
STAGES AND PLATFORMS	15	NET

SECTION 1004.4 - FIXED SEATING
FOR AREAS HAVING FIXED SEATS AND AISLES, THE OCCUPANT LOAD SHALL BE DETERMINED BY THE NUMBER OF FIXED SEATS INSTALLED THEREIN.

MEANS OF EGRESS SIZING
SECTION 1005
1005.3 REQUIRED CAPACITY BASED ON OCCUPANT LOAD
1005.3.1 STAIRWAYS
CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY SUCH STAIRWAYS BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.3 INCH PER OCCUPANT.

1005.3.2 OTHER EGRESS COMPONENTS
MEANS OF EGRESS COMPONENTS OTHER THAN STAIRWAYS SHALL BE CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY EACH COMPONENT BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.2 INCH PER OCCUPANT.

NUMBER OF EXITS AND EXIT ACCESS DOORWAYS
SECTION 1006
1006.2.1 EGRESS BASED ON OCCUPANT LOAD AND COMMON PATH OF EGRESS TRAVEL DISTANCE:
TWO EXITS OR EXIT ACCESS DOORWAYS FROM ANY SPACE SHALL BE PROVIDED WHERE THE DESIGN OCCUPANT LOAD OR THE COMMON PATH OF EGRESS TRAVEL DISTANCE EXCEEDS THE VALUES LISTED IN TABLE 1006.2.1

"E" OCCUPANCY:
49 MAX OCCUPANT LOAD
75' MAX COMMON PATH OF EGRESS TRAVEL DISTANCE

EXIT ACCESS
SECTION 1016
1016.2 EGRESS THROUGH INTERVENING SPACE
EGRESS FROM A ROOM OR SPACE SHALL NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS OR AREAS, EXCEPT WHERE SUCH ADJOINING ROOMS OR AREAS AND THE AREA SERVED ARE ACCESSORY TO ONE OR THE OTHER.

EGRESS SHALL NOT PASS THROUGH KITCHENS, STORAGE ROOMS, CLOSETS OR SPACES USED FOR SIMILAR PURPOSES.

EXIT ACCESS TRAVEL DISTANCE
SECTION 1017
"E" OCCUPANCY:
NOT TO EXCEED 200 FEET WITHOUT SPRINKLER SYSTEM

CORRIDORS
SECTION 1020
1020.1 CORRIDOR FIRE-RESISTANCE RATING:
"E" OCCUPANCY
1 HOUR WITHOUT A SPRINKLER SYSTEM

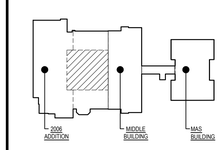
1020.2 MINIMUM CORRIDOR WIDTH

MINIMUM CORRIDOR WIDTH UNLESS OTHERWISE NOTED:	44"
WITH AN OCCUPANT LOAD OF LESS THAN 50:	36"
GROUP "E" WITH A CORRIDOR SERVING MORE THAN 100:	72"

1020.4 DEAD END CORRIDORS
MAX DEAD END CORRIDOR LENGTH = 20'

PER THE 2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
805.6 DEAD END CORRIDORS (ALTERATIONS - LEVEL 2)
MAX DEAD END CORRIDOR LENGTH = 35'

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	DLF
Drawn	TH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
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PROPOSED BASEMENT EGRESS PLAN
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
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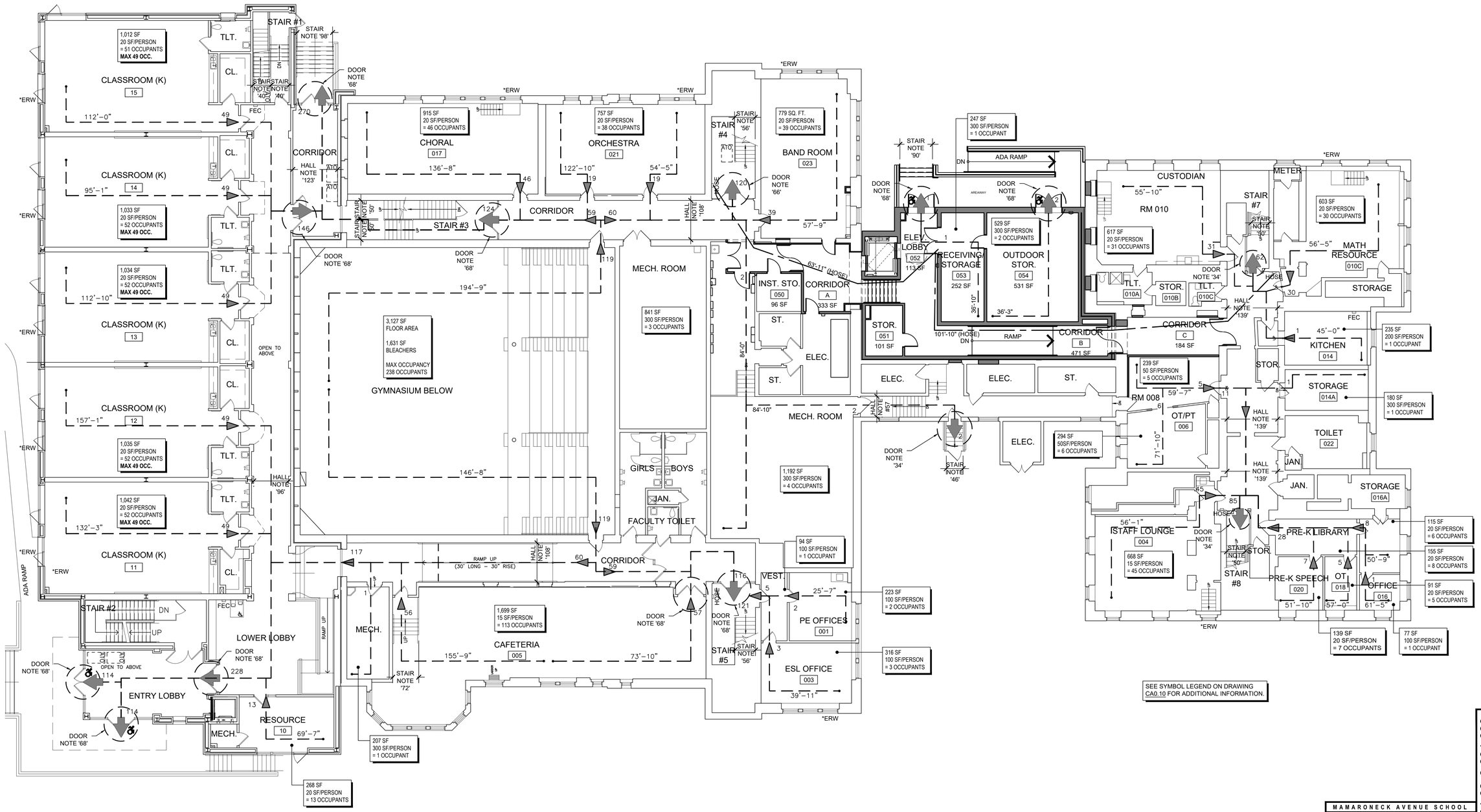
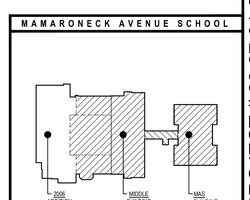
CA0.10



1 CA0.11 Partial Lower Level Egress Plan

3/32" = 1'-0"

NORTH



Key Plan

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Date	1/10/20
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PROPOSED LOWER LEVEL EGRESS PLAN

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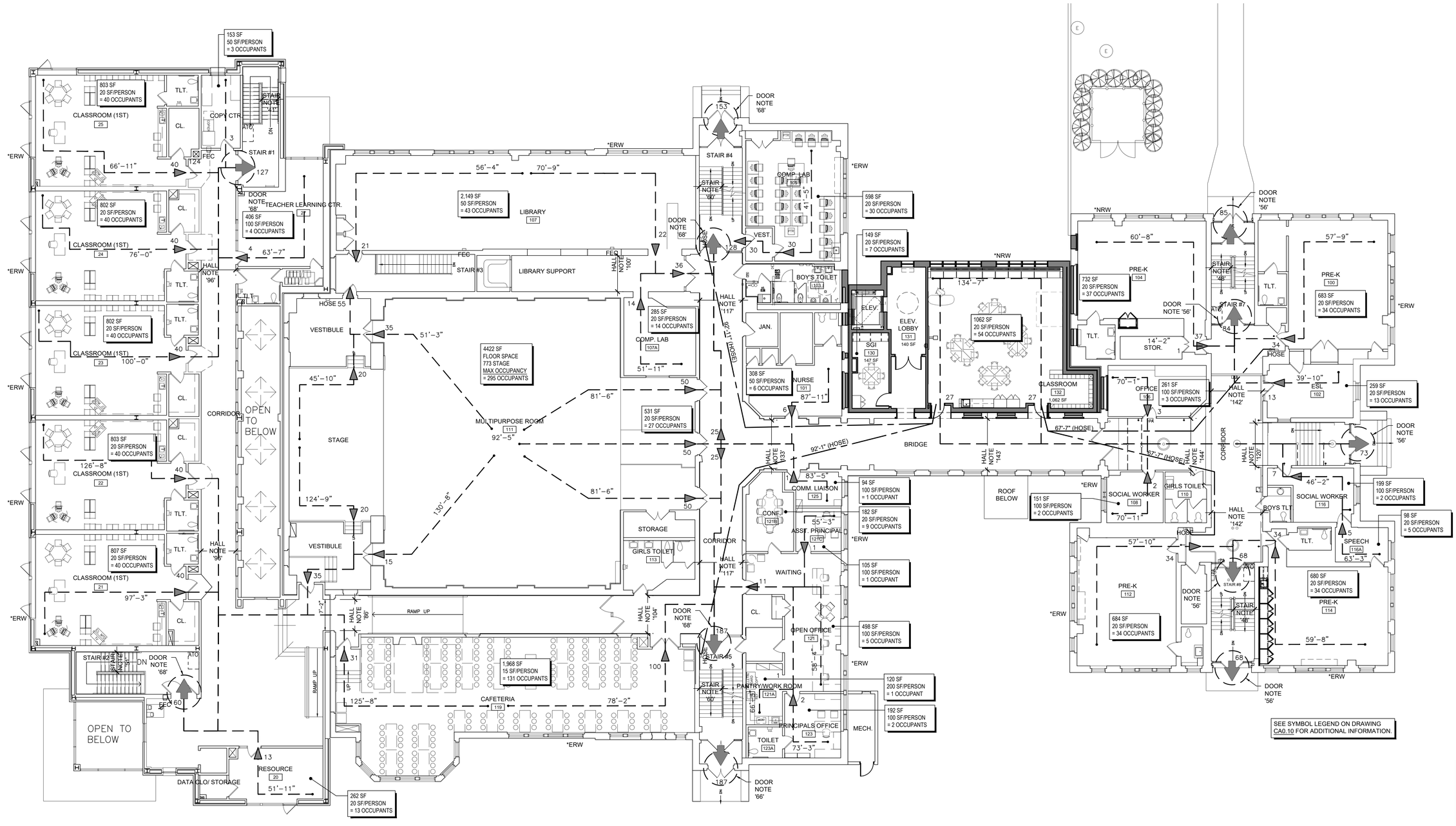
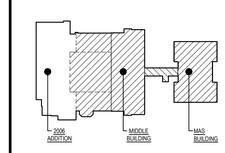


1 CA0.12 Partial Proposed First Floor Plan

3/32" = 1'-0"

NORTH

MAMARONECK AVENUE SCHOOL



Key Plan

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PROPOSED FIRST FLOOR EGRESS PLAN

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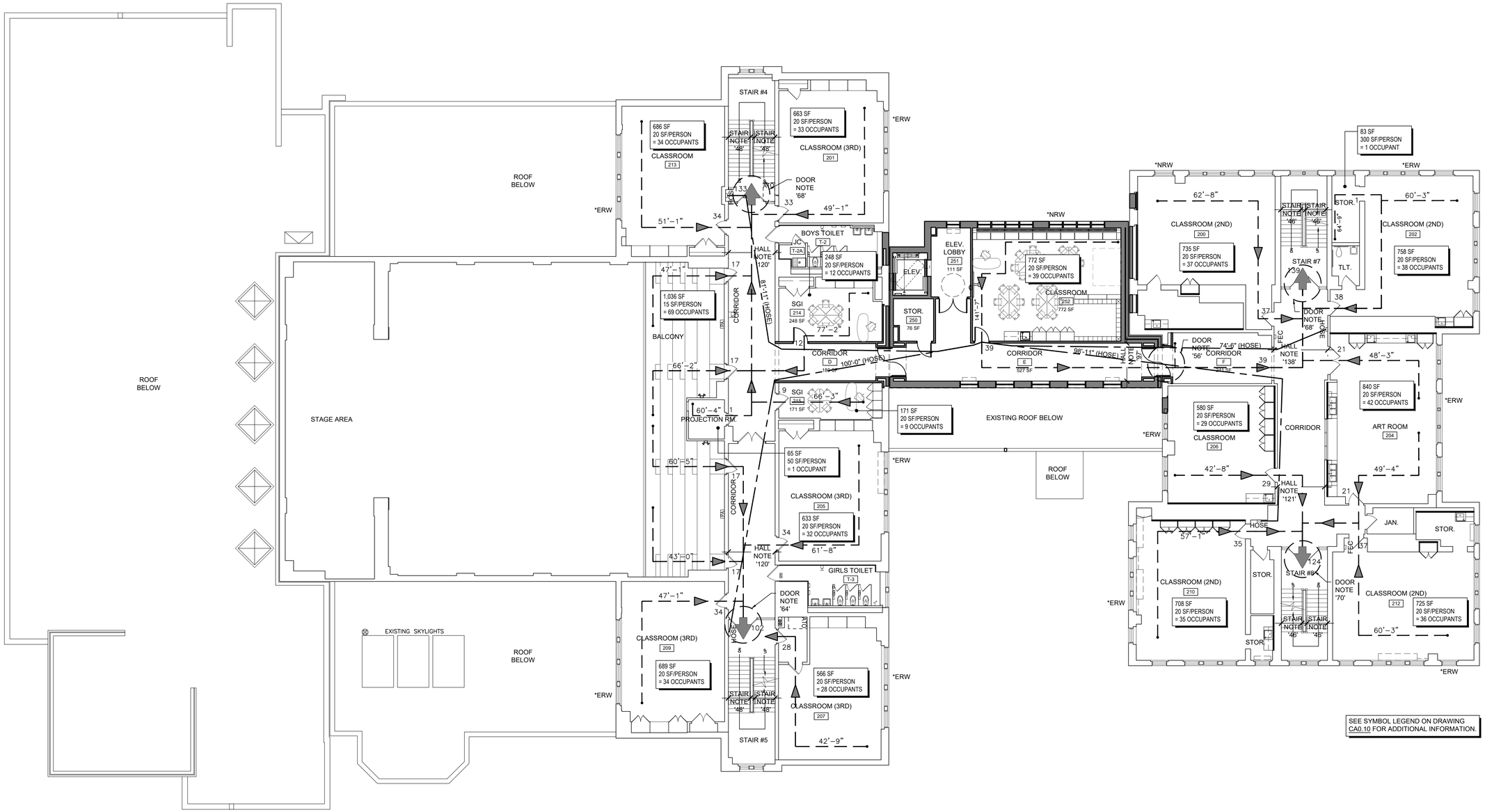
CA0.12



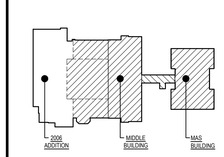
SEE SYMBOL LEGEND ON DRAWING CA0.10 FOR ADDITIONAL INFORMATION.

1 CA0.13 Partial Proposed Second Floor Plan

3/32" = 1'-0"

NORTH

MAMARONECK AVENUE SCHOOL



Key Plan

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PROPOSED SECOND FLOOR EGRESS PLAN

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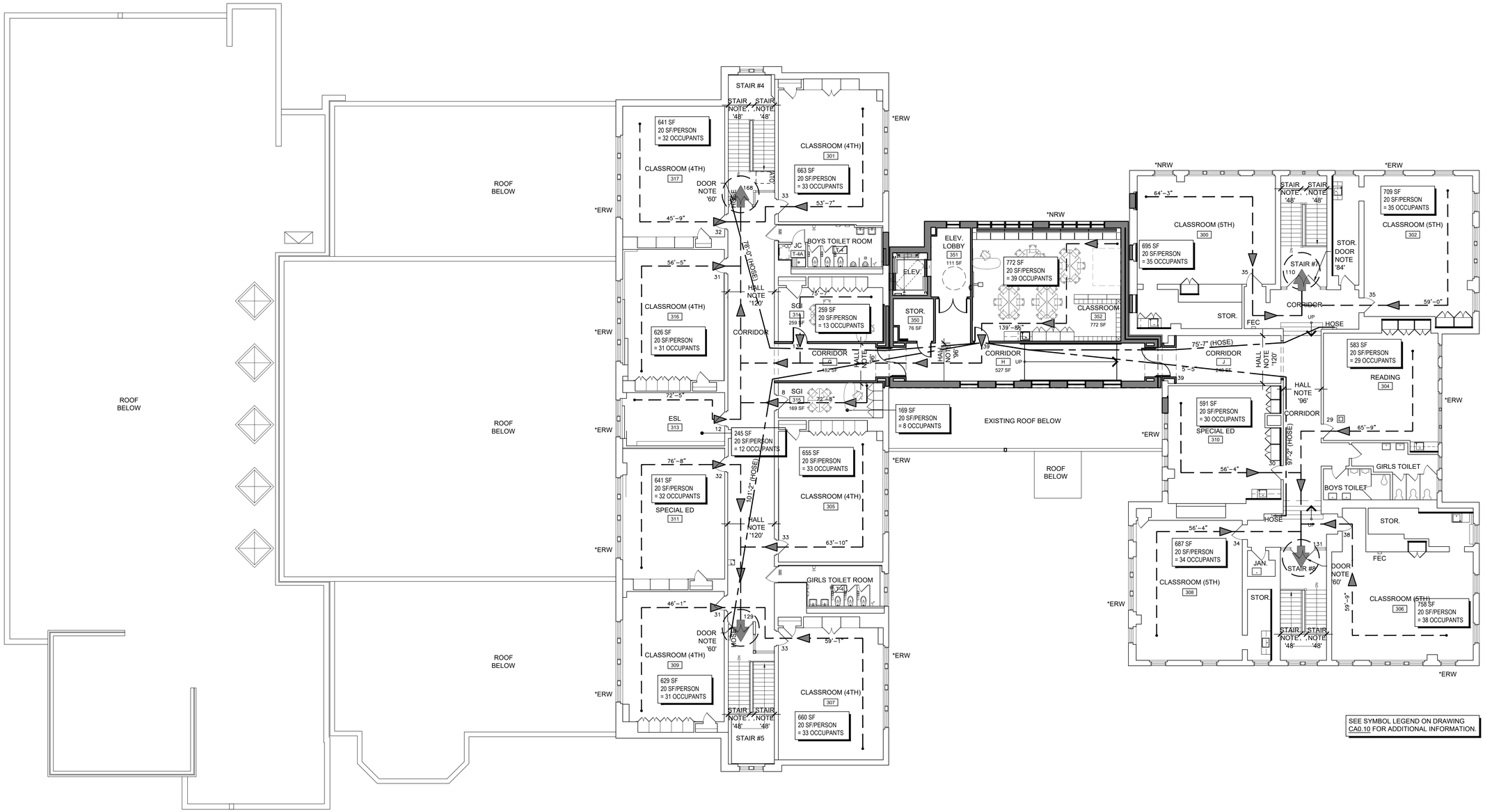


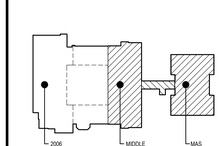
SEE SYMBOL LEGEND ON DRAWING CA0.10 FOR ADDITIONAL INFORMATION.

1 CA0.14 Partial Third Floor Egress Plan

3/32" = 1'-0"

NORTH

MAMARONECK AVENUE SCHOOL



Key Plan

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PROJECT NORTH

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MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

1 ISSUE TO BID 11/23/20

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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

PROPOSED THIRD FLOOR EGRESS PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202CA010

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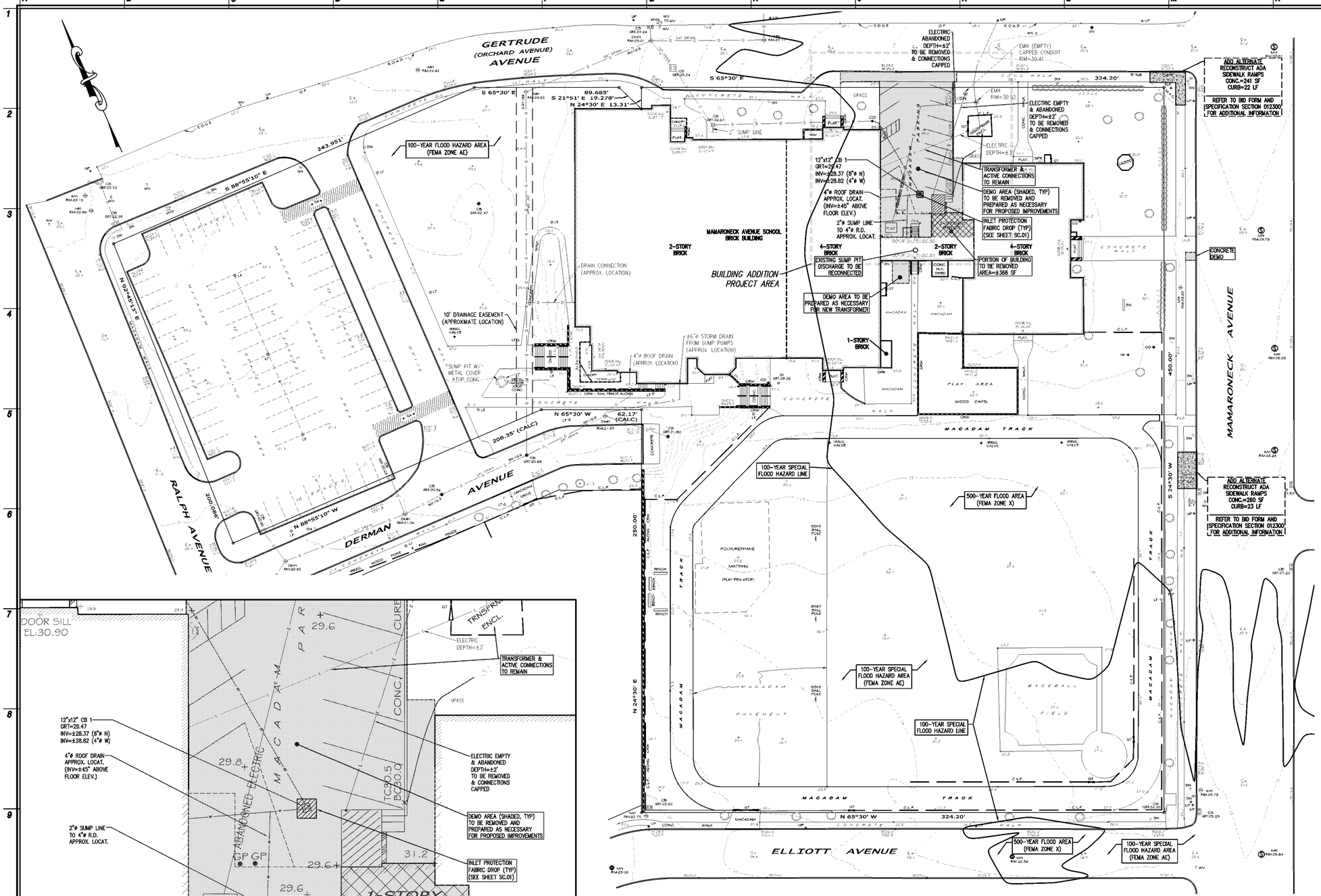


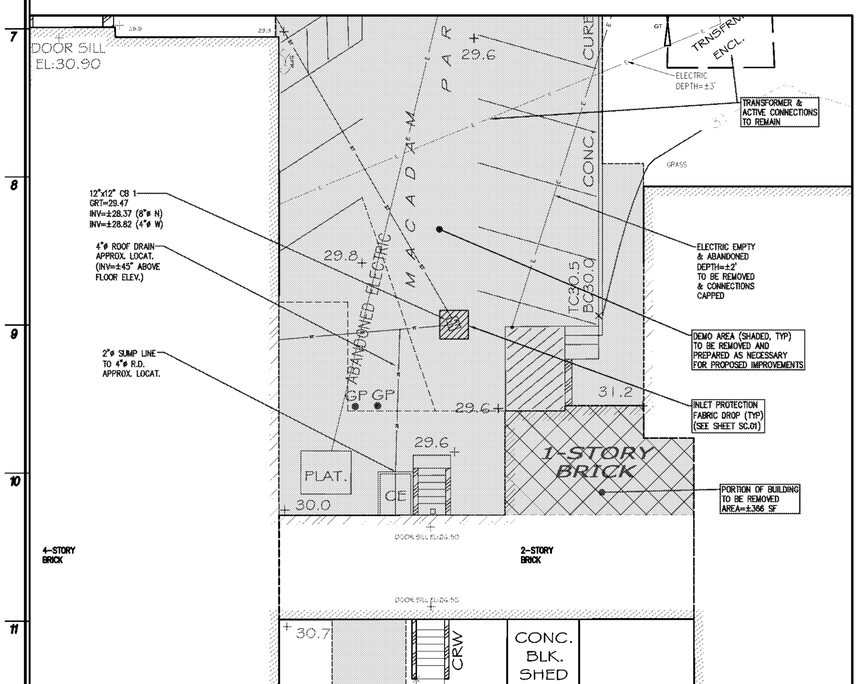
EXISTING CONDITIONS & DEMOLITION PLAN

MAMARONECK AVENUE SCHOOL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



BUILDING ADDITION PROJECT AREA

SCALE: 1"=10'

FLOODPLAIN LEGEND & NOTES

100-YEAR SPECIAL FLOOD HAZARD AREA

PROPERTY LINE

1. THE SITE IS LOCATED WITHIN THE LIMITS OF A FLOOD HAZARD AREA. CERTAIN ACTIVITIES IN FLOOD HAZARD AREAS ARE REGULATED AND MAY BE PROHIBITED ON THIS SITE OR MAY FIRST REQUIRE A PERMIT.
2. THE ENTIRE SITE IS LOCATED WITHIN THE 100-YEAR SPECIAL FLOOD HAZARD AREA (FEMA ZONE AE) OR 500-YEAR FLOOD AREA (FEMA ZONE X)
3. 100-YEAR SPECIAL FLOOD HAZARD AREAS SHOWN ARE PART OF FEMA ZONE AE WHICH IS A SUBSET OF ZONES WITHIN THE SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. WITHIN THE VICINITY OF THE SITE THE BASE FLOOD ELEVATION IS 28' (NAVD88) OR 27.07' (NGVD29). ELEVATIONS SHOWN ARE BASED ON NGVD29.
4. NO ACTIVITIES OR DISTURBANCE IS PROPOSED WITHIN THE 100-YEAR SPECIAL FLOOD HAZARD AREA (FEMA ZONE AE).

SURVEY REFERENCE

1. EXISTING CONDITIONS & TOPOGRAPHY REFERENCES A SURVEY TITLED "TOPOGRAPHIC SURVEY OF MAMARONECK AVENUE ELEMENTARY SCHOOL IN THE TOWN OF MAMARONECK, WESTCHESTER COUNTY, NEW YORK" PERFORMED BY ARISTOTLE BOURNAZOS, P.C., LAND SURVEYORS-PLANNERS, 20 CEDAR STREET, NEW ROCHELLE, N.Y. 10801, DATED 9-18-07. DATUM REFERENCES NGVD29.
2. FLOODPLAIN INFORMATION REFERENCES FEMA NFIP FIRM MAP NUMBER 36119C0353F, EFFECTIVE DATE SEPTEMBER 28, 2007.
3. ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). CONVERSION FACTOR FROM NGVD29 TO NAVD88 = -1.07'

811 Know what's below. 811 before you dig.

Date	1/10/20
Checked	EB
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NYSED PROJECT # 66-07-01-03-0-004-030

EXISTING CONDITIONS & DEMOLITION PLAN
2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

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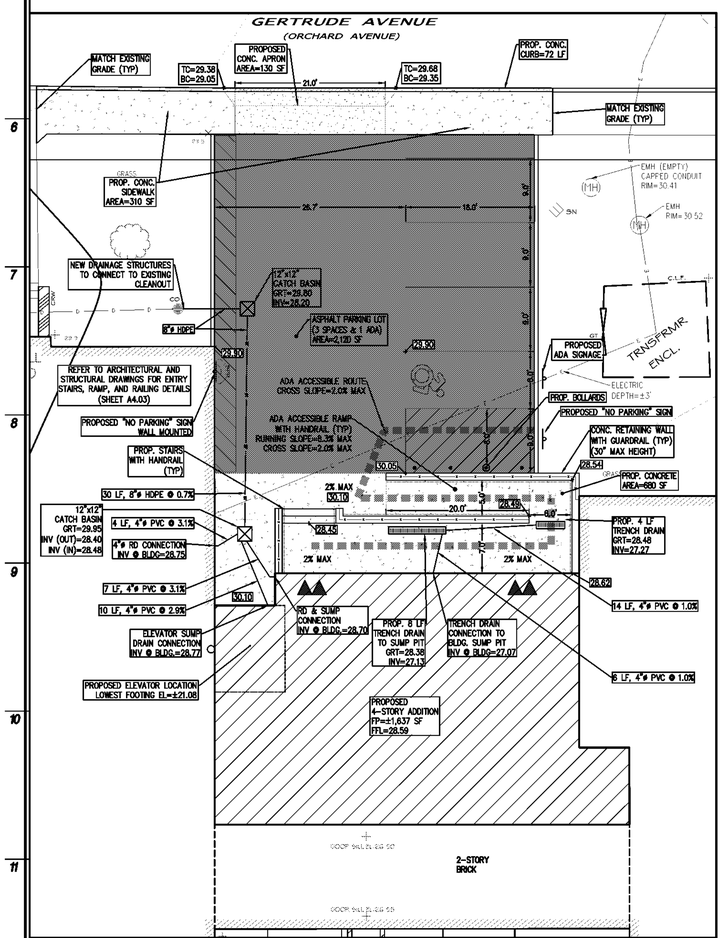
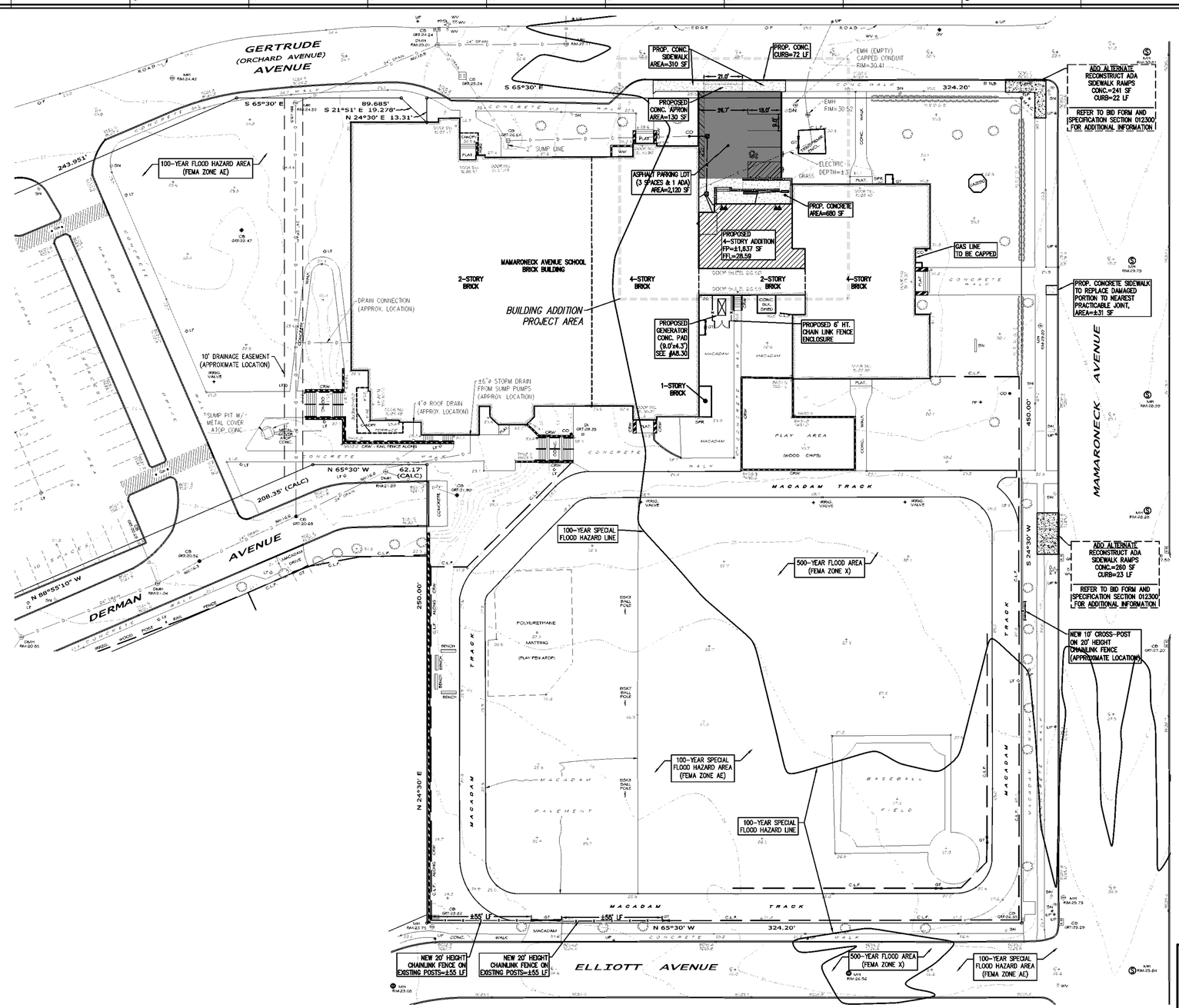
File No. 1092.72.02_C1

SP.11



BUILDING ADDITION PROJECT AREA

SCALE: 1"=10'



SITE PLAN - PROPOSED BUILDING ADDITION

MAMARONECK AVENUE SCHOOL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

GENERAL NOTES

1. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ENTRY STAIRS, RAMP, AND RAILING DETAILS.

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SITE PLAN

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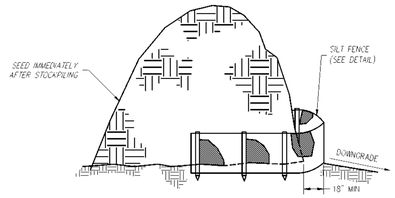
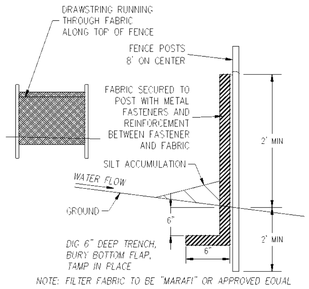
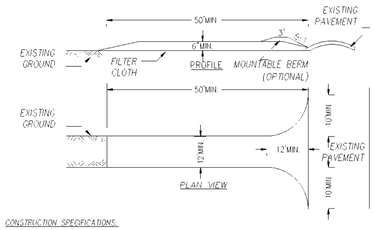


1 SC.01 **TYP. TOPSOIL STOCKPILE DETAIL**
N.T.S.



NOTE: FILTER FABRIC TO BE "MARAFI" OR APPROVED EQUAL

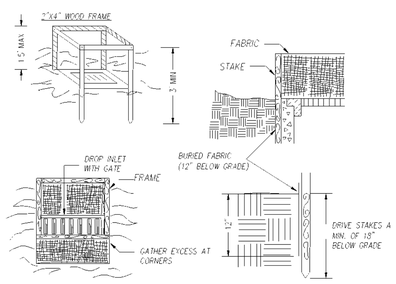
2 SC.01 **TYP. SEDIMENT FENCE DETAIL**
N.T.S.



CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN

3 SC.01 **TYP. STABILIZED CONSTRUCTION ENTRANCE DETAIL**
N.T.S.



CONSTRUCTION SPECIFICATIONS:

1. FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY

MAXIMUM DRAINAGE AREA 1 ACRE

4 SC.01 **TYP. FABRIC DROP INLET PROTECTION DETAIL**
N.T.S.

STANDARD EROSION CONTROL NOTES

AN EROSION CONTROL SYSTEM WILL BE UTILIZED BY THE DEVELOPER TO MINIMIZE THE PRODUCTION OF SEDIMENT FROM THE SITE. METHODS TO BE UTILIZED WILL BE THOSE FOUND MOST EFFECTIVE FOR THE SITE AND SHALL INCLUDE ONE OR MORE OF THE FOLLOWING AS APPLICABLE.

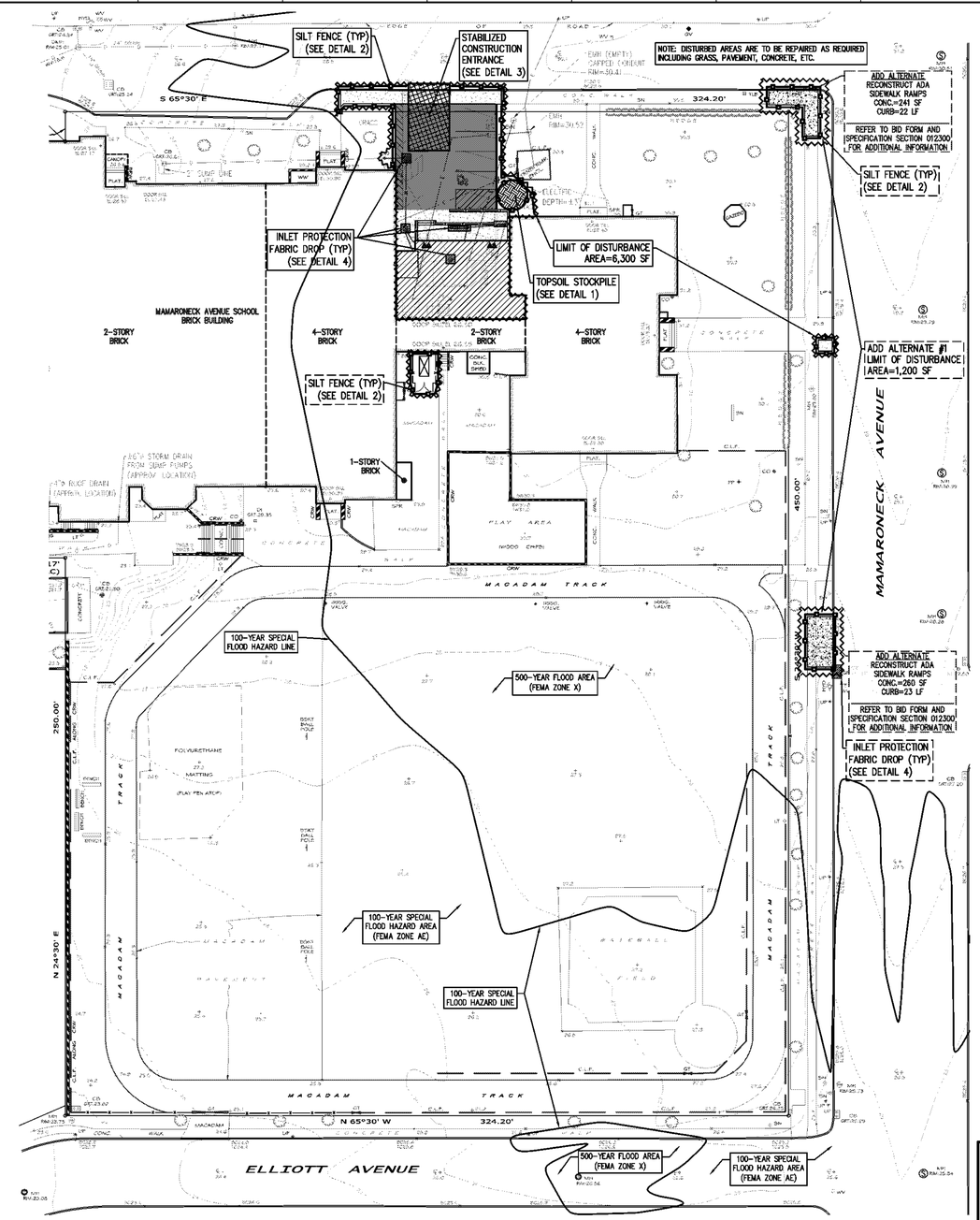
1. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED, AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."
2. TEMPORARY SEDIMENTATION ENTRAPMENT AREAS SHALL BE PROVIDED AT THE KEY LOCATIONS TO INTERCEPT AND CLARIFY SILT LADEN RUNOFF FROM THE SITE. THESE MAY BE EXCAVATED OR MAY BE CREATED UTILIZING RIP-RAP OR CRUSHED STONE DAMS, HAY BALES, OR OTHER SUITABLE MATERIALS. DIVERSION SWALES, BERMS, OR OTHER CHANNELIZATION SHALL BE CONSTRUCTED TO INSURE THAT ALL SILT LADEN WATERS ARE DIRECTED INTO ENTRAPMENT AREAS, WHICH SHALL NOT BE PERMITTED TO FILL IN, BUT SHALL BE CLEANED PERIODICALLY DURING THE COURSE OF CONSTRUCTION. THE COLLECTION SILT SHALL BE DEPOSITED IN AREAS SAFE FROM FURTHER EROSION.
3. ALL DISTURBED AREAS, EXCEPT BROADWAYS, WHICH WILL REMAIN UNFINISHED FOR MORE THAN 30 DAYS SHALL BE TEMPORARILY SEEDED WITH ½ LB. OF RYE GRASS OR MULCHED WITH 100 LBS. OF STRAW OR HAY PER 1,000 SF. ROADWAYS SHALL BE STABILIZED AS RAPIDLY AS PRACTABLE BY THE INSTALLATION OF THE BASE COURSE.
4. SILT THAT LEAVES THE SITE IN SPITE OF THE REQUIRED PRECAUTIONS SHALL BE COLLECTED AND REMOVED AS DIRECTED BY THE APPROPRIATE MUNICIPAL AUTHORITIES.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES, EXCLUDING CATCH-BASIN MEASURES, SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES AND/OR UTILITIES
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND/TO STABILIZED.

LAND GRADING CONSTRUCTION SPECIFICATIONS

1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS".
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
5. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.
6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
7. ALL FILL TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
8. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
9. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.
15. CONTRACTOR SHALL LIMIT ACCESS OF HIGH-IMPACT EARTH MOVING EQUIPMENT.
16. CONTRACTOR SHALL NOT OVER-EXCAVATE.
17. CONTRACTOR SHALL USE DE-COMPACTION PRACTICES TO RESTORE THE SOILS ORIGINAL INFILTRATION PRACTICES.
18. THE CONTRACTOR SHALL CONSTRUCT THE STORMWATER BASINS AND OTHER PERMANENT STORMWATER INFRASTRUCTURE PER THE REQUIREMENTS AND RECOMMENDATIONS WITHIN THE THE NYS DEC STORMWATER DESIGN MANUAL (2015 VERSION).
19. ALL SLOPES CONSTRUCTED WITH FILL MATERIAL SHALL BE TOPSOILED, SEEDED, MULCHED, AND STABILIZED.
20. ANY AREAS CONSIDERED CRITICAL FOR SEEDING AND STABILIZATION SHALL BE PROTECTED USING EROSION CONTROL MATS.

SEQUENCE OF CONSTRUCTION

1. AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING TO INCLUDE OWNER, ENGINEER, SCHOOL REPRESENTATIVES & CONTRACTOR.
2. PRIOR TO LAND DISTURBANCE, CONTRACTOR SHALL INSTALL SILT FENCE, INLET PROTECTION AND STABILIZED CONSTRUCTION ENTRANCES (2 WEEKS)
3. DEMOLISH SPECIFIED SITE FEATURES, STRIP STOCKPILE TOPSOIL FROM THE PROPOSED DISTURBED AREA IN DESIGNATED STAGING AREAS. (2 WEEKS)
4. ROUGH GRADE SITE AREAS REMAINING UNDISTURBED FOR 14 DAYS SHALL BE TEMPORARILY STABILIZED. (2 WEEKS)
5. CONSTRUCT UTILITIES AND BASE COURSE FOR SITE WORK. (3 WEEKS)
6. CONSTRUCT BUILDING ADDITIONS AND ASSOCIATED IMPROVEMENTS. (6 MONTHS)
7. FINISH GRADE & INSTALL PROPOSED LANDSCAPING. (2 WEEKS)
8. FINAL STABILIZATION (TOPSOIL, SEEDING, ETC.) REMOVE ALL TEMPORARY SOIL EROSION & SEDIMENT CONTROL MEASURES (SILT FENCE, INLET PROTECTION, ETC.) AFTER FINAL SITE STABILIZATION IS ACHIEVED. (2 WEEKS)
9. TOTAL CONSTRUCTION TIME (9 MONTHS)



LEGEND

- LIMIT OF DISTURBANCE
- SILT FENCE
- STABILIZED CONSTRUCTION ACCESS
- INLET PROTECTION – FABRIC DROP

SOIL EROSION & SEDIMENT CONTROL PLAN

MAMARONECK AVENUE SCHOOL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

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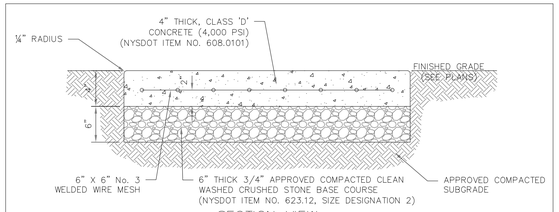


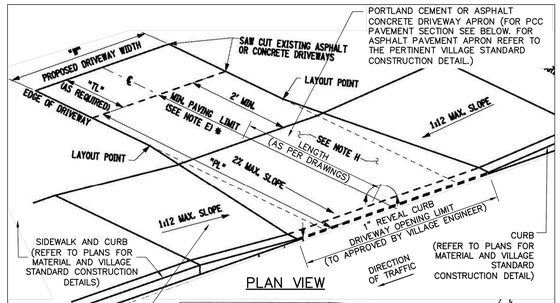
SECTION VIEW

NOTES:

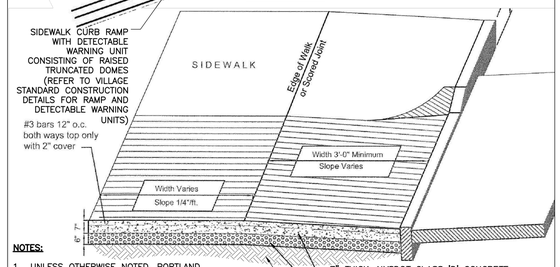
1. WHEN SIDEWALK ABUTS A ROADWAY, CURB AND SIDEWALK SHALL BE MONOLITHICALLY CONSTRUCTED REFER TO VILLAGE STANDARD MONOLITHIC CURB AND SIDEWALK CONSTRUCTION DETAIL
2. UNLESS OTHERWISE NOTED, PORTLAND CEMENT CONCRETE SIDEWALKS SHALL MEET THE SPECIFICATIONS OUTLINED IN SECTION 608 AND SUBSECTION 700 OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, DATED JANUARY 9, 2014 WITH LATEST REVISIONS
3. THE GENERAL CONSTRUCTION DETAILS FOR MANUFACTURING AND TRANSPORTING CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 501, PORTLAND CEMENT CONCRETE– GENERAL.
4. WELDED WIRE FABRIC REINFORCEMENT SHALL BE MADE OF W2.9 OR W3 WIRE AT 6 INCH CENTERS TRANSVERSELY CONVENTIONALLY FORMED CONCRETE SHALL MEET THE REQUIREMENTS FOR CLASS D IN ACCORDANCE WITH SECTION 501 PORTLAND CEMENT CONCRETE––GENERAL ALL CONCRETE SHALL CONTAIN A WATER–REDUCING ADMIXTURE MEETING THE REQUIREMENTS OF SECTION 711–08 IN SUCH A QUANTITY AS TO PROVIDE A MINIMUM 10% REDUCTION OF THE DESIGN WATER CONTENT BY USING A NORMAL RANGEWATER–REDUCER WWF SHALL BE MANUFACTURED IN SHEETS AND PLACED WITH IN CONCRETE BY CHAIRING.
5. REINFORCING SHALL NOT EXTEND THROUGH EXPANSION JOINTS.
6. INSTALL A PREMOULDED RESILIENT JOINT FILLER, §705–07, AT ALL JOINTS BETWEEN SIDEWALK AND CURB, PAVEMENT, BUILDING, ETC. THE PREMOULDED RESILIENT JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF ASTM D1751.
7. THE EXPANSION JOINTS SHALL BE LOCATED AT ALL IMMOVABLE OBJECTS (BRIDGE SUBSTRUCTURES, ETC), WHERE SHOWN ON THE PLANS, AND/OR AS DIRECTED BY THE ENGINEER. EXPANSION JOINTS SHALL NOT BE REQUIRED AT 20 FOOT INTERVALS
8. PREMOULDED RESILIENT JOINT FILLER (§705–07). USE 3/8 – 5/8 INCH THICK FILLER IN TRANSVERSE EXPANSION JOINT ASSEMBLIES ONLY. INCLUDE A ONE–PIECEPREMOULDED RESILIENT JOINT FILLER IN THE ASSEMBLY THAT EXTENDS COMPLETELY ACROSS THE SLAB WIDTH THE JOINT FILLER MUST EITHER EQUAL THE FULL DEPTH OF THE SLAB, OR EXTEND FROM THE BOTTOM OF THE SLAB TO WITHIN 1 1/2 – 2 INCHES OF THE TOP OF THE SLAB WITH A FINISHING CAP THAT EXTENDS TO THE TOP OF THE SLAB
9. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONCRETE SURFACE SHALL BE SCORED AND TOOLED AT INTERVALS OF 5 FEET. SCORE THE CONCRETE A MINIMUM 1/8 INCH TO A MAXIMUM 1/4 INCH IN WIDTH AND TO A MINIMUM DEPTH OF ONE–THIRD THE TOTAL THICKNESS.
10. 3 FOOT WIDE SIDEWALKS SHALL RECEIVE CONTRACTION JOINTS EVERY 4 FEET. 4 AND 5 FOOT WIDE SIDEWALKS SHALL RECEIVE CONTRACTION JOINTS EQUAL TO THE WIDTH OF THE SIDEWALK SIDEWALKS MAY BE CONVENTIONALLY FORMED OR MACHINE FORMED.
11. ONLY MAGNESIUM FLOATS AND TROWELS ARE ALLOWED. THE USE OF ALUMINUM OR STEEL FINISHING TROWELS AND TOOLS IS PROHIBITED. THE CONCRETE SHALL BE FINISHED TO PRODUCE A SMOOTH SURFACE AND THEN LIGHTLY BROOMED TO A UNIFORM TEXTURE. THE EDGES AND SCORED JOINTS OF ALL SIDEWALK SLABS SHALL BE TOOLED WITH AN EDGING TOOL HAVING A 1/4 INCH RADIUS.
12. ALL WORK SHALL BE IN ACCORDANCE WITH NYSDOT SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES AND GRADES SHOWN ON THE PLANS OR ESTABLISHED BY THE ENGINEER.
13. SIDEWALK SHALL BE PAID UNDER NYSDOT ITEM NO. 608.0101. CRUSHED STONE SHALL BE PAID UNDER NYSDOT ITEM NO. 623.12.

CAST-IN-PLACE CONCRETE SIDEWALK DETAIL

N.T.S.



PLAN VIEW



NOTES:

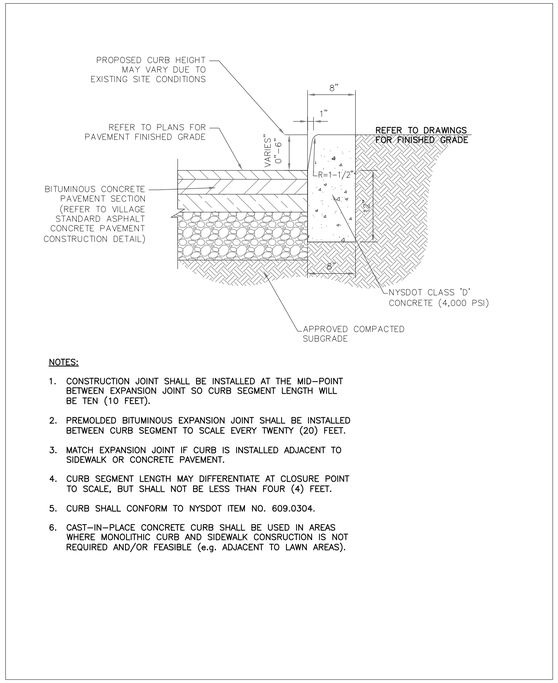
1. UNLESS OTHERWISE NOTED, PORTLAND CEMENT CONCRETE SIDEWALKS SHALL MEET THE SPECIFICATIONS OUTLINED IN SECTION 608 AND SUBSECTION 700 OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, DATED JANUARY 9, 2014 WITH LATEST REVISION.
2. CONVENTIONALLY FORMED CONCRETE SHALL MEET THE REQUIREMENTS FOR CLASS D IN ACCORDANCE WITH SECTION 501 'PORTLAND CEMENT CONCRETE––GENERAL.'

REINFORCED CONCRETE DRIVEWAY

TYPICAL SECTION

CONCRETE TAPERED DRIVEWAY APRON DETAIL

N.T.S.

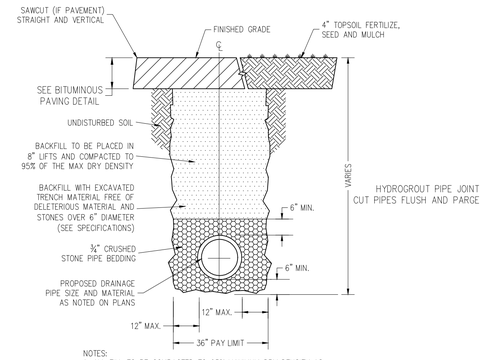


NOTES:

1. CONSTRUCTION JOINT SHALL BE INSTALLED AT THE MID–POINT BETWEEN EXPANSION JOINT SO CURB SEGMENT LENGTH WILL BE TEN (10 FEET).
2. PREMOLDED BITUMINOUS EXPANSION JOINT SHALL BE INSTALLED BETWEEN CURB SEGMENT TO SCALE EVERY TWENTY (20) FEET.
3. MATCH EXPANSION JOINT IF CURB IS INSTALLED ADJACENT TO SIDEWALK OR CONCRETE PAVEMENT.
4. CURB SEGMENT LENGTH MAY DIFFERENTIATE AT CLOSURE POINT TO SCALE, BUT SHALL NOT BE LESS THAN FOUR (4) FEET.
5. CURB SHALL CONFORM TO NYSDOT ITEM NO. 609.0304.
6. CAST–IN–PLACE CONCRETE CURB SHALL BE USED IN AREAS WHERE MONOLITHIC CURB AND SIDEWALK CONSRUCTION IS NOT REQUIRED AND/OR FEASIBLE (e.g. ADJACENT TO LAWN AREAS).

CAST-IN-PLACE CONCRETE CURB DETAIL

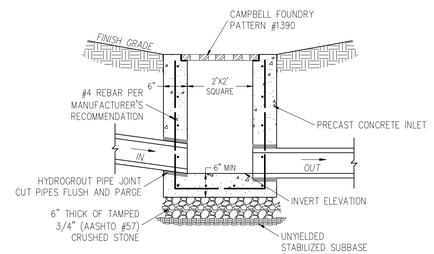
N.T.S.



NOTES:
1. ALL FILL TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
2. ALL DRAINAGE PIPE SHALL BE HDPE WITH A SMOOTH INVERT.
3. ALL EXCAVATION AND TRENCHING TO MEET OSHA REQUIREMENTS.

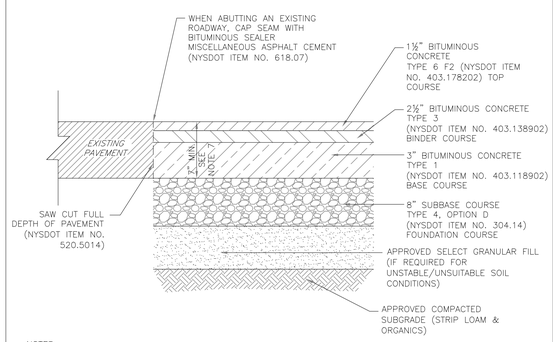
DRAINAGE PIPE TRENCH DETAIL

N.T.S.



YARD DRAIN - CATCH BASIN DETAIL

N.T.S.



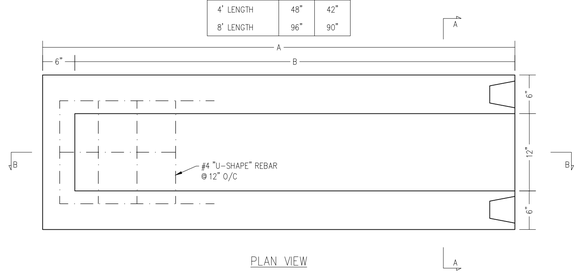
NOTES:

1. UNLESS OTHERWISE NOTED, BITUMINOUS CONCRETE SHALL MEET THE SPECIFICATIONS OUTLINED IN SECTION 403 OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, DATED MAY 1, 2008 WITH LATEST REVISIONS. NOTE, THIS SECTION IS NO LONGER INCLUDED IN THE NYSDOT STANDARD SPECIFICATIONS.
2. UNLESS OTHERWISE NOTED, SUBBASE COURSE SHALL MEET THE SPECIFICATIONS OUTLINED IN SECTION 300 OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, DATED MAY 1, 2008 WITH LATEST REVISIONS.
3. DETAIL DEPICTS COMPACTED PAVEMENT THICKNESS.
4. THIS DETAIL SHALL BE COORDINATED WITH THE VILLAGE STANDARD PIPE TRENCH AND ASPHALT PAVEMENT REPLACEMENT CONSTRUCTION DETAIL AND ALL OTHER PERTINENT VILLAGE STANDARD CONSTRUCTION DETAILS.
5. THIS ASPHALT CONCRETE PAVEMENT SECTION APPLIES ONLY TO LOCAL (i.e. VILLAGE) ROADS. PAVEMENT REPLACEMENT, REHABILITATION, CONSTRUCTION, ETC. FOR COUNTY AND STATE ROADWAYS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AGENCY HAVING JURISDICTION.
6. IF 403 HOT MIX ASPHALT (HMA) ITEM NUMBERS ARE UNAVAILABLE FROM THE ASPHALT PLANT, NYSDOT SUPERPAVE HMA 70 OR 80 SERIES COMPACTION SHALL BE SUBSTITUTED UPON REVIEW AND APPROVAL BY THE VILLAGE ENGINEER.
7. HOT MIX ASPHALT (HMA) PAVEMENT SHALL BE 7" MIN. THICK, OR MATCH EXISTING HMA PAVEMENT THICKNESS, WHICHEVER IS GREATER. IF EXISTING HMA PAVEMENT IS GREATER THAN 7", THE HMA DIFFERENCE SHALL CONSIST OF HMA BASE COURSE (OR BINDER COURSE FOR SMALL QUANTITIES)
8. THE VILLAGE ENGINEER RESERVES THE RIGHT TO MODIFY (e.g. INCREASE THICKNESS) THE PAVEMENT SECTION DUE TO SITE CONDITIONS (e.g. UNSUITABLE/UNSTABLE SUBGRADE, HIGH GROUNDWATER, ETC.).

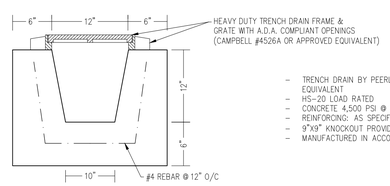
ASPHALT CONCRETE PAVEMENT DETAIL

N.T.S.

TRENCH DRAIN	A	B
4' LENGTH	48"	42"
8' LENGTH	96"	90"

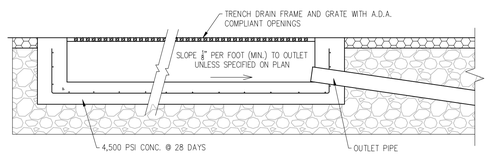


PLAN VIEW



- TRENCH DRAIN BY PEERLESS OR APPROVED EQUIVALENT
- HS–20 LOAD RATED
- CONCRETE 4,500 PSI @ 28 DAYS
- REINFORCING: AS SPECIFIED, GRADE 60 REBAR
- 9"X9" KNOCKOUT PROVIDED ON END UNITS
- MANUFACTURED IN ACCORDANCE WITH ASTM C–890

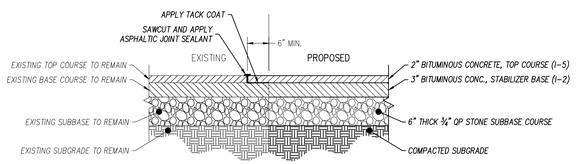
SECTION A–A



SECTION B–B

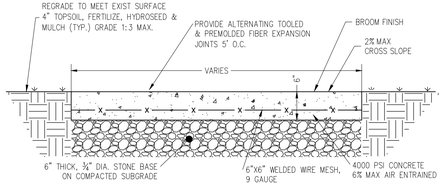
TRENCH DRAIN - CATCH BASIN DETAIL

N.T.S.



BITUMINOUS PAVING - SAWCUT & PATCH DETAIL

N.T.S.



NOTE:
1. AT ALL FIXED VERTICAL SURFACES AND STRUCTURE PROVIDE PMF.
2. ALL EXPOSED SURFACES ARE TO BE COATED WITH A TRANSLUCENT CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE I–D IMMEDIATELY FOLLOWING FINAL FINISHING. COVERAGE SHALL NOT BE LESS THAN ONE GALLON PER 200 SQ. FT.

CONCRETE PAD DETAIL

N.T.S.

ROOF LEADER DETAIL

N.T.S.

Date	1/10/20
Checked	EB
Drawn	PRE

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License No. 089208
Title PROFESSIONAL ENGINEER

Revisions:

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1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

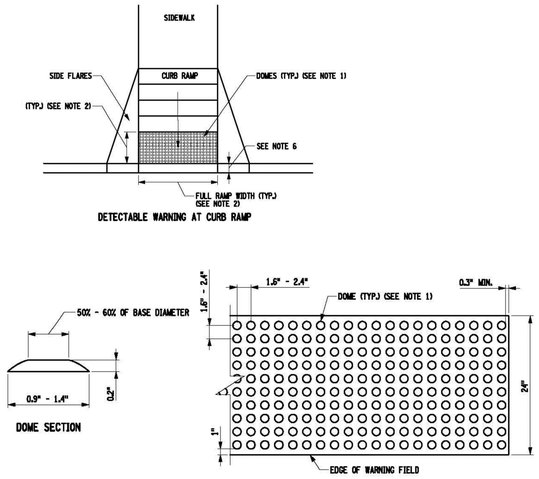
CONSTRUCTION DETAILS #1

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 1092.72.02_C1

CD.01



NOTES:

1. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING UNIT (THE DOMES) AND THE ENTIRE 24" LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.

DETECTABLE WARNING UNIT DIMENSIONS:

2. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.

DOME ALIGNMENT:

3. THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP LANDING OR CURB RAMP AND THE STREET.

4. WHERE DOMES ARE ARRAYED RADIALLY THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.

COLOR REQUIREMENTS:

5. THE DETECTABLE WARNING FIELD SHALL BE THE COLOR SPECIFIED IN THE CONTRACT DOCUMENTS OR MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

DETECTABLE WARNINGS LOCATIONS:

6. DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE FRONT OF THE CURB OR THE ROADWAY EDGE (12" WHERE TRAVERSABLE CURB IS USED).

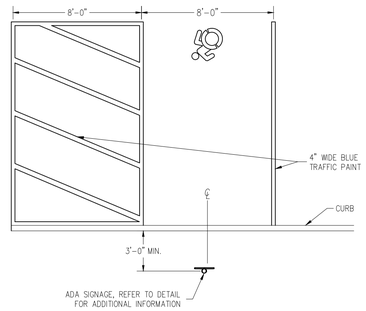
7. THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 6'-0" MINIMUM AND 15'-0" MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL.

NOTES:

1. DETECTABLE WARNINGS SHALL BE INSTALLED ON ALL CURB RAMPS. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES (23 mm), A HEIGHT OF NOMINAL 0.2 INCHES (5 mm), AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCHES (60 mm) AND SHALL CONTRACT VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. DETECTABLE WARNINGS SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF JUSTICE 28 CFH PART 36 "EXCERPT FROM 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN" LAST REVISED JULY 1, 1994.
2. DETECTABLE WARNING SYSTEM SHALL BE CAST-IN-PLACE TRUNCATED DOMES PART NUMBER ATS-C-2x5 MANUFACTURED BY ADVANTAGE TACTILE SYSTEMS OR APPROVED EQUAL. THE COLOR OF THE DETECTABLE WARNING SYSTEM SHALL BE BRICK RED (FEDERAL COLOR NO. 22144).
3. DETECTABLE WARNING UNITS SHALL BE PAID UNDER NYSDOT ITEM NO. 608.21.

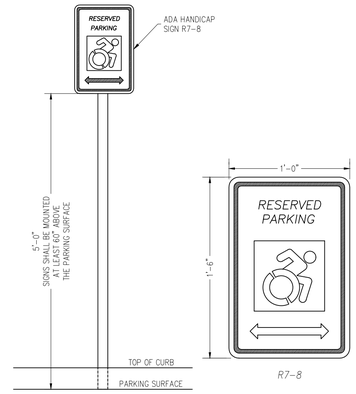
DETECTABLE WARNING SURFACE DETAIL

N.T.S.



TYPICAL ADA PARKING STALL LAYOUT

N.T.S.



TYPICAL ADA SIGNAGE & POST DETAIL

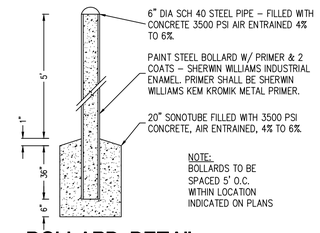
N.T.S.

NOTE: SIGNAGE SHALL BE IN ACCORDANCE WITH MUTCD AND APPLICABLE STATE/LOCAL REQUIREMENTS

R7-1

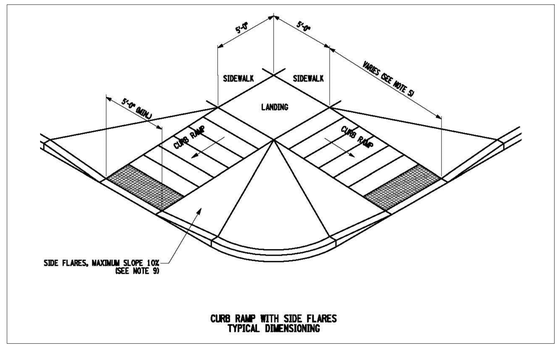
NO PARKING SIGN DETAIL

N.T.S.



BOLLARD DETAIL

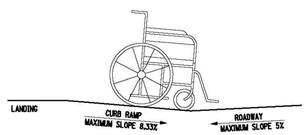
N.T.S.



CURB RAMP WITH SIDE FLARES
TYPICAL DIMENSIONING

SIDEWALK CURB RAMP DETAILS

N.T.S.



NOTE: THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, LANDING, OR BLENDED TRANSITION SHALL BE 5% MAXIMUM

COUNTER SLOPE CONDITIONS

GENERAL NOTES:

1. THE DIMENSIONS AND SLOPES PRESENTED IN THE DETAILS ARE THE MINIMUM NECESSARY TO COMPLY WITH THE ADA AND DOT STANDARDS. ANY DEVIATION LESS THAN THE MINIMUM WIDTH OR GREATER THAN THE MAXIMUM SLOPE FROM THESE STANDARDS MUST BE DOCUMENTED WITH THE STANDARDS BEING MET TO THE GREATEST EXTENT PRACTICABLE AND CONSISTENT WITH THE MOST CURRENT ADAAG.
2. CURB RAMPS, LANDINGS AND BLENDED TRANSITIONS MAY REQUIRE THE USE OF DETECTABLE WARNINGS. DETECTABLE WARNINGS ON THIS SHEET ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE DETECTABLE WARNING DETAILS ON SHEET 4 OF 4 FOR DETAILS ON PLACEMENT, ORIENTATION & DIMENSIONS. REFER TO CHAPTER 18 OF THE HIGHWAY DESIGN MANUAL FOR MORE INFORMATION.

CURB RAMP NOTES:

3. THE MINIMUM WIDTH FOR SIDEWALK CURB RAMPS IS 5'-0".
4. THE RUNNING SLOPE OF A CURB RAMP SHALL BE 1:20 (5%) MINIMUM (PREFERRED) AND 1:12 (8.33%) MAXIMUM.
5. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 8.33% THE CURB RAMP LENGTH IS THE LENGTH NECESSARY TO MEET THE EXISTING SIDEWALK. IT IS NOT NECESSARY THAT THE RAMP LENGTH EXCEED 15'-0".
6. THE CROSS SLOPE OF CURB RAMPS SHOULD BE AS FLAT AS POSSIBLE, NOT TO EXCEED 1:50 (2%). THE CROSS SLOPE AT MIDBLOCK CROSSINGS MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.
7. THE VERTICAL ALIGNMENT OF A CURB RAMP, EXCLUDING THE FLARES, SHALL BE PLANAR. GRADE BREAKS SHALL BE FLUSH AND PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN.
8. RAMP TRANSITIONS BETWEEN WALKS, LANDINGS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES (1/4" MAX).
9. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED PARALLEL TO THE CURB LINE, SHALL BE PROVIDED.

LANDING NOTES:

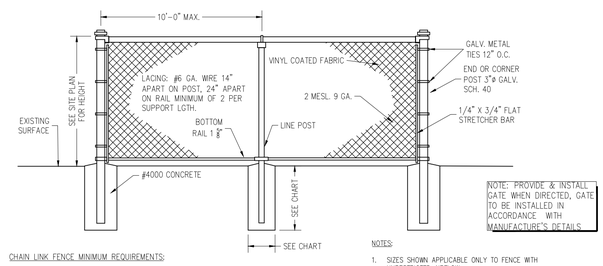
10. LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF A 5'-0" BY 5'-0" EXCEPT AT THE BOTTOM OF RAMPS TYPE 1 & 2 ON SHEET 2 OF 4.
11. THE RUNNING AND CROSS SLOPES ON LANDINGS AT INTERSECTIONS IS 1:50 (2%) MAXIMUM. THE RUNNING AND CROSS SLOPES AT MIDBLOCK CROSSINGS MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.

NOTES:

1. FOR DIMENSIONS & GEOMETRIC VALUES REFER TO SHEET 1 OF 4.
2. THE CONFIGURATIONS SHOWN GENERICALLY REPRESENT THE MOST COMMON SITUATIONS ENCOUNTERED ON NYSDOT PROJECTS. THEY ARE INTENDED TO PRESENT CURB RAMP DESIGN CONCEPTS. SITE CONDITIONS AT INDIVIDUAL LOCATIONS REQUIRE SPECIFIC DESIGNS. CURB RAMP DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF SHEETS 1, 2, AND 3 OF 4. REFER TO REGIONAL LANDSCAPE ARCHITECT FOR ADDITIONAL DESIGN GUIDANCE.
3. COORDINATE TRAFFIC CONTROL DEVICES, UTILITY LOCATIONS, SIGNS, STREET FURNITURE AND DRAINAGE TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE FOR CROSSWALK MARKINGS AND TRAFFIC CONTROL DEVICES IS PROVIDED IN THE MUTCD.
4. DETECTABLE WARNINGS SHOWN ON THIS SHEET ARE FOR ILLUSTRATION ONLY. FOR SPECIFIC PLACEMENT ORIENTATIONS AND DIMENSIONS REFER TO SHEET 4 OF 4, SEE NOTE 10.
5. THE CROSS SLOPE OF RAMPS AND/OR LANDINGS AT MID BLOCK CROSSINGS MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.
6. USE TYPE B ONLY WHERE OTHER RAMPS ARE UNUSABLE. SINGLE DIAGONAL OR DEPRESSED CORNER CURB RAMPS SERVING TWO STREET CROSSING DIRECTIONS SHOULD BE AVOIDED IN NEW CONSTRUCTION AND SHOULD ONLY BE CONSIDERED WHERE CONDITIONS REQUIRE THEIR USE.
7. GRATES SHALL NOT BE LOCATED ON CURB RAMPS, BLENDED TRANSITIONS OR LANDINGS. ACCESS COVERS OF SIMILAR SURFACES SHALL COMPLY WITH APPLICABLE SURFACE REQUIREMENTS.
8. UTILITIES, SIGNS, AND OTHER FIXED OBJECTS MAY NOT BE PLACED ON A CURB, OR IN A MANNER THAT INTERFERES WITH THE USE OF THE CURB RAMP.
9. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
10. THERE SHALL BE A LANDING AT THE TOP OF EACH PERPENDICULAR CURB RAMP AND A LANDING AT THE BOTTOM OF RAMPS TYPE 1 & 2 ON SHEET 2 OF 4.
11. LANDINGS MAY OVERLAP WITH ADJACENT LANDINGS OR A SINGLE LANDING MAY SERVE MULTIPLE CURB RAMPS.
12. LANDINGS MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.

SIDEWALK CURB RAMP NOTES

N.T.S.



CHAIN LINK FENCE MINIMUM REQUIREMENTS:

FENCE HEIGHT (FT)	TERMINAL POST (DIAMETER, IN)	LINE POST (DIAMETER, IN)	TERMINAL POST FOUNDATION SIZE (DIAMETER, DEPTH)	LINE POST FOUNDATION SIZE (DIAMETER, DEPTH)
UP TO 4'	2-3/8"	1-7/8"	10" x 30"	8" x 24"
4' TO 5'	2-3/8"	1-7/8"	10" X 30"	8" X 24"
5' TO 6'	2-3/8"	1-7/8"	10" X 30"	8" X 24"
6' TO 8'	2-7/8"	2-3/8"	10" X 36"	10" X 36"
8' TO 10'	3-1/2"	2-7/8"	12" X 40"	10" X 40"
10' TO 12'	3-1/2"	2-7/8"	12" X 42"	12" X 42"

NOTES:

1. SIZES SHOWN APPLICABLE ONLY TO FENCE WITH UNRESTRICTED AIRFLOW
2. 10' POST SPACING MAXIMUM.
3. POSTS SHALL BE SCH. 40 STEEL PIPE.
4. POSTS SHALL BE EMBEDDED TO WITHIN 6" FROM THE BOTTOM OF EACH FOUNDATION.
5. FENCE FABRIC SHALL BE 9 GAUGE, VINYL COATED (COLOR TO BE SELECTED BY OWNER)
6. POSTS & HARDWARE SHALL BE VINYL-COATED (COLOR TO BE SELECTED BY OWNER)
7. FENCE FABRIC SHALL BE 2"x2" PVC-COATED (FUSED & ADHERED POLY VINYL CHLORIDE) 9 GAUGE CORE
8. PROVIDE & INSTALL GATE WHEN DIRECTED, GATE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

CHAIN LINK FENCE DETAIL

N.T.S.

Date	1/10/20
Checked	EB
Drawn	PRE

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License No. 089208
Title PROFESSIONAL ENGINEER

Revisions:

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1	ISSUE TO BID 11/23/20

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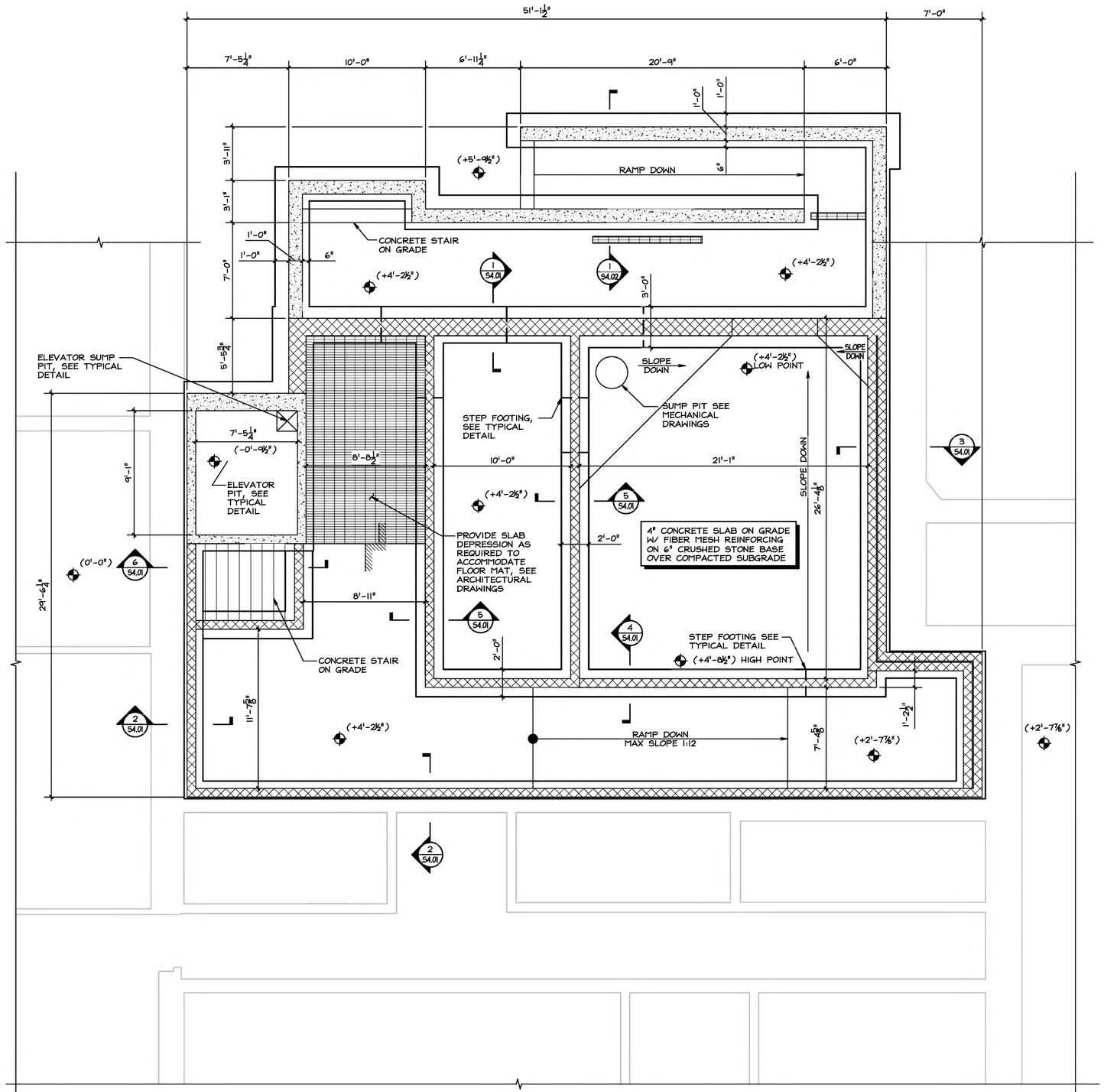
NYSED PROJECT # 66-07-01-03-0-004-030

CONSTRUCTION DETAILS #2
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 1092.72.02_C1

CD.02



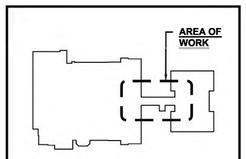
FOUNDATION PLAN
SCALE: ¼" = 1'-0"

FOUNDATION NOTES

1. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 3'-6" BELOW FINISHED GRADE.
2. ALL FOOTINGS ARE DESIGNED FOR A MINIMUM SOIL BEARING CAPACITY OF 4000 PSF. BOTTOM OF FOOTING ELEVATION SHALL BE LOWERED TO ACHIEVE THE MINIMUM REQUIRED BEARING CAPACITY. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT BY SESI CONSULTING ENGINEERS, DATED NOVEMBER 26, 2019, FOR SUBSURFACE CONDITIONS AND CONSTRUCTION PROCEDURES.
3. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
4. REFER TO DRAWING S6.01 TO S6.03 FOR GENERAL NOTES AND TYPICAL DETAILS.

FOUNDATION SCHEDULE

MARK	DESCRIPTION
( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.
x 100.00'	DENOTES APPROXIMATE FINISHED GRADE ELEVATION. SEE SITE PLAN FOR FURTHER INFORMATION.



KEY PLAN
NOT TO SCALE

PLAN NORTH

Micucci Engineering, P.C.
Consulting Structural Engineers
265 South Little Tor Road, Suite 207
New City, New York 10956
Phone: (845) 623-9100

Job No.: 19135 Dwg. 1 of 10

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N.Y. License No. : 082493

Date	1/10/20
Checked	EW
Drawn	AJ

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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LAN ASSOCIATES
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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

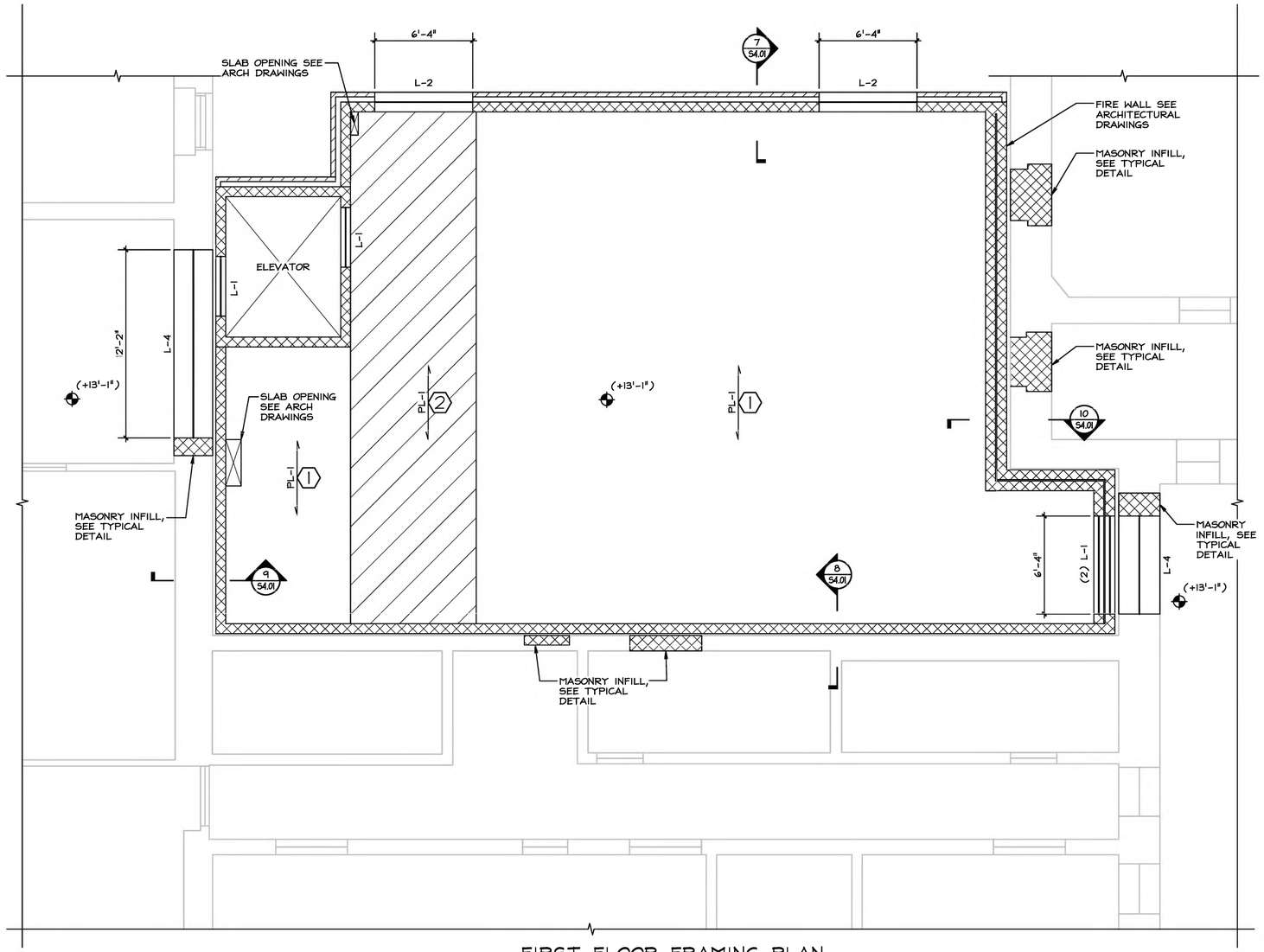
FOUNDATION PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No.

S2.01



FIRST FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

FRAMING NOTES

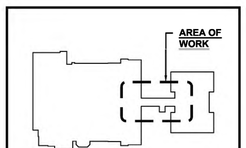
1. FINISH FLOOR ELEVATION TO BE (+13'-1") UNLESS NOTED OTHERWISE ON PLAN.
2. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR PLANK OPENING REQUIREMENTS. THE CONTRACTOR SHALL LOCATE ALL PLANK PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE PLANK SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
3. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
4. REFER TO DRAWINGS S6.01 TO S6.03 FOR GENERAL NOTES AND TYPICAL DETAILS.
5. REFER TO DRAWING S6.03 FOR LINTEL SCHEDULE

FRAMING SCHEDULE

MARK	DESCRIPTION
PL-1	INDICATES 10" PRECAST CONCRETE PLANK W/ 2" CONCRETE TOPPING. REFER TO PRECAST CONCRETE PLANK LOAD SCHEDULE FOR ADDITIONAL INFORMATION.
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

PRECAST PLANK LOAD SCHEDULE

MARK	PLANK THICKNESS	TOPPING	SUPERIMPOSED LOADS		NOTES
			DEAD	LIVE	
1	10"	2"	15	40	CLASSROOM
2	10"	2"	15	80	CORRIDOR



KEY PLAN

NOT TO SCALE

PLAN NORTH

Micucci Engineering, P.C.
Consulting Structural Engineers
265 South Little Tor Road, Suite 207
New City, New York 10956
Phone: (845) 623-9100

Job No.: 19135 Dwg. 2 of 10

EDWARD P. WILKOWSKI, P.E.
N.Y. License No. : 082493

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	EW
Drawn	AJ

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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FIRST FLOOR FRAMING PLAN

2019 BOND REFERENDUM
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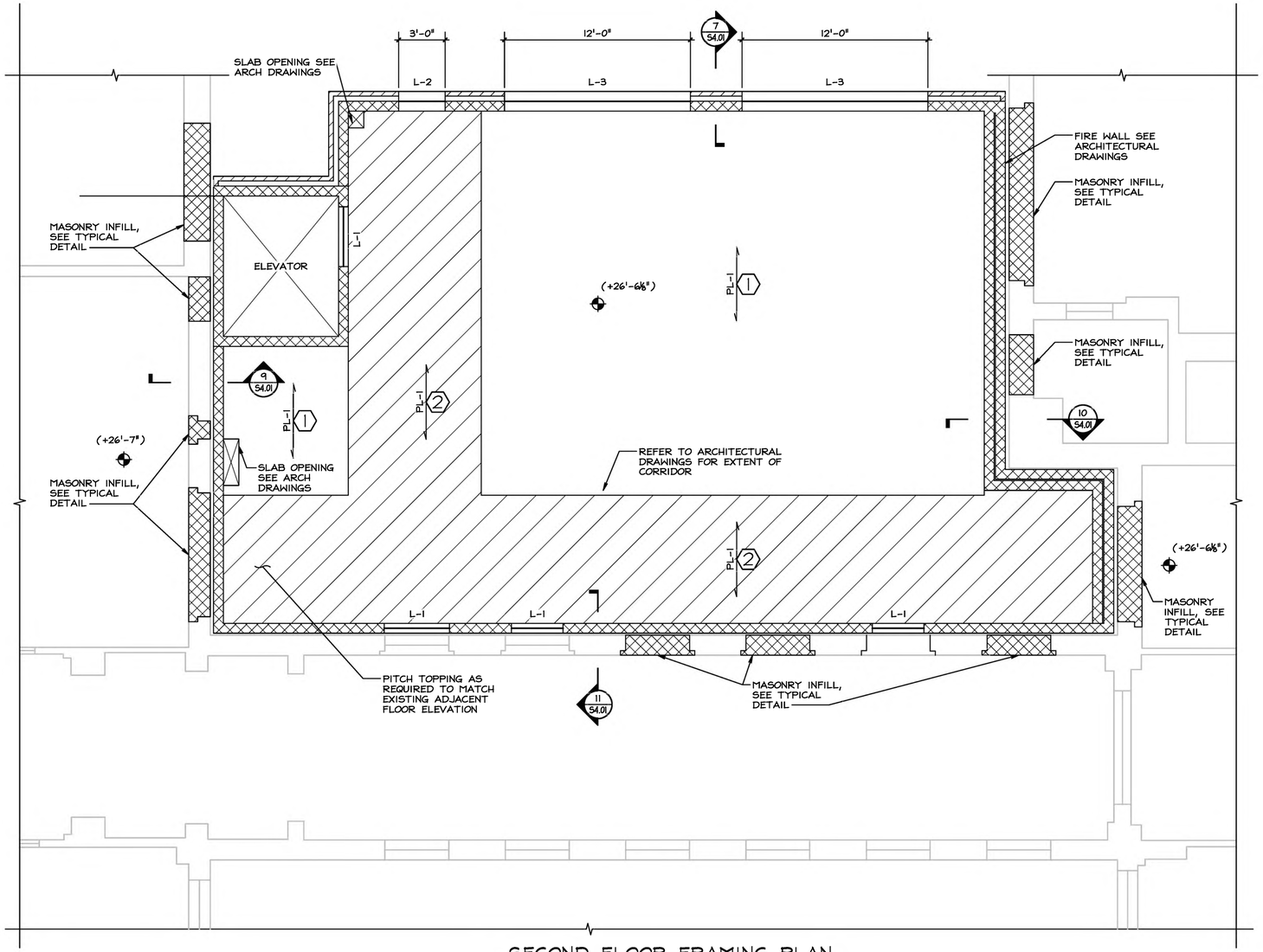
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No.

S2.02



SECOND FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

FRAMING NOTES

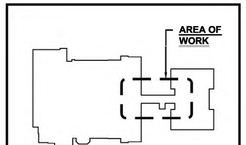
1. FINISH FLOOR ELEVATION TO BE (+26'-6⅛") UNLESS NOTED OTHERWISE ON PLAN.
2. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR PLANK OPENING REQUIREMENTS. THE CONTRACTOR SHALL LOCATE ALL PLANK PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE PLANK SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
3. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
4. REFER TO DRAWINGS S6.01 TO S6.03 FOR GENERAL NOTES AND TYPICAL DETAILS.
5. REFER TO DRAWING S6.03 FOR LINTEL SCHEDULE

FRAMING SCHEDULE

MARK	DESCRIPTION
PL-1	INDICATES 10" PRECAST CONCRETE PLANK W/ 2" CONCRETE TOPPING. REFER TO PRECAST CONCRETE PLANK LOAD SCHEDULE FOR ADDITIONAL INFORMATION.
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

PRECAST PLANK LOAD SCHEDULE

MARK	PLANK THICKNESS	TOPPING	SUPERIMPOSED LOADS		NOTES
			DEAD	LIVE	
1	10"	2"	15	40	CLASSROOM
2	10"	2"	15	80	CORRIDOR



KEY PLAN
NOT TO SCALE

PLAN NORTH

Micucci Engineering, P.C.
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Job No.: 19135 Dwg. 3 of 10

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SECOND FLOOR FRAMING PLAN

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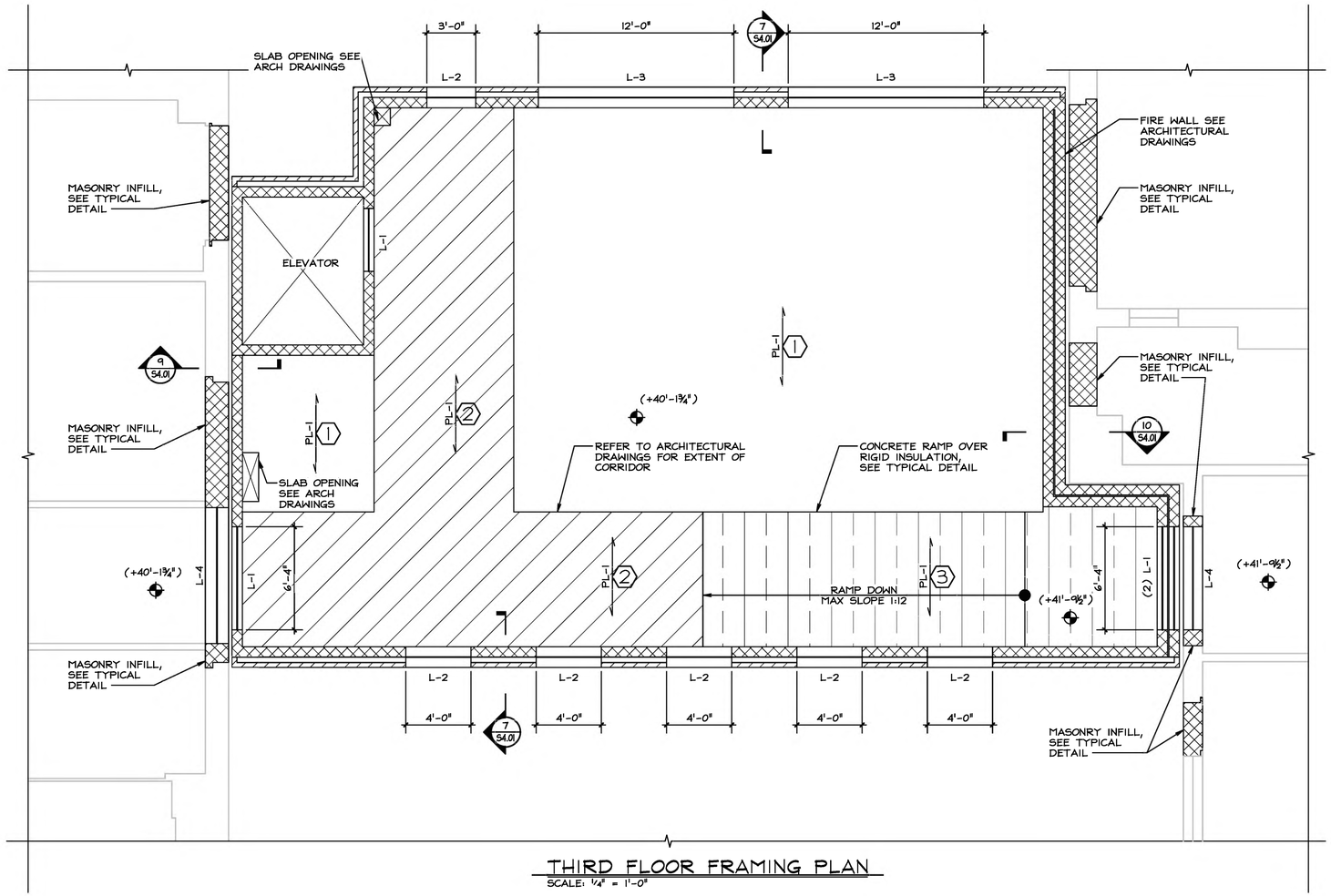
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No.

S2.03



THIRD FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

FRAMING NOTES

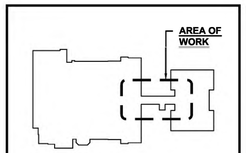
1. FINISH FLOOR ELEVATION TO BE (+40'-1¾") UNLESS NOTED OTHERWISE ON PLAN.
2. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR PLANK OPENING REQUIREMENTS. THE CONTRACTOR SHALL LOCATE ALL PLANK PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE PLANK SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
3. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
4. REFER TO DRAWINGS S6.01 TO S6.03 FOR GENERAL NOTES AND TYPICAL DETAILS.
5. REFER TO DRAWING S6.03 FOR LINTEL SCHEDULE

FRAMING SCHEDULE

MARK	DESCRIPTION
PL-1	INDICATES 10" PRECAST CONCRETE PLANK W/ 2" CONCRETE TOPPING. REFER TO PRECAST CONCRETE PLANK LOAD SCHEDULE FOR ADDITIONAL INFORMATION.
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

PRECAST PLANK LOAD SCHEDULE

MARK	PLANK THICKNESS	TOPPING	SUPERIMPOSSED LOADS		NOTES
			DEAD	LIVE	
1	10"	2"	15	40	CLASSROOM
2	10"	2"	15	80	CORRIDOR
3	10"	2"	40	80	CORRIDOR RAMP



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NOT TO SCALE

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Job No.: 19135 Dwg. 4 of 10

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THIRD FLOOR FRAMING PLAN

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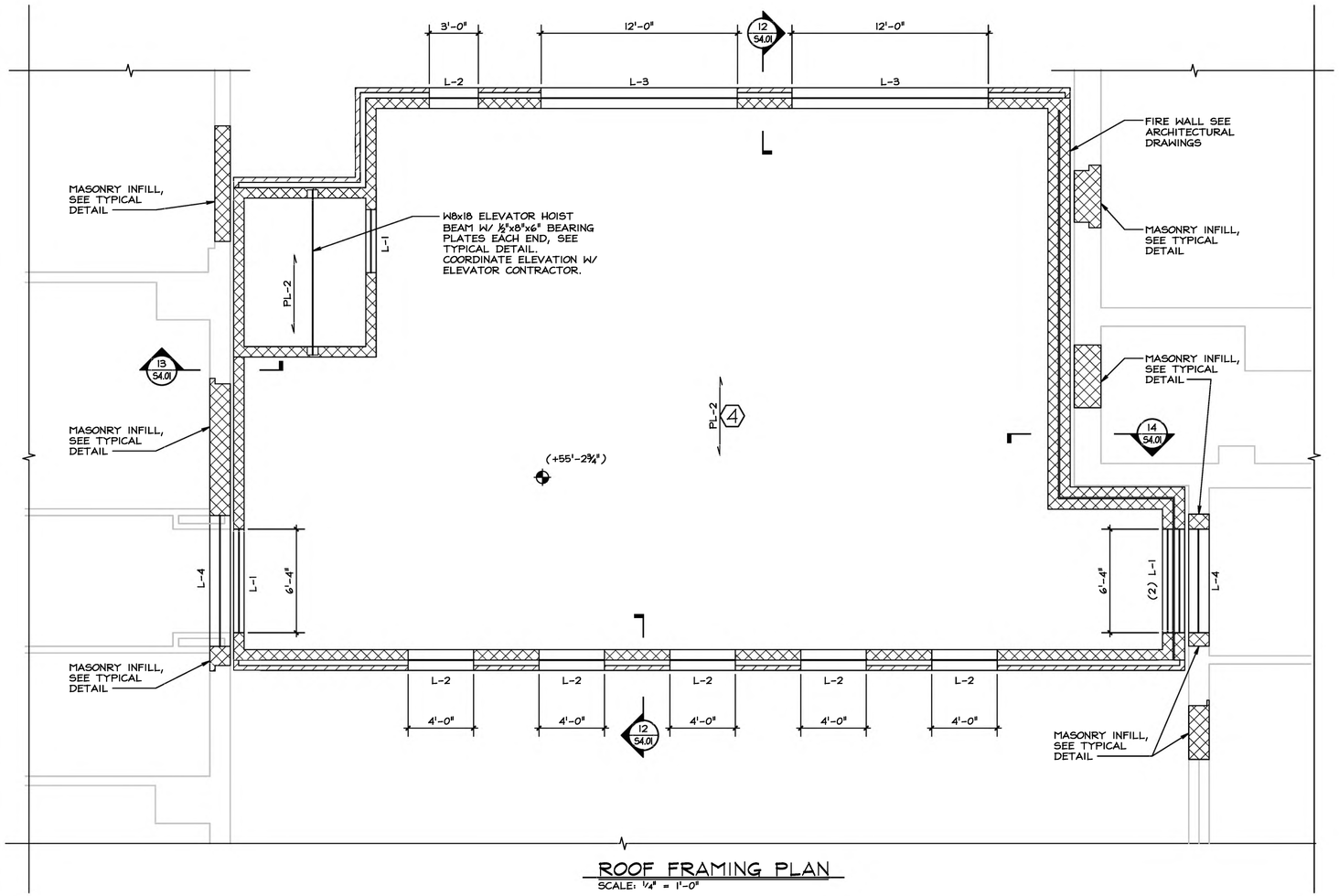
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No.

S2.04



ROOF FRAMING PLAN
SCALE: ¼" = 1'-0"

FRAMING NOTES

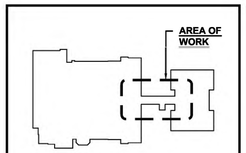
1. TOP OF PLANK ELEVATION TO BE (+55'-2¾") UNLESS NOTED OTHERWISE ON PLAN.
2. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR PLANK OPENING REQUIREMENTS. THE CONTRACTOR SHALL LOCATE ALL PLANK PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE PLANK SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
3. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
4. REFER TO DRAWINGS S6.01 TO S6.03 FOR GENERAL NOTES AND TYPICAL DETAILS.
5. REFER TO DRAWING S6.03 FOR LINTEL SCHEDULE

FRAMING SCHEDULE

MARK	DESCRIPTION
PL-2	INDICATES 10" PRECAST CONCRETE PLANK. REFER TO PRECAST CONCRETE PLANK LOAD SCHEDULE FOR ADDITIONAL INFORMATION.
◆ ( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

PRECAST PLANK LOAD SCHEDULE

MARK	PLANK THICKNESS	TOPPING	SUPERIMPOSSED LOADS		NOTES
			DEAD	LIVE	
4	10"	NONE	25	30	ROOF



KEY PLAN
NOT TO SCALE
PLAN NORTH

Micucci Engineering, P.C.
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265 South Little Tor Road, Suite 207
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Phone: (845) 623-9100
Job No.: 19135 Dwg. 5 of 10

EDWARD P. WILKOWSKI, P.E.
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ROOF FRAMING PLAN

2019 BOND REFERENDUM
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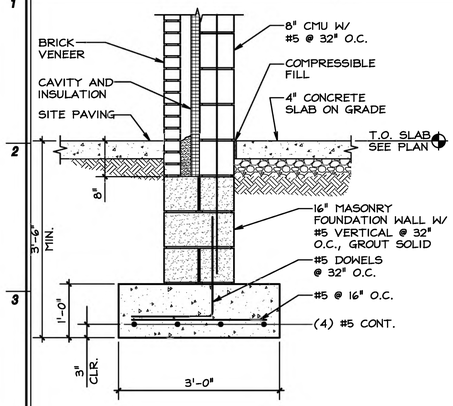
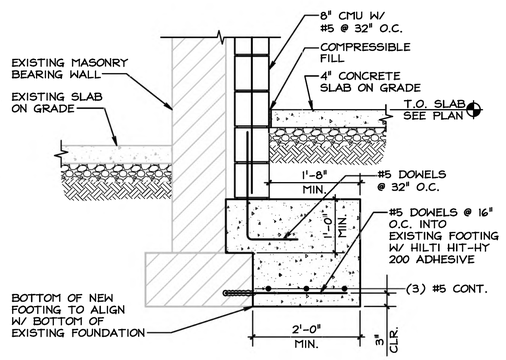
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No.

S2.05



SECTION 1 (S4.01)
SCALE: 3/4" = 1'-0"



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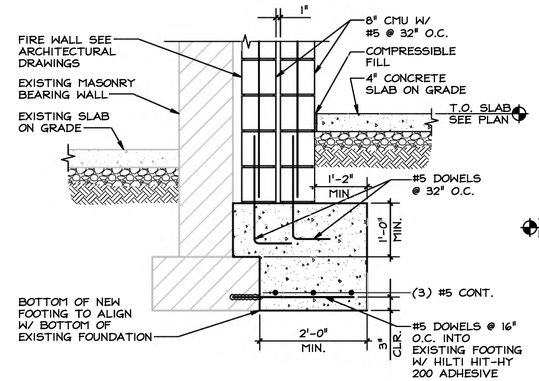

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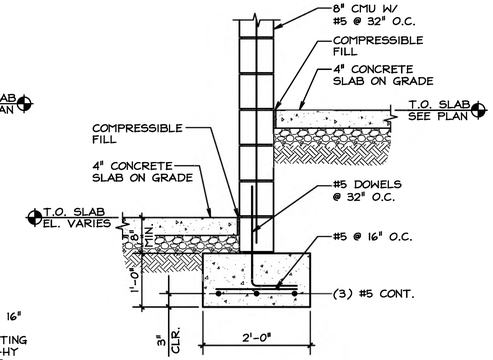

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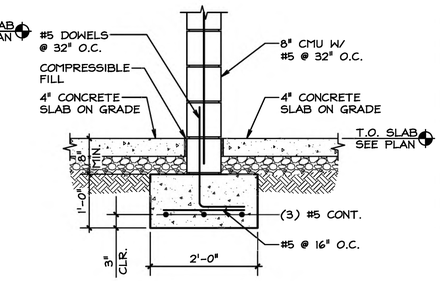

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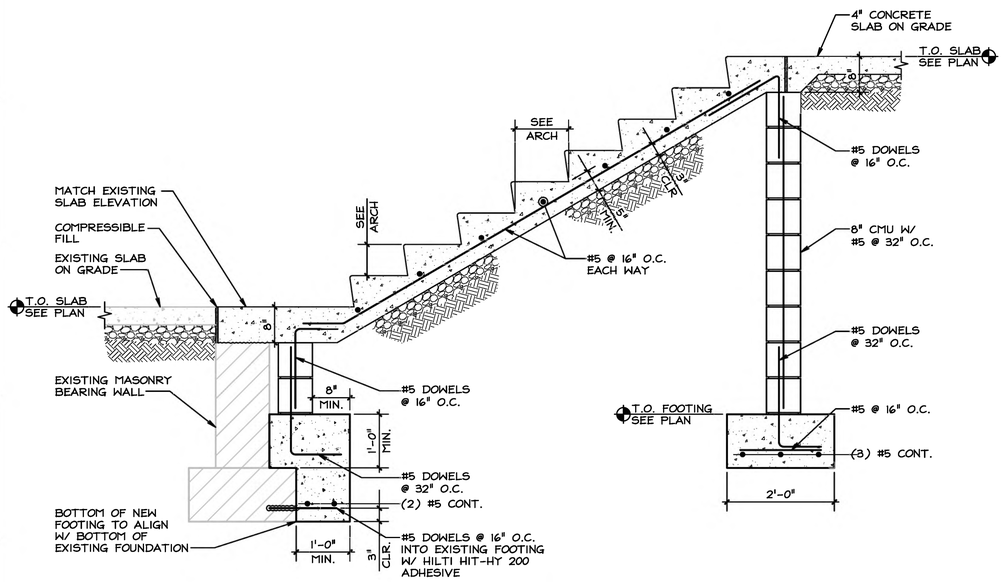

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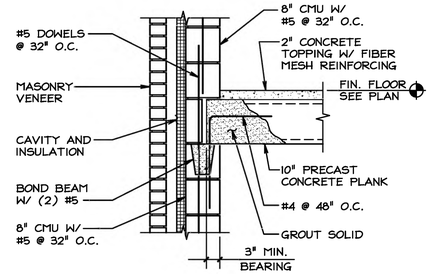

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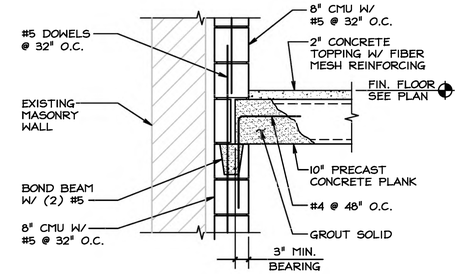

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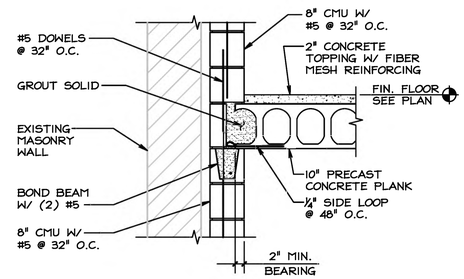

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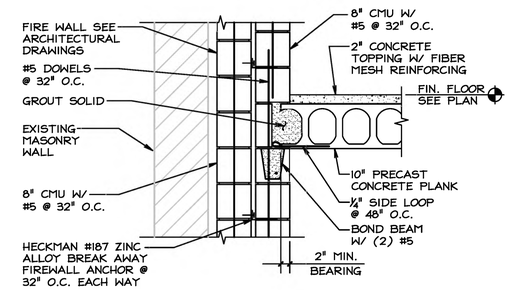

SECTION 10 (S4.01)
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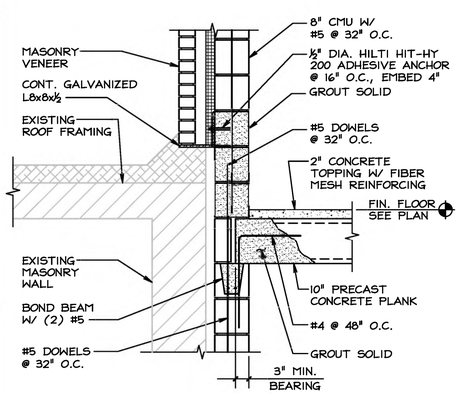

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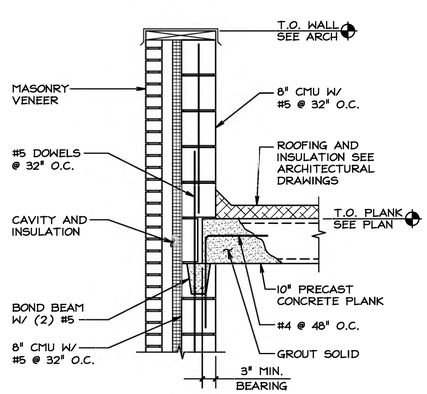

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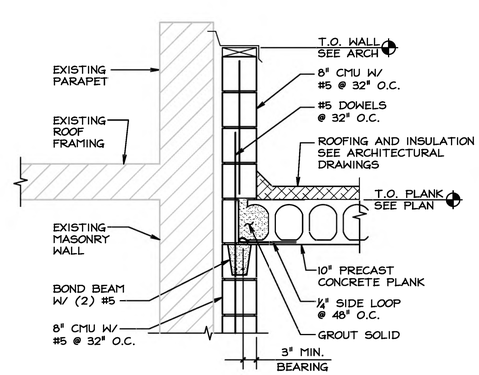

SECTION 13 (S4.01)
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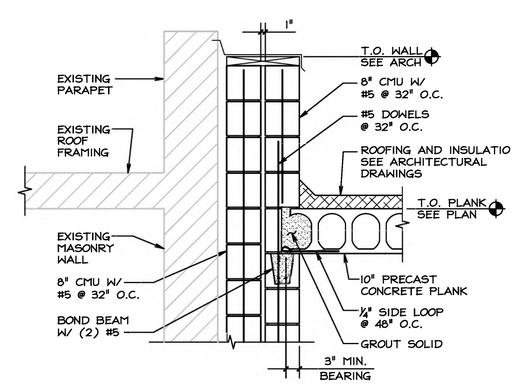

SECTION 14 (S4.01)
SCALE: 3/4" = 1'-0"

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Job No.: 19135 Dwg. 6 of 10

EDWARD P. WILKOWSKI, P.E.
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NYSED PROJECT # 66-07-01-03-0-004-030

SECTIONS

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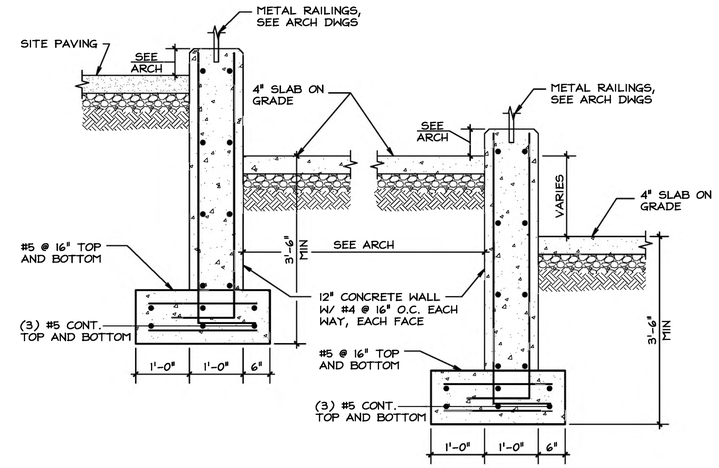
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No.

S4.01



SECTION 1/S4.02
SCALE: 3/4" = 1'-0"

Micucci Engineering, P.C.
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265 South Little Tor Road, Suite 207
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Phone: (845) 623-9100
Job No.: 19135 Dwg. 7 of 10

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SECTIONS

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Job No. 4.1092.72.2
File No.

S4.02

GENERAL

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF "THE 2015 INTERNATIONAL BUILDING CODE" AND "THE 2017 NEW YORK STATE UNIFORM CODE SUPPLEMENT."

WORK THESE DRAWING IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE COMMENCING WORK. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS OR MEASUREMENTS AND THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER IMMEDIATELY. NO WORK SHALL CONTINUE UNTIL THE DISCREPANCY IS RESOLVED.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY COORDINATION BETWEEN ALL TRADES WITH REGARD TO THE DRAWINGS. LOCATE BOLTS, SLEEVES, AND TRENCHES AS REQUIRED FOR MECHANICAL TRADES, AND PROVIDE AND INSTALL VARIOUS ITEMS NOT SHOWN ON THESE DRAWINGS BUT AS REQUIRED FOR VARIOUS TRADES.

DO NOT SCALE THE STRUCTURAL DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE STRUCTURAL ENGINEER.

THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT ON COMPLETED CONSTRUCTION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL SUPPLY ANY TEMPORARY BRACING REQUIRED UNTIL BUILDING CONSTRUCTION IS COMPLETE.

DURING CONSTRUCTION THE CONTRACTOR SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOADS. CONSTRUCTION MATERIAL PLACED ON FRAMED FLOORS AND ROOFS SHALL BE SPREAD OUT AS REQUIRED.

THE CONTRACTOR IS RESPONSIBLE FOR SAFETY WITHIN THE JOB SITE AND FOR MEETING ALL APPLICABLE OSHA REQUIREMENTS DURING CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED EXCAVATION SHORING AND THE EVALUATION AND PROTECTION OF ADJACENT STRUCTURES.

FOUNDATIONS AND SLABS ON GRADE

ALL EXCAVATION, SUBGRADE PREPARATION, AND OTHER EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

ALL FOOTINGS ARE DESIGNED FOR A MINIMUM SOIL BEARING CAPACITY OF 4 KIPS PER SQUARE FOOT.

ALL FOOTINGS ARE TO BEAR ON UNDISTURBED VIRGIN SOIL OR CONTROLLED COMPACTED FILL.

THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL EXTEND 3'-6" MINIMUM BELOW FINISHED GRADE.

ALL EXCAVATIONS SHALL BE FREE OF WATER BEFORE POURING CONCRETE.

HAND TRIM SIDES AND BOTTOM OF EARTH FORMS AND REMOVE LOOSE DIRT.

NO SUBSEQUENT EXCAVATION SHALL BE NEARER THAN 2:1 (HORIZONTAL:VERTICAL) TO AN INSTALLED FOOTING OR FOUNDATION.

CONCRETE FOUNDATION WALLS SHALL BE PLACED IN ALTERNATE SECTIONS, NOT MORE THAN 60 FEET IN LENGTH. HORIZONTAL CONSTRUCTION JOINTS ARE NOT PERMITTED EXCEPT WHERE SHOWN.

PLACE SLABS ON GROUND PER THICKNESS SHOWN ON DRAWINGS WITH TOP OF SLAB SET TO ACCOMMODATE ARCHITECTURAL FINISHES.

PROVIDE SAW CUT CONTROL JOINTS AT AN OPTIMUM TIME AFTER FINISHING. CUT SLABS WITH A 3/16 INCH THICK BLADE TO 1 INCH DEPTH. LOCATE CONTROL JOINTS AT A MAXIMUM SPACING OF 36 TIMES THE SLAB DEPTH AND AT EACH CORNER, COLUMN AND PLAN IRREGULARITY.

THE CONTRACTOR SHALL SUBMIT POUR SEQUENCE AND JOINT LAYOUT TO THE ARCHITECT FOR APPROVAL PRIOR TO POURING CONCRETE SLABS.

SEPARATE SLABS ON GRADE FROM VERTICAL SURFACES WITH JOINT FILLER. EXTEND JOINT FILLER FROM BOTTOM OF SLAB TO WITHIN ¼ INCH OF FINISHED SLAB SURFACE.

CONSTRUCT SLAB ON GRADE WITH OVERALL SPECIFIED FF30/FL20 IN ACCORDANCE WITH ACI 302.1. DETERMINATION OF FF/FL NUMBERS WILL BE IN ACCORDANCE WITH ASTM E 1155. THE CONTRACTOR WILL TAKE REMEDIAL MEASURES WHEN FLOOR SLABS DO NOT MEET SPECIFIED REQUIREMENTS.

WHERE COMPACTED FILL IS REQUIRED, WELL GRADED GRANULAR MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS PER ASTM D-1557.

VERIFICATION OF BEARING CAPACITY AND INSPECTION OF COMPACTED FILL SHALL BE COMPLETED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

ANY UNEXPECTED SUBGRADE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER.

CONCRETE

ALL CONCRETE MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH ACI 318. EVALUATION AND ACCEPTANCE OF CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH ACI 301.

SPECIFIED COMPRESSIVE STRENGTH F'C AT 28 DAYS:

FOUNDATIONS AND FOOTINGS: 4000 PSI.
WALLS, COLUMNS, ELEVATED SLABS, AND BEAMS: 4000 PSI.
FLOOR SLABS ON GRADE: 3000 PSI
CONCRETE FILL ON METAL DECK: 3000 PSI.
SITE WALLS AND SIDEWALKS: 5000 PSI.

SUBMIT PROPOSED MIX DESIGNS AND TEST DATA BEFORE CONCRETE OPERATIONS BEGIN. ESTABLISH THE REQUIRED AVERAGE STRENGTH OF EACH DESIGN MIX ON THE BASIS OF EITHER FIELD EXPERIENCE OR TRIAL MIXTURES AS SPECIFIED IN ACI 301, AND PROPORTION MIXES PER THE RECOMMENDATIONS OF ACI 211.1. EACH MIX SHALL BE IDENTIFIED AS IT WILL APPEAR ON BATCH TICKETS DELIVERED TO PROJECT SITE.

CONCRETE MIX DESIGN SHALL PROVIDE FOR A CONCRETE SLUMP APPROPRIATE FOR PROJECT CONDITIONS. THE CONCRETE SHALL BE SUFFICIENTLY FLUID TO ALLOW FOR EASE OF PLACEMENT AND SUFFICIENTLY STIFF TO PREVENT SEGREGATION.

AGGREGATE SHALL CONFORM TO ASTM C33.

WATER-TO-CEMENT RATIO SHALL NOT EXCEED 0.40 BY WEIGHT FOR EXTERIOR EXPOSED CONCRETE. WEIGHT OF WATER SHALL INCLUDE ALL FREE MOISTURE, INCLUDING LIQUID ADMIXTURES.

AIR-ENTRAINING ADMIXTURE SHALL BE ADDED TO ACHIEVE TOTAL AIR CONTENT OF 6 PERCENT FOR EXTERIOR EXPOSED CONCRETE AND 3 PERCENT FOR CONCRETE NOT EXPOSED TO EXTERIOR WITH A TOLERANCE OF 1 PERCENT.

PROVIDE WATER-REDUCING ADMIXTURES CONFORMING TO ASTM C494 AS REQUIRED FOR PLACEMENT AND WORKABILITY AT THE MAXIMUM WATER TO CEMENT RATIO SPECIFIED.

INDICATE TYPE AND QUANTITY OF ADMIXTURES PROPOSED OR REQUIRED. ADMIXTURES CONTAINING MORE THAN 0.1 PERCENT CHLORIDE IONS ARE NOT PERMITTED. WHERE MIX CONTAINS MORE THAN ONE ADMIXTURE, ALL ADMIXTURES SHALL BE SUPPLIED BY ONE MANUFACTURER. MANUFACTURER SHALL CERTIFY THAT ADMIXTURES ARE COMPATIBLE SUCH THAT DESIRABLE EFFECTS OF EACH ADMIXTURE WILL BE REALIZED. LIQUID ADMIXTURES SHALL BE CONSIDERED PART OF THE TOTAL WATER.

WATER SHALL BE CLEAN, POTABLE AND FREE FROM DELETERIOUS MATERIAL.

PROVIDE DATA FOR PROPRIETARY MATERIALS, INCLUDING ADMIXTURES, CURING MATERIALS, AND FINISH MATERIALS.

SUBMIT MATERIAL CERTIFICATIONS FOR CEMENTITIOUS MATERIALS, AGGREGATES AND ADMIXTURES.

PROVIDE DEFORMED REINFORCING BARS COMPLYING WITH ASTM A615, GRADE 60, EXCEPT WHERE OTHERWISE INDICATED. ALL DETAILING OF REINFORCING SHALL BE IN ACCORDANCE WITH ACI STANDARD 315.

WELDED WIRE FABRIC SHALL BE ASTM A1064, COLD-DRAWN STEEL, PLAIN.

SUBMIT BAR PLACEMENT SHOP DRAWINGS SHOWING THE LOCATION OF REINFORCING AND CONSTRUCTION JOINTS. DELIVER REINFORCEMENT TO PROJECT SITE BUNDLED AND TAGGED INDICATING BAR SIZES, LENGTHS, AND OTHER DATA CORRESPONDING TO INFORMATION SHOWN ON PLACEMENT DRAWINGS.

PLACE REINFORCEMENT TO ACHIEVE NOT LESS THAN MINIMUM CONCRETE COVERAGE AS REQUIRED FOR PROTECTION. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT TO PREVENT DISPLACEMENT.

CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

ELEVATED SLABS: 3/4"
BEAMS AND COLUMNS (PEDESTALS): 1 1/2"
INSIDE FACE OF WALLS: 1"
CONCRETE POURED ON GROUND: 3"
EXTERIOR FACE OF WALLS (AGAINST EARTH): 2"

FIBROUS REINFORCEMENT FOR SLABS SHALL BE FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE COMPLYING WITH ASTM C 1116 TYPE III, 1/2" TO 1 1/2". UNIFORMLY DISPERSE FIBERS IN THE CONCRETE MIX AT THE MANUFACTURER'S RECOMMENDED RATE BUT NOT LESS THAN 1.5 POUNDS PER CUBIC YARD.

PROVIDE CLASS B TENSION LAP SPLICES COMPLYING WITH ACI 318 UNLESS OTHERWISE INDICATED.

INSTALLATION TOLERANCES FOR ANCHOR BOLTS FOR STRUCTURAL STEEL COLUMNS SHALL COMPLY WITH THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

GROUT SHALL CONFORM TO ASTM C1107, GRADE B NON-SHRINK, NON-METALLIC, PREPACKAGED GROUT WITH A COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.

THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, ENGINEERING, AND CONSTRUCTION OF FORMWORK, CAPABLE OF SUPPORTING ALL APPLIED LOADS UNTIL THE CONCRETE IS ADEQUATELY CURED, WITHIN ALLOWABLE TOLERANCES AND DEFLECTION LIMITS.

LOCATE AND INSTALL CONSTRUCTION JOINTS AS INDICATED ON DRAWINGS. IF CONSTRUCTION JOINTS ARE NOT INDICATED, LOCATE IN A MANNER WHICH WILL NOT IMPAIR STRENGTH AND WILL HAVE LEAST IMPACT ON APPEARANCE.

PROVIDE WATERSTOPS AT CONSTRUCTION JOINTS AND AS OTHERWISE INDICATED, SIZED AND CONFIGURED TO SUIT JOINTS. INSTALL TO FORM CONTINUOUS, WATERTIGHT DAM, WITH FIELD JOINTS FABRICATED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

PREPARE PREVIOUSLY PLACED CONCRETE BY CLEANING AND APPLYING BONDING AGENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.

IN LOCATIONS WHERE NEW CONCRETE IS DOWELED TO EXISTING WORK, DRILL HOLES IN EXISTING CONCRETE, INSERT STEEL DOWELS AND PACK SOLID WITH EPOXY GROUT.

FOUNDATION SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED MUST BE FREE FROM STANDING WATER, MUD AND DEBRIS. SURFACES SHALL BE CLEAN AND FREE FROM OIL, OBJECTIONABLE COATINGS, AND LOOSE OR UNSOUND MATERIAL.

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER, UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWINGS.

CONSOLIDATE CONCRETE BY MEANS OF MECHANICAL VIBRATORS TO ACHIEVE CONSISTENT CONSOLIDATION WITHOUT SEGREGATION OF COARSE AGGREGATES.

REPAIR SURFACE DEFECTS, INCLUDING TIE HOLES, IMMEDIATELY AFTER REMOVING FORMWORK.

PROTECT CONCRETE FROM SUN AND RAIN. DO NOT PERMIT CONCRETE TO BECOME DRY DURING CURING PERIOD. CONCRETE SHALL NOT BE SUBJECTED TO ANY LOADS UNTIL CONCRETE IS COMPLETELY CURED, AND UNTIL CONCRETE HAS ATTAINED ITS 28 DAY STRENGTH AND 14 DAYS MINIMUM.

UPON COMPLETION OF FINISHING OPERATION, THE SURFACE OF SLABS SHALL BE SEALED AGAINST MOISTURE LOSS FOR 7 DAYS BY THE APPLICATION OF A CURING MEMBRANE OR BLANKET.

CONCRETE IN FORMS SHALL BE KEPT MOIST UNTIL REMOVAL. IMMEDIATELY UPON REMOVAL OF FORMS, AN APPROVED SPRAYED-ON CURING COMPOUND SHALL BE APPLIED TO THE CONCRETE SURFACES IN STRICT COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CURING SHALL BE MAINTAINED FOR 7 DAYS.

FORMED SURFACES SHALL COMPLY WITH MINIMUM TOLERANCES ESTABLISHED IN ACI 117, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED ON THE DRAWINGS.

FINISH EXPOSED CONCRETE TO OFFER SMOOTH, STAIN-FREE FINAL APPEARANCE AND MINIMUM NUMBER OF JOINTS. PROVIDE FORMING MATERIALS WITH SUFFICIENT STRENGTH TO RESIST HYDROSTATIC HEAD WITHOUT BOW OR DEFLECTION IN EXCESS OF ALLOWABLE TOLERANCES.

PROVIDE CONCRETE FILL FOR STEEL PAN STAIR TREADS, LANDINGS, AND ASSOCIATED ITEMS. SCREED, TAMP, AND FINISH CONCRETE SURFACES AS SCHEDULED.

COMPLY FULLY WITH RECOMMENDATIONS OF ACI 306 WHEN AIR TEMPERATURES ARE EXPECTED TO DROP BELOW 40°F EITHER DURING CONCRETE PLACEMENT OPERATIONS OR BEFORE CONCRETE HAS CURED. PROTECTIVE MEASURES INCLUDE BUT ARE NOT LIMITED TO HEATING OF MATERIALS, HEATED ENCLOSURES, AND INSULATING BLANKETS.

COMPLY FULLY WITH RECOMMENDATIONS OF ACI 305 WHEN AMBIENT TEMPERATURE BEFORE, DURING, OR AFTER CONCRETE PLACEMENT IS EXPECTED TO EXCEED 90°F OR WHEN COMBINATIONS OF HIGH AIR TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND SPEED ARE SUCH THAT THE RATE OF EVAPORATION FROM FRESHLY POURED CONCRETE WOULD OTHERWISE EXCEED 0.2 POUNDS PER SQUARE FOOT PER HOUR. PROTECTIVE MEASURES INCLUDE BUT ARE NOT LIMITED TO COOLING OF MATERIALS BEFORE OR DURING MIXING, PLACEMENT DURING EVENING TO DAWN HOURS, FOGGING DURING FINISHING AND CURING, SHADING, AND WINDBREAKS

SAMPLE CONCRETE AND MAKE SPECIMENS FOR TESTING PER ASTM C172 AND ASTM C31. TAKE SAMPLES AT POINT OF DISCHARGE AND REPORT RESULTS OF ALL TESTS.

TEST SLUMP OF THE FIRST 2 LOADS OF CONCRETE DELIVERED FOR EACH POUR AND ONCE PER STRENGTH TEST PERFORMED PER ASTM C143 WITH ADDITIONAL TESTS IF CONCRETE CONSISTENCY CHANGES.

TEST AIR CONTENT OF THE FIRST 2 LOADS OF CONCRETE DELIVERED FOR EACH POUR AND ONCE FOR EACH STRENGTH TEST PERFORMED PER ASTM C173 OR ASTM C231.

TEST CONCRETE TEMPERATURE FOR EACH STRENGTH TEST PERFORMED AND HOURLY WHEN AIR TEMPERATURE IS BELOW 40°F OR ABOVE 90°F.

PROVIDE ONE COMPRESSIVE STRENGTH TEST PER ASTM C39 FOR EVERY 50 CUBIC YARDS OR FRACTION THEREOF FOR EACH DAY'S POUR OF EACH CONCRETE CLASS.

MOLD AND CURE ONE SET OF 4 STANDARD CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST REQUIRED. TEST ONE SPECIMEN PER SET AT 7 DAYS FOR INFORMATION AND TEST 2 SPECIMENS PER SET FOR ACCEPTANCE OF STRENGTH POTENTIAL AT 28 DAYS. RETAIN ONE SPECIMEN FROM EACH SET FOR LATER TESTING, IF REQUIRED.

EVALUATE CONSTRUCTION AND CURING PROCEDURES AND IMPLEMENT CORRECTIVE ACTION WHEN STRENGTH RESULTS FOR FIELD-CURED SPECIMENS ARE LESS THAN 85 PERCENT OF TEST VALUES FOR COMPANION LABORATORY-CURED SPECIMENS.

COST OF ADDITIONAL TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHEN UNACCEPTABLE CONCRETE HAS BEEN VERIFIED.

MASONRY

ALL MASONRY CONSTRUCTION, REINFORCED AND UNREINFORCED, SHALL COMPLY WITH THE REQUIREMENTS OF THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES," ACI 530 AND THE "SPECIFICATION FOR MASONRY STRUCTURES," ACI 530.1.

PROVIDE MATERIALS TO ACHIEVE THE NET COMPRESSIVE STRENGTH OF CONCRETE UNIT MASONRY EQUAL TO OR GREATER THAN 2000 PSI F'M

MATERIAL SPECIFICATIONS:

CONCRETE MASONRY UNITS: ASTM C-90, MEDIUM WEIGHT, TYPE I
REINFORCING BARS: ASTM A615, GRADE 60.
SHEET-METAL ANCHORS AND TIES: ASTM A1008
WIRE TIES AND ANCHORS: ASTM A82
JOINT REINFORCEMENT: ASTM A951
SIDE ROD DIAMETER: 0.1875 INCH
CROSS ROD DIAMETER: 0.1483 INCH
MORTAR: ASTM C270, TYPE M OR S
GROUT: ASTM C476, 2500 PSI @ 28 DAYS.
MINIMUM SLUMP: 8 INCHES.

PROVIDE MORTAR FOR UNIT MASONRY PER ASTM C 270 PROPORTION SPECIFICATION. PROVIDE TYPE M MORTAR FOR MASONRY BELOW GRADE AND TYPE S MORTAR FOR MASONRY ABOVE GRADE.

PROVIDE GROUT CONSISTENCY REQUIRED AT TIME OF PLACEMENT TO FILL COMPLETELY ALL SPACES INDICATED TO BE GROUTED. GROUT SHALL BE EITHER FINE OR COARSE DEPENDING ON SPACE TO BE GROUTED. MINIMUM GROUT STRENGTH SHALL BE 2500 PSI AT 28 DAYS AS MEASURED BY ASTM C1019.

SUBMIT PUBLISHED DATA FROM MANUFACTURERS OF PRODUCTS AND ACCESSORIES SPECIFIED, INDICATING COMPLIANCE WITH REQUIREMENTS.

PROVIDE MIX DESIGN AND TEST REPORTS FOR PRE-BLENDED MORTAR AND CONVENTIONAL GROUT INDICATING TYPES AND PROPORTIONS OF MATERIALS.

PROVIDE STANDARD UNITS WITH NOMINAL FACE DIMENSIONS OF 16 INCHES LONG AND 8 INCHES HIGH (15-5/8 BY 7-5/8 ACTUAL), WITH NOMINAL THICKNESSES AS INDICATED ON DRAWINGS.

PROVIDE SPECIAL BLOCK TYPES WHERE REQUIRED FOR CORNERS, CONTROL JOINTS, HEADERS, LINTELS, AND OTHER SPECIAL CONDITIONS, WHETHER OR NOT SPECIFICALLY INDICATED ON THE DRAWINGS.

ALL MASONRY WALLS SHALL BE CONSTRUCTED WITH TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT AT 16 INCHES ON CENTER. PROVIDE WELDED WIRE UNITS PREFABRICATED INTO STRAIGHT LENGTHS OF NOT LESS THAN 10 FEET, WITH DEFORMED CONTINUOUS SIDE RODS AND PLAIN CROSS RODS. SIZE REINFORCEMENT APPROXIMATELY TWO INCHES LESS THAN NOMINAL WALL WIDTH, PROVIDING NOT LESS THAN 5/8 INCH MORTAR COVERAGE ON EXTERIOR EXPOSURES AND 1/2 INCH ELSEWHERE.

REINFORCEMENT SHALL BE PLACED ACCURATELY AND SECURED AT INTERVALS NOT TO EXCEED 72 INCHES. MINIMUM SPACING BETWEEN BARS OR MASONRY SURFACES SHALL BE ONE BAR DIAMETER. LAPPED SPLICES SHALL BE A MINIMUM OF 48 BAR DIAMETERS. PROVIDE LAP-JOINT TIE FOR EACH SPLICE.

PROTECT CARBON STEEL JOINT REINFORCEMENT, TIES, AND ANCHORS FROM CORROSION BY GALVANIZING, UNLESS OTHERWISE REQUIRED.

DELIVER, HANDLE, AND STORE MASONRY UNITS, MATERIALS, AND ACCESSORIES BY MEANS WHICH WILL PREVENT MECHANICAL DAMAGE AND DETERIORATION DUE TO MOISTURE, TEMPERATURE AND CONTAMINATION.

PRIOR TO LAYING MASONRY, REMOVE LAITANCE, LOOSE AGGREGATE, AND ANY OTHER MATERIAL THAT WOULD PREVENT MORTAR FROM BONDING TO FOUNDATION.

ALL MASONRY SHALL BE LAID TRUE, LEVEL, PLUMB, AND IN ACCORDANCE WITH THE DRAWINGS. ENSURE ALL VERTICAL CELLS TO BE GROUTED ARE ALIGNED AND UNOBSTRUCTED.

PLACE MASONRY UNITS ON FULL MORTAR BED IN ALL COURSES OF BEARING WALLS, PIERS, FOUNDATION WALLS, COLUMNS, AND PILASTERS.

VERTICAL REINFORCING SHALL EXTEND THROUGH BOND BEAMS WHERE SHOWN. CUT BOTTOM OF MASONRY UNIT TO ACCOMMODATE VERTICAL BAR. GROUT CAVITIES BELOW BOND BEAM PRIOR TO INSTALLATION OF BOND BEAM COURSE.

ALL HEAD AND BED JOINTS SHALL BE A NOMINAL 3/8 IN. THICK, UNLESS OTHERWISE REQUIRED.

MASONRY SHALL BE LAID IN RUNNING BOND UNLESS OTHERWISE INDICATED IN THE DRAWINGS.

BRACE MASONRY DURING CONSTRUCTION TO ASSURE STABILITY. DESIGN, PROVIDE, AND INSTALL BRACING AS REQUIRED.

ALL MORTAR JOINTS ON EXPOSED WALLS SHALL BE STRUCK TO PRODUCE A DENSE, SLIGHTLY CONCAVE SURFACE WELL BONDED TO THE SURFACE OF THE MASONRY UNIT.

UNLESS OTHER CONDITIONS ARE SPECIFICALLY DETAILED, GROUT CAVITIES SOLID FOR AT LEAST 24 INCHES BELOW BEARING PLATES, LINTELS, AND SIMILAR FEATURES AND CONDITIONS.

PROVIDE MASONRY WALL CONTROL JOINTS AT A MAXIMUM SPACING OF 25 FEET ON CENTER AND AT EACH CORNER OR CHANGE IN WALL HEIGHT. CONSTRUCT CONTROL JOINTS WITH PREFORMED CONTROL JOINT GASKETS AS DETAILED IN THE DRAWINGS AS MASONRY PROGRESSES.

PROVIDE ONE VERTICAL REINFORCING BAR WITHIN 16 INCHES OF EACH SIDE OF EVERY CORNER AND AT EACH SIDE OF ALL WALL OPENINGS.

CAVITIES CONTAINING REINFORCING OR BELOW BEARING PLATES SHALL BE GROUTED BY MEANS OF LOW-LIFT TECHNIQUES. HIGH-LIFT GROUTING MAY BE USED ONLY WITH PRIOR APPROVAL. FOLLOW ACI SPECIFICATIONS FOR MASONRY GROUTING.

COVER TOPS OF INCOMPLETE MASONRY ELEMENTS WITH WATERPROOF SHEET MATERIAL AT END OF EACH WORK DAY AND WHEN MASONRY WORK IS NOT UNDER WAY.

IMPLEMENT COLD WEATHER CONSTRUCTION PROCEDURES IN ACCORDANCE WITH ACI 530.1 WHEN AMBIENT TEMPERATURE FALLS BELOW 40°F OR THE TEMPERATURE OF MASONRY UNITS IS BELOW 40°F. WET OR FROZEN UNITS SHALL NOT BE LAID.

IMPLEMENT HOT WEATHER CONSTRUCTION PROCEDURES IN ACCORDANCE WITH ACI 530.1 WHEN AMBIENT TEMPERATURE EXCEEDS 100°F, OR EXCEEDS 90°F WITH A WIND VELOCITY GREATER THAN 8 MPH.

INSTALL FLASHING AT ALL CONDITIONS SUCH AS LINTELS AND SHELF ANGLES, WHERE THE DOWNWARD FLOW OF WATER WITHIN THE MASONRY WILL BE INTERRUPTED.

DO NOT APPLY UNIFORM FLOOR OR ROOF LOADS FOR AT LEAST 12 HOURS, OR CONCENTRATED LOADS FOR AT LEAST 3 DAYS, AFTER COMPLETION OF MASONRY ELEMENTS.

AFTER MORTAR IS THOROUGHLY SET AND CURED, CLEAN EXPOSED MASONRY SURFACES OF STAINS, EFFLORESCENCE, MORTAR OR GROUT DROPPINGS, AND DEBRIS.

AT COMPLETION OF MASONRY WORK, REMOVE ALL SCAFFOLDING AND EQUIPMENT USED DURING CONSTRUCTION, AND REMOVE ALL DEBRIS, REFUSE, AND SURPLUS MASONRY MATERIAL FROM THE SITE.

SPRAYED-ON WATER REPELLENT SHALL BE APPLIED AFTER MASONRY UNITS ARE CLEANED AND THOROUGHLY DRY IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

THE OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

THE CONTRACTOR WILL REPLACE WORK THAT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS AND BE RESPONSIBLE FOR ADDITIONAL INSPECTING TO DETERMINE COMPLIANCE OF CORRECTED WORK WITH SPECIFIED REQUIREMENTS.

PRECAST CONCRETE HOLLOW CORE PLANK

ALL PRECAST CONCRETE HOLLOW CORE PLANK SHALL BE DESIGNED, MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PRESTRESSED CONCRETE INSTITUTE.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW OF ALL PLANK UNITS PRIOR TO FABRICATION. THE CONTRACTOR SHALL LOCATE AND MARK ALL REQUIRED OPENINGS TO BE CAST OR FIELD CUT BEFORE SUBMITTING THE DRAWINGS.

DESIGN OF THE PRECAST UNITS SHALL PROVIDE FOR A MAXIMUM LIVE LOAD DEFLECTION OF L/480 OF THE TOTAL SPAN.

THE INSTALLER SHALL INSPECT ALL EXISTING CONSTRUCTION PRIOR TO DELIVERY OF THE PRECAST UNITS TO ENSURE THAT ALL CONDITIONS ARE ACCEPTABLE AND WITHIN ALLOWABLE TOLERANCES.

NO BROKEN, CRACKED, SPALLED OR OTHERWISE DEFECTIVE UNITS SHALL BE ERECTED.

INSTALL DOWELS AS SHOWN ON THE SHOP DRAWINGS AND DETAILS. ALL PLANK JOINTS AND ENDS SHALL BE GROUTED AS SHOWN AND IN ACCORDANCE WITH THE SPECIFICATIONS.

PRIOR TO GROUTING PLANK DIFFERENTIAL PLANK CAMBER SHALL BE REMOVED BY INSERTING THREADED RODS WITH LOCK PLATES AND NUTS IN THE JOINTS. TIGHTEN THE NUTS TO FORCE THE PLANKS TOGETHER. GROUT AFTER PLANKS ARE ALIGNED.

BRICK VENEER

ALL BRICK VENEER CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF ACI 530, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES," AND THE BRICK INSTITUTE OF AMERICA, "TECHNICAL NOTES ON BRICK CONSTRUCTION".

PROVIDE MORTAR FOR BRICK VENEER PER ASTM C 270 PROPORTION SPECIFICATION. PROVIDE TYPE S MORTAR FOR VENEER BELOW GRADE AND TYPE N MORTAR FOR VENEER ABOVE GRADE.

BRICK VENEER WITH A MAXIMUM UNIT WEIGHT OF 40 POUNDS PER SQUARE FOOT SHALL BE ANCHORED BY GALVANIZED WALL TIES WITH A MINIMUM CLEAR SPACE OF 1 INCH BETWEEN INSIDE FACE VENEER AND OUTSIDE FACE OF SHEATHING OR INSULATION.

BRICK VENEER INSTALLED OVER SOLID SURFACE SHALL BE ANCHORED WITH HOHMANN & BARNARD DW-10HS VENEER ANCHORS OR APPROVED EQUAL. BRICK VENEER INSTALLED OVER RIGID INSULATION SHALL BE ANCHORED WITH HOHMANN & BARNARD X-SEAL VENEER ANCHORS OR APPROVED EQUAL.

EMBED ALL BRICK TIES A MINIMUM OF 1 1/2 INCHES INTO MORTAR JOINTS WITH AT LEAST 5/8 INCH COVER TO OUTSIDE FACE.

SPACE ANCHORS TO PROVIDE AT LEAST ONE ANCHOR FOR 2.67 SQUARE FEET OF WALL AREA WITH A MAXIMUM TIE SPACING NOT TO EXCEED 16 INCHES HORIZONTAL OR 24" VERTICAL.

STRUCTURAL STEEL

ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," LATEST EDITION.

ALL WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE - STEEL" FOR EACH PROCESS, POSITION AND JOINT CONFIGURATION.

STRUCTURAL STEEL WIDE FLANGE MEMBERS SHALL CONFORM WITH ASTM A992.

STEEL PLATE, BARS AND CHANNELS SHALL CONFORM WITH ASTM A36 UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL TUBING SHALL CONFORM WITH ASTM A500, GRADE B

STRUCTURAL STEEL PIPE SHALL CONFORM WITH ASTM A53, GRADE B.

BOLTS FOR STRUCTURAL STEEL CONNECTIONS SHALL BE MINIMUM 3/4" DIAMETER ASTM A325-N UNLESS DESIGNATED AS A490 ON THE DRAWINGS. NUTS SHALL BE ASTM A563 GRADE C OR DH. TENSION CONTROL BOLTS SHALL BE ASTM F1852 OR ASTM F2280.

WASHERS SHALL BE FLAT CONFORMING TO ASTM F436 TYPE 1. THE FINISH OF WASHERS IS TO MATCH THE NUT. A325 BOLTS SHALL HAVE WASHERS UNDER THE HEAD AND A490 BOLTS SHALL HAVE HARDENED WASHERS UNDER THE HEAD AND THE NUT.

ANCHOR BOLTS SHALL BE ASTM F1554 35 KSI YIELD STRENGTH, UNLESS OTHERWISE NOTED.

SHEAR STUD CONNECTORS CONFORMING TO ASTM A108 ARE TO BE FIELD INSTALLED. AFTER WELDING, STUDS ARE TO BE THE LENGTH SHOWN ON THE DRAWINGS. SHOP WELDING OF STUDS IS NOT PERMITTED.

ALL WELDS SHALL UTILIZE E70XX ELECTRODES AND SHALL BE A MINIMUM OF 3/16 INCH IN SIZE UNLESS NOTED OTHERWISE.

CONNECTIONS SHALL BE BOLTED OR WELDED WITH A MINIMUM OF TWO BOLTS OR EQUIVALENT WELD.

UNLESS CONNECTIONS ARE DETAILED ON THE DRAWINGS, THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF CONNECTIONS. CONNECTION DESIGN SHALL BE UNDER THE DIRECT SUPERVISION OF AN ENGINEER EXPERIENCED IN CONNECTION DESIGN.

BEAM CONNECTIONS SHALL BE IN ACCORDANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION. STANDARD WEB CONNECTIONS SHALL BE PROVIDED WHERE POSSIBLE.

BEAM CONNECTIONS ARE TO BE DESIGNED TO RESIST ONE HALF THE ALLOWABLE LOAD FOR THE APPROPRIATE SPAN GIVEN IN THE MAXIMUM TOTAL UNIFORM LOAD TABLE OF THE AISC MANUAL OF STEEL CONSTRUCTION.

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Job No.: 19135 Dwg. 8 of 10

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NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	EW
Drawn	WR

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Revisions:
ISSUE TO BID 11/23/20

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GENERAL NOTES

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No.

S6.01

STRUCTURAL STEEL (CONT'D)

THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF ANY CONNECTIONS DESIGNED BY THE CONTRACTOR. APPROVAL OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF THIS RESPONSIBILITY

SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION OR ORDERING OF STEEL.

SHOP DRAWINGS SHALL INCLUDE ERECTION PLANS AND PIECE DETAILS INDICATING SIZE, SPACING, LOCATION AND ATTACHMENT OF STRUCTURAL MEMBERS INCLUDING SIZE AND SPACING OF BOLTS AND WELDS. SUBMITTAL MUST ALSO INCLUDE A THREE DIMENSIONAL RENDERING OF THE STEEL FRAMING.

THE CONTRACTOR SHALL SURVEY, REVIEW AND CONFIRM EXISTING CONDITIONS PRIOR TO DEVELOPING SHOP DRAWINGS.

NO PORTION OF THE CONTRACT DRAWINGS SHALL BE REPRODUCED FOR USE AS SHOP DRAWINGS.

SHOP PRIME ALL STRUCTURAL STEEL MEMBERS WITH FAST-CURING, LEAD AND CHROMATE-FREE, VOC-COMPLIANT, UNIVERSAL MODIFIED-ALKYD PRIMER WITH GOOD RESISTANCE TO NORMAL ATMOSPHERIC CORROSION, COMPLYING WITH PERFORMANCE REQUIREMENTS OF FS TT-P-664, OR EQUIVALENT.

DO NOT PRIME SURFACES THAT WILL BE FIREPROOFED, IN CONTACT WITH CONCRETE, WITHIN 3 INCHES OF FIELD WELDS, OR ON THE FAYING SURFACE OF HIGH STRENGTH BOLTED FRICTION CONNECTIONS.

GALVANIZE STRUCTURAL STEEL MEMBERS AS INDICATED ON THE DRAWINGS IN ACCORDANCE WITH ASTM A123 AND A385 AFTER FABRICATION. PREPARE GALVANIZED SURFACES TO BE PAINTED IN ACCORDANCE WITH ASTM D2092 AND SHOP COAT WITH A COMPATIBLE PRIMER. REPAIR DAMAGED GALVANIZING IN ACCORDANCE WITH ASTM A780.

FURNISH AND INSTALL TEMPORARY SUPPORTS AND INTERNAL BRACES NECESSARY TO SUPPORT STRUCTURAL STEEL DURING ERECTION. TEMPORARY SUPPORTS AND BRACES SHALL BE ADEQUATE FOR ANTICIPATED WIND, SEISMIC, EQUIPMENT AND ERECTION LOADS. REMOVE TEMPORARY SHORING AFTER THE STEEL ERECTION IS COMPLETE.

THE OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

FIELD WELDING AND HIGH STRENGTH BOLTS WILL BE SUBJECT TO INSPECTION.

THE CONTRACTOR WILL REMOVE AND REPLACE WORK THAT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS AND BE RESPONSIBLE FOR THE COST OF ADDITIONAL INSPECTING TO DETERMINE COMPLIANCE OF CORRECTED WORK WITH SPECIFIED REQUIREMENTS.

METAL STAIRS AND GUARD RAILS

METAL STAIRS, GUARD RAILS AND LADDERS SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," LATEST EDITION.

ALL STAIRS SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING LOADING REQUIREMENTS:

UNIFORM LIVE LOAD: 100 POUNDS PER SQUARE FOOT
CONCENTRATED LIVE LOAD: 300 POUNDS ON AN AREA OF 4 SQUARE INCHES
DEFLECTION: MAXIMUM L/360

ALL GUARD RAILS SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING LOADING REQUIREMENTS:

UNIFORM LIVE LOAD: 50 POUNDS PER LINER FOOT
CONCENTRATED LIVE LOAD: 200 POUNDS IN ANY DIRECTION

SUBMIT SHOP DRAWING FOR EACH FABRICATED ITEM INCLUDING PLANS, ELEVATIONS, AND PIECE DETAILS. SHOP DRAWINGS SHALL INDICATE SECTION PROFILES, REINFORCING, WELDS, FASTENERS AND ANCHORS.

SUBMIT STRUCTURAL CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

MEMBER SIZES INDICATED ON PLAN ARE MINIMUM. PROVIDE ACTUAL MEMBER SIZES REQUIRED TO SATISFY DESIGN REQUIREMENTS.

BEFORE STARTING WORK, VERIFY MEASUREMENTS, GRADES, ELEVATIONS, LOCATIONS AND DETAILS OF EXISTING FIELD CONDITIONS.

PROVIDE WELDED CONNECTIONS, UNLESS OTHERWISE INDICATED. FABRICATE UNITS SO THAT MECHANICAL FASTENERS DO NOT APPEAR ON FINISHED SURFACES. ALL WELDS TO BE CONTINUOUS, AND GROUND SMOOTH WHERE EXPOSED.

CONSTRUCT STAIR UNITS TO CONFORM TO THE SIZE ARRANGEMENT INDICATED ON ARCHITECTURAL DRAWINGS. PROVIDE METAL FRAMING, HANGERS, COLUMNS, RAILINGS, NEWELS, BALUSTERS, STRUTS, CLIPS, BRACKETS, BEARING PLATES AND OTHER COMPONENTS FOR THE SUPPORT OF STAIRS AND LANDINGS.

FABRICATE STRINGERS FROM STRUCTURAL STEEL CHANNELS, PLATES, OR A COMBINATION THEREOF AND PROVIDE CLOSURES FOR EXPOSED ENDS OF STRINGERS.

CONSTRUCT PLATFORMS FROM STRUCTURAL STEEL CHANNEL HEADERS AND MISCELLANEOUS FRAMING MEMBERS.

PROVIDE METAL STAIR PANS OF 12 GAUGE GALVANIZED STRUCTURAL STEEL. SHAPE PANS TO CONFORM TO THE CONFIGURATION REQUIRED.

CONSTRUCT RISERS AND METAL PANS WITH STEEL ANGLE SUPPORTING BRACKETS WELDED TO STRINGERS. SECURE METAL PANS TO BRACKETS BY WELDING. PROVIDE PLATFORMS OF THE SAME METAL AND GAUGE AS SPECIFIED FOR PANS.

PROVIDE STEEL PIPE RAILINGS, CONSISTING OF TOP RAIL, INTERMEDIATE RAIL, POSTS, AND WALL MOUNTED RAILS. UNLESS OTHERWISE SHOWN, FABRICATE RAILS OF 1 1/2 INCH DIAMETER PIPE.

COPE INTERSECTIONS OF RAILS AND POSTS, WELD JOINTS, AND GRIND SMOOTH. BUTT WELD END-TO-END JOINTS OF RAILINGS. AT CONNECTIONS TO STEEL SUPPORTS, WELD POST DIRECTLY TO STEEL SUPPORT.

POST-INSTALLED ANCHORS

ALL-POST INSTALLED ANCHORS SHALL BE PROVIDED BY HILTI, INC. AS NOTED BELOW OR APPROVED EQUAL.

ADHESIVE ANCHORS TO CONCRETE SHALL BE HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HAS-E THREADED ROD.

MECHANICAL SCREW ANCHORS TO CONCRETE SHALL BE HILTI HUS EZ SCREW ANCHORS.

MECHANICAL EXPANSION ANCHORS TO CONCRETE SHALL BE HILTI HSL-3 EXPANSION ANCHORS.

REBAR DOWELING TO CONCRETE SHALL BE HILTI HI-HY 200 SAFE SET SYSTEM.

ADHESIVE ANCHORS TO MASONRY SHALL BE HILTI HIT-HY 70 ANCHORING SYSTEM WITH HILTI HAS-E THREADED ROD AND SCREEN TUBE.

ANCHORS SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS.

ANCHOR DIAMETER, EMBEDMENT AND SPACING SHALL BE AS NOTED ON THE DRAWINGS.

ANCHOR CAPACITY IS DEPENDENT ON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE DISTANCE INDICATED ON THE DRAWINGS AND THE MANUFACTURER RECOMMENDATIONS.

SPECIAL INSPECTIONS

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF "THE 2015 INTERNATIONAL BUILDING CODE" AND "THE 2017 NEW YORK STATE UNIFORM CODE SUPPLEMENT."

THE OWNER SHALL EMPLOY A SPECIAL INSPECTION AGENCY TO PERFORM INSPECTIONS AND TESTING DURING CONSTRUCTION.

SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY MEETING THE REQUIREMENTS OF ASTM E329 - MATERIALS, ASTM D3740 - SOILS, ASTM C1077 - CONCRETE, ASTM A880 - STEEL, AND ASTM E543 - NON-DESTRUCTIVE TESTING.

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING CODE OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION.

THE SPECIAL INSPECTOR SHALL OBSERVE CONSTRUCTION PROGRESS FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF NOT CORRECTED DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER AND BUILDING OFFICIAL.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, CONTRACTOR, AND OWNER.

THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT INDICATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

INSPECTIONS SHALL BE CONDUCTED FOR THE MATERIALS AND OPERATIONS LISTED PE THE FOLLOWING STATEMENT OF SPECIAL INSPECTIONS:

GEOTECHNICAL INSPECTIONS:

BEARING CAPACITY BELOW SHALLOW FOUNDATIONS
DEPTH OF FOOTING
CLASSIFICATION AND TESTING OF FILL MATERIALS
MATERIAL, DENSITY AND LIFT THICKNESS OF COMPACTED FILL

CONCRETE INSPECTIONS:

PLACEMENT OF REINFORCING STEEL
ANCHOR BOLT LOCATION
VERIFY USE OF REQUIRED MIX DESIGN
SAMPLE CONCRETE FOR STRENGTH TESTS
MEASURE AIR CONTENT, TEMPERATURE, AND SLUMP
FORMWORK FOR SIZE, SHAPE AND LOCATION

MASONRY INSPECTIONS:

TEST MASONRY UNIT STRENGTH
PROPORTIONING OF MORTAR AND GROUT
SIZE, GRADE, AND LOCATION OF REINFORCING
CONSTRUCTION OF MORTAR JOINTS
GROUTING PROCEDURE

STEEL INSPECTIONS:

BOLT QUANTITY AND TENSIONING
WELD SIZE AND TYPE
MEMBER LOCATIONS AND JOINT DETAILS

DESIGN LOADS

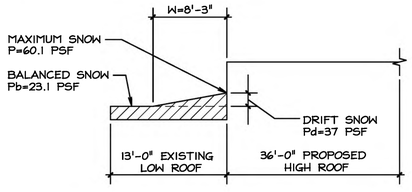
FLOOR
DEAD LOAD : 107 PSF
LIVE LOAD
GROUND FLOOR CORRIDOR : 100 PSF
UPPER FLOORS CORRIDOR : 80 PSF
CLASSROOMS : 40 PSF

ROOF
DEAD LOAD : 92 PSF
LIVE LOAD : 30 PSF - SEE SNOW DRIFT DIAGRAM

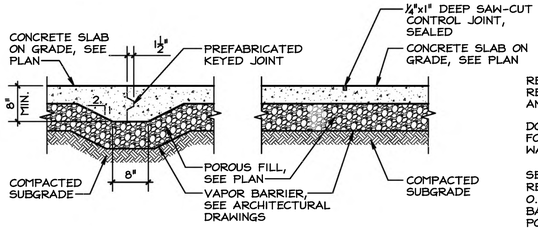
ROOF SNOW LOADS
GROUND SNOW LOAD (Pg): 30 PSF
FLAT ROOF SNOW LOAD (Pf): 23.1 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (Is): 1.1
THERMAL FACTOR (Ct): 1.0

WIND LOADS
ULTIMATE DESIGN WIND SPEED (Vult): 125 MPH
NOMINAL DESIGN WIND SPEED (VASD): 97 MPH
RISK CATEGORY: III
WIND EXPOSURE CATEGORY: B
INTERNAL PRESSURE COEFFICIENT: ± 0.18
WALLS: +33/-44 PSF
ROOF: +14/-54 PSF

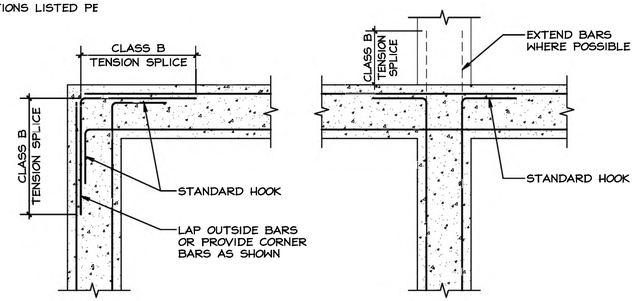
EARTHQUAKE DESIGN DATA
RISK CATEGORY: III
SEISMIC IMPORTANCE FACTOR (Ie): 1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
-Ss : .271
-S1 : .071
SITE CLASS: E
SPECTRAL RESPONSE COEFFICIENTS:
- Sds : 0.440
- Sd1 : 0.166
SEISMIC DESIGN CATEGORY: C
SEISMIC FORCE RESISTING SYSTEM:
SPECIAL MASONRY SHEAR WALLS
SEISMIC RESPONSE COEFFICIENT (Cs): 0.110
RESPONSE MODIFICATION FACTOR (R): 5.0
SEISMIC BASE SHEAR (V): 144 K
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE



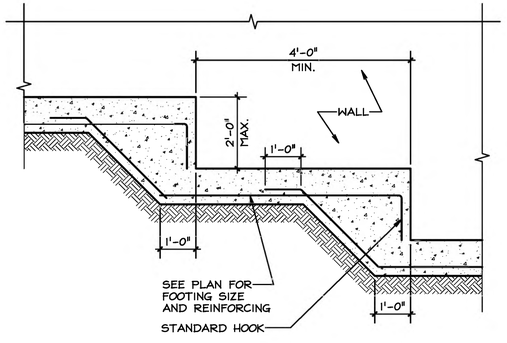
SNOW DRIFT DIAGRAM



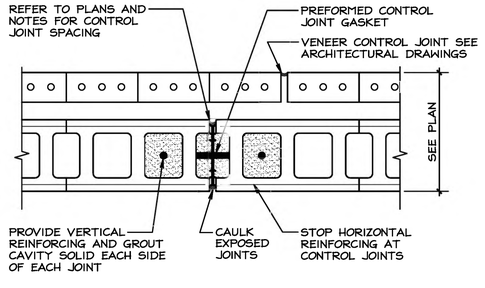
TYPICAL CONCRETE SLAB ON GRADE JOINTS
NOT TO SCALE



TYPICAL CONCRETE WALL AND FOOTING INTERSECTION
NOT TO SCALE



TYPICAL STEPPED FOOTING DETAIL
NOT TO SCALE



TYPICAL MASONRY WALL CONTROL JOINT
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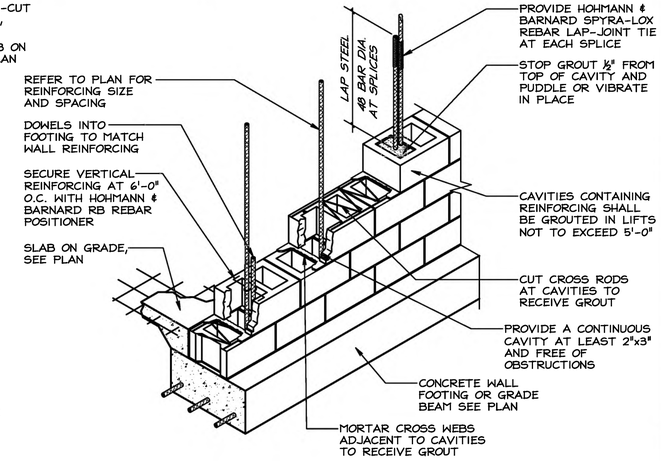
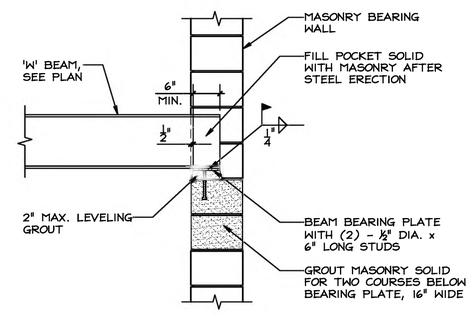
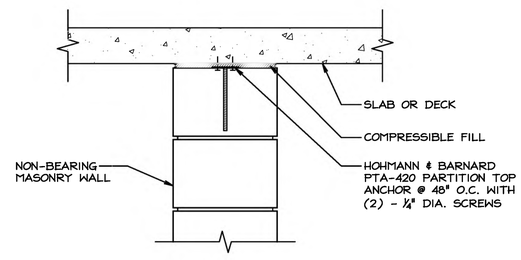


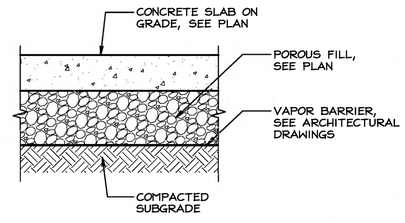
TYPICAL REINFORCED CONCRETE MASONRY CONSTRUCTION
NOT TO SCALE



TYPICAL BEAM BEARING ON MASONRY WALL
NOT TO SCALE



TYPICAL NON-BEARING MASONRY WALL ANCHORAGE
NOT TO SCALE



TYPICAL SLAB ON GRADE
NOT TO SCALE

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NYSED PROJECT # 66-07-01-03-0-004-030

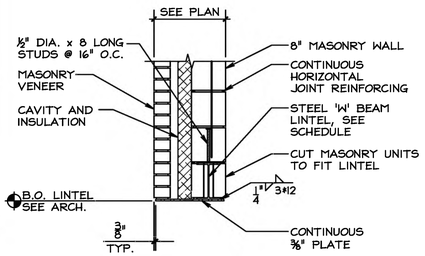
GENERAL NOTES AND TYPICAL DETAILS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

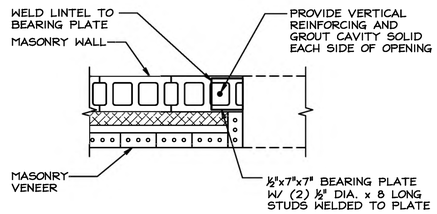
Job No. 4.1092.72.2

File No.

S6.02



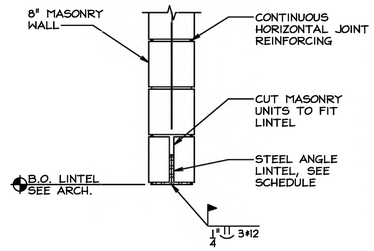
SECTION



PLAN

TYPICAL 'W' LINTEL IN 16" MASONRY CAVITY WALL

NOT TO SCALE



NOTES:

1. BEAR LINTEL 8" MINIMUM BEYOND OPENING. GROUT WALL SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.
2. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS.

TYPICAL ANGLE LINTEL IN 8" MASONRY WALL

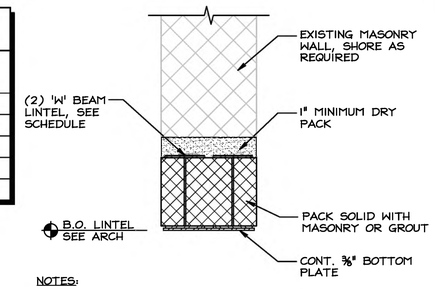
NOT TO SCALE

LINTEL SCHEDULE

MARK	MASONRY OPENING SIZE	NOTES	WALL TYPE	LINTEL SIZE
	6'-4" MAX.	INTERIOR NON-BEARING	8" BLOCK	(2) - L5 x 3 1/2 x 3/8
L-1	6'-4" MAX.	INTERIOR BEARING	8" BLOCK	(2) - L5 x 3 1/2 x 3/8
L-2	6'-4" MAX.	EXTERIOR BEARING	8" BLOCK 4" VENEER	W8x18 W/ CONT. 3/8" x 14" PLATE
L-3	12'-6" MAX.	EXTERIOR BEARING	8" BLOCK 4" VENEER	W12x30 W/ CONT. 3/8" x 14" PLATE
L-4	12'-6" MAX.	EXISTING BEARING	8" BLOCK 4" VENEER	(2) W12x26 W/ CONT. 3/8" PLATE

NOTES

1. THE CONTRACTOR MUST VERIFY ALL MASONRY OPENING SIZES, LOCATIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCY WITH THE INFORMATION SHOWN ON THESE DRAWINGS.
2. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE, QUANTITY AND LOCATION OF OPENINGS IN 8" NON-BEARING MASONRY WALLS AND OPENINGS FOR MECHANICAL SYSTEMS.
3. PROVIDE BEARING PLATE W/ (2) ⅜"x8" LONG STUDS AT EACH END OF ALL 'W' LINTELS PER TYPICAL DETAILS. GROUT BLOCK SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.
4. REFER TO LINTEL DETAILS FOR ADDITIONAL INFORMATION.
5. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS AND REQUIREMENTS.
6. BEAR ALL ANGLE LINTELS 8" MINIMUM EACH END. GROUT BLOCK SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.



NOTES:

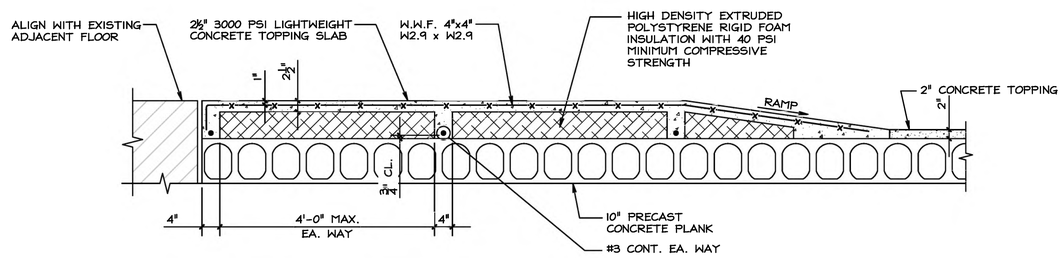
1. BEAR LINTEL 8" MINIMUM BEYOND OPENING. GROUT WALL SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.
2. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS.

TYPICAL 'W' LINTEL IN EXISTING MASONRY WALL

NOT TO SCALE

'W' LINTEL INSTALLATION NOTES

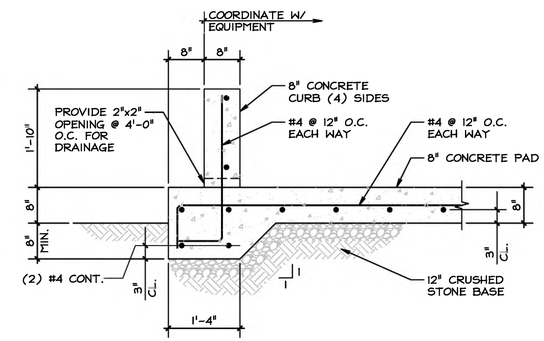
1. INSTALL ANY REQUIRED SHORING OF THE EXISTING CONSTRUCTION. VERIFY THAT THE EXISTING WALL IS STRUCTURALLY SOUND.
2. CUT HOLES IN EXISTING WALL FOR INSTALLATION OF NEW BEARING PLATES AT EACH END OF NEW LINTEL BEAMS.
3. CUT HORIZONTAL SLOT ONE-HALF THE WALL THICKNESS INTO THE EXISTING WALL AT THE LINTEL LOCATION. CARE MUST BE TAKEN TO AVOID DAMAGE TO THE PORTIONS OF THE WALL TO REMAIN.
4. INSTALL FIRST LINTEL BEAM ON ONE SIDE AND CONNECT TO BEARING PLATES. PATCH AND DRY-PACK OVER BEAM TO PROVIDE FULL BEARING OVER LINTEL.
5. CUT HORIZONTAL SLOT THROUGH REMAINDER OF WALL FROM OPPOSITE SIDE TO ACCOMMODATE INSTALLATION OF SECOND LINTEL BEAM. PATCH AND DRY-PACK OVER BEAM TO PROVIDE FULL BEARING.
6. INSTALL BOTTOM FLANGE PLATE AND REPAIR MASONRY.
7. SAWCUT AND REMOVE REMAINING PORTION OF EXISTING WALL BELOW NEW LINTEL AND REPOINT AREA AROUND OPENING TO REPAIR DAMAGED MORTAR JOINTS.



NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT OF RAISED SLAB

TYPICAL RAISED CONCRETE TOPPING SLAB

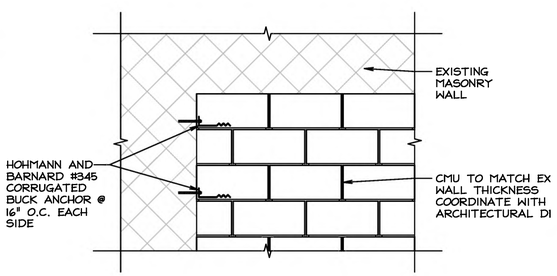
NOT TO SCALE



NOTE: REFER TO CIVIL DRAWINGS FOR PAD SIZE AND LOCATIONS

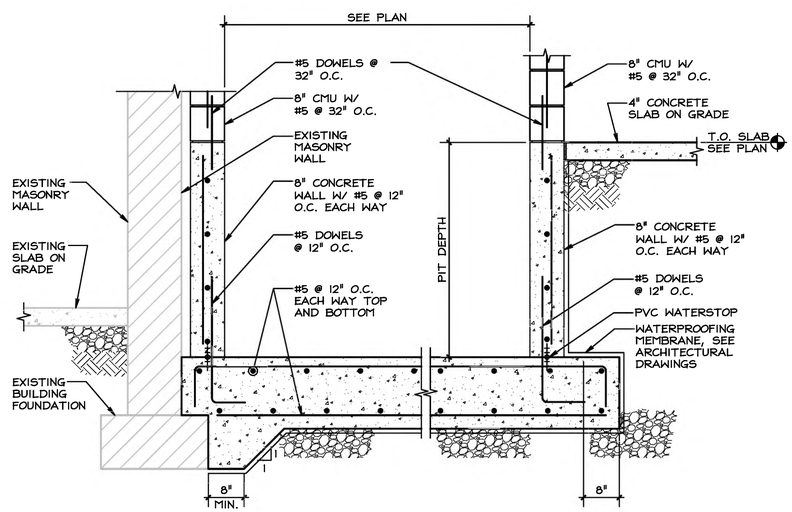
TYPICAL EXTERIOR GENERATOR PAD

SCALE: 3/4" = 1'-0"



TYPICAL MASONRY WALL INFILL AT EXISTING OPENING

NOT TO SCALE

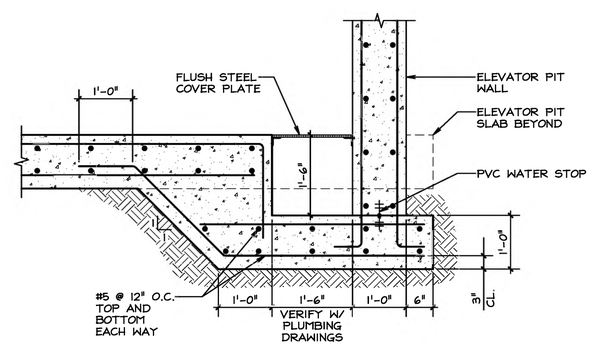


NOTES:

1. VERIFY ELEVATOR PIT DIMENSIONS WITH MANUFACTURER'S REQUIREMENTS.
2. PROVIDE OPENING IN MAT FOR ELEVATOR PLUNGER AS REQUIRED.
3. PROVIDE SUMP PIT PER PLUMBING DRAWINGS. REFER TO TYPICAL DETAIL.

TYPICAL ELEVATOR PIT

NOT TO SCALE



TYPICAL ELEVATOR SUMP PIT

NOT TO SCALE

Micucci Engineering, P.C.
Consulting Structural Engineers
265 South Little Tor Road, Suite 207
New City, New York 10956
Phone: (845) 623-9100

Job No.: 19135 Dwg. 10 of 10

EDWARD P. WILKOWSKI, P.E.
N.Y. License No. : 082493

Date	1/10/20
Checked	EW
Drawn	WR

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

TYPICAL DETAILS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No.

S6.03

DRAWING NOTES:

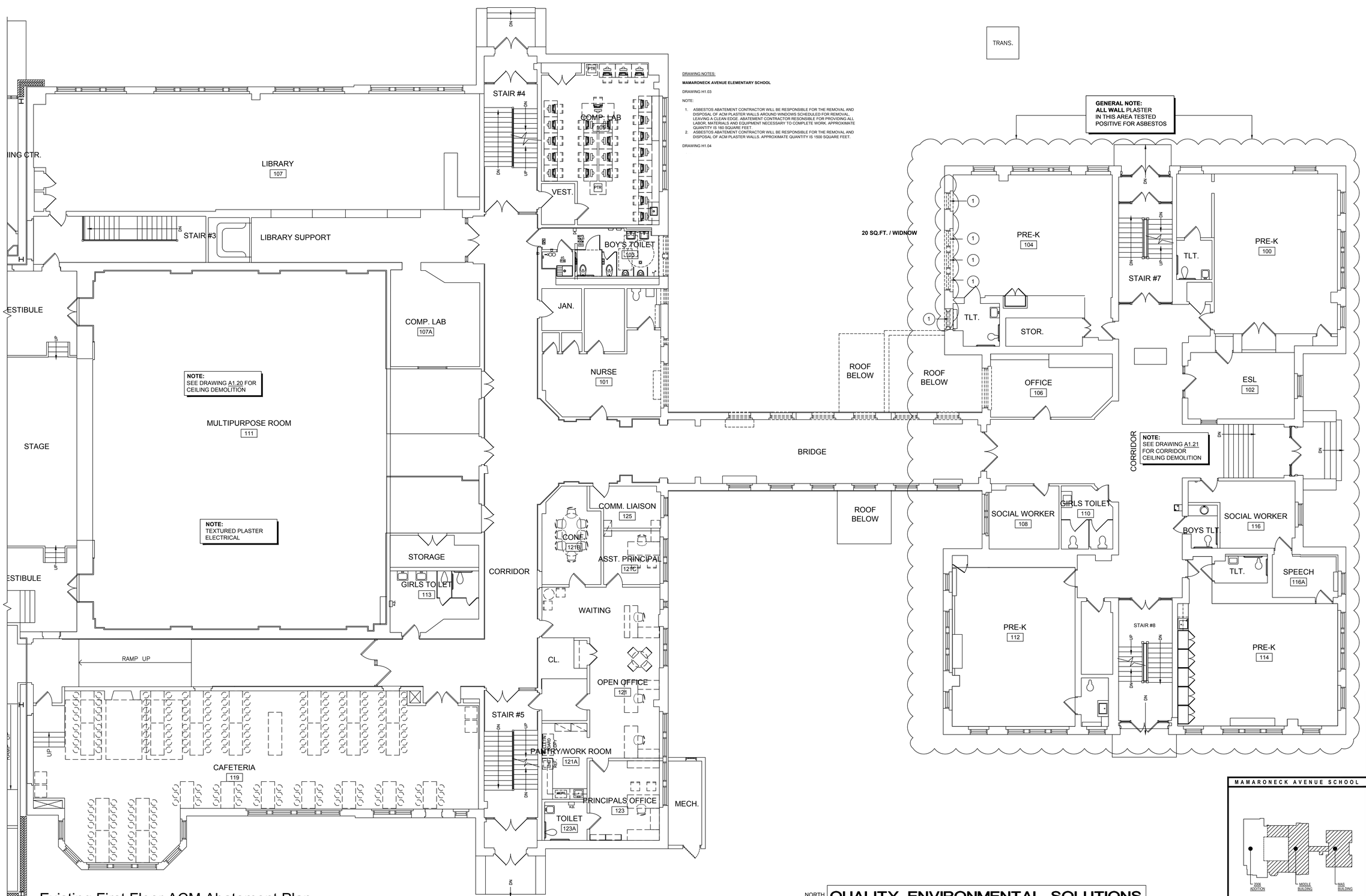
MAMARONECK AVENUE ELEMENTARY SCHOOL

DRAWING H1.03

NOTE:

1. ASBESTOS ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ACM PLASTER WALLS AROUND WINDOWS SCHEDULED FOR REMOVAL, LEAVING A CLEAN EDGE. ABATEMENT CONTRACTOR RESONSIBLE FOR PROVIDING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE WORK. APPROXIMATE QUANTITY IS 160 SQUARE FEET.
2. ASBESTOS ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ACM PLASTER WALLS. APPROXIMATE QUANTITY IS 1500 SQUARE FEET.

DRAWING H1.04



1 H1.03 Existing First Floor ACM Abatement Plan

1/8" = 1'-0"

NORTH

QUALITY ENVIRONMENTAL SOLUTIONS & TECHNOLOGIES, INC.

1376 NYS ROUTE 9, WAPPINGERS FALLS, NY 12590 TEL: (845)298-6031 FAX (845)298-1325

MAMARONECK AVENUE SCHOOL

Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	LG
Drawn	AM

MICHAEL J. McGOVERN, R.A.

Title: REGISTERED ARCHITECT License No. 022257-1

Revisions:

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NYSED PROJECT # 66-07-01-03-0-004-030

EXISTING FIRST FLOOR ABATEMENT PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

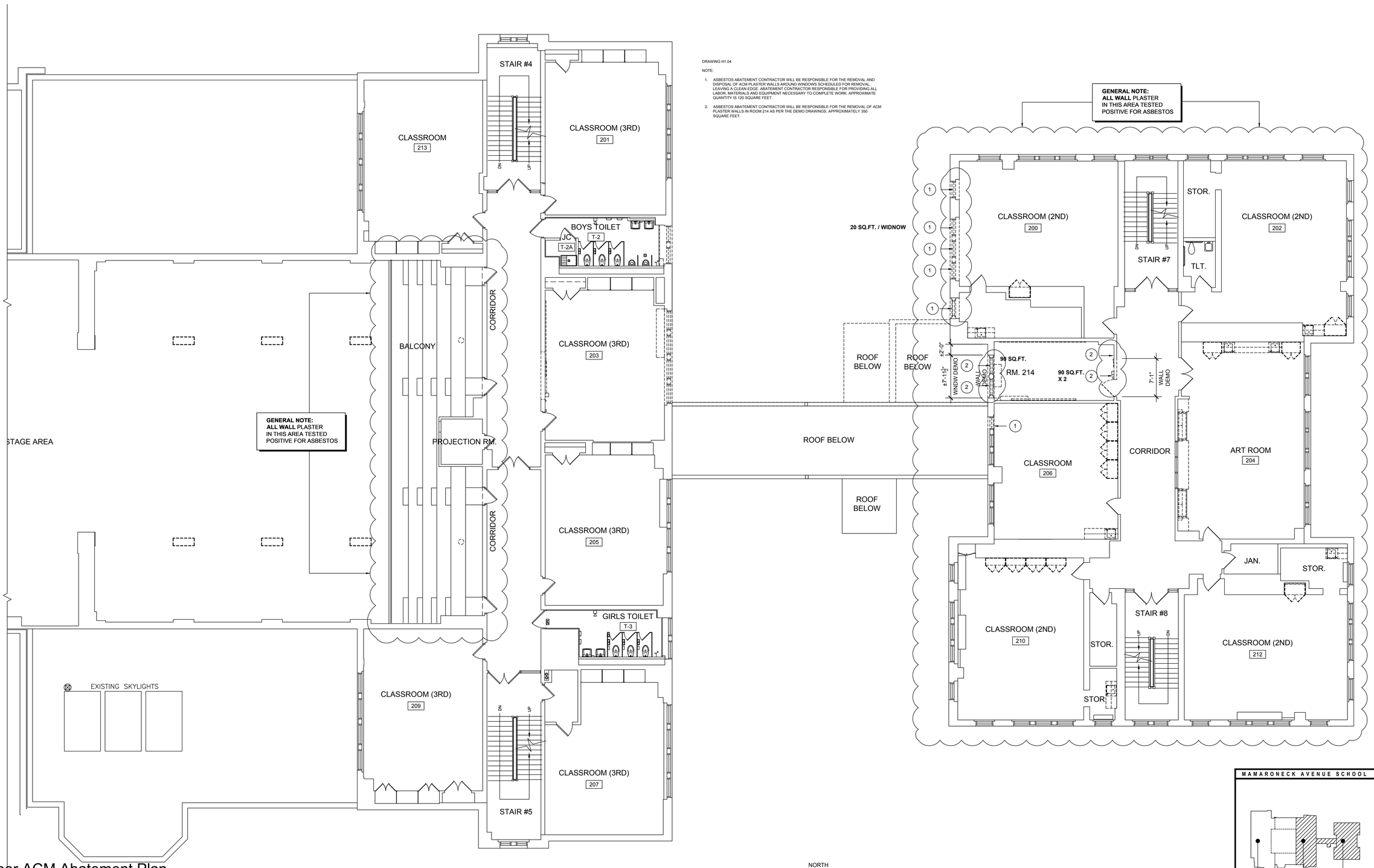
File No. 10927202A101

H1.03

DRAWING H1.04

NOTE:

1. ASBESTOS ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ACM PLASTER WALLS AROUND WINDOWS SCHEDULED FOR REMOVAL, LEAVING A CLEAN EDGE. ABATEMENT CONTRACTOR RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE WORK. APPROXIMATE QUANTITY IS 120 SQUARE FEET.
2. ASBESTOS ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ACM PLASTER WALLS IN ROOM 214 AS PER THE DEMO DRAWINGS. APPROXIMATELY 350 SQUARE FEET.



Second Floor ACM Abatement Plan

H1.04 1/8" = 1'-0"

NORTH

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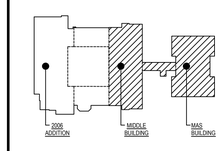
MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	LG
Drawn	AM

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

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NYSED PROJECT # 66-07-01-03-0-004-030

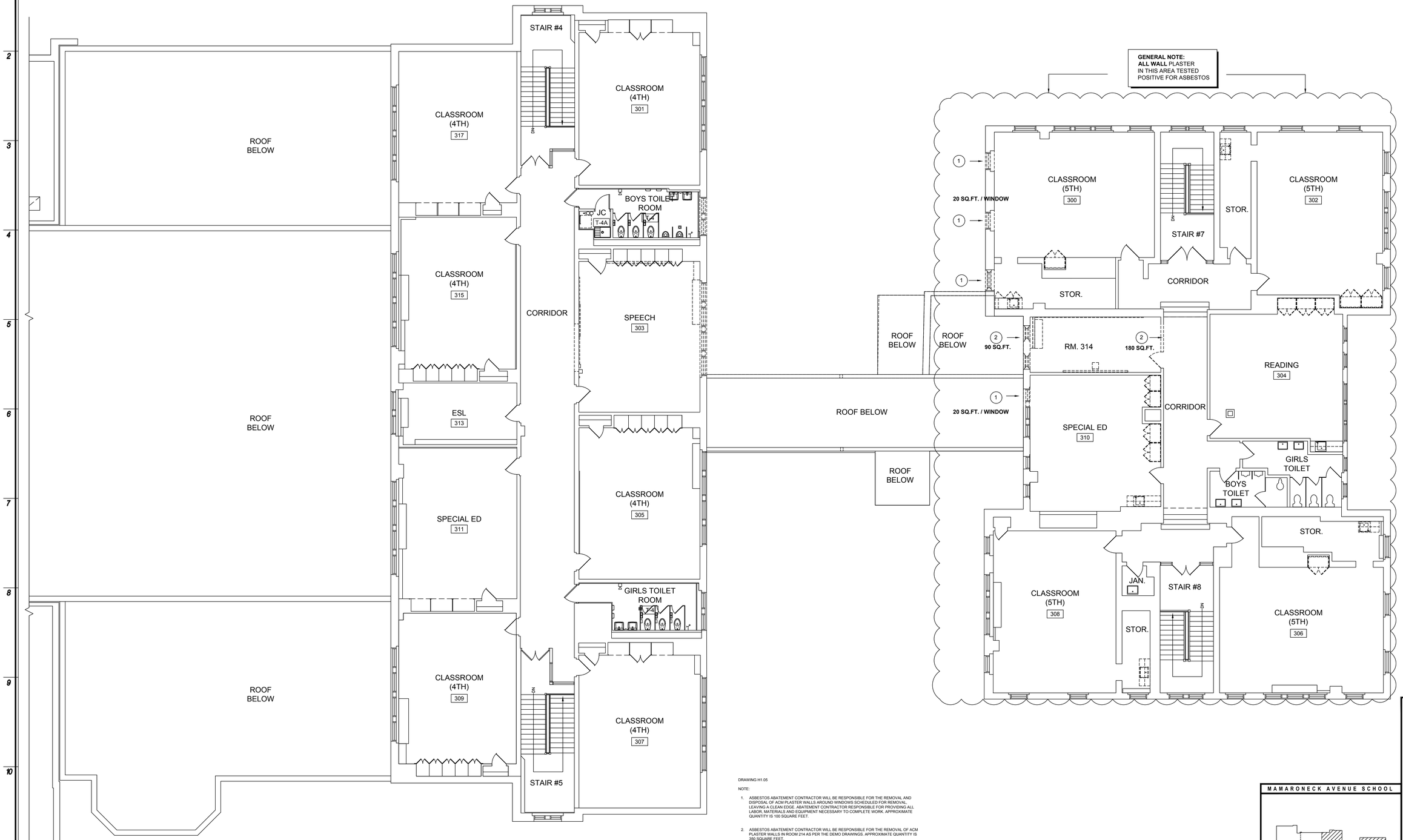
EXIST. SECOND FLOOR ABATEMENT PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A101

H1.04



1 H1.05 Existing Third Floor ACM Abatement Plan

1/8" = 1'-0"

DRAWING H1.05

NOTE:

1. ASBESTOS ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ACM PLASTER WALLS AROUND WINDOWS SCHEDULED FOR REMOVAL, LEAVING A CLEAN EDGE. ABATEMENT CONTRACTOR RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE WORK. APPROXIMATE QUANTITY IS 100 SQUARE FEET.

2. ASBESTOS ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ACM PLASTER WALLS IN ROOM 214 AS PER THE DEMO DRAWINGS. APPROXIMATE QUANTITY IS 350 SQUARE FEET.

NORTH

QUALITY ENVIRONMENTAL SOLUTIONS & TECHNOLOGIES, INC.

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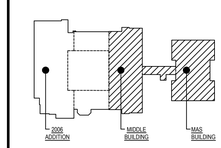
MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	LG
Drawn	AM

MICHAEL J. McGOVERN, R.A.

Title: REGISTERED ARCHITECT License No. 022257-1

Revisions:

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NYSED PROJECT # 66-07-01-03-0-004-030

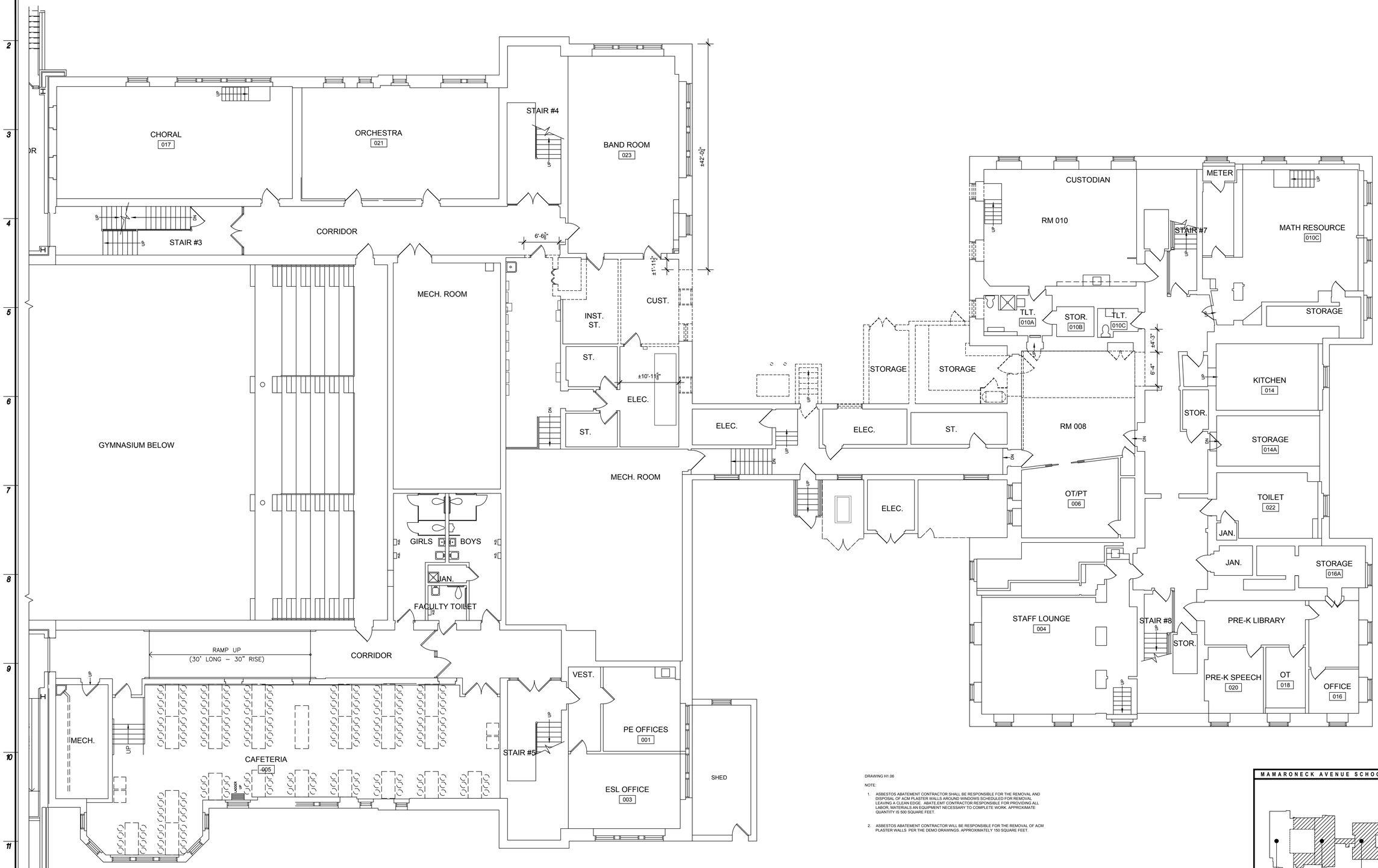
EXIST. THIRD FLOOR ABATEMENT PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272O2A101

H1.05



1
H1.02
Existing Lower Level ACM -Abatement Plan
1/8" = 1'-0"

DRAWING H1.06

NOTE:

1. ASBESTOS ABATEMENT CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ACM PLASTER WALLS AROUND WINDOWS SCHEDULED FOR REMOVAL LEAVING A CLEAN EDGE. ABATE.EMT CONTRACTOR RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS AN EQUIPMENT NECESSARY TO COMPLETE WORK. APPROXIMATE QUANTITY IS 500 SQUARE FEET.

2. ASBESTOS ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ACM PLASTER WALLS PER THE DEMO DRAWINGS. APPROXIMATELY 150 SQUARE FEET.

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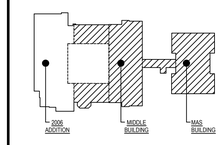
MAMARONECK AVENUE SCHOOL



Key Plan
NOT TO SCALE
PROJECT NORTH

Date	1/10/20
Checked	LG
Drawn	AM

MICHAEL J. McGOVERN, R.A.
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NYSED PROJECT # 66-07-01-03-0-004-030

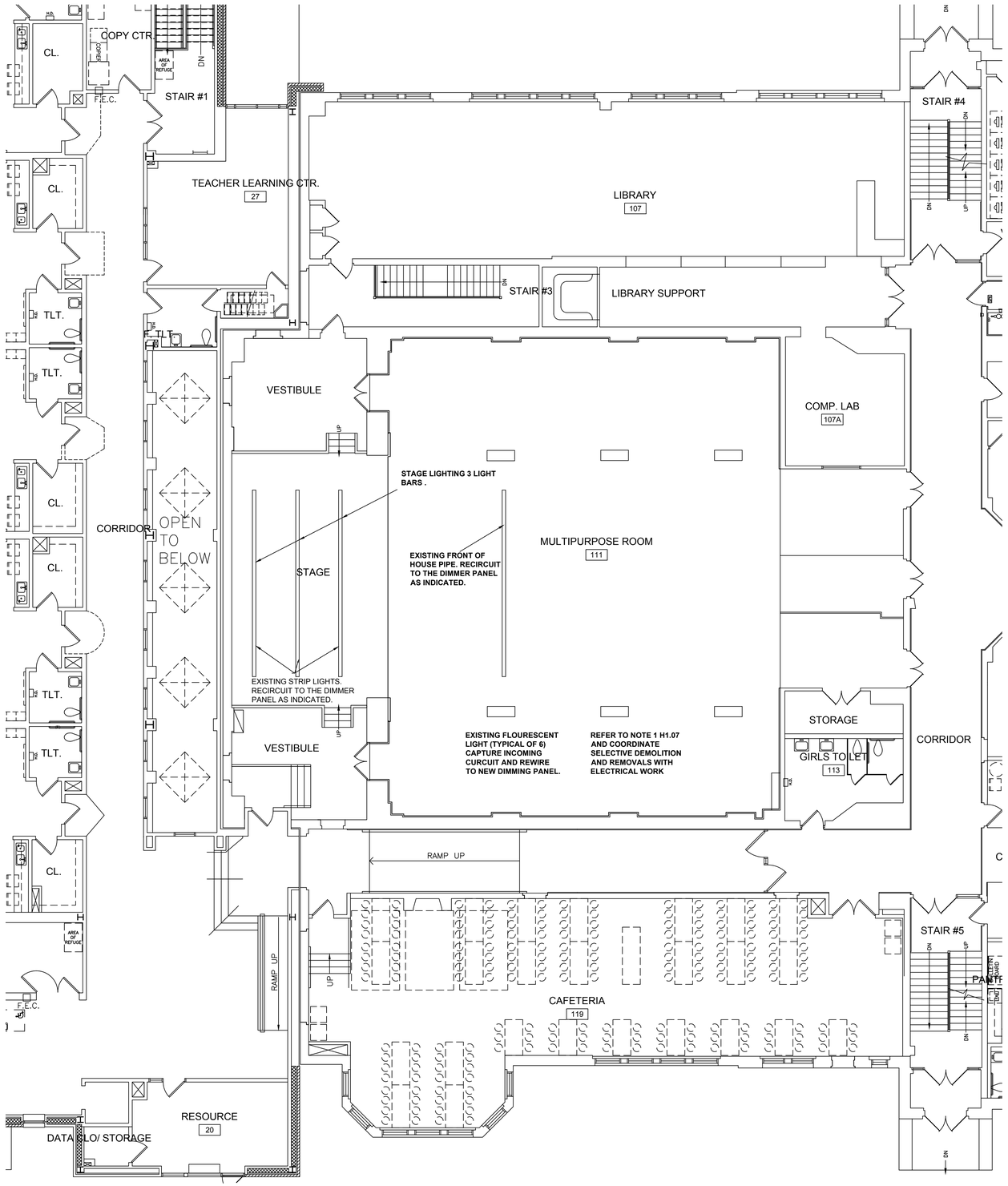
EXIST. LOWER LEVEL ABATEMENT PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A101

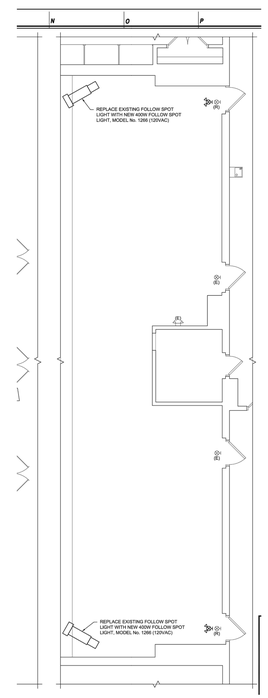
H1.06



DRAWING H1.07

NOTE:

1. ASBESTOS ABATEMENT CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL FRIABLE PRESUMED ASBESTOS CONTAINING WIRING AND INSULATION , INCLUDING BUT NOT LIMITED TO STAGE LIGHTS, HOUSE FIXTURES, CONDUITS, ELECTRICAL BOXES AND WIRING, ETC. AS IDENTIFIED ON THE ELECTRICAL DEMOLITION DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL ELECTRICAL CIRCUIT DISCONNECTS AND PERFORM LOCKOUT-TAGOUT OF ALL CIRCUITS AND EQUIPMENT THAT COULD BE INADVERTENTLY ENERGIZED.



QUALITY ENVIRONMENTAL SOLUTIONS & TECHNOLOGIES, INC.

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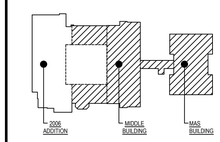
MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	LG
Drawn	AM

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

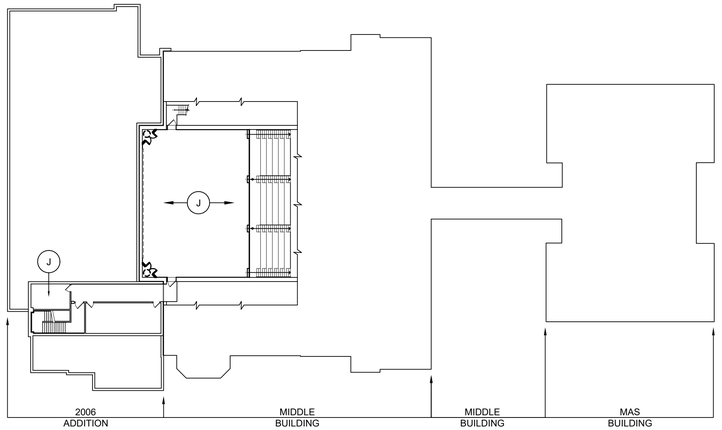
EXISTING FIRST FLOOR ABATEMENT PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A101

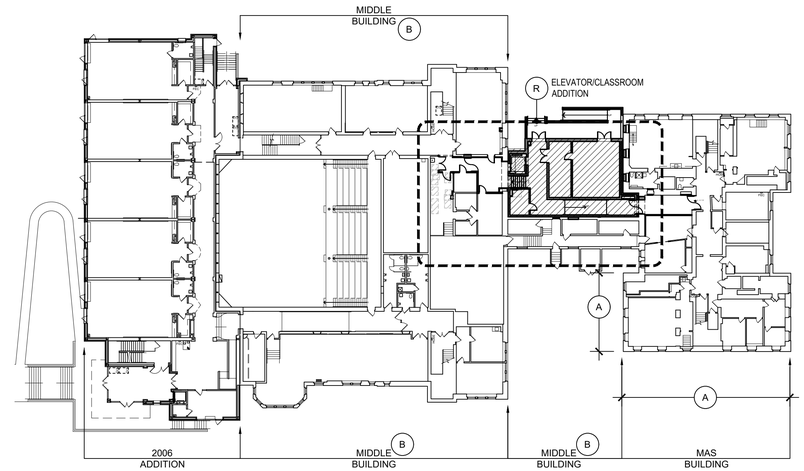
H1.07



1 A0.01 Basement - Key Plan

1/32" = 1'-0"

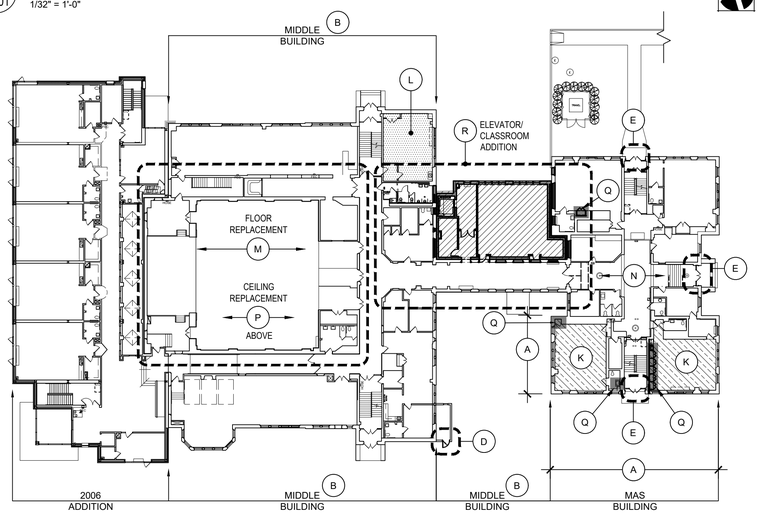
NORTH



2 A0.01 Lower Level - Key Plan

1/32" = 1'-0"

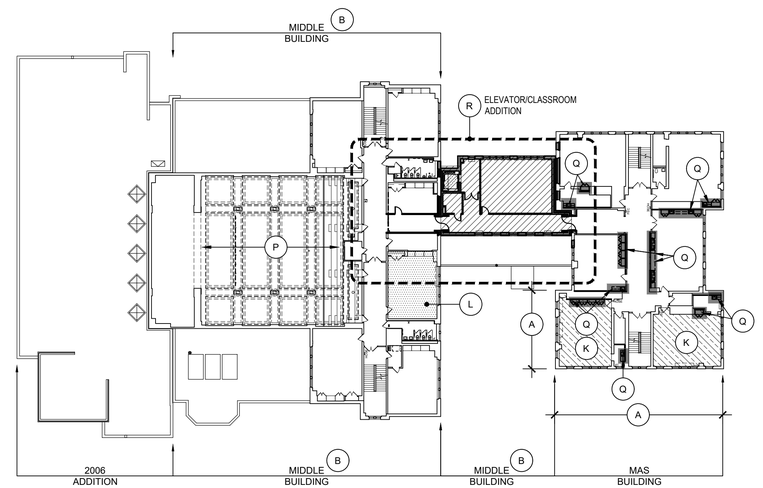
NORTH



3 A0.01 First Floor - Key Plan

1/32" = 1'-0"

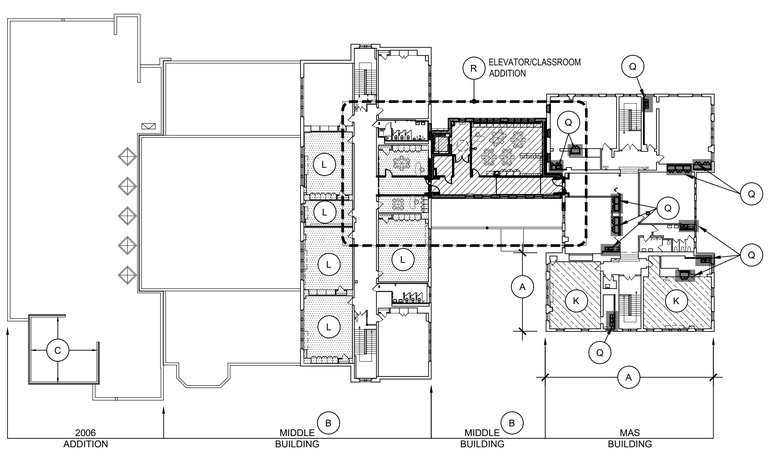
NORTH



4 A0.01 Second Floor - Key Plan

1/32" = 1'-0"

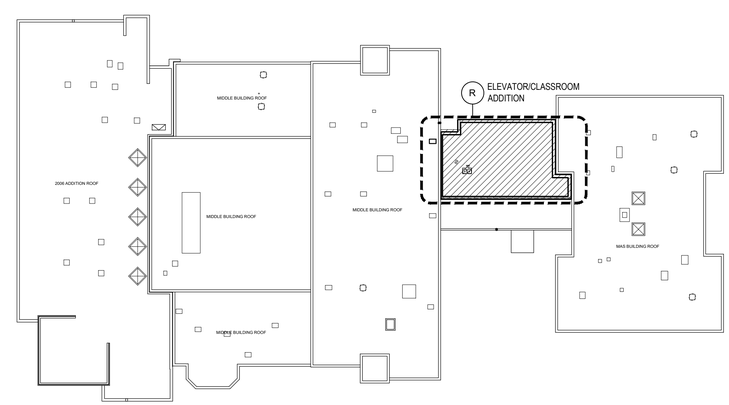
NORTH



5 A0.01 Third Floor - Key Plan

1/32" = 1'-0"

NORTH



6 A0.01 Roof - Key Plan

1/32" = 1'-0"

NORTH

LEGEND:

	AREA OF CLASSROOM CASEWORK REPLACEMENT
	AREA OF PROPOSED ADDITIONS
	AREA OF WOOD FLOOR REMOVAL AND REPLACEMENT WITH NEW FINISHES
	AREA OF CLASSROOM SUBFLOOR AND FLOOR FINISH REPLACEMENT
X	AREA OF WORK: REFER TO "SCOPE OF WORK" DESCRIPTIONS FOR ADD'L. INFORMATION

SCOPE OF WORK ITEMS & ALTERATION DESIGNATION

	SCOPE ITEM	ALTERATION LEVEL
A	EXTERIOR MASONRY FACADE RESTORATION. REFER TO DRAWINGS A3.01 - A3.03 FOR ADDITIONAL INFORMATION.	1
B	EXTERIOR MASONRY REPAIR AND RE-POINTING. REFER TO DRAWINGS A3.01 - A3.03 FOR ADDITIONAL INFORMATION.	1
C	EXTERIOR STUCCO REPAIR, REFER TO DRAWING A2.06 FOR ADDITIONAL INFORMATION.	1
D	EXTERIOR SERVICE DOOR REPLACEMENT, REFER TO DRAWING A2.03 FOR ADDITIONAL INFORMATION.	1
E	EXTERIOR DOOR TRIM RESTORATION, REFER TO DRAWING A8.30 FOR ADDITIONAL INFORMATION.	1
F	**RESERVED**	-
G	**RESERVED**	-
H	**RESERVED**	-
J	GYMNASIUM WATERPROOFING IMPROVEMENTS, REFER TO DRAWING A2.01 FOR ADDITIONAL INFORMATION.	2
K	CLASSROOM SUBFLOOR AND FLOOR FINISH REPLACEMENT - MAS BUILDING, REFER TO DRAWINGS A2.20, A2.21 & A8.30.	2
L	CLASSROOM WOOD FLOOR REMOVAL AND REPLACEMENT WITH NEW FINISHES, REFER TO DRAWINGS A2.20, A2.21 & A8.30.	1
M	MULTI-PURPOSE ROOM WOOD FLOOR REPLACEMENT, REFER TO DRAWINGS A2.20 & A8.30.	1
N	DECORATIVE CEILING REPLACEMENT - FIRST FLOOR CORRIDOR - MAS BUILDING, REFER TO DRAWINGS A1.21 & A5.10.	1
P	MULTI-PURPOSE ROOM CEILING REPAIR/REPLACEMENT, REFER TO DRAWINGS A1.20 & A5.11.	1
Q	CLASSROOM CASEWORK REPLACEMENT - MAS BUILDING, REFER TO DRAWINGS A7.03 - A7.06.	1
R	ELEVATOR AND CLASSROOMS ADDITION, REFER TO DRAWINGS A2.10 - A2.14.	ADDITION

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	MJM
Drawn	LH

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

1 ISSUE TO BID 11/23/20

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OVERALL KEY PLANS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A001

A0.01

Legend (REFER TO DEMOLITION FLOOR PLANS)

SYMBOL	DESCRIPTION
	EXISTING PARTITION TO REMAIN
	EXISTING PARTITION TO BE REMOVED/ DEMOLISHED
	REMOVE PORTION OF EXISTING PARTITION TO DIMENSION SHOWN.
	EXISTING DOOR/FRAME TO BE REMOVED
	EXISTING SUSPENDED CEILING TO BE REMOVED
	EXISTING PLASTER CEILING TO BE REMOVED

General Notes

1. DIMENSIONS SHOWN ARE FROM FACE OF FINISH MATERIALS (+/-) UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS.
3. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF AREAS TO BE DEMOLISHED AND ADJACENT FACILITIES TO REMAIN.
4. THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES ONLY WITHIN THE ALLOWABLE HOURS OF OPERATION ON WEEKDAYS AND WEEKENDS IN ACCORDANCE WITH THE LOCAL NOISE ORDINANCE. THE CONTRACTOR SHALL CONSULT THE LOCAL MUNICIPALITY FOR ACCEPTABLE HOURS.
5. CONTRACTOR IS REQUIRED TO PATCH (TO MATCH EXISTING), IMMEDIATELY AFTER REMOVAL, ALL WALL, FLOOR & CEILING OPENINGS WHERE EXISTING PIPE, DUCT, CONVECTORS, ETC. ARE BEING REMOVED. SEAL OPENING WITH 3 HOUR BARRIER CAULK AS PER FIRESTOPPING SPECIFICATIONS. REFER TO FIRESTOPPING DETAILS FOR ADDITIONAL INFORMATION.

MULTIPLE PRIME CONTRACTOR ABBREVIATIONS

ALL REFERENCES TO "CONTRACTOR" IN NOTES SHALL REFER TO THE PRIME CONTRACTOR RESPONSIBLE FOR DRAWING SERIES THE NOTE IS FOUND ON, UNLESS NOTED OTHERWISE. ABBREVIATIONS FOR PRIME CONTRACTORS ARE AS FOLLOWS:

GC - GENERAL CONTRACTOR
MC - MECHANICAL CONTRACTOR
EC - ELECTRICAL CONTRACTOR
PC - PLUMBING CONTRACTOR

MULTIPLE PRIME CONTRACT NOTES:

1. SEE SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS AND 010101 - MULTIPLE CONTRACT SUMMARY FOR INFORMATION REGARDING RESPONSIBILITY OF EACH PRIME CONTRACTOR AND REQUIRED COORDINATION.
2. ALL PRIME CONTRACTORS ARE RESPONSIBLE FOR REVIEWING DEMOLITION NOTES ON A1.00 AS WELL AS ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND NOTES.

CORE DRILL LAYOUT NOTES:

1. CORE DRILLING SHALL BE PERFORMED BY EACH INDIVIDUAL PRIME CONTRACT. REFER TO SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS. FOR ADDITIONAL INFORMATION.
2. EACH PRIME CONTRACTOR SHALL FIELD VERIFY AND MARK ON PLANS ALL STRUCTURAL MEMBERS BELOW PROPOSED CORE DRILL LOCATIONS AND NOTE ANY INTERFERENCES ON THE DRAWINGS. ANY DISCREPANCIES BETWEEN PROPOSED PLANS AND EXISTING CONDITIONS SHALL BE CLEARLY MARKED AND IDENTIFIED ON THE LAYOUTS AND PRESENTED TO THE ARCHITECT FOR REVIEW.

HAZARDOUS MATERIALS NOTES:

ASBESTOS:
GENERAL CONTRACTOR (GC) SHALL PERFORM ASBESTOS ABATEMENT IN ACCORDANCE WITH CONTRACT DOCUMENTS AND SPECIFICATION SECTION 028200 FOR ASBESTOS ABATEMENT PROCEDURES.

LEAD:
GENERAL CONTRACTOR (GC) SHALL REFER TO SPECIFICATION SECTION 020010 - LEAD ABATEMENT PROCEDURES.

Demolition Key Notes

SYMBOL INDICATES DEMOLITION KEY NOTE

1. **INTERIOR PARTITION DEMOLITION:** GC TO REMOVE A PORTION OF OR ALL OF THE EXISTING INTERIOR PARTITION, INCLUDING WALL BASE, GWB, STUDS, ELECTRICAL OUTLETS, SWITCHES, ETC. EC TO TERMINATE ALL ELECTRICAL COMPONENTS IN ACCORDANCE WITH NEC REQUIREMENTS. GC TO TEMPORARILY BRACE AND SHORE ALL REMAINING WALLS, FLOORS, AND CEILINGS AS REQUIRED PRIOR TO DEMOLITION.
2. **EXTERIOR WALL DEMOLITION:** GC TO REMOVE PORTION OF OR ALL OF EXISTING EXTERIOR WALL CONSTRUCTION INCLUDING MASONRY, WALL FRAMING, INTERIOR FINISHES, ETC. EC TO TERMINATE ALL ELECTRICAL COMPONENTS IN ACCORDANCE WITH NEC REQUIREMENTS. GC TO TEMPORARILY BRACE AND SHORE ALL REMAINING WALLS, FLOORS, AND CEILINGS AS REQUIRED PRIOR TO DEMOLITION.
3. **DOOR DEMOLITION:** GC TO REMOVE EXISTING DOOR, HINGES, FRAME, HARDWARE, CLOSER, ETC. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
4. **EXTERIOR WINDOWS:** GC TO REMOVE EXISTING EXTERIOR WINDOWS, JAMBS, SILLS, SASHES, INTERIOR TRIM, ETC IN THEIR ENTIRETY. EXISTING LINTEL ABOVE SHALL REMAIN UNLESS NOTED OTHERWISE.
5. **FLOOR FINISH DEMOLITION:** GC TO REMOVE EXISTING FLOOR FINISH MATERIAL AND ANY ASSOCIATED ADHESIVES, NAILERS, ETC. DOWN TO EXISTING SUB-FLOOR. PREP SUB-FLOOR AS REQUIRED FOR INSTALLATION OF NEW FINISH FLOOR. SEE PROPOSED PLANS FOR ADDITIONAL INFORMATION.
6. **CASEWORK:** GC TO REMOVE AND DISCARD OF EXISTING CASEWORK INCLUDING, COUNTERS, DOORS, HINGES, BLOCKING, SINKS, ETC. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
7. **SINK DEMOLITION:** PC TO REMOVE EXISTING SINK IN ITS ENTIRETY. PC TO DISCONNECT ALL PLUMBING CONNECTIONS AND CAP AS REQUIRED PRIOR TO SINK REMOVAL. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
8. **ACOUSTICAL CEILING TILE & GRID DEMOLITION:** GC TO REMOVE AND DISCARD EXISTING SUSPENDED CEILING AND TILE, INCLUDING CEILING GRID, WALL ANGLES, SUPPORT WIRES, CLIPS, TIES, ETC.
9. **LIGHTING DEMOLITION:** EC TO DEMO EXISTING LIGHTING IN ITS ENTIRETY. EC TO TERMINATE ALL ELECTRICAL CONNECTIONS IN PER NEC REQUIREMENTS. SEE ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION. CONFER WITH OWNER FOR SALVAGE PRIOR TO DEMOLITION.
10. **HVAC DIFFUSERS & RETURN AIR GRILLES:** MC TO REMOVE EXISTING SUPPLY DIFFUSERS, RETURN AIR GRILLES, AND/OR LOUVERS IN THEIR ENTIRETY. SEE MECHANICAL DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION.
11. GC TO DEMO EXISTING OUTDOOR STORAGE BUILDINGS IN THEIR ENTIRETY. EC TO DISCONNECT AND TERMINATE ANY AND ALL ELECTRICAL RECEPTACLES, LIGHTING FIXTURES, SWITCHES, CONDUIT, JUNCTION BOXES, ETC. IN THEIR ENTIRETY. MC TO DISCONNECT AND DEMO ANY AND ALL HVAC EQUIPMENT, INCLUDING HEATERS, FANS, ETC.
12. MC TO DISCONNECT, REMOVE AND RELOCATE EXISTING COMPRESSOR AND ASSOCIATED PIPING, FILTERS, ETC. IN ITS ENTIRETY. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
13. GC TO REMOVE EXISTING EXTERIOR CONCRETE STAIRCASE AND RETAINING WALL IN THEIR ENTIRETY AND DISCARD IN AN APPROVED MANNER.
14. GC TO CLEAN AND SCRAPE EXISTING WOOD DOORWAY TRIM AT EXTERIOR DOORS AND PREP FOR NEW FINISH. SEE DETAIL 9/A8.30 FOR ADDITIONAL INFORMATION.
15. GC TO CLEAN ALL EXISTING MECHANICAL DIFFUSERS & GRILLES TO LIKE NEW CONDITION, TYPICAL
16. GC TO SCRAPE AND CLEAN EXISTING CEILING SYSTEM INCLUDING THE PRIMARY FIELD, RECESSED FIELDS AND VERTICAL FACES INSIDE THE RECESSED COVES,TYPICAL UNLESS OTHERWISE NOTED.
17. GC TO REMOVE & DISCARD EXISTING 12"x12" GLUED IN PLACE CEILING TILES. EXISTING LIGHTING TO REMAIN UNLESS OTHERWISE NOTED.
18. EXISTING PENDANT MOUNTED LIGHT FIXTURE, TO REMAIN, TYPICAL. EC TO TEMPORARILY SUPPORT ALL FIXTURES FOR GC WORK.
19. EXISTING PLASTER STYLE RELIEF MOLDING TO REMAIN. GC SHALL CAREFULLY CLEAN AND RESTORE TO LIKE NEW CONDITION, TYPICAL.
20. GC TO SCRAPE FLAKING PAINT AT THE EXISTING WALLS OF THE MULTI-PURPOSE ROOM AND PATCH EXISTING HOLES, DENTS, DIVOTS, ETC. PREP AS REQUIRED TO RECEIVE NEW PAINT.
21. EXISTING PROSCENIUM WALL TO REMAIN. GC SHALL CAREFULLY CLEAN AND RESTORE PLASTER MOLDING TO LIKE NEW CONDITION, TYPICAL.
22. EXISTING SMOKE DETECTOR, EMERGENCY LIGHT, EXIT SIGN, PA SPEAKER, HORN STROBE OR RELATED DEVICE TO REMAIN, EC TO TEMPORARILY SUPPORT & PROTECT DURING CONSTRUCTION. COORDINATE WITH GC.
23. EXISTING SURFACE MOUNTED LIGHTING FIXTURE TO REMAIN. EC TO TEMPORARILY SUPPORT AS REQUIRED FOR GC WORK. COORDINATE WITH GC.
24. EXISTING PENDANT MOUNTED STAGE LIGHTING SYSTEM TO REMAIN. EC TO TEMPORARILY SUPPORT AS REQUIRED FOR GC WORK. COORDINATE WITH GC.
25. EXISTING PLASTER MOLDING TO REMAIN. STYLE 'C' IS TO BE STRIPPED OF PAINT AND REPAIRED TO LIKE NEW CONDITION. GC SHALL INCLUDE REPLACEMENT OF 200 LINEAR FEET IN LIKE AND KIND AS PART OF THE SCOPE OF WORK. PROVIDE A LINEAR FOOT UNIT PRICE ON THE BID FORM IF THE QUANTITY IS MORE THAN, OR LESS THAN 200 LINEAR FEET. REFER TO UNIT PRICE SPEC SECTION 012200. SEE DRAWING A5.01 FOR ADDITIONAL INFORMATION.
26. EC TO REMOVE, RELOCATE AND REWIRE EXISTING SMOKE DETECTOR OR RELATED DEVICE. EC TO ENSURE THE WIRING PATH IS CONCEALED ABOVE THE CEILING SYSTEM.
27. EC TO REMOVE AND RELOCATE EXISTING LOW VOLTAGE WIRE MOLD. EC TO RE-ROUTE AND CONSOLIDATE WIRING AS NECESSARY TO MINIMIZE QUANTITY OF NEW WIRE MOLD, AND CONCEAL ABOVE CEILING, TYPICAL.
28. EC TO REMOVE, SALVAGE AND REINSTALL EXISTING LIGHT FIXTURE. EC TO MODIFY LOCATION AS NECESSARY TO COORDINATE WITH NEW CEILING GRID LAYOUT, TYPICAL FOR ALL CEILING MOUNTED LIGHTS.
29. EXISTING SPRINKLER HEAD AND PIPING LOCATED BELOW THE CEILING IS TO REMAIN, EXACT LOCATION TO BE VERIFIED IN THE FIELD, TYPICAL.
30. GC TO REMOVE EXISTING METAL CEILING SYSTEM AND CONCEALED PLASTER ON LATHE, TYPICAL. SEE DETAIL 2/A1.21 FOR ADDITIONAL INFORMATION.
31. GC TO COORDINATE WORK WITH EXISTING VERTICAL SPRINKLER PIPE AND CEILING REMOVAL/INSTALLATION, TYPICAL.
32. GC TO REMOVE EXISTING CROWN MOLDING AND ADJACENT BOARDER FILL PANEL, TYPICAL. SEE DETAIL 2/A1.21 FOR ADDITIONAL INFORMATION.
33. EXISTING BALUSTRADE POSTS AT STAIR LANDING ABOVE TO REMAIN, TYPICAL.
34. EXISTING SOFFIT TO REMAIN. MECHANICAL UNIT CONCEALED BEHIND SOFFIT.
35. GC TO DEMO EXISTING WOOD FLOOR AND 2"X2" SLEEPER FRAMING SYSTEM. GC IS NOT TO DISTURB THE EXISTING 2"X3" EMBEDDED WOOD SLEEPERS AND ADJACENT CINDER FILL, TYPICAL UNLESS NOTED OTHERWISE. REFER TO DETAIL 2/A8.30 FOR ADDITIONAL INFORMATION.
36. GC TO DEMO EXISTING FLOOR FINISHES (VINYL AND BRICK PAVERS) AND APPROXIMATELY 3 $\frac{1}{2}$" OF CEMENTITIOUS FILL. EXISTING CINDER FILL AND ADJACENT 2"X3" EMBEDDED WOOD SLEEPERS ARE TO REMAIN, REFER TO DETAIL 4/A8.30 FOR ADDITIONAL INFORMATION.
37. GC TO DEMO EXISTING VINYL FLOOR FINISH & WOOD SUBSTRATE. GC IS NOT TO DISTURB THE EXISTING 2"X3" EMBEDDED WOOD SLEEPERS AND ADJACENT CINDER FILL, TYPICAL UNLESS NOTED OTHERWISE. REFER TO DETAIL 6/A8.30 FOR ADDITIONAL INFORMATION.
38. GC TO DEMO EXISTING WOOD FLOORING SYSTEM. GC IS NOT TO DISTURB THE EXISTING 2"X2" SLEEPER FRAMING SYSTEM, EXISTING 2"X3" EMBEDDED WOOD SLEEPERS AND ADJACENT CINDER FILL, TYPICAL UNLESS NOTED OTHERWISE. REFER TO DETAIL 8/A8.30 FOR ADDITIONAL INFORMATION.
39. EXISTING SKYLIGHT TO REMAIN, TYPICAL.
40. GC TO DEMO EXISTING COAL CHUTE AND FRAME IN ITS ENTIRETY. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
41. EC TO TEMPORARILY SUPPORT EXISTING ELECTRICAL METER. COORDINATE WITH GC WORK TO REMOVE AND REINSTALL NEW PARTITION.
42. PC TO RE-ROUTE EXISTING SANITARY, ROOF DRAIN, AND CONDENSATE PIPING AS REQUIRED. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
43. GC TO REMOVE EXISTING INCINERATOR IN ITS ENTIRETY, INCLUDING INCINERATOR DOORS, AND ASH REMOVAL DOORS BELOW. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL..
44. GC TO REMOVE EXISTING PIPE CHASE AT FLOOR IN ITS ENTIRETY. PC TO RE-ROUTE PIPING FOUND IN CHASE. EC TO RELOCATE ANY CONDUIT FOUND IN CHASE. SEE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
45. GC TO DEMO EXISTING SHELVING UNIT IN OUTDOOR STORAGE UNIT. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
46. GC TO DEMO EXISTING THRU-WALL LOUVER IN ITS ENTIRETY. COORDINATE WITH MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
47. GC TO CAREFULLY REMOVE & SALVAGE EXISTING DEDICATION BRICKS IN MULTI-PURPOSE ROOM FLOOR AND DEMO UNDERLAYMENT TO EXPOSE EXISTING CINDER FILL UNDERNEATH. GC SHALL PHOTO-DOCUMENT ALL BRICKS PRIOR TO REMOVAL. GC SHALL TURN DEDICATION BRICKS OVER TO OWNER FOR REINSTALLATION. COORDINATE WITH DEMOLITION OF ADJACENT FLOOR SURFACES.
48. MC TO DEMO EXISTING MECHANICAL UNIT. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
49. GC TO DEMO EXISTING THRU-WALL SCUPPER AT ROOF IN ITS ENTIRETY.
50. GC TO TEMPORARILY REMOVE EXISTING WALL PADS AS REQUIRED TO INSTALL NEW FLOORING SYSTEM. GC SHALL PROTECT PADS DURING STORAGE FROM DAMAGE, RIPS, TEARS, ETC. REINSTALL WHEN FLOORING WORK IS COMPLETE.
51. GC TO DEMO EXISTING FLOOR REGISTER FOR HVAC SYSTEM AT MULTI-PURPOSE ROOM. PREP DUCTWORK BELOW AS REQUIRED TO RECEIVE NEW REGISTER.
52. EC TO DEMO EXISTING FLOOR MOUNT ELECTRICAL BOX IN ITS ENTIRETY. TEMPORARILY TERMINATE ALL CONNECTIONS PER NEC REQUIREMENTS. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
53. GC SHALL CUT EXISTING CHAIR RAIL TO ACCOMODATE NEW OPENING IN EXISTING WALL. GC SHALL SCRAPE, SAND AND PREP EXISTING CHAIR RAIL TO RECEIVE NEW FINISH. GC TO FINISH CUT END OF CHAIR RAIL TO MATCH. COLOR PER OWNER'S SELECTION.
54. GC SHALL REMOVE EXISTING VINYL FLOOR TILE TO EXPOSE SUB-FLOOR UNDERNEATH. GC SHALL PREP EXISTING SUB-FLOOR AS REQUIRED TO RECEIVE NEW FILL MATERIAL TO RAISE FLOOR. SEE PROPOSED PLANS FOR ADDITIONAL INFORMATION.
55. EXISTING SINK TO REMAIN.
56. EXISTING SWITCHGEAR TO REMAIN.
57. GC TO REMOVE EXISTING METAL PLATE & BLOCKING BEHIND IN ITS ENTIRETY TO EXPOSE EXISTING OPENING.
58. GC TO DEMO EXISTING CLOSURE AROUND EXISTING COMPRESSOR IN ITS ENTIRETY..
59. EXISTING ELECTRICAL PANELS TO REMAIN UNLESS NOTED OTHERWISE. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
60. GC TO REMOVE EXISTING ASPHALT PAVEMENT, CONCRETE CURBING, GRASS AREA, ETC. TO ACCOMMODATE NEW ELEVATOR & CLASSROOM ADDITION. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
61. EC TO DISCONNECT EXISTING GENERATOR IN ITS ENTIRETY. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
62. GC TO DEMO EXISTING CHAIN LINK FENCE IN ITS ENTIRETY INCLUDING GATES, POSTS, LATCHES, ETC.
63. GC TO DEMO EXISTING BOLLARDS IN THEIR ENTIRETY, TYPICAL.
64. GC TO DEMO EXISTING ABANDONED CONCRETE TRANSFORMER PAD IN ITS ENTIRETY.
65. GC TO REMOVE EXISTING WALL FINISH FOR MC TO REMOVE ABANDON RADIATOR WITHIN WALL. COORDINATE WITH MC.
66. EXISTING FLOORING TO REMAIN, TYPICAL.
67. GC SHALL LEVEL/PATCH EXISTING SUB-FLOOR TO RECEIVE NEW FLOOR FINISH. SEE FLOOR FINISH PLANS & SCHEDULE FOR ADDITIONAL INFORMATION.
68. GC TO MODIFY EXISTING ROOF PARAPET TO ACCOMMODATE NEW EXTERIOR WALL ABOVE, SEE PROPOSED ROOF PLANS & SECTION DRAWINGS FOR ADDITIONAL INFORMATION.
69. EXISTING CEILING TO REMAIN.
70. GC TO DEMO EXISTING WINDOW UNIT. ADJACENT WINDOWS IN UNIT TO REMAIN.
71. MC TO DEMO EXISTING PIPE CHASE ENCLOSURE AND PIPING AS REQUIRED. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
72. EXISTING CASEWORK TO REMAIN. PROTECT DURING CONSTRUCTION.
73. GC TO DEMO EXISTING THRU-WALL SCUPPER IN ITS ENTIRETY & INFILL OPENING.SEE PROPOSED PLAN FOR ADDITIONAL INFORMATION AND NEW SCUPPER LOCATION.
74. GC TO DEMO EXISTING BUILT-OUT CHASE. MC TO TERMINATE AND REMOVE ANY PIPING WITHIN CHASE. EC TO DEMO ANY EXISTING CONDUIT WITHIN CHASE. SEE MECHANICAL AND ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
75. GC TO DEMO EXISTING BASE MOLDING, TYPICAL.
76. GC TO DEMO EXISTING WALL-MOUNTED TACK STRIP, TYPICAL.
77. EC TO CAREFULLY REMOVE AND SALVAGE EXISTING WALL-MOUNT CLOCK. EC SHALL RETURN CLOCK TO OWNER. GC TO PATCH/REPAIR WALL AS REQUIRED.
78. EC TO CAREFULLY REMOVE AND SALVAGE EXISTING WALL-MOUNT PA SPEAKER. EC SHALL RETURN PA SPEAKER TO OWNER. GC TO PATCH/REPAIR WALL AS REQUIRED.
79. GC TO DEMO EXISTING WALL MOUNT HAND SANITIZER UNIT. CONFER WITH OWNER FOR SALVAGE PRIOR TO REMOVAL.
80. EC TO REMOVE EXISTING WIRE MOLD & ELECTRICAL BOXES. TERMINATE ALL WIRING PER NEC REQUIREMENTS. REFER TO ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
81. GC TO REMOVE EXISTING WALL-MOUNTED TEACHER PRESENTATION UNIT (SMARTBOARD, WHITE BOARD, BLACK BOARD, TACK BOARD, PIN BOARD, WORLD MAP, ETC.) IN ITS ENTIRETY. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
82. EC TO REMOVE EXISTING FIRE ALARM DEVICE. SEE FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
83. GC TO DEMO PORTION OF EXISTING MASONRY PARAPET WALL FOR INSTALLATION OF NEW SCUPPER. SEE PROPOSED ROOF PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
84. EXISTING HAND SANITIZER UNIT TO REMAIN, TYPICAL UNLESS OTHERWISE NOTED.
85. EC TO MODIFY EXISTING WIRE MOLD, WIRING, SWITCH BOXES, DATA/TELEPHONE JACKS, RECEPTACLES, ETC. AS REQUIRED TO COORDINATE WITH NEW CONSTRUCTION. TERMINATE ALL CONNECTIONS PER NEC REQUIREMENTS. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
86. EXISTING ROOFING TO REMAIN, TYPICAL.
87. GC TO REMOVE EXISTING SINK AND FAUCET AND SALVAGE FOR REINSTALLATION. PC TO DISCONNECT AND TEMPORARILY CAP EXISTING PLUMBING AS REQUIRED. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
88. GC TO REMOVE EXISTING WALL MOUNTED SHELVING. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
89. EC TO REMOVE EXISTING WIRELESS ACCESS POINT (WAP) AND ALL ASSOCIATED WIRING AND WIRE MOLD. EC TO RETURN WAP TO OWNER. TERMINATE ALL CONNECTIONS IN AN APPROVED MANNER AND PER NEC REQUIREMENTS. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
90. EXISTING GENERATOR HOUSEKEEPING PAD TO REMAIN.
91. EXISTING SPRINKLER HEAD TO REMAIN UNLESS OTHERWISE NOTED, TYPICAL. GC SHALL PROTECT DURING CONSTRUCTION AND COORDINATE WITH PROPOSED WORK.
92. GC SHALL TEMPORARILY SUPPORT EXISTING SPEAKER FOR P.A. SYSTEM & PROTECT DURING CONSTRUCTION. REINSTALL SPEAKER IN NEW CEILING. REFER TO PROPOSED REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION.
93. MC TO DEMO EXISTING ROOF MOUNTED EXHAUST FAN. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
94. GC TO DEMO EXISTING RAILING AT OUTDOOR STAIR IN ITS ENTIRETY.
95. GC TO DEMO EXISTING BILCO DOORS IN THEIR ENTIRETY.
96. GC TO DEMO EXISTING CONCRETE PIER IN ITS ENTIRETY.
97. EC TO DEMO EXISTING SURFACE MOUNTED LIGHT FIXTURES, LOUDSPEAKERS, SECURITY CAMERAS, ETC. AND SALVAGE FOR REINSTALLATION. ALSO DEMO ASSOCIATED SURFACE MOUNTED CONDUIT.
98. GC TO SAW-CUT AND REMOVE EXISTING SLAB AT PERIMETER OF GYMNASIUM FLOOR TO A DISTANCE OF 2'-0" FROM GYMNASIUM WALL (AND BLEACHERS). REMOVE EXISTING UNDER-SLAB MATERIAL TO A DEPTH OF 18" BELOW BOTTOM OF EXISTING SLAB. VERIFY ACTUAL UNDER-SLAB CONDITIONS IN FIELD. CONTRACTOR SHALL TAKE CAUTION TO NOT UNDERMINE EXISTING BUILDING FOOTING.
99. GC TO REMOVE EXISTING RUBBER FLOORING AND UNDERLAYMENT FROM GYMNASIUM FLOOR IN ITS ENTIRETY AND DISCARD. PREP FLOOR TO RECEIVE NEW FLOORING. SEE A2.01 AND FLOOR FINISH PLANS ON A2.26 FOR ADDITIONAL INFORMATION.
100. EXISTING WALL PADDING TO REMAIN. GC TO PROTECT FROM DAMAGE.
101. GC TO DEMO EXISTING SUMP PIT ENCLOSURES (2 TOTAL) IN THEIR ENTIRETY AND DISCARD. REMOVE ALL LEDGERS FROM EXISTING WALLS AND/OR FLOOR AND PATCH/REPAIR EXISTING SUBSTRATE AS NECESSARY.
102. GC TO SAW-CUT AND REMOVE 5'-0"W X 5'-0"L PORTION OF EXISTING SLAB, AND EXCAVATE TO A DEPTH OF 5'-0" BELOW TOP OF SLAB AT SUMP PIT LOCATION TO ACCOMMODATE NEW SUMP BASIN. VERIFY ACTUAL UNDER-SLAB CONDITIONS IN FIELD. CONTRACTOR SHALL TAKE CAUTION TO NOT UNDERMINE EXISTING BUILDING FOOTING.
103. EXISTING BLEACHERS TO REMAIN, TYPICAL.
104. EXISTING STEP TO BE REMOVED & RECONSTRUCTED. CONTRACTOR TO NOTE SIZE, TREAD DEPTH, AND RISER HEIGHT PRIOR TO DEMOLITION. SEE A2.01 FOR ADDITIONAL INFORMATION.
105. GC TO POWERWASH EXISTING STUCCO AT ROOF PARAPET WALLS TO PREP FOR NEW LIQUID COATING. SEE PROPOSED FLOOR ROOF PLAN AND CONSTRUCTION KEY NOTES FOR ADDITIONAL INFORMATION.
106. MC TO REMOVE EXISTING UNIT VENTILATOR AND SALVAGE FOR REINSTALLATION. PC TO TEMPORARILY CAP ALL PIPING. EC TO TEMPORARILY TERMINATE ALL ELECTRICAL CONNECTIONS PER NEC REQUIREMENTS. MC TO STORE IN SAFE LOCATION TO PREVENT DAMAGE TO EXISTING UNIT VENTILATOR. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
107. GC TO REMOVE AND DISCARD EXISTING VINYL WALL BASE TO FACILITATE FLOORING REPLACEMENT.
108. GC TO REMOVE AND DISCARD EXISTING QUARTER-ROUND MOLDING AT BASE OF WALL TO FACILITATE FLOORING REPLACEMENT. CONTRACTOR SHALL SALVAGE WOOD BASE MOLDING BEHIND QUARTER ROUND AND PROTECT DURING CONSTRUCTION. IF WOOD BASE IS DAMAGED, CONTRACTOR SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THE OWNER.
109. EXISTING COMPUTERS AND FURNISHINGS TO BE REMOVED BY THE OWNER.
110. EC TO REMOVE EXISTING SURFACE MOUNTED LIGHTING FIXTURES TO ACCOMMODATE THE CONSTRUCTION OF THE NEW CORRIDOR AND SGI ROOM. TURN OVER FIXTURES TO OWNER. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

Date	1/10/20
Checked	DLF
Drawn	TT

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Revisions:

#	
1	ISSUE TO BID 11/23/20

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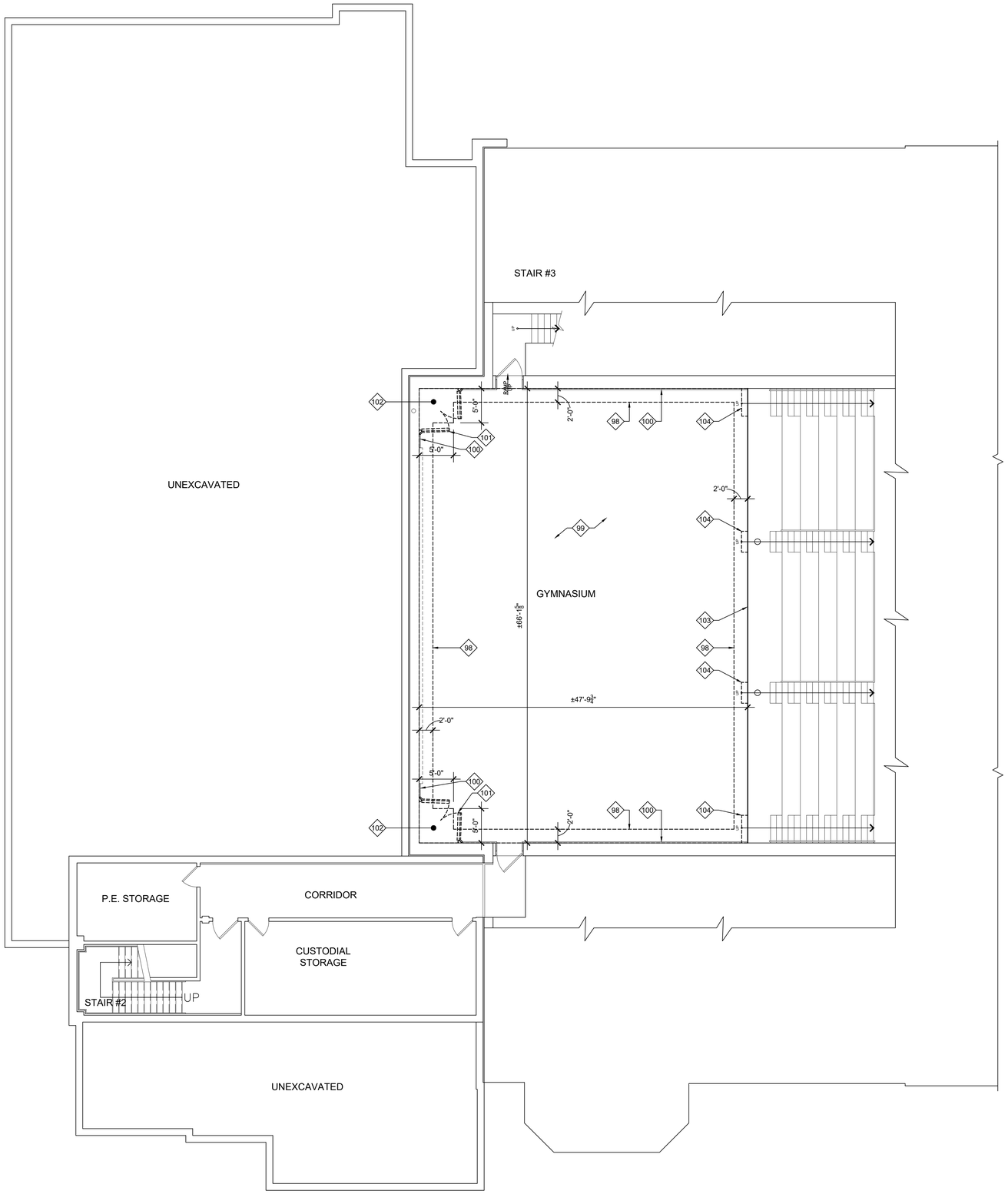
NYSED PROJECT # 66-07-01-03-0-004-030

DEMOLITION KEY NOTES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A100

A1.00



1 A1.01 Existing Basement Plan with Demolition

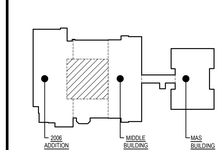
1/8" = 1'-0"

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA." REFER TO DEMOLITION KEY NOTES ON SHEET A1.00.

SYMBOL INDICATES MASONRY DEMOLITION KEY NOTE. SEE MASONRY DEMOLITION KEY NOTES ON SHEET A1.30.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

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MICHAEL J. McGOVERN, R.A.

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NYSED PROJECT # 66-07-01-03-0-004-030

EXISTING BASEMENT PLAN W/ DEMO.

2019 BOND REFERENDUM
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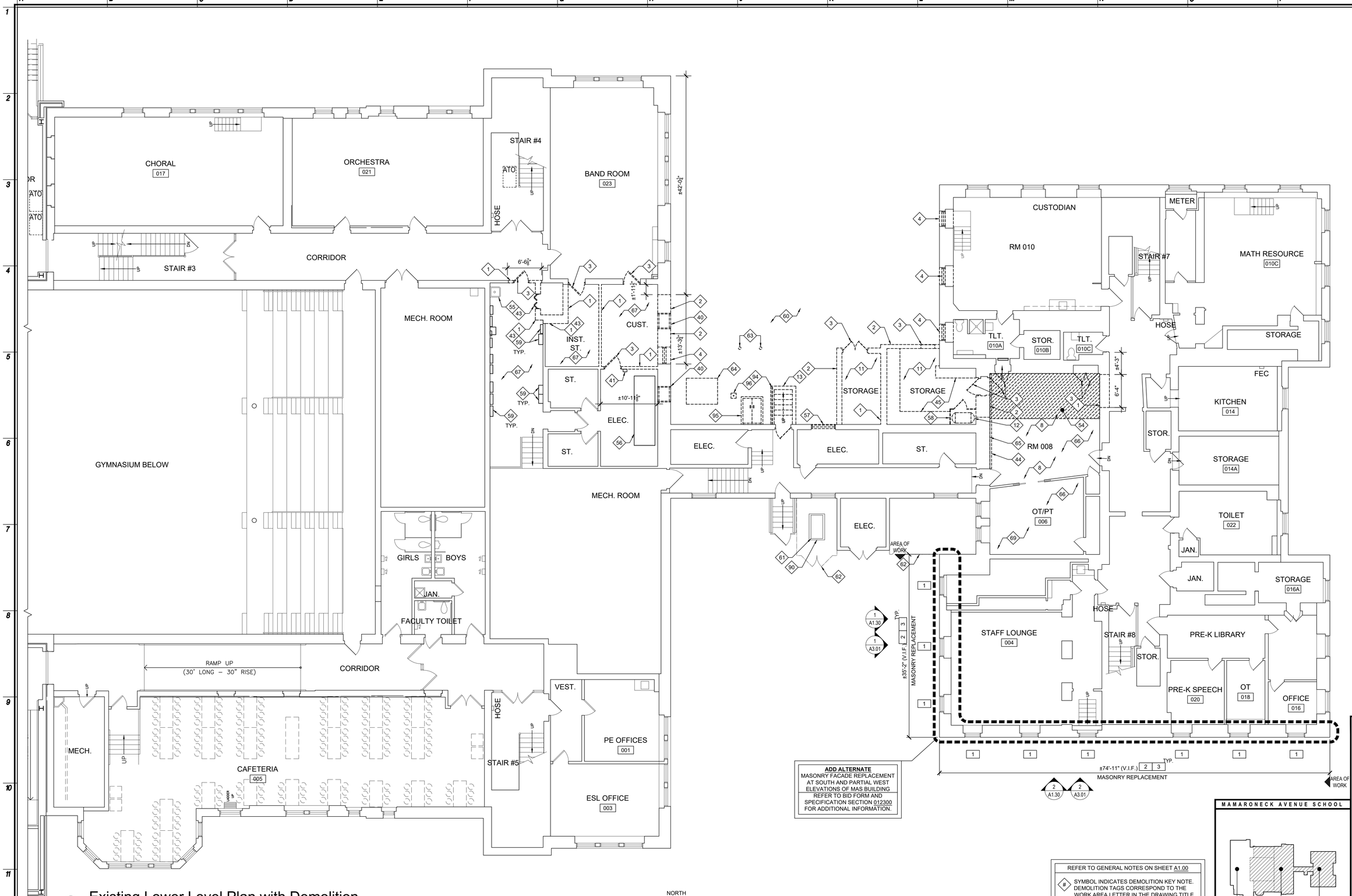
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A101

A1.01



1 A1.02 Existing Lower Level Plan with Demolition

1/8" = 1'-0"

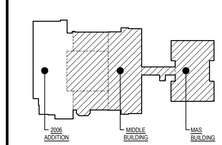
ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA." REFER TO DEMOLITION KEY NOTES ON SHEET A1.00.

SYMBOL INDICATES MASONRY DEMOLITION KEY NOTE. SEE MASONRY DEMOLITION KEY NOTES ON SHEET A1.30.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
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EXISTING LOWER LEVEL PLAN W/ DEMO.

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
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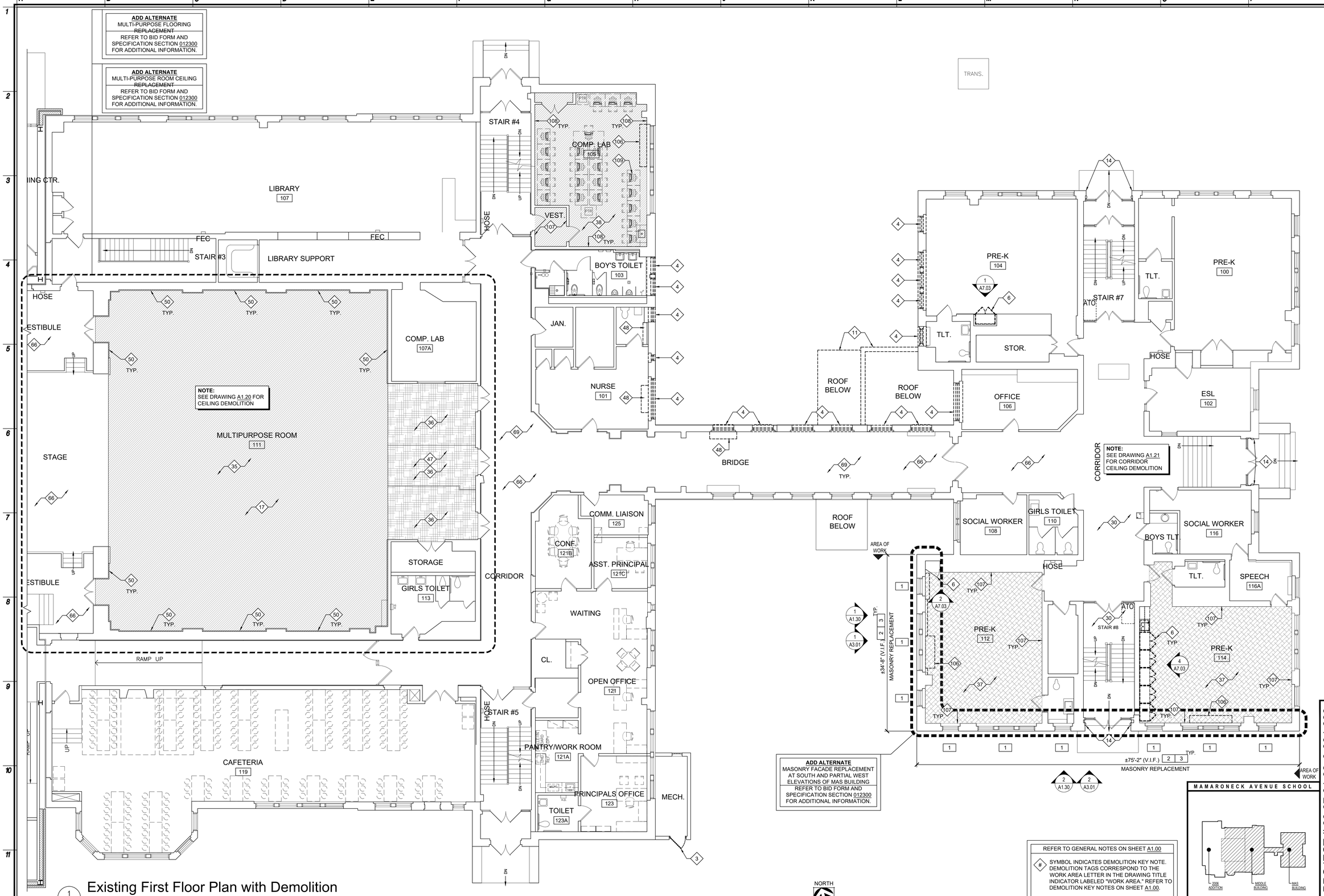
Job No. 4.1092.72.2

File No. 10927202A101

A1.02

ADD ALTERNATE
MULTI-PURPOSE FLOORING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

ADD ALTERNATE
MULTI-PURPOSE ROOM CEILING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.



NOTE:
SEE DRAWING A1.20 FOR CEILING DEMOLITION

NOTE:
SEE DRAWING A1.21 FOR CORRIDOR CEILING DEMOLITION

ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA." REFER TO DEMOLITION KEY NOTES ON SHEET A1.00.

SYMBOL INDICATES MASONRY DEMOLITION KEY NOTE. SEE MASONRY DEMOLITION KEY NOTES ON SHEET A1.30.

1 A1.03 Existing First Floor Plan with Demolition
1/8" = 1'-0"

MAMARONECK AVENUE SCHOOL

Key Plan
NOT TO SCALE
PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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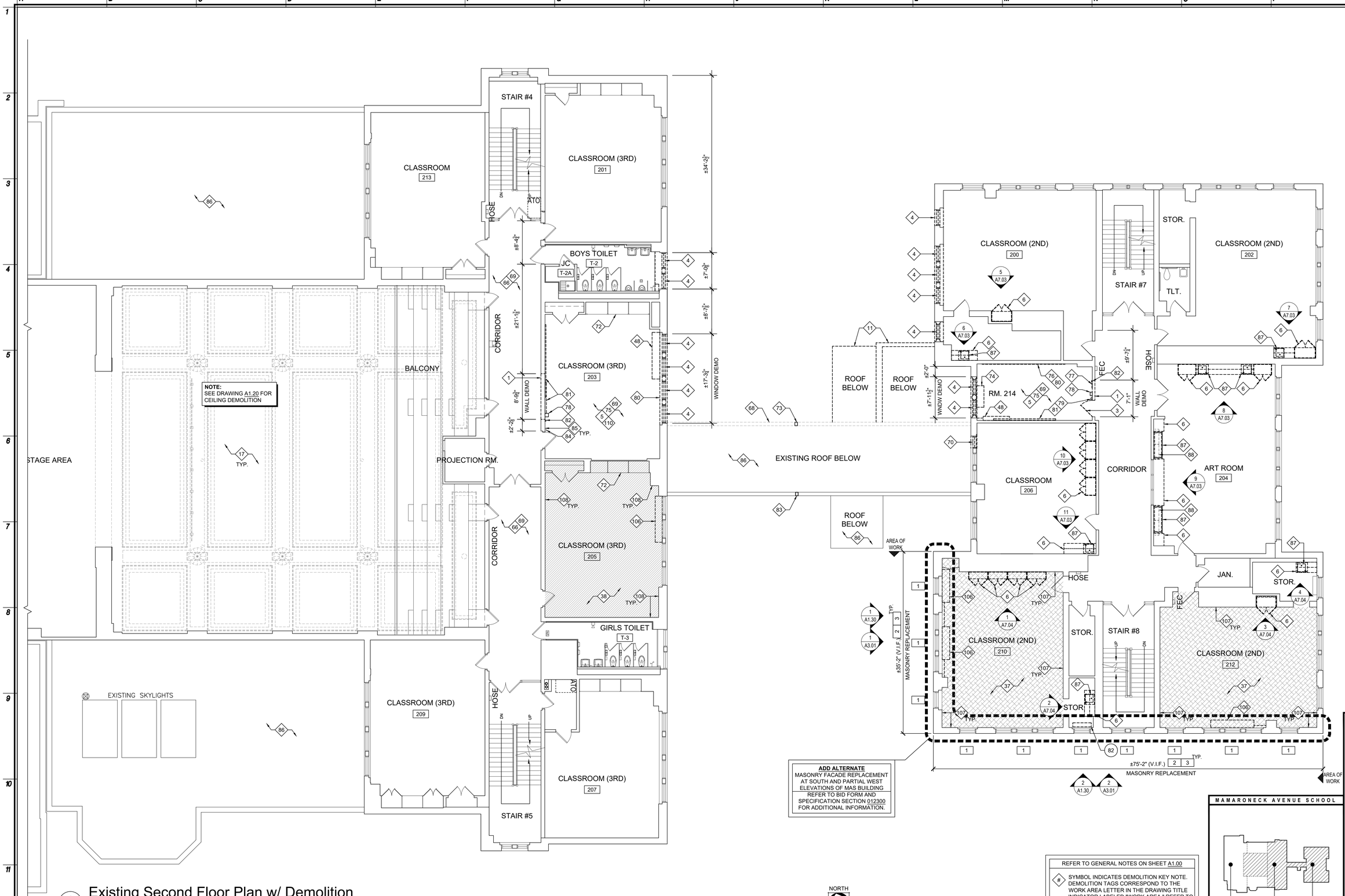
NYSED PROJECT # 66-07-01-03-0-004-030

EXISTING FIRST FLOOR PLAN W/ DEMO.
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A101

A1.03



1 A1.04 Existing Second Floor Plan w/ Demolition

1/8" = 1'-0"

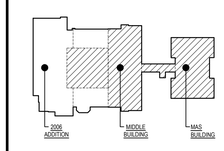
ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA." REFER TO DEMOLITION KEY NOTES ON SHEET A1.00.

SYMBOL INDICATES MASONRY DEMOLITION KEY NOTE. SEE MASONRY DEMOLITION KEY NOTES ON SHEET A1.30.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

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NYSED PROJECT # 66-07-01-03-0-004-030

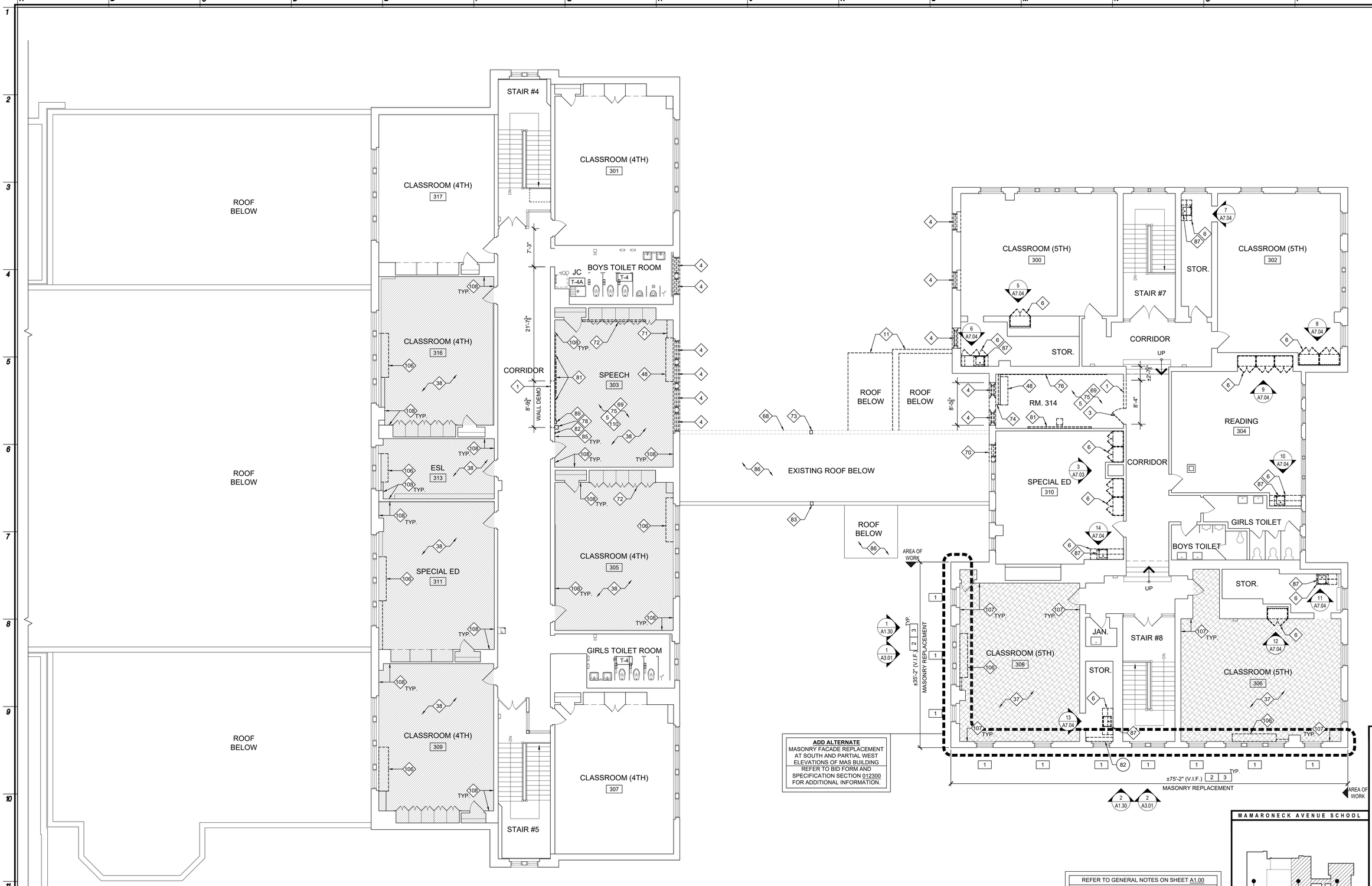
EXISTING SECOND FLOOR PLAN W/ DEMO.

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A101

A1.04



1 A1.05 Existing Third Floor Plan with Demolition

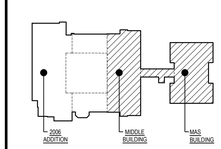
1/8" = 1'-0"

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA." REFER TO DEMOLITION KEY NOTES ON SHEET A1.00.

SYMBOL INDICATES MASONRY DEMOLITION KEY NOTE. SEE MASONRY DEMOLITION KEY NOTES ON SHEET A1.30.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
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EXISTING THIRD FLOOR PLAN W/ DEMO.

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

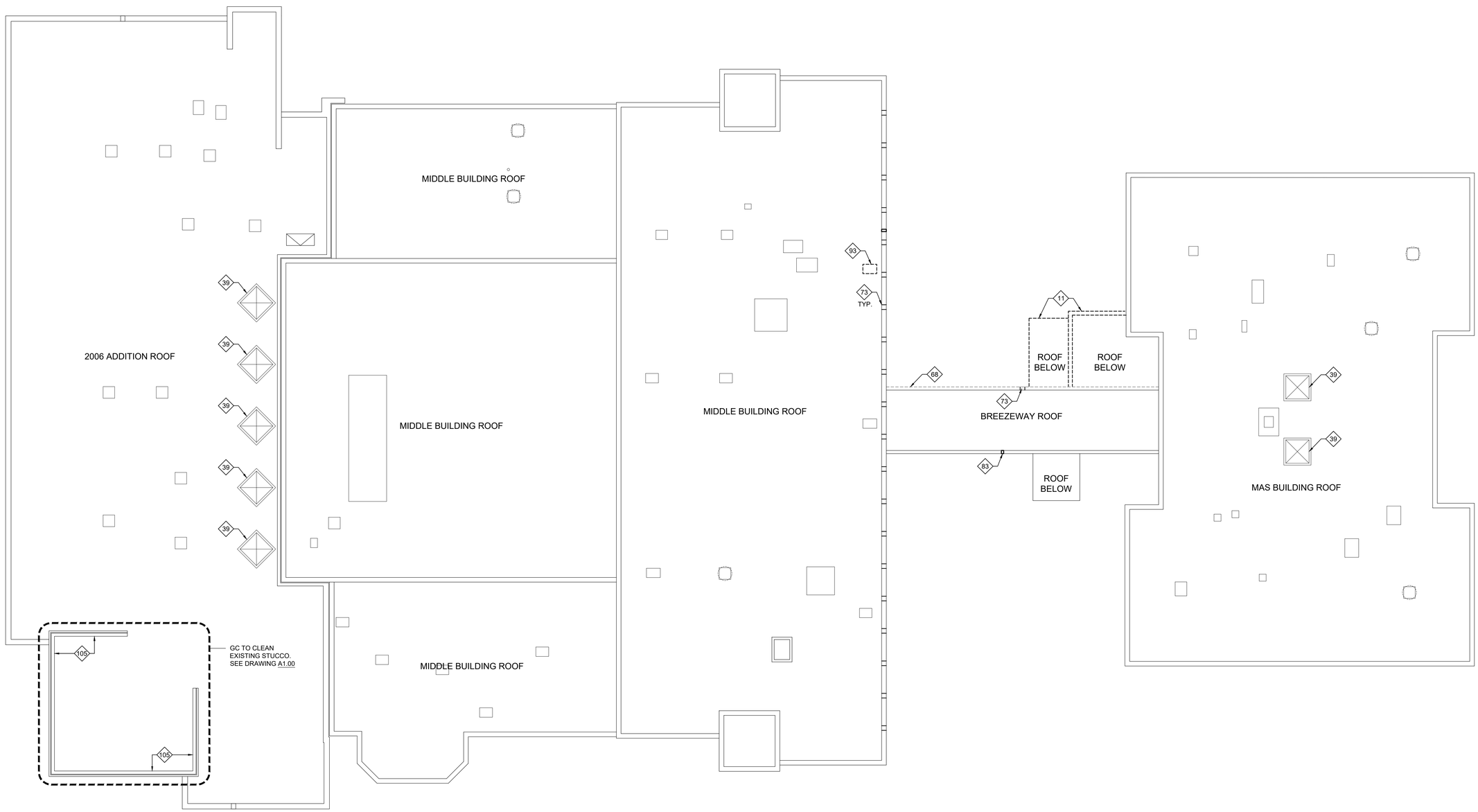
Job No. 4.1092.72.2

File No. 10927202A101

A1.05

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE.
REFER TO DEMOLITION KEY NOTES ON SHEET A1.00



1 A1.06 Existing Roof Plan with Demolition

3/32" = 1'-0"

NORTH

ROOF PLAN

Date	1/10/20
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Drawn	—

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License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

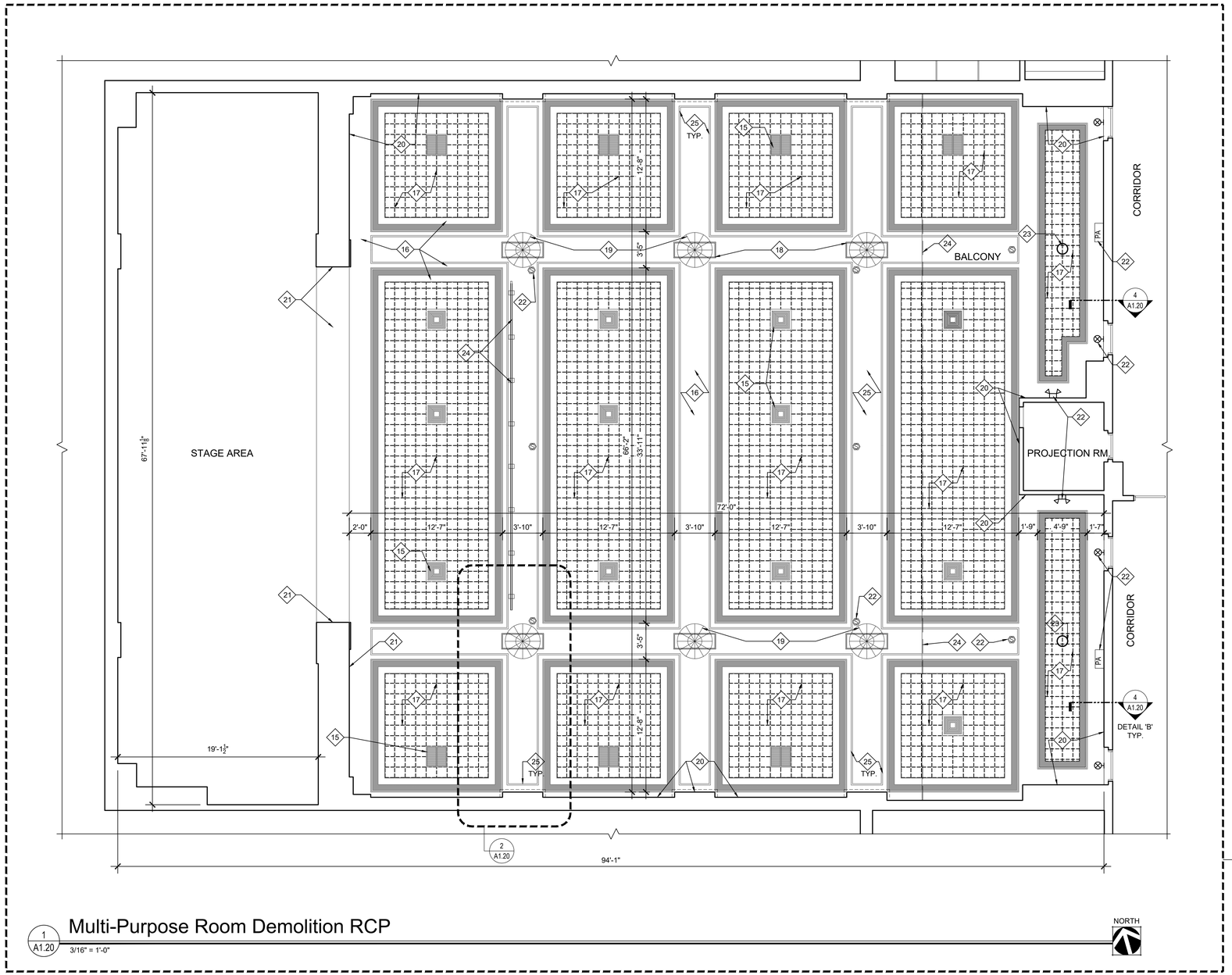
DEMOLITION ROOF PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

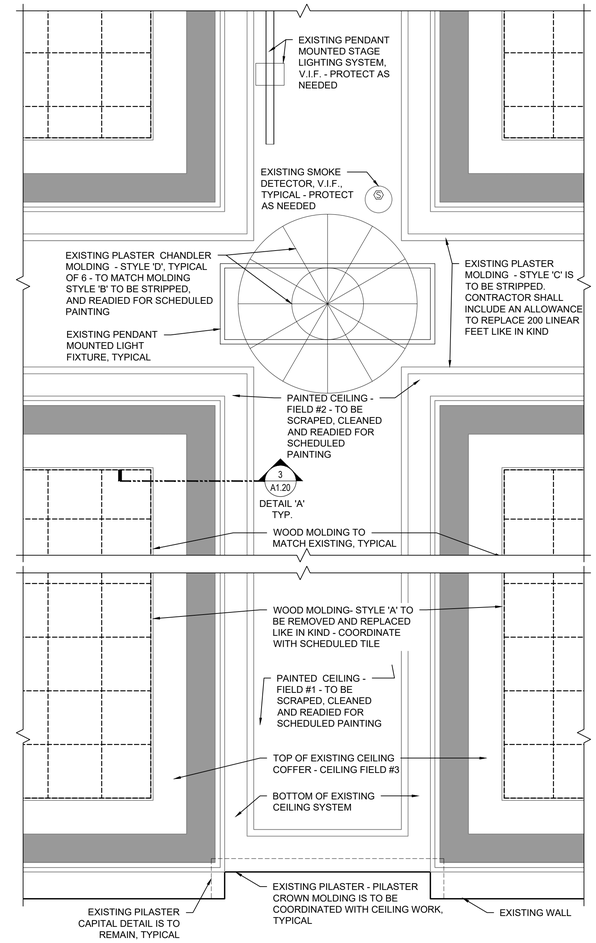
File No. 10927202A106

A1.06



1 A1.20 Multi-Purpose Room Demolition RCP

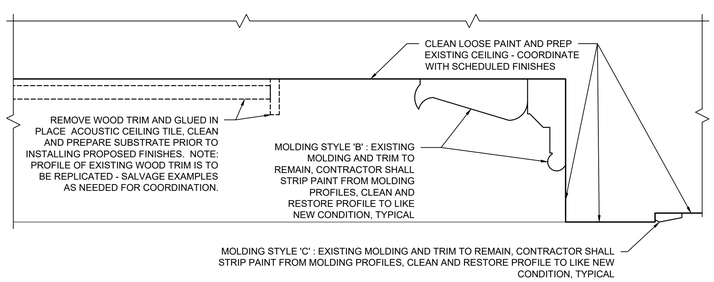
3/16" = 1'-0"



2 A1.20 Enlarged Ceiling Detail - A

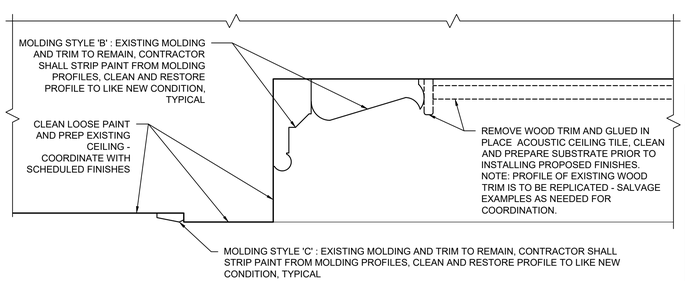
3/4" = 1'-0"

ADD ALTERNATE
MULTI-PURPOSE ROOM CEILING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.



3 A1.20 Demolition Molding Detail - A

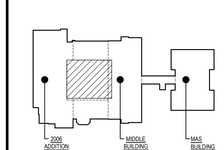
3" = 1'-0"



4 A1.20 Demolition Molding Detail - B

3" = 1'-0"

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MJM
Drawn	—

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

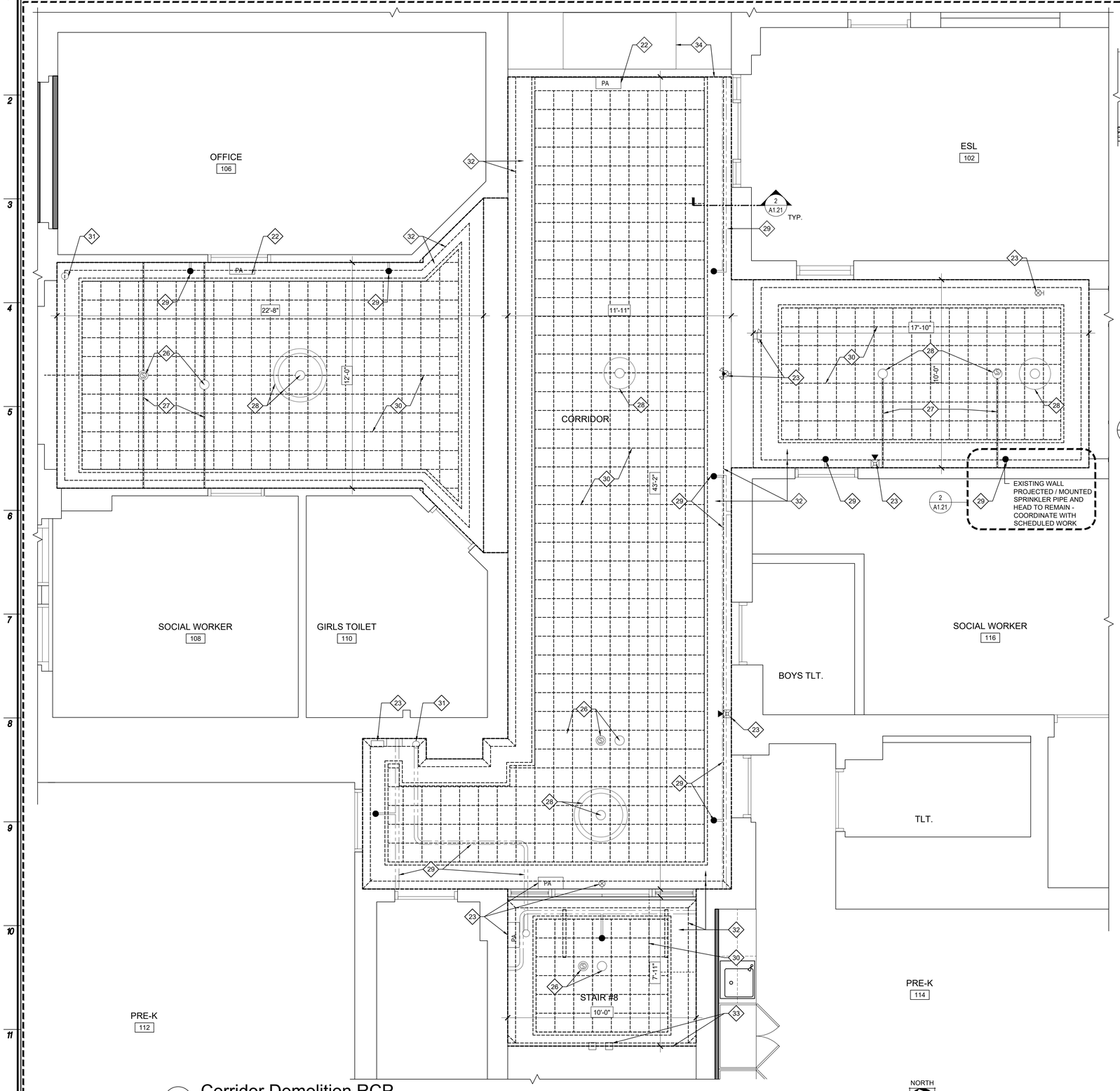
MULTI-PURPOSE ROOM DEMOLITION RCP

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

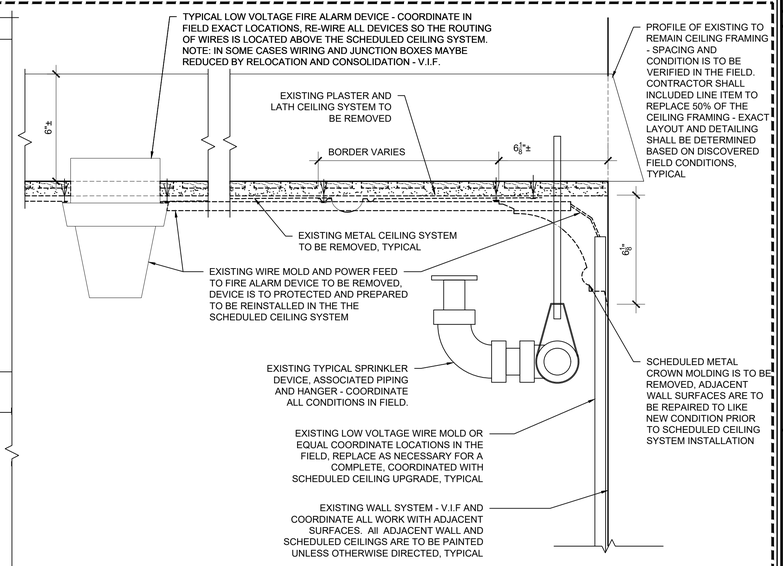
File No. 10927202A120

A1.20



1 A1.21 Corridor Demolition RCP

3/8" = 1'-0"



2 A1.21 Detail Section at Metal Ceiling

3" = 1'-0"

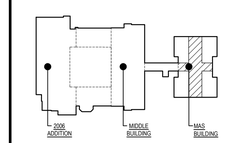
ADD ALTERNATE
MAS FIRST FLOOR CORRIDOR CEILING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO DEMOLITION KEY NOTES ON SHEET A1.00

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	MJM
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

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CORRIDOR DEMOLITION RCP
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

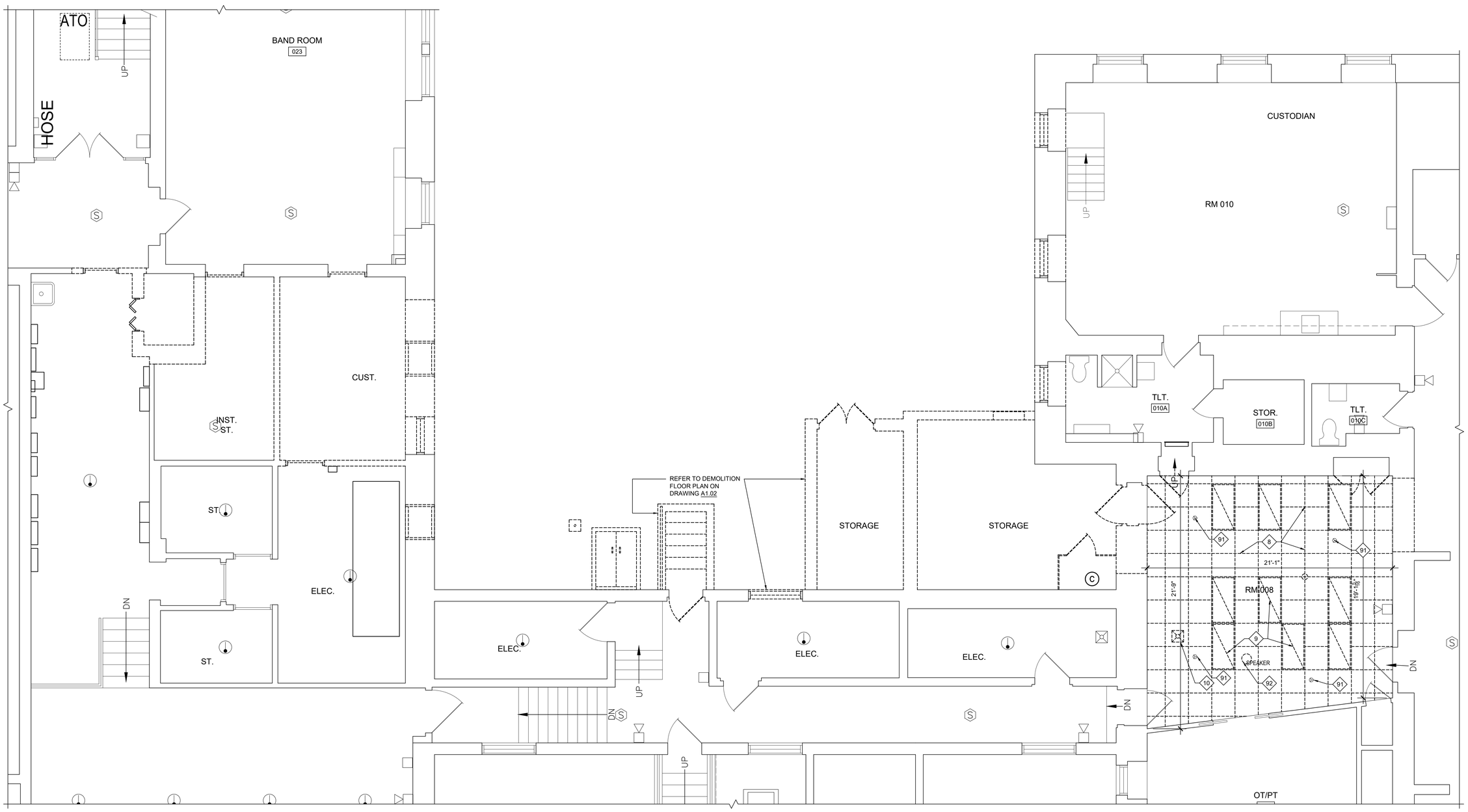
File No. 10927202A121

A1.21

REFER TO GENERAL NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO DEMOLITION KEY NOTES ON SHEET A1.00



1 A1.22 Demolition Reflected Ceiling Plan - Lower Level

1/4" = 1'-0"

NORTH

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT

License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

DEMO RCP - LOWER LEVEL

2019 BOND REFERENDUM

MAMARONECK AVENUE ELEMENTARY SCHOOL

MAMARONECK UNION FREE SCHOOL DISTRICT

850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A122

A1.22

Symbol Legend

	AREA OF MASONRY (BRICK AND STONE) REMOVAL AND REPLACEMENT WITH NEW BRICK AND EXISTING STONE. REFER TO NOTES 2 3
EXIST. CRACK	EXISTING CRACKED BRICK, REFER TO REPAIR DETAILS ON A8.21

Brick Veneer Replacement Notes

1. THE WORK SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF THE EXTERIOR BRICK VENEER, FLASHINGS, WATERPROOFING, UNIT VENTILATOR LOUVERS AND WALL SLEEVES AS INDICATED ON THE DRAWINGS. WORK SHALL ALSO INCLUDE THE REMOVAL, SALVAGING, AND RE-INSTALLATION OF EXISTING WINDOWS AND CAST STONE SILLS, HEADERS, AND BANDS.
2. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS AND THE EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL SUBMIT A SCHEDULE AND SEQUENCE OF THE WORK FOR REVIEW PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS IN THE PERFORMANCE OF THE WORK AND TO MAINTAIN A SAFE WORKSITE FOR THE WORKMEN, BUILDING OCCUPANTS AND PEDESTRIANS AND TO PROTECT EXISTING BUILDING COMPONENTS AND SITE FEATURES TO REMAIN.
3. THE CONTRACTOR SHALL MAKE PROVISIONS FOR THE ARCHITECT/ENGINEER TO INSPECT THE FIELD CONDITIONS AT EACH STAGE OF THE WORK TO VERIFY THE EXISTING CONSTRUCTION. NO FABRICATIONS OF NEW COMPONENTS SHALL BE MADE UNTIL THE EXISTING CONDITIONS ARE VERIFIED AND MEASURED IN THE FIELD AT EACH LOCATION.
4. THE EXISTING LINTELS OVER THE LARGE WINDOWS SHALL BE EXPOSED BY THE CONTRACTOR AND INSPECTED IN THE FIELD BY THE ENGINEER AT THE START OF WORK. FIELD CONDITIONS MAY REQUIRE MODIFICATION TO THE SPECIFIED REPAIR DETAIL. NO FABRICATION OF NEW COMPONENTS SHALL BE MADE UNTIL THE FIELD CONDITIONS ARE DETERMINED AND THE REPAIR DETAILS VERIFIED.
5. EXISTING BRICK BACKUP WALLS SHALL BE STABILIZED AS DIRECTED IN FIELD BY ARCHITECT/ ENGINEER WITH STAINLESS STEEL HELICAL ANCHORS AT 24" OC HORIZONTALLY AND 16" OC VERTICALLY. ADDITIONAL ANCHORS SHALL BE LOCATED AT 8" OC AROUND ALL VENEER OPENINGS AND ALONG ALL VERTICAL JOINTS. ANCHORS SHALL BE "HECKMANN" #391 REMEDIAL TIES, 10 MM DIAMETER. THE ANCHOR LENGTH SHALL BE DETERMINED BASED ON FIELD MEASUREMENTS OF THE EXISTING WALL.
6. THE NEW BRICK VENEER SHALL BE ANCHORED TO EXISTING BRICK BACKUP WALL WITH NEW CONCRETE SEAL TIE ANCHORS WITH 2-SEAL BYNA-LOK WIRE TIE" BY "HOHMANN & BERNARD, INC." MINIMUM SPACING OF 16" O.C. VERTICAL AND 24" O.C. HORIZONTAL.

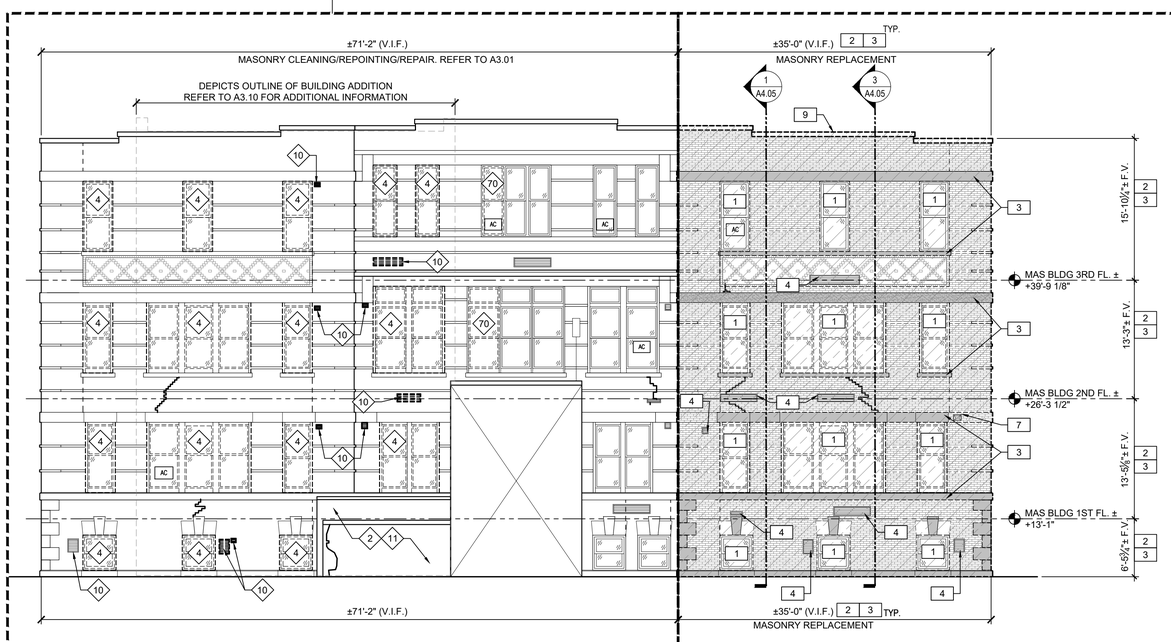
Brick Veneer Demolition Key Notes

#	DEMOLITION KEY NOTE SYMBOL - REFER TO PLANS, SECTIONS & ELEVATIONS

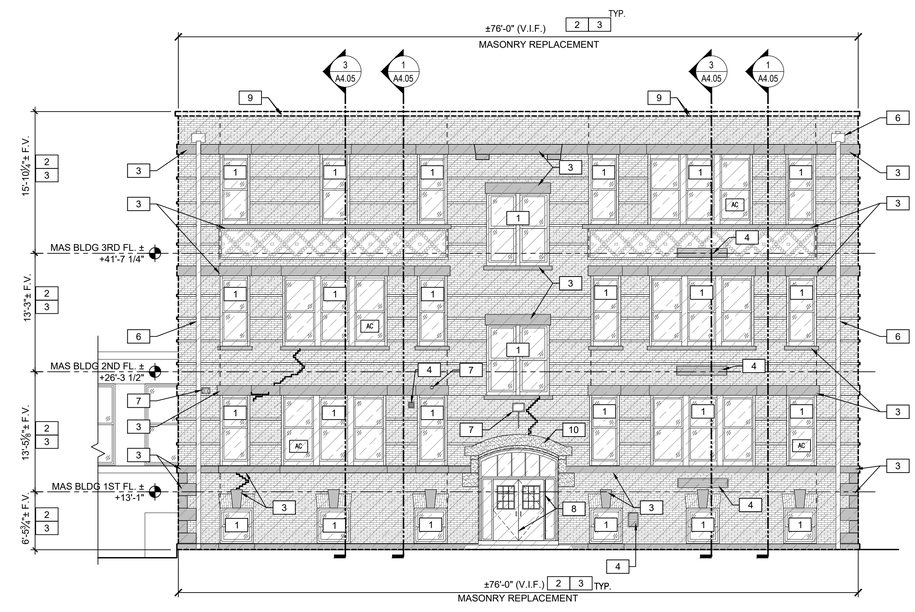
1. CONTRACTOR TO CAREFULLY REMOVE EXISTING WINDOWS AND SALVAGE FOR REINSTALLATION. REMOVE EXISTING EXTERIOR SILL AND WINDOW PANNING, WOOD SASH BOX, EXISTING WINDOW BLOCKING, AND INTERIOR WOOD TRIM. CONTRACTOR TO TEMPORARILY REMOVE EXISTING WINDOW BLINDS AS REQUIRED TO PERFORM RENOVATIONS AND REINSTALL UPON COMPLETION. PROVIDE NEW WINDOW LINTELS AND COLUMNS (WERE APPLICABLE) PER DETAILS 3&5/A8.20.
2. CONTRACTOR TO REMOVE EXISTING BRICK VENEER IN LOCATIONS SHOWN ON THE DRAWINGS TO EXPOSE EXISTING BRICK BACK UP WALL. CONTRACTOR TO REMOVE EXISTING FACE BRICK WALL ANCHORS IF APPLICABLE. CONTRACTOR SHALL SHORE MASONRY ABOVE AS REQUIRED TO PERFORM WORK AND INSTALL TEMPORARY COVERINGS TO PROTECT ALL NEWLY EXPOSED SURFACES FROM MOISTURE INFILTRATION DURING CONSTRUCTION.
3. CONTRACTOR TO REMOVE, SALVAGE AND REINSTALL EXISTING CAST STONE SILLS AND BANDING. REPLACE ALL DAMAGED PIECES WHERE APPLICABLE TO MATCH EXISTING.
4. CONTRACTOR TO REMOVE EXISTING UNIT VENTILATOR LOUVER & SLEEVE AND PREPARE FOR NEW LOUVER SLEEVE PER DETAIL 6/A8.20. SECTION DRAWING 5/A4.05 AND NEW FLASHING PER DETAIL 12/A8.20.
5. CONTRACTOR TO EXPOSE EXISTING STEEL LINTEL AND NOTIFY ARCHITECT/ ENGINEER FOR VISUAL INSPECTION OF THE CONDITION OF THE EXISTING LINTEL. REFER TO DETAILS 3&5/A8.20 FOR REPAIR FOLLOWING INSPECTION.
6. CONTRACTOR TO REMOVE EXISTING SCUPPER BOX AND LEADER, SALVAGE FOR REINSTALLATION.
7. CONTRACTOR TO REMOVE EXISTING SURFACE MOUNTED LIGHTING FIXTURES, LOUDSPEAKERS, SECURITY CAMERAS, ETC & SALVAGE FOR REINSTALLATION.
8. EXISTING DOORS & FRAMES TO REMAIN. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT DOORS & FRAMES DURING REMOVAL & REINSTALLATION OF BRICK VENEER.
9. CONTRACTOR TO REMOVE EXISTING METAL ROOF COPING AND BLOCKING OR CAST STONE COPING BELOW (VERIFY IN FIELD). REPLACE WITH NEW METAL COPING.
10. EXISTING CAST STONE TO REMAIN, CLEAN CAST STONE. REPOINT ALL JOINTS.

ADD ALTERNATE
MASONRY RESTORATION AT MIDDLE BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.



1 A1.30 Partial Demolition West Elevation
1/8" = 1'-0"
MAS BUILDING

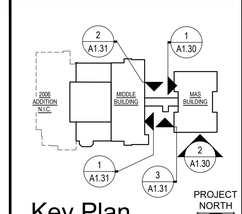


2 A1.30 Partial Demolition South Elevation
1/8" = 1'-0"
MAS BUILDING

REFER TO DEMOLITION NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"
REFER TO DEMOLITION KEY NOTES ON SHEETS A1.00

MAMARONECK AVENUE SCHOOL



Key Plan
NOT TO SCALE
PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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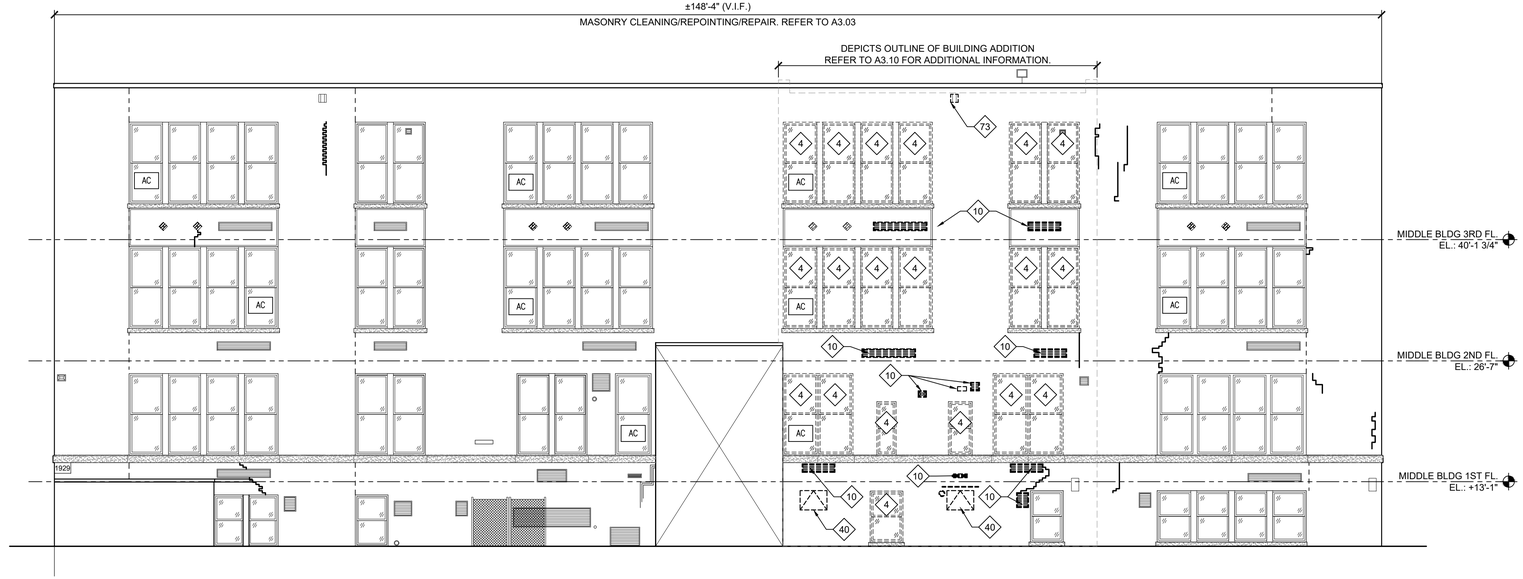
NYSED PROJECT # 66-07-01-03-0-004-030

DEMOLITION ELEVATIONS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A130

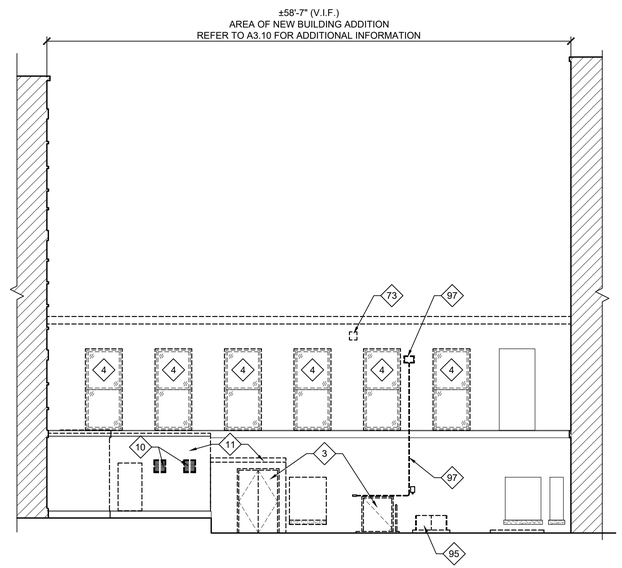
A1.30



1 A1.31 **Partial Demolition East Elevation**

1/8" = 1'-0"

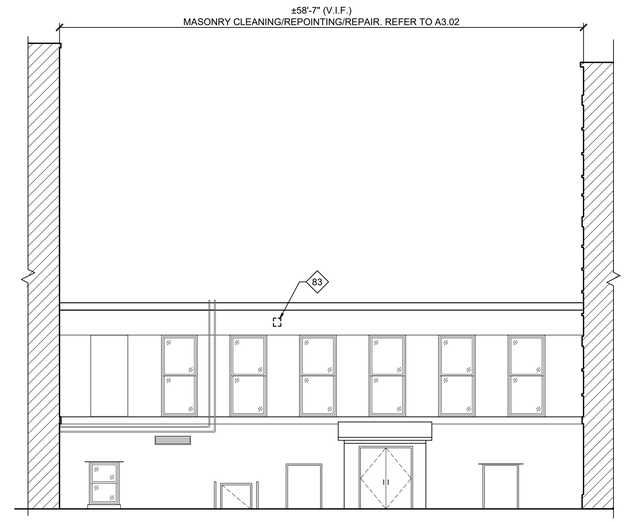
MIDDLE BUILDING



2 A1.31 **Partial Demolition North Elevation**

1/8" = 1'-0"

CONNECTOR LINK



3 A1.31 **Partial Demolition South Elevation**

3/16" = 1'-0"

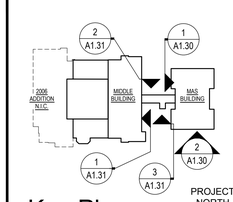
CONNECTOR LINK

REFER TO DEMOLITION NOTES ON SHEET A1.00

SYMBOL INDICATES DEMOLITION KEY NOTE. DEMOLITION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO DEMOLITION KEY NOTES ON SHEETS A1.00

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

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DEMOLITION ELEVATIONS

2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

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A1.31

Construction General Notes

1. **DIMENSIONS SHOWN ARE FROM FACE OF FINISH MATERIALS UNLESS NOTED OTHERWISE.**
2. CONTRACTOR SHALL INSTALL THROUGH-PENETRATION FIRESTOPS, DRAFT-STOPS, FIRE CAULKING, ETC. AS REQUIRED AT ALL CEILING/WALL PENETRATIONS TO ENSURE THE STRUCTURAL INTEGRITY AND CONT. FIRE RATING OF THE ASSEMBLY. (COORDINATE WITH PARTITION TYPES AS REQUIRED.) REFER TO PARTITION TYPES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. SEAL TOP OF ALL PARTITIONS. FILL ALL VOIDS WITH ACOUSTIC SEALANT CONTINUOUS. (COORDINATE WITH PARTITION TYPES AS REQUIRED.)
4. CONTRACTOR SHALL PROVIDE WOOD BLOCKING AS REQUIRED FOR INSTALLATION OF ALL WALL MOUNTED EQUIPMENT AND CASEWORK, TYP. PROVIDE P.T. WOOD BLOCKING IN TOILET ROOMS, TYP. BLOCKING SHALL BE PROVIDED AS PER SPECIFICATION SECTION 061000 - ROUGH CARPENTRY.

Legend

(REFER TO DEMOLITION & PROPOSED FLOOR PLANS)

PROPOSED	
SYMBOL	DESCRIPTION
	NEW CONSTRUCTION (FRAMING)
	EXISTING WALLS TO REMAIN
	NEW DOORS

DUCTWORK REMOVAL PATCH NOTE:

GC TO PATCH HOLES LEFT DUE TO REMOVAL OF DUCTWORK ETC. IN MASONRY AND OTHER WALL/FLOOR/CEILING CONSTRUCTION WITH NEW MATERIAL TO MATCH EXISTING. PAINT TO MATCH ADJACENT SURFACES WHERE APPLICABLE. GC TO COORDINATE WITH MC FOR EXACT LOCATION AND EXTENT OF REPAIR WORK.

MULTIPLE PRIME CONTRACTOR ABBREVIATIONS:

GC - GENERAL CONTRACTOR
MC - MECHANICAL CONTRACTOR
EC - ELECTRICAL CONTRACTOR
PC - PLUMBING CONTRACTOR

Construction Key Notes

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. GC TO PRIME AND PAINT EXISTING WOOD TRIM ALL AROUND ENTRY WITH (1) PRIMER COAT AND (2) FINISH COATS. NOTE ANY GOUGES, DAMAGE AND/OR ROT SHALL BE REPAIRED TO LIKE NEW CONDITION. SEE DRAWING A2.03 FOR ADDITIONAL KEY NOTE LOCATIONS AND TYPICAL DETAIL PROFILE ON DRAWING A8.30.
2. EC TO REINSTALL EXISTING ELECTRIC METER ON NEW INTERIOR PARTITION. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. GC TO INSTALL SCHEDULED FINISH FLOORING, FLOOR SYSTEM, ASSOCIATED ASSEMBLIES AND VINYL COVE BASE. GC IS NOT TO DISTURB THE EXISTING 2"X3" SLEEPERS AND ADJACENT CINDER FILL, TYPICAL UNLESS NOTED OTHERWISE. PREFER TO DETAIL 1/A8.30 AND FLOOR FINISH PLANS FOR ADDITIONAL INFORMATION.
4. <RESERVED>
5. GC TO INSTALL NEW VINYL FLOOR FINISH, TWO LAYERS OF PLYWOOD SUB FLOOR, ROSIN PAPER, ASSOCIATED ASSEMBLIES AND VINYL COVE BASE. GC IS NOT TO DISTURB THE EXISTING 2"X3" SLEEPERS AND ADJACENT CINDER FILL, TYPICAL UNLESS NOTED OTHERWISE. REFER TO DETAIL 5/A8.30 FOR ADDITIONAL INFORMATION.
6. GC TO MODIFY EXISTING DOOR ASSEMBLY AND INSTALL THRESHOLD. COORDINATE WITH ADJACENT FLOOR FINISHES AND DOOR ASSEMBLY - REFER TO DETAIL ON DRAWING A8.30, TYPICAL.
7. GC TO INSTALL NEW VINYL FLOOR FINISH, PLYWOOD SUB FLOOR, ROSIN PAPER, ASSOCIATED ASSEMBLIES, AND VINYL COVE BASE. GC IS NOT TO DISTURB EXISTING PLYWOOD SUBSTRATE, TYPICAL UNLESS NOTED OTHERWISE. REFER TO DETAIL 7/A8.30.
8. EC TO INSTALL NEW ELECTRICAL POWER DISTRIBUTION PANELS. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
9. GC TO INSTALL NEW CONCRETE STAIRS WITH RUBBER STAIR TREADS. SEE STRUCTURAL DRAWINGS AND FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION.
10. GC TO INSTALL NEW RAMP TO MEET ADA REQUIREMENTS WITH RUBBER FLOORING SURFACE. SEE FLOOR FINISH SCHEDULE FOR ADDITIONAL INFORMATION. MAX RAMP SLOPE 1:12.
11. GC TO INSTALL NEW HANDRAIL. SEE TYPICAL DETAILS ON DRAWING A4.03 FOR ADDITIONAL INFORMATION.
12. GC TO PROVIDE AND INSTALL 24"X48" FLUSH ACCESS DOOR WITH EXPOSED TRIM. GC TO PRIME AND PAINT TO MATCH ADJACENT WALL SURFACE. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
13. GC TO RAISE EXISTING SUB-FLOOR ±2¾" TO MATCH SUB-FLOOR HEIGHT OF EXISTING MAS BUILDING CORRIDOR WITH LIGHTWEIGHT CONCRETE. GC SHALL SCARIFY EXISTING SUB-FLOOR AS REQUIRED FOR PROPER BONDING OF NEW LIGHTWEIGHT CONCRETE. PREP NEW CONCRETE AS REQUIRED TO RECEIVE NEW FINISH FLOORING.
14. GC TO PROVIDE AND INSTALL NEW FINISH FLOORING. REFER TO FLOOR FINISH PLANS, AND FLOOR FINISH LEGEND ON DRAWING A2.20 FOR ADDITIONAL INFORMATION.
15. GC TO SLOPE CONCRETE FLOOR IN OUTDOOR STORAGE 054 TO PROVIDE POSITIVE PITCH TOWARDS EXTERIOR DOOR. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
16. GC TO INSTALL NEW THROUGH-FLOOR MECHANICAL/ELECTRICAL CHASE. COORDINATE LOCATIONS OF FINAL OPENINGS AND FINAL SIZE OF CHASE WITH EC & MC. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL OF PENETRATION SIZES AND LOCATIONS PRIOR TO FABRICATING CONCRETE PLANK.
17. EC TO INSTALL NEW GAS-FIRED STANDBY GENERATOR. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. GC TO COORDINATE WITH EC FOR INSTALLATION OF NEW STANDBY GENERATOR.
18. GC TO INSTALL NEW 6'-0" TALL CHAIN LINK FENCE AROUND NEW GENERATOR AND GENERATOR PAD. SEE DETAIL ON DRAWING CD.02, SITE PLAN, AND SPECIFICATION FOR ADDITIONAL INFORMATION.
19. GC TO INSTALL NEW 6" HIGH CONCRETE STANDBY GENERATOR PAD. SEE DETAIL ON DRAWING A8.30 AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION AND REQUIRED PAD SIZE WITH OWNER AND EC.
20. GC TO EXCAVATE AND TRENCH FOR NEW ELECTRICAL CONDUIT FROM BUILDING TO NEW EMERGENCY GENERATOR. REFER TO DETAIL 3/E2.03 AND ELECTRICAL PLANS FOR ADDITIONAL INFORMATION. COORDINATE TRENCH LOCATION WITH EC.
21. GC TO CONSTRUCT NEW EXTERIOR AREAWAY WITH AREA DRAIN. REFER TO CIVIL DRAWINGS AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
22. GC TO PROVIDE AND INSTALL NEW EXTERIOR CONCRETE STAIRS. SEE SITE PLAN FOR ADDITIONAL INFORMATION.
23. GC TO PROVIDE NEW REINFORCED CONCRETE RETAINING WALL AND FOOTING. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
24. GC TO PROVIDE NEW EXTERIOR CONCRETE RAMP TO MEET ADA REQUIREMENTS. MAX SLOPE 1:12. SEE SITE PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
25. GC TO PROVIDE AND INSTALL NEW STEEL TUBE STAIR HANDRAIL AND SUPPORT AT EXTERIOR STAIRS. HANDRAIL TO BE 1 ½" DIA. STEEL TUBE, PAINTED. SEE TYPICAL DETAILS ON SHEET A4.30 FOR ADDITIONAL INFORMATION. COLOR PER OWNER'S SELECTION. SEE DETAILS AND SPEC FOR ADDITIONAL INFORMATION.
26. GC TO PROVIDE AND INSTALL NEW METAL GUARD RAIL. GUARD RAIL SHALL BE PAINTED, COLOR PER OWNER'S SELECTION. SEE DETAILS AND SPEC FOR ADDITIONAL INFORMATION.
27. PC TO INSTALL NEW AREA DRAIN. REFER TO PLUMBING DRAWINGS.
28. GC TO PROVIDE AND INSTALL NEW RECESSED WALK-OFF MAT WITH VINYL HINGES AND ALUMINUM RAILS. WALK-OFF MAT SHALL BE RECESSED IN CONCRETE FLOOR SLAB AS REQUIRED TO PROVIDE FLUSH TRANSITION WITH ADJACENT FINISH FLOOR. SEE FLOOR FINISH PLAN AND SPEC FOR ADDITIONAL INFORMATION.
29. GC TO PROVIDE AND INSTALL NEW 3500# MACHINE ROOM LESS (MRL) ELEVATOR, MODEL "GEN2" BY 'OTIS ELEVATOR COMPANY.' ELEVATOR SHALL BE HIGH CAB MODEL AND ABLE TO ACCOMMODATE A STRETCHER. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
30. DISTRICT VENDOR TO PROVIDE AND INSTALL NEW CLASSROOM CASEWORK. SEE INTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION, TYPICAL. REFER TO DETAIL 15/A7.04 FOR ADDITIONAL INFORMATION.
31. GC TO PROVIDE AND INSTALL NEW 6"W x 72"L ALUMINUM LOUVER IN NEW COUNTER PROVIDED BY DISTRICT VENDOR TO VENT HVAC UNIT BEHIND CASEWORK. ALUMINUM SHALL BE KYNAR FINISH, COLOR PER OWNER'S SELECTION. SEE CASEWORK SECTIONS FOR ADDITIONAL INFORMATION.
32. GC TO PROVIDE AND INSTALL NEW 4"H ALUMINUM TOE-KICK LOUVER IN BASE CABINET PROVIDED BY DISTRICT VENDOR TO VENT HVAC UNIT BEHIND CASEWORK. ALUMINUM SHALL BE KYNAR FINISH, COLOR PER OWNER'S SELECTION. SEE CASEWORK SECTIONS FOR ADDITIONAL INFORMATION.
33. GC SHALL MOUNT NEW INTERACTIVE PRESENTATION DISPLAY PROVIDED BY OWNER. EC SHALL BE RESPONSIBLE TO MAKE ALL CONNECTIONS, TYPICAL.
34. NEW CLASSROOM FURNISHINGS BY OWNER.
35. GC SHALL PROVIDE AND INSTALL NEW 4' TALL WHITE BOARD WITH TACK STRIP AND MARKER TRAY, TYPICAL. SEE PLAN FOR WHITE BOARD LENGTH. COORDINATE FINAL MOUNTING LOCATION WITH OWNER.
36. GC TO PROVIDE AND INSTALL NEW CEILING FINISH. REFER TO REFLECTED CEILING PLANS, RCP LEGEND ON SHEET A5.00 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
37. PC TO PROVIDE AND INSTALL NEW ROOF DRAIN WITH CAST IRON DRAIN RING. ROOF DRAIN TO BE INSTALLED IN NEW ROOF SUMP AND PER MANUFACTURER'S INSTRUCTIONS. SEE DETAIL 3/A8.10 AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
38. GC TO INSTALL NEW EQUIPMENT SUPPORT RAILS BY 'PATE' FOR NEW AIR CONDITIONING CONDENSERS (ACCU). SEE DETAIL 2/A8.10 AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. MC TO PROVIDE EQUIPMENT SUPPORT RAILS.
39. MC TO PROVIDE AND INSTALL NEW AIR CONDITIONING CONDENSING UNITS. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
40. MC TO INSTALL NEW EXHAUST FAN FOR ELEVATOR SHAFT. MC TO PROVIDE NEW ROOF CURBS AS REQUIRED FOR NEW EXHAUST FAN. GC TO INSTALL ROOF CURBS PROVIDED BY MC. SEE DETAIL 5/A8.10 FOR ADDITIONAL INFORMATION. MC TO COORDINATE WITH GC FOR PENETRATION THROUGH CONCRETE PLANK AND PENETRATION SHALL BE INCLUDED ON PLANK SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
41. ELEVATION CHANGE IN PARAPET WALL. SEE SECTIONS FOR ADDITIONAL INFORMATION.
42. GC TO PROVIDE WATER-TIGHT PENETRATION FOR MC/EC/PC TO RUN REQUIRED CONDUIT/LINES TO NEW AIR CONDITIONING CONDENSING UNITS. GC TO COORDINATE WITH MC/EC/PC.
43. GC TO PROVIDE AND INSTALL FLUID APPLIED FULLY REINFORCED ALIPHATIC ROOFING MEMBRANE AND TRILAMINATE BASE SHEET OVER NEW ½" COVER BOARD, NEW TAPERED POLYISOCYANURATE INSULATION (MIN. R-30) OVER NEW CONCRETE ROOF DECK. ALL FLASHINGS SHALL BE FLUID APPLIED AND INTEGRAL TO FLUID ROOF FIELD MEMBRANE. GC TO PROVIDE SILICA SAND BROADCAST COAT OVER ENTIRE ROOF AREA FOR SLIP RESISTANCE. INSTALL ROOFING SYSTEM PER MANUFACTURER'S STRICT INSTRUCTIONS. SEE SPECIFICATION AND DETAIL 1/A8.10 FOR ADDITIONAL INFORMATION.
44. GC TO PROVIDE AND INSTALL NEW TAPERED POLYISOCYANURATE ROOF INSULATION. CONTRACTOR SHALL PROVIDE POSITIVE PITCH OF MIN. ¼" PER FOOT TOWARDS ROOF DRAINS.
45. GC TO PROVIDE NEW THROUGH-WALL SCUPPER IN EXISTING PARAPET WALL OF BREEZEWAY. SEE DETAIL 9 ON SHEET A8.10 FOR ADDITIONAL INFORMATION.
46. PC TO INSTALL NEW OVERFLOW DRAIN WITH CAST IRON DRAIN RING. SEE DETAIL 4/A8.10 AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
47. GC TO PROVIDE AND INSTALL NEW .040" THICK ALUMINUM COPING. ALUMINUM SHALL BE KYNAR FINISH AND COLOR SHALL BE PER OWNER'S SELECTION. SEE ROOF DETAILS AND SPECIFICATION FOR ADDITIONAL INFORMATION.
48. MC TO PROVIDE AND INSTALL NEW LOUVERS FOR MECHANICAL EQUIPMENT. GC TO COORDINATE THROUGH-WALL PENETRATIONS WITH MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
49. GC TO INSTALL NEW WINDOWS IN EXTERIOR WALL. SEE WINDOW SCHEDULE, TYPES, AND DETAILS ON SHEET A6.10 FOR ADDITIONAL INFORMATION.
50. GC TO PROVIDE AND INSTALL NEW DECORATIVE CAST STONE TRIM. SUPPORT AND ANCHOR PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
51. GC TO PROVIDE AND INSTALL NEW 2-HOUR RATED EXTERIOR WALL WITH BRICK VENEER. SEE STRUCTURAL DRAWINGS, SECTIONS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. BRICK BONDING PATTER TO BE COMMON BOND WITH HEADER COURSE EVERY 10 COURSES. SEE ADJACENT EXISTING BRICK MASONRY FOR ADDITIONAL INFORMATION.
52. LINE OF ROOF BEYOND.
53. GC TO PROVIDE AND INSTALL NEW EXTERIOR DOORS. SEE DOOR SCHEDULE ON DRAWING A6.01 FOR ADDITIONAL INFORMATION.
54. NEW DUCTWORK BY MC TO NEW LOUVERS. SEE MECH. DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE WORK WITH MC.
55. GC TO PROVIDE AND INSTALL NEW FINISH FLOORING. SEE FINISH FLOOR PLANS AND SPECIFICATIONS.
56. GC TO PROVIDE AND INSTALL NEW ACOUSTICAL SUSPENDED CEILING. SEE PROPOSED REFLECTED CEILING PLANS AND SPECIFICATIONS.
57. NEW ROOFING. SEE PROPOSED ROOF PLAN ON DRAWING A2.14 FOR ADDITIONAL INFORMATION.
58. GC TO INFILL EXISTING WINDOW OPENING. FACE BRICK, MORTAR AND BONDING SHALL MATCH THAT OF ADJACENT BRICK. NEW FACE BRICK SHALL BE TOOTHED INTO EXISTING BRICK PER DETAIL 5/A8.21. ALL INTERIOR FINISHES SHALL ALIGN AND BE FINISHED TO MATCH ADJACENT SURFACES. PAINT INFILLED AREA TO MATCH ADJACENT INTERIOR FINISH. SEE PROPOSED FLOOR PLANS A2.10 - A2.13 AND ELEVATION DRAWINGS FOR ADDITIONAL INFORMATION.
59. NEW ELEVATOR HOIST BEAM. COORDINATE SIZE AND LOCATION WITH ELEVATOR MANUFACTURER. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
60. GC TO PROVIDE AND INSTALL NEW LINTEL IN MODIFIED OPENING. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
61. NEW 10" THICK PRE-CAST CONCRETE PLANK WITH 2" LIGHTWEIGHT CONCRETE TOPPER (WHERE APPLICABLE). SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. ALL CONTRACTORS SHALL COORDINATE PENETRATIONS THROUGH ALL CONCRETE PLANK WITH GC. PROVIDE SHOP DRAWINGS SHOWING ALL PENETRATIONS WITH SIZES AND LOCATIONS PRIOR TO FABRICATION.
62. NEW BUILDING FOOTINGS AND FOUNDATIONS. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
63. ELEVATOR SUMP PIT PER MANUFACTURER. SEE STRUCTURAL DRAWINGS FOR SUMP PIT SIZE AND DEPTH. SEE PLUMBING DRAWINGS FOR SUMP PIT PUMP INFORMATION.
64. GC TO PROVIDE AND INSTALL NEW ELEVATOR DOOR AND FRAME. SEE ELEVATOR SPECIFICATION FOR ADDITIONAL INFORMATION.
65. MC TO PROVIDE AND INSTALL NEW CABINET HEATERS AND METAL COVERS TO CONCEAL PIPING. SEE PROPOSED MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
66. NEW 6" REINFORCED CONCRETE SLAB OVER 15 MIL POLY VAPOR BARRIER OVER 6" COMPACTED ¾" CLEAN STONE. SEE STRUCTURAL DRAWINGS AND SPECIFICATION FOR ADDITIONAL INFORMATION.
67. ELEVATION OF RAMP ADJACENT TO MAS BUILDING. SEE SECTION 1/A4.02 FOR ADDITIONAL INFORMATION.
68. GC TO INFILL OPENINGS IN EXISTING WALL WITH NEW STEEL STUDS AND GWB. SEE WALL PROPOSED PLANS AND WALL TYPES FOR ADDITIONAL INFORMATION. FINISHED SURFACES SHALL ALIGN FLUSH WITH ADJACENT SURFACES. PAINT INFILLED AREA TO MATCH ADJACENT.
69. EXISTING CEILING TO REMAIN.
70. GC TO PROVIDE AND INSTALL NEW PORCELAIN TILE WAINSCOTING WITH TILE BASE AND BULLNOSE CAP. SEE SECTIONS, INTERIOR ELEVATIONS AND SPECIFICATION FOR ADDITIONAL INFORMATION.
71. DISTRICT VENDOR TO PROVIDE AND INSTALL NEW CLASSROOM CASEWORK. SIZE OF NEW CLASSROOM CASEWORK SHALL MATCH THAT OF EXISTING CASEWORK TO BE REMOVED. SEE INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
72. DISTRICT VENDOR TO PROVIDE AND INSTALL NEW 1 ½" THICK SOLID SURFACE COUNTERTOP WITH 3" INTEGRATED BACKSPLASH. GC TO COORDINATE SINK CUTS WHERE APPLICABLE WITH PC. ALL COUNTERS SHALL HAVE EASED EDGES. SEE INTERIOR ELEVATIONS AND SPECIFICATION FOR ADDITIONAL INFORMATION.
73. GC TO INSTALL NEW SINK INTO NEW COUNTER. PC TO PLUMB SINK AND ENSURE FULLY FUNCTIONAL OPERATION. INSTALL ADA SINK WHERE INDICATED. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. GC TO COORDINATE WITH DISTRICT VENDOR FOR SINK OPENINGS IN COUNTERTOPS.
74. GC TO PROVIDE AND INSTALL RUBBER EXPANSION JOINT. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
75. GC TO INSTALL NEW INTERIOR PARTITION AT ROOM 008 WHERE EXISTING WALL WAS DEMOLISHED AND EXISTING IN-WALL RADIATOR WAS REMOVED. COORDINATE ACTUAL LOCATION OF NEW WALL WITH FIELD CONDITIONS.
76. GC TO INSTALL NEW PRE-MANUFACTURED 36" DIA. X 48" DEEP SUMP BASIN IN NEW EXCAVATION. LINE OPEN EXCAVATION WITH FILTER FABRIC AND BACKFILL WITH ¾" DIA. CLEAN DRAINAGE STONE. GC TO POUR NEW 4" THICK REINFORCED CONCRETE ON TOP OF STONE. REINFORCE SIMILAR TO DETAIL 2/A2.01. COORDINATE WITH PC.
77. GC TO INSTALL (2) - 6" DIA. PERFORATED TRIPLE-WALL FOOTING DRAINS IN 2'-0"W X 18"D TRENCH. GC TO LINE TRENCH WITH FILTER FABRIC AND BACKFILL WITH ¾" DIA. CLEAN DRAINAGE STONE. GC TO INSTALL INTERIOR DRAIN TILE AT WALL EDGE ON TOP OF NEW STONE. GC TO CONNECT PIPING TO NEW SUMP BASIN. POUR NEW 4" THICK, 3,500 PSI REINFORCED CONCRETE SLAB ON TOP OF NEW STONE. LEAVE GAP AT SLAB EDGE AS REQUIRED FOR INTERIOR DRAIN TILE. SEE DETAIL 1/A2.01 FOR ADDITIONAL INFORMATION.
78. GC TO CONSTRUCT NEW P.T. INTERIOR SUMP BASIN ENCLOSURE WITH NEW DOOR AND SLOPED TOP. SEE DETAILS FOR ADDITIONAL INFORMATION. GC REQUIRED TO PROVIDE NEW WALL PADDING AS NECESSARY TO FIT NEW SUMP ENCLOSURE. NEW PADDING TO MATCH EXISTING IN THICKNESS, SIZE AND COLOR.
79. GC TO POWERWASH, PRIME, & COAT EXISTING STUCCO WITH "SOLARGARD HY-BUILD" BY 'TREMCO' TO A MINIMUM THICKNESS OF 28 WET MILS. GC SHALL DETAIL CORNERS, EDGES, AND COPINGS WITH SEAM SEALER. LAP SOLARGARD ONTO EXISTING ROOF FLASHING 1", TYPICAL. COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S STANDARD RANGE.
80. GC TO PROVIDE AND INSTALL NEW SEMI-RECESSED FIRE EXTINGUISHER CABINET AND FIRE EXTINGUISHER. MAINTAIN FIRE RATING OF WALL THROUGHOUT WHERE APPLICABLE. INSTALL 48" A.F.F. TO TOP OF EXTINGUISHER. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
81. ABATEMENT CONTRACTOR SHALL FUR OUT EXISTING WALL AS BACKER FOR NEW CASEWORK WITH METAL HAT CHANNELS (SEE A8.01). GC TO INSTALL PLYWOOD BACKER AND GWB TO METAL FURRING. NEW WALL SHALL EXTEND TO THE UNDERSIDE OF EXISTING CEILING. TERMINATE TOP OF NEW GWB WITH J-MOLDING TO CREATE A FINISHED CAP. ALL EXPOSED ENDS SHALL HAVE THE GWB RETURNED TO THE WALL.
82. MC TO REINSTALL SALVAGED UNIT VENTILATORS IN THEIR ORIGINAL LOCATIONS. MC TO CONNECT TO EXISTING PIPING. EC TO RECONNECT ELECTRICAL POWER AND CONTROL PER NEC REQUIREMENTS. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
83. GC TO INSTALL NEW STEEL LADDER IN ELEVATOR PIT. SEE SPECIFICATION 055133 FOR ADDITIONAL INFORMATION.
84. GC TO INSTALL NEW VINYL WALL BASE. SEE FINISH SCHEDULE ON A6.20 FOR ADDITIONAL INFORMATION. COLOR TO BE PER OWNER'S SELECTION.
85. GC SHALL INSTALL NEW 1" QUARTER ROUND MOLDING ONTO EXISTING WOOD BASE MOLDING, AND PRIME & PAINT TO MATCH THE EXISTING WOOD BASE MOLDING.
86. GC TO LAMINATE ⅝" GYPSUM BOARD TO CUT FACE OF CONCRETE BLOCK TO CREATE A FINISH SURFACE. TAPE ALL JOINTS AND PAINT. GC TO INSTALL J-MOLDING AT EXPOSED EDGE OF GYPSUM BOARD.
87. GC TO RECONSTRUCT EXISTING STEP TO BLEACHERS WITH 3,500 PSI CONCRETE. RISER HEIGHT, TREAD DEPTH, AND STEP WIDTH TO BE SAME AS STEP THAT WAS REMOVED.
88. GC TO PROVIDE RESCUE WINDOW TAGS AS REQUIRED. SEE DRAWING A6.10 FOR ADDITIONAL INFORMATION.
89. GC TO PROVIDE AND INTALL NEW WINDOW SHADES. SEE SPECIFICATION SECTION 122124 FOR ADDITIONAL INFORMATION.
90. GC TO MODIFY EXISTING CEILING AS REQUIRED TO INSTALL NEW WALL INFILL. REINSTALL TO CREATE A FINISHED APPEARANCE.
91. GC TO INSTALL NEW SURFACE MOUNTED FIRE EXTINGUISHER. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
92. GC TO ADHERE 'SOPREMA' "COLPHENE BSW PROTECT'R" WATERPROOFING MEMBRANE (80 MIL THICK) OVER 'SOPREMA' "COLPHENE BSW H" BLINDSIDE WATERPROOFING MEMBRANE (140 MIL THICK), PRIMED WITH 'SOPREMA' "ELASTOCOL STICK" AT THE UNDERSIDE OF THE NEW ELEVATOR PIT. WRAP BOTH WATERPROOFING MEMBRANES UP VERTICAL FACES MIN. 2' AND TIE INTO VERTICAL WATERPROOFING PER MANUFACTURER'S SPECIFICATIONS. HEAT WELD ALL LAP SPLICES. REFER TO SPECIFICATION SECTION 071326 AND 071352 FOR ADDITIONAL INFORMATION.
93. GC TO ADHERE 'SOPREMA' "COLPHENE BSW PROTECT'R" WATERPROOFING MEMBRANE (80 MIL THICK) OVER 'SOPREMA COLPHENE BSW V" BLINDSIDE WATERPROOFING MEMBRANE (120 MIL THICK) PRIMED WITH 'SOPREMA ELASTOCOL STICK" ON VERTICAL SURFACES OF NEW ELEVATOR PIT. TIE INTO HORIZONTAL WATERPROOFING MEMBRANES PER MANUFACTURER'S SPECIFICATIONS. HEAT WELD ALL LAP SPLICES. REFER TO SPECIFICATION SECTION 071326 AND 071352 FOR ADDITIONAL INFORMATION.
94. GC TO PRIME CLEAN AND PREP EXISTING FOUNDATION WALL, PER WATERPROOFING MANUFACTURER'S REQUIREMENTS, FROM BOTTOM OF EXISTING FOOTING TO GRADE FOR INSTALLATION OF NEW POSITIVE SIDE, 'SOPREMA' "COLPHENE STICK" BELOW GRADE WATER PROOFING. REFER TO SPECIFICATION SECTION 071326 AND 071352 FOR ADDITIONAL INFORMATION.
95. GC TO INSTALL TWO (2) PLIES OF 'SOPREMA' "COLPHENE 3000" SELF-ADHERED BITUMEN MEMBRANE TO PRIMED SUBSTRATE. GC TO PRIME SUBSTRATE WITH 'SOPREMA' "ELASTOCOL STICK" PRIMER, INSTALLED PER MANUFACTURERS INSTRUCTIONS. REFER TO SPECIFICATION SECTION 071326 AND 071352 FOR ADDITIONAL INFORMATION.
96. GC TO PROVIDE NEW RETROFIT PVC WATERSTOP SYSTEM, MODEL "581" BY 'SIKA' AT PERIMETER OF NEW BUILDING ADDITION. INSTALL INTO EXISTING SLAB WITH S.S. EXPANSION BOLT AND S.S. BATTEN BAR. SET WATERSTOP IN 'SIKA' "7300" EPOXY. NEW WATERPROOFING MEMBRANE TO BE TERMINATED INTO S.S. BATTEN BAR. INSTALL PER MANUFACTURER'S REQUIREMENTS

Date	1/10/20
Checked	MJM
Drawn	TT

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
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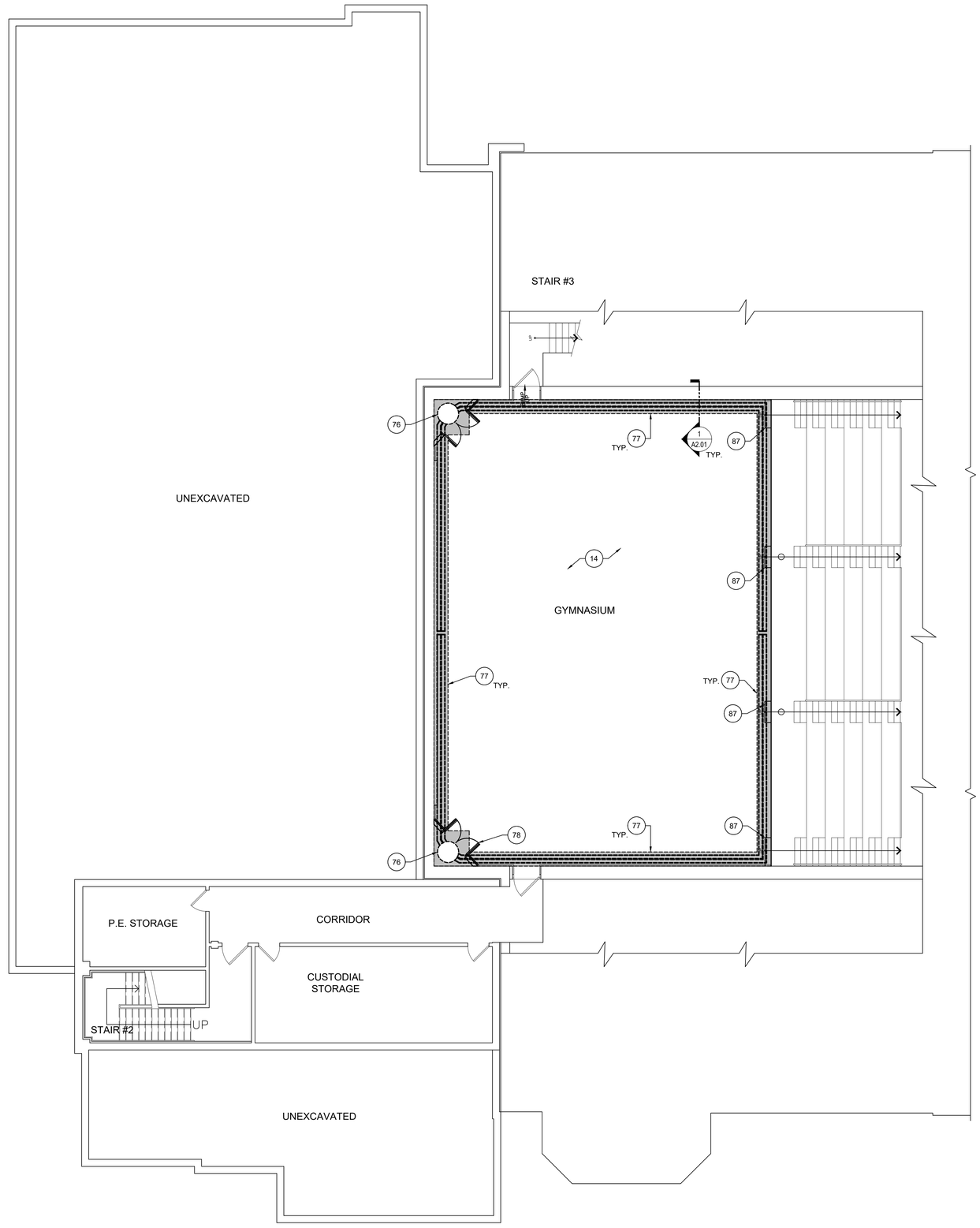
NYSED PROJECT # 66-07-01-03-0-004-030

CONSTRUCTION KEY NOTES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A200

A2.00

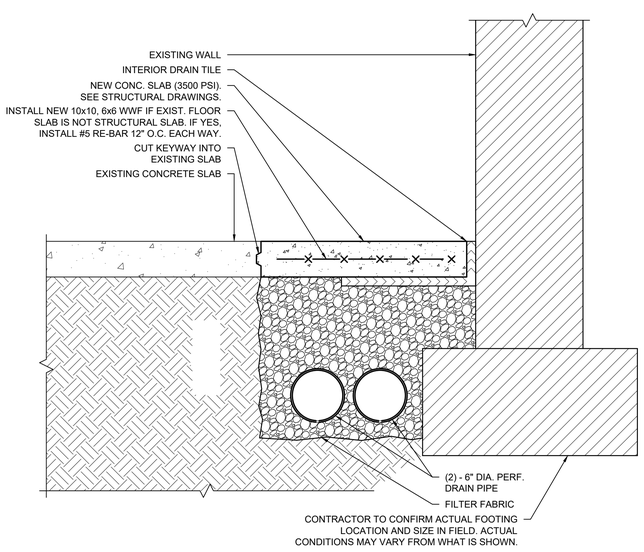


1 A2.01 Partial Proposed Basement Floor Plan

1/8" = 1'-0"

NORTH

GYMNASIUM



2 A2.01 Interior Trench Drain Detail

1 1/2" = 1'-0"

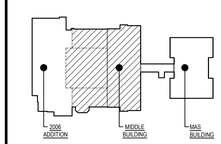
REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

(#) SYMBOL INDICATES BRICK VENEER REPLACEMENT KEY NOTE. REFER TO DRAWING A3.01 FOR NOTES.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT

License No. 022257-1

Revisions:

(#) ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

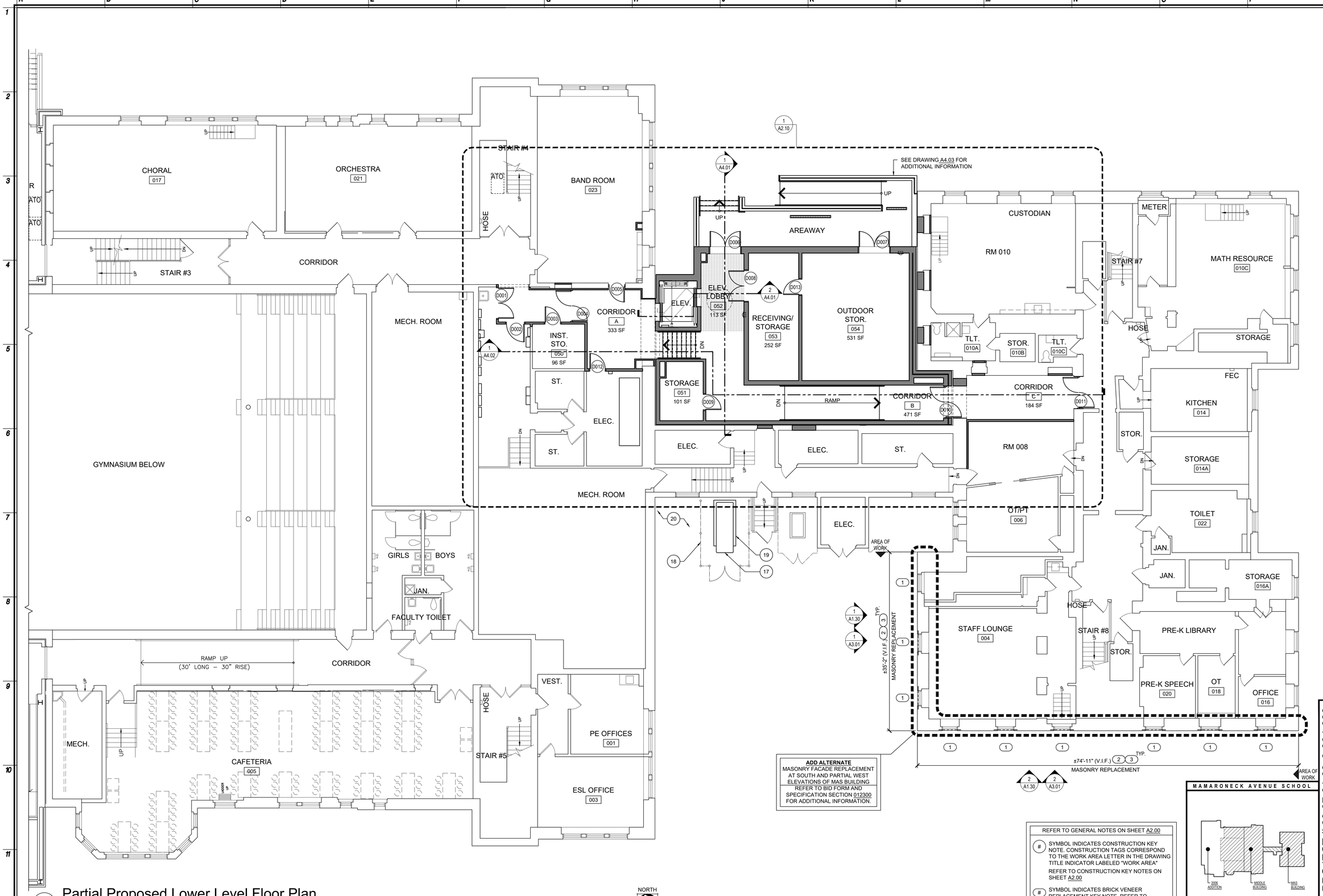
PROPOSED BASEMENT FLOOR PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A201

A2.01



1 A2.02 Partial Proposed Lower Level Floor Plan

1/8" = 1'-0"

NORTH

ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

(#) SYMBOL INDICATES BRICK VENEER REPLACEMENT KEY NOTE. REFER TO DRAWING A3.01 FOR NOTES.

MAMARONECK AVENUE SCHOOL

Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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PROPOSED LOWER LEVEL FLOOR PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

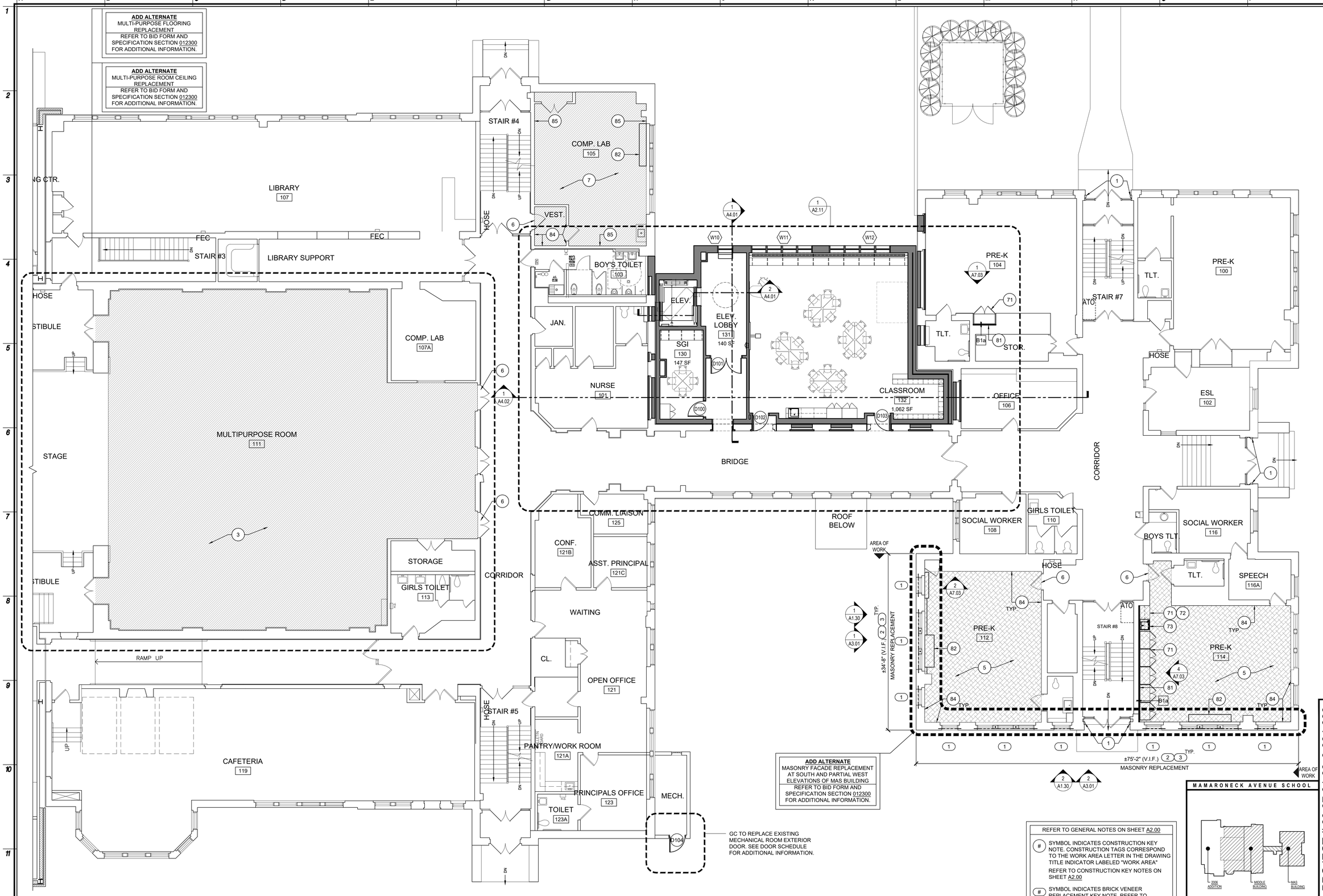
Job No. 4.1092.72.2

File No. 10927202A201

A2.02

ADD ALTERNATE
MULTI-PURPOSE FLOORING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

ADD ALTERNATE
MULTI-PURPOSE ROOM CEILING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.



ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

GC TO REPLACE EXISTING MECHANICAL ROOM EXTERIOR DOOR. SEE DOOR SCHEDULE FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"
REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

(#) SYMBOL INDICATES BRICK VENEER REPLACEMENT KEY NOTE. REFER TO DRAWING A3.01 FOR NOTES.

MAMARONECK AVENUE SCHOOL

Key Plan
NOT TO SCALE
PROJECT NORTH

1 A2.03 Partial Proposed First Floor Plan
1/8" = 1'-0"

NORTH

Date	1/10/20
Checked	MJM
Drawn	LH

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

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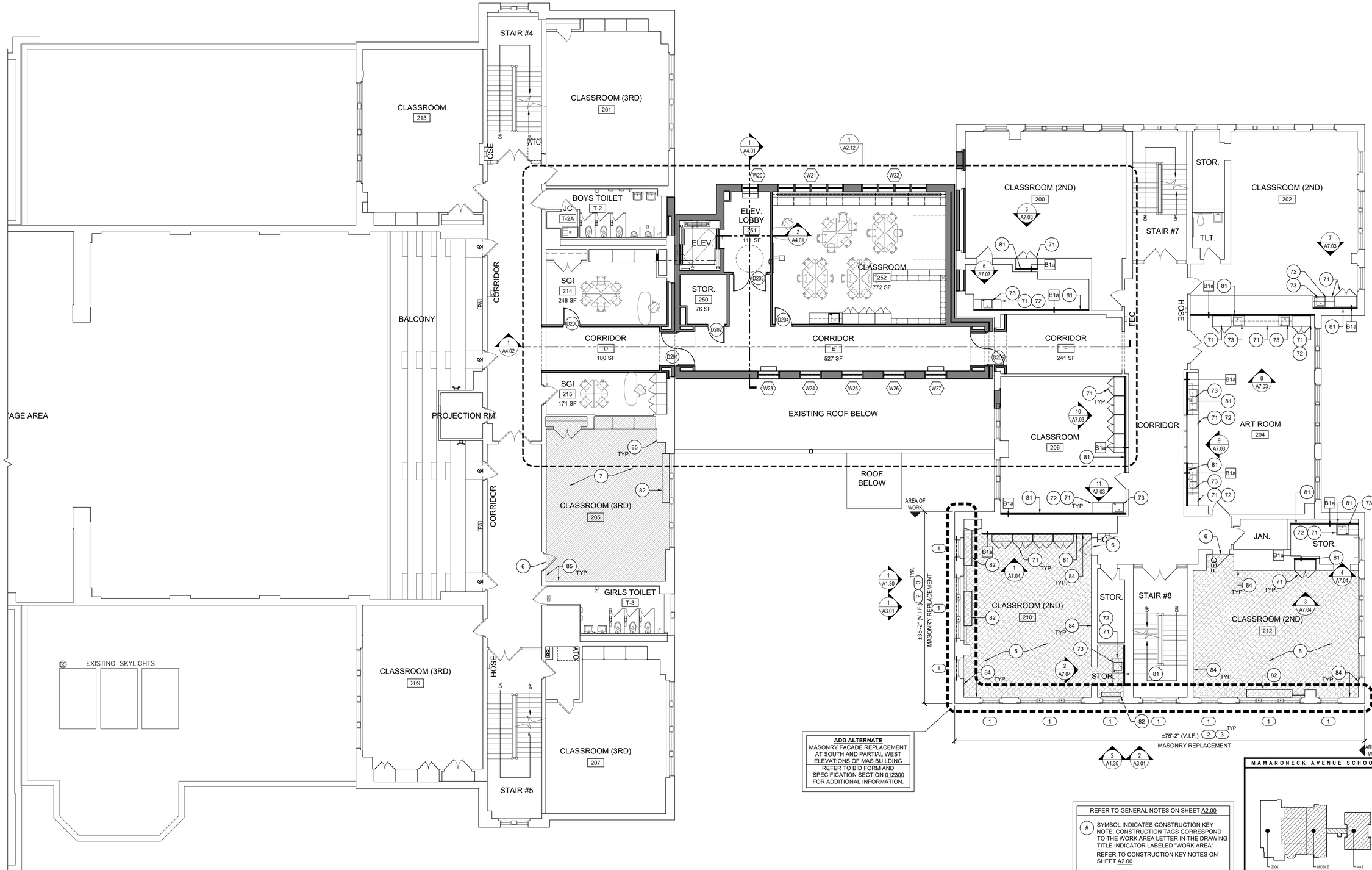
PROPOSED FIRST FLOOR PLAN
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

Job No. 4.1092.72.2
File No. 10927202A201

A2.03



ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

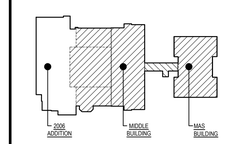
REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

(#) SYMBOL INDICATES BRICK VENEER REPLACEMENT KEY NOTE. REFER TO DRAWING A3.01 FOR NOTES.

MAMARONECK AVENUE SCHOOL



Key Plan
NOT TO SCALE

PROJECT NORTH

NORTH

1 A2.04 Partial Proposed Second Floor Plan
1/8" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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1 ISSUE TO BID 11/23/20

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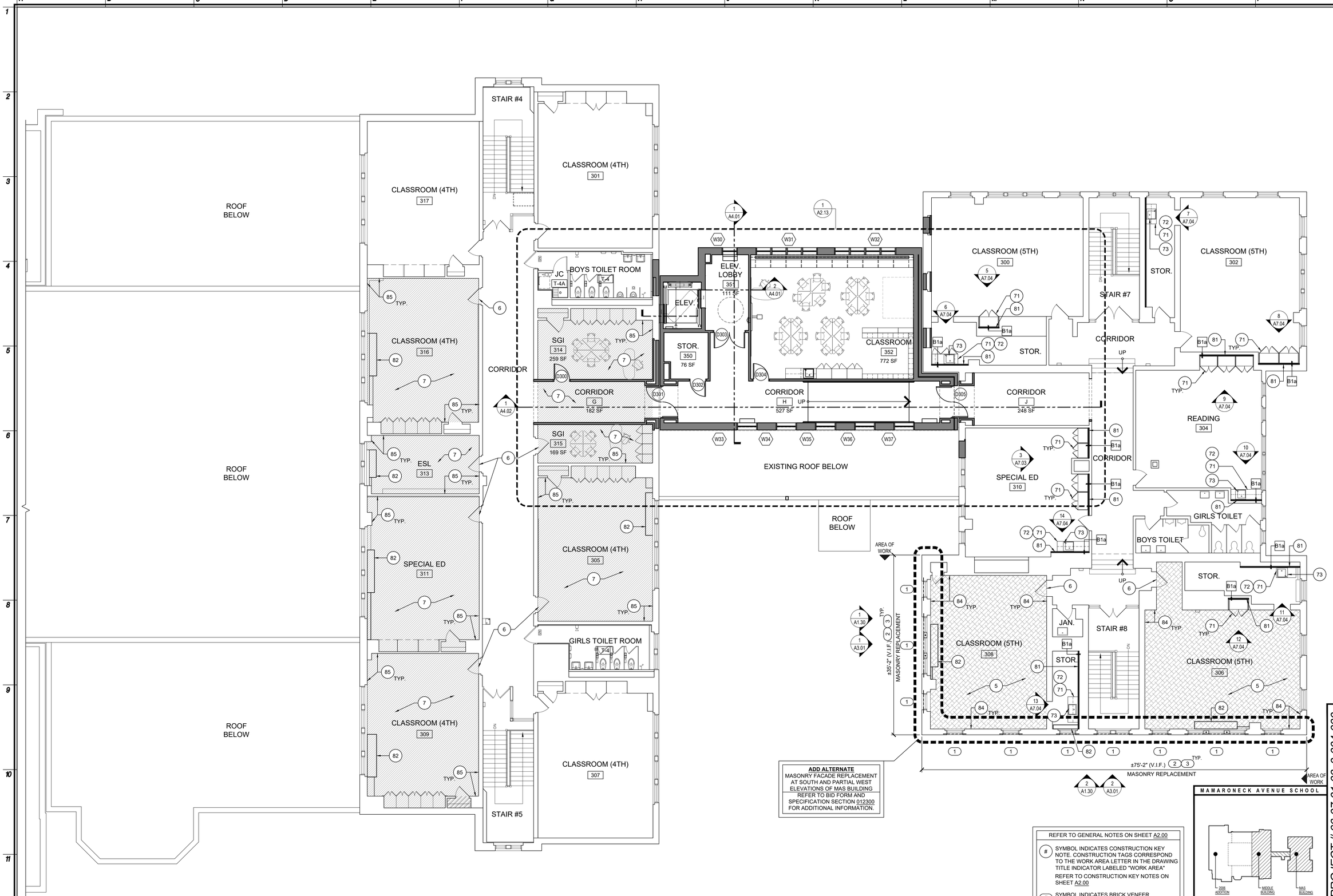
PROPOSED SECOND FLOOR PLAN
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

Job No. 4.1092.72.2
File No. 10927202A201

A2.04



ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

(#) SYMBOL INDICATES BRICK VENEER REPLACEMENT KEY NOTE. REFER TO DRAWING A3.01 FOR NOTES.

MAMARONECK AVENUE SCHOOL

Key Plan
NOT TO SCALE

PROJECT NORTH

NORTH

1 A2.05 Partial Proposed Third Floor Plan
1/8" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	TT

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Title REGISTERED ARCHITECT
License No. 022257-1

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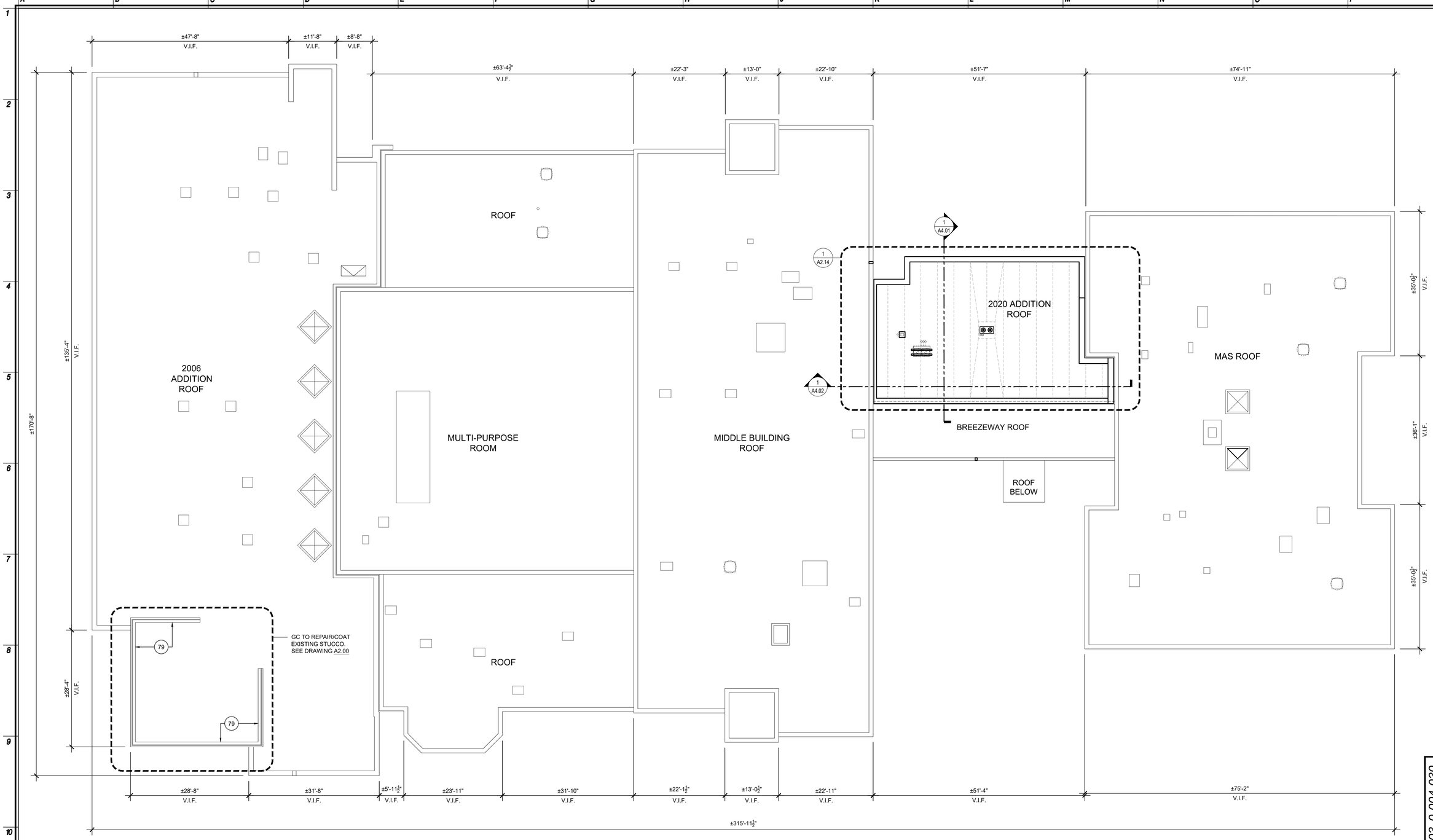
PROPOSED THIRD FLOOR PLAN
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

Job No. 4.1092.72.2
File No. 10927202A201

A2.05



1 A2.06 Proposed Roof Plan

3/32" = 1'-0"

NORTH

ROOF PLAN

REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO DEMOLITION KEY NOTES ON SHEET A2.00

(#) SYMBOL INDICATES BRICK VENEER REPLACEMENT KEY NOTE. REFER TO DRAWING A3.01 FOR NOTES.

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	DLF
Drawn	TT/JG

MICHAEL J. McGOVERN, R.A.

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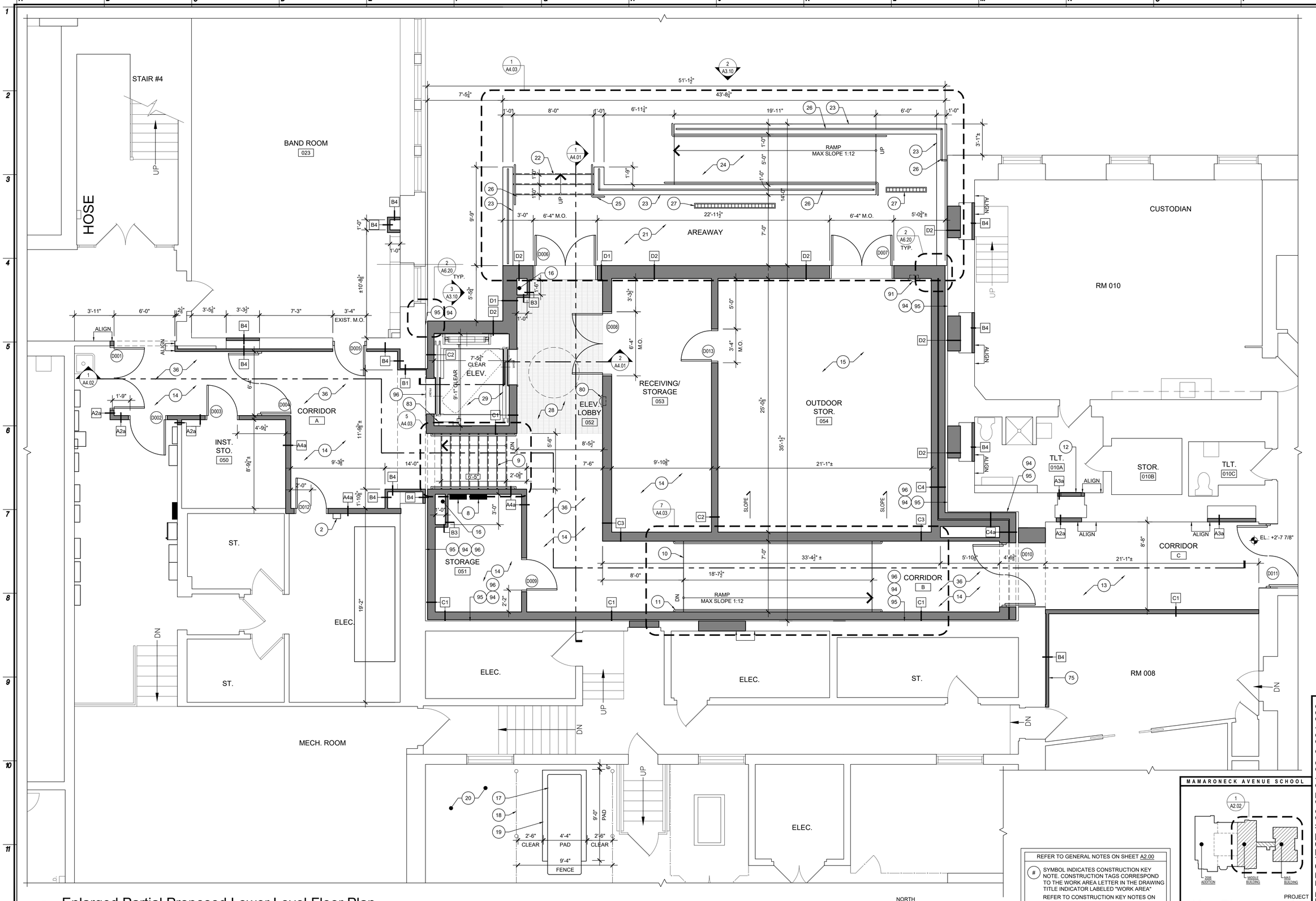
PROPOSED ROOF PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A206

A2.06



1 A2.10 Enlarged Partial Proposed Lower Level Floor Plan

1/4" = 1'-0"

NORTH

REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

DENOTES LOCATION OF MOBILITY IMPAIRED FURNITURE LOCATION.

MAMARONECK AVENUE SCHOOL

Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

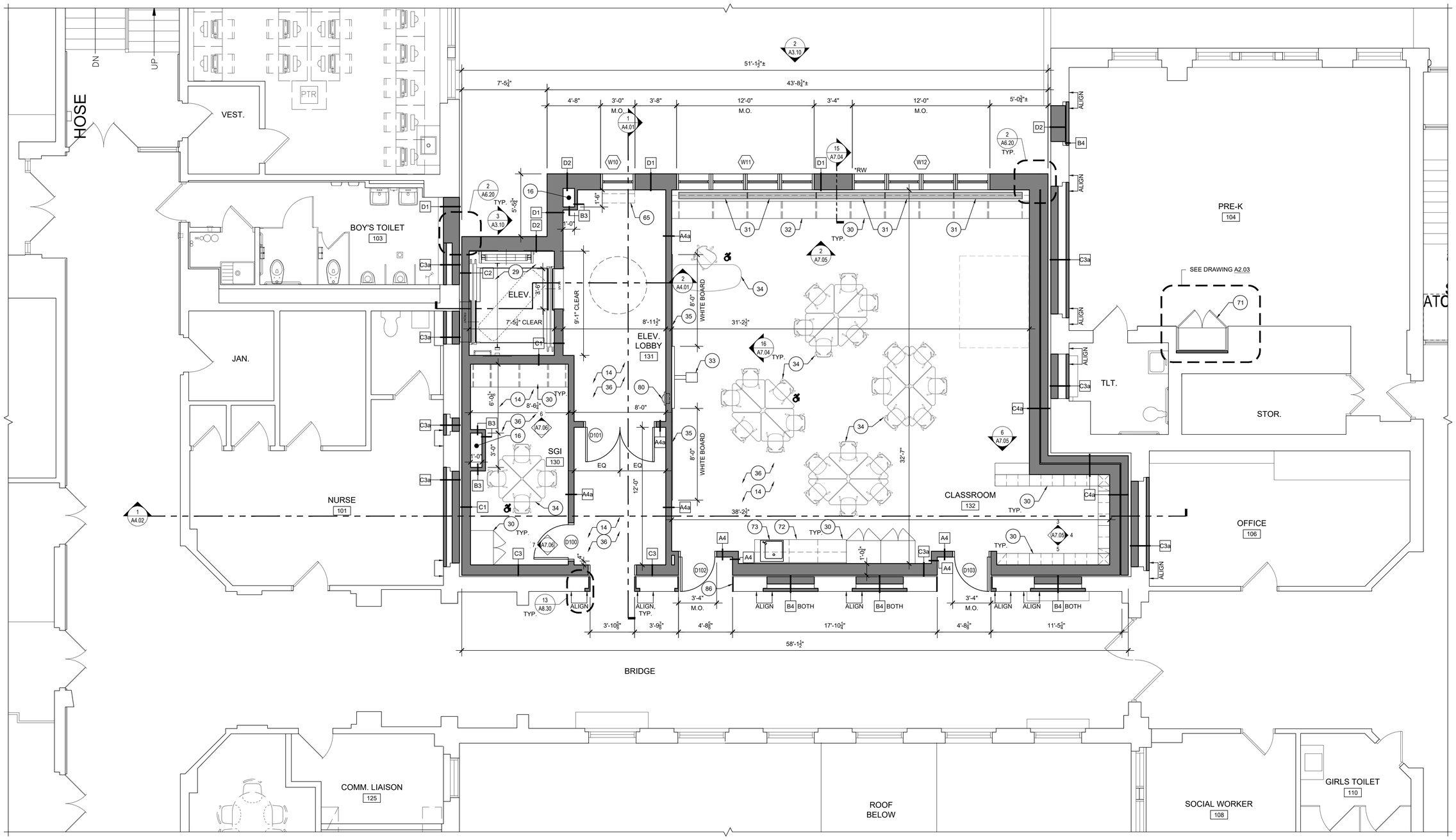
ENLARGED PROPOSED LL. FLOOR PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272202A210

A2.10



1 A2.11 Enlarged Partial Proposed First Floor Plan

1/4" = 1'-0"

NORTH

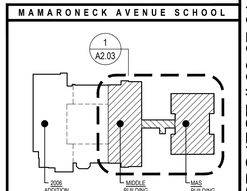
REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

DENOTES LOCATION OF MOBILITY IMPAIRED FURNITURE LOCATION.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MJM
Drawn	LH

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

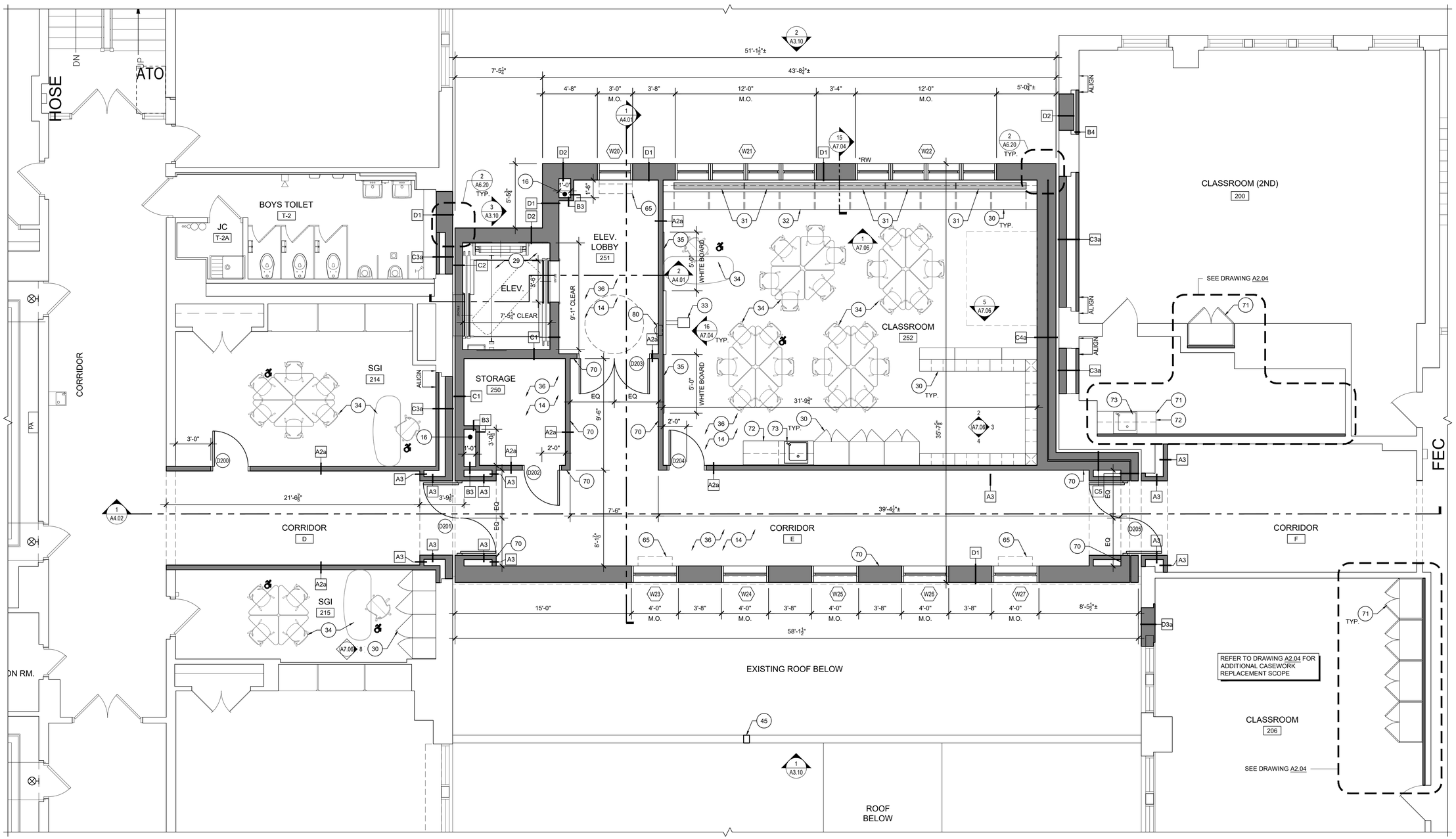
ENLARGED PROPOSED FIRST FLOOR PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272202A210

A2.11



1 A2.12 Enlarged Partial Proposed Second Floor Plan

1/4" = 1'-0"

NORTH

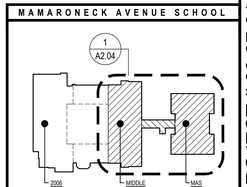
REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

♿ DENOTES LOCATION OF MOBILITY IMPAIRED FURNITURE LOCATION.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

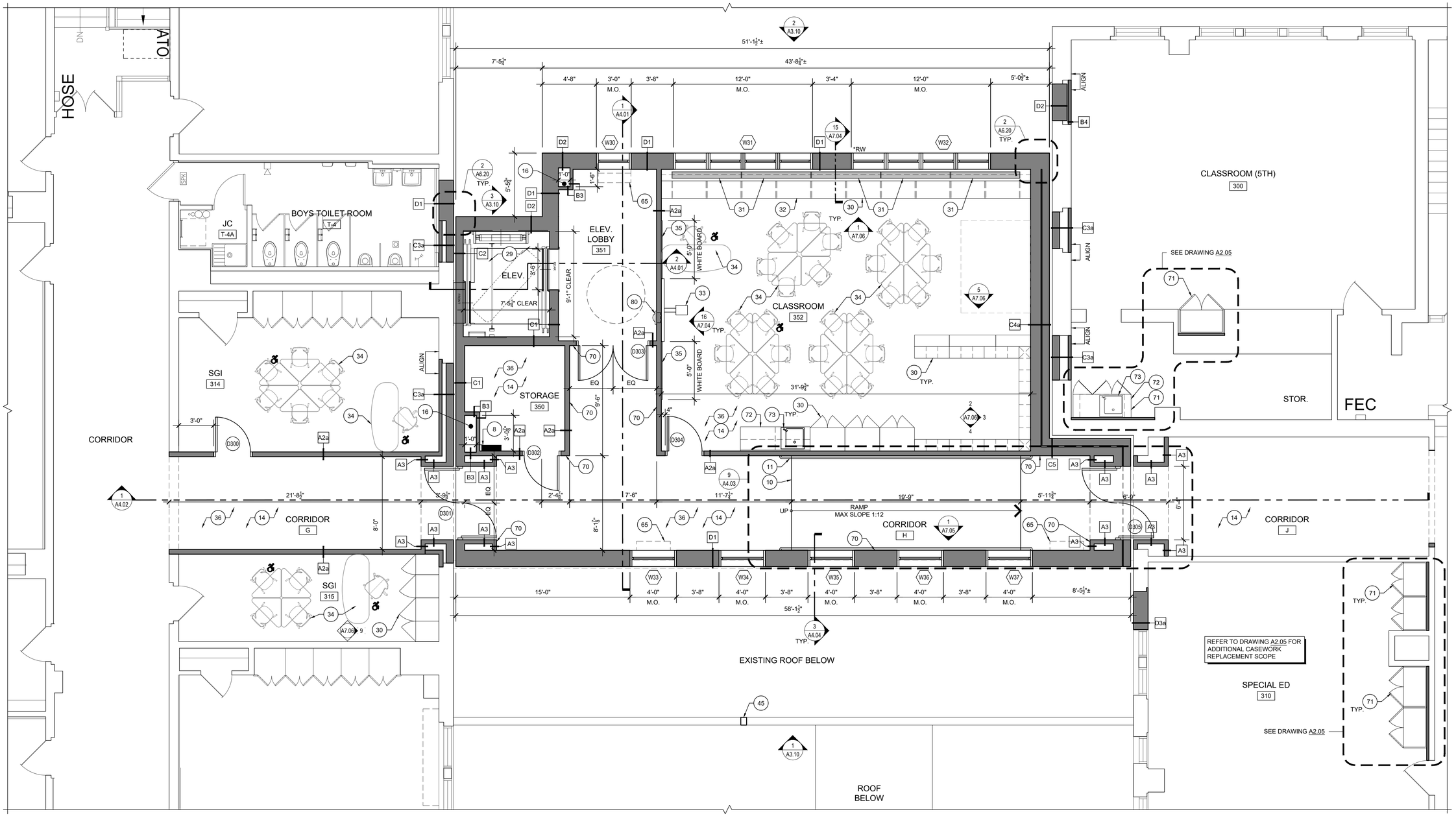
ENLARGED PROPOSED SECOND FLOOR PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A210

A2.12



1 A2.13 Enlarged Partial Proposed Third Floor Plan

1/4" = 1'-0"

NORTH

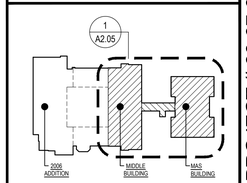
REFER TO GENERAL NOTES ON SHEET A2.00

SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

DENOTES LOCATION OF MOBILITY IMPAIRED FURNITURE LOCATION.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

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Drawn	TT

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

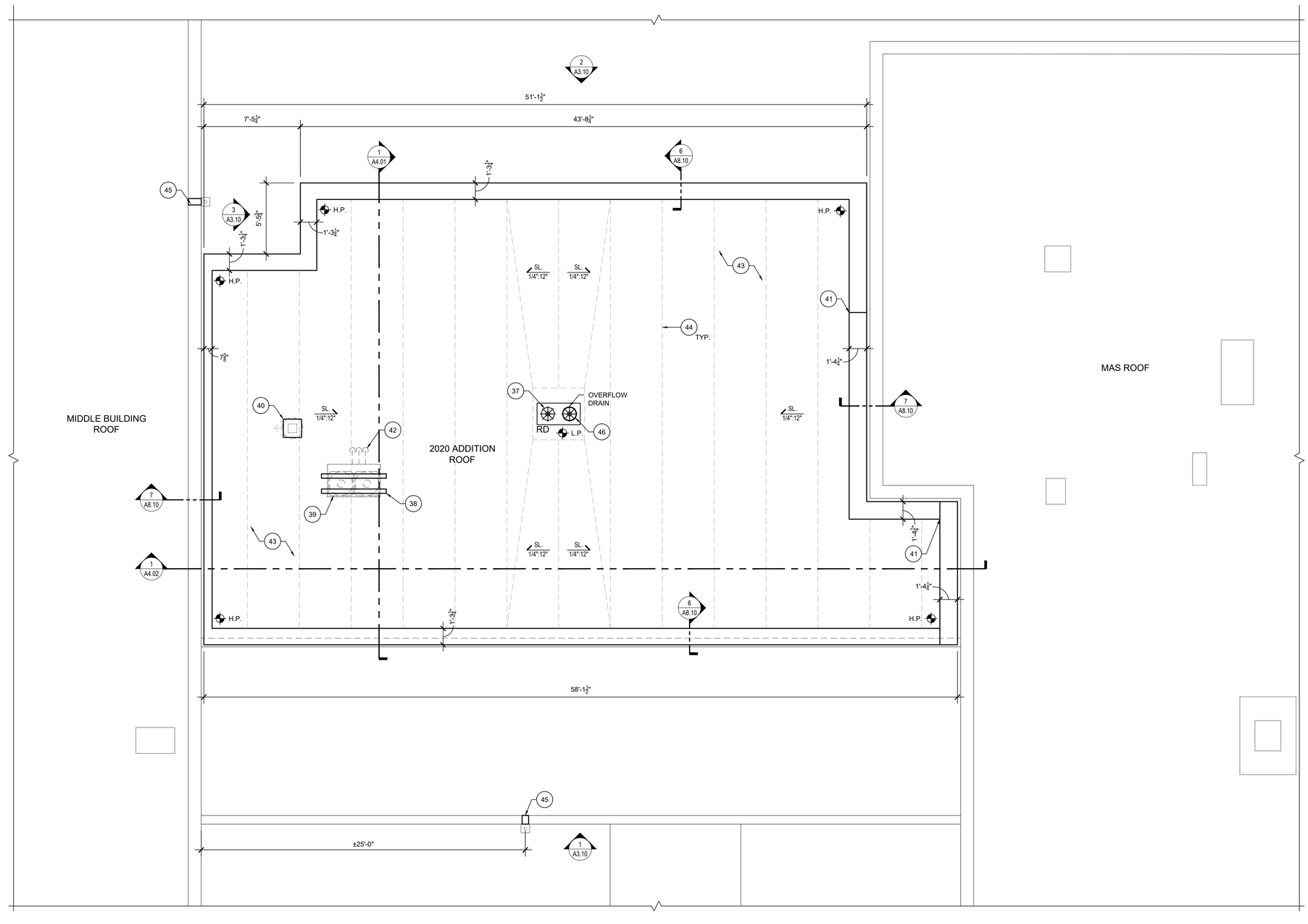
ENLARGED PROPOSED THIRD FLOOR PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272024210

A2.13



1 A2.14 Enlarged Partial Proposed Roof Plan

1/4" = 1'-0"

NORTH

Legend

RD	ROOF DRAIN
	ROOF EDGE SCUPPER W/ CONDUCTOR HEAD
SL. 1/4":12"	DENOTES SLOPE OF NEW ROOF INSULATION
	NEW TAPERED POLYISO INSULATION LAYOUT

NOTES:

- ALL DIMENSION ARE ±. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO START OF WORK.
- MAINTAIN POSITIVE DRAINAGE SLOPE OF MINIMUM 1/4" PER FOOT TO ALL ROOF DRAINS/SCUPPERS, TYPICAL.
- SEE SHEET **A8.10** FOR ROOF SYSTEMS AND DETAILS
- HATCH DENOTES ROOF AREAS NIC.

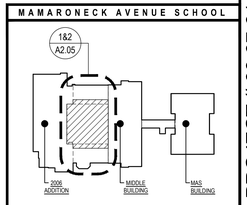
REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

DENOTES LOCATION OF MOBILITY IMPAIRED FURNITURE LOCATION.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
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Drawn	LH

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

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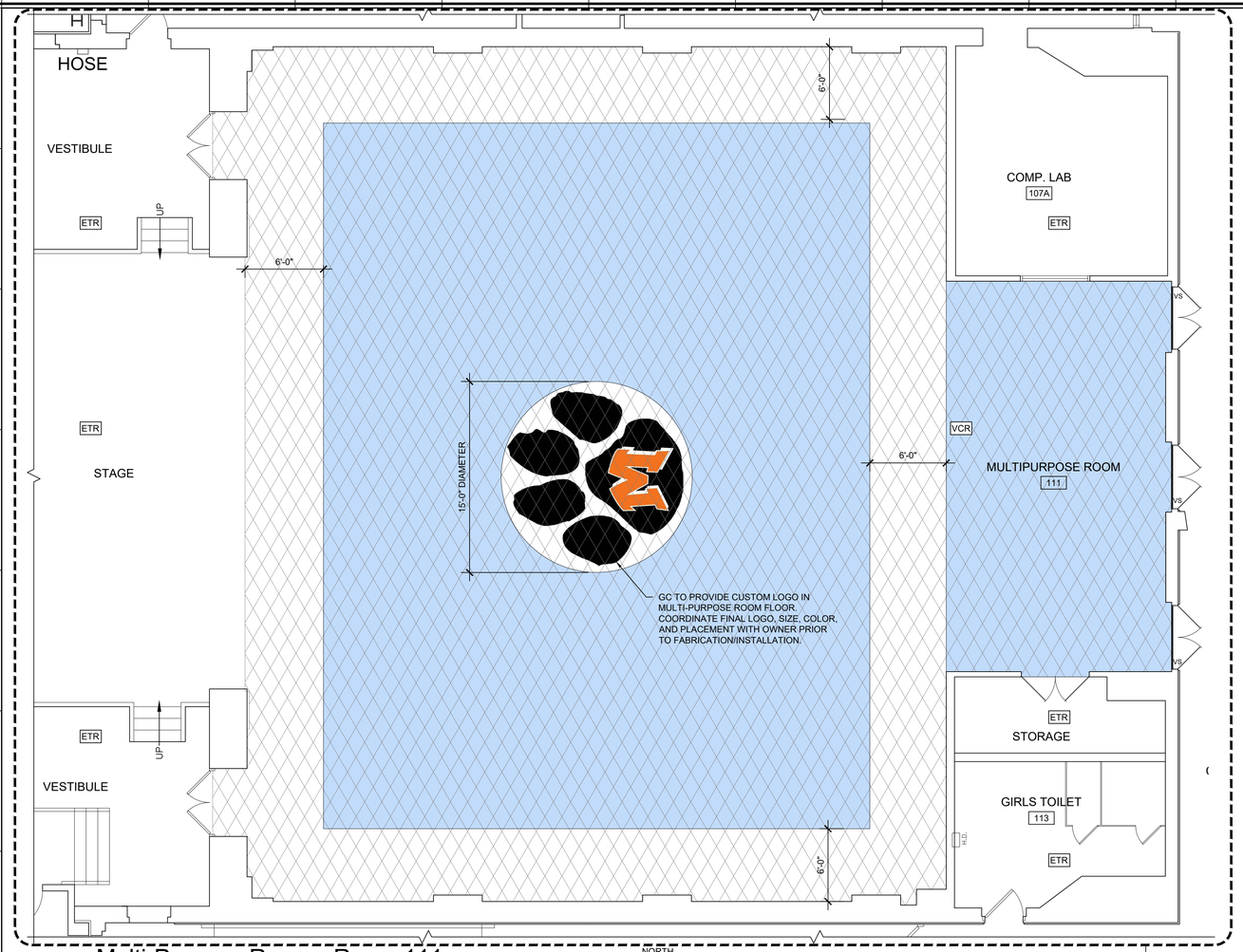
ENLARGED PROPOSED ROOF PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A210

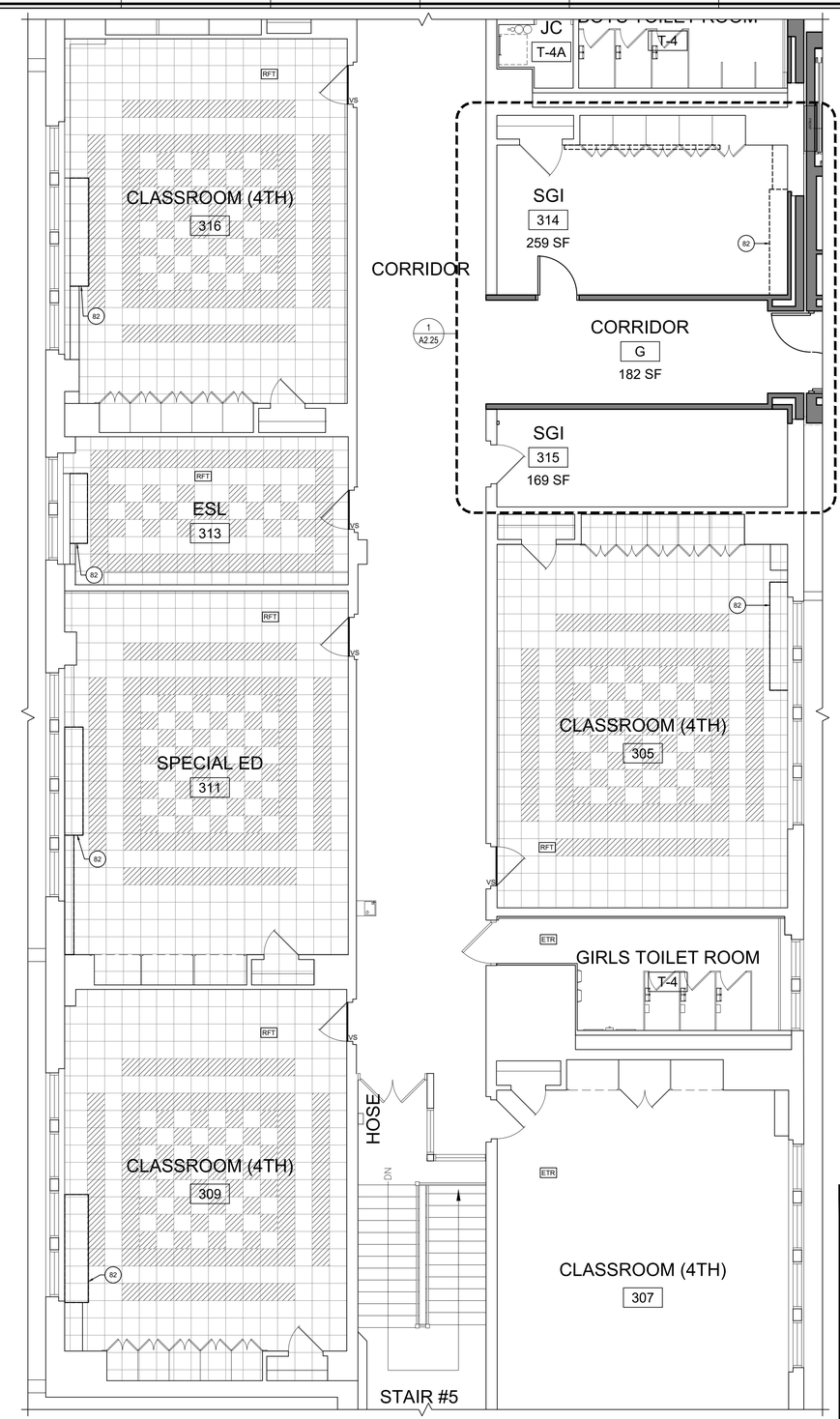
A2.14



1 A2.20 Multi-Purpose Room - Room 111

3/16" = 1'-0"

NORTH



2 A2.20 Proposed Finish Floor Plan - Third Floor

3/16" = 1'-0"

NORTH

Floor Finish Legend

SYMBOL	ABBREVIATIONS	DESCRIPTIONS
(COLOR 1) (COLOR 2)	RFT	NEW RESILIENT FLOOR TILE SOLID VINYL FLOOR TILE BY 'TARKETT' MODEL: 'CORTINA GRANDE' COLOR TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE 16"x16" TILE, 0.125" THICK
(COLOR 1) (COLOR 2)	LVT	NEW SOLID VINYL TILE BY 'AVA' MODEL: 'VRSE' COLOR TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE 9.84" x 39.37" TILE, 5MM THICK
	RBF	NEW RUBBER FLOORING BY 'AMERICAN BILTRITE' MODEL: 'AB PURE'. COLOR AND STYLE TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE. STAIR TREADS TO BE ONE PIECE TREAD AND RISER WITH CARBORUNDUM STRIP.
	EPXF	NEW POURED EPOXY FLOOR WITH INTEGRAL COVE BASE
	WO	NEW METAL WALK OFF SURFACE
(COLOR 1) (COLOR 2)	VCR	VULCANIZED COMPOSITION RUBBER BACKED SHEET VINYL
	MSF	MODULAR SPORTS FLOORING SYSTEM BY 'SPORT COURT' MODEL: 'RESPONSE' COLOR: TO BE SELECTED BY OWNER FROM MANUF'S FULL RANGE. SIZE: 9.84" x 9.84" x 0.5" THICK
	ETR	EXISTING TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION.
	AS	ADA ALUMINUM SADDLE
	MS	ADA MARBLE SADDLE
	PS	ADA PORCELAIN TILE SADDLE
	VS	ADA VINYL SADDLE TRANSITION STRIP
	EX	EXISTING SADDLE
	EJ	EXPANSION JOINT
	PTC	PAINTED CONCRETE - COLOR TO BE SELECTED BY OWNER

Interior Finish Notes

1. CONTRACTOR SHALL PREP ALL SUBFLOORS AS REQUIRED TO ACCEPT NEW FLOOR FINISHES.
2. FLOOR FINISH MATERIALS SHALL BE INSTALLED CONTINUOUS UNDER CASEWORK. INFORMATION ON PLANS ARE FOR DIAGRAMMATIC PURPOSES ONLY AND FLOOR FINISHES UNDER CASEWORK MAY NOT BE SHOWN FOR CLARITY.
3. ALL FLOOR PENETRATIONS SHALL BE SEALED WITH LISTED/RATED MATERIAL TO MAINTAIN INTEGRITY AND CONTINUITY OF FIRE ASSEMBLIES.
4. AT LOCATIONS WHERE THE EXISTING FLOOR FINISHES ARE TO REMAIN, DEMO ONLY AS MUCH AS REQUIRED TO ACCOMMODATE NEW PARTITIONS. WALL BASE AT THESE LOCATIONS SHALL MATCH EXISTING ADJACENT WALL BASE.
5. COLORS, PATTERNS AND TEXTURES OF ALL FINISH MATERIALS SHALL BE SELECTED BY OWNER. PROVIDE SAMPLES FROM MANUFACTURER'S FULL RANGE AS REQUIRED.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION ON FLOORING MATERIALS, INSTALLATION AND SPECIFICS.
7. AT LOCATIONS WHERE NEW FLOORING MEETS EXISTING FLOORING, THE GC SHALL CAREFULLY AND CLEANLY CUT EXISTING FLOORING AS REQUIRED TO ABUT NEW FLOOR FINISH. PROVIDE TRANSITION STRIP AT LOCATIONS WHERE FLOORING TYPE CHANGES. SEE PLANS AND LEGEND.

SURFACE PREPARATION NOTE:

FOR ALL WORK AREAS: WHERE REQUIRED, NEW FLOOR TO BE INSTALLED OVER SELF LEVELING MATERIAL. BASIS OF DESIGN TO BE 'CMP LEVEL 1' SELF-LEVELING WITH 'CMP LOCKDOWN' VAPOR SUPPRESSION SYSTEM.
REFER TO FLOOR PATTERN PLANS OF INDIVIDUAL AREAS AND SPECIFICATION SECTION 035416 FOR ADDITIONAL INFORMATION. CONSULT INDIVIDUAL FLOORING MANUFACTURER TO VERIFY SURFACE PREPARATION REQUIREMENTS AND COMPATIBILITY.

REFER TO INTERIOR FINISH SCHEDULE ON DRAWING A6.20 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A2.00

SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

ADD ALTERNATE
MULTI-PURPOSE FLOORING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

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MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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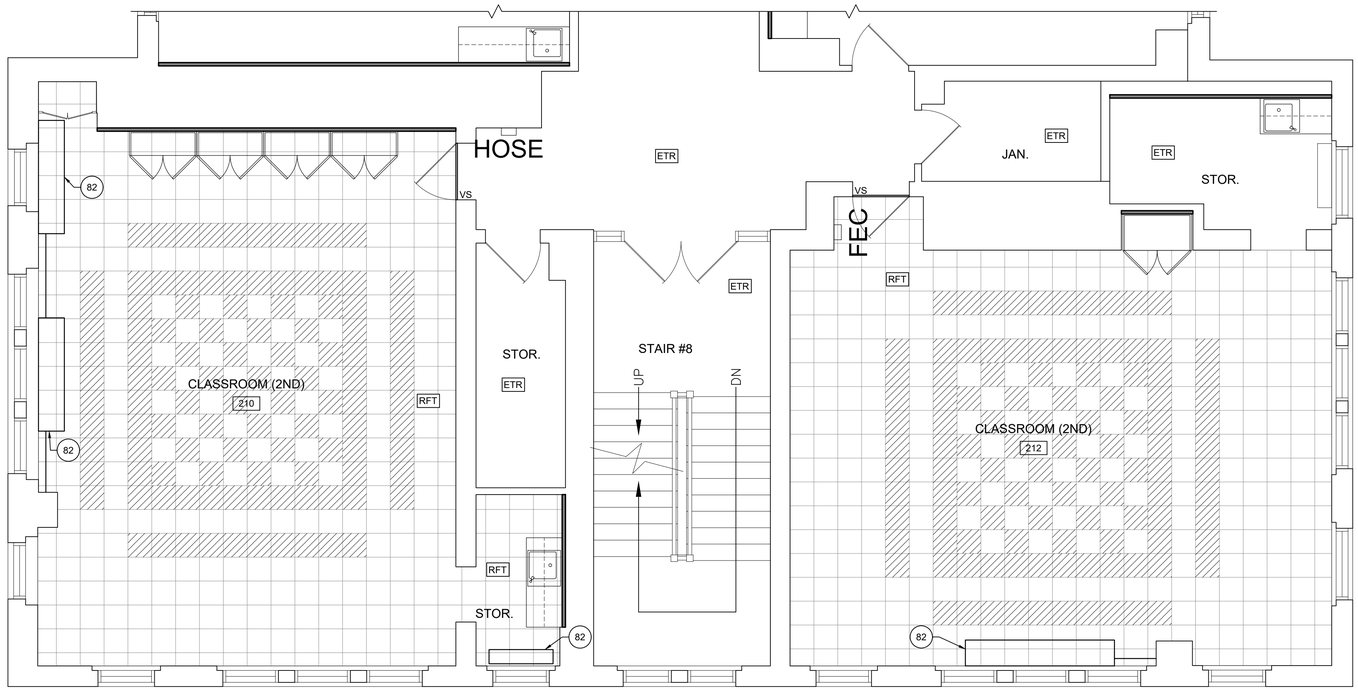
PROP. FLOOR FINISH PLANS & LEGEND
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

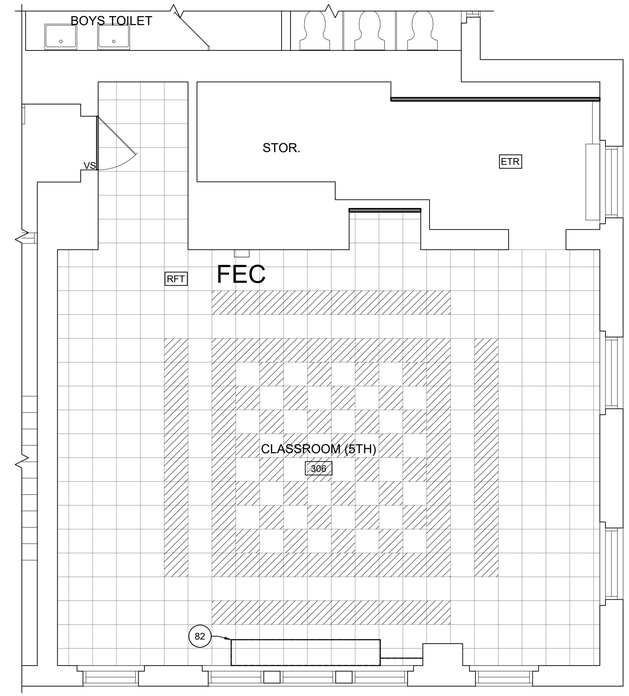
Job No. 4.1092.72.2

File No. 10927202A220

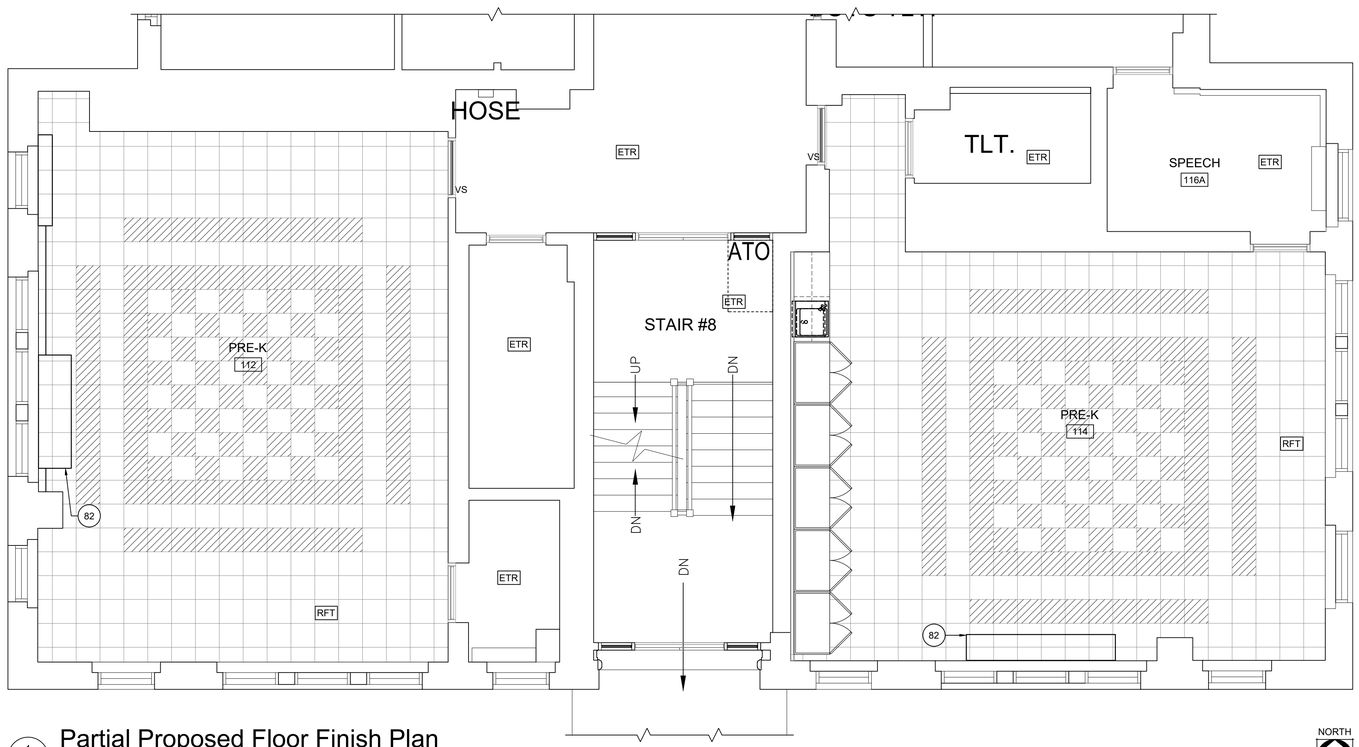
A2.20



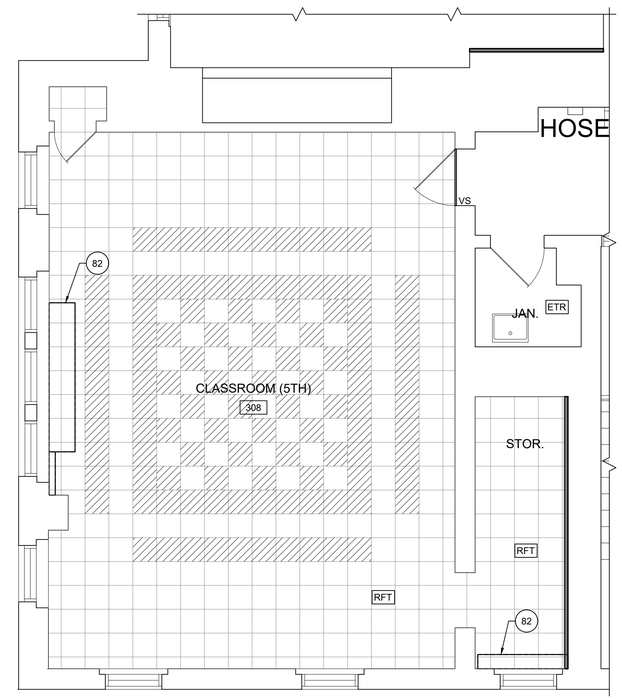
2 A2.21 Partial Proposed Floor Finish Plan
1/4" = 1'-0"
NORTH
SECOND FLOOR



3 A2.21 Partial Proposed Floor Finish Plan
1/4" = 1'-0"
NORTH
THIRD FLOOR



1 A2.21 Partial Proposed Floor Finish Plan
1/4" = 1'-0"
NORTH
FIRST FLOOR



4 A2.21 Partial Proposed Floor Finish Plan
1/4" = 1'-0"
NORTH
THIRD FLOOR

General Notes

1. SEE DRAWING A2.20 FOR FLOORING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED FINISH FLOOR PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A220

A2.21

General Notes

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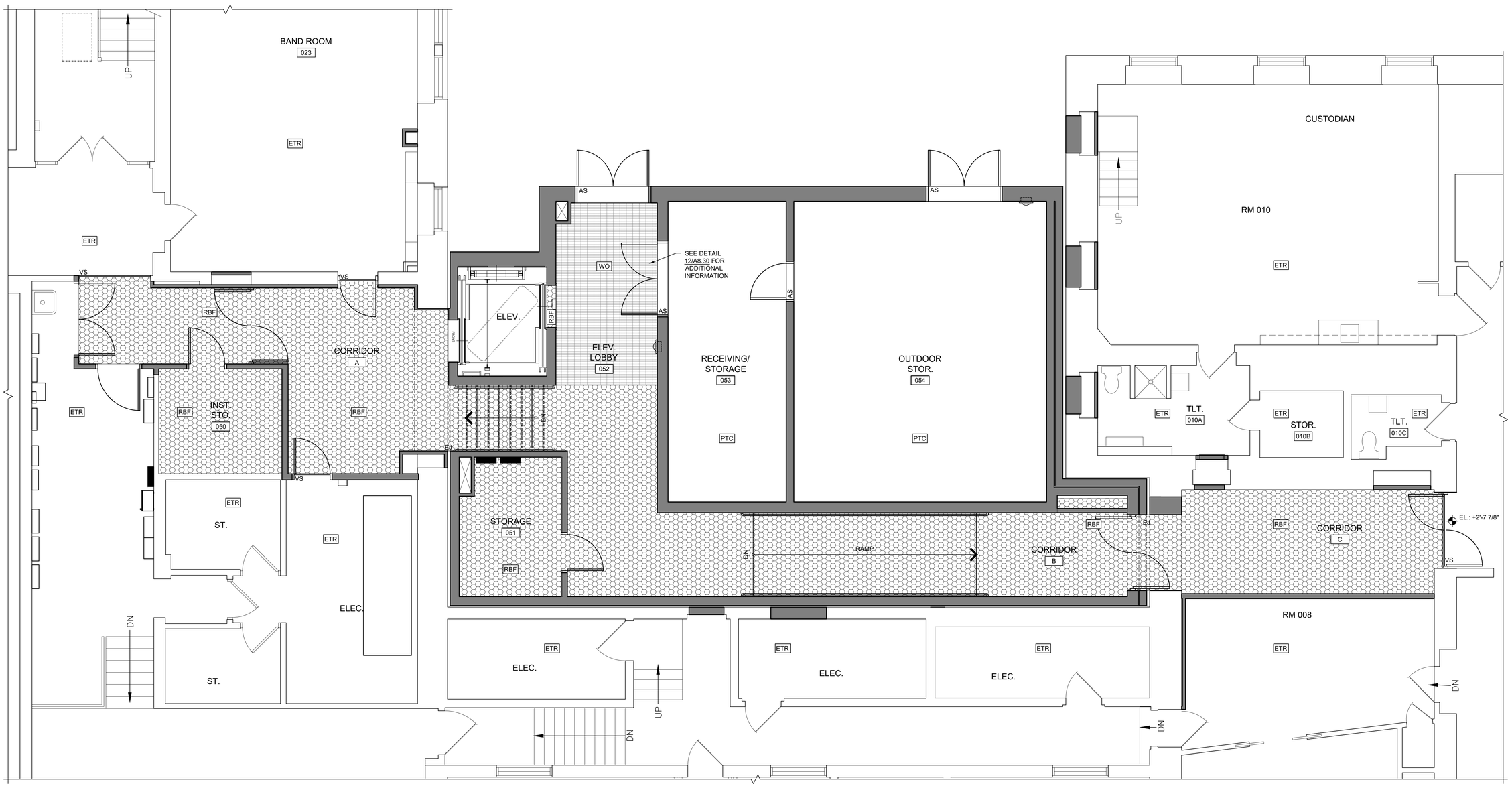

1 A2.22 Proposed Floor Finish Plan - Lower Level

1/4" = 1'-0"

NORTH

Date	1/10/20
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NYSED PROJECT # 66-07-01-03-0-004-030

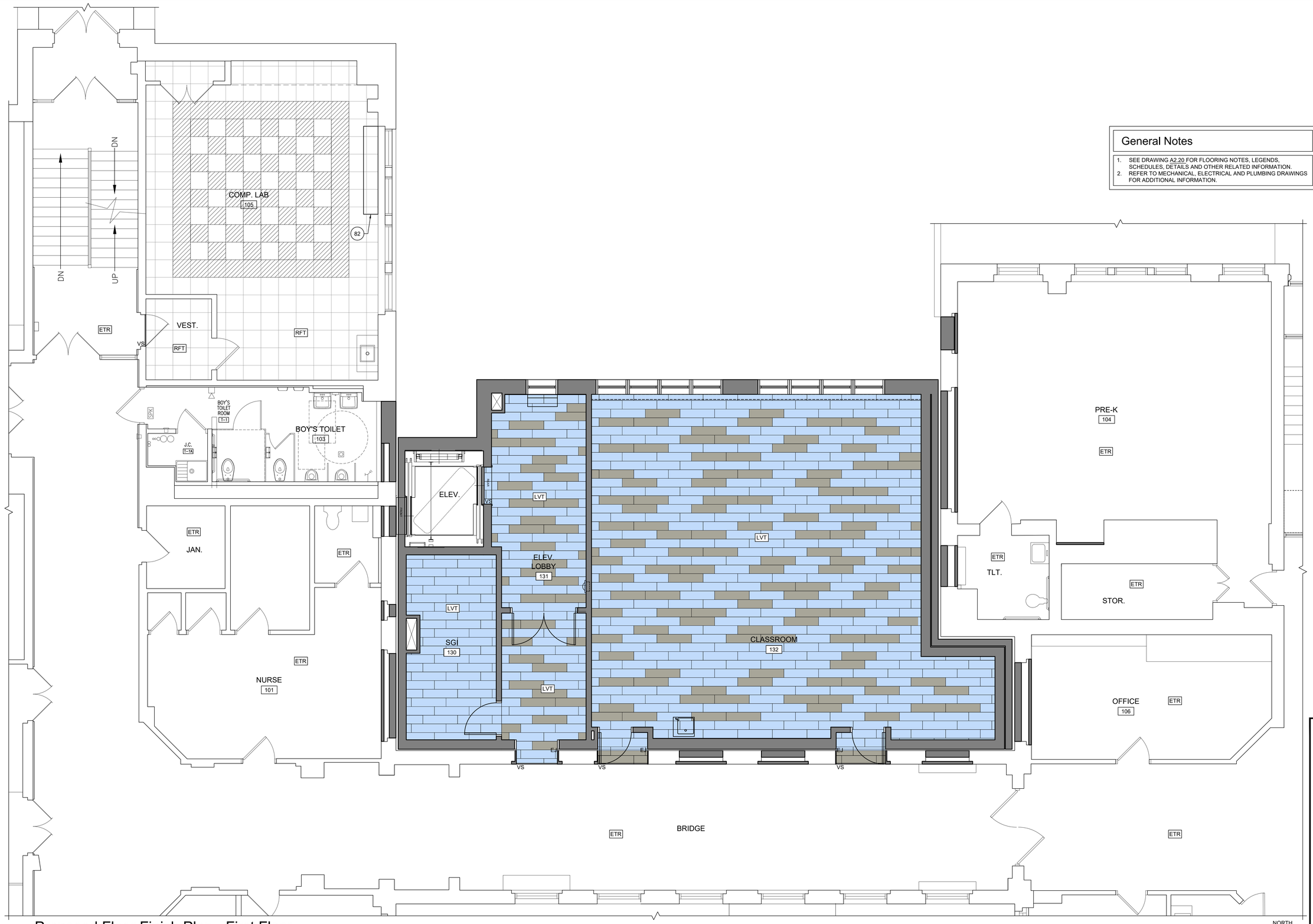
PROP. FLOOR FINISH PLAN - LOWER LEVEL

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A222

A2.22



General Notes

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2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

1 / A2.23 Proposed Floor Finish Plan - First Floor

1/4" = 1'-0"

NORTH

Date	1/10/20
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PROP. FLOOR FINISH PLAN - FIRST FLOOR

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A222

A2.23

General Notes

1. SEE DRAWING A2.20 FOR FLOORING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

1 A2.24 Proposed Floor Finish Plan - Second Floor

1/4" = 1'-0"

NORTH

Date	1/10/20
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PROP. FLOOR FINISH PLAN - SECOND FLOOR

2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A222

A2.24

General Notes

1. SEE DRAWING A2.20 FOR FLOORING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
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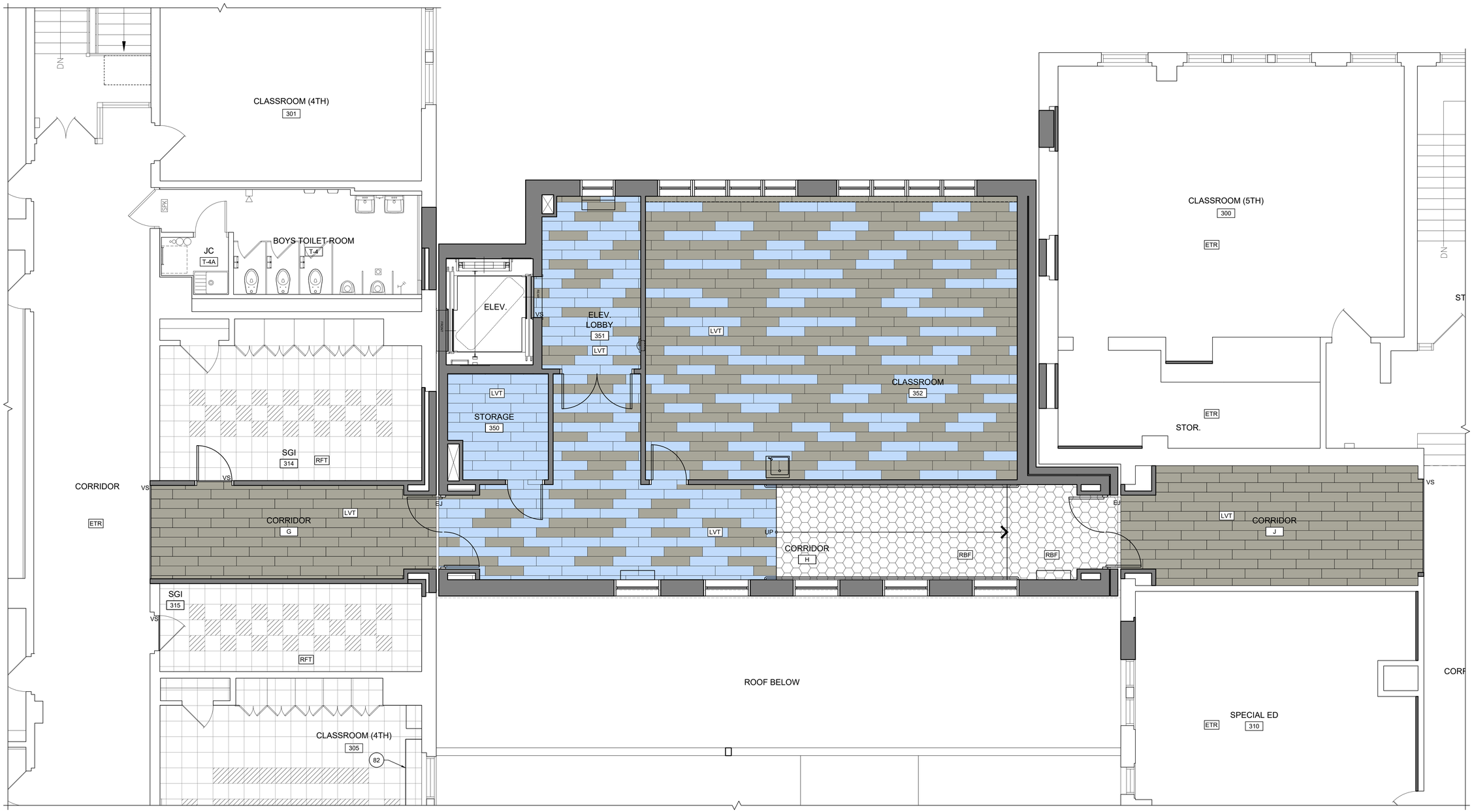

1 A2.25 Proposed Floor Finish Plan - Third Floor

1/4" = 1'-0"

NORTH

Date	1/10/20
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NYSED PROJECT # 66-07-01-03-0-004-030

PROP. FLOOR FINISH PLAN - THIRD FLOOR

2019 BOND REFERENDUM
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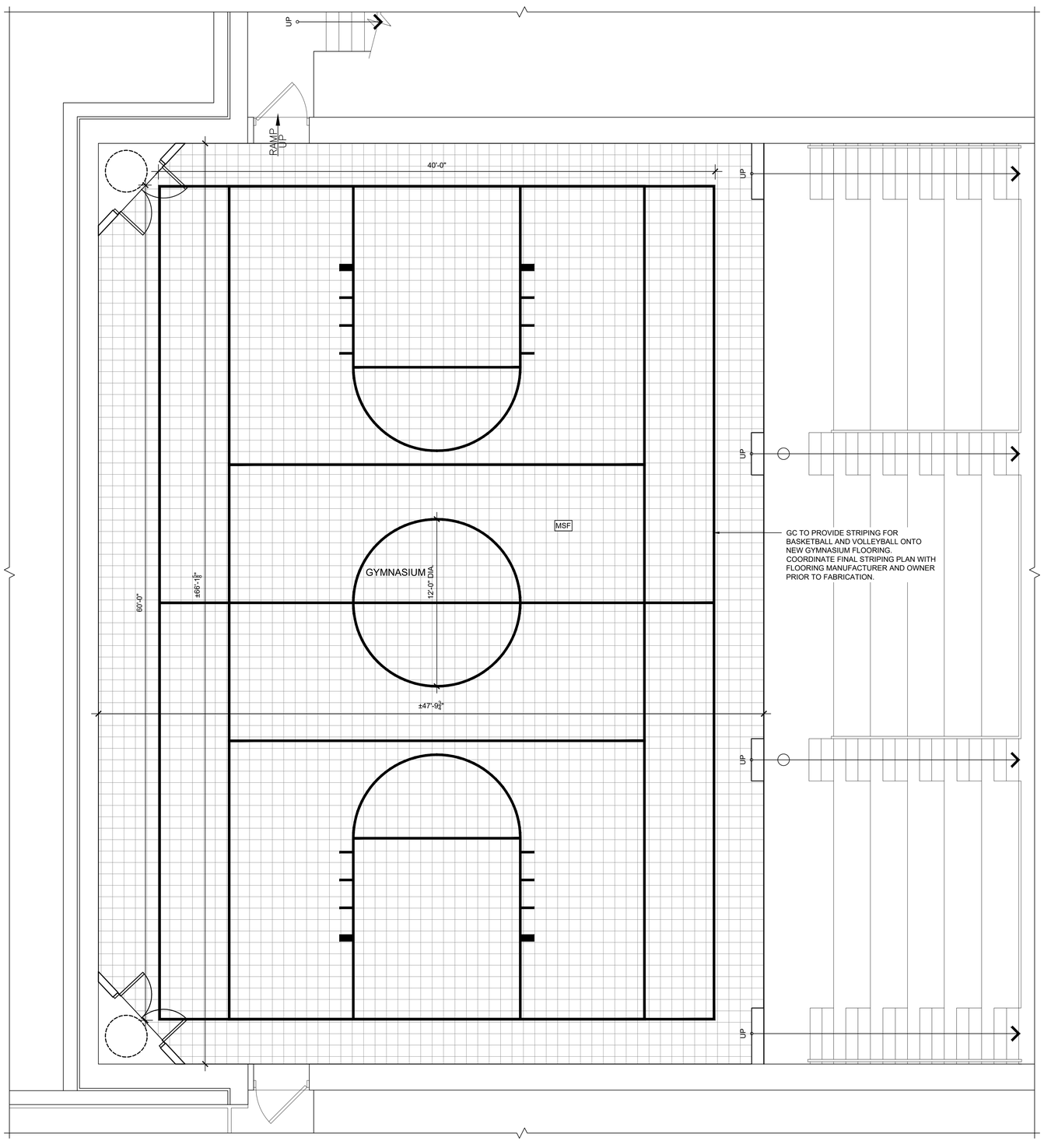
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A222

A2.25



1 A2.26 Proposed Floor Finish Plan - Basement

1/4" = 1'-0"

NORTH

GYMNASIUM

General Notes

1. SEE DRAWING A2.20 FOR FLOORING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

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NYSED PROJECT # 66-07-01-03-0-004-030

PROP. FLOOR FINISH PLAN - BASEMENT GYMNASIUM

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272O2A222

A2.26

Symbol Legend

	AREA OF MASONRY (BRICK AND STONE) REMOVAL AND REPLACEMENT WITH NEW BRICK AND EXISTING STONE. REFER TO NOTES (2) (3)
	AREA OF MASONRY (BRICK AND STONE) CLEANING, REPOINTING AND REPAIR. REFER TO NOTES (1) (2) AND DETAILS ON A8.21
	APPROXIMATE AREA OF CRACKED BRICK. CONTRACTOR TO FIELD VERIFY QUANTITY. REFER TO REPAIR DETAILS ON A8.21 AND NOTE (5)

Brick Veneer Replacement Notes

1. THE WORK SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF THE EXTERIOR BRICK VENEER, FLASHINGS, WATERPROOFING, UNIT VENTILATOR LOUVERS AND WALL SLEEVES AS INDICATED ON THE DRAWINGS. WORK SHALL ALSO INCLUDE THE REMOVAL, SALVAGING, AND RE-INSTALLATION OF EXISTING WINDOWS AND CAST STONE SILLS, HEADERS, AND BANDS.
2. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS AND THE EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL SUBMIT A SCHEDULE AND SEQUENCE OF THE WORK FOR REVIEW PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS IN THE PERFORMANCE OF THE WORK AND TO MAINTAIN A SAFE WORKSITE FOR THE WORKMEN, BUILDING OCCUPANTS AND PEDESTRIANS AND TO PROTECT EXISTING BUILDING COMPONENTS AND SITE FEATURES TO REMAIN.
3. THE CONTRACTOR SHALL MAKE PROVISIONS FOR THE ARCHITECT/ENGINEER TO INSPECT THE FIELD CONDITIONS AT EACH STAGE OF THE WORK TO VERIFY THE EXISTING CONSTRUCTION. NO FABRICATIONS OF NEW COMPONENTS SHALL BE MADE UNTIL THE EXISTING CONDITIONS ARE VERIFIED AND MEASURED IN THE FIELD AT EACH LOCATION.
4. THE EXISTING LINTELS OVER THE LARGE WINDOWS SHALL BE EXPOSED BY THE CONTRACTOR AND INSPECTED IN THE FIELD BY THE ENGINEER AT THE START OF WORK. FIELD CONDITIONS MAY REQUIRE MODIFICATION TO THE SPECIFIED REPAIR DETAIL. NO FABRICATION OF NEW COMPONENTS SHALL BE MADE UNTIL THE FIELD CONDITIONS ARE DETERMINED AND THE REPAIR DETAILS VERIFIED.
5. EXISTING BRICK BACKUP WALLS SHALL BE STABILIZED AS DIRECTED IN FIELD BY ARCHITECT/ ENGINEER WITH STAINLESS STEEL HELICAL ANCHORS AT 24" OC HORIZONTALLY AND 16" OC VERTICALLY. ADDITIONAL ANCHORS SHALL BE LOCATED AT 8" OC AROUND ALL VENEER OPENINGS AND ALONG ALL VERTICAL JOINTS. ANCHORS SHALL BE "HECKMANN" #391 REMEDIAL TIES, 10 MM DIAMETER. THE ANCHOR LENGTH SHALL BE DETERMINED BASED ON FIELD MEASUREMENTS OF THE EXISTING WALL.
6. THE NEW BRICK VENEER SHALL BE ANCHORED TO EXISTING BRICK BACKUP WALL WITH NEW CONCRETE SEAL TIE ANCHORS WITH 2-SEAL BYNA-LOK WIRE TIE" BY "HOHMANN & BERNARD, INC." MINIMUM SPACING OF 16" O.C. VERTICAL AND 24" O.C. HORIZONTAL.

Brick Veneer Replacement Key Notes

(#) CONSTRUCTION KEY NOTE SYMBOL - REFER TO PLANS, SECTIONS & ELEVATIONS

(1) CONTRACTOR SHALL REINSTALL EXISTING SALVAGED WINDOWS AND BLINDS. PROVIDE NEW ALUMINUM EXTERIOR WINDOW EXTENSION SILL. REINSTALL ALL WINDOW PANNING AND CAULK AT ENTIRE PERIMETER OF WINDOW. INSTALL NEW WOOD INTERIOR SILL AND CASING TO MATCH EXISTING. PROVIDE NEW WINDOW LINTELS AND COLUMNS (WHERE APPLICABLE) AND PER DETAILS 3&5/A8.20.

(2) CONTRACTOR TO INSTALL NEW BRICK VENEER (COLOR TO MATCH EXISTING, REFER TO SPECIFICATION SECTION 042113) AND BRICK MASONRY TIES. ORDER OF OPERATIONS FOR BRICK INSTALLATION SHALL INCLUDE THE FOLLOWING AS ILLUSTRATED ON SHEET A8.20.
1. INSTALL HELICAL WALL TIES ("HECKMANN" #391-10 OR "HOHMANN & BERNARD, INC" EQUIVALENT) INTO BRICK BACKUP WALL TO STABILIZE AS DIRECTED IN FIELD.
2. INSTALL NEW AIR BLOCK 31MR: LIQUID APPLIED VAPOR-PERMEABLE AIR BARRIER MANUFACTURED BY "HENRY" OVER EXISTING MASONRY BACKUP WALL.
3. INSTALL NEW "TOTAL FLASH" INTEGRATED CAVITY WALL DRAINAGE SYSTEM PER DETAILS ON SHEET A8.20.
4. INSTALL NEW "CONCRETE SEAL TIE ANCHORS WITH 2-SEAL BYNA-LOK WIRE TIE" BY "HOHMANN & BERNARD, INC." MINIMUM SPACING OF 16" O.C. VERTICAL AND 24" O.C. HORIZONTAL.

(3) CONTRACTOR REINSTALL EXISTING CAST STONE SILLS AND BANDING. REPLACE ALL DAMAGED PIECES WHERE APPLICABLE TO MATCH EXISTING.

(4) CONTRACTOR TO INSTALL NEW UNIT VENTILATOR LOUVER "RELIABLE" MODEL RBV7020/ CHANNEL FRAME WITH KYNAR FINISH. INSTALL NEW SLEEVE PER DETAIL 6/A8.20, SECTION DRAWING 5/A4.05 AND NEW FLASHING PER DETAIL 12/A8.20.

(5) FOLLOWING VISUAL INSPECTION OF THE CONDITION OF THE EXISTING LINTEL BY THE ARCHITECT/ ENGINEER, CONTRACTOR SHALL INSTALL NEW LINTEL AS PER DETAILS 3&5/A8.20.

(6) CONTRACTOR TO REINSTALL EXISTING SCUPPER BOX AND LEADER FOLLOWING NEW BRICK VENEER INSTALLATION. ANCHOR AS PER 11/A8.20.

(7) CONTRACTOR SHALL REINSTALL EXISTING SURFACE MOUNTED LIGHTING FIXTURE, SPEAKER, ETC. FOLLOWING NEW BRICK VENEER INSTALLATION.

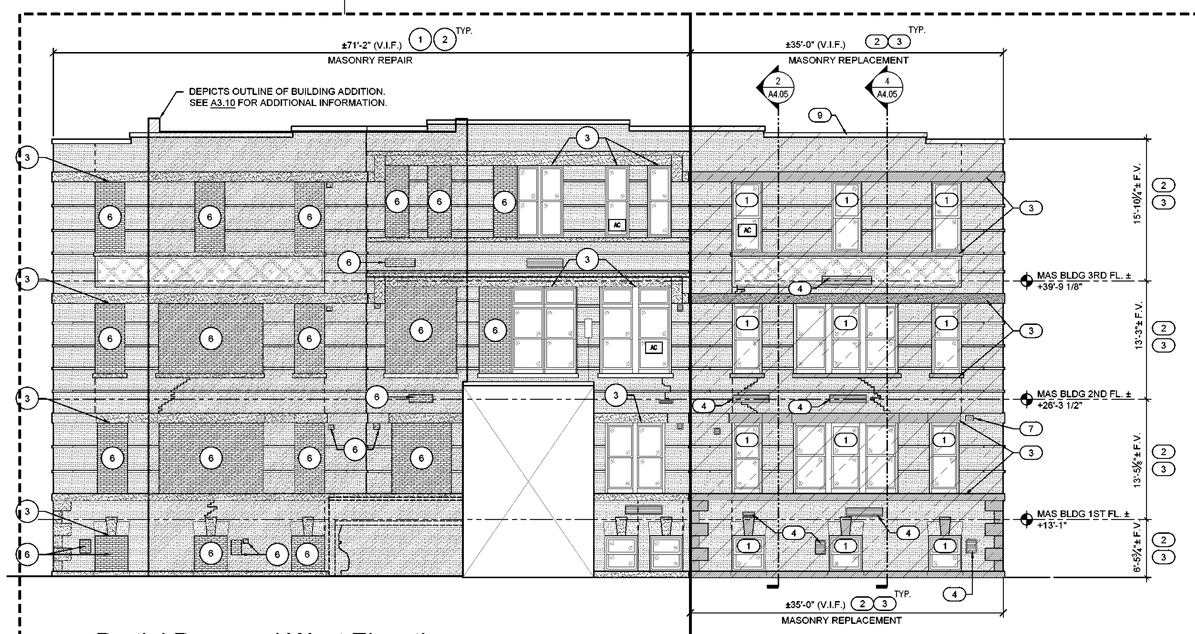
(8) EXISTING DOORS & FRAMES TO REMAIN.

(9) CONTRACTOR TO INSTALL NEW .050 ALUMINUM ROOF COPING TO MATCH EXISTING. PROVIDE NEW P.T. BLOCKING AS REQUIRED TO ACHIEVE NECESSARY HEIGHT. CAULK ALL EXISTING JOINTS IN EXISTING COPING NOT SCHEDULED TO BE REPLACED.

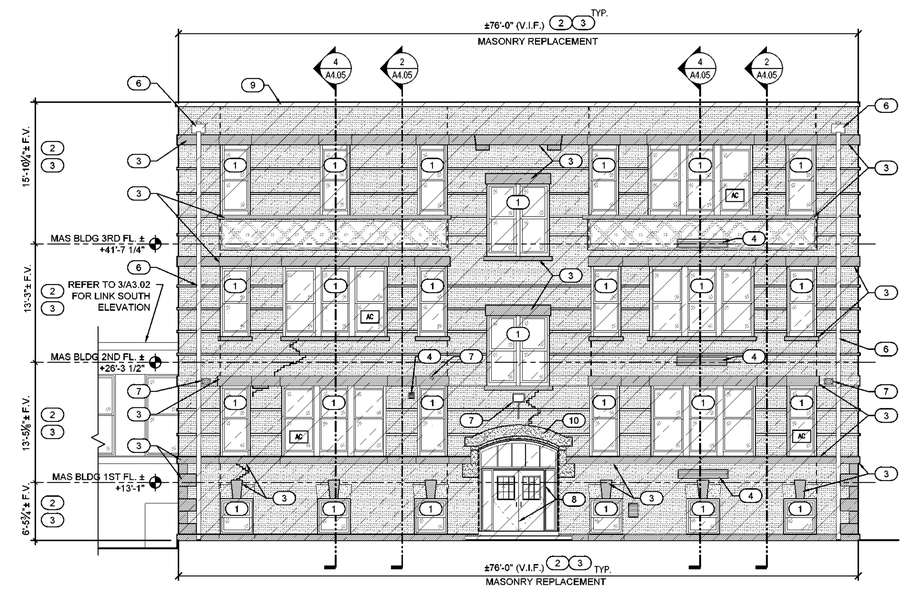
(10) EXISTING CAST STONE TO REMAIN. CLEAN CAST STONE. REPOINT ALL JOINTS.

ADD ALTERNATE
MASONRY RESTORATION AT MIDDLE BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

ADD ALTERNATE
MASONRY FACADE REPLACEMENT AT SOUTH AND PARTIAL WEST ELEVATIONS OF MAS BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

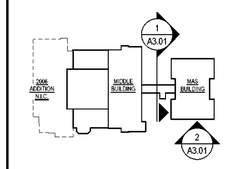


1 A3.01 Partial Proposed West Elevation
1/8" = 1'-0"
MAS BUILDING



2 A3.01 Partial Proposed South Elevation
1/8" = 1'-0"
MAS BUILDING

MAMARONECK AVENUE SCHOOL



Key Plan
NOT TO SCALE
PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title: REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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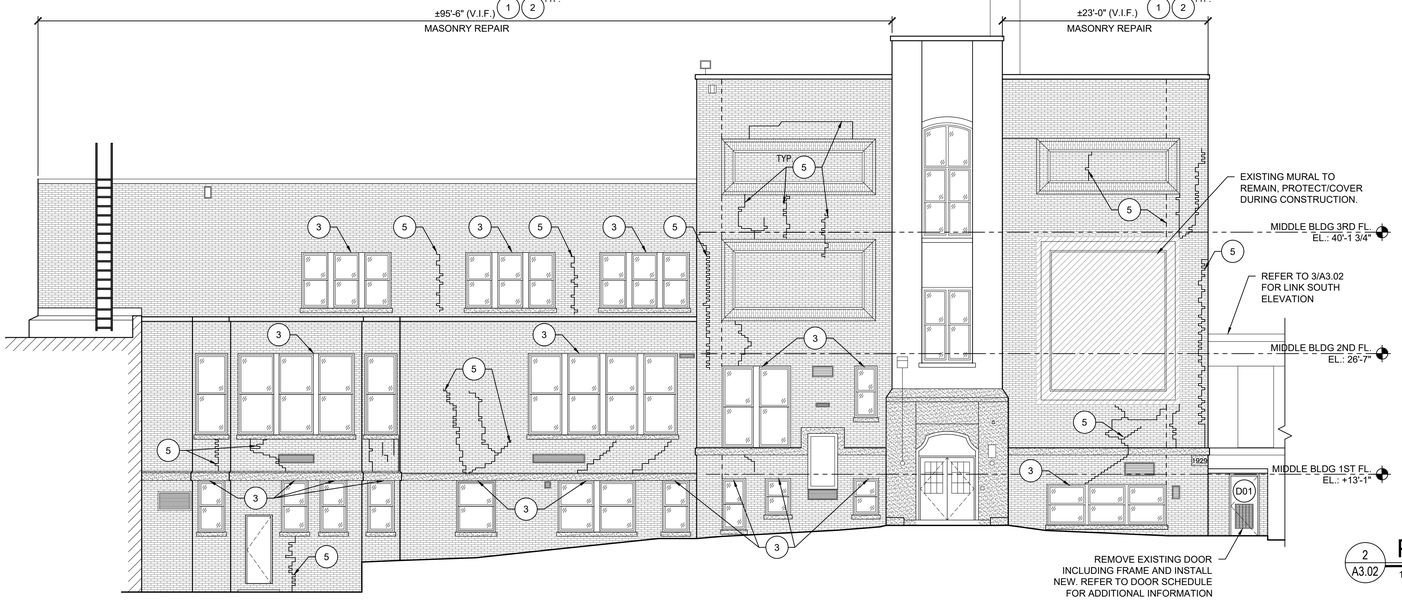
NYSED PROJECT # 66-07-01-03-0-004-030

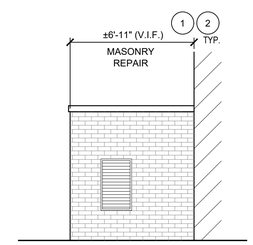
EXTERIOR ELEVATIONS - VENEER REPLACEMENT
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A301

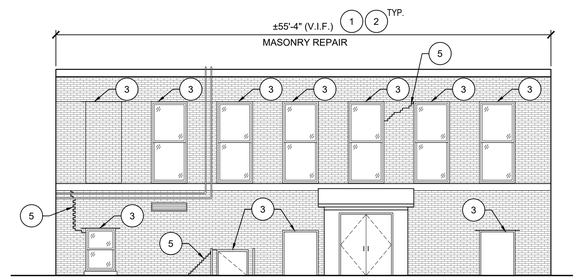
A3.01



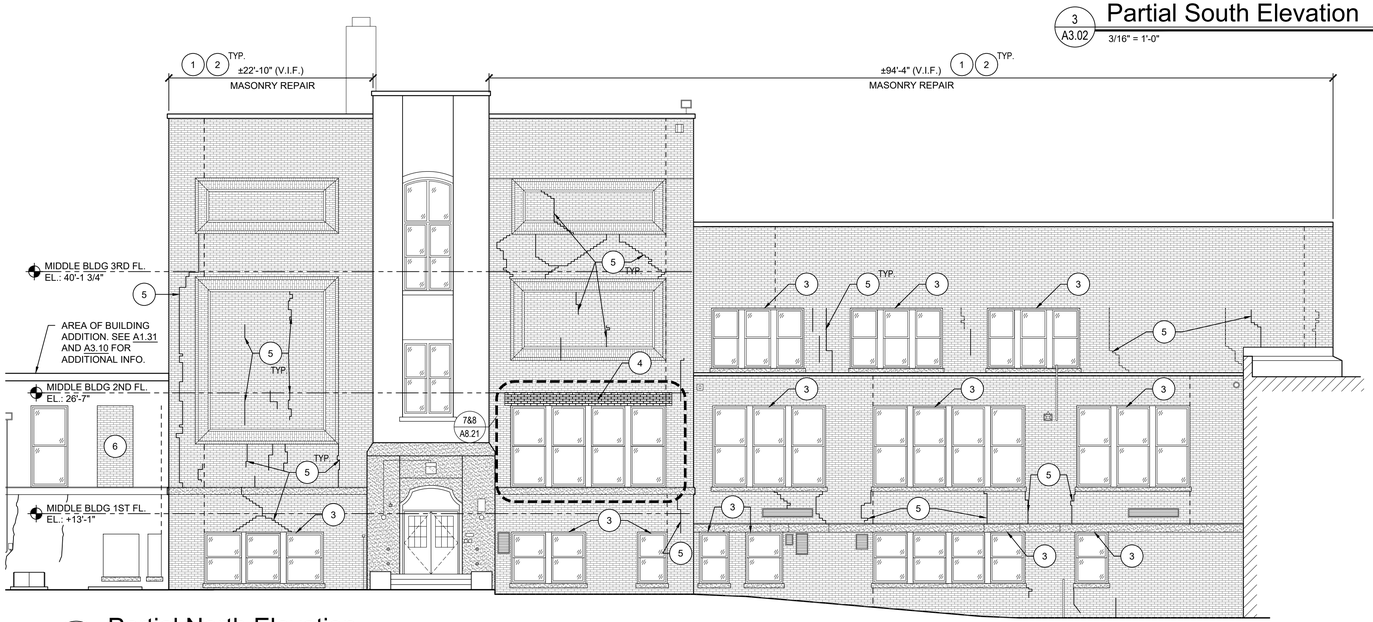
1 A3.02 **Partial South Elevation**
1/8" = 1'-0" MIDDLE BUILDING



2 A3.02 **Partial West Elevation**
1/4" = 1'-0" MIDDLE BUILDING



3 A3.02 **Partial South Elevation**
3/16" = 1'-0" CONNECTOR LINK



4 A3.02 **Partial North Elevation**
1/8" = 1'-0"

Masonry Repair Key Notes

(#) MASONRY REPAIR TYPE

1. GC TO REPOINT EXISTING MASONRY FACADE.
   - SEE DETAILS, NOTES AND *"BRICK RE-POINTING CORRECTIVE PROCEDURE"* ON SHEET A8.21 FOR ADDITIONAL INFORMATION.
   - GC TO PROVIDE NEW MORTAR JOINT WHERE MORTAR IS MISSING FROM EXISTING MASONRY WALLS. NEW MORTAR SHALL MATCH EXISTING IN TYPE, COMPOSITION AND COLOR.
   - GC TO REMOVE BRICKS WITH HAIRLINE CRACKS THAT ARE EXISTING OR THAT APPEAR AFTER CLEANING.
   - GC TO CORRECT ALL OLD MASONRY REPAIRS THAT WERE DONE INCORRECTLY SUCH AS CAULKING OF JOINTS, ETC.
2. GC TO CLEAN EXISTING MASONRY SURFACE WITH APPROPRIATE CLEANING AGENT. CONTRACTOR SHALL FOLLOW ALL APPLICATION PROCEDURES AS SET FORTH BY THE MANUFACTURER. PROTECT ALL SURFACES NOT INTENDED TO BE CLEANED. GC TO PROVIDE MOCK-UP OF CLEANED SURFACE. SEE NOTES BELOW. SEE SPECIFICATION SECTION 040110 AND RELATED SECTIONS FOR ADDITIONAL INFORMATION. REFER TO MASONRY CLEANING NOTES BELOW.
3. GC TO SCRAPE, PRIME AND PAINT EXISTING STEEL LINTELS. SEE *"STEEL LINTEL PAINTING NOTES"* ON SHEET A8.21 FOR ADDITIONAL INFORMATION.
4. GC TO REPLACE EXISTING STEEL LINTEL. SEE DETAILS 7&8/A8.21 FOR ADDITIONAL INFORMATION.
5. GC TO REPAIR STEP CRACK IN EXISTING MASONRY WALL. SEE DETAILS 2&3/A8.21 FOR ADDITIONAL INFORMATION. NOT ALL CRACKS ARE SHOWN ON DRAWING. CONTRACTOR TO FIELD VERIFY BEFORE BID AS WELL AS AFTER BRICK CLEANING FOR HAIRLINE CRACKS.

NOTES:

- GC TO HIRE A CONSERVATOR PROVIDE MORTAR ANALYSIS OF EXISTING MORTAR FOR MATCHING. BASE BID TO INCLUDE UP TO EIGHT (8) MORTAR TEST LOCATIONS. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
- GC TO PROVIDE MOCK-UPS OF EXTERIOR WALL ASSEMBLIES WHERE INDICATED. MOCK-UPS SHALL BE FULLY FINISHED EXTERIOR ASSEMBLIES, AND SHALL INCLUDE ALL FLASHINGS.
- GC TO PROVIDE CLEANING MOCK-UP OF EACH TYPE OF CLEANED SURFACE. CLEANING MOCK-UPS MINIMUM 4' x 4' AND SHALL BE LOCATED IN AN INCONSPICUOUS AREA. REFER TO SPECIFICATION SECTION 040110.
- REFER TO SPECIFICATION SECTION "042113 - BRICK MASONRY" FOR ADDITIONAL INFORMATION REGARDING BRICK CONSTRUCTION.
- WHERE MASONRY INFILL/REBUILDING/RECONSTRUCTION IS INDICATED, BRICK TYPE, MORTAR COLOR, COMPOSITION, COLOR AND BONDING PATTERN SHALL MATCH ADJACENT IN LIKE AND KIND.
- GC TO REMOVE AND RE-SET EXISTING HVAC LOUVER IN EXISTING MASONRY WALL AS REQUIRED.

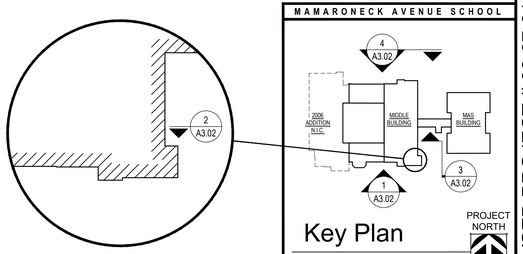
Masonry Cleaning Notes

1. REFER TO SPECIFICATION SECTION 040110 FOR ADDITIONAL MASONRY CLEANING REQUIREMENTS.
2. GC TO PROTECT ADJACENT SURFACES NOT TO BE CLEANED.
3. GC TO CLEAN ALL EXPOSED SURFACES OF MASONRY (WHERE INDICATED) USING CLEANING MATERIALS SPECIFIED. ALL CLEANED SURFACES SHALL HAVE A UNIFORM FINISHED APPEARANCE.
4. GC TO TEST EXISTING MASONRY FOR COMPOSITION AND SELECT APPROPRIATE CLEANER BASED ON MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS FOR SUBSTRATE TO BE CLEANED.
5. GC TO UTILIZE CLEANERS AND CLEANING METHODS THAT MINIMIZE DAMAGE TO SURFACES AND DETERIORATION OF APPEARANCE.
6. GC SHALL CONFER WITH ARCHITECT FOR INSPECTION OF CLEANING FOR EACH MASONRY TYPE. CLEANING WORK AREA SHALL ONLY BE CONSIDERED COMPLETE WHEN ACCEPTED BY ARCHITECT AND OWNER.
7. AT COMPLETION OF WORK, GC TO REMOVE AND DISCARD PROTECTIVE COVERINGS. IN THE EVENT THAT PROTECTED SURFACES BECOME DAMAGED, CLEAN/REPAIR TO THE SATISFACTION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
8. GC SHALL COLLECT, NEUTRALIZE AND DISPOSE OF ANY EXCESS CLEANING CHEMICALS / AFTER-WASH IN AN APPROVED MANNER AS DIRECTED BY THE MANUFACTURER. GC SHALL BE RESPONSIBLE FOR ANY RUNOFF OF EXCESS MATERIALS.

Symbol Legend

	AREA OF MASONRY (BRICK AND STONE) REMOVAL AND REPLACEMENT WITH NEW BRICK AND EXISTING STONE. REFER TO NOTES (2) (3)
	AREA OF MASONRY (BRICK AND STONE) CLEANING, REPOINTING AND REPAIR. REFER TO NOTES (1) (2) AND DETAILS ON A8.21
	APPROXIMATE AREA OF CRACKED BRICK. CONTRACTOR TO FIELD VERIFY QUANTITY. REFER TO REPAIR DETAILS ON A8.21 AND NOTE (5)

ADD ALTERNATE
MASONRY RESTORATION AT MIDDLE BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.



Key Plan
NOT TO SCALE

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
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NYSED PROJECT # 66-07-01-03-0-004-030

EXTERIOR ELEVATIONS - MASONRY REPAIR
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

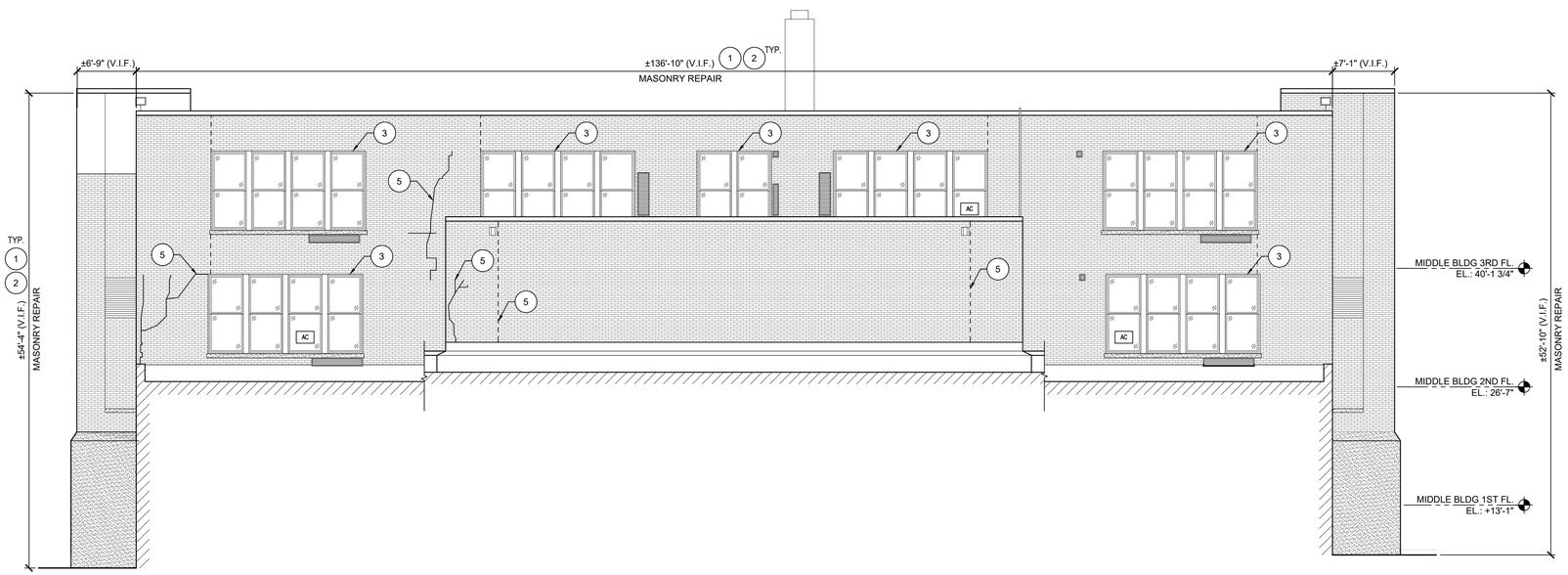
Job No. 4.1092.72.2
File No. 10927202A301

A3.02

1 A3.03 Partial East Elevation

1/8" = 1'-0"

MIDDLE BUILDING



2 A3.03 Partial East Elevation

1/8" = 1'-0"

MIDDLE BUILDING

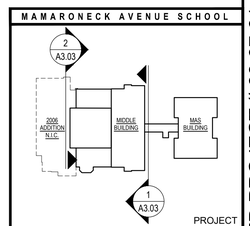
Symbol Legend

	AREA OF MASONRY (BRICK AND STONE) REMOVAL AND REPLACEMENT WITH NEW BRICK AND EXISTING STONE. REFER TO NOTES 2 3
	AREA OF MASONRY (BRICK AND STONE) CLEANING, REPOINTING AND REPAIR. REFER TO NOTES 1 2 AND DETAILS ON A8.21
	APPROXIMATE AREA OF CRACKED BRICK. CONTRACTOR TO FIELD VERIFY QUANTITY. REFER TO REPAIR DETAILS ON A8.21 AND NOTE 5

ADD ALTERNATE
MASONRY RESTORATION AT MIDDLE BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

ADD ALTERNATE
MASONRY RESTORATION AT MIDDLE BUILDING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

EXTERIOR ELEVATIONS - MASONRY REPAIR

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

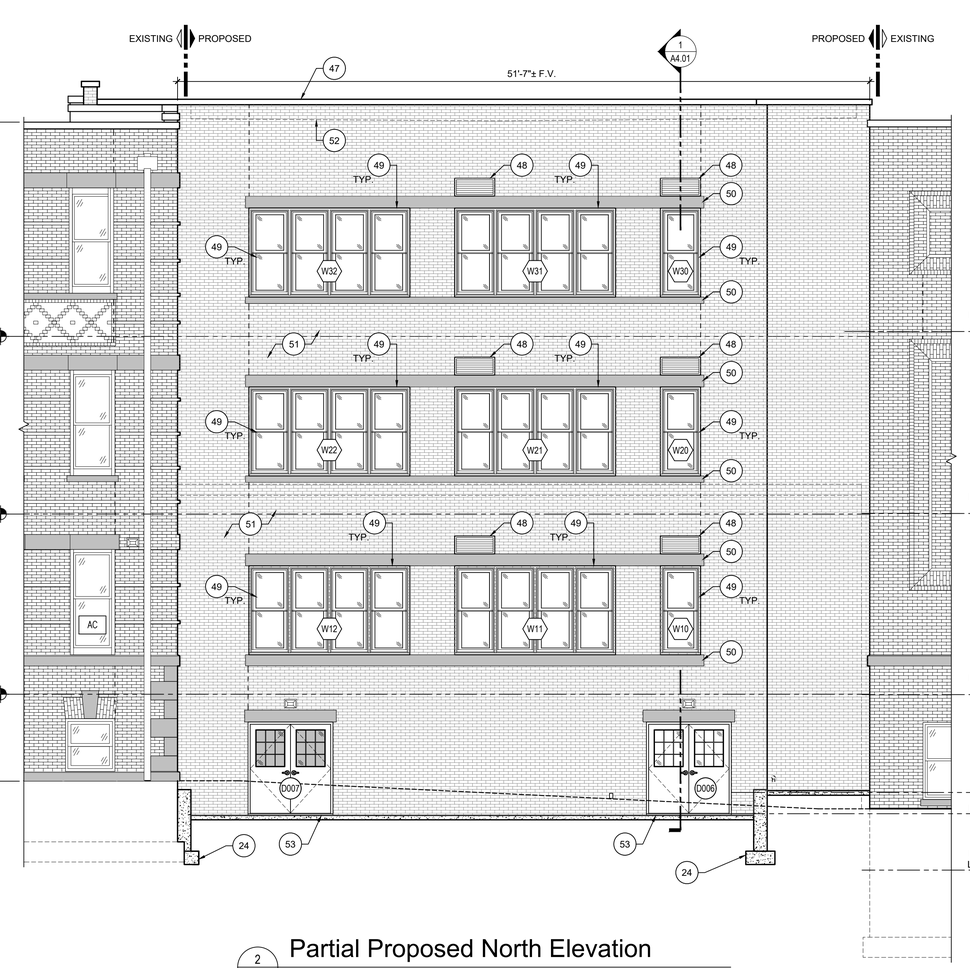
Job No. 4.1092.72.2

File No. 10927202A301

A3.03

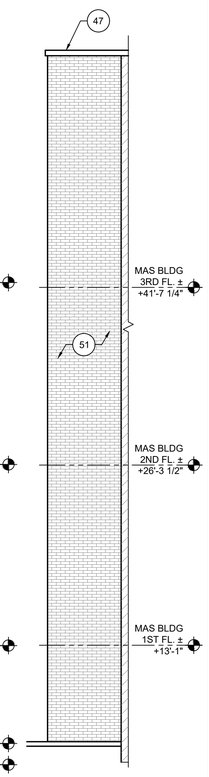
1 A3.10 Partial Proposed South Elevation

3/16" = 1'-0"



2 A3.10 Partial Proposed North Elevation

3/16" = 1'-0"



3 A3.10 East Elev.

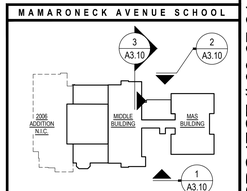
3/16" = 1'-0"

REFER TO GENERAL NOTES ON SHEET A2.00

SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.

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PROPOSED EXTERIOR ELEVATIONS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A310

A3.10

Elevator Job Site Requirements

THE FOLLOWING NOTES ARE DESIGNATED FOR THE 'OTIS' GEN2 MACHINE-ROOM LESS ELEVATOR SYSTEM. SEE SPECIFICATION SECTION 142100 FOR ADDITIONAL INFORMATION.

HOISTWAY:
1. HOISTWAY MUST BE CONSTRUCTED PER FINAL LAYOUT DRAWINGS.
2. THE LOCATION OF ATTACHMENT SUPPORT FOR THE TOP RAIL BRACKET IS AT A CRITICAL ELEVATION CALLED OUT ON THE HOISTWAY LAYOUT.
3. AN OVERHEAD BEAM MUST BE PROVIDED AT THE LOCATION CALLED OUT ON THE HOISTWAY LAYOUT AND DESIGNED TO SUPPORT 7,500 LBS PER ELEVATOR.
4. PROVIDE A CLEAR PLUMB HOISTWAY WITH VARIATIONS FROM THE SIZE SHOWN ON THE OTIS LAYOUT NOT TO EXCEED -0"/+1" (25MM) AND NOT LESS THAN THE CLEAR DIMENSIONS SHOWN ON THE OTIS LAYOUT.
5. PRIOR TO THE START OF INSTALLATION, PROVIDE A DRY, PROPERLY FRAMED, ENCLOSED AND VENTED HOISTWAY IN ACCORDANCE WITH ALL APPLICABLE CODES.
6. • FRONT ENTRANCE WALL AT MAIN AND TOP LANDING, OR LANDING BELOW TOP LANDING IF THE CONTROLLER IS LOCATED THERE, IS NOT TO BE CONSTRUCTED UNTIL OR AFTER ALL ELEVATOR EQUIPMENT IS INSTALLED IN THE HOISTWAY.

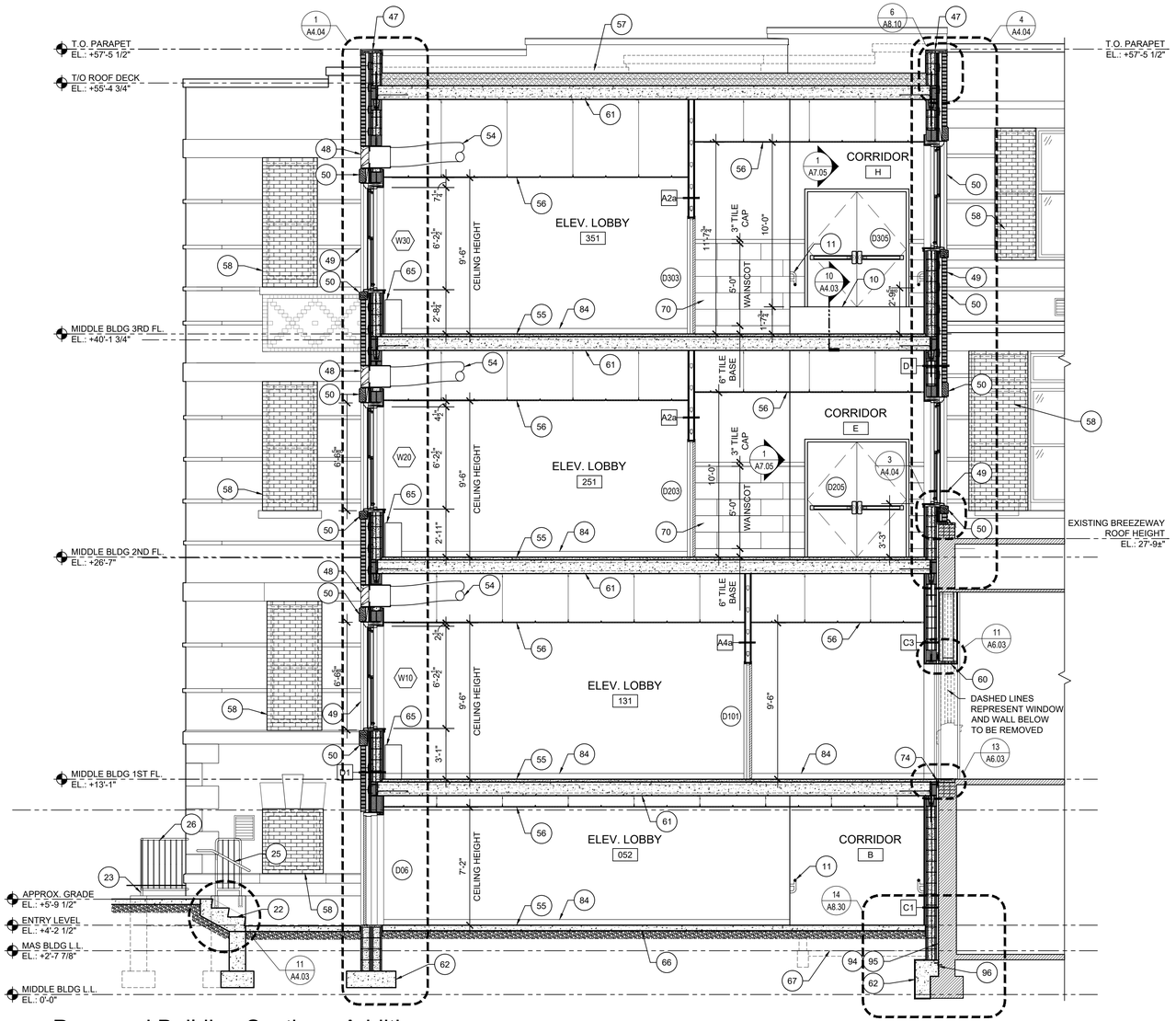
SMOKE DETECTORS:
1. PROVIDE SMOKE DETECTORS, LOCATED AS REQUIRED, WITH WIRING FROM THE SENSING DEVICES TO THE CONTROLLERS DESIGNATED BY OTIS.
2. IF SPRINKLERS ARE INSTALLED IN THE HOISTWAY OR MACHINE SPACE, A MEANS TO AUTOMATICALLY DISCONNECT THE MAIN LINE POWER SUPPLY UPON OR PRIOR TO THE APPLICATION OF WATER IS REQUIRED (UNLESS PROHIBITED BY LOCAL CODE).

PIT:
1. PIT FLOOR DESIGNED TO SUSTAIN VERTICAL FORCES ON CAR AND COUNTERWEIGHT RAILS AND IMPACT LOADS ON CAR AND COUNTERWEIGHT BUFFERS AS SHOWN ON OTIS LAYOUT.
2. PIT MUST BE CLEAN AND DRY PRIOR TO START OF INSTALLATION.
3. LIGHT MUST HAVE AN EXTERNAL GUARD AND BE LOCATED AT A POINT WHERE ILLUMINATION ON THE PIT LADDER BASE IS NO LESS THAN 10 FOOT CANDLES.

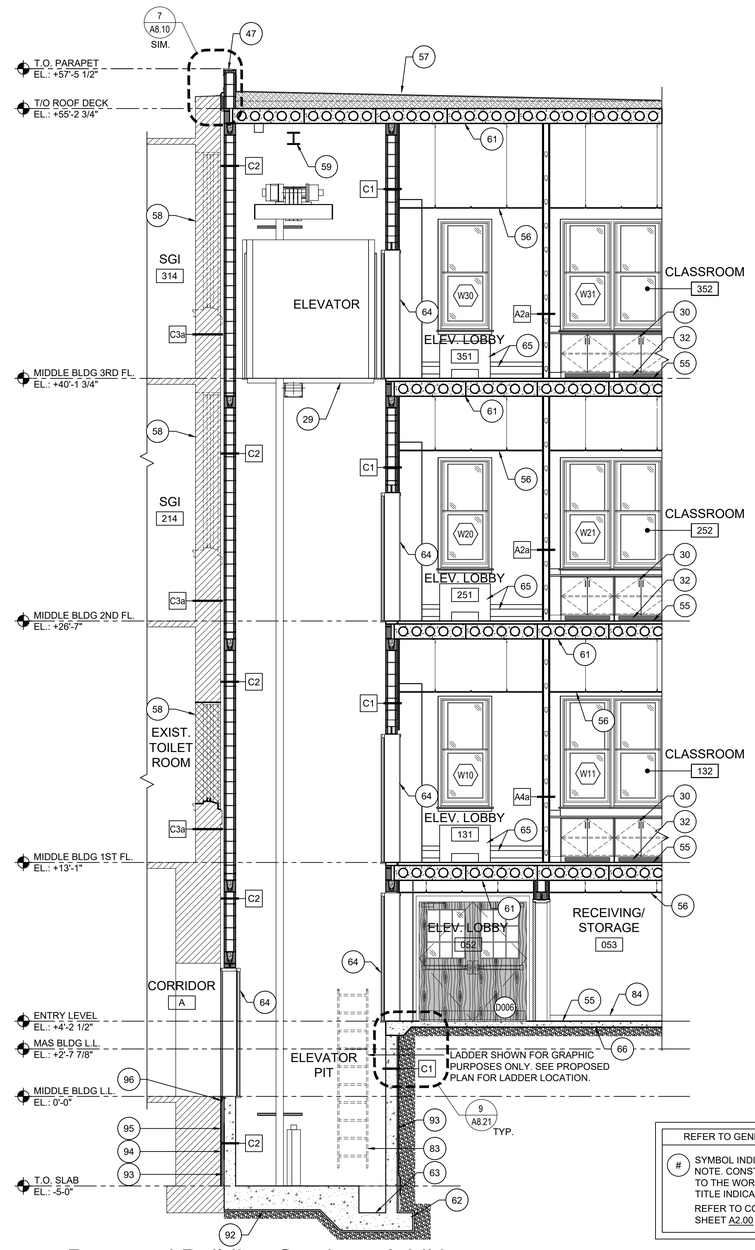
ELECTRICAL:
1. PROVIDE PERMANENT THREE PHASE ELECTRICAL FEEDER WITH SEPARATE GROUNDING CONDUCTOR TERMINATING IN CONTROLLER EITHER AT THE TOP LANDING OR LANDING BELOW BEFORE THE START OF THE INSTALLATION.
2. PROVIDE A TEMPORARY 220 VOLT, 30 AMP SINGLE PHASE, 4 WIRE ELECTRICAL SUPPLY FOR PLATFORM OPERATION DURING CONSTRUCTION AND AVAILABLE AT THE START OF ELEVATOR INSTALLATION.
3. PROVIDE A 125 VOLT, 15 AMP SINGLE PHASE BRANCH CIRCUIT FOR THE ELEVATOR CAR/LIGHT CIRCUITS AT THE START OF THE INSTALLATION OF THE TOP LANDING.
4. PROVIDE A TEMPORARY 220 VOLT, 30 AMP SINGLE PHASE, 4 WIRE ELECTRICAL SUPPLY FOR PLATFORM OPERATION DURING CONSTRUCTION AND AVAILABLE AT THE START OF ELEVATOR INSTALLATION.
5. PROVIDE A PERMANENT LIGHT FIXTURE AT THE TOP OF THE HOISTWAY. ILLUMINATION SPECIFICATIONS AND LOCATION OF THE LIGHT SWITCH ARE PROVIDED IN THE OTIS LAYOUT.
6. INSTALL A PERMANENT LIGHT FIXTURE AT THE TOP LANDING ENTRANCE IN THE HALL. ILLUMINATION SPECIFICATIONS AND LOCATION OF THE LIGHT SWITCH ARE PROVIDED IN THE OTIS LAYOUT.
7. PROVIDE ELECTRIC POWER FOR LIGHTS TOOLS, WELDING, HOISTING, ETC.
8. PROVIDE ONE DEDICATED OUTSIDE TELEPHONE LINE, PER ELEVATOR, AND TERMINATED AT THE CONTROLLER.

BARRICADES (MUST MEET MINIMUM OSHA REQUIREMENTS):
1. GC SHALL PROVIDE GUARDING AND PROTECTION OF THE HOISTWAY DURING CONSTRUCTION.
2. HOISTWAY BARRICADES SHALL BE CONSTRUCTED, MAINTAINED, AND REMOVED BY THE GC.
3. GC SHALL PROVIDE A FREESTANDING REMOVABLE BARRICADE AT EACH HOISTWAY OPENING AT EACH FLOOR.
4. BARRICADES SHALL BE 42" HIGH, HAVE CENTERBOARD AND KICK BOARD AND WITHSTAND 200 LBS. OF LATERAL FORCE.
5. GC SHALL PROVIDE FULL ENTRANCE SCREENING/MESH IN FRONT OF ALL HOISTWAY ENTRANCES.

GENERAL NOTES:
1. THE GC IS RESPONSIBLE FOR ALL ITEMS LISTED ABOVE, ON THE OTIS LAYOUT PAGE, THE CONFIRMATION OF POWER SUPPLY DOCUMENT AND ALL CODE REQUIREMENTS. WHERE CONFLICTS BETWEEN DIFFERENT BUILDING CODES OCCUR, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
2. THESE NOTES ARE SPECIFIC TO THE ELEVATOR LISTED AS BASIS OF DESIGN. IF THE CONTRACTOR PROVIDES A SUBSTITUTION FOR THE ELEVATOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL JOBSITE REQUIREMENTS SET FORTH BY THE SUBSTITUTED MANUFACTURER. (SEE SPECIFICATION FOR SUBSTITUTION PROCEDURES)



1 A4.01 Proposed Building Section - Addition
1/4" = 1'-0"



REFER TO GENERAL NOTES ON SHEET A2.00

SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

2 A4.01 Proposed Building Section - Addition
1/4" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

Revisions:
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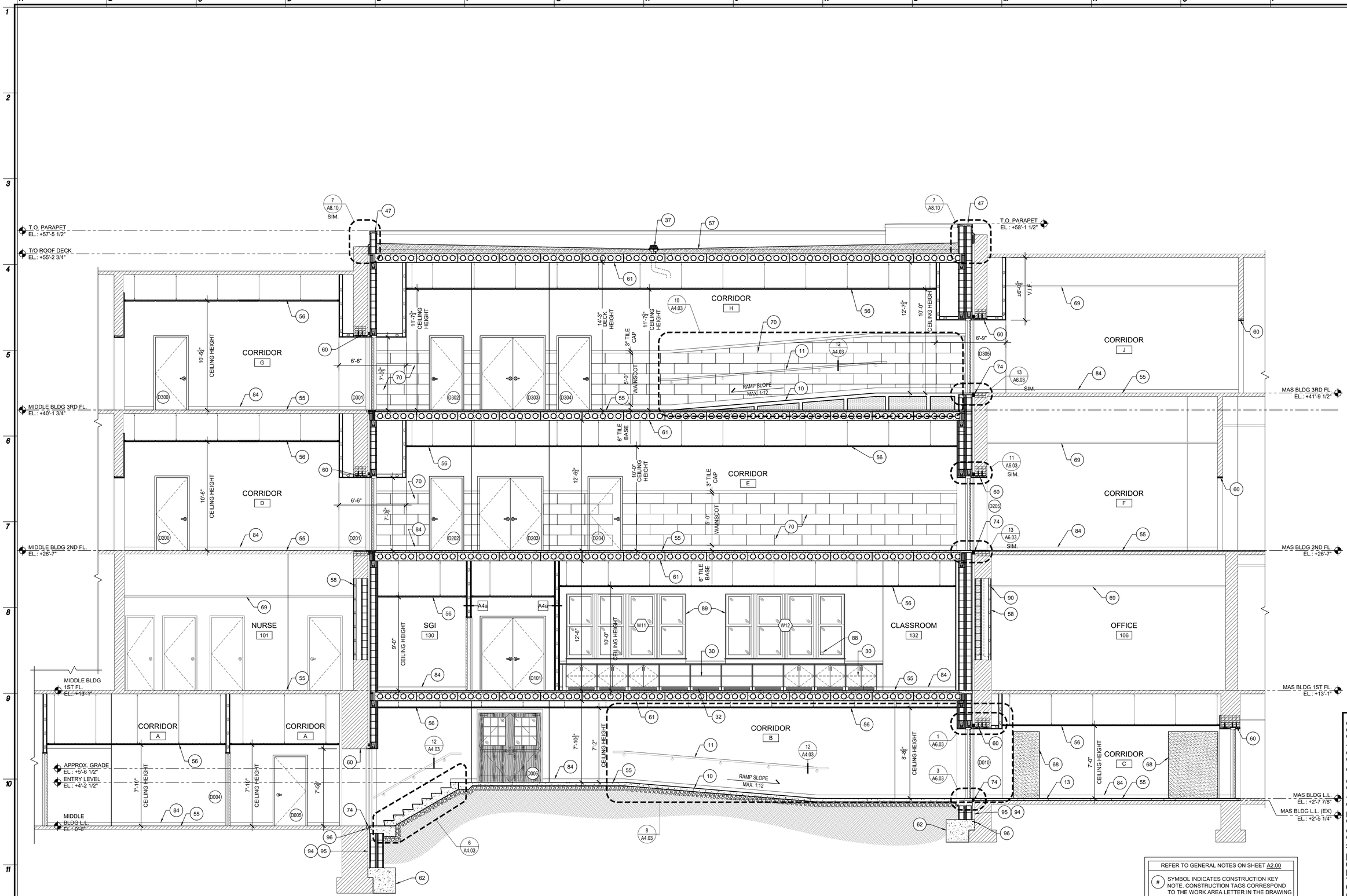
NYSED PROJECT # 66-07-01-03-0-004-030

BUILDING SECTION
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A401

A4.01



REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00

1 / A4.02 Proposed Building Section - Addition

1/4" = 1'-0"

Date	1/10/20
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BUILDING SECTION

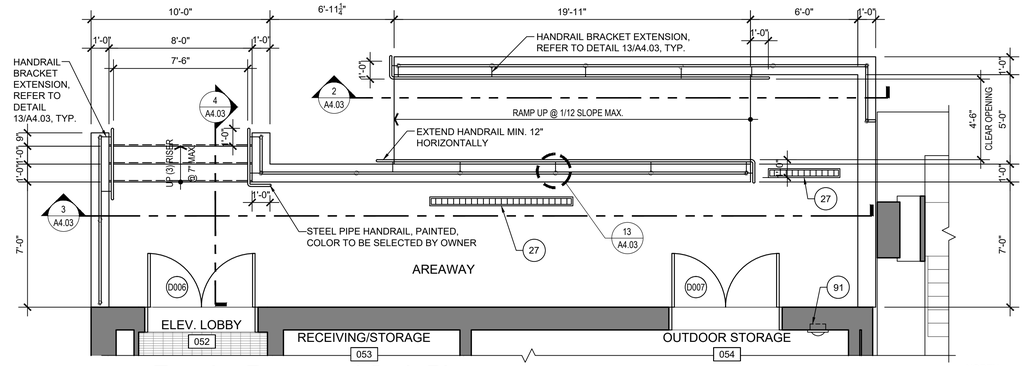
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

Job No. 4.1092.72.2

File No. 10927202A401

A4.02

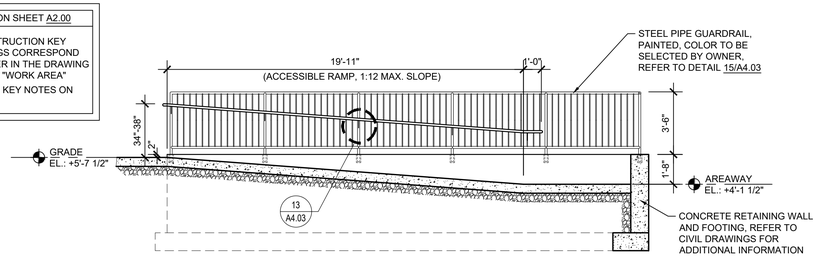


1 A4.03 Exterior Ramp and Stair Plan
1/4" = 1'-0"

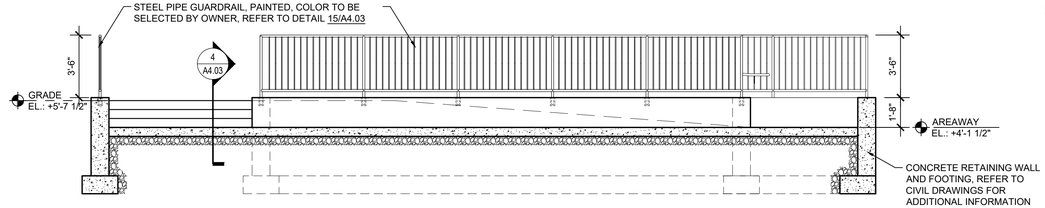
REFER TO GENERAL NOTES ON SHEET A2.00

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE. CONSTRUCTION TAGS CORRESPOND TO THE WORK AREA LETTER IN THE DRAWING TITLE INDICATOR LABELED "WORK AREA"

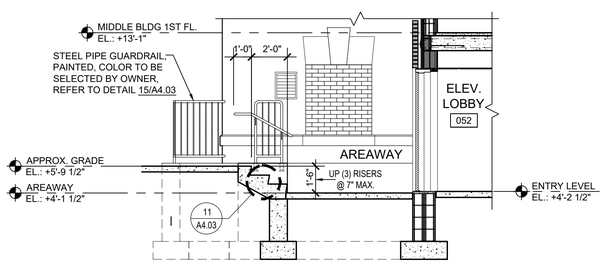
REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00



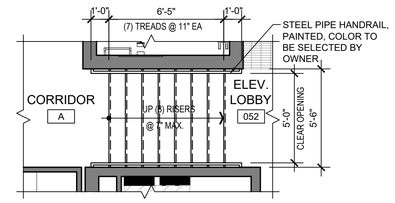
2 A4.03 Ramp Section
1/4" = 1'-0"
Lower Level



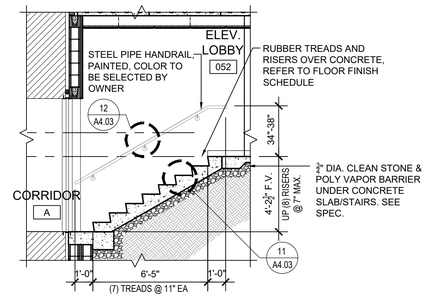
3 A4.03 Areaway Section
1/4" = 1'-0"
Lower Level



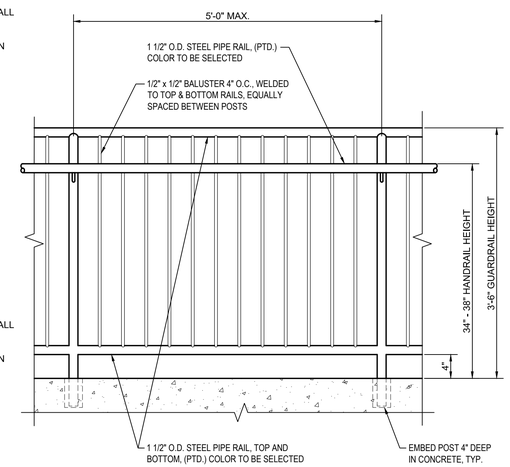
4 A4.03 Areaway Stair Section
1/4" = 1'-0"
Lower Level



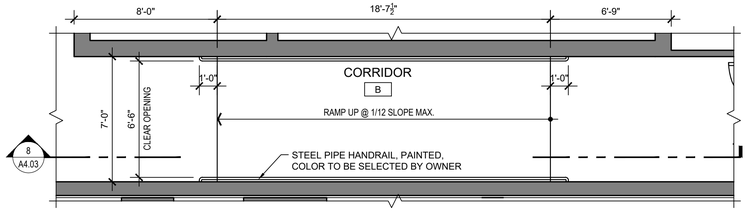
5 A4.03 Interior Stair Plan
1/4" = 1'-0"
Lower Level



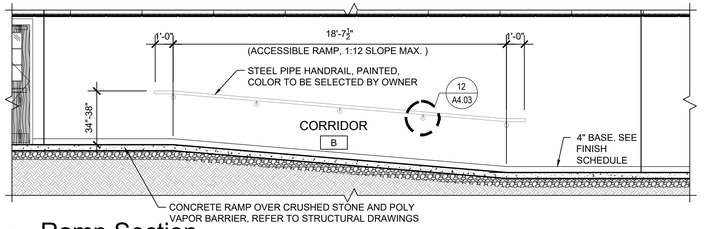
6 A4.03 Stair Section
1/4" = 1'-0"
Lower Level



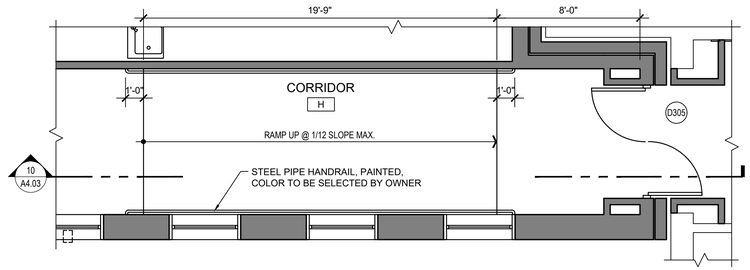
15 A4.03 Typical Railing Detail
1" = 1'-0"



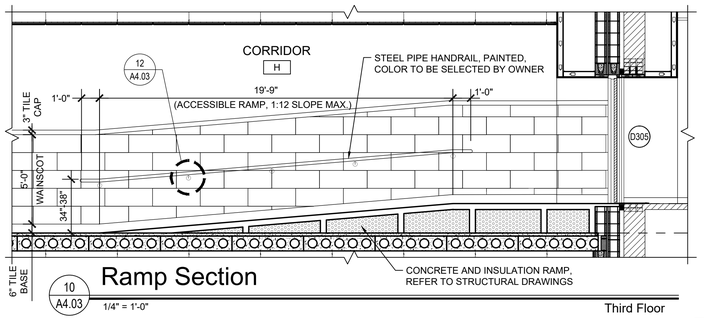
7 A4.03 Interior Ramp Plan
1/4" = 1'-0"
Lower Level



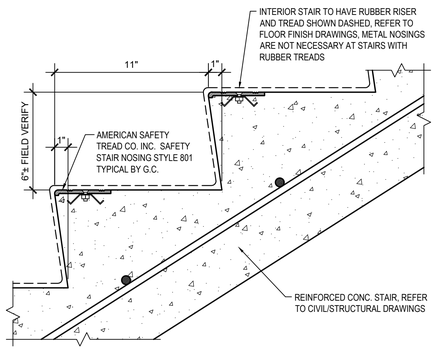
8 A4.03 Ramp Section
1/4" = 1'-0"
Lower Level



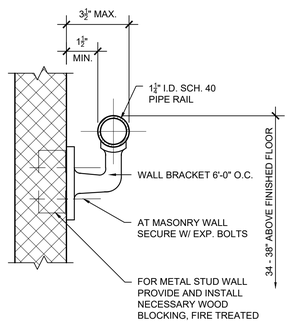
9 A4.03 Interior Ramp Plan
1/4" = 1'-0"
Third Floor



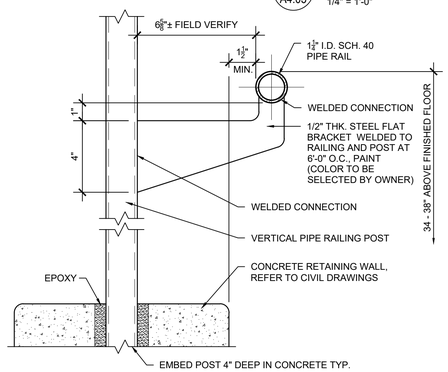
10 A4.03 Ramp Section
1/4" = 1'-0"
Third Floor



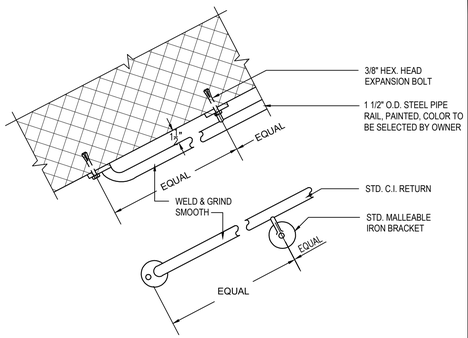
11 A4.03 Exterior Stair Nosing Detail
3" = 1'-0"



12 A4.03 Pipe Railing at Wall
3" = 1'-0"



13 A4.03 Handrail Bracket Extension
3" = 1'-0"



14 A4.03 Detail of Pipe Handrail
1 1/2" = 1'-0"

Date	1/10/20
Checked	TT
Drawn	JG

MICHAEL J. McGOVERN, R.A.
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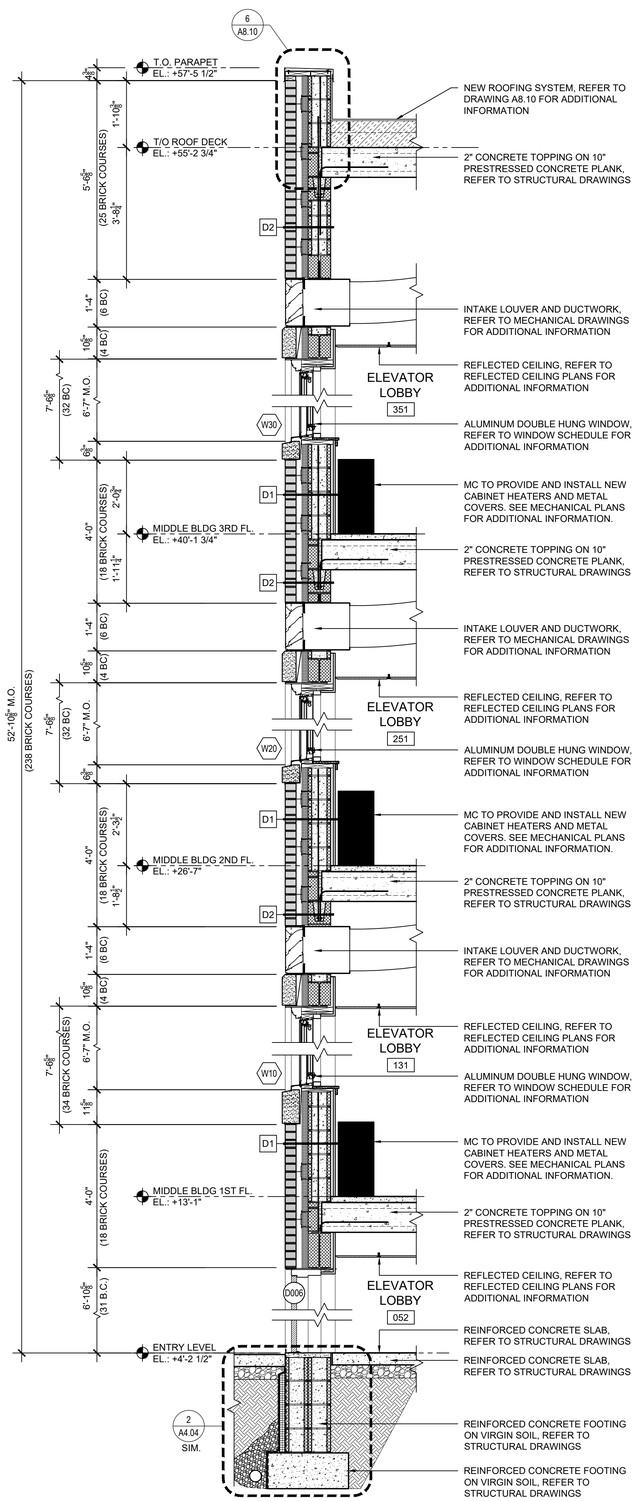
NYSED PROJECT # 66-07-01-03-0-004-030

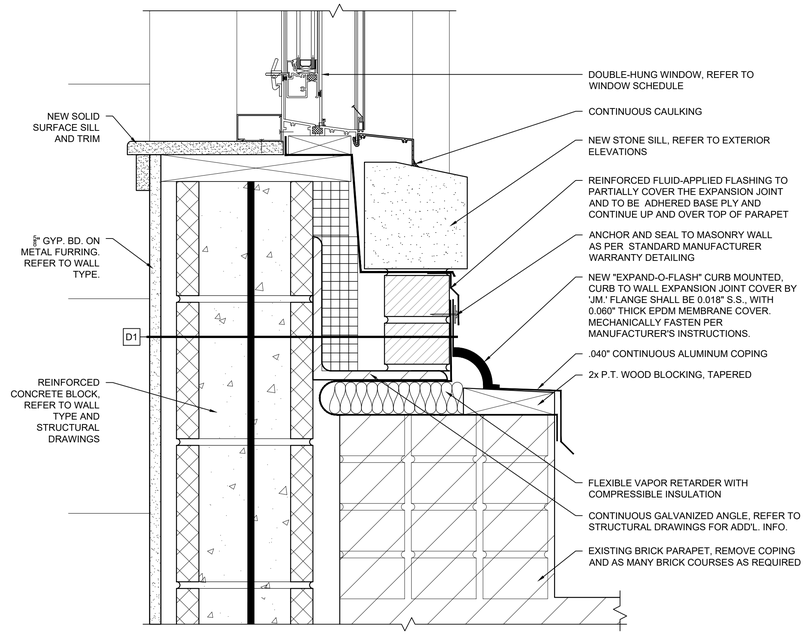
STAIR/RAMP PLANS, SECTIONS & DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A403

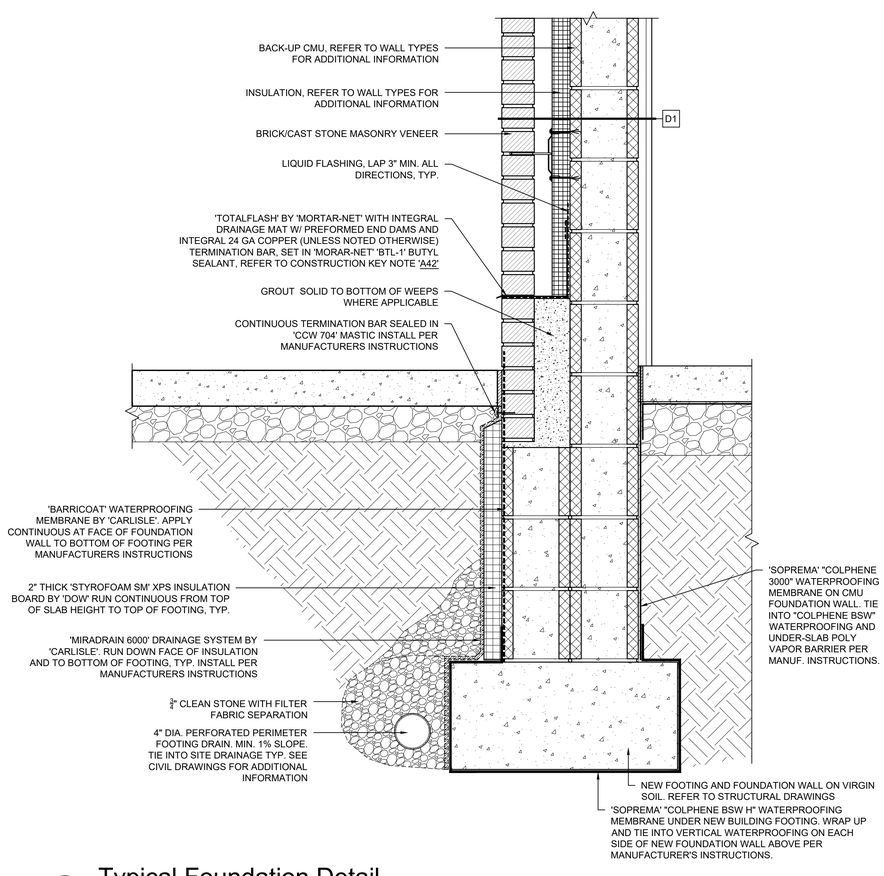
A4.03



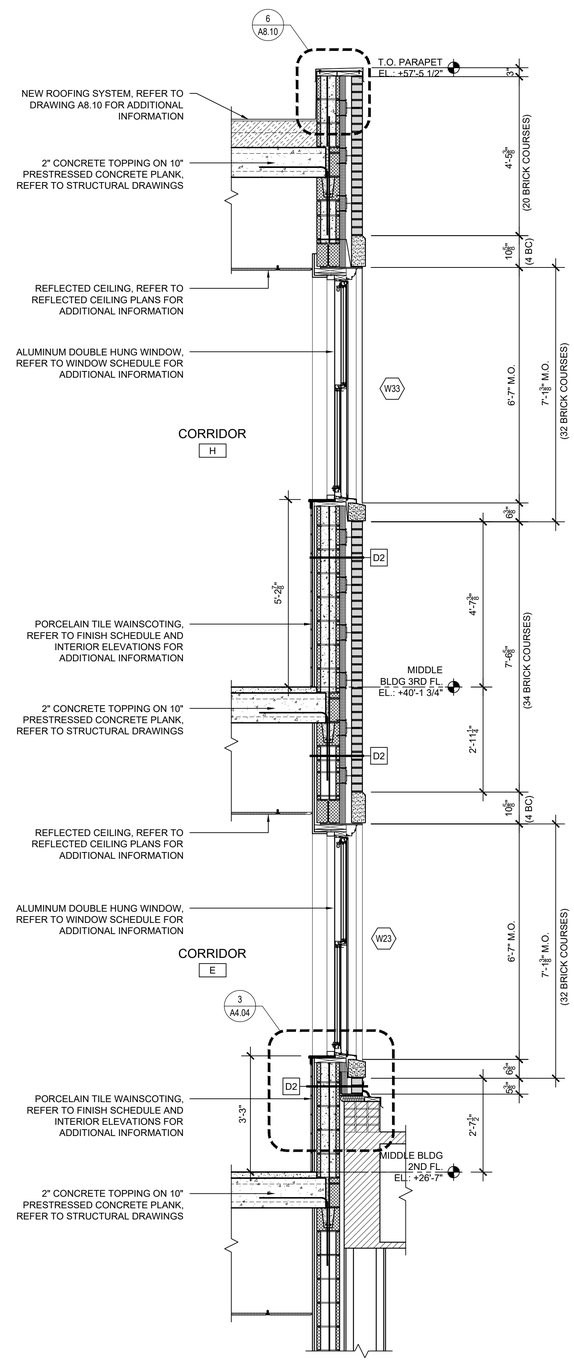
1 A4.04 Wall Section
1/2" = 1'-0"



3 A4.04 Expansion Joint Detail
3" = 1'-0"



2 A4.04 Typical Foundation Detail
1 1/2" = 1'-0"



4 A4.04 Wall Section
1/2" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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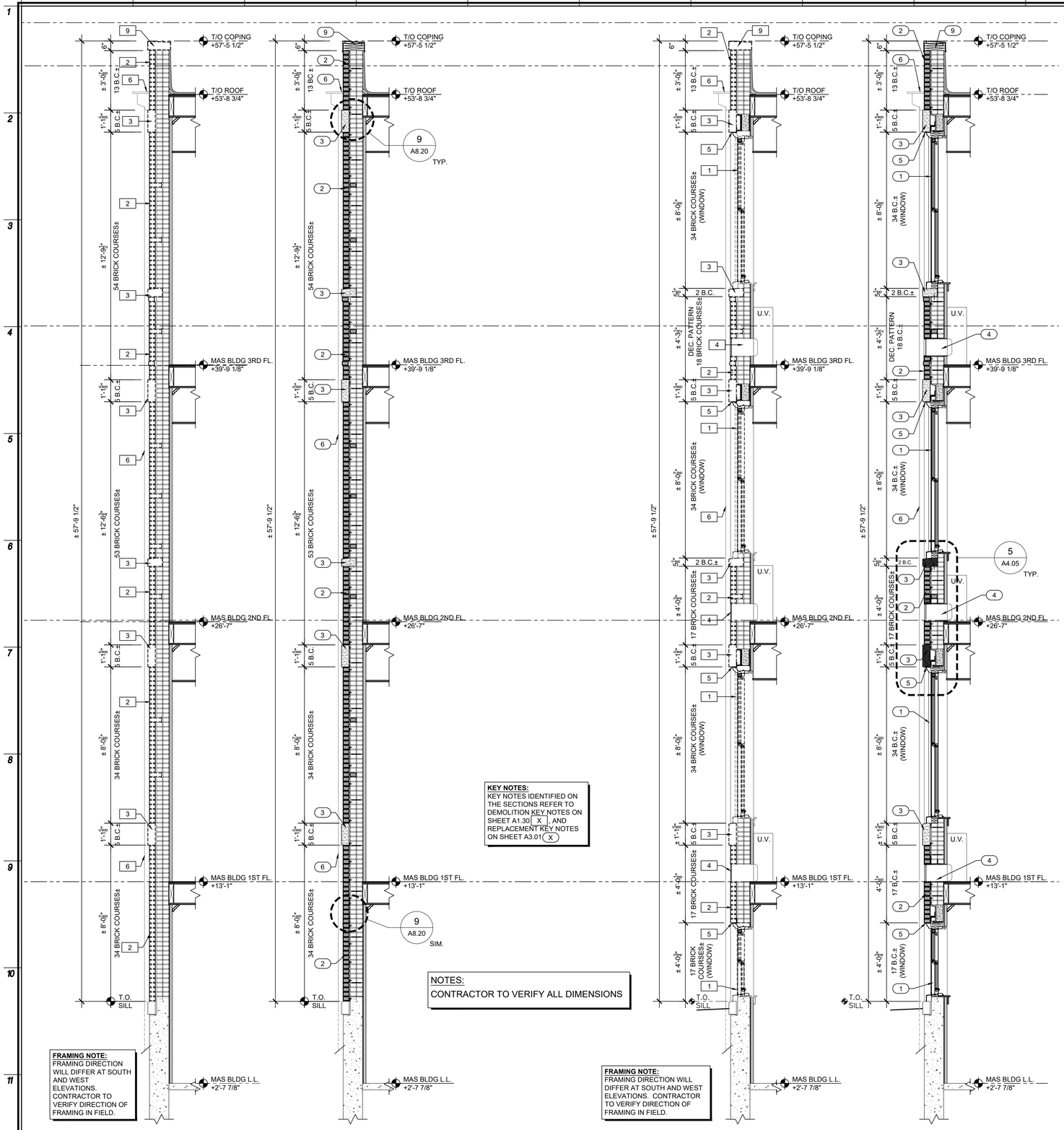
NYSED PROJECT # 66-07-01-03-0-004-030

WALL SECTIONS AND DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A404

A4.04

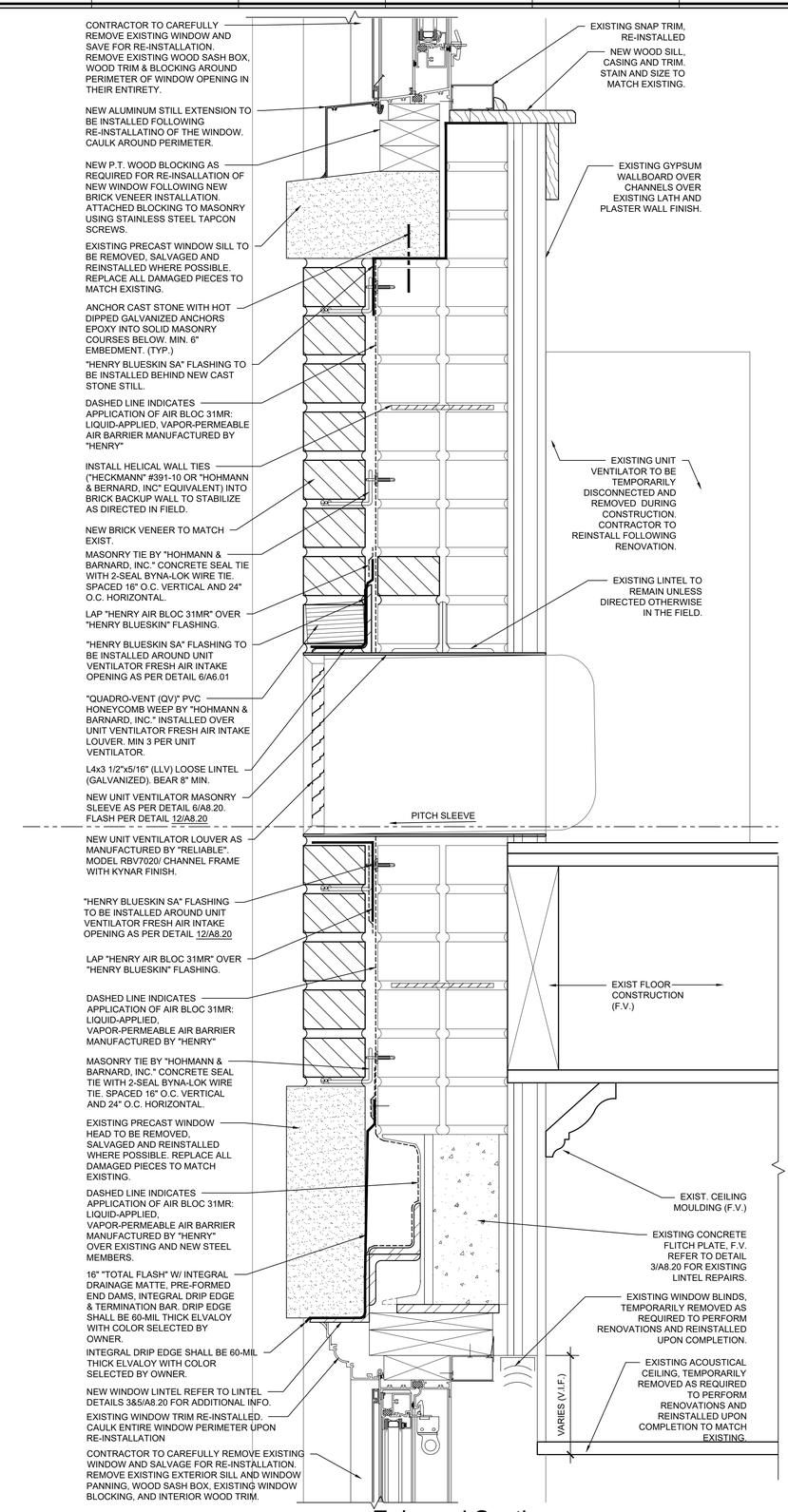


1 A4.05 Demo. Wall Section 3/8" = 1'-0"

2 A4.05 Prop. Wall Section 3/8" = 1'-0" TYP. WALL

3 A4.05 Demo. Wall Section 3/8" = 1'-0" TYP. WALL @ WINDOW

4 A4.05 Prop. Wall Section 3/8" = 1'-0" TYP. WALL @ WINDOW



5 A4.05 Enlarged Section 3" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	LH

MICHAEL J. McGOVERN, R.A.
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NYSED PROJECT # 66-07-01-03-0-004-030

MASONRY REPLACEMENT WALL SECTIONS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A405

A4.05

Ceiling Types

MARK	DESCRIPTION	SYMBOL
CT-1	ARMSTRONG 2'x2'x¾" "ULTIMA" BEVELED TEGULAR ACOUSTIC CEILING TILE W/ ARMSTRONG "SUPRAFINE" 9/16" EXPOSED TEE GRID	
CT-2	ARMSTRONG LYRA PB DIRECT APPLY SQUARE EDGED DIRECT ADHERED ACOUSTICAL CEILING SYSTEM. PATTERN AND LAYOUT AS SHOWN ON PLAN. V.I.F ALL DIMENSIONS, CUT EDGES ARE TO BE FINISHED. PATTERN IS TO BE TRIMMED AND COORDINATED WITH A PAINTED WOOD MOLDING TO MATCH IN KIND THE EXISTING.	FIELD VARIES
CT-3	ARMSTRONG 2'x4' METAL WORKS ACOUSTICAL CEILING TILE SYSTEM. TILE PATTERN SHALL BE #56007 NAIL-UP OR EQUAL, WITH COORDINATING CORNICE STYLE #56055 NAIL-UP AND BORDER - FILL PANEL IN STYLE #6575 NAIL-UP GRID PATTERN AND LAYOUT AS SHOWN ON PLAN	
CT-4	PAINT EXISTING PLASTER CEILING TO REMAIN, PATCH AND REPAIR AS REQUIRED.	
CT-5	'ARMSTRONG' 2'x4'x1" "CALLA" TEGULAR ACOUSTIC CEILING TILE WITH "SUPRAFINE" 9/16" EXPOSED TEE GRID. OFFSET GRID PATTERN AS SHOWN ON PLAN, TYP. TILE COLORS TO BE SELECTED BY OWNER /ARCHITECT, REFER TO RCPs FOR COLOR PATTERN, GRID AND TRIM COLOR: "WHITE" EACH FLOOR SHALL CONSIST OF WHITE, GRAY AND A COLORED TILE. COLOR 3 VARIES PER FLOOR.	(COLOR 1) (COLOR 2) (COLOR 3)
CT-6	'ARMSTRONG' 2'x2'x1" "CALLA" TEGULAR ACOUSTIC CEILING TILE WITH "SUPRAFINE" 9/16" EXPOSED TEE GRID. TILE COLORS TO BE WHITE, GRID AND TRIM COLOR: "WHITE"	
CT-7	PAINT EXISTING GYPSUM BOARD CEILING TO REMAIN, PATCH AND REPAIR AS REQUIRED.	
OTA	OPEN TO ABOVE, PAINT ALL EXPOSED CEILING STRUCTURE, TYP.	
ETR	EXISTING CEILING TO REMAIN	

Typical Ceiling Notes

1. PENETRATIONS THROUGH CEILINGS ARE TO BE PROTECTED PER RATED DESCRIPTIONS. REFER TO FIRE RESISTANT RATED ASSEMBLIES, WALL AND CEILING TYPES.
2. ALL ACCESS PANELS, HATCHES/LADDERS, GYPSUM BOARD SOFFITS, BULKHEAD, HVAC GRILLES AND REGISTERS, SHALL BE PAINTED TO MATCH CEILING FINISHES.
3. SUSPENDED ACOUSTIC TILE CEILINGS SHALL BE CENTERED IN SPACE IN BOTH DIRECTIONS TO MINIMIZE WASTE AS REQUIRED, UNLESS OTHERWISE INDICATED, FIELD VERIFY.
4. ALL AREAS NOT GRIDDED AS CEILING TILE SHALL BE OPEN TO ABOVE UNLESS OTHERWISE NOTED.
5. TENT ALL LIGHT FIXTURES IN RATED FLOOR/CEILING, ROOF/CEILING ASSEMBLIES AS REQUIRED. REFER TO FIRE RESISTANT RATED ASSEMBLIES DRAWING FOR ADDITIONAL INFORMATION.
6. ALL CONTRACTORS (I.E. MECHANICAL, ELECTRICAL, PLUMBING) ARE REQUIRED TO COORDINATE THEIR WORK WITH INDIVIDUAL CEILING FINISHES. ALL DISTURBED AREAS RESULTING FROM CONTRACTORS OPERATIONS SHALL BE PATCHED AND DAMAGED AREAS AS A RESULT OF CONTRACTORS OPERATIONS SHALL BE PATCHED AND REPAIRED TO MATCH.
7. FIELD VERIFY ALL DIMENSIONS AND CLEARANCES. COORDINATE INSTALLATION OF LIGHTING, EQUIPMENT, MECHANICAL DUCTWORK, ETC. TO ENSURE PROPER INSTALLATION.
8. ALL COLORS AND PATTERNS TO BE SELECTED BY OWNER, TYPICAL.
9. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY ACCESSORIES INCLUDING PERIMETER MOLDINGS, FASTENERS, SUPPORT WIRES, TRIM, ETC. FOR A COMPLETE INSTALLATION.
10. ALL LIGHTING FIXTURES SHOWN ON REFLECTED CEILING PLAN ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY, REFER TO ELECTRICAL LIGHTING PLAN FOR ACTUAL LOCATIONS.
11. AT LOCATIONS WHERE NEW CEILING ADJOINS, ABUTS, OR EXTENDS AN EXISTING CEILING, NEW CEILING GRID SHALL MATCH THAT OF EXISTING.

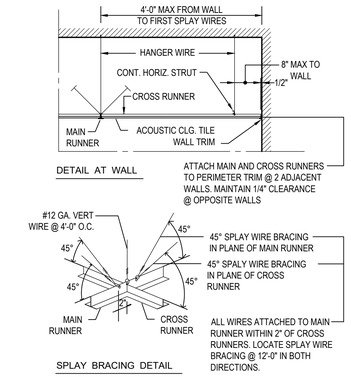
Symbol Legend

SYMBOL	DESCRIPTION
0'-0"	DATUM: FINISH CEILING HEIGHT ABOVE FINISH FLOOR
CT-#	CEILING TYPE (REFER TO CEILING TYPES SCHEDULE)
	LIGHTING FIXTURES - REFER TO ELECTRICAL PLANS FOR EXACT LIGHTING FIXTURE LOCATIONS. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR CEILING DIFFUSER LOCATIONS.
	CEILING MOUNTED EQUIPMENT - REFER TO ELECTRICAL PLANS FOR EXACT FIXTURE LOCATIONS. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR CEILING DIFFUSER LOCATIONS. MECHANICAL DIFFUSERS - REFER TO MECHANICAL PLANS FOR EXACT CEILING DIFFUSER LOCATIONS. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR LIGHT FIXTURE LOCATIONS. SPRINKLER HEADS AND PIPING - REFER TO FIRE PREVENTION DRAWINGS

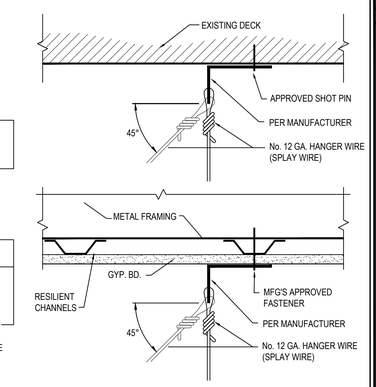
RCP Key Notes

(#) SYMBOL INDICATES RCP KEY NOTE

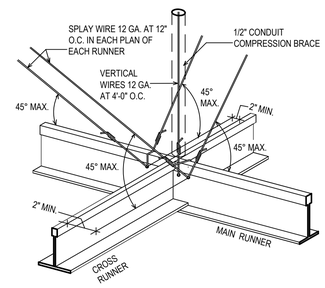
1. EXISTING ALL WALLS WITHIN THE MULTI PURPOSE MAIN SPACE, THE PROSCENIUM RETURNS AND THE WALLS UNDER THE BALCONY ARE TO BE PAINTED - PAINTING SHALL INCLUDE A TWO COLOR SYSTEM.
2. TYPICAL EXISTING SMOKE DETECTOR / FIRE DEVICE, V.I.F.
3. EXISTING PENDANT MOUNTED LIGHT AND DECORATIVE ROUND MOLDING, TYPICAL. LIGHT FIXTURE IS TO BE CLEANED AND INSPECTED. DECORATIVE ROUND MOLDING IS TO BE CLEANED, RESTORED TO LIKE NEW AND PAINTED
4. EXISTING PENDANT MOUNTED LIGHT BAR AND LIGHTS FOR STAGE LIGHTING SYSTEM, V.I.F.
5. EXISTING MECHANICAL LOUVER, V.I.F. ALL LOCATIONS AND COORDINATE TILE LAYOUT AS SHOWN
6. EXISTING TO REMAIN EXIT DEVICE, EMERGENCY LIGHT OR MISCELLANEOUS EMERGENCY COMMUNICATION DEVICE
7. EXISTING SURFACE MOUNTED LIGHT TO REMAIN - COORDINATE CEILING WORK
8. ALL CEILING SURFACES ARE TO BE PAINTED - CONTRACTOR TO INCLUDE A THREE COLOR SYSTEM - PLASTER MOLDING B, FILED 1 AND FIELD 2, LAYOUT TO BE DETERMINED IN THE FIELD
9. CEILING FIELD #2
10. CEILING FIELD #3
11. CEILING FIELD #1
12. EXISTING PLASTER MOLDING - STYLE 'C' TO REMAIN, STRIP PAINT FROM MOLDING PROFILES, CLEAN AND RESTORE PROFILE TO LIKE NEW CONDITION, TYPICAL
13. COMBINED EXISTING PLASTER MOLDING AND ADJACENT WOOD MOLDING - STYLE 'B' TO REMAIN, CONTRACTOR SHALL REPAIR TO LIKE NEW CONDITION AND PAINT, TYPICAL
14. EXISTING PLASTER CHANDLER MOLDING - STYLE 'D', TYPICAL OF 6 - PAINTED TO MATCH MOLDING STYLE 'B'
15. SCHEDULED CEILING PANELS ARE TO BE BUTTED TIGHT UP AGAINST THE EXISTING MOLDING - COORDINATE LAYOUT WITH EXISTING VENTS, TILES ARE TO BE DIRECT ADHERED IN PLACE, CONFIRM AND COORDINATE IN WRITING WITH THE TILE MFR FOR PROPER INSTALLATION METHOD
16. EXISTING SPRINKLER PIPE, SPRINKLER HEAD AND/OR HANGERS TO REMAIN - COORDINATE WITH SCHEDULED WORK - NOTE HANGERS NEED TO BE COORDINATED WITH CEILING WORK, V.I.F. ALL LOCATIONS
17. EXISTING LIGHT FIXTURE MODIFY LOCATION AS NECESSARY TO ACCOMMODATE SCHEDULED WORK, TYPICAL FOR ALL CEILING MOUNTED LIGHTS
18. EXISTING LOW VOLTAGE WIRE MOLD LAYOUT AND ROUTING TO BE REVIEWED IN FIELD FOR POSSIBLE CONSOLIDATION - NOTE WIRES ARE TO BE REROUTED AS PART OF THE SCHEDULED CEILING WORK, TYPICAL
19. TYPICAL VERTICAL SPRINKLER PIPE OR SIMILAR - COORDINATE CEILING AND COVE MOLDING AS REQUIRED
20. BORDER AREA BETWEEN CEILING TILE FIELD AND CROWN MOLDING - NOTE BORDER AND CEILING FIELD ARE TO BE EQUALLY CENTERED, ALL MOLDING IS TO MITERED AND JOINTS ARE TO SMOOTH, TYPICAL.
21. HATCH INDICATES TYPICAL METAL CROWN MOLDING SYSTEM AS PART OF THE COMPLETE CEILING SYSTEM, ALL CROWN MOLDING IS TO MITERED AND JOINTS ARE TO SMOOTH, TYPICAL
22. EXISTING SOFFIT CONCEALING A MECHANICAL UNIT TO REMAIN
23. COORDINATE DETAIL OF BORDER TRIM WITH EXISTING STEEL FRAMING, BALUSTRADE POSTS AND UNDERSIDE OF BALCONY IN THE FILED ALL EXPOSED METAL EDGES OF THE METAL CEILING SYSTEM ARE TO BE HEMMED CONCEALED, TYPICAL



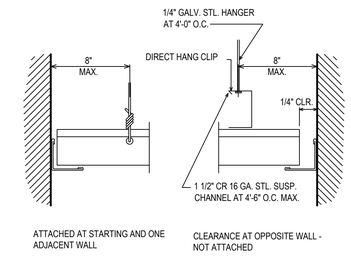
A/A5.00 Typ. Seismic Bracing
3/8" = 1'-0" SUSPENSION CEILING SYSTEM



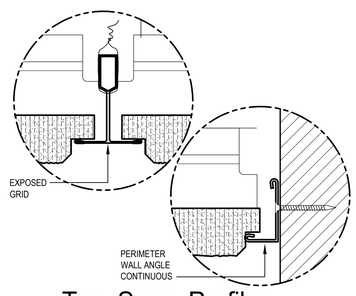
B/A5.00 Typ. Hanger Wire Detail
1-1/2" = 1'-0" SUSPENSION CEILING SYSTEM



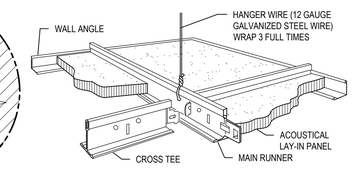
C/A5.00 Typ. Susp. Ceiling Detail
1-1/2" = 1'-0" SUSPENSION CEILING SYSTEM



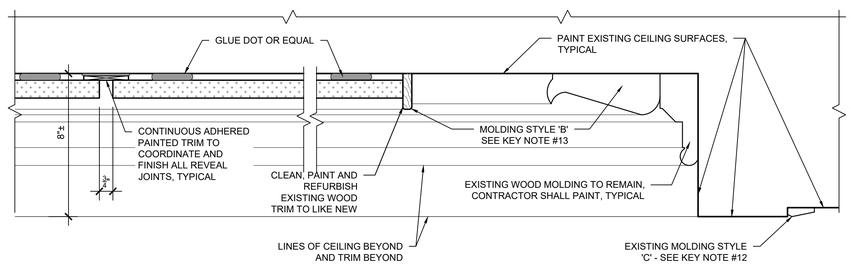
D/A5.00 Typ. Clng. Edge Detail
1-1/2" = 1'-0" SUSPENSION CEILING SYSTEM



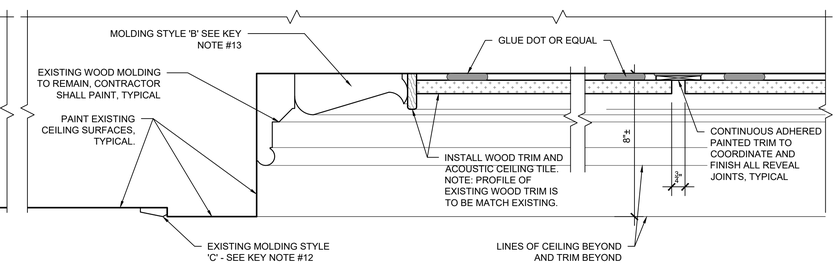
F/A5.00 Typ. Susp. Profiles
N.T.S. ACOUSTIC PANEL SUSP. SYSTEM



E/A5.00 Typ. Susp. Ceiling
N.T.S. ACOUSTIC PANEL SUSP. SYSTEM



2/A5.00 Molding Detail - A
3" = 1'-0"



1/A5.00 Molding Detail - B
3" = 1'-0"
WORK AREA 'C'

Date	1/10/20
Checked	MJM
Drawn	—

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:
(#) ISSUE TO BID 11/23/20

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LAN ASSOCIATES
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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

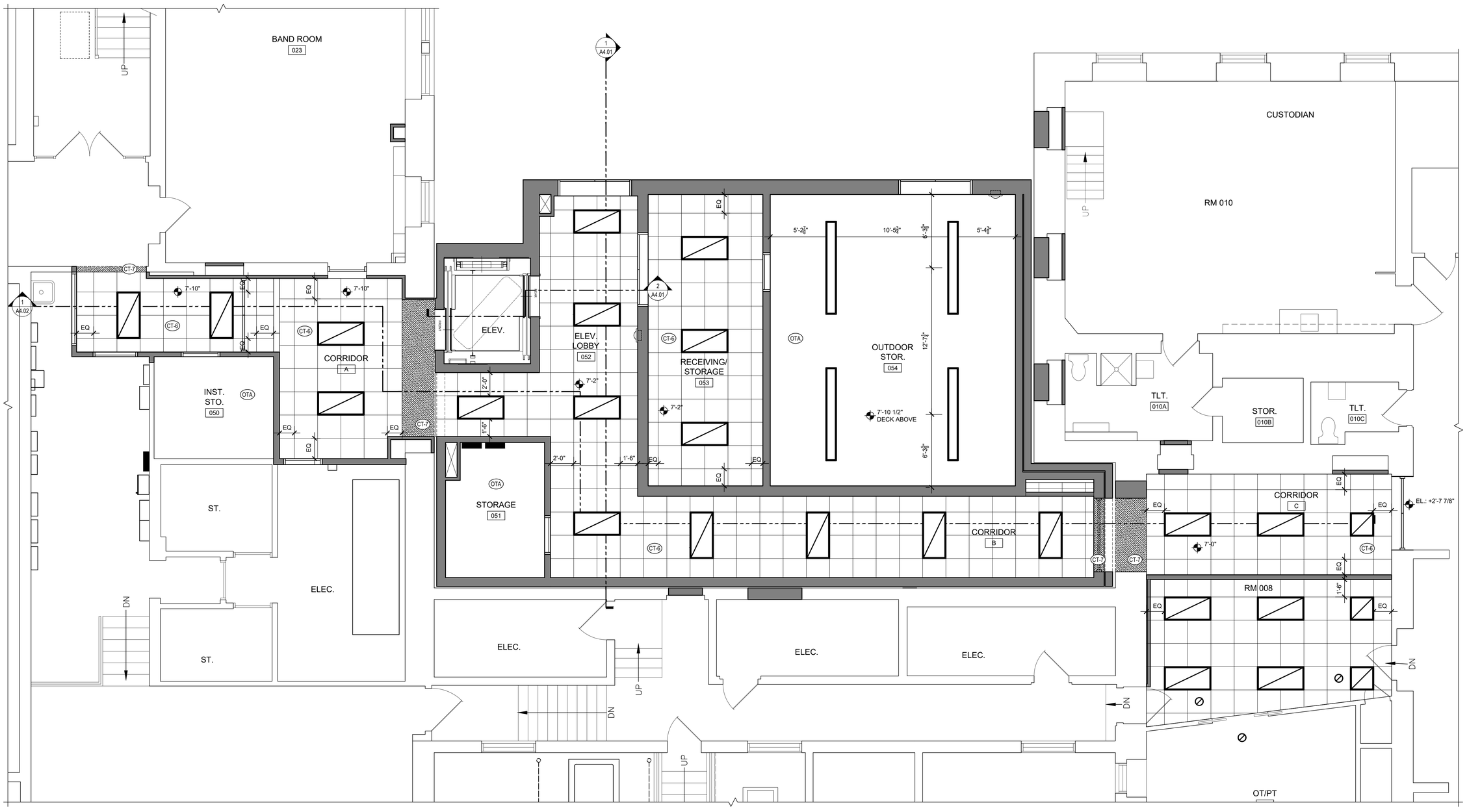
CEILING DETAILS AND SCHEDULES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A500

A5.00

Genaral Notes

1. SEE DRAWING A500 FOR CEILING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



1 A5.01 Proposed Reflected Ceiling Plan - Lower Level

1/4" = 1'-0"

NORTH

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED RCP - LOWER LEVEL

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

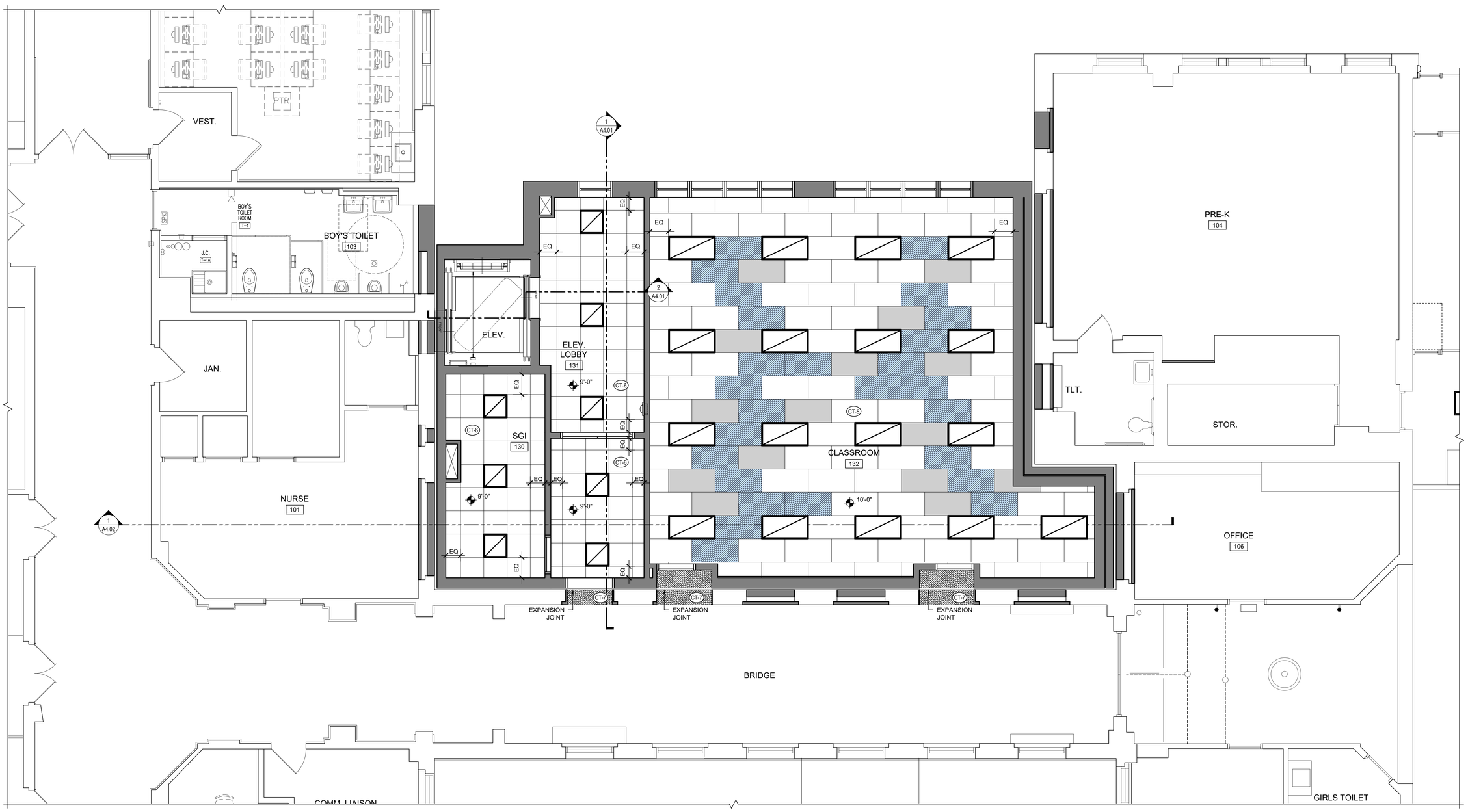
Job No. 4.1092.72.2

File No. 10927202A501

A5.01

Genaral Notes

1. SEE DRAWING A500 FOR CEILING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



1 A5.02 Proposed Reflected Ceiling Plan - First Floor

1/4" = 1'-0"

NORTH

Date	1/10/20
Checked	DLF
Drawn	TT

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License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED RCP - FIRST FLOOR

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

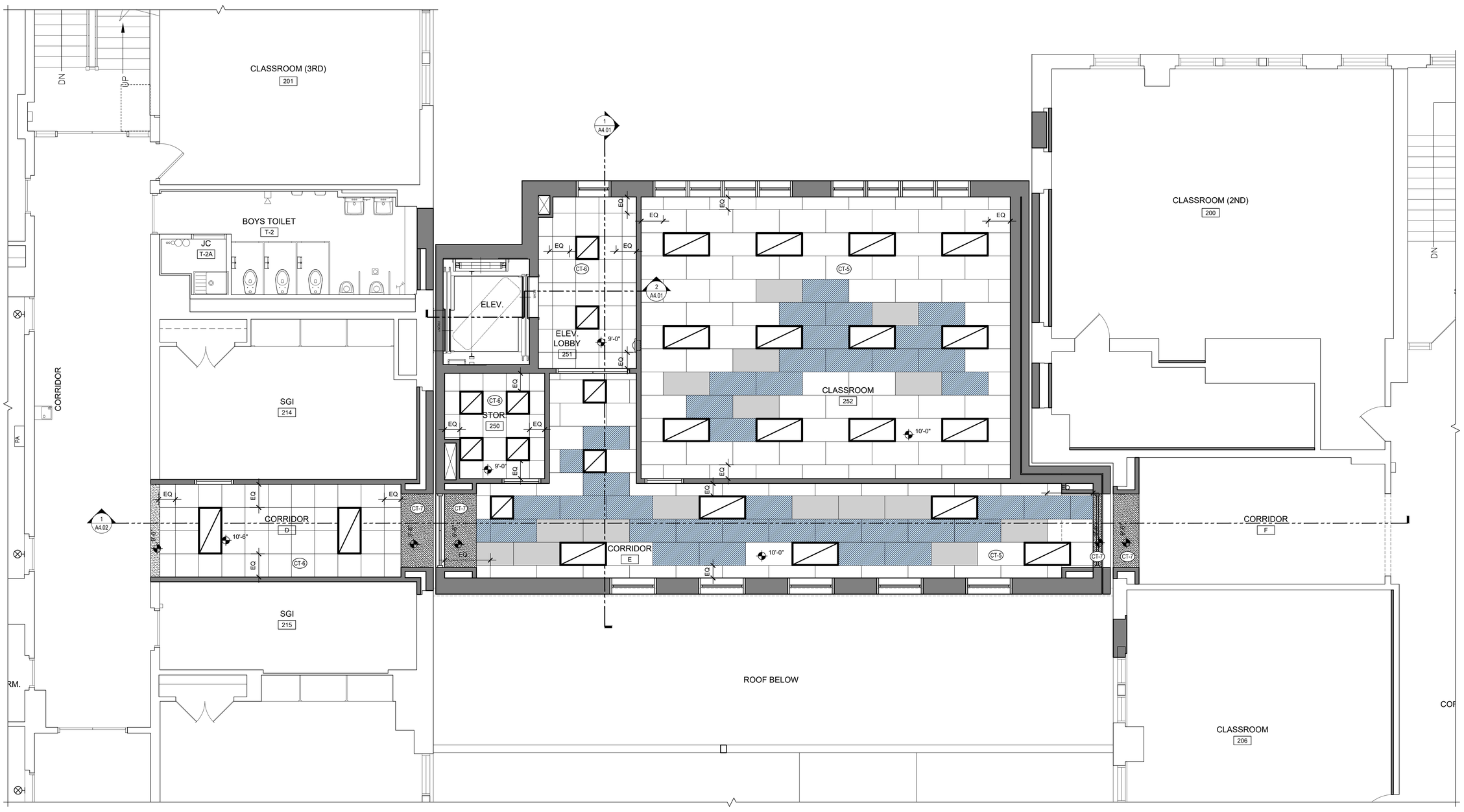
Job No. 4.1092.72.2

File No. 109272O2A501

A5.02

Genaral Notes

1. SEE DRAWING A500 FOR CEILING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



1 A5.03 Proposed Reflected Ceiling Plan - Second Floor

1/4" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED RCP - SECOND FLOOR

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

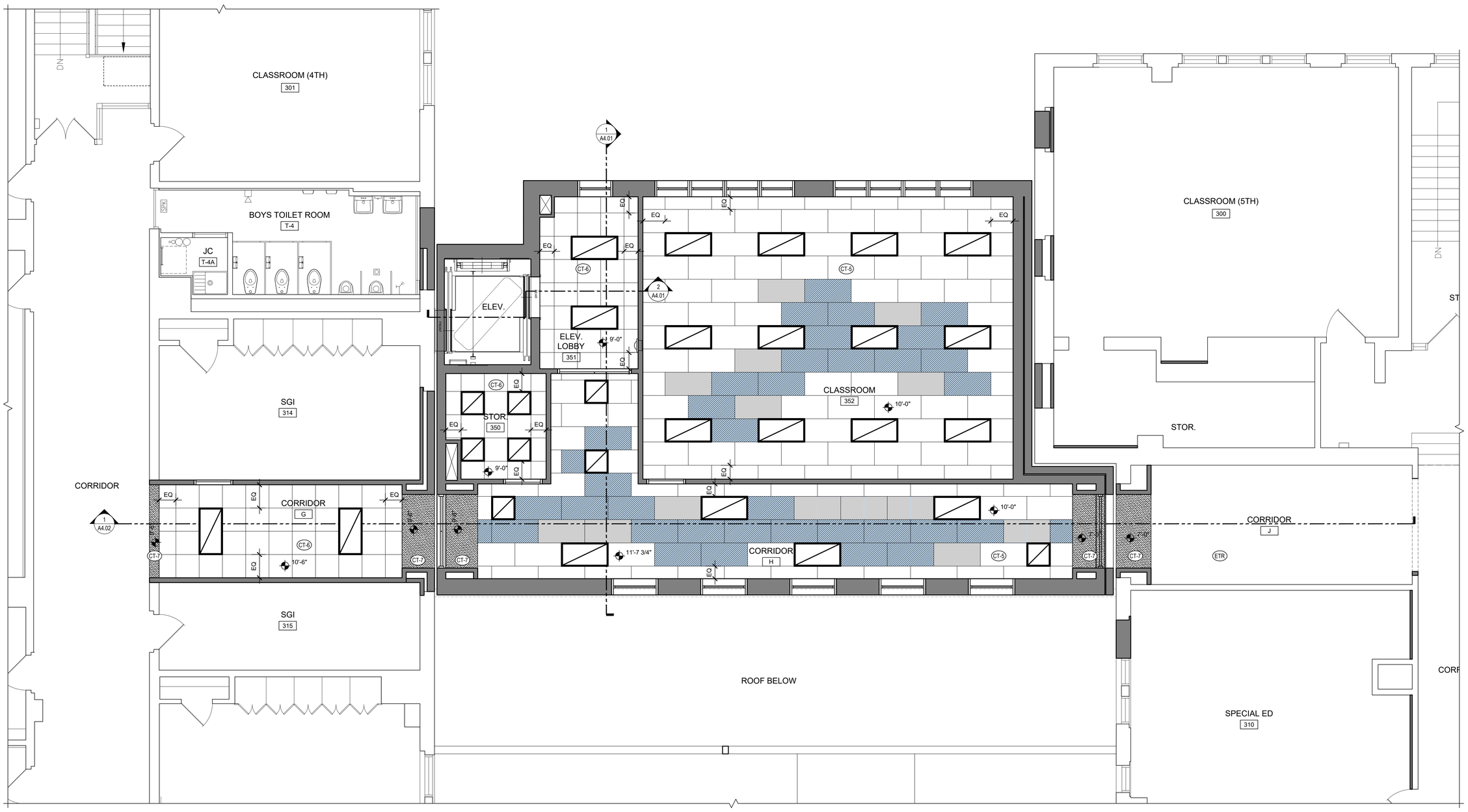
Job No. 4.1092.72.2

File No. 10927202A501

A5.03

Genaral Notes

1. SEE DRAWING A500 FOR CEILING NOTES, LEGENDS, SCHEDULES, DETAILS AND OTHER RELATED INFORMATION.
2. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



1 A5.04 Proposed Reflected Ceiling Plan - Third Floor

1/4" = 1'-0"

NORTH

Date	1/10/20
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Drawn	TT

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

Revisions:

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NYSED PROJECT # 66-07-01-03-0-004-030

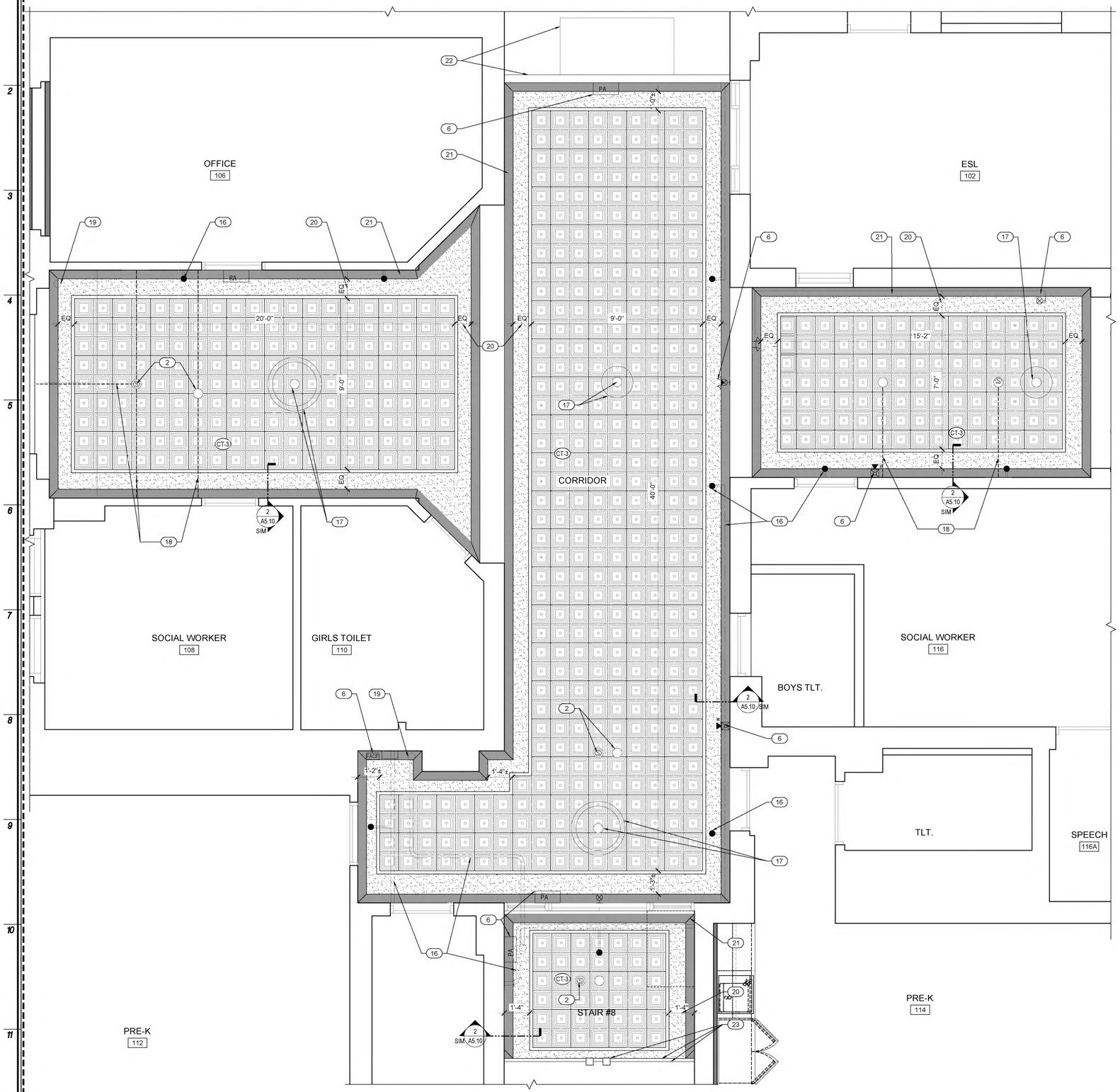
PROPOSED RCP - THIRD FLOOR

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

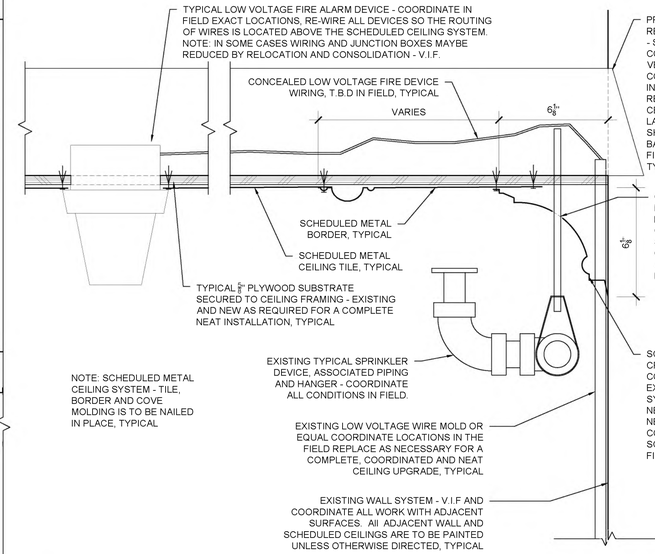
File No. 10927202A501

A5.04



1 A5.10 Proposed Corridor RCP

3/8" = 1'-0"



2 A5.10 Detail Section at Metal Ceiling

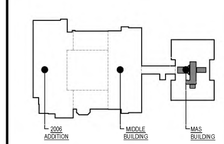
3" = 1'-0"

ADD ALTERNATE
MAS FIRST FLOOR CORRIDOR CEILING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO REFER TO DRAWING A5.00 FOR LEGENDS, SCHEDULES AND TYPICAL REFLECTED CEILING DETAILS

(#) SYMBOL INDICATES REFLECTED CEILING PLAN KEY NOTE. REFER TO DRAWING A5.00 FOR NOTES.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	DLF
Drawn	AK

MICHAEL J. McGOVERN, R.A.
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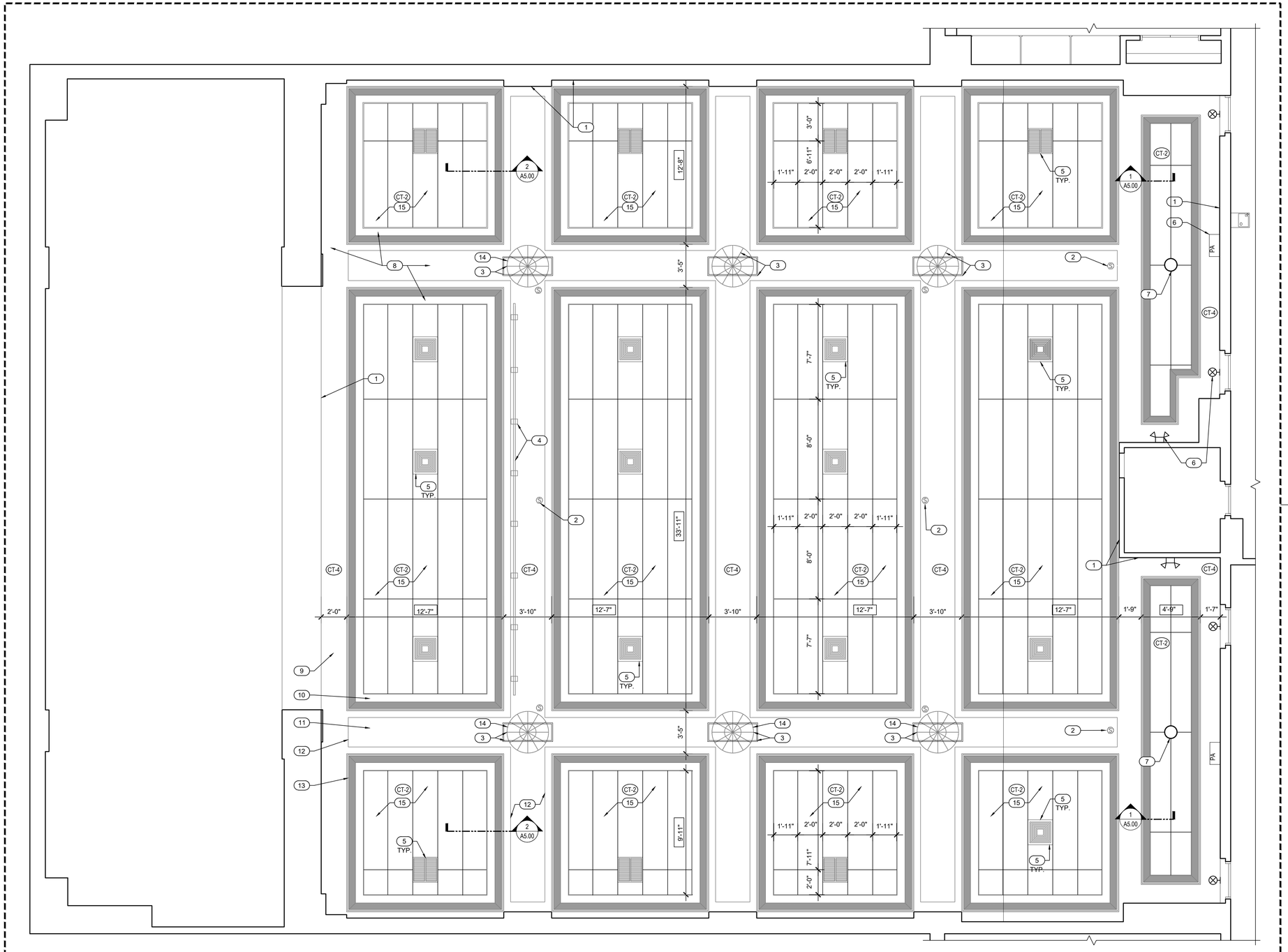
252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

PROPOSED CORRIDOR RCP
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A510

A5.10



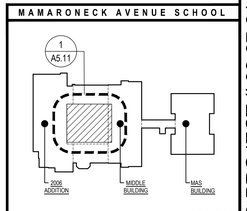
ADD ALTERNATE
MULTI-PURPOSE ROOM CEILING REPLACEMENT
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET A5.00

REFER TO REFER TO DRAWING A5.00 FOR LEGENDS, SCHEDULES AND TYPICAL REFLECTED CEILING DETAILS

(#) SYMBOL INDICATES REFLECTED CEILING PLAN KEY NOTE. REFER TO DRAWING A5.01 FOR NOTES.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

1 A5.11 Proposed Multi-Purpose Room RCP

1/4" = 1'-0"

NORTH

Date	1/10/20
Checked	MJM
Drawn	AK

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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED MULTI-PURPOSE ROOM RCP
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A511

A5.11

DOOR SCHEDULE

DOOR NO.	DOOR TYPE	ROOM NAME/ NUMBER	DOOR ACTION	DOOR MATERIAL	DOOR FIRE RATING	DOOR FINISH	MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	VISION PANEL	FRAME DETAIL NO. MAT.	FRAME DETAIL NO. HEAD	FRAME DETAIL NO. JAMB	SILL DETAIL NO.	HARDWARE (SEE SPECIFICATIONS) HARDWARE SET	CLOSER	PANIC	SECURITY PACKAGE	NOTES
LOWER LEVEL																				
D001	G	CORRIDOR 'A'	DOUBLE SWING	METAL	45	PRIME/PAINT	-	-	6'-0"	6'-8"	-	MTL.	1/A6.02	2/A6.02	3/A6.02	01	●	-		
D002	H	CORRIDOR 'A'	SINGLE SWING	METAL	45	PRIME/PAINT	-	-	3'-6"	6'-8"	-	MTL.	1/A6.02	2/A6.02	3/A6.02	02	●	-		
D003	B	INST. STOR. 050	SINGLE SWING	WOOD	60	STAIN/POLY	-	-	3'-0"	6'-8"	-	MTL.	1/A6.02	2/A6.02	3/A6.02	03	●	-		
D004	K	CORRIDOR 'A'	BI-SWING	WOOD	90	STAIN/POLY	-	-	6'-0"	6'-8"	-	MTL.	1/A6.02	2/A6.02	3/A6.02	04	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D005	E	BAND ROOM 023	SINGLE SWING	WOOD	60	STAIN/POLY	-	-	3'-0"	6'-8"	●	MTL.	5/A6.02	6/A6.02	7/A6.02	05	●	-		**FIRE RATED VISION PANEL: D-H-T-W-60**
D006	C	ELEVATOR LOBBY 052	DOUBLE SWING	ALUM./ FRP	-	PRIME/PAINT	-	-	6'-0"	6'-8"	●	ALUM.	9/A6.02	10 /A6.02	11 /A6.02	06	●	●		
D007	C	OUTDOOR STOR. 054	DOUBLE SWING	ALUM./ FRP	90	PRIME/PAINT	-	-	6'-0"	6'-8"	●	ALUM.	9/A6.02	10 /A6.02	11 /A6.02	07	●	-		GLAZING SHALL BE TINTED TO 5% LIGHT TRANSMITTANCE
D008	G	RECEIVING STOR. 053	DOUBLE SWING	METAL	60	PRIME/PAINT	-	-	6'-0"	6'-8"	-	MTL.	14 /A6.02	15 /A6.02	19 /A6.02	08	●	-		
D009	J	STORAGE 051	SINGLE SWING	METAL	60	PRIME/PAINT	-	-	3'-0"	6'-8"	-	MTL.	1/A6.02	2/A6.02	3/A6.02	03	●	-		
D010	K	CORRIDOR 'B'	BI-SWING	WOOD	180	STAIN/POLY	-	-	6'-0"	6'-8"	-	MTL.	1/A6.03	2/A6.03	3/A6.03	15	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D011	K	CORRIDOR 'C'	BI-SWING	WOOD	90	STAIN/POLY	-	-	6'-0"	6'-8"	-	MTL.	7/A6.03	8/A6.03	9/A6.03	04	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D012	J	CORRIDOR 'A'	SINGLE SWING	METAL	90	PRIME/PAINT	-	-	3'-0"	6'-8"	-	MTL.	16 /A6.02	17 /A6.02	3/A6.02	14	●	-		
D013	J	RECEIVING/ STORAGE 053	SINGLE SWING	METAL	-	PRIME/PAINT	-	-	3'-0"	6'-8"	-	MTL.	12 /A6.02	13 /A6.02	8/A6.02	17	●	-		
FIRST FLOOR																				
D100	D	SGI 130	SINGLE SWING	WOOD	90	STAIN/POLY	-	-	3'-0"	7'-0"	●	MTL.	16 /A6.02	17 /A6.02	4/A6.02	09	●	-		**FIRE RATED VISION PANEL: D-H-W-90**
D101	F	ELEVATOR LOBBY 131	DOUBLE SWING	WOOD	90	STAIN/POLY	-	-	6'-0"	7'-0"	-	MTL.	16 /A6.02	17 /A6.02	4/A6.02	10	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D102	D	CLASSROOM 132	SINGLE SWING	WOOD	90	STAIN/POLY	-	-	3'-0"	7'-0"	●	MTL.	11 /A6.03	12 /A6.03	13 /A6.03	11	●	-		**FIRE RATED VISION PANEL: D-H-W-90**
D103	D	CLASSROOM 132	SINGLE SWING	WOOD	90	STAIN/POLY	-	-	3'-0"	7'-0"	●	MTL.	11 /A6.03	12 /A6.03	13 /A6.03	11	●	-		**FIRE RATED VISION PANEL: D-H-W-90**
D104	A	MECH.	SINGLE SWING	METAL	-	PRIME/PAINT	3'-4" F.V.	7'-2" F.V.	3'-0" F.V.	7'-0" F.V.	-	MTL.	4/A6.03	5/A6.03	-	16	-	-		
SECOND FLOOR																				
D200	D	SGI 214	SINGLE SWING	WOOD	20	STAIN/POLY	-	-	3'-0"	7'-0"	●	MTL.	1/A6.02	2/A6.02	4/A6.02	11	●	-		
D201	F	CORRIDOR 'D'	BI-SWING	WOOD	90	STAIN/POLY	-	-	6'-0"	7'-0"	-	MTL.	11 /A6.03 SIM.	12 /A6.03 SIM.	18 /A6.02	12	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D202	B	STORAGE	SINGLE SWING	WOOD	20	STAIN/POLY	-	-	3'-0"	7'-0"	-	MTL.	1/A6.02	2/A6.02	4/A6.02	03	●	-		
D203	F	ELEVATOR LOBBY 251	DOUBLE SWING	WOOD	90	STAIN/POLY	-	-	6'-0"	7'-0"	-	MTL.	1/A6.02	2/A6.02	4/A6.02	10	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D204	D	CLASSROOM 252	SINGLE SWING	WOOD	20	STAIN/POLY	-	-	3'-0"	7'-0"	●	MTL.	1/A6.02	2/A6.02	4/A6.02	09	●	-		**FIRE RATED VISION PANEL: D-20**
D205	F	CORRIDOR 'E'	DOUBLE SWING	WOOD	180	STAIN/POLY	-	-	6'-0"	7'-0"	-	MTL.	1/A6.03 SIM.	2/A6.03 SIM.	18 /A6.02	13	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
THIRD FLOOR																				
D300	D	SGI 314	SINGLE SWING	WOOD	20	STAIN/POLY	-	-	3'-0"	7'-0"	●	MTL.	1/A6.02	2/A6.02	4/A6.02	11	●	-		**FIRE RATED VISION PANEL: D-20**
D301	F	CORRIDOR 'H'	BI-SWING	WOOD	90	STAIN/POLY	-	-	6'-0"	7'-0"	-	MTL.	11 /A6.03 SIM.	12 /A6.03 SIM.	18 /A6.02	12	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D302	B	STORAGE	SINGLE SWING	WOOD	20	STAIN/POLY	-	-	3'-0"	7'-0"	-	MTL.	1/A6.02	2/A6.02	4/A6.02	03	●	-		
D303	F	ELEVATOR LOBBY 351	DOUBLE SWING	WOOD	90	STAIN/POLY	-	-	6'-0"	7'-0"	-	MTL.	1/A6.02	2/A6.02	4/A6.02	10	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.
D304	D	CLASSROOM 352	SINGLE SWING	WOOD	20	STAIN/POLY	-	-	3'-0"	7'-0"	●	MTL.	1/A6.02	2/A6.02	4/A6.02	09	●	-		**FIRE RATED VISION PANEL: D-20**
D305	F	CORRIDOR 'H'	BI-SWING	WOOD	180	STAIN/POLY	-	-	6'-0"	7'-0"	-	MTL.	1/A6.03 SIM.	2/A6.03 SIM.	18 /A6.02	13	●	●		MAGNETIC HOLD OPEN; TIE HOLD OPEN TO FIRE ALARM.

Door & Door Hardware Notes

1. DOOR ELEVATIONS & DOOR HARDWARE ARE PROVIDED TO DEMONSTRATE THE "TYPICAL" CONDITION. REFER TO DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATION FOR ACTUAL DOOR HARDWARE REQUIREMENTS. REFER TO FINISH HARDWARE SPECIFICATION AND SCHEDULE FOR HARDWARE SET INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ALL MASONRY OPENING SIZES, DOOR SIZES, HINGE LOCATIONS, DOOR SWING ETC. AND PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING DOORS.
3. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN PRIOR TO THE BID TO BE OF LIKE KIND AND OF EQUAL QUALITY.
4. ALL DOOR FINISHES ARE SPECIFIED ON THE DOOR SCHEDULE AND NOTED IN THE SPECIFICATIONS. COLOR SHALL BE SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE.
5. CONTRACTOR TO PATCH AND REPAIR ALL DISTURBED INTERIOR AND EXTERIOR FINISHES AS REQUIRED.
6. WHERE SECURITY FILM IS USED, SECURITY FILM SHALL BE INSTALLED BY MANUFACTURER TO ENSURE FILM EXTENDS BEYOND GLAZING STOPS.
7. CONTRACTOR SHALL VERIFY AND COORDINATE ALL HARDWARE WITH OWNER PRIOR TO ORDERING OR INSTALLING. COORDINATE WITH ACTUAL FIELD CONDITIONS FOR A COMPLETE INSTALLATION.
8. CONTRACTOR SHALL COORDINATE WITH OWNER TO KEY ALL CYLINDERS TO MATCH EXISTING MASTER KEYING SYSTEM FOR DISTRICT STANDARDS.
9. CONTRACTOR SHALL PROVIDE & INSTALL WEATHER STRIPPING FOR ALL EXTERIOR DOORS.
10. CONTRACTOR SHALL PROVIDE AND INSTALL ASTRAGALS AND DOOR BOTTOM SHOES FOR ALL EXTERIOR DOUBLE DOORS.
11. CONTRACTOR SHALL PROVIDE FIRE RATED GLAZING IN FIRE RATED DOOR AND FRAME ASSEMBLIES AS REQUIRED TO ACHIEVE THE MINIMUM FIRE RATING. REFER TO DOOR ELEVATIONS.
12. ALL INTERIOR FIRE RATED GLAZING IN DOORS, SIDELITES AND WINDOWS SHALL BE FIRELITE PLUS 1/4" THICK CLEAR GLASS OR PILKINGTON PYROSTOP CLEAR GLASS AS INDICATED ON DOOR SCHEDULE / DOOR ELEVATIONS. CONTRACTOR SHALL PROVIDE FIRE RATED DOOR ASSEMBLY INCLUDING FRAMES AND GLAZING TO COMPLY WITH BUILDING CODE. SEE DOOR SCHEDULE FOR ASSEMBLY FIRE RATINGS.
13. ALL DOOR HARDWARE, CARD ACCESS READER AND SECURITY HARDWARE SHALL BE COORDINATED WITH OWNER REQUIREMENTS. PROVIDE POWER AS REQUIRED.
14. CONTRACTOR SHALL COORDINATE WITH OWNERS REQUIREMENTS FOR OVERHEAD DOOR OPTIONS AND CONTROLS
15. GC TO PROVIDE AND INSTALL ALL REQUIRED BLOCKING, SHIMS, AND SEALANT FOR A COMPLETE INSTALLATION. WOOD TO BE PRESSURE TREATED WHERE APPLICABLE.
16. ALL GLAZING IN DOORS, SIDELITES AND TRANSOMS SHALL BE SAFETY GLAZING AS REQUIRED BY IBC SECTION 2406.2 AND THE NYSED MANUAL OF PLANNING STANDARDS.

Energy Code Requirements

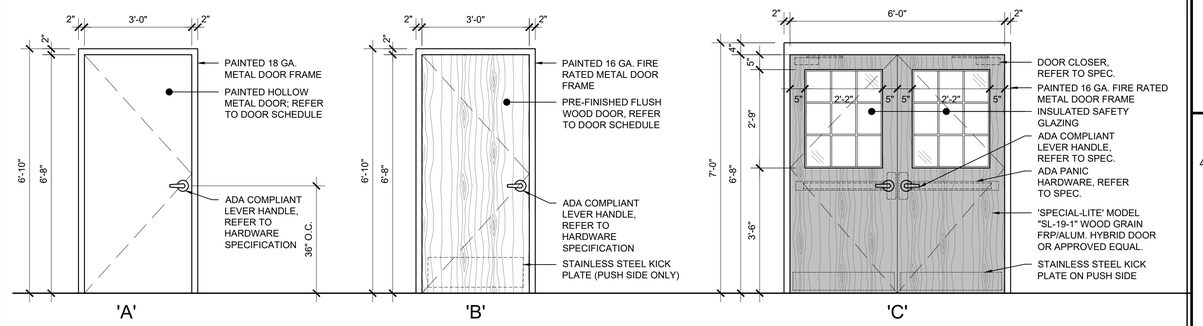
IECC 2015 - Table C402.4

Climate ZONE - 4

Vertical Fenestration:
U-Factor
Fixed Fenestration: 0.38
Operable Fenestration: 0.45
Entrance Doors: 0.77

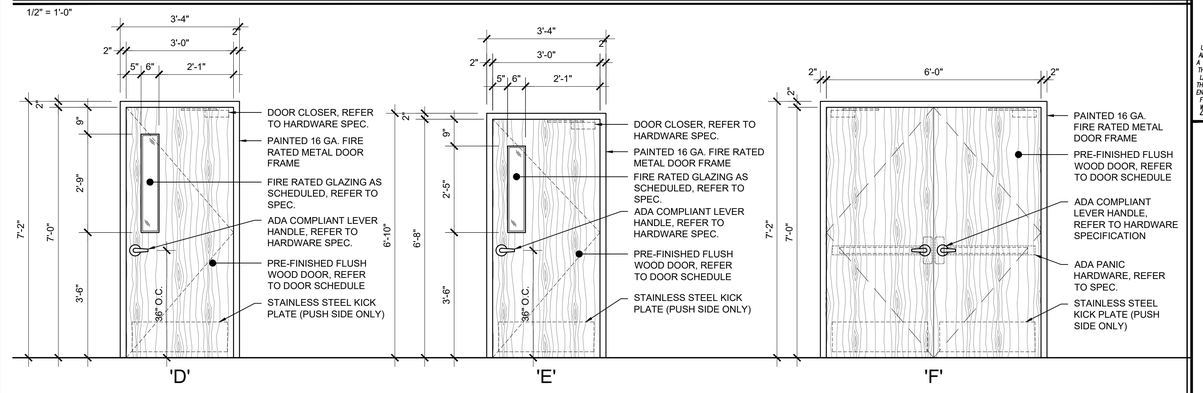
SHGC
N-0.53, SEW-0.40

NOTE: ALL EXTERIOR DOORS AND WINDOWS SHALL MEET OR EXCEED THE ENERGY CODE MINIMUM REQUIREMENTS.



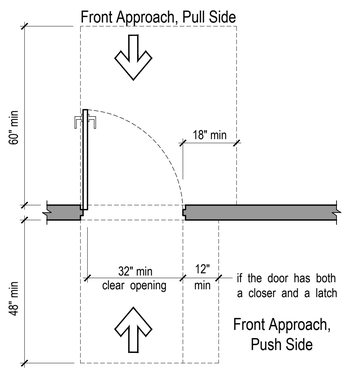
Door Types

1/2" = 1'-0"

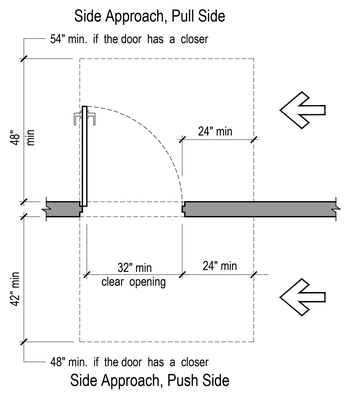


Door Types

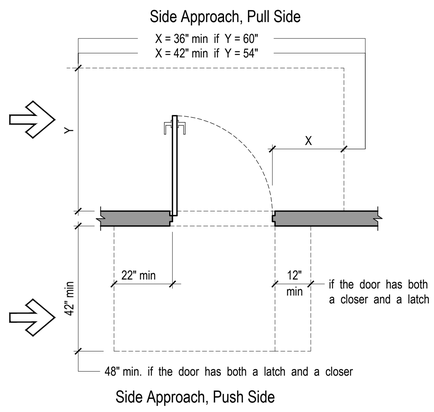
1/2" = 1'-0"



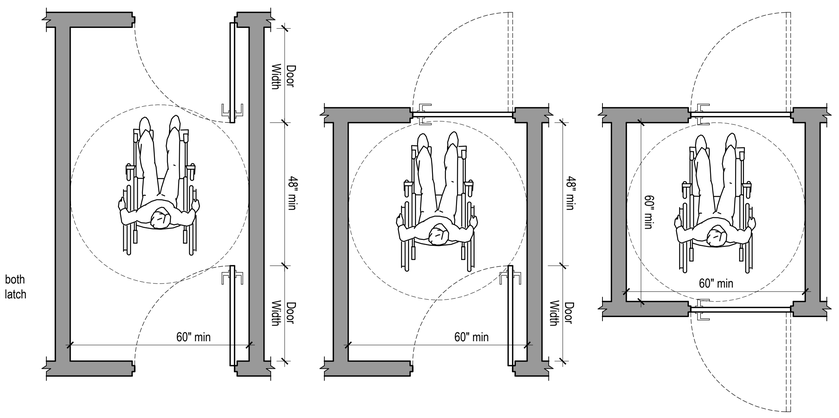
A Door Maneuv. Clearances
N.T.S.



B Door Maneuv. Clearances
N.T.S.



C Door Maneuv. Clearances
N.T.S.



D Door Maneuv. Clearances - Two Hinged Doors In Series
N.T.S.

Date	1/10/20
Checked	TT
Drawn	JG

MICHAEL J. McGOVERN, R.A.
Title: REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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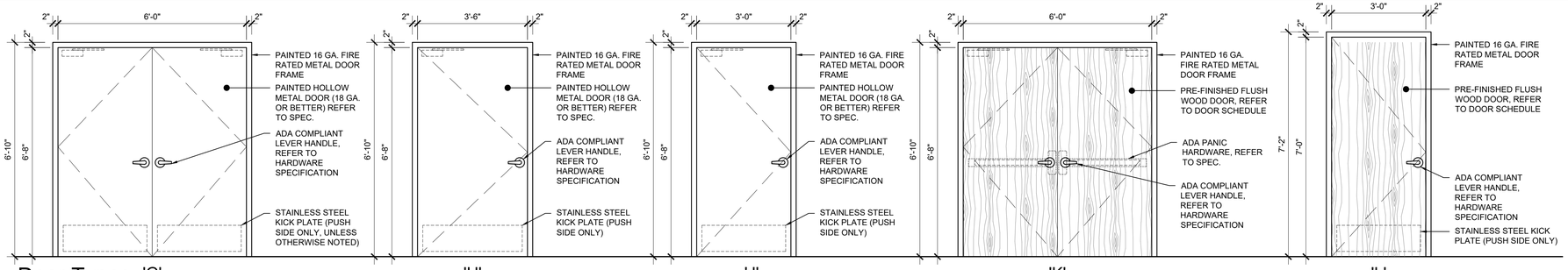
NYSED PROJECT # 66-07-01-03-0-004-030

DOOR SCHEDULE & DOOR TYPES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A601

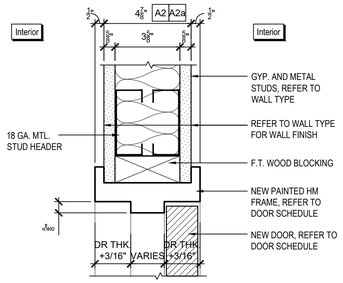
A6.01



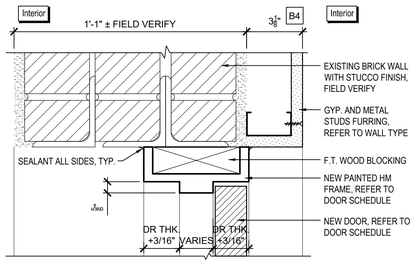
Door Types 'G' 'H' 'J' 'K' 'L'

1/2" = 1'-0"

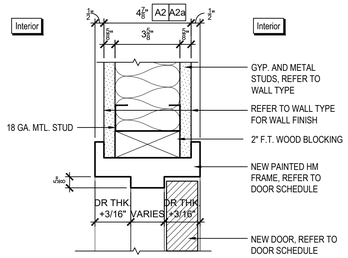
Table 716.3 - Marking Fire Rated Glazing Assemblies		
FIRE TEST STANDARD	**MARKING**	**DEFINITION OF MARKING**
ASTM E119 OR UL 263	W	MEETS WALL ASSEMBLY CRITERIA
NFPA 257 OR UL 9	OH	MEETS FIRE WINDOW ASSEMBLY CRITERIA INCLUDING THE HOSE STREAM TEST.
NFPA 252 OR UL 10B OR UL 10C	D	MEETS FIRE DOOR ASSEMBLY CRITERIA.
	H	MEETS FIRE DOOR ASSEMBLY HOSE STREAM TEST.
	T	MEETS 450°F TEMPERATURE RISE CRITERIA FOR 30 MINUTES.
	XXX	THE TIME IN MINUTES OF FIRE-RESISTANCE OR FIRE PROTECTION RATING OF THE GLAZING ASSEMBLY.



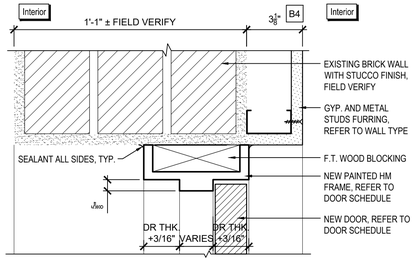
1 A6.02 Door Head Detail
3"= 1'-0"



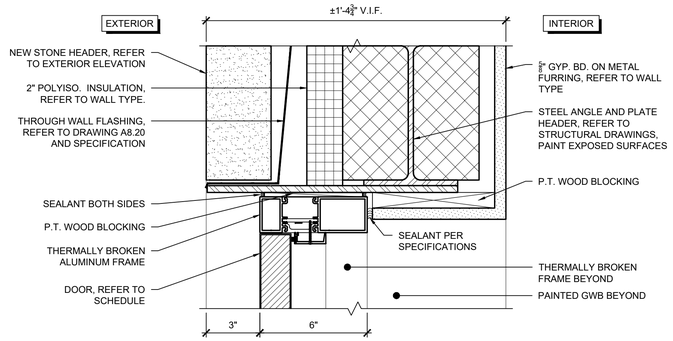
5 A6.02 Door Head Detail
3"= 1'-0"



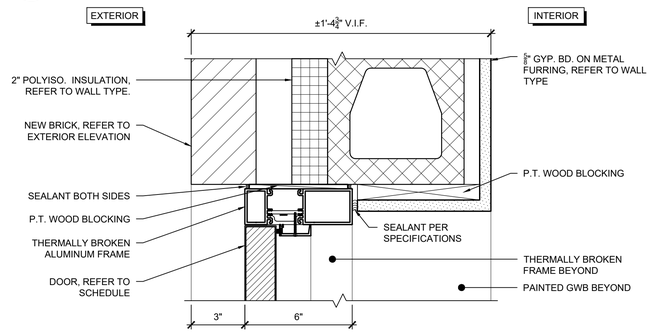
2 A6.02 Door Jamb Detail
3"= 1'-0"



6 A6.02 Door Jamb Detail
3"= 1'-0"



9 A6.02 Door Head Detail
3" = 1'-0"



10 A6.02 Door Jamb Detail
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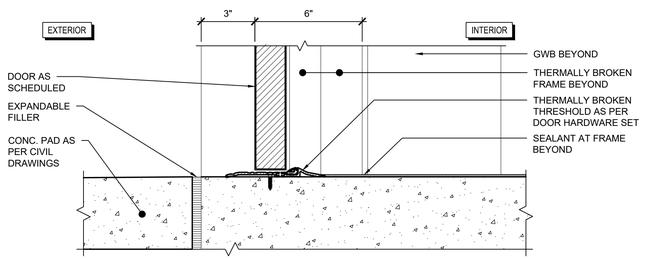
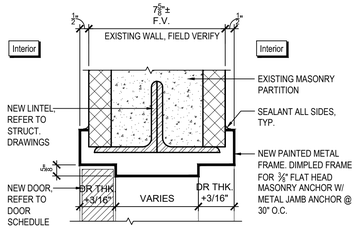
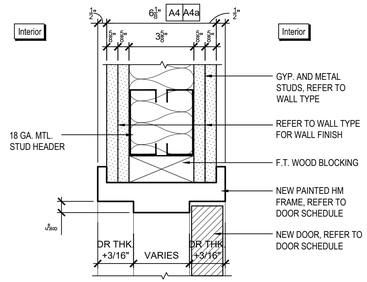


11 A6.02 Door Sill Detail
3" = 1'-0"



12 A6.02 Door Head Detail
3"= 1'-0"



16 A6.02 Door Head Detail
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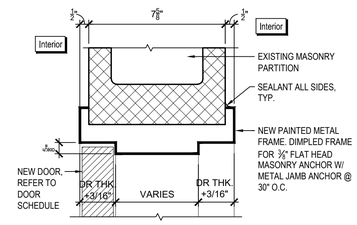
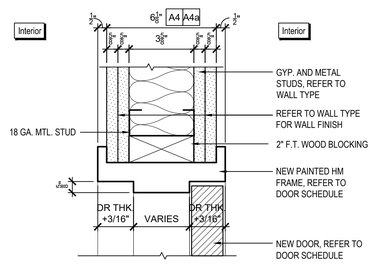


13 A6.02 Door Jamb Detail
3"= 1'-0"



17 A6.02 Door Jamb Detail
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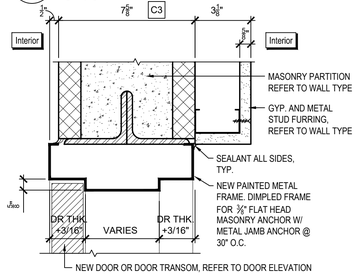
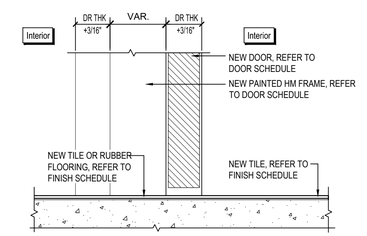
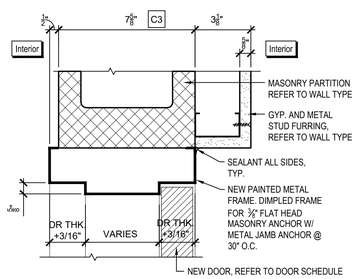


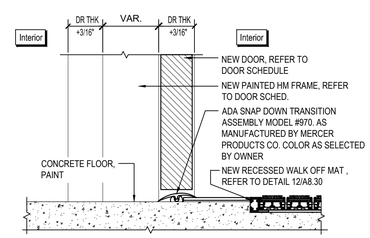
14 A6.02 Door Head Detail
3"= 1'-0"



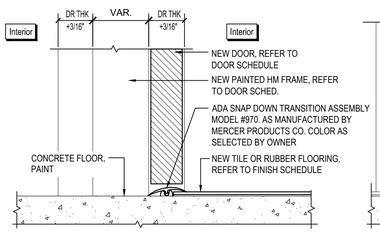
18 A6.02 Door Sill Detail
3"= 1'-0"



15 A6.02 Door Jamb Detail
3"= 1'-0"



19 A6.02 Door Sill Detail
3"= 1'-0"



3 A6.02 Door Sill Detail
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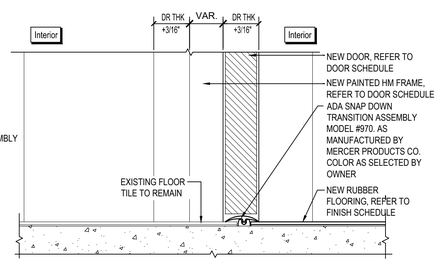

7 A6.02 Door Sill Detail
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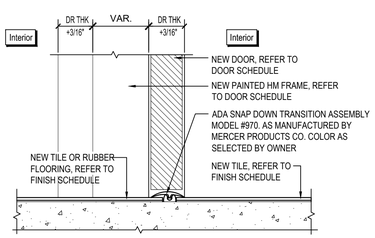

4 A6.02 Door Sill Detail
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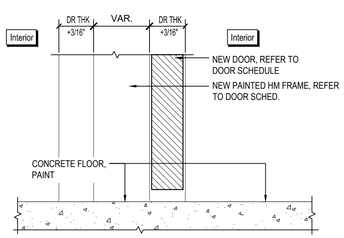

8 A6.02 Door Sill Detail
3"= 1'-0"

Date	1/10/20
Checked	TT
Drawn	JG

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

ISSUE TO BID 11/23/20

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engineering • planning • architecture • surveying
252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

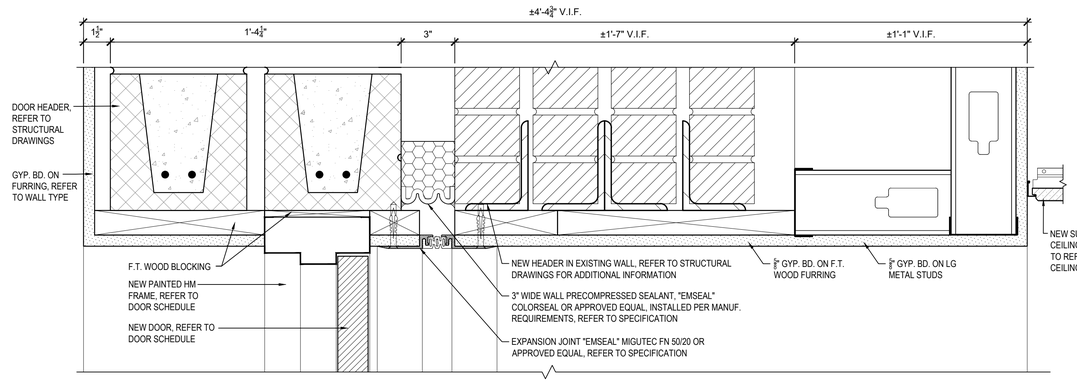
DOOR TYPES & DETAILS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202A601

A6.02



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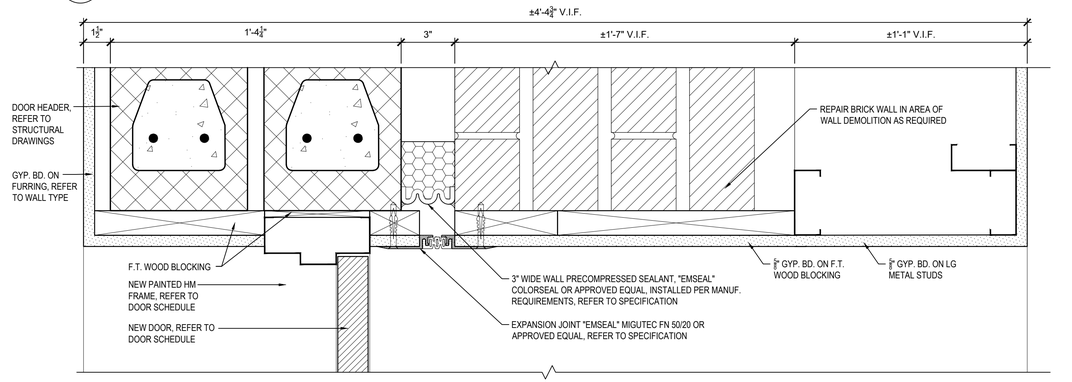

2 A6.03 Door Jamb Detail
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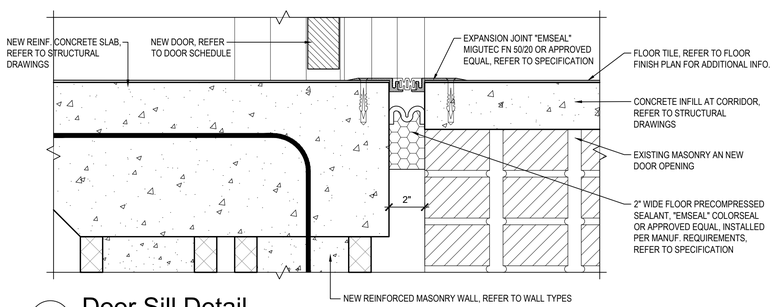

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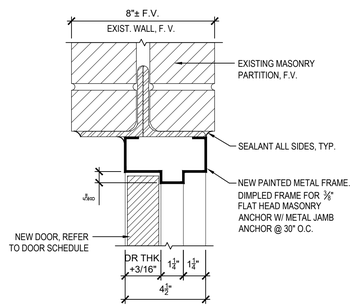
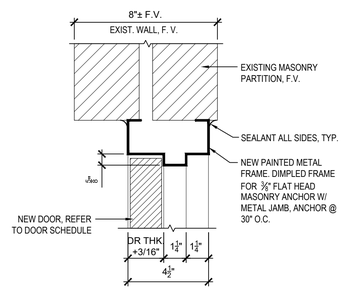
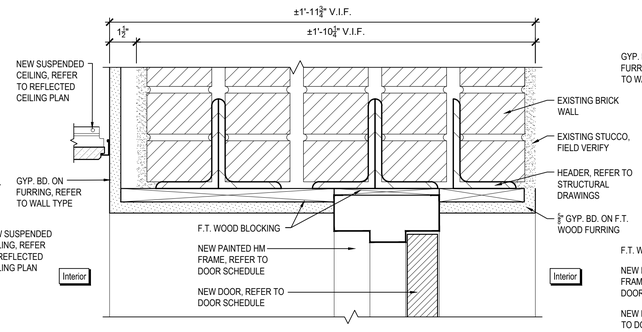


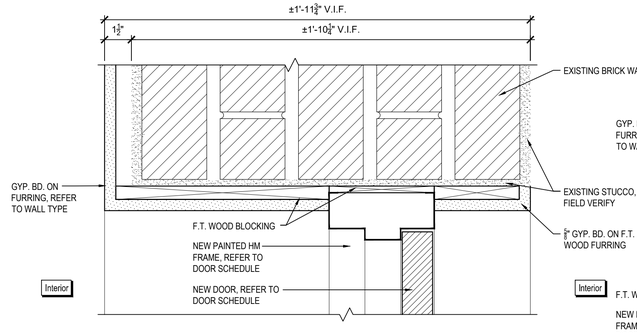
4 A6.03 Door Head Detail
3"= 1'-0"



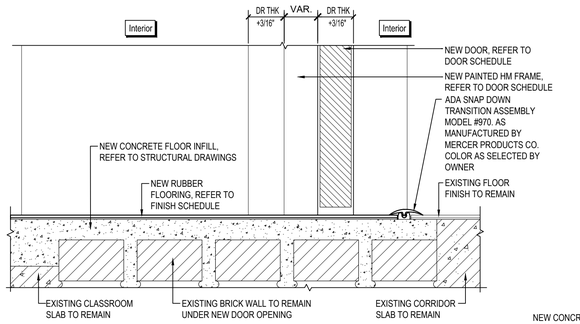
5 A6.03 Door Jamb Detail
3"= 1'-0"



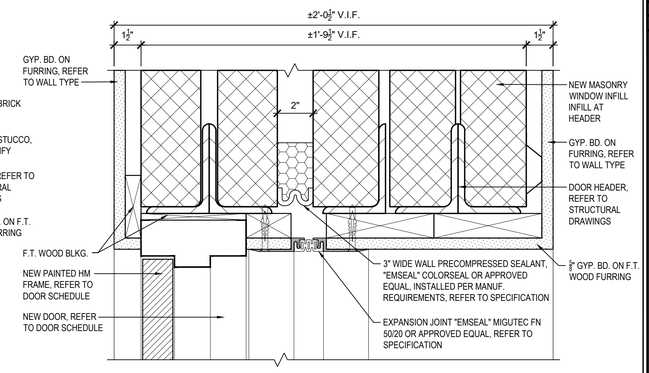
7 A6.03 Door Head Detail
3" = 1'-0"



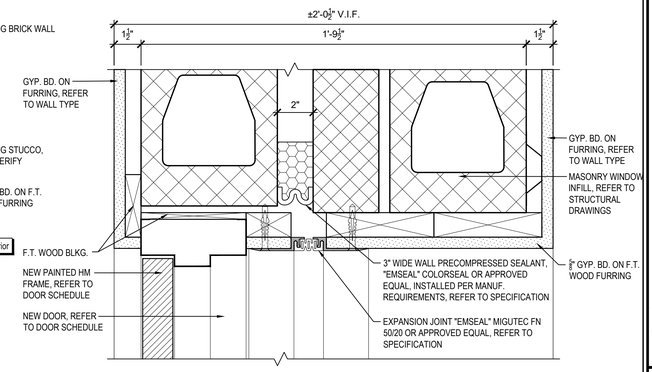
8 A6.03 Door Jamb Detail
3" = 1'-0"



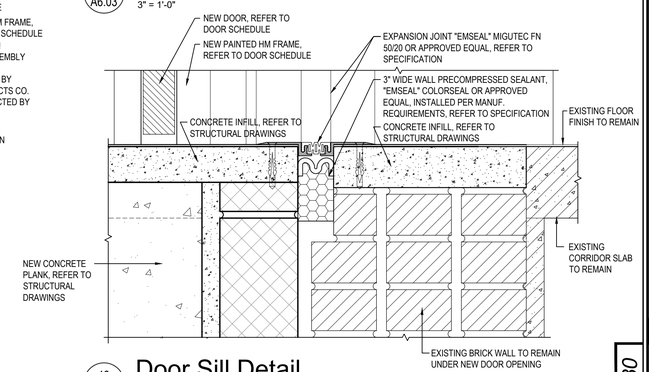
9 A6.03 Door Sill Detail
3"= 1'-0"



11 A6.03 Door Head Detail
3" = 1'-0"



12 A6.03 Door Jamb Detail
3" = 1'-0"



13 A6.03 Door Sill Detail
3"= 1'-0"

Date	1/10/20
Checked	TT
Drawn	JG

MICHAEL J. McGOVERN, R.A.
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Revisions:

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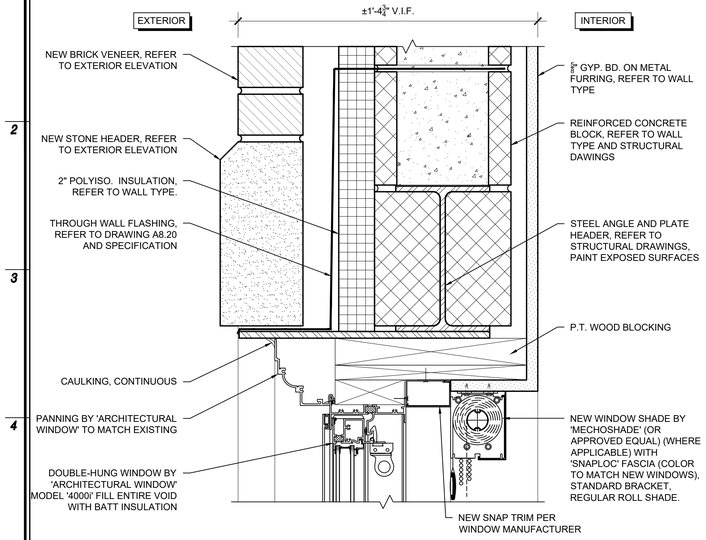
NYSED PROJECT # 66-07-01-03-0-004-030

DOOR DETAILS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

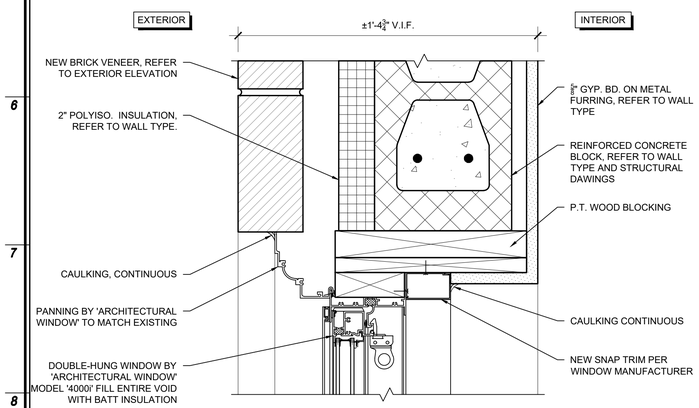
Job No. 4.1092.72.2
File No. 10927202A601

A6.03



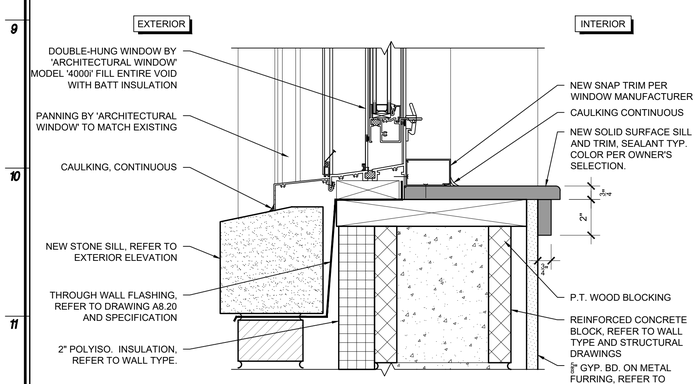
2 / A6.10 **Proposed Window Head Detail**

3" = 1'-0"



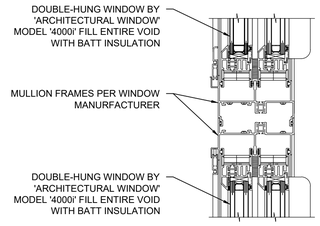
3 / A6.10 **Proposed Window Jamb Detail**

3" = 1'-0"



4 / A6.10 **Proposed Window Sill Detail**

3" = 1'-0"



5 / A6.10 **Window Mullion Detail**

3" = 1'-0"

Window Symbol Legend and Notes

R.W. SYMBOL INDICATES RESCUE WINDOW. PROVIDE LABELING AS REQUIRED. REFER TO RESCUE WINDOW NOTES ON A6.10 FOR WINDOW LABELING REQUIREMENTS.

1. WINDOWS SHALL BE THERMALLY BROKEN ALUMINUM BY "ARCHITECTURAL WINDOW MANUFACTURING CORPORATION" OR APPROVED EQUAL.
2. ALL WINDOW WORK IS TO BE PREFORMED BY THE GENERAL CONTRACTOR.
3. GC TO INCL. WINDOW SHADES FOR ALL WINDOWS EXCLUDING THE CURTAIN WALL IN THE "A" WING STAIRWELLS & COURTYARD. REFER TO "WINDOW SHADE NOTE " BELOW.
4. CONTRACTOR SHALL FIELD VERIFY ALL WINDOW DIMENSIONS.
5. DRAWINGS ARE BASED ON SPECIFIC TYPE & MODEL ALUMINUM WINDOW BY A SINGLE MANUFACTURER. EQUIVALENT TYPE WINDOWS BY OTHER MANUFACTURERS MAY BE ACCEPTED (IF THEY CAN BE SHOWN IN ADVANCE TO BE OF LIKE KIND AND OF EQUAL QUALITY). PROVIDED DEVIATIONS IN DIMENSIONS AND PROFILE ARE MINOR AND DO NOT MATERIALLY DETRACT FROM DESIGN CONCEPT OR INTENDED PERFORMANCE, AS JUDGED SOLELY BY THE ARCHITECT. REFER TO SPECIFICATIONS FOR SPECIFIC SUBSTITUTION REQUIREMENTS.
6. CONTRACTOR RESPONSIBLE TO CHECK & VERIFY ACTUAL WINDOW OPENINGS BY ACCURATE FIELD MEASUREMENTS BEFORE FABRICATION, AND SHOW RECORDED MEASUREMENTS ON FINAL SHOP DRAWINGS.
7. CAULK EXTERIOR PERIMETER OF ALL WINDOWS. COLOR OF CAULK TO MATCH WINDOWS.
8. SET WINDOWS PLUMB, LEVEL, AND TRUE TO LINE WITHOUT WARP OR RACK OF FRAMES OR SASH. ANCHOR SECURELY IN PLACE. SEPARATE ALUMINUM AND OTHER CORRODIBLE SURFACES FROM SOURCES OF CORROSION OR ELECTROLYTIC ACTION.
9. ADJUST OPERATING SASH AND HARDWARE TO PROVIDE TIGHT FIT AT CONTACT POINTS AND AT WEATHERSTRIPPING, AND TO ENSURE SMOOTH OPERATION AND WEATHERTIGHT CLOSURE.
10. CLEAN ALUMINUM SURFACES PROMPTLY AFTER INSTALLATION OF WINDOWS, EXERCISING CARE TO AVOID DAMAGE TO PROTECTIVE COATINGS AND FINISHES. REMOVE EXCESS SEALANT COMPOUNDS, DIRT AND OTHER SUBSTANCES.
11. CLEAN GLASS OF PRE GLAZED UNITS PROMPTLY AFTER INSTALLATION OF WINDOW. COMPLY WITH REQUIREMENTS OF MANUFACTURER.
12. INITIATE & MAINTAIN PROTECTIONS AND OTHER PRECAUTIONS REQUIRED TO ENSURE THAT WINDOW UNITS WILL BE WITHOUT DETERIORATION AT TIME OF ACCEPTANCE.
13. PROVIDE AND INSTALL WINDOW SCREENS AT ALL OPERABLE EXTERIOR WINDOWS.
14. CONTRACTOR SHALL PRIME AND PAINT ALL EXPOSED SURFACES OF STEEL LINTELS, STEEL PLATES AND STEEL DOOR AND WINDOW FRAMES, TYPICAL. PAINT COLOR AS SELECTED BY OWNER.
15. GC TO PROVIDE AND INSTALL ALL REQUIRED BLOCKING, SHIMS, AND SEALANT FOR A COMPLETE INSTALLATION. WOOD TO BE PRESSURE TREATED WHERE APPLICABLE.

Rescue Windows

2014 NYSED MANUAL OF PLANNING STANDARDS:

S106-4 RESCUE WINDOWS

A. EMERGENCY RESCUE WINDOWS, AS REQUIRED IN S106-2, SHALL BE WINDOWS OF SUCH SIZE AND DESIGN THAT WILL PERMIT AND FACILITATE EMERGENCY EGRESS THROUGH THEM. WINDOW HARDWARE SHALL BE A MAXIMUM OF 54 INCHES ABOVE THE FLOOR. IT IS RECOMMENDED THAT ALL CLASSROOM WINDOWS PERMIT EMERGENCY EGRESS. DOUBLE HUNG, CASEMENT, AND SLIDING WINDOWS ARE SATISFACTORY WINDOW TYPES. CASEMENT WINDOWS MUST HAVE HARDWARE THAT PERMITS THE WINDOW TO OPEN AT LEAST 90 DEGREES.

B. THE MINIMUM CLEAR OPENING AREA FOR RESCUE WINDOWS SHALL BE AT LEAST 6 SQUARE FEET AND THE MINIMUM DIMENSION SHALL BE 24 INCHES UNLESS OTHERWISE APPROVED.

C. SCREENS, IF PROVIDED AT RESCUE WINDOWS, SHALL BE HINGED OR SLIDING AND SHALL BE OPERABLE FROM THE INSIDE WITH ONE HAND, AND WITHOUT THE USE OF A KEY, SPECIAL TOOL OR SPECIAL KNOWLEDGE.

D. WHEN A RESCUE WINDOW IS REQUIRED, SCHOOL AUTHORITIES SHALL CAUSE AT LEAST ONE SUCH WINDOW PER CLASSROOM, TO BE MARKED BY AN APPROPRIATE SIGN IDENTIFYING THE RESCUE WINDOW. ANY WINDOW COVERINGS THAT MAY COVER THE WINDOW MUST ALSO HAVE A LABEL.

E. RESCUE WINDOW LABELS SHALL BE:
1. COLOR: BRIGHT YELLOW BACKGROUND WITH BLACK LETTERS
2. SIZE: 3 INCHES BY 5 INCHES
3. TEXT: **RESCUE WINDOW** READABLE FROM EACH SIDE OF THE WINDOW

F. INTERIOR RESCUE WINDOW ACCESS: RESCUE WINDOWSILL HEIGHT SHALL BE AT THE RECOMMENDED SILL HEIGHT FOR THE GRADE LEVEL HOUSED IN THE ROOM (SEE TABLE S303-1). CASEWORK/CABINETS THAT SUPPORT BODY WEIGHT, PERMANENT PLATFORMS, OR 60 DEGREE SHIPS LADDERS MAY BE CONSIDERED TO ACCESS EXISTING WINDOWSILL HEIGHTS ON AN INDIVIDUAL BASIS.

G. EXTERIOR RESCUE WINDOW ACCESS: GROUND LEVEL ACCESS AND LEVEL WORKING AREAS MUST BE PROVIDED FOR THE USE OF EMERGENCY PERSONNEL. LOCAL CONDITIONS AND EQUIPMENT MAY ALLOW VARYING SOLUTIONS TO THIS REQUIREMENT. APPROVAL OF THE RESPONDING EMERGENCY AGENCY(S) MAY BE REQUIRED IN SITUATIONS THAT ARE DIFFICULT.

H. RESCUE WINDOWS THAT OPEN ONTO A ROOF FROM NEW CONSTRUCTION MAY BE APPROVED ON AN INDIVIDUAL BASIS PROVIDING THE ROOF IS READILY ACCESSIBLE TO EMERGENCY PERSONNEL AND THE ROOF STRUCTURE IS ONE-HOUR MINIMUM FIRE PROTECTED. IT IS RECOMMENDED THAT EXISTING RESCUE WINDOWS MEET THESE REQUIREMENTS FOR THE SAFETY OF EMERGENCY PERSONNEL, STUDENTS AND STAFF. RENOVATIONS OF AREAS UNDER SUCH WINDOWS MUST ADDRESS THIS ISSUE.

Energy Code Requirements

IECC 2015 - Table C402.4

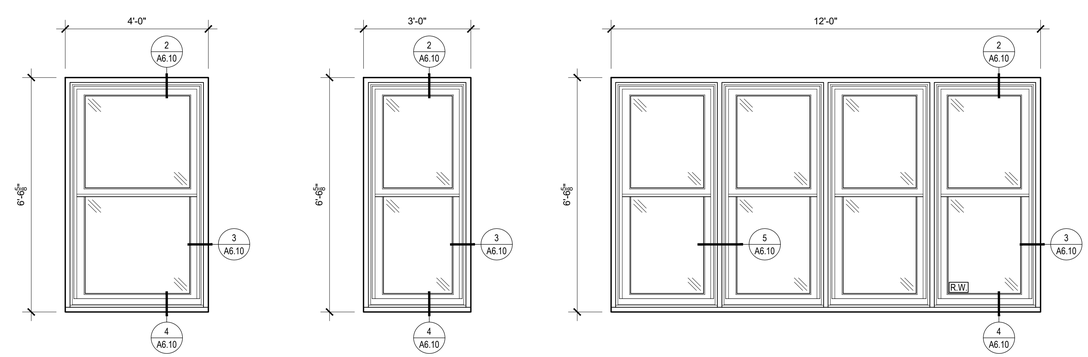
Climate ZONE - 4

Vertical Fenestration:
U-Factor
Fixed Fenestration: 0.38
Operable Fenestration: 0.45
Entrance Doors: 0.77

SHGC
N-0.53, SEW-0.40

NOTE: ALL EXTERIOR DOORS AND WINDOWS SHALL MEET OR EXCEED THE ENERGY CODE MINIMUM REQUIREMENTS.

WINDOW SHADE NOTE: GC TO FURNISH AND INSTALL NEW WINDOW SHADES AT ALL EXTERIOR NON-CURTAIN-WALL WINDOW OPENINGS. SHADE SHALL BE 'MECHOSHADE' (BASIS OF DESIGN) WITH 'SNAPLOC' FASCIA, COLOR TO MATCH NEW WINDOWS, TYP. WINDOW SHADE FABRIC TO BE SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE. SEE TYPICAL WINDOW HEAD DETAILS ON THIS PAGE FOR MOUNTING LOCATION AND ADDITIONAL INFORMATION. WHERE WINDOW SHADES COVER A RESCUE WINDOW, A LABEL SHALL BE AFFIXED TO THE SHADE IN CONFORMANCE WITH THE RESCUE WINDOW NOTES ON THIS PAGE.



WINDOW TYPE 'A' WINDOW TYPE 'B' WINDOW TYPE 'C'

1 / A6.10 **Window Types**

1/2" = 1'-0"

WINDOW SCHEDULE

WINDOW NO.	WINDOW TYPE	ROOM NAME/ NUMBER	OPERATION	SHADES: SOLAR SHADE	SHADES: BLACKOUT	SHADES: INSECT SCREEN	NOTES
FIRST FLOOR							
W10	B	ELEVATOR LOBBY 131	DH	■	■	■	
W11	C	CLASSROOM 132	DH	■	■	■	
W12	C	CLASSROOM 132	DH	■	■	■	
SECOND FLOOR							
W20	B	ELEVATOR LOBBY 251	DH	■	■	■	
W21	C	CLASSROOM 252	DH	■	■	■	
W22	C	CLASSROOM 252	DH	■	■	■	RESCUE WINDOW
W23	A	CORRIDOR 'E'	DH	■	■	■	
W24	A	CORRIDOR 'E'	DH	■	■	■	
W25	A	CORRIDOR 'E'	DH	■	■	■	
W26	A	CORRIDOR 'E'	DH	■	■	■	
W27	A	CORRIDOR 'E'	DH	■	■	■	
THIRD FLOOR							
W30	B	ELEVATOR LOBBY 351	DH	■	■	■	
W31	C	CLASSROOM 352	DH	■	■	■	
W32	C	CLASSROOM 352	DH	■	■	■	RESCUE WINDOW
W33	A	CORRIDOR 'H'	DH	■	■	■	
W34	A	CORRIDOR 'H'	DH	■	■	■	
W35	A	CORRIDOR 'H'	DH	■	■	■	
W36	A	CORRIDOR 'H'	DH	■	■	■	
W37	A	CORRIDOR 'H'	DH	■	■	■	

NOTES:
1. REFER TO SPECIFICATIONS FOR GLAZING TYPES.
2. WINDOW SCREENS AT RESCUE WINDOWS SHALL BE ABLE TO BE REMOVED WITHOUT TOOLS TO FACILITATE EMERGENCY EXITING.

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

WINDOW SCHEDULE & TYPES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A610

A6.10

Finish Legend

ABBREVIATIONS	DESCRIPTIONS
ACT	ACOUSTIC CEILING TILE: REFER TO REFLECTED CEILING PLAN FOR CEILING TYPES (CT-#)
BK	EXISTING EXPOSED BRICK / STONE VENEER
CAN	ACOUSTIC CEILING CANOPIES: 'SOUNDSCAPES ACOUSTICAL CANOPIES' BY 'ARMSTRONG' (BASIS OF DESIGN) REFER TO REFLECTED CEILING PLAN FOR CEILING TYPES (CT-#)
CLD	ACOUSTIC CEILING CLOUDS: 'SOUNDSCAPES SHAPES' BY 'ARMSTRONG' (BASIS OF DESIGN) REFER TO REFLECTED CEILING PLAN FOR CEILING TYPES (CT-#)
CONC	CONCRETE
CPT	CARPET: REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
EPXF (FLOOR)	POURED EPOXY FLOORING: EPOXY/ALIPHATIC URETHANE TOPCOAT SEAMLESS FLOORING SYSTEM REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
EPXC (COVE)	4" INTEGRAL EPOXY COVE BASE. PROVIDE MANUFACTURERS METAL TRANSITION BETWEEN WALL AND COVE BASE.
EPXW (WALL)	EPOXY WALL SYSTEM: WATER-BASED HIGH BUILD WALL SURFACING SYSTEM UTILIZING AN EPOXY BASE COAT AND WATER-BASED POLYURETHANE FINISH COAT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
ETR	EXISTING TO REMAIN
GWB	GYPSUM WALL BOARD: REPAIR EXISTING (SPACKLE, SAND, PRIME) GYP. BD. OR INSTALL NEW. PAINT, TYP. REFER TO PLANS AND WALL TYPE FOR ADDITIONAL INFORMATION
GWBC	GYPSUM WALL BOARD CEILING: REFER TO CEILING TYPES ON REFLECTED CEILING PLANS.
OTA	OPEN TO STRUCTURE ABOVE
PLAS	EXISTING PLASTER CEILING TO REMAIN. REPAIR AS REQUIRED. PREPARE AND PAINT. SEE RCP FOR ADDITIONAL INFORMATION
PSF	NEW PLYWOOD SUBFLOOR. REFER TO STRUCTURAL DRAWINGS
PNT	PAINT (INTERIOR): PREPARE AND PAINT EXISTING MASONRY WALLS. REFER TO INTERIOR ELEVATIONS AND/OR SPECIFICATIONS FOR ADDITIONAL INFORMATION.
PTB	PORCELAINTILE BASE, SEE SECTIONS AND INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION
PWT	PORCELAIN WALL TILE, SEE SECTIONS AND INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION
RBB	RUBBER FLOOR BASE
RBF	RUBBER FLOOR TILE
RFT	RESILIENT FLOOR TILE: REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
LVT	LUXURY VINYL FLOOR TILE: REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
VB	VINYL BASE: 'JOHNSONITE' (BASIS OF DESIGN) VINYL COVE BASE
WSF	EXISTING WOOD SUBFLOOR
WO	METAL WALK OFF SURFACE, SEE FLOOR FINISH PLAN AX.XX FOR ADDITIONAL INFORMATION.

SURFACE PREPARATION NOTE:

FOR ALL WORK AREAS: WHERE REQUIRED, NEW FLOOR TO BE INSTALLED OVER SELF LEVELING MATERIAL. BASIS OF DESIGN TO BE 'CMP LEVEL 1' SELF-LEVELING WITH 'CMP LOCKDOWN' VAPOR SUPPRESSION SYSTEM. REFER TO FLOOR PATTERN PLANS OF INDIVIDUAL AREAS AND SPECIFICATION SECTION **035416** FOR ADDITIONAL INFORMATION. CONSULT INDIVIDUAL FLOORING MANUFACTURER TO VERIFY SURFACE PREPARATION REQUIREMENTS AND COMPATIBILITY.

Interior Finish General Notes

1. REFER TO FINISH LEGEND FOR FINISH DESCRIPTIONS.
2. REFER TO FLOOR FINISH LEGEND ON SHEET **A2.80** FOR FLOOR PATTERNS
3. WHERE NEW WALLS / FINISHES INTERSECT EXISTING, CONTRACTOR SHALL FINISH / SEAL INTERSECTION OR GAPS TO ACHIEVE A FINISHED APPEARANCE THROUGHOUT.
4. UNLESS NOTED OTHERWISE ALL EXPOSED CMU WALLS SHALL BE PAINTED. PAINT PER SPEC, COLOR SELECTED BY OWNER.
5. ALL DISTURBED SURFACES SHALL BE PATCHED AND REPAIRED TO MATCH EXISTING. ANY DAMAGE RESULTING FROM THE CONTRACTOR(S) ACTIONS SHALL BE REPAIRED IN LIKE AND KIND AT NO ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR SHALL COORDINATE FINISHES WITH INSTALLATION OF TOILET ACCESSORIES, PLUMBING FIXTURES, DOOR BUCKS, THRESHOLDS, LIGHTING FIXTURES, HVAC GRILLES, CASEWORK, FURNITURE, ETC.
7. CONTRACTOR SHALL COORDINATE FLOOR TRANSITIONS BETWEEN FINISH MATERIALS AND CHANGES IN ELEVATION TO BE BARRIER-FREE ADA COMPLIANT.
8. CONTRACTOR SHALL FURNISH AND INSTALL TRANSITION STRIP AT ALL CHANGES BETWEEN FLOOR FINISH MATERIALS AS REQUIRED TO BE BARRIER-FREE ADA COMPLIANT.
9. CONTRACTOR SHALL FURNISH AND INSTALL ADA COMPLIANT MARBLE THRESHOLD AT ALL TOILET ROOMS AS REQUIRED TO ACCOMMODATE FINISH FLOOR MATERIAL CHANGES. REFER TO INTERIOR FINISH SCHEDULE AND DETAILS FOR ROOM FINISH LOCATIONS.
10. CONTRACTOR SHALL COORDINATE INSTALLATION OF FINISHES WITH RESPECTIVE TRADES TO ACCOMMODATE THE INSTALLATION OF PLUMBING, MECHANICAL, LIGHTING, ETC. REFER TO REFLECTED CEILING PLAN, CEILING TYPE SCHEDULE AND DETAILS.
11. ALL FLOOR FINISH MATERIALS SHALL BE OF SLIP-RESISTANT SURFACE.
12. COLORS, PATTERNS AND TEXTURES OF ALL FINISH MATERIALS SHALL BE SELECTED BY OWNER. PROVIDE SAMPLES AS REQUIRED.
13. ALL ACCESS PANELS, HATCHES, GYPSUM BOARD SOFFITS, BULKHEADS, HVAC GRILLES AND REGISTERS SHALL BE PAINTED TO MATCH CEILING FINISHES UNLESS INDICATED OTHERWISE.
14. ALL FLOOR FINISHES SHALL BE CONTINUOUS UNDERNEATH BUILT-IN FURNITURE AND CASEWORK. INFORMATION SHOWN ON PLANS IS FOR DIAGRAMMATIC PURPOSES ONLY AND FLOOR FINISHES UNDER CASEWORK MAY NOT BE SHOWN FOR CLARITY.
15. ALL FLOOR PENETRATIONS ARE REQUIRED TO BE SEALED WITH LISTED/RATED MATERIAL TO MAINTAIN **2-HOUR** FIRE RATING OF THE FLOOR SLAB.
16. INSTALL PVC MOLDED CORNER GUARDS AT ALL EXTERIOR CORNERS OF METAL STUD AND GWB WALLS, COLOR TO MATCH WALL.
17. ALL DOOR FRAMES WITHIN AREAS OF WORK TO BE PAINTED, COLOR SELECTED BY OWNER.
18. CONTRACTOR SHALL PREP ALL SUBFLOORS AS REQUIRED TO ACCEPT NEW FLOOR FINISHES.
19. AT AREAS WHERE EXISTING FLOOR FINISHES ARE TO REMAIN, DEMO ONLY AS MUCH AS REQUIRED TO ACCOMODATE NEW WORK. PROVIDE AND INSTALL NEW WALL BASE AT THESE LOCATIONS TO MATCH EXISTING ADJACENT WALL BASE.

FINISH CLASSIFICATION NOTES:

ALL FINISHES IN REQUIRED VERTICAL EXITS AND PASSAGEWAYS SHALL BE OF CLASS A MATERIALS.

ALL FINISHES IN PASSAGEWAYS WHICH ARE NOT PART OF AN EXIT, INTERIOR FINISHES SHALL BE CLASS A or B.

ALL FINISHES IN OFFICES OR ENCLOSED SPACES SHALL BE OF CLASS C MATERIALS. CLASS D MATERIALS NOT PERMITTED.

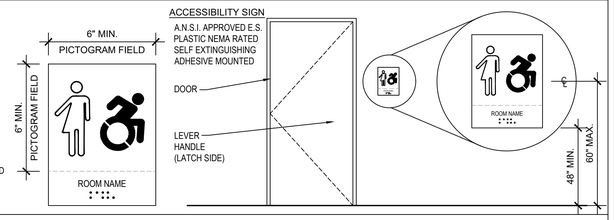
WHEN AN APPROVED SPRINKLER SYSTEM IS PROVIDED THROUGH OUT THE BUILDING, CLASS B INTERIOR FINISH MAY BE USED IN LOCATIONS WHERE CLASS A IS REQUIRED, AND CLASS C MAY BE USED IN LOCATIONS WHERE CLASS B IS REQUIRED.

GLAZING NOTES:
ALL GLAZING SHALL BE SIZED, CONSTRUCTED, AND TREATED OR COMBINED WITH OTHER MATERIALS AS TO MINIMIZE PERSONAL INJURY. TEMPERED SAFETY GLAZING SHALL BE INSTALLED IN ALL LOCATIONS WITHIN 18" OR LESS FROM FINISH FLOOR, SIDE LITES ADJACENT TO SWING DOORS AND WINDOW WALL ASSEMBLIES, TYPICAL.

NOTE:
WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE KIND AND OF EQUAL QUALITY.

ADA ROOM SIGNAGE

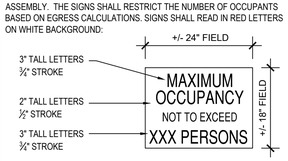
1. LETTERS AND NUMERALS MUST BE RAISED 1/32" FROM SIGN SURFACE.
2. CHARACTER HEIGHT MUST BE AT LEAST 5/8" BUT NOT EXCEED 2".
3. TYPE STYLE FOR LETTERS AND NUMBERS SHALL BE "SANS SERIF". CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.
4. WORDS AND NUMBERS MUST BE CONVERTED INTO GRADE 2 BRAILLE, AND BE APPLIED TO SIGN.
5. PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW PICTOGRAM.



SIGNAGE NOTES:
1. ALL SIGNAGE SHALL CONFORM WITH THE ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES GUIDELINES IN ACCORDANCE WITH ICC/ANSI A117.1-2009.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED SIGNAGE. COORDINATE ROOM NAMES AND NUMBERS WITH OWNER'S REQUIREMENTS, TYPICAL.
3. SEE SPECIFICATION SECTION 101419 FOR SIGNAGE SCHEDULE AND ADDITIONAL INFORMATION.

MAX. OCCUPANCY SIGNAGE

MAXIMUM OCCUPANCY SIGNAGE SHALL BE PROVIDED FOR PLACES OF ASSEMBLY. THE SIGNS SHALL RESTRICT THE NUMBER OF OCCUPANTS BASED ON EGRESS CALCULATIONS. SIGNS SHALL READ IN RED LETTERS ON WHITE BACKGROUND:

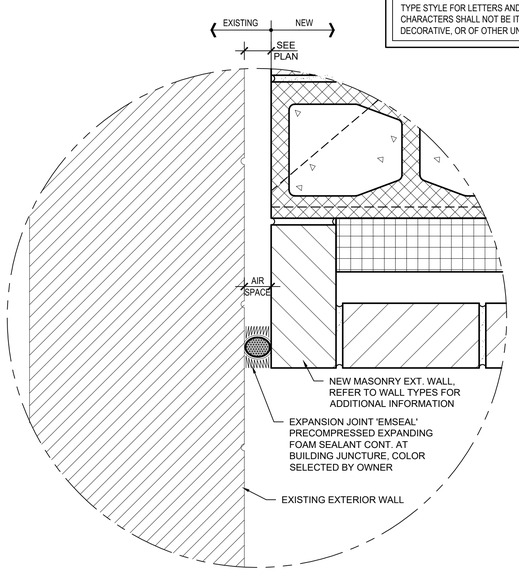


TYPE STYLE FOR LETTERS AND NUMBERS SHALL BE "SANS SERIF". CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

SIGNAGE NOTES:
1. SIGNAGE SHALL CONFORM WITH LOCAL AND STATE CODES.
3. OCCUPANCY NAMES & NUMBERS TO BE PROVIDED DURING SHOP DRAWING PHASE.
4. NEW SIGNAGE TO BE PROVIDED AND INSTALLED BY GC FOR ALL NEW AND REPURPOSED SPACES. REFER TO SPECIFICATION SECTION 101419 AND 'ADA ROOM SIGNAGE' INFORMATION ON THIS SHEET. COORDINATE ALL SIGNAGE REQUIREMENTS WITH OWNER.

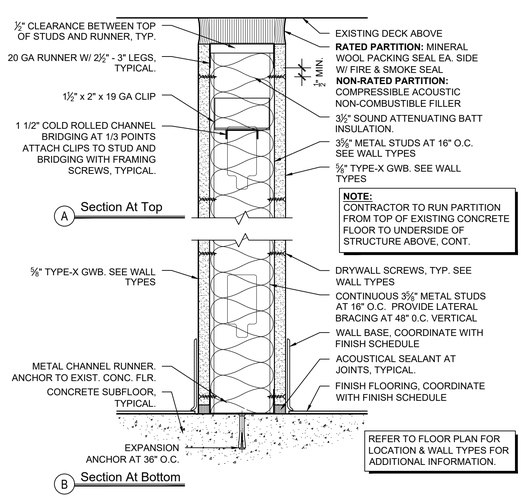
PAINTING NOTES:
1. ALL EXPOSED ROOF DECK, STRUCTURE, AND DUCTWORK WITHIN AREA OF WORK, SHALL BE PAINTED AS PART OF THE BASE BID.

NOTE: REFER TO SPECIFICATION SELECTION 012300 FOR SPACES LISTED AS ALTERNATES.



2 A6.20 Typical Expansion Joint Sealant Detail

3"= 1'-0"



1 A6.20 Framing Details @ L.G. Partition

3"= 1'-0"

INTERIOR FINISH SCHEDULE

ROOM NO.		SUB-FLOOR	FLOOR FINISH	BASE	BASE HEIGHT	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	SIGNAGE SET	NOTES	CEILING	CEILING HEIGHT	ROOM NO.
E	ELEVATOR													E
LOWER LEVEL														
008	OT/PT ROOM	CONC	ETR	ETR	4	PNT	PNT	PNT	PNT	4		ETR	-	008
050	INSTRUMENT STORAGE	CONC	RBF	RBB	4	PNT	PNT	PNT	PNT	1		OTA	-	050
-	CORRIDOR 'A'	CONC	RBF	RBB	4	PNT	PNT	PNT	PNT	-		CT-6	7'-10"	-
051	STORAGE	CONC	RBF	RBB	4	PNT	PNT	PNT	PNT	1		OTA	-	051
052	ELEVATOR LOBBY	CONC	WO	RBB	4	PNT	PNT	PNT	PNT	1		CT-6	7'-2"	052
053	RECEIVING/STORAGE	CONC	PTC	RBB	4	PNT	PNT	PNT	PNT	1		CT-6	7'-2"	053
054	OUTDOOR STORAGE	CONC	PTC	RBB	4	PNT	PNT	PNT	PNT	1		OTA	-	054
-	CORRIDOR 'B'	CONC	RBF	RBB		PNT	PNT	PNT	PNT	-		CT-6	8'-8-5/8"	-
-	CORRIDOR 'C'	CONC	RBF	RBB		PNT	PNT	PNT	PNT	-		CT-6	7'-0"	-
FIRST FLOOR														
105	COMPUTER LAB	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	105
111	MULTIPURPOSE ROOM	CONC	VCR	RBB	4	PNT	PNT	PNT	PNT	1		CT2/CT4	EXIST	111
112	PRE-K CLASSROOM	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	112
114	PRE-K CLASSROOM	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	114
130	SMALL GROUP INSTRUCTION	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	130
131	ELEVATOR LOBBY	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	1		CT-6	9'-0"	131
-	CORRIDOR EXTENSION	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	-		CT-6	9'-0"	-
132	CLASSROOM	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	4		CT-5	10'-0"	132
-	BRIDGE	CONC	ETR	ETR	4	PNT	PNT	PNT	PNT	-		CT-3	EXIST	-
SECOND FLOOR														
205	CLASSROOM (3RD)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	205
210	CLASSROOM (2ND)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	210
212	CLASSROOM (2ND)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	212
214	SMALL GROUP INSTRUCTION	CONC	ETR	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	214
-	CORRIDOR 'D'	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	-		CT-6	10'-6"	-
215	SMALL GROUP INSTRUCTION	CONC	ETR	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	215
250	STORAGE	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	1		CT-6	9'-0"	250
251	ELEVATOR LOBBY	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	1		CT-6	9'-0"	251
-	CORRIDOR "E"	CONC	LVT	PTB	6	PWT/PNT	PWT/PNT	PWT/PNT	PWT/PNT	-	3" TILE WALL CAPP	CT-5	10'-0"	-
252	CLASSROOM	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	4		CT-5	10'-0"	252
-	CORRIDOR "F"	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	-				
THIRD FLOOR														
305	CLASSROOM (4TH)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	305
306	CLASSROOM (5TH)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	306
308	CLASSROOM (5TH)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	308
309	CLASSROOM (4TH)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	309
311	SPECIAL EDUCATION	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	311
313	ESL	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	313
314	SMALL GROUP INSTRUCITON	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	314
315	CLASSROOM (4TH)	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	315
316	SMALL GROUP INSTRUCTION	CONC	RFT	RBB	4	PNT	PNT	PNT	PNT	4		ETR	-	316
-	CORRIDOR "G"	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	-		CT-6	10'-6"	-
350	STORAGE	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	1		CT-6	9'-0"	350
351	ELEVATOR LOBBY	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	4		CT-6	9'-0"	351
352	CLASSROOM	CONC	LVT	RBB	4	PNT	PNT	PNT	PNT	4		CT-5	10'-0"	352
-	CORRIDOR "H"	CONC	LVT	PTB	6	PWT/PNT	PWT/PNT	PWT/PNT	PWT/PNT	-	3" TILE WALL CAPP	CT-5	VAR	-
-	CORRIDOR "J"	CONC			4	PNT	PNT	PNT	PNT	-		ETR	-	-

Date	1/10/20
Checked	DLF
Drawn	TT

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
ISSUE TO BID
11/23/20

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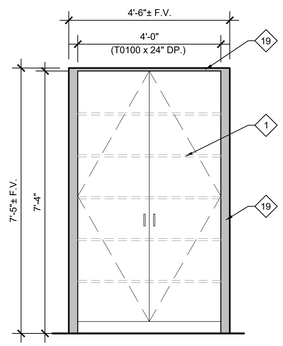
NYSED PROJECT # 66-07-01-03-0-004-030

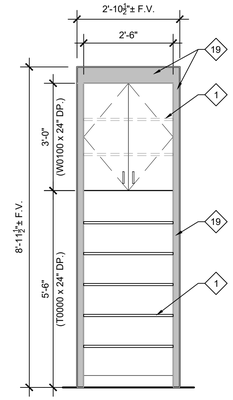
FINISH SCHEDULE, NOTES & DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A620

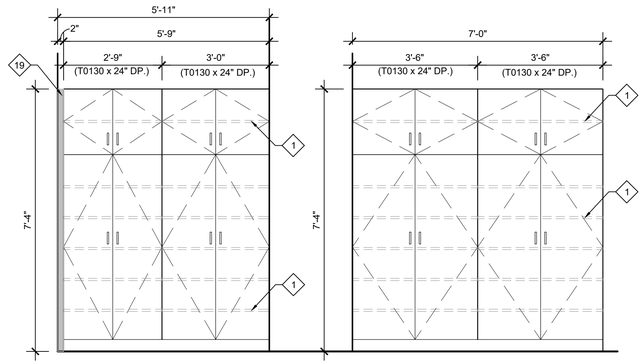
A6.20



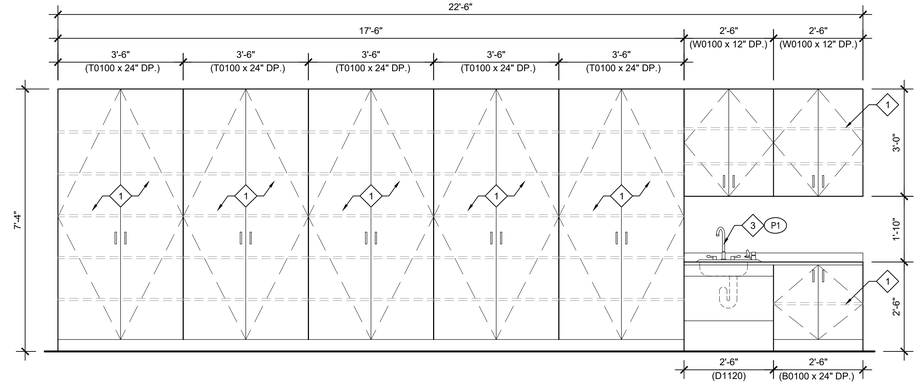
1 A7.03 Casework Elev.
1/2" = 1'-0" ROOM 104



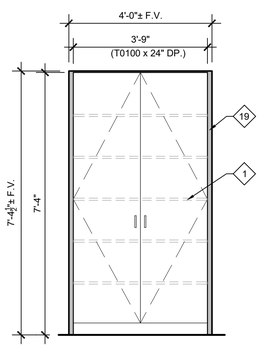
2 A7.03 Casework Elev.
1/2" = 1'-0" ROOM 112



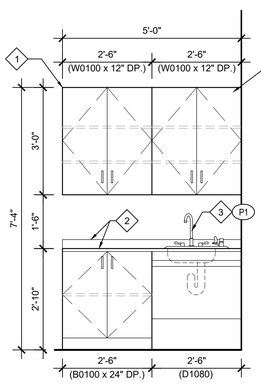
3 A7.03 Casework Elev.
1/2" = 1'-0" ROOM 310



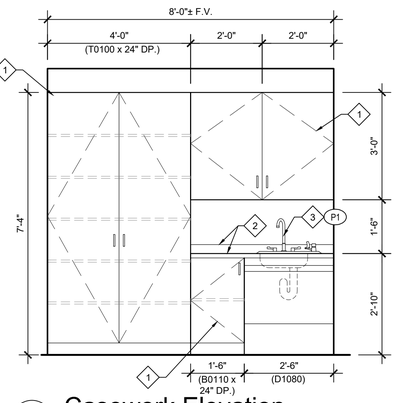
4 A7.03 Casework Elevation
1/2" = 1'-0" ROOM 114



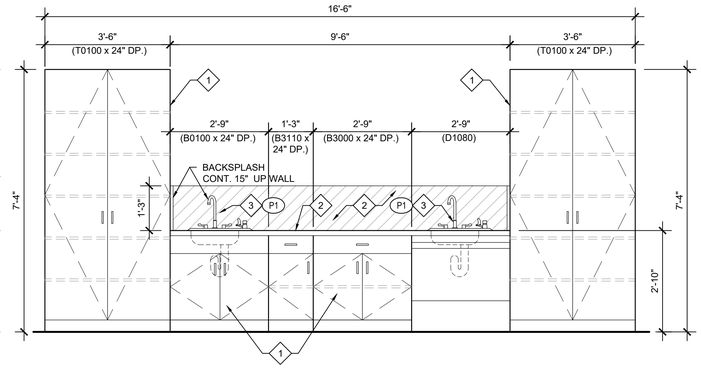
5 A7.03 Casework Elev.
1/2" = 1'-0" ROOM 200



6 A7.03 Casework Elev.
1/2" = 1'-0" ROOM 200



7 A7.03 Casework Elevation
1/2" = 1'-0" ROOM 202



8 A7.03 Casework Elevation
1/2" = 1'-0" ROOM 204

Interior Elevation Key Notes

SYMBOL INDICATES INT. ELEV. KEY NOTE

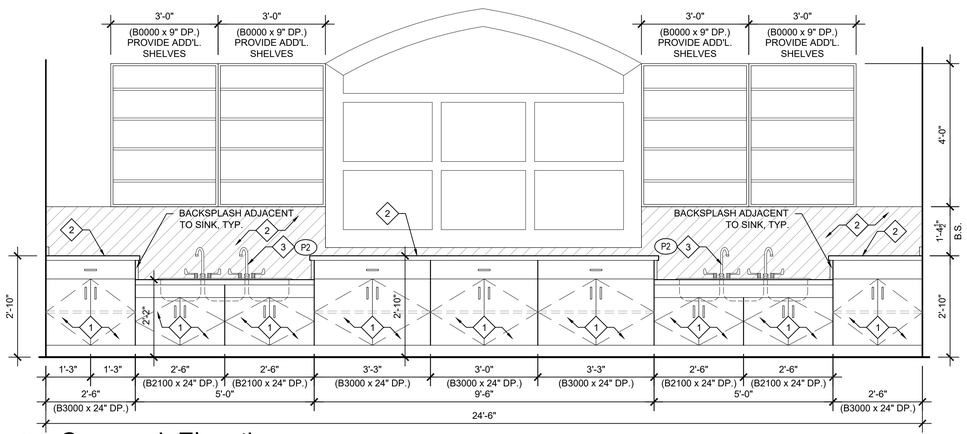
1. DISTRICT VENDOR TO PROVIDE AND INSTALL NEW HIGH PRESSURE LAMINATE CASEWORK.
2. DISTRICT VENDOR TO PROVIDE AND INSTALL NEW SOLID SURFACE COUNTER TOP WITH INTEGRAL 3" BACKSPLASH. EXPANDED BACKSPLASH IN SOME AREAS, REFER TO ELEVATIONS.
3. GC TO INSTALL NEW SINK INTO NEW COUNTER. PC TO PLUMB SINK AND ENSURE FULLY FUNCTIONAL OPERATION. SEE PLUMBING DRAWINGS.
4. **RESERVED**
5. GC TO INSTALL NEW VINYL FLOOR FINISH, PLYWOOD SUBFLOOR, ASSOCIATED ASSEMBLIES AND VINYL COVE BASE. GC IS NOT TO DISTURB THE EXISTING 2"X2" SLEEPER FRAMING SYSTEM SPACED 12" O.C., EXISTING 2"X3" SLEEPERS AND ADJACENT CINDER FILL, TYPICAL UNLESS NOTED OTHERWISE. REFER TO DETAIL 5/A8.30 FOR ADDITIONAL INFORMATION.
6. GC TO PRIME AND FINISH PAINT WALL SURFACE. SEE INTERIOR FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
7. GC TO REMOVE AND INSTALL NEW CEILING. SEE REFLECTED CEILING PLAN ON SHEETS A5.01-A5.04 FOR ADDITIONAL INFORMATION.
8. GC TO PROVIDE AND INSTALL NEW FINISH FLOORING. SEE FLOOR FINISH PLAN ON SHEETS A2.20-A2.25 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. GC TO INSTALL NEW VINYL WALL BASE. SEE INTERIOR FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
10. GC TO INSTALL NEW RAMP TO MEET ADA REQUIREMENTS WITH RUBBER FLOORING SURFACE. SEE FLOOR FINISH SCHEDULE FOR ADDITIONAL INFORMATION. MAX RAMP SLOPE 1:12.
11. GC TO INSTALL NEW HANDRAIL. SEE TYPICAL DETAILS ON DRAWING A4.03 FOR ADDITIONAL INFORMATION.
12. GC TO INSTALL NEW WINDOWS IN EXTERIOR WALL. SEE WINDOW SCHEDULE, TYPES, AND DETAILS ON SHEET A6.10 FOR ADDITIONAL INFORMATION.
13. GC TO PROVIDE AND INSTALL NEW ACOUSTICAL SUSPENDED CEILING. SEE PROPOSED REFLECTED CEILING PLANS AND SPECIFICATIONS.
14. MC TO PROVIDE AND INSTALL NEW CABINET HEATERS AND METAL COVERS TO CONCEAL PIPING. SEE PROPOSED MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
15. GC TO PROVIDE AND INSTALL NEW PORCELAIN TILE WAINSCOTING WITH TILE BASE AND BULLNOSE CAP. SEE SECTIONS, INTERIOR ELEVATIONS AND SPECIFICATION FOR ADDITIONAL INFORMATION.
16. GC TO PROVIDE AND INSTALL NEW 6"W x 72"L ALUMINUM LOUVER IN NEW COUNTER TO VENT HVAC UNIT BEHIND CASEWORK. ALUMINUM SHALL BE KYNAR FINISH, COLOR PER OWNER'S SELECTION. SEE CASEWORK SECTIONS FOR ADDITIONAL INFORMATION.
17. GC TO PROVIDE AND INSTALL NEW 4"H ALUMINUM TOE-KICK LOUVER TO VENT HVAC UNIT BEHIND CASEWORK. ALUMINUM SHALL BE KYNAR FINISH, COLOR PER OWNER'S SELECTION. SEE CASEWORK SECTIONS FOR ADDITIONAL INFORMATION.
18. GC TO PROVIDE AND INSTALL NEW INTERIOR DOORS. SEE DOOR SCHEDULE ON DRAWING A6.01 FOR ADDITIONAL INFORMATION.
19. GC TO INSTALL CASEWORK FILLER PANELS. SIZE TO FILL OPENING. FILLER PANEL SHALL MATCH ADJACENT CASEWORK UNLESS OTHERWISE NOTED.

CASEWORK DESIGN NOTE:
CASEWORK MODEL NUMBERS REFER TO 'CASE SYSTEMS INC.' FOR REPRESENTATION OF INTENT OF DESIGN ONLY. THIS DOES NOT PRECLUDE THE USE OF OTHER MANUFACTURERS THAT ARE SUBMITTED AND FOUND TO BE EQUAL. PRE-APPROVED EQUAL MANUFACTURERS CAN BE FOUND IN THE SPECIFICATIONS.

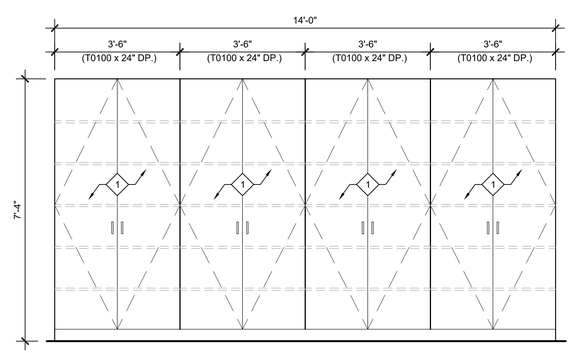
CASEWORK NOTE:
ALL EXPOSED CASEWORK ENDS SHALL BE PROVIDED WITH FINISH END PANELS TO MATCH FINISH OF CABINETS, TYPICAL.

(X) REFER TO PLUMBING DRAWING FOR FIXTURE SELECTION

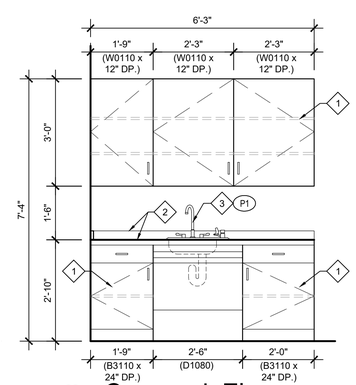
PAINTING NOTE:
WHERE IT IS INDICATED TO PRIME AND PAINT, IT SHALL REQUIRE (1) PRIMER COAT & (2) FINISH COATS. COLOR TO BE SELECTED BY OWNER.



9 A7.03 Casework Elevation
1/2" = 1'-0" ROOM 204



10 A7.03 Casework Elevation
1/2" = 1'-0" ROOM 206



11 A7.03 Casework Elev.
1/2" = 1'-0" ROOM 206

Date	1/10/20
Checked	MJM
Drawn	LH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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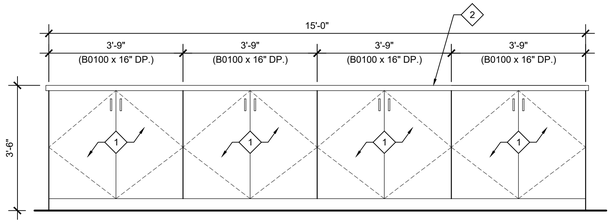
NYSED PROJECT # 66-07-01-03-0-004-030

INTERIOR ELEVATIONS - CASEWORK
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

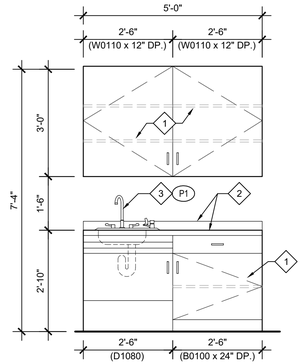
Job No. 4.1092.72.2
File No. 10927202A703

A7.03

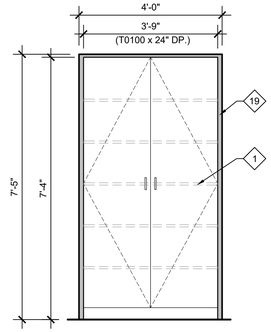
REFER TO A7.03 FOR DEMOLITION KEY NOTES.



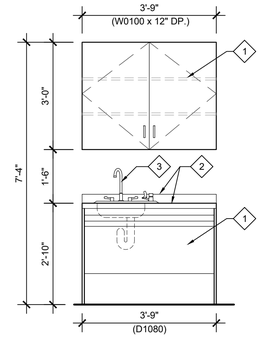
1 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 210



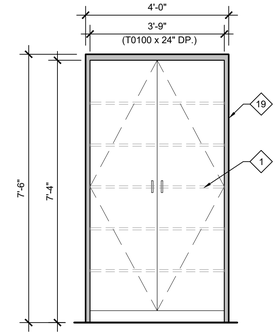
2 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 210



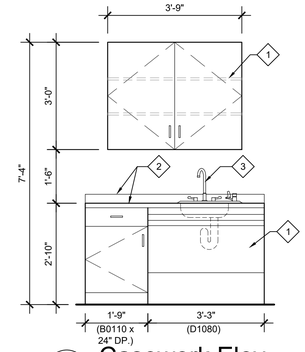
3 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 212



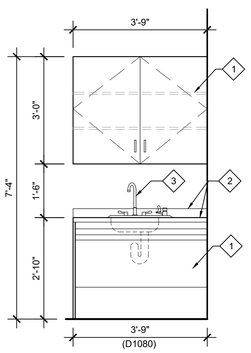
4 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 212



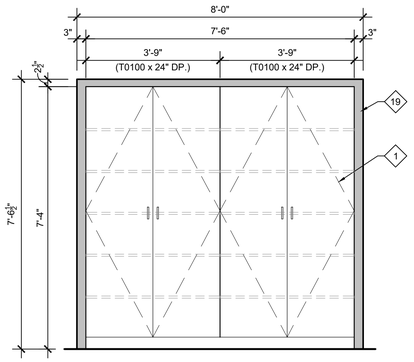
5 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 300



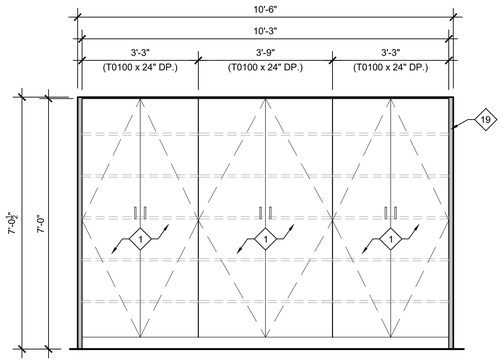
6 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 300



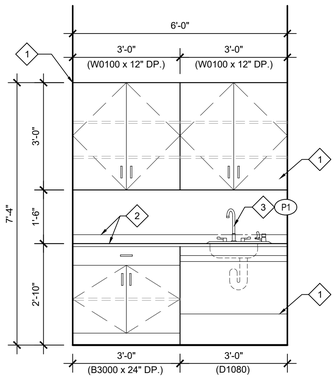
7 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 302



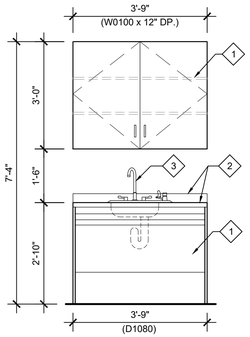
8 A7.04 Casework Elevation 1/2" = 1'-0" ROOM 302



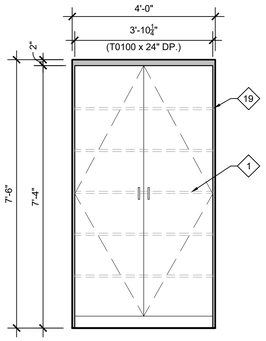
9 A7.04 Casework Elevation 1/2" = 1'-0" ROOM 304



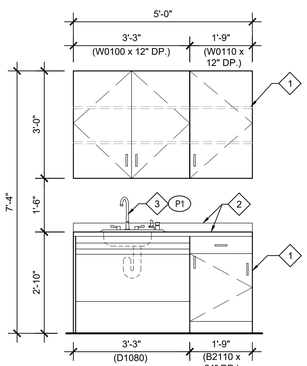
10 A7.04 Casework Elevation 1/2" = 1'-0" ROOM 304



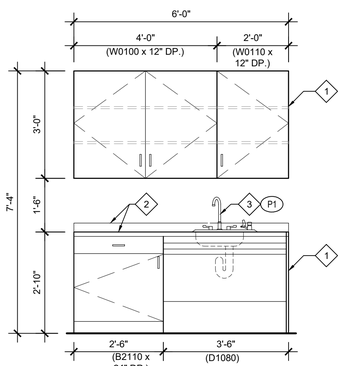
11 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 306



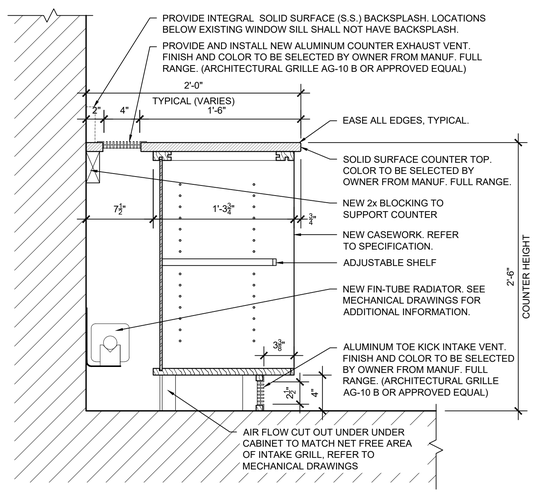
12 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 306



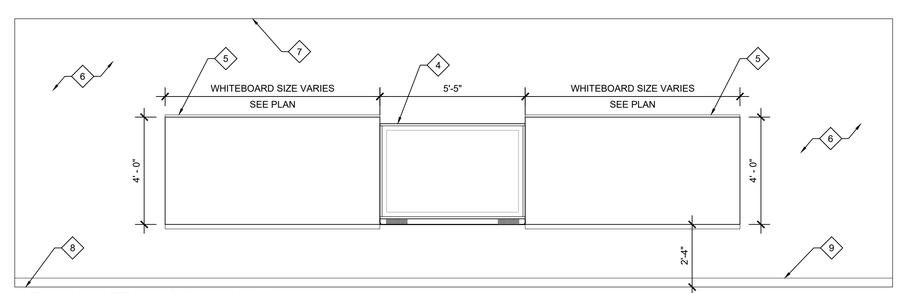
13 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 308



14 A7.04 Casework Elev. 1/2" = 1'-0" ROOM 310



15 A7.04 Typ. Classroom Window Casework Detail 1 1/2"" = 1'-0"



16 A7.04 Typical Teaching Wall 3/8" = 1'-0"

Date	1/10/20
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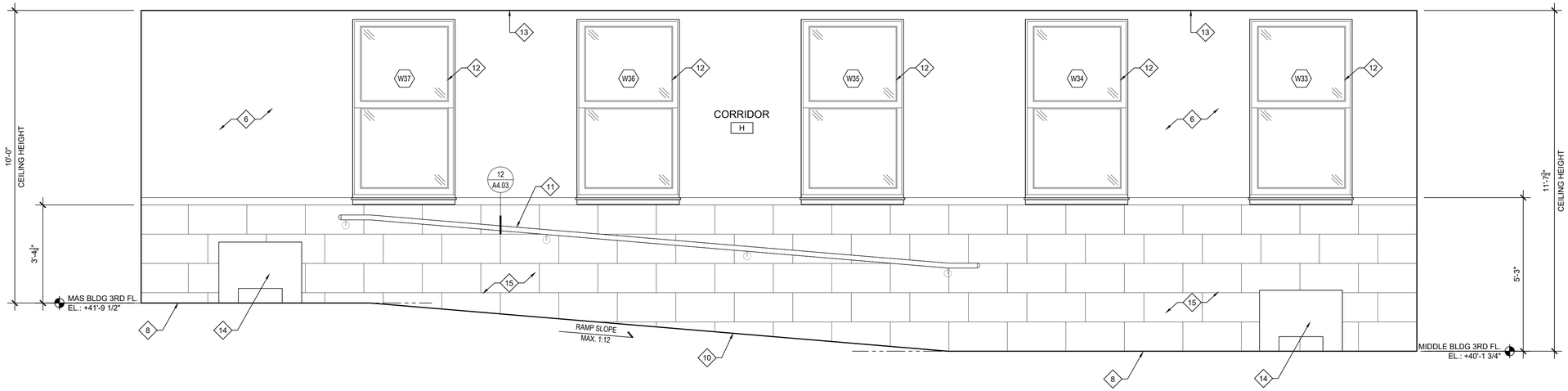
NYSED PROJECT # 66-07-01-03-0-004-030

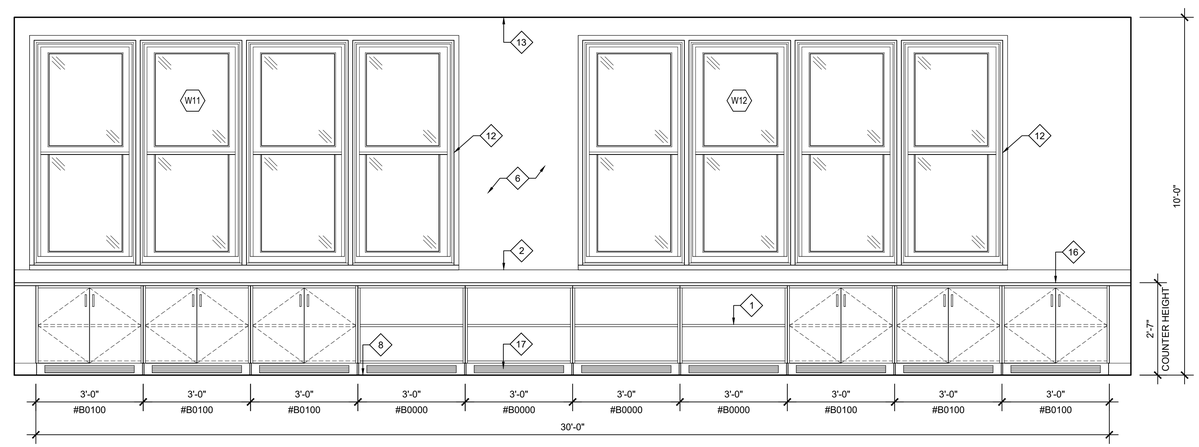
INTERIOR ELEVATIONS - CASEWORK
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A703

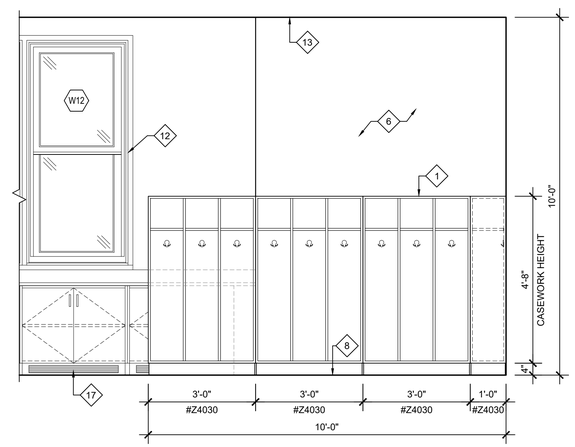
A7.04



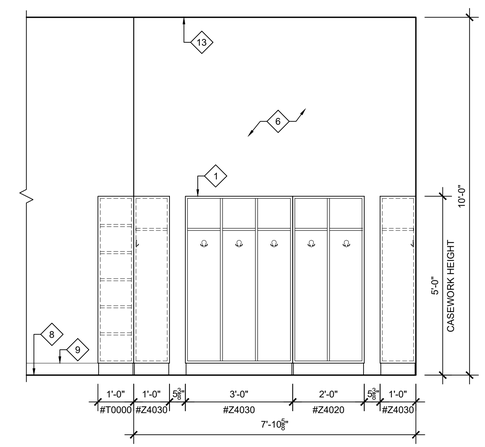
1 A7.05 Interior Elevation
1/2" = 1'-0"



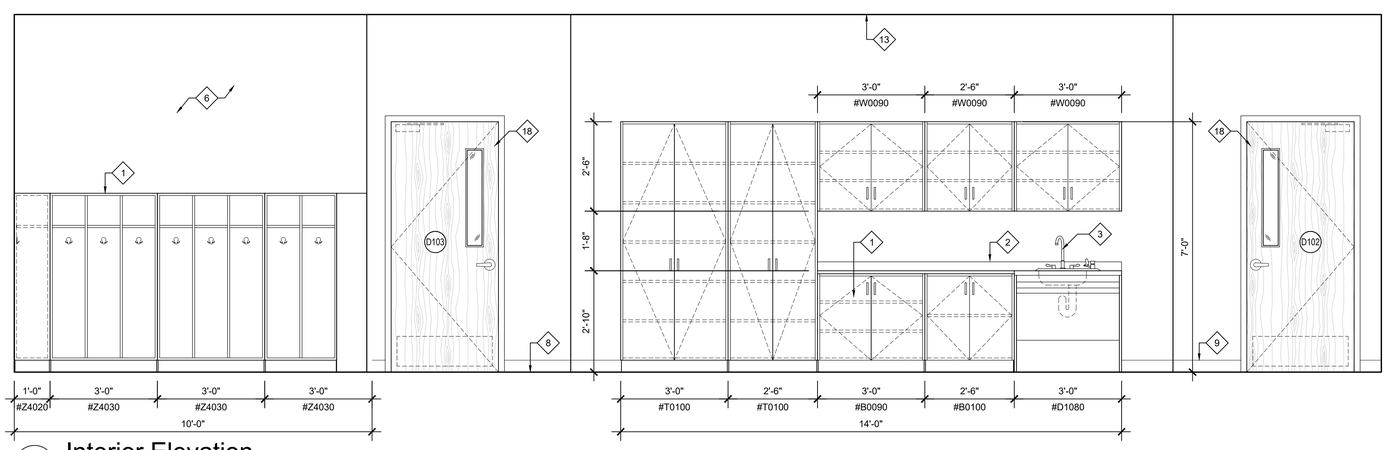
2 A7.05 Interior Elevation
1/2" = 1'-0"
CLASSROOM 132



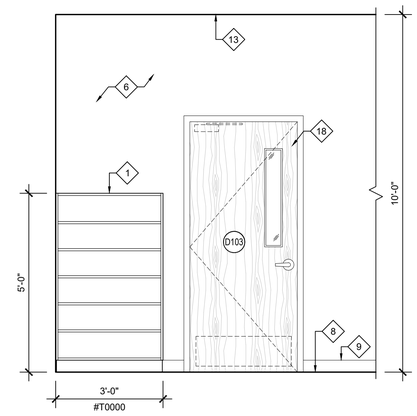
3 A7.05 Partial Interior Elevation
1/2" = 1'-0"
CLASSROOM 132



4 A7.05 Partial Interior Elevation
1/2" = 1'-0"
CLASSROOM 132



5 A7.05 Interior Elevation
1/2" = 1'-0"
CLASSROOM 132



6 A7.05 Partial Interior Elevation
1/2" = 1'-0"
CLASSROOM 132

SEE DRAWING A7.03 FOR ELEVATION KEY NOTES

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Drawn	LH

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

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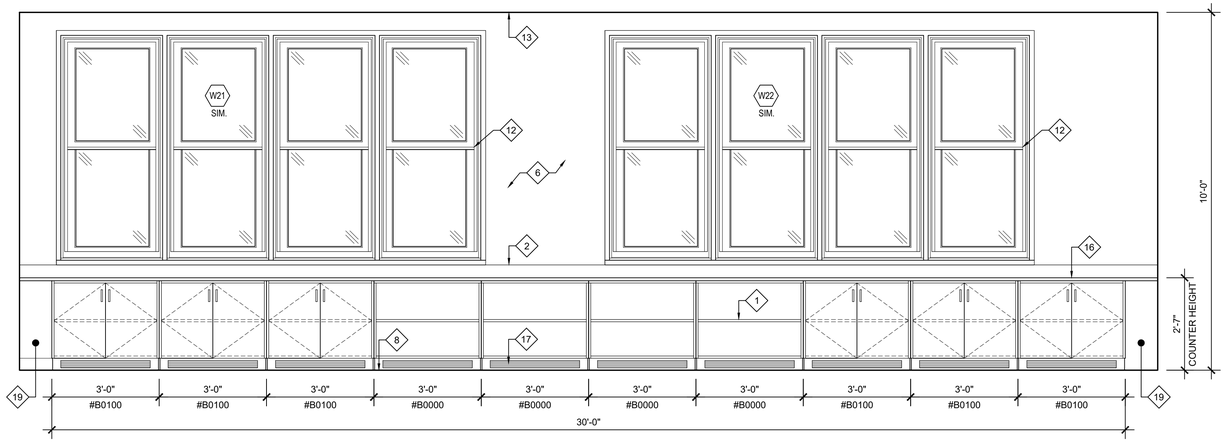
NYSED PROJECT # 66-07-01-03-0-004-030

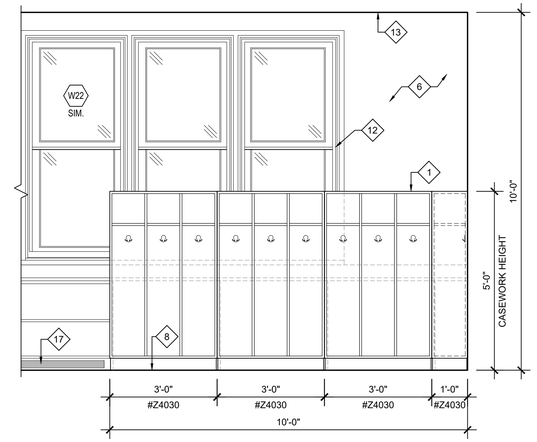
INTERIOR ELEVATIONS - CASEWORK
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A705

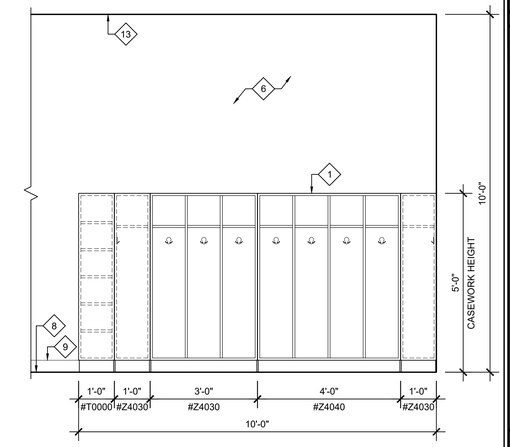
A7.05



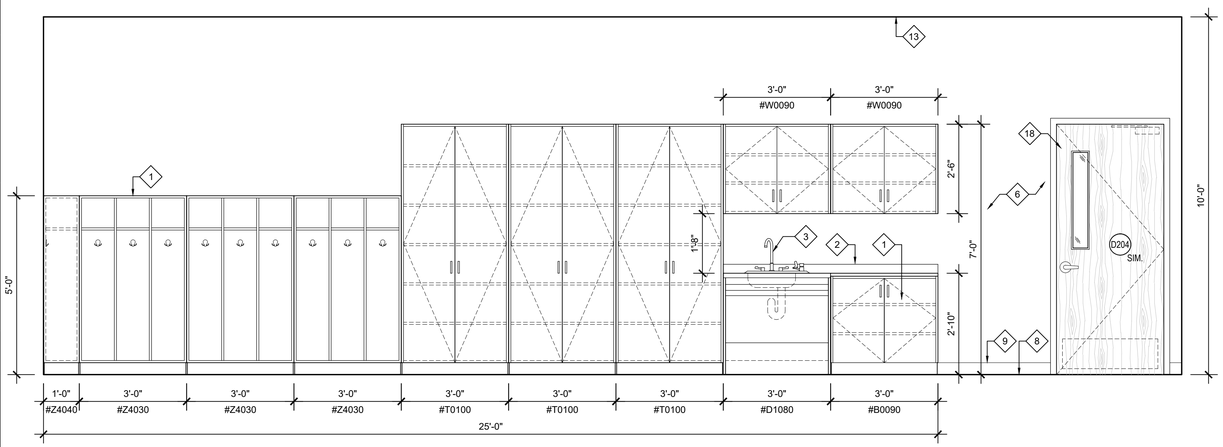
1 A7.06 **Interior Elevation**
1/2" = 1'-0"
CLASSROOM 252 AND 352



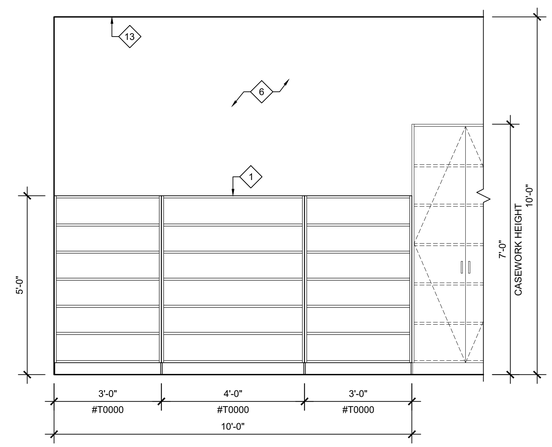
2 A7.06 **Partial Interior Elevation**
1/2" = 1'-0"
CLASSROOM 252 AND 352



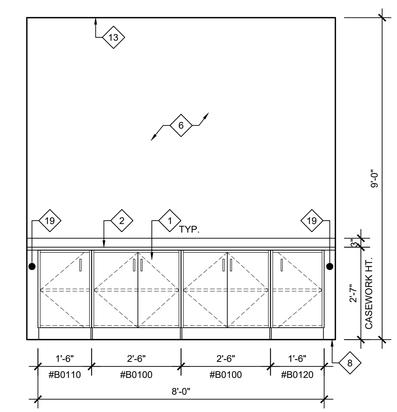
3 A7.06 **Partial Interior Elevation**
1/2" = 1'-0"
CLASSROOM 252 AND 352



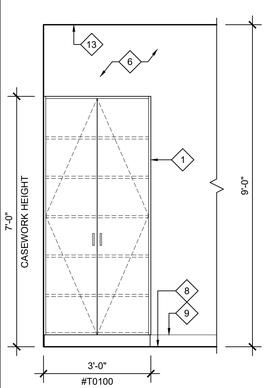
4 A7.06 **Interior Elevation**
1/2" = 1'-0"
CLASSROOM 252 AND 352



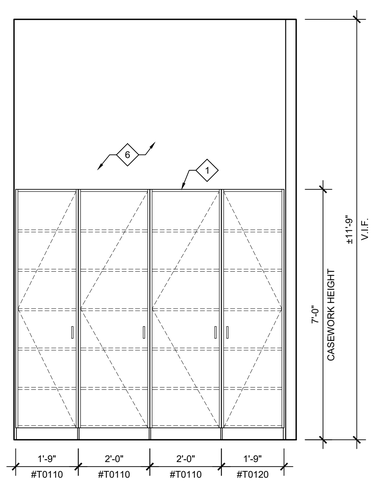
5 A7.06 **Partial Interior Elevation**
1/2" = 1'-0"
CLASSROOM 252 AND 352



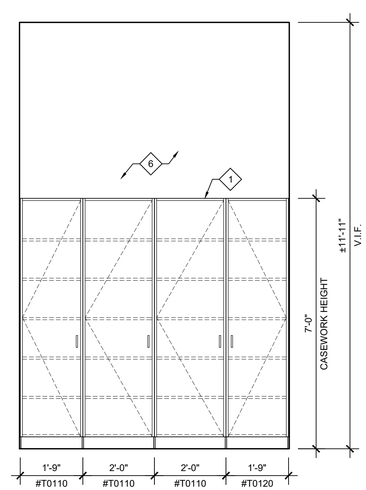
6 A7.06 **Partial Interior Elevation**
1/2" = 1'-0"
SGI 130



7 A7.06 **Interior Elevation**
1/2" = 1'-0"
SGI 130



8 A7.06 **Interior Elevation**
1/2" = 1'-0"
SGI 215



9 A7.06 **Interior Elevation**
1/2" = 1'-0"
SGI 315

SEE DRAWING A7.03 FOR ELEVATION KEY NOTES

Date	1/10/20
Checked	MJM
Drawn	KM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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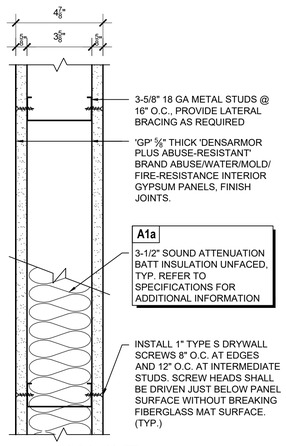
NYSED PROJECT # 66-07-01-03-0-004-030

INTERIOR ELEVATIONS - CASEWORK

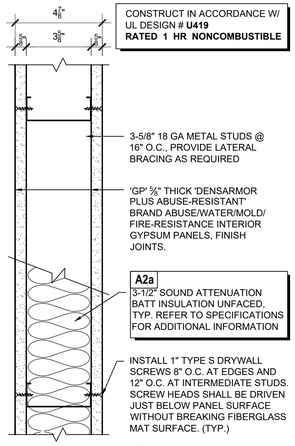
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A705

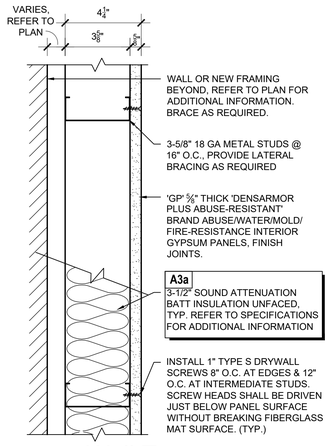
A7.06



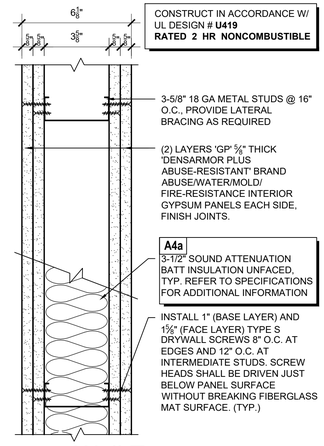
A1 Wall Type 3" = 1'-0" INTERIOR PARTITION



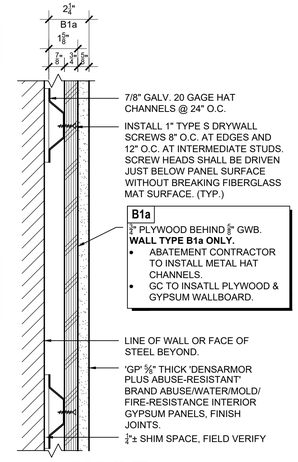
A2 Wall Type 3" = 1'-0" INTERIOR PARTITION



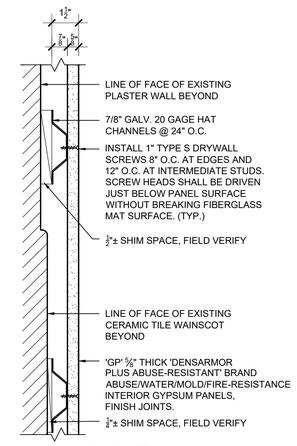
A3 Wall Type 3" = 1'-0" INTERIOR PARTITION



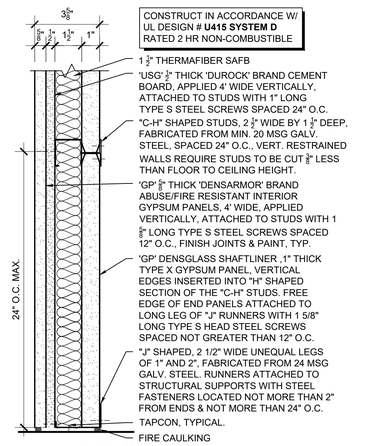
A4 Wall Type 3" = 1'-0" INTERIOR PARTITION



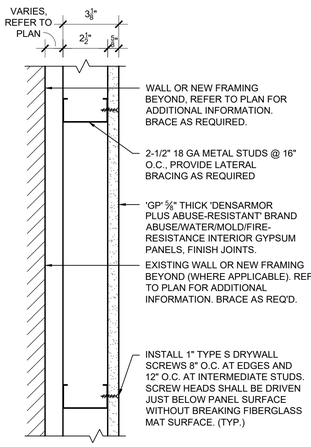
B1 Wall Type 3" = 1'-0" INTERIOR PARTITION



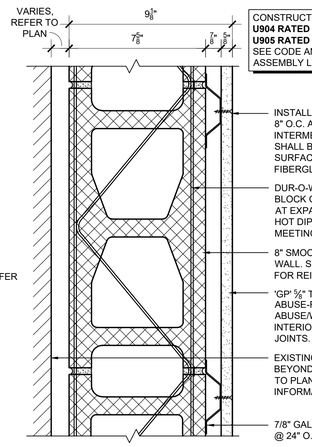
B2 Wall Type 3" = 1'-0" INTERIOR PARTITION



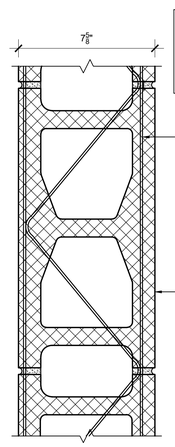
B3 Wall Type 3" = 1'-0" SHAFT WALL



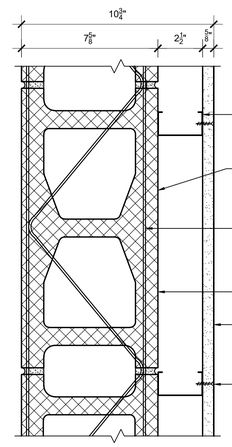
B4 Wall Type 3" = 1'-0" INTERIOR PARTITION



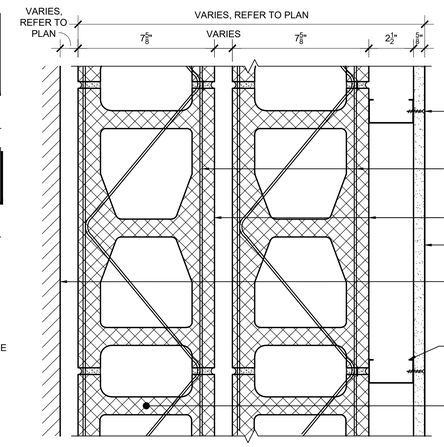
C1 Wall Type 3" = 1'-0" INTERIOR PARTITION



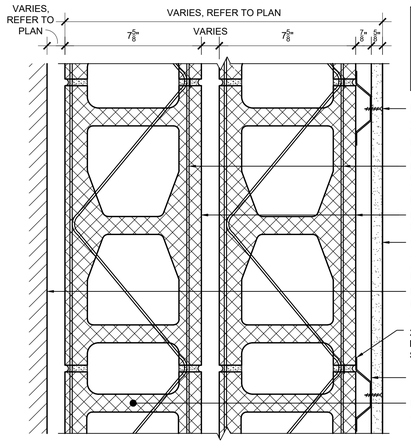
C2 Wall Type 3" = 1'-0" INTERIOR PARTITION



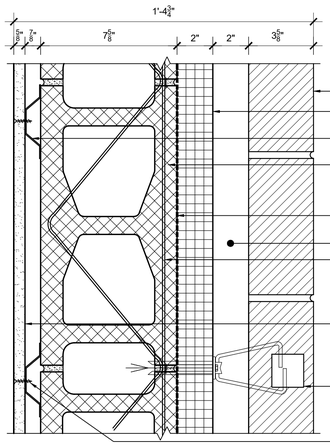
C3 Wall Type 3" = 1'-0" INTERIOR PARTITION



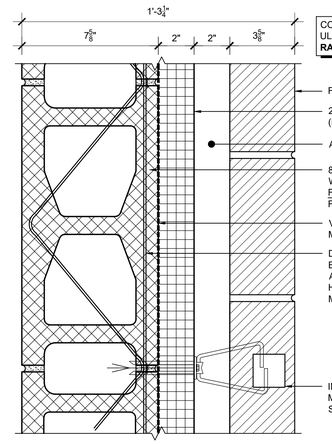
C4 Wall Type 3" = 1'-0" FIRE WALL



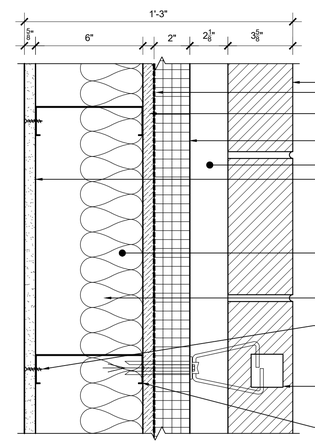
C5 Wall Type 3" = 1'-0" FIRE WALL



D1 Wall Type 3" = 1'-0" EXTERIOR WALL



D2 Wall Type 3" = 1'-0" EXTERIOR WALL



D3 Wall Type 3" = 1'-0" EXTERIOR WALL

Date	1/10/20
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Drawn	TT

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NYSED PROJECT # 66-07-01-03-0-004-030

WALL TYPES

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

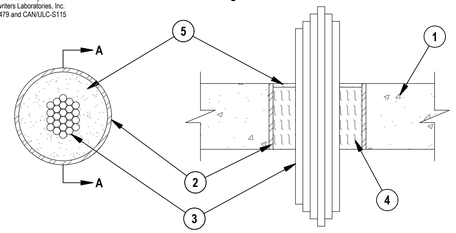
File No. 10927202A801

A8.01

System No. C-AJ-3180

F Rating - 3 Hr
T Rating = 0 Hr

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600 2400 kg/m3) concrete floor or min 4-3/4 in. (121 mm) thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 6 in.(152 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Steel Sleeve — (Optional) — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with floor or wall surfaces.
3. Cables — Aggregate cross-sectional area of cables in opening to be max 45 percent of the aggregate cross-sectional area of the opening. Cables to be rigidly supported on both sides of floor or wall assembly. Any combination of the following types and sizes of metallic conductor or fiber optic cable may be used:
   A. Max 500 kcmil single copper connector power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
   B. Max 300 pair No. 24 AWG copper conductor telecommunication cables with polyvinyl chloride (PVC) insulation and jacket material.
   C. Max 7/C copper conductor No. 12 AWG multiconductor power and control cables with polyvinyl chloride (PVC) or cross-linked polyethylene (XLPE) insulation and PVC jacket.
   D. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in. (13 mm).
   E. Max 3/C copper conductor No. 12 AWG with bare aluminum ground, polyvinyl chloride (PVC) insulated steel, Metal-clad cable.
   F. Max 3/C with ground 2/0 AWG copper conductor SER cable with cross-linked polyethylene (XLPE) insulation and polyvinyl chloride (PVC) jacket.
   G. RG/U coaxial cable with polyethylene (PE) insulation and polyvinyl chloride (PVC) jacket having a max outside diameter of ½ in. (13 mm)
   H. Fire Resistive Cables* - Max 1-1/4 in. (32 mm) diam single conductor or multi conductor Type MI cable. A min 1/8 in. (3 mm) separation shall be maintained between MI cables and any other types of cable.
4. Packing Material — Min 4-1/4 in. (108 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor to accommodate the required thickness of fill material.
5. Fill, Void or Cavity Material* — Sealant — Min 1/4 in. (6.4 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant.

*Bearing the UL Classification Mark

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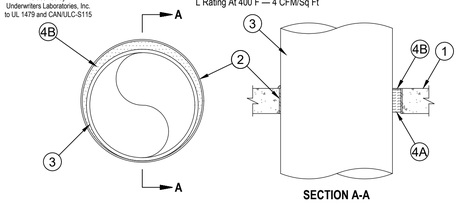
System No. C-AJ-1226

F Rating — 3 Hr T Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/Sq Ft
L Rating At 400 F — 4 CFM/Sq Ft

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 32 in.
2. Metallic Sleeve — (Optional) Nom 32 in. diam (or smaller) Schedule 40 (or heavier) steel sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces or extending a max of 3 in. above floor or beyond both surfaces of wall.
2A. Sheet Metal Sleeve — (Optional) Max 6 in. diam, min 26 ga galv steel provided with a 26 ga galv steel square flange spot welded to the sleeve at approx mid-height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. larger than the sleeve diam. The sleeve is to be cast in place and may extend a max of 4 in. below the bottom of the deck and a max of 1 in. above the top surface of the concrete floor.
2B. Sheet Metal Sleeve — (Optional) - Max 12 in. diam, min 24 ga galv steel provided with a 24 ga galv steel square flange spot welded to the sleeve at approx mid-height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. larger than the sleeve diam. The sleeve is to be cast in place and may extend a max of 4 in. below the bottom of the deck and a max of 1 in. above the top surface of the concrete floor.
3. Through-Penetrant — One metallic pipe, tube or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between penetrant and periphery of opening shall be min 0 in. (point contact) to max 1-7/8 in. Penetrant may be installed with continuous point contact. Penetrant to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic penetrants may be used:
   A. Steel Pipe — Nom 30 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 30 in. diam (or smaller) cast or ductile iron pipe.
   C. Copper Pipe — Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
   D. Copper Tubing — Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
   E. Conduit — Nom 6 in. diam (or smaller) steel conduit.
   F. Conduit — Nom 4 in. diam (or smaller) steel electrical metallic tubing (EMT).
4. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 4 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or sleeve or from both surfaces of wall or sleeve as required to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 1/4 in. thickness of fill material applied within the annulus, flush with top surface of floor or sleeve or with both surfaces of wall or sleeve. At the point or continuous contact locations between penetrant and concrete or sleeve, a min 1/4 in. diam bead of fill material shall be applied at the concrete or sleeve/ pipe penetrant interface on the top surface of floor and on both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant
*Bearing the UL Classification Mark

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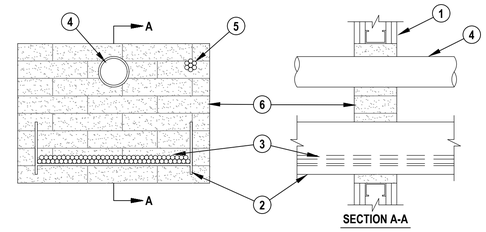
System No. W-L-8013

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — 5 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating At 400 F — 2 CFM/sq ft	FTH Rating — 0 Hr
	L Rating At Ambient — 5 CFM/sq ft
	L Rating At 400 F — 2 CFM/sq ft

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. (51 mm) by 4 in. (102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. Additional studs installed to completely frame the opening.
   B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max area of opening is 352 sq in. (2271 sq cm) with max dimension of 22 in. (559 mm) wide.
   The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.
2. Cable Tray* — Max 18 in. (457 mm) wide by max 6 in. (152 mm) deep open-ladder or solid-back cable tray with channel-shaped side rails formed of 0.065 in. (1.65 mm) thick aluminum or 0.060 in. (1.52 mm) thick steel and with 1-1/2 in. (38 mm) wide by 1 in. (25 mm) channel shape rungs spaced 9 in. (229 mm) OC or a 0.029 in. (0.74 mm) thick steel solid back, respectively. One cable tray to be installed in the opening. The max annular space between the cable tray and the periphery of the opening shall be min 1 in. (25 mm) to max 7 in. (178 mm) Cable tray to be rigidly supported on both sides of floor or wall assembly.
3. Cables — Aggregate cross-sectional area of cables in cable tray to be max 30 percent of the cross-sectional area of the cable tray. Any combination of the following types and sizes of copper conductor cables may be used:
   A. 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and PVC jacket.
   B. 100 pair - No. 24 AWG cable with PVC insulation and jacket.
   C. 1/C, 750 kcmil (or smaller) with PVC insulation and jacket.
4. Through-Penetrants — One or more pipe or tube to be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and types and sizes of the penetrants. Any combination of the penetrants described below may be used provided that the following parameters relative to the annular spaces and the spacings between the pipes are maintained. The space between the pipe or tube and the periphery of the opening shall be min 1-1/2 in. (38 mm) to max 9-1/4 in. (235 mm). Pipe or tube to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of non-metallic or metallic pipes, or tubes may be used:
   A. Polyvinyl Chloride (PVC) Pipe — Max 3 in. (76 mm) diam Schedule 40 solid core PVC pipe (or smaller) for use in closed (process or supply) or vented (drain, waste or vent) piping system.
   B. Steel Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) diam steel conduit.
   D. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
   E. Copper Tube — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tube.
4A. Pipe Covering — (Not Shown) Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf) (56kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering and Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 may be used.
5. Cables — Max 1-1/2 in. (38 mm) diam tight bundle of cables installed within the opening and rigidly supported on both surfaces of wall. The space between the cables and periphery of the opening shall range from 1-3/16 in. (30.2 mm) min to a max of 1-1/2 in. (38 mm). Any combination of the following types and sizes of cables may be used:
   A. 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.
   B. 25 pair — No. 24 AWG cable with PVC insulation and jacket.
   C. Type R GU/59 coaxial cable with PVC outer jacket.
   D. 24 fiber optic cable with PVC sub unit and outer jacket.
6. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* — Fire Blocks For walls incorporating max 3-5/8 in. (92 mm) steel studs or max 2 (51 mm) by 4 in. (102 mm) wood studs, fire block installed with 5 in. (127 mm) dimension projecting through and centered in opening. For walls constructed of larger steel or wood studs, fire block installed with long dimension passing through and centered in opening. Blocks may or may not be cut flush with both surfaces of wall. When multiple layers of gypsum board are used, blocks may be recessed 1/2 in. (13 mm) from surface of wall. Blocks to be firmly packed in opening. Either one or a combination of the block types specified below may be used.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS 657 Fire Block or CFS-BL Firestop Block
   B. Fill, Void or Cavity Material* — Sealant or Putty - Fill material to be forced into interstices of cables, between cables and cable trays, around each penetrant and where obvious voids are observed to max extent possible on both surfaces of the penetration.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant, FS-ONE MAX Intumescent Sealant, CP 618 Putty Stick or CP620 Fire Foam

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System No. C-AJ-8143

F Rating -- 2 Hr
T Rating -- 0 Hr

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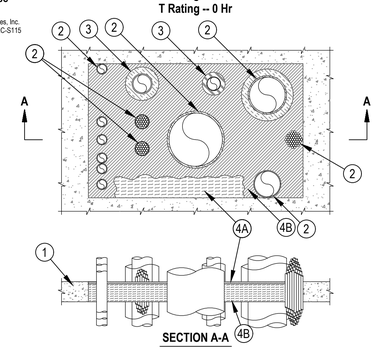

SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor. Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max size of opening is 1440 in.2 (9,290 cm2) with a max dimension of 48 in. (1219 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through-Penetrant — One cable tray and one or more pipes, tubes or cable bundles may be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and the types and sizes of the penetrants. Any combination of the penetrants described below may be used provided that the following parameters relative to the annular spaces are maintained. The annular space between cable tray and all other penetrants shall be min 3 in. (76 mm). The annular space between individual cables and cable bundles shall be a min 1/2 in. (13 mm). The annular space between individual cables and cable bundles and other penetrants shall be a min 1/2 in. (13 mm) except that a min 2 in. (51 mm) shall be maintained between the cables and copper pipes and tubes greater than a nom 3 in. (76 mm) diam and steel and iron pipes and conduits greater than a nom 4 in. (102 mm) diam. The annular space between metallic pipes, conduit and tubes and insulated pipes and tubes shall be a min 2 in. (51 mm). The annular space between nom 3 in (76mm) diam (and smaller) copper pipes and tubes and between nom 4 in (102mm) diam (and smaller) steel and iron pipes and conduits shall be min 1/2 in. (13 mm). The annular space between nom 2 in. (51 mm) diam (and smaller) metallic pipes and conduits shall be min 0 in. (point contact). The annular space between insulated penetrants or the cable tray and the periphery of opening shall be min 1/2 in. (13 mm). The annular space between all other penetrants and the periphery of opening shall be min 0 in. (point contact). A max annular space in the system shall be 12 in. (305 mm). Penetrants to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of penetrants may be used.
   A. Metallic Pipes — The following types of metallic pipes, tubes or conduits may be used:
      1. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
      2. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
      3. Steel Pipe — Nom 24 in. (610 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
      4. Iron Pipe — Nom 24 in. (610 mm) diam (or smaller) cast or ductile iron pipe.
      5. Conduit — Nom 4 in. (102 mm) diam (or smaller) electric metallic tubing (EMT) or nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.
   B. Cables Bundles — Max 4 in. (102 mm) diam tightly bundled cables. Any combination of the following types and sizes of cables may be used:
      1. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
      2. Max 300 pair No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
      3. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
      4. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
      5. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.
   C. Individual Cables — Any of the following types and sizes of individual (non-bundled) cables may be used:
      1. Max 3/C No. 2/0 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.
      2. Through Penetrating Product* — Any cables, Armored Cable+ or Metal Clad Cable+ currently Classified under the Through Penetrating Product category.
      See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers.
      3. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
      4. Max 300 pair No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
      5. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
      6. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
      7. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.
      8. Max 4C/750 kcmil (or smaller) aluminum or copper conductor metal clad cable with aluminum or steel armor, with or without PVC jacket.
   D. Cable Tray* — (Not Shown) — Max 24 in. (610 mm) wide by 6 in. (152 mm) deep open-ladder steel or aluminum cable tray. Aggregate cross-sectional area of cable tray to be max 40 percent of the cross-sectional area of the cable tray based on a max 3 in. cable loading depth. Any combination of the types and sizes of cables described in Item 2B may be used. Cable tray to be rigidly supported on both sides of floor or wall assembly.
3. Pipe Insulation — (Optional) - Pipes and tubes of the sizes noted below may be provided with one of the following types of pipe insulations::
   A. Pipe Covering* — Nom 1-1/2 in. (38 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket for pipes with a nom diam of 8 in. (203 mm) (or smaller) or tubes with a nom diam of 4 in. (102 mm) (or smaller). Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   B. Pipe Covering* — Nom 2 in. (51 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket for pipes or tubes with a nom diam of 2 in. (51 mm) (or smaller). Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   C. Tube Insulation-Plastics+ — Nom 1 in. (25 mm) thick (or thinner) acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing for pipes or tubes with a nom diam of 2 in. (51 mm) (or smaller).
   See Plastics (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.
4. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 4 in. (102 mm) thickness of 4 pcf (64 kg/m³) mineral wool batt insulation tightly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material - Sealant* — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with the top surface of the floor or both surfaces of the wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant
*Bearing the UL Classification Mark

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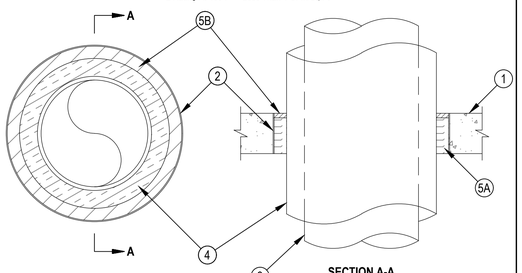
System No. C-AJ-5091

F Rating — 2 Hr
T Ratings — 0 and 1 Hr (See Items 2 and 4)
L Rating At Ambient — 4 CFM/Sq Ft
L Rating At 400 F — Less Than 1 CFM/Sq Ft

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 29 in. (737 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance directory for names of manufacturers.
2. Metallic Sleeve — (Optional) — Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces or extending a max of 3 in. (76 mm) above floor or beyond both surfaces of wall. If the steel sleeve extends beyond the top surface of the floor or both surfaces of the wall, the T Rating of the firestop system is 0 hr.
2A. Sheet Metal Sleeve — (Optional) - Max 6 in. (152 mm) diam, min 26 ga galv steel provided with a 26 ga galv steel square flange spot welded to the sleeve at approximately mid- height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. (51 mm) larger than the sleeve diam. The sleeve is to be cast in place flush with bottom surface of floor and may extend a max of 1 in. (25 mm) above the top surface of the floor.
2B. Sheet Metal Sleeve — (Optional) - Max 12 in. (305 mm) diam, min 24 ga galv steel provided with a 24 ga galv steel square flange spot welded to the sleeve at approximately mid- height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. (51 mm) larger than the sleeve diam. The sleeve is to be cast in place flush with bottom surface of floor and may extend a max of 1 in. (25 mm) above the top surface of the floor.
3. Through Penetrants — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or tubing may be used:
   A. Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.
   C. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
   D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
4. Pipe Covering — Min 1/2 in. (13 mm) to max 2 in. (51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) glass fiber units jacketed on the outside with an all-service jacket. Longitudinal joints sealed with metal fasteners or factory-applied, self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the insulated pipe and the edge of the periphery of the opening shall be min 1/2 in. (13 mm) to max 12 in. (305 mm). When thickness of pipe covering is less than 2 in. (51 mm), the T Rating for the firestop system is 0 hr.
   See Pipe Equipment Covering — Materials — (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
4A. Pipe Covering — (Not Shown) — As an alternate to Item 4, max 2 in. (51 mm) thick cylindrical calcium silicate (min 14 pcf or 224 kg/m³) units sized to the outside diam of the pipe or tube may be used. Pipe insulation secured with stainless steel bands or min 18 AWG stainless steel wire spaced max 12 in. (305 mm) OC. The annular space shall be min 1/2 in. (13 mm) to max 12 in. (305 mm).
5. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant
*Bearing the UL Classification Mark

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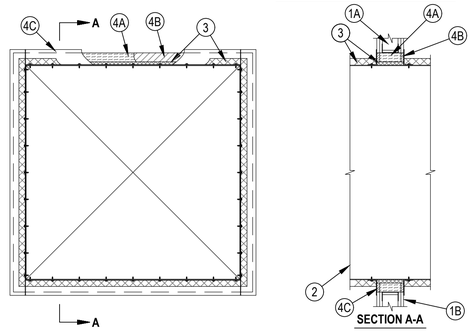
System No. W-L-7156

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Ratings — 1 and 2 Hr (See Item 1)
	FTH Rating — 0 Hr

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. Additional framing members shall be used to completely frame around opening.
   B. Gypsum Board* — Min 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers and orientation shall be as specified in the individual U300, U400 or V400 Wall and Partition Design. Max size of opening is 210 sq in. (1355 cm²) with a max width of 14-1/2 in. (368 mm) for wood studs. Max size of opening is 76.2 sq ft. (7 m²) with a max width of 105-1/2 in. (2.7 m) for steel studs.
   The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall in which it is installed.
2. Steel Duct — Max 100 by 100 in. (2.5 by 2.5 m) steel duct to be installed within the framed opening. The duct shall be constructed and reinforced in accordance with SMACNA construction standards. Steel duct to be rigidly supported on both sides of wall assembly.
3. Batts and Blankets* — Nom 1-1/2 or 2 in. (38 or 51 mm) thick glass fiber batt or blanket (min 3/4 pcf or 12 kg/m³) jacketed on the outside with a foil-scrim-kraft facing. Longitudinal and transverse joints sealed with aluminum foil tape. During the installation of the fill material, the batt or blanket shall be compressed minimum 50% such that the annular space within the firestop system shall be min 1/2 in. (13 mm) to max 2 in. (51 mm).
   See Batts and Blankets (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index 50 or less may be used.
4. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 3-5/8 (92 mm) or 4-7/8 in. (124 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form for 1 or 2 hr fire-rated walls, respectively. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant
   C. Steel Retaining Angles — Min No. 16 gauge (0.059 in. or 1.5 mm) galv steel angles sized to lap steel duct a min of 2 in. 51 mm) and lap wall surfaces a min of 1 in. (25 mm). Angles attached to steel duct on both sides of wall with min No. 10 steel sheet metal screws spaced a max of 1 in. (25 mm) from each end of steel duct and spaced a max of 6 in. (152 mm) OC. When max duct dimension does not exceed 48 in. (122 cm) and duct area does not exceed 1300 in² (8387 cm²), angles may be min No. 18 gauge galv steel. Angles attached to steel duct on both sides of wall with min No. 10 by 1/2 in. (13 mm) long steel sheet metal screws located a max of 1 in. (25 mm) from each end of steel duct and spaced a max of 6 in. (152 mm) OC. When max 1-1/2 in. (38 mm) thick insulation is used, steel angles are optional for those sides of duct that do not exceed the dimension specified in Table below, dependent on packing material and annular space as specified.

*Bearing the UL Classification Mark

Max Duct Dimension	Duct Thickness	Annular Space	Packing Material	Angle (Item 3C) Required
24 in. (610 mm)	24 ga or heavier	1/2 in. min to 1 in. max (13 to 25 mm)	Item 3A1	No

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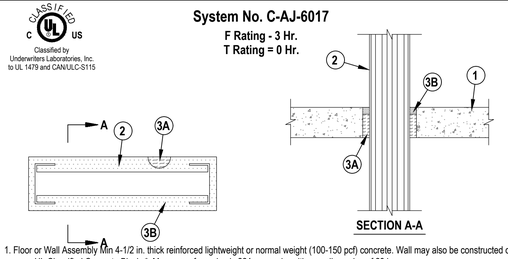
System No. C-AJ-6017

F Rating - 3 Hr.
T Rating = 0 Hr.

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of opening is 224 square in. with max dimension of 28 in.
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Busway+ Nominal 26 in. wide (or smaller) by 6 in. deep "I" shaped steel enclosure containing factory mounted aluminum bars rated for 600 V, 4000 A. One busway to be installed within the opening. the annular space between the flange tip of the busway and the periphery of the opening shall be 1 in. The annular space between the web of the busway and the periphery of the opening shall be 2 in. Busway to be ridged supported on both sides of floor and wall assembly. The busway shall bear the UL Listing Mark and shall be installed in accordance with all provisions of Article 364 of the National Electrical Code, NFPA No. 70.
3. Firestop System The firestop system shall consist of the following:
   A. Packing Material Min 3-1/2 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* -- Sealant Min 1 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE Sealant
+Bearing the UL Listing Mark *Bearing UL Classification Mark

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FIRESTOPPING NOTES:

1. FIRESTOPPING ASSEMBLIES SHOWN ON THIS SHEET REPRESENT VARIOUS RATED ASSEMBLIES THAT MAY BE REQUIRED FOR THIS PROJECT. ADDITIONAL CONDITIONS AND ASSEMBLIES MAY EXIST AND THE CONTRACTOR SHALL REFER TO SPECIFICATION SECTION **078443 - FIRESTOPPING** FOR ADDITIONAL INFORMATION AND THE SELECTED MANUFACTURER FOR ADDITIONAL ASSEMBLY TYPES.
2. FIRESTOPPING DETAILS WERE OBTAINED FROM AND REPRODUCED BY HILTI, INC. COURTESY OF UNDERWRITERS LABORATORIES, INC. (UL) AND ARE SHOW AS THE BASIS OF DESIGN. USE OF THESE DETAILS AND REFERENCE TO HILTI, INC. PRODUCTS OR SYSTEMS DOES NOT PRECLUDE THE USE OF OTHER PRODUCTS THAT ARE SUBMITTED AND APPROVED AS EQUAL.
3. REFER TO CODE REVIEW PLANS CA0.01 - CA0.03 FOR REQUIRED FIRE RATINGS. PROVIDE APPROPRIATE FIRESTOPPING FOR FIRE RATING AS PER FIRESTOPPING DETAILS AND SPECIFICATIONS.

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

Revisions:

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1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

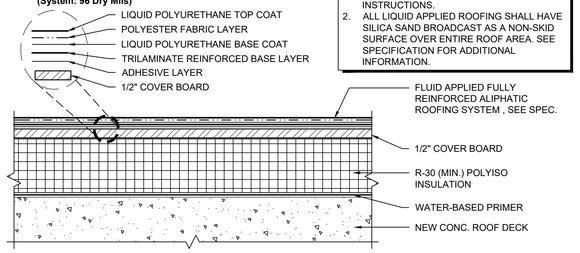
FIRESTOPPING DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A805

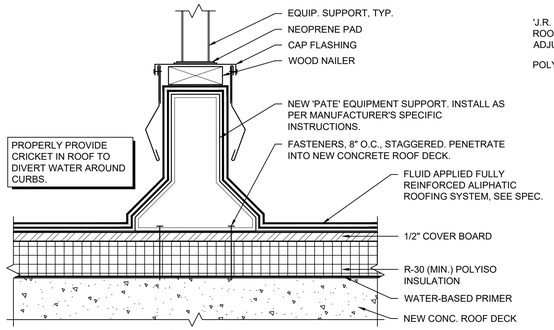
A8.05

ROOF SYSTEM 1:
LIQUID APPLIED ROOF OVER CONC. DECK
(System: 96 Dry Mils)

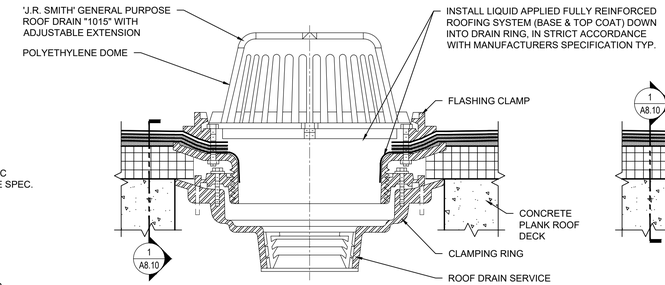
ROOFING NOTES:
1. CONTRACTOR SHALL FOLLOW MANUFACTURER'S STRICT INSTALLATION INSTRUCTIONS.
2. ALL LIQUID APPLIED ROOFING SHALL HAVE SILICA SAND BROADCAST AS A NON-SKID SURFACE OVER ENTIRE ROOF AREA. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.



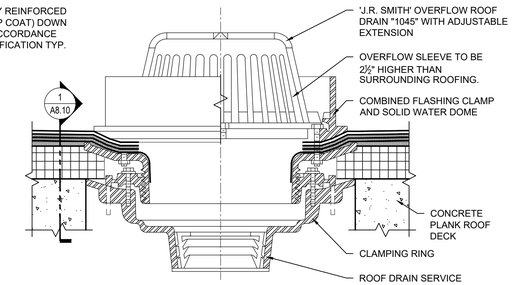
1 A8.10 Liquid Applied Roofing Detail
3" = 1'-0"



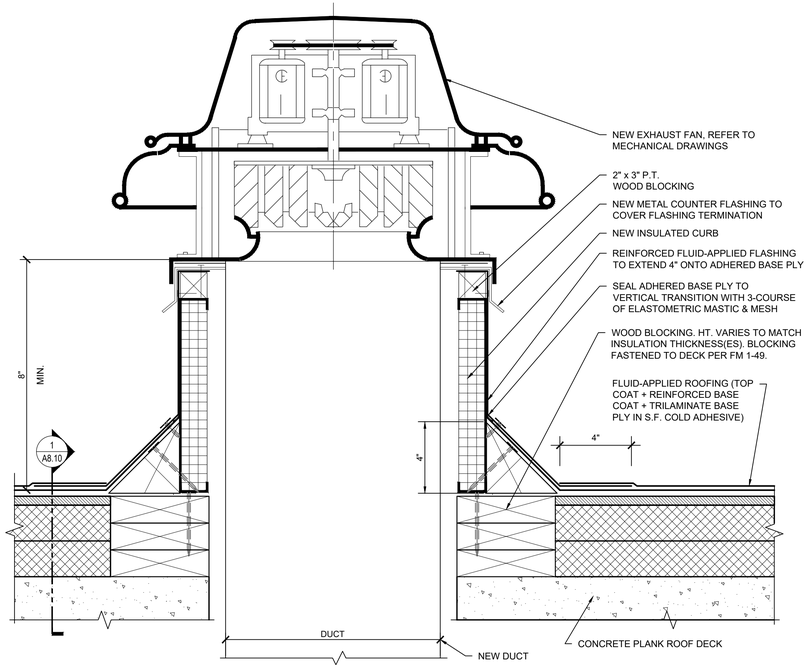
2 A8.10 Equipment Curb Detail
3" = 1'-0"



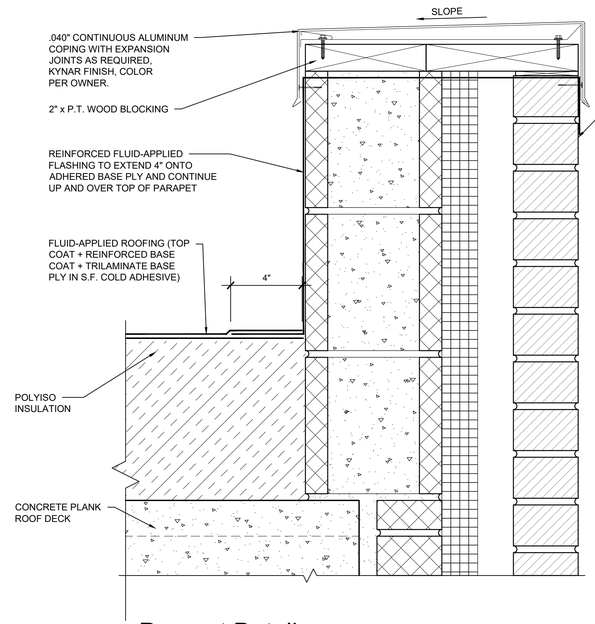
3 A8.10 Roof Drain Detail
3" = 1'-0"



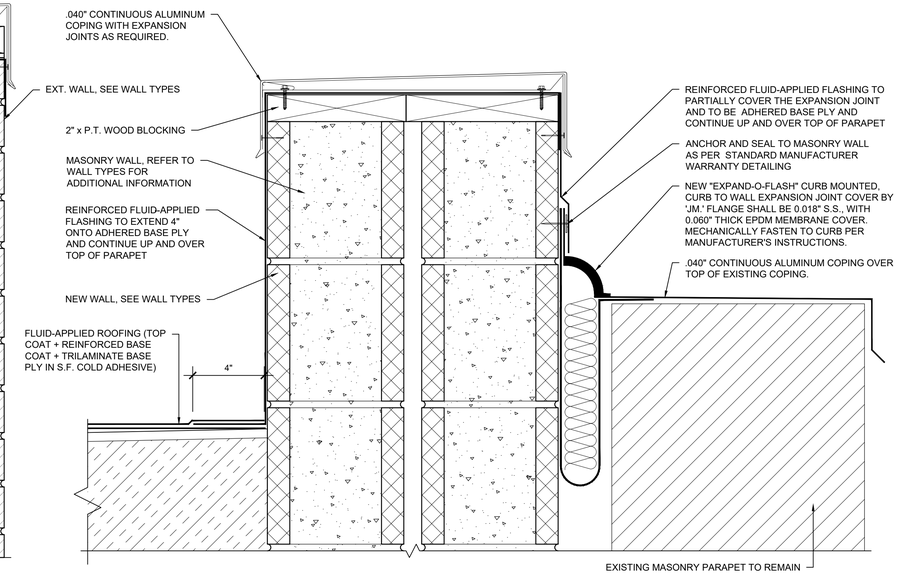
4 A8.10 Overflow Roof Drain Detail
3" = 1'-0"



5 A8.10 Roof Curb Detail @ Exhaust Fan
3" = 1'-0"

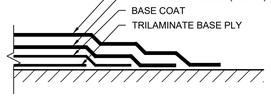


6 A8.10 Parapet Detail
3" = 1'-0"

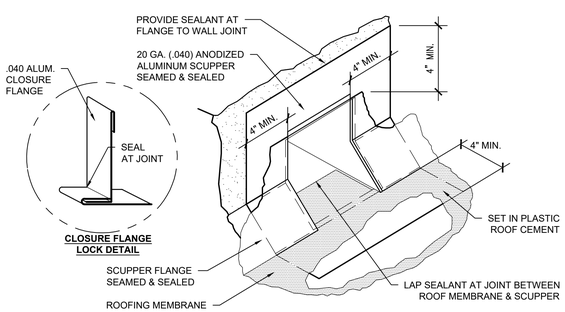


7 A8.10 Parapet Expansion Joint Detail
3" = 1'-0"

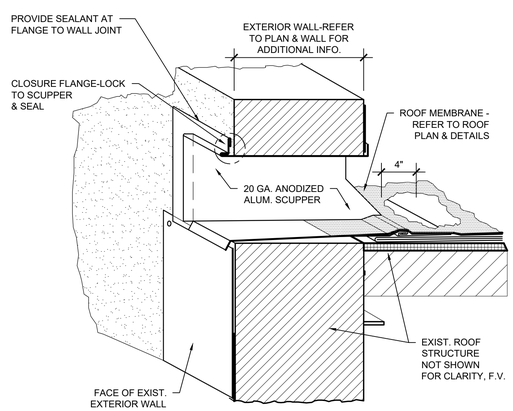
NOTE:
CONTRACTOR SHALL APPLY ALL LAYERS OF NEW FLUID APPLIED ROOFING SO AS TO ENSURE EACH SUCCESSIVE LAYER COVERS THE LAYER UNDERNEATH, BY MINIMUM OF ¾", TYPICAL.



8 A8.10 Lapping Detail
N.T.S.



9 A8.10 Through-Wall Scupper/Conductor Head Detail
3" = 1'-0"



ROOFING NOTES:

- ALL LIQUID FLASHINGS SHALL BE COMPATIBLE WITH PROPOSED ROOFING SYSTEM.
- ALL BLOCKING SHALL BE FASTENED TO EXISTING METAL DECK (OR MASONRY) WITH APPROVED FASTENERS. (SEE WOOD BLOCKING NOTE)
- FASTEN BASE LAYER OF INSULATION TO METAL DECK WITH MANUFACTURER'S APPROVED FASTENERS. TOP LAYERS OF INSULATION AND COVER BOARD SHALL BE ADHERED WITH MANUFACTURER'S APPROVED LOW RISE FOAM ADHESIVE.
- **DO NOT** COVER EXISTING WEEP HOLES. CONTRACTOR TO ENSURE ALL WEEPS ARE IN GOOD CONDITION & FREE OF ANY OBSTRUCTIONS.
- ALL ALUMINUM (U.O.N.) SHALL BE KYNAR FINISH. COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S STANDARD RANGE.

JOINT SEALANT NOTES:

1. CONTRACTOR TO PROVIDE ELASTOMERIC JOINT SEALANTS THAT ESTABLISH AND MAINTAIN WATERTIGHT AND AIRTIGHT CONTINUOUS JOINT SEALS WITHOUT STAINING OR DETERIORATING JOINT SUBSTRATES.
2. ALL ELASTOMERIC JOINT SEALANTS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C920 FOR ADHESION & COHESION UNDER CYCLICAL MOVEMENT, ADHESION IN PEEL, AND INDENTATION HARDNESS.
3. INSTALL JOINT SEALANTS ONLY WHEN OUTDOOR TEMPERATURES/CONDITIONS ARE WITHIN MANUFACTURER'S SPECIFIED RANGE.
4. CONTRACTOR TO ENSURE JOINT SEALANTS ARE COMPATIBLE WITH SUBSTRATE IN WHICH THE SEAL IS BEING APPLIED.

WOOD BLOCKING NOTES:

1. WOOD (P.T.) BLOCKING SHOWN ON THESE DRAWINGS IS FOR SCHEMATIC PURPOSES ONLY. BLOCKING AMOUNTS/HEIGHTS MAY DIFFER FROM WHAT IS SHOWN. CONTRACTOR TO DETERMINE PROPER BLOCKING AMOUNT IN FIELD BASED ON ACTUAL FIELD CONDITIONS.
2. **ACQ TREATED LUMBER, OR EQUIVALENT, SHALL BE USED FOR ALL WOOD BLOCKING/NAILERS AND MUST CONFORM TO ALL FEDERAL STANDARDS/REGULATIONS.**
   - USE HOT-DIP GALVANIZED (ASTM A653 WITH A G90 OR GREATER) OR STAINLESS STEEL FASTENERS.
   - DO NOT USE ELECTRO-GALVANIZED SCREWS OR NAILS.
3. INSTALL TREATED LUMBER AT THE SAME HEIGHT AS THE INSULATION LAYER. WOOD NAILERS SHALL BE INSTALLED AT ALL PERIMETERS AND PENETRATIONS AS SHOWN IN THE APPROVED DETAILS. THE SURFACE UNDER WOOD NAILERS SHALL BE FREE OF ALL CONTAMINANTS AND SHALL BE AS EVEN AS POSSIBLE. WHERE WOOD NAILERS ARE INSTALLED DIRECTLY ON THE SUBSTRATE, THE SUBSTRATE SHALL BE CAREFULLY EXAMINED TO CONFIRM THAT THE ENTIRE AREA PROVIDES A SUITABLE FASTENING SURFACE. ALL DEFECTS SHALL BE REPAIRED BY THE APPROPRIATE TRADE PRIOR TO INSTALLATION.
4. BASE LAYER OF BLOCKING AT PERIMETER TO BE FASTENED TO EXISTING MASONRY WALL WITH 3/16" DIA X 3¼" LONG TAPCON ANCHORS @ 16" O.C., TYPICAL. ALL SUCCESSIVE LAYERS SHALL BE FASTENED TO BLOCKING UNDERNEATH WITH APPROVED FASTENERS. (SEE NOTE #2)

Date	1/10/20
Checked	DLF
Drawn	TT/JG

MICHAEL J. McGOVERN, R.A.
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Revisions:
1 ISSUE TO BID 11/23/20

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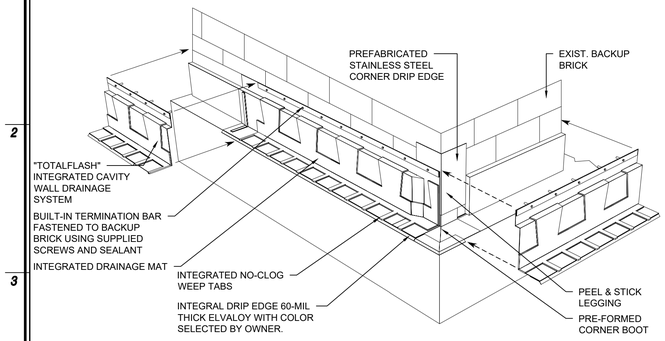
NYSED PROJECT # 66-07-01-03-0-004-030

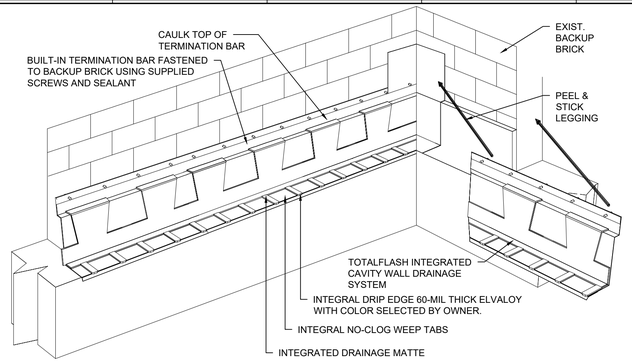
ROOF DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 109272024810

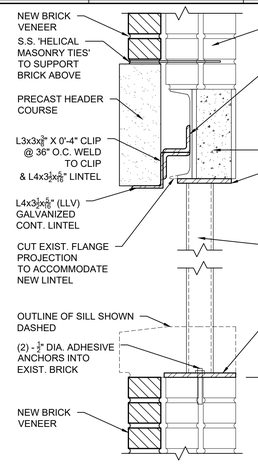
A8.10



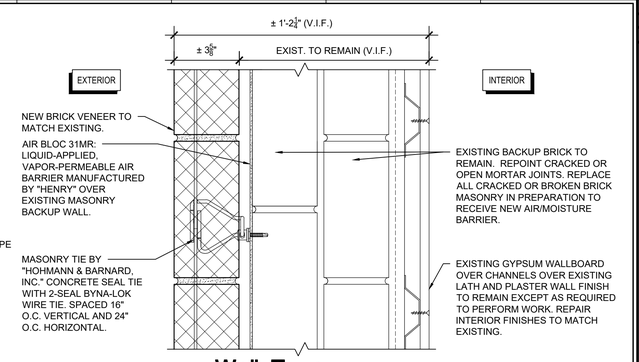
1 A6.02 **Base Flashing Detail**
N.T.S. — OUTSIDE CORNER



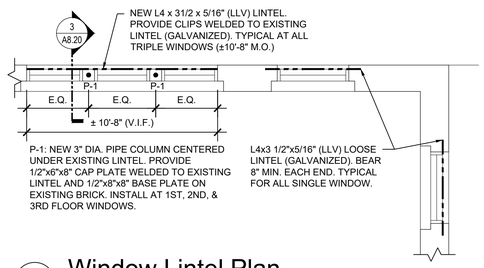
2 A8.20 **Base Flashing Detail**
N.T.S. — INSIDE CORNER



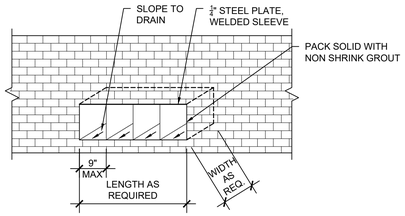
3 A8.20 **Lintel Support Detail**
1 1/2" = 1'-0" — VENEER REPLACEMENT



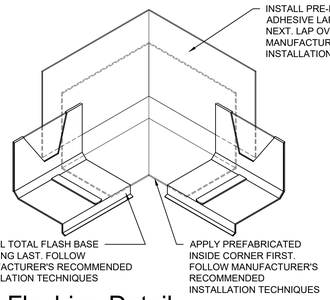
A **Wall Type**



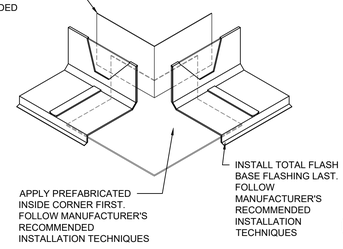
5 A8.20 **Window Lintel Plan**
1/4" = 1'-0"



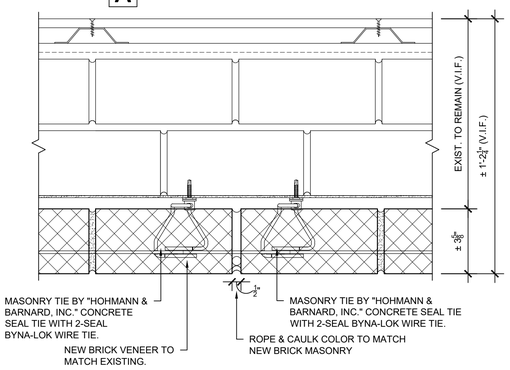
6 A8.20 **U.V. Masonry Support Detail**
N.T.S.



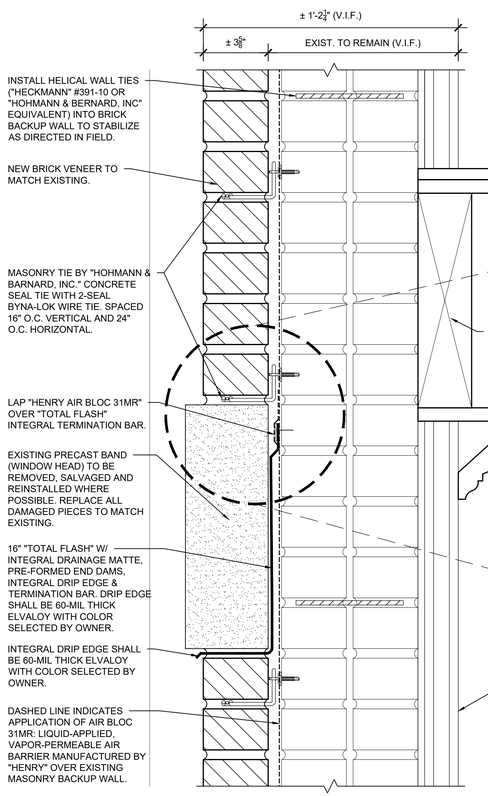
7 A8.20 **Flashing Detail**
3" = 1'-0" — INSIDE CORNER



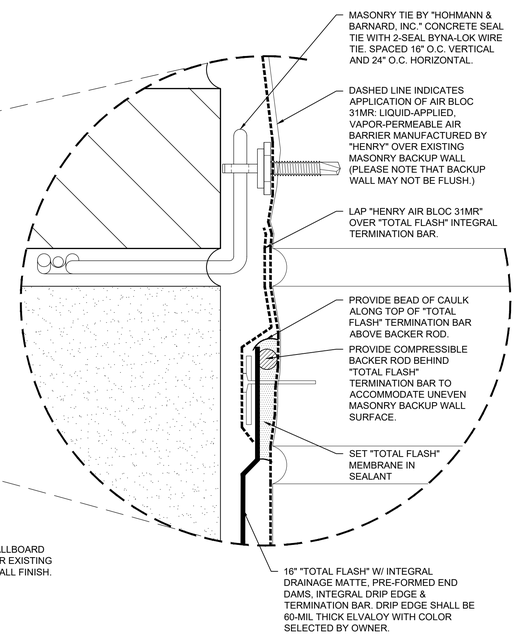
8 A8.20 **Flashing Detail**
3" = 1'-0" — OUTSIDE CORNER



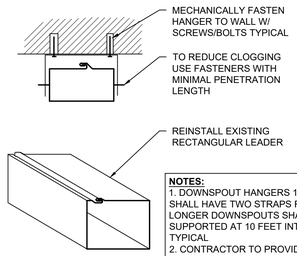
4 A8.20 **Control Joint Detail**
3" = 1'-0"



9 A8.20 **Flashing Detail**
3" = 1'-0" — TYPICAL @ CAST STONE

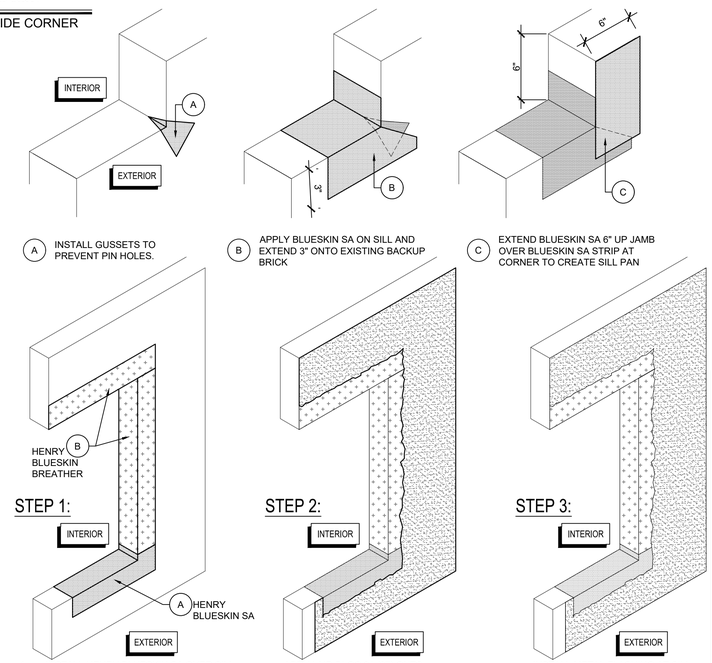


10 A8.20 **Termination Bar Detail**
N.T.S. — TYPICAL @ CAST STONE



NOTES:
1. DOWNSPOUT HANGERS 10 FEET OR LESS SHALL HAVE TWO STRAPS FOR SUPPORT LONGER DOWNSPOUTS SHALL BE SUPPORTED AT 10 FEET INTERVALS MAX. TYPICAL
2. CONTRACTOR TO PROVIDE NEW SPLASHBLOCKS AT EACH DOWNSPOUT

11 A8.20 **Downspout Detail**
3" = 1'-0"



A. INSTALL HENRY BLUESKIN SA OVER SILL AND ONTO EXISTING BACKUP BRICK. SEE STEP 1A ABOVE.
B. INSTALL HENRY BLUESKIN BREATHER AT ROUGH OPENING AT THE HEAD AND JAMBS

APPLY AIR-BLOC 31 (07) ONTO EXISTING BACKUP BRICK. LAPPING ONTO BLUESKIN SA AND BREATHER AT ROUGH OPENING AND PANEL JOINTS.

12 A8.20 **Unit Ventilator/Window Flashing Detail**
3" = 1'-0"

Date	1/10/20
Checked	MJM
Drawn	JG

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
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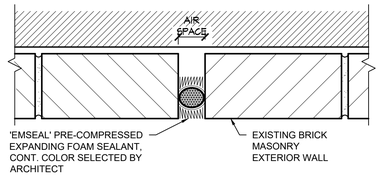
NYSED PROJECT # 66-07-01-03-0-004-030

MASONRY DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

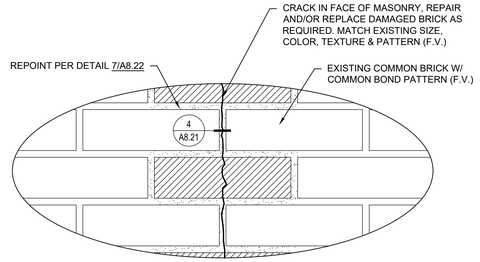
Job No. 4.1092.72.2
File No. 109272024820

A8.20



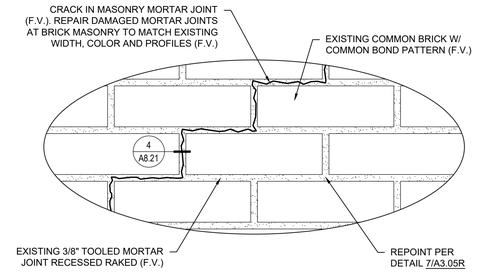
1 A8.21 Expansion Joint Detail

3" = 1'-0"



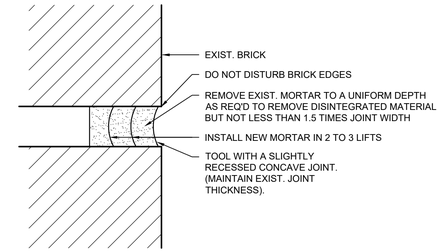
2 A8.21 Cracked Brick Repair / Repointing

N.T.S.



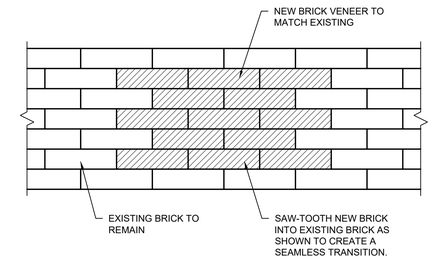
3 A8.21 Repointing / Joint Repair

N.T.S.



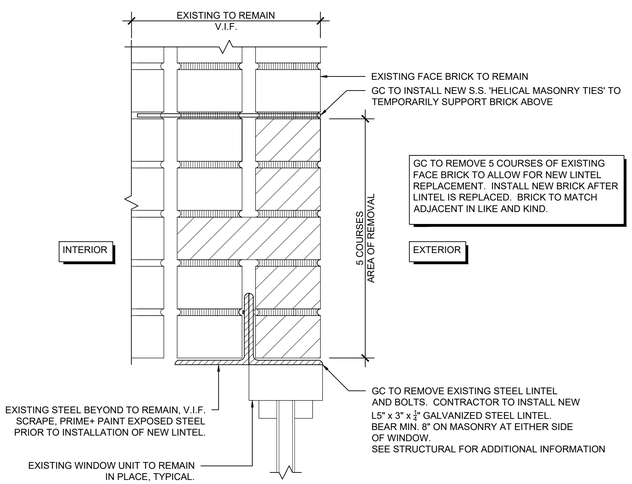
4 A8.21 Brick Repointing Detail

N.T.S.



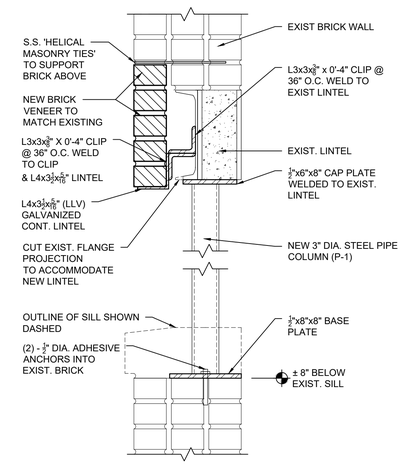
5 A8.21 Saw-Tooth Brick Install Detail

1-1/2" = 1'-0"



7 A8.21 Lintel Replacement Detail

3" = 1'-0"



8 A8.21 Lintel Support Detail

1 1/2" = 1'-0"

BRICK HEADER

MORTAR NOTES:

- MORTAR IN NEW WALLS SHALL BE TYPE "S" MORTAR, TYP. COLOR TO BE SELECTED BY OWNER AND ARCHITECT. SUBMIT SAMPLES OF MORTAR TO ARCHITECT / OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
- REPLACEMENT MORTAR SHALL MATCH THAT OF EXISTING IN TYPE, COMPOSITION AND COLOR. CONTRACTOR SHALL TEST MORTAR FOR COMPOSITION TO RECREATE. PROVIDE SAMPLES TO OWNER/ARCHITECT FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.

BRICK RE-POINTING CORRECTIVE PROCEDURE:

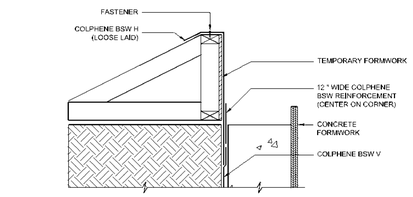
1. CLEAN OUT CRACK OF ALL LOOSE MORTAR, BRICK, CONTAMINANTS, AND IMPURITIES.
2. ROUT CRACK TO 1/8" MIN. WIDTH.
3. PRIME ALL SURFACES TO RECEIVE SEALANT, WITH APPROVED PRIMER, AS PER SEALANT MANUFACTURER'S SPECIFICATIONS.
4. MASK ALL ADJOINING SURFACES WITH TAPE TO ENSURE A NEAT JOB AND TO PROTECT ADJOINING SURFACES.
5. INSERT BACKUP MATERIAL INTO JOINT.
6. APPLY SEALANT.
7. REMOVE MASKING TAPE IMMEDIATELY AFTER THE FINISH TOOLING OF THE SEALANT IS ACCOMPLISHED AND BEFORE THE SEALANT BEGINS TO CURE.
8. THE SEALANT SHALL MEET FEDERAL SPEC. TT-S-00230C TYPE II, CLASS A. THE SEALANT SHALL BE APPLICABLE IN VERTICAL JOINTS. COLOR OF THE SEALANT SHALL MATCH COLOR OF EXIST. BRICK.

STEEL LINTEL PAINTING NOTES:

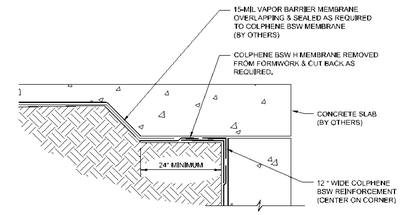
PRIMER:
(1) COAT PRO INDUSTRIAL PRO CRYL PRIMER (B66W01310) BY 'SHERWIN WILLIAMS'

FINISH:
(2) COATS PRO INDUSTRIAL WATER BASED CATALYZED EPOXY, B73-360 SERIES BY 'SHERWIN WILLIAMS'

NOTE:
CONTRACTOR SHALL PROPERLY PREPARE SUBSTRATE AS PER MANUFACTURER'S RECOMMENDATIONS, TYPICAL.



STEP 1



STEP 2

9 A8.21 Typical Foundation Waterproofing Detail

N.T.S.

6 A8.21 Masonry/Stone Restoration Detail

Step 1

Proper preparation of any substrate is crucial for the success of the repair.

Correct *(Square Cut)* Surface Preparation

Incorrect *(Feathered Edge)* Surface Preparation

Step 2

Cut 1/2" shoulder around patch (NO FEATHER EDGE PATCHING).

Remove all deteriorated stone plus an additional 1/4" to sound substrate.

Use a toothed chisel to provide more surface area.

Step 3

Thoroughly clean substrate with water, removing all dust and debris that may prevent proper adhesion.

If pins/anchors are specified, only use stainless steel threaded rods or spiral anchors.

Step 4

Moisten substrate with water until glistening wet on vertical surfaces, and no pooling of water on horizontal surface. Substrates that are very porous must be moistened several times. **If the surface is allowed to dry out before applying Jahn mortar, this step must be repeated. This is very important.**

Step 5

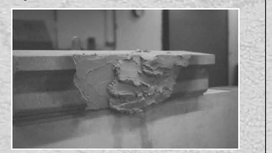
Apply "Peanut Butter" coat into the glistening wet substrate. The Jahn mortar should be mixed with water to the consistency of wet putty, also known as the "Peanut Butter" coat. Apply the "Peanut Butter" coat to the glistening wet substrate approximately 1/8" inch thick. **Important – To achieve proper bond, the "Peanut Butter" coat must not dry out.** When repairing large areas, divide work into smaller sections.

Step 6

The "Peanut Butter" coat must be applied approximately 1/8" thick to the repair area. It is very important to apply the "Peanut Butter" coat to the shoulders of the repairs.

On larger repairs, apply "peanut butter" coat to an area no larger than can be covered with the repair mortar before this coat dries out. If the "peanut butter" coat dries before this application, scrape it off, re-wet the surface to glistening, and re-apply.

Step 7



While the "Peanut Butter" coat is still wet, apply the drier (approximately 5 parts powder to 1 part water for M70 and M90, see data sheet for specific mixing instructions for other mortars) Jahn mortar mix into the wet "Peanut Butter" coat. If the "Peanut Butter" coat is allowed to dry out, a sufficient bond may not be achieved.

Step 8

Build the material out beyond the surface of the original stone (minimum of 1/8").

Tinting Mortar System

Cathedral Stone® Products, Inc.'s Tinting Mortar System, allows Cathedral Stone® standard mortars to be adjusted on site. The standard colors are the basic building blocks for the tinting mortar system and can be infinitely adjusted to give the installer an array of colors. *(Custom colors are still available through Cathedral Stone Products, Inc.)*

Custom Colors

The system developed in our laboratory for matching masonry is unparalleled in the industry. The system was developed by masons to closely simulate actual on-site application methods. This system, established in 1984 and improved for the last twenty years, allows us to quickly and accurately match most masonry. Generally, samples go out within a few days; however, there are colors that are more difficult or are unable to be matched due to exceeding pigment levels (destabilizing the mortar). The color matching process also applies to our Stlin potassium silicate paints and to our Terra Cotta glazing system.

In addition to Cathedral Stone's custom color system, a standard color chart is available. The standard color chart is the basis for the Jahn Tinting Mortar System. The Tinting Mortar System was developed for onsite custom color matching. Please contact a Cathedral Stone representative for more information on the Jahn Tinting Mortar System.

Other Services Offered by Cathedral Stone® Products, Inc.

- Consulting
- Training
- Technical Service
- Lab Analysis/ Testing
- Custom Formulated Mortars

Cathedral Stone Products, Inc.
Setting the Standard for Masonry Restoration Products
7266 Park Circle Drive
Hanover, MD 21076
Phone: 410-782-9150 Fax: 410-782-9155
www.cathedralstone.com

Step 9

While mortar is still damp, pre-screed or scrape the mortar down, leaving it approximately 1/8" proud. Once the pre-screeding is complete, let the mortar dry before final finishing.

Clean around edge of the patch with sponge and water, removing any excess mortar from substrate.

Step 10

For the best result, wait until the Jahn Mortar is the consistency of slightly damp sand before final screeding. Mortar should not stick to finishing tool. Screeding too early or late will affect final color.

After achieving initial set, scrape away excess mortar until the desired profile is reached. The waiting period for scraping must be determined on the job, due to the effects of heat, humidity, and wind on the final color.

Step 11

Care must be taken when scraping the Jahn mortar down.

Do not scrape all of the excess mortar at once, this will tear the mortar, scrape material down a little at a time.

Step 12

After final tooling and texturing, clean around the edge of the patch with a sponge and water, removing any excess mortar from the substrate. Do not introduce water into the fresh mortar. Repeat cleaning several times with clean water to avoid a "halo" around the repair.

See datasheet for curing procedures.

Cathedral Stone Products, Inc.
Setting the Standard for Masonry Restoration Products

Jahn Mortars
Basic Patching Procedures

Before

After

Before and after pictures of a sandstone repair project in Washington, D.C. Jahn M70 repair mortar was used to patch damaged sandstone.

Disclaimer: This guide shows the basic application and finishing techniques for Jahn M70, M90 and M100. This guide is not a substitute for the Jahn Certification Class. Onsite conditions and the scope of work could dictate alternative application techniques.

REFER TO SPECIFICATION SECTION 040142

Date	1/10/20
Checked	DLF
Drawn	TT/JG

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

#	
1	ISSUE TO BID 11/23/20

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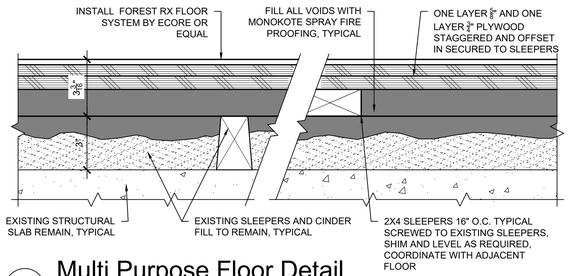
LAN ASSOCIATES
engineering • planning • architecture • surveying
252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

MASONRY DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 109272024820

A8.21



1 A8.30 Multi Purpose Floor Detail

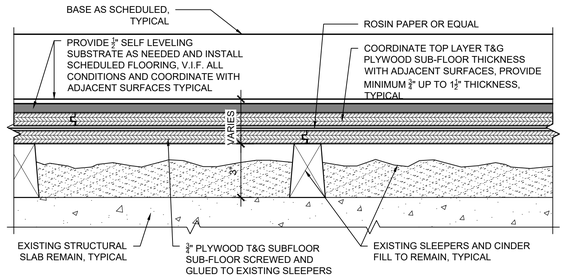
3" = 1'-0"

Flooring Replacement Wall Base Notes

1. WHERE A ROOM RECEIVING FLOORING REPLACEMENT HAS VINYL WALL BASE, THE CONTRACTOR SHALL REMOVE THE EXISTING VINYL WALL BASE IN ITS ENTIRETY AND DISCARD. THE CONTRACTOR SHALL INSTALL NEW VINYL WALL BASE ONCE THE FLOORING INSTALLATION IS COMPLETE. REFER TO THE INTERIOR FINISH SCHEDULE ON DRAWING A6.20. VINYL BASE COLOR TO BE PER OWNER'S SELECTION.
2. WHERE A ROOM RECEIVING FLOORING REPLACEMENT HAS A WOOD BASE MOLDING WITH AN APPLIED QUARTER ROUND MOLDING, THE CONTRACTOR SHALL REMOVE THE EXISTING QUARTER ROUND MOLDING TO FACILITATE FLOORING REPLACEMENT. CONTRACTOR SHALL SALVAGE WOOD BASE MOLDING BEHIND QUARTER ROUND AND PROTECT DURING CONSTRUCTION. IF WOOD BASE IS DAMAGED, CONTRACTOR SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THE OWNER. ONCE THE FLOORING REPLACEMENT IS COMPLETE, THE CONTRACTOR SHALL INSTALL NEW QUARTER ROUND MOLDING ONTO EXISTING WOOD BASE MOLDING, AND PRIME & PAINT TO MATCH THE EXISTING WOOD BASE MOLDING.

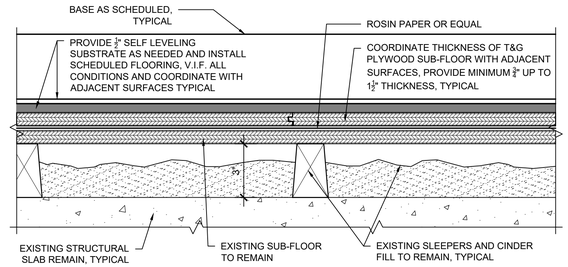
3 A8.30 RESERVED

N.T.S.



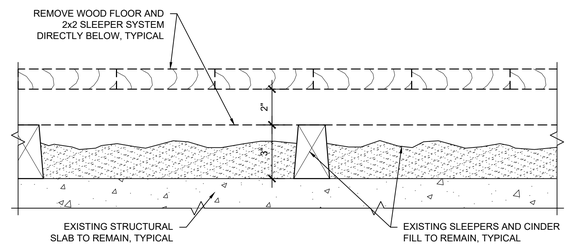
5 A8.30 Classroom Floor Detail

3" = 1'-0"



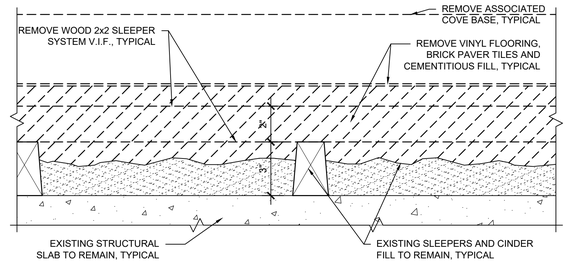
7 A8.30 Classroom Floor Detail

3" = 1'-0"



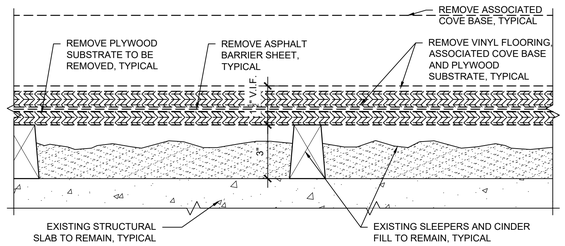
2 A8.30 Multi Purpose Floor Detail - Demo

3" = 1'-0"



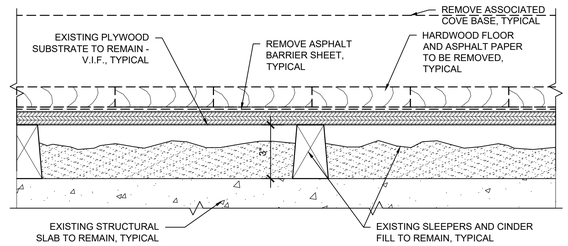
4 A8.30 Paver Tile Floor Detail - Demo

3" = 1'-0"



6 A8.30 Classroom Floor Detail - Demo

3" = 1'-0"

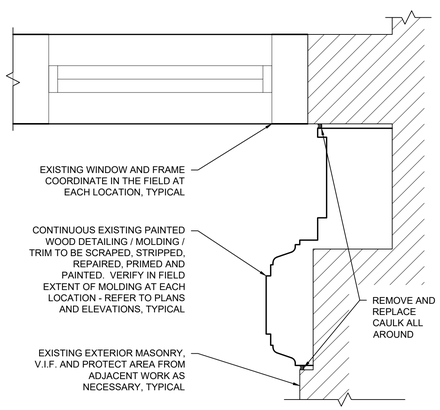


8 A8.30 Classroom Floor Detail - Demo

3" = 1'-0"

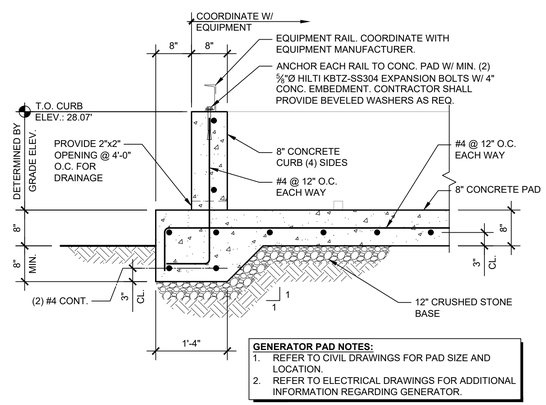
Flooring Notes

1. COORDINATE THICKNESS OF T&G PLYWOOD SUB-FLOOR WITH ADJACENT SURFACES, PROVIDE MINIMUM ¾" UP TO 1½" THICKNESS ONE LAYER OR TWO, TYPICAL
2. SCREW T&G PLYWOOD TO EXISTING SUBSTRATE 12" O.C. BOTH WAYS USE MINIMUM 2" LONG STRONG-DRIVE WSNTL SUBFLOOR SCREW BY SIMPSON STRONG-TIE OR EQUAL, COORDINATE SCREW LENGTH IN THE FIELD / INSTALL PLYWOOD SHEETS IN A STAGGERED PATTERN, SCREWS ARE TO BE COORDINATED WITH DETERMINED PLYWOOD THICKNESS, TYPICAL
3. INSTALL ROSIN PAPER OR EQUAL UNDER THE SCHEDULED PLYWOOD SUBSTRATE, TYPICAL



9 A8.30 Wood Door Trim Detail

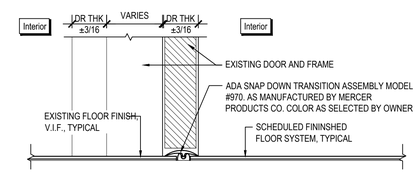
3" = 1'-0"



GENERATOR PAD NOTES:
1. REFER TO CIVIL DRAWINGS FOR PAD SIZE AND LOCATION.
2. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING GENERATOR.

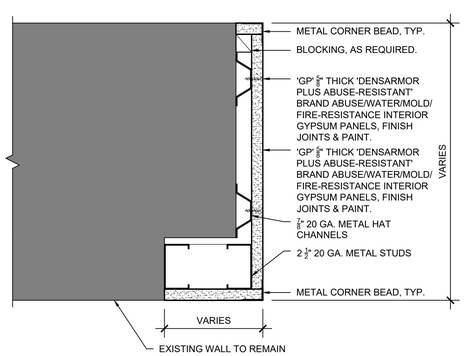
11 A8.30 Typical Exterior Generator Pad

3/4" = 1'-0"



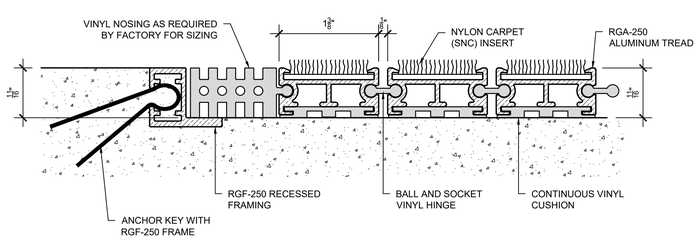
10 A8.30 Door Sill Detail

3"= 1'-0"



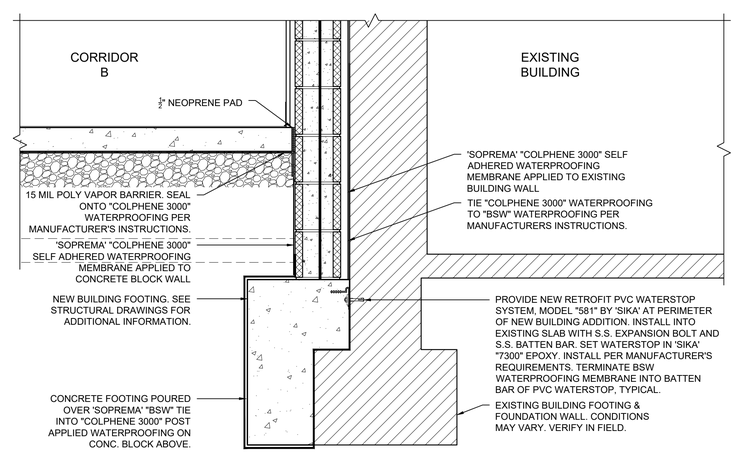
13 A8.30 Typ. Wall Edge Finish Detail

3" = 1'-0"



12 A8.30 Recessed Floor Mat Detail

1'-0" = 1'-0"



GC TO REMOVE ANY AND ALL EXISTING BUILDING WATERPROOFING FROM THE FOOTING/FOUNDATION WALL AS REQUIRED BY THE MANUFACTURER TO FACILITATE THE INSTALLATION OF NEW POST APPLIED WATERPROOFING.

14 A8.30 Footing Waterproofing Detail

1" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	AK

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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engineering • planning • architecture • surveying
252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202A830

A8.30

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE NEW YORK STATE ENERGY CODE, INTERNATIONAL MECHANICAL CODE, ASHRAE GUIDELINES, SMACNA, COUNTY GUIDELINES, NEC, NATIONAL STANDARD PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. FOR NEW YORK STATE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH THE EXISTING CONDITIONS AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS AND COMMENCING WORK, AND INCLUDE ALL SUCH NECESSARY WORK BASED ON THIS SITE FAMILIARIZATION IN THIS BID.
3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT WORKMEN, OCCUPANTS AND THE PUBLIC FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, APPROVALS, ETC. PRIOR TO COMMENCING WORK AND SHALL SECURE CERTIFICATE OF OCCUPANCY UPON COMPLETION OF WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF ANY SALVAGED OR EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
8. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
9. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF THE EXISTING FACILITY.
10. CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER, AND AS NECESSARY FOR A PROPER OPERATIONAL SYSTEM.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF HIS WORK AND TO ENSURE THE OWNER'S FACILITY TO BE OPERATIONAL.
12. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL QUESTIONS TO ENGINEER PRIOR TO COMMENCING WORK.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK.
14. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL WRITTEN OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
15. CONTRACTOR SHALL SUBMIT, WHERE REQUIRED BY THE ARCH/ENGR, SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL PRIOR TO THE START OF FABRICATION OF THOSE ITEMS. THIS INCLUDES ALL EQUIPMENT, SCHEMATIC DUCTWORK AND PIPING LAYOUT, ETC. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL EQUIPMENT ETC WILL FIT (WITH PROPER MAINTENANCE CLEARANCES) AT ALL LOCATIONS. REVIEW OF SHOP DRAWINGS/SUBMITTALS BY THE ARCH/ENGR DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING THE CURRENT MODEL NUMBERS, TYPE, & FEATURES OF ALL EQUIPMENT'S & MATERIALS.
16. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH CERTIFICATES OF INSURANCE PRIOR TO STARTING THE WORK.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURES AS NEEDED TO COMPLETE THE NEW WORK.
18. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE TO WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION OF THE ENGINEER AND THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF EQUAL OR BETTER QUALITY.
19. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
20. THE ARCHITECT/ENGINEER HAS THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, UNAUTHORIZED, OR WORK DONE CONTRARY TO THE THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
21. CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD OF TWO (2) YEARS AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
22. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
23. CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WRECKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.
24. ENGINEER/OWNER MAY ASK THE CONTRACTOR TO PROVIDE DETAILED SHOP DRAWINGS & SUBMITTALS OF ANY/ALL PARTS OF THIS PROJECT WHICH THE ENGINEER/OWNER DEEMS NECESSARY FOR.

HVAC GENERAL NOTES

1. PROCURE AND PAY ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT THE WORK SHOWN. OBTAIN AND PAY FOR ALL FEES.
2. COMPLY WITH ALL FEDERAL, STATE AND MUNICIPAL LAWS AND CODES, ORDINANCES, RULES AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED.
3. GUARANTEE HVAC SYSTEM FOR A PERIOD OF TWO (2) YEARS FROM OWNER'S ACCEPTANCE TO BE FREE FROM DEFECTS AND REPAIR OR REPLACE, AT NO COST TO OWNER, FAILURES OR DEFECTS.
4. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL HIS DEBRIS.
5. BALANCE HVAC SYSTEM TO QUANTITIES INDICATED. CONTRACTOR TO SUBMIT FOUR (4) SETS OF AIR, WATER AND UNIT BALANCING REPORT TO ENGINEER/OWNER PRIOR TO FINAL ACCEPTANCE OF THE SYSTEM.
6. BIDDERS FOR THIS WORK SHALL VISIT THE PREMISES AND CAREFULLY EXAMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING BIDS. NOT ALL EXISTING CONDITIONS HAVE BEEN IDENTIFIED ON DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER. OF ALL DISCREPANCIES PRIOR TO SUBMITTING BID.
7. ALL BIDDERS SHALL ALSO FAMILIARIZE THEMSELVES WITH THE MEANS OF ENTRANCE AND EXIT AT THE PROPERTY AND ALL OTHER INFORMATION NECESSARY TO PROPERLY CARRY OUT THE WORK.
8. THE CONTRACTOR SHALL, WITH THE APPROVAL OF THE ENGINEER AND WITHOUT ADDITIONAL COST TO THE OWNER, MAKE ALL NECESSARY CHANGES OR MODIFICATIONS TO LOCATIONS AS MAY BE NECESSARY TO SUIT REQUIREMENTS AND CONDITIONS FOR THE PROPER AND CONVENIENTLY ACCESSIBLE LOCATIONS OF ALL PARTS OF EACH SYSTEM.
9. SMALL DETAILS ARE NOT USUALLY SHOWN OR SPECIFIED BUT NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OR WORK SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL COST.
10. THE CONTRACTOR SHALL NOTE THAT ALL SERVICE CONNECTIONS MAY NOT BE SHOWN IN TRUE POSITIONS. EACH BIDDER IS CAUTIONED, THEREFORE, TO VERIFY SAME WITH FIELD CONDITIONS.
11. CONTRACTOR SHALL CHECK FOR INTERFERENCE AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR INSTALLATION OF PIPING AND DUCTWORK.
12. IF AN ITEM OF EQUIPMENT OTHER THAN THE ITEM(S) SPECIFIED IS APPROVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST ARISING OUT OF ADDITIONAL OR CHANGED GENERAL CONSTRUCTION AND MECHANICAL WORK REQUIRED TO ACCOMMODATE THE SUBSTITUTED EQUIPMENT.
13. ALL EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS DIRECTIONS AND RECOMMENDATIONS.
14. PROVIDE TWO (2) SETS OF SPARE FILTERS FOR THE INSTALLED RTUs, AC UNITS, & OTHER EQUIPMENT.
15. PROVIDE TWO-YEAR PREVENTIVE & REGULAR MAINTENANCE SERVICE FOR ALL INSTALLED HVAC/MECHANICAL SYSTEM. THIS INCLUDES A MINIMUM OF TWO (2) PERIODIC SERVICE VISITS ANNUALLY TO INSPECT, TEST & CHECK ALL COMPONENTS OF HVAC UNITS AND ANY ADDITIONAL VISITS REQUIRED IF ANY HVAC UNIT FAILS. ALL NECESSARY BELT ALIGNMENTS, PROPER REFRIGERANT CHARGE, PROPER OPERATIONS OF ALL DAMPERS, DDC CONTROLS, ETC. IS INCLUDED IN THIS SCOPE OF WORK. PROVIDE SERVICE REPORT FOR EACH VISIT.
16. PROVIDE FIRE DAMPERS/ACCESS DOORS AT ALL DUCT PENETRATIONS THROUGH CORRIDORS, SLABS AND OTHER RATED PARTITIONS, IRRESPECTIVE OF WHETHER IT IS INDICATED ON THE DRAWINGS OR NOT.
17. PROVIDE FIRE STOPPING AROUND ALL OPENINGS FOR DUCT, PIPING, CONDUIT, ETC. PENETRATIONS THROUGH CORRIDORS, SLABS AND OTHER RATED PARTITIONS.
18. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND RESTORATION OF AREAS OF MECHANICAL REMOVALS.
19. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUMPSTER/CONTAINER SERVICES AND LABOR TO KEEP THE BUILDING FREE OF DEBRIS.
20. CONTRACTOR TO PROVIDE TWO (2) SEPARATE TRAINING SESSIONS (FOUR WEEKS APART) ON PROPER OPERATION & TROUBLESHOOTING OF NEW HVAC SYSTEM & CONTROLS.
21. CONTRACTOR TO NOTE THAT BOTH DWGS. & SPECS. ARE COLLECTIVELY A PART OF BID REQUIREMENTS. IN CASE OF ANY DIFFERENCES BETWEEN VARIOUS DWGS. OR BETWEEN DWGS. & SPECS, THE MOST STRINGENT REQUIREMENT WILL PREVAIL.
22. CONTRACTOR TO SUBMIT FOUR (4) SETS OF OPERATION & MAINTENANCE MANUALS, INCLUDING A SUMMARY SHEET OF ALL EQUIPMENT MANUFACTURERS/MODEL'S/SERIAL #'S, SHOP DRAWING SUBMITTALS, WARRANTY INFORMATION, O&M MANUALS, PROJECT INFORMATION, CONTACT DETAILS & AS-BUILT DRAWINGS.
23. CONTRACTOR TO PROVIDE FOUR (4) SETS AND AN ELECTRONIC COPY OF AS-BUILT DRAWINGS OF THE ENTIRE SYSTEM.

GENERAL CONSTRUCTION NOTES

1. REFER TO "MULTIPLE PRIME CONTRACT NOTES" ON DWG. A1.00 & SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS FOR CONTRACTORS' RESPONSIBILITIES.
2. CORE DRILLING SHALL BE PERFORMED BY EACH INDIVIDUAL PRIME CONTRACT. REFER TO SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. SEE DRAWINGS FOR APPROXIMATE LOCATIONS OF PIPES, DUCT, ETC.
3. GC TO REFER TO MECHANICAL DRAWINGS FOR PAINTING, FURNISHING AND INSTALLING ACCESS PANELS, CUTOUT LOCATIONS, ETC.
4. EC SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, PIPING & DUCTWORK. VERIFY IN FIELD.
5. GC SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. VERIFY IN FIELD.
6. EACH INDIVIDUAL PRIME CONTRACTOR IS REQUIRED TO PATCH (TO MATCH EXISTING), IMMEDIATELY AFTER REMOVAL, ALL OPENINGS WHERE EXISTING EQUIPMENT, PIPES, ETC. ARE BEING REMOVED. SEAL OPENING WITH 2 HOUR FIRE BARRIER CAULK. SEE GENERAL LOCATIONS ON MECHANICAL DEMOLITION PLANS. SEE SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

HVAC MATERIALS

EQUIPMENT:

- REFER TO SCHEDULES FOR UNIT MANUFACTURER, SIZE, AND CAPACITY DATA.

DUCTWORK:

- INDOOR AIR DUCTWORK, EXCEPT AS INDICATED BELOW, SHALL BE GALVANIZED STEEL CONSTRUCTION. WEIGHTS AND CONSTRUCTION DETAIL SHALL BE IN ACCORDANCE WITH THE LATEST ASHRAE GUIDE AND/OR SMACNA STANDARDS. MIN. 24 GAUGE DUCTWORK SHALL BE USED FOR THE PROJECT.
- OUTDOOR AIR INTAKE DUCTWORK SHALL BE ALUMINUM CONSTRUCTION CLASS "A" SEALED.
- ALL ROUND DUCTWORK SHALL BE DOUBLE-WALL SPIRAL DUCTWORK (SOLID W/ 1" THICK 3-LBS DENSITY INSULATION).
- FLEXIBLE DUCTWORK: SHALL NOT EXCEED FOUR (4) FEET IN LENGTH. FOR ANY HORIZONTAL FLEX DUCT BRANCH TO A CEILING DIFFUSER, FURNISH A 90° BRACE TO MAINTAIN A LONG RADIUS ELBOW TO THE DIFFUSER (TITUS MAKE, MODEL "FLEXRIGHT" OR APPROVAL EQUAL MANUFACTURERS).
- FIRE DAMPER: GREENHECK MAKE, MODEL FD-150 TYPE B (BLADE OUT OF AIRSTREAM), 1-1/2 HR RATED (UNLESS OTHERWISE NOTED) UL-555 LABELED DAMPER W/ STANDARD FRAME (OR APPROVED EQUAL). PROVIDE WW/ A RETAINING ANGLE & ACCESS DOOR.

AIR DEVICES:

- CD - TITUS MAKE, MODEL TMS (12"x12" OR 24"x24" MODULE W/ ROUND NECK, STEEL CONSTRUCTION).
- RG - TITUS MAKE, MODEL TMS (12"x12" OR 24"x24" MODULE W/ ROUND NECK, STEEL CONSTRUCTION).
- SR - TITUS MAKE, MODEL 300RS, STEEL CONSTRUCTION.
- SG - TITUS MAKE, MODEL 350RL, STEEL CONSTRUCTION.

NOTES:
1. ALL CEILING DIFFUSERS LOCATED IN GYPSUM BOARD AND/OR CONCEALED SPLINE CEILINGS SHALL BE PROVIDED WITH FRAME TYPE FOR SURFACE MOUNTING.
2. PROVIDE FACTORY INSTALLED 90° BLANK-OFF PLATE(S) IN ALL 2 AND 3 WAY DIFFUSERS.
3. COLOR OF NEW AIR INLETS & OUTLETS SHALL MATCH THE CEILING COLOR.
4. NC RATING OF ALL CDs SHALL NOT EXCEED 20. NC RATING OF ALL RARs/EARs SHALL NOT EXCEED 22.

PIPING:

- HOT WATER PIPING SHALL BE HARD COPPER TYPE "L" W/ SOLDERED FITTINGS. PROVIDE DIELECTRIC FITTINGS FOR CONNECTION OF DISSIMILAR PIPING.
- REFRIGERANT PIPING SHALL BE HARD COPPER TYPE "K" WITH BRAZED FITTINGS.
- CONDENSATE DRAIN PIPING SHALL BE HARD COPPER TYPE "L" WITH WROUGHT COPPER SOLDERED FITTINGS. REFER TO PLUMBING DRAWINGS.

INSULATION:

- ALL DUCTWORK (SA, RA, OA, ETC.) SHALL BE INSULATED W/ EXTERNAL DUCT INSULATION, UNLESS OTHERWISE NOTED ON DRAWINGS.
- EXTERNAL DUCTWORK INSULATION: NEW DUCTWORK SHALL BE INSULATED WITH A MINIMUM OF R-6 (2" THICK, MIN. 1LB. DENSITY) FIBERGLASS DUCT INSULATION PER THE REQUIREMENTS OF IECC 2015, WITH REINFORCED FOIL FACED FLAME RESISTANT VAPOR BARRIER, ADHERE TO DUCT W/ SEALED LAPS AND TAPED JOINTS.
- INTERNALLY LINED DUCT: 1" THICK, MIN. 2 LB. DENSITY RIGID INSULATION ADHERED TO DUCT. DUCTS WIDER THAN 12" TO HAVE WELDED PINS AND WASHERS. DUCT DIMENSIONS AS INDICATED ARE CLEAR INSIDE DUCT DIMENSIONS.

  NOTES:
  1. ALL SUPPLY & RETURN AIR DUCTWORK SHALL BE INTERNALLY LINED FOR A MIN. OF 25' TO AND FROM ANY RTU OR AHU.
  2. ALL SUPPLY AIR DUCTWORK SHALL BE INTERNALLY LINED FOR A MINIMUM OF 15' DOWNSTREAM OF ALL HVAC BOXES.
- DUCT INSULATION NOTE: PROVIDE A MINIMUM 6" OVERLAP WHERE INTERNAL INSULATION ENDS AND EXTERNAL INSULATION BEGINS.
- FRESH AIR INTAKE AND EXPOSED DUCT: 1" THICK, MIN. 2 LB. DENSITY RIGID FIBERGLASS DUCT INSULATION WITH FOIL FACING VAPOR BARRIER FASTENED WITH WELDED CLIPS, CEMENTED JOINTS WITH ALUMINUM TAPE.
- HEATING PIPING INSULATION: REFER TO SPEC. SECTION FOR PIPE INSULATION REQUIREMENTS.
- INTERIOR REFRIGERANT SUCTION & HOT GAS BYPASS PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL).
- EXTERIOR REFRIGERANT SUCTION, LIQUID & HOT GAS BYPASS PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL) & BE PROVIDED WITH MIN. 30 MIL PVC FIELD APPLIED JACKETS.
- CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL). REFER TO PLUMBING DRAWINGS.

SYMBOLS

NOT TO SCALE

	=	ROUND SUPPLY AIR CEILING DIFFUSER (CD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS.
	=	4-WAY SUPPLY AIR CEILING DIFFUSER (SAD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS.
	=	RETURN AIR REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.
	=	EXHAUST AIR REGISTER (EAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.
	=	SUPPLY AIR CEILING REGISTER/GRILLE (SAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.
	=	RETURN AIR REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLAN
	=	POINT OF CONNECTION OF NEW PIPING/DUCTWORK TO EXISTING
	=	POINT OF DISCONNECTION OF NEW PIPING/DUCTWORK TO EXISTING
W" x D"	=	INDICATES HARD DUCT WITH INTERNAL LINING (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH).
W" x D"	=	INDICATES HARD DUCT (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH).
	=	DUCT TURN UP (SUPPLY, RETURN, EXHAUST)
	=	DUCT TURN DOWN (SUPPLY, RETURN, EXHAUST)
DSD/AD	=	DUCT SMOKE DETECTOR WITH ACCESS DOOR
FD/AD	=	FIRE DAMPER WITH ACCESS DOOR
FD/SD/AD	=	COMBINATION FIRE & SMOKE DAMPER WITH ACCESS DOOR
VD	=	VOLUME DAMPER
BDD	=	BACK DRAFT DAMPER
U	=	UNDERCUT DOOR
T	=	INDICATES NEW ROOM THERMOSTAT
CLASSROOM 201	=	ROOM NAME ROOM NUMBER
1	=	REVISION
	=	PIPE TURN UP
	=	PIPE TURN DOWN
OR	=	BALL VALVE
	=	CHECK VALVE
	=	UNION
	=	PRESSURE GAUGE
	=	TEMPERATURE GAUGE
	=	STRAINER
	=	CONTROL VALVE
	=	OS&Y VALVE

ABBREVIATIONS

&	=	AND
@	=	AT
Ø	=	DIAMETER OR ROUND
(E)	=	EXISTING
(N)	=	NEW
AC	=	AIR CONDITIONING UNIT
ACC	=	AIR-COOLED CONDENSING
AD	=	ACCESS DOOR
ADD'L	=	ADDITIONAL
AFF	=	ABOVE FINISHED FLOOR
ALC	=	AUTOMATED LOGIC CONTROL
ALT	=	ALTERNATE
ALUM	=	ALUMINUM
APPROX	=	APPROXIMATE
AS	=	AIR SEPARATOR
BC	=	BLOWER COIL
BDD	=	BACK DRAFT DAMPER
BLDG	=	BUILDING
BMS	=	BUILDING MANAGEMENT SYSTEM
CD	=	CEILING DIFFUSER
CFM	=	CUBIC FEET PER MINUTE
CLG	=	CEILING
CO	=	CLEANOUT
CP	=	CONDENSATE DRAIN PUMP
CV	=	CONVECTOR
DDC	=	DIRECT DIGITAL CONTROL
DIA	=	DIAMETER
DN	=	DOWN
DWG	=	DRAWING
EA	=	EXHAUST AIR
EAR	=	EXHAUST AIR REGISTER
EAT	=	ENTERING AIR TEMPERATURE
EC	=	ELECTRICAL CONTRACTOR
EF	=	EXHAUST FAN
ET	=	EXPANSION TANK
EXIST	=	EXISTING
EWT	=	ENTERING WATER TEMPERATURE
FAI	=	FRESH AIR INTAKE
FC	=	FLEXIBLE CONNECTION
FCU	=	FAN COIL UNIT
FD	=	FIRE DAMPER
FTR	=	FINED TUBE RADIATION/BASEBOARD
GC	=	GENERAL CONTRACTOR
HTP	=	HEAT TRANSFER PACKAGE
HVAC	=	HEAT/VENTILATION/AIR CONDITIONING
HWH	=	HOT WATER HEATER
IAQ	=	INDOOR AIR QUALITY
ID	=	INSIDE DIAMETER (DIM)
IN	=	INCH
INFO	=	INFORMATION
LAT	=	LEAVING AIR TEMPERATURE
LDB	=	LEAVING DRY BULB
LWB	=	LEAVING WET BULB
LWT	=	LEAVING WATER TEMPERATURE
MAX	=	MAXIMUM
MC	=	MECHANICAL CONTRAOCTOR
MECH	=	MECHANICAL
MFR	=	MANUFACTURER
MIN	=	MINIMUM
NK	=	NECK SIZE
NTS	=	NOT TO SCALE
OA	=	OUTSIDE AIR
OD	=	OUTSIDE DIAMETER
PC	=	PLUMBING CONTRACTOR
RA	=	RETURN AIR
RAR	=	RETURN AIR REGISTER
RG	=	RETURN GRILLE
RM	=	ROOM
RTU	=	ROOFTOP HVAC UNIT
SA	=	SUPPLY AIR
SAD	=	SUPPLY AIR DIFFUSER
SAR	=	SUPPLY AIR REGISTER
SD	=	SMOKE DAMPER
SG	=	RETURN AIR SIDE GRILLE
SPEC	=	SPECIFICATION
SR	=	SUPPLY AIR SIDE REGISTER
SS	=	STAINLESS STEEL
TG	=	TRANSFER AIR GRILLE
TYP	=	TYPICAL
UH	=	UNIT HEATER
UV	=	UNIT VENTILATOR
VD	=	VOLUME DAMPER
VFD	=	VARIABLE FREQUENCY DRIVE
VIF	=	VERIFY IN FIELD
VRF	=	VARIABLE REFRIGERANT FLOW
W/	=	WITH
WMS	=	WIRE MESH SCREEN

Date	1/10/20
Checked	
Drawn	IM/MAM

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Revisions:

#	
1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

MECHANICAL NOTES

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

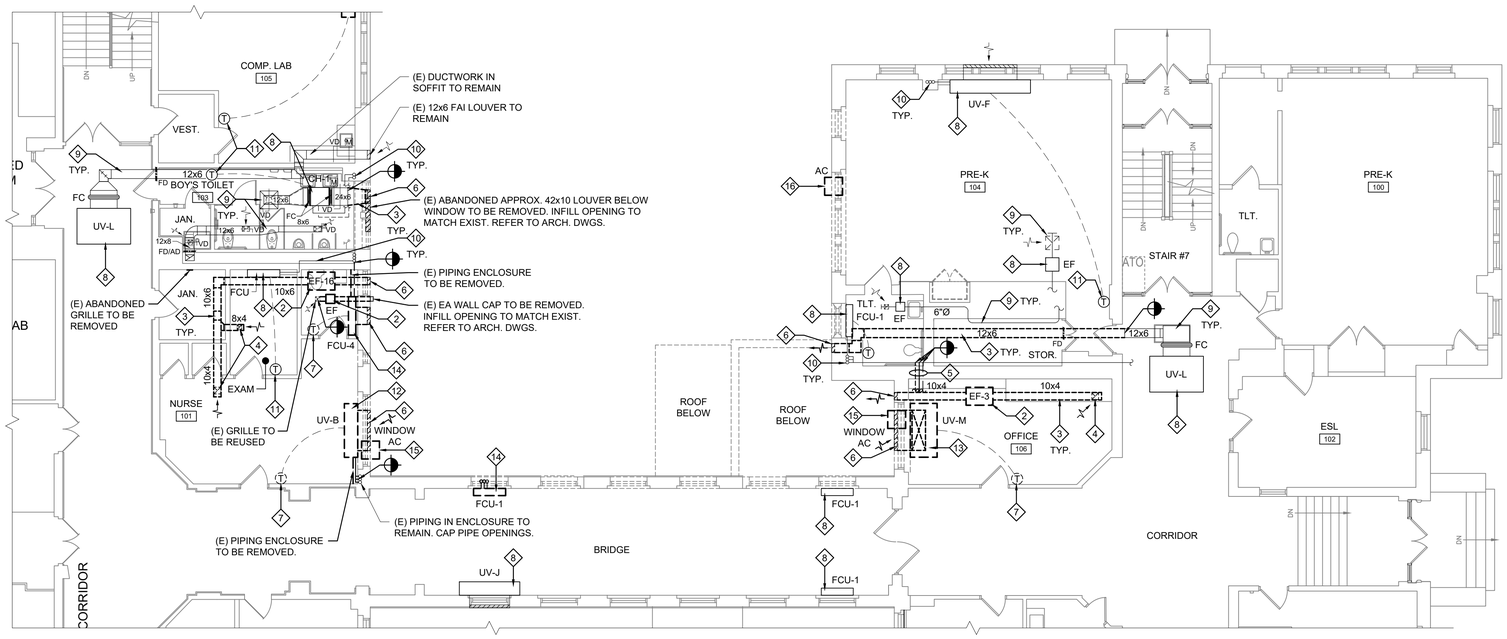
Job No. 4.1092.72.2

File No. 10927202M201

M0.01

GENERAL MECHANICAL DEMOLITION NOTES

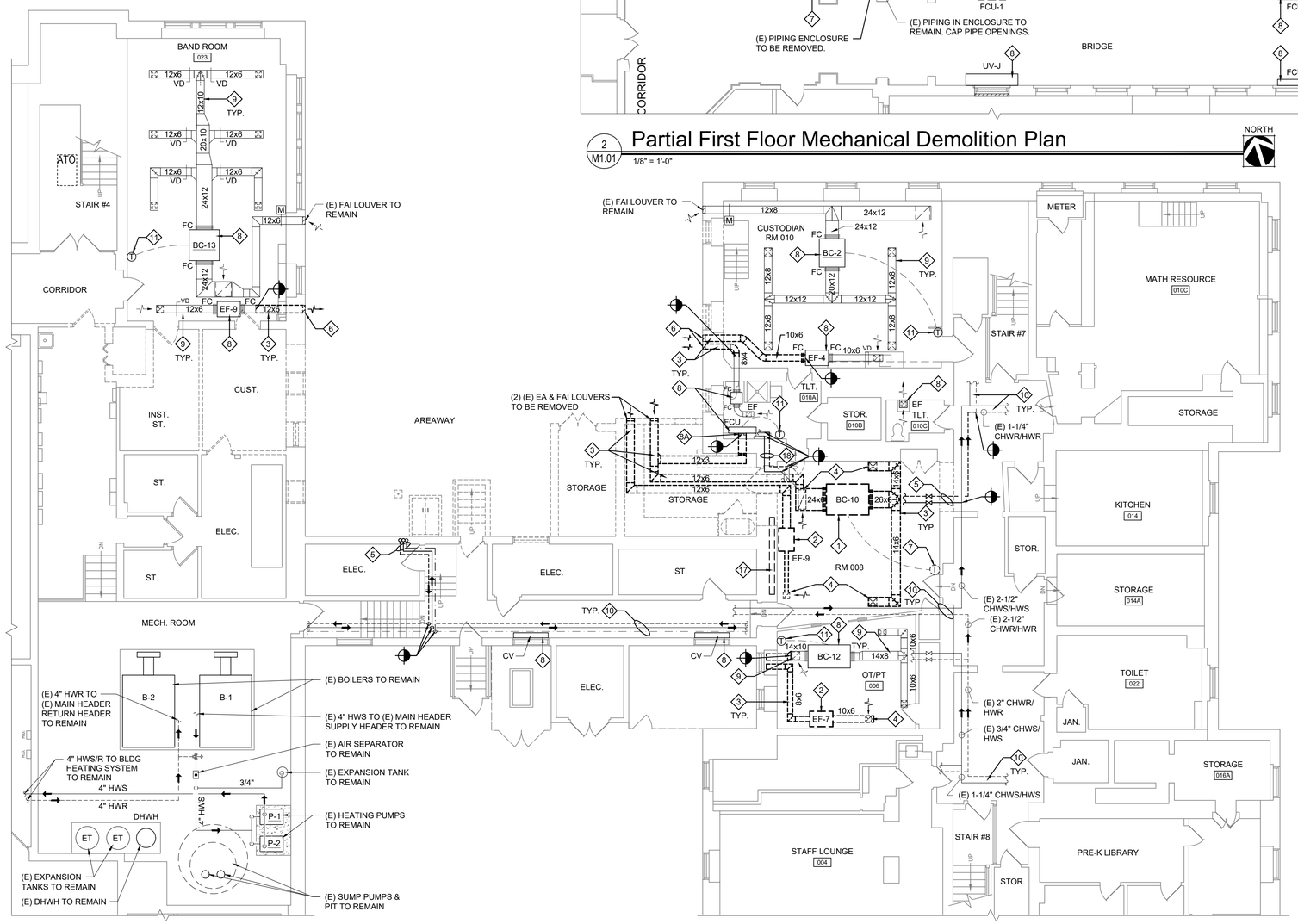
1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, AIR INLETS/OUTLETS, PIPING, ETC. SHOWN ON DRAWINGS ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. SOME OF DUCT & PIPE ROUTING COULD BE DIFFERENT FROM THAT SHOWN. MC IS REQUIRED TO PROVIDE DUCTWORK SHOP DRAWINGS IDENTIFYING THEM.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING SYSTEM, GRIDS & TILES TO ACCOMMODATE MECHANICAL DEMOLITION. REINSTALL TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES. MODEL & STYLE OF NEW CLG. TILES SHALL MATCH EXISTING.
4. EC IS RESPONSIBLE TO TEMPORARILY REMOVE/RELOCATE EXIST. LIGHT FIXTURES, ELECTRICAL DEVICES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE MECH. DEMOLITION. REINSTALL TO MATCH EXISTING. CHECK IN FIELD.
5. GC IS RESPONSIBLE TO PATCH ALL OPENINGS ON CLGS, WALLS & ROOF WHERE EXIST. MECH. EQUIPMENT, DUCTWORK & PIPING ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS & PAINT TO MATCH EXISTING.
6. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED / REPLACED AT EXPENSE OF THE GC.
7. MC IS RESPONSIBLE TO ISOLATE/SHUTDOWN & DRAIN-DOWN EXIST. HOT WATER HEATING PIPING SYSTEM TO ACCOMMODATE REMOVAL OF EXIST. HWS/HWR PIPING ASSOCIATED W/ DEMOLISHED MECH. EQUIPMENT AND INSTALLATION OF NEW MECH. EQUIPMENT & PIPING. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.
8. MC TO REMOVE ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DWGS. GC TO PATCH AND PAINT WALLS TO MATCH EXISTING.



2 M1.01 Partial First Floor Mechanical Demolition Plan

1/8" = 1'-0"

NORTH



1 M1.01 Partial Lower Level Mechanical Demolition Plan

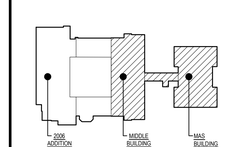
1/8" = 1'-0"

NORTH

ITEM #	MECHANICAL DEMOLITION KEY NOTES
1	EXIST. CEILING-MOUNTED BLOWER COIL (BC) UNITS TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, AIR INLETS & OUTLETS, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
2	EXIST. CEILING-MOUNTED EXHAUST FAN (EF) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, INLETS, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
3	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, SUPPORTS, FILTERS, CONTROLS, ETC. TO BE REMOVED.
4	EXIST. AIR INLET/OUTLET & RELATED DUCTWORK, DAMPER, ETC. TO BE REMOVED. REPLACE OPENING TO MATCH EXIST. CLG.
5	EXIST. PIPING (DUAL-TEMP. HWS/HWR, CHWS/CHWR, CONDENSATE DRAIN, ETC.) TO BE REMOVED. CAP PIPE OPENINGS ON EXIST. MAINS.
6	EXIST. EA / FAI LOUVERS TO BE REMOVED. INFILL OPENING TO MATCH EXIST. REFER TO ARCH. DWGS.
7	EXIST. THERMOSTAT & SENSOR & RELATED CONTROL WIRING, ETC. TO BE REMOVED. INFILL OPENING & PAINT TO MATCH EXIST.
8	EXIST. MECHANICAL EQUIPMENT (BCs, UVs, FCUs, CHs, CVs, EFs, WINDOW ACs, ETC.) TO REMAIN.
8A	CUT EXIST. DUCT TO TOP OF CHASE & CAP OPENING. PAINT DUCT TO MATCH EXIST. CHASE.
9	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, AIR INLET/OUTLET, SUPPORTS, FILTERS, CONTROLS, ETC. TO REMAIN.
10	EXIST. PIPING (DUAL-TEMP, CHWS/HWS, CHWR/HWR, CONDENSATE DRAIN, ETC.) TO REMAIN.
11	EXIST. THERMOSTAT & SENSOR TO REMAIN.
12	EXIST. FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. PIPING, VALVES, LOUVER, ELECTRICAL, CONTROLS, ETC. CAP PIPE OPENINGS ON EXIST. MAINS IN CHASE.
13	EXIST. CEILING-MOUNTED HORIZONTAL UNIT VENTILATOR (UV) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, DAMPERS, PIPING, VALVES, LOUVER, ELECTRICAL, CONTROLS, ETC. CAP PIPE OPENINGS ON EXIST. MAINS. REPLACE OPENING TO MATCH EXIST. CLG SYSTEM.
14	EXIST. FLOOR-MOUNTED VERTICAL FAN COIL UNIT (FCU) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, DAMPERS, PIPING, VALVES, LOUVER, ELECTRICAL, CONTROLS, ETC. CAP PIPE OPENINGS ON EXIST. MAINS.
15	EXIST. WINDOW AC TO BE REMOVED. TURN THE UNIT OVER TO SCHOOL PERSONNEL FOR REUSE.
16	EXIST. WINDOW AC TO BE RELOCATED & REUSED.
17	EXIST. ABANDONED STEAM RADIATOR TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. PIPING, STEAM TRAPS, VALVES, SUPPORTS, CONTROLS, ETC. REFER TO ARCH DWGS. FOR NEW WALL.
18	EXIST. DUAL-TEMP PIPING (CHWS/HWS & CHWR/HWR) TO BE REMOVED & ROUTED TO ACCOMMODATE FOR NEW CONSTRUCTION.

NOTE - FLOOR REPLACEMENT MECHANICAL DEMOLITION WORK:
MECHANICAL EQUIPMENT (UNIT VENTILATORS (UVs), FAN COIL UNITS (FCUs), CABINET HEATERS (CHs), ETC.) & ASSOCIATED PIPE ENCLOSURES TO BE TEMPORARILY REMOVED AND SHALL BE REINSTALLED DURING FLOOR REPLACEMENT PROJECT ARE NOT SHOWN ON MECHANICAL DRAWINGS. MECHANICAL CONTRACTOR (MC) SHALL REFER TO ARCHITECTURAL DEMOLITION PLANS DRAWINGS A1.02 THRU A1.05, ARCHITECTURAL PROPOSED PLANS DRAWINGS A2.02 THRU A2.05 AND PROPOSED FLOOR FINISH PLANS A2.20 THRU A2.25 AND REFER TO NOTES #106 ON DEMOLITION KEY NOTES DRAWING A1.00 AND #82 ON CONSTRUCTION KEY NOTES DRAWING A2.00 FOR SCOPE OF WORK REQUIRED BY THE MC ASSOCIATED WITH THE FLOOR REPLACEMENT PROJECT. MC IS RESPONSIBLE FOR THIS SCOPE OF WORK.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

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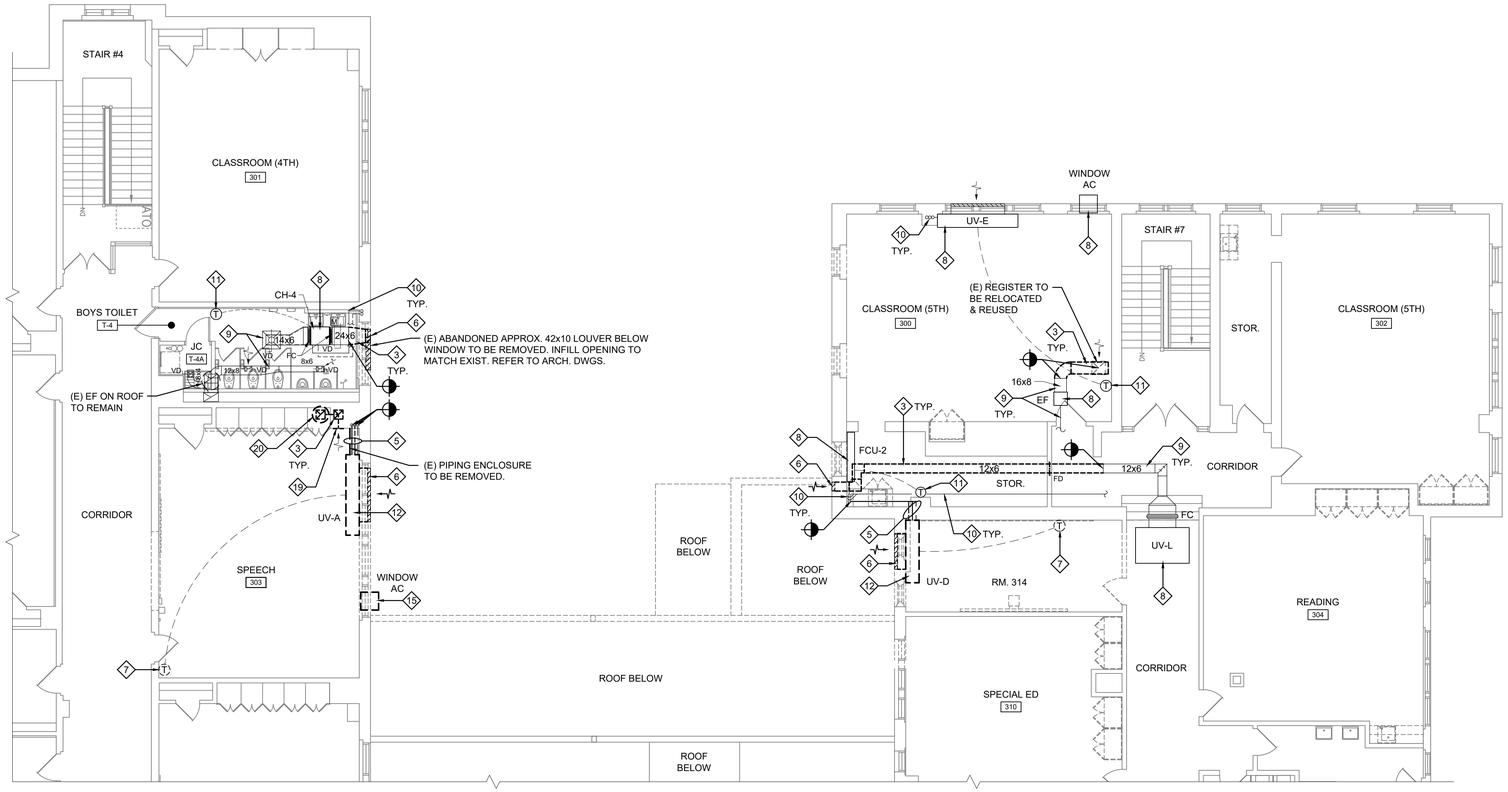
MECHANICAL DEMOLITION PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202M201

M1.01

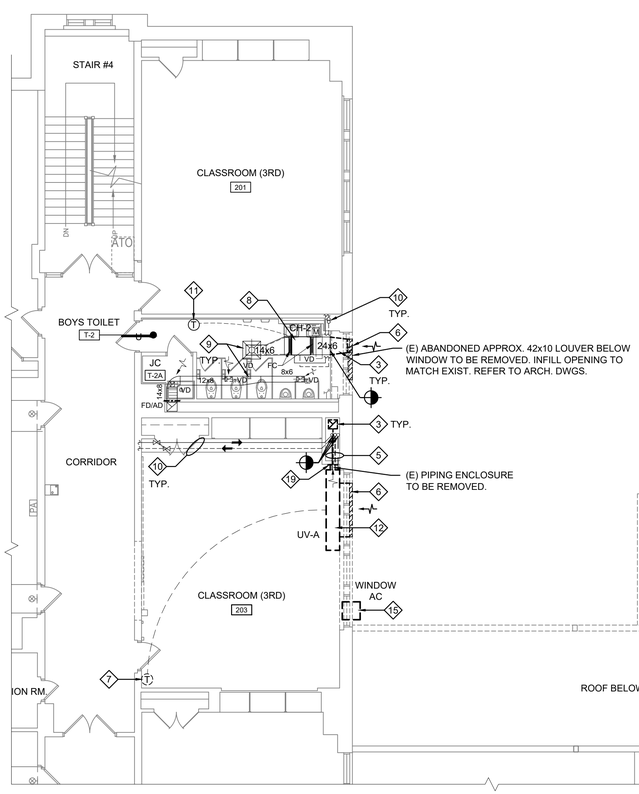
ITEM #	MECHANICAL DEMOLITION KEY NOTES
3	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, SUPPORTS, FILTERS, CONTROLS, ETC. TO BE REMOVED.
5	EXIST. PIPING (DUAL-TEMP, HWS/HWR, CHWS/CHWR, CONDENSATE DRAIN, ETC.) TO BE REMOVED. CAP PIPE OPENINGS ON EXIST. MAINS.
6	EXIST. EA / FAI LOUVERS TO BE REMOVED. INFILL OPENING TO MATCH EXIST. REFER TO ARCH. DWGS.
7	EXIST. THERMOSTAT & SENSOR & RELATED CONTROL WIRING, ETC. TO BE REMOVED. INFILL OPENING & PAINT TO MATCH EXIST.
8	EXIST. MECHANICAL EQUIPMENT (BCs, UVs, FCUs, CHs, CVs, EFs, WINDOW ACs, ETC.) TO REMAIN.
9	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, AIR INLET/OUTLET, SUPPORTS, FILTERS, CONTROLS, ETC. TO REMAIN.
10	EXIST. PIPING (DUAL-TEMP, CHWS/HWS, CHWR/HWR, CONDENSATE DRAIN, ETC.) TO REMAIN.
11	EXIST. THERMOSTAT & SENSOR TO REMAIN.
12	EXIST. FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. PIPING, VALVES, LOUVER, ELECTRICAL, CONTROLS, ETC. CAP PIPE OPENINGS ON EXIST. MAINS IN CHASE.
14	EXIST. FLOOR-MOUNTED VERTICAL FAN COIL UNIT (FCU) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, DAMPERS, PIPING, VALVES, LOUVER, ELECTRICAL, CONTROLS, ETC. CAP PIPE OPENINGS ON EXIST. MAINS.
15	EXIST. WINDOW AC TO BE REMOVED. TURN THE UNIT OVER TO SCHOOL PERSONNEL FOR REUSE.
16	EXIST. WINDOW AC TO BE RELOCATED & REUSED.
19	EXIST. EA GRILLE ON CHASE TO BE REMOVED. INFILL & PAINT OPENING TO MATCH EXIST.
20	EXIST. EF ON ROOF TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, DAMPERS, CURB, ELECTRICAL, CONTROLS, ETC. PATCH ROOF & DECK OPENING & SEAL AIRTIGHT & WATERTIGHT. ALL ROOF CUTTING, PATCHING & REPAIRS SHALL BE PERFORMED BY A FACTORY-CERTIFIED ROOFING CONTRACTOR.



2 M1.02 Partial Third Floor Mechanical Demolition Plan

1/8" = 1'-0"

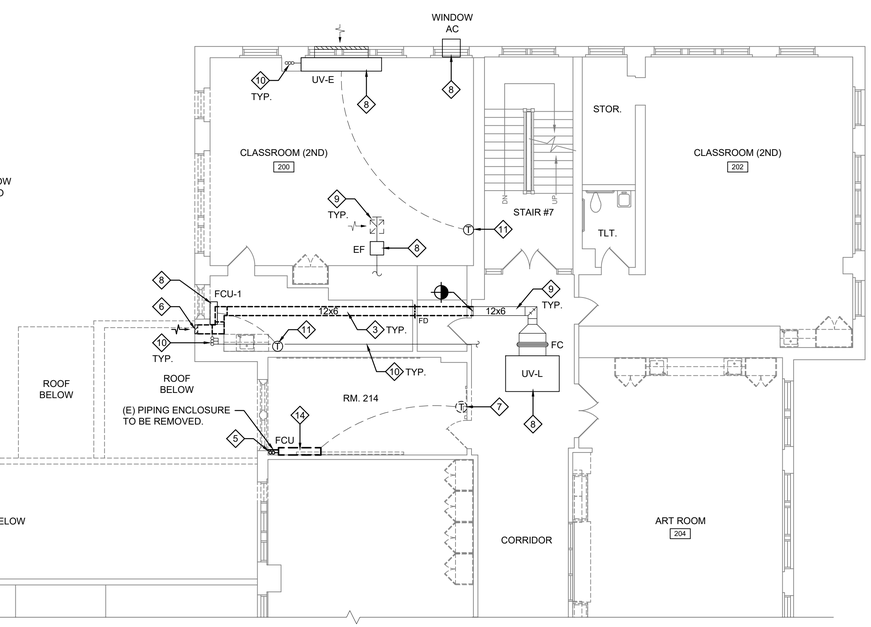
NORTH



1 M1.02 Partial Second Floor Mechanical Demolition Plan

1/8" = 1'-0"

NORTH

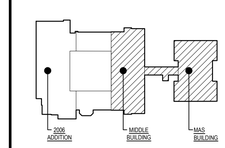


GENERAL MECHANICAL DEMOLITION NOTES

1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, AIR INLETS/OUTLETS, PIPING, ETC. SHOWN ON DRAWINGS ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. SOME OF DUCT & PIPE ROUTING COULD BE DIFFERENT FROM THAT SHOWN. MC IS REQUIRED TO PROVIDE DUCTWORK SHOP DRAWINGS IDENTIFYING THEM.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING SYSTEM, GRIDS & TILES TO ACCOMMODATE MECHANICAL DEMOLITION. REINSTALL TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES. MODEL & STYLE OF NEW CLG. TILES SHALL MATCH EXISTING.
4. EC IS RESPONSIBLE TO TEMPORARILY REMOVE/RELOCATE EXIST. LIGHT FIXTURES, ELECTRICAL DEVICES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE MECH. DEMOLITION. REINSTALL TO MATCH EXISTING. CHECK IN FIELD.
5. GC IS RESPONSIBLE TO PATCH ALL OPENINGS ON CLGS, WALLS & ROOF WHERE EXIST. MECH. EQUIPMENT, DUCTWORK & PIPING ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS & PAINT TO MATCH EXISTING.
6. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED / REPLACED AT EXPENSE OF THE GC.
7. MC IS RESPONSIBLE TO ISOLATE/SHUTDOWN & DRAIN-DOWN EXIST. HOT WATER HEATING PIPING SYSTEM TO ACCOMMODATE REMOVAL OF EXIST. HWS/HWR PIPING ASSOCIATED W/ DEMOLISHED MECH. EQUIPMENT AND INSTALLATION OF NEW MECH. EQUIPMENT & PIPING. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.
8. MC TO REMOVE ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DWGS. GC TO PATCH AND PAINT WALLS TO MATCH EXISTING.

NOTE - FLOOR REPLACEMENT MECHANICAL DEMOLITION WORK: MECHANICAL EQUIPMENT (UNIT VENTILATORS (UVs), FAN COIL UNITS (FCUs), CABINET HEATERS (CHs), ETC.) & ASSOCIATED PIPE ENCLOSURES TO BE TEMPORARILY REMOVED AND SHALL BE REINSTALLED DURING FLOOR REPLACEMENT PROJECT ARE NOT SHOWN ON MECHANICAL DRAWINGS. MECHANICAL CONTRACTOR (MC) SHALL REFER TO ARCHITECTURAL DEMOLITION PLANS DRAWINGS A1.02 THRU A1.05, ARCHITECTURAL PROPOSED PLANS DRAWINGS A2.02 THRU A2.05 AND PROPOSED FLOOR FINISH PLANS A2.20 THRU A2.25 AND REFER TO NOTES #106 ON DEMOLITION KEY NOTES DRAWING A1.00 AND #62 ON CONSTRUCTION KEY NOTES DRAWING A2.00 FOR SCOPE OF WORK REQUIRED BY THE MC ASSOCIATED WITH THE FLOOR REPLACEMENT PROJECT. MC IS RESPONSIBLE FOR THIS SCOPE OF WORK.

MAMARONECK AVENUE SCHOOL



Key Plan

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PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

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MECHANICAL DEMOLITION PLANS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

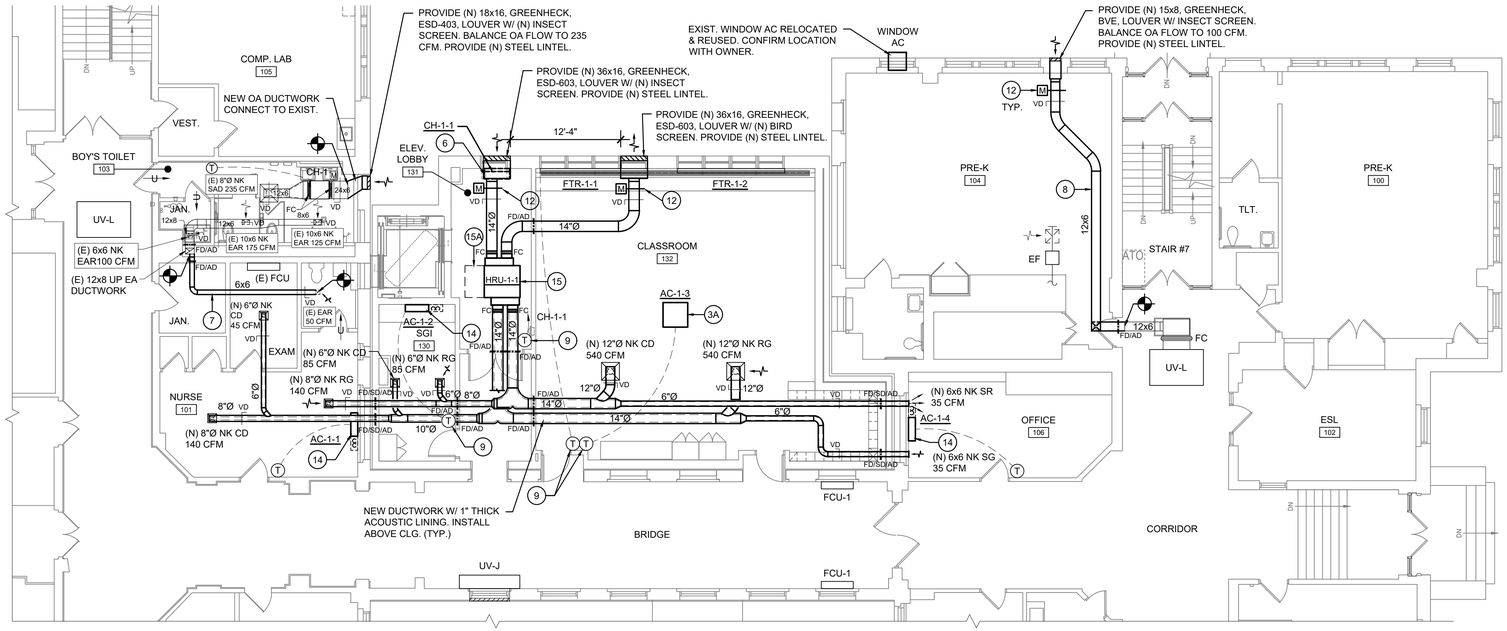
Job No. 4.1092.72.2

File No. 10927202M201

M1.02

GENERAL MECHANICAL CONSTRUCTION NOTES

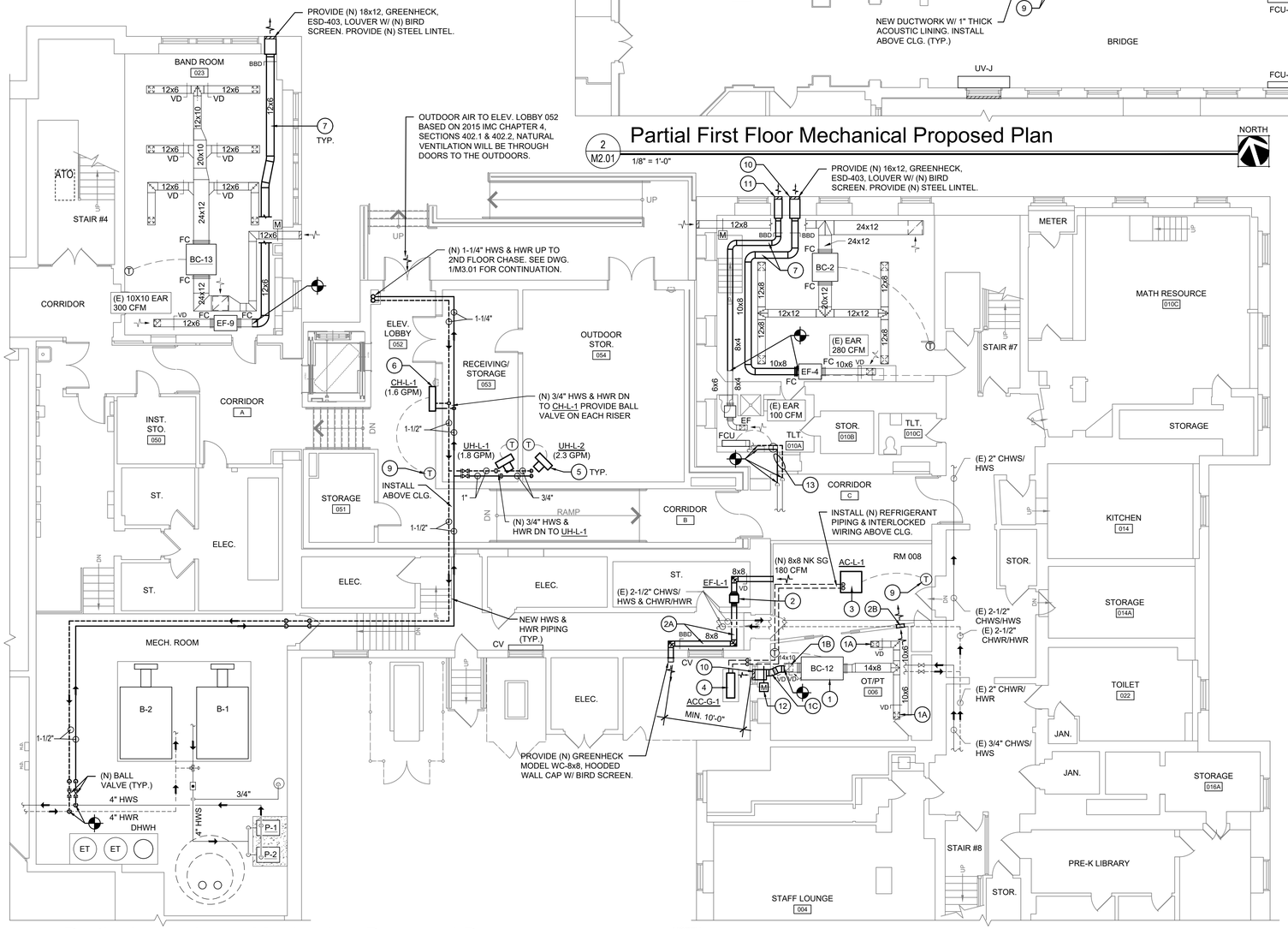
1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING GRIDS, CEILING TILES, LIGHT FIXTURES, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE DEMOLITION OF EXIST. HVAC/HV EQUIPMENT, DUCTWORK, PIPING, ETC. REINSTALL TO MATCH EXIST.
4. GC IS REPONSIBLE TO SAWCUT & CORE DRILL EXIST. WALLS / FLOORS / CLG. FOR NEW DUCTWORK / PIPING / CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE GC.
6. MC IS RESPONSIBLE TO ISOLATE / SHUT-DOWN & DRAIN-DOWN EXIST. HEATING PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
7. ALL NEW DDC WIRING SHALL BE INSTALLED CONCEALED ABOUT EXIST. / NEW SUSPENDED CLG. WHEREVER NEW THERMOSTAT ARE INSTALLED ON NEW WALLS, ALL NEW DDC WIRING FROM MECH. EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED CONCEALED IN WALLS. WHEREVER NEW THERMOSTATS ARE INSTALLED ON EXIST. MASONRY WALL, ALL NEW DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
8. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE GC.
9. ALL EXIST. DUCTWORK & AIR INLETS/OUTLETS THAT ARE SHOWN TO REMAIN & BE REUSED SHALL BE VACUUM-CLEANED THOROUGHLY TO BE FREE OF DUST & DEBRIS. PROVIDE PHOTO DOCUMENTATION BEFORE & AFTER CLEANING.



Partial First Floor Mechanical Proposed Plan

2 M2.01 — 1/8" = 1'-0"

NORTH



Partial Lower Level Mechanical Proposed Plan

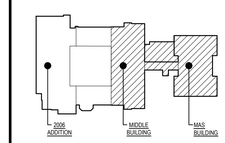
1 M2.01 — 1/8" = 1'-0"

NORTH

ITEM #	MECHANICAL CONSTRUCTION KEY NOTES
1	EXIST. BLOWER COIL UNIT (BC-12) TO BE BALANCED TO 500 SA CFM & OA FLOW TO 180 CFM.
1A	EXIST. SUPPLY AIR OUTLETS TO BE REUSED. PROVIDE & INSTALL NEW VOLUME DAMPERS ON EXIST DUCTWORK & BALANCE TO 250 CFM EACH.
1B	EXIST. RETURN AIR INLET TO BE REUSED. PROVIDE & INSTALL NEW VOLUME DAMPER ON EXIST DUCTWORK/ REGISTER & BALANCE TO 320 CFM.
1C	NEW OUTDOOR AIR DUCTWORK.
2	PROVIDE & INSTALL NEW CEILING-HUNG EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES. INTERLOCK W/ EXIST. BC-12. INSTALL BELOW EXIST. ELECTRICAL CONDUITS & PIPING. BALANCE EA FLOW TO 180 CFM.
2A	INSTALL NEW 8x8 EA DUCTWORK MIN. 6'-10" A.F.F. & BELOW EXISTING CONDUITS & PIPING.
2B	(2) NEW 12x12 TRANSFER GRILLES, ONE ON EACH SIDE OF WALL. COORDINATE FINAL LOCATION WITH THE OPERATION OF THE SLIDING DOOR.
3	PROVIDE & INSTALL NEW CEILING-MOUNTED CASSETTE TYPE AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, BUILT-IN CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
3A	PROVIDE & INSTALL NEW VRF CEILING-MOUNTED CASSETTE TYPE AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, BUILT-IN CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
4	PROVIDE & INSTALL NEW AIR-COOLED CONDENSING UNIT OF SIZE & CAPACITIES SCHEDULED ON NEW 6" HIGH CONCRETE PAD, COMPLETE W/ ALL PIPING, VALVES, SUPPORTS, CONTROLS & ALL ASSOCIATED APPURTENANCES.
5	PROVIDE & INSTALL NEW HOT WATER UNIT HEATER OF SIZE & CAPACITIES SCHEDULED AT CEILING, COMPLETE W/ ALL PIPING, VALVES, INSULATION, SUPPORTS, ELECTRICAL, CONTROLS, & ALL ASSOCIATED APPURTENANCES . SEE PIPING DETAIL 5/M6.01.
6	PROVIDE & INSTALL NEW FLOOR-MOUNTED CABINET HEATER OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, & ALL ASSOCIATED APPURTENANCES.
7	INSTALL NEW EXHAUST AIR DUCTWORK ABOVE CEILING & CONNECT TO EXIST.
8	INSTALL NEW FRESH AIR INTAKE DUCTWORK ABOVE CEILING & CONNECT TO EXIST.
9	PROVIDE NEW THERMOSTAT IN LOCKABLE ENCLOSURE.
10	PROVIDE NEW GREENHECK, ESD-403, LOUVER W/ (N) INSECT SCREEN ON UPPER WINDOW PANEL. BALANCE OUTDOOR AIR FLOW TO 180 CFM.
11	PROVIDE (N) 12x8, GREENHECK, BVE, LOUVER W/ (N) BIRD SCREEN. PROVIDE (N) STEEL LINTEL.
12	NEW MOTORIZED DAMPER TO INTERLOCK W/ ASSOCIATED MECHANICAL EQUIPMENT.
13	NEW DUAL-TEMP PIPING (CHWS/HWS & CHWR/HWR) ROUTED TO ACCOMMODATE FOR NEW CONSTRUCTION.
14	PROVIDE & INSTALL NEW VRF WALL-MOUNTED DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
15	PROVIDE & INSTALL NEW HEAT RECOVER UNIT (HRU) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL DUCTWORK, DAMPERS, LOUVERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
15A	HRU EQUIPMENT SERVICE CLEARANCE. MINIMUM 24" SPACING FROM SERVICE COVER SIDE.

NOTE - FLOOR REPLACEMENT MECHANICAL PROPOSED WORK: MECHANICAL EQUIPMENT (UNIT VENTILATORS (UVs), FAN COIL UNITS (FCUs), CABINET HEATERS (CHs), ETC.) & ASSOCIATED PIPE ENCLOSURES TO BE TEMPORARILY REMOVED AND SHALL BE REINSTALLED DURING FLOOR REPLACEMENT PROJECT ARE NOT SHOWN ON MECHANICAL DRAWINGS. MECHANICAL CONTRACTOR (MC) SHALL REFER TO ARCHITECTURAL DEMOLITION PLANS DRAWINGS A1.02 THRU A1.05, ARCHITECTURAL PROPOSED PLANS DRAWINGS A2.02 THRU A2.05 AND PROPOSED FLOOR FINISH PLANS A2.20 THRU A2.25 AND REFER TO NOTES #106 ON DEMOLITION KEY NOTES DRAWING A1.00 AND #82 ON CONSTRUCTION KEY NOTES DRAWING A2.00 FOR SCOPE OF WORK REQUIRED BY THE MC ASSOCIATED WITH THE FLOOR REPLACEMENT PROJECT. MC IS RESPONSIBLE FOR THIS SCOPE OF WORK.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

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NYSED PROJECT # 66-07-01-03-0-004-030

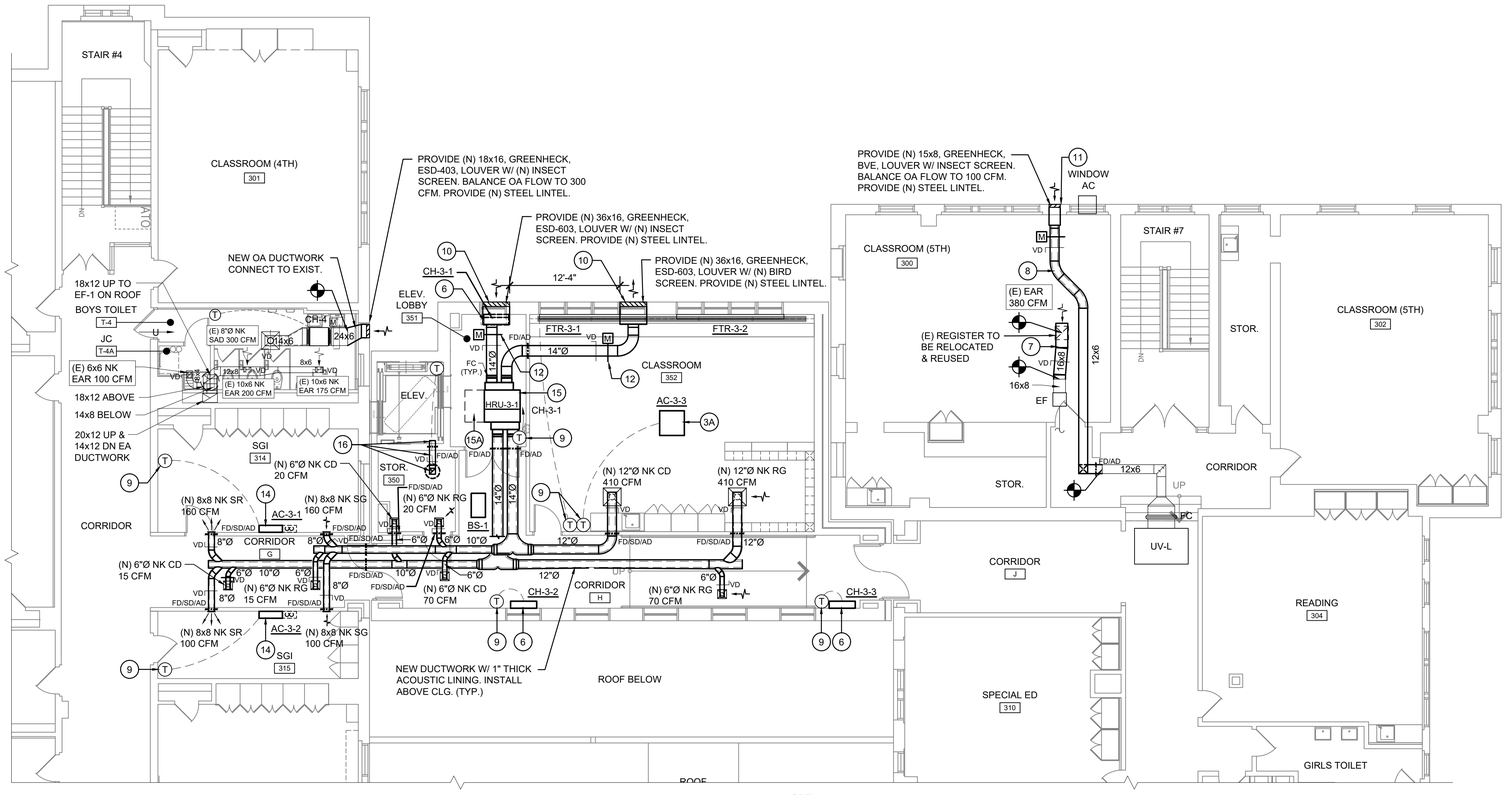
MECHANICAL PROPOSED PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202M201

M2.01

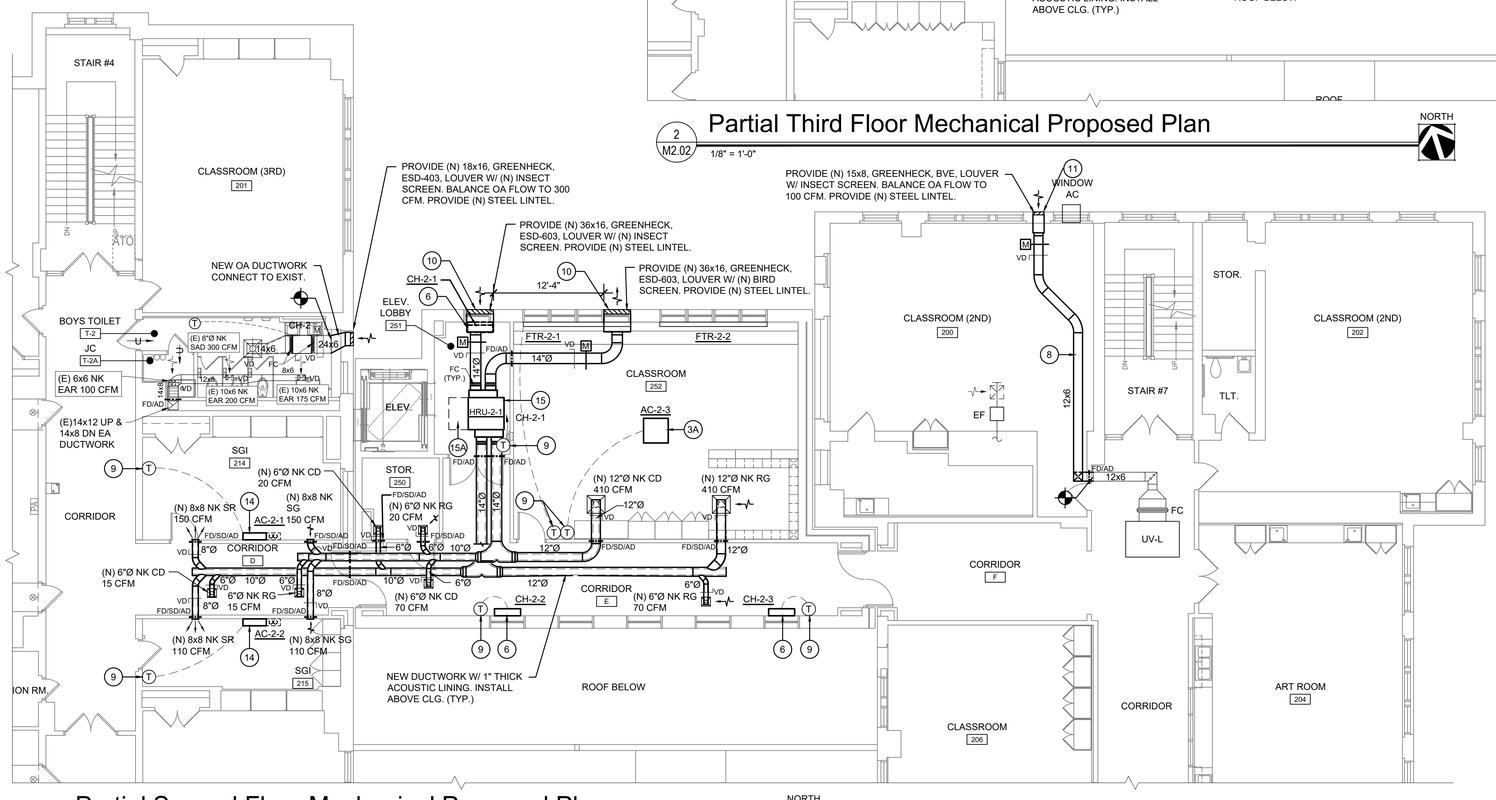
ITEM #	MECHANICAL CONSTRUCTION KEY NOTES
3A	PROVIDE & INSTALL NEW VRF CEILING-MOUNTED CASSETTE TYPE AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, BUILT-IN CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
4	PROVIDE & INSTALL NEW AIR-COOLED CONDENSING UNIT OF SIZE & CAPACITIES SCHEDULED ON NEW 6" HIGH CONCRETE PAD, COMPLETE W/ ALL PIPING, VALVES, SUPPORTS, CONTROLS & ALL ASSOCIATED APPURTENANCES.
6	PROVIDE & INSTALL NEW FLOOR-MOUNTED CABINET HEATER OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, & ALL ASSOCIATED APPURTENANCES.
7	INSTALL NEW EXHAUST AIR DUCTWORK ABOVE CEILING & CONNECT TO EXIST.
8	INSTALL NEW FRESH AIR INTAKE DUCTWORK ABOVE CEILING & CONNECT TO EXIST.
9	PROVIDE NEW THERMOSTAT IN LOCKABLE ENCLOSURE.
10	PROVIDE NEW GREENHECK, LOUVER W/ (N) BIRD SCREEN.
11	PROVIDE (N) 15x8, GREENHECK, BVE, LOUVER W/ (N) INSECT SCREEN.
12	NEW MOTORIZED DAMPER TO INTERLOCK W/ ASSOCIATED MECHANICAL EQUIPMENT.
13	NEW DUAL-TEMP (CHW/HW) PIPING RELOCATED TO ACCOMMODATE FOR NEW CONSTRUCTION.
14	PROVIDE & INSTALL NEW VRF WALL-MOUNTED DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
15	PROVIDE & INSTALL NEW HEAT RECOVER UNIT (HRU) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL DUCTWORK, DAMPERS, LOUVERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
15A	HRU EQUIPMENT SERVICE CLEARANCE. MINIMUM 24" SPACING FROM SERVICE COVER SIDE.
16	NEW 8x8 ELEVATOR EXHAUST AIR DUCTWORK ABOVE CEILING. OPEN-ENDED DUCTWORK IN ELEVATOR SHAFT UP TO EF-R-1 ON ROOF. SEE DWG 2/M3.02 FOR CONTINUATION. REFER TO DETAIL 6/M6.01 FOR ADDITIONAL INFORMATION.



2 M2.02 Partial Third Floor Mechanical Proposed Plan

1/8" = 1'-0"

NORTH



1 M2.02 Partial Second Floor Mechanical Proposed Plan

1/8" = 1'-0"

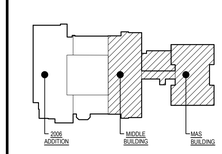
NORTH

GENERAL MECHANICAL CONSTRUCTION NOTES

1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING GRIDS, CEILING TILES, LIGHT FIXTURES, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE DEMOLITION OF EXIST. HVAC/HV EQUIPMENT, DUCTWORK, PIPING, ETC. REINSTALL TO MATCH EXIST.
4. GC IS REPONSIBLE TO SAWCUT & CORE DRILL EXIST. WALLS / FLOORS / CLG. FOR NEW DUCTWORK / PIPING / CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE GC.
6. MC IS RESPONSIBLE TO ISOLATE / SHUT-DOWN & DRAIN-DOWN EXIST. HEATING PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
7. ALL NEW DDC WIRING SHALL BE INSTALLED CONCEALED ABOUT EXIST. / NEW SUSPENDED CLG. WHEREVER NEW THERMOSTAT ARE INSTALLED ON NEW WALLS, ALL NEW DDC WIRING FROM MECH. EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED CONCEALED IN WALLS. WHEREVER NEW THERMOSTATS ARE INSTALLED ON EXIST. MASONRY WALL, ALL NEW DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
8. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE GC.
9. ALL EXIST. DUCTWORK & AIR INLETS/OUTLETS THAT ARE SHOWN TO REMAIN & BE REUSED SHALL BE VACUUM-CLEANED THOROUGHLY TO BE FREE OF DUST & DEBRIS. PROVIDE PHOTO DOCUMENTATION BEFORE & AFTER CLEANING.

NOTE - FLOOR REPLACEMENT MECHANICAL PROPOSED WORK: MECHANICAL EQUIPMENT (UNIT VENTILATORS (UVs), FAN COIL UNITS (FCUs), CABINET HEATERS (CHs), ETC.) & ASSOCIATED PIPE ENCLOSURES TO BE TEMPORARILY REMOVED AND SHALL BE REINSTALLED DURING FLOOR REPLACEMENT PROJECT ARE NOT SHOWN ON MECHANICAL DRAWINGS. MECHANICAL CONTRACTOR (MC) SHALL REFER TO ARCHITECTURAL DEMOLITION PLANS DRAWINGS A1.02 THRU A1.05, ARCHITECTURAL PROPOSED PLANS DRAWINGS A2.02 THRU A2.05 AND PROPOSED FLOOR FINISH PLANS A2.20 THRU A2.25 AND REFER TO NOTES #106 ON DEMOLITION KEY NOTES DRAWING A1.00 AND #82 ON CONSTRUCTION KEY NOTES DRAWING A2.00 FOR SCOPE OF WORK REQUIRED BY THE MC ASSOCIATED WITH THE FLOOR REPLACEMENT PROJECT. MC IS RESPONSIBLE FOR THIS SCOPE OF WORK.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

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LAN ASSOCIATES
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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

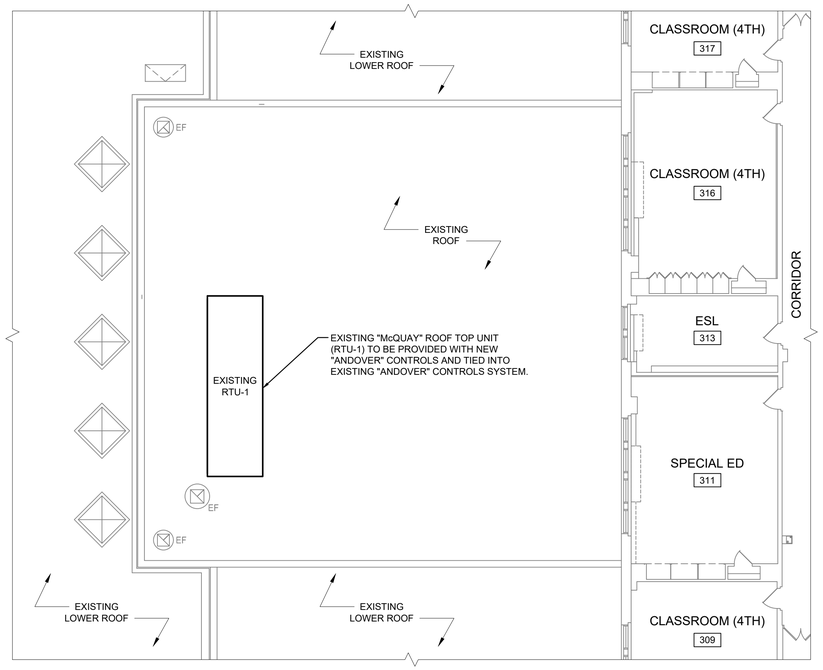
MECHANICAL PROPOSED PLANS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272O2M201

M2.02



2 M2.03 Roof/Third Floor DDC Replacement Plan

3/32" = 1'-0"

NORTH

EXISTING PACKAGED ROOFTOP AIR CONDITIONING UNIT SCHEDULE

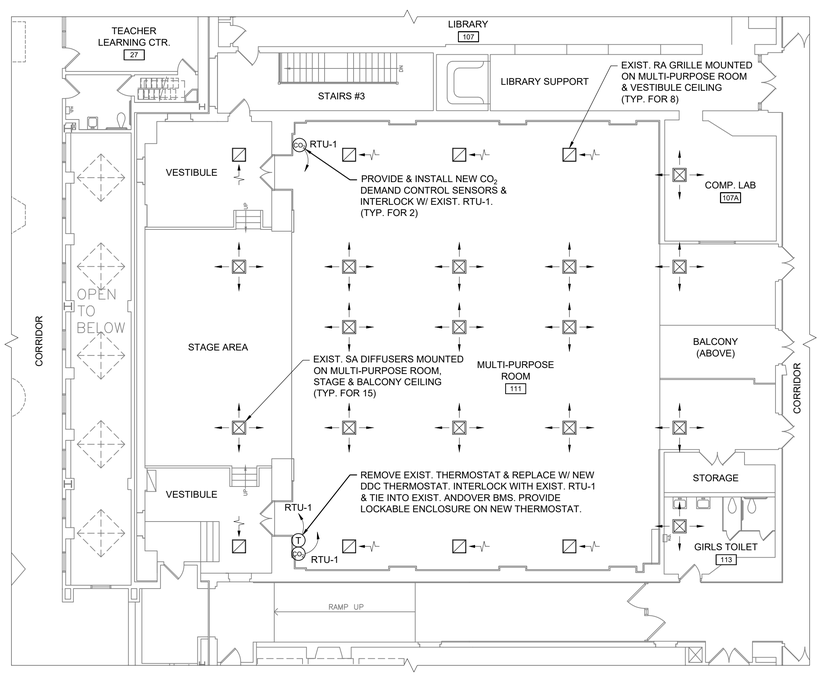
FOR INFORMATION ONLY

TAG No.	AREA SERVED	MFG'R	MODEL No.	SUPPLY (CFM)	MIN. O.A. (CFM)	MAX. O.A. (CFM)	SUPPLY FAN DATA				RETURN/SPILL FAN DATA				COOLING COIL						ELECTRICAL DATA			EFFICIENCY		UNIT WT. (LBS)	REMARKS
							ESP. (IN)	RPM	BHP	HP	CFM	ESP. (IN)	RPM	BHP	HP	COOLING (TMBH)	COOLING (SMBH)	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	MCA	MOP	VOLT/PH/HZ	PRE-FILTER	FINE-FILTER		
RTU-1	MULTIPURPOSE ROOM	McQUAY	RPS050C	15,000	1,250	6,200	1.25	638	10.7	15	14,000	0.75	525	3.0	3.0	642.7	470.6	83	68	54.3	54.0	249.4	250	208/3/60	30%	95%	10,800	WITH THERMOSTAT, CONVENIENCE OUTLET, DISCONNECT SWITCH, DUAL ENTHALPY AIR SIDE ECONOMIZER, CO2 DEMAND CONTROLLED VENTILATION, SMOKE DETECTOR AND SHUTDOWN.

VENTILATION INDEX

UNIT SERVED	ROOM NAME & NUMBER	OCCUPANCY CLASSIFICATION	FLOOR AREA (SQ. FT.)	REQUIRED O.A. PER SQ. FT.	REQUIRED O.A. FOR SPACE	OCCUPANCY DENSITY PER 1,000 FT²	OCCUPANCY BASED ON DENSITY	VENTILATION OCCUPANCY	REQUIRED O.A. PER PERSON	REQUIRED O.A. FOR OCCUPANCY	TOTAL REQUIRED O.A. (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	ZONE MIN. O.A. REQUIRED (CFM)	ACTUAL O.A. (CFM)	EXHAUST AIR (CFM)	REMARKS
EXIST. RTU-1	MULTI-PURPOSE ROOM 111 & STAGE	MULTIUSE ASSEMBLY	4,972	0.06	298	100	497	497	7.5	3,728	4,026	0.8	5,032	5,050		
EXIST. RTU-1	BALCONY	AUDITORIUMS	1,034	0.06	62	150	155	160	5	800	862	0.8	1,078	1,100		SEE NOTE #1.
EXIST. RTU-1	VESTIBULES	CORRIDORS	564	0.06	34	-	-	-	-	-	34	0.8	42	50		SEE NOTE #2.
												TOTAL	6,152	6,200		

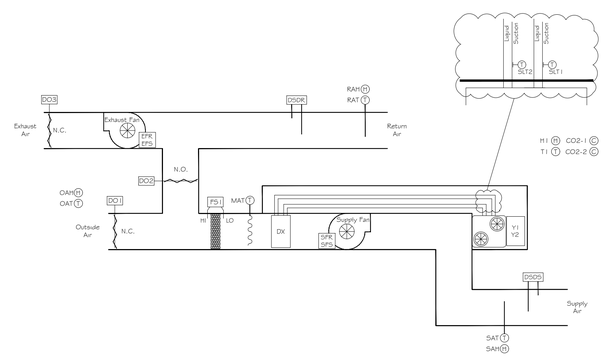
NOTES:
1. VENTILATION OCCUPANCY IS BASED ON TOTAL SEATING.
2. MAKEUP AIR TO VESTIBULES FROM STAGE THROUGH OPEN SPACE.



1 M2.03 Multipurpose Room DDC Replacement Plan

3/32" = 1'-0"

NORTH

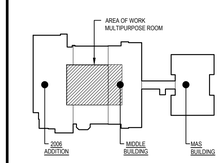


Legend		
Sym	Point Description	Point Type
CO2-1	Room CO2 transmitter 1	AI
CO2-2	Room CO2 transmitter 2	AI
DO1	Outside air damper actuator	AO
DO2	Return air damper actuator	AO
DO3	Exhaust air damper actuator	AO
DSDR	Duct smoke detector return	DI
DSDS	Duct smoke detector supply	DI
EFR	Power exh. fan start/stop control relay	DO
EFS	Power exh. fan run status	DI
FS1	Filter DP switch	DI
H1	Space humidity transmitter	AI
MAT	Mixed air temperature sensor	AI
OAH	Outside air humidity transmitter	AI
OAT	Outside air temperature sensor	AI
RAH	Return air humidity transmitter	AI
RAT	Return air temperature sensor	AI
SAH	Supply air humidity transmitter	AI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
SLT1	DX CLG suction line temp sensor stage 1	AI
SLT2	DX CLG suction line temp sensor stage 2	AI
T1	Space temperature sensor	AI
Y1	DX cooling control relay stage 1	DO
Y2	DX cooling control relay stage 2	DO

3 M2.03 Existing Rooftop Unit (RTU-1) Flow Diagram

NOT TO SCALE

MAMARONECK AVENUE SCHOOL



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NYSED PROJECT # 66-07-01-03-0-004-030

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2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
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Job No. 4.1092.72.2

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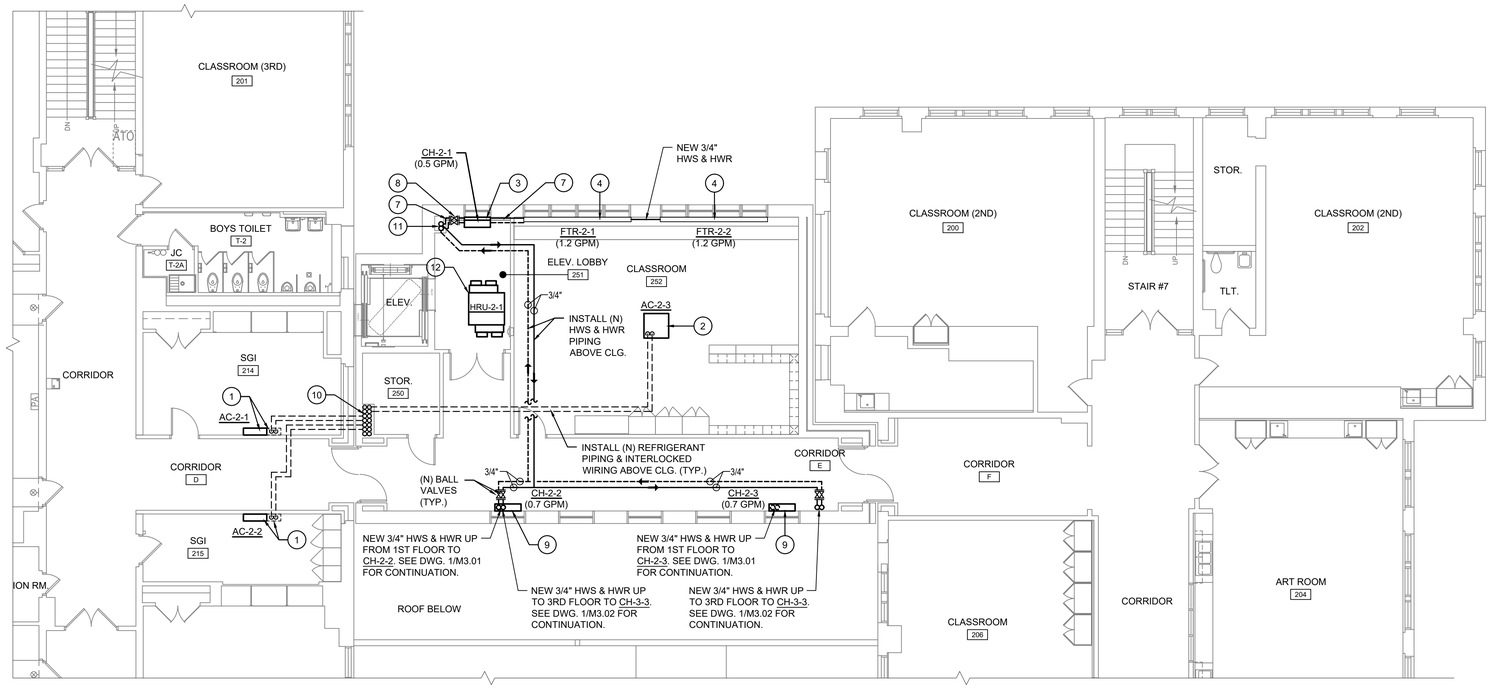
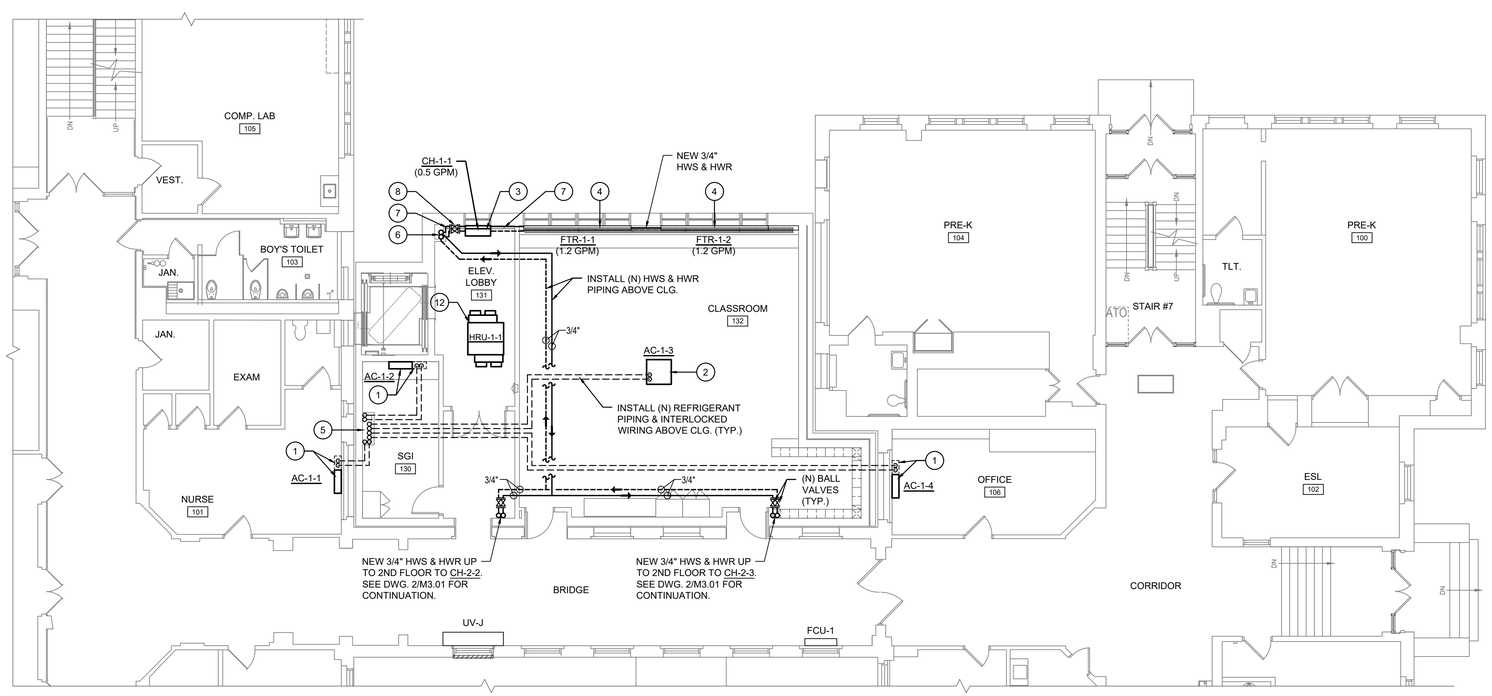


2 M3.01 Partial Second Floor Mechanical Proposed Plan

1/8" = 1'-0"

NORTH

ITEM #	MECHANICAL CONSTRUCTION KEY NOTES
1	PROVIDE & INSTALL NEW VRF WALL-MOUNTED DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES. RUN NEW REFRIGERANT PIPING & INTERLOCKED WIRING DOWN IN NEW TRUNKING (ASPEN PUMPS OR APPROVED EQUAL) FROM CEILING DOWN TO BOTTOM OF AC UNIT.
2	PROVIDE & INSTALL NEW VRF CEILING-MOUNTED CASSETTE TYPE DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, SUPPORTS, ELECTRICAL, CONTROLS, BUILT-IN CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
3	PROVIDE & INSTALL NEW FLOOR-MOUNTED HOW WATER CABINET HEATER OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, 4" FALSE BACK & ALL ASSOCIATED APPURTENANCES. RUN NEW 3/4" HWS & HWR MAINS CONCEALED IN FALSE BACK.
4	PROVIDE & INSTALL NEW WALL-MOUNTED HOW WATER BARE ELEMENT FTR OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL PIPING, VALVES, SUPPORTS, CONTROLS & ALL ASSOCIATED APPURTENANCES. SEE PIPING DETAIL 3/M6.02. INSTALL BEHIND NEW CASEWORK. REFER TO ARCH. DWGS.
5	NEW REFRIGERANT PIPING AND INTERLOCKED WIRING DOWN FROM 2ND FLOOR CHASE. SEE DWG. 2/M3.01 FOR CONTINUATION.
6	NEW 1-1/4" HWS & HWR PIPING UP FROM LOWER LEVEL IN CHASE TO ABOVE 1ST FLOOR CEILING & 1" HWS & HWR PIPING UP TO 2ND FLOOR CHASE. SEE DWG. 1/M2.01 & 2/M3.01 FOR CONTINUATION.
7	RUN NEW 3/4" HWS & HWR PIPING CONCEALED IN NEW METAL COVER. MANUFACTURER TO PROVIDE METAL PIPE COVER. COLOR TO BE SELECTED BY OWNER.
8	PROVIDE NEW BALL VALVES ON 3/4" HWS & HWR PIPING MAINS.
9	PROVIDE & INSTALL NEW FLOOR-MOUNTED CABINET HEATER OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, & ALL ASSOCIATED APPURTENANCES.
10	NEW REFRIGERANT PIPING AND INTERLOCKED WIRING IN CHASE DOWN FROM 3RD FLOOR CHASE TO 1ST FLOOR CEILING. SEE DWGS. 1/M3.01 & 1/M3.02 FOR CONTINUATION.
11	NEW 1" HWS & HWR PIPING UP FROM 1ST FLOOR IN CHASE TO ABOVE 2ND FLOOR CEILING & 3/4" HWS & HWR PIPING UP TO 3RD FLOOR CHASE. SEE DWG. 1/M3.01 & 1/M3.02 FOR CONTINUATION.
12	PROVIDE & INSTALL NEW HEAT RECOVER UNIT (HRU) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL DUCTWORK, DAMPERS, LOUVERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.



1 M3.01 Partial First Floor Mechanical Proposed Plan

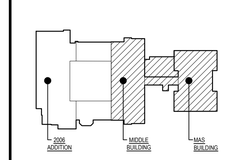
1/8" = 1'-0"

NORTH

GENERAL MECHANICAL CONSTRUCTION NOTES

1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING GRIDS, CEILING TILES, LIGHT FIXTURES, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE DEMOLITION OF EXIST. HVAC/HV EQUIPMENT, DUCTWORK, PIPING, ETC. REINSTALL TO MATCH EXIST.
4. GC IS REPONSIBLE TO SAWCUT & CORE DRILL EXIST. WALLS / FLOORS / CLG. FOR NEW DUCTWORK / PIPING / CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE GC.
6. MC IS RESPONSIBLE TO ISOLATE / SHUT-DOWN & DRAIN-DOWN EXIST. HEATING PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
7. ALL NEW DDC WIRING SHALL BE INSTALLED CONCEALED ABOUT EXIST. / NEW SUSPENDED CLG. WHEREVER NEW THERMOSTAT ARE INSTALLED ON NEW WALLS, ALL NEW DDC WIRING FROM MECH. EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED CONCEALED IN WALLS. WHEREVER NEW THERMOSTATS ARE INSTALLED ON EXIST. MASONRY WALL, ALL NEW DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
8. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE GC.
9. ALL EXIST. DUCTWORK & AIR INLETS/OUTLETS THAT ARE SHOWN TO REMAIN & BE REUSED SHALL BE VACUUM-CLEANED THOROUGHLY TO BE FREE OF DUST & DEBRIS. PROVIDE PHOTO DOCUMENTATION BEFORE & AFTER CLEANING.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

MECHANICAL PROPOSED PLANS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202M201

M3.01

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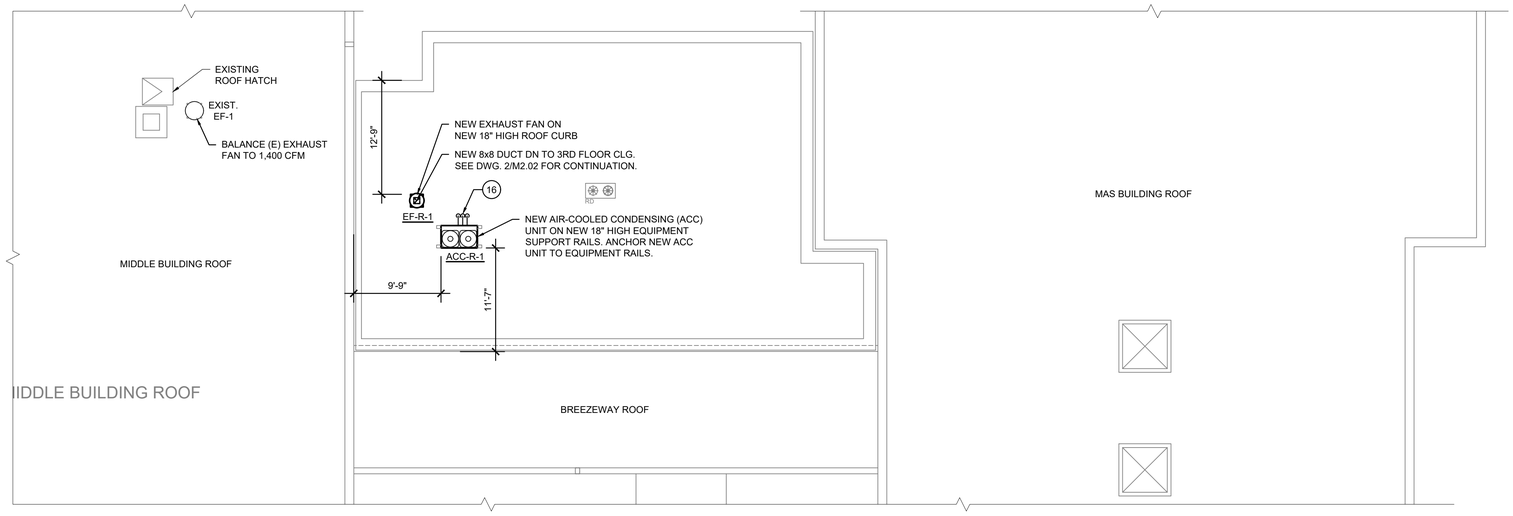

2 / M3.02 Partial Roof Mechanical Proposed Plan

1/8" = 1'-0"

NORTH

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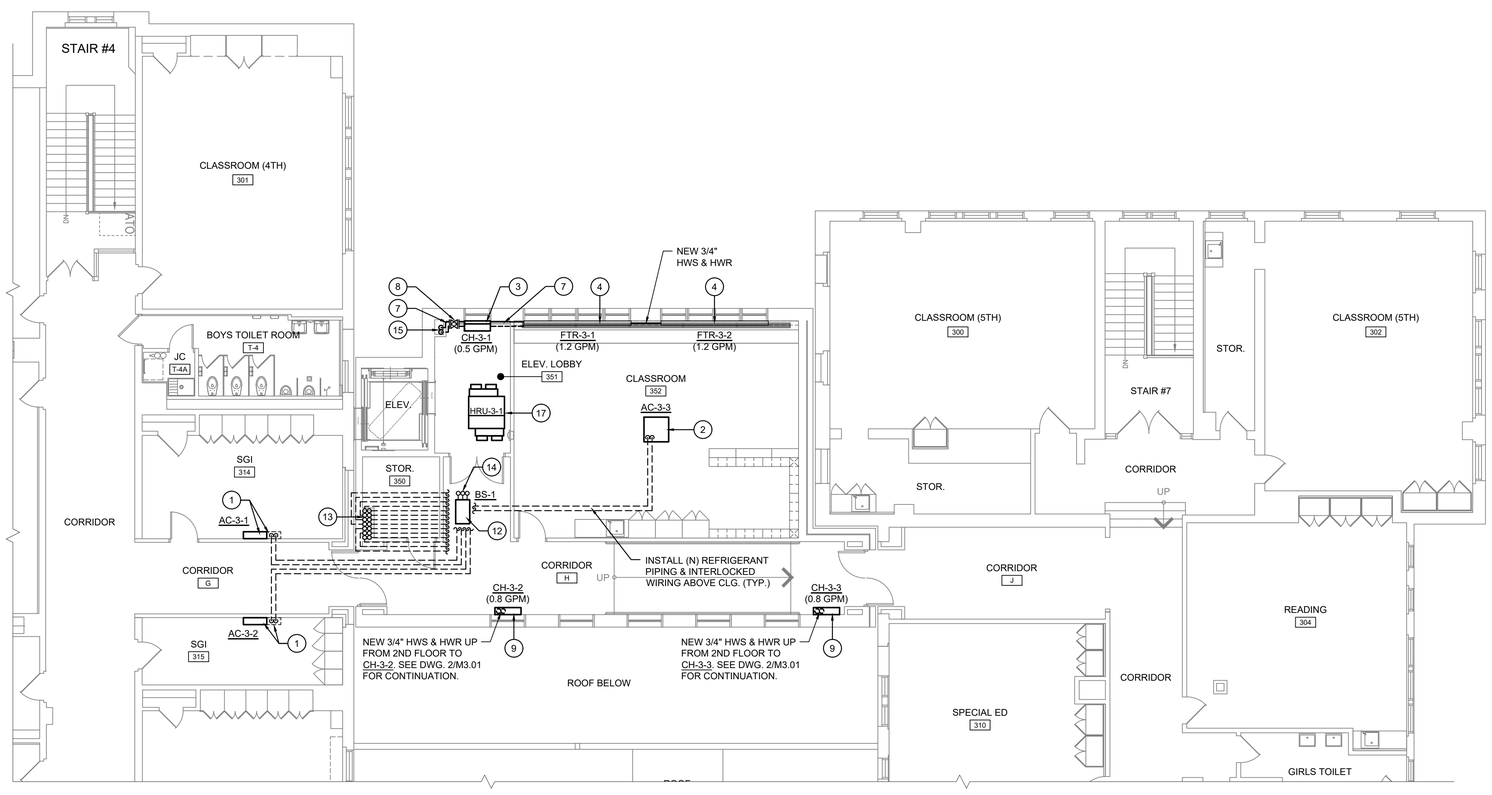
4	PROVIDE & INSTALL NEW WALL-MOUNTED HOW WATER BARE ELEMENT FTR OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL PIPING, VALVES, SUPPORTS, CONTROLS & ALL ASSOCIATED APPURTENANCES. SEE PIPING DETAIL 3/M6.02. INSTALL BEHIND NEW CASEWORK. REFER TO ARCH. DWGS.
7	RUN NEW 3/4" HWS & HWR PIPING CONCEALED IN NEW METAL COVER. MANUFACTURER TO PROVIDE METAL PIPE COVER. COLOR TO BE SELECTED BY OWNER.
8	PROVIDE NEW BALL VALVES ON 3/4" HWS & HWR PIPING MAINS.
9	PROVIDE & INSTALL NEW FLOOR-MOUNTED CABINET HEATER OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, & ALL ASSOCIATED APPURTENANCES.
12	PROVIDE & INSTALL NEW SELECTOR BOX ABOVE CEILING & CONNECT ALL AC UNIT REFRIGERANT PIPING & INTERLOCKED WIRING TO SELECTOR BOX.
13	NEW REFRIGERANT PIPING AND INTERLOCKED WIRING IN CHASE DOWN TO 2ND FLOOR CEILING. SEE DWG. 2/M3.01 FOR CONTINUATION.
14	NEW REFRIGERANT PIPING AND INTERLOCKED WIRING UP TO ACC-1 ON ROOF. SEE DWG. 2/M3.02 FOR CONTINUATION.
15	NEW 3/4" HWS & HWR PIPING IN CHASE FROM 2ND FLOOR CHASE. SEE DWG. 2/M3.01 FOR CONTINUATION.
16	NEW REFRIGERANT PIPING AND INTERLOCKED WIRING DOWN TO BS-1 ABOVE 3RD FLOOR CEILING. SEE DWG. 1/M3.02 FOR CONTINUATION.
17	PROVIDE & INSTALL NEW HEAT RECOVER UNIT (HRU) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL DUCTWORK, DAMPERS, LOUVERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.



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NORTH

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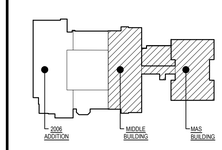

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1	ISSUE TO BID 11/23/20

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MECHANICAL PROPOSED PLANS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

Job No. 4.1092.72.2

File No. 10927202M201

M3.02

OUTDOOR AIR COOLED CONDENSING UNIT SCHEDULE

(DAIKIN AS STANDARD)

TAG NO.	LOCATION	AREA SERVED	UNIT SERVED	COOLING (TMBH)	HEATING (TMBH)	AMBIENT TEMP (°F)	ELECTRICAL DATA V - PH - HZ	MCA	MOP	IEER	EER	MODEL & MANUFACTURER	DIMENSIONS (W x H x D) (IN.)	APPROX. WEIGHT (LBS.)	REMARKS
ACC-R-1	ROOF	NEW SGI & CLASSROOMS	AC-1-1 THRU 3-3	144	111	95	208 - 3 - 60	58.3	70	24.8	12.3	REYQ144TATJU DAIKIN	48.9 x 66.7 x 30.2	703	SEE NOTE(S) BELOW
ACC-G-1	GRADE	ROOM 008	AC-L-1	18	20	95	208 - 1 - 60	16.5	25	18.6	13	RZQ18TAVJU DAIKIN	37 x 39 x 12-5/8	175	SEE NOTE(S) BELOW

NOTES:
PROVIDE WITH LOW AMBIENT CONTROL TO 0°F, INTERLOCK WITH RESPECTIVE AC UNITS. ELECTRICAL SUBCONTRACTOR SHALL FURNISH & INSTALL NEMA 3R DISCONNECT SWITCH & GFI CONVENIENCE OUTLET FOR EACH UNIT. REFER TO ELECTRICAL DRAWINGS

INDOOR DUCTLESS AIR-CONDITIONING / HEAT PUMP UNIT SCHEDULE

(DAIKIN AS STANDARD)

TAG NO.	LOCATION	COOLING (TMBH)	HEATING (TMBH)	ENT. TEMP DB / WB(°F)	SUCTION TEMP (°F)	ELECTRICAL DATA V - PH - HZ	MCA	MOP	MODEL & MANUFACTURER	DIMENSIONS (W x H x D) (IN.)	APPROX. WEIGHT (LBS.)	REMARKS
AC-L-1	RM 008	18	20	79 / 66	42.8	208 - 1 - 60	0.6	15	FCQ18TAVJU DAIKIN	33.1 x 10 x 33.1	63	SEE NOTE(S) BELOW
AC-1-1	NURSE 101	7	8.7	79 / 66	42.8	208 - 1 - 60	0.3	15	FXAQ07PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTE(S) BELOW
AC-1-2	SGI 130	7	8.7	79 / 66	42.8	208 - 1 - 60	0.3	15	FXAQ07PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTE(S) BELOW
AC-1-3	CLASSROOM 132	34.1	41.5	79 / 66	42.8	208 - 1 - 60	1.5	15	FXFQ36TVJU DAIKIN	33.1 x 11.3 x 33.1	57.3	SEE NOTE(S) BELOW
AC-1-4	OFFICE 106	7	8.7	79 / 66	42.8	208 - 1 - 60	0.3	15	FXAQ07PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTE(S) BELOW
AC-2-1	SGI 214	7	8.7	79 / 66	42.8	208 - 1 - 60	0.3	15	FXAQ07PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTE(S) BELOW
AC-2-2	SGI 215	7	8.7	79 / 66	42.8	208 - 1 - 60	0.3	15	FXAQ07PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTE(S) BELOW
AC-2-3	CLASSROOM 252	22.7	28.0	79 / 66	42.8	208 - 1 - 60	0.7	15	FXFQ24TVJU DAIKIN	33.1 x 9.7 x 33.1	50.7	SEE NOTE(S) BELOW
AC-3-1	SGI 314	9	11.1	79 / 66	42.8	208 - 1 - 60	0.3	15	FXAQ09PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTE(S) BELOW
AC-3-2	SGI 315	7	8.7	79 / 66	42.8	208 - 1 - 60	0.3	15	FXAQ07PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTE(S) BELOW
AC-3-3	CLASSROOM 352	28.4	35.3	79 / 66	42.8	208 - 1 - 60	1.5	15	FXFQ30TVJU DAIKIN	33.1 x 11.3 x 33.1	57.3	SEE NOTE(S) BELOW

NOTES:
PROVIDE "DAIKIN" REMOTE CONTROLLER, WALL MOUNTING BRACKET, PROPER REFRIGERANT CHARGE. INTERLOCK WITH RESPECTIVE CONDENSING UNIT. PROVIDE WITH MINI "DAIKIN" CONDENSATE PUMP (MODEL # DACA-CP1-1. PROVIDE WITH CONDENSATE DRAIN WATER-LEVEL DETECTOR SWITCH TO PREVENT ANY DAMAGE TO ANY BUILDING COMPONENT AS A RESULT OF OVERFLOW FROM THE EQUIPMENT PRIMARY DRAIN.

HEAT RECOVERY UNIT VENTILATOR SCHEDULE

(DAIKIN AS STANDARD)

TAG NO.	QTY	AREA SERVED	SUPPLY AIR (CFM)	EXHAUST AIR (CFM)	ELECTRICAL DATA V - PH - HZ	MCA	MOP	MODEL & MANUFACTURER	DIMENSIONS (L x W x H) (IN.)	APPROX. WEIGHT (LBS.)	REMARKS
HRU-1-1	1	1ST FLOOR SGI & CLASSROOMS	845	800	208 - 1 - 60	8.1	15	VAM1200GVJU DAIKIN	64 x 48 x 30	350	SEE NOTE(S) BELOW
HRU-2-1	1	2ND FLOOR SGI & CLASSROOMS	775	775	208 - 1 - 60	8.1	15	VAM1200GVJU DAIKIN	64 x 48 x 30	350	SEE NOTE(S) BELOW
HRU-3-1	1	3RD FLOOR SGI & CLASSROOMS	775	775	208 - 1 - 60	8.1	15	VAM1200GVJU DAIKIN	64 x 48 x 30	350	SEE NOTE(S) BELOW

NOTES:
1. PROVIDE FUSED DISCONNECT SWITCH.
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
3. BAROMETRIC OUTDOOR AIR DAMPER
4. UNIT TO BE TIED INTO EXISTING BMS SYSTEM

HOT WATER CABINET HEATER SCHEDULE

(TRANE AS STANDARD)

TAG NO.	AREA SERVED	CFM	HOT WATER HEATING				HP	ELECTRICAL DATA V - PH - HZ	FLA	MOP	MODEL & MANUFACTURER	DIMENSIONS (L x W x H) (IN)	APPROX. UNIT WEIGHT (LBS)	REMARKS
			MBH	EWT (°F)	LWT (°F)	GPM								
CH-L-1	ELEV. LOBBY 052	540	16.0	180	160	1.6	0.22	208 - 1 - 60	3.1	15	FFBB-040 TRANE	38 x 10 x 25	125	SEE NOTE(S) BELOW
CH-1-1	ELEV. LOBBY 131	220	5.0	180	160	0.5	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTE(S) BELOW
CH-2-1	ELEV. LOBBY 251	220	5.0	180	160	0.5	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTE(S) BELOW
CH-2-2	CORRIDOR E	220	6.8	180	160	0.7	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTE(S) BELOW
CH-2-3	CORRIDOR E	220	6.8	180	160	0.7	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTE(S) BELOW
CH-3-1	ELEV. LOBBY 351	220	5.0	180	160	0.5	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTE(S) BELOW
CH-3-2	CORRIDOR H	220	8.4	180	160	0.8	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTE(S) BELOW
CH-3-3	CORRIDOR H	220	8.4	180	160	0.8	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTE(S) BELOW

NOTES:
1. PROVIDE W/ HW HEATING COIL, FACTORY INSTALLED DELUXE PIPING PACKAGE OPTION #F W/ 3-WAY MODULATING CONTROL VALVE FOR EACH UNIT.
2. PROVIDE W/ ECM MOTOR, FRONT BAR GRILLE INLET & TOP BAR GRILLE OUTLET, FILTERS, KEYLOCK PANEL & ACCESS DOOR, & DISCONNECT SWITCH FOR EACH UNIT.
3. CH-1-1, CH-2-1 & CH-3-1 SHALL BE PROVIDED W/ 4-IN. FALSE BACK
4. UNIT COLOR TO BE SELECTED BY OWNER. PROVIDE COLOR CHART.
5. EACH UNIT TO BE TIED INTO EXISTING BMW SYSTEM.

HOT WATER UNIT HEATER SCHEDULE

(REZNOR AS STANDARD)

TAG NO.	LOCATION	CFM	HP	HOT WATER HEATING					ELECTRICAL DATA V - PH - HZ	MODEL & MANUFACTURER	REMARKS
				MBH	EWT (°F)	LWT (°F)	GPM	WPD			
UH-L-1	RECEIVING/ STORAGE 053	270	0.04	18	180	160	1.8	0.06	115 - 1 - 60	WS-18/24 REZNOR	PROVIDE W/ 4-WAY DIFFUSER, OSHA FAN GUARD, DISCONNECT SWITCH, TRANSFORMER, & HEAVY DUTY THERMOSTAT.
UH-L-1	OUTDOOR STOR. 054	330	0.05	23	180	160	2.3	0.01	115 - 1 - 60	WS-23/33 REZNOR	PROVIDE W/ 4-WAY DIFFUSER, OSHA FAN GUARD, DISCONNECT SWITCH, TRANSFORMER, & HEAVY DUTY THERMOSTAT.

EXHAUST FAN SCHEDULE

(GREENHECK AS STANDARD)

TAG NO.	AREA SERVED	CFM	SP. (IN)	BHP	MHP	RPM	ELECTRICAL DATA V - PH - HZ	MODEL & MANUFACTURER	DIMENSIONS (L x W x H) (IN)	APPROX. WT. (LBS)	SONES	REMARKS
EF-L-1	OT / PT 006 & ROOM 008	180	0.25	0.03	22 WATTS	794	120 - 1 -60	CSP-A390-VG GREENHECK	12 x 14 x 11	24	0.5	W/ CEILING HUNG SUPPORTS & VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER 84-277VAC TO 24 VDC & BACK DRAFT DAMPER, INTERLOCK W/ EXISTING BC-12. FAN TO BE TIED INTO EXISTING BUILDING MANAGEMENT SYSTEM (BMS).
EF-R-1	ELEVATOR SHAFT	300	0.25	0.03	0.07	1,632	120 - 1 -60	G-070-VG GREENHECK	19"Ø x 24	17	5.4	W/ 18" HIGH ALUMINUM ROOF CURB, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER 84-277VAC TO 24 VDC & BACK DRAFT DAMPER, PROVIDE THERMOSTAT IN ELEVATOR SHAFT AND SET FOR 80°F ADJUSTABLE. FAN TO BE TIED INTO EXISTING BUILDING MANAGEMENT SYSTEM (BMS).

HOT WATER FINNED TUBE RADIATION SCHEDULE

(STERLING AS STANDARD)

TAG NO.	LOCATION	TUBE SIZE	FIN PER FT.	ACTIVE ELEMENT LENGTH	BTU/HR-FT	HOT WATER HEATING				MODEL & MANUFACTURER	REMARKS
						MBH	EWT (°F)	LWT (°F)	GPM		
FTR-1-1	CLASSROOM 132	3/4"	50	12'-0"	980	11.8	180	160	1.2	BARE ELEMENT "B" STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES.
FTR-1-2	CLASSROOM 132	3/4"	50	12'-0"	980	11.8	180	160	1.2	BARE ELEMENT "B" STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES.
FTR-2-1	CLASSROOM 252	3/4"	50	12'-0"	980	11.8	180	160	1.2	BARE ELEMENT "B" STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES.
FTR-2-2	CLASSROOM 252	3/4"	50	12'-0"	980	11.8	180	160	1.2	BARE ELEMENT "B" STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES.
FTR-3-1	CLASSROOM 352	3/4"	50	12'-0"	980	11.8	180	160	1.2	BARE ELEMENT "B" STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES.
FTR-3-2	CLASSROOM 352	3/4"	50	12'-0"	980	11.8	180	160	1.2	BARE ELEMENT "B" STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES.

NOTES:
1. THE LENGTH INDICATED IN ABOVE SCHEDULE IS ACTIVE FINNED TUBE LENGTH.
2. PROVIDE AIR VENT, WATER BRACKETS & TAMPER RESISTANT DAMPERS.
3. PROVIDE CONTROL VALVE AND INTERLOCK WITH RESPECTIVE AC UNIT.

VENTILATION INDEX

UNIT SERVED	ROOM NAME & NUMBER	OCCUPANCY CLASSIFICATION	FLOOR AREA (SQ. FT.)	REQ'D O.A. PER SQ. FT.	REQ'D O.A. FOR SPACE	OCCUPANCY DENSITY PER 1,000 FT²	OCCUPANCY BASED ON DENSITY	VENTILATION OCCUPANCY	REQ'D O.A. PER PERSON	REQ'D O.A. FOR OCCUPANCY	TOTAL REQ'D O.A. (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	ZONE MIN. O.A. REQ'D (CFM)	ACTUAL O.A. (CFM)	EXHAUST AIR E.A. (CFM)	REMARKS
LOWER LEVEL																
(E) BC-12	OT / PT 006	CLASSROOMS (AGE 9 PLUS)	247	0.12	30	35	9	4	10	40	70	0.8	87	90		SEE NOTE #1.
(E) BC-12	ROOM 008	CLASSROOMS (AGE 9 PLUS)	239	0.12	29	35	8	4	10	40	69	0.8	86	90		SEE NOTE #1.
	ELEV. LOBBY 052 & CORRIDOR A & B	CORRIDORS	917	0.06	55	-	-	-	-	-	55	1.0	55	-		SEE NOTE #2.
FIRST FLOOR																
HRU-1-1	EXIST. EXAM ROOM	-	88	0.18	16	20	2	2	10	20	36	0.8	45	45		
HRU-1-1	EXIST. NURSE 101	-	280	0.18	50	20	6	6	10	60	110	0.8	138	140		
HRU-1-1	EXIST. OFFICE 106	OFFICE SPACES	261	0.06	16	5	1	2	5	10	26	0.8	32	35		
EXIST. UVs	EXIST. BRIDGE & CORRIDORS	CORRIDORS	3,425	0.06	206	-	-	-	-	-	206	0.8	257	400		SEE NOTE #3.
HRU-1-1	SGI 130	CLASSROOMS (AGE 9 PLUS)	147	0.12	18	35	5	5	10	50	68	0.8	85	85		
	ELEV. LOBBY 131	CORRIDORS	140	0.06	8	-	-	-	-	-	8	1.0	8	-		SEE NOTE #4.
HRU-1-1	CLASSROOM 132	CLASSROOMS (AGE 9 PLUS)	925	0.12	111	35	32	32	10	320	431	0.8	539	540		SEE NOTE #5.
SECOND FLOOR																
HRU-2-1	SGI 214	CLASSROOMS (AGE 9 PLUS)	248	0.12	30	35	9	9	10	90	120	0.8	150	150		
HRU-2-1	SGI 215	CLASSROOMS (AGE 9 PLUS)	171	0.12	21	35	6	6	10	60	81	0.8	101	110		
HRU-2-1	STOR. 250	STORAGE ROOMS	76	0.12	9	-	-	-	-	-	9	0.8	11	20		SEE NOTE #6.
	ELEV. LOBBY 251	CORRIDORS	111	0.06	7	-	-	-	-	-	7	1.0	7	-		SEE NOTE #4.
HRU-2-1	CLASSROOM 252	CLASSROOMS (AGE 9 PLUS)	625	0.12	75	35	22	25	10	250	325	0.8	406	410		SEE NOTES #1 & #5.
EXIST. UV & HRU-2-1	EXIST. CORRIDORS & CORRIDOR D	CORRIDORS	1,075	0.06	65	-	-	-	-	-	65	0.8	81	115		SEE NOTES #3 & #7.
HRU-2-1	CORRIDOR E	CORRIDORS	527	0.06	32	-	-	-	-	-	32	0.8	40	70		
THIRD FLOOR																
HRU-3-1	SGI 314	CLASSROOMS (AGE 9 PLUS)	259	0.12	31	35	9	9	10	90	121	0.8	151	160		
HRU-3-1	SGI 315	CLASSROOMS (AGE 9 PLUS)	169	0.12	20	35	6	6	10	60	80	0.8	100	100		
HRU-3-1	STOR. 350	STORAGE ROOMS	76	0.12	9	-	-	-	-	-	9	0.8	11	20		SEE NOTE #6.
	ELEV. LOBBY 351	CORRIDORS	111	0.06	7	-	-	-	-	-	7	1.0	7	-		SEE NOTE #4.
HRU-3-1	CLASSROOM 352	CLASSROOMS (AGE 9 PLUS)	625	0.12	93	35	22	25	10	250	325	0.8	406	410		SEE NOTES #1 & #5.
EXIST. UV & HRU-3-1	EXIST. CORRIDOR & CORRIDOR G	CORRIDORS	1,110	0.06	67	-	-	-	-	-	67	0.8	83	115		SEE NOTE #3.
HRU-3-1	CORRIDOR H	CORRIDORS	527	0.06	32	-	-	-	-	-	32	0.8	40	70		

NOTES:
1. VENTILATION OCCUPANCY IS BASED ON DESIGN OCCUPANCY USAGE.
2. BASED ON 2015 IMC CHAPTER 4, SECTIONS 402.1 & 402.2, NATURAL VENTILATION WILL BE THROUGH DOORS TO THE OUTDOORS.
3. ACTUAL OUTDOOR AIR INCLUDES OUTDOOR AIR FROM EXISTING UNIT VENTILATOR(S) (UV(s)).
4. MAKEUP AIR TO ELEVATOR SHAFT FROM ELEVATOR LOBBY FROM ADJACENT CORRIDOR THROUGH OPERABLE DOORS.
5. VENTILATION SQUARE FOOTAGE IS REDUCED BY THE AREA OF FIXED WALL FURNITURE (I.E. CASEWORK, CABINETS, CUBBIES, ETC.).
6. BASED ON 2015 IMC CHAPTER 2, SECTION 202, DEFINITION OF "OCCUPIABLE SPACE" & CHAPTER 4, SECTION 401.2, STORAGE ROOMS ARE EXCLUDED FROM OCCUPIABLE SPACE AND DO NOT REQUIRE VENTILATION AIR.
7. MAKEUP AIR TO CORRIDOR FROM ADJACENT CORRIDOR THROUGH OPERABLE DOORS.

Date 1/10/20
Checked
Drawn IM/MAM

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Revisions:
1 ISSUE TO BID 11/23/20

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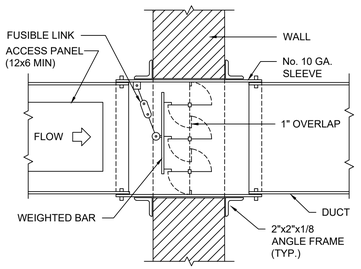
NYSED PROJECT # 66-07-01-03-0-004-030

MECHANICAL SCHEDULES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

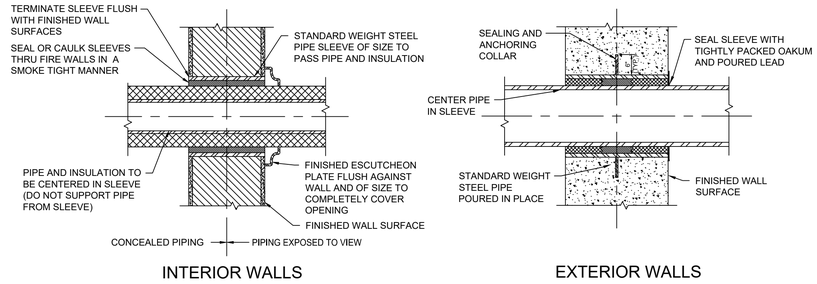
Job No. 4.1092.72.2
File No. 10927202M601

M6.01



1 M6.01 Fire Damper In Wall

Not To Scale



2 M6.01 Pipe Sleeves Thru Wall Details

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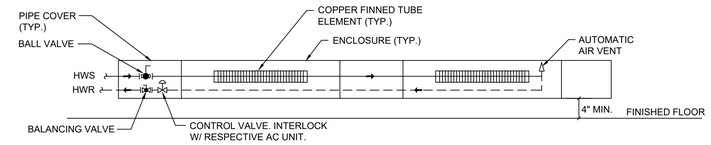
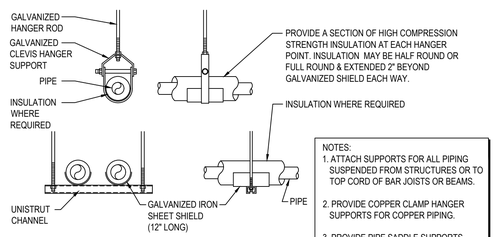


3 M6.01 Hot Water FTR Piping Detail

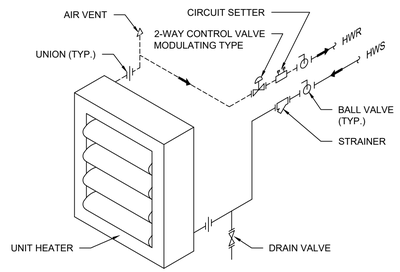
Not To Scale



NOTES:
1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM STRUCTURES OR TO TOP CORD OF BAR JOISTS OR BEAMS.
2. PROVIDE COPPER CLAMP HANGER SUPPORTS FOR COPPER PIPING.
3. PROVIDE PIPE SADDLE SUPPORTS FOR LARGE DIAMETER PIPES OR PIPE HEADERS.

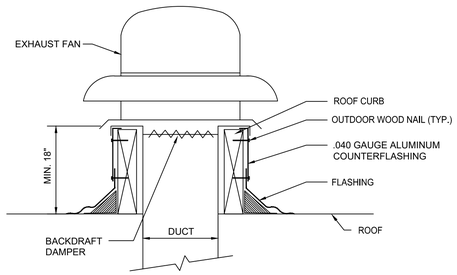
4 M6.01 Pipe Support Hangers

Not To Scale



5 M6.01 Unit Heater Piping Detail

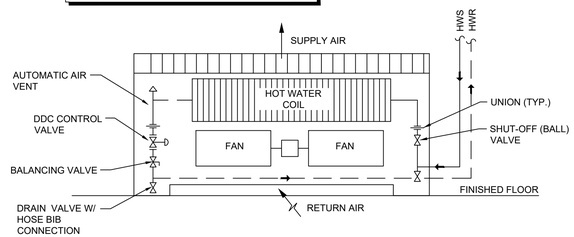
Not To Scale



6 M6.01 Roof Exhaust Fan Detail

Not To Scale

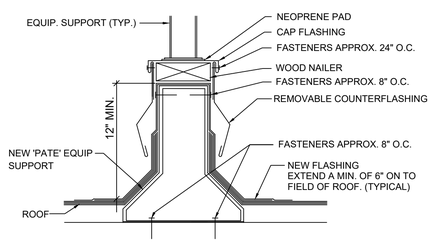
NOTE:
1. CONTRACTOR SHALL PROVIDE 3-WAY DDC VALVES & CONTROLS. CONNECT TO EXISTING BMS SYSTEM



7 M6.01 Hot Water Cabinet Heater Piping Detail

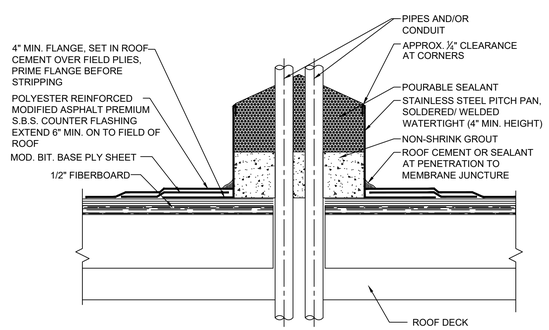
Not To Scale

INSTALL NEW CURB PERPENDICULAR TO STEEL PLATES OF ROOF DECK. PROVIDE CRICKET IN ROOF TO DIVERT ROOF WATER AROUND CURBS.



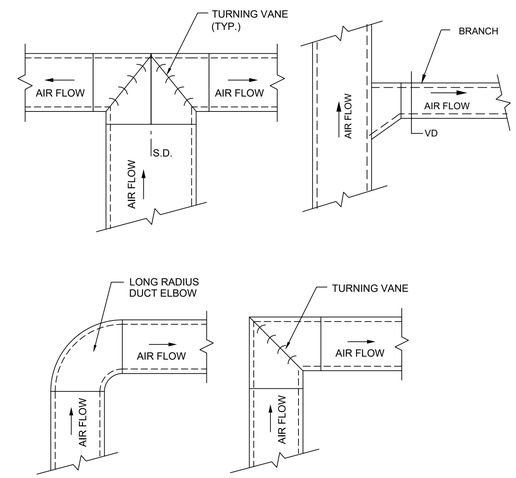
8 M6.01 Equipment Support Detail

Not To Scale



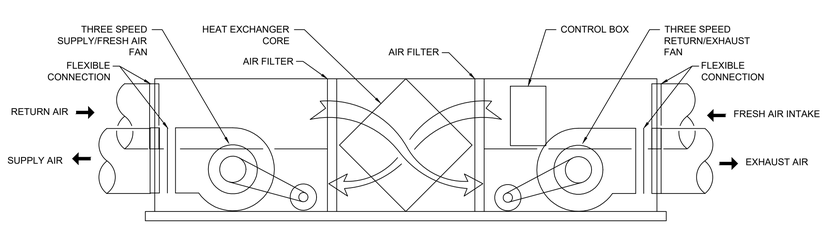
9 M6.01 Pitch Pocket Detail

Not To Scale



10 M6.01 Duct Take-Off & Turn Detail

Not To Scale



11 M6.01 Low Profile Heat Recovery Unit Detail

Not To Scale

Date	1/10/20
Checked	
Drawn	IM/MAM

MICHAEL J. McGOVERN, R.A.
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Revisions:

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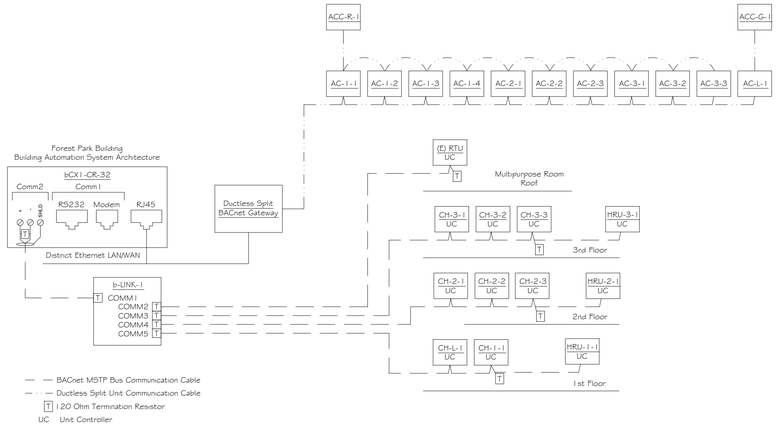
NYSED PROJECT # 66-07-01-03-0-004-030

MECHANICAL DETAILS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202M601

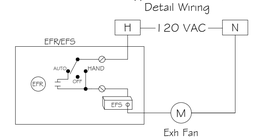
M6.02



1 BAS SYSTEM ARCHITECTURE - MAMARONECK BUILDING

NOT TO SCALE

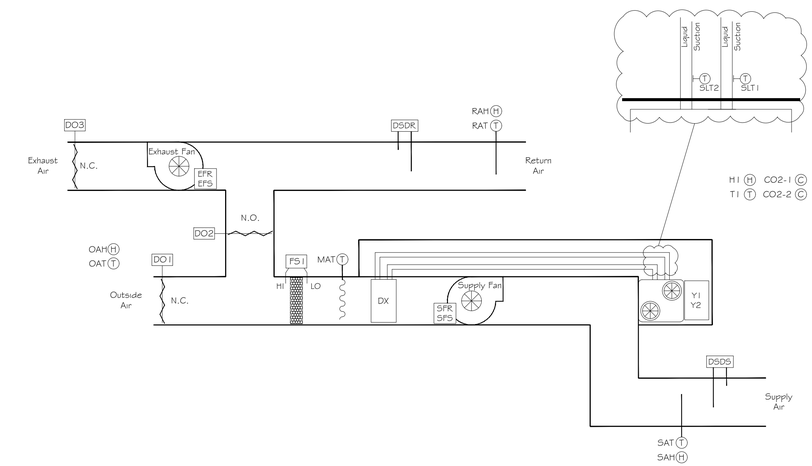
Typical Exhaust Fan
Detail Wiring



Legend		
Sym	Point Description	Point Type
EFR	Exhaust fan start/stop control relay	DO
EFS	Exhaust fan run status current sensor	DI
T1	Space temperature sensor	AI

2 EXHAUST FAN FLOW DIAGRAMS

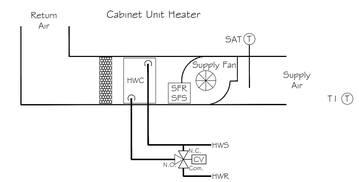
NOT TO SCALE



Legend		
Sym	Point Description	Point Type
CO2-1	Room CO2 transmitter 1	AI
CO2-2	Room CO2 transmitter 2	AI
DO1	Outside air damper actuator	AO
DO2	Return air damper actuator	AO
DO3	Exhaust air damper actuator	AO
DSDR	Duct smoke detector return	DI
DSDS	Duct smoke detector supply	DI
EFR	Power exh. fan start/stop control relay	DO
EFS	Power exh. fan run status	DI
FS1	Filter DP switch	DI
H1	Space humidity transmitter	AI
MAT	Mixed air temperature sensor	AI
OAH	Outside air humidity transmitter	AI
OAT	Outside air temperature sensor	AI
RAH	Return air humidity transmitter	AI
RAT	Return air temperature sensor	AI
SAH	Supply air humidity transmitter	AI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
SLT1	DX CLG suction line temp sensor stage 1	AI
SLT2	DX CLG suction line temp sensor stage 2	AI
T1	Space temperature sensor	AI
Y1	DX cooling control relay stage 1	DO
Y2	DX cooling control relay stage 2	DO

3 EXISTING ROOFTOP UNIT FLOW DIAGRAM

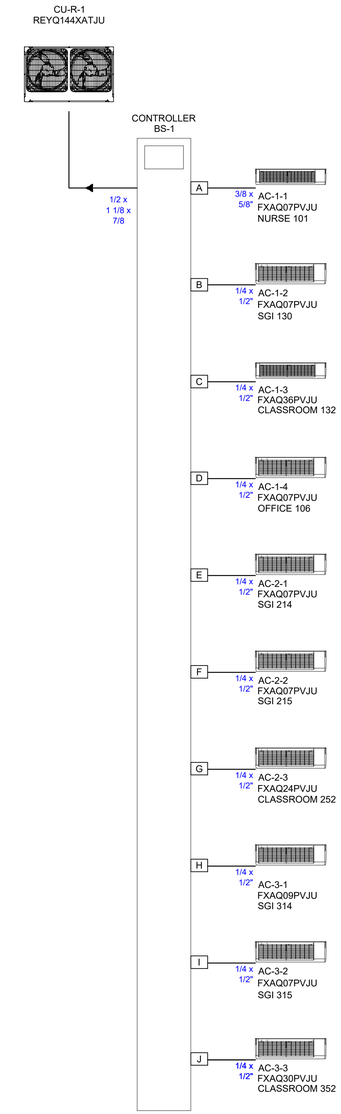
NOT TO SCALE



Legend		
Sym	Point Description	Point Type
CV	Hot water 3-way control valve	AO
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
T1	Space temperature sensor	AI

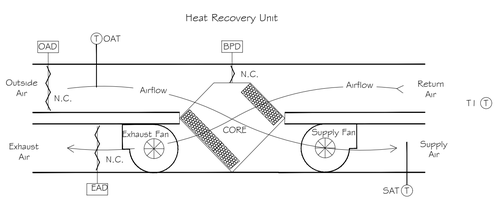
4 CUH FLOW DIAGRAM

NOT TO SCALE



7 VRF SYSTEM PIPING SCHEMATIC DIAGRAM

NOT TO SCALE



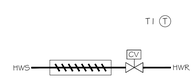
Legend		
Sym	Point Description	Point Type
BPD	HX Bypass damper	AO
EAD	Exhaust air damper	DO
EAT	Exhaust air temperature sensor	AI
OAD	Outside air damper	DO
OAT	Outside air temperature sensor	AI
RAT	Return air temperature sensor	AI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
T1	Space temperature sensor	AI

Typical for HRU-1-1, HRU-2-1 and HRU-3-1

5 HRU FLOW DIAGRAM

NOT TO SCALE

Convector & Fin Tube Radiation



Legend		
Sym	Point Description	Point Type
CV	Hot water 2-way control valve	DO
T1	Space temperature sensor	AI

6 CV FLOW DIAGRAM

NOT TO SCALE

Date	1/10/20
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NYSED PROJECT # 66-07-01-03-0-004-030

CONTROLS & REFRIG. PIPING DIAGRAM

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202M601

M6.03

ABBREVIATIONS

&	=	AND
ø	=	DIAMETER OR ROUND
ADD'L	=	ADDITIONAL
AFF	=	ABOVE FINISHED FLOOR
ALT	=	ALTERNATE
ARCH.	=	ARCHITECTURAL
BLDG	=	BUILDING
CD	=	CONDENSATE DRAIN
CDP	=	CONDENSATE DRAIN PUMP
CLG	=	CEILING
CO	=	CLEANOUT
CODP	=	CLEANOUT DECK PLATE
COWP	=	CLEANOUT WALL PLATE
DCW	=	DOMESTIC COLD WATER
DDC	=	DIRECT DIGITAL CONTROL
DHW	=	DOMESTIC HOT WATER
DHWR	=	DOMESTIC HOT WATER RETURN
DN	=	DOWN
DWG	=	DRAWING
GC	=	GENERAL CONTRACTOR
EA	=	EACH
ESP	=	ELEVATOR SUMP PUMP
EXIST	=	EXISTING
FD	=	FLOOR DRAIN
GPH	=	GALLON PER HOUR
GPM	=	GALLON PER MINUTE
HWH	=	DOMESTIC HOT WATER HEATER
ID	=	INSIDE DIAMETER (DIM)
IN	=	INCH
INFO	=	INFORMATION
JAN	=	JANITOR
MAX	=	MAXIMUM
MC	=	MECHANICAL CONTRACTOR
MECH	=	MECHANICAL
MIN	=	MINIMUM
NTS	=	NOT TO SCALE
PC	=	PLUMBING CONTRACTOR
PV	=	PLUMBING VENT
RD	=	ROOF DRAIN
RL	=	ROOF LEADER
SPEC	=	SPECIFICATION
SP	=	SUMP PUMP
SS	=	STAINLESS STEEL
STD	=	STANDARD
T&P	=	TEMPERATURE & PRESSURE
TMV	=	THERMOSTATIC MIXING VALVE
TYP	=	TYPICAL
VTR	=	VENT THROUGH ROOF
W/	=	WITH

PIPING LEGEND & SYMBOLS

NOT TO SCALE

- SANITARY WASTE/ROOF LEADER PIPING ABOVE GRADE
- SANITARY WASTE/STORM PIPING BELOW SLAB
- SANITARY VENT PIPING
- DOMESTIC COLD WATER (DCW) PIPING
- DOMESTIC HOT WATER (DHW) PIPING
- DOMESTIC HOT WATER RETURN (DHWR) PIPING
- GAS PIPING (GAS — GAS — GAS — GAS)
- CONDENSATE DRAIN PIPING
- PIPE TURN UP
- PIPE TURN DOWN
- PIPE TOP CONNECTION
- PIPE BOTTOM CONNECTION
- SHUTOFF BALL VALVE (OR)
- POINT OF CONNECTION OF NEW PIPING TO EXISTING
- POINT OF DISCONNECTION OF DEMOLISHED PIPING FROM EXISTING

PLUMBING SYSTEM MATERIALS

PIPING:

WASTE & VENT PIPING BELOW GRADE SHALL BE SERVICE WEIGHT CAST IRON PIPE WITH GASKETS, ABOVE GRADE SHALL BE NO-HUB SERVICE WEIGHT CAST IRON PIPE WITH STAINLESS STEEL SHIELDED COUPLINGS.

ROOF LEADER & STORM PIPING BELOW GRADE SHALL BE SERVICE WEIGHT CAST IRON PIPE WITH GASKETS, ABOVE GRADE SHALL BE NO-HUB SERVICE WEIGHT CAST IRON PIPE WITH STAINLESS STEEL SHIELDED COUPLINGS.

DOMESTIC HOT AND COLD WATER PIPING ABOVE GRADE SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDER FITTINGS (LEAD-FREE SOLDER). BELOW GRADE SHALL BE TYPE "K" COPPER WITHOUT FITTINGS.

GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON THREADED FITTINGS (PIPE SIZES 2-1/2" & SMALLER) AND WELDED FITTINGS (PIPE SIZES 3" & LARGER). PRIME & PAINT W/ TWO (2) FINISH COATS OF YELLOW COLOR PAINT.

CONDENSATE DRAIN PIPING SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDER FITTINGS.

FORCED DRAIN PIPING SHALL BE SCH. 40 GALVANIZED STEEL PIPE W/ THREADED FITTINGS OR TYPE "L" COPPER PIPING W/ SOLDERED FITTINGS (LEAD-FREE SOLDER).

COMPRESSED AIR PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON THREADED FITTINGS.

INSULATION:

ALL DOMESTIC HOT AND COLD WATER PIPING SHALL BE INSULATED WITH FIBERGLASS PIPE INSULATION WITH ASJ JACKET. REFER TO SPECIFICATIONS FOR INSULATION THICKNESS.

ALL ROOF LEADER & STORM PIPING ABOVE GRADE SHALL BE INSULATED WITH FIBERGLASS PIPE INSULATION WITH ASJ JACKET. REFER TO SPECIFICATIONS FOR INSULATION THICKNESS.

ALL CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL).

CLEANOUTS:

FLOOR: J.R. SMITH #4023S W/ ROUND NICKEL-BRONZE TOP.

WALL: J.R. SMITH #4532S W/ ROUND STAINLESS STEEL TOP.

PIPE INSULATION/COVERS:

FOR ALL LAVATORIES, INSTALL PROTECTIVE ENCLOSURE "LAV SHIELD" W/ TAMPER-RESISTANT SCREWS BY TRUEBRO OR APPROVED EQUAL.

VALVES & FITTINGS:

ALL VALVES & FITTINGS FOR DOMESTIC WATER SYSTEM SHALL BE LEAD FREE TYPE IN COMPLIANCE W/ REQUIREMENTS OF NSF/ANSI STANDARD 61. ALL BALL VALVES SHALL BE FULL-PORT TYPE.

PENETRATION FIRESTOPPING:

ALL PIPE PENETRATIONS (AT WALL, FLOOR, CHASE, ETC.) SHALL BE SEALED & CAULKED W/ 2 HR RATED FIRESTOPPING MATERIALS.

GENERAL CONSTRUCTION NOTES

1. REFER TO "MULTIPLE PRIME CONTRACT NOTES" ON DWG. A1.00 & SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS FOR CONTRACTORS' RESPONSIBILITIES.
2. CORE DRILLING SHALL BE PERFORMED BY EACH INDIVIDUAL PRIME CONTRACT. REFER TO SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. SEE DRAWINGS FOR APPROXIMATE LOCATIONS OF PIPES, DUCT, ETC.
3. EACH INDIVIDUAL PRIME CONTRACTOR IS REQUIRED TO PATCH (TO MATCH EXISTING), IMMEDIATELY AFTER REMOVAL, ALL OPENINGS WHERE EXISTING EQUIPMENT, PIPES, ETC. ARE BEING REMOVED. SEAL OPENING WITH 2 HOUR FIRE BARRIER CAULK. SEE GENERAL LOCATIONS ON PLUMBING DEMOLITION PLANS. SEE SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
4. WHERE A FIREPROOFING MATERIAL THAT IS INTEGRAL TO THE RATING OF AN EXISTING FIRE-RATED ASSEMBLY IS REMOVED OR DISTURBED, CONTRACTOR IS REQUIRED TO REPLACE THE MATERIAL TO PRESERVE THE RATING.

PLUMBING GENERAL NOTES

1. ALL WORK SHALL CONFORM TO LATEST EDITION OF NEW YORK STATE ENERGY CODE & PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL VISIT JOB SITE AND NOTE ALL EXISTING CONDITIONS TO BE MET BEFORE SUBMITTING BID. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND SHOW THE INTENT OF WORK.
3. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
4. CONTRACTOR TO PROCURE AND PAY FOR ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT WORK, OBTAIN AND PAY FOR ALL NECESSARY CERTIFICATES OF APPROVAL FOR WORK, AND PAY FOR ANY LEGAL FEES.
5. INSTALLATION TO COMPLY WITH ALL FEDERAL, STATE, MUNICIPAL LAWS, AND ALL CODES, RULES, ORDINANCES, AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED IN THE WORK.
6. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
7. PIPE INSTALLATION AS FOLLOWS:
   a) RUN ALL PIPING CONCEALED IN CEILINGS, WALLS AND PARTITIONS.
   b) ALL PIPING TO BE PITCHED TO LOW POINTS WITH DRAIN VALVES. STORM AND WASTE PIPING SHALL BE SLOPED PER LATEST PLUMBING CODE.
   c) SLEEVE PIPING THAT PASSES THROUGH WALLS.
   d) INSTALL PITCH POCKETS & FLASH ALL PIPING THAT PASSES THROUGH ROOF.
   e) PROVIDE ROD HANGERS WITH CLEVIS PIPE SUPPORT PER SPECIFICATION.
   f) PROVIDE VALVES REQUIRED FOR COMPLETE CONTROL OF ALL SYSTEMS. STOP VALVES FOR SUPPLY TO ALL FIXTURES TO BE CHROME PLATED WHERE EXPOSED.
   g) PROVIDE ACCESS DOORS FOR ALL CONCEALED VALVES AND CLEANOUTS.
   h) CORE-DRILL FLOOR SLABS & PROVIDE 2-HR RATED FIRE STOPPING MATERIALS FOR ALL PIPE PENETRATION THROUGH FLOOR SLABS.
8. CONTRACTOR TO PERFORM ALL TESTING OF THE PLUMBING WORK IN THE PRESENCE OF THE OWNER. PROVIDE ALL APPARATUS, TEMPORARY CONNECTIONS, AND OTHER REQUIREMENTS TO DO SUCH TESTS. ANY DEFECTS, LEAKS, ETC. WILL BE REPLACED AND TEST REPEATED UNTIL TEST REQUIREMENTS ARE MET.
9. SUBMIT SHOP DRAWINGS OF ALL WORK TO BE DONE, EQUIPMENT, AND FIXTURES FURNISHED.
10. PLUMBING CONTRACTOR TO CARRY OUT PERIODIC CLEANING TO REMOVE RUBBISH ETC., TO LEAVE PREMISES FREE FROM DEBRIS, AND DISCARDED MATERIALS. AFTER INSTALLATION, CLEAN FIXTURES, FITTINGS, ETC. AND LEAVE READY FOR USE.
11. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP WORK AREAS UPON COMPLETION OF WORK.

Date	1/10/20
Checked	AL
Drawn	IM/AL

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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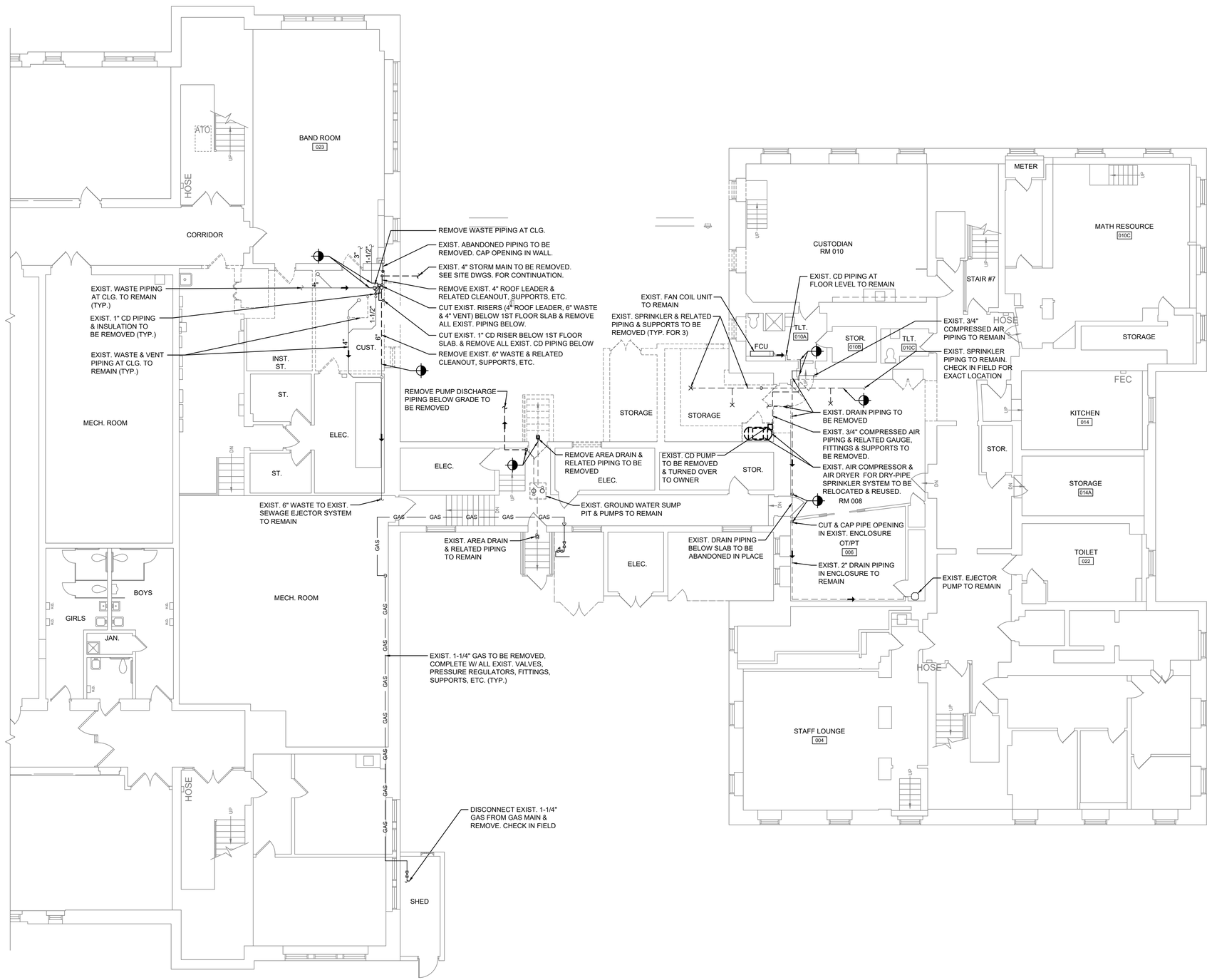
NYSED PROJECT # 66-07-01-03-0-004-030

PLUMBING NOTES

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202P201

P0.01



1 P1.01 Partial Lower Level Plumbing Demolition Plan

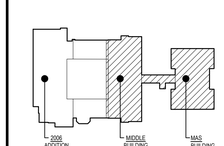
1/8" = 1'-0"

NORTH

GENERAL DEMOLITION NOTES

1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY THEM IN FIELD. GC TO SAWCUT EXIST. WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. GC TO PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING WORK IS THE RESPONSIBILITY OF GC.
3. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING & SPRINKLER SYSTEMS, AND DRAIN WATER FROM THE SYSTEMS TO ACCOMMODATE FOR DEMOLITION. RESTORE THE SYSTEMS AS REQUIRED.
4. GC IS RESPONSIBLE TO REMOVE EXISTING CEILING/GRIDS & RELOCATE EXISTING LIGHT FIXTURES, FIRE & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE PLUMBING INSTALLATION. REINSTALL TO MATCH EXISTING. REPLACE ALL DAMAGED TILES. MODEL & TYPE OF NEW CEILING TILES SHALL MATCH EXISTING.
5. ALL EXIST. CONDENSATE DRAIN PIPING THAT IS ASSOCIATED WITH DEMOLISHED HVAC UNITS SHALL BE REMOVED BY MC. REFER TO MECH. DWGS. FOR LOCATIONS.
6. EXIST. CABINET SINKS THROUGHOUT THE SCHOOL ARE TO BE REPLACED. REFER TO DWGS. A2.03 THRU A2.05 FOR LOCATIONS. PC SHALL DISCONNECT EXIST. PLUMBING PIPING TO ACCOMMODATE REMOVAL OF EXIST. CABINETS. REMOVE EXIST. SINKS & FAUCETS & PLUMBING ACCESSORIES & DISPOSE OFF THE SITE.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

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LOWER LEVEL PLUMBING DEMOLITION PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

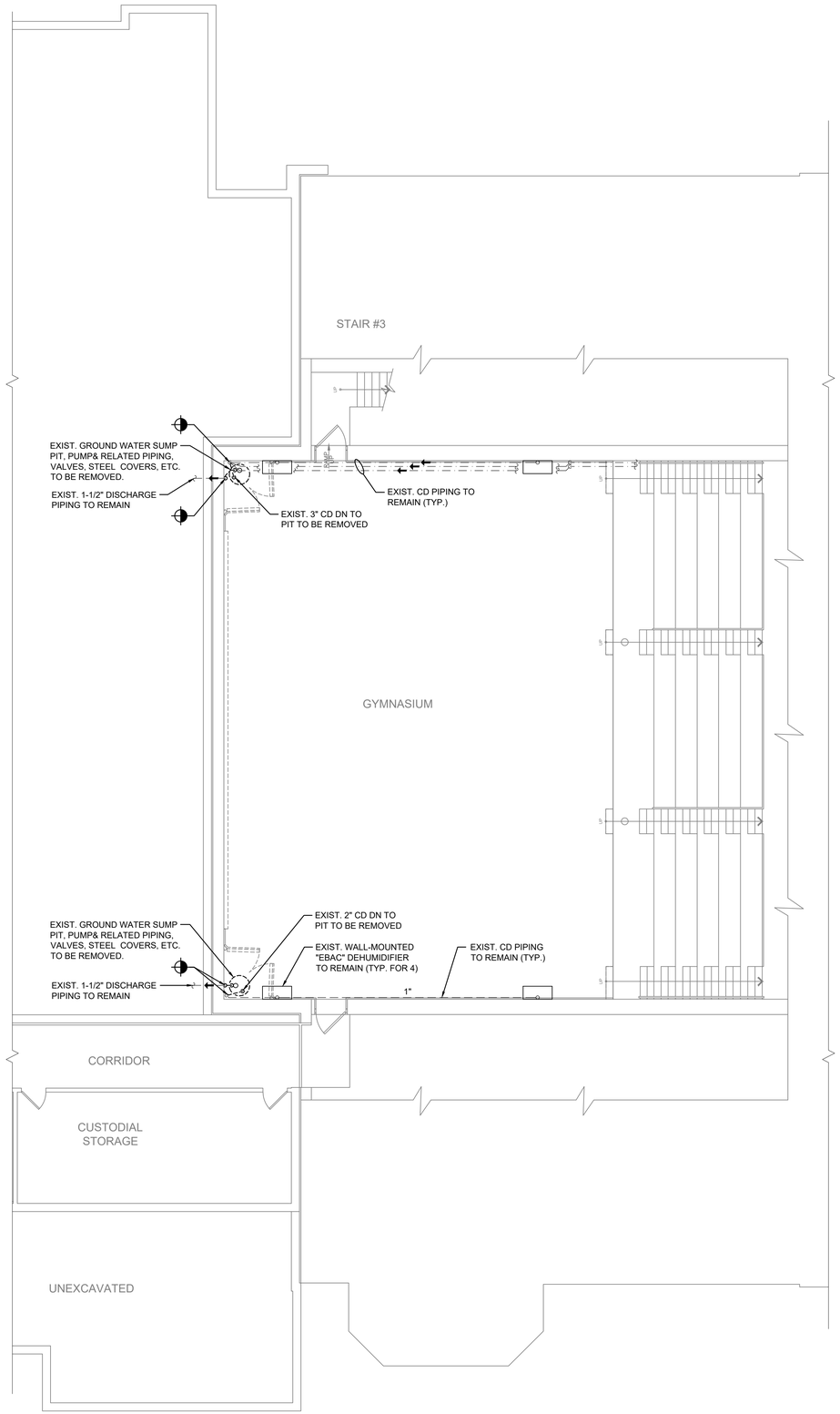
Job No. 4.1092.72.2

File No. 10927202P201

P1.01

GENERAL CONSTRUCTION NOTES

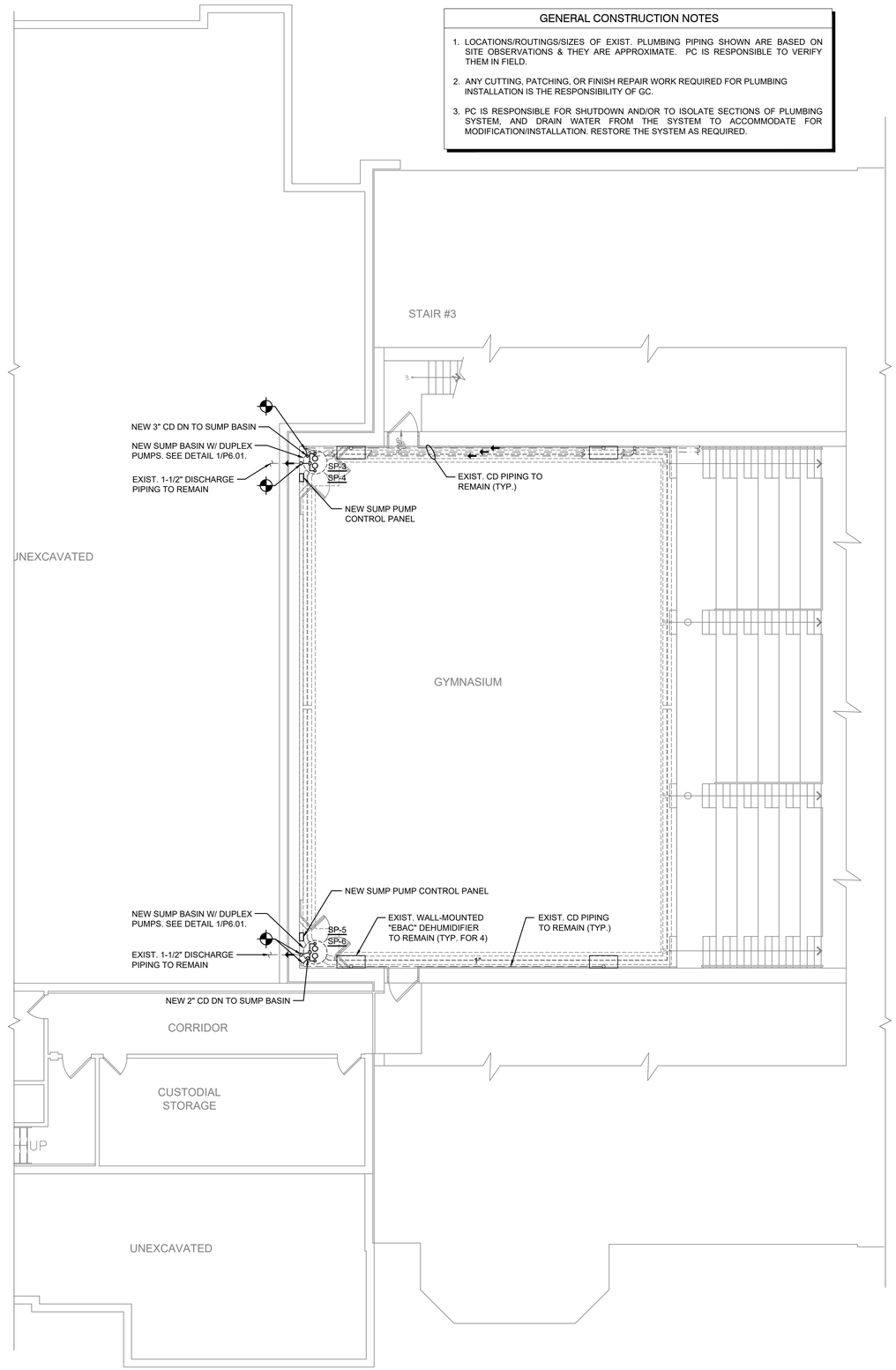
1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY THEM IN FIELD.
2. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING INSTALLATION IS THE RESPONSIBILITY OF GC.
3. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING SYSTEM, AND DRAIN WATER FROM THE SYSTEM TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEM AS REQUIRED.



1 P2.01 Basement Plumbing Demolition Plan

1/8" = 1'-0"

NORTH

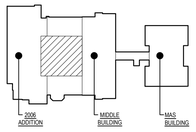


2 P2.01 Basement Plumbing Proposed Plan

1/8" = 1'-0"

NORTH

MAMARONECK AVENUE SCHOOL



Key Plan

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PROJECT NORTH

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MICHAEL J. McGOVERN, R.A.

Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-004-030

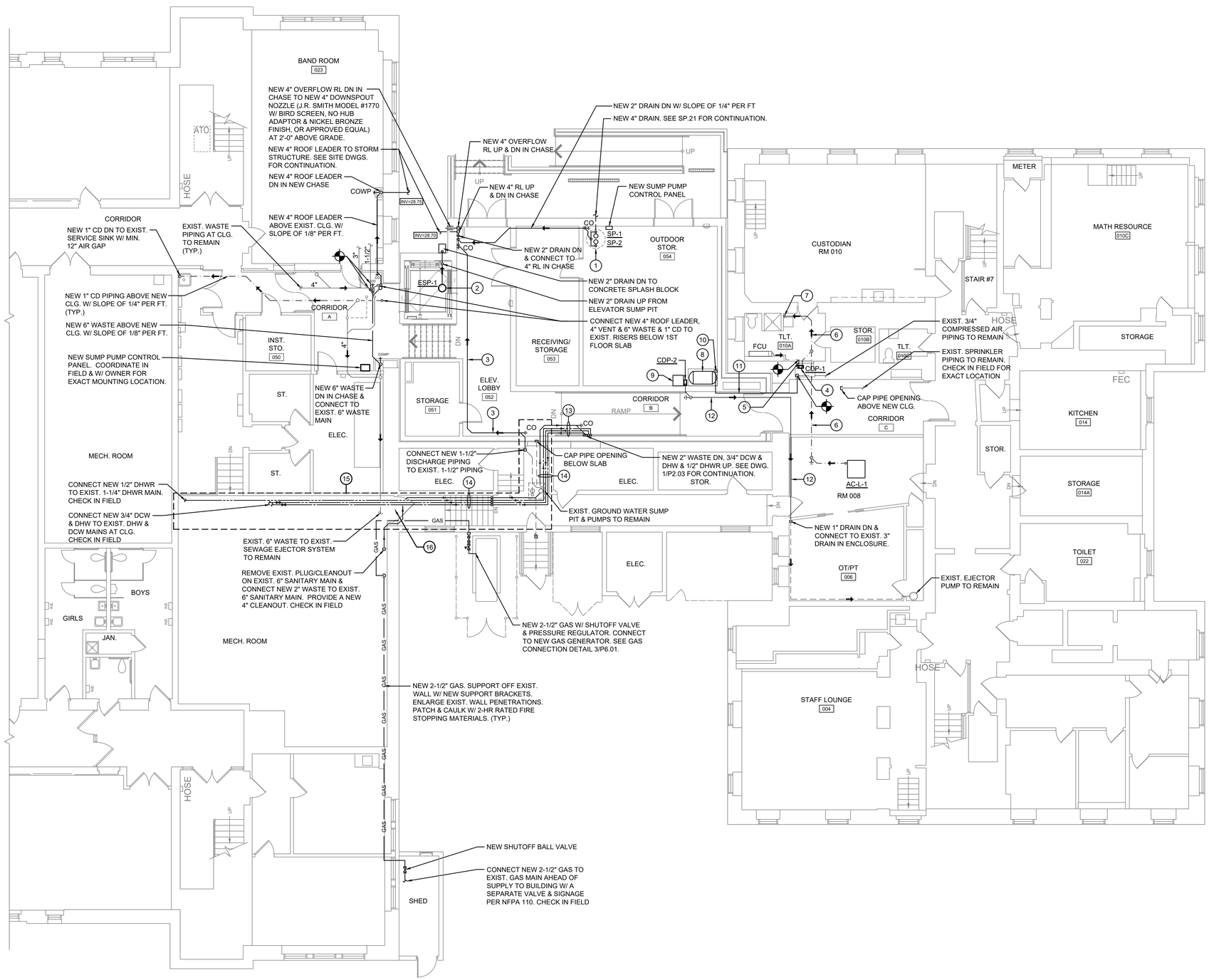
BASEMENT PLUMBING PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272020P201

P2.01



1 P2.02 Partial Lower Level Plumbing Proposed Plan

1/8" = 1'-0"

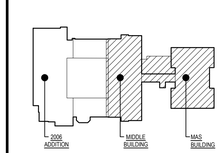
NORTH

GENERAL CONSTRUCTION NOTES

1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY THEM IN FIELD. GC TO SAWCUT EXIST. WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. GC TO PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ALL NEW PLUMBING PIPING SHALL BE INSTALL CONCEALED IN NEW WALLS/CHASES/ABOVE CEILING/BELOW SLABS, UNLESS OTHERWISE NOTED.
3. PC SHALL CHECK IN FIELD FOR EXACT ROUTING OF NEW PLUMBING PIPING. REUSE EXISTING WALL/FLOOR PENETRATIONS WHERE POSSIBLE.
4. PC TO CORE-DRILL FOR NEW PIPE PENETRATIONS AS REQUIRED & CAULK W/ 2HR RATED FIRESTOPPING MATERIALS. GC TO SAW-CUT EXIST. WALLS/FLOORS/CLG. AS REQUIRED & PATCH & PAINT TO MATCH EXIST. FINISH. PC TO PROVIDE PIPE ELBOWS, FITTINGS, ETC. REQUIRED FOR THE PROJECT.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING WORK IS THE RESPONSIBILITY OF GC.
6. ALL NEW ROOF LEADER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS PIPE INSULATION WITH ASJ JACKETS. ALL NEW CONDENSATE PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL). PROVIDE PIPE IDENTIFICATIONS WITH FLOW ARROWS ON PIPE INSULATION.
7. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING & SPRINKLER SYSTEMS, AND DRAIN WATER FROM THE SYSTEMS TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEMS AS REQUIRED.
8. GC IS RESPONSIBLE TO REMOVE EXISTING CEILING/GRIDS & RELOCATE EXISTING LIGHT FIXTURES, FIRE & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE PLUMBING INSTALLATION. REINSTALL TO MATCH EXISTING. REPLACE ALL DAMAGED TILES. MODEL & TYPE OF NEW CEILING TILES SHALL MATCH EXISTING.
9. EXIST. CABINET SINKS THROUGHOUT THE SCHOOL ARE TO BE REPLACED. REFER TO DWGS. A2.03 THRU A2.05 FOR LOCATIONS. PC SHALL DISCONNECT EXIST. PLUMBING PIPING TO ACCOMMODATE REMOVAL OF EXIST. CABINETS. REMOVE EXIST. SINKS & FAUCETS & PLUMBING ACCESSORIES & DISPOSE OFF THE SITE. INSTALL NEW SINKS WITH NEW FAUCETS ON NEW CABINETS & CONNECT TO EXIST. PLUMBING PIPING.

ITEM #	PLUMBING KEY NOTES (PROPOSED)
1	NEW SUMP BASIN W/ DUPLEX PUMPS. SEE DETAIL 1/P6.01.
2	NEW SUMP PUMP IN ELEVATOR SUMP PIT. SEE DETAIL 2/P6.01.
3	NEW 1-1/2" DISCHARGE PIPING ABOVE NEW CLG W/ SLOPE OF 1/8" PER FT.
4	GC TO SAWCUT EXIST. FLOOR & PC TO RECESS NEW CD PUMP BELOW SLAB TO ALLOW GRAVITY DRAIN OF CD FROM EXIST. FCU.
5	CONNECT NEW 3/4" CD TO EXIST. PIPING & NEW CD PUMP.
6	NEW 3/4" CD ABOVE NEW/EXIST. CLG. W/ SLOPE OF 1/4" PER FT.
7	NEW 3/4" CD DN & CONNECT TO EXIST. SINK TAILPIECE.
8	RELOCATED AIR COMPRESSOR ON NEW 6" HIGH CONCRETE PAD. RECONNECT TO EXIST. DRY PIPE SPRINKLER SYSTEM. CONNECT DRAIN TUBING TO NEW CDP-2 ON FLOOR.
9	RELOCATED AIR DRYER. SUPPORT OFF WALL W/ NEW SUPPORT BRACKETS. RECONNECT TO EXIST. DRY PIPE SPRINKLER SYSTEM. CONNECT DRAIN TUBING TO NEW CDP-2 ON FLOOR.
10	NEW 3/4" COMPRESSED AIR PIPING DN & CONNECT TO EXIST. AIR COMPRESSOR. PROVIDE A PRESSURE GAUGE ON PIPE RISER.
11	NEW 3/4" COMPRESSED AIR PIPING ABOVE NEW CLG.
12	NEW 1" DRAIN PIPING ABOVE NEW CLG. W/ SLOPE OF 1/4" PER FT.
13	NEW 2" WASTE, 3/4" DCW & DHW & 1/2" DHWR. INSTALL ABOVE CLG.
14	NEW 2" WASTE, 3/4" DCW & DHW & 1/2" DHWR. INSTALL TIGHT TO CLG.
15	PC TO NOTE THAT THERE IS SUBSTANTIAL AMOUNT OF UTILITY PIPING & ELECTRICAL CONDUITS IN THIS AREA. CORE-DRILL EXIST. WALLS FOR NEW PIPE PENETRATIONS & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. PROVIDE ALL REQUIRED PIPE ELBOWS TO GET AROUND EXIST. PIPING, CONDUITS, ETC.
16	PC TO NOTE THAT THERE ARE SUBSTANTIAL AMOUNT OF UTILITY PIPING & ELECTRICAL CONDUITS THRU THIS WALL & ELECTRICAL JUNCTION BOXES, ETC. ON THE WALL. CORE-DRILL EXIST. WALL FOR NEW PIPE PENETRATIONS & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.. PROVIDE ALL REQUIRED PIPE ELBOWS TO GET AROUND EXIST. PIPING, CONDUITS, JUNCTION BOXES, ETC.

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-004-030

Date	1/10/20
Checked	AL
Drawn	IM/AL

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

#	
1	ISSUE TO BID 11/23/20

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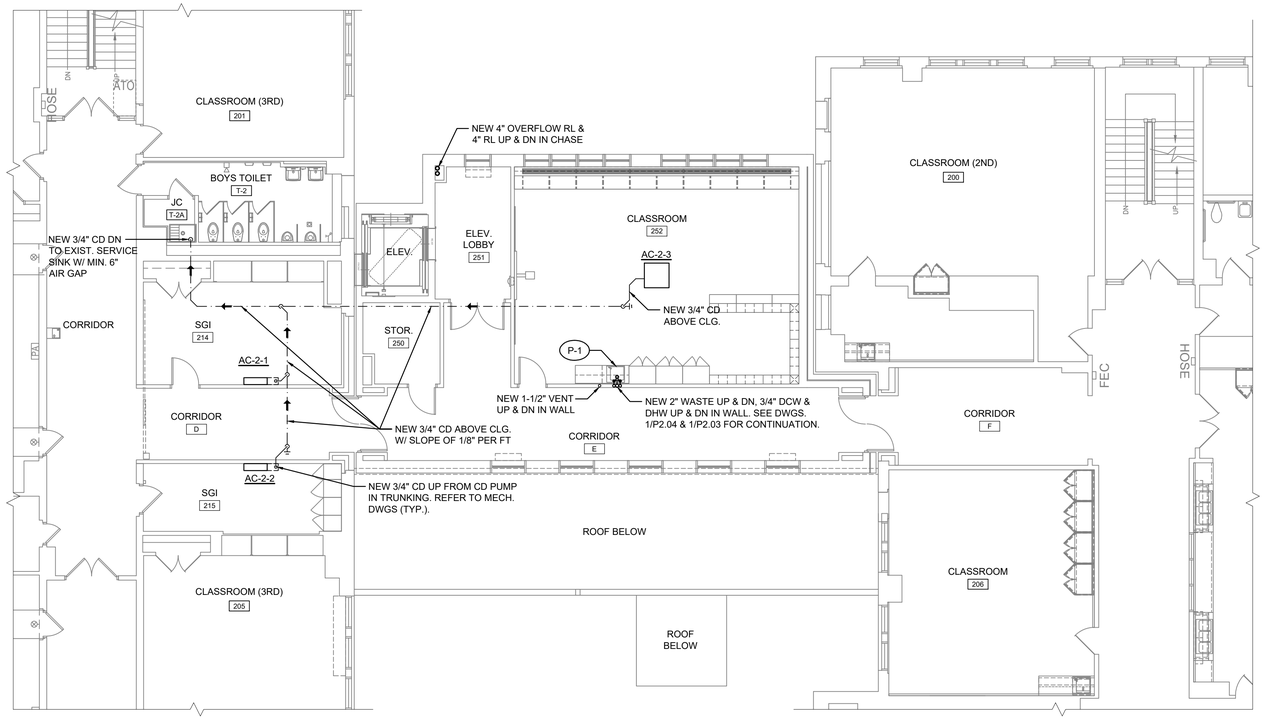
LOWER LEVEL PLUMBING PROPOSED PLAN

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 10927202P201

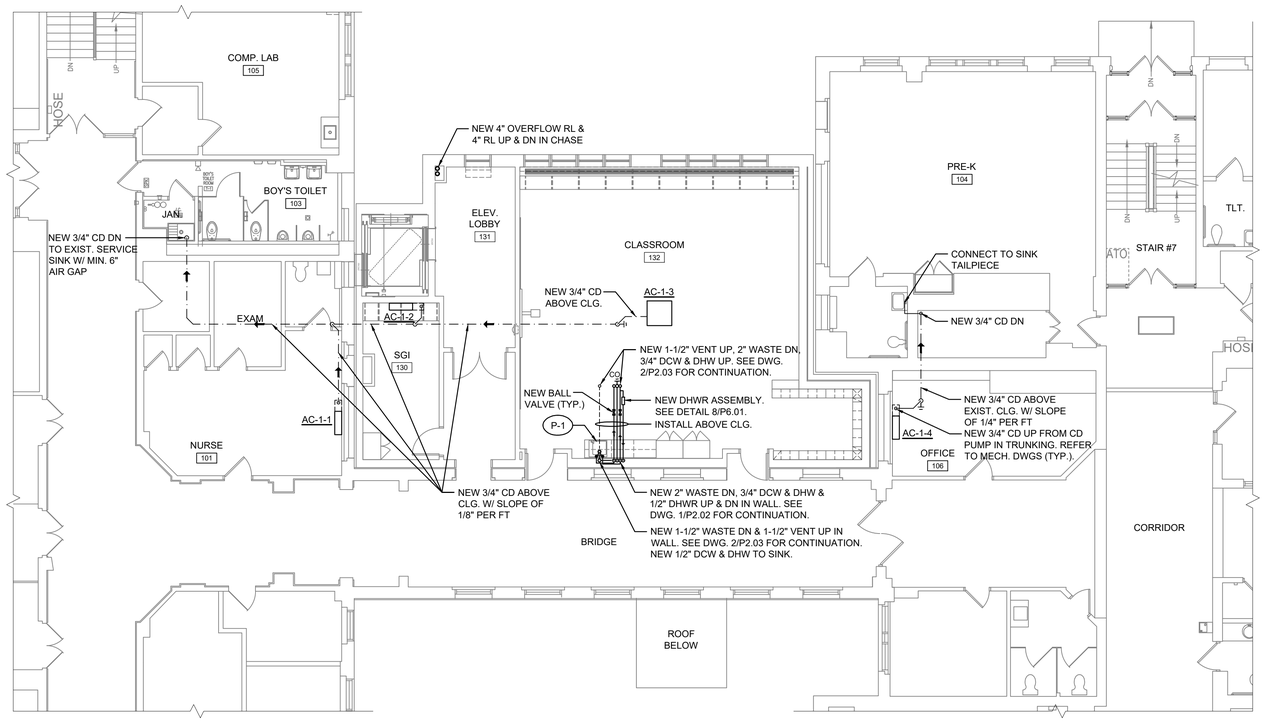
P2.02



2 P2.03 Partial Second Floor Plumbing Proposed Plan

1/8" = 1'-0"

NORTH



1 P2.03 Partial First Floor Plumbing Proposed Plan

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NORTH

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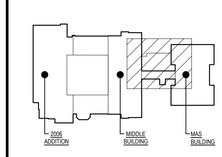
MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	AL
Drawn	IM/AL

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
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NYSED PROJECT # 66-07-01-03-0-004-030

PLUMBING PROPOSED PLANS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

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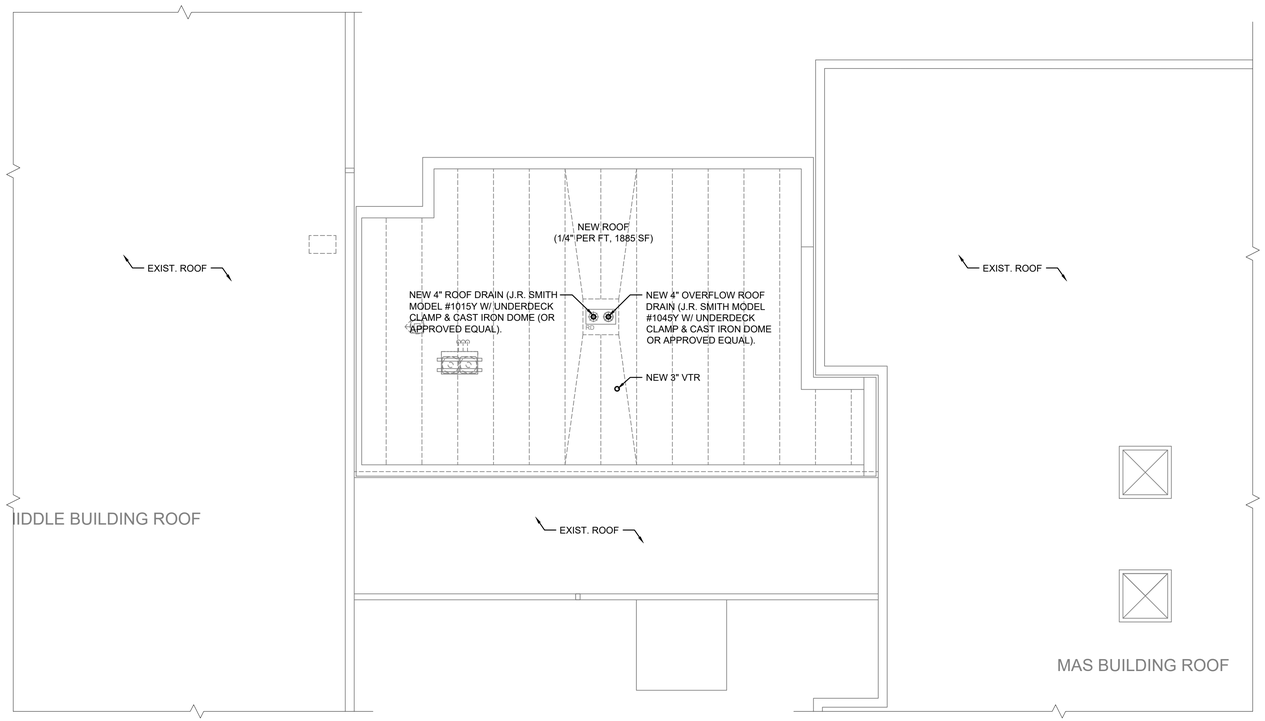
P2.03



2 P2.04 Partial Roof Plumbing Proposed Plan

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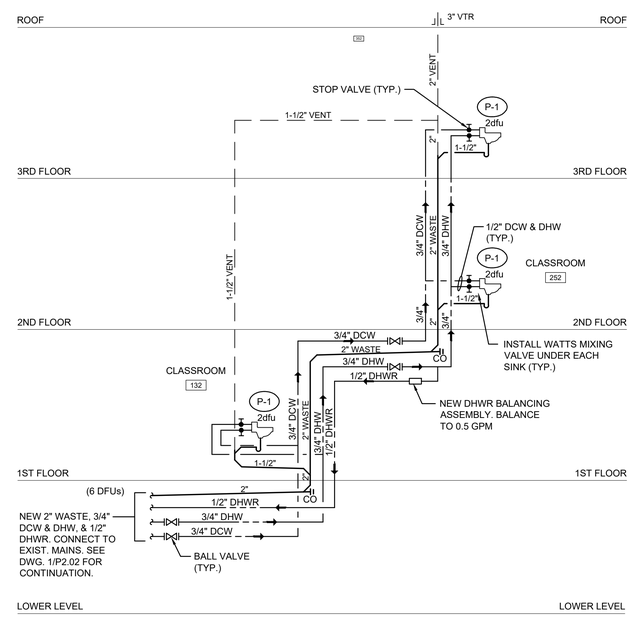
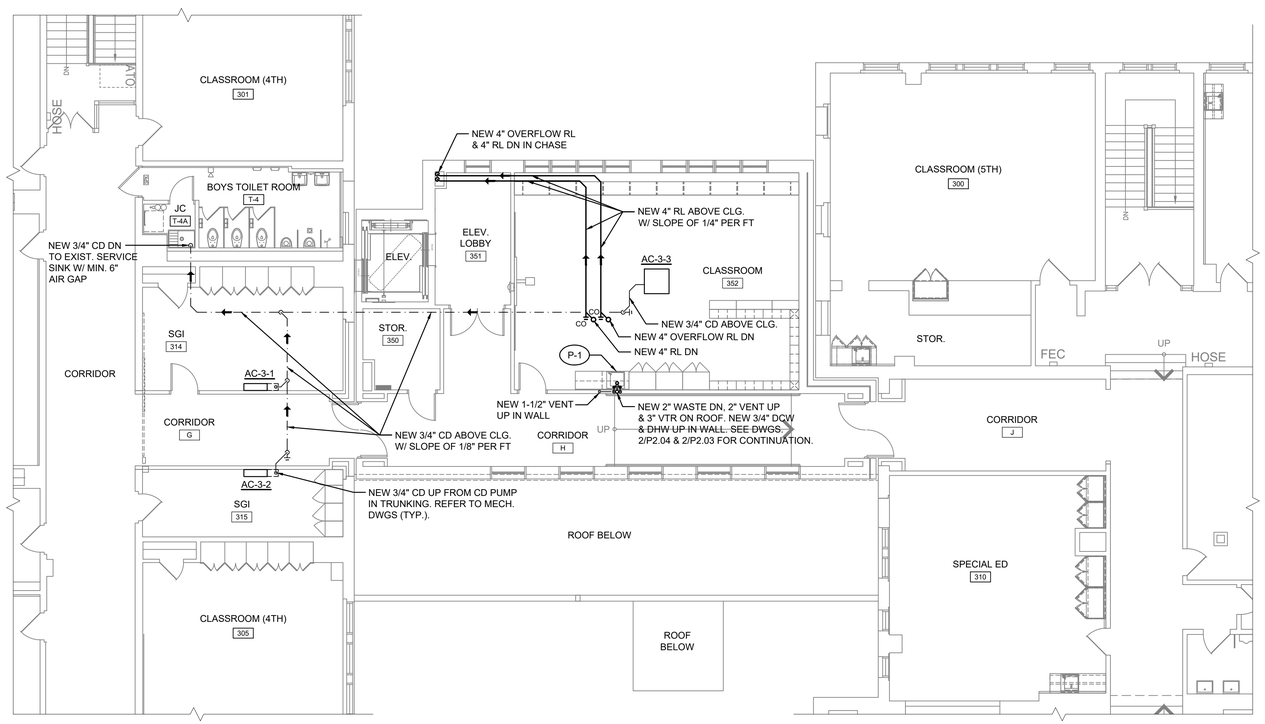


3 Plumbing Riser Diagram

NOT TO SCALE



1 P2.04 Partial Third Floor Plumbing Proposed Plan

1/8" = 1'-0"

Date	1/10/20
Checked	AL
Drawn	IM/AL

MICHAEL J. McGOVERN, R.A.
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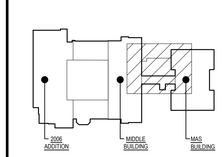


Key Plan

NOT TO SCALE

PROJECT NORTH

SUMP PUMP SCHEDULE

(GOULDS PUMP AS STANDARD)

TAG No.	LOCATION	GPM	HD (FT)	HP	RPM	ELECTRICAL DATA VOLT/PH/HZ	MODEL & MANUFACTURER	REMARKS
SP-1, 2	OUTDOOR STORAGE 054	45	25	1/2	3450	115/1/60	3885 WE0511H GOULDS PUMP	PROVIDE W/ 36"Ø x 48" DEEP FIBERGLASS BASIN W/ ANTO-FLOATATION COLLAR, NEMA 1 DUPLEX CONTROLLER & (3) A2-6 NON-MERCURY FLOATS & HIGH WATER ALARM CONTROLS. SEE DETAIL 1/P6.01 FOR ADD'L INFO.
SP-3, 4	BASEMENT GYMNASIUM	60	25	3/4	3450	208/1/60	3885 WE0718H GOULDS PUMP	PROVIDE W/ 36"Ø x 48" DEEP FIBERGLASS BASIN W/ ANTO-FLOATATION COLLAR, NEMA 1 DUPLEX CONTROLLER & (3) A2-6 NON-MERCURY FLOATS & HIGH WATER ALARM CONTROLS. SEE DETAIL 1/P6.01 FOR ADD'L INFO.
SP-5, 6	BASEMENT GYMNASIUM	60	25	3/4	3450	208/1/60	3885 WE0718H GOULDS PUMP	PROVIDE W/ 36"Ø x 48" DEEP FIBERGLASS BASIN W/ ANTO-FLOATATION COLLAR, NEMA 1 DUPLEX CONTROLLER & (3) A2-6 NON-MERCURY FLOATS & HIGH WATER ALARM CONTROLS. SEE DETAIL 1/P6.01 FOR ADD'L INFO.

ELEVATOR SUMP PUMP SCHEDULE

(GOULDS PUMP AS STANDARD)

TAG No.	LOCATION	GPM	HD (FT)	HP	RPM	ELECTRICAL DATA VOLT/PH/HZ	MODEL & MANUFACTURER	REMARKS
ESP-1	ELEVATOR SUMP PIT	50	15	1/3	3,450	115/1/60	ELKTWE0511H GOULDS PUMP	ELEVATOR SUMP PUMP. PROVIDE W/ CONTROL PANEL (ITT CENTRIPRO MODEL #A1SEE1) WITH LIQUID SMART SWITCH & HIGH ALARM CONTROLS, OIL SMART SWITCH (ITT CENTRIPRO MODEL #A1SEEWAWTER), & CHECK & SHUTOFF VALVES.

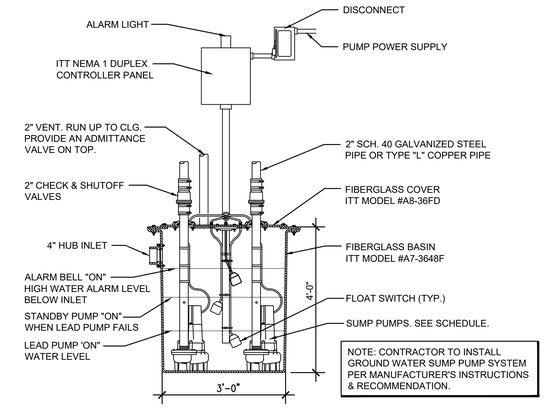
CONDENSATE DRAIN PUMP SCHEDULE

(LITTLE GIANT AS STANDARD)

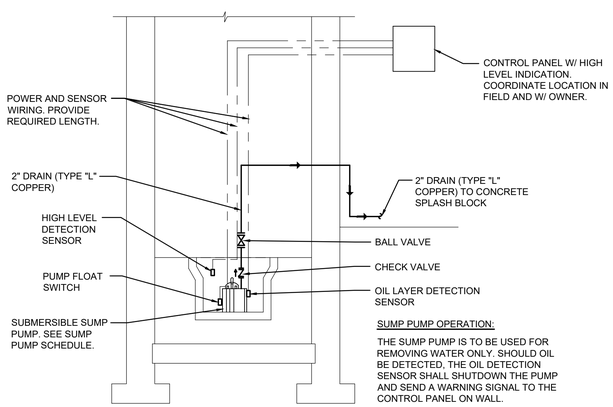
TAG No.	UNIT SERVED	LOCATION	PERFORMANCE (GPH @ HEAD)	SHUT OFF	ELECTRICAL DATA				MODEL & MANUFACTURER	UNIT DIMENSIONS (L x W x H) (IN)	APPROX. WEIGHT (LBS.)	REMARKS
			10'	FEET	HP	VOLT/PH/HZ	AMPS	WATTS				
CDP-1	EXIST. FCU	TOILET 010A	48	20	1/30	115/1/60	1.5	93	VCMA-20UL LITTLE GIANT	10-1/2 x 5-1/8 x 7-1/8	5.0	PROVIDE SHUTOFF & CHECK VALVES ON DISCHARGE PIPING.
CDP-2	EXIST. AIR COMPRESSOR & AIR DRYER	OUTDOOR STORAGE 054	48	20	1/30	115/1/60	1.5	93	VCMA-20UL LITTLE GIANT	10-1/2 x 5-1/8 x 7-1/8	5.0	PROVIDE SHUTOFF & CHECK VALVES ON DISCHARGE PIPING.

PLUMBING FIXTURE SCHEDULE

NUMBER	FIXTURE	MANUFACTURER	MODEL NO.	TRIM NO.	SUPPLY PIPE NO.	TRAP NO.	PIPE SIZES					NOTES
							TRAP	WASTE	VENT	DCW	DHW	
P-1	SINK	ELKAY	DRKAD222065R	ELKAY LKD2439BHC	McGUIRE LF158	McGUIRE 8902C	1-1/2" x 1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	22"x19-1/2"x6-1/2" 18 GA. 304 STAINLESS STEEL SINK. PROVIDE W/ FAUCET W/ 4" LEVER HANDLES, BUBBLER MODLE #LK1141A, ELKAY STRAINER & TAILPIECE #LK18B, WATTS TMV #LFUSG-B, & ELKAY IN-LINE WATER FILTER KIT MODEL #EWF3000 W/ FILTER #51300C (TO BE INSTALLED FOR BUBBLER). INSTALL TO MEET ADA REQUIREMENTS.
P-2	SINK	ELKAY	LTR4622	ELKAY LKD2439BHC	McGUIRE LF158	McGUIRE 8902C	1-1/2" x 1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	22"x19-1/2"x5-1/2" 18 GA. 304 STAINLESS STEEL SINK. PROVIDE W/ TWO (2) FAUCETS W/ 4" LEVER HANDLES, THREE (3) ELKAY STRAINER & TAILPIECE #LK18B & TWO (2) WATTS TMV #LFUSG-B.

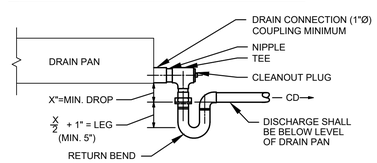


1 SUMP PUMP SYSTEM DETAIL
NOT TO SCALE



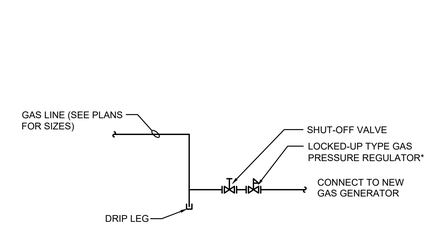
2 ELEVATOR SUMP PUMP PIPING DETAIL
NOT TO SCALE

NOTES:
1. ALLOW SUFFICIENT SPACE BELOW DRAIN PAN FOR TRAP.
2. PITCH DRAIN FOR PROPER RUN-OFF.
3. MANUALLY, PRIME FILL TRAP BEFORE START-UP TO FORM INITIAL DRAIN SEAL.
4. SUPPORT LENGTHY DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.



X = NEGATIVE INTERNAL STATIC PRESSURE AT FAN INLET.

3 CONDENSATE DRAIN TRAP DETAIL
NOT TO SCALE



4 GAS CONNECTION DETAIL
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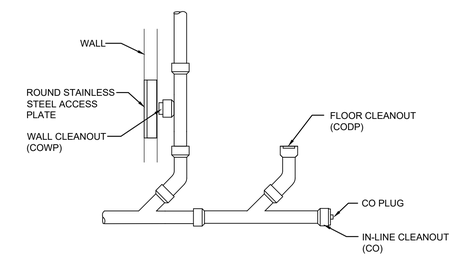
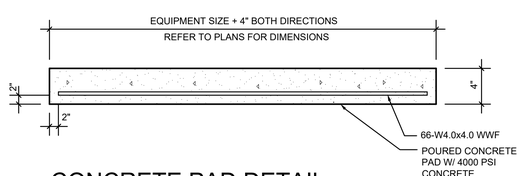
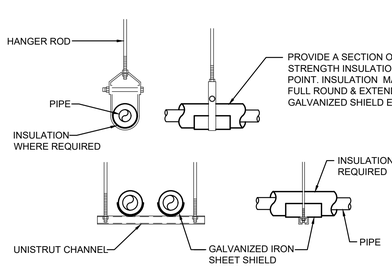


5 CLEANOUT DETAIL
NOT TO SCALE

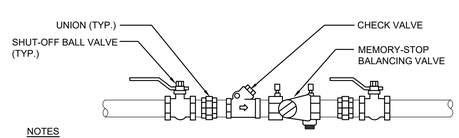


7 CONCRETE PAD DETAIL
NOT TO SCALE



NOTES:
1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM STEEL STRUCTURE TO TOP CORD OF JOISTS OR BEAMS.
2. PROVIDE COPPER OR PLASTIC COATED HANGERS FOR NON-INSULATED COPPER PIPE.
3. ALL SUPPORTS SHALL HAVE GALVANIZED FINISH.

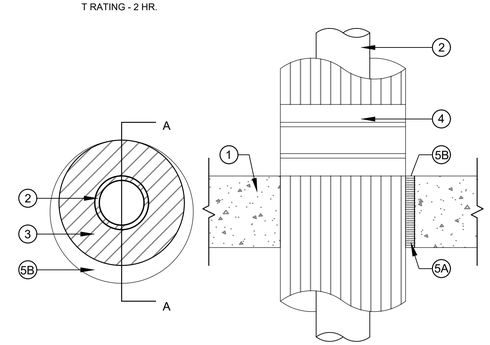
6 PIPE SUPPORT HANGERS
NOT TO SCALE



NOTES
1. ALL THREADED PIPING BETWEEN UNIONS SHALL BE BRASS.
2. INSTALL DI-ELECTRIC UNIONS FOR PIPING CONNECTIONS OF DISSIMILAR METALS.

8 DHWR BALANCING ASSEMBLY DETAIL
NOT TO SCALE

UL SYSTEM NO. C-BJ-5011
F RATING - 2 HR.
T RATING - 2 HR.



SECTION A-A

1. Floor or Wall Assembly - Min 5½ in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam. of opening is 14 in. See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Through Penetrants - One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly.

3. Pipe Covering* - Cellular Glass Insulation - Max 3 in. thick cellular glass units sized to the outside diam. of the steel pipe and supplied in nom 24 in. long half sections or nom 18 in. long segments. The annular space shall be min 0 in. (point contact) to max 2 in. Pipe insulation installed on pipe in accordance with the manufacturer's instructions.
PITTSBURGH CORING CORP - FOAMGLAS

4. Metal Jacket - Min. 12 in. long jacket formed on min. 0.010 in. thick steel or aluminum sheet cut to wrap tightly around the pipe insulation with a min. 2 in. lap. Jacket secured with min. ½ in. wide stainless steel hose clamps or bands located within 2 in. of each end of the jacket and spaced a max. of 10 in. O.C.

Jacket to be installed with edges abutting surface of caulk fill material (Item 5) on both surfaces of wall. Metal jacket to be used in addition to any other jacketing material which may be required to or desired on the pipe insulation.

5. Firestop System - The firestop system shall consist of the following:
   A Packaging Material - Min 5 in. thickness of min. 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
   B Fill, Void or Cavity Material* - Sealant - Min. ½ in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At point contact location between penetrant and periphery of opening, a min. ½ in. diam. bead of fill material shall be applied at the periphery of opening/pipe covering interface on top surface of floor assembly or both surfaces of wall assembly.
JOHNS MANVILLE INTERNATIONAL INC - Firetemp

*Bearing the UL Classification Mark

9 TYPICAL PIPE PENETRATION (ALL LOCATIONS) 2-HOUR RATED
NOT TO SCALE

Date	1/10/20
Checked	AL
Drawn	IM/AL

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

PLUMBING SCHEDULES & DETAILS

2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202P201

P6.01

Electrical General Notes

Project Information:

1. Unless specifically noted otherwise, it shall be understood that when the words "Owner" or "Client" are used in these drawings they are interchangeable an all refer to Mamaroneck UFSD.
2. Unless specifically noted otherwise, it shall be understood that when the words "Architect", "Engineer", or "A/E" are used in these drawings they are interchangeable an all refer to LAN Associates, Engineering, Planning, Architecture Surveying ("LAN").
3. Unless specifically noted otherwise, it shall be understood that when the word "Contractor" is used in the Electrical (E#.##) drawings and/or Electrical Specification sections it refers to the Electrical Contractor.
4. Where any device or part of equipment is referred to in these drawings in the singular number (e.g., "the switch", "the receptacle"), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.
5. Health, safety and critical operating equipment shall not be compromised without owner's authorization. Schedule shutdown during off hours and implement and maintain a temporary operational plan.

Code & Standards Compliance:

6. Code compliance is mandatory. Nothing in these Drawings and Specifications permits work not conforming to these codes. Where work is shown to exceed minimum code requirements, comply with drawings and specifications. When differences in utility specifications or standards, governmental ordinances or codes occur, the more stringent requirements shall govern the installation.
7. The electric installation shall be in accordance with the currently enforced edition of the National Electrical Code (NEC), National Electrical Safety Code (NESC), American Electricians' Handbook, International Building Code (IBC), Americans with Disabilities Act (ADA), NFPA 55 & 99 ASHRAE 90.1 and NEC Standard of installation. Wherever in the documents the word "code" is stated, the more stringent of the above referenced codes is implied.
8. All contractor supplied materials/equipment shall be new and UL Listed or approved by another Nationally Recognized Testing Laboratory (NRTL).
9. The contractor shall pay for and obtain all permits and inspections required by the building and safety codes and ordinances, and the rules and regulations of any legal body having jurisdiction. Permit and inspections shall be include in the base bid and shall not be cause for an extra.
10. Contractor shall confirm to all safety rules and other regulations, etc. pertaining to construction work on the client's premises. Contractor shall be responsible to ensure that all rules and regulations have been met and coordinate this work with responsible client's personnel.
11. All electrical equipment and raceways permanently attached to structures, including supporting structures and attachments to non-building structures, shall be anchored for seismic loading to resist a horizontal force action in any direction. Contractor shall provide seismic restraints for all conduits larger than 2½" trade diameter. Provide sway braces for conduit and equipment suspended from the overhead. Provide anchor bolts for floor and wall mounted equipment. The installation shall meet the requirements of International Building Code (IBC) as it applies to electrical equipment for Earthquake Loads.
12. Contractor shall review code compliance drawings and identify all penetrations through fire/smoke partitions, floor and roofs. Patch compromised partitions to match fire/smoke resistance rating as stated on code compliance drawings.

General Procedures:

13. All equipment shall be as indicated by the Engineer/Architect.
14. The cost incurred by the acceptance of substitutions shall be borne by the contractor. Proof for the equality of the substitutions shall be by the contractor and differences shall be enumerated with the submittal. Submission without the differences noted can be grounds for rejection without review.
15. Electrical components, including but not limited to, conductor size, overcurrent protection device and disconnect switches are based on the power requirements of the equipment shown on the contract documents. All costs (including additional design fees if required) associated with changes to these power requirements shall be the responsibility of the contractor making the change.
16. Obtain shop drawings and wiring diagrams for the proper installation of related electrical work.
17. The contractor shall remove and reinstall ceiling systems as required for the installation of new electrical work and replace in kind, any components damaged by personnel or equipment during performance of the work.
18. Electrical Contractor shall be responsible for the removal of debris generated by his work and workers at the end of each working day and for general pool housekeeping by his workers. Electrical Contractor shall provide required refuse containers.
19. Unless otherwise indicated on the mechanical schedules/drawings, the electrical contractor shall provide and install all disconnect switches for all mechanical equipment (i.e., roof top HVAC units, exhaust fans, variable air volume devices, etc.)

Site Conditions/Drawing Coordination:

20. These drawings and specifications illustrate the work to be performed. The Engineer is not responsible for the means, methods, techniques, sequences, and procedures used to do the work, or the safety aspects of constructions, and nothing on these drawings expressed or implied changes this condition. Prior to bidding and/or starting work the contractor shall visit the project site to determine the conditions under which the work is to be performed and shall be responsible for knowing how they affect the work. Schedule site visit with client's representatives. Additionally, the contractor shall field verify all site dimensions and room layouts. Submission of a bid to perform this work is an acknowledgement of these responsibilities, and that they have been fully considered in planning of the work, and the bid price. No claims or extra charges due to these conditions will be forthcoming.
21. The client will occupy the site and existing building during the entire construction period. Cooperate with the client during construction operations to avoid any conflicts. Perform the work so as not to interfere with the client's operations. Schedule all power outages with client's approval for overtime on Sundays and Holidays at no additional cost to the client.
22. Existing project conditions indicated are based on field observations; existing design/construction documents and existing record documents and are intended to indicate the scope of the work affected by this project
23. Drawings shall not be scaled. Drawings indicate the general arrangement of systems and requirements of the work. Although size and location of equipment is drawn to scale wherever possible, contractor shall make use of all data in all of the contract documents and verify information at the project site.
24. The electrical contractor shall make his own takeoff on all quantities. It shall be his responsibility, at his cost, to include all equipment and material in order to comply with the intent of the drawings.
25. The circuit numbers are for identification only. The contractor shall be responsible for correctly phasing the circuits in panels.
26. Existing Circuit Designations:
    a. All reference to existing circuit designations is based on previous project documentation. The contractor shall consult the engineer in the event that actual conditions do not coincide with the indicated re-distribution or other use of existing circuits as herein indicated.
    b. The total connected load for any general purpose (protected at 20A) branch circuit which is re-distributed as a part of this project shall not exceed 13A.
    c. Any deviation, as may be directed by the engineer, from the indicated circuit structure specified in this drawing set will require both verification by the contractor that the total connected load on the associated supply conductors is within the above specified limit and documentation in the project record (as-built) drawings.
27. The electrical installation shown is represented diagrammatically and indicates the general arrangement of systems and work. The locations and arrangements of equipment, devices, switchboards, panelboards, partitions, openings, etc. are designed to show preferred configurations to suit known conditions but are approximate and are subject to modifications caused by structural conditions and other existing or proposed equipment. The locations are subject to such modifications as may be found necessary or desirable at the time of installation in order to accommodate field conditions and coordination requirements. Contractor shall follow the intent of the drawings in "laying out" the work and coordinate the work with other trades to verify spacing conditions. Contractor shall determine roughing locations required to effect such coordination. The electrical contractor shall coordinate all work and shall make such changes without extra charge.
28. The contract drawings depict the approximate location of all required equipment and if shown, the diagrammatic arrangement of piping, raceways, conduits, feeders, cables, etc, herein after referred to as "conduit." Conduit runs, if shown, have been depicted with the intention of most clearly indicating the proposed routing. Actual runs may differ if kept within the requirements and provisions of these specifications, and providing that that all modifications have been shown in the shop drawings. Contractor responsible to determine conduit runs and "clear" piping, ductwork, access doors, and other obstructions as applicable. Contractor shall coordinate conduit with work of other trades and alter where necessary to avoid interference. Submit for approval, prior to scaled installation drawings showing the location of all new equipment/devices to be installed and indicating circuitry. Shop drawings shall include all wiring, pull boxes, junction boxes, fittings, wiring devices and dimensioned clearances from the structure and equipment. Coordinate shop drawings with other trades prior to submission.
29. Before the relevant work proceeds, the Contractor shall prepare and submit five (5) copies of shop drawings depicting the proposed conduit routing diagram and equipment layout. Specifically detailed shall be a layout of the switchboard and related equipment in each electric room or electric closet. All equipment layouts shall be drawn to scale and dimensioned. Shop drawings shall be a minimum of 1/8" = 1'-0" and preferably 1/4"=1'-0", dimensioned, showing construction, sizes, weights, arrangements, operating clearances, performance characteristics and the necessary coordinating trades involved. Shop drawings will not be accepted unless a complete list of deviations from architect's/engineer's proposed plans is included. Exact location of all equipment will be determined in the field and the contractor must secure exact dimensional data before the layout of any work.
30. Routing for feeders, instrumentation and control circuits is not shown on the plan drawings. If indicated on the floor plans, they express the intent of routing. Final location and routing shall be suited for the construction of the building and established by the contractor based on the installation conditions and shall be verified in the field. All feeder information, conduit types and installation requirements shall be in accordance with the specifications, electrical riser diagram and appropriate panel schedules.
31. Any cutting, patching, or finish repair work required for the electrical installation is the responsibility of the contractor.
32. Where mounting heights are not detailed or dimensioned, install electrical services and overhead equipment to provide maximum headroom possible. Connect equipment for ease of disconnecting with minimum interference with other installations.
33. Provide temporary power and lighting as required during the entire duration of demolition and construction utilizing the existing electrical system as a source. The Electrical Contractor shall remove all temporary power and lighting upon the completion of the project.
34. Unless otherwise noted, refer to architectural drawings for elevations and relative positions of equipment, wall, ceiling and floor information and minor architectural differences in each room.
35. Where conflicts exist, provide in the bid proposal the more costly alternative.

Work/Trade Coordination

36. Refer to all other trades' drawings for additional work requirements called out to be performed by the Electrical Contractor. The Electrical Contractor is responsible for all work items pertaining to electric (120V or low voltage), regardless of the drawing location.
37. Coordinate work with other trades to avoid conflict and to provide correct rough in and connection for equipment furnished under trades that require electrical connections. Inform Contractors of other trades of the required access to and clearances around electrical equipment to maintain serviceability and code compliance.
38. The electrical contractor shall verify the size and rating of all approved mechanical equipment prior to the installation of feeder and branch circuit conductors and overcurrent protection devices.
39. AC and Refrigeration Equipment Nameplate Rating: Short circuit and ground fault protection device rating shall not exceed the manufacturer's values marked on the equipment.
40. Sequence, coordinate and integrate installations of electrical materials and equipment for efficient flow of work. Give particular attention to large equipment requiring positioning prior to closing in the building. Coordinate the cutting and patching of building components to accommodated installation of the electrical equipment and materials.
41. Provide coordination drawings for all required access panel locations in gypsum ceiling to architect/engineer for coordination.
42. The Contractor shall coordinate work with the other trades to ensure the minimum safe working clearances around electrical equipment and to ensure access to equipment requiring calibration or maintenance (including motors, controls, instruments, panels, lights, valves, filters, and VAV boxes). Working space and access shall be sufficient for an adult to perform maintenance safely without straddling or removing obstructions and shall conform to NEC requirements (i.e., 110.26 & 110.34). Work that encroaches on working space or that impedes maintenance shall be relocated at the Contractor's expense.

Installation:

43. Grounding shall be installed in accordance with the NEC in accordance with electrode, grounding and bonding requirements for service, equipment and enclosures. Install an insulated equipment ground conductor in each raceway or conduit. Size equipment ground conductor in accordance with NEC Table 250.122. Bond raceways and the frames and enclosures of motors, breakers, switches, and other electrical equipment to the building grounding system. Precaution shall be taken to ensure adequate ground continuity along the conduit or raceway.
44. Provide a separate neutral conductor for each circuit. Install neutral conductors and ground conductors into all switch boxes. Multiple circuits shall not share a common neutral. Neutral shall be sized as large as the phase conductors. Neutral conductors shall not be reduced in size.
45. Arrange connections for single phase circuits to achieve three phase load balance within 20% of the average phase load current. Ungrounded conductors using a common neutral must originate from different phases.
46. The electrical contractor is responsible for maintaining proper phase rotation with all existing three (3) phase electric loads.
47. Phase rotation check: on multi-phase equipment, perform a phase rotation check prior to energizing the equipment. Use Knopp K-3 or equivalent device with red or "A" lead connected to phase A, white or "B" lead connected to phase B, and blue or "C" lead connected to phase C. Note the phase rotation and annotate test documentation with device used, manner connected, rotation observed, date of test, and name of craftsman. Do not energize equipment unless observed rotation matches the requirements of the equipment
48. Contractor shall supply all labor, power cables, conduit boxes, fittings, wiring materials, hardware, supports, and miscellaneous items for a complete electrical installation and connection of the electrical work required, except that the provision for owner supplied equipment shall be only completed to the point indicated elsewhere on the drawings.
49. The Contractor shall use a calibrated torque tool to achieve the indicated torque value when the tightening torque numeric values identified on the electrical equipment or in the installation instructions. In the absence of connector or the equipment manufacturer's recommended torque values, the tables in Informative Annex I may be used to correctly tighten screw-type connections for power and lighting circuits. Informative Annex I represents the "Recommended Tightening Torque Tables from UL Standard 486A-B."
50. All cables, not within conduit (ex., MC type, fire alarm, PA), routed within the ceiling cavity must be secured using Bridle rings, J-hooks, or other appropriate means. The cable must not lay on dropped ceiling panels, be fastened to existing electrical conduits, steam pipes, sprinkler pipes, insulated pipes, or be routed in such a fashion as to obstruct access hatches, doors, utility access panels, mechanical service work areas or fittings and shall not be routed through fire doors, ventilating shafts, or grates.
    a. Unless otherwise provided, MC cables shall be secured at intervals not exceeding 6'. Cables containing four or fewer conductors sized no larger than 10 AWG shall be secured within 12" of every box, cabinet, fitting, or other cable termination.
    b. Type MC cable shall be permitted to be unsupported where the cable: (a) Is fished between access points through concealed spaces in finished buildings or structures and supporting is impractical; or (b) Is not more than 6' in length from the last point of cable support to the point of connection to luminaires or other electrical equipment and the cable and point of connection are within an accessible ceiling. Type MC cable fittings shall be permitted as a means of cable support.
51. All cable trays and electrical conduits shall be independently supported and braced independently of the ceiling.
52. All new wiring is to be run concealed wherever possible. All conductors shall be in a surface mounted metallic raceway in public spaces or metallic conduit in utility locations when not routed concealed in the ceiling/wall cavities. Any locations that do not have accessible or dropped ceilings will require the use of surface mounted metallic raceways. Provide pull-boxes (size per code) and locate in conduit runs as required. No exposed cable may be installed.
53. Surface mounted metallic raceway shall meet the following criteria:
    a. Install in accordance with manufacturer's instructions for system components and approved shop drawings. Coordinate installation with adjacent work to ensure proper clearances and to prevent electrical hazards.
    b. Install in accordance with complete system instruction sheets.
    c. Install enclosures to be mechanically continuous and connected to all electrical outlets, boxes, device mounting brackets, and cabinets, in accordance with manufacturer's installation sheets.
    d. Install enclosures to be electrically continuous and bonded in accordance with the National Electric Code for proper grounding.
    e. Mechanical Security: Raceway systems shall be mechanically continuous and connected to all electrical outlets, boxes, device mounting brackets, and cabinets, in accordance with manufacturer's installation sheets.
    f. Electrical Security: Metal raceway shall be electrically continuous and bonded in accordance with the National Electric Code for proper grounding.
    g. Raceway Support: Raceway shall be supported by 2-hole straps at intervals not exceeding 5 feet or in accordance with manufacturer's installation sheets.
    h. Accessories: Provide accessories as required for a complete installation, including insulated bushings and inserts where required by manufacturer.
    i. Unused Openings: Close unused raceway openings using manufacturer's recommended accessories.
54. Where PVC raceway is indicated to be installed exposed in an external environment, expansion fittings shall be installed to meet the requirements of NEC 352.44.
55. All openings and penetrations shall be sealed upon completion of the electrical installation to prevent the spread of smoke and fire through openings. Seal around conduit and raceway penetrations through interior walls and floor separating areas to restore original fire rating; use a UL classified fire sealant. Seal penetrations through roof and exterior walls to make waterproof. Request inspection of fire seals by electrical inspector from authority having jurisdiction before and after placement of fire seal materials. All openings shall be coordinated with the other trades to limit interference and obstruction.
56. Limit the use of electrical metallic tubing (EMT) to where it will not be subject to physical damage or corrosion. Use intermediate metal conduit (IMC) or rigid galvanized steel conduit (RGS) where raceways are embedded in concrete or exposed to physical damage. Use minimum 3/4" conduit except as follows: 1/2" conduit may be used for 20 amp general light and power circuits and for control circuits; 3/8" flexible metal conduit may be used to connect light fixtures in suspended ceilings. Use liquid tight flexible metal conduit for flexible connection to equipment in mechanical rooms or outdoors.
57. Where raceways contain insulated conductors 4 AWG and larger that enter an enclosure, the conductors must be protected from abrasion during and after installation by a fitting that provides a smooth, rounded insulating surface, such as an insulating bushing as per NEC 300.4(G).
58. Install outdoor equipment to be weatherproof (NEMA 3R).
59. Wherever the length of the secondary conductors of any transformer exceeds ten feet, and enclosed circuit breaker or fused disconnect is required to be provided within ten feet of the transformer secondary terminals in accordance with NEC Article 240‑21‑(C)(2). This overcurrent device shall have an ampacity rating equal to the ampacity of the panel being served. If this occurs and the panel is in the same room, the panel being fed may be changed to main lug only.
60. All penetrations through exterior walls shall be sealed watertight. Furnish and install seals for conduit and raceways to seal the annular space between the raceway and the building penetration. Furnish and install conduit sealing bushings as manufactured by OZ/Gendy type CSMI or CSMC or approved equal Furnish and install conduit sealing bushings as manufactured by OZ/Gendy type CSBG or approved equal to seal the conductors inside the raceway. Coordinate submittal submission with conductor size, quantity and insulation type.
61. Underground conduits shall be pitched to drain away for them building in manholes.
62. As per 1022.4 of the IBC, no conduit, piping, raceway etc. serving other areas may pass through the stair enclosure. Conduit, piping, raceway etc. must terminate at the stair enclosure.

Wire Information:

63. All wiring shall be copper conductor, 600 volts in EMT raceway with approved fittings unless otherwise indicated. Feeder and branch circuit wiring shall be minimum #12 AWG unless otherwise indicated. Feeder and branch circuit wiring larger than #10 AWG shall be stranded conductor: #10 AWG and smaller, shall be solid conductor. Control wiring shall be #18 AWG THWN. Type of insulation as follows unless noted otherwise:
    a. THHN/THWN insulation for #4 AWG and smaller
    b. THW or THHN/THWN insulation for #2 AWG and larger
    c. THW used for all panel feeder and service conductors
    d. XHHW-2 insulation type shall be used where conductors are installed in conduits exposed to the weather.
64. Use the following conductor color codes:

	208Y/120V	480Y/277V
Phase A	Black	Brown
Phase B	Red	Orange
Phase C	Blue	Yellow
Neutral	White	Gray
Equip. Ground	Green	Green

Circuit Breakers:

65. Use 600 VAC circuit breakers in 480V and 480Y/277V switchboards, panelboards and motor control centers.
66. Provide circuit breakers with UL listed interrupting rating (RMS symmetrical amperes) greater than the available fault current shown on the electrical one-line diagram. "Series rated" equipment shall not be accepted.
67. Install UL Listed circuit breaker padlocking devices for service and maintenance personnel on all over current protection devices at the main building panel (MDP or equivalent). The device must have provisions for placement of a lock on it to secure the device in the off position. The lock-out device must be part of the disconnect assembly and must remain in place after the padlock is removed, whether it is a fused disconnect switch, a single circuit breaker, or a circuit breaker in a panelboard. A device that is attached to the circuit breaker handle by a set screw is not an acceptable means to serve as a safe method of locking the device in the off position.
68. All circuit breakers shall be molded case thermal magnetic and rated for available short circuit current.
69. Circuit breakers used as switches shall be UL listed for switching duty and marked "SWD" per NEC 240-83(D).

Receptacles:

70. Receptacles and communications outlets shown on drawings shall be mounted 8" apart on center horizontally. Contractor shall coordinate exact location of all boxes in two hour or less rated assemblies such that area of box per wall area and outlets on opposite side wall horizontally spacing comply with state building code regarding fire resistant construction.
71. All receptacles shall be listed tamper-resistant receptacles.
72. All outdoor receptacles shall be mounted 42" above the finished grade, unless noted otherwise. The outdoor receptacles shall be GFCI type with a weatherproof enclosure. The weatherproof enclosure shall have a gasketed hinged outlet cover/enclosure which is suitable for wet locations while in use and UL listed as manufactured by TayMac or approved equal.

Labeling:

73. All switchboards, panelboards, industrial control panels and motor control centers that are in other than dwelling occupancies and are likely to require examination, adjustment, servicing or maintenance while energized shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing or maintenance of the equipment. Marking shall be self adhesive, commercial label conforming to NEC 110.16 and ANSI Z535.4. Arc Flash Label shall be Brady (bradyid.com) catalog No. 102308 or equal.
74. Provide identification tags for all new wiring and install at each end and in all intermediate pull/junction boxes, cabinets, housings, etc. Indicate on tags, legibly minimum ¼" high letters, the points of origin and termination of each conduit and conduit run. Label all receptacles and switch covers with panelboard and circuit number. For interior equipment, use Brother P-touch 3 label maker with TC-10 label cartridge or equal. For exterior equipment, use aluminum dymo half-inch tape label with embossed lettering. Abbreviate lettering to provide necessary information with minimum label size (i.e., Panelboard PP1, Circuit 23 should read PP1-23).
75. Label all switchgear, panelboards, and separately-mounted equipment with feeder source and circuit number. For interior equipment, provide white Micarta plate with quarter-inch block lettering. For exterior equipment, provide anodized aluminum plate with quarter-inch embossed block lettering. Attach to equipment using contact cement in a clear space on the upper portion of the equipment cover approximately 66" AFF. Abbreviate lettering or adjust letter size to provide necessary information with minimum label size, (i.e., 227/480V PANEL PP1 FROM MDP CKT 3 or P-1 20 HP PUMP FROM PP1 CKT 3).
76. All panels shall have typed, completed directories indicating equipment served and room number (as indicated on the final building signage) of equipment location, or spare, or space. Identify the purpose of individual circuit breakers, safety switches and motor starters by means of nameplates as indicated. Update directories as panels are altered. Circuit changes shall be reflected on "as-built" drawings.
77. All circuits and circuit modifications must be legibly identified as to their clear, evident, and specific purpose. The identification must include sufficient detail to allow each circuit to be distinguished from all others, and the identification must be on a circuit directory located on the face or inside of the door of its panelboard. Circuit directories containing multiple entries with only ``lights" or ``outlets" do not provide the sufficient detail required by the NEC.

Lighting:

78. Support for light fixtures in or on grid-type suspended ceilings: A Seismic Fixture Clamp (SFC) shall be installed as a metal clip to attach recessed fluorescent light fixtures (luminaries) to framing members of metal suspension systems for acoustical and lay-in panel ceilings. One clamp is required at each of the four corners.
79. In mechanical areas, the contractor shall verify locations and make adjustments necessary to clear obstructions and required to suit field conditions.
80. "Wiring" to battery operated exit or emergency luminaries shall be as per the Manufacturer's instructions and in conformance with the UL Listing of the equipment. As per NEC 700-12(F), connect the emergency battery to the line side, ahead of the switch of the area lighting and clearly identify the circuit feeding the unit at the distribution panel.
81. Provide neutral for all lighting circuits.
82. Gang switches together under one faceplate.
83. For installation of light fixtures in areas without a ceiling, contractor shall determine method of support using hanger fittings, threaded rod, and "Unistrut" as applicable. These costs shall be included with the base bid.
84. Lighting controls factory startup:
    a. The contractor, with the assistance of the lighting control system manufacturer or representative, and lighting designer shall program and verify the system performs per the manufacturer's instructions and the lighting designer's intent, sequences of operations, plans, and specifications. This includes properly locating the daylight sensor in the room(s), setting the dimming curves, setting occupancy sensor shut-off delays, setting dimming levels, and addressing all of the components in the lighting control system.

Inspections/Warranty:

85. No work shall be concealed until after inspection and approval by proper authorities. If work is concealed without inspection and approval, the Contractor shall be responsible for all work required to both open and restore the concealed areas in addition to any required modifications.
86. The contractor shall make a final inspection of all electrical equipment to ensure that there are no loose electrical connections or electrical circuits subject to electrical break down due to the presence of foreign material. This shall include inspection of all connections made under this contract.
87. The contractor shall contract with an electrical underwriter to provide third-party electrical inspection services (both "rough" and "final") for issuance of a "Certificate of Completion". All fees and costs shall be the responsibility of the contractor.
88. The contractor shall deliver certificates of electrical and other inspections or copies thereof, to the client at the completion of the project with copies to the Engineer/architect.
89. The contractor shall guarantee all work in writing to the client against any and all defects in material and workmanship for a period of one year, or as indicated in the specification, from date of acceptance and perform all corrective work at no cost to the client.

Electrical Demolition General Notes

THE ELECTRICAL CONTRACTOR SHALL REFER TO THE A1.XX, M1.XX, AND P1.XX SERIES OF DRAWINGS FOR ADDITIONAL SCOPE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL ELECTRICAL DEMOLITION REQUIREMENTS ON THOSE PLANS.

General Project Info:

1. The demolition drawings are diagrammatic and indicated the general intent and scope. Plans do not attempt to show all electrical demolition items. Unless otherwise noted, devices shown are for information purposes. Field verify all demolition items and the extent of demolition work, conditions under which demolition is to be accomplished along with kind and amount of materials being removed and provide for removal of all devices accordingly prior to bid.
2. Contractor shall include all labor and materials in the base bid including all temporary connections, conduit and wire in order to accommodate construction and provide continuous service to devices. Systems that are to remain temporary or permanently and require the shutdown of the building power shall be performed during overtime and shall be included in the base bid.
3. The contractor is responsible for the sequence of all work and shall include in the base bid all labor and materials required for the extensions, re-routing and relocation of existing system components, equipment, wiring, conduits and cabling to maintain operation of all systems throughout the building during demolition and construction phases.
4. The contractor shall report to the client any and/or all conditions that may interfere with or otherwise affect or prevent the proper execution and completion of the work of this contract.
5. The contractor shall execute all work within the regulations of the building for demolition and removal of debris. Overtime work required will be at no extra cost to the client.
6. All equipment shall be disconnected and removed back to its power source of origination unless otherwise noted ("U.O.N.") by Existing to Remain ("E"). All disconnected and removed items that are not being reused shall be returned to the owner or disposed off site in an approved method.
7. The contractor shall at all times protect the property of the client and the building owner, including but not limited to windows, finishes, public toilets, elevators, doors, bucks, electrical and air conditioning equipment, convectors and grilles. Abandoned wiring and raceways can result from actions that include the following:
    a. Equipment is removed or relocated.
    b. Fixtures are removed or relocated.
    c. System is no longer used.
    d. There is no demonstrable near term future use for the existing circuit or raceway system.
8. Unused electrical equipment and material should only be left in place if one or more of the following conditions exist:
    a. The removal requires the demolition of other structures or equipment that is still in use. An example is conduit embedded in walls or ductbanks.
    b. The cost of removal is excessive due to hazards, construction methods, or restricted access. A final determination for this condition shall be made by the engineer.
    c. If either of the above two cases exist, remove the conduits, including those above accessible ceilings, to the point that building construction, earth, or paving covers them. Cut conduit beneath or flush with building construction or paving. Plug, cap, or seal the remaining unused conduits. Install blank covers for abandoned boxes and enclosures not removed.
9. Do not disable or disrupt building fire or life safety systems without written permission from the Owner. In all cases, permission shall have been granted not less than ten (10) working days prior to the intended interruption.
10. Before the start of work, the electrical contractor shall check all existing devices, light fixtures, equipment, etc. that is noted or required to be reused to satisfy himself that they are operating properly. Should any of the items not be operating properly, contractor shall report same to the engineer and await his directions. Contractor not complying with the above will be responsible for providing operational items at his expense.
11. Field investigate the existing electrical & low voltage systems installations. All existing installations in the renovation areas that are to remain but are not currently in compliance with current codes shall be corrected, including but not limited to the following: Un-supported wire, conduit and junction boxes laying on top of ceiling tiles, wire, conduit and/or junction boxes supported only by tie-wire. Raise and support conduit with strap per specs. Raise and support wire with bridle rings, J-hooks, or other appropriate means. Provide new conduit/wire as required. Fixtures improperly supported or inadequately supported by device boxes - provide proper support per N.E.C.

Work/Trade Coordination:

13. Electrical Contractor shall coordinate the mechanical equipment demolition with the Mechanical Contractor and mechanical demolition plans and general construction demolition with the General Contractor and architectural demolition plans for all equipment to be demolished and schedule time for electrical demolition.
14. The contractor shall remove all electrical equipment left after wall demolition, including conduit, switch boxes, plates, bridges or any other telephone or electric wiring and equipment. Disconnect all wiring at panels and remove old wiring from plenum.
15. Temporarily relocate electrical equipment as required to accommodate the construction schedule. All areas not under construction must be kept operational during construction. To accomplish this, provide the necessary temporary electrical services. Remove temporary devices upon completion of the project.
16. As part of the base bid, the Electrical Contractor shall provide temporary electric power required for construction activities of all project divisions. All temporary branch circuits shall be supplied by circuits protected by ground fault circuit breakers. All temporary branch circuits shall be in accordance with NEC Article 590.
    a. Complaints concerning power distribution or devices available in a specific area or areas of the project will be reviewed by the AE. If directed by the AE, the Contractor shall provide additional power distribution or connection devices required under this section at no additional cost.
17. As part of the base bid, the Electrical Contractor shall provide temporary lighting with local switch for general illumination and task illumination for the General Contractor, other prime contractors, and for all sub-contractors for the duration of the construction. Lighting levels provided are to be in compliance with applicable workplace standards. All temporary lighting shall be supplied by circuits protected by ground fault circuit breakers. All temporary lighting shall be in accordance with NEC Article 590.
    a. Complaints concerning lighting levels and/or lighting quality in a specific area or areas of the project will be reviewed by the AE. If directed by the AE, the Contractor shall provide additional luminaries and/or additional distribution wiring required at no additional cost.
18. At the conclusion of the construction activities remove all wiring, both exposed and concealed, used for temporary lighting and power distribution.

Demolition Requirements:

19. Remove abandoned electrical equipment, devices and wiring (i.e., distribution equipment, receptacles, data ports, raceway systems) back to the source panelboard, switchboard, switchgear, communications closet, or equipment. Abandoned wiring and raceways can result from actions that include the following:
    a. Equipment is removed or relocated.
    b. Fixtures are removed or relocated.
    c. System is no longer used.
    d. There is no demonstrable near term future use for the existing circuit or raceway system.
20. Unused electrical equipment and material should only be left in place if one or more of the following conditions exist:
    a. The removal requires the demolition of other structures or equipment that is still in use. An example is conduit embedded in walls or ductbanks.
    b. The cost of removal is excessive due to hazards, construction methods, or restricted access. A final determination for this condition shall be made by the engineer.
    c. If either of the above two cases exist, remove the conduits, including those above accessible ceilings, to the point that building construction, earth, or paving covers them. Cut conduit beneath or flush with building construction or paving. Plug, cap, or seal the remaining unused conduits. Install blank covers for abandoned boxes and enclosures not removed.
21. Inventory each panelboard where circuits are indicated to be reused. Sequentially consolidate existing circuits within each panelboard with regard to area served. Maximize capacity for service to the project area by including existing spares with the group of circuits breakers to be disconnected as a result of this selective demolition. Prepare a current directory, post demolition, for each panelboard as the base upon which the final directories will be compiled.

Extension/Continuity:

22. All thermostats should remain connected until such time that they are relocated. If they are in a wall to be removed, leave them connected and either tuck them into the ceiling or attach to adjacent structure remaining.
23. Extend existing equipment connections using materials and methods compatible with the existing electrical installation and identified in the Electrical Specifications.
24. When relocation or removal of an electrical device interrupts the continuity of a downstream circuit or device to remain, reroute/modify the circuit as required to maintain circuit continuity. Provide new junction boxes, pullboxes, raceways, wiring, etc., as required.
25. When circuits are interrupted by the removal of a panelboard, the Electrical Contractor shall rewire devices to the nearest panelboard of same voltage requirements with available space. Furnish and install new circuit breakers or utilize spare circuit breakers as required.
26. Where an existing device is removed but the raceway and box remains for circuit Continuity, provide an appropriate blank cover plate of material and finish to match the cover plates of the devices in that room.
27. If the continuity of the neutral conductor of a multiwire circuit is interrupted (open), the resultant over or under voltage can cause a fire and/or destruction of electrical equipment. Contractor shall take necessary precautions to preclude the interruption of neutral conductor on a multiwire circuit.
28. Non-demolition areas: Demolition works shall not affect areas not included in demolition. Contractor shall be responsible for the continuity of all services in non-demolition areas. All services shall be maintained at all times. Maintain service by extending, re-routing and/or reconnecting any circuits affected by demolition. Provide additional conduit/wire as required to maintain service. Circuits in non-demolition areas that are connected to demolished panels and/or circuits shall be re-circuited to the existing panels. Provide temporary power as required during change-over to maintain continuous service. Provide temporary power for all relocated circuits as required to maintain continuous service.
29. Where existing outlets are shown to remain, but are indicated with new circuitry perform the following:
    a. Remove existing circuitry. Provide additional conduit, wiring, etc., necessary to maintain circuit continuity to existing devices on the same circuit that are not to be recircuited.
    b. Provide new wiring device and faceplate.
    c. Recircuit devices as indicated.

Patching/Repairing:

30. Restore the original fire rating of floors, walls, and ceilings after electrical demolition using a UL classified fire sealant.
31. Except for areas where partitions or ceilings are to be demolished or where new air conditioning or electric is to be installed, contractor shall replace the existing condition in area of disturbed ceiling. Any water damaged or broken ceiling tiles as the result of contractor's demolition shall also be replaced.
32. Upon completion of the demolition work, the contractor shall provide that all areas be left broom clean.
33. Furnish and install knockout plugs on all existing panels, equipment, and outlet box openings created by the removal or relocation of existing raceways.
34. Where an existing electrical device, equipment, etc., is being removed from an existing wall and that wall is to remain contractor shall patch existing wall to architects satisfaction.

Hazardous Material Disposal:

35. Disconnect and remove all ballasts from fluorescent light fixtures that do not have a labels stating "BALLAST DOES NOT CONTAIN PCBs" or similar label (BALLAST MAY CONTAIN PCBs). Place PCB ballasts in D.O.T. approved containers. Properly dispose of containers with a federally approved disposal contractor. Disposal shall involve segregation of components for recycling and incineration of PCB contents. All disposal documentation shall be provided to the owner upon completion of the project. Contractor shall maintain an owner approved log sheet for each run.
36. Remove all mercury-containing lamps, do not break or crush. Retain services of a state approved lamp recycling facility able to accept waste 0009. Coordinate packaging required and package, secure, and deliver lamps as required by the selected recycling facility to insure minimum lamp breakage. Minimum of 95% of lamp material must be shipped intact. Contractor must comply with all reporting and paperwork requirements of state laws regarding the handling, transportation, and disposal of hazardous waste including but not limited to filing the required paperwork and manifest with the state and owners as required by law. All disposal documentation shall be provided to the owner upon completion of the project.
37. Remove all sealed lead-acid batteries from the site. Return to the battery manufacturer or to a similarly qualified battery processing facility for proper disposal. Obtain a receipt for submission with the close out documents.

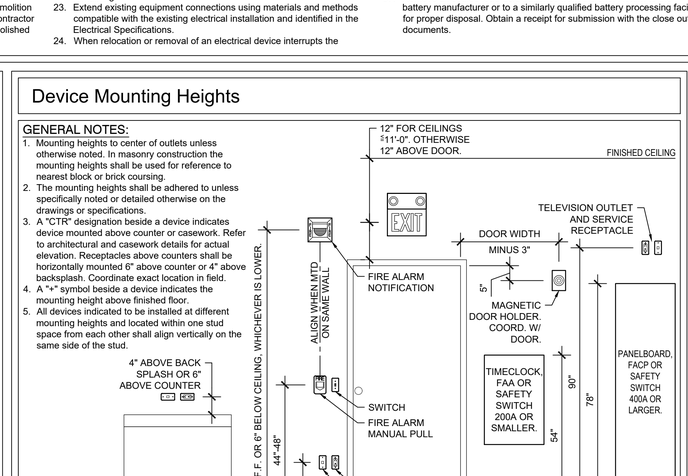
Application of Raceways

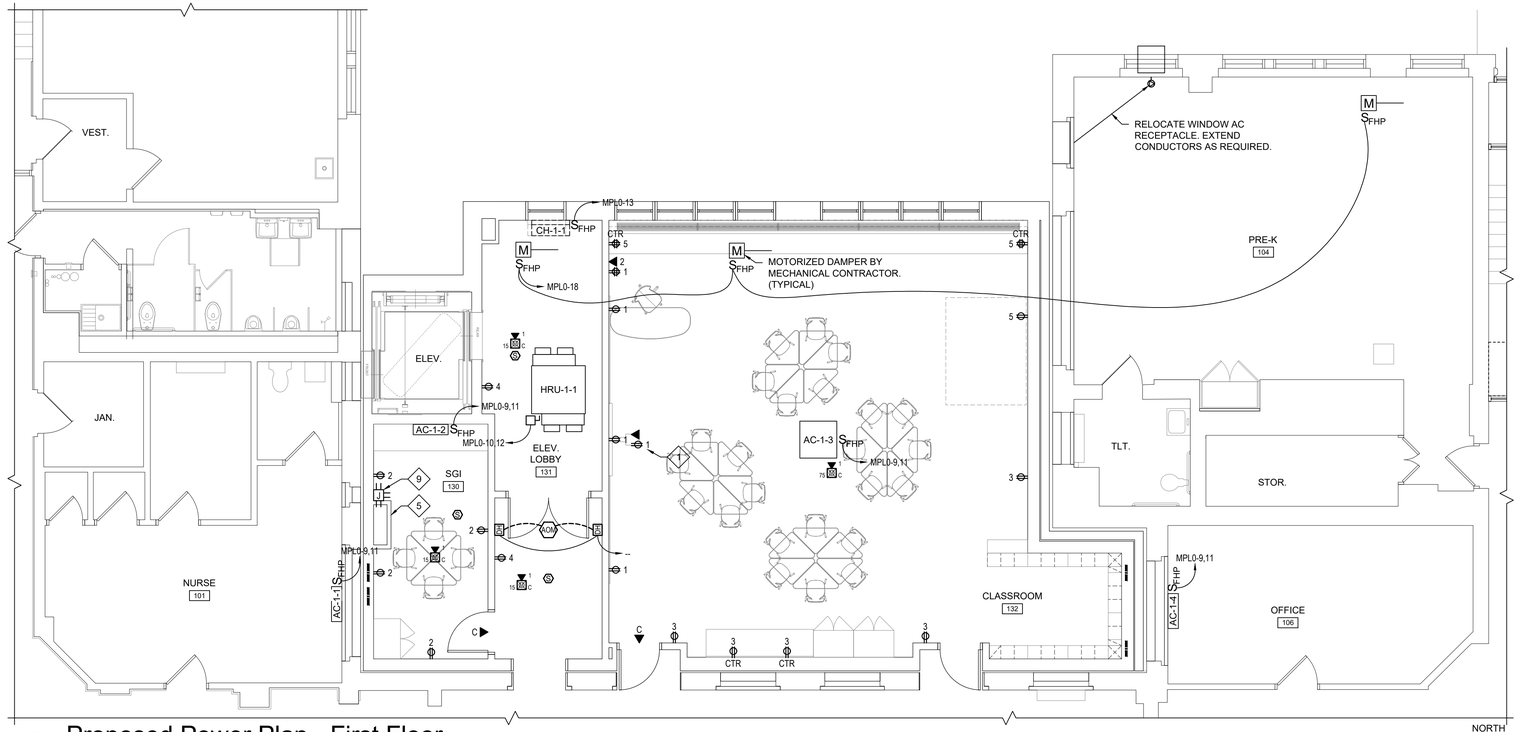
RACEWAY TYPE	APPLICATION
Rigid Steel Conduit	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
I.M.C.	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
E.M.T	Use in every instance except where another material is not specified.
Flexible Metal Clad Cables	Lighting and receptacle branch circuits concealed in hollow spaces of building. May not be used in corridors, places of assembly, or where prohibited by Code.
Type MC Flexible Steel	Use in dry areas for connections to lighting fixtures in hung ceilings, connections to equipment installed in removable panels of hung ceilings. At all transformer or equipment raceway connections where sound and vibration isolation is required.
Liquid-Tight Flexible Conduit	Use in areas subject to moisture where flexible steel is unacceptable, at connections to all motors, and all raised floor areas.
Non-Metallic Conduit	1. Schedule 40 - Where raceways are in slab in below grade levels, for raceway duct banks. 2. Schedule 80 - For underground raceways outside of building which are not encased in concrete. Also for secondary conductors of cold cathode lighting systems.
Wireways and Aux Gutters	Where indicated on the Drawings and as otherwise specifically required.

Device Mounting Heights

GENERAL NOTES:

1. Mounting heights to center of outlets unless otherwise noted. In masonry construction the mounting heights shall be used for reference to nearest block or brick coursing.
2. The mounting heights shall be adhered to unless specifically noted or detailed otherwise on the drawings or specifications.
3. A "C TR" designation beside a device indicates device mounted above counter or casework. Refer to architectural and casework details for actual elevation. Receptacles above counters shall be mounted horizontally 6" above counter or 4" above backsplash. Coordinate exact location in field.
4. A "+" symbol beside a device indicates the mounting height above finished floor.
5. All devices indicated to be installed at different mounting heights and located within one stud space from each other shall align vertically on the same side of the stud.


12" FOR CEILINGS
11'-0" OTHERWISE
12" ABOVE DOOR.
FINISHED CEILING
EXIT
TELEVISION OUTLET AND SERVICE RECEPTACLE
DOOR WIDTH MINUS 3"
5'
MAGNETIC DOOR HOLDER. COORD. W/ DOOR.
FIRE ALARM NOTIFICATION
ALIGN WHEN MTD ON SAME WALL
PANELBOARD, FACP OR SAFETY SWITCH 400A OR LARGER.
TIMECLOCK, FAA OR SAFETY SWITCH 200A OR SMALLER.
90"
78"
54"
SWITCH
FIRE ALARM MANUAL PULL
TELE/DATA OUTLET
RECEPTACLE
FINISHED FLOOR
96" A.F.F. OR 6" BELOW CEILING, WHICHEVER IS LOWER.
44"-48"
18"
4" ABOVE BACK SPLASH



Proposed Power Plan - First Floor

2 / E2.01

3/16" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPL0 UNLESS NOTED OTHERWISE

NORTH

SYMBOL LEGEND

SYMBOLS FOR DWGS E2.01 & E2.02

- NAME — NEW PANEL. REFER TO PANEL SCHEDULES AND RISER DIAGRAM FOR ADDITIONAL INFO.
- REQUIRED CLEAR SPACE. MIN. 30"W x 36"D
- # — 20A, 120V, TAMPER RESISTANT DUPLEX RECEPTACLE TO CIRCUIT INDICATED.
- # — 20A, 120V, TAMPER RESISTANT QUAD. RECEPTACLE TO CIRCUIT INDICATED.
- J — CODE SIZED JUNCTION BOX
- CODE SIZED DISCONNECT SWITCH. - "F" INDICATES CURRENT LIMITING FUSES.
- S_{FHP} — FRACTIONAL HP MOTOR STARTER W/ THERMAL OVERLOAD
- # — HOMERUN TO CIRCUIT INDICATED
- # — CAT. 6 DATA JACK, MOUNTED 18" A.F.F. WITH CATEGORY 6 CABLE(S) EXTENDING FROM THE DATA JACK TO THE CLOSEST IDF/MDF CLOSET. CABLE(S) SHALL BE SLEEVED WITH ¾"C MIN. INTO CEILING CAVITY WHERE INSTALLED CONCEALED IN PARTITION WALLS OR FLOORS.
  - "#" INDICATES NUMBER OF PORTS/HOMERUNS. WHEN MORE THAN ONE, TERMINATE IN A MULTI-SOCKET RJ45 FACEPLATE
  - "W" INDICATES A SINGLE PORT MOUNTED 60" A.F.F. FOR WALL MOUNTED PHONE.
  - "C" INDICATES A SINGLE PORT MOUNTED 12" ABOVE THE DOOR FOR A FUTURE CLOCK.
- G/GFCI GROUND FAULT CURRENT INTERRUPTER
- CTR INSTALLED ABOVE COUNTER HEIGHT. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFO.
- WP WEATHERPROOF (RECEPTACLE MOUNTED IN AND "IN-USE" COVER

- ALL DUCT SMOKE/FIRE DAMPERS SHALL BE CONNECTED TO CIRCUIT MPL0-23 UNLESS NOTED OTHERWISE.
- CONNECT ALL DAMPERS TO THE FIRE ALARM SYSTEM WITH INPUT/OUTPUT RELAYS. DAMPERS SHALL CLOSE UPON AN ALARM CONDITION. CONFIRM EXACT QUANTITY AND LOCATIONS WITH THE MECHANICAL PLANS. COORDINATE INSTALLATION WITH THE MECHANICAL CONTRACTOR.

Fire Alarm Symbol Legend

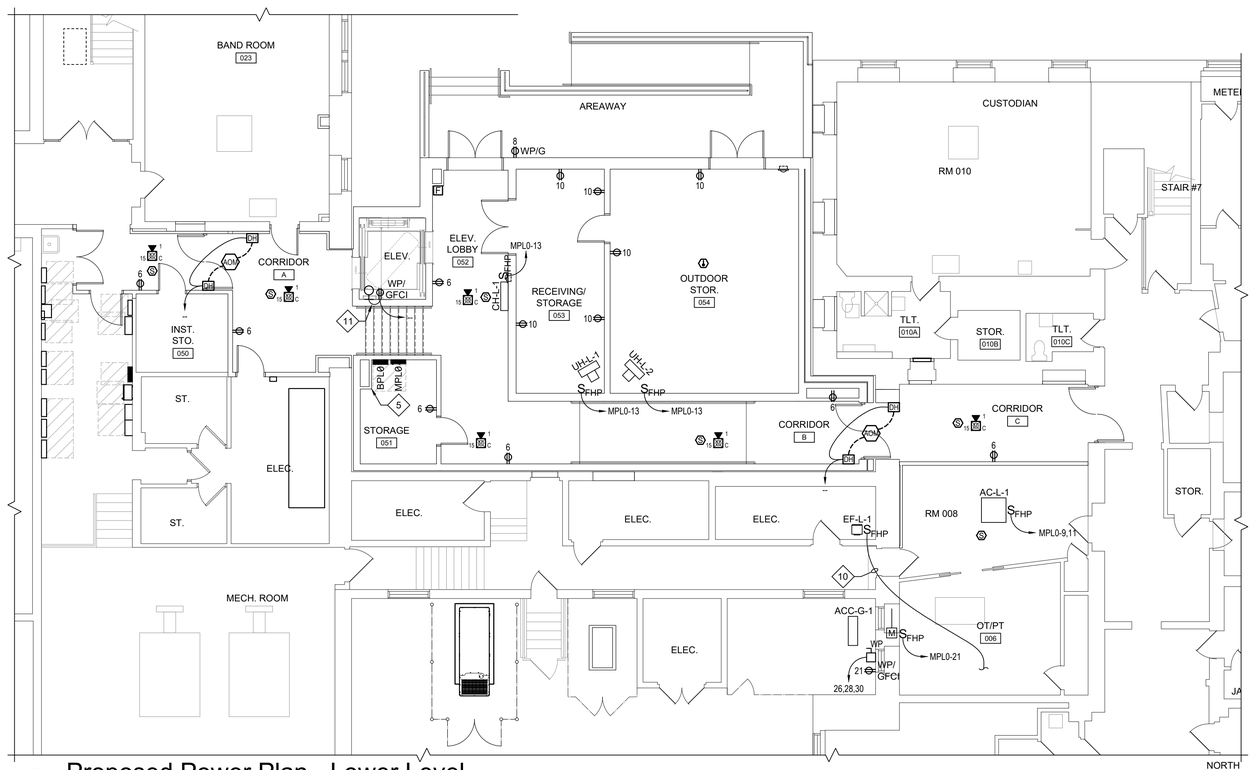
SYMBOLS FOR DWGS E2.01 & E2.02

NOTE:
LIGHT LINES INDICATE EXISTING TO REMAIN.
DARK LINES INDICATE NEW WORK.

- COMBINATION SPEAKER/STROBE
  "CD" - MINIMUM CANDELA RATING
  "W" - MINIMUM WATTAGE TAP
  "C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)
- CEILING MOUNTED STROBE
  "CD" - MINIMUM CANDELA RATING
- PHOTOELECTRIC SMOKE DETECTOR
- HEAT DETECTOR - COMBO ROR/FIXED TEMPERATURE
- DUCT SMOKE DETECTOR. LOCATE IN DUCT WITHIN AFTER PENETRATION INTO CONDITIONED SPACE. COORDINATE INSTALLATION WITH MC. PROVIDE A REMOTE TEST STATION IN AN ACCESSIBLE LOCATION.
- MANUAL PULL STATION WITH LEXAN GUARD WITH AN INTEGRAL HORN. MOUNT PULL STATION ON MANUF.'S SURFACE MOUNT RED BACKBOX WHEN SURFACE MTD.
- DH — 120V MAGNETIC DOOR HOLDER. COORDINATE WITH DOOR CONTRACTOR. DOORS SHALL SHUT UPON ACTIVATION OF THE FIRE ALARM SYSTEM.
- M — ADDRESSABLE MODULE
  "I" - INPUT
  "O" - OUTPUT

ALL DEVICES SHALL BE UL LISTED FOR USE WITH THE EXISTING NOTIFIER FACP. THE CONTRACTOR SHALL CONNECT TO EXISTING SLC/NAC LOOPS AS REQUIRED AND AS PER MANUFACTURER'S INSTRUCTIONS USING PLENUM RATED CABLE.
CONTRACTOR SHALL SUPPLY AND INSTALL A SPEAKER CONTROL INTERFACE TO ALLOW FOR SPEAKER MESSAGES WITHIN THE ADDITION.

REFER TO DWG A0.01 FOR AREAS OF WORK AND DEFINED AREAS OF EXISTING AND NEW CONSTRUCTION AREAS.



Proposed Power Plan - Lower Level

1 / E2.01

1/8" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPL0 UNLESS NOTED OTHERWISE

NORTH

PANEL SCHEDULE - PANEL MPL0

FED FROM MDP | 208/120V

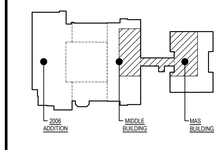
CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway	Voltage	Load kVA	Load per Phase(A) Phase A	Load per Phase(A) Phase B	Load per Phase(A) Phase C	Voltage Drop %
1/3	AC-3-1 -2 -3	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.67	3.59	3.59		0.94%
2/4	HRU-3-1	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.52	8.1	8.1		1.66%
5/7	AC-2-1 -2 -3	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.67	3.59		3.59	0.94%
6/8	HRU-2-1	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.52	8.1		8.1	1.66%
9/11	AC-1-1 -2 -3 -4 & -L-1	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.77		4.1	4.1	1.02%
10/12	HRU-1-1	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.52		8.1	8.1	1.66%
13	CH-1-1 -L-1 & UH-L-1 -2	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.26	2.4			0.96%
14	3rd FL. MOTORIZED DAMPERS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.43	3.97			1.39%
15	EF-R-1 & ROOFTOP RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.22		1.99		0.96%
16	2nd FL. MOTORIZED DAMPERS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.43		3.97		1.39%
17	CH-3-1 -2 -3	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1			9.3	3.51%
18	1st FL. MOTORIZED DAMPERS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.43			3.97	1.39%
19	CH-2-1 -2 -3	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1	9.3			3.51%
20/22/24	ACC-R-1	Std	3	70A	(3) 4 ga.	none	(1) 8 ga.	1 in. EMT	208	18.9	58.3	58.3	58.3	1.91%
21	ACC-G-1 RECEPT & MD	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.22		1.99		0.96%
23														
25														
26/28/30	ACC-G-1	Std	3	25A	(3) 10 ga.	none	(1) 10 ga.	3/4 in. EMT	208	5.35	16.5	16.5	16.5	1.83%
27														
29														
31-42														
		Total Circuits		26					Connected Loads: 34,910 VA		113.1 A	106.1 A	111.1 A	

Voltage: 120 / 208
Circuits: 26 / 42
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

Main Connection: breaker
Load kVA: 35
OCPD Size: 200A
OCPD Type: Std
Location:
Remarks: 22kAIC SCCR

3-Phase Connection			
Voltage Drop % for 50 Feet is 0.37%	Current	Neutral	Ground
Raceway: 2 in. dia. EMT	(3) 3/0 ga. THHN	(1) 3/0 ga. THHN	(1) 6 ga. THHN

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title: REGISTERED ARCHITECT
License No. 022257-1

Revisions:

1 — ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED POWER PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2

File No. 109272O2E201

E2.01

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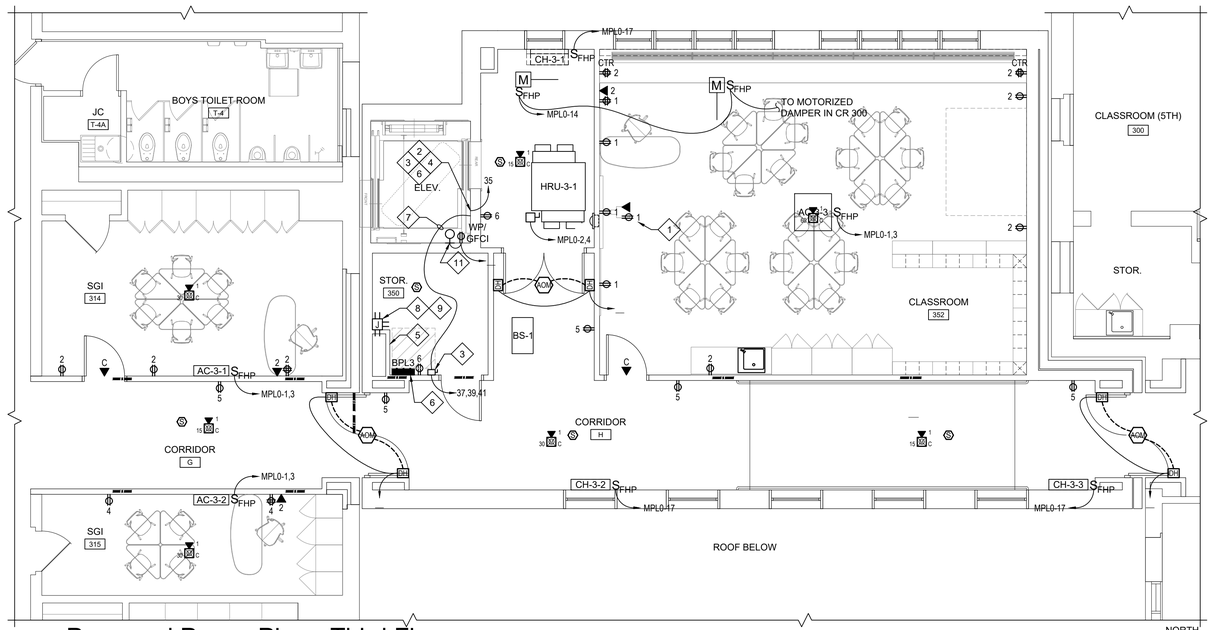
Electrical Key Notes

KEY NOTES FOR DRAWINGS E2.01 & E2.02

(#) SYMBOL INDICATES PROPOSED KEY NOTE

1. RECEPTACLE & DATA PORT MOUNTED AT SMARTBOARD/PROJECTOR HEIGHT. COORDINATE EXACT HEIGHT IN FIELD WITH EQUIPMENT SUPPLIED.
2. COORDINATE EXACT LOCATION OF ELEVATOR CONTROLLER IN FIELD.
3. PROVIDE FEEDER TERMINATING IN THE ELEVATOR CONTROLLER LOCATED AT THE TOP LANDING. FEEDER TO BE TERMINATED AT THE ELEVATOR CONTROLLER AT THE START OF INSTALLATION OF THE TOP LANDING ELEVATOR ENTRANCE AND THE TIMING OF CONNECTION TO CONTROLLER SHALL BE COORDINATED WITH THE ELEVATOR INSTALLER. PROVIDE AN ENCLOSED, FUSED DISCONNECT SWITCH CAPABLE OF BEING LOCKED IN THE OPEN POSITION. FUSES TO BE CURRENT LIMITING CLASS J OR EQUIVALENT. FUSES ARE TO BE TIME DELAY TO COVER THE FULL LOAD UP ACCELERATING CURRENT. ACCELERATING CURRENT TYPICALLY IS A PEAK OF 55A, AND LASTS FOR DURATION NOT TO EXCEED 7 SECONDS.
4. PROVIDE AND INSTALL ONE (1) DEDICATED OUTSIDE TELEPHONE LINE TERMINATED AT THE CONTROLLER. COORDINATE WITH THE ELEVATOR CONTRACTOR.
5. CHASE FOR CONDUIT RISERS. FLOOR PENETRATIONS MUST BE COORDINATED DURING THE SHOP DRAWING PROCESS. THE CONTRACTOR SHALL SUBMIT A CONDUIT ROUTING DIAGRAM FOR APPROVAL.
6. PANEL CONTAINING THE BREAKER FOR THE DEDICATED 120 VOLT, 20A SINGLE-PHASE BRANCH CIRCUIT FOR THE CAR LIGHTS, CAR TOP RECEPTACLE, AUXILIARY LIGHTING POWER SOURCE AND VENTILATION. THE BREAKER SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION. TERMINATION OF THIS BRANCH CIRCUIT SHALL BE IN THE ELEVATOR CONTROLLER LOCATED AT THE TOP LANDING AND SHALL BE CONNECTED AT THE SAME TIME AS THE FEEDER REFERENCED IN KEY NOTE 3.
7. 1" C W/ (3) #6 & (1) #10 GND FOR ELEVATOR MOTOR.
8. COMBINE CIRCUITS 7,8,9 AND 10,11,12 IN (2) ¾"C WITHIN THE RISER CHASE. PROVIDE AND INSTALL A CODE SIZED JB AT EACH FLOOR TO DISTRIBUTE INTO INDIVIDUAL ¾"C PER CIRCUIT.
9. COMBINE CIRCUITS [1/3,2/4,14,17] [5/7,6/8,16,19] AND [9/11,10/12,18] IN (3) ¾"C WITHIN THE RISER CHASE. PROVIDE AND INSTALL A CODE SIZED JB AT EACH FLOOR TO DISTRIBUTE INTO INDIVIDUAL ¾"C PER CIRCUIT.
10. CONNECT TO CIRCUIT OF EXISTING EXHAUST FAN THAT HAS BEEN REMOVED VIA (2) #12 & (1) #12 GND.
11. RECEPTACLE & LIGHT IN ELEVATOR SHAFT. PROVIDE SWITCH AT ELEVATOR ENTRANCE. FIXTURE SHALL BE LUMINAIRE LED MODEL No. "VPF42 15W 5000K CC 120-277 OP BLK WET TX/SD"

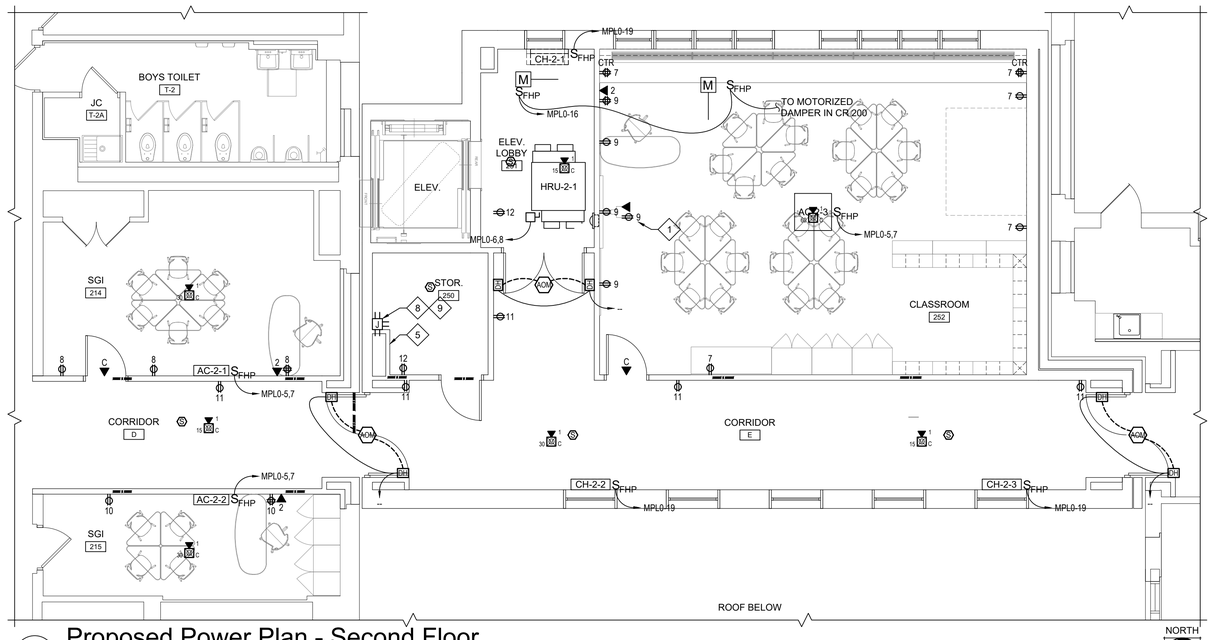


1 E2.02 Proposed Power Plan - Third Floor

3/16" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPL3 UNLESS NOTED OTHERWISE

NORTH



1 E2.02 Proposed Power Plan - Second Floor

3/16" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPL3 UNLESS NOTED OTHERWISE

NORTH

PANEL SCHEDULE - PANEL BPL0

FED FROM MDP | 208/120V

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway (5 8)	Voltage	Load kVA	Load per Phase(A) Phase A	Phase B	Phase C	Voltage Drop %
1	CR 132 RECEPTACLES A	Std	1	20A	(1) 10 ga.	(1) 10 ga.	(1) 12 ga.	3/4 in. EMT	120	1.08	9.47			2.10%
2	SGI 130 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72	6.32			2.21%
3	CR 132 RECEPTACLES B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9		7.89		2.75%
4	COR. 131 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36		3.16		1.12%
5	CR 132 RECEPTACLES C	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9			7.89	2.75%
6	COR. A/B/C RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9			7.89	2.75%
7	LOWER LEVEL LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.15	9.55			3.61%
8	AREAWAY RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.18	1.58			0.57%
9	1st FL ADDITION LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.1		9.19		3.47%
10	STORAGE 53/54 RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.08		9.47		3.30%
11-42														
		Total Circuits	10					Connected Loads: 8,370 VA			26.1 A	29.1 A	15.1 A	

Voltage: 120 / 208
Circuits: 10 / 42
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

Main Connection: breaker
Load kVA: 8
OCPD Size: 100A
OCPD Type: Std
Location:
Remarks: 22 kAIC SCCR

3-Phase Connection			
Voltage Drop % for 20 Feet is 0.10%	Current	Neutral	Ground
Raceway: 1-1/4 in. dia. EMT	(3) 3 ga. THHN	(1) 3 ga. THHN	(1) 8 ga. THHN

PANEL SCHEDULE - PANEL BPL3

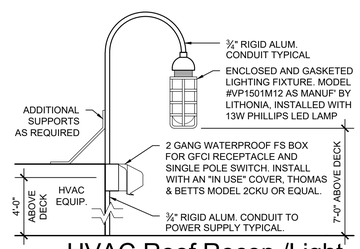
FED FROM PANEL BPL0 | 208/120V

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway (5 8)	Voltage	Load kVA	Load per Phase(A) Phase A	Phase B	Phase C	Voltage Drop %
1	CR 352 RECEPTACLES A	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.26	11.05			1.55%
2	SGI 314 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72	6.32			1.01%
3	CR 352 RECEPTACLES B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.08		9.47		1.37%
4	SGI 315 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54		4.74		0.83%
5	COR. G & H RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9			7.89	1.19%
6	350/351 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36			3.16	0.64%
7	CR 252 RECEPTACLES A	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.26	11.05			1.55%
8	SGI 214 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72	6.32			1.01%
9	CR 252 RECEPTACLES B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.08		9.47		1.37%
10	SGI 215 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54		4.74		0.83%
11	COR. D & E RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9			7.89	1.19%
12	250/251 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36			3.16	0.64%
13	3rd FL ADDITION LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.18	9.82			1.51%
14-34														
35	ELEV. 120V LOADS	Std	1	20A	(1) 10 ga.	(1) 10 ga.	(1) 10 ga.	3/4 in. EMT	120	1.37			12	1.16%
36														
37/39/41	ELEVATOR	Std	3	90A	(3) 4 ga.	none	(1) 8 ga.	1 in. EMT	208	17.83	55	55	55	0.84%
38/40/42	SURGE PROTECTION DEVICE ("SPD")	Std	3	30A	(3) 10 ga.	none	(1) 10 ga.	3/4 in. EMT	208	0				
		Total Circuits	17					Connected Loads: 31,280 VA			99.1 A	83 A	89 A	

Voltage: 120 / 208
Circuits: 21 / 42
Neutral Buss: No
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

Main Connection: breaker
Load kVA: 31
OCPD Size: 200A
OCPD Type: Std
Location:
Remarks: 22kAIC SCCR

3-Phase Connection			
Voltage Drop % for 50 Feet is 0.36%	Current	Neutral	Ground
Raceway: 2 in. dia. EMT	(3) 3/0 ga. THHN	(3) 3/0 ga. THHN	(1) 6 ga. THHN

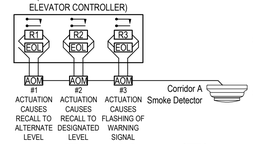


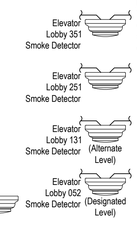
4 E2.02 HVAC Roof Recep./Light

N.T.S.

Component	Function
R1	Signal to elevator controller for recall to designated level.
R2	Signal to elevator controller for recall to alternate level.
R3	Signal to elevator controller for firefighter notification.

Component	Function
AOM #1	Control Module for operating R1.
AOM #2	Control Module for operating R2.
AOM #3	Control Module for operating R3.
EOL	End of line resistor.





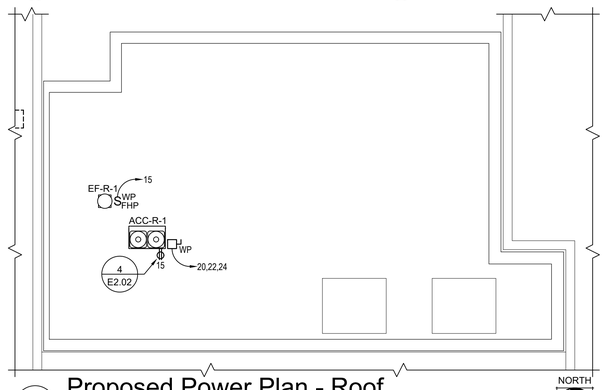
NOTE:
THE FIRE ALARM CONTRACTOR SHALL COORDINATE WITH ELEVATOR INSTALLER FOR FINAL CONNECTIONS AS PART OF THE BASE BID.

Fire Alarm Interface Summary:
There will be three supervised control circuits from the fire alarm system that will interface with the elevator system. They are as follows:

a. Input to elevator controller for Phase I recall to the designated level from actuation of smoke detectors other than at the designated level lobby.
b. Input to elevator controller for Phase I recall to the alternate level from actuation of a smoke detector at the designated level lobby or Elevator Machine Room.
c. Input to elevator controller to flash the firefighter helmet signal when recall is initiated by a smoke detector in the elevator machine room or hoistway.

5 E2.02 Fire Alarm/Elevator Interface

N.T.S.



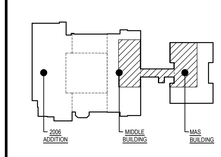
3 E2.02 Proposed Power Plan - Roof

1/8" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL MPL0

NORTH

MAMARONECK AVENUE SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title: REGISTERED ARCHITECT
License No. 022257-1

Revisions:

(#) ISSUE TO BID 11/23/20

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PROPOSED POWER PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

Job No. 4.1092.72.2

File No. 10927202E201

E2.02

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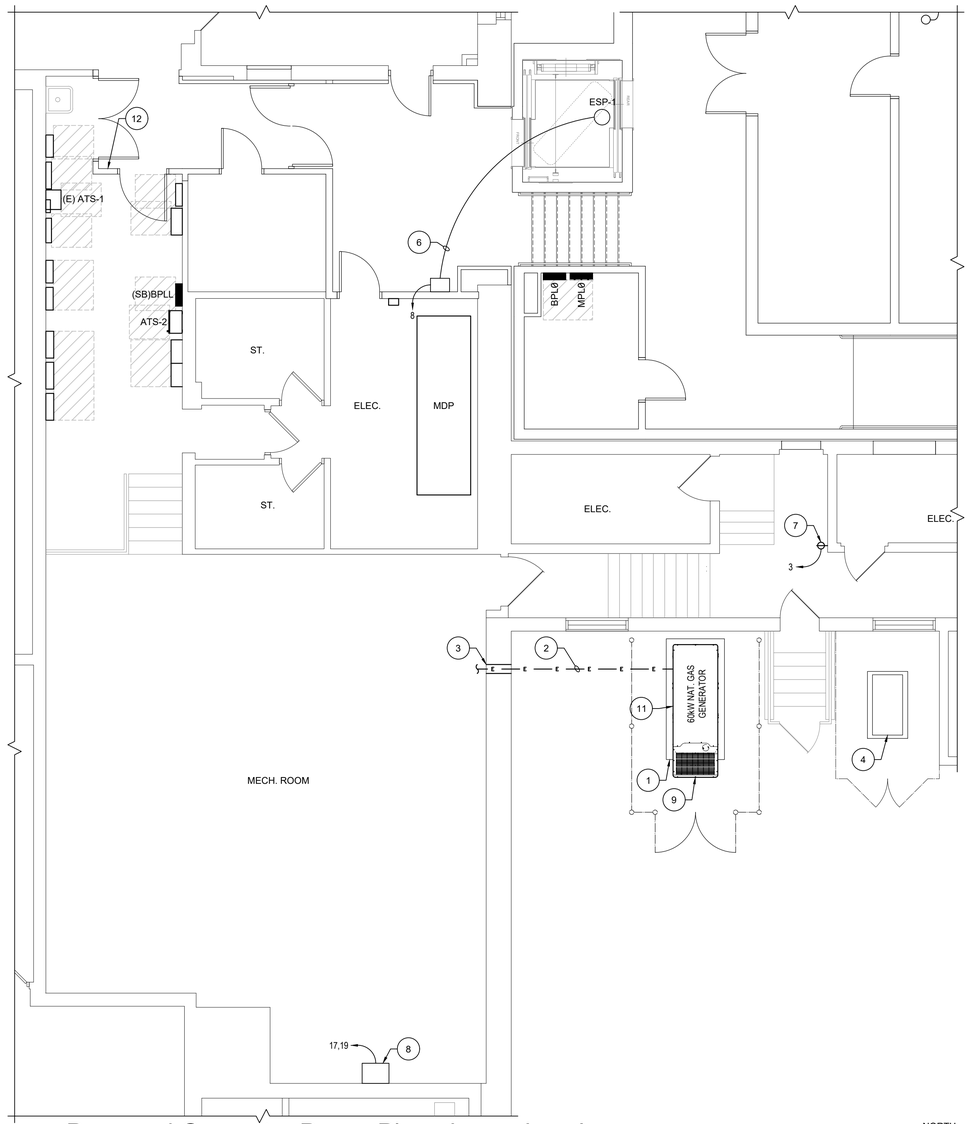
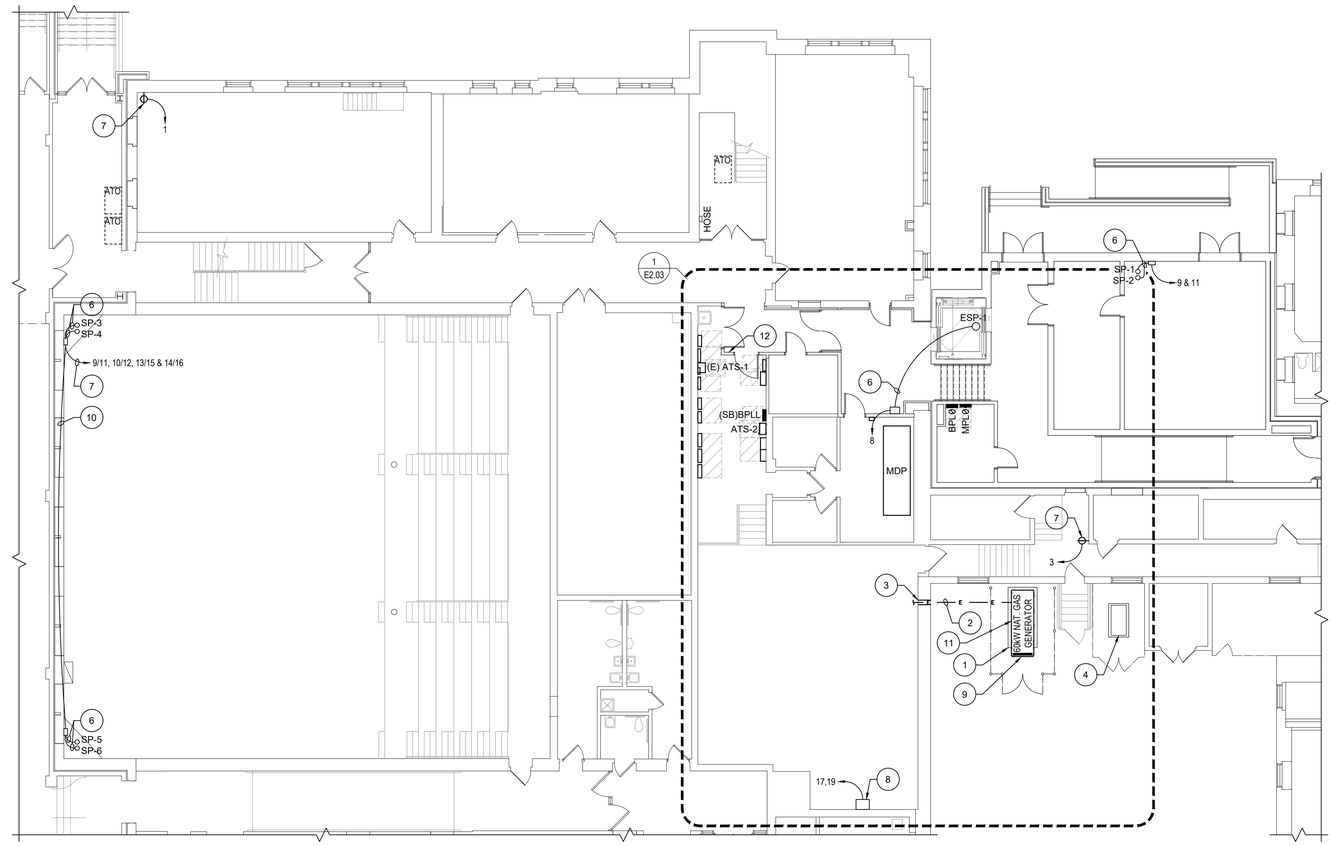


1 E2.03 Proposed Generator Power Plan - Lower Level

3/16" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPLL UNLESS NOTED OTHERWISE

NORTH



2 E2.03 Proposed Standby Power Plan - Lower Level

3/32" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPLL UNLESS NOTED OTHERWISE

NORTH

Electrical Key Notes

(#) SYMBOL INDICATES KEY NOTE

1. CONCRETE PAD BY **GC**. **EC** TO COORDINATE CONDUIT ENTRY POINTS.
2. UNDERGROUND RACEWAY(S). REFER TO DETAILS 2 & 3/E2.03 FOR ADDITIONAL REQUIREMENTS. TRENCHING AND SURFACE RESTORATION BY **GC**. CONDUITS/ RACEWAY BY **EC**.
3. CONDUIT ENTRY POINT. REFER TO DETAIL 4/E2.03 FOR ADDITIONAL INFORMATION.
4. EXISTING GENERATOR TO BE DISCONNECTED AND TO REMAIN IN PLACE.
5. EXISTING ATS SWITCH FOR SUMP PUMP SP-1 & SP-2 CONTROLLER. CONTRACTOR TO REFEED WITH NEW GENERATOR. CONNECT CONTROL WIRES TO NEW GENERATOR AS REQUIRED TO PROVIDE A START SIGNAL AT LOSS OF POWER.
6. (2) #12 & (1) #12 GND TO EACH PUMP. REFER TO PLUMBING DRAWINGS AND MANUFACTURER'S REQUIREMENTS FOR ADDITIONAL REQUIREMENTS.
7. 1"C W/ (8) #12 & (1) #12 GND FOR PUMPS SP-3, 4, 5, & 6. CURRENT CARRYING CONDUCTORS HAVE BEEN DERATED AS PER NEC TABLE 310.15(B)(3)(a).
8. REFEED EXISTING SEWAGE EJECTOR PUMP CONTROLLER. CONFIRM POWER REQUIREMENTS IN FIELD.
9. RADIATOR AIRFLOW COOLED, VERTICAL FLOW, 50kW LOAD BANK MOUNTED TO TOP OF GENERATOR.
10. ¾"C W/ (4) #12 & (1) #12 GND FOR PUMPS SP-5, & 6. CURRENT CARRYING CONDUCTORS HAVE BEEN DERATED AS PER NEC TABLE 310.15(B)(3)(a).
11. GENERATOR. REFER TO DWG E6.01 FOR ADDITIONAL INFORMATION.
12. INSTALL GENERATOR ANNUCIATOR IN THIS AREA. CONFIRM EXACT LOCATION WITH OWNER'S AUTHORIZED REP. IN FIELD.

PANEL SCHEDULE - PANEL (SB)BPLL

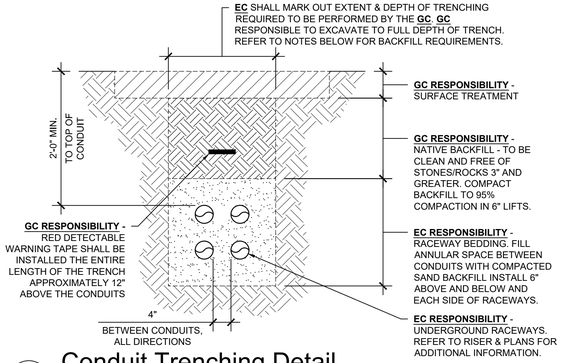
FED FROM MDP & GENERATOR VIA ATS-2 | 208/120V

		OCPD			Conductors					Load	Load per Phase(A)			Voltage
CT#	Load Description	Type	Poles	Rated	Current	Neutral	Ground	Raceway	Voltage	kVA	Phase A	Phase B	Phase C	Drop %
1	MUSIC ROOM SUMP PUMP	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.53	5.22			0.96%
2	GENERATOR BATTERY CHARGER	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.6	5			1.25%
3	CORRIDOR SUMP PUMP	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.53		5.22		0.96%
4	GENERATOR ALTERNATOR HEATER	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.2		10		2.50%
5	SUPMP PUMP - SP-1	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.53			5.22	0.96%
6	GENERATOR COOLANT JKT HTR	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.92			16	4.00%
7	SUMP PUMP - SP-2	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.53	5.22			0.96%
8	ELEV. SUMP PUMP - ESP-1	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.35	3.45			0.64%
9/11	GYM SP-5	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	1 in. EMT	208	0.8		4.52	4.52	0.56%
10/12	GYM SP-3	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	1 in. EMT	208	0.8		4.52	4.52	0.56%
13/15	GYM SP-6	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	1 in. EMT	208	0.8	4.52	4.52		0.56%
14/16	GYM SP-4	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	1 in. EMT	208	0.8	4.52	4.52		0.56%
17/19	(E) SEWAGE EJECTOR PUMP	Std	2	30A	(2) 10 ga.	(1) 10 ga.	(1) 10 ga.	3/4 in. EMT	208	2.13	12.06		12.06	0.90%
18														
20-42														
		Total Circuits		18				Connected Loads: 11,520 VA			39.1 A	33 A	42 A	

Voltage: 120 / 208
Circuits: 18 / 42
Neutral Buss: No
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

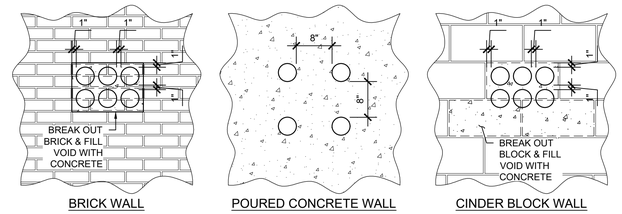
Main Connection: breaker
Load kVA: 12
OCPD Size: 200A
OCPD Type: Std
Location:
Remarks:

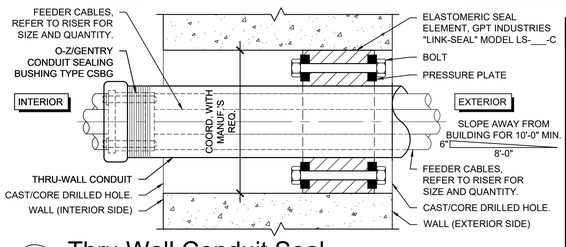
3-Phase Connection			
Voltage Drop % for 30 Feet is 0.08%	Current	Neutral	Ground
Raceway: 2 in. dia. EMT	(3) 3/0 ga. THHN	(1) 3/0 ga. THHN	(1) 6 ga. THHN



3 E2.03 Conduit Trenching Detail

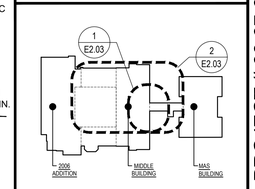
N.T.S.





4 E2.03 Thru Wall Conduit Seal

N.T.S.



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

ISSUE TO BID 11/23/20

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PROPOSED GENERATOR PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

NYSED PROJECT # 66-07-01-03-0-004-030

Job No. 4.1092.72.2

File No. 10927202E203

E2.03

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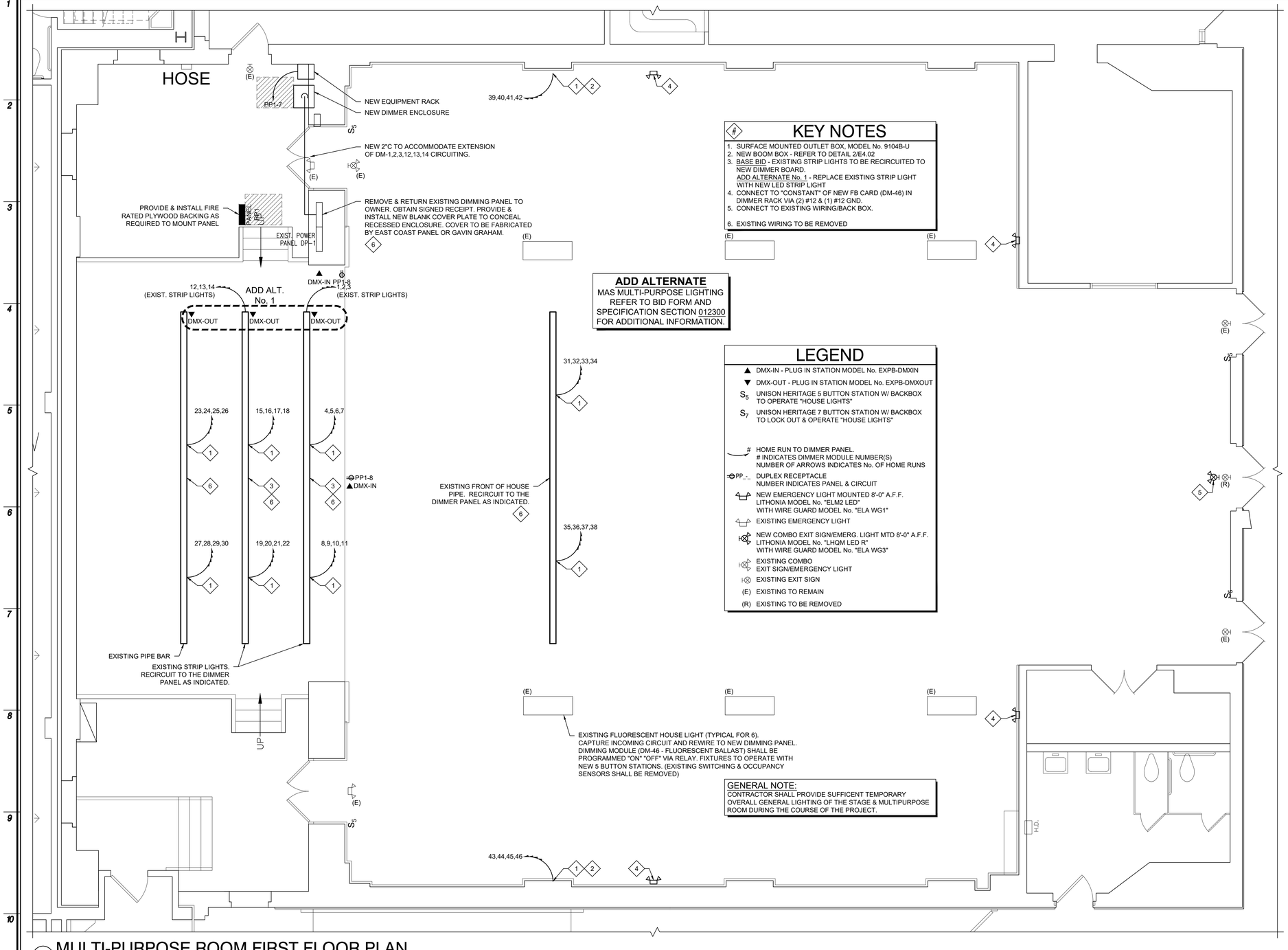


KEY NOTES

1. SURFACE MOUNTED OUTLET BOX, MODEL No. 9104B-U
2. NEW BOOM BOX - REFER TO DETAIL 2/E4.02
3. BASE BID - EXISTING STRIP LIGHTS TO BE RECIRCUITED TO NEW DIMMER BOARD.
   ADD ALTERNATE No. 1 - REPLACE EXISTING STRIP LIGHT WITH NEW LED STRIP LIGHT
4. CONNECT TO "CONSTANT" OF NEW FB CARD (DM-46) IN DIMMER RACK VIA (2) #12 & (1) #12 GND.
5. CONNECT TO EXISTING WIRING/BACK BOX.
6. EXISTING WIRING TO BE REMOVED

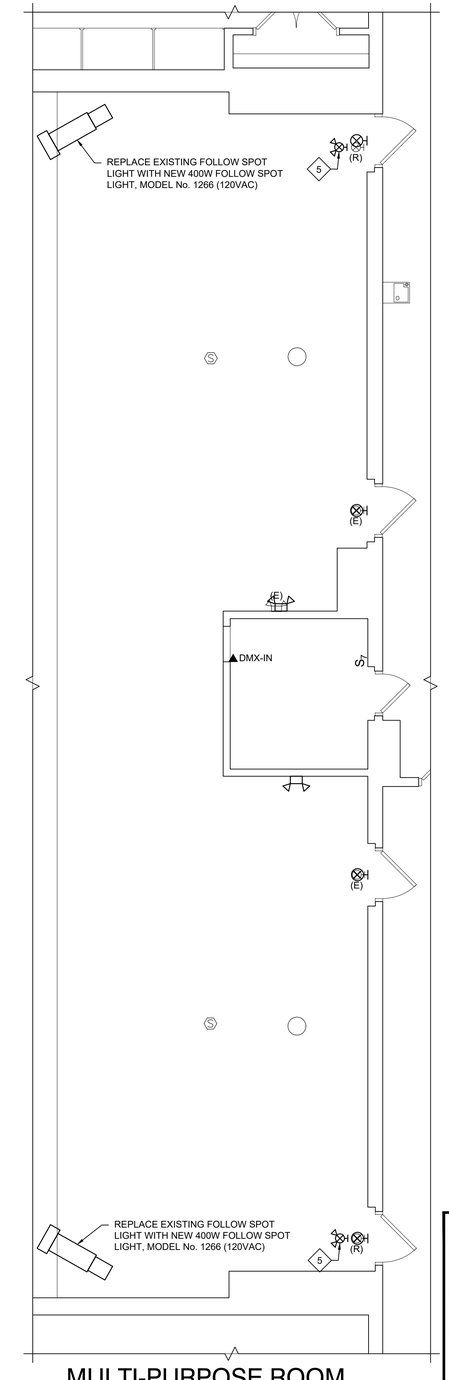
ADD ALTERNATE
MAS MULTI-PURPOSE LIGHTING
REFER TO BID FORM AND SPECIFICATION SECTION 012300 FOR ADDITIONAL INFORMATION.

LEGEND

- ▲ DMX-IN - PLUG IN STATION MODEL No. EXPB-DMXIN
- ▼ DMX-OUT - PLUG IN STATION MODEL No. EXPB-DMXOUT
- S_5 UNISON HERITAGE 5 BUTTON STATION W/ BACKBOX TO OPERATE "HOUSE LIGHTS"
- S_7 UNISON HERITAGE 7 BUTTON STATION W/ BACKBOX TO LOCK OUT & OPERATE "HOUSE LIGHTS"
- # HOME RUN TO DIMMER PANEL. # INDICATES DIMMER MODULE NUMBER(S) NUMBER OF ARROWS INDICATES No. OF HOME RUNS
- PP DUPLEX RECEPTACLE NUMBER INDICATES PANEL & CIRCUIT
- NEW EMERGENCY LIGHT MOUNTED 8'-0" A.F.F. LITHONIA MODEL No. "ELM2 LED" WITH WIRE GUARD MODEL No. "ELA WG1"
- EXISTING EMERGENCY LIGHT
- NEW COMBO EXIT SIGN/EMERG. LIGHT MTD 8'-0" A.F.F. LITHONIA MODEL No. "LHQM LED R" WITH WIRE GUARD MODEL No. "ELA WG3"
- EXISTING COMBO EXIT SIGN/EMERGENCY LIGHT
- EXISTING EXIT SIGN
- (E) EXISTING TO REMAIN
- (R) EXISTING TO BE REMOVED

GENERAL NOTE:
CONTRACTOR SHALL PROVIDE SUFFICENT TEMPORARY OVERALL GENERAL LIGHTING OF THE STAGE & MULTIPURPOSE ROOM DURING THE COURSE OF THE PROJECT.

1 MULTI-PURPOSE ROOM FIRST FLOOR PLAN
1/4" = 1'-0"



2 MULTI-PURPOSE ROOM SECOND FLOOR PLAN
1/4" = 1'-0"

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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LAN ASSOCIATES L.L.P.
engineering • planning • architecture • surveying
252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

STAGE LIGHTING PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202E401

E4.01

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ADD ALTERNATE
MAS MULTI-PURPOSE LIGHTING
REFER TO BID FORM AND
SPECIFICATION SECTION 012300
FOR ADDITIONAL INFORMATION.

Monday, Nov. 02, 2015

PP1 - Panel Schedule

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway	Voltage	Load kVA	Load per Phase(A) Phase A	Load per Phase(A) Phase B	Load per Phase(A) Phase C	Voltage Drop %
1/3/5	Stage Dimming Panel	Std	3	200A	(3) 3/0 ga.	(1) 3/0 ga.	(1) 6 ga.	2 in. EMT	208	36.03	100.00	100.00	100.00	1.22%
2/4/6	DP1	Std	3	80A	(3) 4 ga.	(1) 4 ga.	(1) 8 ga.	1-1/4 in. EMT	208	25.22	70.00	70.00	70.00	1.40%
7	Equipment Panel	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	1/2 in. EMT	120	0.24	2.00			1.15%
8	Stage Receptacle	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	1/2 in. EMT	120	0.18	1.50			1.12%
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
		Total Circuits	8					Connected Loads: 61,670 VA			173.1 A	170 A	170 A	

Voltage: 120 / 208
Circuits: 8 / 30
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

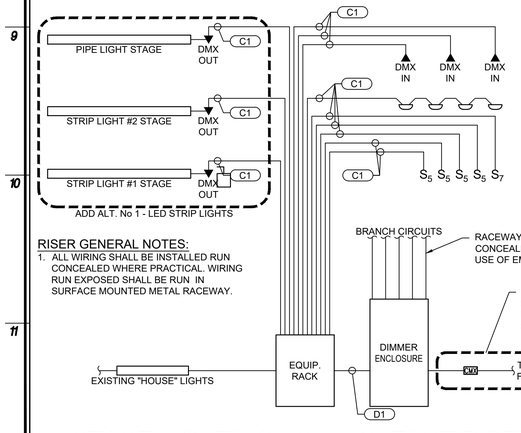
Main Connection: Main Lug
Load kVA: 62
OCPD Size: 200A
OCPD Type: Main Lug
Location: Stage
Remarks: SCCR - 22KAIC

3-Phase Connection			
Voltage Drop % for 125 Feet is 1.112%	Current	Neutral	Ground
Raceway: 2 in. dia. EMT	(3) 3/0 ga. THHN	(1) 3/0 ga. THHN	(1) 6 ga. THHN

Dimming and Dist. Schedule

ID	Description	Location	Wiring	Route
DM-1	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	Exist. Conduit
DM-2	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	Exist. Conduit
DM-3	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	Exist. Conduit
DM-4	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-5	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-6	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-7	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-8	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-9	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-10	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-11	Exist. Strip Light #1	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-12	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	Exist. Conduit
DM-13	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	Exist. Conduit
DM-14	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	Exist. Conduit
DM-15	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-16	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-17	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-18	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-19	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-20	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-21	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-22	Exist. Strip Light #2	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-23	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-24	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-25	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-26	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-27	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-28	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-29	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-30	Exist. Stage Pipe	Stage	(2) #12 & (1) #12 Gnd	New Conduit
DM-31	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-32	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-33	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-34	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-35	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-36	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-37	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-38	Front of House Pipe	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-39	Box Boom Stage L.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-40	Box Boom Stage L.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-41	Box Boom Stage L.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-42	Box Boom Stage L.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-43	Box Boom Stage R.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-44	Box Boom Stage R.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-45	Box Boom Stage R.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-46	Box Boom Stage R.	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-47	House Lights #1	Multipurp. Rm.	(2) #12 & (1) #12 Gnd	New Conduit
DM-48				

Notes:
1. All wiring shall be new unless noted otherwise.
2. New branch circuits. Each circuit shall be served by each dedicated phase and neutral conductor. Shared neutrals shall not be permitted. Use THHN copper conductors for all new branch circuits and extensions of branch circuits.
3. Multi-branch circuits installed in the same raceway shall be adjusted per NEC Table 310.15(B)(2)(a) - Adjustment factors for more than three current carrying conductors in a raceway or cable.



RACEWAYS & CONDUCTORS TO BE CONCEALED TO FULLEST EXTENT PRACTICAL. USE OF EMT PERMITTED. (TYPICAL)

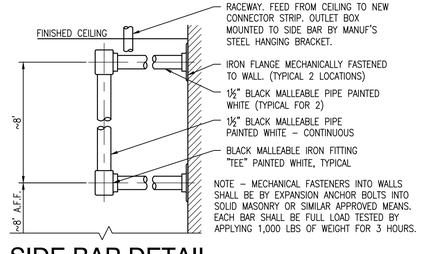
N.I.C.
OWNER TO CONTRACT WITH F.A. VENDOR TO PROVIDE, INSTALL, AND PROGRAM A NEW CONTROL MODULE TO TURN ON HOUSE LIGHTS UPON FIRE ALARM INITIATION. CONTROL MODULE TO BE LOCATED AT DIMMER ENCLOSURE.

RISER SYMBOL LEGEND

- CWD FIRE ALARM CONTROL MODULE
- UNISON PARADIGM OCCUPANCY/VACANCY SENSOR
- ▲ DMX-IN
- ▼ DMX-OUT
- S_5 UNISON HERITAGE 5 BUTTON STATION W/ BACKBOX
- S_7 UNISON HERITAGE 7 BUTTON STATION W/ BACKBOX
- B1 -
- C1 BELDEN 8471 & (1) #14 GND CONDUCTOR
- D1 BELDEN 9729

RISER GENERAL NOTES:
1. ALL WIRING SHALL BE INSTALLED RUN CONCEALED WHERE PRACTICAL. WIRING RUN EXPOSED SHALL BE RUN IN SURFACE MOUNTED METAL RACEWAY.

1 STAGE LIGHTING LOW VOLTAGE RISER DIAGRAM
N.T.S.



2 SIDE BAR DETAIL
N.T.S.

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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LAN ASSOCIATES LLP
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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

STAGE LIGHTING DETAILS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202E401

E4.02

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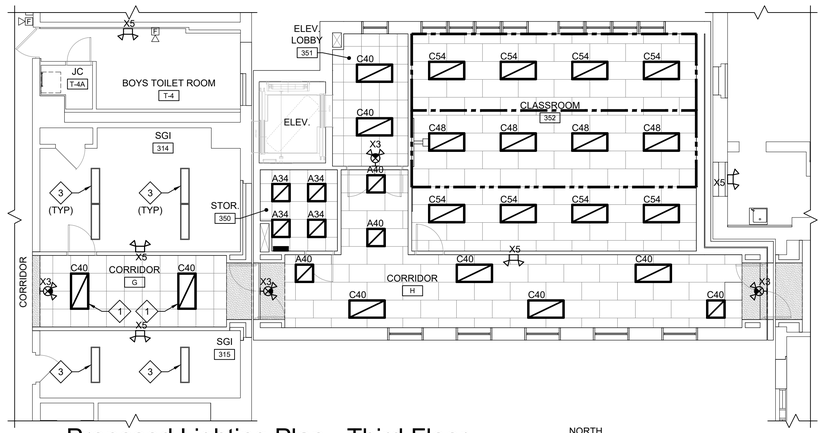
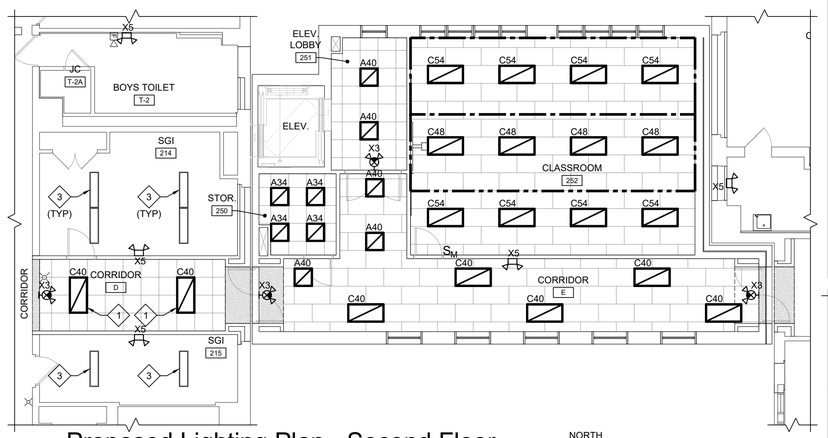


4 E5.01 **Proposed Lighting Plan - Third Floor**

1/8" = 1'-0"

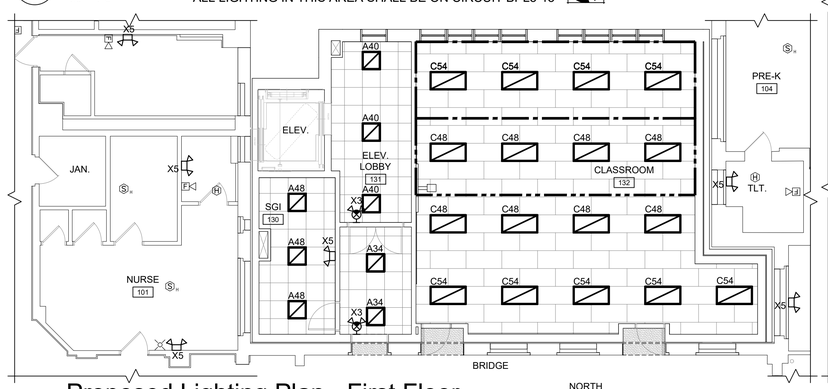
ALL LIGHTING IN THIS AREA SHALL BE ON CIRCUIT BPL3-14



3 E5.01 **Proposed Lighting Plan - Second Floor**

1/8" = 1'-0"

ALL LIGHTING IN THIS AREA SHALL BE ON CIRCUIT BPL3-13



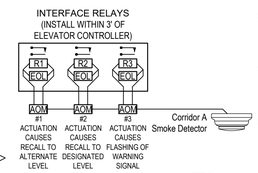
2 E5.01 **Proposed Lighting Plan - First Floor**

1/8" = 1'-0"

ALL LIGHTING IN THIS AREA SHALL BE ON CIRCUIT BPL0-9

Component	Function
R1	Signal to elevator controller for recall to designated level.
R2	Signal to elevator controller for recall to alternate level.
R3	Signal to elevator controller for firefighter notification.

Component	Function
AOM #1	Control Module for operating R1.
AOM #2	Control Module for operating R2.
AOM #3	Control Module for operating R3.
EOL	End of line resistor.



NOTE:
THE FIRE ALARM CONTRACTOR SHALL COORDINATE WITH ELEVATOR INSTALLER FOR FINAL CONNECTIONS AS PART OF THE BASE BID.

Fire Alarm Interface Summary:
There will be three supervised control circuits from the fire alarm system that will interface with the elevator system. They are as follows:

a. Input to elevator controller for Phase I recall to the designated level from actuation of smoke detectors other than at the designated level lobby.
b. Input to elevator controller for Phase I recall to the alternate level from actuation of a smoke detector at the designated level lobby or Elevator Machine Room.
c. Input to elevator controller to flash the firefighter helmet signal when recall is initiated by a smoke detector in the elevator machine room or hoistway.

2 FA.01 **Fire Alarm/Elevator Interface**

N.T.S.

Light Fixture Schedule

SYMBOL	TYPE	MANUF.	MODEL	DESCRIPTION	VOLT	WATT	MOUNTING	HEIGHT	LED INFORMATION LUMENS	LPW	CLR	KEY NOTES
	A34	LITHONIA	EPANL 2X2 3400LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x2 - 3400 NOMINAL LUMENS	UNIV.	32	CLG. RECESSED	N/A	3225	101	80CRI, 35K	
	A40	LITHONIA	EPANL 2X2 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x2 - 4000 NOMINAL LUMENS	UNIV.	32	CLG. RECESSED	N/A	4025	126	80CRI, 35K	
	A48	LITHONIA	EPANL 2X2 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x2 - 4800 NOMINAL LUMENS	UNIV.	36	CLG. RECESSED	N/A	4446	124	80CRI, 35K	
	B	LITHONIA	TZL 1 N L96 SMR 6000LM L/LENS MVOLT 35K 80CRI LB0ZU WH SQ2 XLR L96 SYM WH R56	"ZL 1 N" LED STRIPLIGHT 8' LONG - 6000 NOMINAL LUMENS	UNIV.	48	CLG. SURFACE	N/A	7261	151	80CRI, 35K	
	C40	LITHONIA	EPANL 2X4 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x4 - 4000 NOMINAL LUMENS	UNIV.	39	CLG. RECESSED	N/A	3914	100	80CRI, 35K	
	C48	LITHONIA	EPANL 2X4 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x4 - 4800 NOMINAL LUMENS	UNIV.	47	CLG. RECESSED	N/A	4771	102	80CRI, 35K	
	C54	LITHONIA	EPANL 2X4 5400LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x4 - 5400 NOMINAL LUMENS	UNIV.	51	CLG. RECESSED	N/A	5143	101	80CRI, 35K	
	D	LITHONIA	WDGE2 LED P3 40K 80CRI VF MVOLT SRM E20WC PE COLOR R56	"WDGE2" LED ARCH. WALL SCONCE 3000 NOMINAL LUMENS W/ EMERG. BATTERY	UNIV.	23	WALL SURFACE	REFER TO ELEVATION	3132	136	80CRI, 40K	
	E	GOTHAM	EVO6 35/02 AR WD LSS MVOLT GZ10	"EVO" 6" ROUND DOWNLIGHT - 250 NOMINAL LUMENS	UNIV.	3	CLG. RECESSED	N/A	297	87	80CRI, 40K	
	X1	LITHONIA	EDG 1 R EL R56	SURFACE MOUNT LED EDGE-LIT EXIT SIGN - SINGLE FACE - UNIVERSAL MOUNT	120	3	CLG./WALL SURFACE	REFER TO DETAIL	N/A			1,2
	X2	LITHONIA	LHQM LED R HO R56	HIGH OUTPUT UNIVERSAL (TOP/END/BACK) MOUNT COMBO EXIT SIGN & EMERG. LIGHT	120	3	CLG./WALL SURFACE	REFER TO DETAIL	N/A			2
	X3	LITHONIA	LHQM LED R R56	UNIVERSAL (TOP/END/BACK) MOUNT COMBO EXIT SIGN & EMERGENCY LIGHT	120	1	WALL SURFACE	REFER TO DETAIL	N/A			2,4
	X4	LITHONIA	ELA T QWP L0309 R56	REMOTE, DUAL HEAD EMERGENCY LIGHT FOR USE WITH FIXTURE X2	UNIV.	N/A	WALL SURFACE	REFER TO DETAIL	N/A			2,3
	X5	LITHONIA	ELM4L R56	DUAL HEAD EMERGENCY LIGHT	UNIV.	1	WALL SURFACE	REFER TO DETAIL	N/A			2

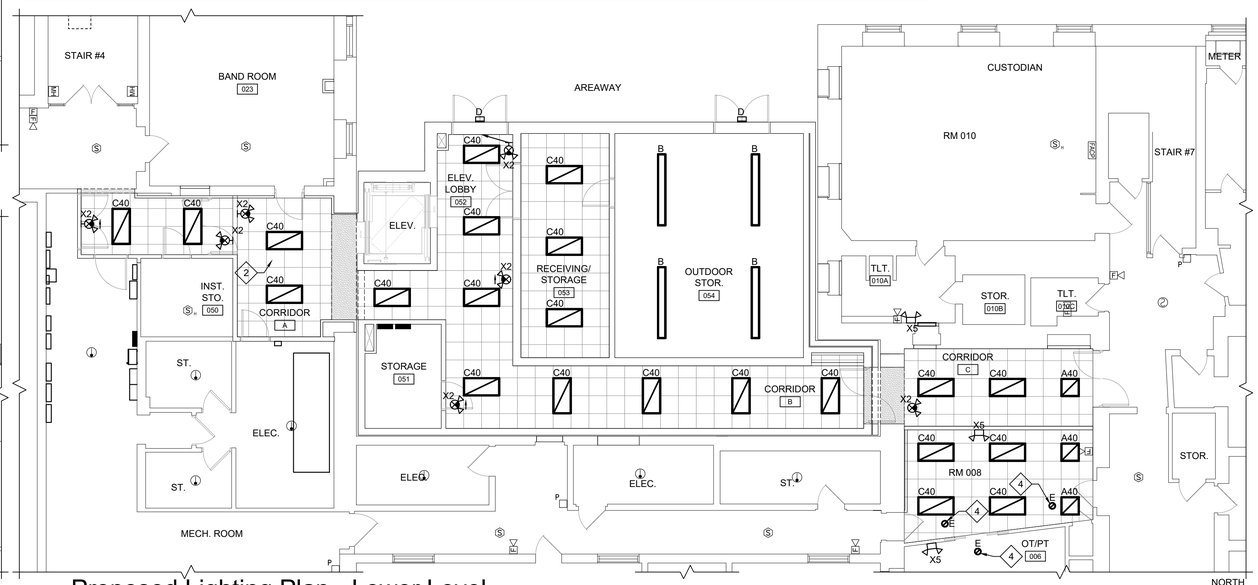
Key Notes
1. PROVIDE RMR OPTION WHEN INSTALLED WALL MOUNTED
2. CONNECT BATTERY TO LINE SIDE OF AREA LIGHTING SWITCH/POWER PACK.
3. CONNECT TO INTERIOR EXIT SIGN BATTERY AS PER MANUF.'S INSTRUCTIONS.

REFER TO DRAWING A0.01 FOR AREAS OF WORK AND DEFINED AREAS OF EXISTING AND NEW CONSTRUCTION AREAS.

Lighting Key Notes

SYMBOL INDICATES LIGHTING KEY NOTE

1. CONNECT FIXTURE(S) TO EXISTING CORRIDOR POWER & SWITCHING ARRANGEMENTS.
2. REPLACE EXISTING HEAT DETECTOR AND MOUNT AT NEW CEILING.
3. EXISTING SURFACE MOUNTED LIGHT FIXTURE. CONTRACTOR RESPONSIBLE TO REMOVE FIXTURES TO ACCOMMODATE THE CONSTRUCTION OF THE NEW CORRIDOR. RECIRCUIT THE REMAINING FIXTURES AS REQUIRED.
4. CONNECT FIXTURE TO LINE SIDE OF AREA LIGHTING TO MAINTAIN A MIN. OF 1 FC ALONG THE PATH OF EGRESS AT ALL TIMES.



1 E5.01 **Proposed Lighting Plan - Lower Level**

1/8" = 1'-0"

ALL LIGHTING IN THIS AREA SHALL BE ON CIRCUIT BPL0-7

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title: REGISTERED ARCHITECT
License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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LAN ASSOCIATES
engineering • planning • architecture • surveying
252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED LIGHTING PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 109272O2E501

E5.01

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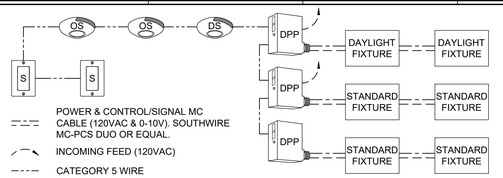
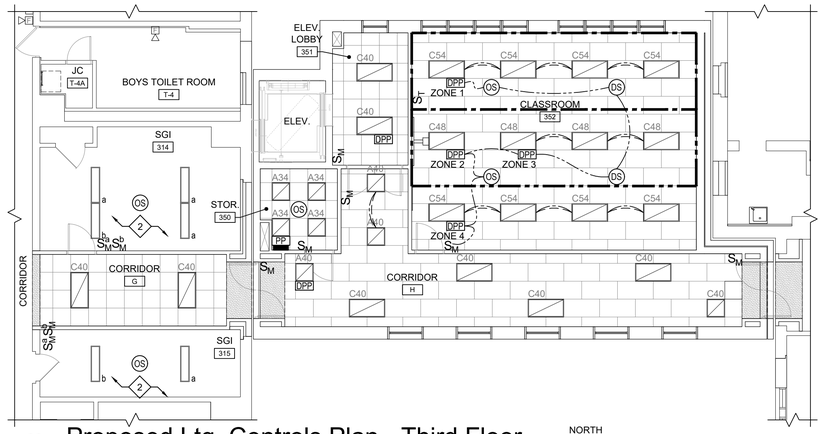


GENERAL NOTES:
1. REFER TO PLAN FOR ACTUAL ARRANGEMENT OF FIXTURES/ SWITCHES/SENSORS.
2. REFER TO MANUFACTURER'S DETAILS FOR EXACT WIRING REQUIREMENTS.

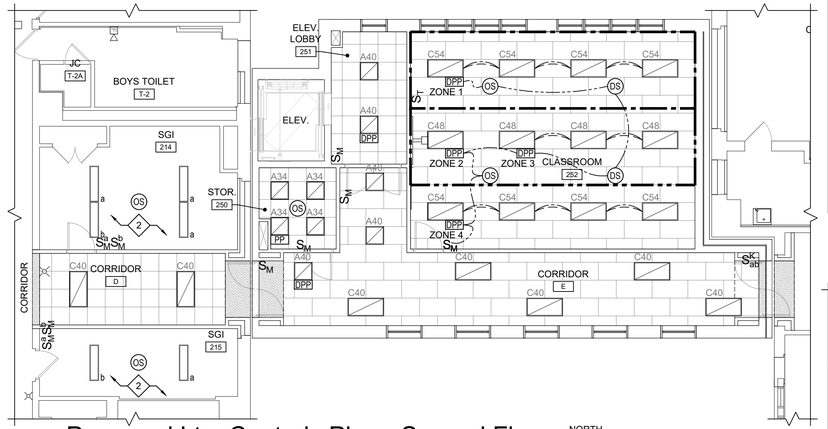
Schematic Lighting Controls Wiring

5 / E5.02 — N.T.S. — SIMILAR THROUGHOUT BUILDING



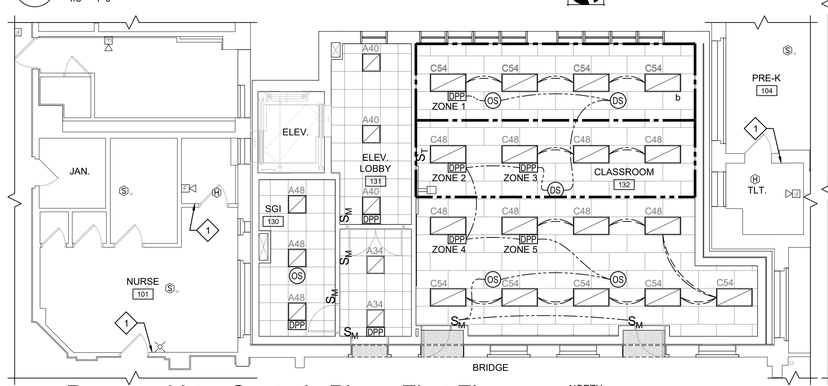
Proposed Ltg. Controls Plan - Third Floor

4 / E5.02 — 1/8" = 1'-0" — NORTH



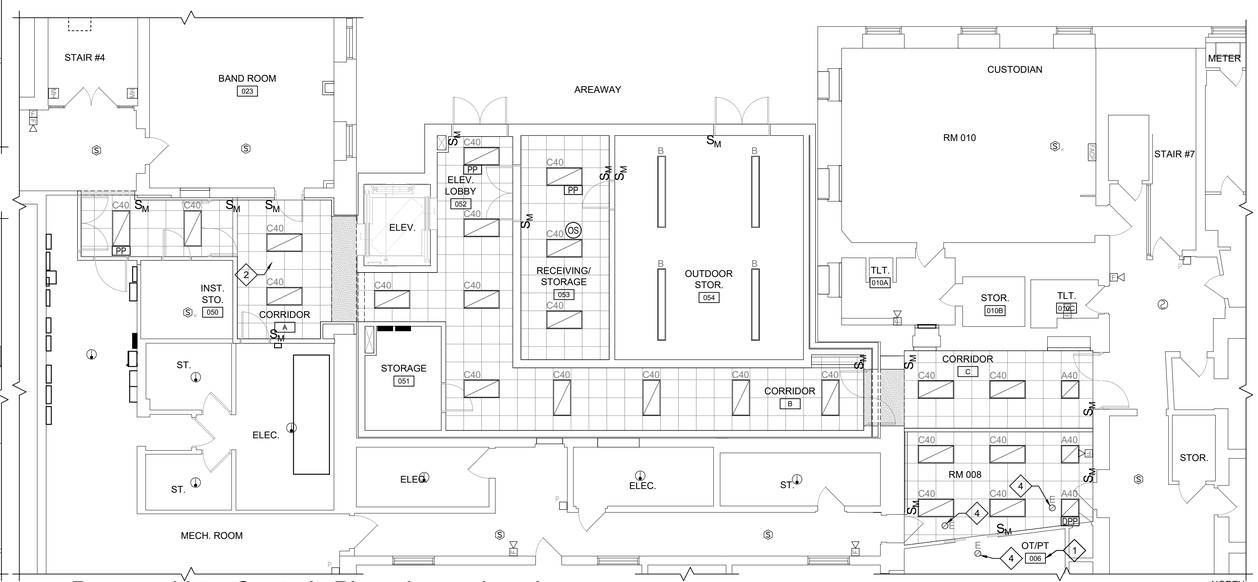
Proposed Ltg. Controls Plan - Second Floor

3 / E5.02 — 1/8" = 1'-0" — NORTH



Proposed Ltg. Controls Plan - First Floor

2 / E5.02 — 1/8" = 1'-0" — NORTH



Proposed Ltg. Controls Plan - Lower Level

1 / E5.02 — 1/8" = 1'-0" — NORTH

Lighting Controls Narrative Schedule

TYPICAL FOR ALL SPACES

LIGHTS
- ALL LIGHTS ARE CAPABLE OF BEING DIMMED
- EACH ZONE MODULE OR nLIGHT ENABLED FIXTURE CAN BE EITHER CONTROLLED INDEPENDENTLY, AS AN ENTIRE SPACE, OR IN ANY COMBINATION AS PROGRAMMED ON THE APP IN THE FIELD.
- MAXIMUM LIGHT OUTPUT CAN BE ASSIGNED IN THE FIELD.

DAYLIGHTING CONTROL (WHEN INDICATED ON THE PLAN)
- SMOOTH CONTINUOUS AUTOMATIC DIMMING OF LIGHTING CONTROL ZONES WITHIN THE DAYLIGHTING ZONE TO MAINTAIN THE LIGHT LEVEL DEFINED IN THE CONTROLS SCHEDULE.
- PRIMARY AND SECONDARY DAYLIGHTING ZONES SHALL BE CONTROLLED INDEPENDENTLY BY THEIR RESPECTIVE PHOTOCELL.

GENERAL INFORMATION
- WHERE "100%" IS INDICATED IN THE NARRATIVES, IT REFERS TO 100% OF MAXIMUM PRESET VALUE SET IN THE FIELD.

CONTROLS NARRATIVE 1 - STANDARD CLASSROOM

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

ZONES
ZONE 1 - ROW AT WINDOW
ZONE 2 - FIXTURE OVER WHITEBOARD
ZONE 3 - MIDDLE ROW, MINUS FIXTURE OVER WHITEBOARD
ZONE 4 - CORRIDOR ROW

MANUAL CONTROL
"MASTER SWITCH" SHALL HAVE THE FOLLOWING PRESETS:
1. "ON" - ALL ZONES ON TO 100% OF MAXIMUM PRESET VALUE.
2. "OFF" - ALL ZONES OFF
3. "▲" - ALL FIXTURES BRIGHTEN.
4. "▼" - ALL FIXTURES DIM.

"TEACHER CONTROL" SWITCH SHALL HAVE THE FOLLOWING PRESETS (NOTE - THESE SETTINGS ARE FOR REFERENCE ONLY AND SHALL BE CONFIRMED DURING THE SHOP DRAWING PHASE):
1. "ALL ON" - ALL ZONES/FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
2. "ALL OFF" - ALL ZONES/FIXTURES OFF
3. "AV" - ZONES 1, 3 & 4 ON TO 70% OF MAXIMUM PRESET VALUE, ZONE 3 OFF (DAYLIGHTING DISABLED)
4. "50% DIM" - ALL ZONES/FIXTURES DIMMED TO 50% OF MAXIMUM PRESET VALUES.

CONTROLS NARRATIVE 1A - STANDARD CLASSROOM (4 ROWS)

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

ZONES
ZONE 1 - ROW AT WINDOW
ZONE 2 - FIXTURE OVER WHITEBOARD - WINDOW SIDE
ZONE 3 - MIDDLE ROW - WINDOW SIDE, MINUS FIXTURE OVER WHITEBOARD
ZONE 4 - FIXTURE OVER WHITEBOARD - CORRIDOR SIDE
ZONE 5 - MIDDLE ROW - CORRIDOR SIDE, MINUS FIXTURE OVER WHITEBOARD & CORRIDOR ROW

MANUAL CONTROL
"MASTER SWITCH" SHALL HAVE THE FOLLOWING PRESETS:
1. "ON" - ALL ZONES ON TO 100% OF MAXIMUM PRESET VALUE.
2. "OFF" - ALL ZONES OFF
3. "▲" - ALL FIXTURES BRIGHTEN.
4. "▼" - ALL FIXTURES DIM.

"TEACHER CONTROL" SWITCH SHALL HAVE THE FOLLOWING PRESETS (NOTE - THESE SETTINGS ARE FOR REFERENCE ONLY AND SHALL BE CONFIRMED DURING THE SHOP DRAWING PHASE):
1. "ALL ON" - ALL ZONES/FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
2. "ALL OFF" - ALL ZONES/FIXTURES OFF
3. "AV" - ZONES 1, 3 & 5 ON TO 70% OF MAXIMUM PRESET VALUE, ZONES 3 & 4 OFF (DAYLIGHTING DISABLED)
4. "50% DIM" - ALL ZONES/FIXTURES DIMMED TO 50% OF MAXIMUM PRESET VALUES.

CONTROLS NARRATIVE 2 - CORRIDOR

MANUAL ON/MANUAL OFF ONLY
OCCUPANCY CONTROL
- NO OCCUPANCY CONTROL

MANUAL CONTROL
"MASTER SWITCH(ES)" SHALL BE A KEY SWITCH, nLIGHT MODEL "nPOD KEY COLOR" AND HAVE THE FOLLOWING PRESETS:
1. "ON" - ALL FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
2. "OFF" - ALL FIXTURES OFF

CONTROLS NARRATIVE 3 - SMALL, NON-DIMMING SPACES

MANUAL ON/AUTOMATIC OFF ONLY
OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
"MASTER SWITCH" SHALL HAVE THE FOLLOWING PRESETS:
1. "ON" - ALL FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
2. "OFF" - ALL FIXTURES OFF

CONTROLS NARRATIVE 4 - SMALL, DIMMING SPACES

MANUAL ON/AUTOMATIC OFF ONLY
OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
"MASTER SWITCH" SHALL HAVE THE FOLLOWING PRESETS:
1. "ON" - ALL FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
2. "OFF" - ALL FIXTURES OFF
3. "▲" - ALL FIXTURES BRIGHTEN.
4. "▼" - ALL FIXTURES DIM.

CONTROLS NARRATIVE 5 - RENOVATED SGI'S

MANUAL ON/AUTOMATIC OFF ONLY
OCCUPANCY CONTROL
- OCCUPANCY SENSORS IN THIS AREA SHALL BE 120VAC SENSORS AND CONTROL "a" FIXTURES ONLY.
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS CONTROLLED BY THE SENSOR AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
"MASTER SWITCHES" IN THESE SPACES SHALL BE 120VAC SWITCHES.
"MASTER SWITCH a" SHALL BE A MOMENTARY CONTACT SWITCH AND HAVE THE FOLLOWING PRESETS:
1. "ON" - ALL "a" FIXTURES ON.
2. "OFF" - ALL "a" FIXTURES OFF

"MASTER SWITCH b" SHALL BE A KEY SWITCH AND HAVE THE FOLLOWING PRESETS:
1. "ON" - ALL "b" FIXTURES ON.
2. "OFF" - ALL "b" FIXTURES OFF

Lighting Controls Symbol Legend

GENERAL SWITCH REQUIREMENTS:
ALL SWITCHES SHALL BE nLIGHT nPODM FAMILY UNLESS NOTED OTHERWISE. REFER TO CONTROL NARRATIVES FOR BUTTON QUANTITY AND PROGRAMMING.

S_M "MASTER" WALL SWITCH - REFER TO CONTROLS NARRATIVE FOR BUTTON/CONTROLS REQUIREMENTS.

S_T "TEACHER CONTROL STATION" WALL SWITCH - REFER TO CONTROLS NARRATIVE FOR BUTTON/CONTROLS REQUIREMENTS.

PRIMARY DAYLIGHTING ZONE. PHOTOCELL SHALL CONTROL FIXTURES PARTIALLY OR FULLY IN THIS AREA. WHERE A PORTION OF A LINEAR FIXTURE FALLS IN THIS AREA, CONTRACTOR SHALL PROVIDE FOR DUAL CIRCUITING OPTION WITHIN THE FIXTURE TO ALLOW FOR THE PORTION WITHIN THE DAYLIGHTING ZONE TO BE CONTROLLED INDEPENDENTLY.

SECONDARY DAYLIGHTING ZONE. PHOTOCELL SHALL CONTROL FIXTURES PARTIALLY OR FULLY IN THIS AREA. WHERE A PORTION OF A LINEAR FIXTURE FALLS IN THIS AREA, CONTRACTOR SHALL PROVIDE FOR DUAL CIRCUITING OPTION WITHIN THE FIXTURE TO ALLOW FOR THE PORTION WITHIN THE DAYLIGHTING ZONE TO BE CONTROLLED INDEPENDENTLY.

OS — DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR. SMALL MOTION, STANDARD RANGE, 360° LENS. nLIGHT MODEL "nCM PDT 9 RJ45" OR EQUAL

DS — DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR WITH PHOTOCELL ENABLED. SMALL MOTION, STANDARD RANGE, 360° LENS. nLIGHT MODEL "nCM PDT 9 RJ45 ADCX" OR EQUAL

DPP — DIMMING POWER/RELAY PACK. nLIGHT MODEL "nPP16D EFP" OR EQUAL. CONNECT VIOLET & GRAY, 0-10V CONTROL CDTRS (600V INSULATED CONDUCTORS) TO FIXTURES TO BE CONTROLLED TO THIS PACK. "ZONE #" INDICATES ZONE NUMBER FOR PROGRAMMING PURPOSES.

PP — NON-DIMMING POWER/RELAY PACK. nLIGHT MODEL "nPP16 EFP" OR EQUAL.

CONTRACTOR'S OPTION:
IN LIEU OF PROVIDING A POWER PACK IN SMALL ROOMS, THE FIXTURES CAN BE PROVIDED WITH THE INTEGRAL nLIGHT MODULE.

REFER TO DRAWING A0.01 FOR AREAS OF WORK AND DEFINED AREAS OF EXISTING AND NEW CONSTRUCTION AREAS.

Key Notes

SYMBOL INDICATES KEY NOTE

1. PROVIDE AND INSTALL A KEY SWITCH TO CONTROL THE FIXTURE CLOSEST TO THE DOOR OF THIS ROOM. RECIRCUIT THE FIXTURE AS REQUIRED.
2. RECIRUIT LIGHTS TO THE NEW SWITCHES IN THIS SPACE AS PER THE PLANS AND CONTROLS NARRATIVE. CONTRACTOR RESPONSIBLE TO REMOVE THE FIXTURES WHERE THE NEW CORRIDOR CUTS THROUGH. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR ADDITIONAL INFORMATION.

Lighting Controls System General Notes

THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL WIRING (POWER, CAT 5, 0-10V DIMMING), POWER PACKS, MODULES, ETC., WHETHER INDICATED OR NOT, FOR A COMPLETE AND OPERATION SYSTEM TO MEET THE INTENT OF THE CONTROLS MATRIX. THE CONTROLS, WIRING, AND MODULES INDICATED ON THE DRAWING ARE TO SHOW THE DESIGN INTENT AND ARE NOT MEANT TO BE "ALL INCLUSIVE".

Design Notes
1. System is based on Acuity Brands nLight Controls.
2. One relay is needed per fixture group to be controlled and can reside within sensors, wall switches, or relay packs. Power Pack placement on drawings is for schematic purposes only to indicate the design intent; final quantity shall be determined by the contractor and/or the manufacturer's design rep. during the shop drawing stage. Confirm all quantities to verify the number of relays needed to switch all desired loads.
3. Sensors and wall switches are indicated to show design intent. The contractor shall allow to provide and install an additional 5 (five) occupancy sensors to accomodate building changes, final partition height/placement, furniture placement, equipment height/placement and shelving height/placement.
4. All devices have RJ-45 Female ports. Making CAT-5(e) cables with T568B Male terminations is required. It is imperative that all CAT-5 cables be tested with a LAN Cable Tester to verify proper terminations.

PRE-INSTALLATION LIGHTING NOTES:
1. The electrical contractor shall coordinate a pre-installation conference, prior to construction activities, to review the exact lighting control requirements.
   a. Pre-installation conference shall be attended by:
      - Owner's authorized representative
      - Contractor
      - Engineer
      - Lighting controls factory representative
2. All nLight devices come with a self adhesive identification label. The contractor shall supply a drawing with the nLight identification labels place at their applicable device/fixture. The drawing shall be updated to reflect the as-built conditions. Failure to do this will require the contractor to manually determine the address of every device.

Controls Sequence of Operation

SPACE/ROOM	CONTROLS NARRATIVE No. (REFER TO CONTROLS NARRATIVE SCHED.)	OCCUPANCY: VACANCY MODE (MANUAL ON)	OCCUPANCY: OCCUPANCY MODE (AUTO ON)	OCCUPANCY: SENSOR TIME OUT PERIOD (FULL OFF) IN MINUTES	WALL: ON/OFF ONLY	WALL: ON/OFF & DIMMER SWITCH	WALL: KEY SWITCH	PHOTOCELL: INDOOR - DIMMING	PHOTOCELL: AVE. LIGHT LEVEL MAINTAINED (FC @ 30" A.F.F.)	PHOTOCELL: EXTERIOR PHOTOCELL - ON/OFF
AREAWAY										X
A CORRIDOR	2					X	X			
B CORRIDOR	2					X	X			
C CORRIDOR	2					X	X			
008 ROOM	4	X		20		X				
050 INST. STO.	3	X		20	X					
051 STORAGE	3	X		20	X					
052 ELEV. LOBBY	2					X	X			
053 RECEIVING STORAGE	2	X		20	X					
054 OUTDOOR STOR.	2	X		20	X					
130 SGI	4	X		20		X				
131 ELEV. LOBBY	2					X	X			
132 CLASSROOM	1A	X		20		X		X	50	
D CORRIDOR	EXISTING SWITCHING/CONTROLS									
E CORRIDOR	2				X	X				
214 SGI	5	X		20	X		X			
215 SGI	5	X		20	X		X			
250 STOR.	3	X		20	X					
251 ELEV. LOBBY	2				X	X				
252 CLASSROOM	1	X		20		X		X	50	
G CORRIDOR	EXISTING SWITCHING/CONTROLS									
H CORRIDOR	2				X	X				
314 SGI	5	X		20	X		X			
315 SGI	5	X		20	X		X			
350 STOR.	3	X		20	X					
351 ELEV. LOBBY	2				X	X				
352 CLASSROOM	1	X		20		X		X	50	

Date	1/10/20
Checked	BH
Drawn	MH

Revisions:
1. ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED LIGHTING CONTROLS PLANS
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202E501

E5.02

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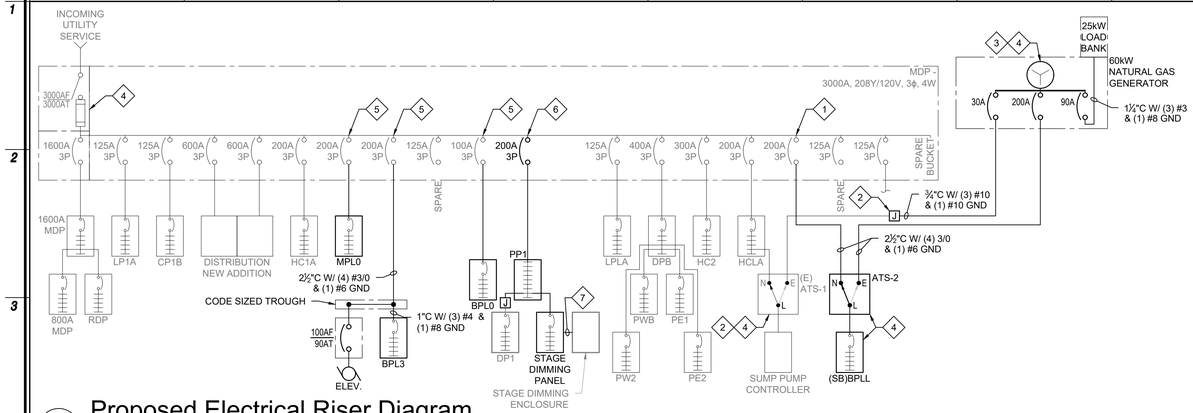


1 E6.01 Proposed Electrical Riser Diagram

N.T.S.

LIGHT LINES INDICATE EXISTING TO REMAIN.
DARK LINES INDICATE PROPOSED WORK.

Riser Diagram Key Notes

SYMBOL INDICATES RISER DIAGRAM KEY NOTE

1. UTILIZE AN EXISTING SPARE 200A, 3P BREAKER TO FEED THE NEW ATS-2.
2. REFEED EXISTING ATS. WHERE ADDITIONAL CONDUCTOR LENGTH IS REQUIRED TO MAKE THE NEW CONNECTION, INTERCEPT THE EXISTING FEEDER CIRCUIT AND INSTALL A NEW, CODE SIZED, JUNCTION BOX. COORDINATE WITH EXISTING FIELD CONDITIONS. REUSE EXISTING RACEWAY(S) TO THE FULLEST EXTENT PRACTICAL. INSTALL NEW CONDUCTORS AS REQUIRED.
3. REFER TO GENERATOR REQUIREMENTS.
4. PER NEC 702.7, CONTACTOR SHALL FURNISH AND INSTALL FIXED IDENTIFIER ON ALL PANELBOARDS INCLUDING THE MDP, TRANSFER SWITCH, GENERATOR, ETC. CONTAINING "OPTIONAL LOADS" TO READILY IDENTIFY THEM AS COMPONENTS OF A STANDBY GENERATOR. IDENTIFICATION LABELS SHALL BE WHITE LETTERING ON RED BACKGROUND. ALL IDENTIFICATION PLATE SHALL BE ENGRAVED WITH LETTERING HEIGHT ½" AND MUST BE SECURED WITH RIVETS. A PERMANENT SIGN MUST BE PLACED ON THE MDP BY THE CONTRACTOR INDICATING THE LOCATION OF THE ALTERNATE ON-SITE POWER SOURCE.
5. UTILIZE AN EXISTING SPARE BREAKER TO FEED THE NEW PANEL.
6. INSTALL A NEW ELECTRONIC TRIP BREAKER IN EXISTING SPACE. COORDINATE BREAKER WITH 200A STAGE DIMMING PANEL.
7. NEW 2"C TO ACCOMMODATE EXTENSION OF DM-1,2,3,12,13,14 CIRCUITING. (DERATE #12 AWG BRANCH CIRCUIT CONDUCTORS TO COMPLY WITH NEC TABLE 310.15(B)(2)(a)

Riser Diagram Symbol Legend

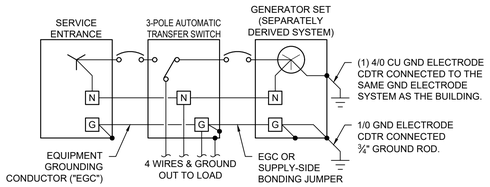
FRAME / TRIP — LOW VOLTAGE, CIRCUIT BREAKER "FRAME" INDICATES FRAME SIZE "TRIP" INDICATES DRIP AMPERAGE RATING

J — CODE SIZED JUNCTION BOX TO FACILITATE FEEDER EXTENSION/RE-ROUTING AS REQUIRED.

E N L — AUTOMATIC TRANSFER SWITCH - REFER TO "ATS REQUIREMENTS" SCHEDULE FOR ADDITIONAL INFORMATION.

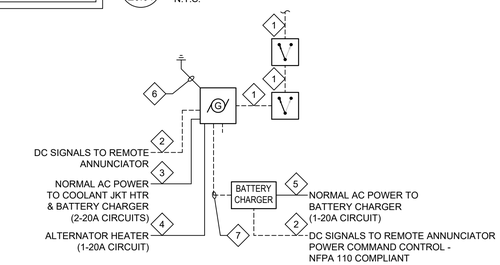
GENERATOR REFER TO "GENERATOR REQUIREMENTS" SCHEDULE FOR ADDITIONAL INFORMATION.

PANEL - REFER TO PANEL SCHEDULE FOR ADDITIONAL REQUIREMENTS.



2 E6.01 ATS Grounding Detail

N.T.S.



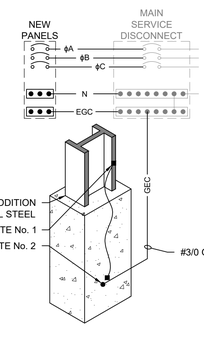
3 E6.01 Generator Wiring Schematic

N.T.S.

Generator Wiring Schematic Key Notes (3/E6.01)

1. DC START SIGNAL FROM TRANSFER SWITCH. ½"C W/ (3) #12 & (1) #12 GND.
2. DC POWER & CAT. 5E CABLE TO REMOTE ANNUNCIATOR. ½"C W/ (2) #12 & ½"C W/ (1) BELDEN CABLE MODEL 9729.
3. 120VAC, (2, 20A, 1P BREAKERS & BRANCH CIRCUITS) FOR EQUIPMENT LISTED.
4. 120VAC, (1, 20A, 1P BREAKER & BRANCH CIRCUIT) FOR EQUIPMENT LISTED.
5. 120VAC, (1, 20A, 1P BREAKER & BRANCH CIRCUIT) FOR EQUIPMENT LISTED.
6. GROUND GENERATOR FRAME.
7. DC POWER TO BATTERY, (2) #6

General Notes:
1. Installation shall conform to NECA/EGSA 404-200, "Recommended Practice for Installing Generator Sets".
2. Refer to Manufacturer's published installation manual for specific wiring requirements. Size raceways as per NEC standards.



DETAIL KEY NOTES:
1. BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE ENCASED MAIN GROUNDING ELECTRODE. USE COMPRESSION CONNECTIONS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.
2. INSTALL A CONCRETE ENCASED ELECTRODE IN THE BUILDING FOUNDATION. LOCATE ELECTRODE IN THE BOTTOM ONE-THIRD OF THE FOUNDATION WITH AT LEAST 3" OF CONCRETE COVER. USE BARE OR GALVANIZED REBAR THAT ARE MADE ELECTRICALLY CONTINUOUS USING COPPER JUMPERS NOT SMALLER THAN THE REQUIRED GROUNDING ELECTRODE CONDUCTOR. USE REINFORCING BARS NOT SMALLER THAN THE FOLLOWING BASED ON TOTAL LENGTH OF THE INTERCONNECTED AND PARALLEL REBARS.

TOTAL LENGTH	MIN. REBAR SIZE
112 FT	1⅛, #11 BAR
150 FT	1", #8 BAR
192 FT	¾", #6 BAR
223 FT	⅝", #5 BAR
268 FT	½", #4 BAR

DETAIL GENERAL NOTES:
1. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
2. TWO WEEKS PRIOR TO THE FINAL INSPECTION, SUBMIT GROUND RESISTANCE FIELD TEST REPORTS TO THE ENGINEER OF RECORD. FIELD TEST REPORTS SHALL INCLUDE A CERTIFICATION BY THE CONTRACTOR THAT THE GROUNDING EQUIPMENT HAS BEEN PROPERLY INSTALLED AND TESTED.
3. PUBLICATIONS LISTED BELOW (INCLUDING AMENDMENTS, ADDENDA, REVISIONS, SUPPLEMENTS, AND ERRATA) FORM A PART OF THE CONTRACT DOCUMENTS TO THE EXTENT REFERENCED:
   a. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (IEEE): 81 IEEE GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM PART 1: NORMAL MEASUREMENTS.

CONDUCTOR LEGEND:
N - NEUTRAL; ϕA - PHASE A; EGC - EQUIPMENT GROUNDING CONDUCTOR
ϕB - PHASE B; ϕC - PHASE C; GEC - GROUNDING ELECTRODE CONDUCTOR

4 E6.01 Concrete Embedded Grounding Electrode Detail

N.T.S.

Riser Diagram General Notes

1. All short circuit interrupting ratings shown, whether AIC or MVA IC are calculated 3ϕ symmetrical values at the line terminals of the equipment, with the exception of 10,000 AIC values. The withstand short circuit current ratings of protective devices, transfer switches and bus bracings shall be equal to or greater than the values indicated.
2. Unless otherwise noted all circuit breakers, and/or switches are three (3) pole unless noted otherwise.
3. Refer to panelboard schedules for additional information.
4. Junction and pull boxes are not necessarily shown on this drawing and shall be provided where necessary and sized in accordance with the National Electrical Code and installed where required.
5. Per NEC 110.16, "Flash Protection. Switchboards, panelboards, industrial control panels, meter socket enclosures, and motor control centers in other than dwelling occupancies, which are likely to require examination, adjustment, servicing, or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards*. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment." The NEC labeling requirements apply to any electrical equipment installed or modified after 2002. The warning label shall comply with ANSI Z535.4, which specifies colors and signal words to be used.
6. Per NEC 408.4(A), every circuit and circuit identification shall be legibly identified as to its clear, evident, and specific purpose of use.
7. Where raceways contain conductors 4 AWG and larger and enter an enclosure, the conductors must be protected from abrasion during and after installation by a fitting that provides a smooth, rounded insulating surface, such as an insulating bushing [300.4(F)]. For IMC and RMC, a metal or plastic bushing must be installed on conduit threads at terminations in accordance with 300.4(F), unless the design of the box, fitting, or enclosure is such as to afford equivalent protection [344.46 and 342.46].

Panelboard General Requirements

1. Breakers for Devices 400 Amps or Less: Protective devices in branch circuit and distribution panels that are rated 400 amperes or less shall be circuit breakers with appropriate short circuit ratings to maintain building coordination. Circuit breakers shall have bolt or screw mounting to bus.
2. Provide panelboard interrupting ratings as noted on the drawings. All panelboards shall be FULLY RATED. No Series-Rating is allowed.
3. Panel Capacity: All new distribution and branch circuit panels shall have 42 spaces. Panel boards with 84 circuits in one panel are not allowed. Panel boards with 42 circuits and feed-thru lugs to a panel board next to it for a total of 84 circuits are allowed.
4. Lockable: All distribution and branch circuit panels shall be lockable. Panel boards shall be door-in-door type.
5. Schedule: Each panel shall contain a typewritten schedule. Schedules shall reflect final load descriptions, room numbers, and room names connected to each circuit breaker. Schedules shall be printed on the panelboard directory cards and be installed in the appropriate panelboards. The schedule shall contain complete and detailed information for loads on each circuit. Any changes, additions, or modifications to Panel boards shall require in a new typed directory.
6. Buss Material: All panelboard Phase, Neutral, and Equipment Ground buss shall be tinned copper.
7. Furnish panelboards with surge protective devices as noted on the drawings.
8. UL Compliance: Comply with applicable UL safety standards pertaining to panelboards, accessories, and enclosures. Provide units which have been UL listed and labeled. UL standards are as follows:
   Panelboards - UL67, Enclosures for Electrical Equipment - UL50
9. NEC Compliance: Comply with the NEC as applicable to the installation of panelboards, cabinets, and cutout boxes.
10. NEMA Compliance: Comply with NEMA Stds. Pub. No. 250 "Enclosures for Electrical Equipment (1000-volt maximum)", Pub. No. 1 "Panelboards" and Pub. No. PB1.1, "Instruction for Safe Installation, Operation, and Maintenance of Panelboards Rates 600 Volts and Less".
11. NECA Compliance: Comply with NECA's "Standard of Installation".
12. Panelboards shall be constructed for top or bottom feeder service, as required by actual project conditions. Contractor to coordinate with field conditions.
13. Where "Std" is indicated for an OCPD in the panel schedules, it shall refer to a thermal magnetic circuit breaker unless noted otherwise.

Load Bank Requirements

1. MANUFACTURER - Simplex - Vector, Generator Mounted, Radiator Airflow Cooled, Vertical Exhaust Flow (Basis of Design)
2. LOAD TEST BANK
   A. The load test bank shall be rated 25kW, 60 hertz, 208 Volts, three-phase, four-wire, NEMA 3R, UL Listed with automatic load regulation. Model No. NP-2.0-25kW-2083-60-L- Automatic and manual control.
   B. The load test bank shall be furnished as a complete system with necessary controls and devices for manual control with automatic load dump on loss of utility power. Load bank shall be equipped for automatic operation, i.e., shall maintain a minimum 30% load while the generator is in operation.
   C. Load Step Resolution: The load shall be able to be stepped in a minimum of 5 steps. Tolerance: ±5 percent overall tolerance, ±2 percent phase-to-phase balance.
   D. Control Power: 120 VAC, single-phase control power shall be derived from a local panel via a control power transformer.
   E. Overload and overcurrent protection shall be provided for each individual load section and control circuit.
   F. The load bank is a completely self-contained, freestanding unit which includes all resistive load elements, load control devices, load element branch circuit fuse protection, main load bus and terminals, cooling system, control power supply, digital controller with malfunction detection system. Outdoor type enclosure.
   G. Digital Controller: PLC based with 6-inch color TFT touchscreen with programmable softkeys (HMI) Local or remote control (specify one) When local, installed behind weatherproof cover. When remote, installed in type-3R wall mountable enclosure. Capable of multi-remote station control. Capable of limited user programming for time/load sequencing.
   H. Powder coated finish to match genset.
   I. Load bank - automatic operation: digital transducer and current transformers to capture electrical values. Type load bank shall provide the following capability:
      Display of electrical values on touchscreen: 3-phase voltage, 3-phase amperes, frequency, KW
      MODBUS registers for these values -Programmable automatic operation:
      - KW sensing automatic load regulation and minimum loading
      - KW sensing regenerative power protection -
      - Automatic sequential step loading
      - Other programmable automatic functions
      - Operator programmable levels, delays, time sequencing.
      Additional protective features, user activated, user programmable:
      - Over/under voltage
      - Over/under current
      - Over/under frequency
      - Over/under power (KW)
   J. An authorized representative of the manufacturer shall inspect the installation and shall perform the installation acceptance testing. The owner's authorized representative will be present for the installation inspection and acceptance testing.
   K. Furnish a written Guarantee that the equipment will meet the specified performance. In addition, the guarantee shall cover the equipment against defects in design, workmanship and material for one (1) year from date of start-up.

Generator General Notes

1. The standby power distribution system shall consist of a central engine generator and a separate distribution system with automatic transfer switch(es), disconnect switch(es), distribution panel(s), and dry-type transformers feeding 208/120V stand by distribution panels as required.
2. The authority having jurisdiction and the local utility company must approve all equipment, i.e., generator, transfer switch, etc. used for the stand by system. Electrical contractor is responsible to coordinate the necessary approvals.
3. The electrical contractor shall coordinate acceptance test with owner's authorized representatives. A written record must be kept of all required tests.
4. Contractor shall erect and maintain all reasonable precautions for safety and health including posting danger signs and other warning against hazards including promulgating safety regulations. Provide safety precautions and barricades for pedestrians at construction vehicle access and egress locations.
5. Contractor shall coordinate and sequence all demolition, cleaning and construction work. Contractor shall submit a detailed construction schedule prior to pre-construction conference.
6. Contractor shall furnish and install fixed identification at the service entrance equipment (2 locations) indicating the type and location of the on-site stand by power source. Identification signs shall be Bakelite with white lettering on red background. All identification plates shall be engraved with lettering height ½" and must be secured with rivets. Example as follows:
   CAUTION
   TWO SOURCES OF SUPPLY
   208/120V 3-PHASE
   Optional Stand By Power Source
   Located at _____
7. Contractor shall furnish and install fixed identification on all boxes and enclosures, including transfer switches, generators and power distribution panels containing emergency circuits to readily identify them as components of an optional stand by power distribution system. Identification labels shall be engraved with lettering height ½" and must be secured with rivets.
8. The optional standby system wiring shall be permitted to occupy the same raceways, cables, boxes and cabinets with other general wiring.
9. Generator control wiring (control conductors) installed between the transfer equipment and the emergency generator shall be shall be kept entirely independent of all other wiring.
10. Verify all equipment dimensions and locations before beginning rough in. Consult all applicable contract drawings and shop drawings to insure minimum NEC code clearances are met around all electrical equipment.
11. All penetrations of fire rated floors, walls, and ceilings shall be sealed with approved material to maintain the fire rating of surface penetrated.
12. Do not penetrate structural elements of floors, walls, ceilings, roofs, etc.
13. The instruction to "provide" also includes installation.
14. The working drawings are diagrammatic. They do not show every offset, bend, elbow or junction box necessary for the complete installation in the space provided. All locations for equipment shall be field verified and coordinated with all drawings.
15. The contractor shall provide provisions for core drills through existing walls. All raceway penetrations in exterior walls shall be "sealed" with a conduit sealing bushing as manufactured by O-Z Gedney or approved equal.
16. Underground exterior PVC raceways where attached to structural components shall equipped with expansion joints to compensate for thermal expansion in accordance with the NEC and NEMA standards.
17. Junction and pull boxes are not necessarily shown on this drawing and shall be provided where necessary and sized in accordance with NEC and installed where required.
18. Unless otherwise noted all circuit breakers, and/or switches are three (3) pole unless noted otherwise.
19. All exterior raceways to generator shall be installed below finished grade and shall be schedule 40 PVC, sunlight resistant.

ATS Requirements

TAG	LOAD	STEP	TIME (SEC.)	RATINGS					
				VOLTS	MIN. CURRENT AMPS	POLES	ϕ	WIRES	CLOSING & WITHSTAND
(E) ATS-1	SP-1/SP-2	1	10	208	60	3	3	3	65,000
ATS-2	(SB)BPLL	2	20	208	200	3	3	4	65,000

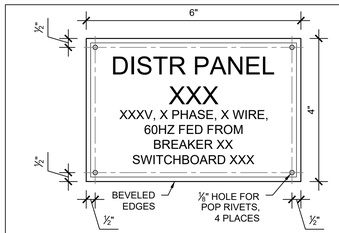
General Notes:
1. All units shall have open transition, except as noted.
2. Level 1 ATS
3. Protected by molded-case circuit breaker.
4. Closing and withstanding-current ratings are minimum symmetrical amperes. Rating may be attained by using the ATS manufacturer's closing and withstand ratings. Coordinate withstand ratings of upstream overcurrent protection devices and transfer switches with manufactures published data.
5. Provide engine startup and shutdown contacts
6. Basis of Design: Power Generation, OTPC Transfer Switch, Level 2 Control (C204), NEMA 1
7. 5-year parts, labor & travel warranty.
8. Digital Display
9. Training session.
10. 10 second delay between steps.

Generator Requirements

System Type:	Standby Duty (NFPA 70 Art. 702 "Optional")
Manufacturer:	Cummins (Basis of Design)
Model:	C60 N6
Alternator:	UC2F
Fuel Type:	Natural Gas
Type:	EPSS Level 1, Type 10, Class 8 (NFPA 110)
Voltage:	208/120V, 3P
Frequency (Hz.):	60
kW (Standby):	60
kVA (Standby)	75
Running kW:	13.1 (Calculated Load Data)
Running kVA:	17.2
Pct. Rated Capacity:	21.83%
Emissions:	EPA, Stationary Application, NSPS Part 60
Housing Enclosure:	Aluminum, Sound Attenuated Level 2 (ONAN - Basis of Design)
Ave. dB(A) at 7 meters:	69.3
Fuel Consumption (scfh):	933.8 at full load
Min. Operating Pressure (in. H_2O)	6
Max. Operating Pressure (in. H_2O)	13
Combustion Air (scfm)	149
Coolant System Air Flow (scfm)	5600
Max. Alt. Temp Rise, °C:	105
Alt. Excitation:	PMG
Motor Starting kVA at	423
Rated Speed, RPM:	1800
Engine Configuration:	Cast Iron, In line, 6 cylinder
Gross engine power output (bhp):	100.3

Misc. Requirements:
- UL2200 Listed
- Battery Heater
- Battery Charger
- Exterior E-Stop
- Alternator Heater
- Meters - AC Output
- Exterior Receptacle
- Display-Control, LCD
- Circuit Breaker Lockout
- Startup and 4 Hour Load Test
- Remote Annunciator (NFPA 110)
- 5-Year Preventative Maintenance Contract
- Power Command 2.3 Control System (UL 508)
- Critical Grade Exhaust Muffler Inside Enclosure
- 208V, Thermostatically Controlled Coolant Heater
- (2) 100% Rated Gen Set Mounted Circuit Brkrs
  (1) ___AF/___AT ET Thermal Magnetic (ATS-1)
  (1) ___AF/___AT ET Thermal Magnetic (ATS-2)
- 5-Year Extended Warranty (2500 hours, parts + labor + travel)
- Remote Monitoring - Cummins N34 Protonode Network Monitoring

Nameplate/Labeling Requirements



REQUIRED DATA
FIRST LINE: EQUIPMENT DESIGNATION
SECOND LINE: VOLTAGE, PHASE, No. OF WIRE, FREQUENCY
THIRD AND FOURTH LINES: POWER SOURCE AND BREAKER
"XXX": BASED ON FINAL SHOP DRAWING AND INSTALLED EQUIPMENT CIRCUIT NUMBER
TRANSFORMERS: INCLUDE LINE INDICATING "FEEDS TO"

LETTER SIZE & SPACING
TOP ROW: 1" LETTERS
OTHER ROWS: ½" LETTERS
BETWEEN ROWS: ¼" BETWEEN 1st & 2nd, ⅛" FOR OTHER ROWS

NOTES
LETTERING SHALL BE WHITE ON A BLACK BACKGROUND
FOR TRANSFORMERS, INCLUDE PRI & SEC VOLTAGES, PRI AND SEC CONNECTIONS (E.G., DELTA, WYE, ETC.) AND EQUIPMENT SERVING.

GENERAL LABELING REQ.:
Engraved Plastic Nameplates and Signs: Engraving stock, melamine plastic laminate, minimum 1/16" thick for signs up to 20 sq. in. and ⅛" thick for larger sizes. Engraved legend with white letters on black face for normal power, white letters on red face for emergency power. Punched or drilled for mechanical fasteners. Text at ½" high lettering.

Nameplates shall adequately describe the function of the particular equipment involved. Where nameplates are detailed on the drawings, inscription and size of letters shall be as shown and shop drawing submitted for approval. Nameplates for panelboards and switchboards shall include the panel designation, voltage, phase and wire. The next item shall be panel name. In addition, describe where the panel is fed from. For example,
PANEL 1LA, 120/208V, 3PH, 4W
PP1 PANEL
FED FROM MDP

The service disconnect shall be labeled as the "Service Disconnect," per NEC 230.70(B).

Per NEC 110.24(A) the maximum available fault current and the date the fault current calculation was performed shall be legibly marked on the service equipment. Example: Maximum available fault current: 33,800 Symmetrical RMS Amperes Date 09/12/18.

Per NEC 110.16, "Flash Protection. Switchboards, panel boards, industrial control panels, meter socket enclosures, transfer switches and motor control centers in other than dwelling occupancies, which are likely to require examination, adjustment, servicing, or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment." The NEC labeling requirements apply to any electrical equipment installed or modified after 2002. Warning label shall comply with ANSI Z535.4, which specifies colors and signal words to be used.

Per NEC 408.4(A), every circuit and circuit identification shall be legibly identified as to its clear, evident, and specific purpose of use.

Per NEC 700.7(B) and NEC 701.7, furnish and install warning label that warns of a shock hazard if the grounding electrode conductor or bonding jumper connection in this type of equipment is removed while alternate energy sources are energized.

Panelboard Naming Convention

(EL)DPHA1(B)-1

- EMERGENCY/STANDBY - USED WHEN REQUIRED
- PANEL TYPE DESIGNATION
- LOCATION - BUILDING WING (A,B,C, ETC., N-NORTH, S-SOUTH, ETC.)
- LOCATION - BUILDING LEVEL/FLOOR
- ADJACENT PANELBOARD DESIGNATION FOR SIMILAR PANELS WITHIN THE BUILDING LOCATION - USED ONLY WHEN REQUIRED
- CIRCUIT NUMBER (AT DEVICES)

PANEL TYPE DESIGNATIONS
"MDP" MAIN DISTRIBUTION PANELBOARD
"MEDP" MAIN EMERGENCY DISTRIBUTION PANELBOARD
"DPH" 480/277V DISTRIBUTION PANELBOARD
"DPL" 208/120V DISTRIBUTION PANELBOARD
"BPH" 480/277V BRANCH CIRCUIT PANELBOARD
"BPL" 208/120V BRANCH CIRCUIT PANELBOARD
"MPH" 480/277V MECHANICAL LOAD PANELBOARD
"MPL" 208/120V MECHANICAL LOAD PANELBOARD
"LPH" 480/277V LIGHTING PANELBOARD
"LPL" 208/120V LIGHTING PANELBOARD
"KPH" 480/277V KITCHEN EQUIPMENT PANELBOARD
"KPL" 208/120V KITCHEN EQUIPMENT PANELBOARD
"SPH" 480/277V SERVER ROOM EQUIP. PANELBOARD
"SPL" 208/120V SERVER ROOM EQUIP. PANELBOARD

EMERGENCY/STANDBY SYSTEM DESIGNATIONS
"EL" LIFE SAFETY BRANCH
"EC" CRITICAL BRANCH
"ES" LIFE SUPPORT BRANCH
"EE" ESSENTIAL EQUIPMENT POWER BRANCH
"EO" OPTIONAL EQUIPMENT POWER BRANCH
"SB" STANDBY BRANCH

Date	1/10/20
Checked	BH
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NYSED PROJECT # 66-07-01-03-0-004-030

PROPOSED RISER DIAGRAM & NOTES
2019 BOND REFERENDUM
MAMARONECK AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
850 MAMARONECK AVENUE, MAMARONECK, NY 10543

Job No. 4.1092.72.2
File No. 10927202E601

E6.01

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