

Tuckpointing:
Use historic mix mortar mix for tuckpointing, match existing adjacent joint composition, density, dimension, color and profile.

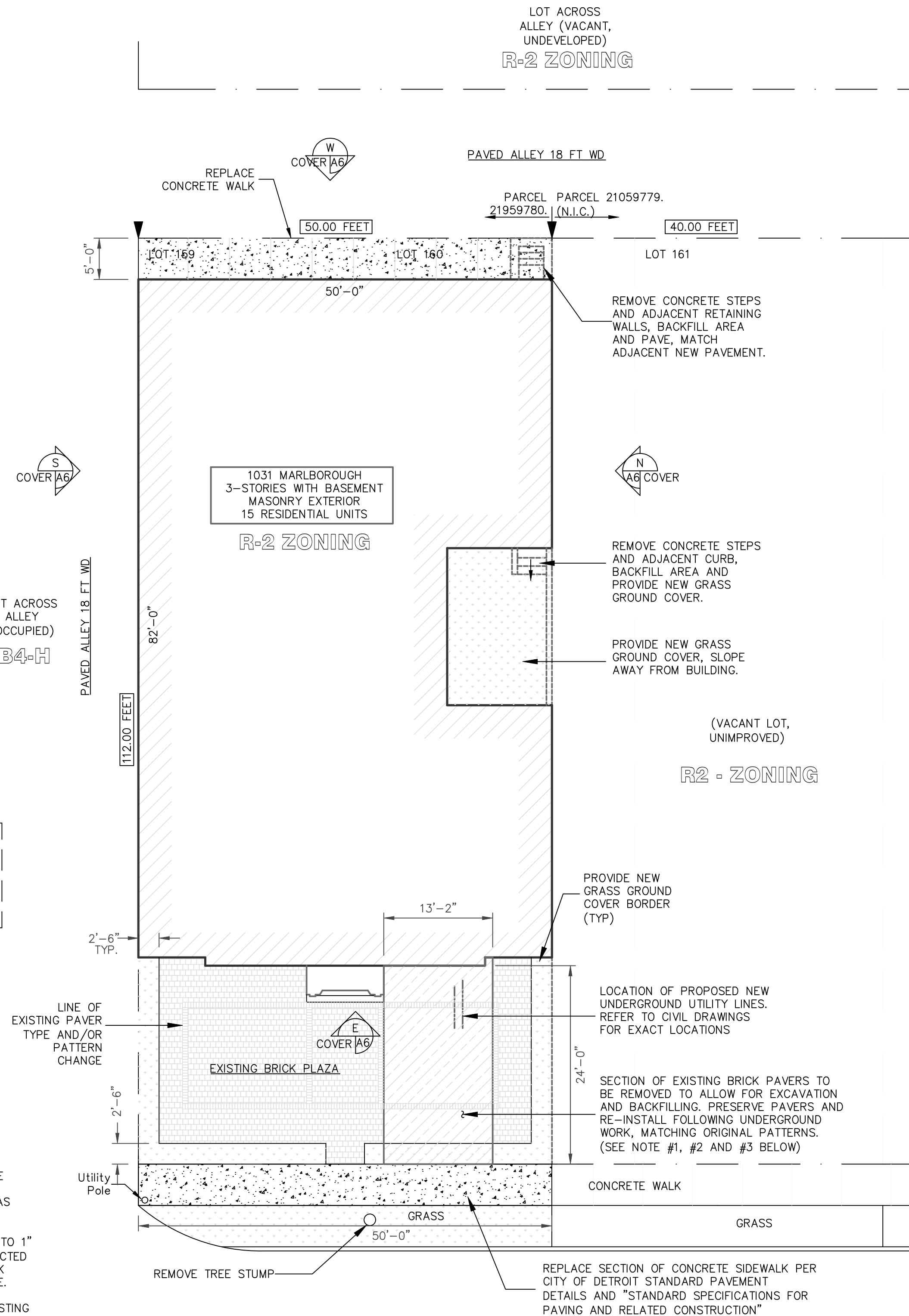
Masonry Cleaning:
Use low-pressure water spray with detergent for masonry cleaning.

Stone and Masonry Restoration, General:
See specifications sections 04901 Stone Restoration and Cleaning and 04902 Stone Restoration and Cleaning for stone and masonry restoration criteria, product requirements and procedures.

Interior Moulding and Trim, General:
Replace interior baseboard, door, window and ceiling trim with new materials matching the locations, materials, sizes, profiles and finish type of existing.

Doors, General:
Replace all doors, mouldings and trim with new materials matching the locations, materials, sizes, profiles and finish type of existing and per door schedule.

Mechanical, Plumbing, Electrical and Life-Safety Systems Concealment, General:
Installation of all new mechanical, plumbing, electrical and life-safety systems must be concealed within the building's walls, floors, ceilings, or within new soffits. No system components shall be exposed, except for flush installed control devices, light fixtures and flush mounted receptacles.

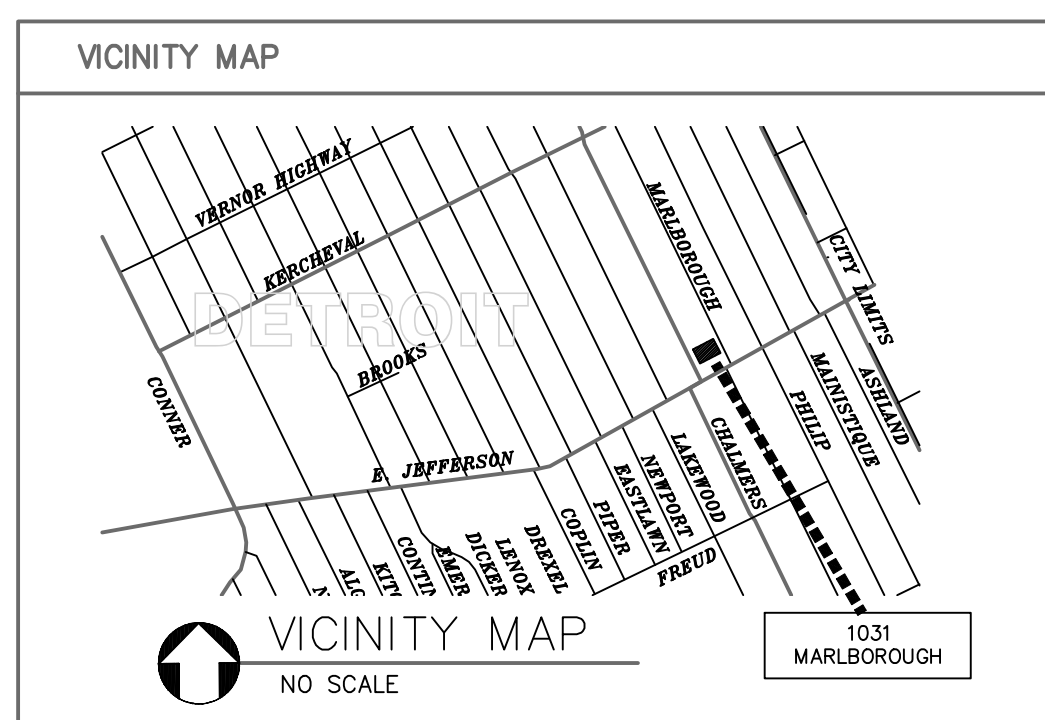


REVISIONS THIS SHEET

1	REVISED SHEET INDEX TO ADD SHEETS A9.2, A9.3 AND A9.4
---	---

- SITE PLAN NOTES:**
- EDGE OF AREA OF PAVERS TO BE REMOVED TO ALIGN WITH EDGE OF EXISTING PAVEMENT CHANGE AS SHOWN.
 - RE-INSTALL PAVERS OVER 3/4" TO 1" SAND SETTING BED OVER 4" COMPACTED AGGREGATE BASE OVER WEED BLOCK FABRIC OVER COMPACTED SUBGRADE.
 - INSTALL PAVERS FLUSH WITH EXISTING ADJACENT PAVERS.
 - SOME AREAS OF EXISTING PAVERS TO BE REMOVED TO RECEIVE NEW GRASS GROUND COVER AS SHOWN INSTEAD OF RE-INSTALLED PAVERS.

SITE PLAN
1" = 10'-0"



LEGAL DESCRIPTION
PARCEL WITH BUILDING:
W MARLBOROUGH S 20 FT 160 159 POINTE VIEW JOS S VISGER & EDGAR J HITS SUB L17 P87 PLATS, WCR 21/302 50X112

CODE REFERENCES

ARCHITECTURAL
2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS

MECHANICAL
2015 MICHIGAN MECHANICAL CODE
2015 MICHIGAN PLUMBING CODE

ELECTRICAL
NATIONAL ELECTRICAL CODE 2014

ZONING, BUILDING CODE AND RELATED DATA

ZONING
R2 - TWO-FAMILY RESIDENTIAL DISTRICT
EXISTING/PROPOSED USE IS A CONDITIONAL/BY-RIGHT USE IN THIS DISTRICT

ZONING USES:
EXISTING/PROPOSED: MULTIPLE-FAMILY DWELLING

BUILDING CODE REFERENCE:
MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS 2015 EDITION AND OTHER CODES REFERENCED THEREIN.

SCOPE OF WORK:
LEVEL II ALTERATIONS INVOLVING RECONFIGURATION OF LESS THAN 50% OF EACH FLOOR AREA.

BUILDING FLOOR AREA:
BASEMENT: 3,456 SQUARE FEET
1ST FLOOR: 3,582 SQUARE FEET
2ND AND 3RD FLOORS EACH: 3,568 SQUARE FEET
TOTAL BUILDING FLOOR AREA: 14,174 SQUARE FEET
AREA LIMIT FOR R2/IIIB/SM: 48,000 SF; R2/IIIB/S13R: 16,000 SF

OCCUPANCY CLASSIFICATIONS/STATUS:
ALL SPACES: R-2 RESIDENTIAL, APARTMENT HOUSE
NO INCIDENTAL USES.
LAUNDRY CLOSETS ARE WITHIN INDIVIDUAL DWELLING UNITS [2015 MBC 509.1].

OCCUPANT LOADS:
SEE OCCUPANT LOAD TABLE

CONSTRUCTION CLASSIFICATION: TYPE IIIB
MASONRY EXTERIOR, WOOD FLOOR, INTERIOR WALL AND ROOF FRAMING, CONCRETE SLAB ON GRADE BASEMENT FLOOR.

PROJECT AREAS WITH AUTOMATIC FIRE SUPPRESSION: EXISTING: NONE / PROPOSED: ENTIRE BUILDING.

RATED ASSEMBLIES AND SEPARATIONS:
ALTERED FLOOR/CEILING ASSEMBLIES ARE REQUIRED TO HAVE A 30-MINUTE FIRE RESISTANCE RATING. REFER TO FIRE RATED SEPARATIONS DIAGRAM. [2015 MBC 420.3, 713.3 Exception]

BUILDING EXITS:
NO. OF BUILDING EXITS PROVIDED = 3

FIRE PROTECTION SYSTEMS:
AN AUTOMATIC FIRE SUPPRESSION SYSTEM SHALL BE PROVIDED THROUGHOUT. NOTE: ATTIC DRAFTSTOPPING REQUIRED IF TYPE 13R SPRINKLER SYSTEM IS INSTALLED.

FIRE ALARM SYSTEMS:
AN NFPA 72 FIRE ALARM AND DETECTION SYSTEM TO BE PROVIDED. [2012 MI EXISTING BLDG REHAB CODE 904.2 AND MI BLDG CODE 907.2.6 AND 907.3.]

LOCAL HISTORIC DISTRICT: NO.

NATIONAL REGISTERED HISTORIC DISTRICT: JEFFERSON-CHALMERS HISTORIC BUSINESS DISTRICT.

ACCESSIBILITY:
ALTERED ELEMENTS ARE DESIGNED TO BE ACCESSIBLE. [2012 MI EXISTING BLDG REHAB CODE 906.1].

NO PRIMARY FUNCTIONS ARE BEING ALTERED. NO COMMON FACILITIES/ACCOMMODATIONS ARE BEING CREATED.

INSULATION:
EXTERIOR WALLS ABOVE GRADE WHERE THE CAVITY IS EXPOSED ARE TO BE PROVIDED WITH R3.8 CONTINUOUS PLUS R13 BETWEEN FRAMING MEMBERS OR R20 INSULATION BETWEEN FRAMING MEMBERS.

DESIGN-BUILD AND DEFERRED SUBMITTAL RESPONSIBILITIES OF THE CONTRACTOR

STRUCTURAL FOR NEW ROOFTOP EQUIPMENT SHALL BE A DESIGN-BUILD RESPONSIBILITY OF THE CONTRACTOR(S).

AUTOMATIC FIRE SUPPRESSION SYSTEM SHALL BE A DESIGN-BUILD RESPONSIBILITY OF THE CONTRACTOR.

UNIT MATRIX

UNIT NO.	NO. OF BEDROOMS	UNIT TYPE	FLOOR AREA
Basement			
B1	2	A	661
B2	1	B	552
B3	2	C	804
1st Floor			
1-A	2	A	708
1-B	1	B	574
1-C	2	C	830
1-D	2	D	832
2nd Floor			
2-A	2	A	708
2-B	1	B	574
2-C	2	C	830
2-D	2	D	832
3rd Floor			
3-A	2	A	708
3-B	1	B	574
3-C	2	C	830
3-D	2	D	832

PROJECT DESCRIPTION

GENERAL:
REHABILITATION OF 3-STORY MULTIPLE-DWELLING APARTMENT BUILDING, REPLACING FIXTURES, INFRASTRUCTURE AND FINISHES, LIMITED RECONFIGURATION OF SPACES, REPAIR OF FIRE DAMAGED FLOOR FRAMING AND ADJACENT BUILDING ELEMENTS, RESTORATION OF PAVED WALKWAYS.

SITE/EXTERIOR:
REPLACE CONCRETE WALK ALONG BACK OF BUILDING. REPLACE SECTION OF PUBLIC SIDEWALK.

RESTORATION OF GRASS, GROUND COVER AND LANDSCAPED AREAS. REMOVAL OF CONCRETE STEPS AT COURTYARD AND REAR OF BUILDING AND RETAINING WALL AT COURTYARD.

STRUCTURAL:
REPLACEMENT OF FIRE-DAMAGED WOOD FLOOR AND WALL FRAMING AND AFFECTED ADJACENT CONSTRUCTION. NO CHANGE IN STRUCTURAL LOADS OR CONFIGURATION.

EXTERIOR ENCLOSURE:
REPLACEMENT OF FIRE-DAMAGED WOOD FLOOR AND WALL FRAMING ASSEMBLIES INCLUDING FRAMING IN LIMITED AREAS, REMOVAL OF PLASTER AND REPLACEMENT WITH GYPSUM BOARD, NEW INTERIOR DOORS AND HARDWARE EXCEPT WHERE NOTED OTHERWISE, REPLACEMENT OF WOOD WALL BASE, CORNICE MOULDING, WINDOW AND DOOR TRIM AND ALL OTHER TRIM AND MOULDING, LIMITED RECONFIGURATION OF SPACES TO IMPROVE CIRCULATION (LESS THAN 50% OF FLOOR AREAS).

INTERIOR:
REPLACEMENT OF INTERIOR WALL AND CEILING FINISHES, PRESERVATION OF WOOD FLOORING, REFINISHING FLOOR WITH NEW CARPET OVER WOOD, INSTALLATION OF NEW FLOOR/CEILING ASSEMBLIES INCLUDING FRAMING IN LIMITED AREAS, REMOVAL OF PLASTER AND REPLACEMENT WITH GYPSUM BOARD, NEW INTERIOR DOORS AND HARDWARE EXCEPT WHERE NOTED OTHERWISE, REPLACEMENT OF WOOD WALL BASE, CORNICE MOULDING, WINDOW AND DOOR TRIM AND ALL OTHER TRIM AND MOULDING, LIMITED RECONFIGURATION OF SPACES TO IMPROVE CIRCULATION (LESS THAN 50% OF FLOOR AREAS).

ROOF:
REPLACEMENT OF ROOFING SYSTEM INCLUDING MEMBRANE, FLASHING IN ACCORDANCE WITH SPECIFICATIONS, NEW INSULATION, GUTTERS AND DOWNSPOUTS.

MECHANICAL HVAC:
INSTALL NEW HVAC SYSTEM THROUGHOUT. EACH DWELLING UNIT WILL CONTAIN AN INDEPENDENT HEATING, COOLING AND WATER HEATING SYSTEM, COMMON AREA HEATING AND VENTILATION.

PLUMBING:
NEW PLUMBING DISTRIBUTION AND FIXTURES THROUGHOUT.

ELECTRICAL:
NEW ELECTRICAL SERVICE, DISTRIBUTION SYSTEM AND FIXTURES THROUGHOUT, INCLUDING LIGHTING.

LIFE-SAFETY SYSTEMS:
NEW LIGHTED EXIT SIGNS AND EMERGENCY LIGHTING, NEW SMOKE DETECTORS/ALARMS. NEW PORTABLE FIRE EXTINGUISHING DEVICES.

NEW AUTOMATIC FIRE SUPPRESSION SYSTEM THROUGHOUT, WITH FLUSH-MOUNTED SPRINKLER HEADS.

ACCESSIBILITY:
CONFIGURE ONE (1) DWELLING UNIT TO CONFORM TO TYPE 'B' BARRIER-FREE DWELLING UNIT CODE REQUIREMENTS.

SHEET INDEX

ARCHITECTURAL DRAWING SHEETS

COVER	PROJECT DATA, SITE PLAN
A1	BASEMENT AND 1ST FLOOR DEMOLITION AND PROPOSED FLOOR PLANS
A1.1	UTILITY SERVICE COORDINATION PLAN
A2	2ND AND 3RD FLOOR DEMOLITION AND PROPOSED FLOOR PLANS
A2.1	BASEMENT FLOOR DEMO AND NEW SLAB PLANS
A3	ROOF PLAN, FLOOR FRAMING REPAIR PLAN
A4	ENLARGED FLOOR PLANS
A4.1	ENLARGED FLOOR PLANS
A4.2	FLOOR PATCH PLANS
A5	REFLECTED CEILING PLANS
A5.1	REFLECTED CEILING PLANS
A5.2	REFLECTED CEILING PLANS
A5.3	PARTIAL BUILDING SECTION
A5.4	CEILING COVES AND ARCH LOCATION PLAN
A5.5	ENLARGED REFLECTED CEILING PLANS
A5.6	ENLARGED REFLECTED CEILING PLANS
A5.7	ENLARGED REFLECTED CEILING PLANS
A6	BUILDING ELEVATIONS
A7	INTERIOR ELEVATIONS
A8	DOOR, FINISH AND PRODUCTS SCHEDULES
A9	WINDOW TYPES, WINDOW SCHEDULES
A9.1	INTERIOR ELEVATIONS, HISTORIC DETAILS
A9.2	DOOR TYPES
A9.3	DOOR OPENING NUMBERS, DOOR SCHEDULE, BASEMENT, 1ST FLOOR
A9.4	DOOR OPENING NUMBERS, DOOR SCHEDULE, 2ND FLOOR, 3RD FLOOR
A9.5	WINDOW DETAILS

MECHANICAL DRAWING SHEETS

M-1	ABBREVIATIONS, SYMBOLS, GENERAL NOTES & SPECIFICATIONS
M-2	DETAILS
M-3	SCHEDULES
M-4	DETAILS
M-5	SCHEDULES
M-6	ROOF PLAN
M-7	NATURAL GAS, DOMESTIC WATER & DX COIL PIPING FLOW DIAGRAMS
M-9	BASEMENT AND 1ST FLOOR HVAC FLOOR PLANS
P-1	2ND AND 3RD FLOORS HVAC FLOOR PLANS
P-2	BASEMENT AND 1ST FLOOR PLUMBING-PIPING FLOOR PLANS 2ND AND 3RD FLOORS PLUMBING-PIPING FLOOR PLANS

ELECTRICAL DRAWING SHEETS

E0.1	DRAWING LIST, ABBREVIATIONS, SYMBOL LIST AND GENERAL NOTES
E2.1	APARTMENT BASEMENT AND FIRST FLOOR LIGHTING PLANS
E3.1	APARTMENT SECOND AND THIRD FLOOR LIGHTING PLANS
E3.2	APARTMENT BASEMENT AND FIRST FLOOR POWER PLANS
E4.1	APARTMENT SECOND AND THIRD FLOOR POWER PLANS
E4.2	APARTMENT BASEMENT AND FIRST FLOOR AUXILIARY SYSTEMS PLAN
E5.1	APARTMENT SECOND AND THIRD FLOOR AUXILIARY SYSTEMS PLANS - Also Labeled as E2.2-
E5.2	ONE LINE DIAGRAMS, PANEL SCHEDULES AND LOAD CALCULATIONS FIRE ALARM RISER DIAGRAM

EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
Detroit, MI 48202
313-966-4000 / Fax 313-966-7878

PROJECT DATA, SITE PLAN

1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

EDWARDS GROUP INTERNATIONAL, INC.
Mechanical | Electrical | Engineering
24775 Northwestern Hwy
Suite 1000
Farmington Hills, MI 48334

EDWARDS GROUP INTERNATIONAL, INC.
DRAWN BY: R. EDWARDS

MARLBORO APARTMENTS
BUILDING RENOVATION

ISSUE DATES:

ADDENDUM #2
OCT-1-2018

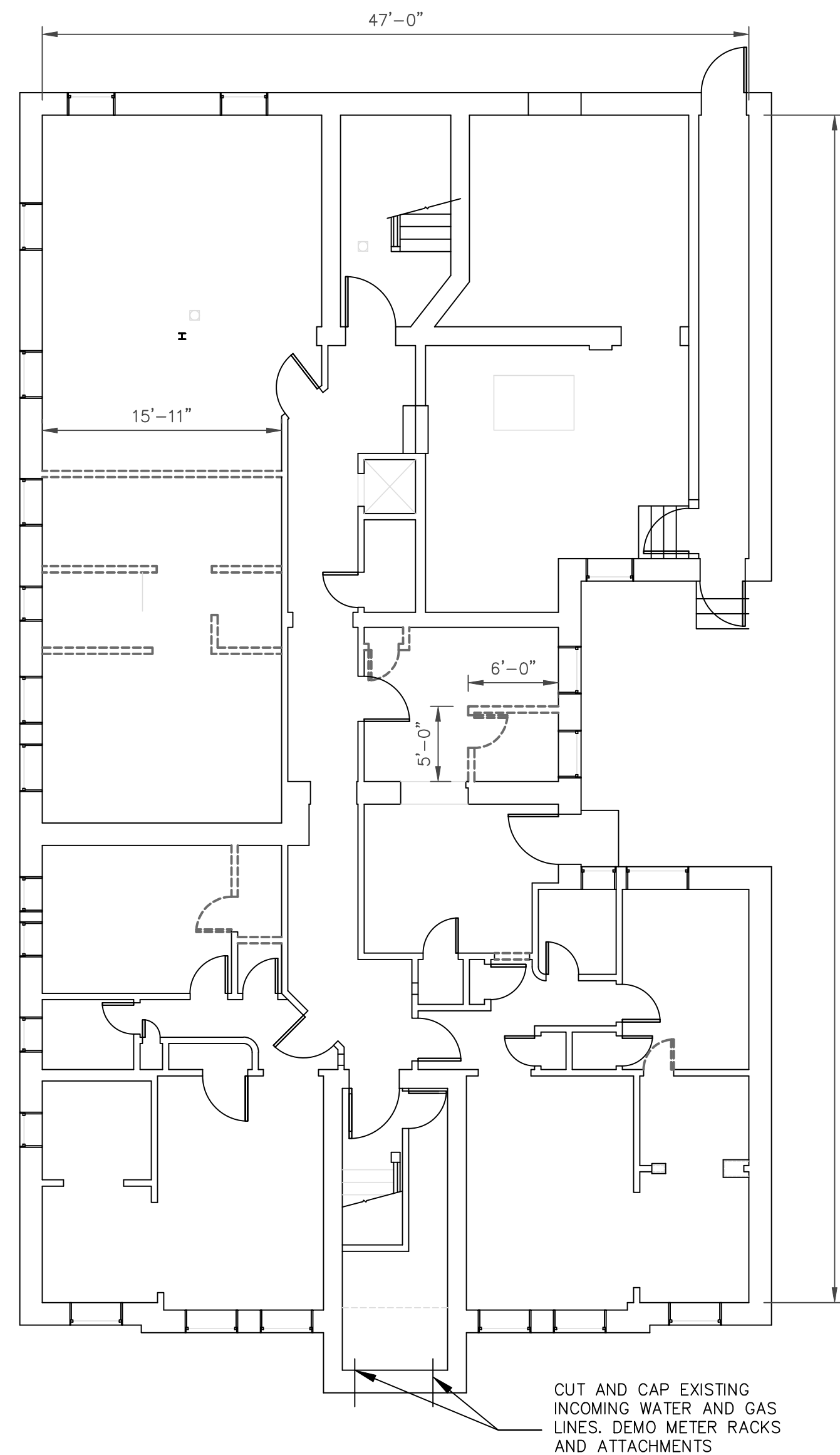
ADDENDUM #3
JAN-10-2019

BULLETIN #1
JAN-30-2019

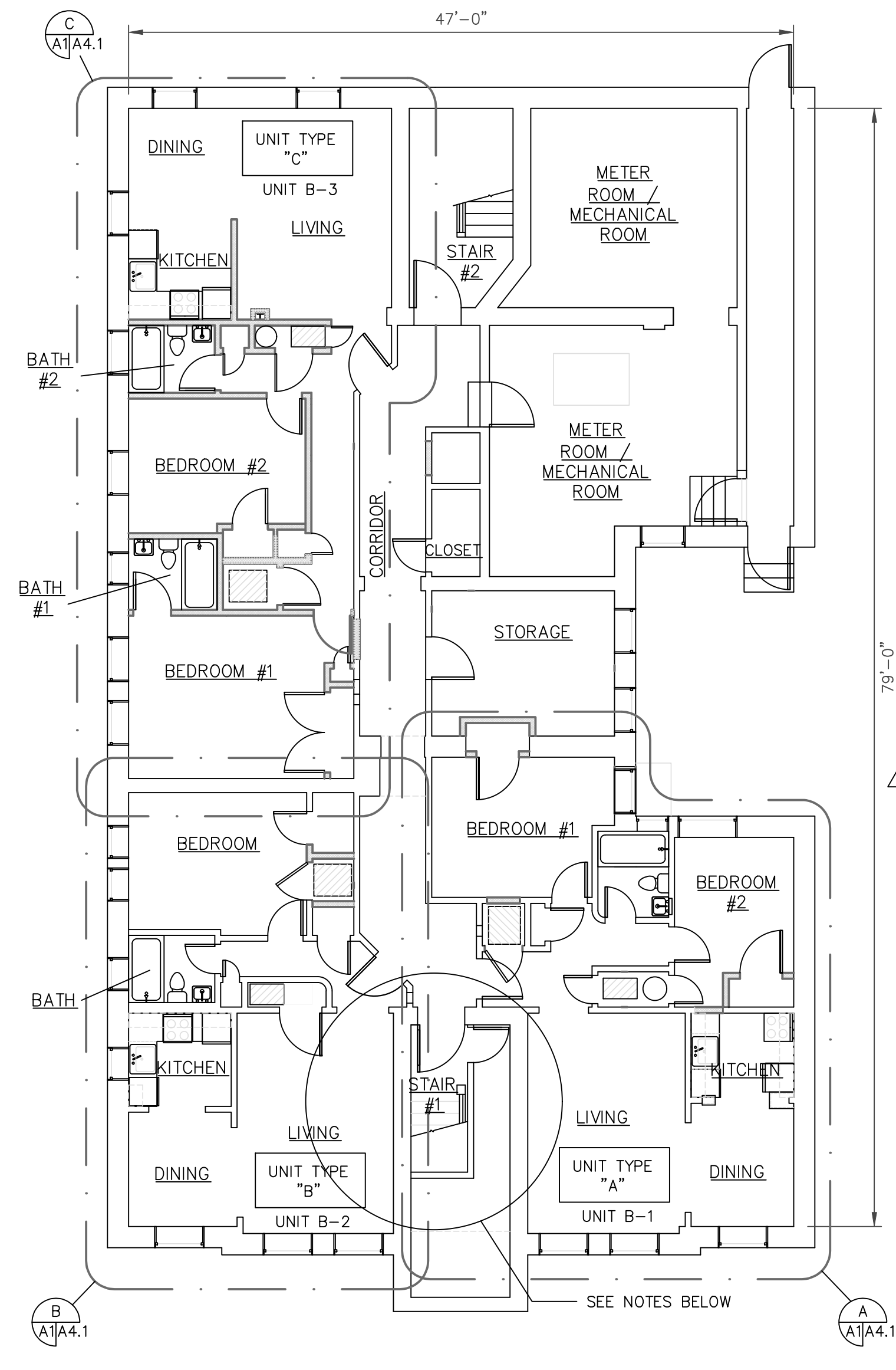
BULLETIN #2
FEB-26-2019

BULLETIN #3
MAR-25-2019

COVER

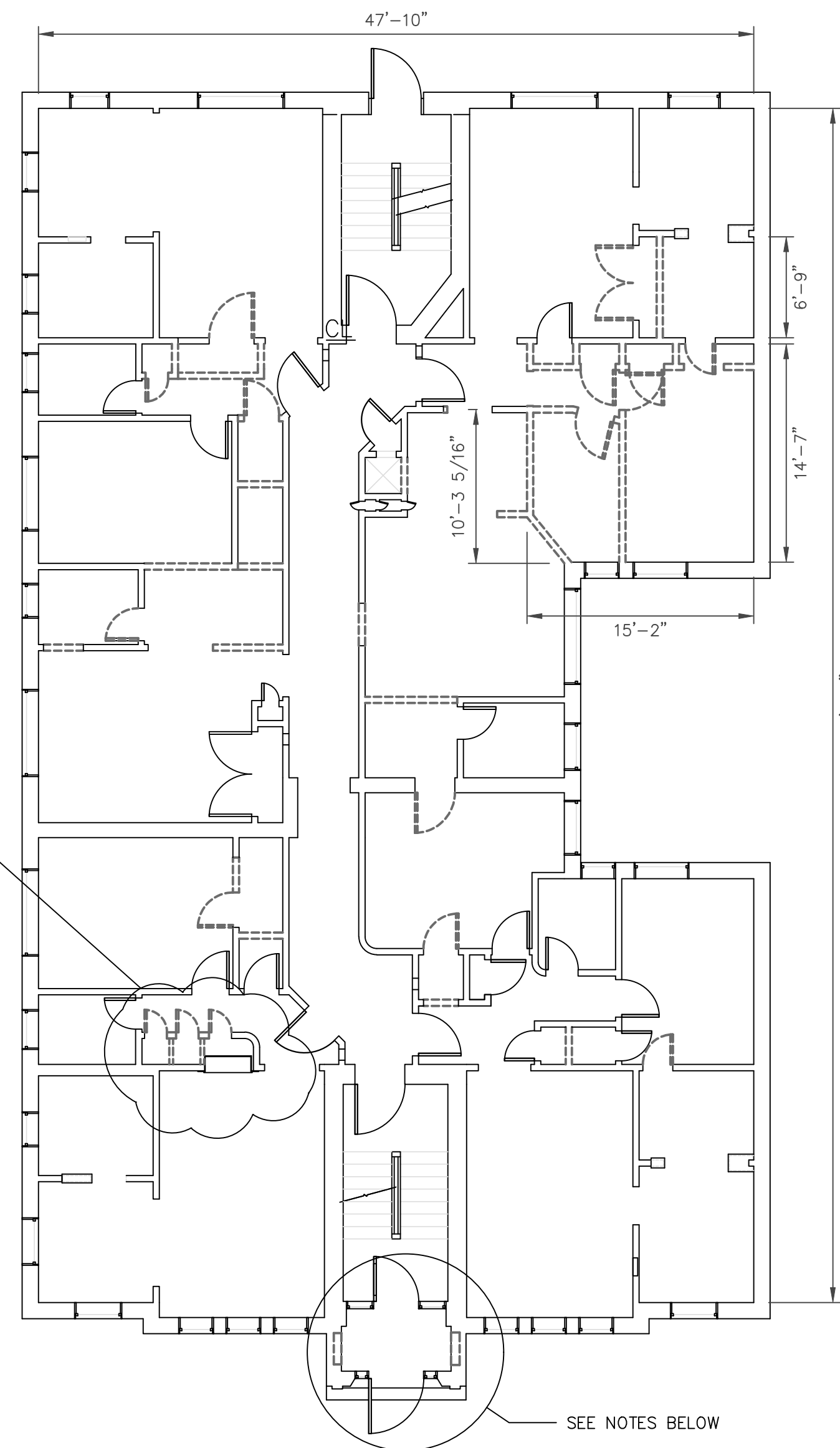


BASEMENT DEMOLITION FLOOR PLAN
1/8" = 1'-0"



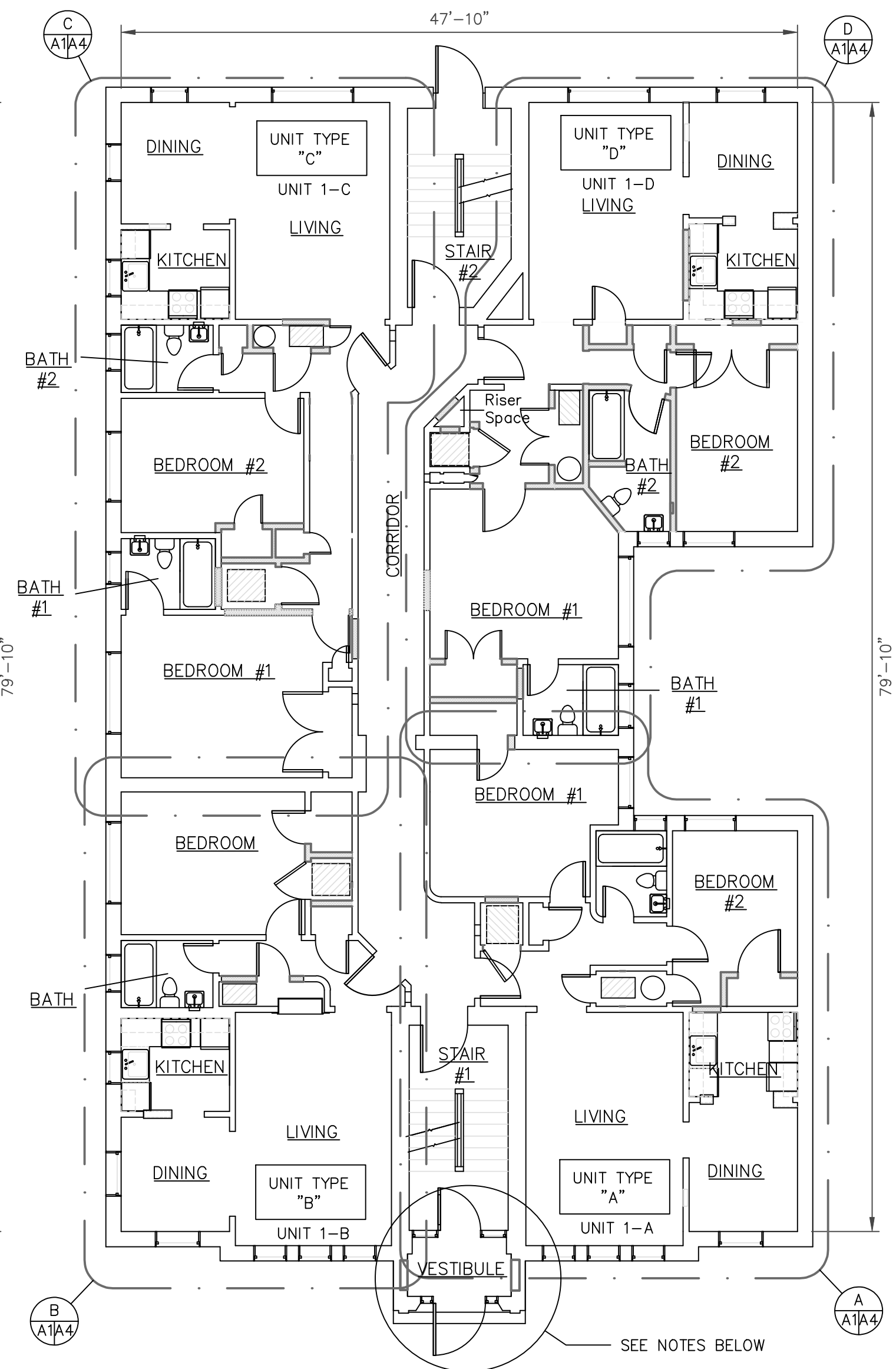
BASEMENT PROPOSED FLOOR PLAN
1/8" = 1'-0"

- BASEMENT FLOOR PLAN NOTES:**
1. REMOVE EXISTING WOOD STAIRCASE PRESERVING HANDRAIL AND BALUSTERS.
 2. CONSTRUCT NEW STAIR WITH EQUAL RISER HEIGHTS FROM GROUND FLOOR LANDING TO TOP OF NEW CONCRETE SLAB.
 3. REINSTALL HANDRAIL AND BALUSTERS. FINISH IN ACCORDANCE WITH THE FINISH SCHEDULE.



1ST FLOOR DEMOLITION FLOOR PLAN
1/8" = 1'-0"

- 1ST FLOOR DEMOLITION PLAN NOTES:**
1. REMOVE EXISTING STONE STEPS. REFER TO SPECIFICATIONS REGARDING STONE RESTORATION WORK.
 2. REMOVE EXISTING BUILT-IN MAILBOXES AND TRIM.
 3. EXISTING CERAMIC TILE FLOORING AND INTACT WALL FINISH IN VESTIBULE TO BE RESTORED AND PRESERVED IN PLACE.

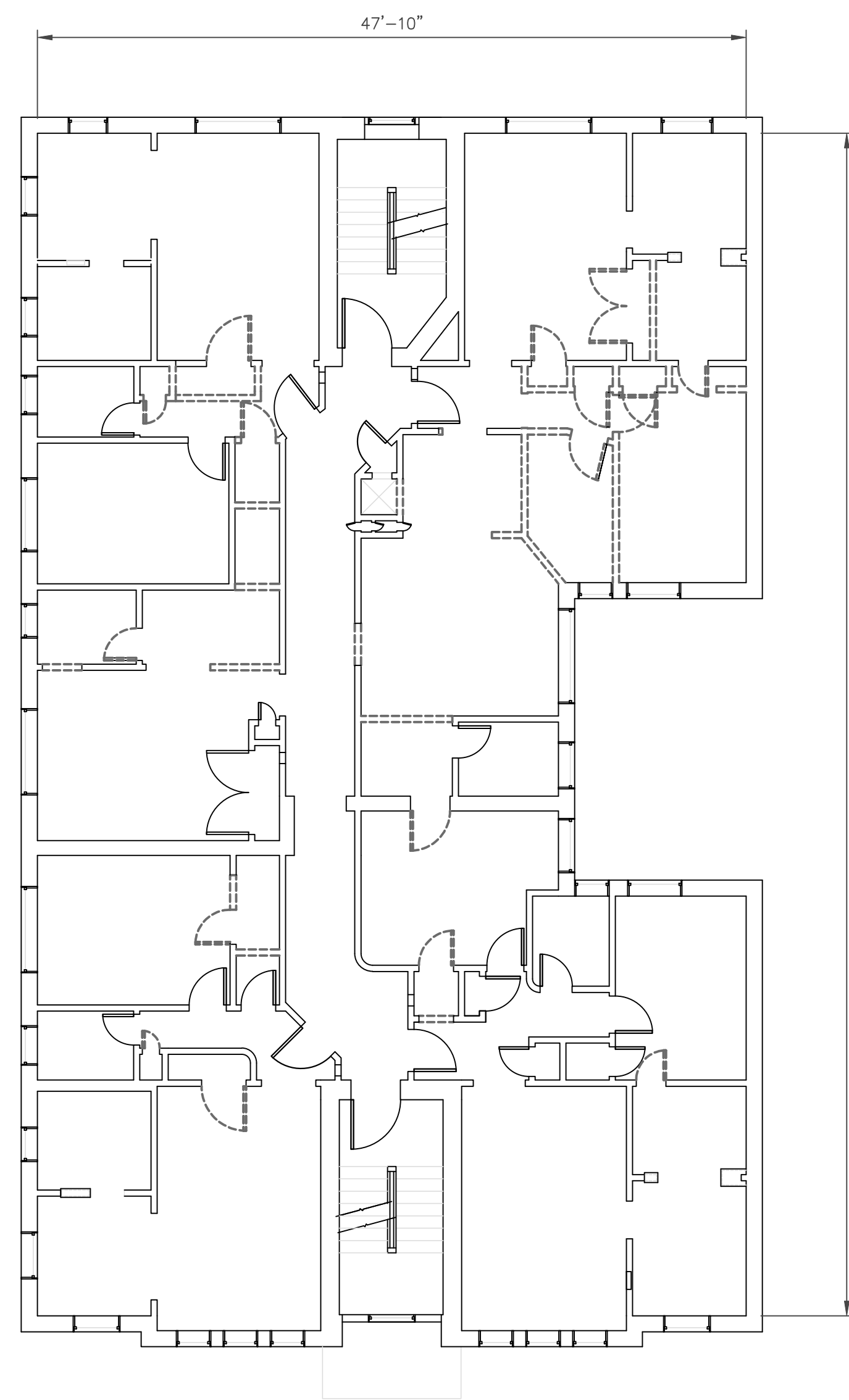


1ST FLOOR PROPOSED FLOOR PLAN
1/8" = 1'-0"

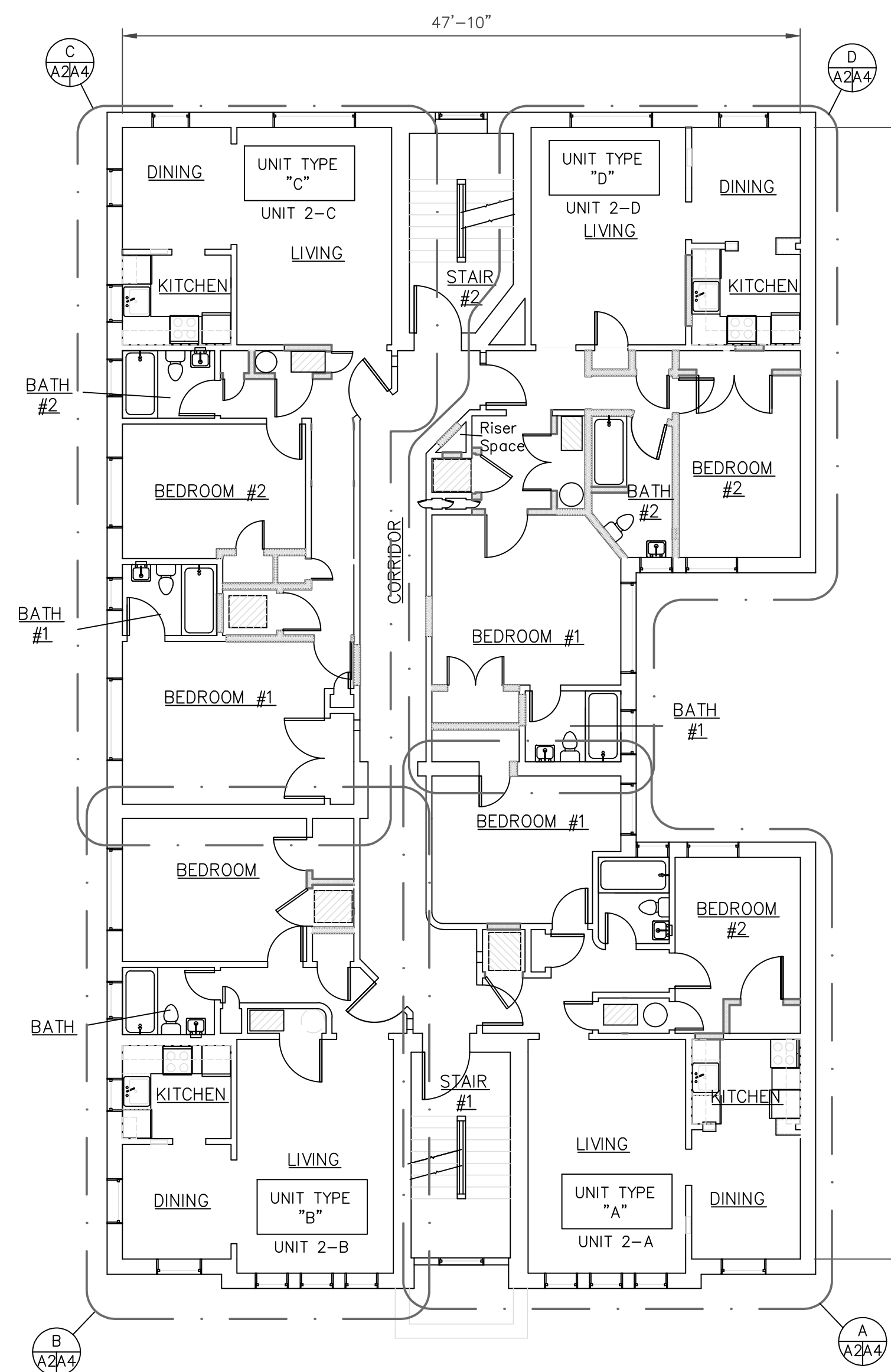
- 1ST FLOOR PROPOSED PLAN NOTES:**
1. INSTALL NEW STONE STEP UNITS MATCHING SIZE, SHAPE AND MATERIAL OF EXISTING ONES TO BE REMOVED. REFER TO SPECIFICATIONS REGARDING STONE RESTORATION WORK.
 2. INSTALL NEW BUILT-IN MAILBOXES AND TRIM IN EXISTING OPENINGS. REFER TO PRODUCTS SCHEDULE FOR NEW MAILBOX DETAILS.
 3. REPLACE INNER VESTIBULE DOOR BETWEEN VESTIBULE AND FRONT STAIRWELL.

DEMOLITION PLAN - SYMBOLS KEY	
=====	EXISTING FULL HEIGHT WOOD FRAMED PLASTER FINISHED NON-LOAD BEARING PARTITION WALL TO BE REMOVED. NOTE: SOME WALLS MAY NOT HAVE EXISTING PLASTER FINISH ON EACH SIDE. REMOVE EXISTING DOORS AND FRAMES WHERE SHOWN.

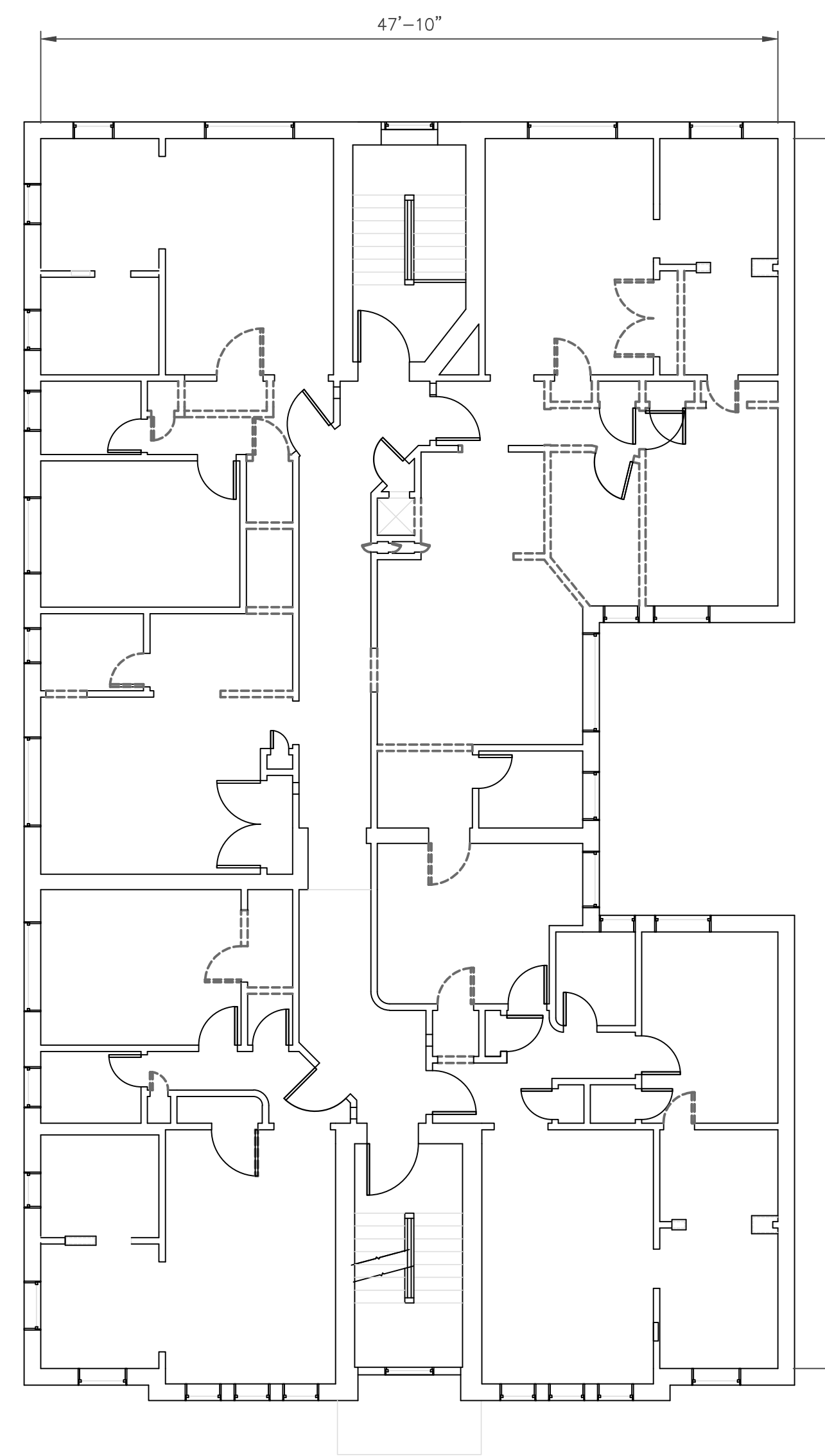
REVISIONS THIS SHEET	
1	REVISED WALL AND DOOR DEMO AT HVAC CLOSET



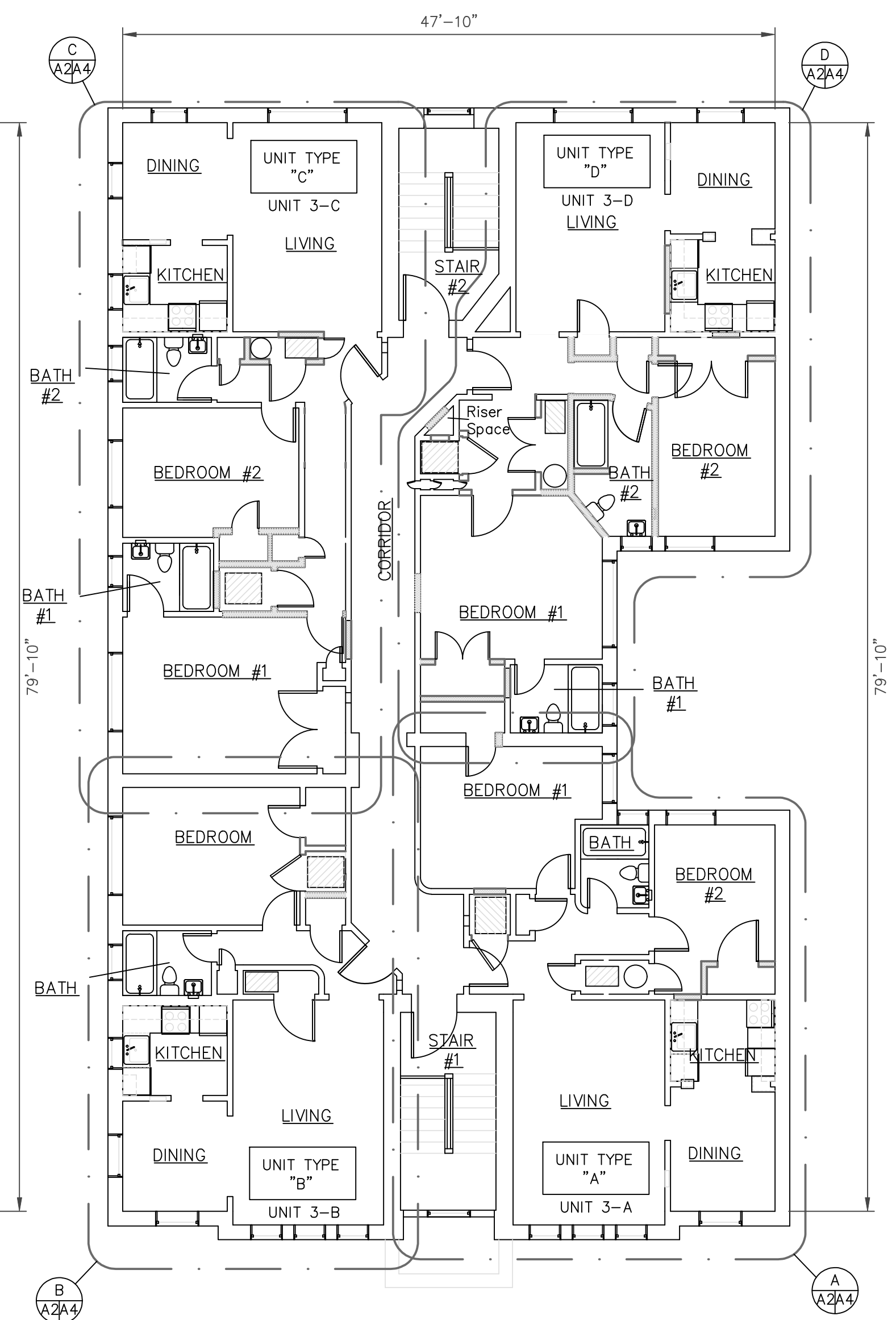
2ND FLOOR DEMOLITION FLOOR PLAN
1/8" = 1'-0"



2ND FLOOR PROPOSED FLOOR PLAN
1/8" = 1'-0"



3RD FLOOR DEMOLITION FLOOR PLAN
1/8" = 1'-0"



3RD FLOOR PROPOSED FLOOR PLAN
1/8" = 1'-0"

DEMOLITION PLAN - SYMBOLS KEY	
-----	EXISTING FULL HEIGHT WOOD FRAMED PLASTER FINISHED NON-LOAD BEARING PARTITION WALL TO BE REMOVED. NOTE: SOME WALLS MAY NOT HAVE EXISTING PLASTER FINISH ON EACH SIDE. REMOVE EXISTING DOORS AND FRAMES WHERE SHOWN.

**MARLBORO APARTMENTS
BUILDING RENOVATION**

DRAWN BY: R. EDWARDS

**2ND AND 3RD FLOOR
DEMOLITION AND PROPOSED
FLOOR PLANS**

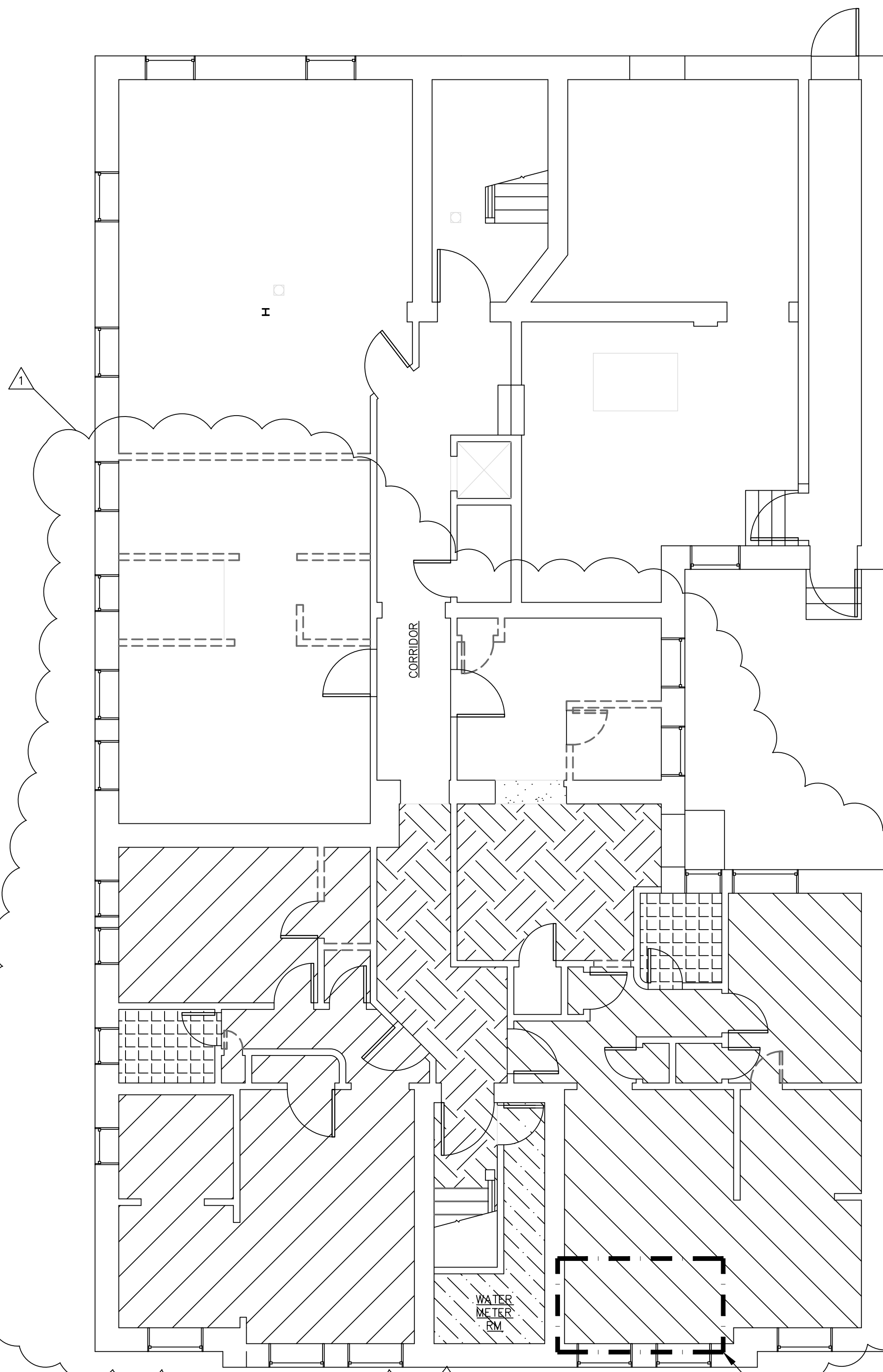
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
Detroit, MI 48202
313-965-4000 / Fax 313-965-7678

A/E/C Associates, Inc.
Mechanical | Electrical | Engineering
24175 NorthWestern Hwy
Southfield, MI 48075
313-996-8525

ISSUE DATES:
HISTORIC REVIEW
JUL-26-2017
ADDENDUM #1
MAR-28-2018
ADDENDUM #2
OCT-1-2018
ADDENDUM #3
JAN-10-2019
BULLETIN #2
FEB-26-2019

A2



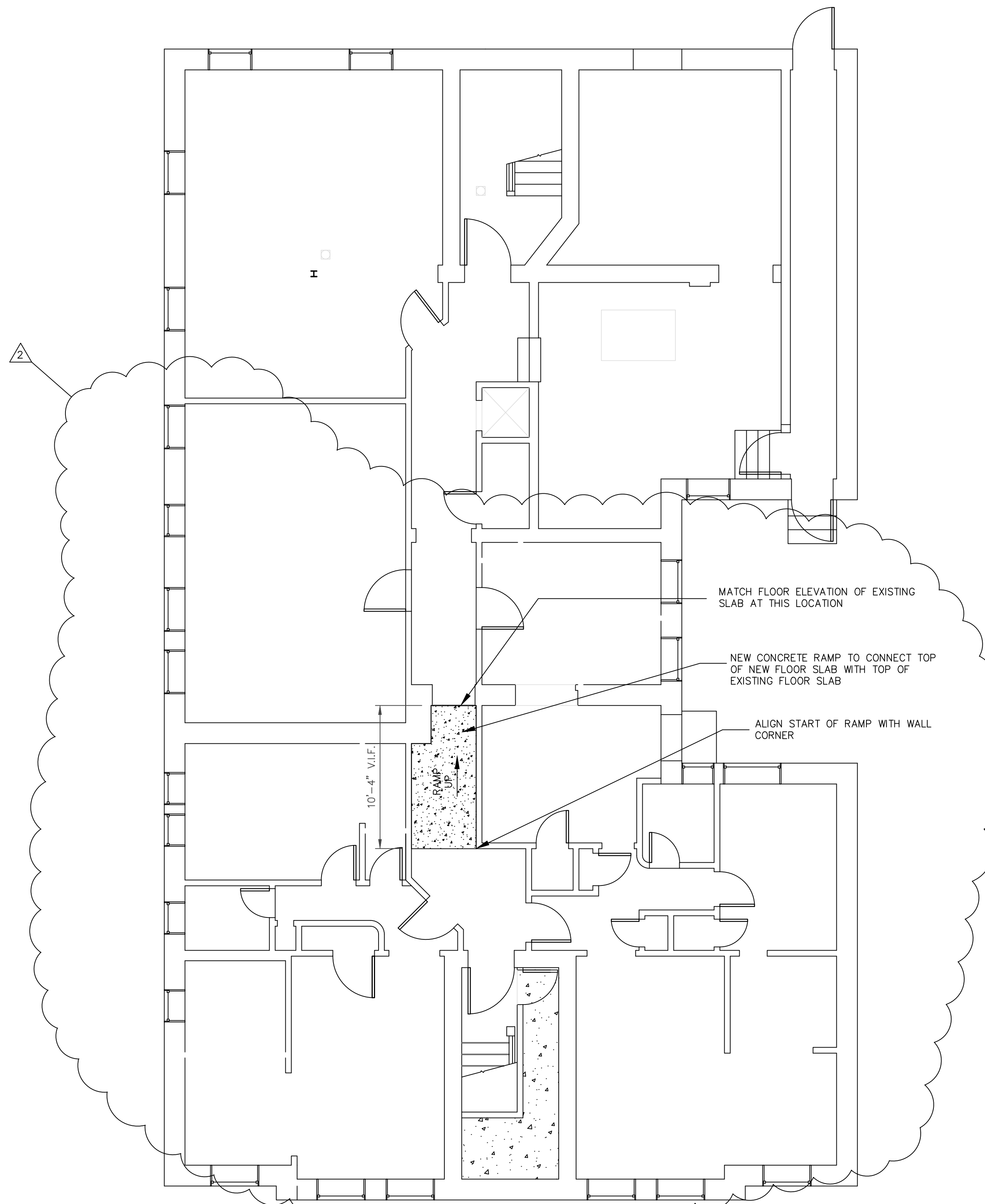
THESE SYMBOLS APPLY ONLY TO AREAS OF EXISTING FLOOR CONSTRUCTION TO BE REMOVED AS SHOWN ON THE BASEMENT FLOOR DEMOLITION PLAN. EXISTING FLOOR CONSTRUCTION TO REMAIN EXCEPT WHERE OTHERWISE NOTED.

DEMOLITION PLAN - SYMBOLS KEY	
	WOOD PLANK FLOORING OVER WOOD SLEEPERS OVER CONCRETE BASE. DEMOLISH WOOD CONSTRUCTION DOWN TO EXISTING CONCRETE. AREA = APPROXIMATELY 348 SQ. FT.
	DEMOLISH CERAMIC TILE ON 4in CONCRETE BASE OVER ADDITIONAL 7in CONCRETE SLAB BELOW. COMBINED AREAS = APPROXIMATELY 114 SQ. FT.
	FINISH GRADE HARDWOOD OVER WOOD PLANKS OVER WOOD SLEEPERS OVER CONCRETE BASE. DEMOLISH WOOD CONSTRUCTION DOWN TO EXISTING CONCRETE. AREA = APPROX. 467 SQ. FT.
	DEMOLISH RAISED FLOOR: FINISH GRADE HARDWOOD OVER FRAMING. AREA = APPROXIMATELY 493 SQ. FT.
	AREA OF EXISTING CONCRETE FLOOR SLAB TO BE REMOVED

DEMOLITION PLAN GENERAL NOTE
 1. REFER TO CIVIL AND UNDERGROUND UTILITY LOCATION COORDINATION PLAN A1.1 FOR ADDITIONAL INFORMATION.

BASEMENT FLOOR DEMOLITION PLAN
 3/16" = 1'-0"

REVISIONS THIS SHEET	
1	CHANGED DESIGNATION OF AREAS OF CONCRETE FLOOR SLAB REMOVAL.
2	CHANGED DESIGNATION OF AREAS TO RECEIVE NEW CONCRETE FLOOR SLAB.

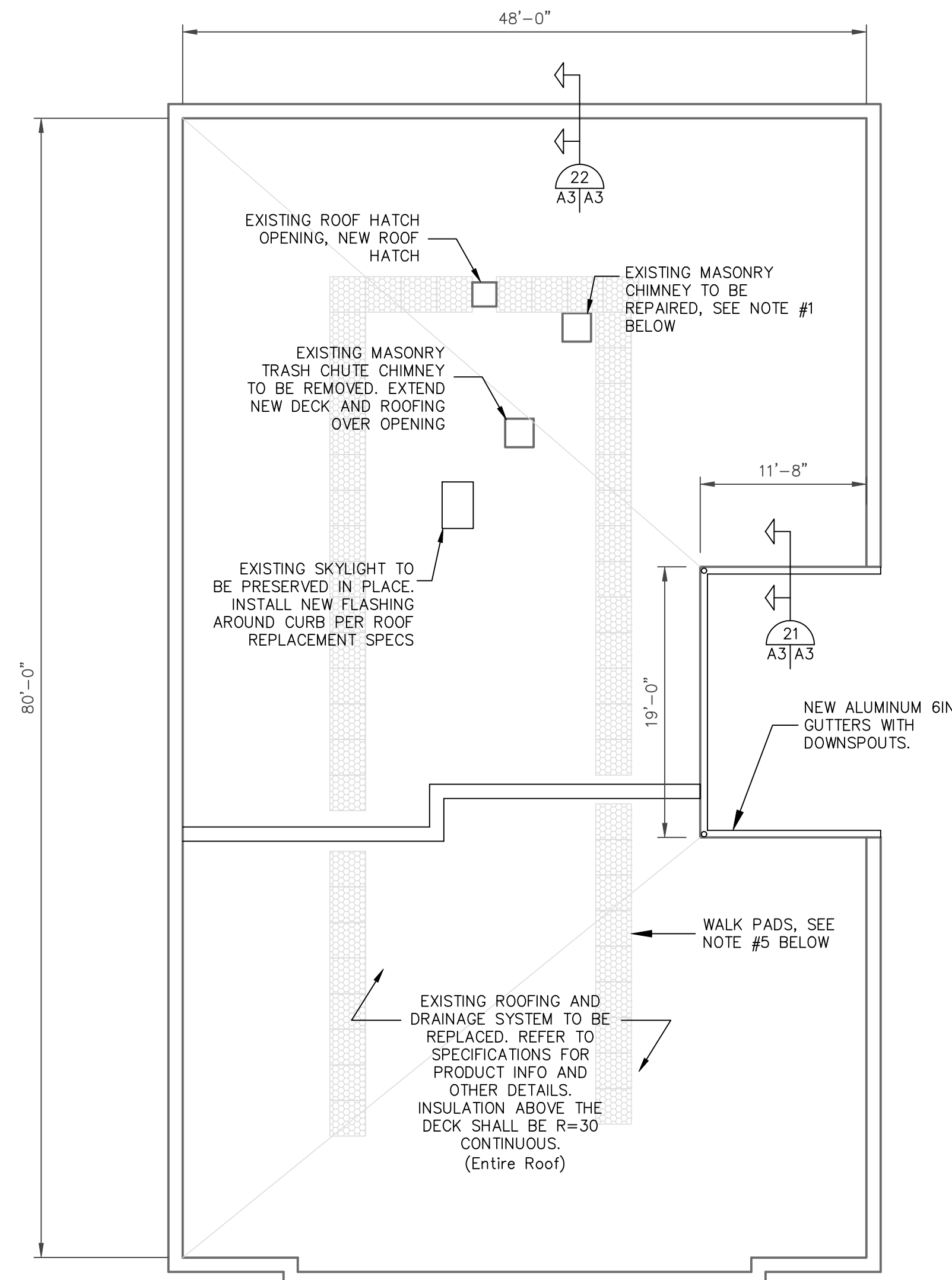


THESE SYMBOLS APPLY ONLY TO AREAS TO RECEIVE NEW CONCRETE FLOOR SLABS AS SHOWN ON THE BASEMENT FLOOR NEW SLAB PLAN

NEW SLAB PLAN - SYMBOLS KEY	
	AREAS TO RECEIVE NEW CONCRETE FLOOR SLAB
	NEW CONCRETE RAMP

BASEMENT FLOOR, NEW SLAB PLAN
 3/16" = 1'-0"

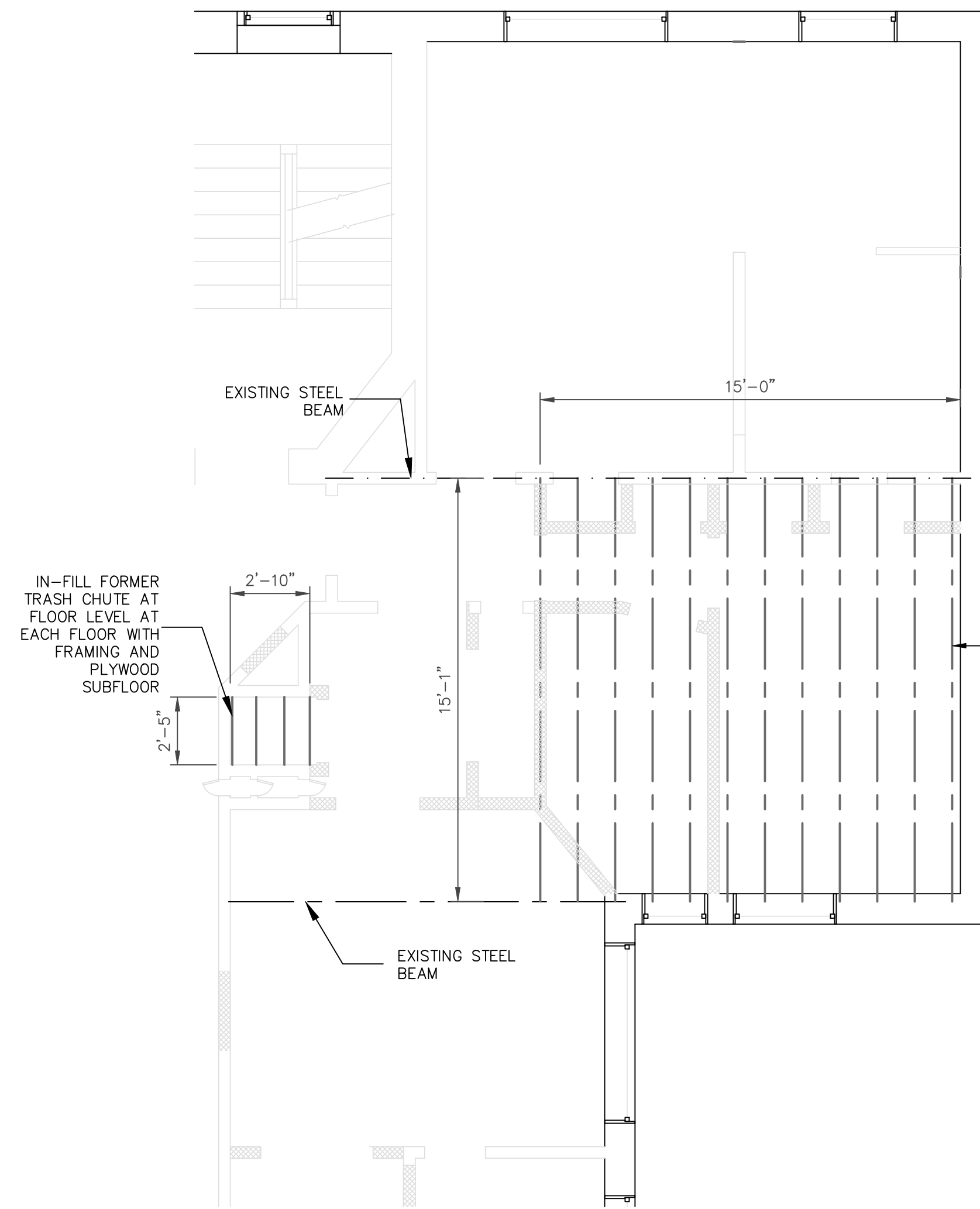
FLOOR SLAB PLANS GENERAL NOTES:
 1. VERIFY QUANTITIES IN FIELD.
 2. CONCEALED CONDITIONS ARE ESTIMATED.



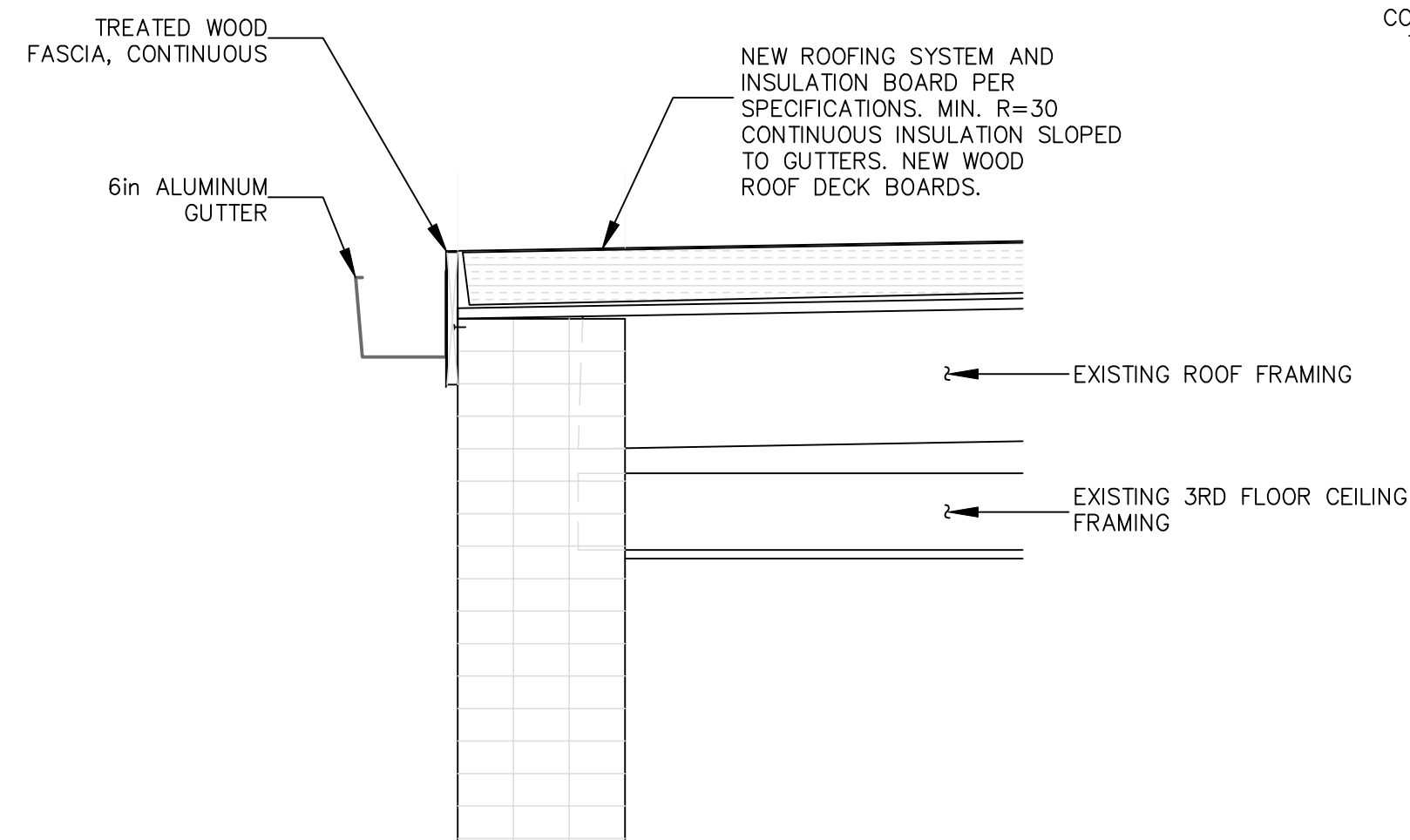
ROOF PLAN
1/8" = 1'-0"

ROOF PLAN AND SECTIONS GENERAL NOTES:

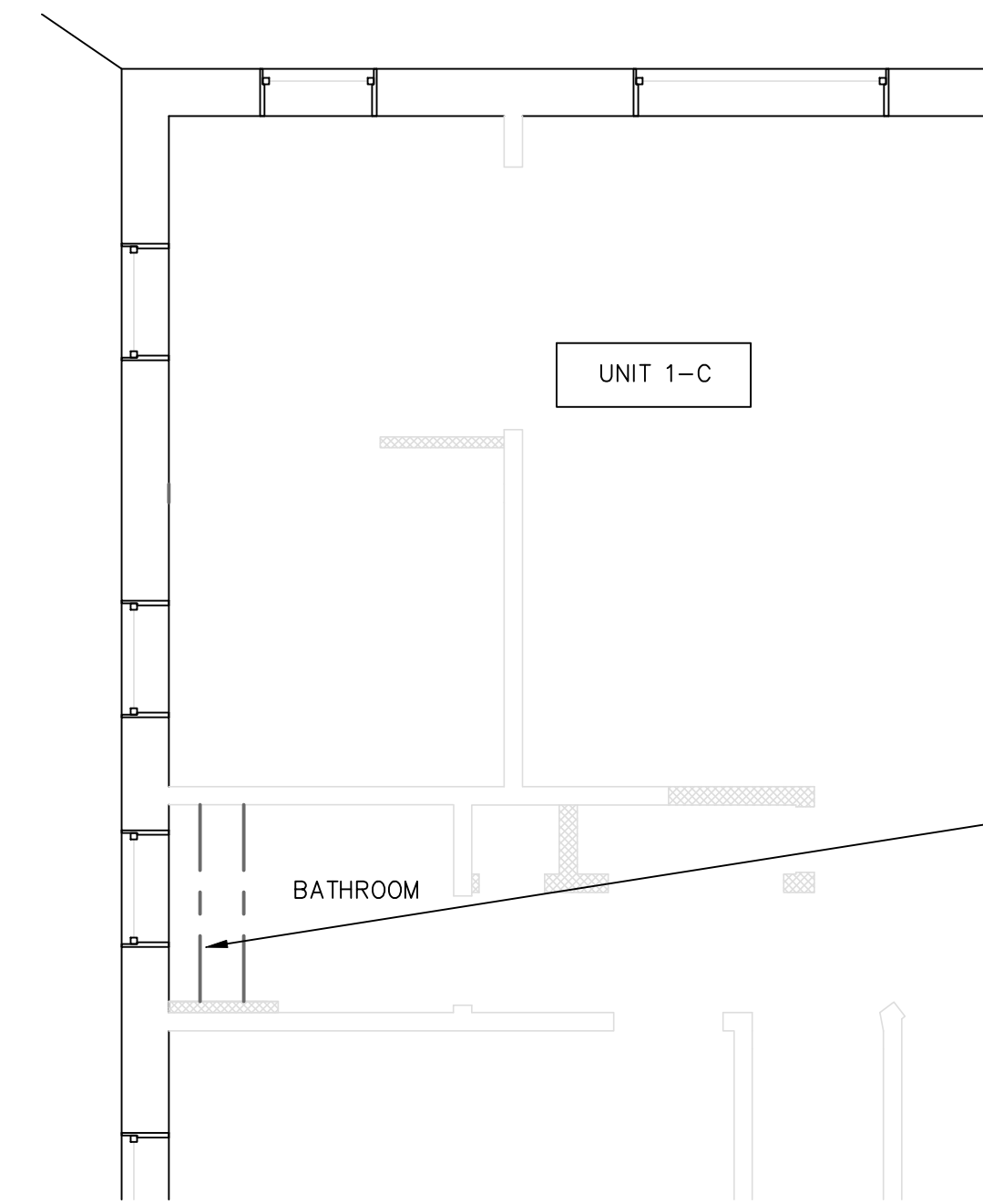
- RESTORE MASONRY CHIMNEYS IN ACCORDANCE WITH THE MASONRY RESTORATION AND CLEANING SPECIFICATIONS.
- REFER TO MECHANICAL DRAWINGS FOR ROOFTOP MECHANICAL EQUIPMENT AND VENT LOCATIONS. ALIGN NEW WALK PAD ROUTES TO ACCESS NEW HVAC EQUIPMENT.
- REFER TO SPECIFICATIONS FOR ADDITIONAL ROOFING SYSTEM REQUIREMENTS.
- CONCEALED EXISTING CONDITIONS BELOW ROOF DECK ARE ESTIMATED, TO BE VERIFIED IN FIELD.
- WALK PADS SHALL BE DURO-LAST ROOF-TRAK III, INSTALLED PER MANUFACTURER'S INSTRUCTIONS.



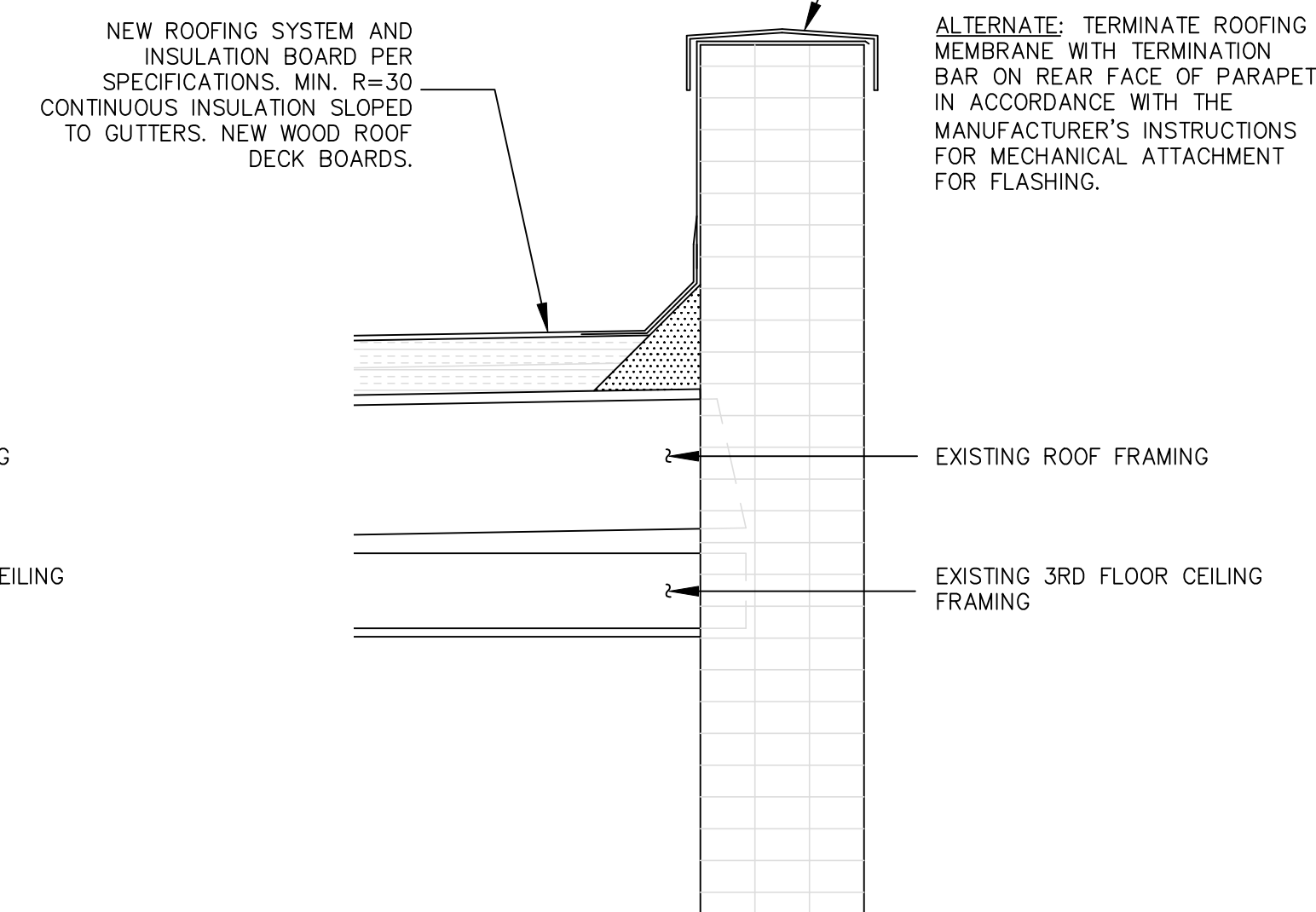
FLOOR FRAMING REPAIR PLAN – TYPICAL AT 1ST, 2ND AND 3RD FLOORS
1/4" = 1'-0"



SECTION THROUGH ROOF AT GUTTER
1" = 1'-0"



FLOOR FRAMING REPAIR UNDER TUBS IN BATHROOMS (TYP)
1/4" = 1'-0"

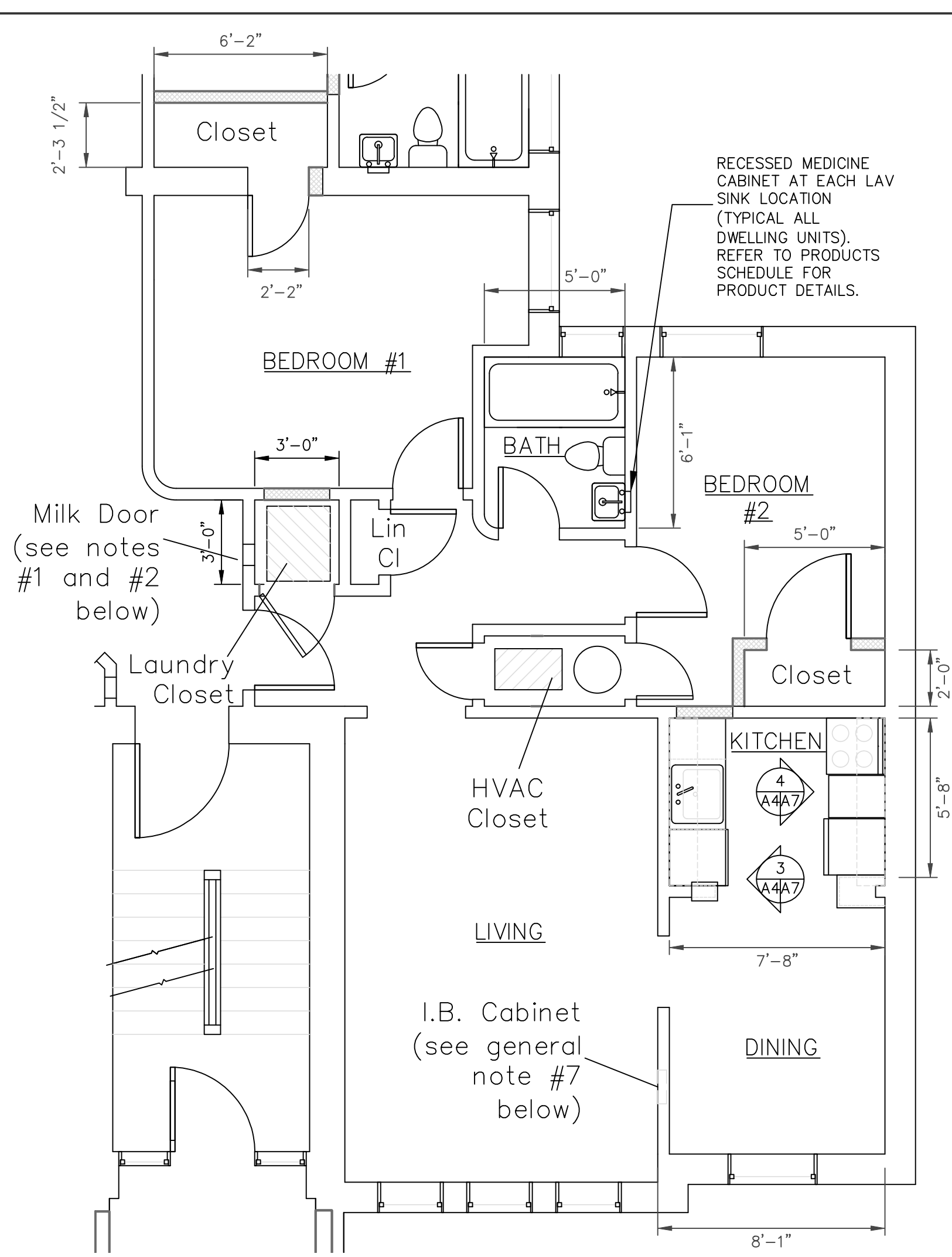


SECTION THROUGH ROOF AT PARAPET, SIMILAR AT FIRE WALL
1" = 1'-0"

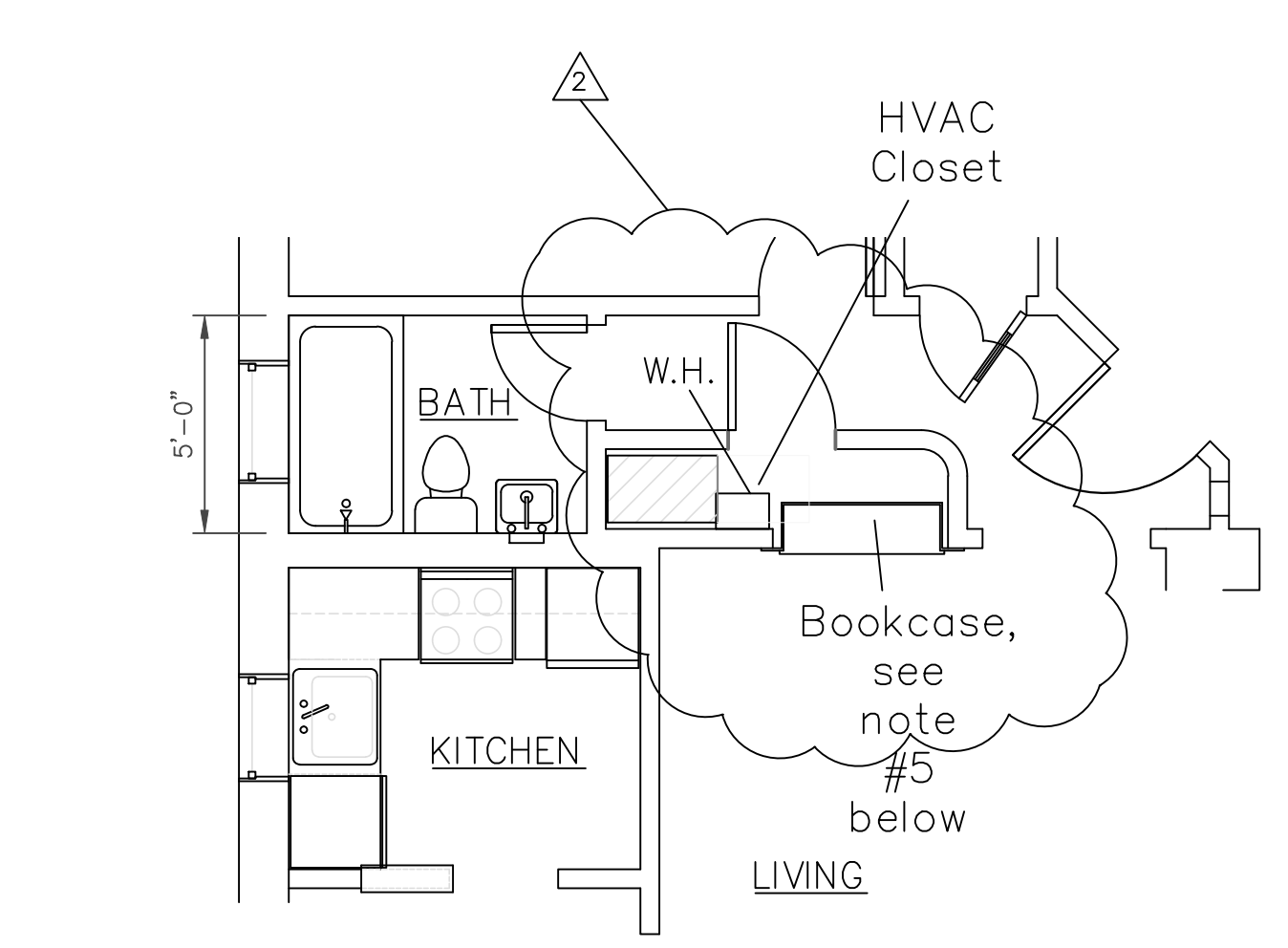
TYPICAL REPAIR AT BATHROOMS UNDER TUB IN ALL EXISTING BATHROOMS TO REMAIN: FOLLOWING REMOVAL OF PIPING, REPLACE ANY FLOOR JOISTS THAT ARE NOT INTACT BETWEEN BEARING POINTS, OR THAT ARE DETERIORATED OR DAMAGED. REPLACE WITH NEW WOOD JOISTS, MATCHING EXISTING SIZE AND BEARING FULLY ON STRUCTURE AT EACH END. MATCH EXISTING SPACING OR MAXIMUM 12" O.C., WHICHEVER SPACING IS LESS.

ISSUE DATES:

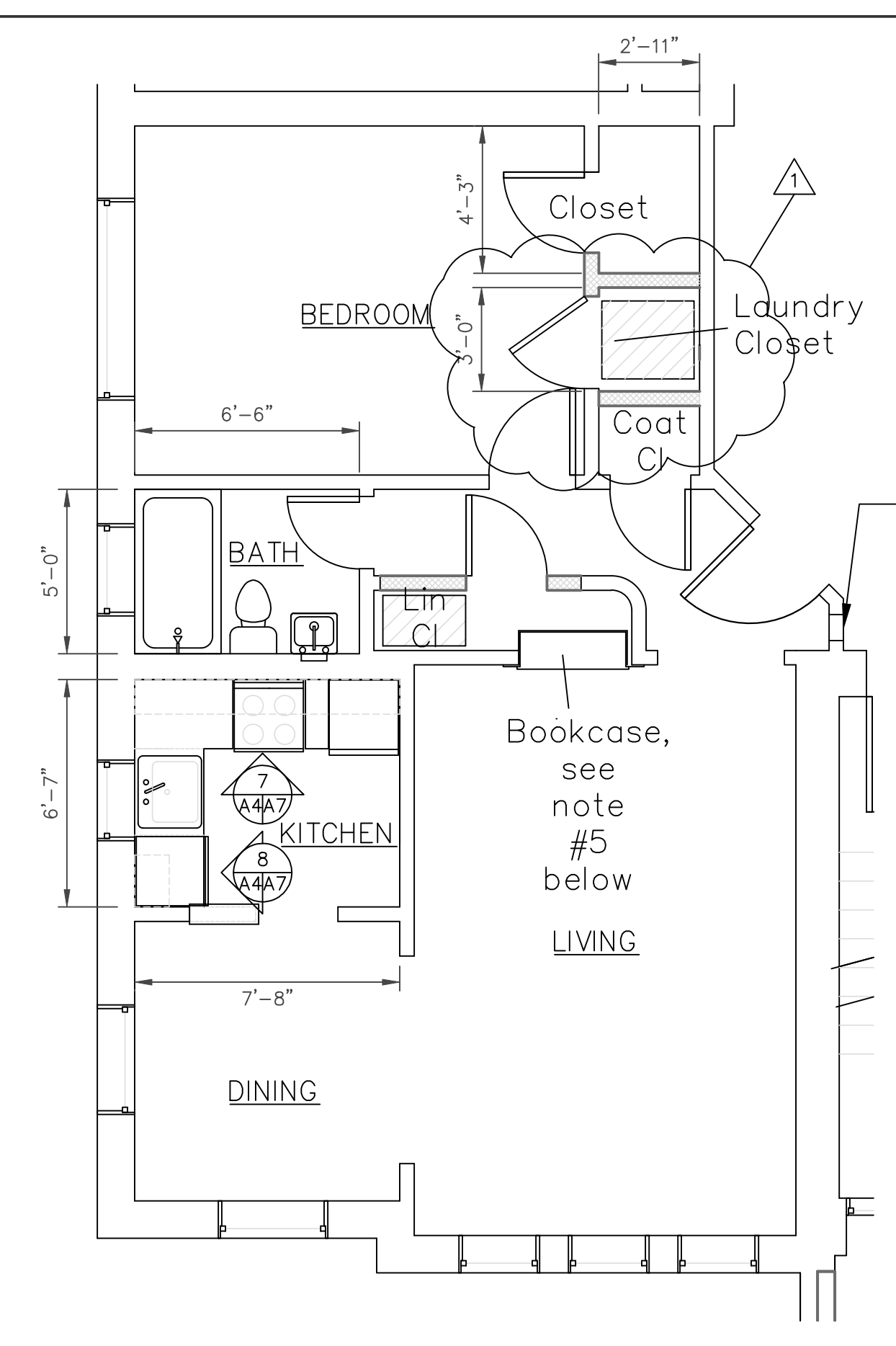
- ADDENDUM #1
MAR-28-2018
- ADDENDUM #2
OCT-1-2018
- ADDENDUM #3
JAN-10-2019
- BULLETIN #1
JAN-30-2019
- BULLETIN #2
FEB-26-2019



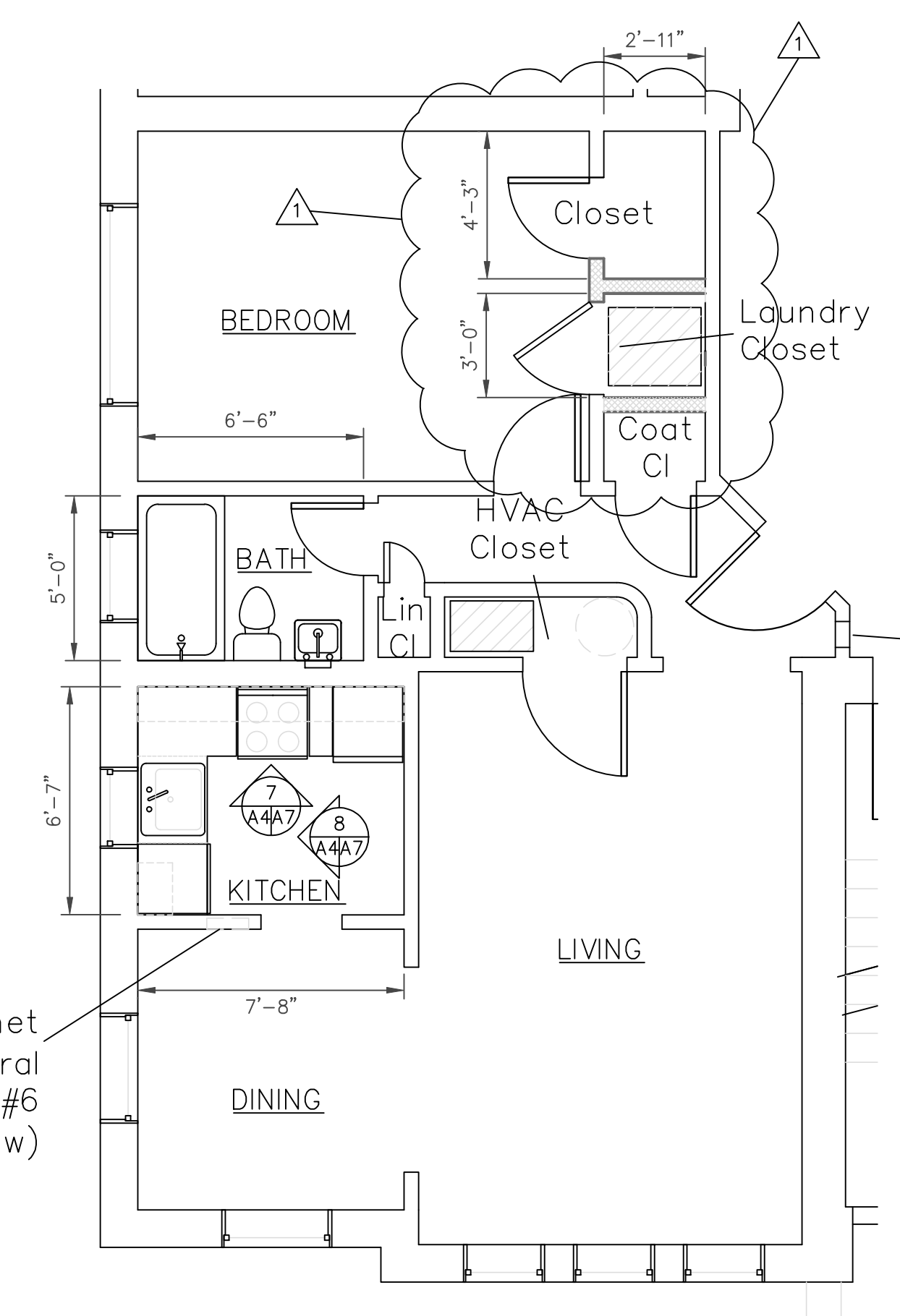
ENLARGED PROPOSED FLOOR PLAN - UNIT TYPE A (1st, 2nd 3rd floors)
 A1/A2/A4 1/4" = 1'-0"



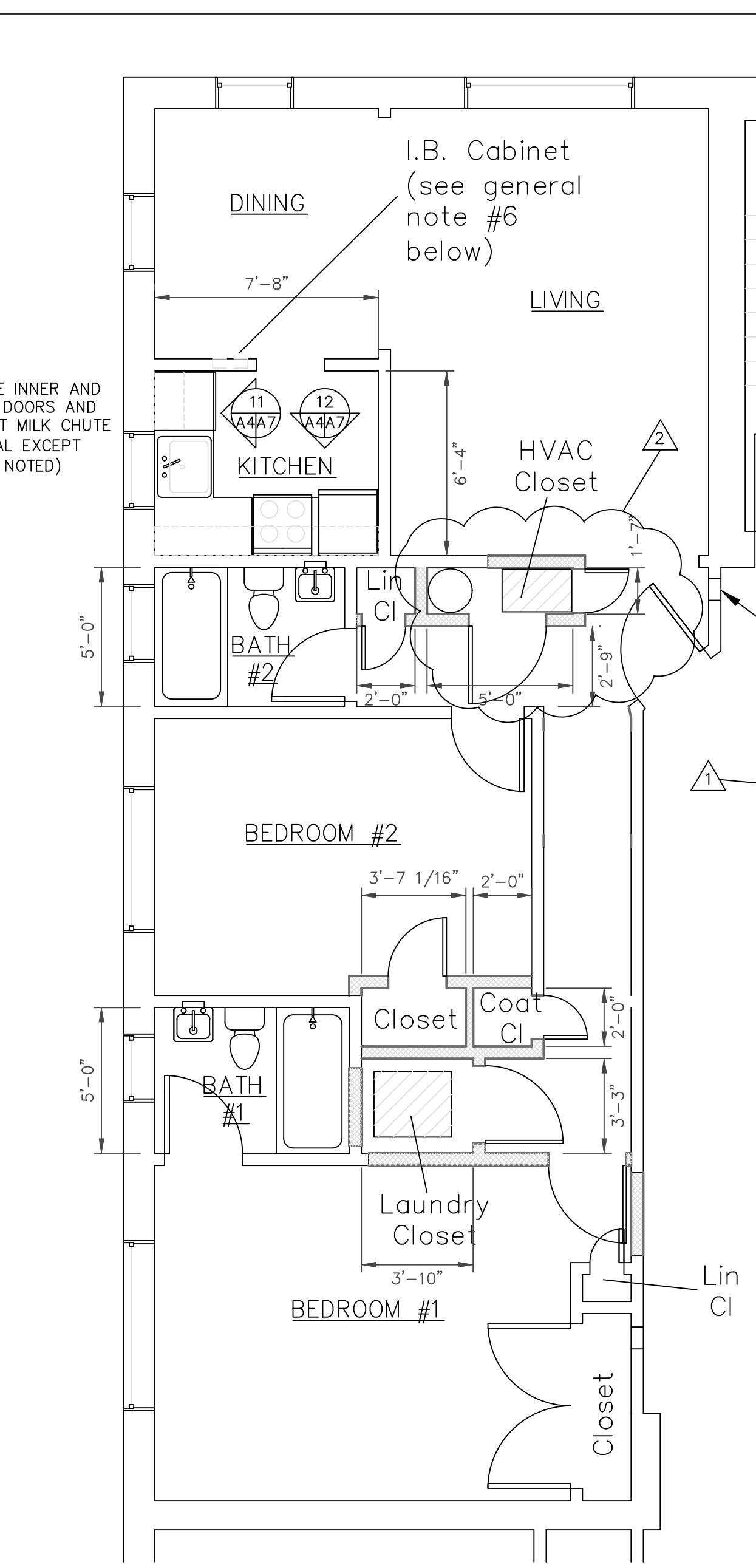
ENLARGED PROPOSED FLOOR PLAN AT HVAC CLOSET, UNIT TYPE B - 1ST FL ONLY
 A1/A2/A4 1/4" = 1'-0"



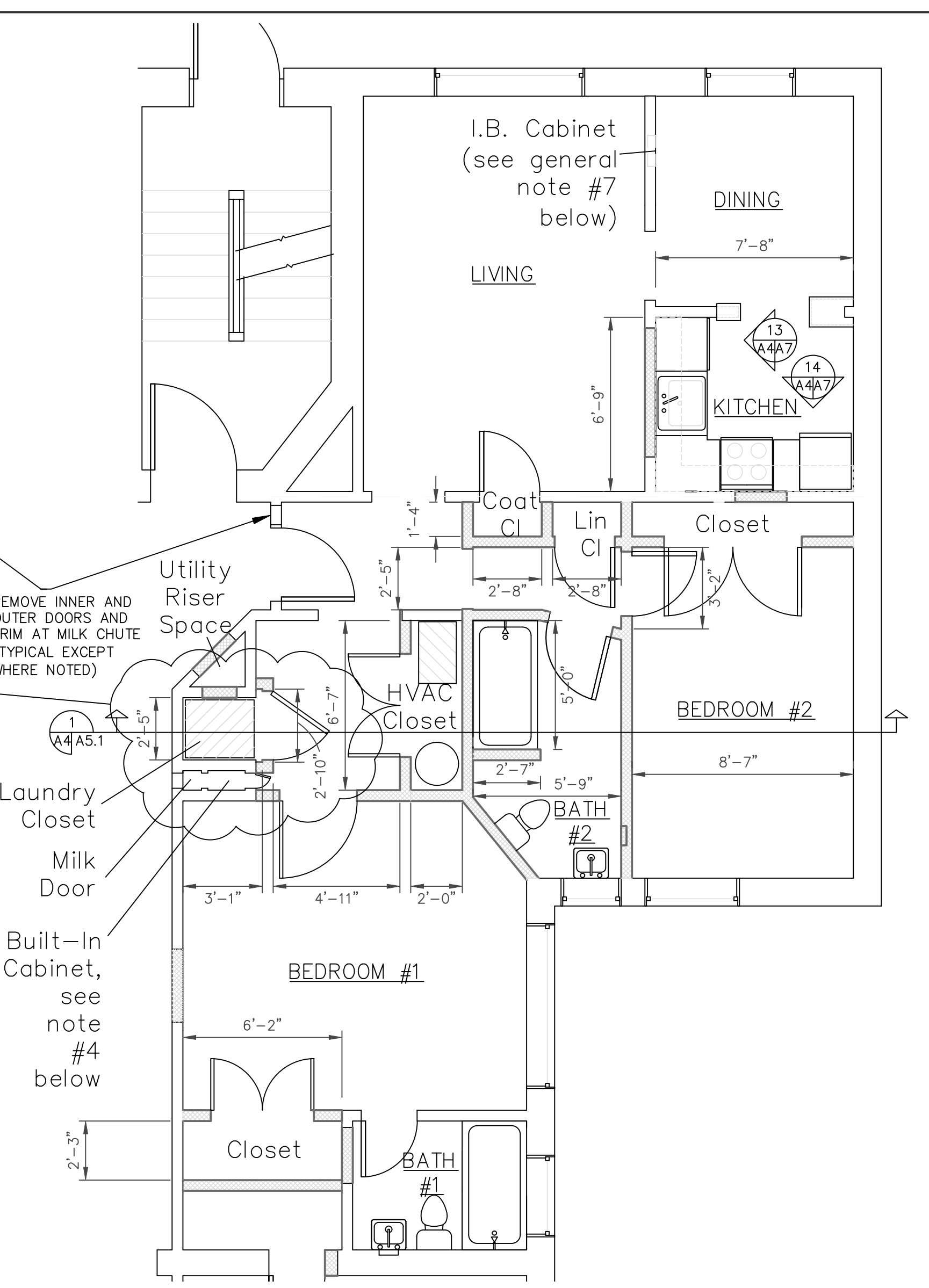
ENLARGED PROPOSED FLOOR PLAN - UNIT TYPE B (1st floor only)
 B1/A2/A4 1/4" = 1'-0"



ENLARGED PROPOSED FLOOR PLAN - UNIT TYPE B (2nd and 3rd floors)
 B1/A2/A4 1/4" = 1'-0"



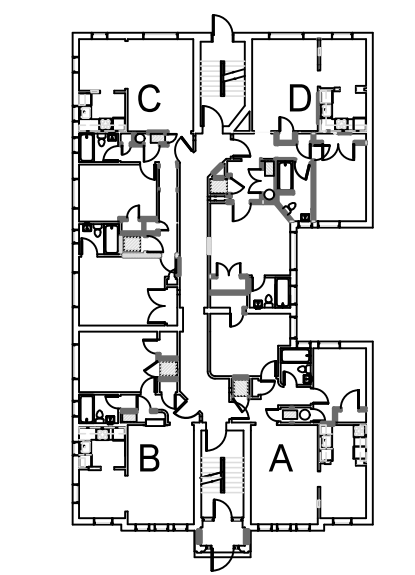
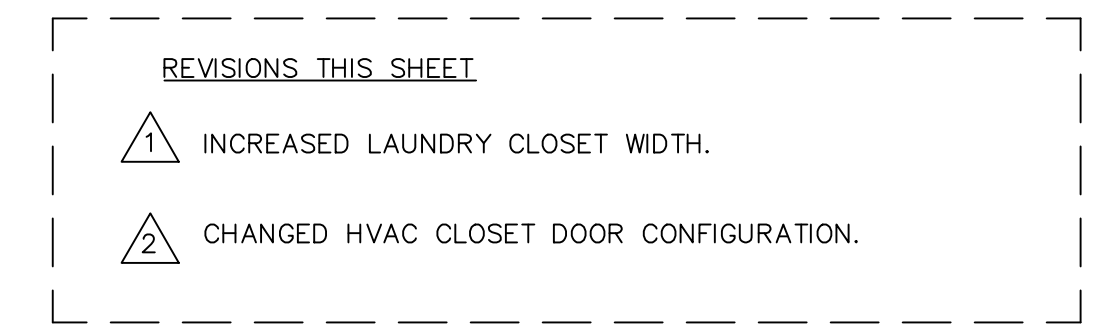
ENLARGED PROPOSED FLOOR PLAN - UNIT TYPE C (1st, 2nd 3rd floors)
 C1/A2/A4 1/4" = 1'-0"



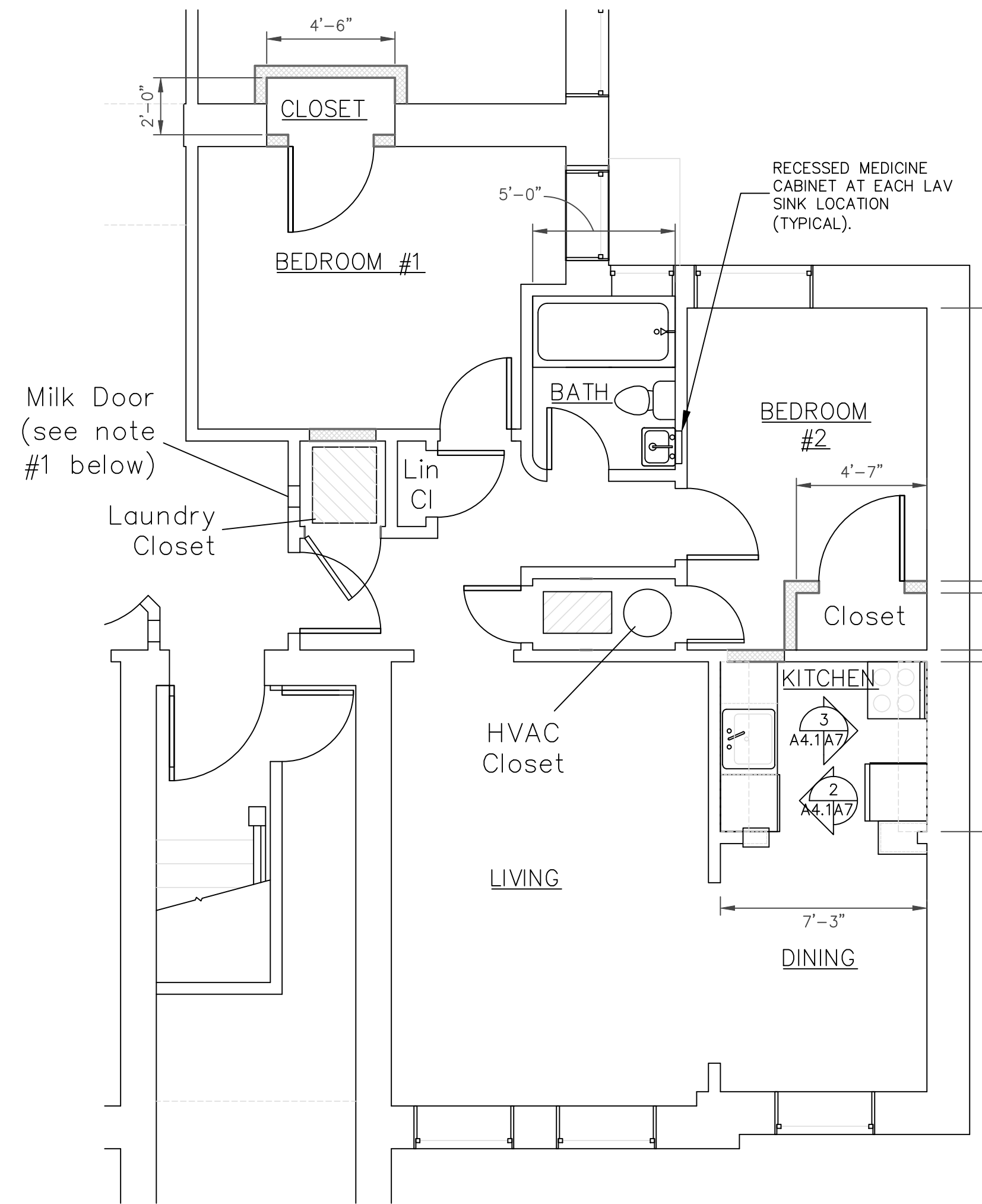
ENLARGED PROPOSED FLOOR PLAN - UNIT TYPE D (1st, 2nd 3rd floors)
 D1/A2/A4 1/4" = 1'-0"

GENERAL NOTES FOR ENLARGED PROPOSED PLANS:

1. REMOVE DOOR, FRAME AND TRIM ON APARTMENT UNIT INTERIOR SIDE AT EXISTING MILK DOORS/CHUTES. PRESERVE AND RESTORE/REFINISH EXISTING MILK DOOR/CHUTE DOORS AND FRAMES ON CORRIDOR SIDE. IN-FILL OPENINGS FLUSH WITH WALL ON APARTMENT UNIT SIDE WITH 5/8" GYPSUM BOARD ON 3 1/2" METAL STUD FRAMING (BOTH SIDES OF FRAMING) CONFORMING TO UL DESIGN #U-419 FOR 1-HOUR RATED CONSTRUCTION. SEE NOTE #4 BELOW FOR SPECIAL CONDITION AT UNIT TYPE "D".
2. EXISTING NICHE (INSTEAD OF MILK DOOR/CHUTE) AT 1ST FLOOR ONLY. REFINISH AND PRESERVE EXISTING PROFILE AND FEATURES INCLUDING SHELF AND TRIM.
3. UNIT 1-D IS DESIGNATED AS TYPE "B" ACCESSIBLE.
4. PRESERVE AND RESTORE BUILT-IN CABINET AT FORMER MILK CHUTE AT UNIT TYPE "D", INCLUDING DOOR, TRIM AND HARDWARE.
5. PRESERVE AND REFINISH BUILT-IN BOOKCASE. FINISH PER FINISH SCHEDULE.
6. PRESERVE IRONING BOARD CABINET SHELL AND DOOR, REMOVING INTERIOR WORKING PARTS. REPLICATE FRAMING AND TRIM AROUND CABINET WHERE REMOVED. REFINISH DOOR. INSTALL NEW DOOR HARDWARE.
7. REMOVE IRONING BOARD CABINET DOOR AND TRIM.
8. WALL-MOUNTED WATER HEATER REQUIRED FOR ALTERNATE FLOOR PLAN AT HVAC CLOSET, UNIT TYPE "B", 1ST FLOOR ONLY.



KEY PLAN
 1/32" = 1'-0"

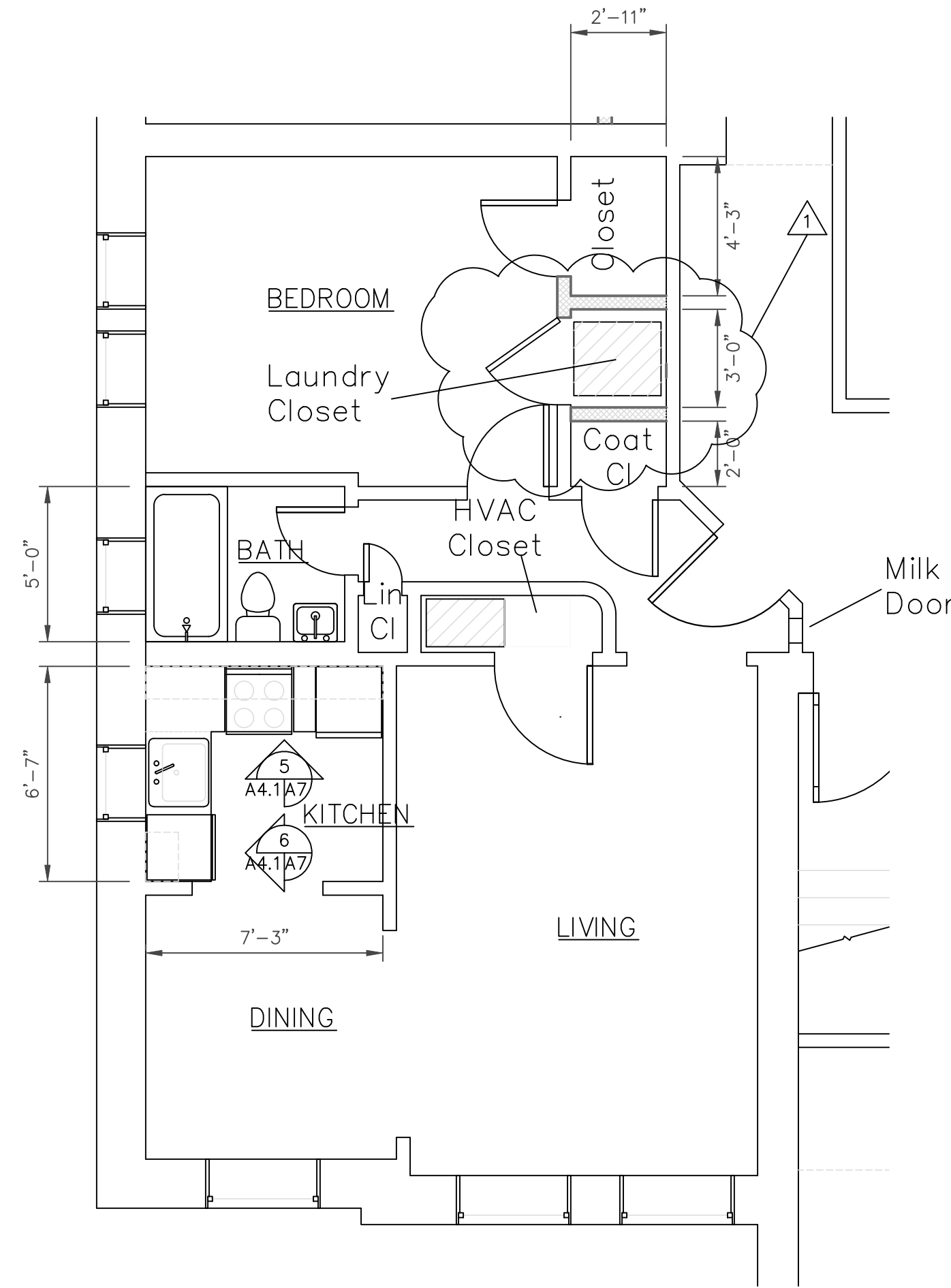


ENLARGED PROPOSED FLOOR PLAN -
UNIT TYPE A - BASEMENT

A1/A2/A4 1/4" = 1'-0"

GENERAL NOTE FOR ENLARGED PROPOSED PLAN:
1. REMOVE DOOR, FRAME AND TRIM AT EXISTING MILK DOOR/CHUTE.

REVISIONS THIS SHEET	
①	INCREASED WIDTH OF LAUNDRY CLOSET.
②	CHANGED HVAC CLOSET DOOR CONFIGURATION.

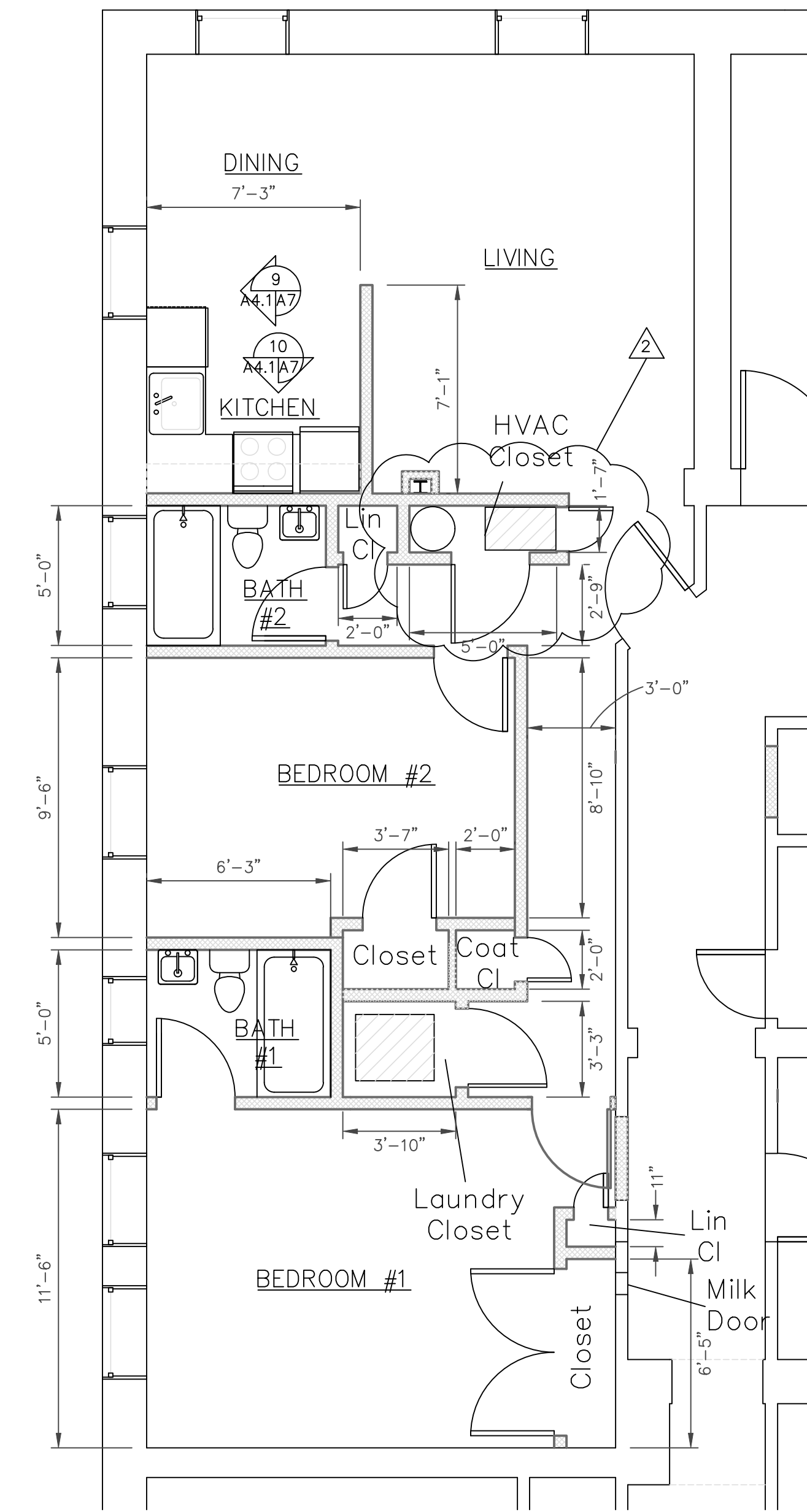


ENLARGED PROPOSED FLOOR PLAN -
UNIT TYPE B - BASEMENT

A1/A2/A4 1/4" = 1'-0"

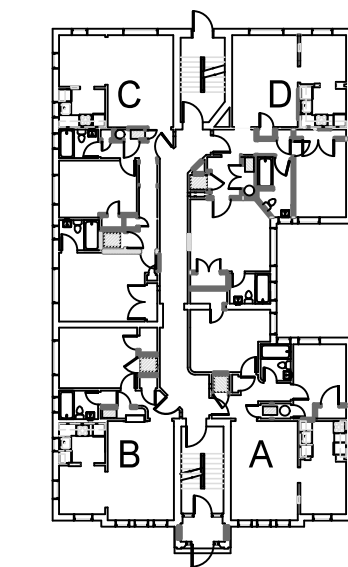
GENERAL NOTES FOR ENLARGED PROPOSED PLANS:

- REMOVE DOOR, FRAME AND TRIM ON APARTMENT UNIT INTERIOR SIDE AT EXISTING MILK DOORS/CHUTES. PRESERVE AND RESTORE/REFINISH EXISTING MILK DOOR/CHUTE DOORS AND FRAMES ON CORRIDOR SIDE. IN-FILL OPENINGS FLUSH WITH WALL ON APARTMENT UNIT SIDE WITH 5/8" GYPSUM BOARD ON 3 1/2" METAL STUD FRAMING (BOTH SIDES OF FRAMING) CONFORMING TO UL DESIGN #U-419 FOR 1-HOUR RATED CONSTRUCTION.
- EXISTING NICHE (INSTEAD OF MILK DOOR/CHUTE) AT 1ST FLOOR ONLY. REFINISH AND PRESERVE EXISTING PROFILE AND FEATURES INCLUDING SHELF AND TRIM.
- UNIT 1-D IS DESIGNATED AS TYPE "B" ACCESSIBLE.
- NOTE NUMBER NOT USED.
- PRESERVE AND REFINISH BUILT-IN BOOKCASE. FINISH PER FINISH SCHEDULE.
- PRESERVE IRONING BOARD CABINET SHELL AND DOOR. REMOVING INTERIOR WORKING PARTS. REPLICATE FRAMING AND TRIM AROUND CABINET WHERE REMOVED. REFINISH DOOR. INSTALL NEW DOOR HARDWARE.
- REMOVE IRONING BOARD CABINET DOOR AND TRIM.
- WALL-MOUNTED WATER HEATER REQUIRED FOR ALTERNATE FLOOR PLAN AT HVAC CLOSET, UNIT TYPE 'B', 1ST FLOOR ONLY.



ENLARGED PROPOSED FLOOR PLAN -
UNIT TYPE C - BASEMENT

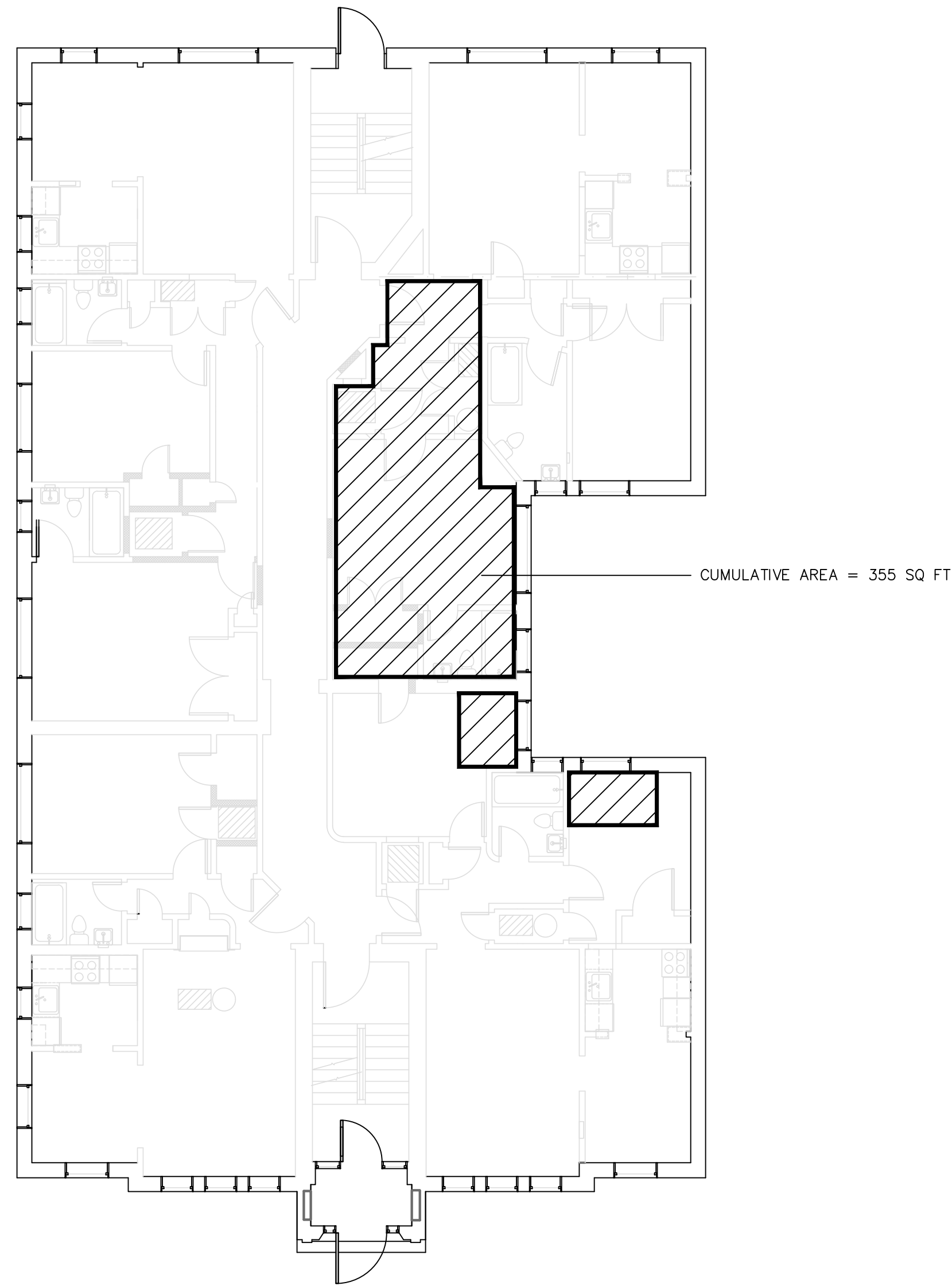
A1/A2/A4 1/4" = 1'-0"



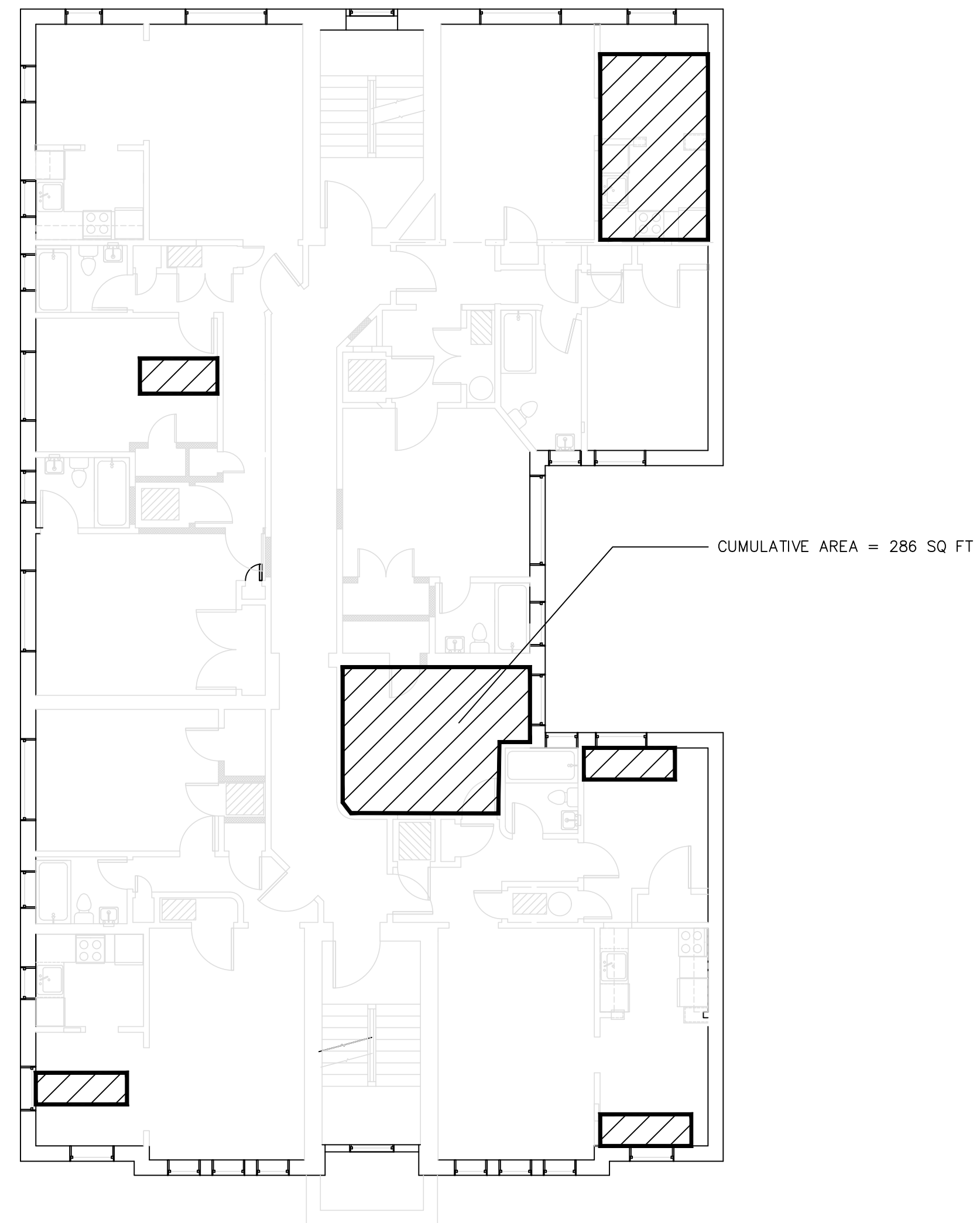
KEY PLAN
1/32" = 1'-0"

ISSUE DATES:

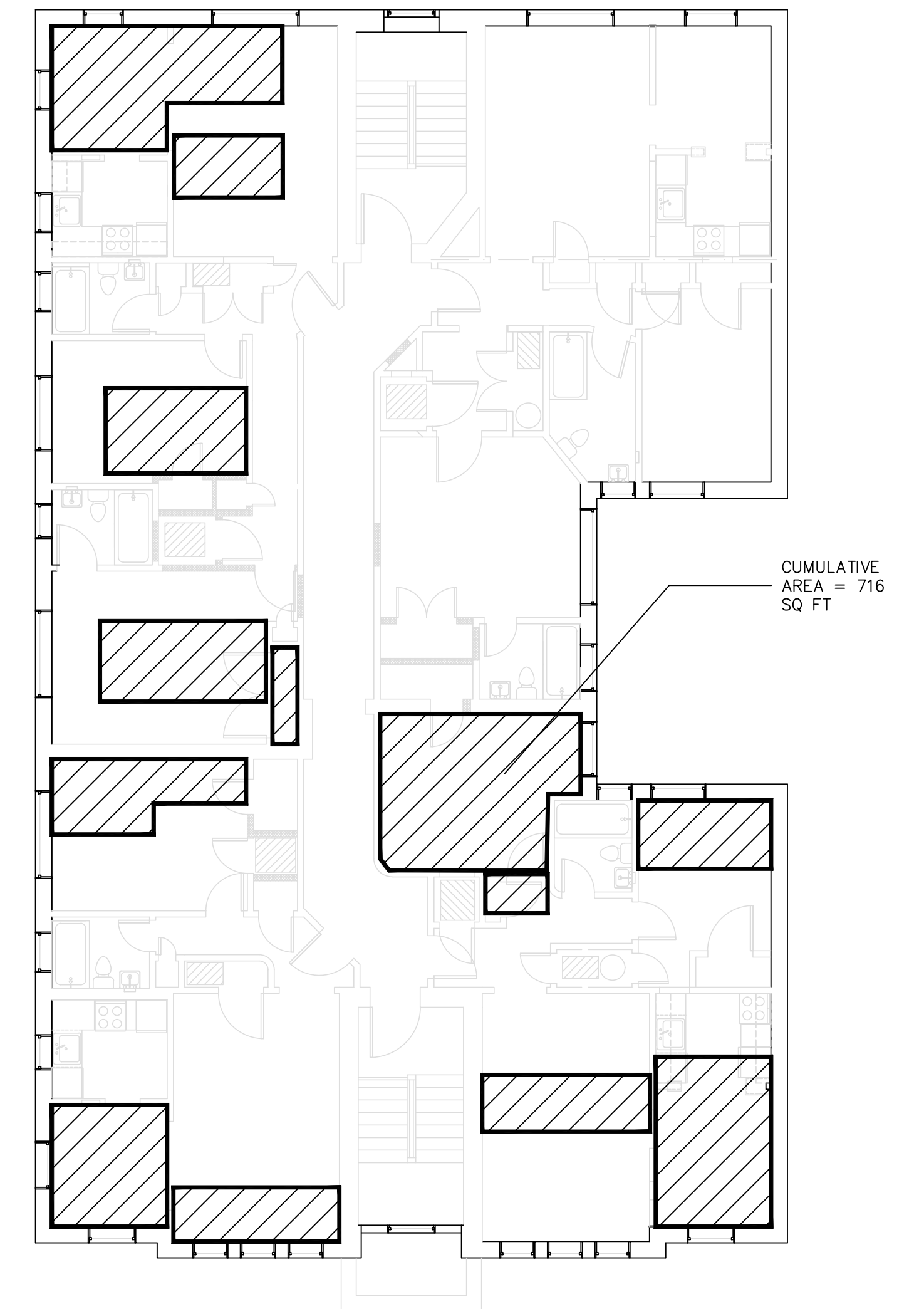
- ADDENDUM #1
MAR-28-2018
- ADDENDUM #2
OCT-1-2018
- ADDENDUM #3
JAN-10-2019
- BULLETIN #2
FEB-26-2019
- BULLETIN #3
MAR-25-2019



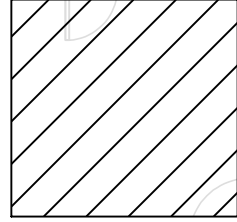
1st FLOOR, HARDWOOD FLOORING PATCH LOCATIONS
 1/4" = 1'-0"

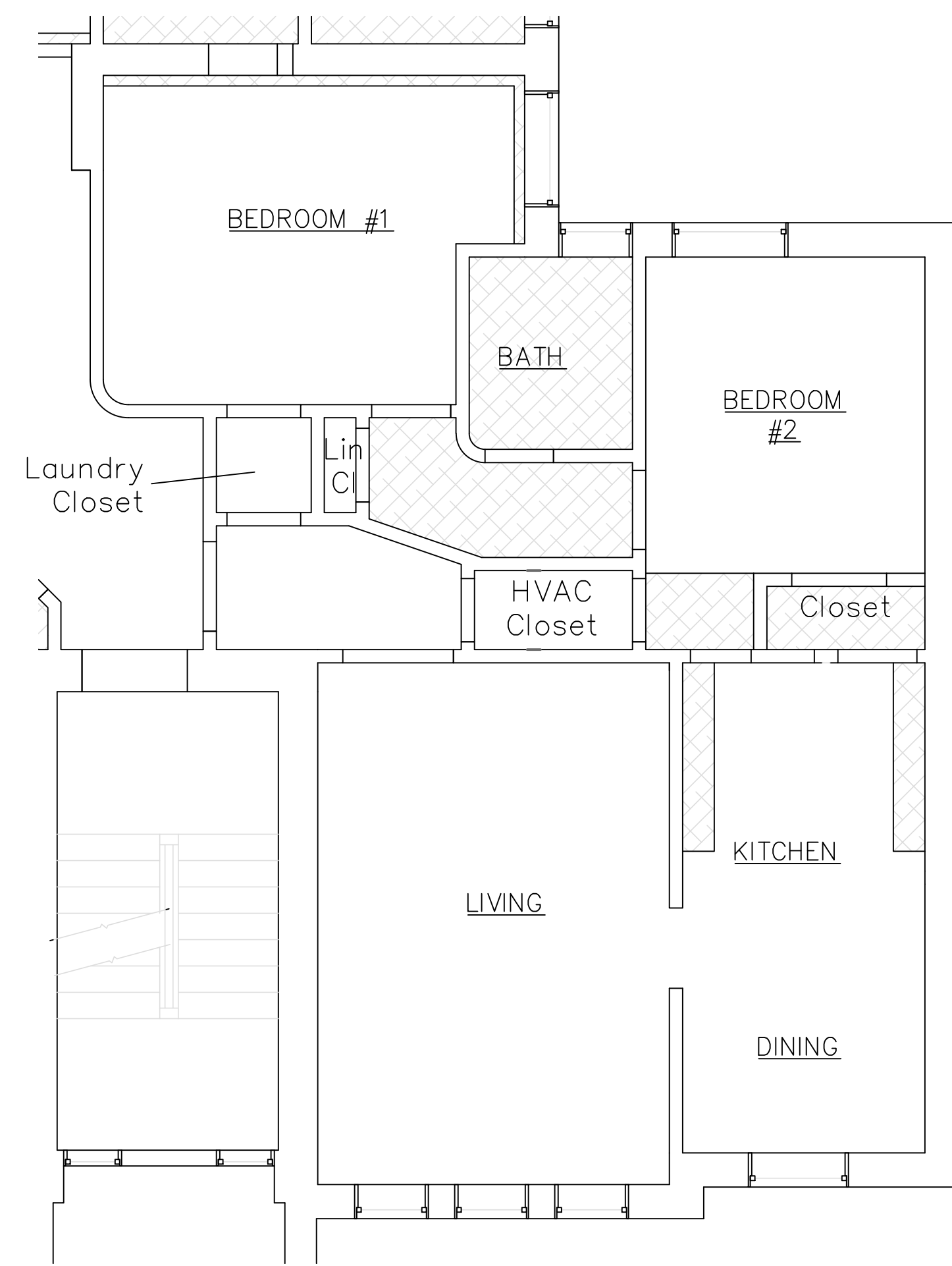


2nd FLOOR, HARDWOOD FLOORING PATCH LOCATIONS
 1/4" = 1'-0"



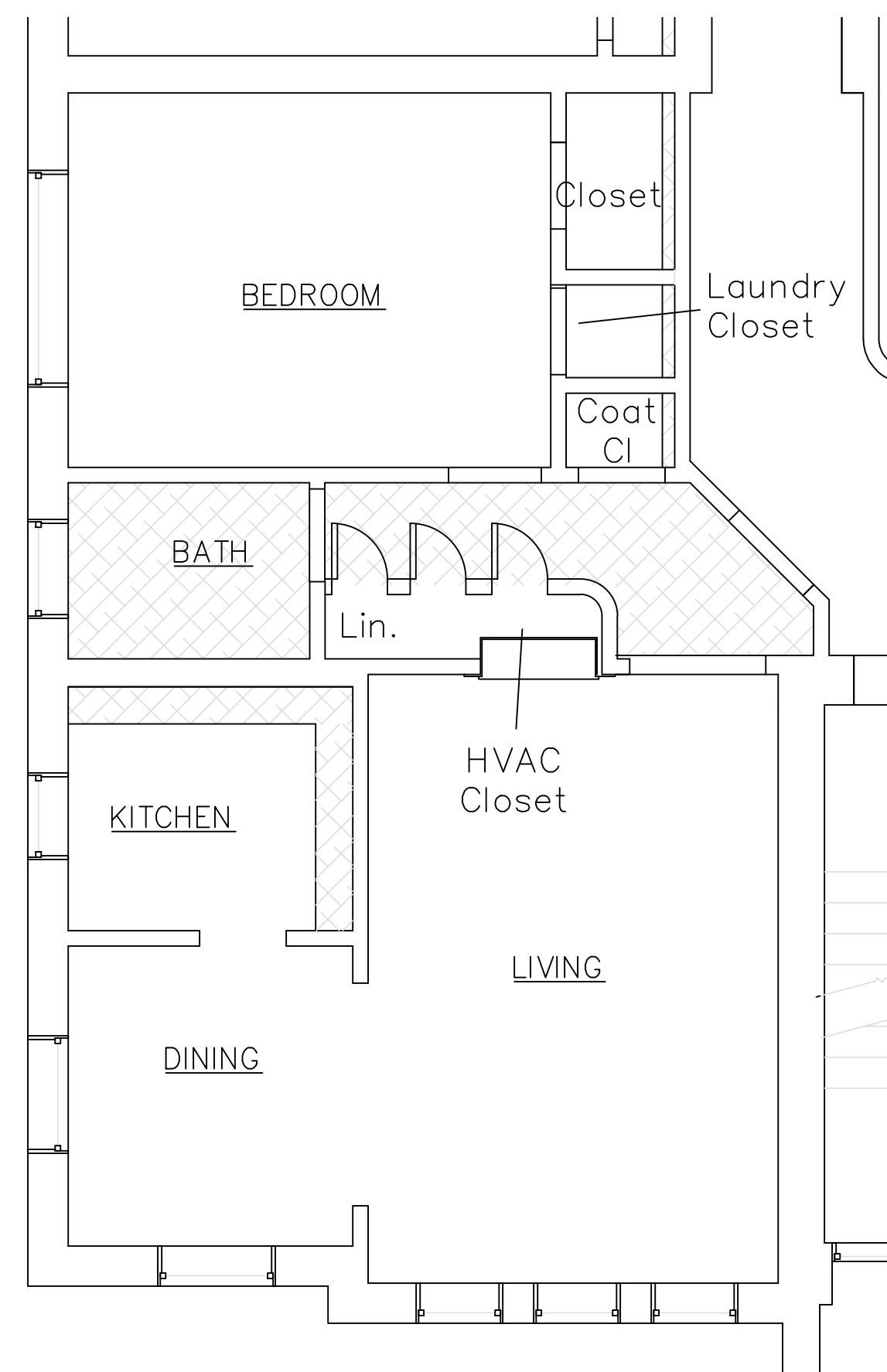
3rd FLOOR, HARDWOOD FLOORING PATCH LOCATIONS
 1/4" = 1'-0"

PLAN SYMBOLS	
	AREAS OF EXISTING HARDWOOD FLOORING TO BE REMOVED AND PATCHED WITH PLYWOOD OR OSB FLUSH WITH EXISTING ADJACENT FLOORING SURFACE. PRESERVE EXISTING HARDWOOD FLOORING TO REMAIN, PROTECT FROM DAMAGE.



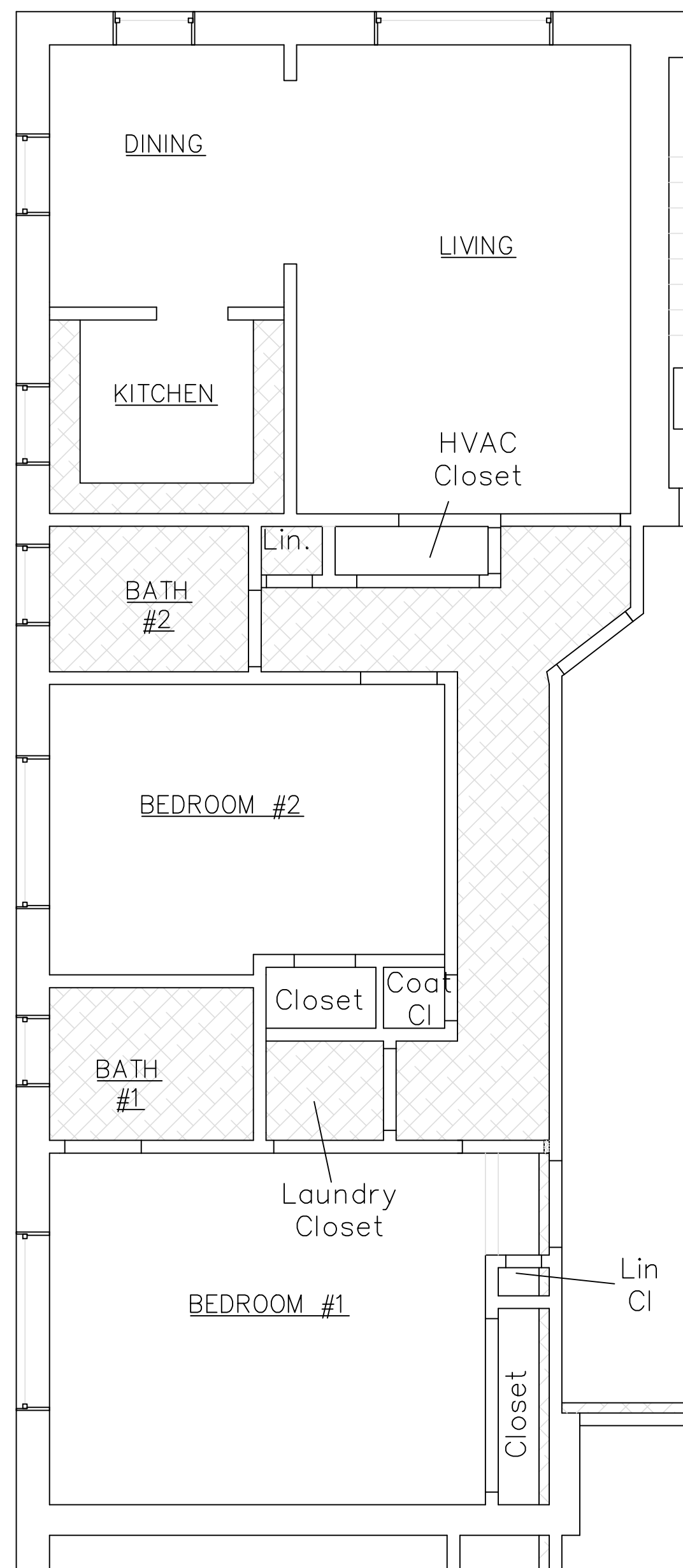
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE A, 1ST, 2ND, 3RD FLOORS

1/4" = 1'-0"
SIM. AT BASEMENT



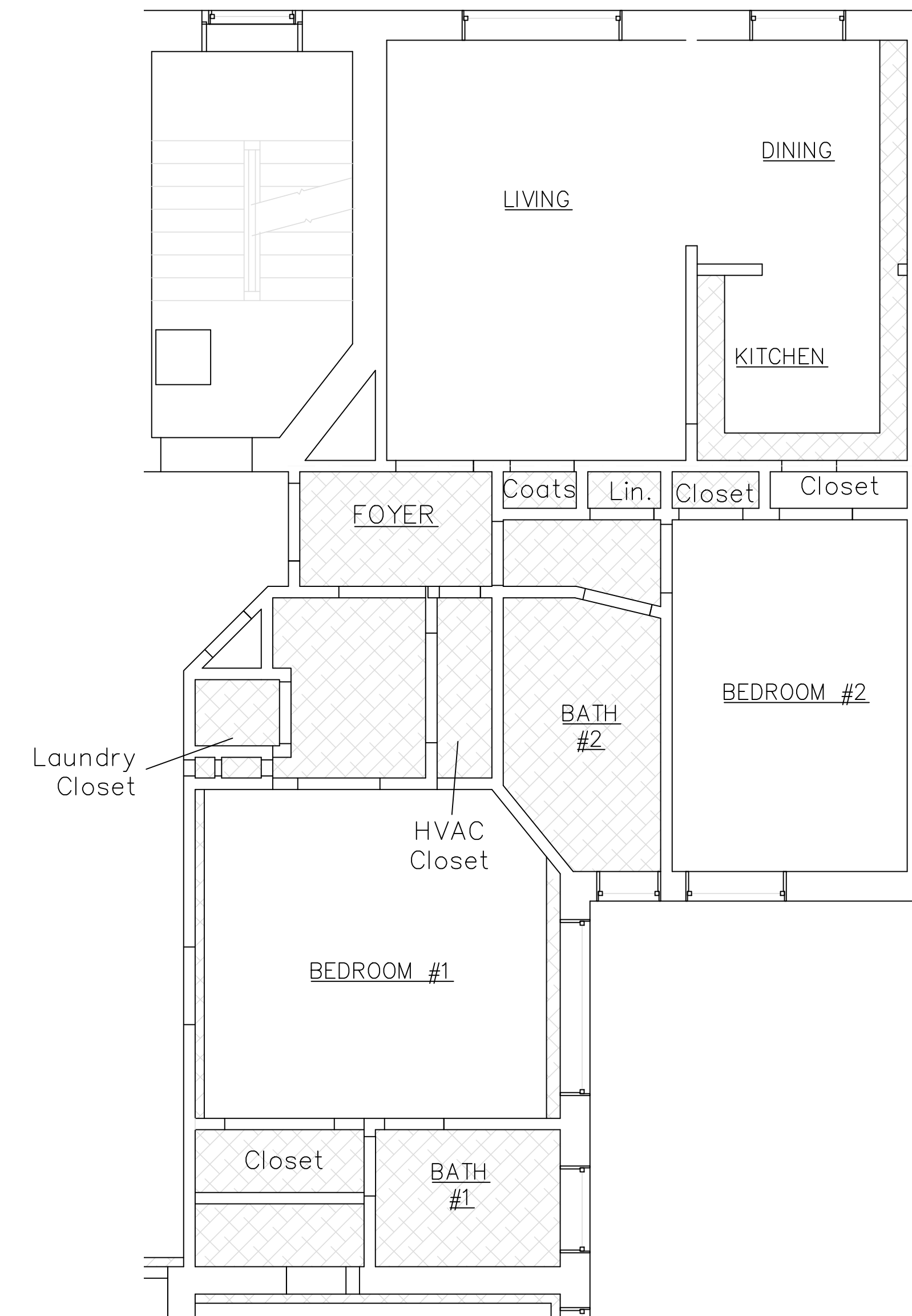
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE B, 2ND, 3RD FLOORS

1/4" = 1'-0"



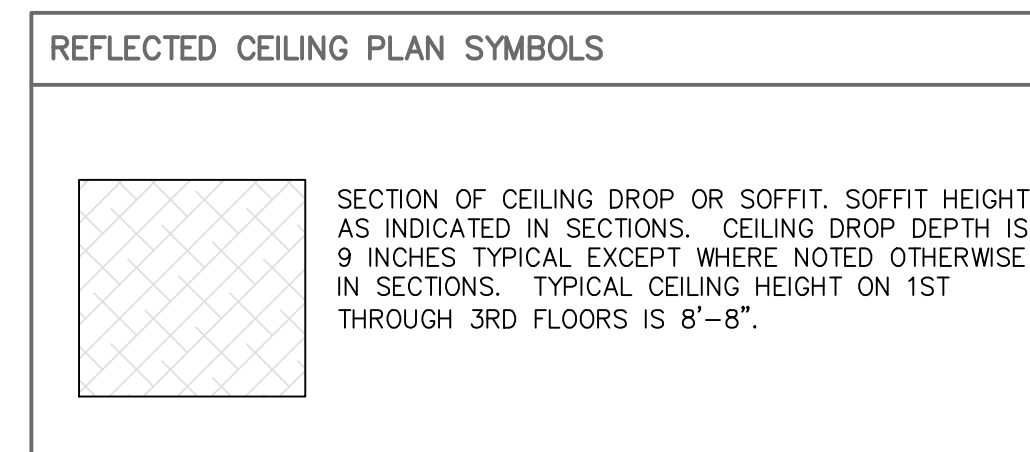
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE C, 1ST, 2ND, 3RD FLOORS

1/4" = 1'-0"



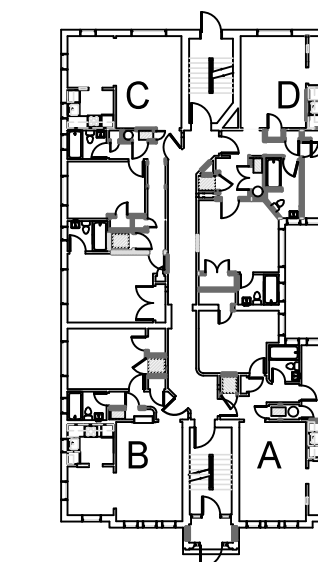
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE D, 1ST, 2ND, 3RD FLOORS

1/4" = 1'-0"

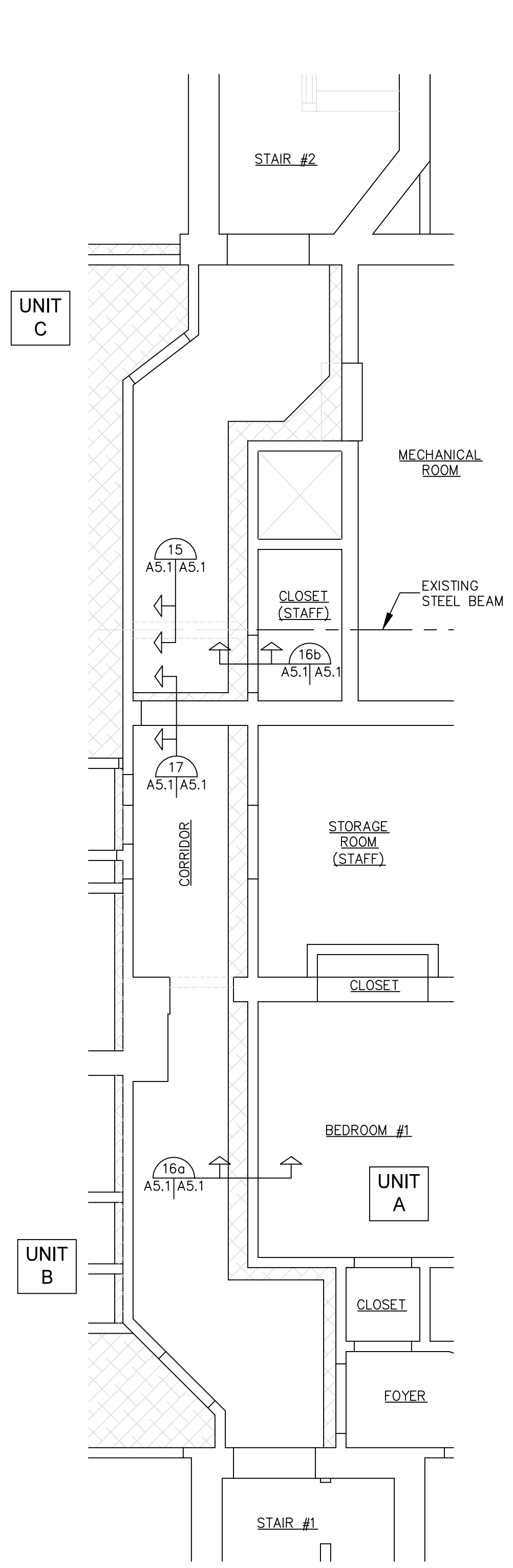


CEILING PLAN LOCATION BY UNIT/SHEET

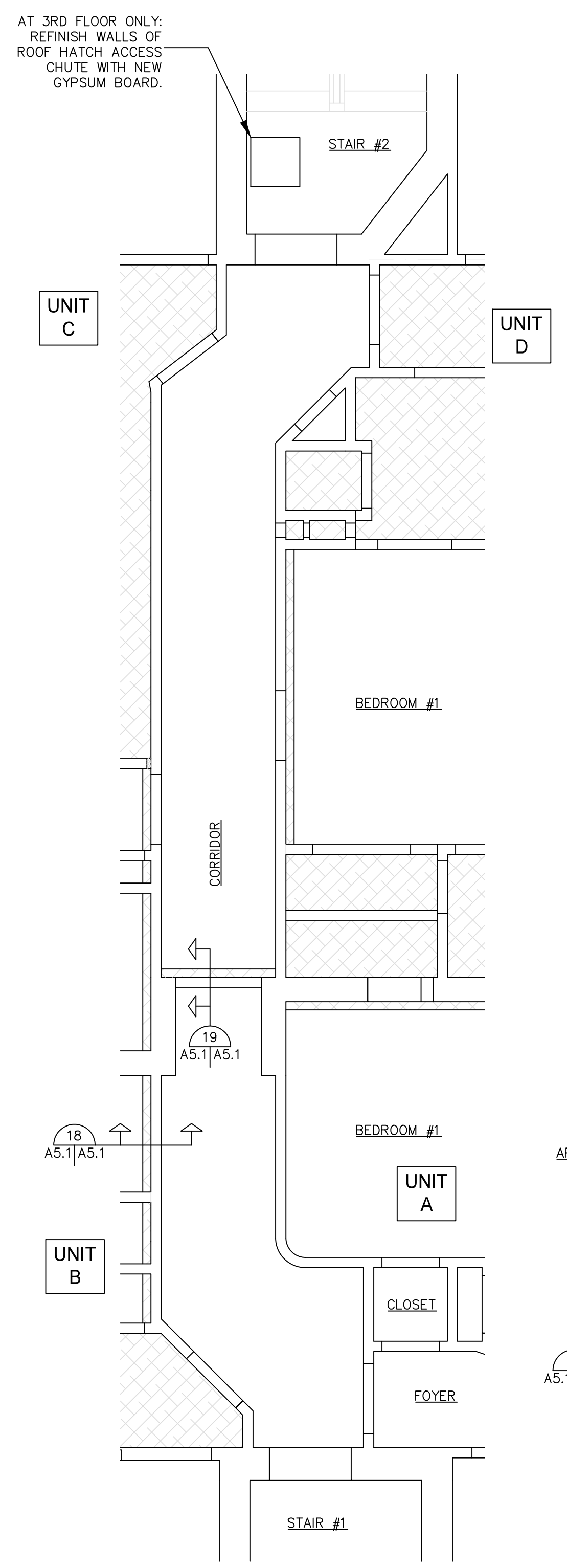
	B	1ST FL	2ND FL	3RD FL
UNIT A	A5.5	A5	A5	A5
UNIT B	A5.5	A5.5	A5	A5
UNIT C	A5.5	A5	A5	A5
UNIT D	N/A	A5	A5	A5
CORRIDORS	A5.1	A5.1	A5.1	A5.1



KEY PLAN
1/32" = 1'-0"

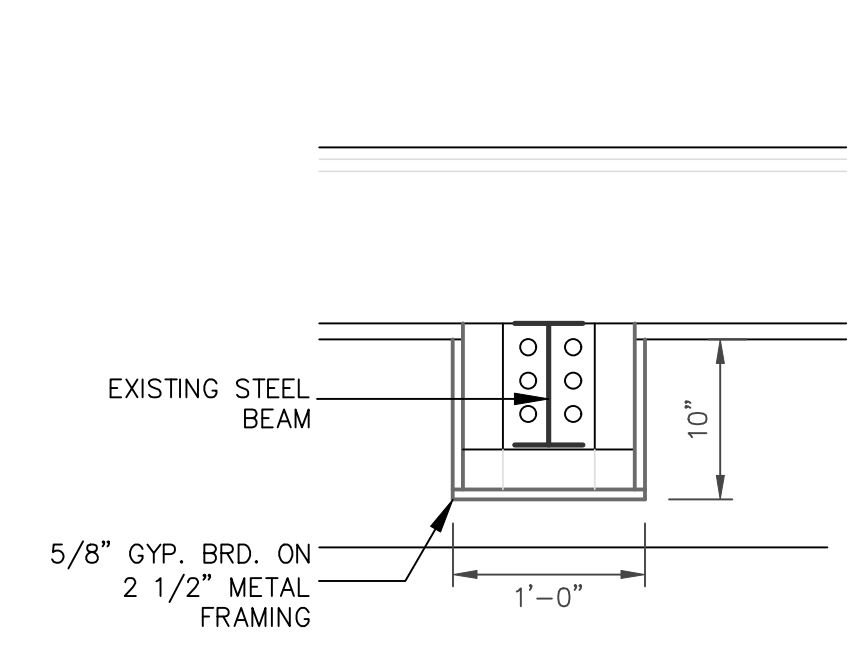


PROPOSED REFLECTED CEILING PLAN -
BASEMENT CORRIDOR
1/4" = 1'-0"

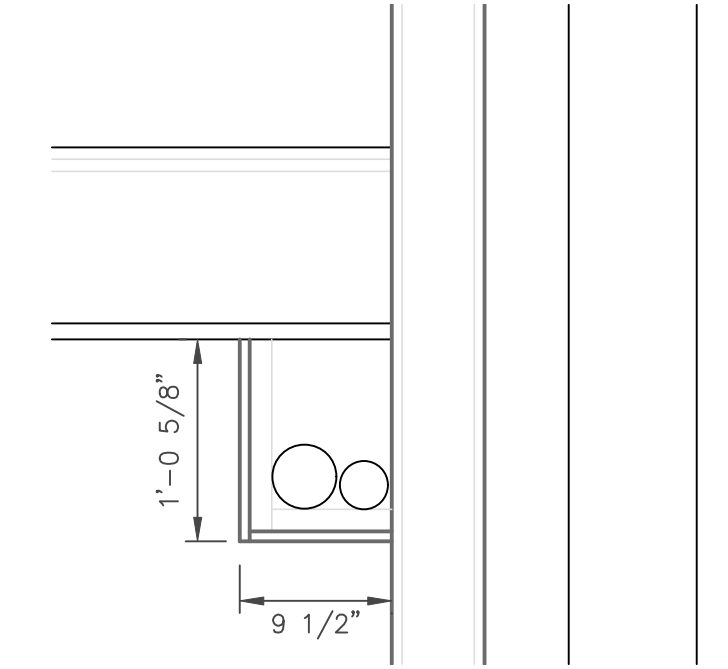


PROPOSED REFLECTED CEILING PLAN -
1ST, 2ND AND 3RD FLOOR CORRIDOR
1/4" = 1'-0"

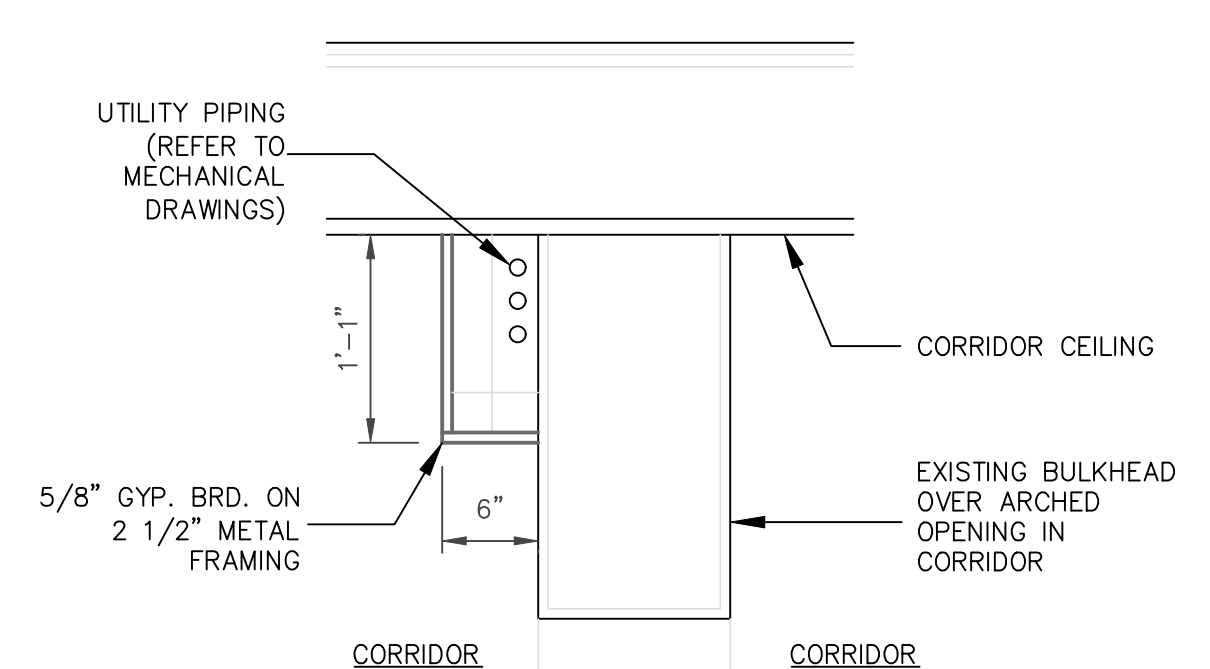
AT 3RD FLOOR ONLY:
REFINISH WALLS OF
ROOF HATCH ACCESS
CHUTE WITH NEW
GYPSUM BOARD.



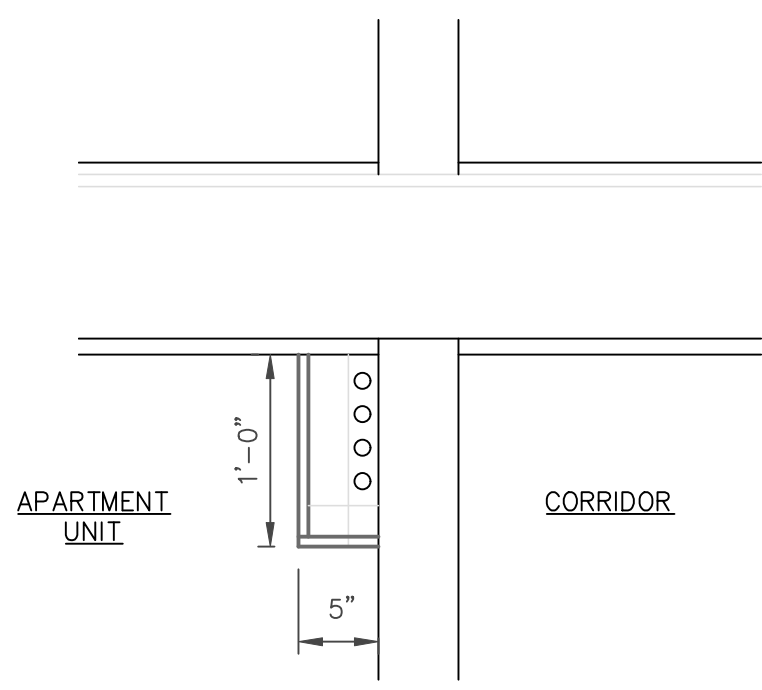
SECTION THROUGH
BASEMENT CROSS-CORRIDOR
SOFFIT AT BEAM
15
A5.1|A5.1 1" = 1'-0"



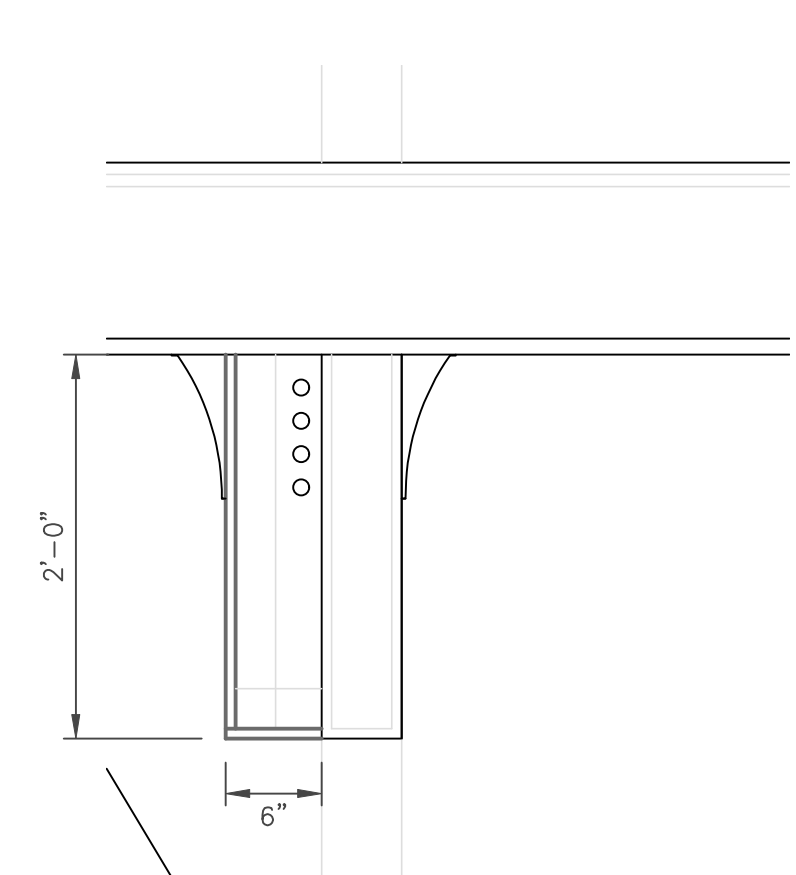
SECTION THROUGH
EAST-WEST SOFFIT IN
BASEMENT
16b
A5.1|A5.1 1" = 1'-0"



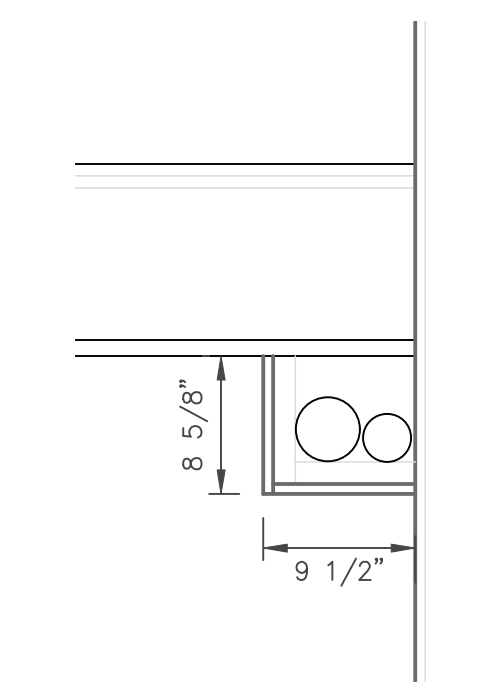
SECTION THROUGH
BASEMENT CROSS-CORRIDOR
SOFFIT AT ARCHWAY
17
A5.1|A5.1 1" = 1'-0"



SECTION THROUGH TYP.
EAST-WEST SOFFITS, 1ST,
2ND AND 3RD FLOORS
18
A5.1|A5.1 1" = 1'-0"



SECTION THROUGH 1ST, 2ND, 3RD
FLOOR CROSS-CORRIDOR SOFFIT
19
A5.1|A5.1 1" = 1'-0"



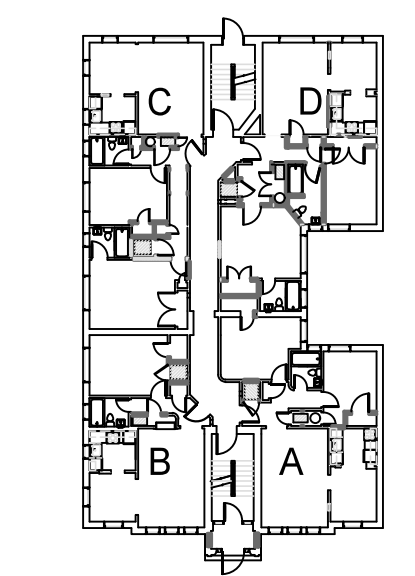
SECTION THROUGH TYP.
EAST-WEST SOFFIT IN
BASEMENT
16a
A5.1|A5.1 1" = 1'-0"

REFLECTED CEILING PLAN SYMBOLS

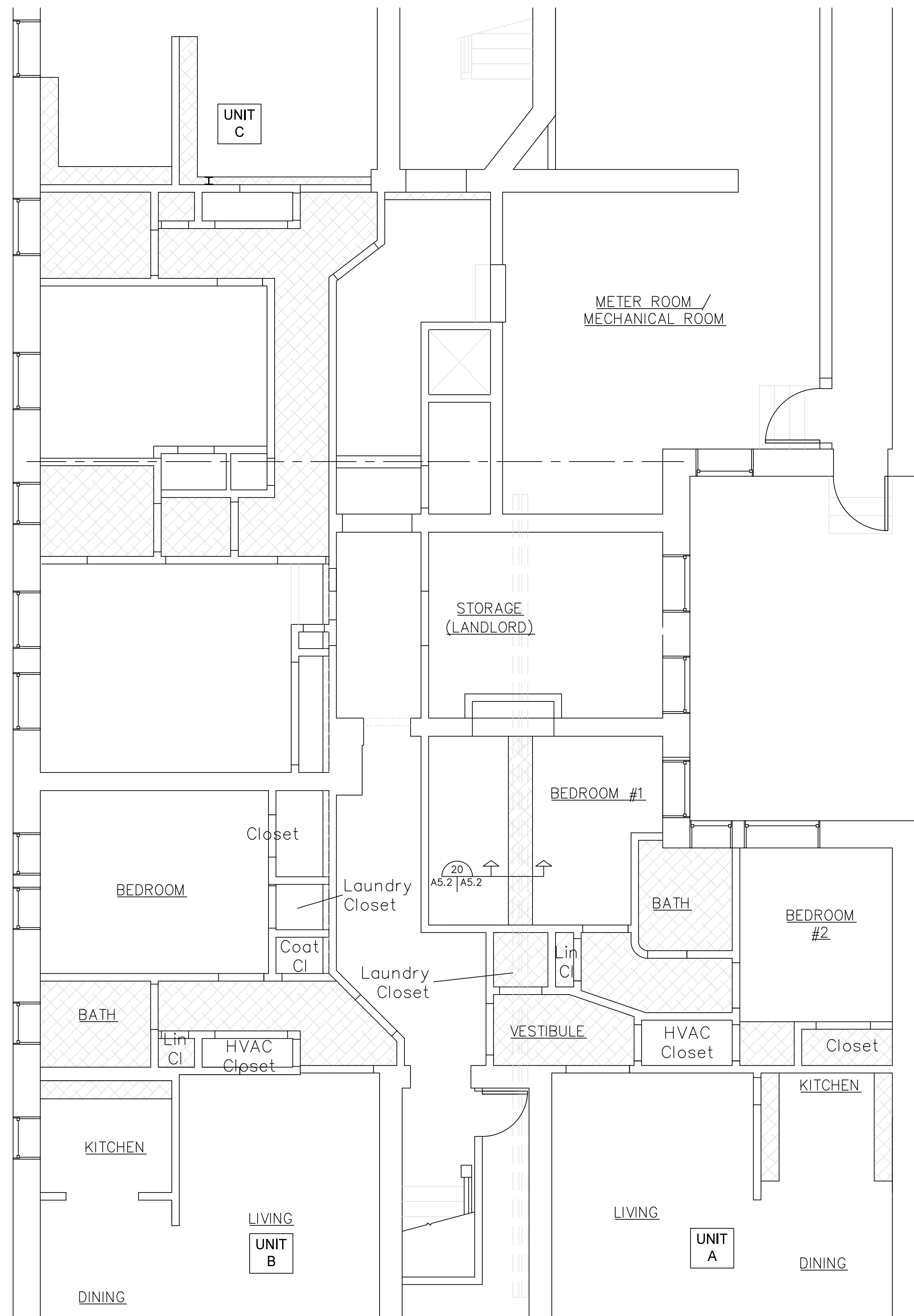
	SECTION OF CEILING DROP OR SOFFIT. SOFFIT HEIGHT AS INDICATED IN SECTIONS. CEILING DROP DEPTH IS 9 INCHES TYPICAL EXCEPT WHERE NOTED OTHERWISE IN SECTIONS. TYPICAL CEILING HEIGHT ON 1ST THROUGH 3RD FLOORS IS 8'-8".
--	--

CEILING PLAN LOCATION BY UNIT/SHEET

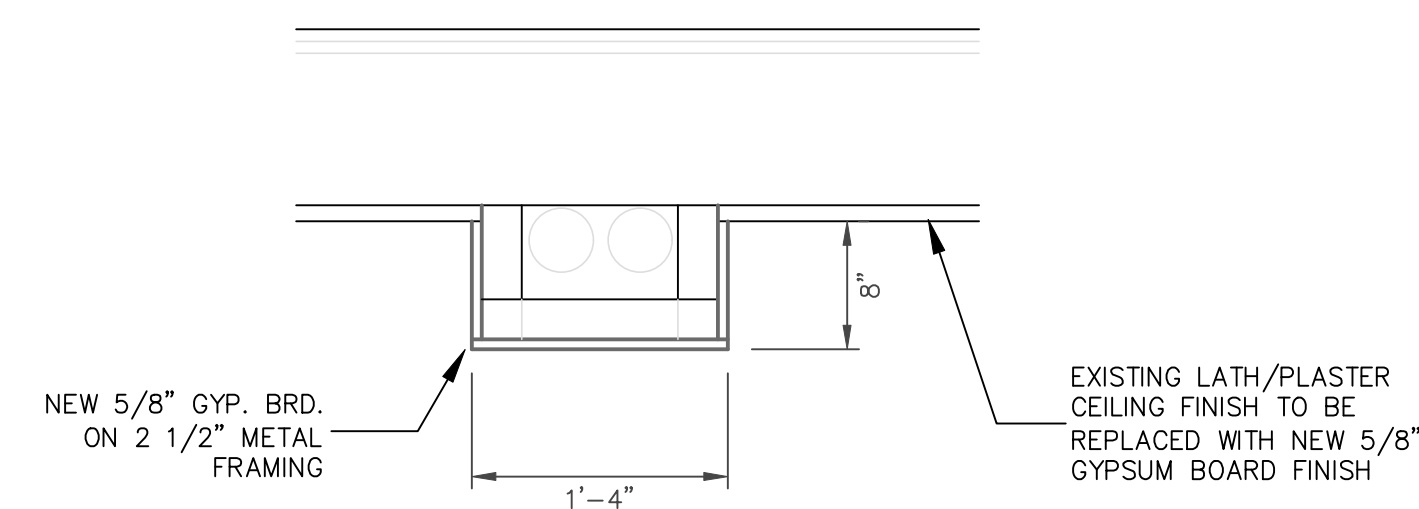
	B	1ST FL	2ND FL	3RD FL
UNIT A	A5.5	A5	A5	A5
UNIT B	A5.5	A5.5	A5	A5
UNIT C	A5.5	A5	A5	A5
UNIT D	N/A	A5	A5	A5
CORRIDORS	A5.1	A5.1	A5.1	A5.1



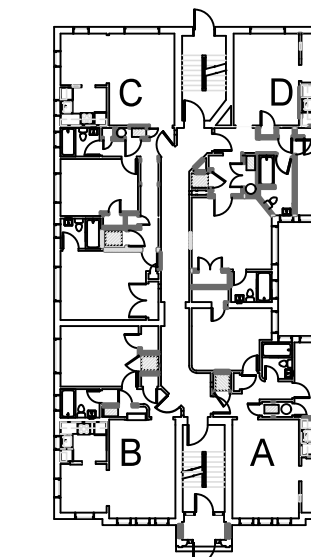
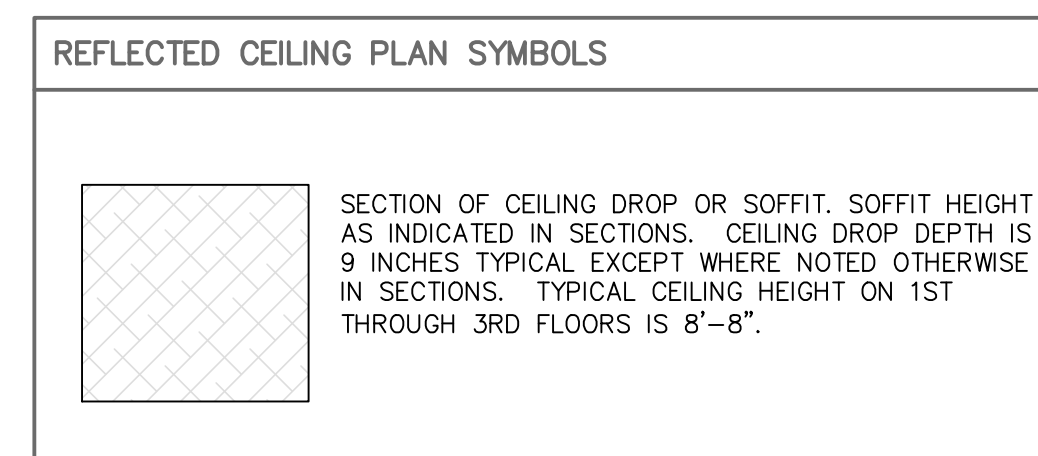
KEY PLAN
1/32" = 1'-0"



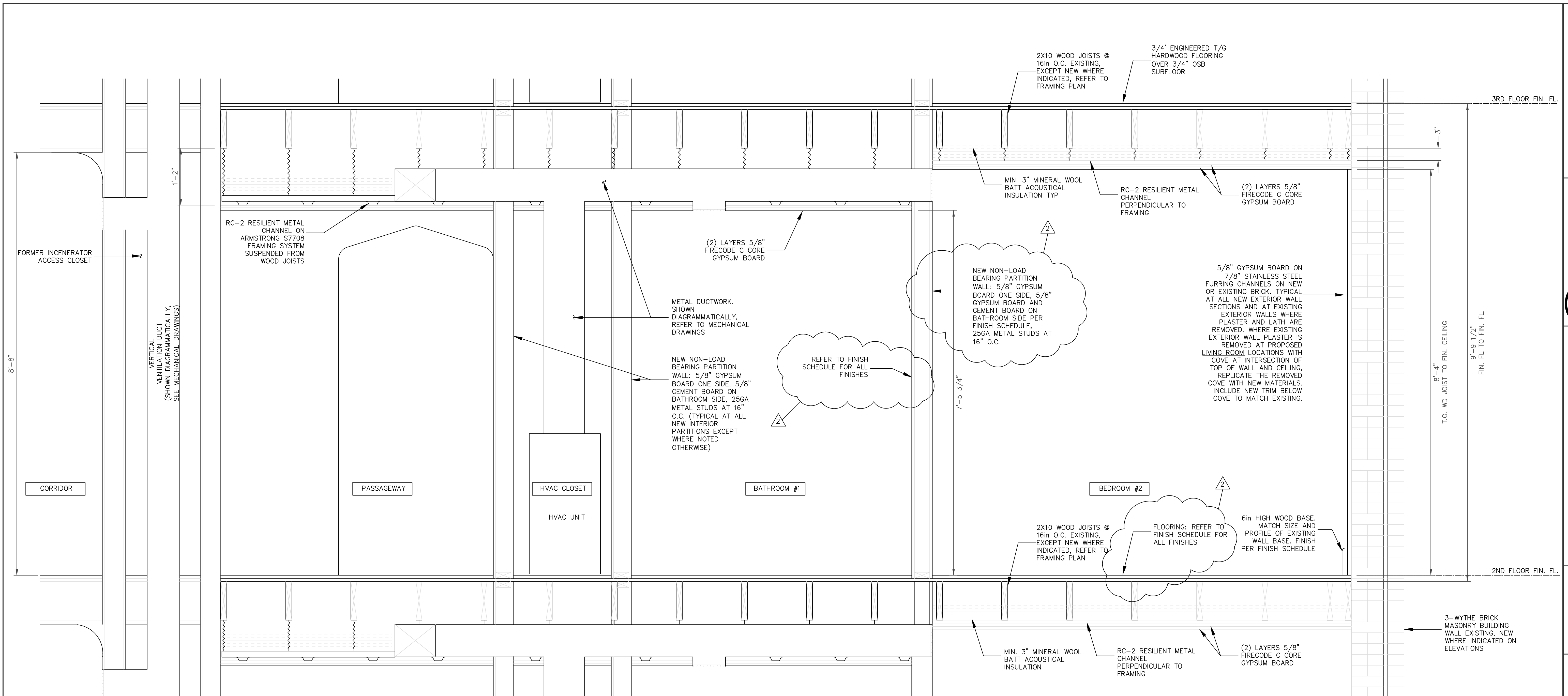
ALTERANTE PROPOSED REFLECTED
CEILING PLAN - BASEMENT
1/4" = 1'-0"



SECTION THROUGH NEW SOFFIT
IN BASEMENT UNIT "A"
A5.2 | A5.2 1" = 1'-0"



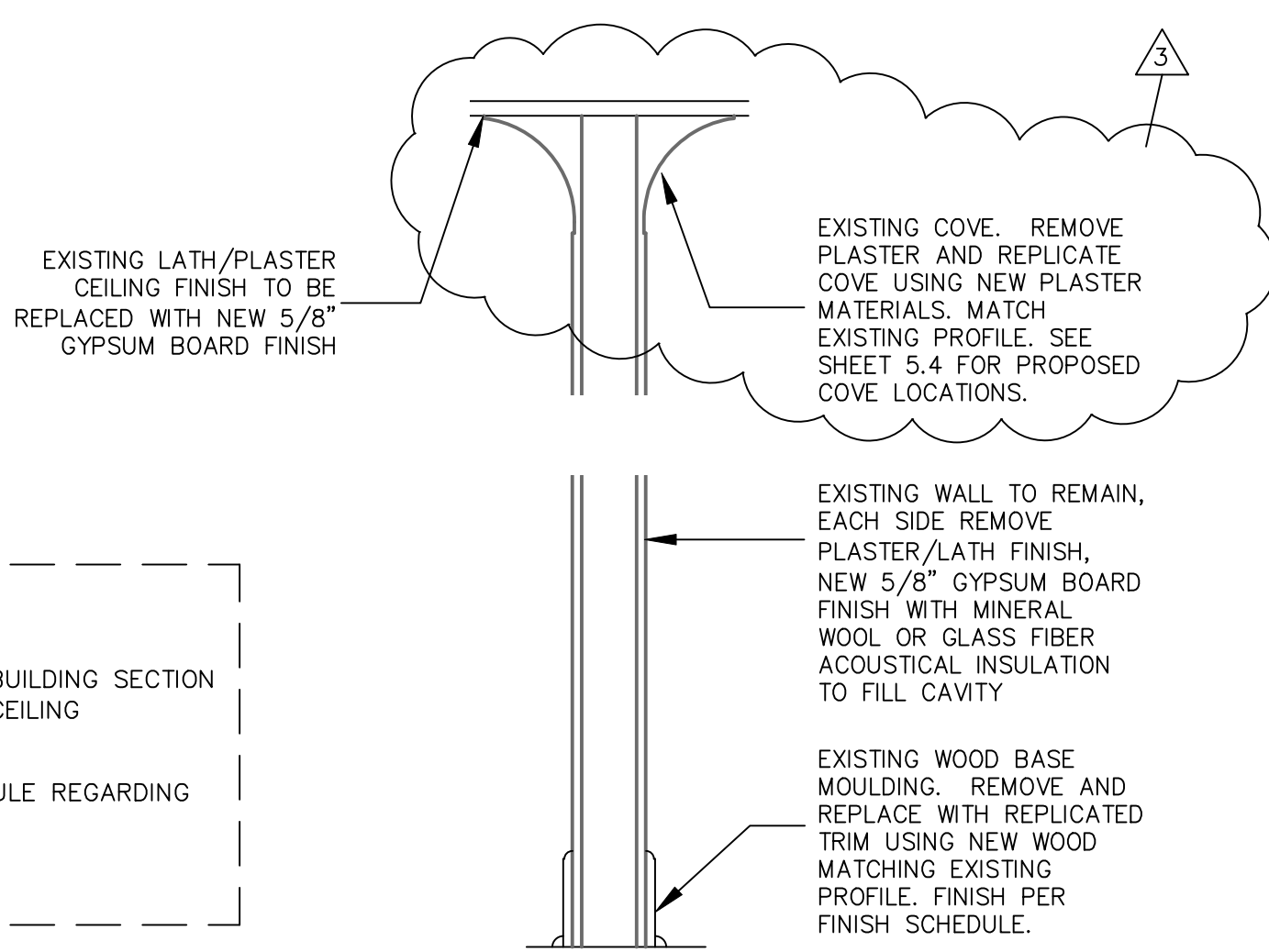
KEY PLAN
1/32" = 1'-0"



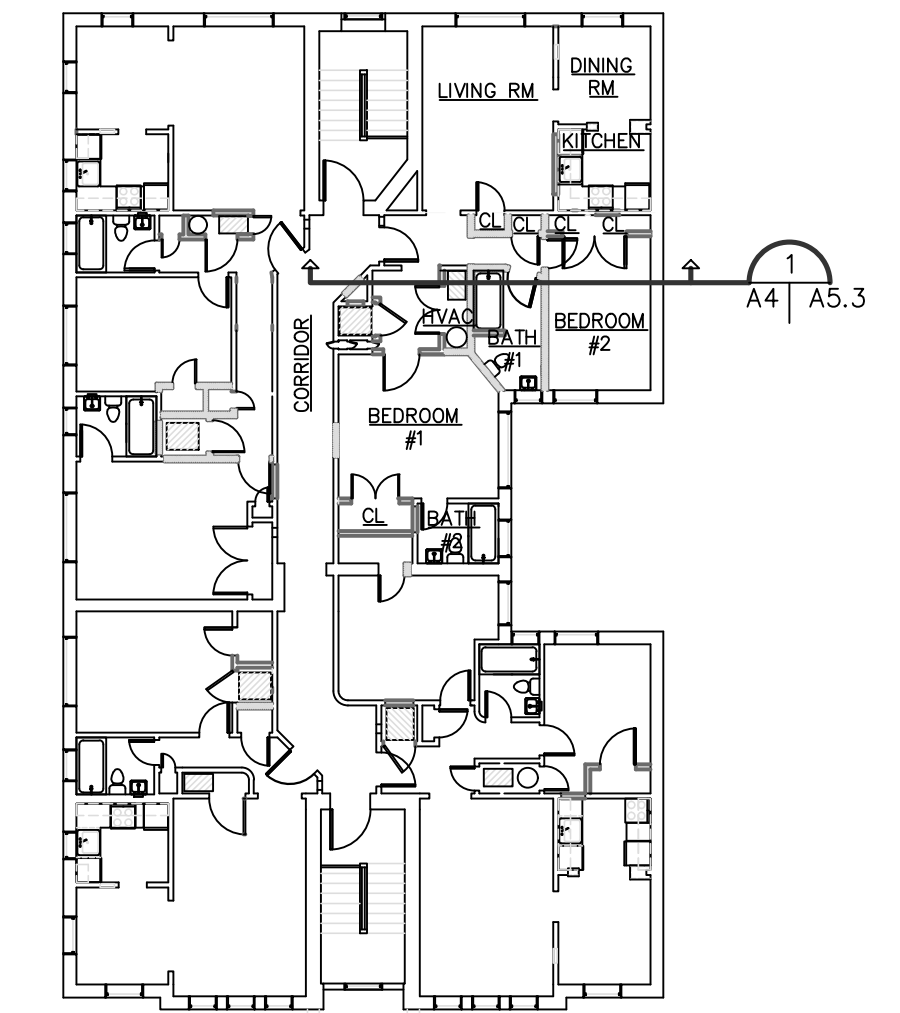
PARTIAL BUILDING SECTION AT CEILING DROPS
 A4 | A5.3 1" = 1'-0"
 THIS SECTION ONLY APPLIES AT AREAS OF FLOOR/CEILING ASSEMBLY RE-CONSTRUCTION.

- BUILDING SECTION GENERAL NOTES:**
- FLOOR/CEILING ASSEMBLY CONFORMS TO UL DESIGN #541 FOR 2-HOUR ASSEMBLY (1-HOUR REQUIRED) AND FOR AN STC RATING OF 59 (MIN. STC 50 REQUIRED), REQUIRED BETWEEN FLOORS ONLY.
 - FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION FLOORING MATERIALS, INCLUDING ACCESSORIES.
 - FLOORING MATERIAL SHALL HAVE A CLASS I OR CLASS II RATING, AS SPECIFIED.
 - FOLLOW ASTM C754 FOR INSTALLATION OF GYPSUM BOARD CEILING FRAMING.
 - SIMILAR AT AREAS OTHER THAN SECTIONS OF NEW FRAMING, OMIT NEW WALL CONSTRUCTION.
 - NEW GYPSUM BOARD SHALL BE "TYPE-X" OR "FIRE-CODE" OR OTHER FIRE RATED CLASSIFIED PRODUCT.

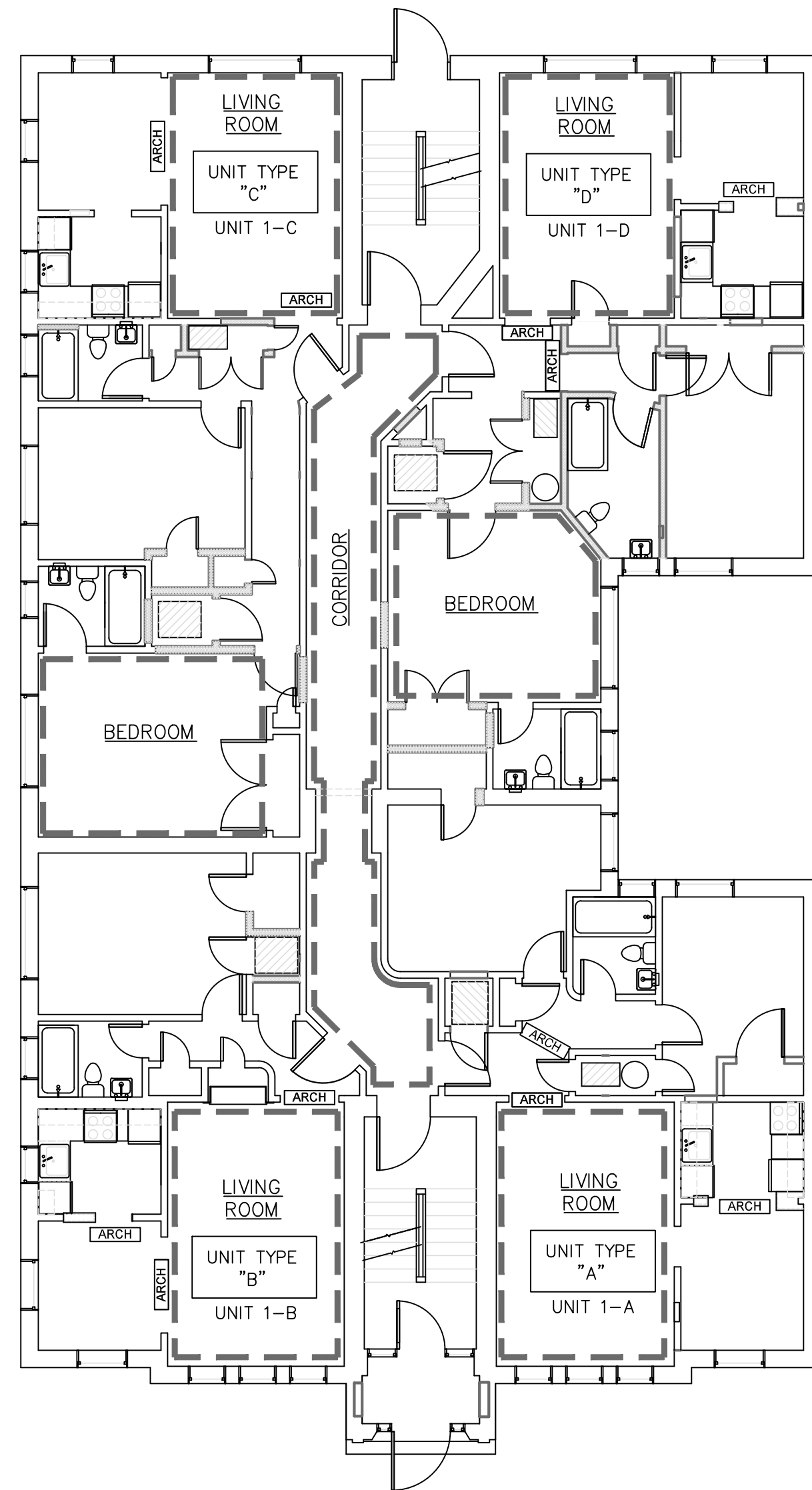
- REVISIONS THIS SHEET**
- 1. ADDED NOTE TO CLARIFY THAT THE PARTIAL BUILDING SECTION ONLY APPLIES TO AREAS WHERE THE FLOOR/CEILING ASSEMBLY IS BEING REPLACED.
 - 2. ADDED NOTE TO REFER TO THE FINISH SCHEDULE REGARDING ALL FINISHES.
 - 3. REVISED NOTE REGARDING CEILING COVES.



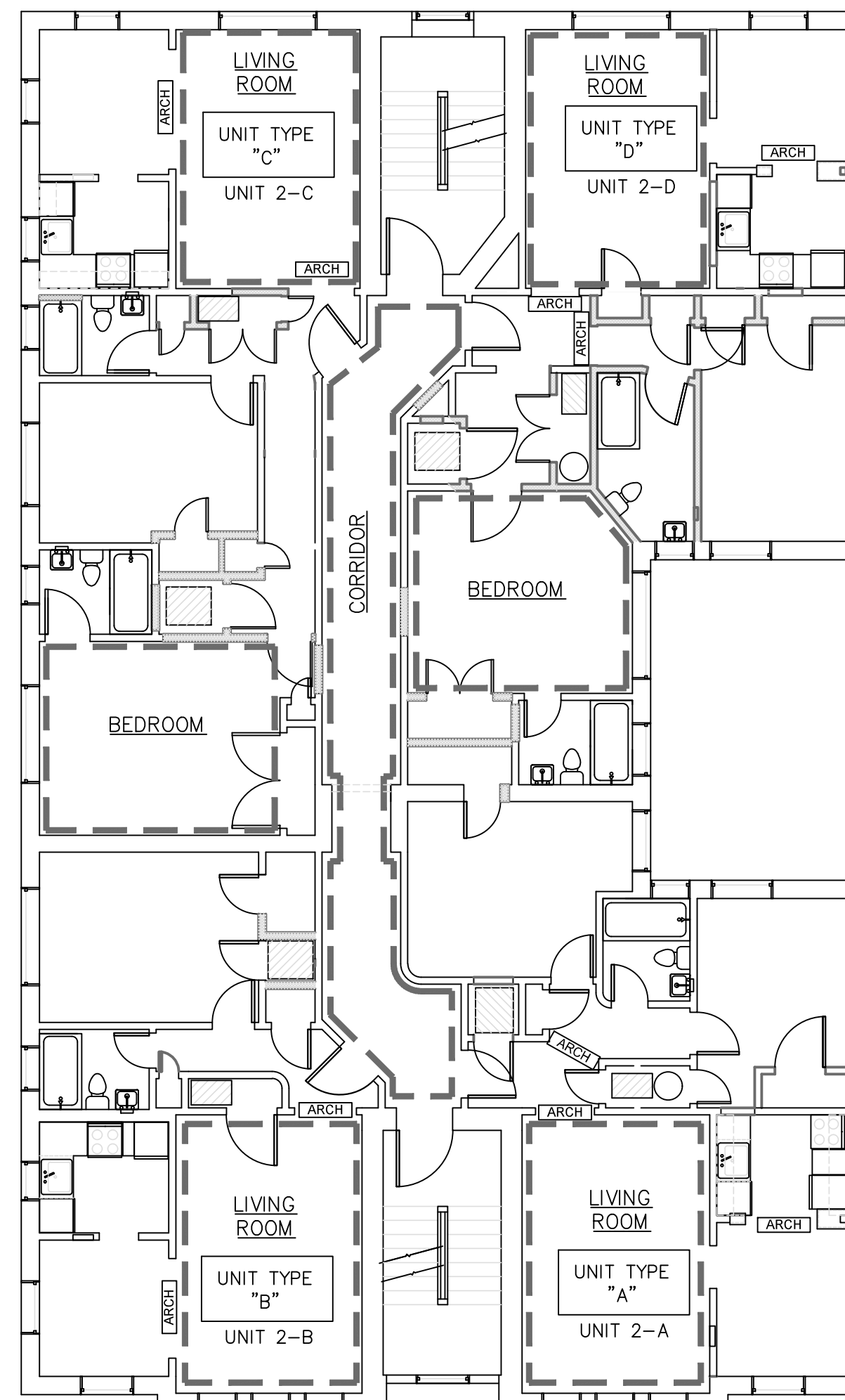
TYPICAL SECTION AT EXISTING INTERIOR WALL TO BE RE-FINISHED
 21 | A5.3 1" = 1'-0"



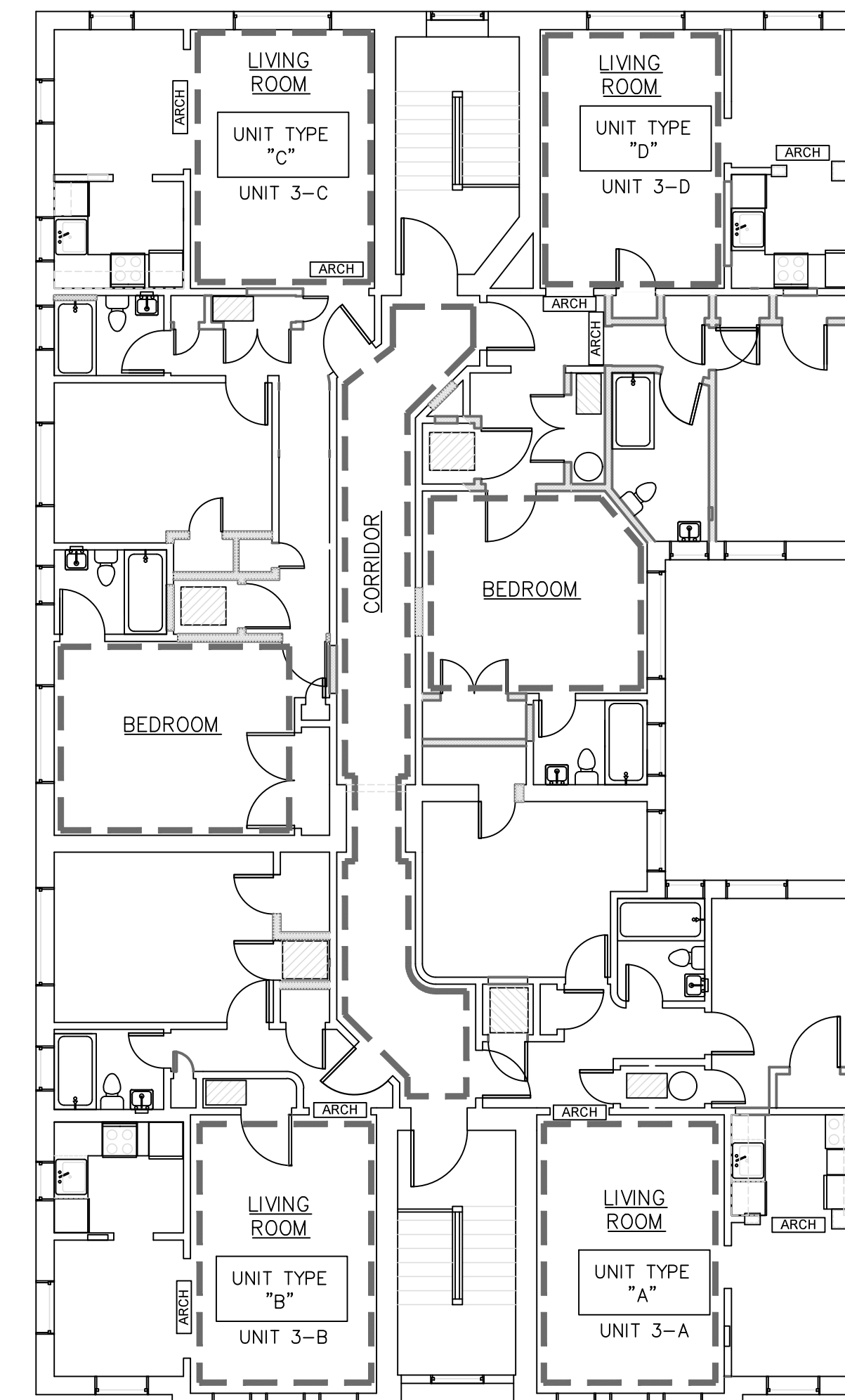
2ND FLOOR KEY PLAN
 1/16" = 1'-0"



CEILING COVES AND ARCH LOCATIONS,
1ST FLOOR
1/8" = 1'-0"



CEILING COVES AND ARCH LOCATIONS,
2ND FLOOR
1/8" = 1'-0"

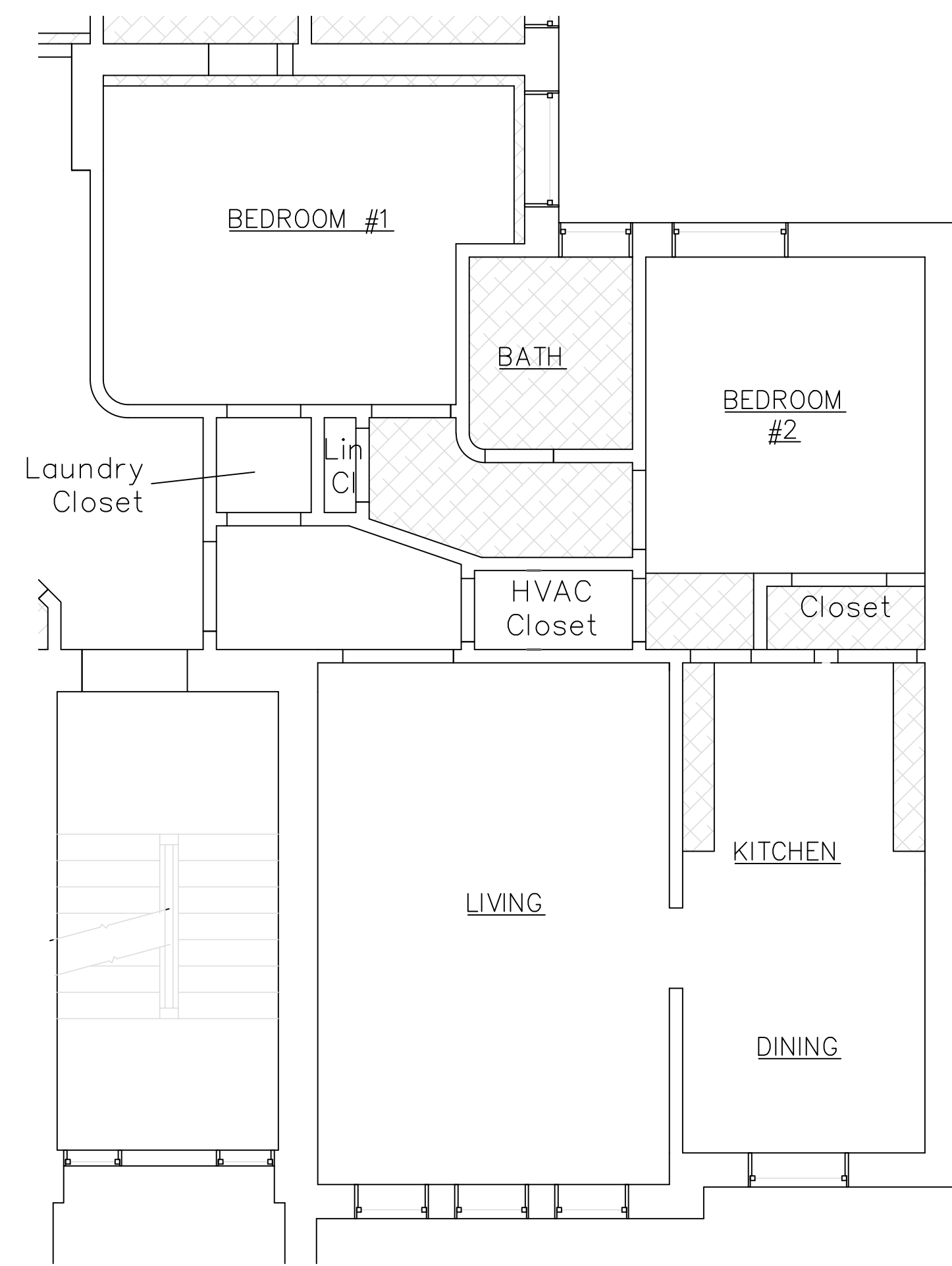


CEILING COVES AND ARCH LOCATIONS,
3RD FLOOR
1/8" = 1'-0"

PLAN SYMBOLS

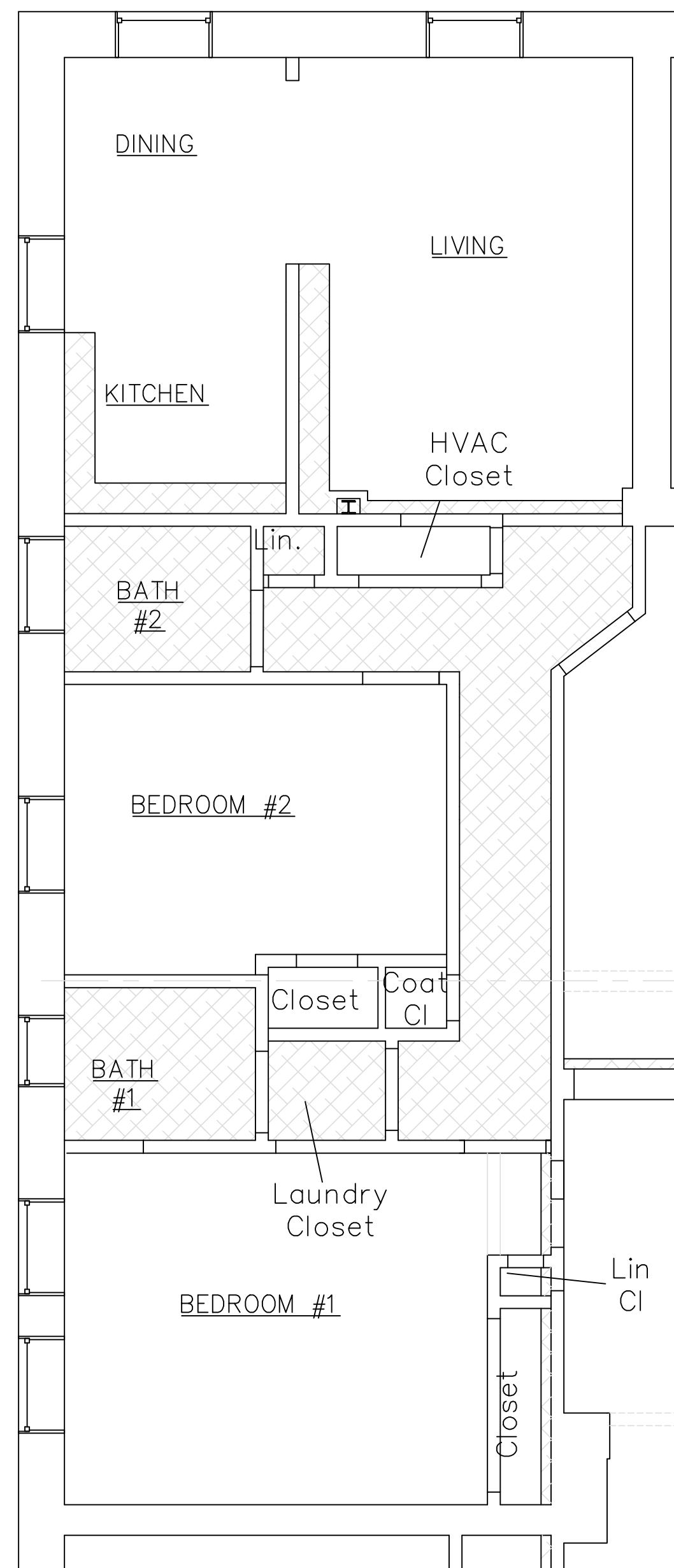
AREAS OF EXISTING PLASTER COVES AT WALL/CEILING INTERSECTION. REPLICATE EXISTING COVES WHERE REMOVED AT EXISTING/PROPOSED LIVING ROOM SPACES AND CORRIDORS. MATCH SIZE AND PROFILE OF EXISTING COVES, INCLUDING TRIM.

INDICATES LOCATION OF EXISTING CURVED OR POINTED PLASTER ARCHWAY ABOVE OPENING TO BE REPLICATED WHERE REMOVED. MATCH SIZE AND PROFILE OF EXISTING ARCHES.



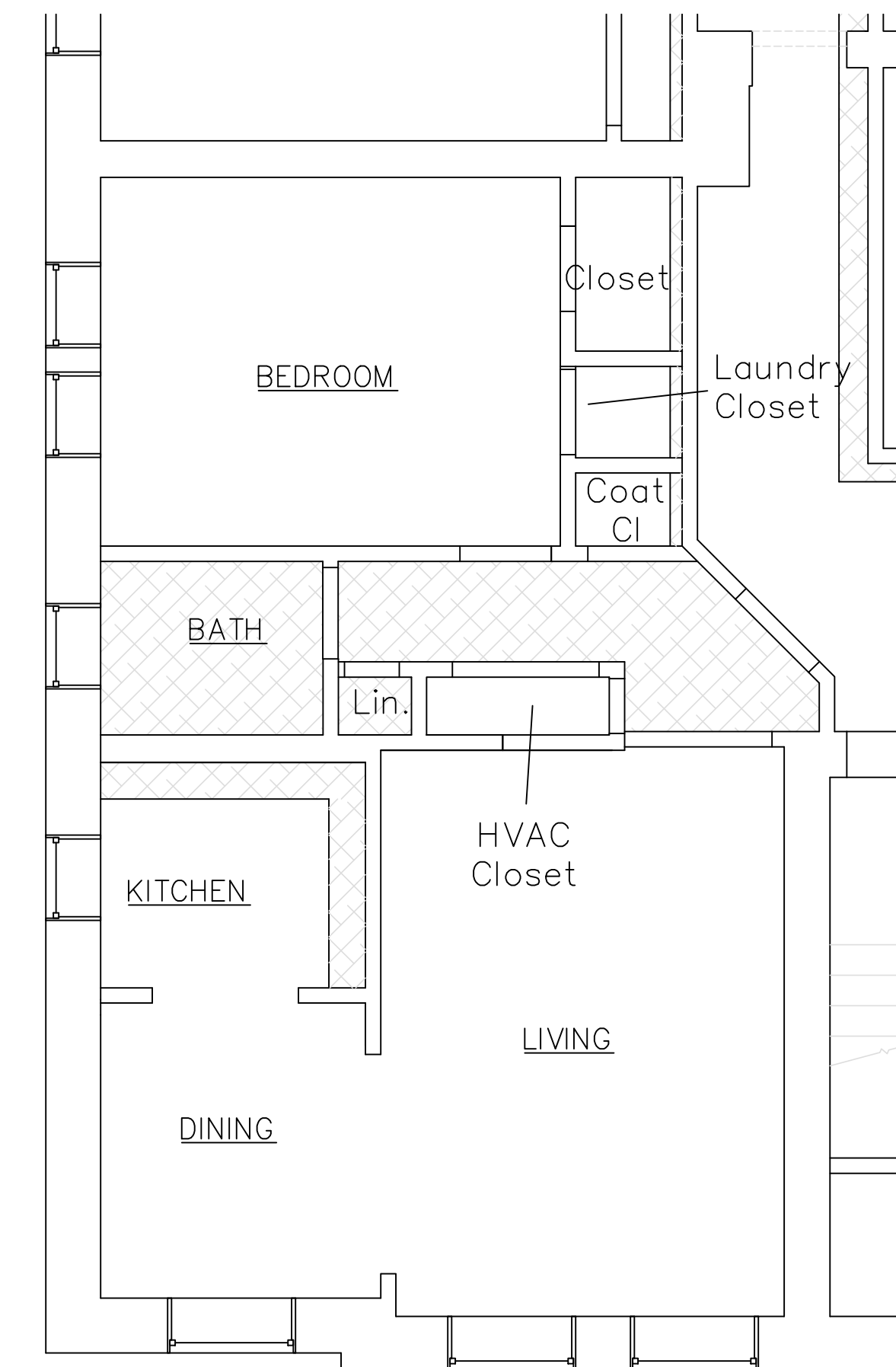
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE A, BASEMENT

1/4" = 1'-0"
SIM. AT BASEMENT



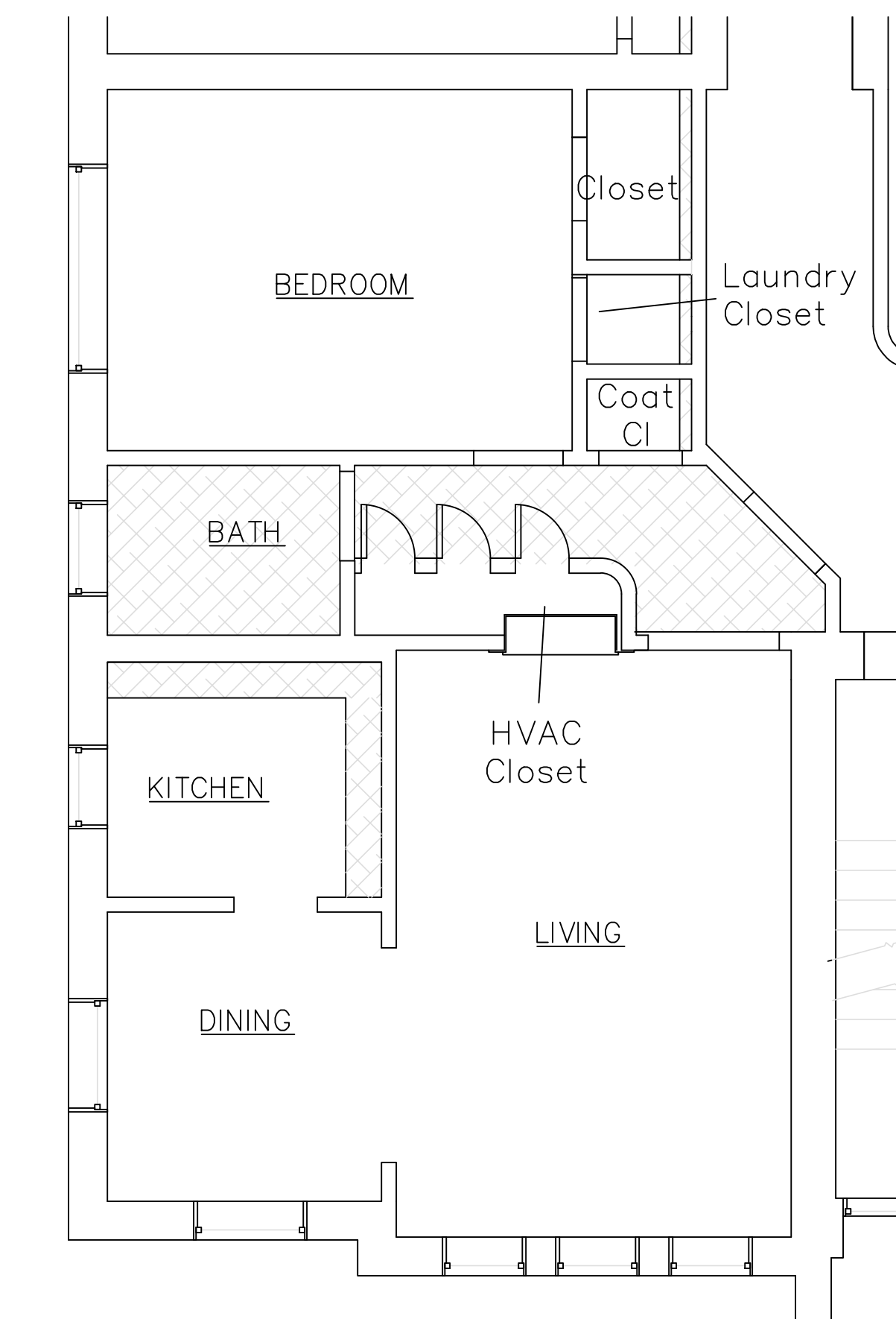
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE C, BASEMENT

1/4" = 1'-0"



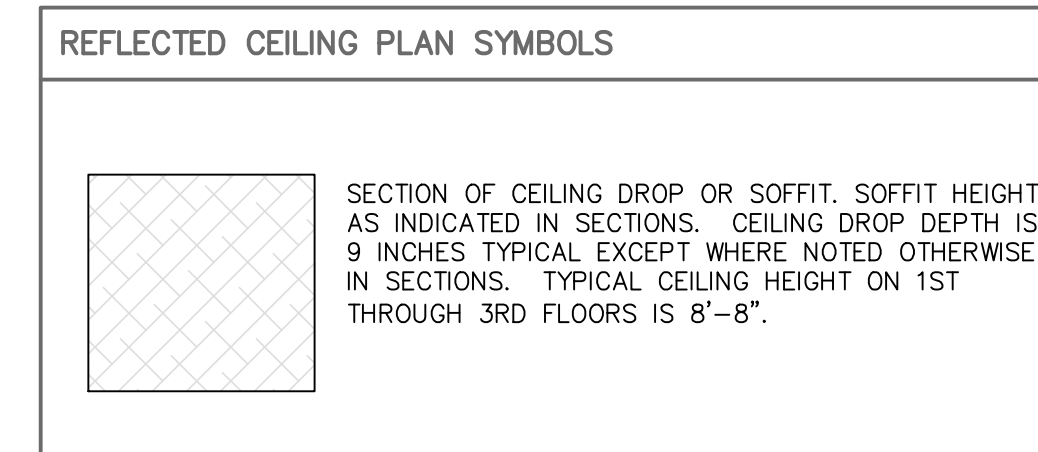
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE B, BASEMENT

1/4" = 1'-0"



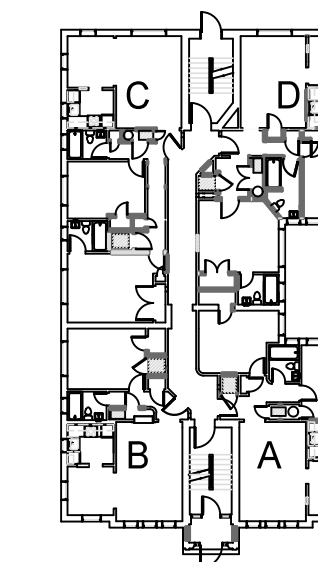
PROPOSED REFLECTED CEILING PLAN –
UNIT TYPE B, 1ST FLOOR

1/4" = 1'-0"

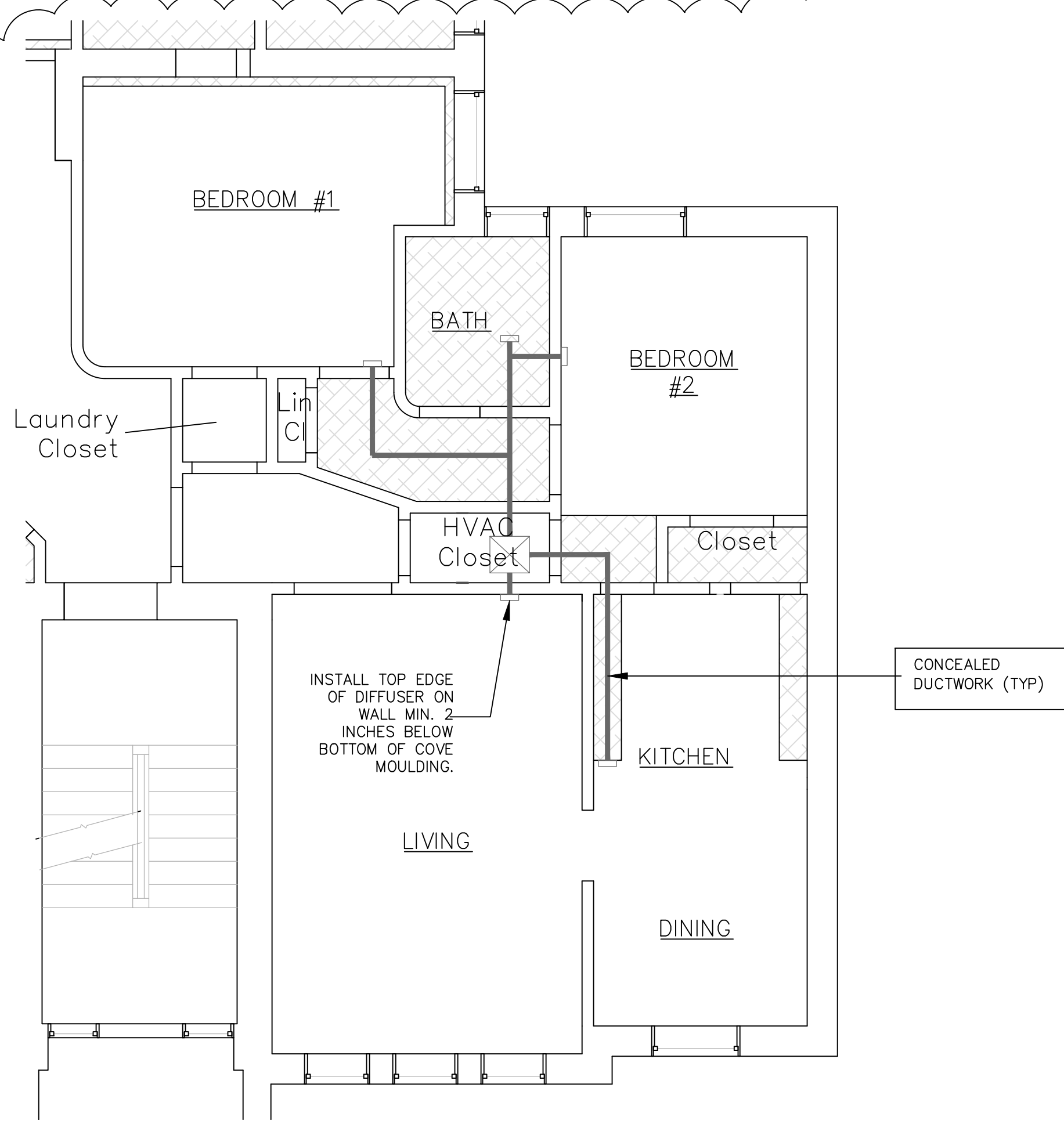


CEILING PLAN LOCATION BY UNIT/SHEET

	B	1ST_FL	2ND_FL	3RD_FL
UNIT A	A5.5	A5	A5	A5
UNIT B	A5.5	A5.5	A5	A5
UNIT C	A5.5	A5	A5	A5
UNIT D	N/A	A5	A5	A5
CORRIDORS	A5.1	A5.1	A5.1	A5.1

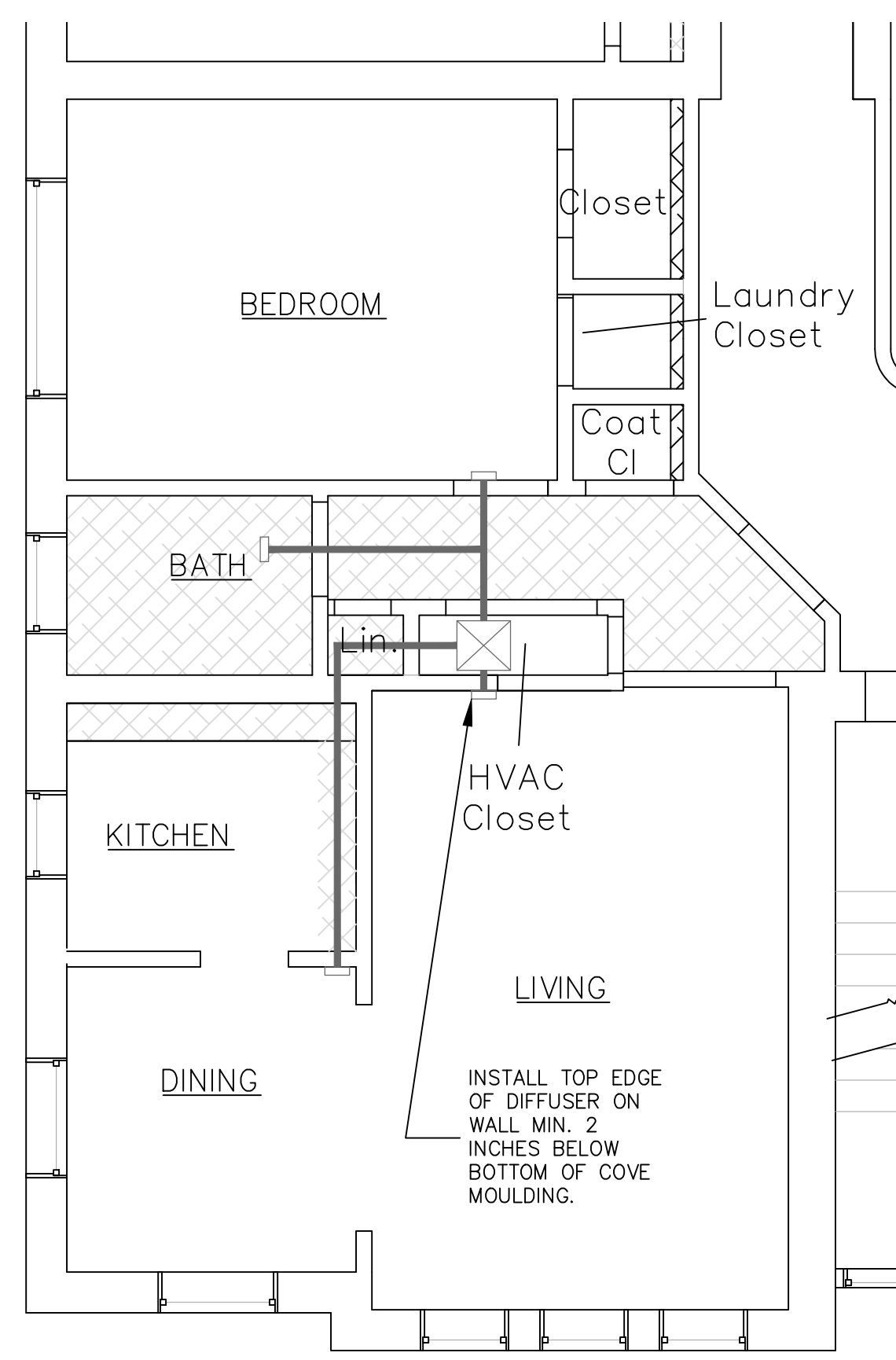


KEY PLAN
1/32" = 1'-0"



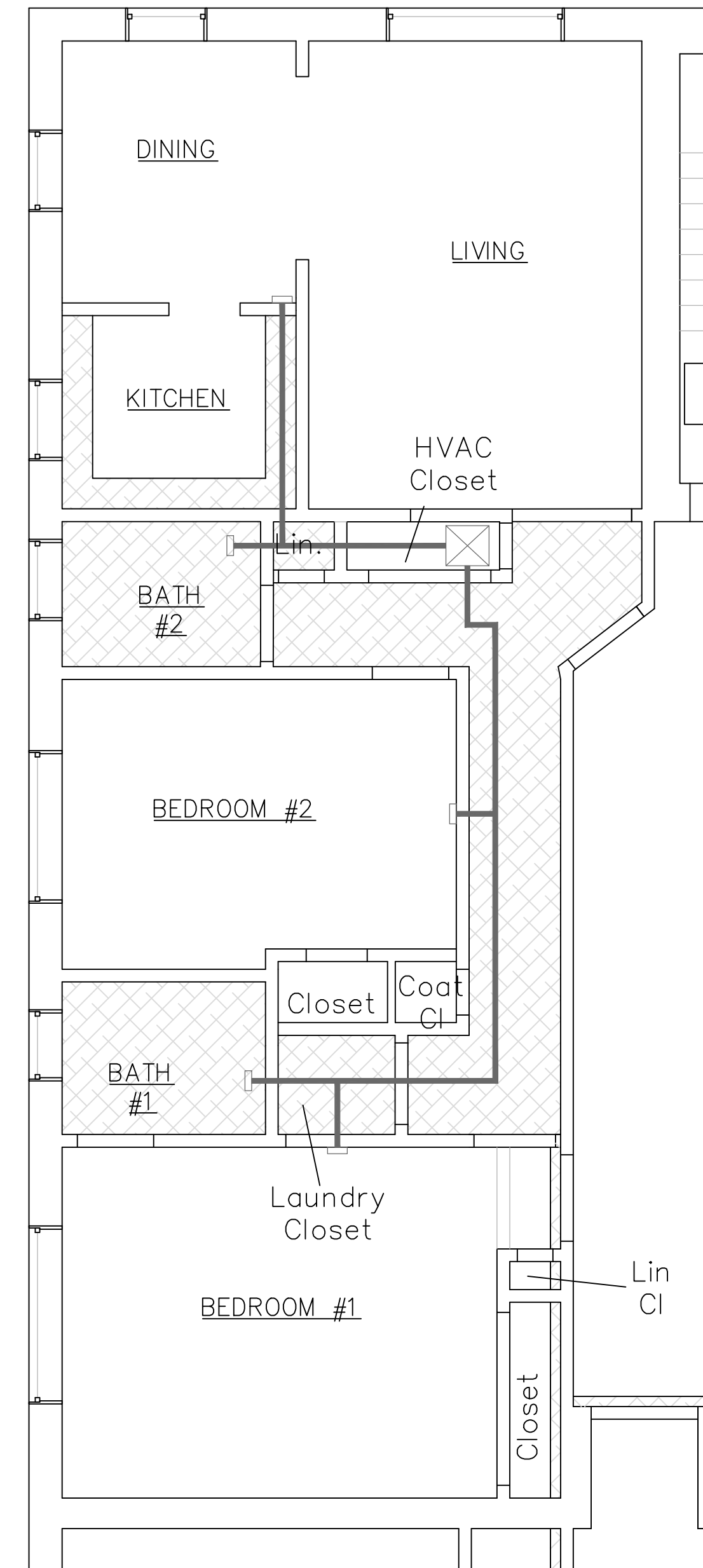
PROPOSED REFLECTED CEILING PLAN – UNIT TYPE A, 1ST, 2ND, 3RD FLOORS

1/4" = 1'-0"
SIM. AT BASEMENT



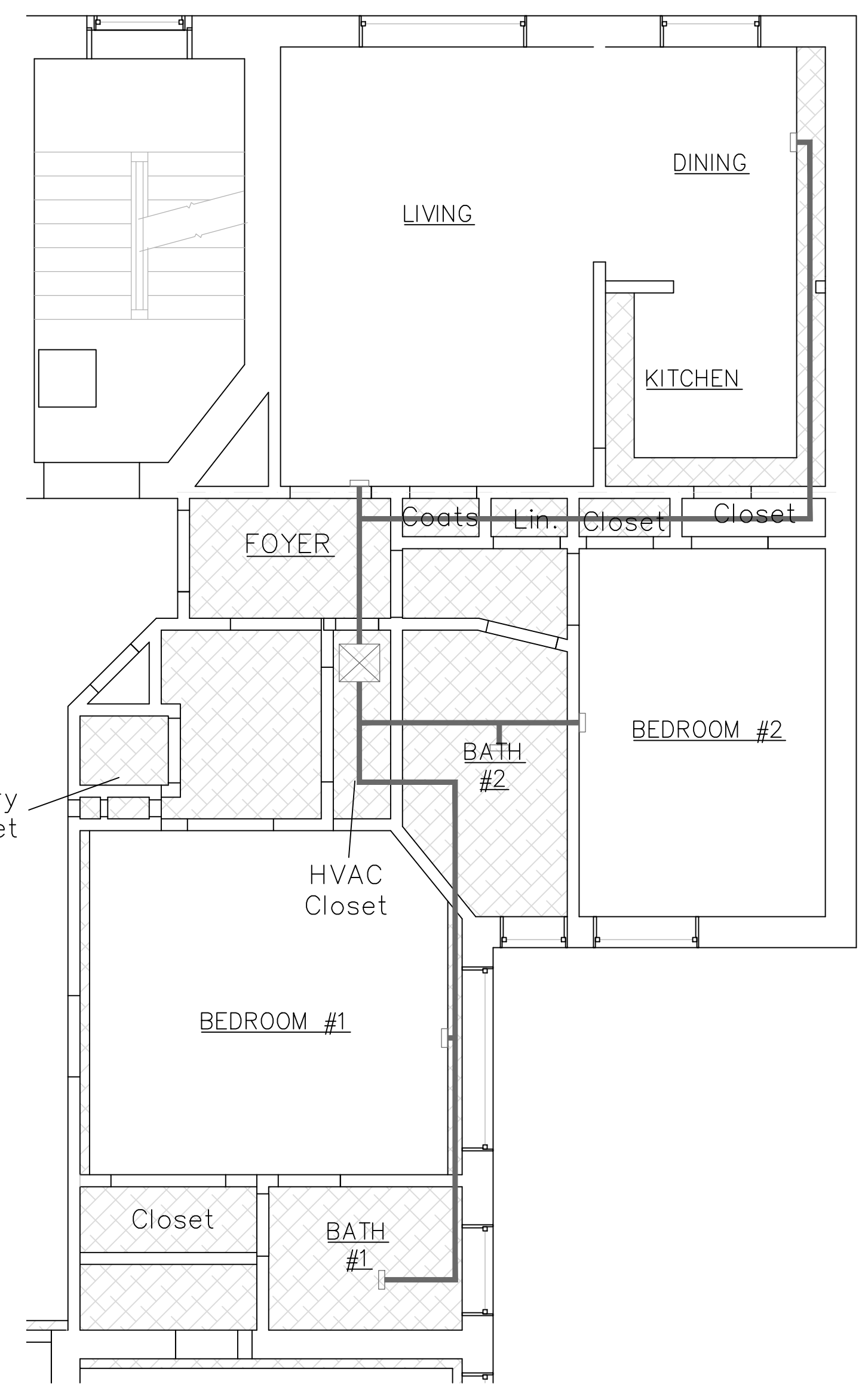
PROPOSED REFLECTED CEILING PLAN – UNIT TYPE B, 2ND, 3RD FLOORS

1/4" = 1'-0"
SIMILAR AT 1ST FLOOR



PROPOSED REFLECTED CEILING PLAN – UNIT TYPE C, 1ST, 2ND, 3RD FLOORS

1/4" = 1'-0"

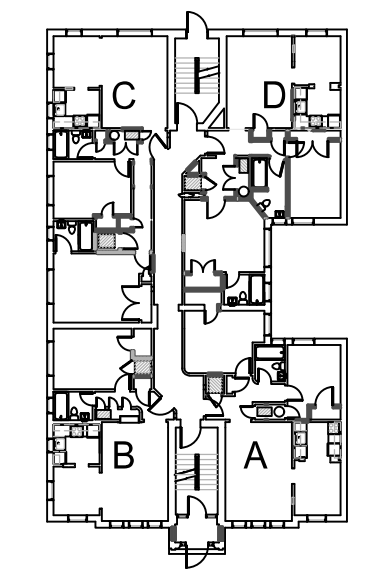


PROPOSED REFLECTED CEILING PLAN – UNIT TYPE D, 1ST, 2ND, 3RD FLOORS

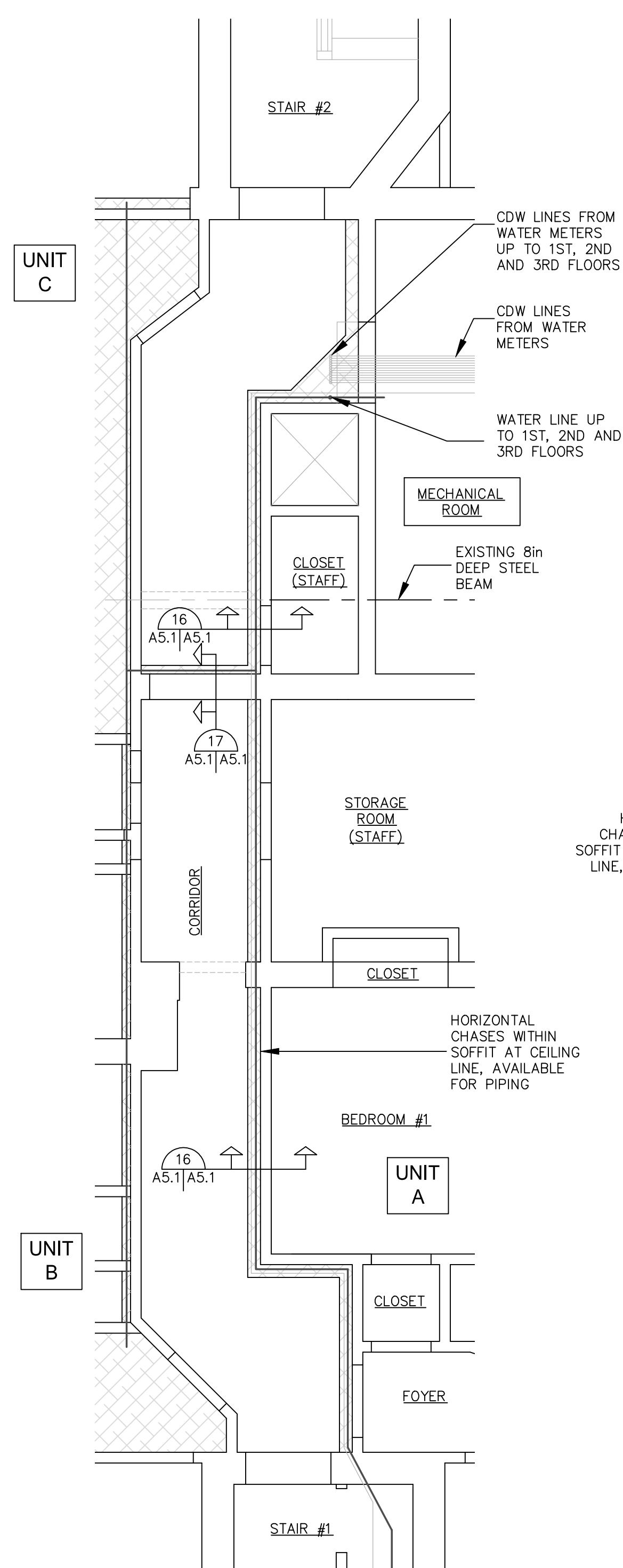
1/4" = 1'-0"

REFLECTED CEILING PLAN SYMBOLS	
	SECTION OF CEILING DROP OR SOFFIT. SOFFIT HEIGHT AS INDICATED IN SECTIONS. CEILING DROP DEPTH IS 9 INCHES TYPICAL EXCEPT WHERE NOTED OTHERWISE IN SECTIONS. TYPICAL CEILING HEIGHT ON 1ST THROUGH 3RD FLOORS IS 8'-8".

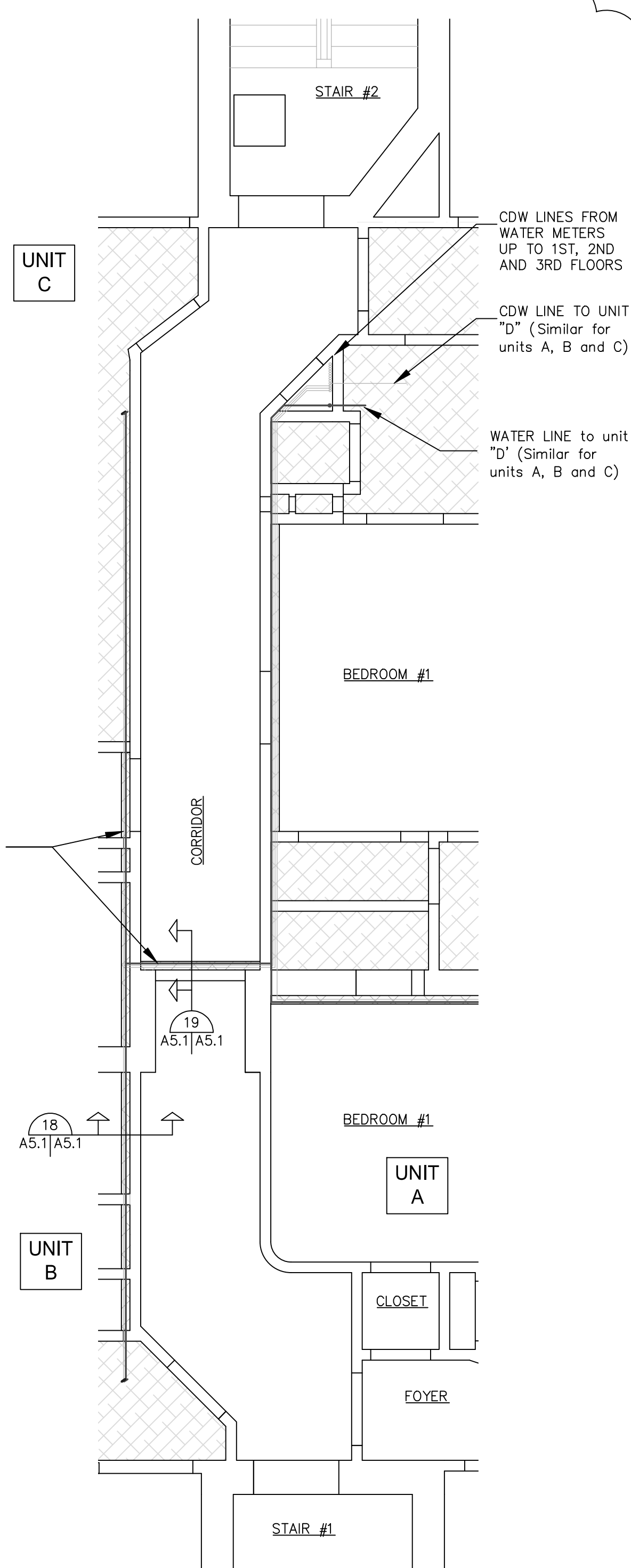
REVISIONS THIS SHEET	
	ADDED OVERLAY TO SHOW AVAILABLE DUCTWORK ROUTES WITHIN ENCLOSED HORIZONTAL SOFFIT CHASES.



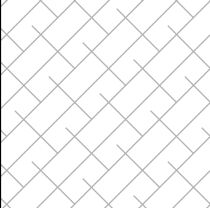

KEY PLAN
1/32" = 1'-0"




REFLECTED CEILING PLAN, AVAILABLE PIPING CHASES, BASEMENT CORRIDOR
1/4" = 1'-0"

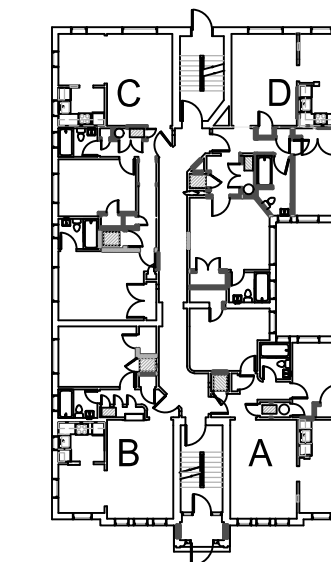


REFLECTED CEILING PLAN, AVAILABLE PIPING CHASES, 1ST, 2ND AND 3RD FLOORS
1/4" = 1'-0"

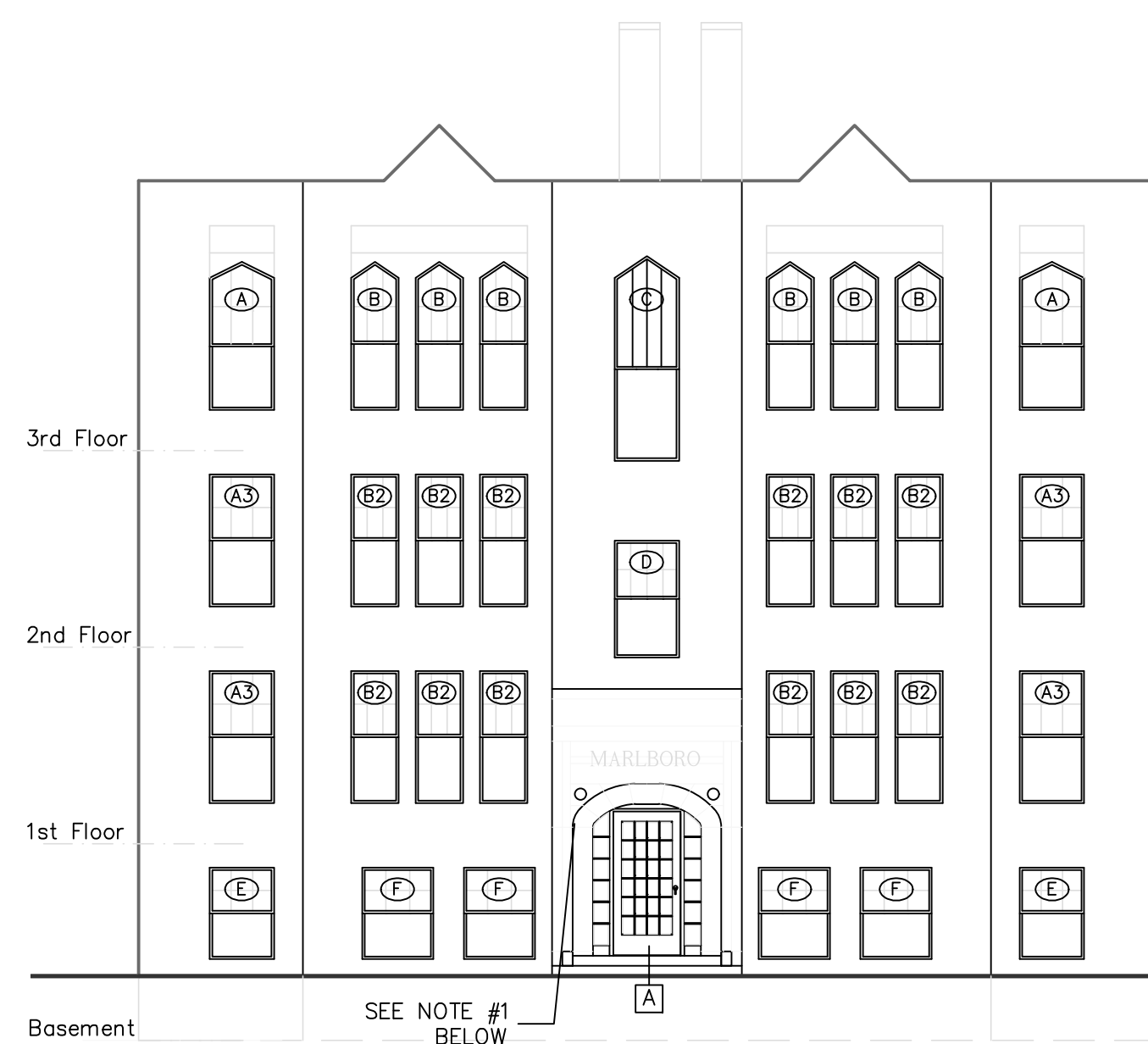
REFLECTED CEILING PLAN SYMBOLS	
	SECTION OF CEILING DROP OR SOFFIT. SOFFIT HEIGHT AS INDICATED IN SECTIONS. CEILING DROP DEPTH IS 9 INCHES TYPICAL EXCEPT WHERE NOTED OTHERWISE IN SECTIONS. TYPICAL CEILING HEIGHT ON 1ST THROUGH 3RD FLOORS IS 8'-8".
	AVAILABLE WATER PIPING ROUTE WITHIN ENCLOSED CHASES

- REFLECTED CEILING PLAN GENERAL NOTES:
1. REFER TO PLUMBING DRAWINGS FOR PIPING REQUIREMENTS.
 2. REFER TO FIRE SUPPRESSION SYSTEM DRAWINGS FOR SUPPRESSION SYSTEM REQUIREMENTS.

REVISIONS THIS SHEET
 ADDED OVERLAY OF PIPE RUNS IN SOFFITS TO SHOW AVAILABLE PIPING ROUTES WITHIN ENCLOSED HORIZONTAL CHASE.



KEY PLAN
1/32" = 1'-0"

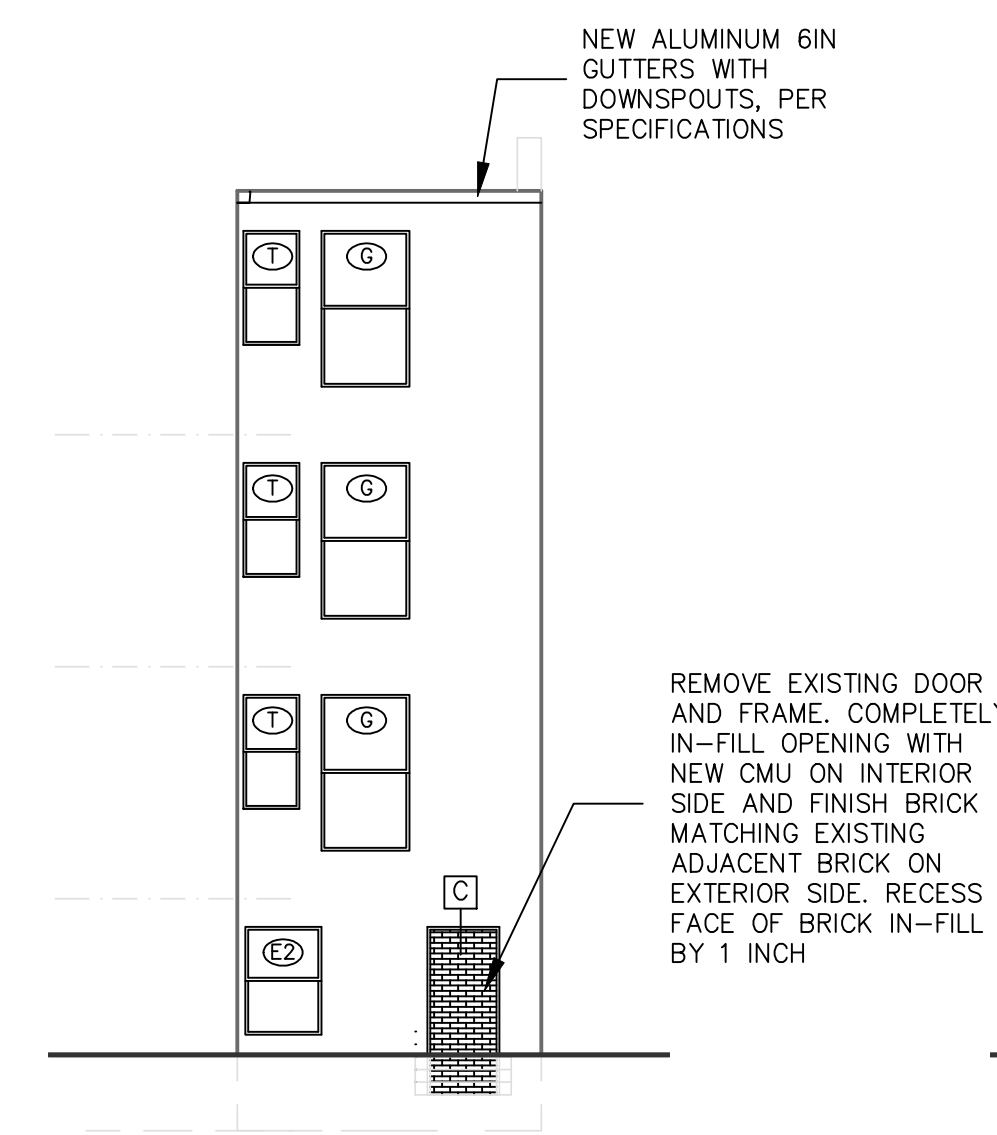


E BUILDING ELEVATION – EAST
 A1/A6 1/4" = 1'-0"

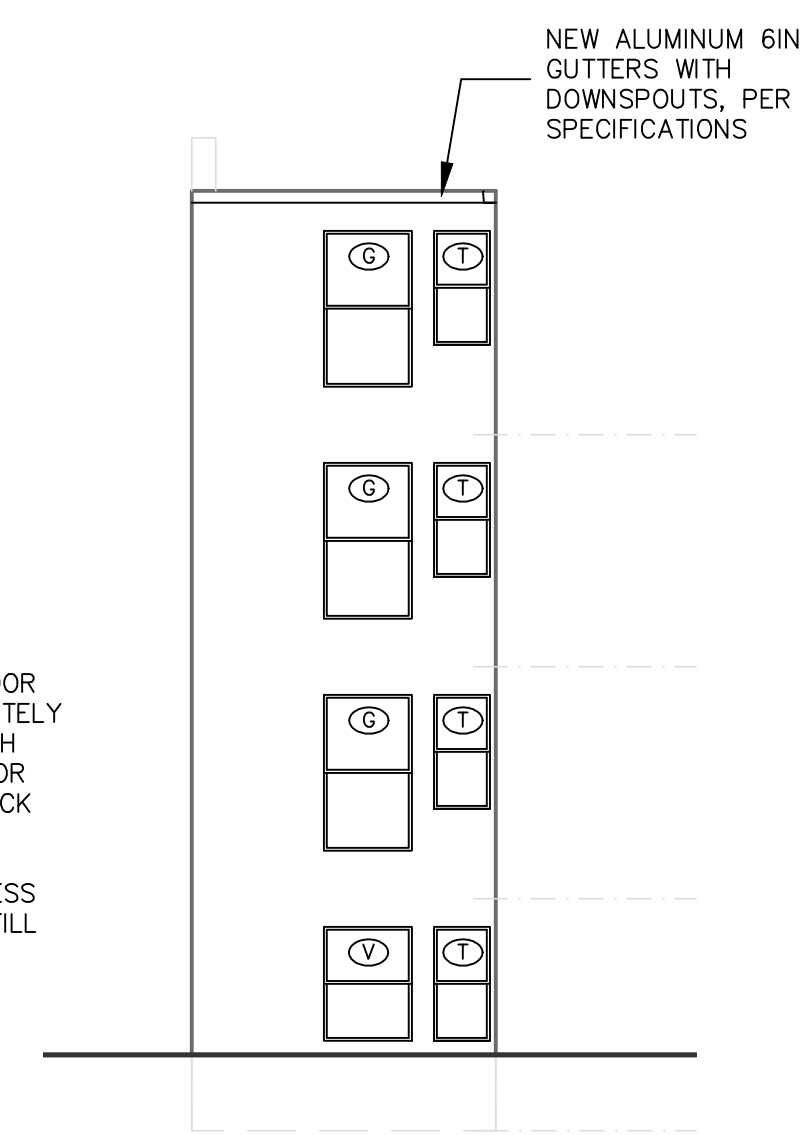
BUILDING ELEVATION – EAST, GENERAL NOTE:
 1. REMOVE EXISTING LIGHT FIXTURES AND REPLACE WITH NEW. REFER TO PRODUCTS SCHEDULE FOR FIXTURE DETAILS.



W BUILDING ELEVATION – WEST
 A1/A6 1/8" = 1'-0"



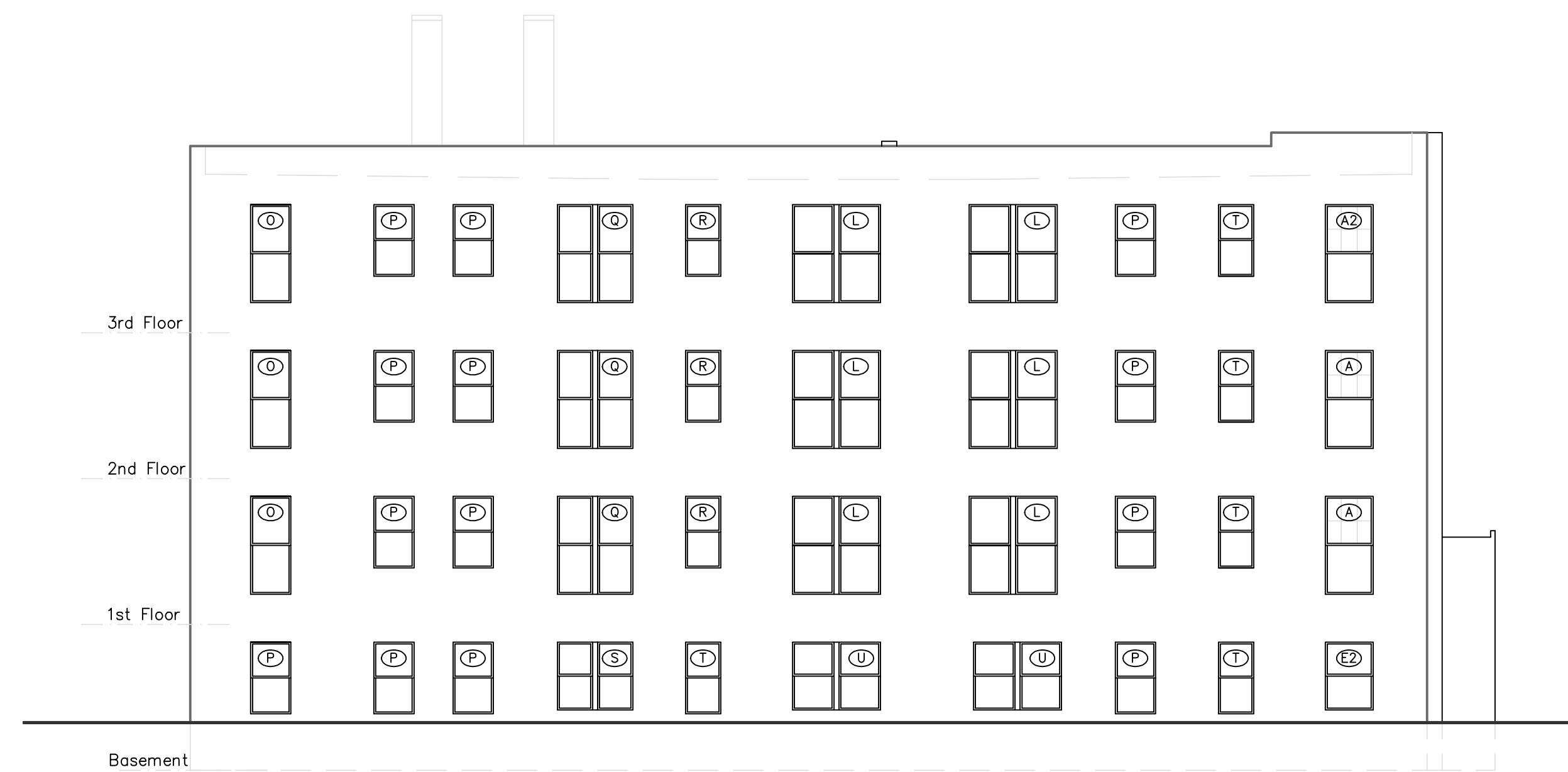
E2 BUILDING ELEVATION – EAST AT COURTYARD
 A1/A6 1/8" = 1'-0"



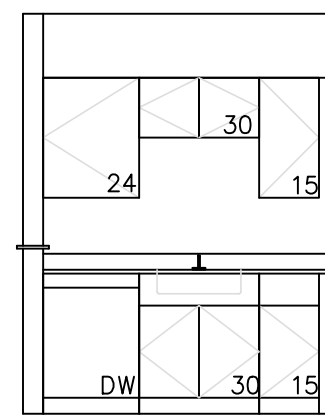
W BUILDING ELEVATION – WEST AT COURTYARD
 A1/A6 1/8" = 1'-0"



N BUILDING ELEVATION – NORTH
 A1/A6 1/4" = 1'-0"

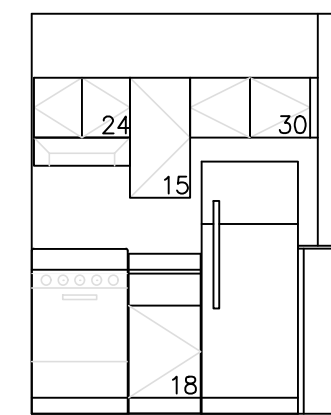


S BUILDING ELEVATION – SOUTH
 A1/A1 1/8" = 1'-0"



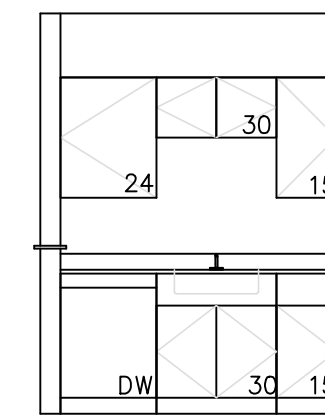
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'A',
BASEMENT

2
A4A7
1/4" = 1'-0"



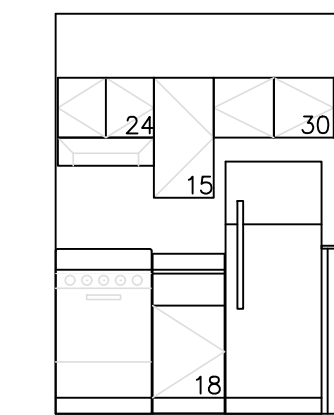
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'A',
BASEMENT

3
A4A7
1/4" = 1'-0"



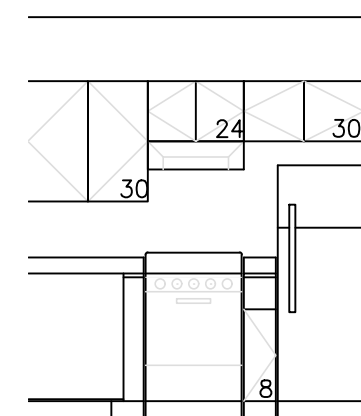
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'A', 1ST,
2ND AND 3RD FLOORS

3
A4A7
1/4" = 1'-0"



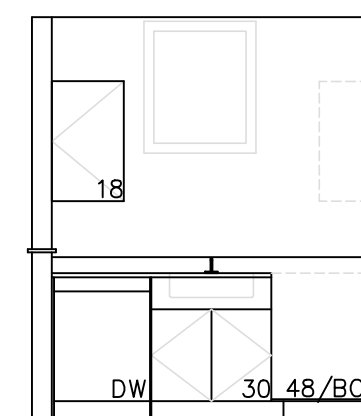
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'A', 1ST,
2ND AND 3RD FLOORS

4
A4A7
1/4" = 1'-0"



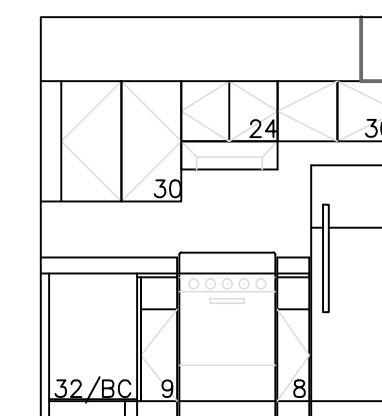
INTERIOR ELEVATION
KITCHEN, UNIT TYPE
'B', BASEMENT

5
A4A7
1/4" = 1'-0"



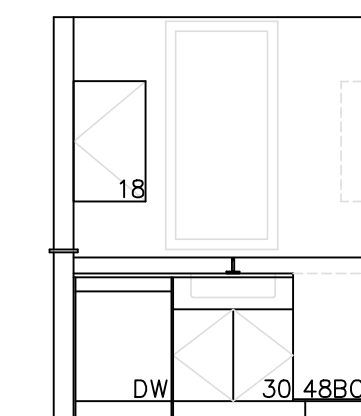
INTERIOR ELEVATION
KITCHEN, UNIT TYPE
'B', BASEMENT

6
A4A7
1/4" = 1'-0"



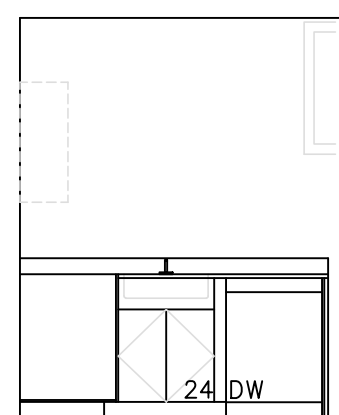
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'B', 1ST,
2ND AND 3RD FLOORS

7
A4A7
1/4" = 1'-0"



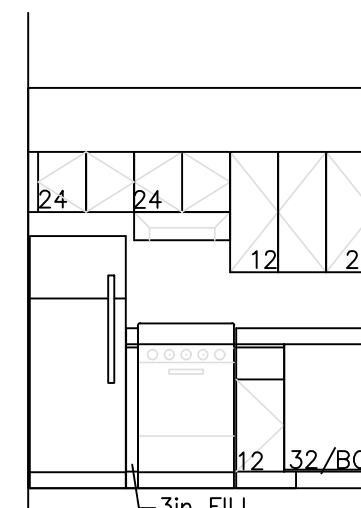
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'B', 1ST,
2ND AND 3RD FLOORS

8
A4A7
1/4" = 1'-0"



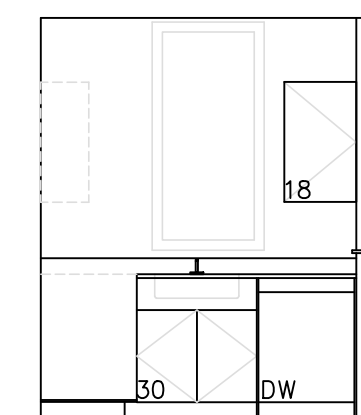
INTERIOR ELEVATION
KITCHEN, UNIT TYPE
'C', BASEMENT

9
A4A7
1/4" = 1'-0"



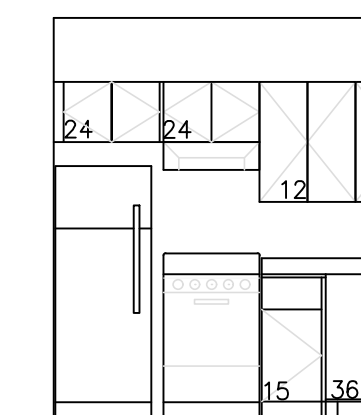
INTERIOR ELEVATION
KITCHEN, UNIT TYPE
'C', BASEMENT

10
A4A7
1/4" = 1'-0"



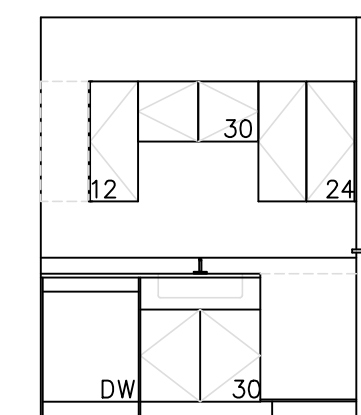
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'C', 1ST,
2ND AND 3RD FLOORS

11
A4A7
1/4" = 1'-0"



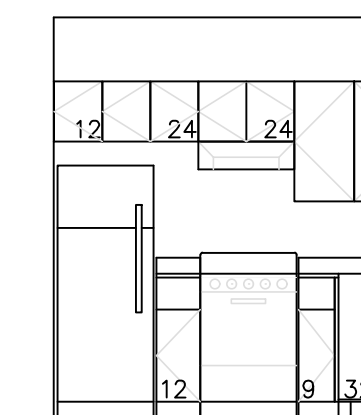
INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'C', 1ST,
2ND AND 3RD FLOORS

12
A4A7
1/4" = 1'-0"



INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'D', 1ST,
2ND AND 3RD FLOORS

13
A4A7
1/4" = 1'-0"



INTERIOR ELEVATION
KITCHEN, UNIT TYPE 'D', 1ST,
2ND AND 3RD FLOORS

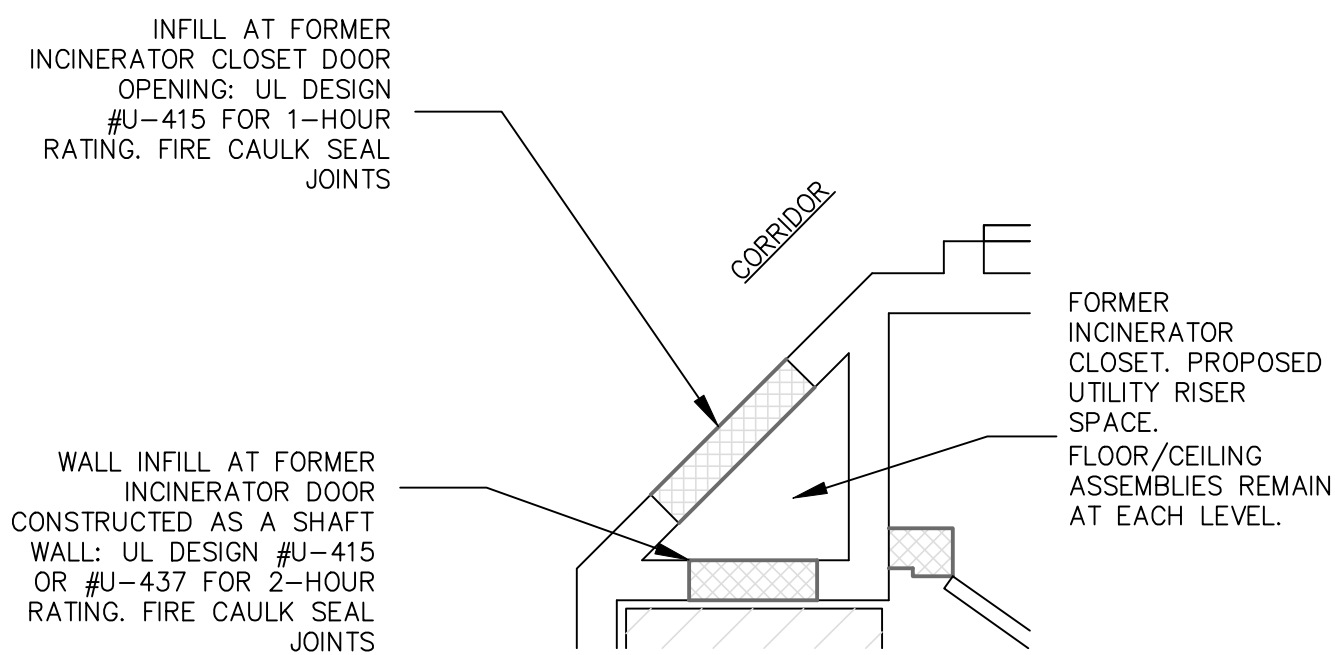
14
A4A7
1/4" = 1'-0"

ROOM FINISH SCHEDULE – COMMON AREAS

Room / Area	Finish
Corridors	
Floors - Existing	Hardwood
Floors - New	Luxury Vinyl Tile, non-adhesive over existing wood and new OSB patch
Walls - Existing	Paint on plaster
Walls - New	Paint on new gypsum board
Ceilings - Existing	Paint on plaster
Ceilings - New	Paint on new gypsum board
Ceiling Coves - New	Paint on new replicated plaster coves
Stairwells / Staircases / Landings	
Floors/Treads - Existing	Hardwood
Floors/Treads - New	Repair, refinish existing hardwood, new anti-slip tread strips
Walls - Existing	Paint on plaster
Walls - New	Paint on new gypsum board
Ceilings - Existing	Paint on plaster
Ceilings - New	Paint on new gypsum board
Front Building Vestibule	
Floors - Existing	Ceramic tile
Floors - New	Existing ceramic tile to be restored
Walls - Existing	Paint on plaster and ceramic wall tiles
Walls - New	Paint on new gypsum board, ceramic wall tile to remain
Ceilings - Existing	Paint on plaster
Ceilings - New	Paint on new gypsum board
Stairwell Handrails and Guardrails	
Handrails, Balustrade - Existing	Painted wood and stained wood
Handrails, Balustrade - New	Restore and re-stain wood, replicate missing pieces
Tenant Unit Entry Doors	
Unit Entry Doors - Existing	None existing
Unit Entry Doors - New	Wood stain on new wood
Basement storage room, former meter room and mechanical rooms	
Floors - Existing	Concrete slab on grade, unfinished
Floors - New	Concrete slab on grade, unfinished
Walls - Existing	Brick, unfinished
Walls - New	Brick, unfinished
Ceilings - Existing	Paint on plaster
Ceilings - New	Paint on new gypsum board (incl. underside of front stairs)
Doors and Frames, Non-Tenant Areas at Corridors, except stairs	
Doors and Frames - Existing	Various finishes on hardwood frames (doors missing)
Doors and Frames - New	Paint on new wood doors Alternate #1: Wood stain on new wood doors
Door and Frame, Front Bldg Vestibule Inner Door	
Door and Frame - Existing	Wood stain on wood door
Door and Frame - New	Wood stain on restored wood door
Doors and Frames, Exit Stairwells	
Doors and Frames - Existing	Paint on hollow metal
Doors and Frames - New	Paint on new hollow metal
Door, Front Building Entry	
Door - Existing	Unfinished hollow metal
Door - New	Stained hardwood, new door
Door Frame, Front Building Entry	
Door Frame - Existing	Stained hardwood (damaged)
Door Frame - New	New hardwood frame, stained

FINISH SCHEDULE NOTES

- INSTALL NEW FINISHES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- CERAMIC TILE IN MAIN FRONT VESTIBULE IS TO BE PRESERVED AND RESTORED.
- NEW FLOOR FINISHES SHALL BE CLASS I OR II RATED.



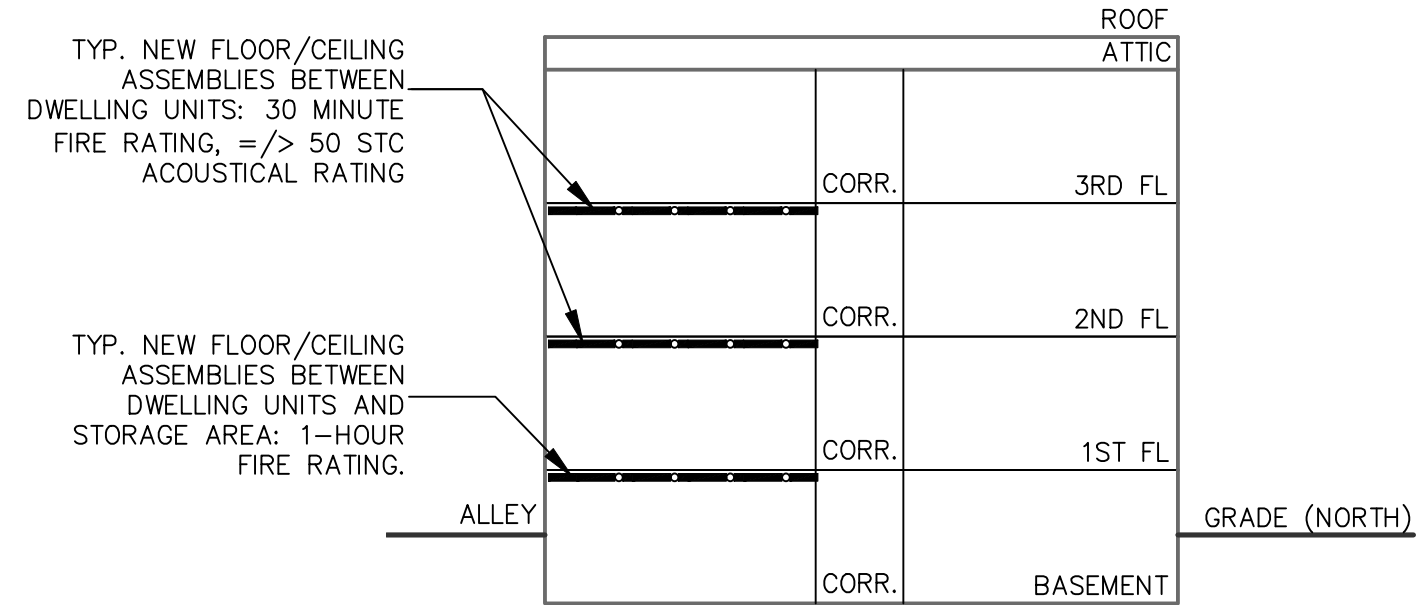
ENLARGED PLAN AT WEST VENTILATION AND PIPING RISER SPACE
1/16" = 1'-0"

ROOM FINISH SCHEDULE – APARTMENT UNITS

Room / Area	Finish
Foyers, Living Rooms, Dining Rooms, Closets except in Bedrooms, Hallways	
Floors - Existing	Hardwood
Floors - New	Luxury Vinyl Tile, non-adhesive over existing wood and new OSB patch
Walls - Existing	Paint on plaster
Walls - New	Paint on new gypsum board
Ceilings - Existing	Paint on plaster
Ceilings - New	Paint on new gypsum board
Bedrooms, Bedroom Closets	
Floors - Existing	Hardwood
Floors - New	Carpet and underlayment over existing hardwood
Kitchens	
Floors - Existing	Hardwood
Floors - New	New sheet vinyl flooring over existing hardwood
Walls - Existing	Paint on plaster
Walls - New	Paint on new gypsum board
Walls - New back/sides of stoves	Paint on new gypsum board
Ceilings - Existing	Alternate #1: Ceramic wall tile thin-set on gypsum board
Ceilings - Soffits - New	Paint on new gypsum board
Bathrooms	
Floors - Existing	Mosaic ceramic tile on mortar base
Floors - New	New sheet vinyl flooring over new underlayment Alternate #1: New ceramic floor tile Alternate #2: Restore existing fully intact ceramic floor tile
Walls - Existing, plaster areas	Paint on plaster
Walls - Existing, tile areas	Ceramic wall tile on mortar base
Walls - New, exposed wall areas	Paint on water-resistant wallboard
Walls - New at tub/showers	Composite tub/shower surround unit
Ceilings - Existing	Paint on plaster
Ceilings - New, general	Paint on water-resistant wallboard
Wall Base	
Wall Base - Existing	Various painted wood
Wall Base - New	New wood wall base, match existing, painted
Window Treatments (except bathrooms)	
Window Blinds	New aluminum horizontal blinds
Window Sills	
Window Sills - Existing	Painted wood
Window Sills - New	Solid surface material with finished edges Alternate #1: New wood matching existing, painted
Doors and Frames, Within Tenant Units	
Doors and Frames - Existing	Various finishes on wood doors (most missing) and frames
Doors and Frames - New	Paint on new replicated wood doors and frames
Miscellaneous Trim and Woodwork	
Divider Cabinets, Shelves - Existing	Various finishes on wood
Divider Cabinets, Shelves - New	Paint over existing stabilized surfaces
Picture Frame Wall Trim - Existing	Painted wood
Picture Frame Wall Trim - New	Paint over new wood trim matching existing

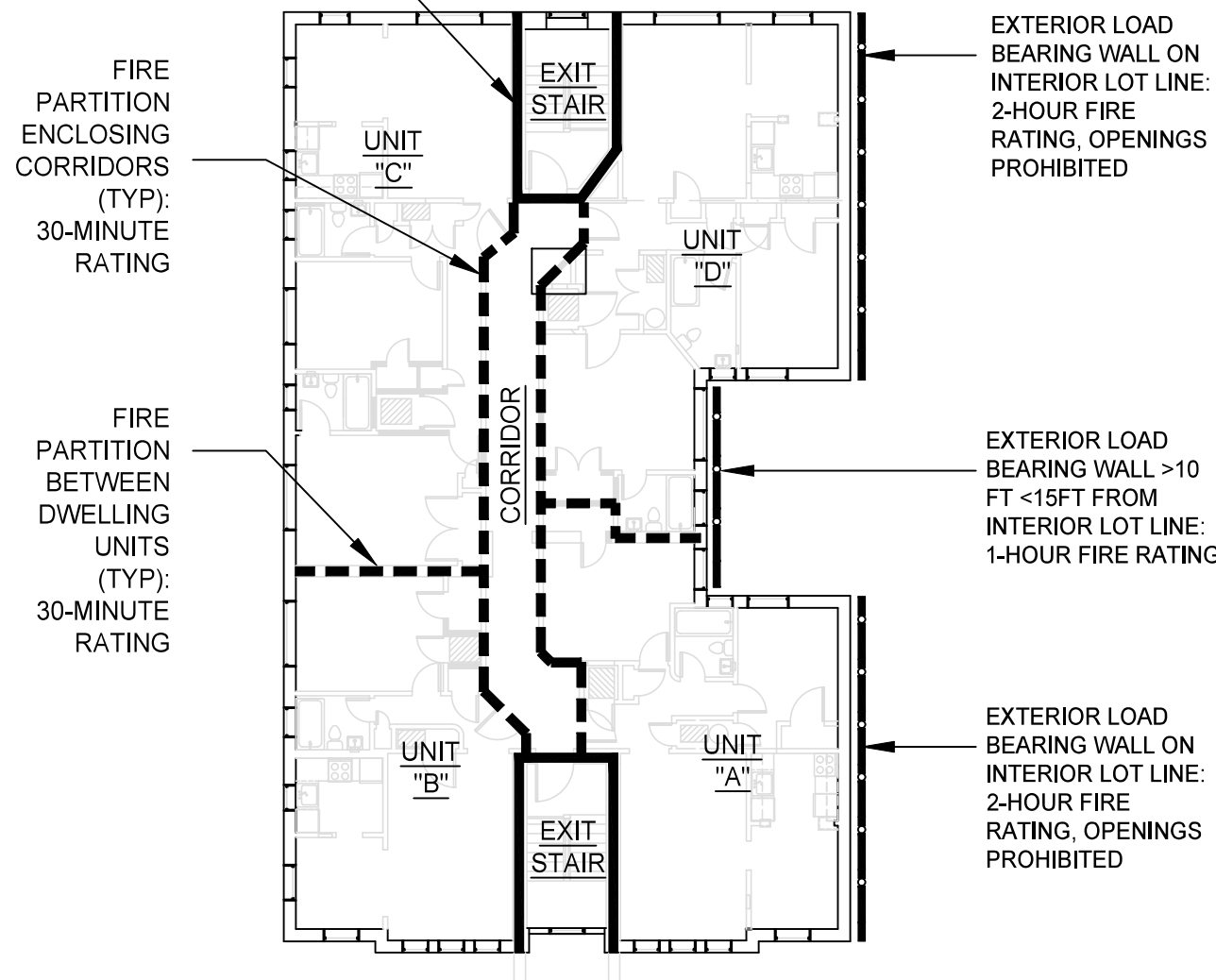
REVISIONS THIS SHEET

- ADDED WOOD WINDOW SILL ALTERNATE.

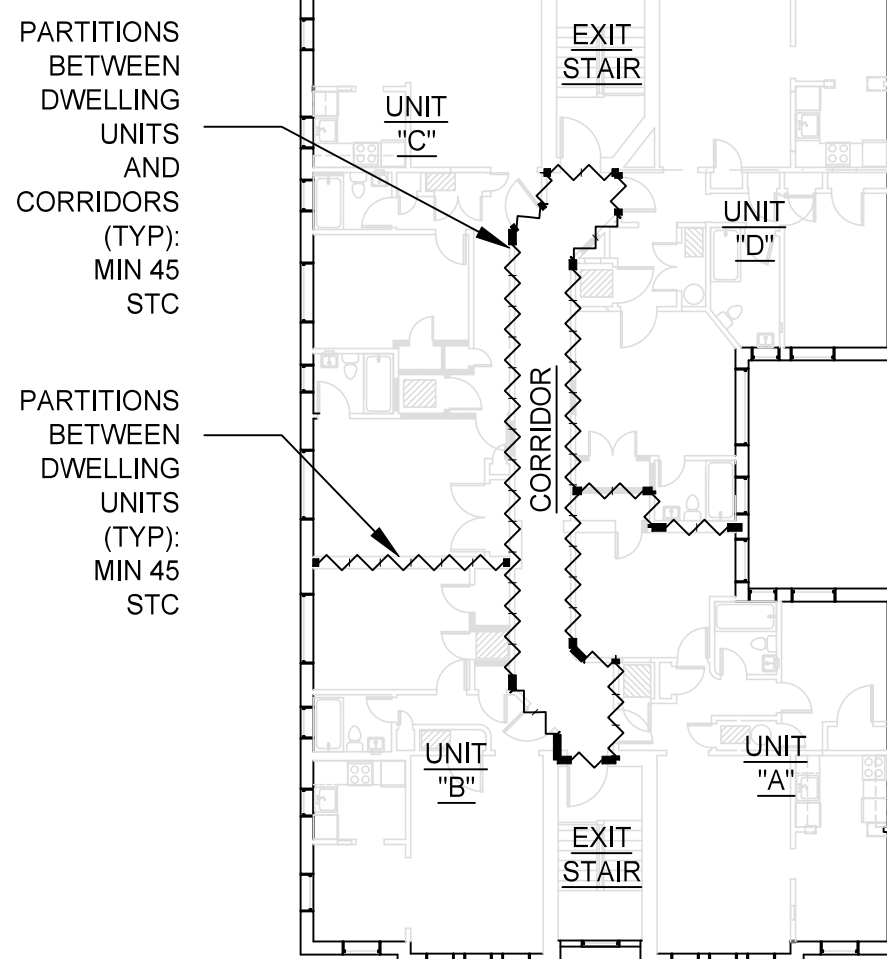


HORIZONTAL RATED SEPARATIONS KEY DIAGRAM
1/16" = 1'-0"

ENCLOSED EXIT STAIRS (TYP): 2-HOUR RATING WITH 90-MINUTE DOORS

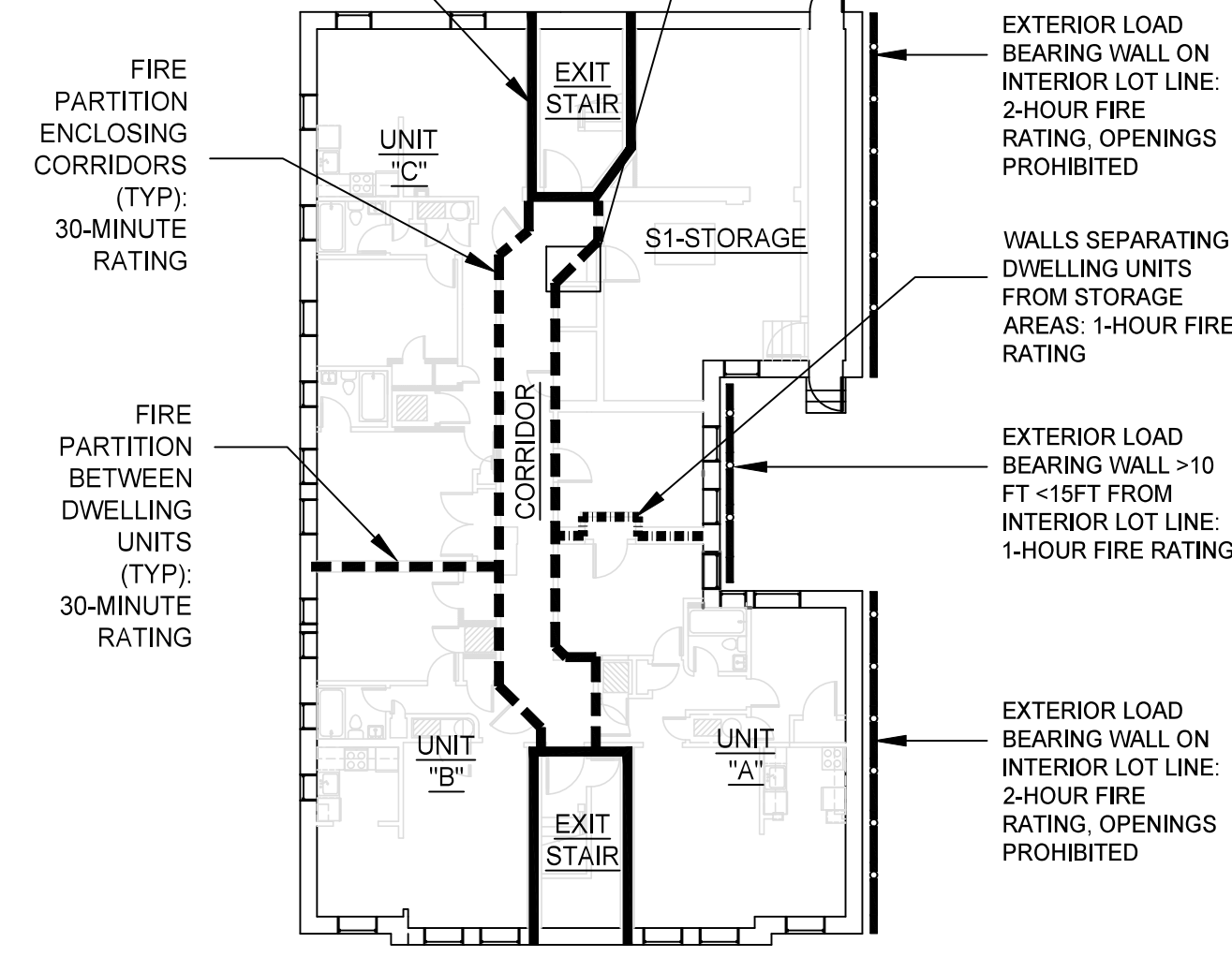


FIRE RATED SEPARATIONS KEY PLAN, TYP FOR 1ST, 2ND AND 3RD FLOORS
1/16" = 1'-0"
NOTE: VERTICAL SEPARATIONS SHOWN

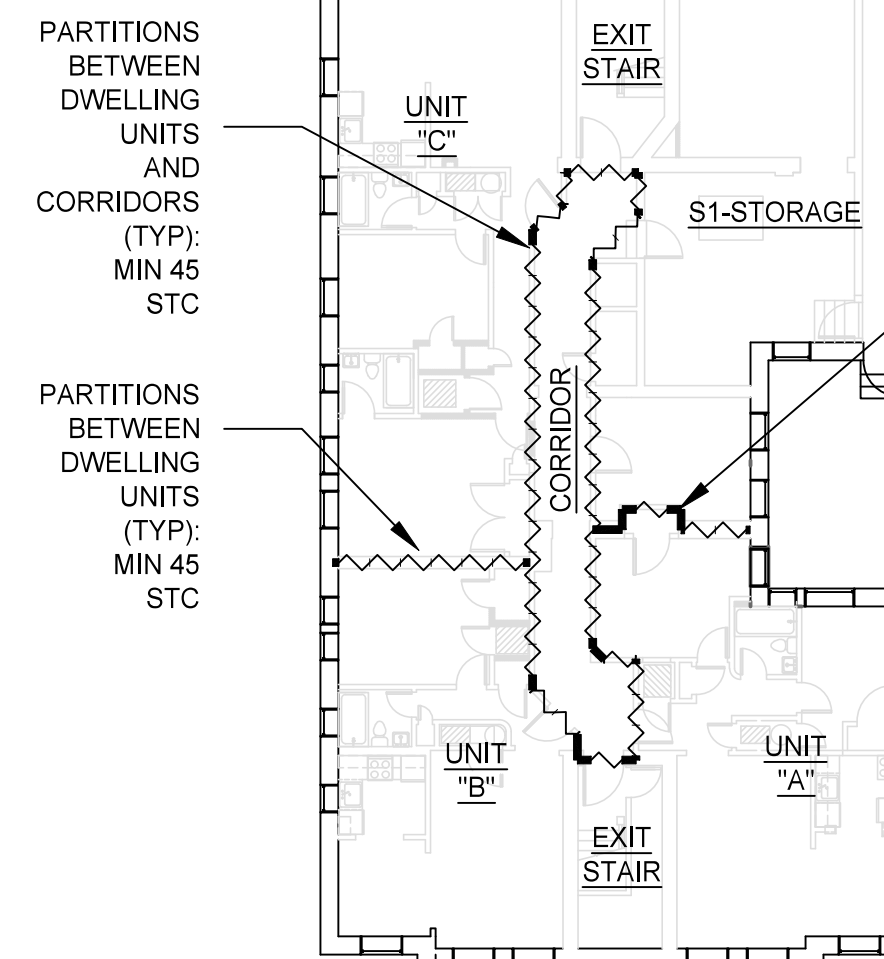


STC* RATED SEPARATIONS KEY PLAN, TYP FOR 1ST, 2ND AND 3RD FLOORS
1/16" = 1'-0"
NOTES:
1. VERTICAL SEPARATIONS SHOWN
2. STC = SOUND TRANSMISSION COEFFICIENT
3. WORK CANNOT REDUCE EXISTING STC RATINGS BELOW CODE REQUIREMENT FOR NEW.

ENCLOSED EXIT STAIRS (TYP): 2-HOUR RATING WITH 90-MINUTE DOORS



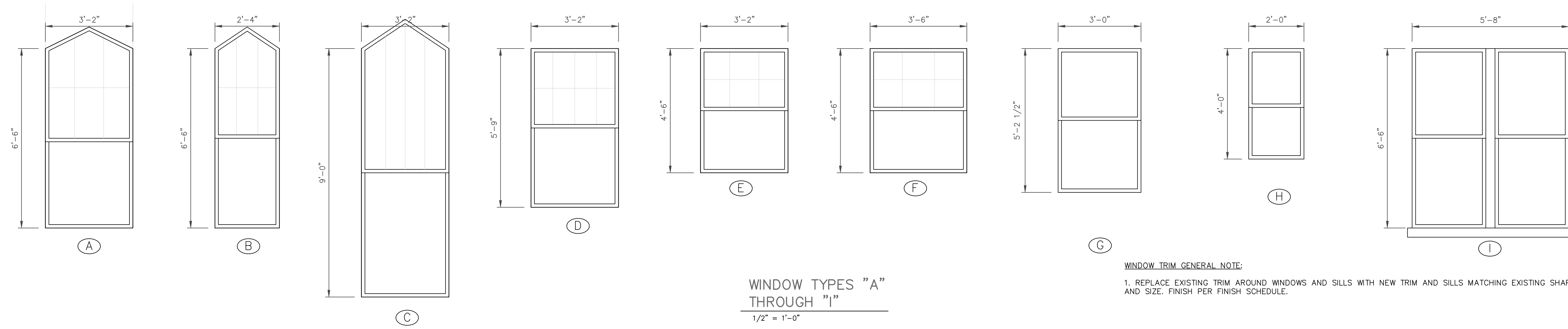
FIRE RATED SEPARATIONS KEY PLAN, BASEMENT
1/16" = 1'-0"
NOTE: VERTICAL SEPARATIONS SHOWN



STC* RATED SEPARATIONS KEY PLAN, BASEMENT
1/16" = 1'-0"
NOTES:
1. VERTICAL SEPARATIONS SHOWN
2. STC = SOUND TRANSMISSION COEFFICIENT
3. WORK CANNOT REDUCE EXISTING STC RATINGS BELOW CODE REQUIREMENT FOR NEW.

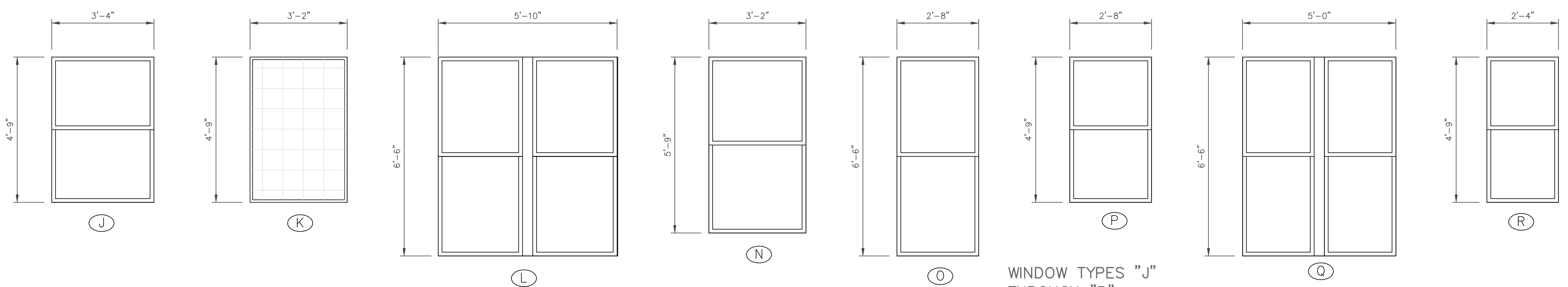
PLAN AND DIAGRAM SYMBOLS

--- (dashed line)	30-MINUTE RATED FIRE PARTITION
..... (dotted line)	1-HOUR RATED FIRE PARTITION
— (solid line)	2-HOUR RATED FIRE BARRIER
— (solid line with dots)	FLOOR/CEILING ASSEMBLY WITH FIRE RATING AND STC RATINGS AS NOTED
~ (wavy line)	STC RATED PARTITION

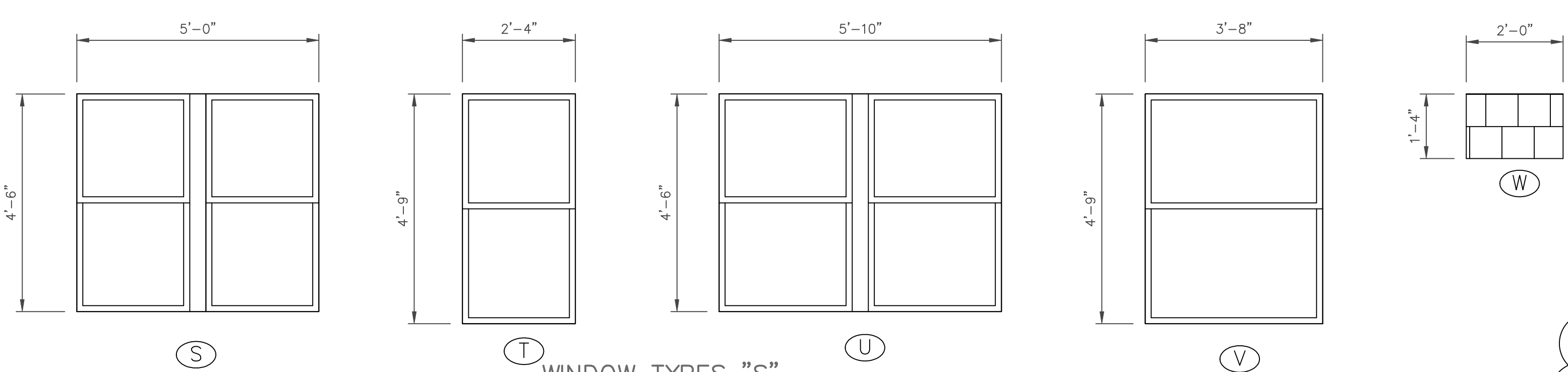


WINDOW TYPES "A" THROUGH "I"
1/2" = 1'-0"

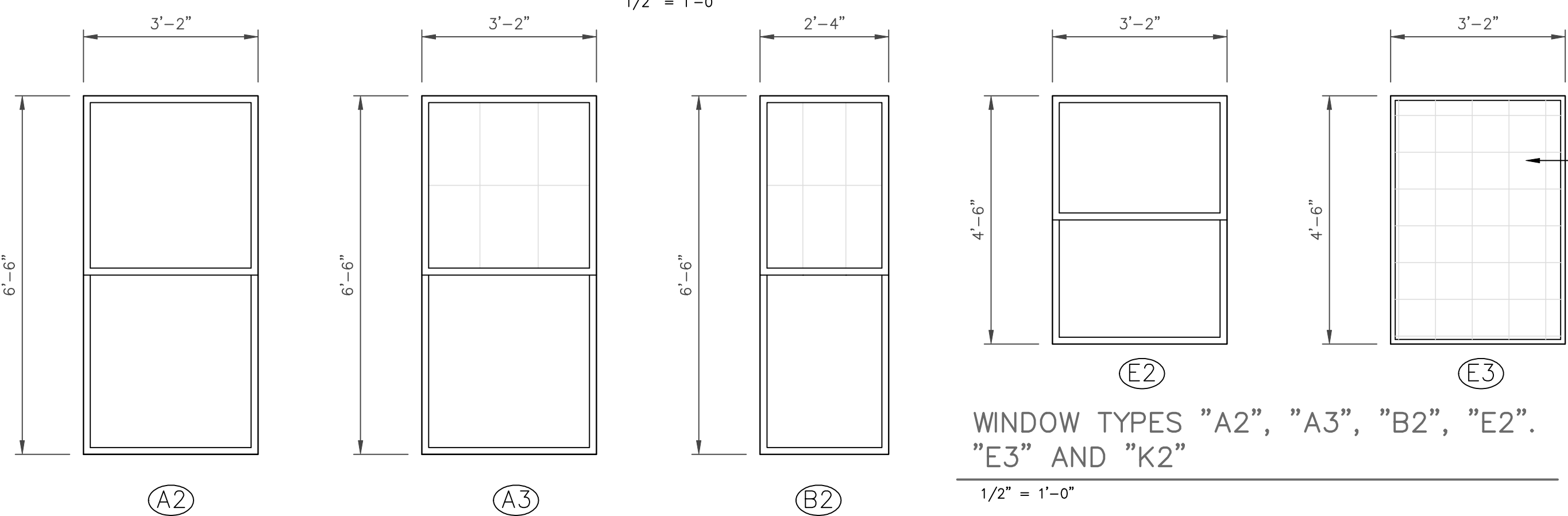
WINDOW TRIM GENERAL NOTE:
1. REPLACE EXISTING TRIM AROUND WINDOWS AND SILLS WITH NEW TRIM AND SILLS MATCHING EXISTING SHAPE, PROFILE AND SIZE. FINISH PER FINISH SCHEDULE.



WINDOW TYPES "J" THROUGH "R"
1/2" = 1'-0"



WINDOW TYPES "S" THROUGH "W"
1/2" = 1'-0"

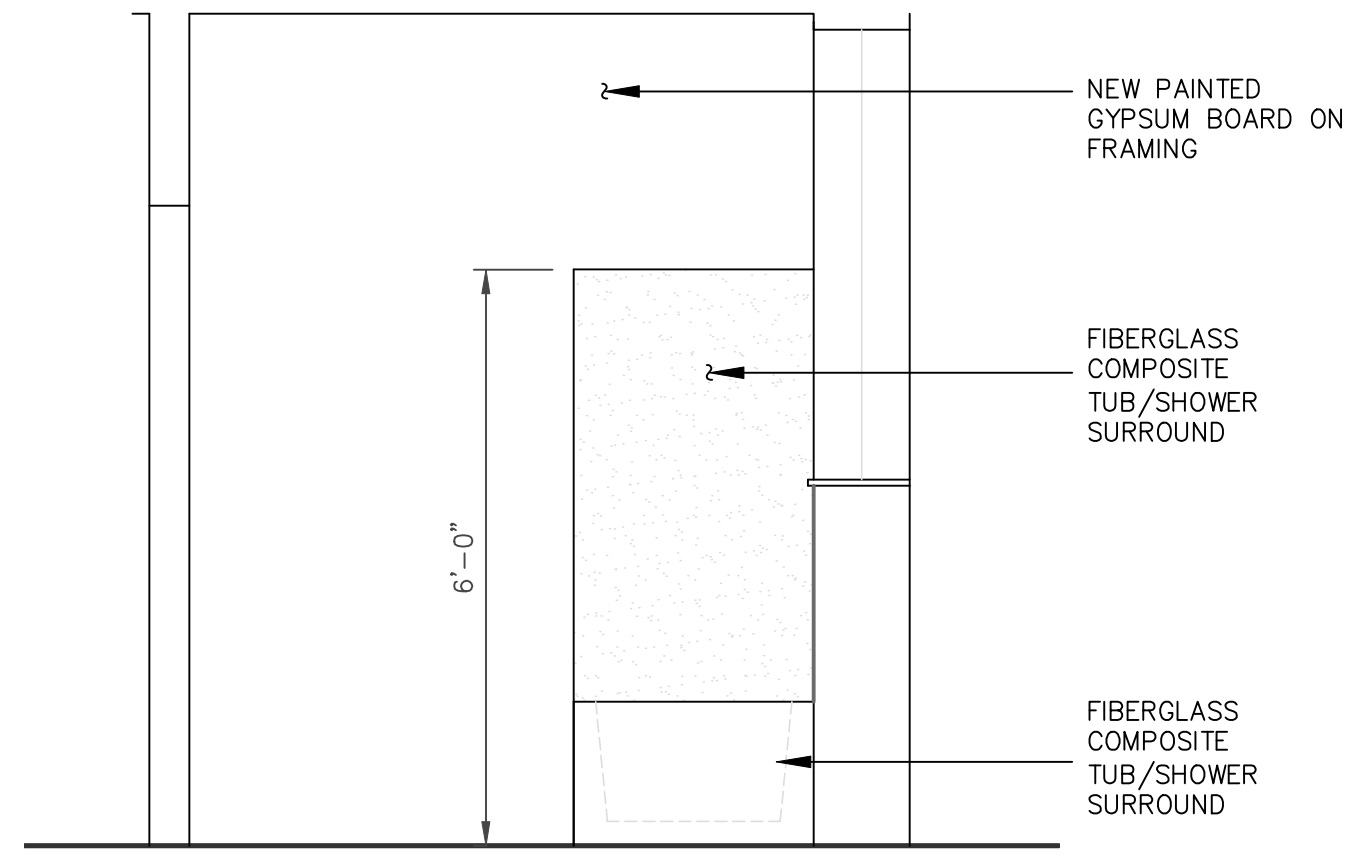


WINDOW TYPES "A2", "A3", "B2", "E2", "E3" AND "K2"
1/2" = 1'-0"

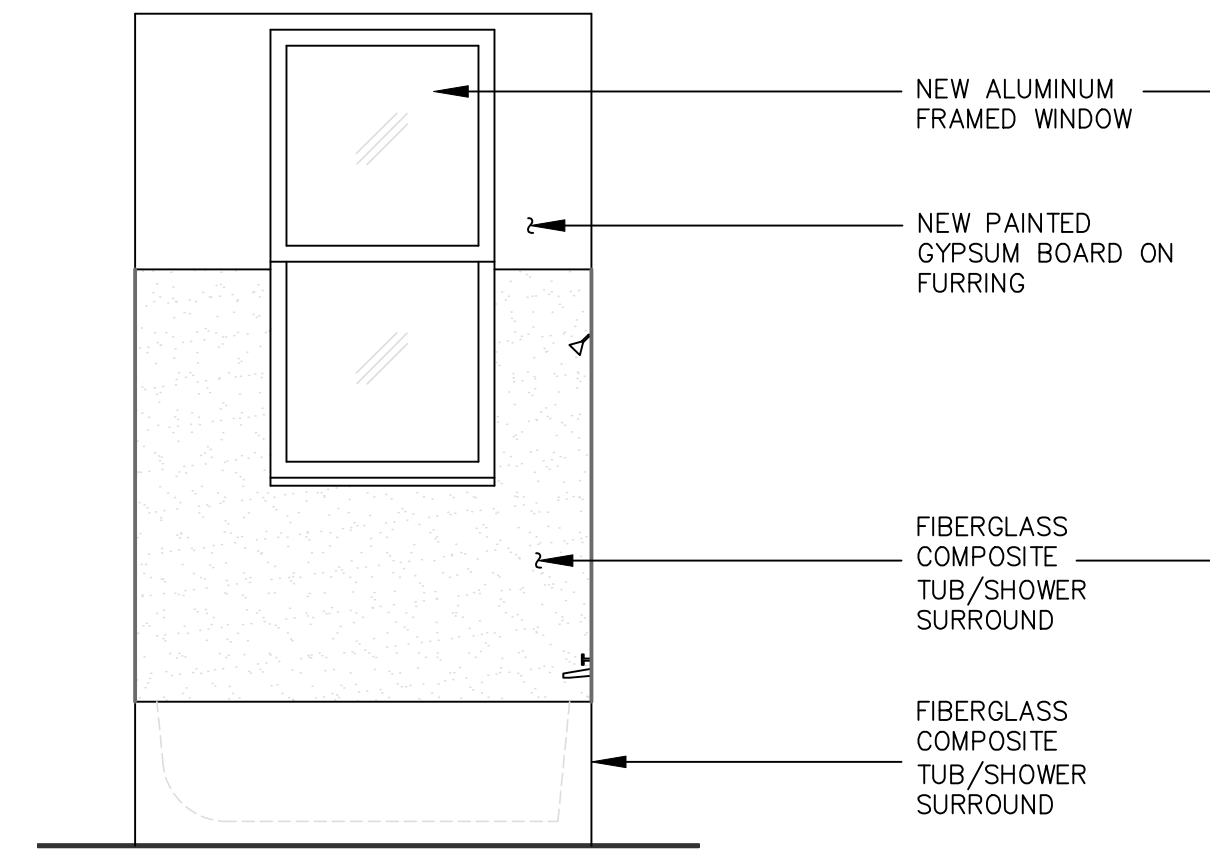
REVISIONS THIS SHEET
1. REMOVED EXTERIOR DOOR TYPE "B" ELEVATION VIEW FROM DRAWING. SEE SHEET A.9 FOR DOOR TYPES.

WINDOW TYPE	ELEVATION				EAST (Courtyard)	WEST (Courtyard)	QUANTITIES
	EAST	SOUTH	WEST	NORTH			
A	2						2
A2			6				6
A3	4	3					7
B	6						6
B2	12						12
C	n/a						0
D	1						1
E	2						2
E2		1	3		1		5
E3				1			1
F	4						4
G				3	3	3	9
H				3			3
I				3			3
J				1			1
K				1			1
L		6	6				12
M							0
N			2				2
O		3					3
P		13					13
Q		3					3
R		3					3
S		1					1
T		5			3	4	12
U		2					2
V					1		1
W			1				1
TOTAL	31	40	18	12	8	7	116

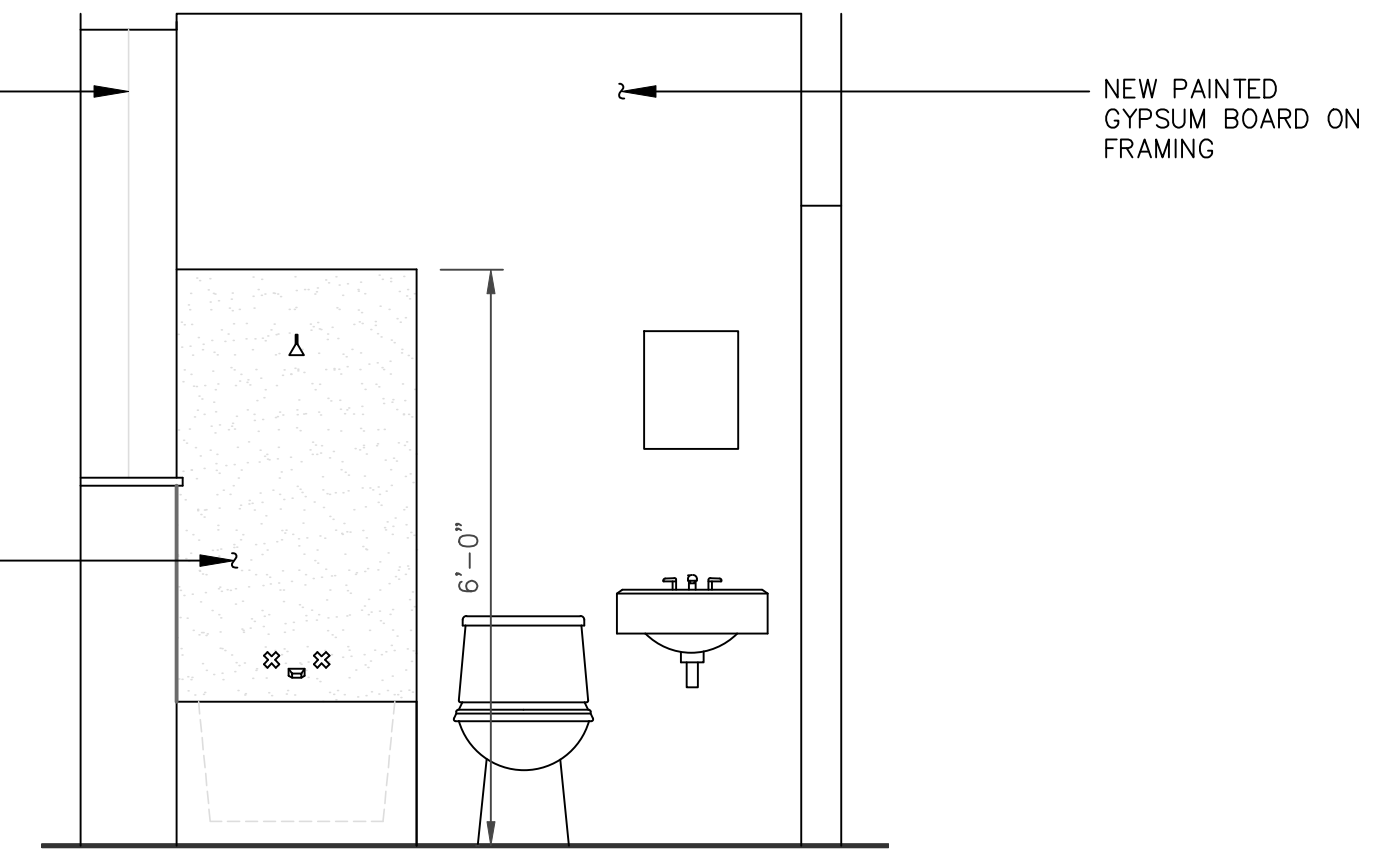
WINDOW SCHEDULE NOTES:
1. Field verify window opening sizes and conditions.
2. All new operable windows shall be constructed with insulated glazing with a maximum unit U value of 0.33.
3. Obscured glazing at all toilet rooms and bathrooms.



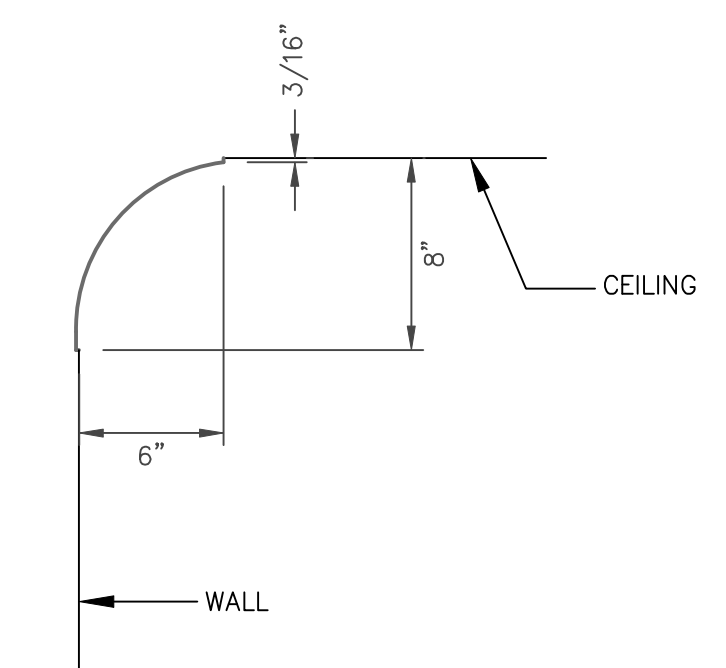
25
1/2" = 1'-0"
TYPICAL PROPOSED BATHROOM
INTERIOR ELEVATION, TUB FOOT WALL



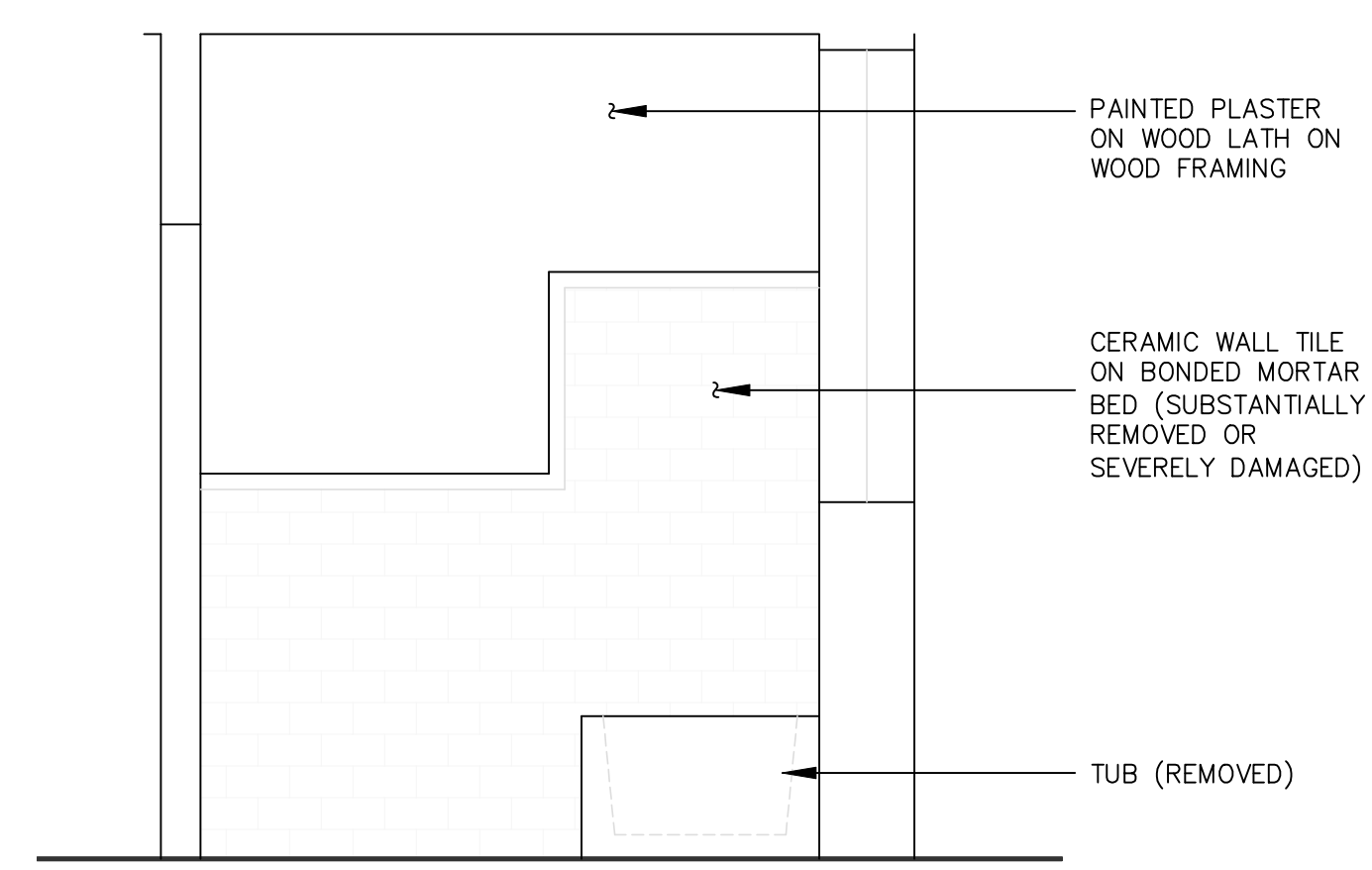
27
1/2" = 1'-0"
TYPICAL PROPOSED BATHROOM
INTERIOR ELEVATION, TUB WALL



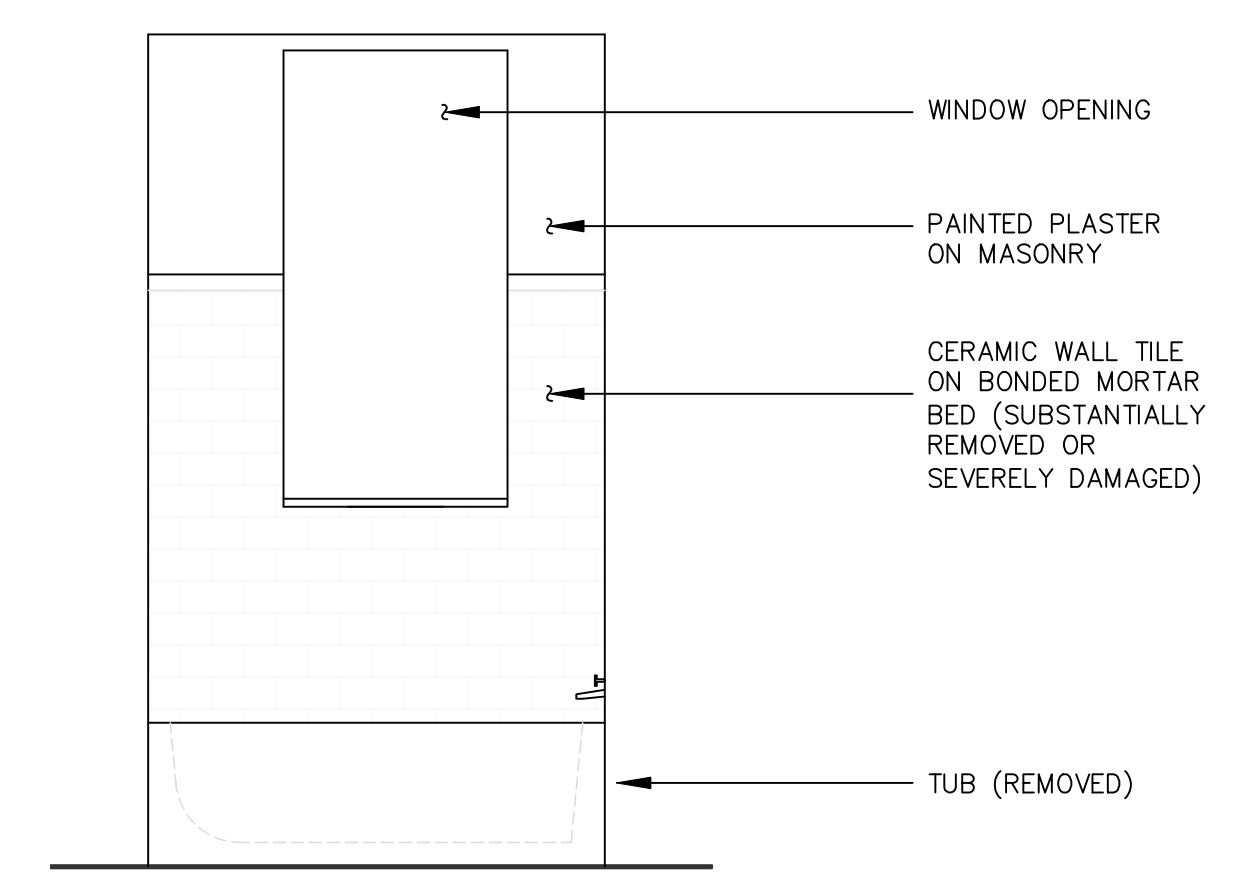
29
1/2" = 1'-0"
TYPICAL PROPOSED BATHROOM INTERIOR
ELEVATION, TOILET/SINK WALL



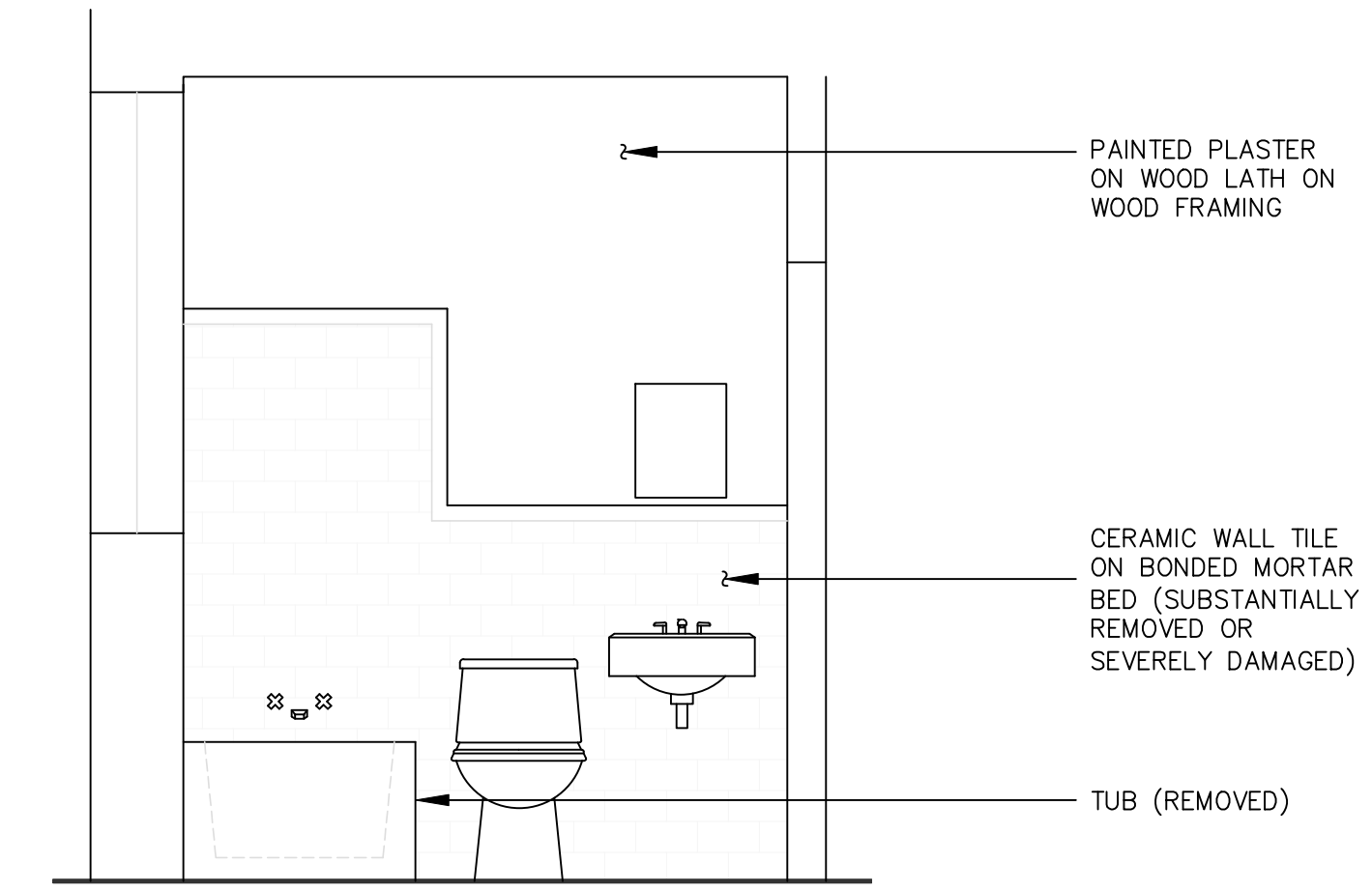
31
1" = 1'-0"
SIDE VIEW OF TYPICAL COVE AT
WALL/CEILING INTERSECTION



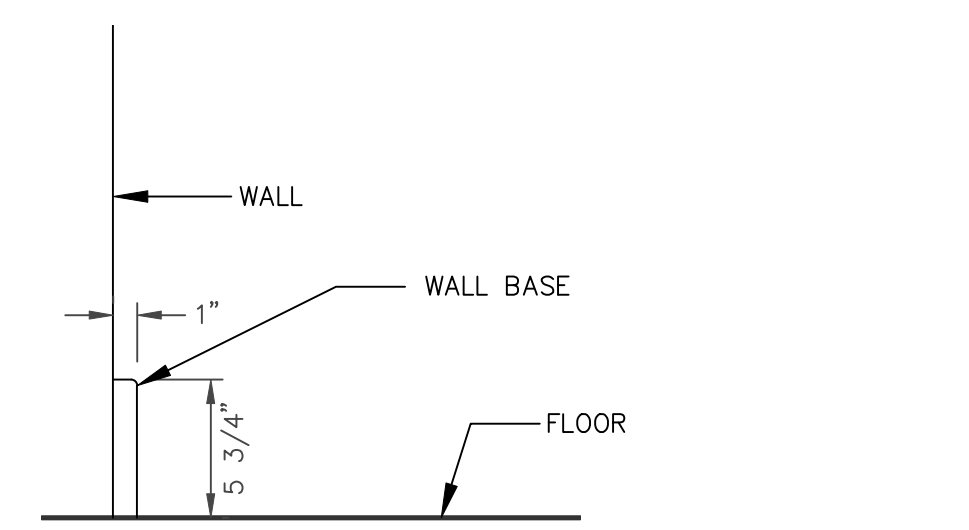
24
1/2" = 1'-0"
TYPICAL EXISTING BATHROOM
INTERIOR ELEVATION, TUB FOOT WALL



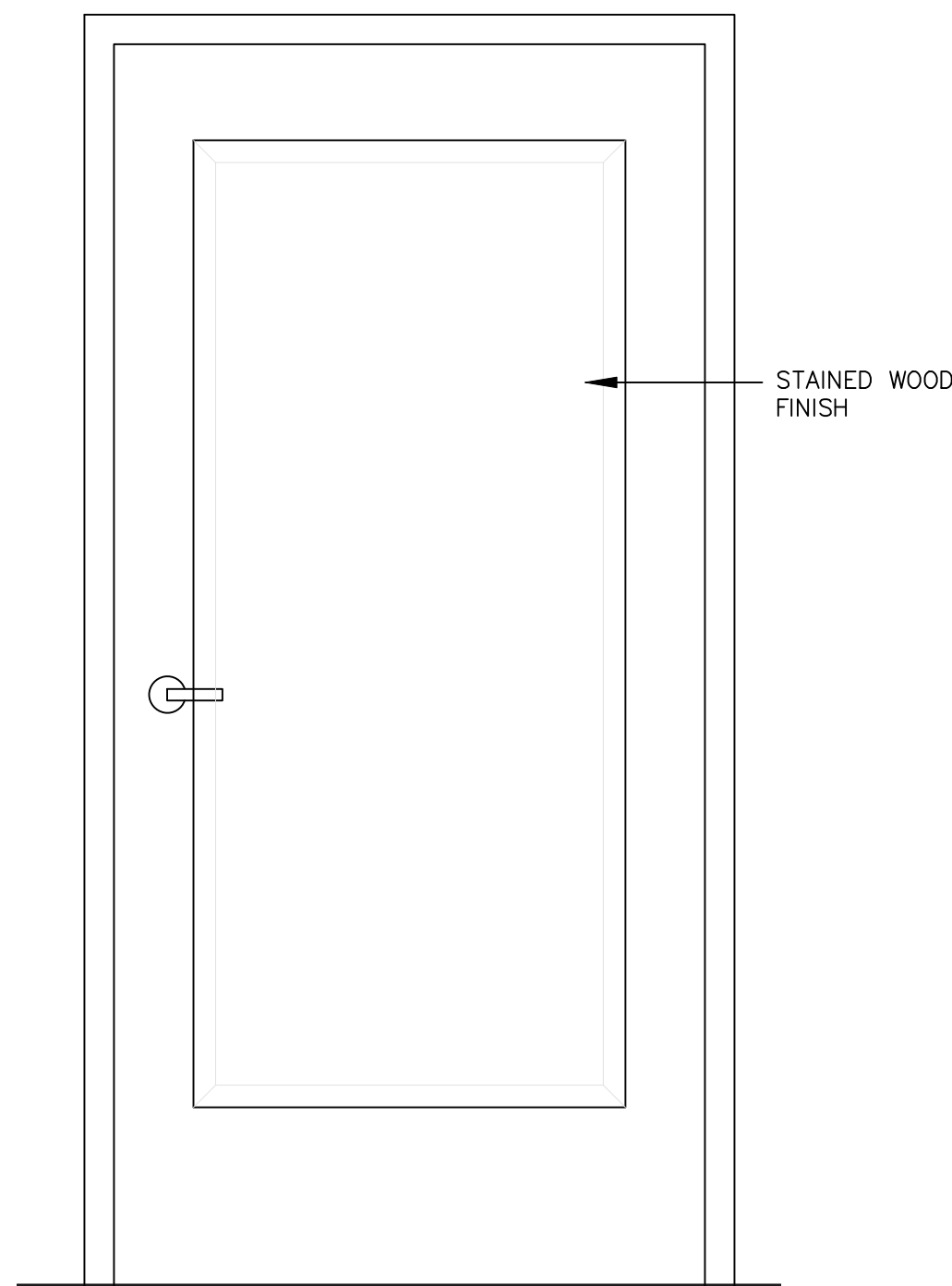
26
1/2" = 1'-0"
TYPICAL EXISTING BATHROOM
INTERIOR ELEVATION, TUB WALL



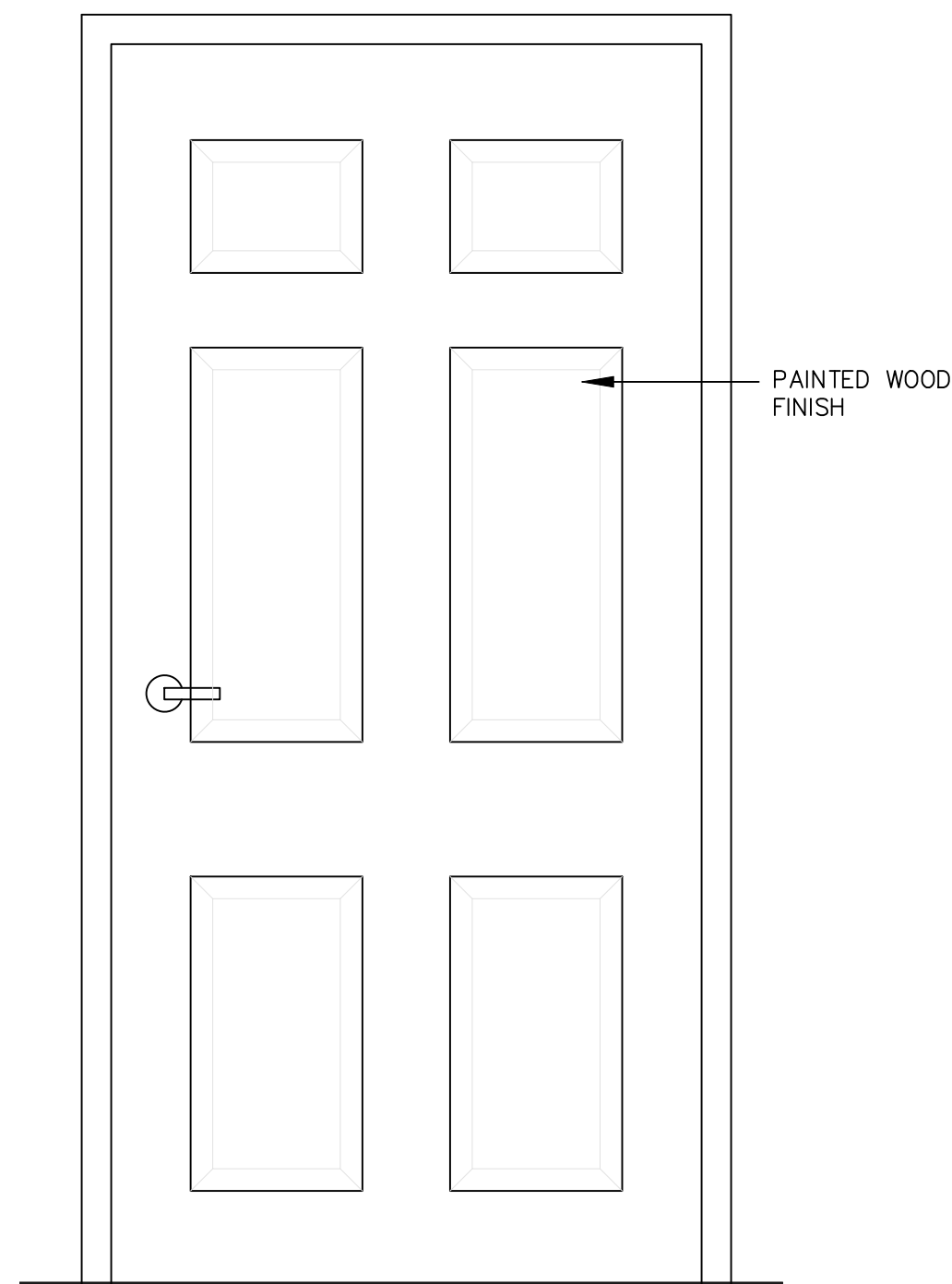
28
1/2" = 1'-0"
TYPICAL EXISTING BATHROOM
INTERIOR ELEVATION, TOILET WALL



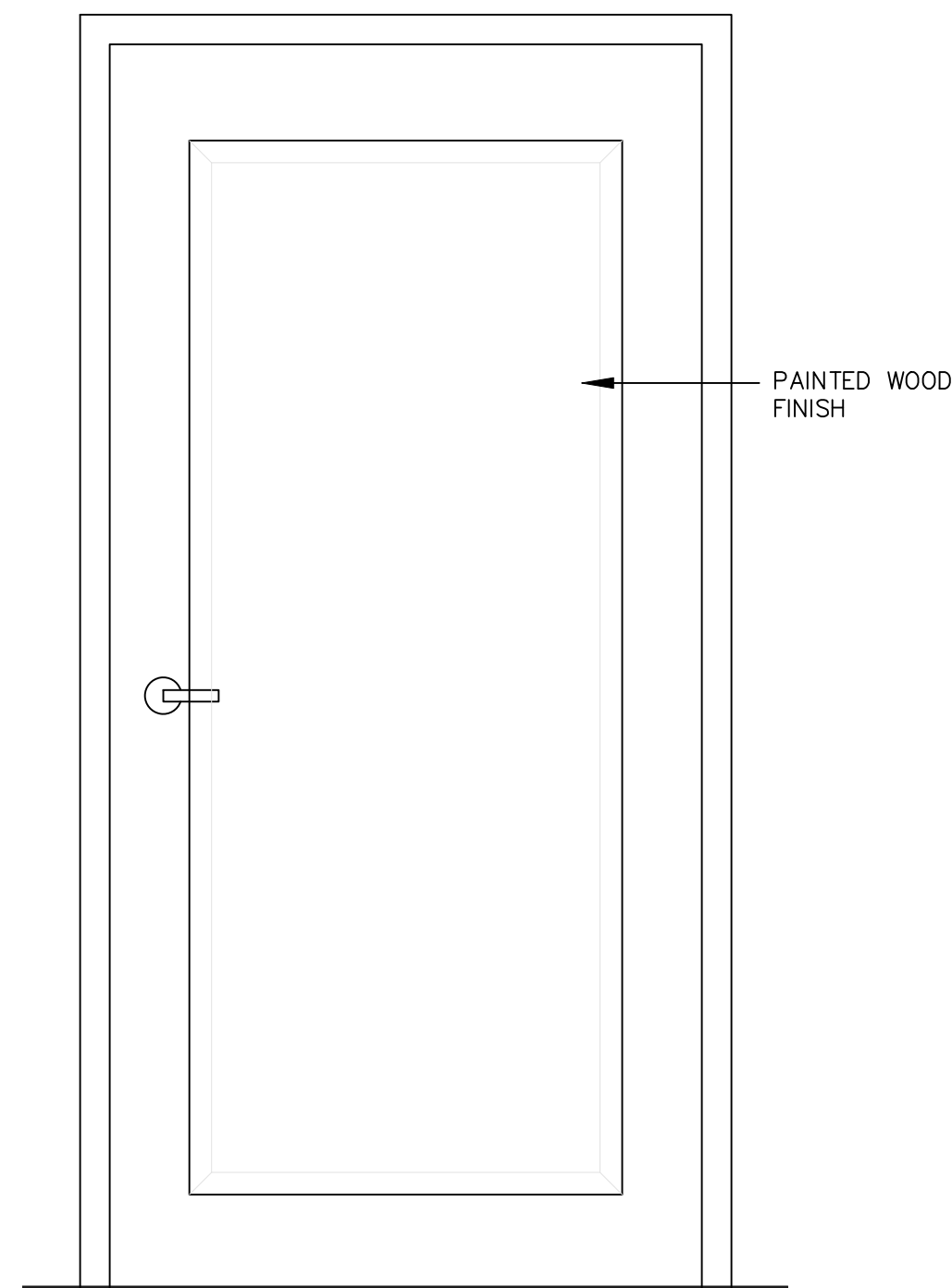
30
1" = 1'-0"
SIDE VIEW OF TYPICAL WALL
BASE



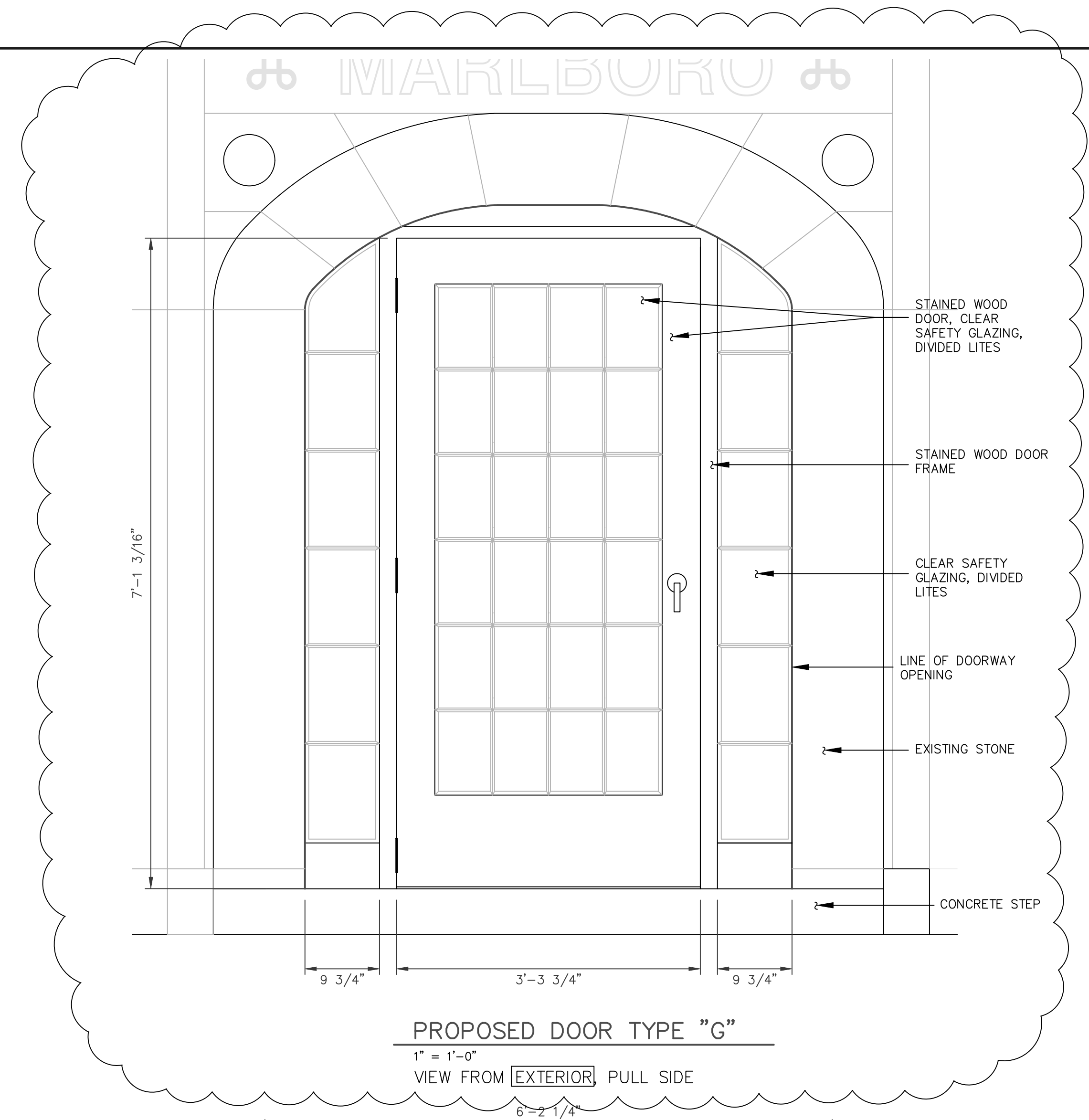
PROPOSED DOOR TYPE "A"
 1" = 1'-0"
 USE EXISTING DOOR PROFILES AND DIMENSIONS



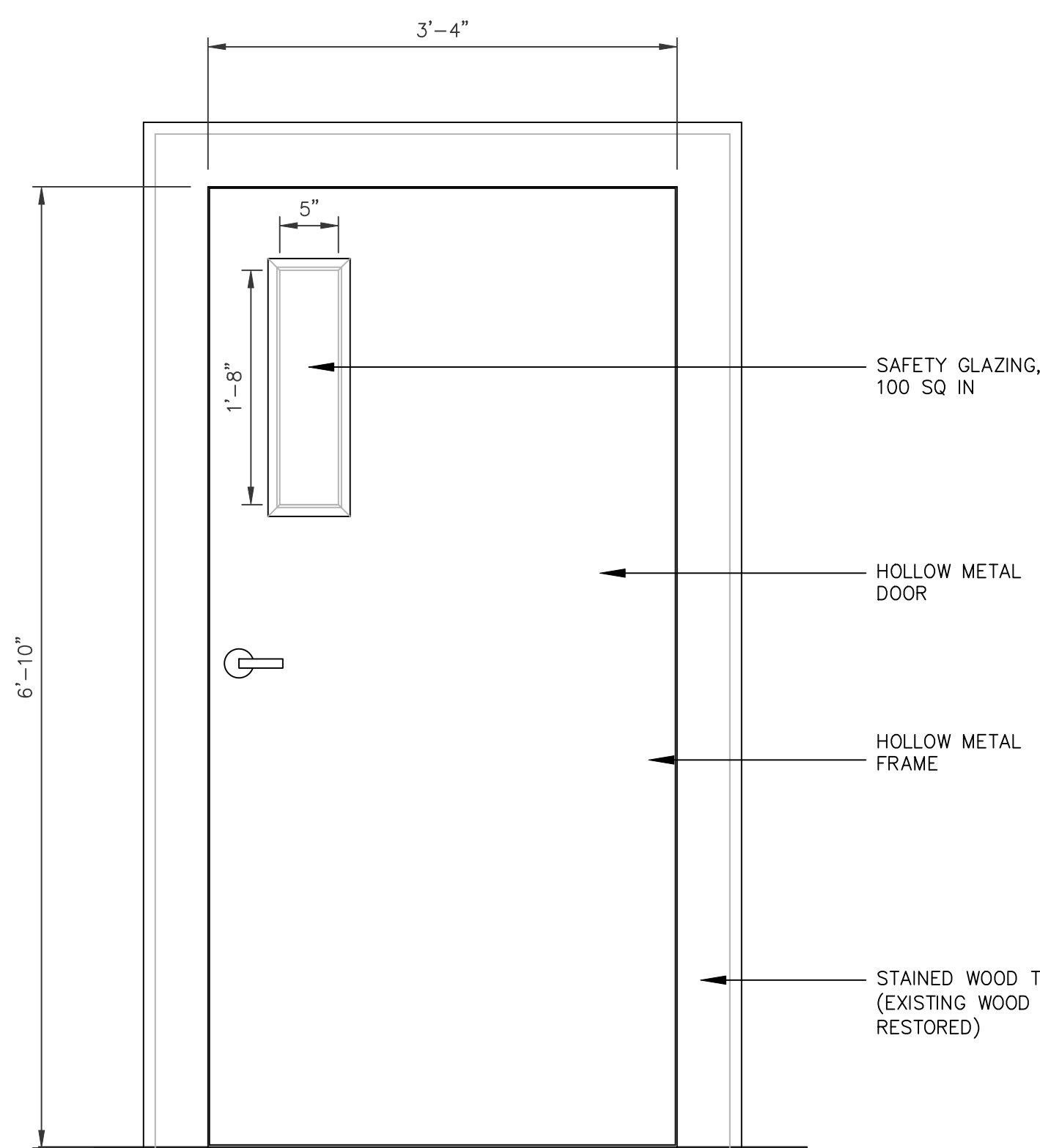
PROPOSED DOOR TYPE "B"
 1" = 1'-0"
 USE EXISTING DOOR PROFILES AND DIMENSIONS



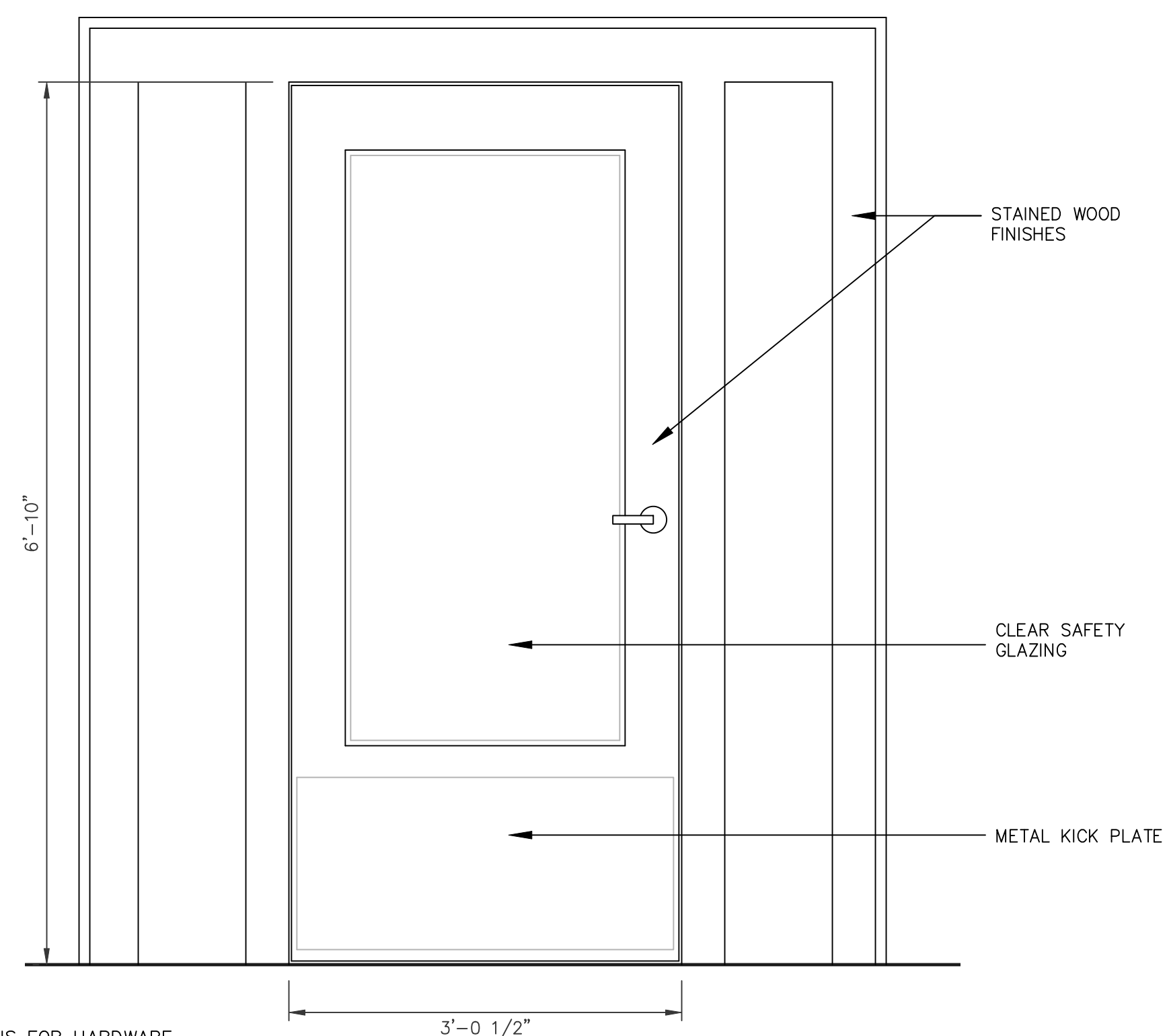
PROPOSED DOOR TYPE "C"
 1" = 1'-0"
 USE EXISTING DOOR PROFILES AND DIMENSIONS



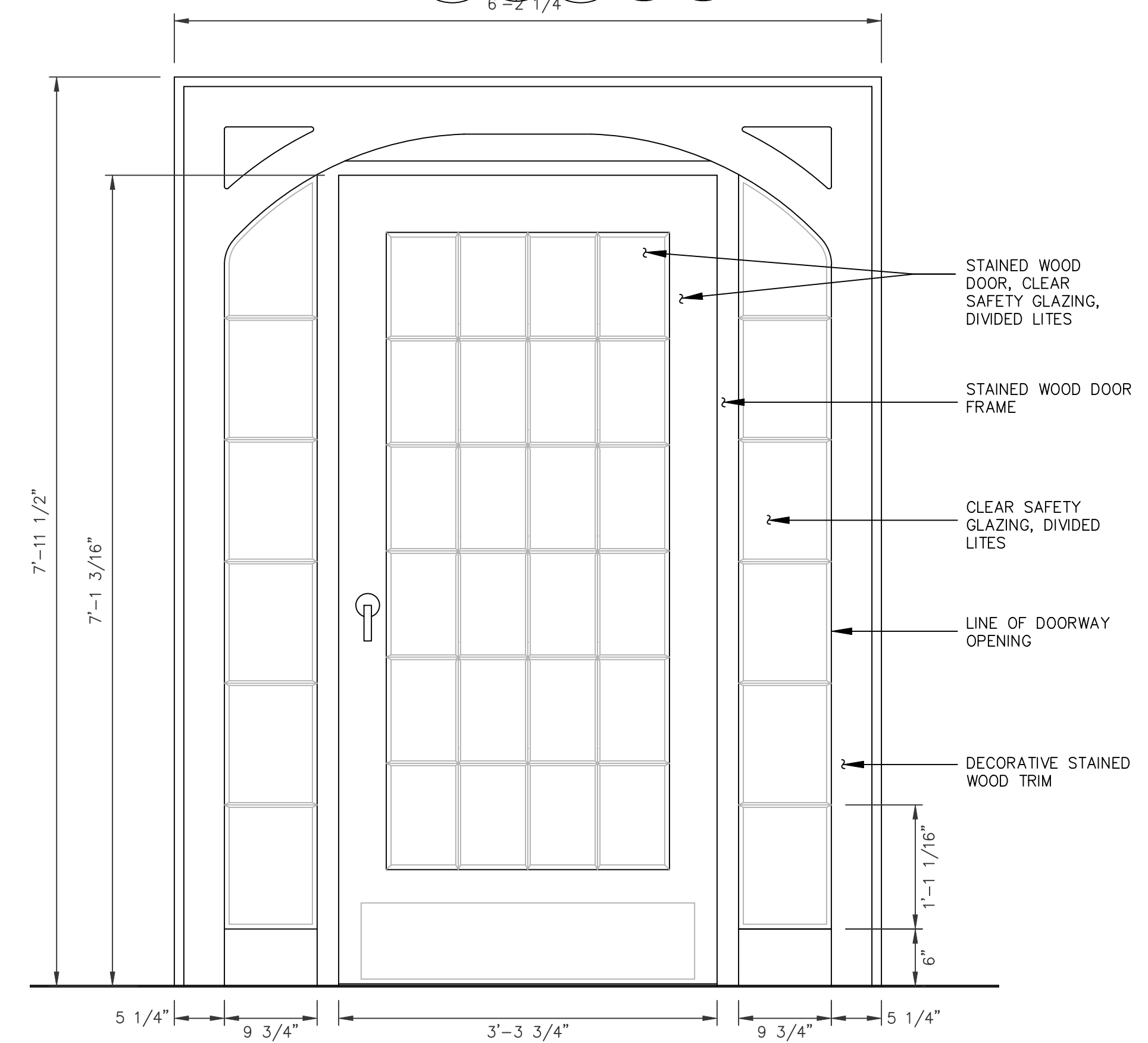
PROPOSED DOOR TYPE "G"
 1" = 1'-0"
 VIEW FROM EXTERIOR PULL SIDE
 6'-2 1/4"



PROPOSED DOOR TYPE "E"
 1" = 1'-0"
 VIEW FROM CORRIDOR



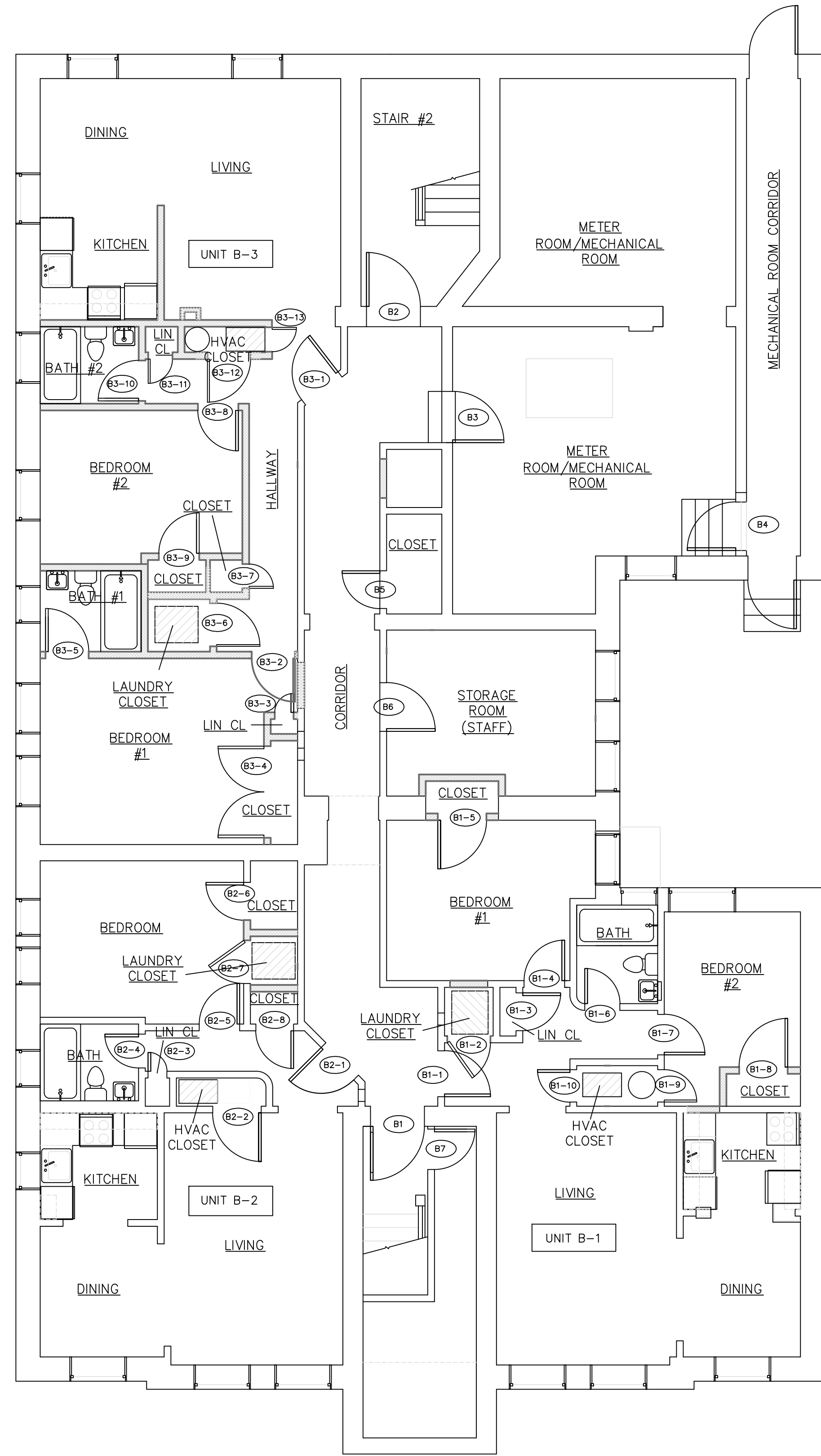
PROPOSED DOOR TYPE "F"
 1" = 1'-0"
 VIEW FROM VESTIBULE, PUSH SIDE



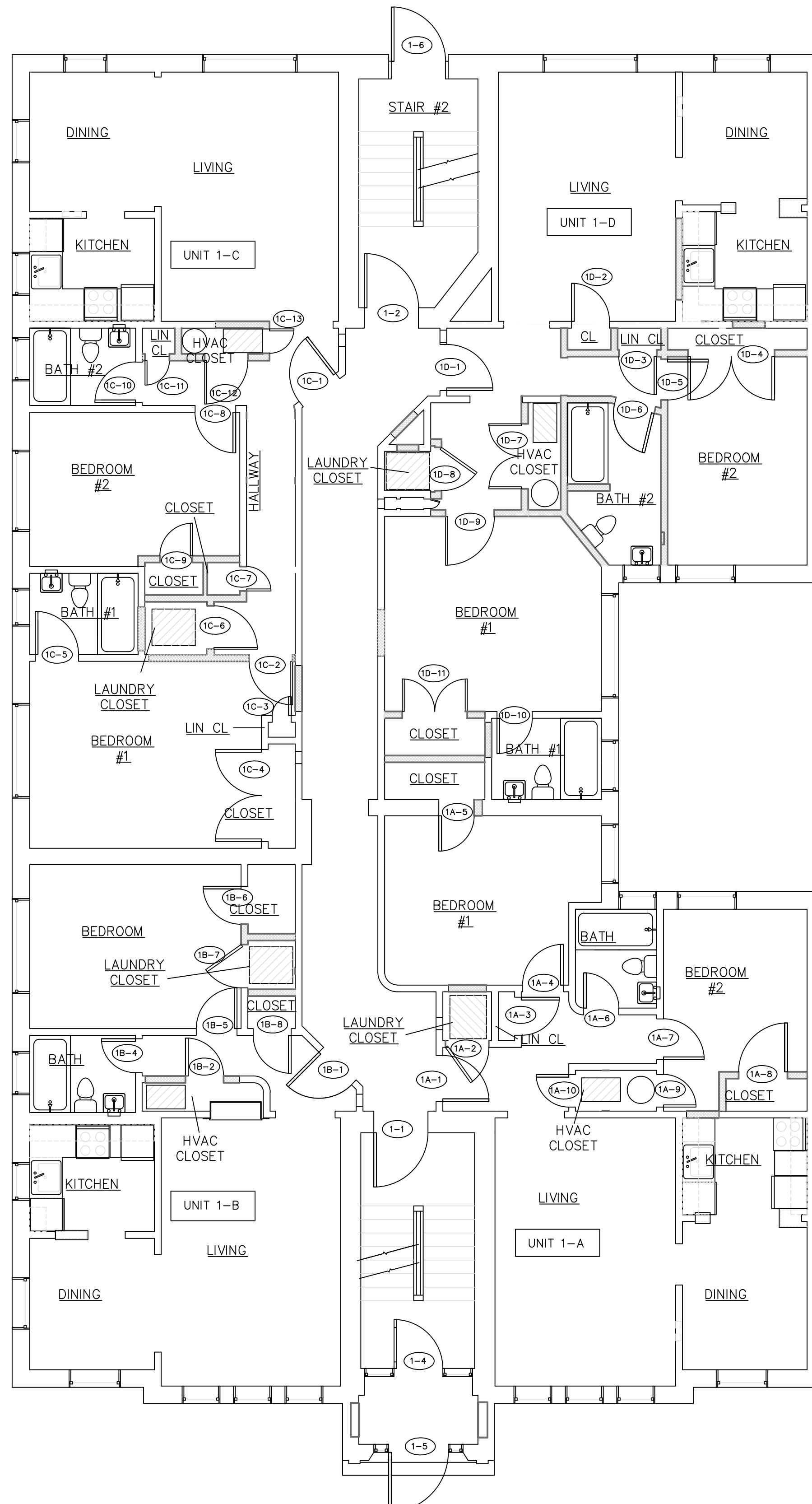
PROPOSED DOOR TYPE "G"
 1" = 1'-0"
 VIEW FROM INTERIOR PUSH SIDE

DOOR GENERAL NOTES:

1. SEE DOOR SCHEDULE AND SPECIFICATIONS FOR HARDWARE AND OTHER REQUIREMENTS.
2. SUBMIT SHOP DRAWING FOR CUSTOM WOOD DOOR/FRAME.
3. LABELED SAFETY GLAZING REQUIRED IN ALL DOORS AND SIDELITES.
4. DOOR DESIGNATION "D" IS NOT USED.



DOOR OPENING NUMBERS - BASEMENT
3/16" = 1'-0"



DOOR OPENING NUMBERS - 1ST FLOOR
3/16" = 1'-0"

REVISIONS THIS SHEET
THIS ENTIRE SHEET ADDED

DOOR SCHEDULE, BASEMENT AND 1ST FLOOR

Door No.	Door Type	Opening Status	Location	Finished Opening		Hardware Set	Comments
				Width	Height		
B-1	E	Existing	Front Stair	35	80	2	90 minute rating required
B-2	E	Existing	Rear Stair	35	80	2	90 minute rating required
B-3	H	Existing	Mechanical Room	40	80	4	Lower header elevation by 18 inches
B-4	N/A	Existing	Mechanical Room Pasageway	n/a	n/a		Remove door and frame
B-5	H	Existing	Corridor Closet	28	80	4	
B-6	H	Existing	Storage Room	32	80	4	Lower header elevation by 6 inches
B-7	H	Existing	Water Meter Room Under Stair (former)	30	80	4	
B-1-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
B-1-2	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
B-1-3	C	Existing	Linin Closet	28	80	3	
B-1-4	B	Existing	Bedroom #1	30	80	5	
B-1-5	C	Existing	Bedroom #1 Closet	52.5	80	3	
B-1-6	C	Existing	Bathroom	28	80	5	
B-1-7	B	Existing	Bedroom #2	30	80	5	
B-1-8	C	New	Bedroom #2 Closet	28	80	3	
B-1-9	C	Existing	HVAC Closet Rear	26	80	4	
B-1-10	C	Existing	HVAC Closet Front	24	80	4	
B-2-1	A	Existing	Unit Entry	32	80	1	Lower header elevation by 2 inches
B-2-2	C	Existing	HVAC Closet	36	80	4	Lower header elevation by 4 inches, Undercut door 1/2"
B-2-3	C	Existing	Linin Closet	18	80	3	Lower header elevation by 4 inches
B-2-4	C	Existing	Bathroom	28	80	5	Lower header elevation by 4 inches
B-2-5	B	Existing	Bedroom	30	80	5	Lower header elevation by 4 inches
B-2-6	C	New	Bedroom Closet	30	80	3	
B-2-7	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
B-2-8	C	Existing	Coat Closet	24	80	3	Lower header elevation by 4 inches
B-3-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
B-3-2	B	New	Bedroom #1	32	80	5	
B-3-3	C	New	Bedroom #1 Linin Closet	15	80	3	
B-3-4	C	New	Bedroom #1 Closet	68	80	3	
B-3-5	C	New	Bathroom #1	32	80	5	
B-3-6	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
B-3-7	C	New	Hallway Closet	18	80	3	
B-3-8	B	New	Bedroom #2	30	80	5	
B-3-9	C	New	Bedroom #2 Closet	30	80	3	
B-3-10	C	New	Bathroom #2	30	80	5	
B-3-11	C	New	Linin Closet	18	80	1	
B-3-12	C	New	HVAC Closet Front	32	80	4	
B-3-13	C	New	HVAC Closet Side	18	80	4	
1-1	E	Existing	Front Stair	35	80	2	90-minute rating required
1-2	E	Existing	Rear Stair	35	80	2	90 minute rating required
1-3	n/a	n/a	Number Not Used	n/a	n/a	n/a	
1-4	F	Existing	Inner Vestibule	36	82.5	6	Restore existing wood door
1-6	G	Existing	Front Entrance	40	84	2	Decorative Hardware
1-6	H	Existing	Rear Entrance/Exit (Alley)	40	80	4	Panic Exit Device instead of lever, add Closer
1-A-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
1-A-2	C	Existing	Laundry Closet	32	80	3	Undercut door 1/2"
1-A-3	C	Existing	Linin Closet	28	80	3	
1-A-4	B	Existing	Bedroom #1	30	80	5	
1-A-5	C	Existing	Bedroom #1 Closet	28	80	3	
1-A-6	C	Existing	Bathroom	26	80	5	
1-A-7	B	Existing	Bedroom #2	30	80	5	
1-A-8	C	New	Bedroom #2 Closet	36	80	3	
1-A-9	C	Existing	HVAC Closet Rear	24	80	4	
1-A-10	C	Existing	HVAC Closet Front	24	80	4	
1-B-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
1-B-2	C	New	HVAC Closet Rear	36	80	4	
1-B-3	n/a	n/a	Number Not Used	n/a	n/a	n/a	
1-B-4	C	Existing	Bathroom	26	80	5	
1-B-5	B	Existing	Bedroom	32	80	5	
1-B-6	C	New	Bedroom Closet	28	80	3	
1-B-7	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
1-B-8	C	Existing	Coat Closet	28	80	3	
1-C-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
1-C-2	B	New	Bedroom #1	32	80	5	
1-C-3	C	Existing	Bedroom #1 Linin Closet	14	80	3	
1-C-4	C	Existing	Bedroom #1 Closet	68	80	3	
1-C-5	C	New	Bathroom #1	32	80	5	
1-C-6	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
1-C-7	C	New	Hallway Closet	18	80	3	
1-C-8	B	Existing	Bedroom #2	32	80	5	
1-C-9	C	New	Bedroom #2 Closet	24	80	3	
1-C-10	C	Existing	Bathroom #2	26	80	5	
1-C-11	C	Existing	Linin Closet	18	80	1	
1-C-12	C	New	HVAC Closet Front	32	80	4	
1-C-13	C	New	HVAC Closet Side	18	80	4	
1-D-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
1-D-2	C	Existing	Coat Closet	30	80	3	
1-D-3	C	Existing	Linin Closet	30	80	3	
1-D-4	C	New	Bedroom #2 Closet	64	80	3	Double Door
1-D-5	B	Existing	Bedroom #2	32	80	5	
1-D-6	C	New	Bedroom Closet	30	80	5	
1-D-7	C	New	HVAC Closet	28	80	4	
1-D-8	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
1-D-9	B	Existing	Bedroom #1	36	80	5	
1-D-10	C	New	Bathroom #1	26	80	5	
1-D-11	C	Existing	Bedroom #1 Closet	48	80	3	Double Door

EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN 48202
313-965-4000 / Fax 313-965-7678

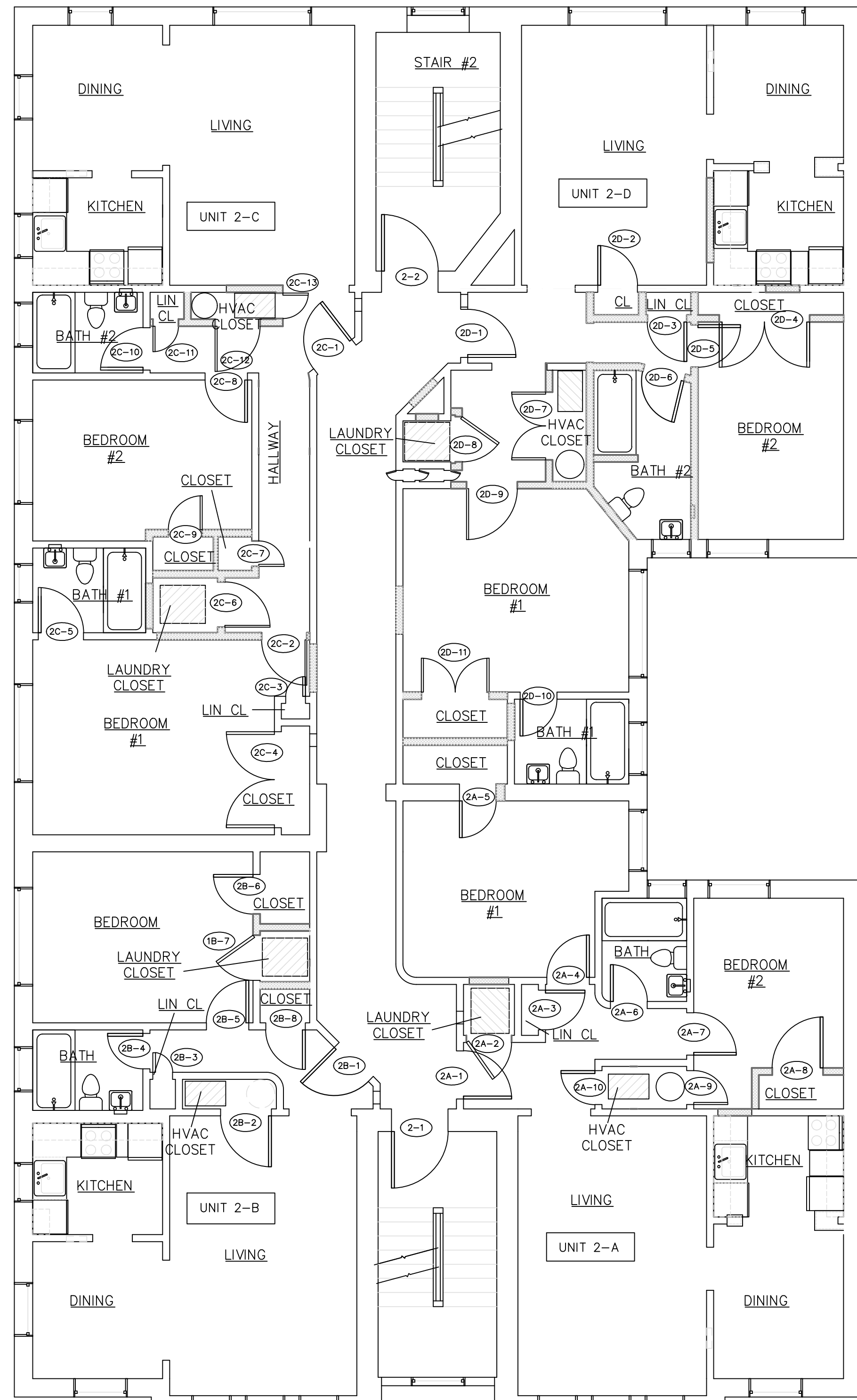
AINA Associates, Inc.
Mechanical | Electrical | Engineering
24775 Northwestern Hwy
Suite 400
Farmington Hills, MI 48334

DOOR OPENING NUMBERS, DOOR SCHEDULE BASEMENT, 1ST FLOOR

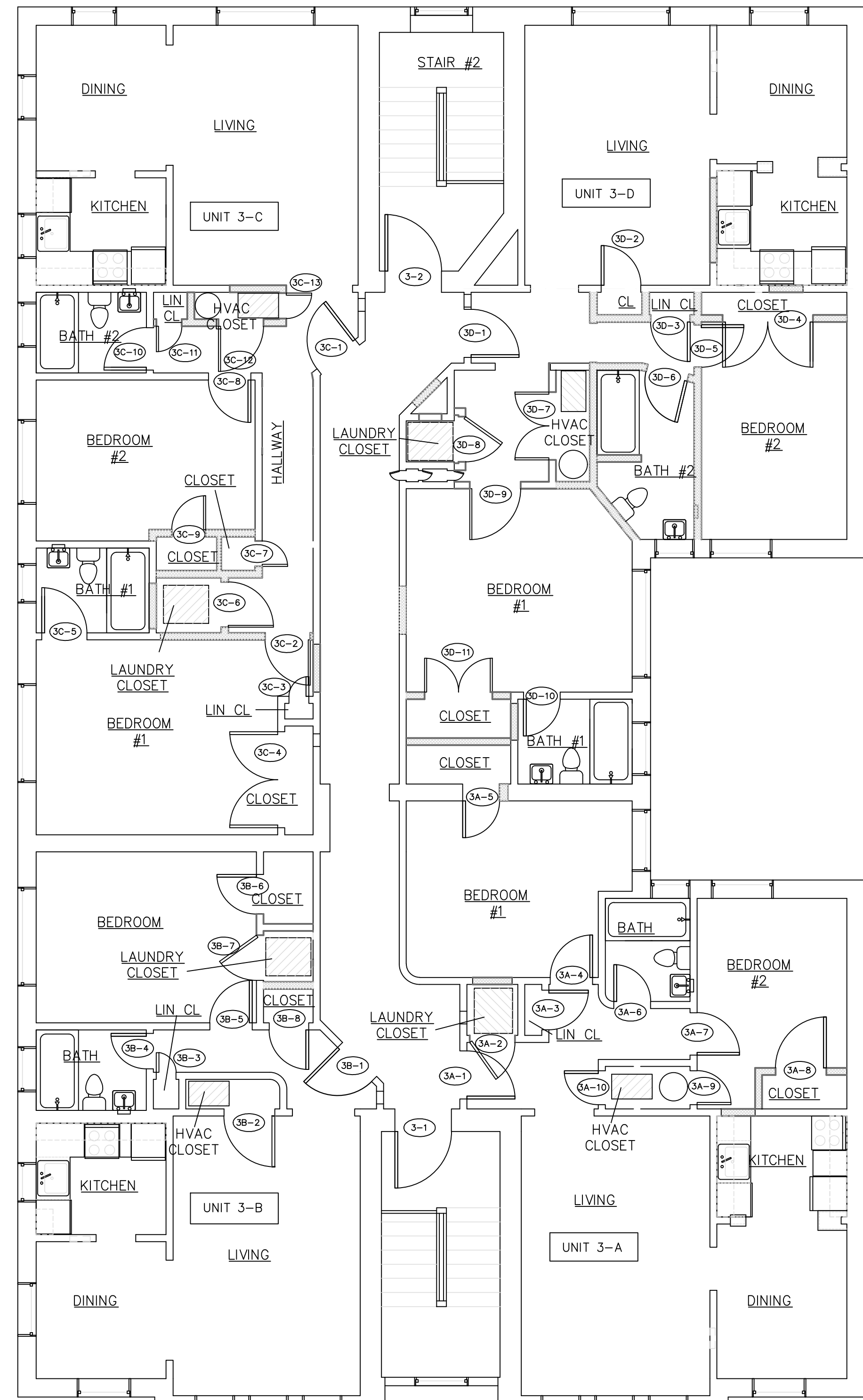
MARLBORO APARTMENTS BUILDING RENOVATION

ISSUE DATES:
HISTORIC REVIEW JUL-26-2017
ADDENDUM #1 MAR-28-2018
ADDENDUM #2 OCT-1-2018
ADDENDUM #3 JAN-10-2019
BULLETIN #3 MAR-25-2019

A9.3



DOOR OPENING NUMBERS - 2ND FLOOR
3/16" = 1'-0"

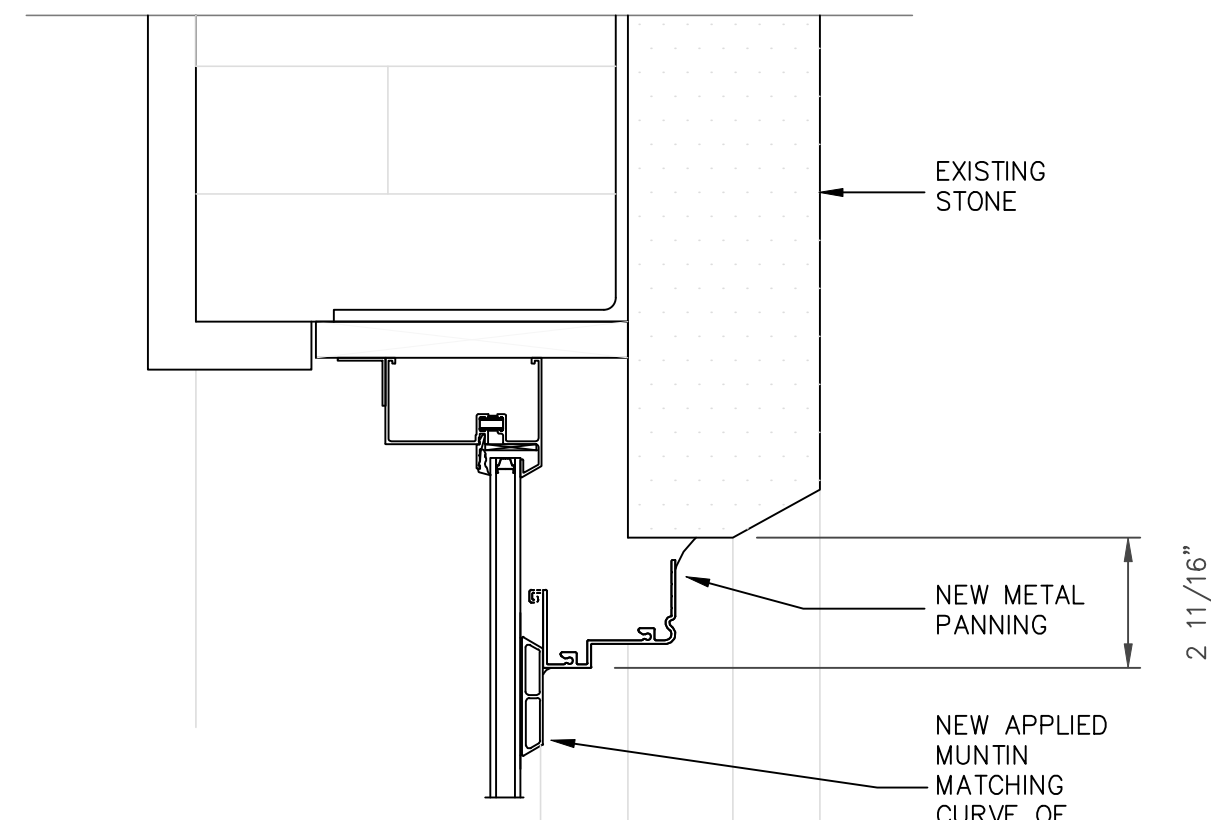


DOOR OPENING NUMBERS - 3RD FLOOR
3/16" = 1'-0"

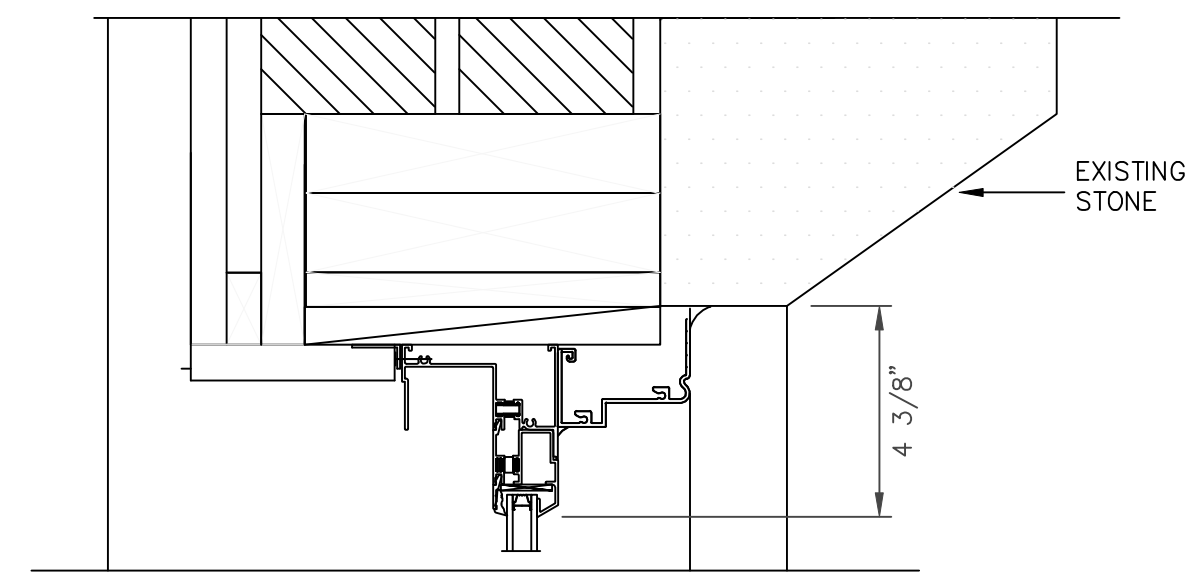
REVISIONS THIS SHEET
THIS ENTIRE SHEET ADDED

DOOR SCHEDULE, 2ND AND 3RD FLOOR

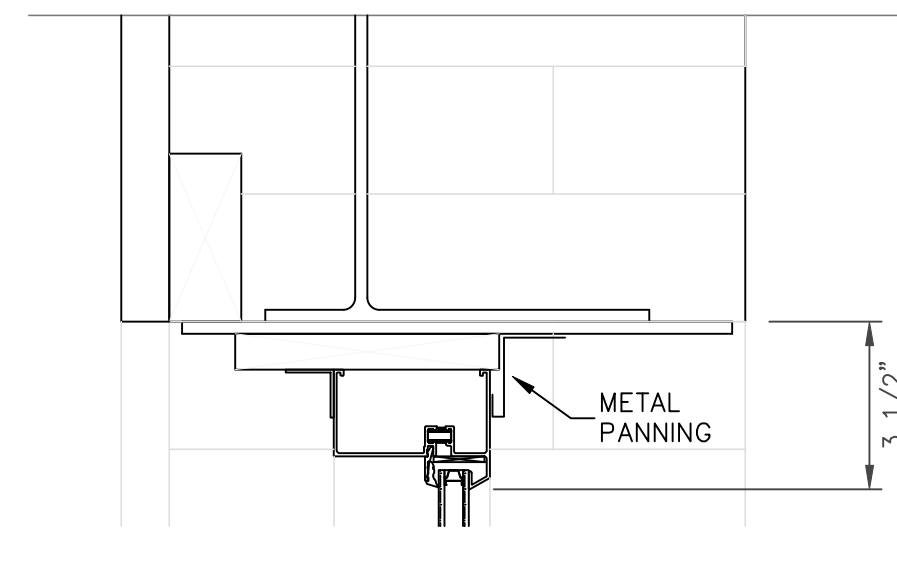
2-1	E	Existing	Front Stair	35	80	2	90 minute rating required
2-2	E	Existing	Rear Stair	35	80	2	90 minute rating required
2-A-1	A	Existing	Unit Entry	32	80	1	20 minute rating required
2-A-2	C	New	Laundry Closet	32	80	3	
2-A-3	C	Existing	Linen Closet	28	80	3	Undercut door 1/2"
2-A-4	B	Existing	Bedroom #1	30	80	5	
2-A-5	C	Existing	Bedroom #1 Closet	28	80	3	
2-A-6	C	Existing	Bathroom	26	80	5	
2-A-7	B	Existing	Bedroom #2	30	80	5	
2-A-8	C	New	Bedroom #2 Closet	36	80	3	
2-A-9	C	Existing	HVAC Closet Rear	24	80	4	
2-A-10	C	Existing	HVAC Closet Front	24	80	4	
2-B-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
2-B-2	C	Existing	HVAC Closet	36	80	4	
2-B-3	C	Existing	Linen Closet	14	80	3	
2-B-4	C	Existing	Bathroom	26	80	5	
2-B-5	B	Existing	Bedroom	32	80	5	
2-B-6	C	New	Bedroom Closet	28	80	3	
2-B-7	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
2-B-8	C	Existing	Coat Closet	28	80	3	
2-C-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
2-C-2	B	New	Bedroom #1	32	80	5	
2-C-3	C	Existing	Bedroom #1 Linen Closet	14	80	3	
2-C-4	C	Existing	Bedroom #1 Closet	68	80	3	
2-C-5	C	New	Bathroom #1	32	80	5	
2-C-6	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
2-C-7	C	New	Hallway Closet	18	80	3	
2-C-8	B	Existing	Bedroom #2	32	80	5	
2-C-9	C	New	Bedroom #2 Closet	24	80	3	
2-C-10	C	Existing	Bathroom #2	26	80	5	
2-C-11	C	Existing	Linen Closet	18	80	1	
2-C-12	C	New	HVAC Closet Front	32	80	4	
2-C-13	C	New	HVAC Closet Side	18	80	4	
2-D-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
2-D-2	C	Existing	Coat Closet	30	80	3	
2-D-3	C	Existing	Linen Closet	30	80	3	
2-D-4	C	New	Bedroom #2 Closet	64	80	3	Double Door
2-D-5	B	Existing	Bedroom #2	32	80	5	
2-D-6	C	Existing	Bathroom #2	30	80	5	
2-D-7	C	New	HVAC Closet	48	80	4	
2-D-8	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
2-D-9	B	Existing	Bedroom #1	36	80	5	
2-D-10	C	Existing	Bathroom #1	26	80	5	
2-D-11	C	New	Bedroom #1 Closet	48	80	3	Double Door
3-1	E	Existing	Front Stair	35	80	2	90-minute rating required
3-2	E	Existing	Rear Stair	35	80	2	90-minute rating required
3-A-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
3-A-2	C	New	Laundry Closet	32	80	3	
3-A-3	C	Existing	Linen Closet	28	80	3	Undercut door 1/2"
3-A-4	B	Existing	Bedroom #1	30	80	5	
3-A-5	C	Existing	Bedroom #1 Closet	28	80	3	
3-A-6	C	Existing	Bathroom	26	80	5	
3-A-7	B	Existing	Bedroom #2	30	80	5	
3-A-8	C	New	Bedroom #2 Closet	36	80	3	
3-A-9	C	Existing	HVAC Closet Rear	24	80	4	
3-A-10	C	Existing	HVAC Closet Front	24	80	4	
3-B-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
3-B-2	C	Existing	HVAC Closet	36	80	4	
3-B-3	C	Existing	Linen Closet	14	80	3	
3-B-4	C	Existing	Bathroom	26	80	5	
3-B-5	B	Existing	Bedroom	32	80	5	
3-B-6	C	New	Bedroom Closet	28	80	3	
3-B-7	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
3-B-8	C	Existing	Coat Closet	28	80	3	
3-C-1	A	Existing	Unit Entry	32	80	1	20 minute rating required
3-C-2	B	New	Bedroom #1	32	80	5	
3-C-3	C	Existing	Bedroom #1 Linen Closet	14	80	3	
3-C-4	C	Existing	Bedroom #1 Closet	68	80	3	
3-C-5	C	New	Bathroom #1	32	80	5	
3-C-6	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
3-C-7	C	New	Hallway Closet	18	80	3	
3-C-8	B	Existing	Bedroom #2	32	80	5	
3-C-9	C	New	Bedroom #2 Closet	24	80	3	
3-C-10	C	Existing	Bathroom #2	26	80	5	
3-C-11	C	Existing	Linen Closet	18	80	1	
3-C-12	C	New	HVAC Closet Front	32	80	4	
3-C-13	C	New	HVAC Closet Side	18	80	4	
3-D-1	A	Existing	Unit Entry	32	80	1	20-minute rating required
3-D-2	C	Existing	Coat Closet	30	80	3	
3-D-3	C	Existing	Linen Closet	30	80	3	
3-D-4	C	New	Bedroom #2 Closet	64	80	3	Double Door
3-D-5	B	Existing	Bedroom #2	32	80	5	
3-D-6	C	Existing	Bathroom #2	30	80	5	
3-D-7	C	New	HVAC Closet	48	80	4	Undercut door 1/2"
3-D-8	C	New	Laundry Closet	32	80	3	Undercut door 1/2"
3-D-9	B	Existing	Bedroom #1	36	80	5	
3-D-10	C	Existing	Bathroom #1	26	80	5	
3-D-11	C	New	Bedroom #1 Closet	48	80	3	Double Door



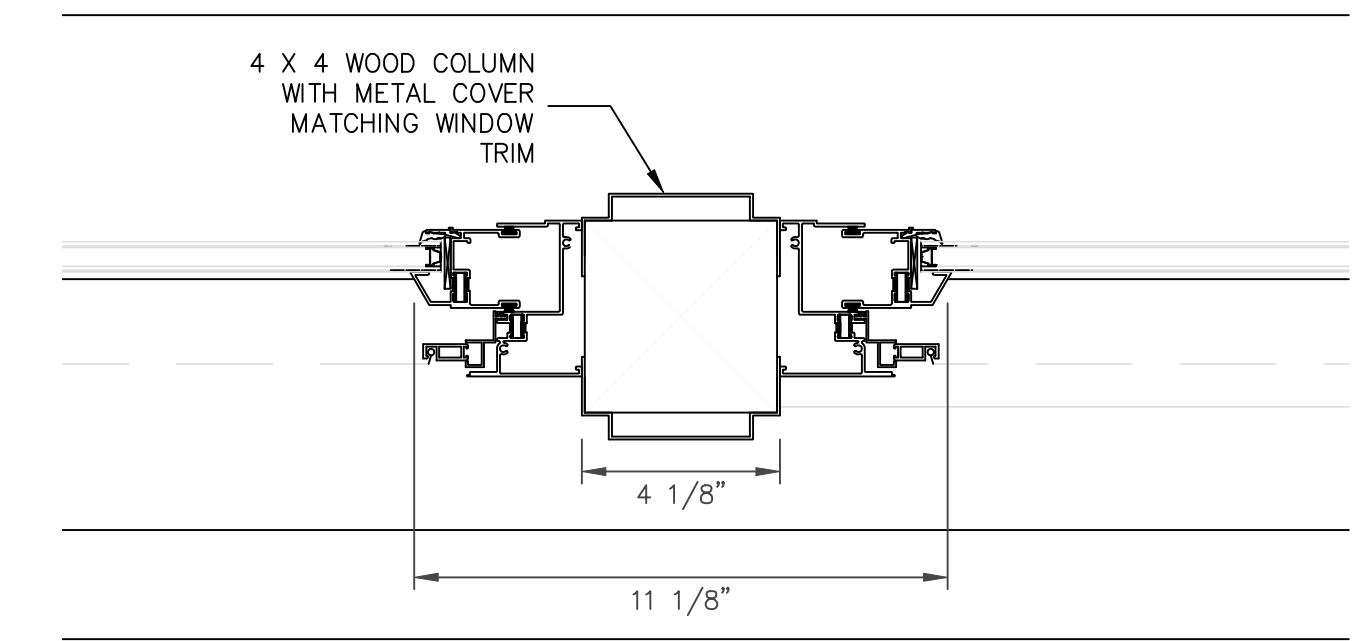
A SECTION THROUGH HEAD
SCALE: 3" - 1'-0"



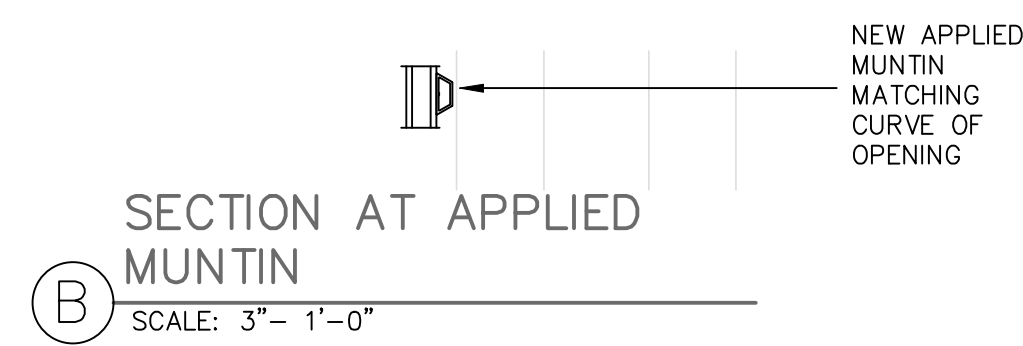
E SECTION THROUGH JAMB
SCALE: 3" - 1'-0"



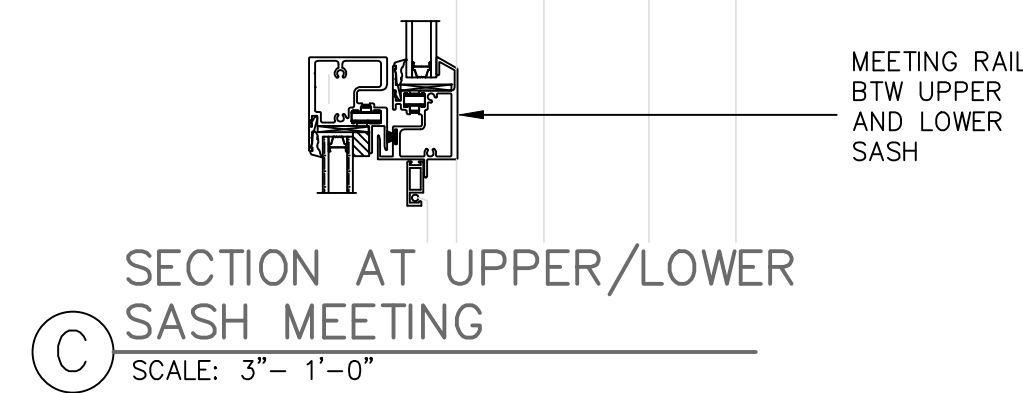
G SECTION THROUGH HEAD
SCALE: 3" - 1'-0"



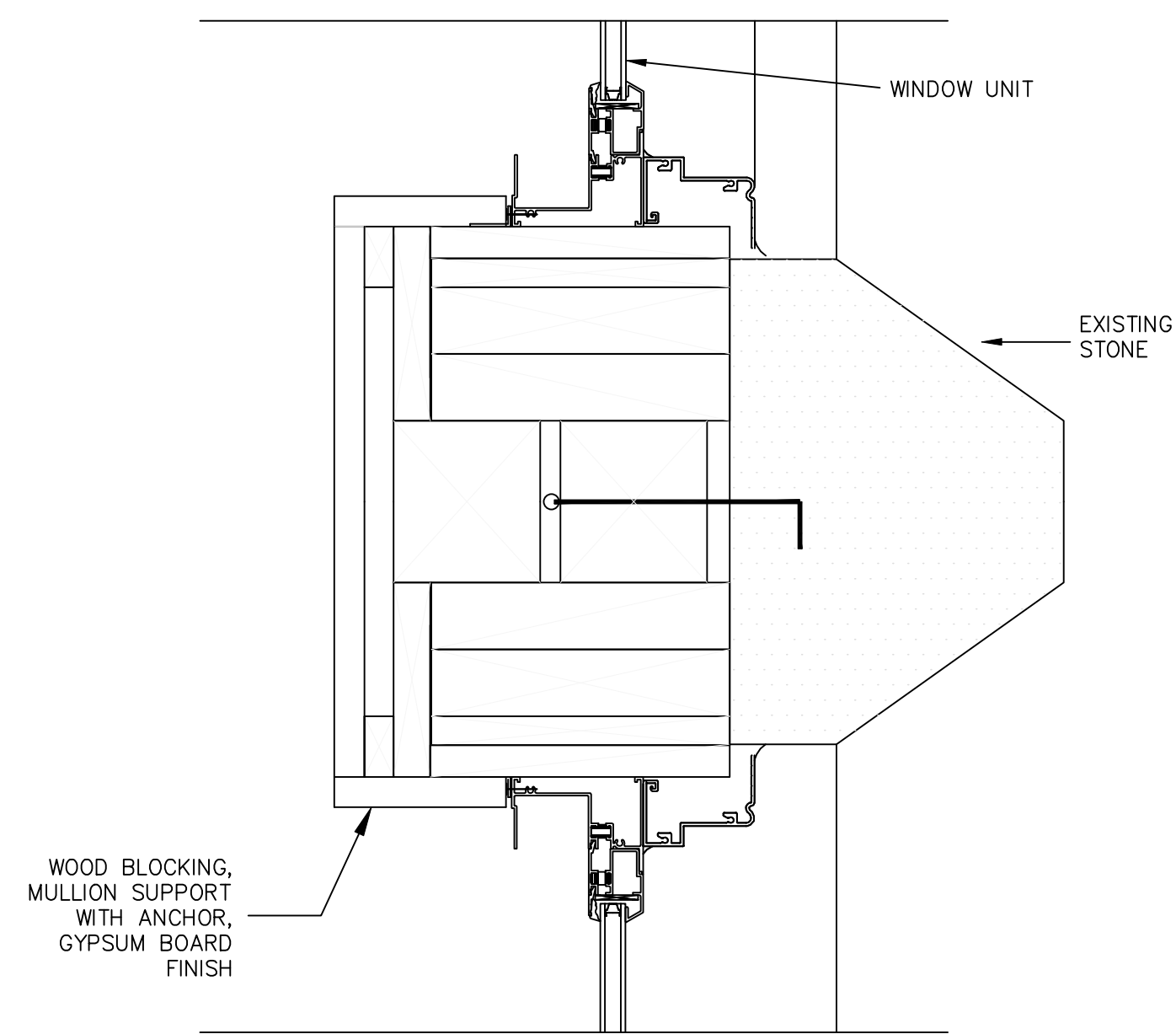
I SECTION THROUGH MULLION
SCALE: 3" - 1'-0"



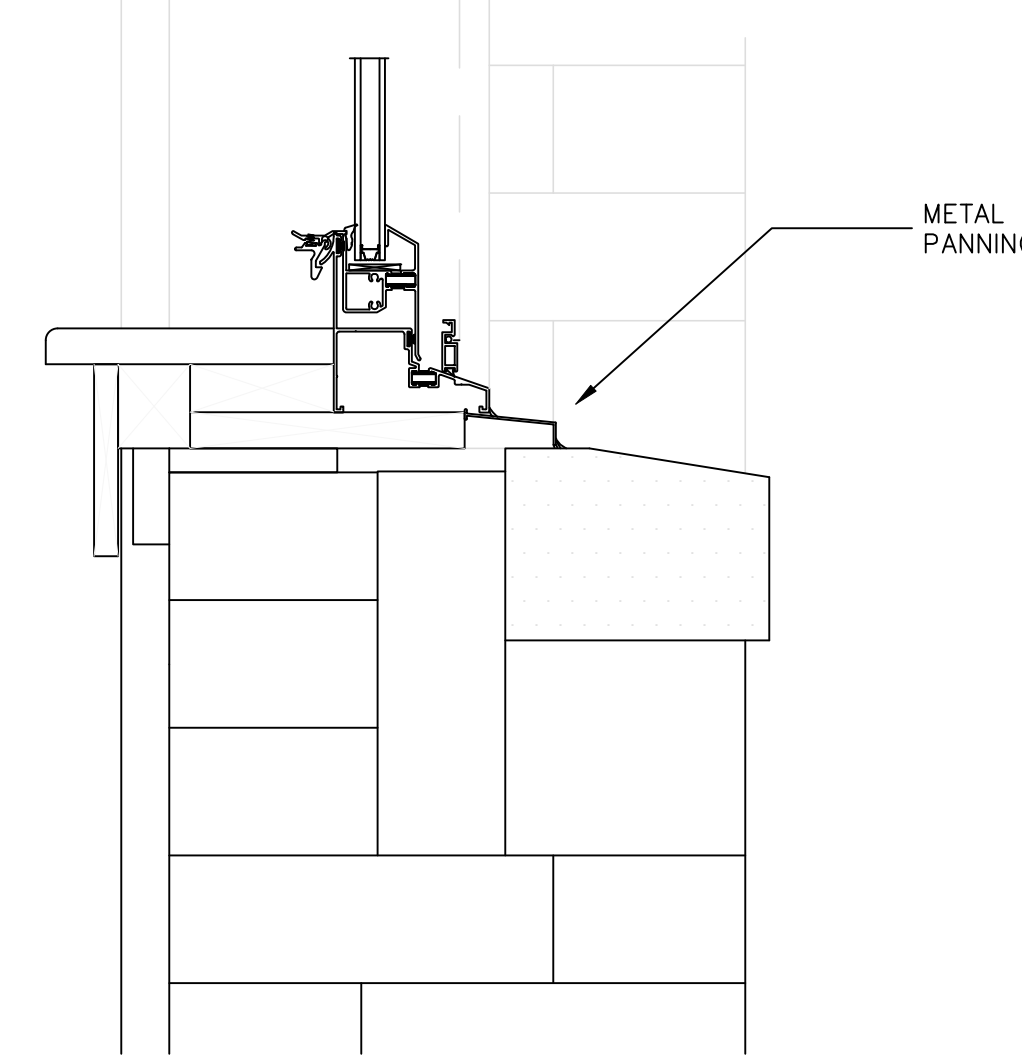
B SECTION AT APPLIED MUNTIN
SCALE: 3" - 1'-0"



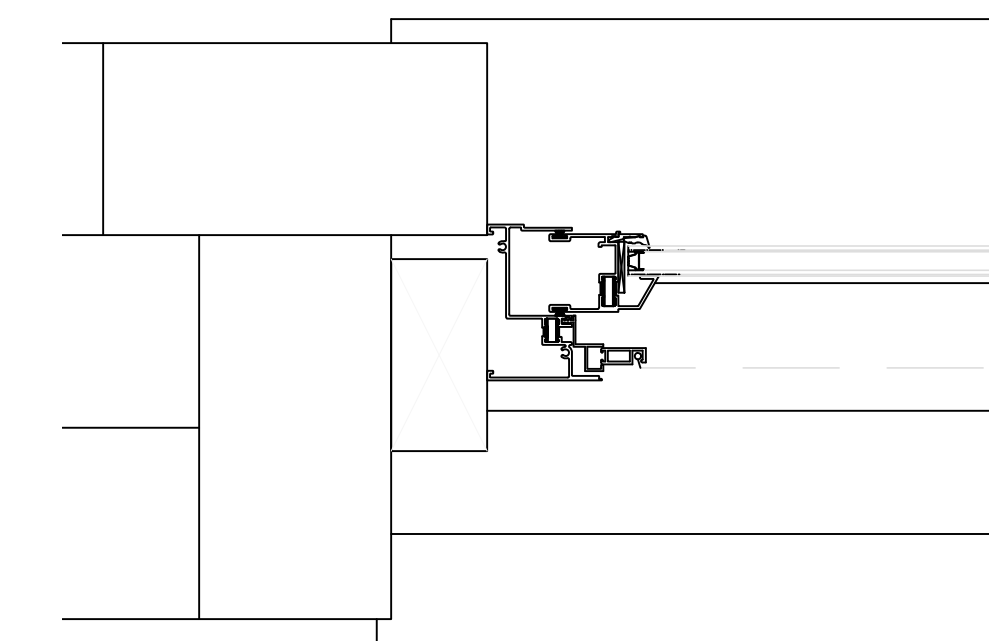
C SECTION AT UPPER/LOWER SASH MEETING
SCALE: 3" - 1'-0"



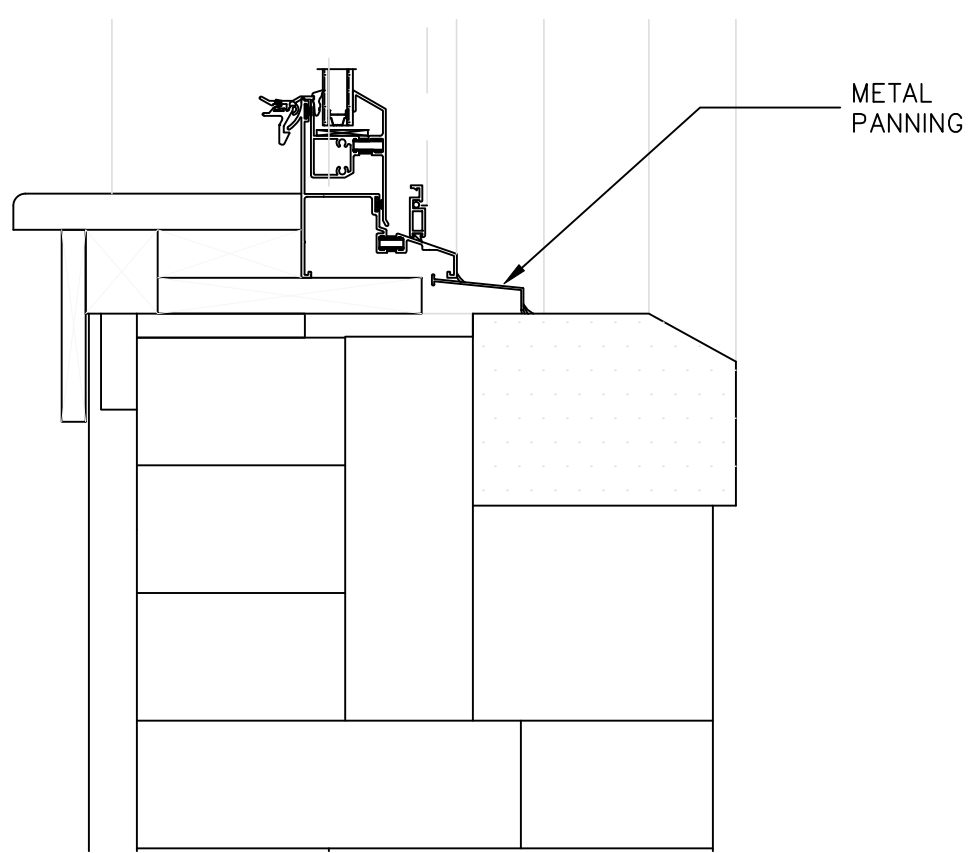
F HORIZONTAL SECTION AT STONE PILLAR BETWEEN WINDOW UNITS
SCALE: 3" - 1'-0"



H SECTION THROUGH SILL
SCALE: 3" - 1'-0"



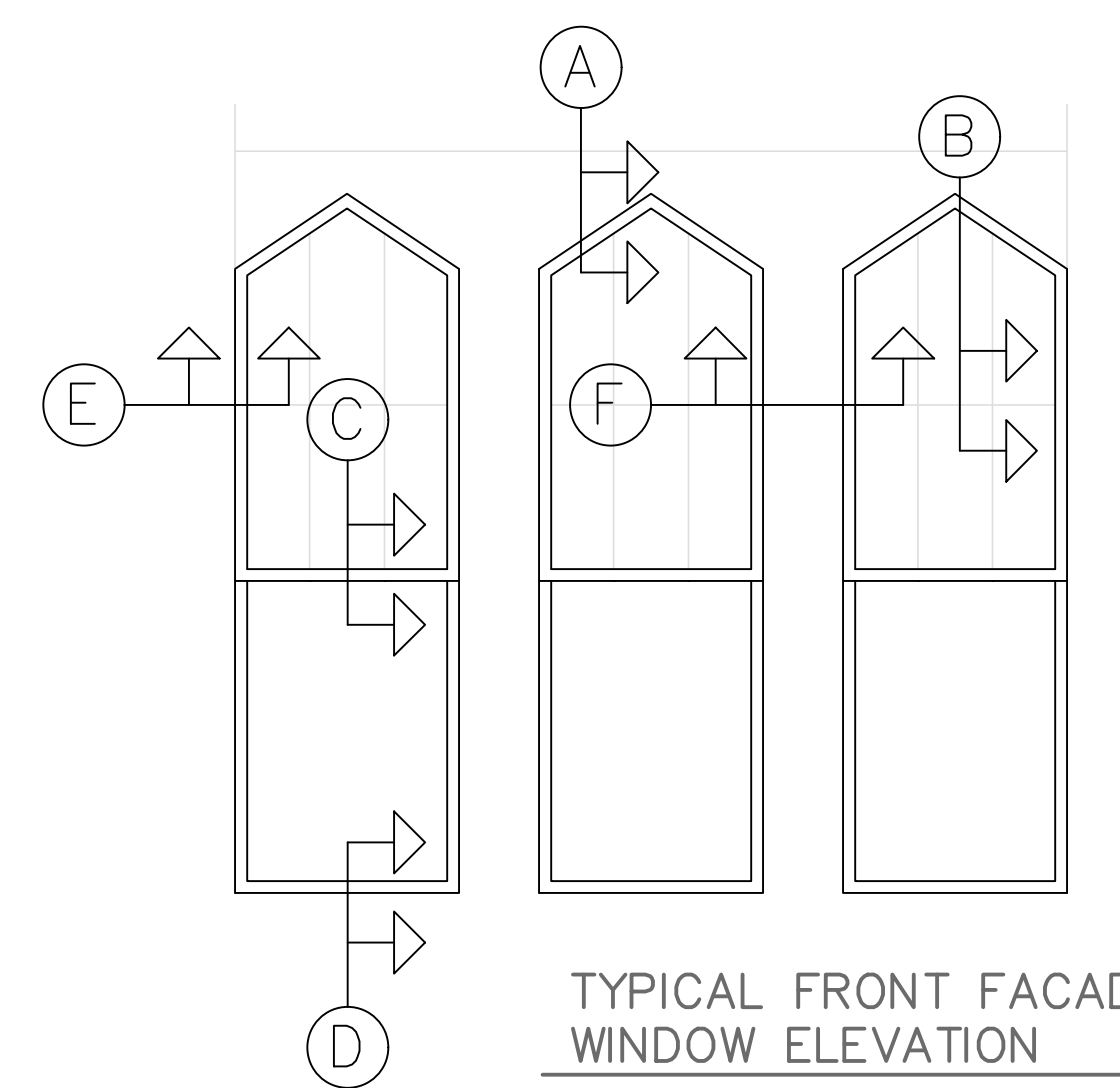
J SECTION THROUGH JAMB
SCALE: 3" - 1'-0"



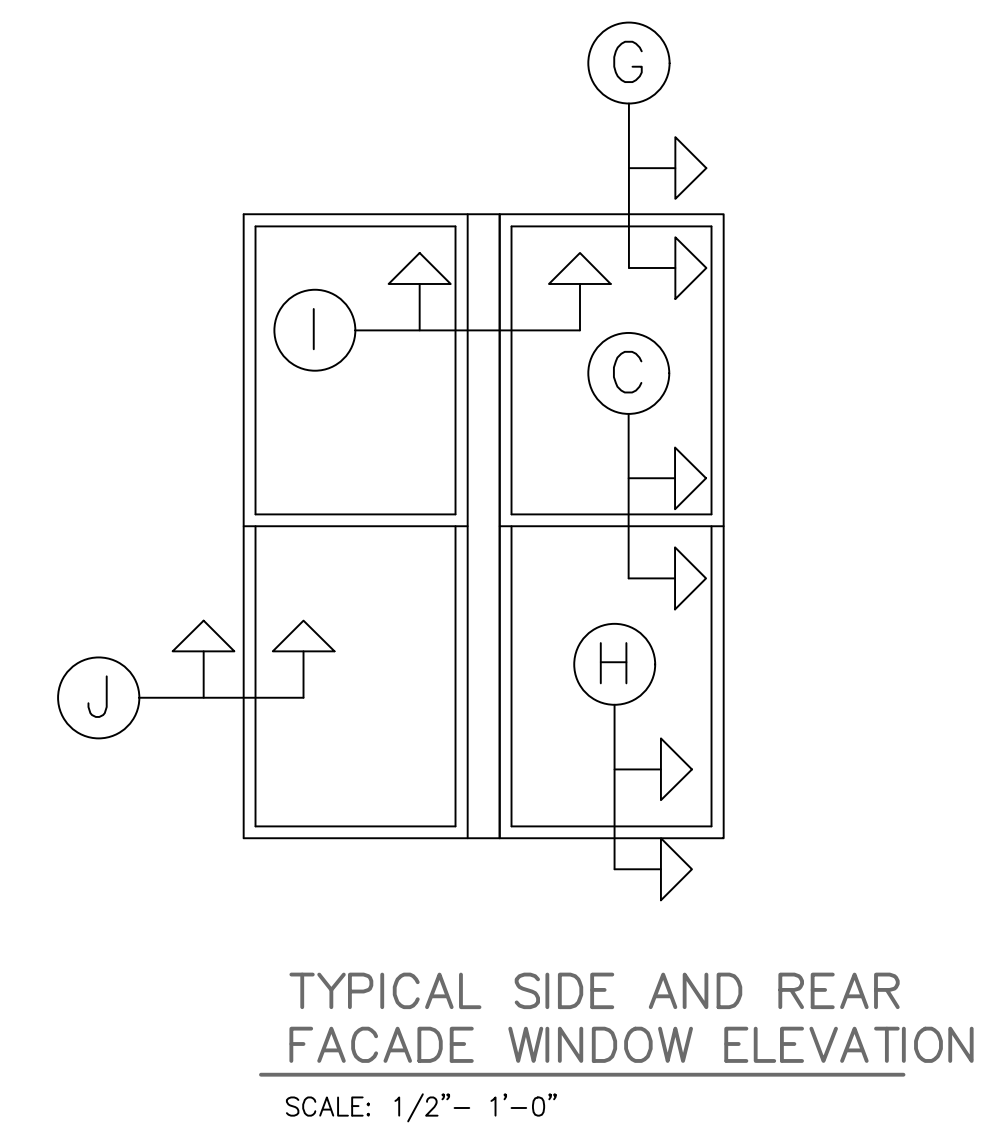
D SECTION AT SILL
SCALE: 3" - 1'-0"

REPLACEMENT WINDOW BASIS OF DESIGN:

QUAKER H300 SINGLE-HUNG HISTORICAL (H-HC40), ALUMINUM WITH BAKED ON POWDER COAT COLOR FINISH, INSULATED GLAZING, WIRE MESH SCREEN, SURFACE APPLIED SIMULATED MUNTINS.



TYPICAL FRONT FACADE WINDOW ELEVATION
SCALE: 1/2" - 1'-0"



TYPICAL SIDE AND REAR FACADE WINDOW ELEVATION
SCALE: 1/2" - 1'-0"

ISSUE DATES:

- PERMIT
SEP-23-2016
- HISTORIC REVIEW
JUL-26-2017
- ADDENDUM #1
MAR-28-2018
- ADDENDUM #2
OCT-1-2018
- ADDENDUM #3
JAN-10-2019

ABBREVIATION LIST

ACC	AIR COOLED CONDENSER
AFF	ABOVE FINISHED FLOOR
AG	ABOVEGROUND
BCS	BLACK CARBON STEEL
BLDG	BUILDING
CDW	COLD DOMESTIC WATER
CI	CAST IRON
CO	CLEANOUT
CO(W)	CLEANOUT (WALL)
COMBUS	COMBUSTION
CONN	CONNECTING / CONNECTION
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGRAM
DN	DOWN
DWG	DRAWING
EG	EXHAUST GRILLE
EL	ELEVATION
EXH	EXHAUST
EXIST	EXISTING
FIN	FINISH
FLR	FLOOR
FT	FOOT/FEET
GALV	GALVANIZED
GM	GAS METER
GPM	GALLON PER MINUTE
HDW	HOT DOMESTIC WATER
HHWB	HYDRONIC HOT WATER BOILER
HVAC	HEATING, VENTILATING AND AIR-CONDITIONING
INSUL	INSULATION
MECH	MECHANICAL
MIN	MINIMUM
M	MOTOR
NG	NATURAL GAS
NTS	NOT TO SCALE
OA	OUTSIDE AIR
PSI	POUND/SQUARE INCH
RA	RETURN AIR
RAG	RETURN AIR GRILLE
RR	RETURN REGISTER
SAN	SANITARY SEWER
SD	SUPPLY DIFFUSER
SG	SUPPLY GRILLE
SH	SHOWER
SPD	STANDPIPE DRAIN
SPEC	SPECIFICATIONS
SR	SUPPLY REGISTER
T	THERMOSTAT
TEMP	TEMPERATURE
TA	THROWAWAY
TYP	TYPICAL
UG	UNDERGROUND
UR	URINAL
V	VENT
VTR	VENT THRU ROOF
WCO	WALL CLEANOUT
W	WASTE
WM	WATER METER

PIPING / PLUMBING SYMBOLS

	EXIST PIPING OR DUCTWORK TO REMAIN(FIELD VERIFIED)
	EXIST PIPING OR DUCTWORK TO BE REMOVED (FIELD VERIFY)
	NEW PIPING OR EQUIPMENT
	PIPE UP
	PIPE DOWN
	BALL VALVE
	GATE VALVE
	UNION
	GLOBE VALVE
	BACKFLOW PREVENTER (CHECK VALVE)
	COLD DOMESTIC WATER
	HOT DOMESTIC WATER, 120°F OR 140°F
	SANITARY
	SANITARY VENT
	FLOOR DRAIN WITH TRAP
	STANDPIPE DRAIN
	CLEANOUT (WALL)
	CLEANOUT (FLOOR)
	BACKFLOW PREVENTER
	THERMOWELL
	GAS METER
	WATER METER
	GAS REGULATOR VALVE

HVAC — DUCTWORK SYMBOLS

	SUPPLY AIR DUCTWORK.
	RETURN OR EXHAUST AIR DUCTWORK.
	SIDEWALL SUPPLY/RETURN REGISTER
	VOLUME DAMPER
	VOLUME DAMPER (REMOTE CONTROLLED)
	FIRE/SMOKE DAMPER HORIZONTAL INSTALLATION
	FIRE/SMOKE DAMPER VERTICAL INSTALLATION
	FLEXIBLE CONNECTION AT EQUIPMENT
	FLEXIBLE DUCT
	POINT OF CONNECTION
	SUPPLY AIRFLOW ARROW
	EXHAUST OR RETURN AIRFLOW ARROW
	THERMOSTAT
	PLUG VALVE (LUBRICATED)
	FLEX CONNECTION PIPING

MECHANICAL GENERAL NOTES

- ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY NOT BE USED ON THIS PROJECT. ONLY THOSE SYMBOLS SHOWN ON PLANS AND DIAGRAMS APPLY.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE BUILDING CODE REQUIREMENTS AND PROVIDE ALL REQUIRED CONTROLLED INSPECTIONS FOR HIS WORK.
- THE GENERAL AND SPECIAL CONDITIONS OF THE ARCHITECTURAL SPECIFICATIONS SHALL BE INCLUDED AS PART OF THESE DOCUMENTS.
- PIPE EQUIPMENT DRAINS TO NEAREST FLOOR DRAIN OR SERVICE SINK IN AN APPROVED MANNER.
- COLD DOMESTIC WATER AND HOT DOMESTIC WATER SHALL BE INSULATED. FOR ADDITIONAL SPECIFICATIONS, SEE DWG. MP-1.
- WHERE A DESIGN BASE IS INDICATED AND OTHER THAN DESIGN BASE, EQUIPMENT IS APPROVED, DESIGN ALL NECESSARY MODIFICATIONS AND SUBMIT A SHOP DRAWING OF PROPOSED INSTALLATION AT NO ADDITIONAL COST TO OWNER.
- FIELD CHECK ALL ELEVATIONS AND DIMENSIONS TO ENSURE THAT NO INTERFERENCE W/ OTHER WORK OCCUR.
- IMPOSE NO PIPE/EQUIPMENT LOAD OR MOMENT ON ANY EQUIPMENT FLANGE OR FLEXIBLE CONNECTOR
- WALL PENETRATION FOR ALL PIPES SHALL BE PROVIDED BY MECHANICAL CONTRACTOR.
- PRIOR TO FABRICATION AND INSULATION WORK, FIELD VERIFY/SURVEY EXISTING MECHANICAL/ELECTRICAL/STRUCTURAL WORK AND COORDINATE.
- MAKE DUCT TO EQUIPMENT CONNECTIONS W/ GASKETED FLANGES.
- SEAL DUCTWORK, PIPING AND CONDUIT SURFACE PENETRATION IN ACCORDANCE W/ ARCHITECTURAL DETAILS OR SMACNA "HVAC DUCT CONSTRUCTION STANDARDS".
- CENTER THERMOSTAT(S) 4'-0" PLUS OR MINUS 2" ABOVE FINISHED FLOOR WITH GUARD(S) UNLESS OTHERWISE NOTED.
- INSTALL LOOSE TRIM FURNISHED W/EQUIPMENT.
- THE CONTRACTOR SHALL FIELD VERIFY ALL PLUMBING FIXTURES/PIPING/MECH. EQUIPMENT FOR EXACT LOCATIONS.
- ALL HORIZONTAL SANITARY SEWERS SHALL BE SLOPED AT 1% UNLESS OTHERWISE NOTED.
- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING OWNER'S REPRESENTATIVE OF ALL HIDDEN OBSTRUCTIONS AND CLEARANCE PROBLEMS.
- NEW FINISHED FIRST FLOOR ELEVATION IS 100.0'. ALL NEW UNDERGROUND SANITARY PIPING INVERT ELEVATIONS TO BEGIN AT 1'-6" BELOW FINISHED FLOOR UNLESS OTHERWISE NOTED OR EXIST. FIELD CONDITIONS ALTER THE LOCATIONS.
- ALL NEW PIPE ROUTING SHOWN ON THE DRAWINGS IS DIAGRAMMATIC AND GENERAL ROUTING. CONTRACTOR SHALL COORDINATE FINAL PIPE ROUTING WITH ALL FITTINGS, OFFSETS AND TRANSITIONS AS REQUIRED FOR FINAL INSTALLATION
- IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE ALL WORK WITH ALL WORK OF ALL OTHER TRADES. THE SHOP DRAWINGS PREPARED BY THIS CONTRACTOR SHALL INDICATE SPACE ALLOWANCES ABOVE CEILING FOR ALL WORK OF ALL OTHER TRADES (CONDUITS, SPRINKLERS, PIPES AND ALL DOMESTIC SERVICES) AND SHALL BE SIGNED OFF BY ALL OTHER CONTRACTORS.
- SUPPLY AIR DUCTWORK SHALL BE INSULATED WITH 1" FIBERGLASS INSULATION.
- ALL HOT AND COLD DOMESTIC WATER PIPE INSULATION SHALL BE FIBERGLASS.
- THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR THE CORRECTNESS OF THE SAME.
- INSTALL FIRE DAMPER IN ALL FIRE RATED WALLS WITH ACCESS DOOR IN DUCTWORK.
- VISIT SITE AND VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING BID.
- COORDINATE ALL DUCTWORK AND PIPING TO ENSURE A 4'-0" MIN CLEARANCE. ACCESS TO ELECTRICAL PANELS.
- PROVIDE SINGLE WALL TURNING VANES @ ALL ELBOWS AND TEES PER SMACNA STANDARDS.
- DO NOT PROVIDE AIR EXTRACTORS OR SPLITTER DAMPERS WHICH PROTRUDE INTO RECTANGULAR TRUNK DUCTS. PROVIDE ROUND SPIN-IN FITTINGS FOR ROUND BRANCH DUCTS.
- ROUND BRANCH DUCTS ARE SAME SIZE AS DIFFUSER WHICH IT SERVES.
- PROVIDE NECESSARY DUCTWORK SUPPORTS PER SMACNA STANDARDS.
- ANY DUCTWORK VISIBLE TO THE RESIDENT MUST BE SPIRAL, NO EXCEPTIONS.
- MAXIMUM FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 5'-0".
- DO NOT ATTACH ANYTHING TO THE UNDERSIDE OF THE ROOF DECK. ALL LOADS AND BRACING MUST BE ADEQUATELY SUPPORTED FROM THE BUILDING ROOF STRUCTURE.

MECHANICAL GENERAL NOTES CONT.

- ALL MATERIALS SHALL BE NEW, UNUSED, AND THE BEST OF THEIR RESPECTIVE KINDS AND FREE FROM DEFECTS.
- THE CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE AIR DISTRIBUTION SYSTEM WITHIN THE TENANT SPACE TO INCLUDE, BUT NOT LIMITED TO ALL DUCTWORK, HANGERS, INSULATION, VAPOR BARRIER, SUPPLY DIFFUSERS, RETURN GRILLES, FLEXIBLE CONNECTIONS, AND CONTROL INSTALLATION AS REQUIRED FOR A COMPLETE AND WORKING SYSTEM. THE CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS AND OBTAIN ALL PERMITS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH ALL WORK UNDER THIS CONTRACT. ALL WORK SHALL BE FURNISHED AND INSTALLED IN FULL ACCORDANCE WITH ALL LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS.
- THE INSTALLATION OF ALL EQUIPMENT AND MATERIALS REQUIRING ACCESS SHALL BE MADE IN SUCH MANNER AS TO MAKE THE EQUIPMENT AND MATERIALS READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIRS.
- THE CONTRACTOR SHALL BE HELD TO HAVE EXAMINED THE SITE FOR HIS WORK BEFORE HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT. CONSTRUCTION DEBRIS AND RUBBISH GENERATED BY THE CONTRACTOR SHALL BE REMOVED FROM PREMISES AS OFTEN AS NECESSARY OR AS DIRECTED TO MAINTAIN A CLEAN AND WORKABLE AREA.
- ALL WORK AND EQUIPMENT SHALL BE FULLY GUARANTEED FOR FIVE (5) YEARS FROM THE DATE OF FINAL PAYMENT AND ACCEPTANCE.
- ALL WORK, INCLUDING INSIDE OF SUPPLY AIR DUCTS, AND EQUIPMENT WITHIN THE CONTRACT AREA FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE CLEANED TO THE SATISFACTION OF THE OWNER BEFORE TURNING SAME OVER TO THE OWNER.
- ALL DESIGN SHALL INCORPORATE CURRENT ASHRAE METHODS, STATE AND LOCAL CODES, RULES AND REGULATIONS.

MECHANICAL SPECIFICATIONS

A. TESTING, ADJUSTING AND BALANCING

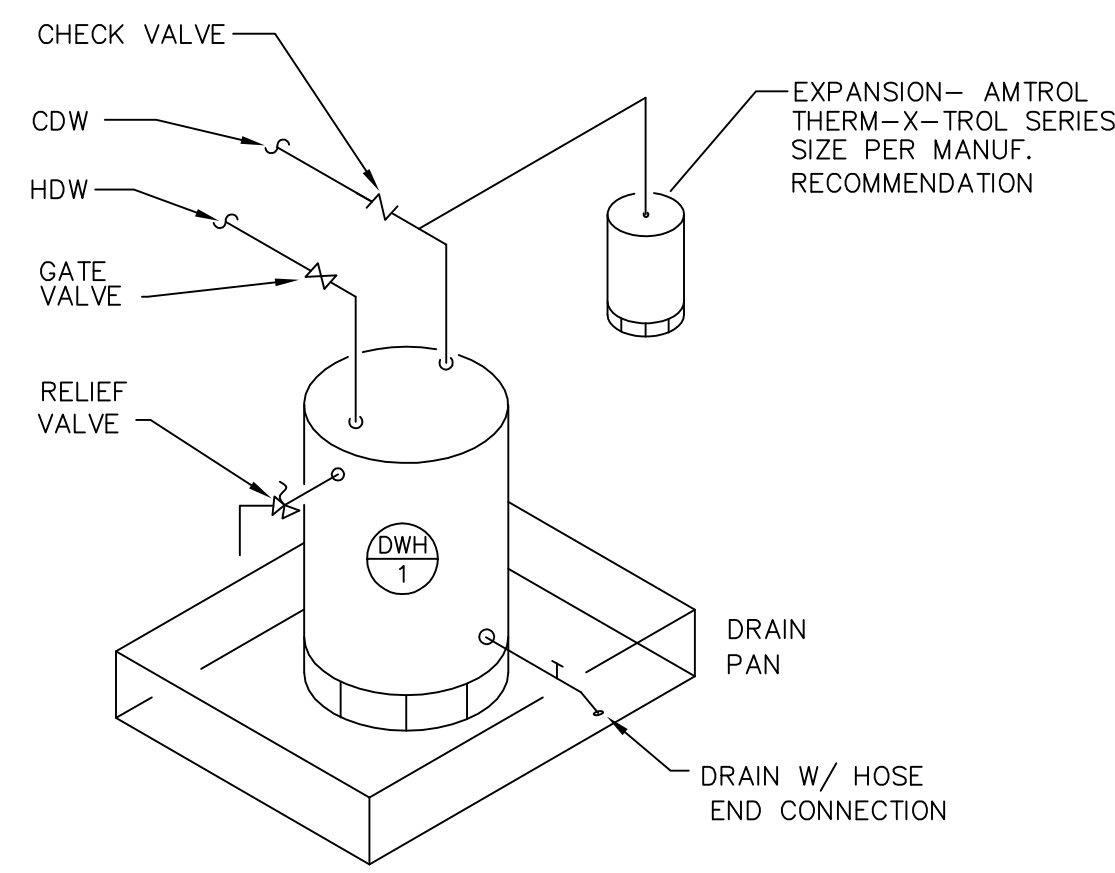
- CONTRACTOR SHALL ENGAGE AABC OR NEBB CERTIFIED AGENT TO PERFORM TESTING, ADJUSTING AND BALANCING HVAC SYSTEMS TO PRODUCE DESIGN OBJECTIVES, INCLUDING THE FOLLOWING:
 - BALANCING AIRFLOW WITHIN DISTRIBUTION SYSTEMS, INCLUDING SUBMAINS AND BRANCHES AS INDICATED QUANTITIES
 - ADJUSTING SYSTEMS TO PROVIDE INDICATED QUANTITIES
 - MEASURING ELECTRICAL PERFORMANCE OF HVAC EQUIPMENT
 - SETTING QUANTITATIVE PERFORMANCE OF HVAC EQUIPMENT
 - MEASURING SOUND AND VIBRATION
 - REPORT RESULTS OF THE ACTIVITIES AND PROCEDURES AS STIPULATED BY AABC OR NEBB
- CONTRACTOR SHALL SUBMIT TO THE ARCHITECT WITHIN 30 DAYS AFTER TEST COMPLETION, TWO (2) COPIES OF THE TEST RESULTS
- BALANCING OF AIR DEVICES SHALL BE ACCOMPLISHED BY ADJUSTING BRANCH TAKEOFF DAMPER AT MAIN TRUNK DUCT. DAMPERS IN THE NECKS OF AIR DEVICES SHALL BE USED FOR FINAL TRIM ONLY, AND IN NO CASE FOR GREATER THAN 5% OF THE INDICATED VOLUME FOR THE INDIVIDUAL AIR DEVICE.

DEMOLITION NOTES

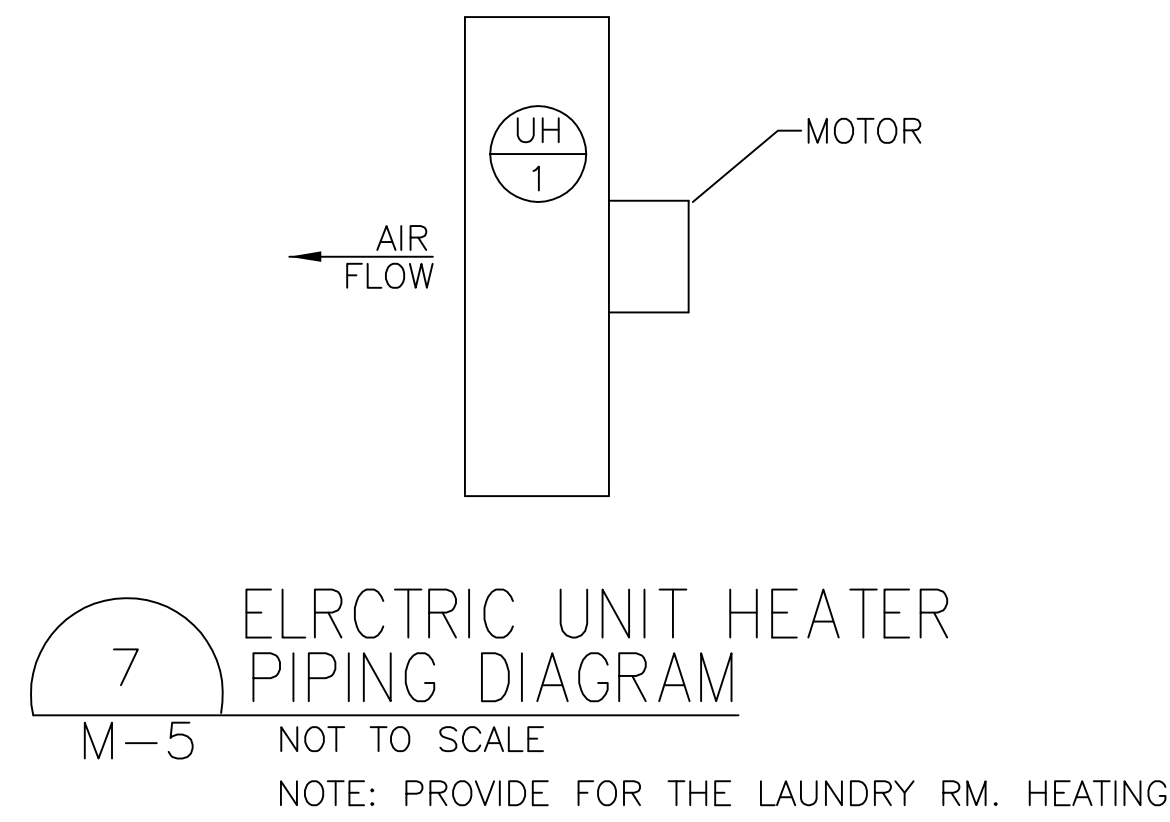
- CONTRACTOR SHALL CUT AND CAP ALL DEMOLISHED PIPING/PLUMBING AND PATCH ALL ROOF, WALL AND FLOOR PENETRATIONS IN AN APPROVED MANNER TO MATCH NEW CONSTRUCTION. DEMOLITION INCLUDE ALL FIXTURES AND EQUIPMENT UNLESS INDICATED OTHERWISE
- ALL ABANDONED PIPING/PLUMBING SHALL BE CUT/CAP AND FLUSH TO THE CEILING/WALL/FLOOR SURFACE IN AN APPROVED MANNER
- CONTRACTOR SHALL CUT AND CAP ALL EXIST. PIPING/PLUMBING INTERFERENCE TO ALLOW INSTALLATION OF NEW MATERIALS AND EQUIPMENT. DEMOLITION PLAN IS NOT AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A THROUGH AND COMPLETE FIELD INVESTIGATION AND BE FAMILIAR WITH THE BUILDING EXISTING CONDITIONS PRIOR TO SUBMITTING HIS/HER BID(S)
- ALL DEMOLISHED MECH. EQUIPMENT SHALL BE REMOVED AND TURNED OVER TO THE OWNER. AT THE OWNER'S DECISION, THE EQUIPMENT COULD BE TURNED OVER TO THE CONTRACTOR FOR PROPER DISPOSAL ACCORDING TO THE CITY REGULATIONS
- REMOVE ALL DEMOLISHED DUCTWORK AND ASSOCIATED AIR OUTLETS AND ACCESSORIES ACCORDINGLY
- REMOVE ALL THE BUILDING RAIN CONDUCTORS
- SEE ADDITIONAL DEMOLITION NOTES IN MECH. DWGS.

MECHANICAL DRAWING LIST

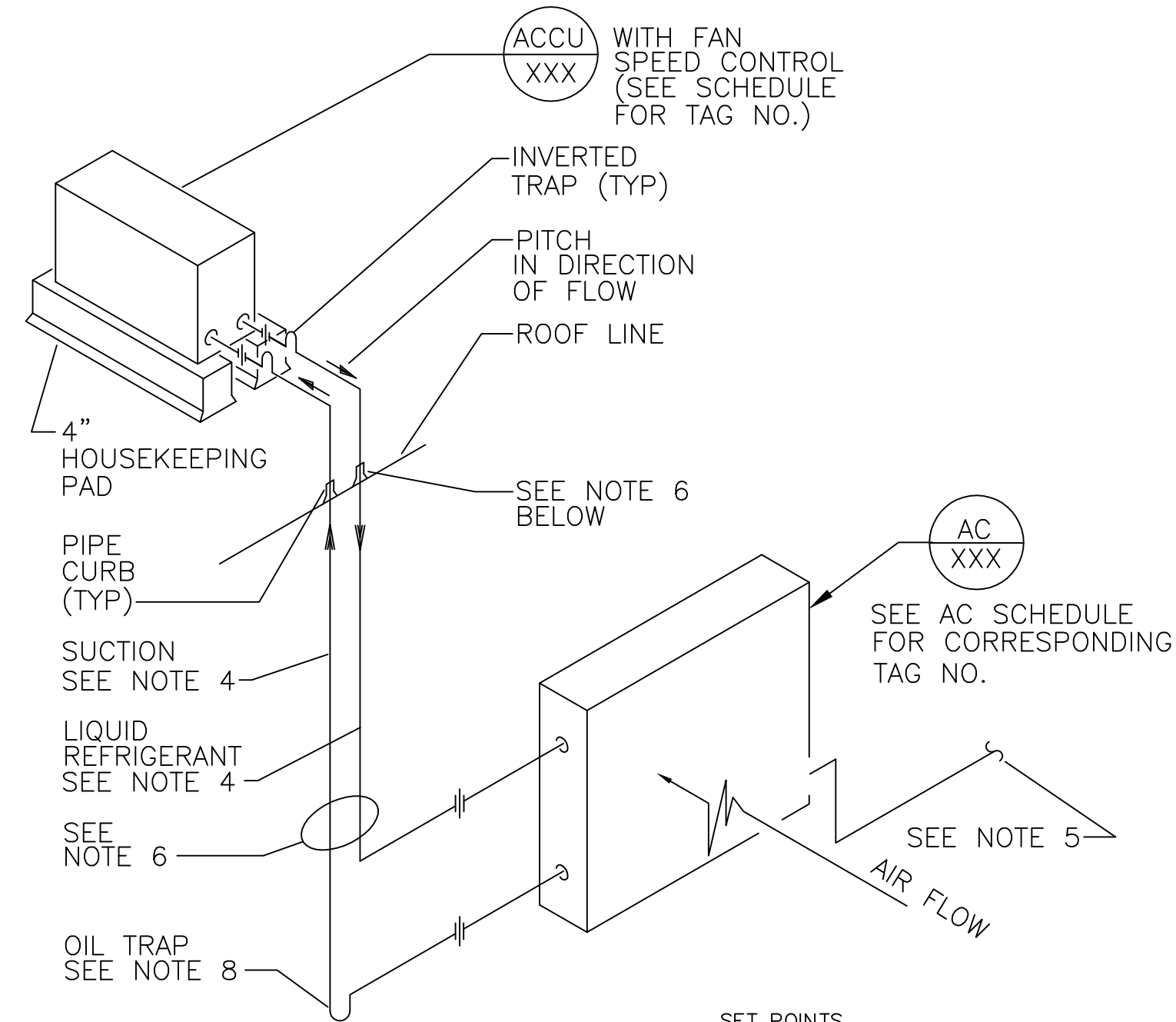
DRAWING NUMBER	DRAWING NUMBER
M-1	ABBREVIATIONS, SYMBOLS, GENERAL NOTES & SPECIFICATIONS
M-2	DETAILS
M-3	SCHEDULES
M-4	SCHEDULES
M-4	SCHEDULES
M-5	SCHEDULES
M-6	ROOF PLAN
M-7	NATURAL GAS,DOMESTIC WATER & DX COIL PIPING FLOW DIAGRAM
M-8	BASEMENT AND 1ST FLOOR HVAC FLOOR PLANS
M-9	2ND AND 3RD FLOORS HVAC FLOOR PLANS
P-1	BASEMENT AND 1ST FLOOR PLUMBING/PIPING FLOOR PLANS
P-2	2ND AND 3RD FLOORS PLUMBING/PIPING FLOOR PLANS



9 ELECTRIC DOMESTIC WATER HEATER PIPING DIAGRAM
MP-1 NO SCALE
NOTE: PROVIDE DRAIN FOR THE DRAIN PAN TO THE NEAREST FLOOR DRAIN. DRAIN NOT NECESSARY ONLY IF PAN IS LARGE ENOUGH TO CONTAIN THE TANK WATER CAPACITY

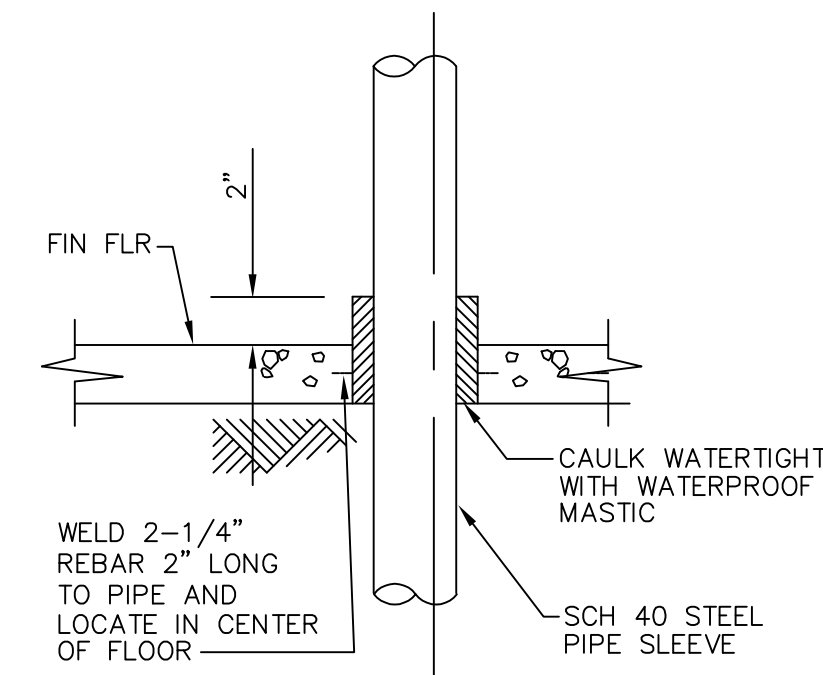


7 ELRCTRIC UNIT HEATER PIPING DIAGRAM
M-5 NOT TO SCALE
NOTE: PROVIDE FOR THE LAUNDRY RM. HEATING

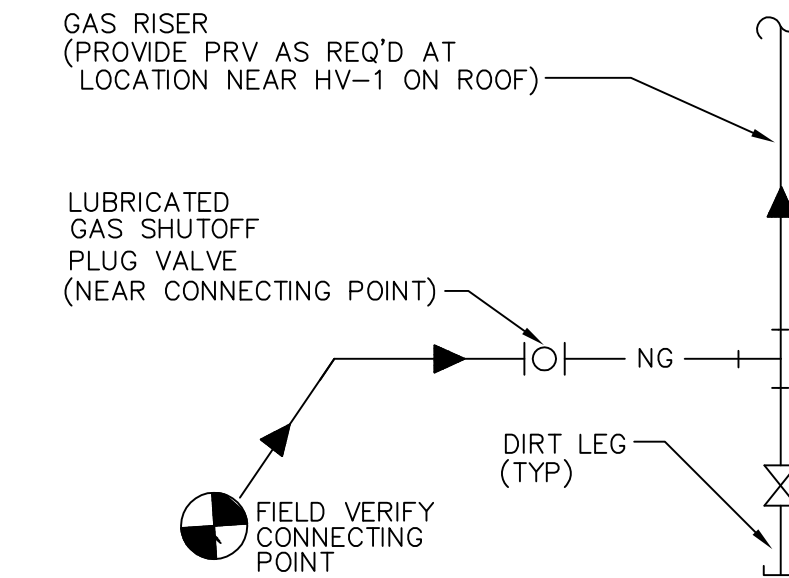


8 COOLING UNIT DETAIL
MP-1 NOT TO SCALE
MP-2
SET POINTS
OCCUPIED MODE: HEATING - 70°F
OCCUPIED MODE: COOLING - 78°F
UNOCCUPIED MODE: HEATING - 60°F
UNOCCUPIED MODE: COOLING - 85°F

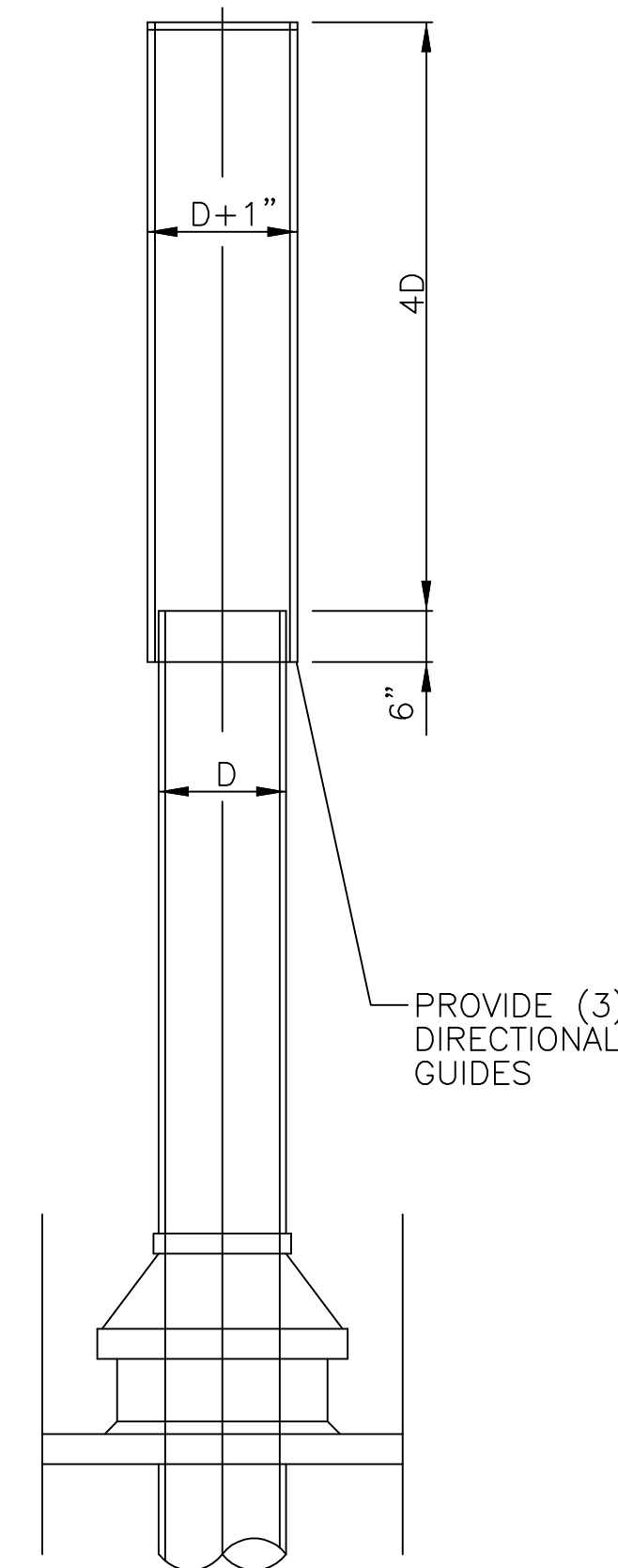
- NOTES:
- PITCH ALL HORIZONTAL LINES TOWARDS FLOW
 - INSULATE ALL LIQUID LINES. INSULATE HOT GAS LINES WITHIN CONDITIONED ROOMS
 - FINAL PIPING SHALL CONFORM TO MANUF. RECOMMENDATIONS. SUBMIT SHOP DRAWINGS
 - SEE REFRIGERANT LINES SCHEDULE FOR SIZES
 - PROVIDE 3/4" DRAIN. SLOPE TO NEAREST FLOOR DRAIN IN THE BASEMENT (NOT SHOWN IN DWGS)
 - CURBED OPENINGS IN EXISTING ROOF. PROVIDE FLASHING AND SEAL OFF
 - SEAL OPENINGS AIRTIGHT IN FLOORS AND CEILINGS AS NECESSARY (REFRIGERANT LINES TO BE LOCATED IN SHAFTS)
 - PROVIDE OIL TRAPS AT EVERY 15'-0" VERTICAL INTERVAL OR PER UNIT MANUFACTURER'S RECOMMENDATIONS



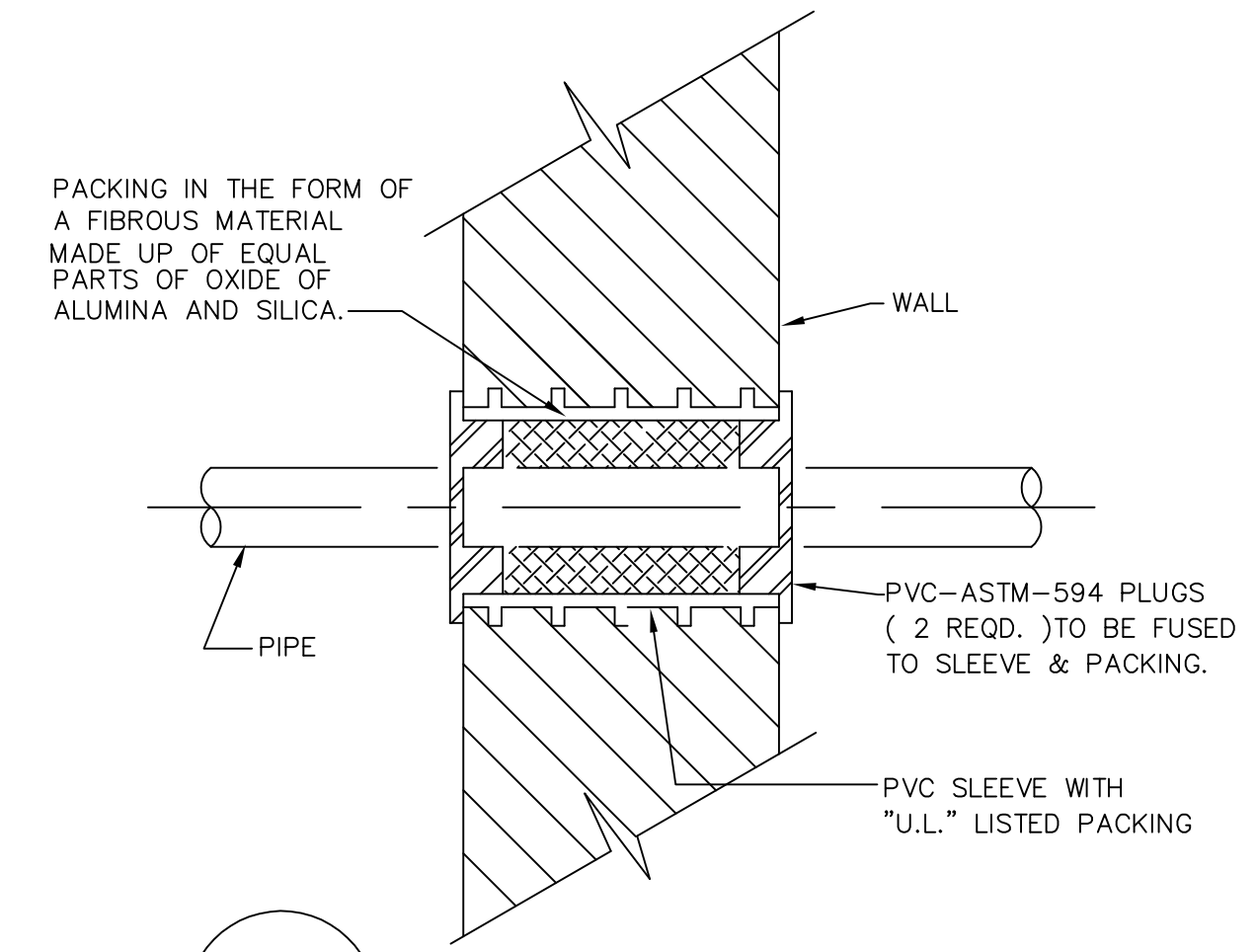
4 SLEEVE THRU FLOOR DETAIL
MP-1 NO SCALE



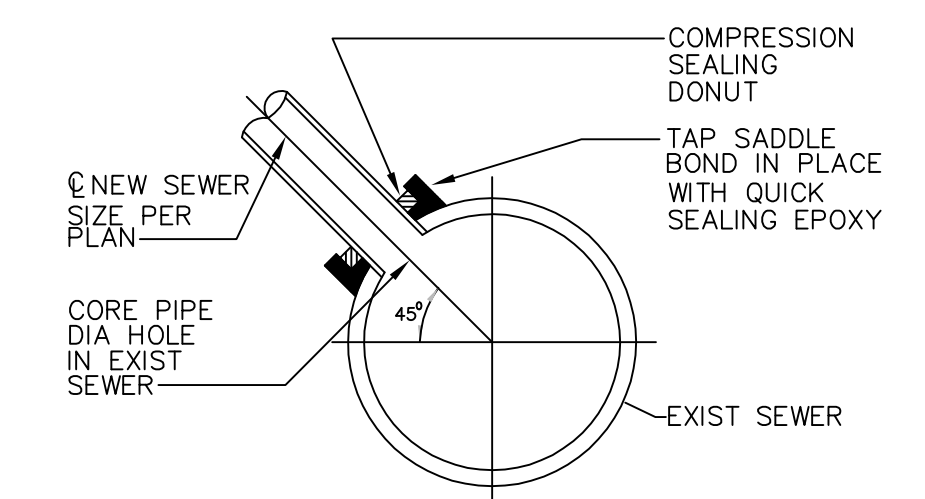
5 GAS BASE RISER DETAIL
MH-1 NO SCALE
MH-2



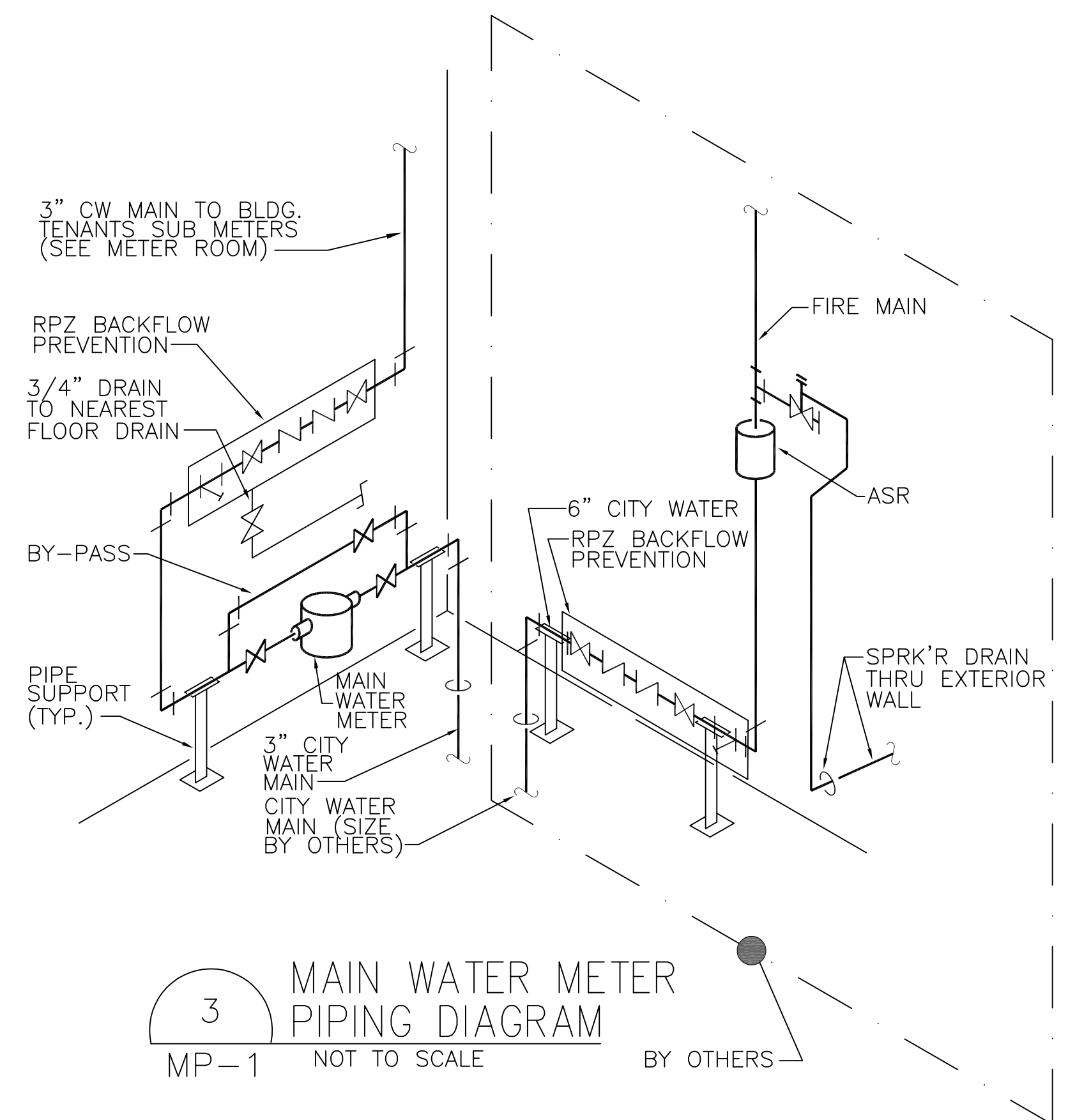
6 VERTICAL DISCHARGE STACK DETAIL (DWH-1)
MH-1 NOT TO SCALE
MH-2
NOTES:
1. DO NOT CAP STACK OR COVER OPENING.
2. TACK WELD 1/2"x1"x5" LEG SUPPORT BARS TO DISCHARGE DUCT. DRILL AND TAP BARS FOR (2) 3/8" BOLTS EACH AND INSTALL



1 WALL SLEEVE DETAIL
MH-1 NO SCALE



NOTES:
1. CONTRACTOR TO DETERMINE STRUCTURE OF EXIST. SEWER FOR TYPE OF DIRECT CONNECTION
2. TAPS SHALL NOT BE MADE WITHIN 12" OF A JOINT
2 DIRECT CONNECTION TO EXIST. SANITARY SEWER DETAIL
MP-1 NO SCALE



3 MAIN WATER METER PIPING DIAGRAM
MP-1 NOT TO SCALE
BY OTHERS

AIR CONDITIONING (SPLIT) WITH GAS FIRED HEATING UNIT SCHEDULE – APARTMENTS

NOTES: SEE AIR-COOLED CONDENSER UNIT SCHEDULE THIS SHEET

MARK	LOCATION	SUPPLY FAN					COMBUSTION FAN		COMB. INTAKE & EXH. (INS) PVC	OUTDOOR DESIGN CONDITIONS (°F)		ROOM DESIGN CONDITIONS (°F)		MIN. O.A. CFM	HEAT EXCHANGER (ALUMINIZED STEEL)	GAS VALVE	DIRECT IGNITION DEVICE	LEAKAGE (LBS)	COND. AMBIENT TEMP (°F)	EVAPORATOR BLOWER MOTOR				GAS HEATING-NATURAL GAS						FILTER		ELEC		APPROX DIMENSIONS HxWxD (INS)	APPROX WEIGHT (LBS)	REMARKS									
		AREA SERVED (DEG. F)	CFM @ 70 F	NO OF FANS	TYPE	EXT. SP. (IN. WG.)	MIN. MOTOR HP	VOLT/PH/Hz		DRIVE/NO. OF SPEED	VOLT/PH/Hz	APPROX. WINTER DB/WB	APPROX. SUMMER DB/WB							APPROX. WINTER DB/WB	APPROX. SUMMER DB/WB	DRIVE	RPM	VOLT	PHASE	WATTS	COMPRESSOR	TYPE	CFM	ENT. AIR (DEG F)	LVG. AIR (DEG F)	INPUT MBH	OUTPUT MBH				INLET GAS PIPING SIZE (IN)	TEMP RISE (°F) MIN/MAX	TEMP. (°F)	TYPE	SIZE (INS)	VOLTS	PH	HZ	AMPS
AC-BA	HVAC CLOSET UNIT 1A	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-BB	HVAC CLOSET UNIT 1B	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-BC	HVAC CLOSET UNIT 1C	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-1A	HVAC CLOSET UNIT 1A	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-1B	HVAC CLOSET UNIT 1B	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-1C	HVAC CLOSET UNIT 1C	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-1D	HVAC CLOSET UNIT 1D	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-2A	HVAC CLOSET UNIT 2A	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-2B	HVAC CLOSET UNIT 2B	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-2C	HVAC CLOSET UNIT 2C	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-2D	HVAC CLOSET UNIT 2D	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-3A	HVAC CLOSET UNIT 3A	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-3B	HVAC CLOSET UNIT 3B	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-3C	HVAC CLOSET UNIT 3C	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA
AC-3D	HVAC CLOSET UNIT 3A	800	5	1	DIRECT DRIVE	0.5	1/2	115/1/60	DIRECT	DIRECT	115/1/60	2/2	0/-	95/70	70/62.5	75/62.5	100	-	-	-	96	95	DIRECT	1750	120	1	-	SEE AIR-COOLED CONDENSER UNIT SCHEDULE	INDIRECT	800	-	-	60.0	53.6	1/2	30/60	THROWAWAY	16x16x1	115	1	60	-	-	115	BASED ON GOODMAN MODEL: GMCC96-0603BNA

NOTES: (AC-BA THRU AC-3D)

1. INSTALLATION SHALL CONFORM WITH THE MANUFACTURER'S STANDARD METHODS
2. PROVIDE UNIT W/ OUTDOOR AIR INTAKE GRAVITY DAMPER
3. THE ENTIRE DRIVE ASSEMBLIES SHALL BE MOUNTED ON VIBRATION ISOLATORS
4. PROVIDE THERMOSTAT W/ HEATING/COOLING SINGLE STAGE & COVER
5. THE CONTRACTOR SHALL CONFIRM ALL ABOVE DATA W/ MANUF. PRIOR TO PURCHASE & INSTALLATION
6. AC EQUIPMENT SHALL CONFORM AS SUGGESTED BY THE CONTRACTOR

ELECTRIC DOMESTIC WATER HEATER SCHEDULE (POU)

MARK	AREA SERVED	TEMP RANGE (F)	STORAGE GALLONS (GPM)	RECOVERY GAL./Hr./90°F	ELEC POWER SUPPLY		ELEC			DIMENSIONS OF TANK (APPROX.)	REMARKS
					VOLT	HZ	INPUT RATING (KW)	RECOMMENDED WIRE SIZE (AWG)	PHASE		
DWH-BA	BASEMENT UNIT BA	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-BB	BASEMENT UNIT BB	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-BC	BASEMENT UNIT BC	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1A	1ST FLOOR UNIT 1A	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1B	1ST FLOOR UNIT 1B	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1C	1ST FLOOR UNIT 1C	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1D	1ST FLOOR UNIT 1D	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2A	2ND FLOOR UNIT 2A	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2B	2ND FLOOR UNIT 2B	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2C	2ND FLOOR UNIT 2C	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2D	2ND FLOOR UNIT 2D	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3A	3RD FLOOR UNIT 3A	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3B	3RD FLOOR UNIT 3B	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3C	3RD FLOOR UNIT 3C	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3D	3RD FLOOR UNIT 3D	40-110	40	21	208	60	4.50	-	1	130	20"D x 61"H BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK

NOTES:

- | | | |
|---|---|--|
| <ol style="list-style-type: none"> 1. WATER HEATER SHALL EXCEEDS NAECA-1900 STDS. EQUAL. 2. ELECTRICAL POWER SHALL BE PROPERLY GROUNDED | PROVIDE DWHs AS FOLLOW:
<ol style="list-style-type: none"> 1. W/ FOAM INSULATION, FACTORY INSTALLED HEAT TRAP, TEMP. & PRESSURE RELIEF VALVE 2. OVER-TEMPERATURE PROTECTOR CUTS OFF POWER IN EXCESS TEMPERATURE SITUATIONS | <ol style="list-style-type: none"> 3. AUTOMATIC THERMOSTAT TO KEEP WATER AT DESIRED TEMPERATURE 6. PROVIDE 6-YEAR TANK AND PRTS WARRANTY |
|---|---|--|



DUCTWORK INSTALLATION AND INSULATION SCHEDULE			
ITEM	DESCRIPTION	DUCTWORK	INSULATION
PACKAGED-AIR UNITS EXH./RET. AIR	OUTSIDE AIR INTAKE DUCTWORK	GALV SHEET METAL. PRESSURE CLASS 2" WG SOLDERED WATERTIGHT	THERMALLY INSULATED W/ VAPOR BARRIER
PACKAGED-AIR UNITS EXH./RET. AIR	SUPPLY AIR DUCTWORK	GALV SHEET METAL. PRESSURE CLASS 3" WG	THERMALLY INSULATED W/ VAPOR BARRIER
EXHAUST AIR DUCTWORK	EXHAUST AIR DUCTWORK	GALV SHEET METAL. PRESSURE CLASS 3" WG	NOT REQUIRED
KITCHEN HOOD EXHAUST AIR DUCTWORK	TOILET ROOM EXHAUST	GALV SHEET METAL. PRESSURE CLASS 2" WG	NOT REQUIRED
	KITCHEN HOOD EXHAUST	16 GAUGE WELDED BLACK CARBON STEEL PRESSURE CLASS 3" WG	2" FIRE PROTECTION WRAPPED

NOTES: (DUCTWORK)

1. PROVIDE DUCTWORK SUPPORTS PER SMACNA STANDARDS

DIFFUSER/REGISTER/GRILLE SCHEDULE						
MARK	APPLICATION	MAT'L	ACCESSORIES	BORDER	FINISH	REMARKS
A	CEILING	ALUM.	OPPOSED - BLADE DAMPER	3	PER ARCH	TITUS MODEL TMS-AA. LAY-IN T-BAR SUPPLY DIFFUSER. 4 WAY ADJ.
B	CEILING	ALUM.	-	3	PER ARCH	TITUS MODEL 3FL. LAY-IN T-BAR MOUNT RETURN GRILLE.
C	WALL	ALUM.	OPPOSED - BLADE DAMPER	7	PER ARCH	TITUS MODEL 272FS. WALL MOUNT SUPPLY REGISTER. ADJ.

PIPE SIZES FOR PLUMBING FIXTURES SCHEDULE						
TAG	ITEM	PIPE CONN. SIZES				REMARKS
		CDW	HDW	W	V	
WC-1	WATER CLOSET (TANK)	1/2"	-	4"	2"	FLOOR MOUNTED
LAV-1 (120F)	LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"	WALL MOUNTED LAV.
KS-1	KITCHEN SINK	1/2"	1/2"	1 1/2"	1 1/2"	DOUBLE SINK COUNTERTOP
SH/TUB	BATH-TUB/SHOWER COMBINATION	1/2"	1/2"	3"	1 1/2"	ALCOVE BASE SHOWER
L-1	LAUNDRY SINK	1/2"	1/2"	3"	2"	BASEMENT LAUNDRY
FD	FLOOR DRAIN	-	-	3"	1 1/2"	WATER HEATER DRAIN
FS	FLOOR SINK	-	-	3"	1 1/2"	HVAC CONDENSATION DRAIN W/ AIR GAP

NOTES: (EFs ONLY)

1. PROVIDE EFs W/ NEMA-1 SAFETY DISCONNECT SWITCH
2. CONTRACTOR SHALL REFER TO GREENHECK OPERATION, MAINTENANCE AND INSTRUCTION MANUALS FOR PROPER AND ACCEPTABLE OF VIBRATION
3. PROVIDE EF-1 W/ MOTORIZED BACKDRAFT DAMPER
4. MOTOR SHALL BE LOCATED OUT OF THE AIR STREAM AND THE ENTIRE DRIVE ASSEMBLY SHALL BE MOUNTED ON VIBRATION ISOLATORS
5. FANS SHALL BE INSTALLED PER NFPA 96 AND MEET ALL LOCAL CODE REQUIREMENT. FAN SHALL BE UL 762 LISTED
4. PROVIDE FAN W/ WALL CAP
DISCHARGE MODEL: WC-10x3

FAN & VENTILATOR SCHEDULE													
MARK	ROOM/SYSTEM SERVED	TYPE	CFM @ 70 DEG. F	EXT. SP IN WG	FAN SPEED RPM	MAXIMUM TIP SPEED RPM	BHP	DRIVE	MOTOR				REMARKS
									HP WATTS	RPM	VOLT	PHASE	
EF-BA	TOILET BASEMENT UNIT 1A	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-BB	TOILET BASEMENT UNIT 1B	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-BC-1 & EF-BC-2	TOILET BASEMENT UNIT 1C	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
	MECH. RM.												
EF-1A-1 & EF-1A-2	TOILET 1ST FLR UNIT 1A	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-1B	TOILET 1ST FLR UNIT 1B	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-1C-1 & EF-1C-2	TOILET 1ST FLR UNIT 1C	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-1D	TOILET 1ST FLR UNIT 1D	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-2A-1 & EF-2A-2	TOILET 2ND FLR UNIT 2A	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-2B	TOILET 2ND FLR UNIT 2B	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-2C-1 & EF-2C-2	TOILET 2ND FLR UNIT 2C	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-2D	TOILET 2ND FLR UNIT 2D	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-3A-1 & EF-3A-2	TOILET 2ND FLR UNIT 3A	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-3B	TOILET 2ND FLR UNIT 3B	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-3C-1 & EF-3C-2	TOILET 3RD FLR UNIT 3C	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH
EF-3D	TOILET 3RD FLR UNIT 3D	CENTRIF. CEILING	100	0.375	1580	2068	-	DIRECT	63 WATTS	1580	115	1	BASED ON "PENN" ZYPHYR MODEL W/BACK-DRAFT DAMPER(GRAVITY), UNIT MOUNTED SAFETY DISCONNECT SWITCH & WALL MOUNTED ON/OFF SWITCH



EDWARDS GROUP INTERNATIONAL INC.
Architecture | Design | Planning Solutions
440 Burroughs St #653
Detroit, MI 48202
313-965-4600 / Fax: 313-965-7078

Aina Associates, Inc.
Mechanical - Electrical Engineering
311-999-8632

SCHEDULES

MARLBORO APARTMENTS
BUILDING RENOVATION

1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

ISSUE DATES:
REVIEW
AUG-11-2016
BACKGROUND
AUG-14-2016
ISSUED
SEPT-20-2016
ADDENDUM #3
JAN-10-2019

DWG FILENAME
m4

M4

AIR COOLED CONDENSING UNIT SCHEDULE

NOTES: GRADE HOUSEKEEPING PAD MOUNTED

MARK	AREA SERVED	SYSTEM SERVED	POWER				COMPRESSOR					OUTDOOR FAN				OUTDOOR COIL				REFRIGERANT				FCCD RESTRICTOR ORIFICE	APPROX DIMENSIONS OUTDOOR UNIT (INS)	WEIGHT		REMARKS							
			VOLT	PH	HZ	MIN CIRCUIT AMPS	MAX AMPS	SUGGE. AMPS	SEER	TYPE	NO./SPEED	VOLT/PH/HZ	RL/LRA AMPS	CIRCUIT SELECTOR CURRENT AMPS	TYPE	DIA (INS) & NO.	DRIVE/SPEED	CFM	NO. OF MOTORS & HP	MOTOR SPEED RPM	VOLT/PH/HZ	TYPE	ROWS (FPI)			FACE AREA (FT ²)	TUBE SIZE (INS)		LBS R-410A	FACTORY SUPPLIED	SUCTION SIZE IN OD	LIQUID SIZE IN OD	SHIPPING LBS	NET LBS	
ACCU-BA	1ST FLR UNIT 1A	CC-BA	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F
ACCU-BB	1ST FLR UNIT 1B	CC-BB	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-BC	1ST FLR UNIT 1C	CC-BC	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-1A	1ST FLR UNIT 1D	CC-1A	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-1B	1ST FLR UNIT 1E	CC-1B	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-1C	1ST FLR UNIT 1F	CC-1C	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-1D	2ND FLR UNIT 2A	CC-1D	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-2A	2ND FLR UNIT 2A	CC-2A	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-2B	2ND FLR UNIT 2B	CC-2B	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-2C	2ND FLR UNIT 2C	CC-2C	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-2D	2ND FLR UNIT 2D	CC-2D	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-3A	3RD FLR UNIT 3A	CC-3A	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-3B	3RD FLR UNIT 3B	CC-3B	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-3C	3RD FLR UNIT 3C	CC-3C	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	
ACCU-3D	3RD FLR UNIT 3D	CC-3D	208/230	1	60	18	30	-	14	SCROLL	-	208/230/60	13.5/58.3	-	PROP.	-	DIRECT	1	-	101/6	-	208/230/60	PER MANUF	-	-	-	YES	3/4	3/8	-	-	180	-	BASED ON GOODMAN MODEL: GSX16-0241F	

- NOTES: (ACCUS)
1. THE CONTRACTOR SHALL CONFIRM ALL ABOVE DATA W/ MANUF. PRIOR TO PURCHASE & INSTALLATION
 2. AC EQUIPMENT SHALL CONFORM AS SUGGESTED BY THE CONTRACTOR

DIRECT EXPANSION COOLING UNIT SCHEDULE

MARK	AREA SERVED	CFM	NOMINAL COOLING CAPACITY (TONNAGE)	SEER (BTUH/WATT-HR)	TYPE	SYSTEM POWER (KW)	REMARKS
CC-BA	BASEMENT UNIT BA	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-BB	BASEMENT UNIT BB	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-BC	BASEMENT UNIT BC	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-1A	1ST FLR UNIT 1A	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-1B	1ST FLR UNIT 1B	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-1C	1ST FLR UNIT 1C	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-1D	1ST FLR UNIT 1D	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-2A	2ND FLR UNIT 2A	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-2B	2ND FLR UNIT 2B	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-2C	2ND FLR UNIT 2C	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-2D	2ND FLR UNIT 2D	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-3A	3RD FLR UNIT 3A	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-3B	3RD FLR UNIT 3B	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-3C	3RD FLR UNIT 3C	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6
CC-3D	3RD FLR UNIT 3D	800	3.0	-	-	-	BASED ON GOODMAN MODEL CAPF-3636B6

- NOTES: (CCs)
1. THE CONTRACTOR SHALL CONFIRM ALL ABOVE DATA W/ MANUF. PRIOR TO PURCHASE & INSTALLATION
 2. AC EQUIPMENT SHALL CONFORM AS SUGGESTED BY THE CONTRACTOR

EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
440 Burroughs St #653
Detroit, MI 48202
313-965-4600 / Fax: 313-965-7078

Aing Associates, Inc.
Mechanical - Electrical Engineering
313-999-8832

SCHEDULES
1031 MARLBOROUGH ST.
DE TROIT, MICHIGAN

MARLBORO APARTMENTS
BUILDING RENOVATION

DWG FILENAME
m4rev
M-4REV



ELECTRIC DOMESTIC WATER HEATER SCHEDULE (POU)												
MARK	AREA SERVED	TEMP RANGE (F)	STORAGE GALLONS (GPM)	RECOVERY GAL/Hr./90°F	ELEC POWER SUPPLY		ELEC			WT (LBS)	DIMENSIONS OF TANK (APPROX.)	REMARKS
					VOLT	HZ	INPUT RATING (KW)	RECOMMENDED WIRE SIZE (AWG)	PHASE			
DWH-BA	BASEMENT UNIT BA	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-BB	BASEMENT UNIT BB	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-BC	BASEMENT UNIT BC	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1A	1ST FLOOR UNIT 1A	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1B	1ST FLOOR UNIT 1B	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1C	1ST FLOOR UNIT 1C	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-1D	1ST FLOOR UNIT 1D	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2A	2ND FLOOR UNIT 2A	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2B	2ND FLOOR UNIT 2B	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2C	2ND FLOOR UNIT 2C	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-2D	2ND FLOOR UNIT 2D	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3A	3RD FLOOR UNIT 3A	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3B	3RD FLOOR UNIT 3B	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3C	3RD FLOOR UNIT 3C	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK
DWH-3D	3RD FLOOR UNIT 3D	40-110	40	21	208	60	4.50	-	1	130	20"0 x 61"H	BASED ON BRADFORD WHITE MODEL: RE340T61NCWW264 PROVIDE W/WATER PAN W/ CPVC FTG. & 2 GAL. EXPANSION TANK

- NOTES:
1. WATER HEATER SHALL EXCEEDS NAECA-1900 STDS. EQUAL.
 2. ELECTRICAL POWER SHALL BE PROPERLY GROUNDED
 3. AUTOMATIC THERMOSTAT TO KEEP WATER AT DESIRED TEMPERATURE
 4. PROVIDE 6-YEAR TANK AND PRTS WARRANTY
- PROVIDE DWHs AS FOLLOW:
1. W/ FOAM INSULATION, FACTORY INSTALLED HEAT TRAP, TEMP. & PRESSURE RELIEF VALVE
 2. OVER-TEMPERATURE PROTECTOR CUTS OFF POWER IN EXCESS TEMPERATURE SITUATIONS

GAS FIRED HEATING & VENTILATING UNIT SCHEDULE																				
MARK	LOCATION	AREA SERVED	SUPPLY FAN					GAS HEATING-NATURAL GAS										WEIGHT (LBS)	REMARKS	
			CFM @ 70 DEG.F	TYPE	EXT. SP (IN.WG.)	MOTOR HP	DRIVE	BURNER TYPE	ENT.AIR (DEG F)	LVG. AIR (DEG F)	MAX INPUT MBH	OUTPUT MBH	INLET GAS PIPING SIZE(IN)	MAX TEMP RISE (°F)	MIN. TEMP RISE (°F)					
HV-1	ROOF	CORRIDORS	300	DIRECT FIRED	1.5	-	BELT	1750	208	3	DIRECT	0	80	27.0	27.0	1/2	80	30	PER MANUF.	BASED ON ACCUREX XDG TYPE OR APPROVED EQUAL

ELECTRIC UNIT HEATER SCHEDULE																	
MARK	AREA SERVED	TYPE	CFM @ 70 DEG. F	AIR TEMP DEG F		KW	MBH	VOLTS	MAR AMPS	PHASE	STAGES	MOTOR			APPROXIMATE DIMENSION (INCHES)	REMARKS	
				ENT	LVG							HP	MAX RPM	VOLTS			PHASE
UH-01	MECH RM. 109	HORIZONTAL DISCHARGE	700	50	89.0	7.5	25.6	208	36.1	3	1	1/125	1550	208	3	15Wx70x18H	TRANE MODEL: UHEC-07-3-AACA W/ FAN GUARD MODEL: OFG-5102

- NOTES: (UH)
- PROVIDE ALL UNITS WITH THE FOLLOWING:
1. PROVIDE WALL THERMOSTAT AND BUILT-IN DISCONNECT
 2. PROVIDE TRANSFORMER FOR CONTROLS
 3. UNIT BOTTOM ELEVATION TO BE FIELD DETERMINED
 4. PROVIDE THERMOSTAT STRATIFICATION CONTROL
 5. INSTALL UNITS PER MANUF. INSTRUCTIONS
 6. PROVIDE LOUVER CONE DIFFUSER SET 45°

EDWARDS GROUP INTERNATIONAL, INC.
 Architecture | Design | Planning Solutions
 440 Burroughs St #653
 Detroit, MI 48202
 313-965-4600 / Fax: 313-965-7078

ATA
 Aing Associates, Inc.
 Mechanical - Electrical Engineering
 313-999-8832

SCHEDULES

1031 MARLBOROUGH ST.
 DETROIT, MICHIGAN

DESIGNED BY: TJB
 DRAWN BY: TJB

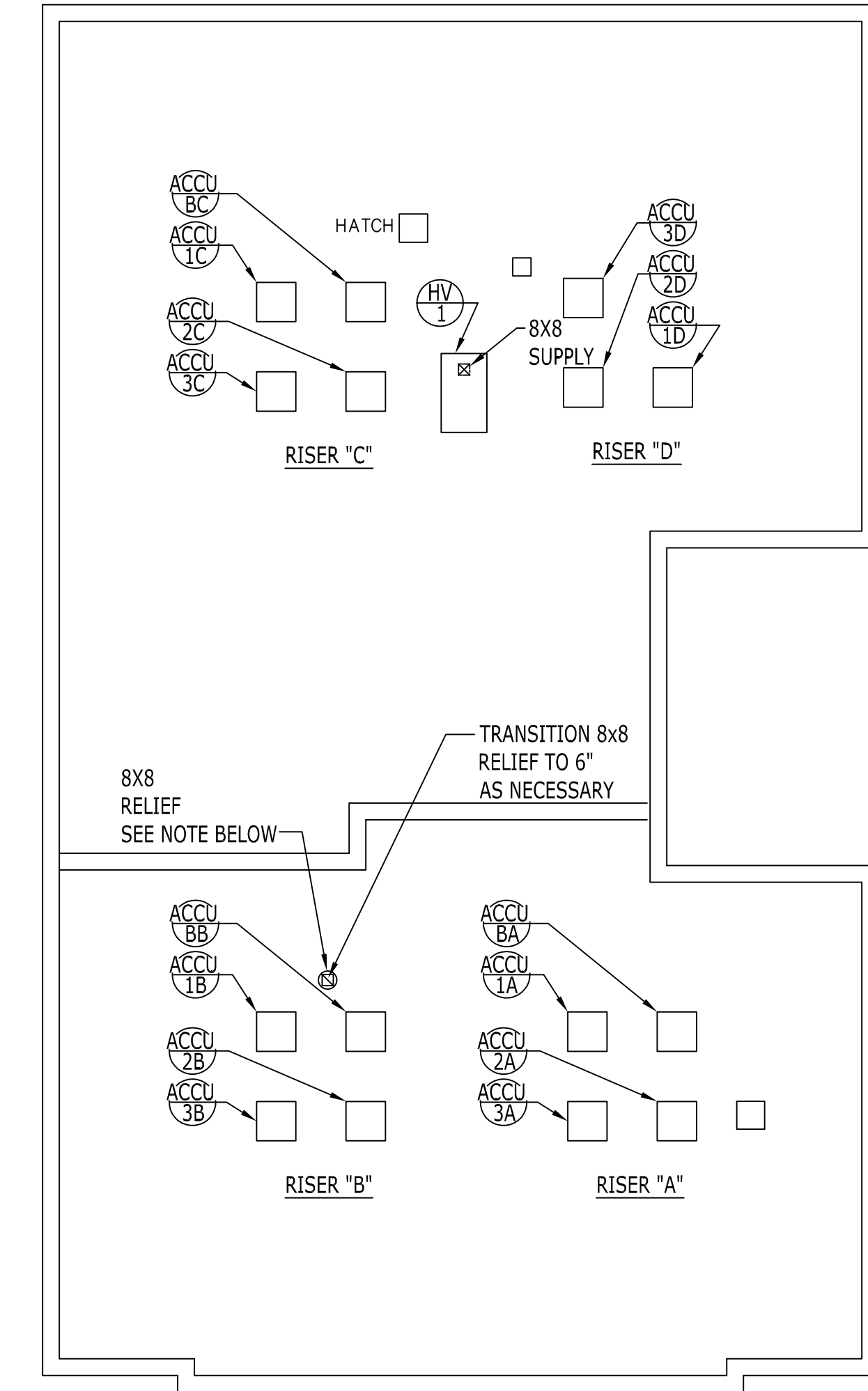
MARLBORO APARTMENTS
 BUILDING RENOVATION

ISSUE DATES:

REVIEW
 AUG-11-2016
 BACKGROUND
 AUG-14-2016
 ISSUED
 SEPT-20-2016
 ADDENDUM #3
 JAN-10-2019

DWG FILENAME
 m5

M5

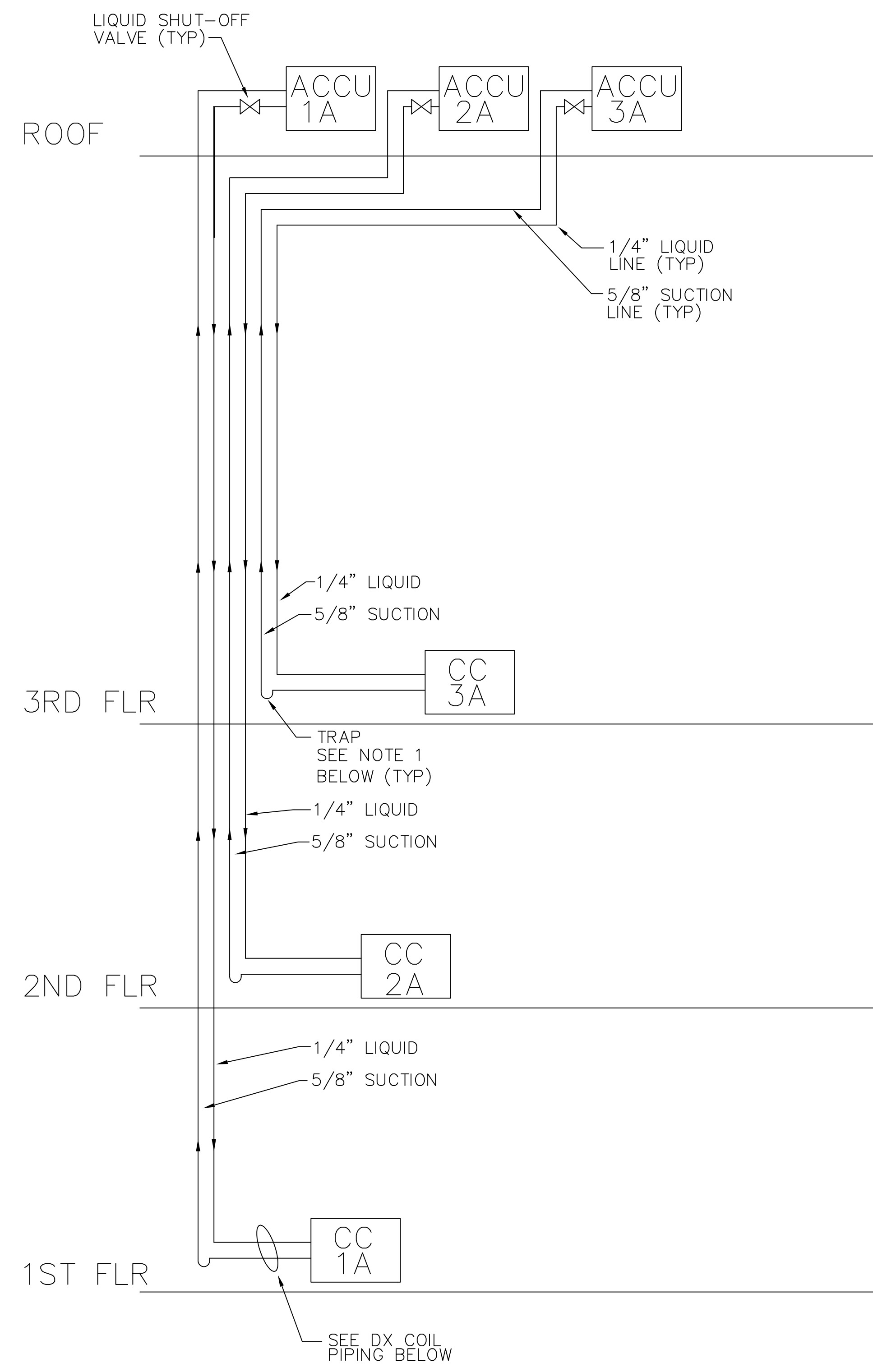
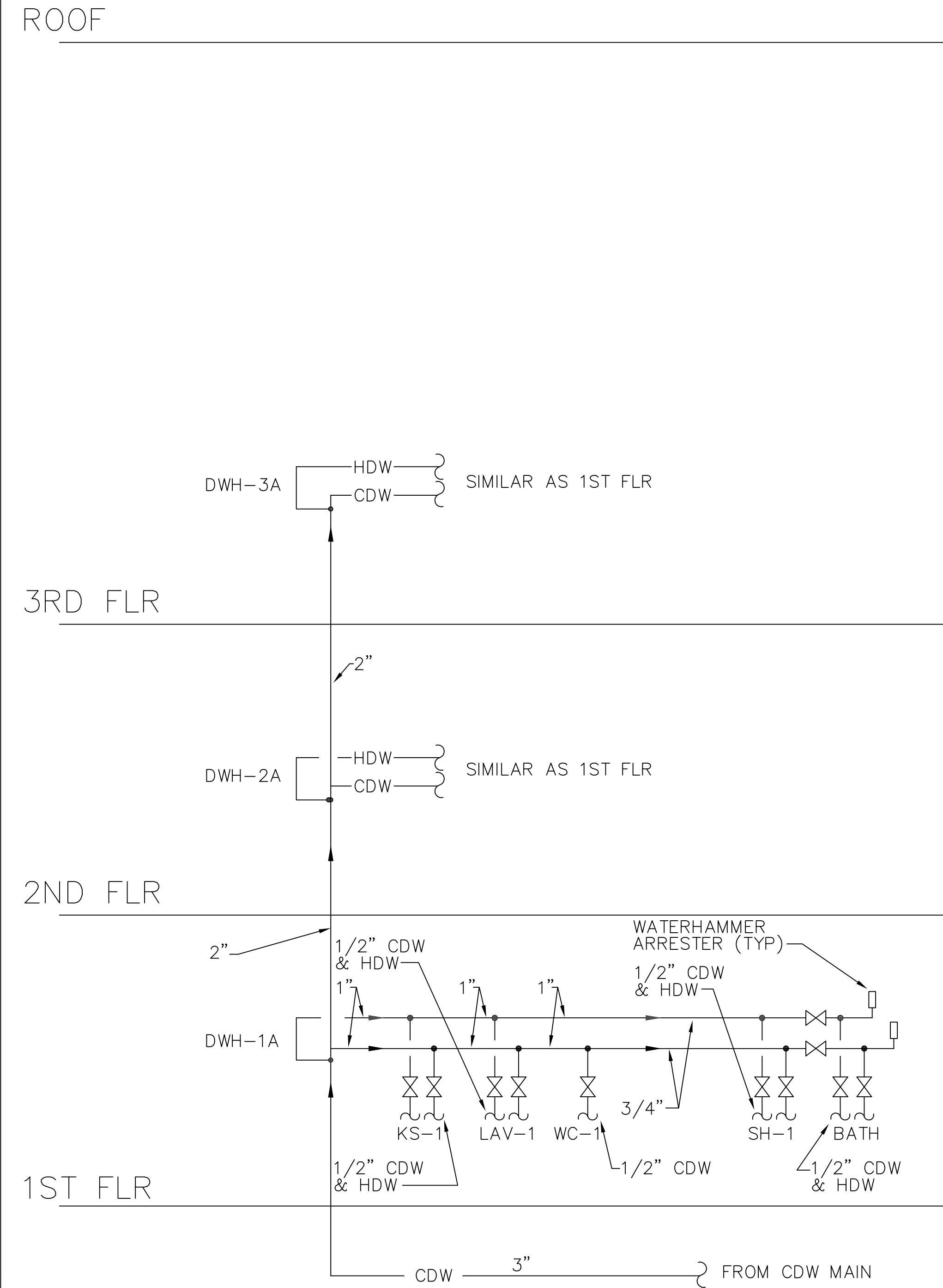
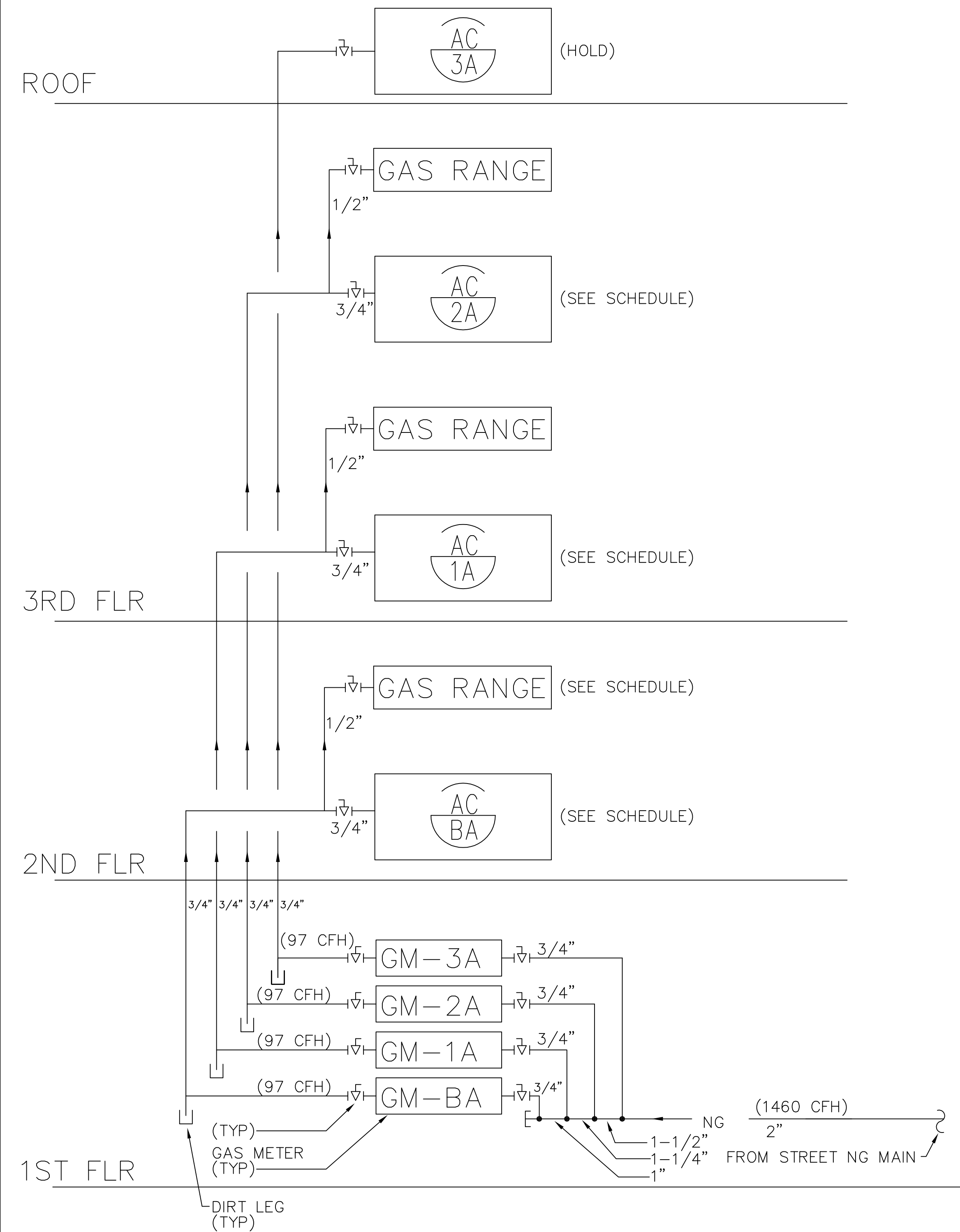


ROOF PLAN
1/8" = 1'-0"

NOTE:
TERMINATE 6" RELIEF RISER ABOVE ROOF
W/ A GOOSENECK AND BIRDSCREEN

ISSUE DATES:

REVIEW	AUG-11-2016
BACKGROUND	AUG-14-2016
ISSUED	SEPT-20-2016
ADDENDUM #3	JAN-10-2019



NATURAL GAS RISER DIAGRAM "A"

- SCALE: NONE
 NOTES:
 1. OWNER SELECTED TO USE ELECTRIC ELECTRIC STOVE. THE ABOVE GAS RISER APPLY ONLY WHEN GAS STOVE IS SELECTED
 2. NATURAL GAS RISER "B" SIMILAR
 3. NATURAL GAS RISER "C" SIMILAR
 4. NATURAL GAS RISER "D" SIMILAR

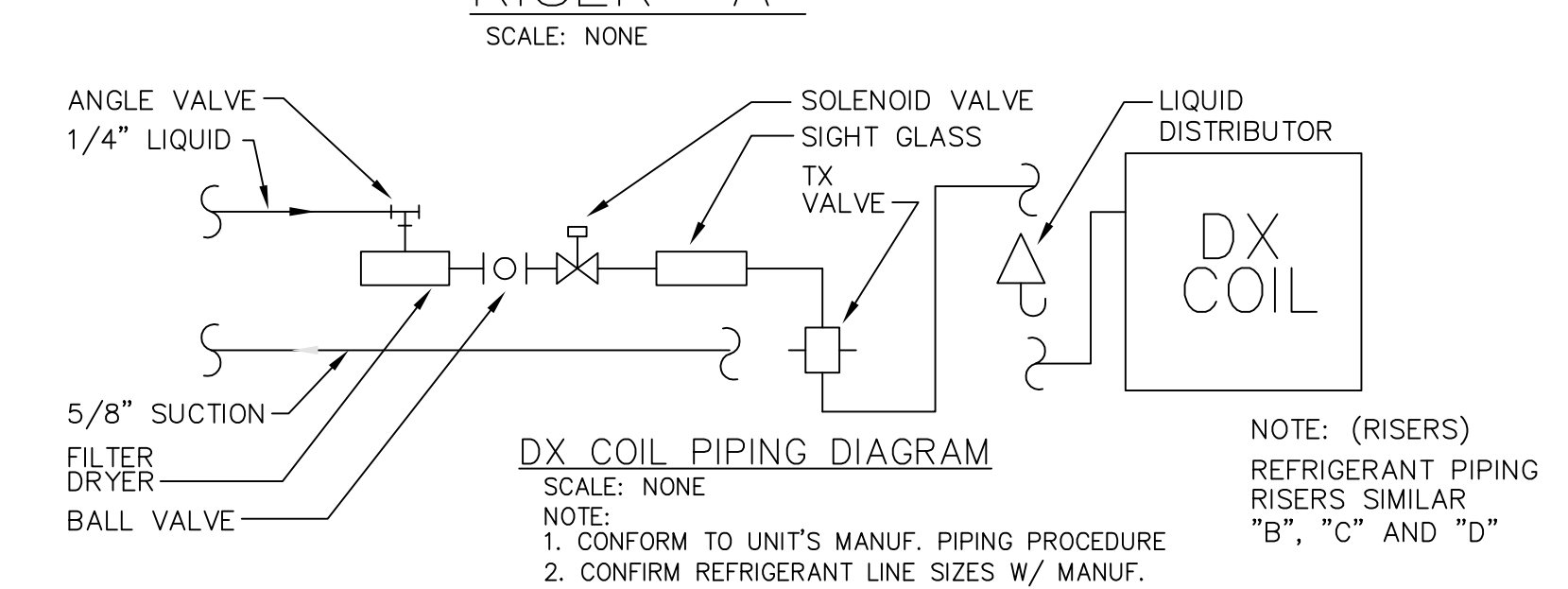
GAS LOAD CHART		
MARK	CFH	REMARK
GAS RANGE	675	TENANTS GAS RANGE 45CFHx15=675 CFH
HV-1	HOLD	ROOF H&V UNIT
AC-BA THRU AC-3D	783	TENANT FURNACES & HDW 15x52.2CFH(AVG)=783CFH
TOTAL (APPROX)	1460	GAS PIPING PRESSURE @ 0.5 PSIG @ 2" NG

GENERAL NOTE: (NG)
 NG
 1. TOTAL TENANT GAS METERS = 15

WATER PIPING RISER DIAGRAM "A"

- SCALE: NONE
 NOTES:
 1. WATER PIPING DIAGRAM TYPICAL FOR RISERS NOS. "B", "C" & "D"
 2. FOR INDIVIDUAL FIXTURE CONNECTING PIPE SIZE, SEE PIPE SCHEDULE ON DWG. M-3
- GENERAL NOTE: (CDW)
 CDW
 1. TOTAL TENANT WATER METERS = 15

DX COIL PIPING DIAGRAM RISER "A"



- NOTE:
 1. PROVIDE P-TRAP @ EVERY 15'-0" SUCTION LINE RISER
 2. RISER "D" SIMILAR "A" EXPECT IN THE BASEMENT

UNDERGROUND

EDWARDS GROUP INTERNATIONAL, INC.
 Architecture | Design | Planning Solutions
 40000 Woodward Ave. #650
 Detroit, MI 48202
 313-965-4200 / Fax 313-965-7878

ESI

Airco Associates, Inc.
 Mechanical - Electrical Engineering
 24175 NorthWestern Hwy.
 Southfield, MI 48075
 313-997-6632

airco

NATURAL GAS, DOMESTIC WATER & DX COIL PIPING FLOW DIAGRAMS

1031 MARLBOROUGH ST.
 DETROIT, MICHIGAN

DRAWN BY: BT
 DESIGN BY: TA
 CONCEPT BY: TA

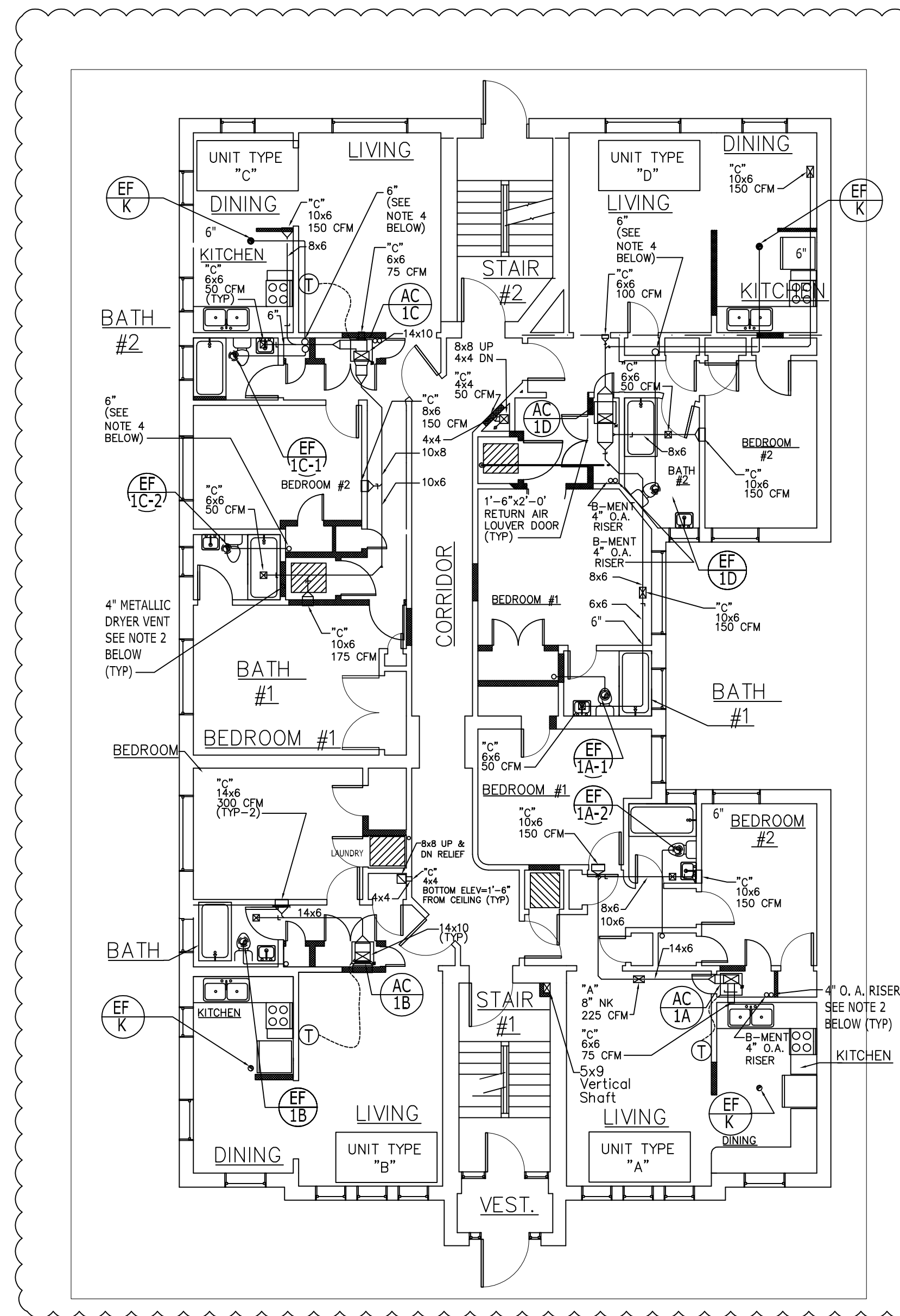
MARLBORO APARTMENTS
 BUILDING RENOVATION

ISSUE DATES:

REVIEW	DATE
AUG-11-2016	
BACKGROUND	AUG-14-2016
ISSUED	SEPT-20-2016
ADDENDUM #3	JAN-10-2019

DWG FILENAME: m7

M7

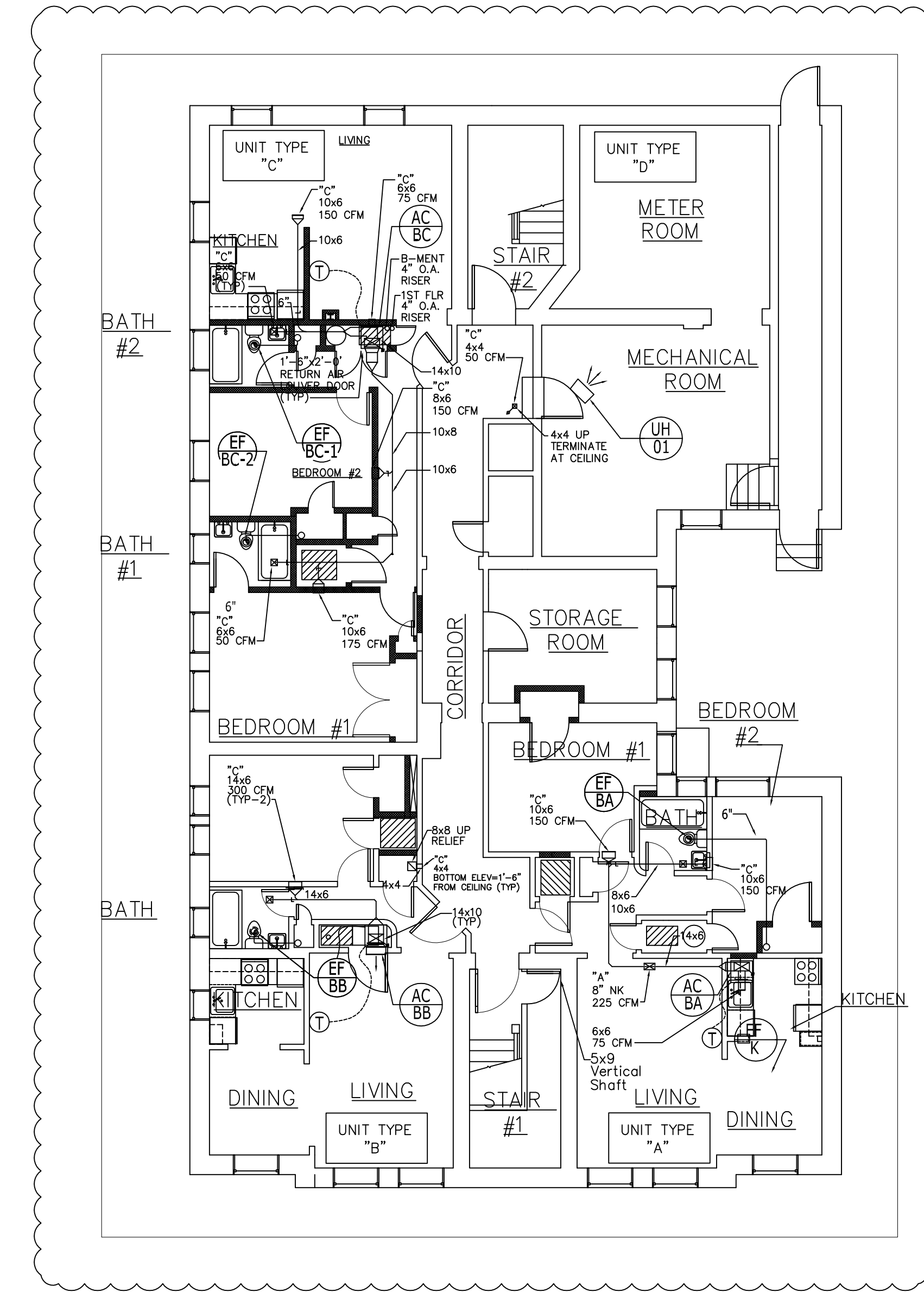


HVAC FLOOR PLAN - 1ST FLR

1/8" = 1'-0"

NOTE:

1. LOCATE 3" PVC BOILER COMBUSTION EXHAUST THRU WALL ABOVE 3" PVC BOILER COMBUSTION AIR INTAKE. LOCATE EXHAUST VENT ABOVE COMBUSTION AIR INTAKE (TYP)
2. PROVIDE FIRE DAMPER IN ALL DUCTWORK PENETRATING FIRE-RATED CEILINGS
3. SEE NOTE 2 UNDER 3RD FLOOR PLAN DWG. ON SHEET MH-2
4. ALL KITCH./BATH EXHAUST SHALL TERMINATE ABOVE ROOF WITH A GOOSENECK (TYP)



HVAC FLOOR PLAN - BASEMENT

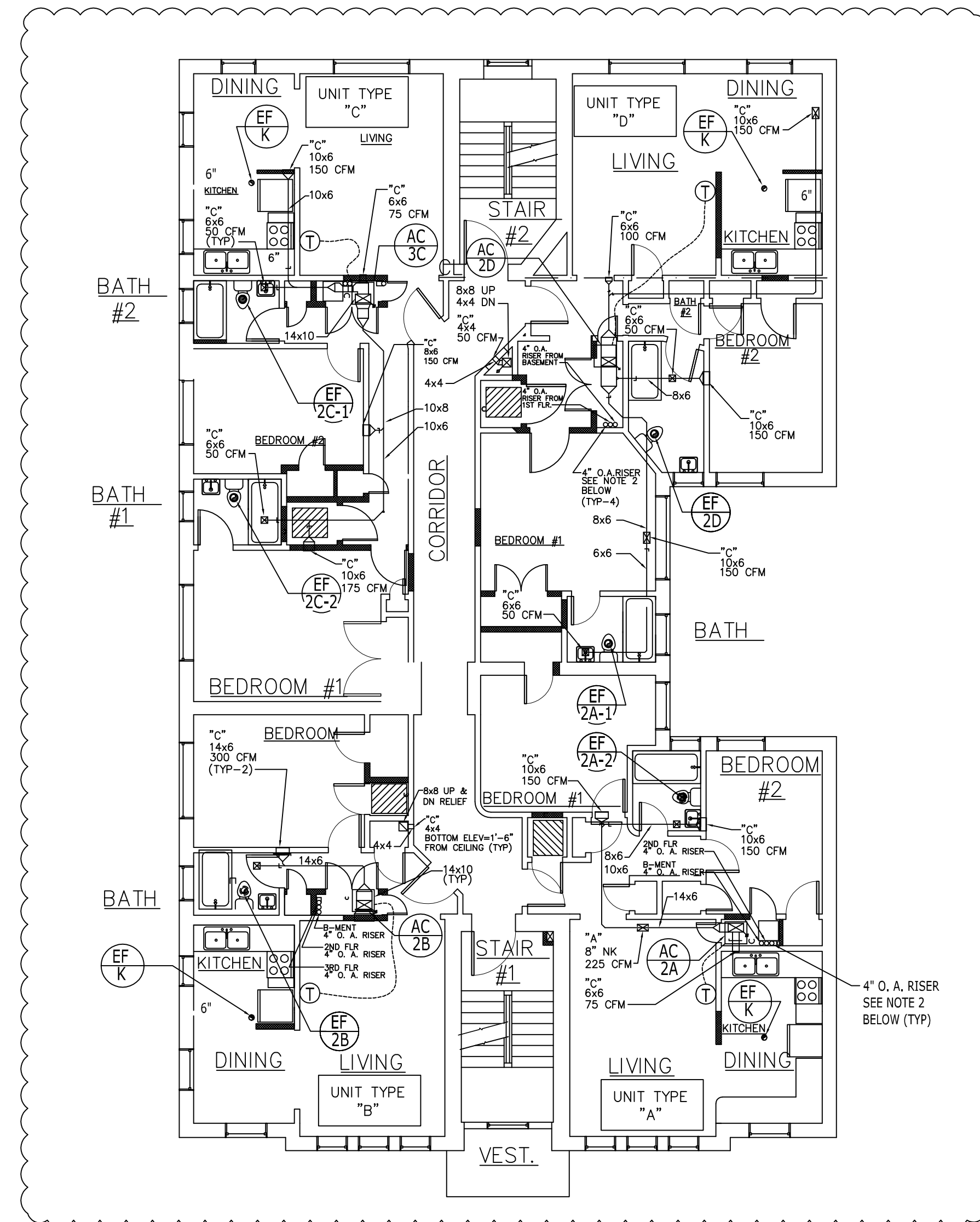
1/8" = 1'-0"

NOTE:

1. FOR BOILER COMBUSTION EXHAUST/AIR INTAKE, SEE SIMILAR EQUIPMENT ON 1ST. FLOOR
2. SEE NOTE 2 UNDER 3RD FLOOR PLAN DWG. ON SHEET MH-2
3. ALL KITCHEN/BATH EXHAUST SHALL TERMINATE ABOVE ROOF WITH A GOOSENECK (TYP)

SPECIFICATIONS (DUCTWORK)

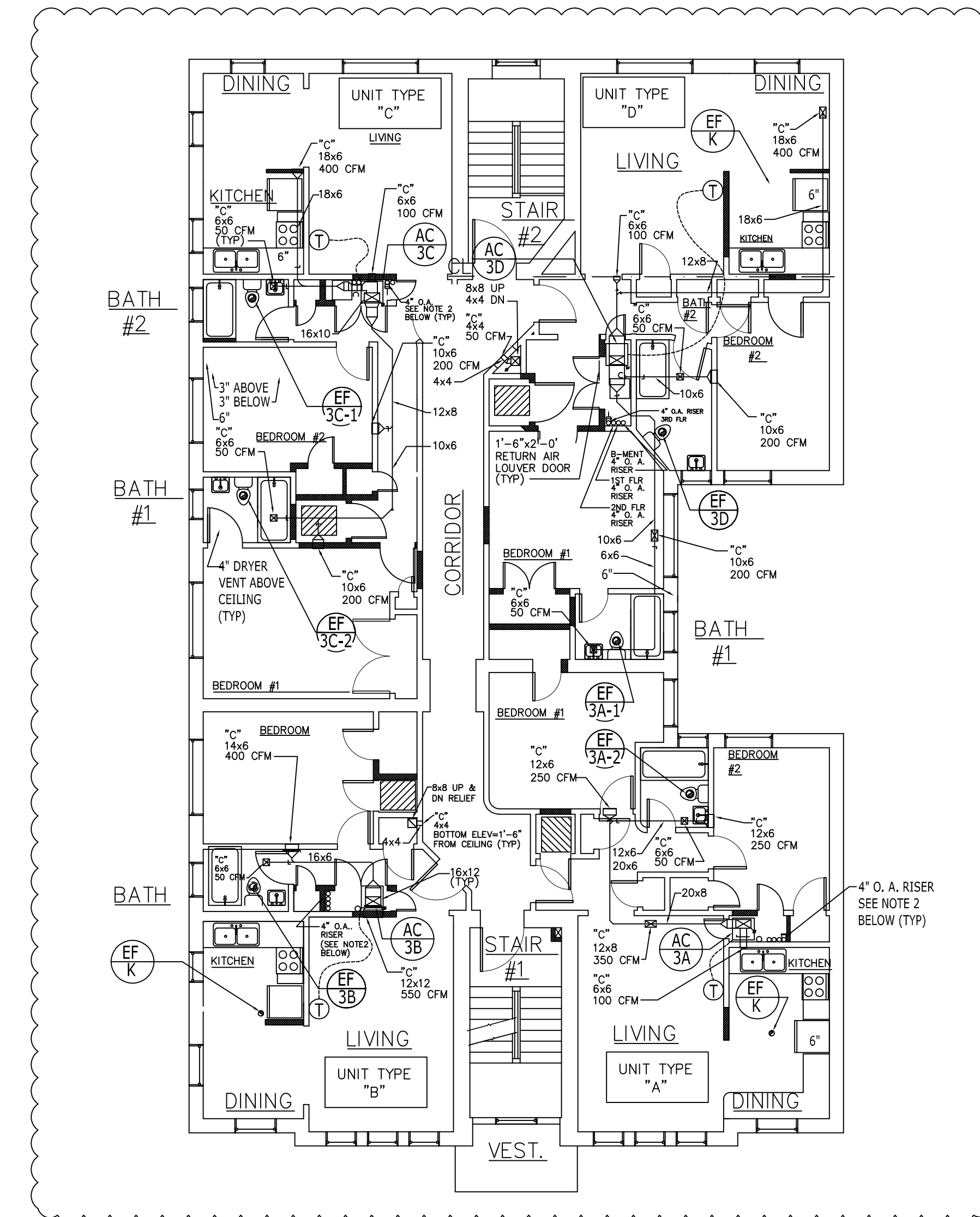
1. CONSTRUCT DUCTWORK SYSTEMS OF LOCK FORMING QUALITY MILL GALVANIZED STEEL PER ASTM A 527 COATING DESIGNATION G-90. REINFORCEMENT AND SUPPORT SHALL BE STRUCTURAL STEEL PER ASTM A 36 MILL GALVANIZED PER ASTM A 123.
2. CONSTRUCT DUCTWORK TO 2" WG POSITIVE OR NEGATIVE, SEAL CLASS B, PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS. DRIVE SLIP JOINTS ARE NOT APPROVED.
3. WHERE DUCTS PASS THROUGH WALLS, FINISH WALL OPENINGS WITH METAL RIM STRIPS. USE METAL SLEEVES; WOOD FRAMES ARE NOT PERMITTED.
4. ALL BULLHEAD TEES AND ALL ELBOWS IN MAIN DUCT DISTRIBUTION SYSTEM SHALL HAVE TURNING VANES. ALL SIDE TAPS TAKE OFFS IN MAIN DUCT RUNS SHALL BE LOW LOSS TYPE.
5. LOW PRESSURE DUCTWORK - (CLASS 2)
6. SEAL CLASSIFICATION "B"
DIMENSION OF LONGEST SIDE.....UP THRU 30" - 24 GAUGE
DUCTWORK INSULATION:
INSULATE SUPPLY DUCTWORK WITH INSULATION AND VAPOR BARRIER. WRAP WITH 1 1/2 FIBERGLASS INSULATION WITH CONTINUOUS VAPOR BARRIER. VAPOR BARRIER FACING SHALL BE A LAMINATE OF WHITE KRAFT PAPER EXTERIOR SURFACE, GLASS FIBER REINFORCEMENT AND ALUMINUM FOIL. INSULATION SHALL BE AS MANUFACTURED BY SCHULLER INTERNATIONAL, INC., KNAUF OR OWENS CORNING.
7. FIELD COORDINATE DUCTWORK AND LIGHT FIXTURES FOR CLEARANCE
8. TRANSITIONS TO ALL ROOF MOUNTED MECH. UNITS INLET & DISCHARGE OPENINGS AS NECESSARY.
CONNECT FULL SIZE TO TERMINAL BOX OUTLET AND TRANSITION TO DUCT SIZE INDICATED ON THE DRAWING.
DIMENSIONS SHOWN ON THE DWGS. ARE INSIDE DIMENSIONS
9. PROVIDE SMOKE DETECTOR AT THE FAN SUPPLY DUCTWORK
10. MECHANICAL CONTRACTOR SHALL COORDINATE W/ EXIST. STRUCTURAL STEEL AT THE SITE AND FURNISH AND INSTALL ALL SUPPLEMENTARY MISCELLANEOUS STEEL NECESSARY FOR PROPER ANCHORAGE GUIDING/ SUPPORT OF DUCTWORK/PIPING/EQUIPMENTS
11. PROVIDE FIRE DAMPER IN ALL DUCTWORKS PENETRATING FIRE RATED WALLS AND FLOORS



HVAC FLOOR PLAN - 2ND FLR

1/8" = 1'-0"

- NOTE:
1. FOR BOILER COMBUSTION EXHAUST/AIR INTAKE, SEE SIMILAR EQUIPMENT ON 1ST. FLOOR.
 2. SEE NOTE 2 UNDER 3RD FLOOR DWG.
 3. ALL KITCHEN/BATH EXHAUST SHALL TERMINATE ABOVE ROOF WITH A GOOSENECK AND BIRDSCREEN. SEE BASEMENT FLOOR PLAN FOR SIMILAR RISER LOCATION. TYP. FOR 3RD FLOOR.
 4. ALL CORRIDOR SUPPLY AIR GRILLE BOTTOM ELEV.= 1'-0" AFF EXCEPT BASEMENT CEILING GRILLE SUPPLY



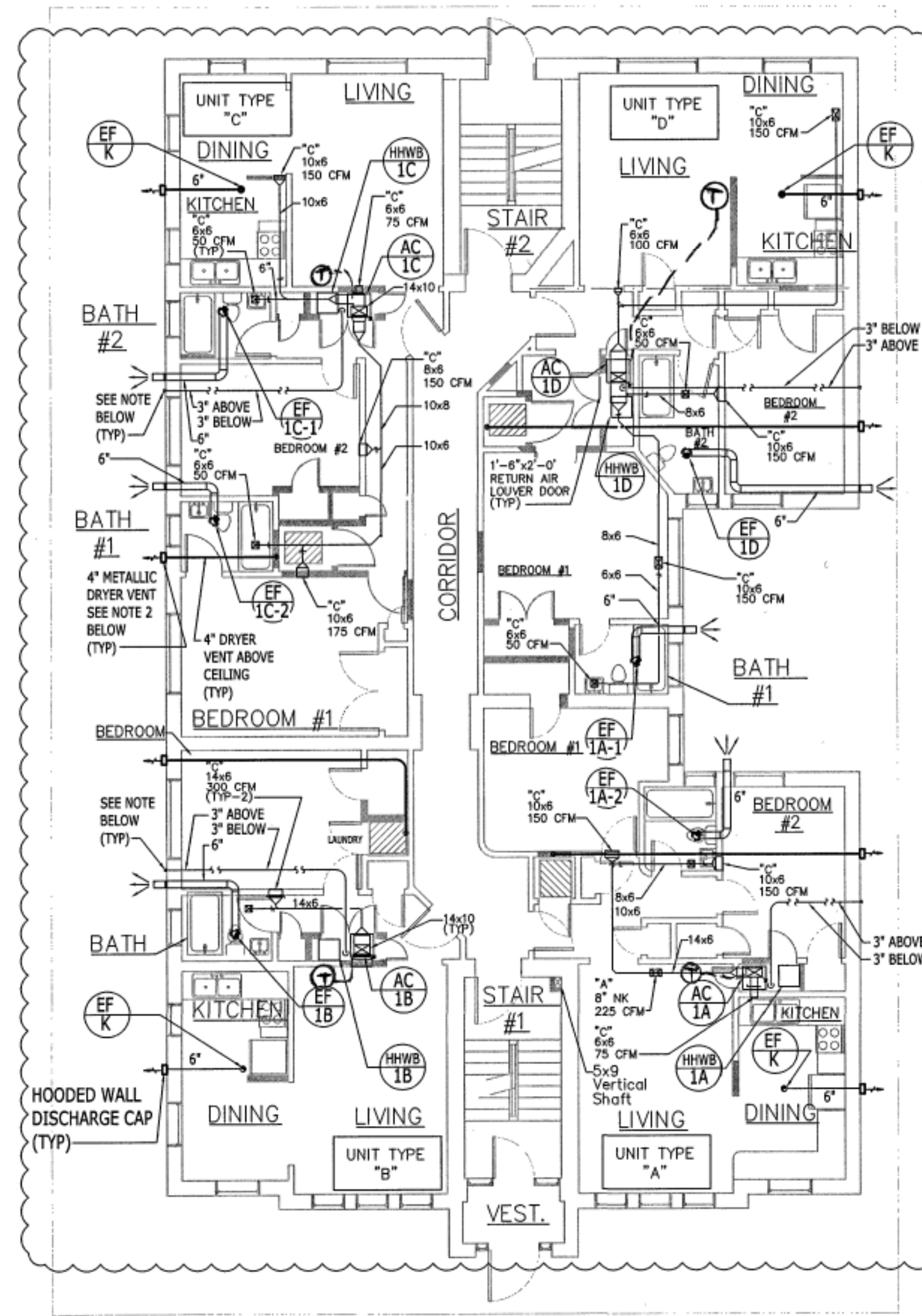
HVAC FLOOR PLAN - 3RD FLR

NOTES:

1. FOR BOILER COMBUSTION EXHAUST/AIR INTAKE, SEE SIMILAR EQUIPMENT ON 1ST. FLOOR.
2. 4" O. A. UP SUPPLY THRU THE ROOF W/ A GOOSE NECK & BIRDSCREEN. SEE RISER SIZES ON SCHEDULE BELOW. 4" O.A. RISER TO PROVIDE EACH HVAC UNIT WITH O.A. REQUIRED
3. ALL KITCHEN/BATH EXHAUST SHALL TERMINATE ABOVE ROOF WITH A GOOSENECK AND BIRDSCREEN. SEE BASEMENT FLOOR PLAN FOR SIMILAR RISER LOCATION. TYP. FOR 3RD FLOOR.
4. SEE NOTE 4 BELOW 2ND FLOOR PLAN DWG. THIS DWG.

OUTSIDE AIR (O.A.) RISER SCHEDULE

FLOOR	RISERS SIZE (IN)
3RD	4
2ND	4
1ST	4
B-MENT	4

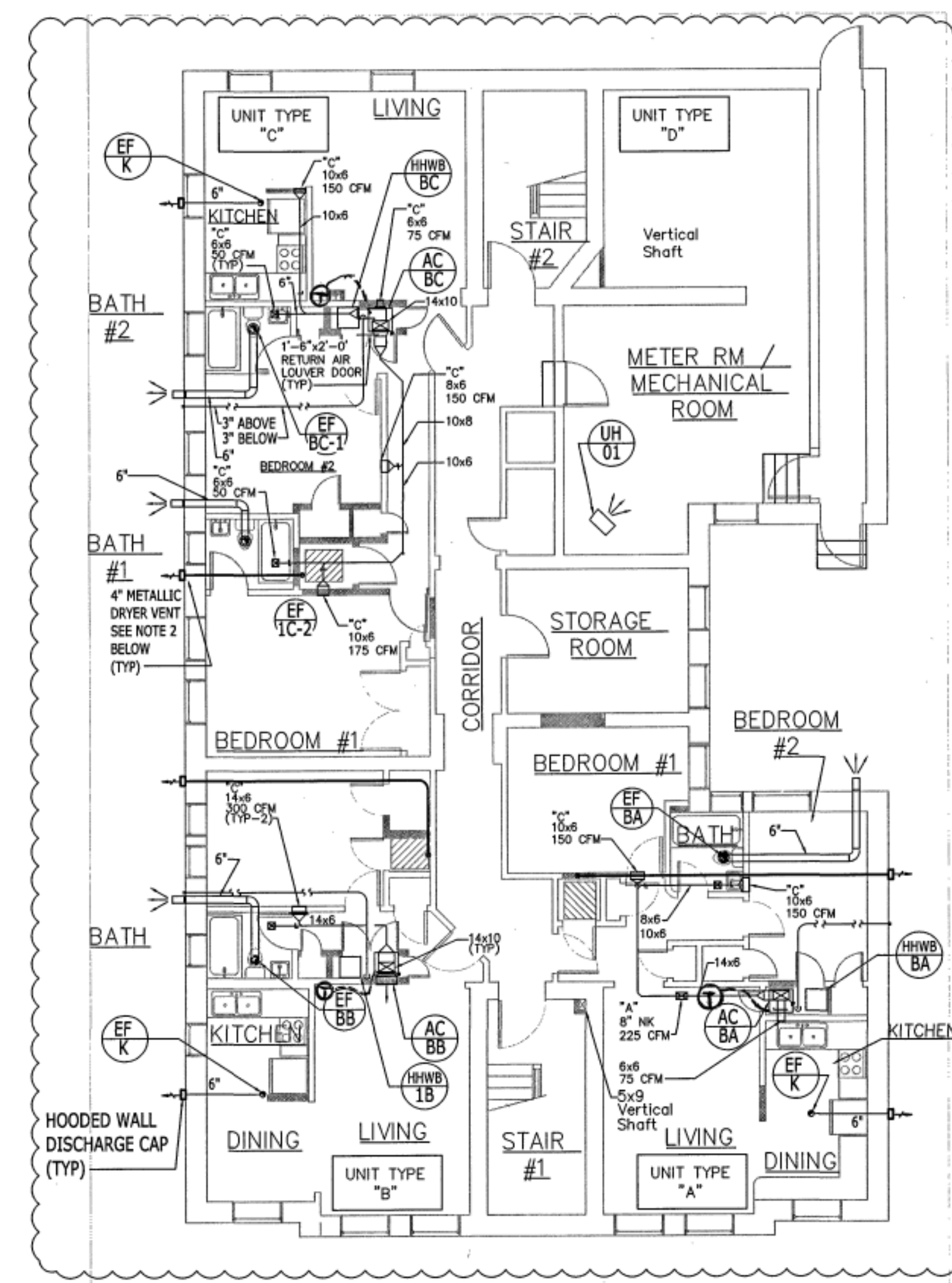


HVAC FLOOR PLAN - 1ST FLR

1/8" = 1'-0"

NOTE:

1. LOCATE 3" PVC BOILER COMBUSTION EXHAUST THRU WALL ABOVE 3" PVC BOILER COMBUSTION AIR INTAKE. LOCATE EXHAUST VENT ABOVE COMBUSTION AIR INTAKE (TYP)
2. PROVIDE FIRE DAMPER IN ALL DUCTWORK PENETRATING FIRE-RATED CEILING
3. SEE NOTE 2 UNDER 3RD FLOOR PLAN DWG. ON SHEET MH-2



HVAC FLOOR PLAN - BASEMENT

1/8" = 1'-0"

NOTE:

1. FOR BOILER COMBUSTION EXHAUST/AIR INTAKE. SEE SIMILAR EQUIPMENT ON 1ST. FLOOR
2. SEE NOTE 2 UNDER 3RD FLOOR PLAN DWG. ON SHEET MH-2

SPECIFICATIONS (DUCTWORK)

1. CONSTRUCT DUCTWORK SYSTEMS OF LOCK FORMING QUALITY MILL GALVANIZED STEEL PER ASTM A 527 COATING DESIGNATION G-90. REINFORCEMENT AND SUPPORT SHALL BE STRUCTURAL STEEL PER ASTM A 36 MILL GALVANIZED PER ASTM A 123.
2. CONSTRUCT DUCTWORK TO 2" WG POSITIVE OR NEGATIVE, SEAL CLASS B, PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS. DRIVE SLIP JOINTS ARE NOT APPROVED.
3. WHERE DUCTS PASS THROUGH WALLS, FINISH WALL OPENINGS WITH METAL RIM STRIPS. USE METAL SLEEVES; WOOD FRAMES ARE NOT PERMITTED.
4. ALL BULLHEAD TEES AND ALL ELBOWS IN MAIN DUCT DISTRIBUTION SYSTEM SHALL HAVE TURNING VANES. ALL SIDE TAPS TAKE OFFS IN MAIN DUCT RUNS SHALL BE LOW LOSS TYPE.
5. LOW PRESSURE DUCTWORK - (CLASS 2)
6. SEAL CLASSIFICATION "B"
DIMENSION OF LONGEST SIDE:.....UP THRU 30" - 24 GAUGE
DUCTWORK INSULATION:
INSULATE SUPPLY DUCTWORK WITH INSULATION AND VAPOR BARRIER. WRAP WITH 1 1/2" FIBERGLASS INSULATION WITH CONTINUOUS VAPOR BARRIER. VAPOR BARRIER FACING SHALL BE A LAMINATE OF WHITE KRAFT PAPER EXTERIOR SURFACE, GLASS FIBER REINFORCEMENT AND ALUMINUM FOIL. INSULATION SHALL BE AS MANUFACTURED BY SCHULLER INTERNATIONAL, INC., KNAUF OR OWENS CORNING.
7. FIELD COORDINATE DUCTWORK AND LIGHT FIXTURES FOR CLEARANCE
8. TRANSITIONS TO ALL ROOF MOUNTED MECH. UNITS INLET & DISCHARGE OPENINGS AS NECESSARY.
CONNECT FULL SIZE TO TERMINAL BOX OUTLET AND TRANSITION TO DUCT SIZE INDICATED ON THE DRAWING.
DIMENSIONS SHOWN ON THE DWGS. ARE INSIDE DIMENSIONS
9. PROVIDE SMOKE DETECTOR AT THE FAN SUPPLY DUCTWORK
10. MECHANICAL CONTRACTOR SHALL COORDINATE W/ EXIST. STRUCTURAL STEEL AT THE SITE AND FURNISH AND INSTALL ALL SUPPLEMENTARY MISCELLANEOUS STEEL NECESSARY FOR PROPER ANCHORAGE GUIDING/ SUPPORT OF DUCTWORK/PIPING/EQUIPMENTS
11. PROVIDE FIRE DAMPER IN ALL DUCTWORKS PENETRATING FIRE RATED WALLS AND FLOORS



EDWARDS GROUP INTERNATIONAL, INC.
Architectural Design | Planning Solutions
10000 E. 15th Ave., Suite 200
Denver, CO 80231
313-964-4200 / Fax 313-965-7878

CSA

ATA Associates, Inc.
Mechanical Electrical Engineering
24175 Northwestern Hwy.
Farmington Hills, MI 48334
313-993-9122

**BASEMENT AND 1ST FLOOR
HVAC FLOOR PLANS**

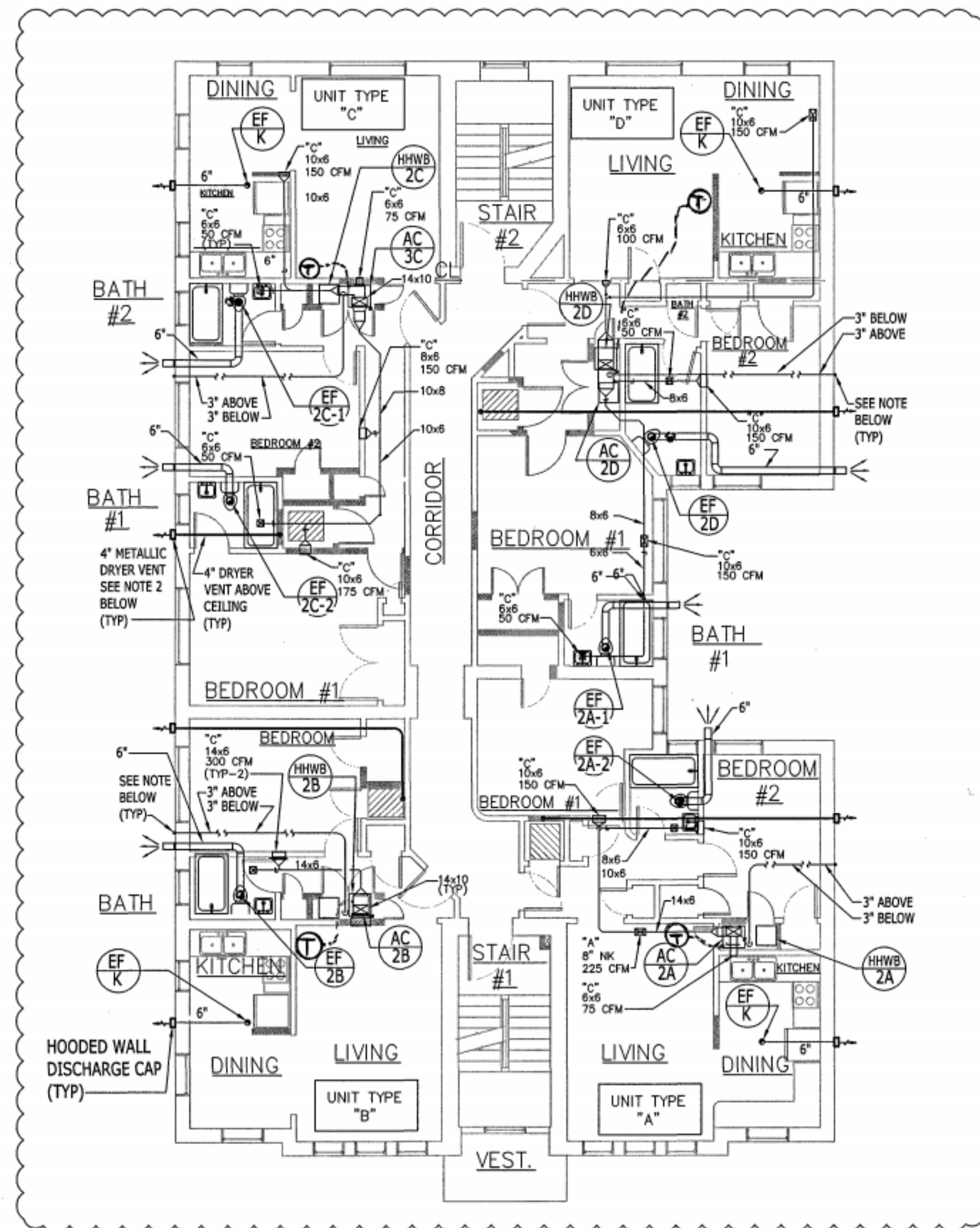
MARLBORO APARTMENTS
BUILDING RENOVATION
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

CONCEPT BY: TA
DESIGN BY: TA
DRAWN BY: BT
CHECK BY: BT

ISSUE DATES:
REVIEW AUG-11-2016
BACKGROUND AUG-14-2016
ISSUED SEPT-20-2016

DWG FILENAME
MH1

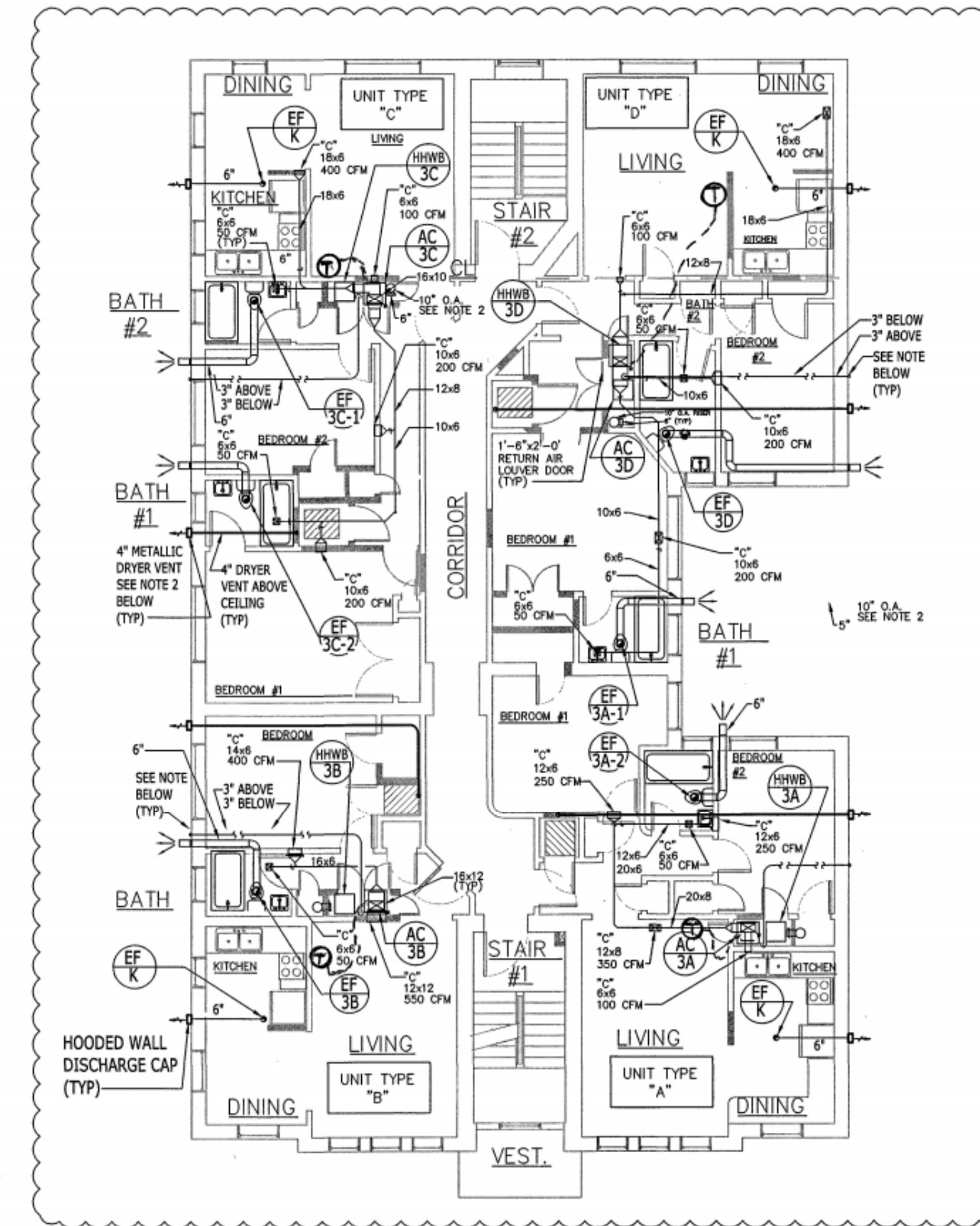
MH-1



HVAC FLOOR PLAN - 2ND FLR

1/8" = 1'-0"

NOTE:
1. FOR BOILER COMBUSTION EXHAUST/AIR INTAKE, SEE SIMILAR EQUIPMENT ON 1ST. FLOOR
2. SEE NOTE 2 UNDER 3RD FLOOR DWG.



HVAC FLOOR PLAN - 3RD FLR

NOTE:
1. FOR BOILER COMBUSTION EXHAUST/AIR INTAKE, SEE SIMILAR EQUIPMENT ON 1ST. FLOOR
2. 10" UP & ON SUPPLY THRU THE ROOF W/ A GOOSE NECK & BIRDSCREEN. RUN TO BASEMENT. SEE RISER SIZES ON PLAN. 6" O.A. BRANCH TO PROVIDE EACH HVAC UNIT LOCATED ON 3RD FLOOR. SEE RISER & BRANCH O.A. OTHER FLOORS SCHEDULE BELOW

OUTSIDE AIR (O.A.) RISER SCHEDULE

FLOOR	RISER SIZE (INS)	BRANCH SIZE (INS)
2ND	8	6
1ST	8	6
BMEN	6	6

1031 MARLBORO #1
PRV 2017-02738

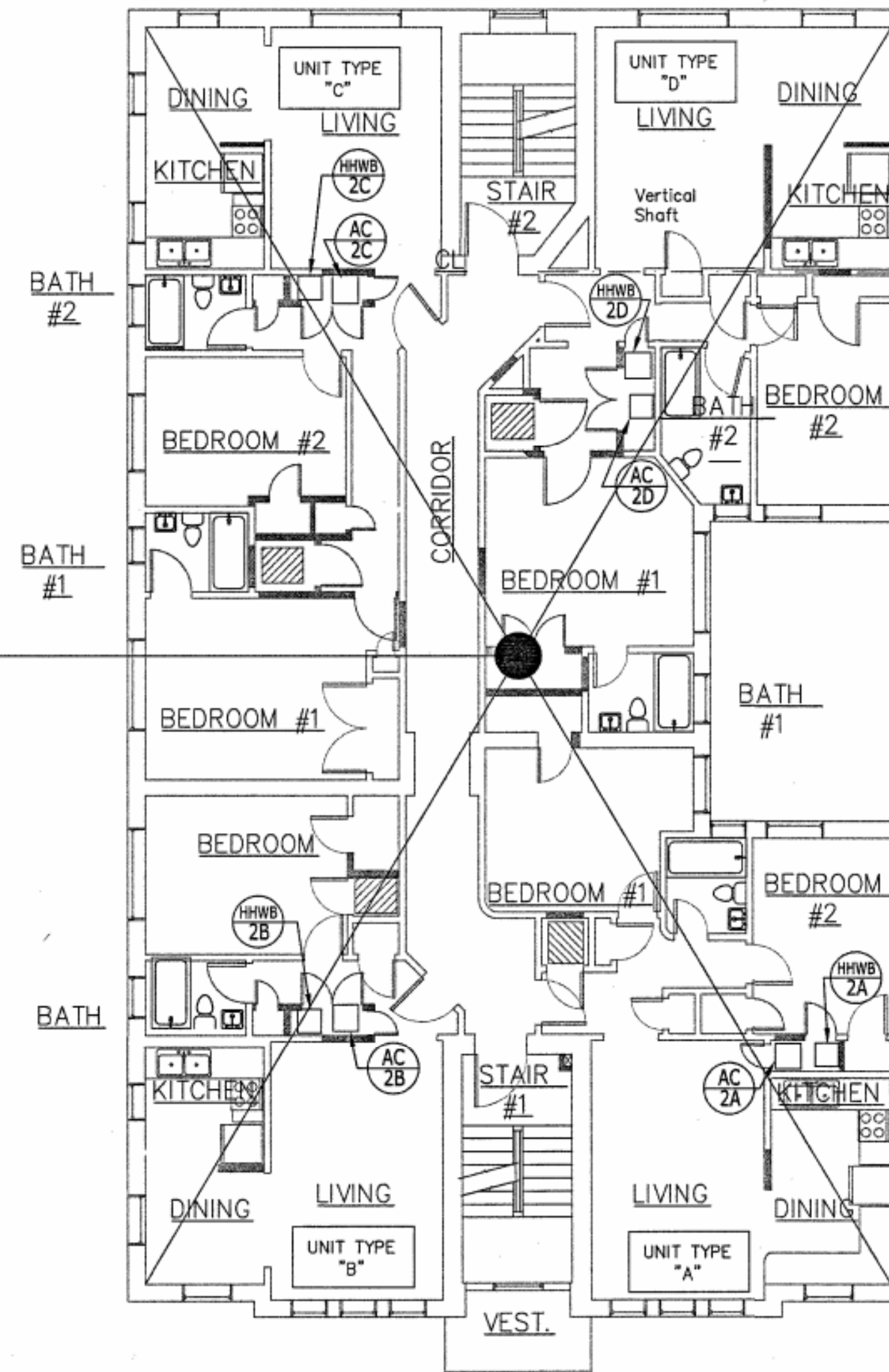
2. 4" UP SUPPLY THRU. THE ROOF W/ A GOOSE NECK & BIRDSCREEN. SEE RISER SIZES ON SCHEDULE BELOW.
4" O.A. RISER TO PROVIDE EACH HVAC UNIT WITH O.A. REQUIRED

OUTSIDE AIR (O.A.) RISER SCHEDULE

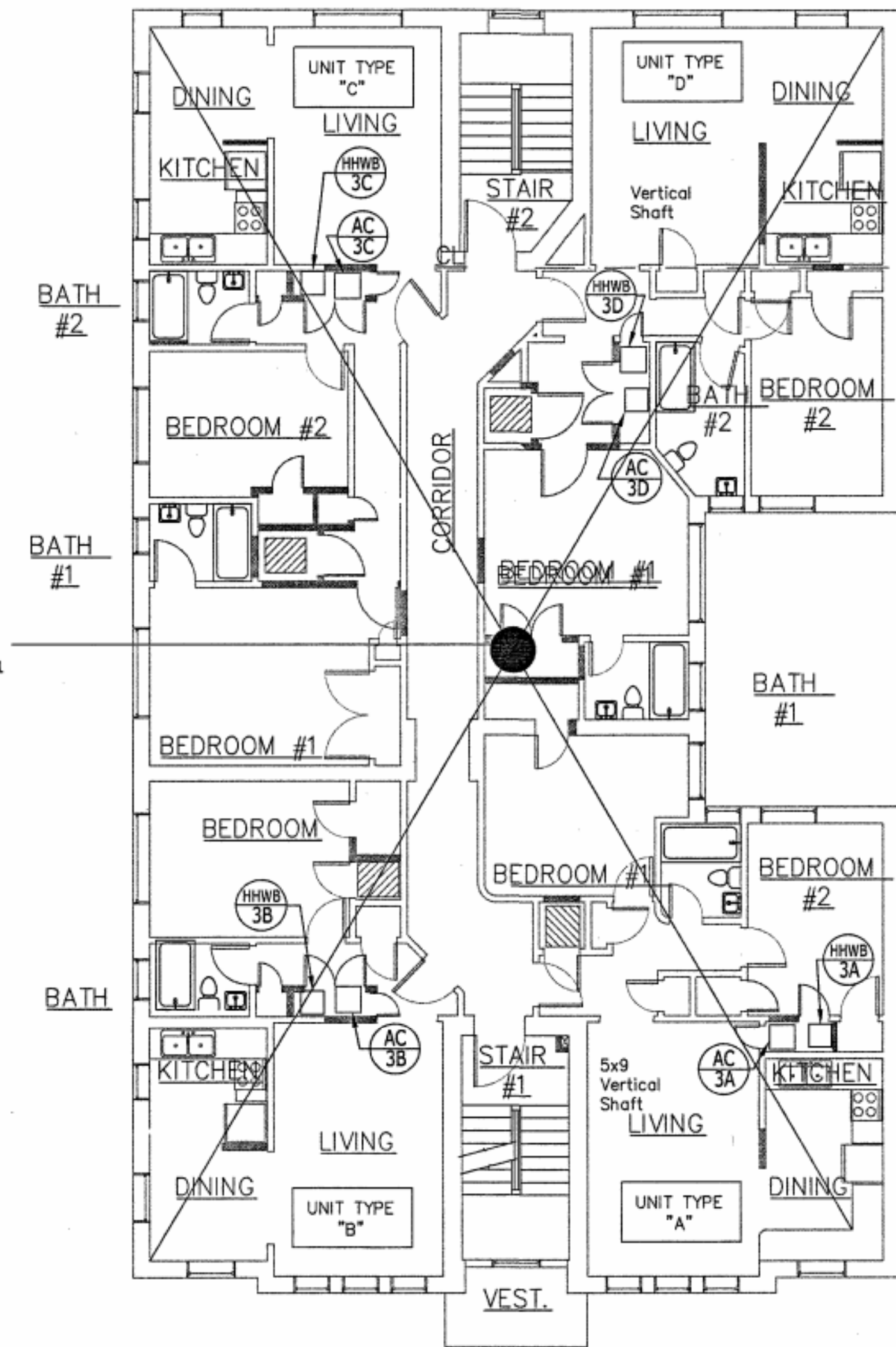
FLOOR	RISER SIZE (INS)
3RD	4
2ND	4
1ST	4
BMEN	4

SEE ATTACHMENT





PLUMBING/PIPING FLOOR PLAN - 2ND FLR
1/8" = 1'-0"



PLUMBING/PIPING FLOOR PLAN - 3RD FLR
1/8" = 1'-0"

SEE SIMILAR
1ST FLR.
PLUMBING PLAN
SHEET DWG. MP-1

SEE SIMILAR
1ST FLR.
PLUMBING PLAN
SHEET DWG. MP-1

SPECIFICATIONS (PLUMBING)

- ALL PLUMBING MATERIALS / INSTALLATION SHALL CONFORM TO THE LATEST INTERNATIONAL PLUMBING CODE AND LOCAL HEALTH DEPARTMENT STANDARDS
- SLOPE ALL SANITARY AND STORM @ 1%
- UNDERGROUND PIPING MATERIALS: SANITARY DRAINAGE TYPE PVC SCHEDULE 40 PIPE UNLESS SPECIFIED OTHERWISE
- ABOVEGROUND PIPING MATERIALS: PIPING, VALVES & SUPPORTS
 - CDW & HAW PIPING: TYPE CPR-SJ, COPPER SOLDER JOINT
 - VALVES: GATE- CRANE 428-UB; GLOBE- POWELL 150
 - WASTE: TYPE GL-DWV, GLASS DRAINAGE OR TYPE PPL - DWV, POLYPROPYLENE DRAINAGE SYSTEMS. APPROVED PVC PIPES ARE ACCEPTABLE
 - SUPPORTS: PROVIDE PADDED SUPPORTS AS RECOMMENDED BY THE PIPE MANUF.
- ALL BARRIER-FREE TOILET FIXTURES SHALL MEET ADA
- ALL PIPING SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
- ALL WATER SUPPLY PIPING AND VENT PIPING SHALL BE LOCATED ABOVE CEILING AND WITHIN WALLS EXCEPT INDICATED OTHERWISE
- CONNECT NEW WATER SUPPLY AND SANITARY LINES TO EXISTING SYSTEMS AT NEAREST LOCATIONS IN A MANNER ACCEPTABLE BY ALL APPLICABLE CODES.
- THE PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND PROVIDE ROUGH-INS FOR ALL EQUIPMENT FURNISHED BY OTHERS.
- PIPING SHALL BE SUPPORTED FROM HANGERS AT AN ADEQUATE DISTANCE WITH ADEQUATE SUPPORTING RODS FASTENED TO THE BUILDING FRAMING WHENEVER POSSIBLE
- ISOLATE PIPING AND EQUIPMENT FROM THE BUILDING STRUCTURES WITH INSULATING HANGERS AND FITTINGS AS REQUIRED TO PREVENT GALVANIC CORROSION OF THE BUILDING PIPING SYSTEM
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PITCH OF PIPE FOR DRAINAGE AND VENTING OF PIPING SYSTEMS
- PROVIDE BRANCH LINE SHUT-OFF VALVES ON DOMESTIC WATER PIPING TO EACH PLUMBING FIXTURE. VALVES SHALL BE ACCESSIBLE
- WATER HAMMER ARRESTORS OR 15" HIGH AIR CHAMBERS SHALL BE INSTALLED ON BOTH HOT AND COLD WATER LINES. INSTALL IN AN UPRIGHT POSITION AT ALL QUICK CLOSING VALVES, SOLENOIDS AND PLUMBING FIXTURES
- TAG AND LABEL ALL VALVES INDICATING FUNCTION AND EQUIPMENT SERVED
- ALL PVC PIPING SHALL BE SCHEDULE 40.

- ALL PIPING IN RETURN AIR PLENUM SHALL BE NON-COMBUSTIBLE MATERIAL
- FIXTURES:
 - LAVATORY: (LAV-1) AMERICAN STANDARD, LUCERNA WHITE MODEL-AQ355012020 W/ THE FOLLOWING: FAUCET BY ZURN MODEL-ZZ8100XL3M, W/ SGL CONTROL; THERMOSTATIC MIXING VALVE BY WILKINS MODEL-WZW3870XL4PC; TRAP COVER BY PROFLO MODEL-PF202WH. INCLUDE ALL FITTINGS AND TRIMS
 - WATER CLOSET: (WC-1) AMERICAN STANDARD, AFWALL MODEL-A2257101020 W/ THE FOLLOWING: FAUCET BY ZURN MODEL-ZZ6000WS1BYC, W/ SWT KIT, SEAT BY BEMIS, MODEL- B1055SSC000. INCLUDE ALL FITTINGS, TRIMS AND REQUIRED CARRIER
 - WATER CLOSET: (WC-2) AMERICAN STANDARD, MADERA MODEL-A3043001020 W/ THE FOLLOWING: FLUSH VALVE BY ZURN MODEL-ZZ6000WS1BYC, W/ SWT KIT, SEAT BY BEMIS, MODEL-B1055SSC000. INCLUDE ALL FITTINGS, TRIMS AND REQUIRED CARRIER
 - WATER CLOSET: (WC-3) AMERICAN STANDARD, MADERA MODEL-A2234001020 W/ THE FOLLOWING: FLUSH VALVE BY ZURN MODEL-ZZ6000WS1BYC, W/ SWT KIT, SEAT BY BEMIS, MODEL-B1055SSC000. INCLUDE ALL FITTINGS, TRIMS AND REQUIRED CARRIER
 - THERMOSTATIC MIXING VALVE: ZURN, WILKINS MODEL-ZW3870XL4P
 - TRAP COVER: PROFLO, MODEL- PF202WH
 - LAVATORY CARRIER: ZURN, MODEL-ZZ1231 W/ CONCEALED ARM CARRIER
 - SERVICE SINK (SS-1): PROFLO, MODEL-PFMB2424 W/ DRAIN WITH THE FOLLOWING: FAUCET BY ZURN, MODEL -Z2843M1RC; HOSE BY PROFLO, MODEL-PFSSHE; SINGLE HOSE BRACKET, MODEL-PF296; WALL HANGER BY PROFLO, MODEL-PF-245
 - KITCHEN SINK (KS-1): DAYTON, MODEL -DDSE12524DF W/ FAUCET, MODEL -LK1001CR
 - WALL HYDRANT (WH-1): ZURN, MODEL -ZZ132034X12
- PLUMBING SPECIALTIES:
 - FLOOR DRAIN: (FD-1) SMITH 2005-YO3-A06NB
 - CLEANOUT: (CO) SMITH 4045
 - WATER HAMMER ARRESTORS: SMITH 5005 PROVIDE WATER HAMMER ARRESTORS AT ALL CDW AND HDW BRANCHES BEFORE THE LAST FIXTURE

20. INSULATE DOMESTIC COLD AND HOT DOMESTIC WATER PIPING WITH GLASS FIBER SUCH AS OWENS/CORNING, FIBERGLASS ASJ/SSL-II AS LISTED IN THE TABLE BELOW:

PIPING SYSTEM	INSULATE THICKNESS IN INCHES FOR PIPES SIZES LISTED	
	UP TO 1	1 1/4
DOMESTIC HOT WATER	1/2	1
DOMESTIC COLD WATER	1/2	1/2

21. PROVIDE PIPE SLEEVES AT ALL PIPE PENETRATIONS THRU WALLS

GENERAL NOTES (PLUMBING):

- SAW CUT EXISTING FLOOR SYSTEM TO PROVIDE NEW SANITARY LINE FOR PROPOSED FIXTURES. THE FLOOR SYSTEM TO CONDITIONS PRIOR TO CONSTRUCTION. PATCH & REPAIR AS NECESSARY
- CONTRACTOR TO FIELD VERIFY CONDITIONS PRIOR TO START OF CONSTRUCTION. IF THE CONDITIONS ARE OTHER THAN SHOWN ABOVE, CONTACT THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION.
- PROVIDE AVB AND ANTI-SIPHON BALLCOCKS ON ALL PROPOSED TOILETS.
- PLUMBING TRADE TO PROVIDE NECESSARY CONNECTIONS FOR EQUIPMENT SUPPLIED BY OTHERS OR OWNER
- THE PLUMBING CONTRACTOR SHALL FURNISH ALL THE NECESSARY LABOR AND MATERIALS, INCLUDING FLOOR DRAINS, FLOOR SINKS, INDIRECT WASTE DRAINS, PIGTAILS, GREASE TRAPS, WASTE TRAPS, GREASE TRAPS, WASTE TRAPS, STEAM TRAPS, PRESSURE REDUCING VALVES, BACKFLOW PREVENTERS, SHUT-OFF VALVES, PREVENTERS, SHUT-OFF VALVES, PIPING AND ALL OTHER FITTINGS NECESSARY FOR THE OPERATION OF THE EQUIPMENT
- ALL PLUMBING FIXTURES MUST COMPLY WITH THE MICHIGAN PLUMBING CODE 2012 EDITION
- CONTRACTOR SHALL FIELD VERIFIED EXIST. SANITARY EXACT LOCATION/SIZE FOR TIE-IN

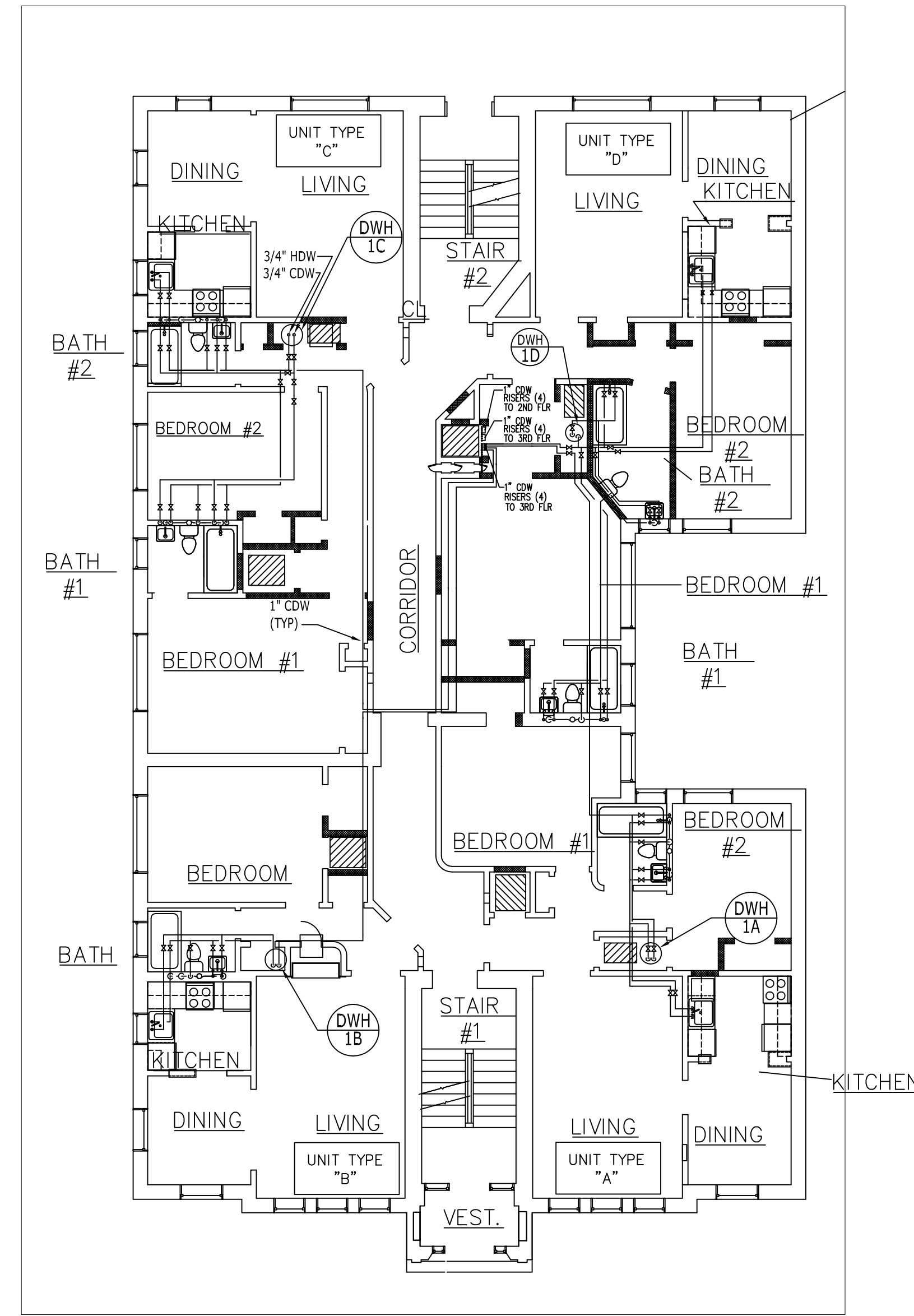


ISSUE DATES:

REVIEW
AUG-11-2016
BACKGROUND
AUG-14-2016
ISSUED
SEPT-20-2016

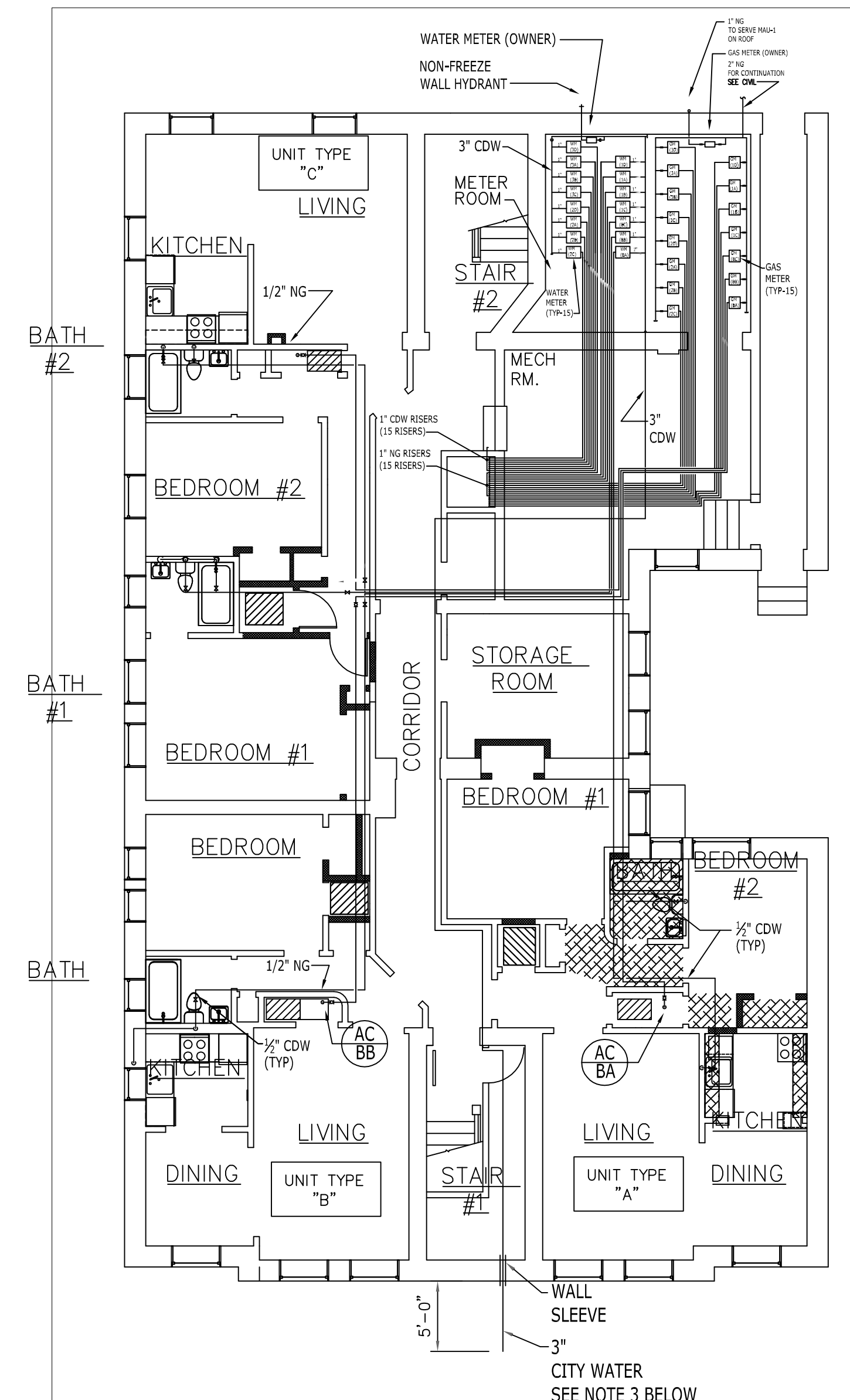
DWG FILENAME
MP2

MP-2



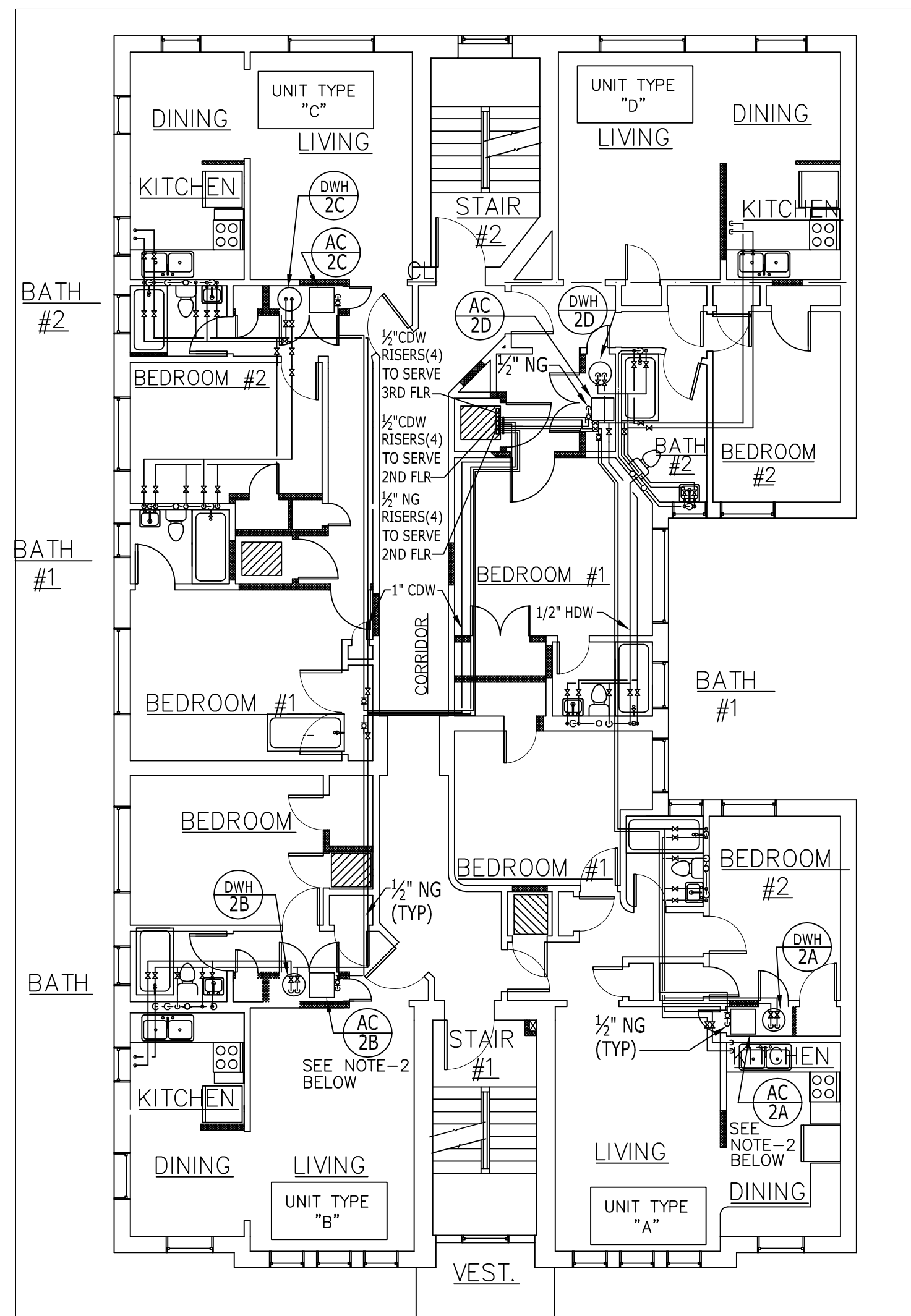
PLUMBING/PIPING FLOOR PLAN-1ST FLR

- 1/8" = 1'-0"
- NOTES:
1. FOR FIXTURE PLUMBING SIZES, SEE SCHEDULE ON SHEET DWG M-3
 2. PLUMBING FOR 2ND & 3RD FLRS. SIMILAR TO 1ST FLR.
 3. DOMESTIC WATER HEATER (DWH) WATER INLET AND OUTLET SHALL BE SIZED 3/4" (TYP), ALL FLOORS



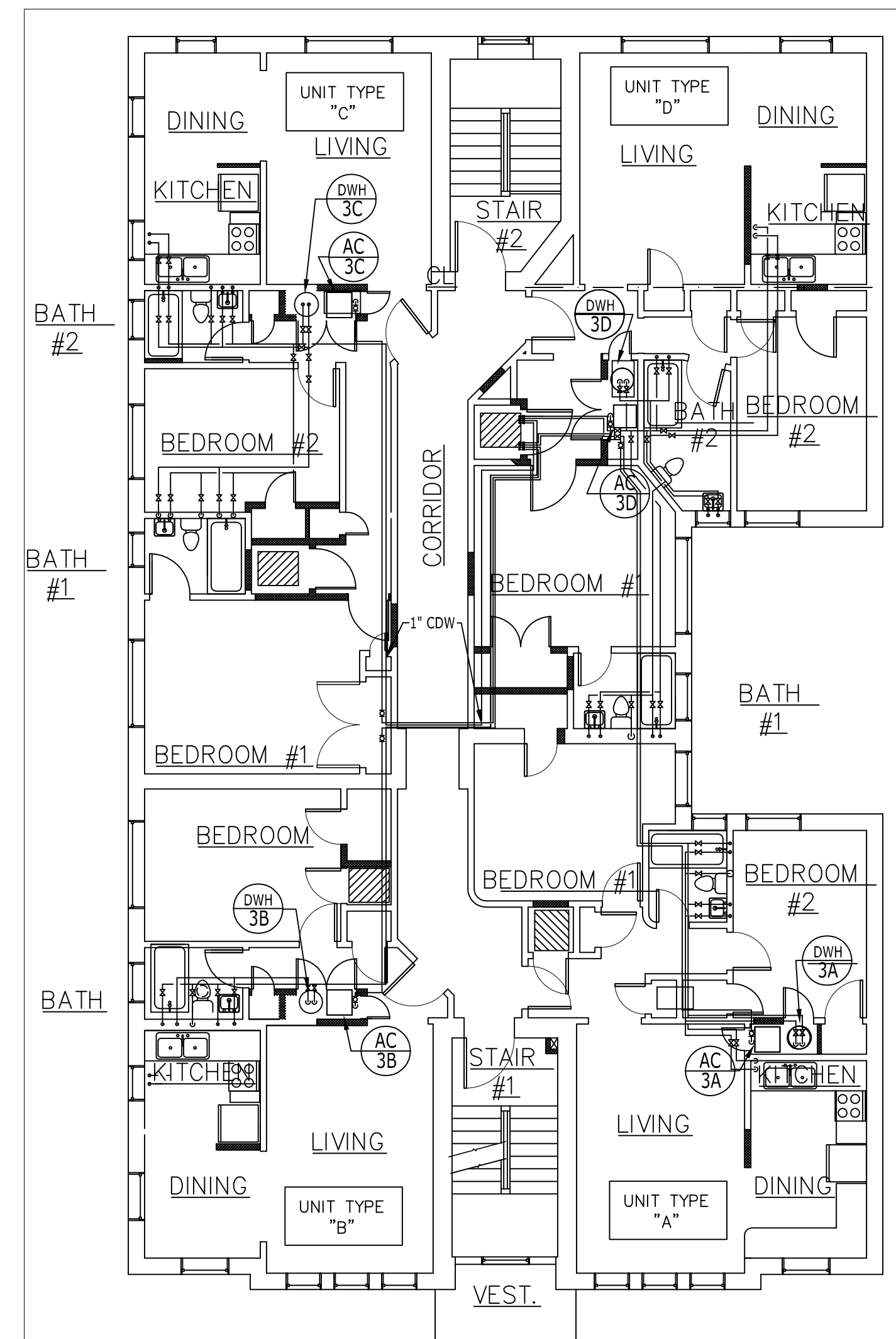
PLUMBING/PIPING FLOOR PLAN-BASEMENT

- 1/8" = 1'-0"
- NOTES:
1. FOR FIXTURE PLUMBING SIZES, SEE SCHEDULE ON SHEET DWG M-3
 2. PLUMBING FOR 2ND & 3RD FLRS. ARE SIMILAR TO 1ST FLR.
 3. FOR CONTINUATION, SEE CIVIL
 4. SEE MAIN WATER METER PIPING DIAGRAM ON DWG M7 DETAIL 3



PLUMBING/PIPING FLOOR PLAN - 2ND FLR
1/8" = 1'-0"

- NOTES: 1. ALTERNATIVE APPROVED PLUMBING FIXTURES AND MATERIALS SHALL BE AS PER OWNER APPROVED VALUE ENGINEERING ITEMS SUBMITTED BY THE APPROVED GENERAL CONTRACTOR.
2. FURNACE SHALL BE SUPPLIED WITH 1/2" NG (TYP)
3. FOR FIXTURE PLUMBING SIZES, SEE SCHEDULE ON SHEET DWG-M3



PLUMBING/PIPING FLOOR PLAN - 3RD FLR
1/8" = 1'-0"

- NOTES: 1. ALTERNATIVE APPROVED PLUMBING FIXTURES AND MATERIALS SHALL BE AS PER OWNER APPROVED VALUE ENGINEERING ITEMS SUBMITTED BY THE APPROVED GENERAL CONTRACTOR.
2. FURNACE SHALL BE SUPPLIED WITH 1/2" NG (TYP)
3. FOR FIXTURE PLUMBING SIZES, SEE SCHEDULE ON SHEET DWG-M3

SPECIFICATIONS (PLUMBING)

- ALL PLUMBING MATERIALS / INSTALLATION SHALL CONFORM TO THE LATEST INTERNATIONAL PLUMBING CODE AND LOCAL HEALTH DEPARTMENT STANDARDS
- SLOPE ALL SANITARY AND STORM @ 1%
- UNDERGROUND PIPING MATERIALS: SANITARY DRAINAGE TYPE PVC SCHEDULE 40 PIPE UNLESS SPECIFIED OTHERWISE
- ABOVEGROUND PIPING MATERIALS: PIPING, VALVES & SUPPORTS
 - CDW & HAW PIPING: TYPE CPR-SJ, COPPER SOLDER JOINT
 - VALVES: GATE - CRANE 428-UB; GLOBE - POWELL 150
 - WASTE: TYPE QL-DWV, GLASS DRAINAGE OR TYPE PPL - DWV, POLYPROPYLENE DRAINAGE SYSTEMS. APPROVED PVC PIPES ARE ACCEPTABLE
 - SUPPORTS: PROVIDE PADDED SUPPORTS AS RECOMMENDED BY THE PIPE MANUF.
- ALL BARRIER-FREE TOILET FIXTURES SHALL MEET ADA
- ALL PIPING SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
- ALL WATER SUPPLY PIPING AND VENT PIPING SHALL BE LOCATED ABOVE CEILING AND WITHIN WALLS EXCEPT INDICATED OTHERWISE
- CONNECT NEW WATER SUPPLY AND SANITARY LINES TO EXISTING SYSTEMS AT NEAREST LOCATIONS IN A MANNER ACCEPTABLE BY ALL APPLICABLE CODES.
- THE PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND PROVIDE ROUGH-INS FOR ALL EQUIPMENT FURNISHED BY OTHERS.
- PIPING SHALL BE SUPPORTED FROM HANGERS AT AN ADEQUATE DISTANCE WITH ADEQUATE SUPPORTING RODS FASTENED TO THE BUILDING FRAMING WHENEVER POSSIBLE
- ISOLATE PIPING AND EQUIPMENT FROM THE BUILDING STRUCTURES WITH INSULATING HANGERS AND FITTINGS AS REQUIRED TO PREVENT GALVANIC CORROSION OF THE BUILDING PIPING SYSTEM
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PITCH OF PIPE FOR DRAINAGE AND VENTING OF PIPING SYSTEMS
- PROVIDE BRANCH LINE SHUT-OFF VALVES ON DOMESTIC WATER PIPING TO EACH PLUMBING FIXTURE. VALVES SHALL BE ACCESSIBLE
- WATER HAMMER ARRESTORS OR 15" HIGH AIR CHAMBERS SHALL BE INSTALLED ON BOTH HOT AND COLD WATER LINES. INSTALL IN AN UPRIGHT POSITION AT ALL QUICK CLOSING VALVES, SOLENOIDS AND PLUMBING FIXTURES
- TAG AND LABEL ALL VALVES INDICATING FUNCTION AND EQUIPMENT SERVED
- ALL PVC PIPING SHALL BE SCHEDULE 40.

- ALL PIPING IN RETURN AIR PLENUM SHALL BE NON-COMBUSTIBLE MATERIAL
- FIXTURES:
 - LAVATORY: (LAV-1) AMERICAN STANDARD, LUCERN WHITE MODEL-A0355012020 W/ THE FOLLOWING: FAUCET BY ZURN MODEL-Z28100XL3M, W/ SGL CONTROL; THERMOSTATIC MIXING VALVE BY WILKINS MODEL-WZV3870XL4PC; TRAP COVER BY PROFLO MODEL-PF202WH. INCLUDE ALL FITTINGS AND TRIMS
 - WATER CLOSET: (WC-1) AMERICAN STANDARD, AFWALL MODEL-A2257101020 W/ THE FOLLOWING: FAUCET BY ZURN MODEL-Z26000WS1YBYC, W/ SWT KIT, SEAT BY BEMIS, MODEL-B10555SC000. INCLUDE ALL FITTINGS, TRIMS AND REQUIRED CARRIER
 - WATER CLOSET: (WC-2) AMERICAN STANDARD, MADERA MODEL-A3043001020 W/ THE FOLLOWING: FLUSH VALVE BY ZURN MODEL-Z26000WS1YBYC, W/ SWT KIT, SEAT BY BEMIS, MODEL-B10555SC000. INCLUDE ALL FITTINGS, TRIMS AND REQUIRED CARRIER
 - WATER CLOSET: (WC-3) AMERICAN STANDARD, MADERA MODEL-A2234001020 W/ THE FOLLOWING: FLUSH VALVE BY ZURN MODEL-Z26000WS1YBYC, W/ SWT KIT, SEAT BY BEMIS, MODEL-B10555SC000. INCLUDE ALL FITTINGS, TRIMS AND REQUIRED CARRIER
 - THERMOSTATIC MIXING VALVE: ZURN, WILKINS MODEL-ZW3870XL4P
 - TRAP COVER: PROFLO, MODEL-PF202WH
 - LAVATORY CARRIER: ZURN, MODEL-Z21231 W/ CONCEALED ARM CARRIER
 - SERVICE SINK (SS-1): PROFLO, MODEL-PFM2424 W/ DRAIN WITH THE FOLLOWING: FAUCET BY ZURN, MODEL-Z2843M1RC; HOSE BY PROFLO, MODEL-PFSSHE; SINGLE HOSE BRACKET, MODEL-PF296; WALL HANGER BY PROFLO, MODEL-PF-245
 - KITCHEN SINK (KS-1): DAYTON, MODEL-DDSE125224DF W/ FAUCET, MODEL-LK1001CR
 - WALL HYDRANT (WH-1): ZURN, MODEL-Z2132034X12
- PLUMBING SPECIALTIES:
 - FLOOR DRAIN: (FD-1) SMITH 2005-YO3-A06NB
 - CLEANOUT: (CO) SMITH 4045
 - WATER HAMMER ARRESTORS: SMITH 5005 PROVIDE WATER HAMMER ARRESTORS AT ALL CDW AND HDW BRANCHES BEFORE THE LAST FIXTURE

- INSULATE DOMESTIC COLD AND HOT DOMESTIC WATER PIPING WITH GLASS FIBER SUCH AS OWENS/CORNING, FIBERGLASS ASJ/SSL-II AS LISTED IN THE TABLE BELOW:

PIPING SYSTEM	INSULATE THICKNESS IN INCHES FOR PIPES SIZES LISTED	
	UP TO 1	1 1/4
DOMESTIC HOT WATER	1/2	1
DOMESTIC COLD WATER	1/2	1/2

- PROVIDE PIPE SLEEVES AT ALL PIPE PENETRATIONS THRU WALLS

GENERAL NOTES (PLUMBING):

- SAW CUT EXISTING FLOOR SYSTEM TO PROVIDE NEW SANITARY LINE FOR PROPOSED FIXTURES. THE FLOOR SYSTEM TO CONDITIONS PRIOR TO CONSTRUCTION. PATCH & REPAIR AS NECESSARY
- CONTRACTOR TO FIELD VERIFY CONDITIONS PRIOR TO START OF CONSTRUCTION. IF THE CONDITIONS ARE OTHER THAN SHOWN ABOVE, CONTACT THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION.
- PROVIDE AVB AND ANTI-SIPHON BALLCOCKS ON ALL PROPOSED TOILETS.
- PLUMBING TRADE TO PROVIDE NECESSARY CONNECTIONS FOR EQUIPMENT SUPPLIED BY OTHERS OR OWNER
- THE PLUMBING CONTRACTOR SHALL FURNISH ALL THE NECESSARY LABOR AND MATERIALS, INCLUDING FLOOR DRAINS, FLOOR SINKS, INDIRECT WASTE DRAINS, PIGTAILS, GREASE TRAPS, WASTE TRAPS, GREASE TRAPS, WASTE TRAPS, STEAM TRAPS, PRESSURE REDUCING VALVES, BACKFLOW PREVENTERS, SHUT-OFF VALVES, PREVENTERS, SHUT-OFF VALVES, PIPING AND ALL OTHER FITTINGS NECESSARY FOR THE OPERATION OF THE EQUIPMENT
- ALL PLUMBING FIXTURES MUST COMPLY WITH THE MICHIGAN PLUMBING CODE 2012 EDITION
- CONTRACTOR SHALL FIELD VERIFY EXIST. SANITARY EXACT LOCATION/SIZE FOR TIE-IN

ELECTRICAL SYMBOL LIST

CONDUIT SYSTEM

- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING EXPOSED IN UNFINISHED AREAS
- CONDUIT CONCEALED IN FLOOR SLAB OR UNDERGROUND
- CONDUIT OR CABLE TURNED UP
- CONDUIT OR CABLE TURNED DOWN
- JUNCTION BOX (SIZE PER NEC OR AS INDICATED)

MOUNTING HEIGHTS

(ALL MOUNTING HEIGHTS ARE TO THE CENTER OF THE DEVICE, UNLESS OTHERWISE NOTED)

- RECEPTACLE 18" AFF
- LIGHT SWITCHES 48" AFF
- FIRE ALARM AUDIO AND VISUAL SIGNALS, OFFICE AREA 6'-8" AFF
- MANUAL PULL STATION 48" AFF

POWER SYSTEMS

- RECEPTACLE PANEL 240/120 VOLT, 3 PHASE, 3 WIRE
- DISTRIBUTION PANEL, 240/120 VOLT, 3 PHASE, 3 WIRE
- 115V, 1 PHASE MOTOR - SIZE AS INDICATED
- UNFUSED DISCONNECT SWITCH
- 20A, 125V, 3W, DUPLEX GROUNDING RECEPTACLE, NEMA 5-20R
- 20A, 240V, 1 PHASE RECEPTACLE, NEMA 6-20R

FIRE ALARM SYSTEM

- MANUAL PULL STATION
- AREA SMOKE DETECTOR -IONIZATION TYPE
- HEAT DETECTOR
- DUCT TYPE SMOKE DETECTOR
- AUDIO/VISUAL ALARM SIGNAL RECESSED MOUNTED
- VISUAL ALARM STROBE SIGNAL - SURFACED WALL MOUNTED
- FIRE ALARM SYSTEM CONTROL PANEL OR TRANSPONDER

SECURITY SYSTEM

- CCTV CAMERA
- MOTION DETECTOR
- GLASS BREAKER DETECTOR
- MAGNETIC DOOR CONTACTS FOR SINGLE DOOR OR WINDOW
- MAGNETIC DOOR CONTACTS FOR DOUBLE DOOR
- EMERGENCY CALL STATION

LINE VOLTAGE SWITCHES

- SWITCH, SINGLE POLE, 20A
- SWITCH, DOUBLE POLE, 20A
- SWITCH, THREE WAY, 20A
- DIMMER SWITCH

TELEPHONE

- TELEPHONE OUTLET, WALL RECESSED 18" AFF
- CABLE TV OUTLET, WALL RECESSED 18" AFF

LIGHTING SYSTEM

- 1'x4' UNDERCABINET FIXTURE
- FLUORESCENT WALL MOUNTED NIGHT LIGHT FIXTURE
- STRIP FLUORESCENT FIXTURE
- INCANDESCENT DOWNLIGHT FIXTURE
- EXIT LIGHT
- DIRECTIONAL ARROWS IF INDICATED
- BATTERY OPERATED AUTOMATIC EMERGENCY LIGHTING UNIT WITH NUMBER OF HEADS AS SHOWN
- REMOTE MOUNTED LIGHT HEAD FROM BATTERY EMERGENCY UNIT
- POLE MOUNTED FIXTURE
- FLOODLIGHT
- INDICATES FIXTURE TYPE (i.e. "A")

GROUNDING

- GROUND ROD
- 1/4 " x 2" COPPER GROUND BAR
- DOT INDICATES THERMIT WELD OR CONNECTION
- #4/0 COPPER GROUND WIRE, UNLESS OTHERWISE NOTED

ELECTRICAL ABBREVIATIONS

- | | |
|--------|--------------------------|
| A.C.T | ABOVE COUNTER TOP |
| A.F.F. | ABOVE FINISH FLOOR |
| BC | BOTTOM CHORD |
| B.C.T. | BELOW COUNTER TOP |
| C | CONDUIT |
| EF | EXHAUST FAN |
| EM | EMERGENCY |
| EWC | ELECTRIC WATER COOLER |
| GND | GROUND |
| G.F.I. | GROUND FAULT INTERRUPT |
| HP | HORSE POWER |
| J.B. | JUNCTION BOX |
| L.P. | LIGHTING PANEL |
| M.D.P. | MAIN DISTRIBUTION PANEL |
| M.L.O | MAIN LUGS ONLY |
| M.B. | MAIN BREAKER |
| N.E.C. | NATIONAL ELECTRICAL CODE |
| NL | NIGHT LIGHT |
| PEC | PHOTO ELECTRIC CELL |
| PP | POWER PANEL |
| RECPT | RECEPTACLE |
| RTU | ROOFTOP UNIT |
| TELE | TELEPHONE |
| TYP | TYPICAL |
| WP | WATERPROOF |
| XFMR | TRANSFORMER |

ELECTRICAL DRAWING LIST

THE DRAWING LIST SHOWN REPRESENTS DRAWINGS ASSOCIATED WITH THIS PROJECT. FOR SPECIFIC CONTRACT DRAWING INDEX, SEE SPECIFICATION SECTION 00850.

DRAWING NUMBER	DRAWING TITLE
EO.1	DRAWING LIST, ABBREVIATIONS, SYMBOL LIST AND GENERAL NOTES
E1.1	APARTMENT BASEMENT AND FIRST FLOOR LIGHTING PLANS
E2.2	APARTMENT SECOND AND THIRD FLOOR LIGHTING PLANS
E3.1	APARTMENT BASEMENT AND FIRST FLOOR POWER PLANS
E3.2	APARTMENT SECOND AND THIRD FLOOR POWER PLANS
E4.1	APARTMENT BASEMENT AND FIRST FLOOR AUXILIARY SYSTEMS PLANS
E4.2	APARTMENT SECOND AND THIRD FLOOR AUXILIARY SYSTEMS PLANS
E5.1	ONE LINE DIAGRAMS, PANEL SCHEDULES AND LOAD CALCULATIONS
E5.2	FIRE ALARM RISER DIAGRAM

LUMINAIRE SCHEDULE

LAMP TYPE	NO. OF LUMENS	LAMP WATTS	AREA	DESCRIPTION	MANUFACTURER
LED	1170	16	UNIT APARTMENT HALLWAY	SURFACE MOUNTED 11" DIAMETER WITH CHROME ACCENT, MATTE WHITE DIFFUSER, 80CRI, 120V, 30K, UL LISTED	LITHONIA "FMBAN11 208" SERIES OR OWNER APPROVED EQUAL
LED	1640	24	UNIT APARTMENT BEDROOM	SURFACE MOUNTED 14" DIAMETER WITH CHROME ACCENT, MATTE WHITE DIFFUSER, 80CRI, 120V, 30K, UL LISTED	LITHONIA "FMBAN14 208" SERIES OR OWNER APPROVED EQUAL
LED	1619	24	UNIT APARTMENT DINING ROOM KITCHEN	16" ROUND SEMI FLUSH MOUNTED LED LIGHT FIXTURE, BRUSHED NICKEL FINISH, MILK-WHITE ACRYLIC DIFFUSER 3-STEM HANGER, 80CRI, 30K, 120V, UL LISTED	LITHONIA "FMSATL" SERIES OR OWNER APPROVED EQUAL
LED	1391	18	UNIT APARTMENT BATHROOM ABOVE THE MIRROR	WALL MOUNTED (CYLINDER) ABOVE THE MIRROR, ALUMINUM DIFFUSER, DECORATIVE BRUSHED NICKEL FINISH, 90CRI, 30K, 120V, UL LISTED DAMP LOCATION	LITHONIA "FMVCL" SERIES OR OWNER APPROVED EQUAL
LED	700	12.4	UNIT APARTMENT UNDER CABINET	2' LONG SURFACE MOUNTED LED UNDERCABINET LIGHT FIXTURE, LOW PROFILE RUGGED ALUMINUM HOUSING, DIRECT WIRE WITH JUNCTION BOX, ON/OFF SWIVEL ROCKER, 90CRI, 30K, WHITE FINISH, 120V, UL LISTED	LITHONIA "UCLD" SERIES OR OWNER APPROVED EQUAL
LED	3000	33	STORAGE/MAINTAINANCE ROOMS (CHAIN HUNG/CEILING MTD.)	LOW PROFILE 4' LONG Z STRIP INDUSTRIAL LED FIXTURE, CODE-GAUGE COLD ROLLED STEEL, 90CRI, 30K, 120V, WHITE FINISH, HANGER CHAIN, 120V, UL LISTED	LITHONIA "ZL1D" SERIES OR OWNER APPROVED EQUAL
LED	1200	24	CORRIDOR CEILING MOUNTED	14" ROUND FLUSH MOUNTED LED LIGHT FIXTURE, MATTE WHITE ACRYLIC DIFFUSER, 80CRI, 30K, 120V, UL LISTED	LITHONIA "FMCRL 14 208" SERIES OR OWNER APPROVED EQUAL
LED		.62	CORRIDOR EXIT SIGN	SOLID DIE CAST ALUMINUM HOUSING, BRUSHED ALUMINUM FACE WITH BLACK MATTE HOUSING, RED LED LAMPS; NICKEL-CADMIUM BATTERY, UNIVERSAL MOUNT.	LITHONIA "LOM" SERIES OR OWNER APPROVED EQUAL
LED		14.2	CORRIDOR EMERGENCY	LED WALL MOUNTED EMERGENCY BATTERY UNIT, SELF CONTAINED WITH MAINTAINANCE-FREE LEAD CALCIUM BATTERY/CHARGER, SELF DIAGNOSTIC, WHITE HOUSING, BROWNOUT PROTECTION.	LITHONIA "ELMLT" SERIES OR OWNER APPROVED EQUAL
LED	2050	18.7	STAIRWELL	4' LONG WALL OR SURFACE MOUNTED LED LIGHT FIXTURE, ROLL FORM CODE-GAUGE STEEL HOUSING; POST PAINTED IN POLYESTER COAT; 30K, 90CRI, 120V, UL LISTED, OCCUPANCY SENSOR, DIMMING TO 10% WHEN UNOCCUPIED, EMERGENCY BATTERY PACK	LITHONIA "WL4 20L EZ1 EL14L" SERIES OR OWNER APPROVED EQUAL
LED	2050	18.7	OUTDOOR WALL PACK	WALL MOUNTED LED LIGHT FIXTURE, DIE CAST ALUMINUM HOUSING; FULLY GASKETED, TYPE IV DISTRIBUTION, PRECISION-MOLDED ACRYLIC LENS, EMERGENCY BATTERY, 40K, 120V, UL LISTED FOR WET LOCATION, BUILT-IN PHOTOCCELL, SINGLE FUSE, VANDAL RESISTANCE, DARK BRONZE FINISH	LITHONIA "WSQ LED 1 10A700 40K SR4 120VLT 88M PE SF EL0W V6 DDBXD" SERIES OR OWNER APPROVED EQUAL

GENERAL ELECTRICAL NOTES:

- ALL ELECTRICAL WORK SHALL CONFORM TO N.E.C. LATEST ADOPTED EDITION, ALL STATE AND LOCAL CODES.
- THE WIRING METHOD(S) USED SHALL BE SUITABLE FOR THE INSTALLATION AND USE IN CONFORMITY WITH THE PROVISIONS OF THE N.E.C. LIST OR LABELED EQUIPMENT SHALL BE USED OR INSTALLED IN ACCORDANCE WITH ANY INSTRUCTIONS INCLUDED IN THE LISTING OR LABELING, REFER TO N.E.C. SECTION 110-3(a) AND (b).
- MAINTAIN A MINIMUM OF 3'-0" CLEAR IN FRONT OF ALL ELECTRICAL EQUIPMENT (L.P.'S, M.D.P.) FOR SERVICING PER N.E.C.
- ALL BUSHING AND WIRING TO BE COPPER. NO ALUMINUM IS ALLOWED ON THIS PROJECT.
- ANY DISCREPANCIES BETWEEN ARCHITECTURAL DRAWINGS AND ELECTRICAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
- FIRST CLASS WORKABLE SYSTEMS SHALL BE PROVIDED BY THE CONTRACTOR. IF, IN THE OPINION OF THE CONTRACTOR, CHANGES IN THE DRAWINGS OR SPECIFICATIONS ARE REQUIRED TO PRODUCT FIRST-CLASS WORKABLE SYSTEMS, CONTRACTOR SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. IF THE CONTRACTOR FAILS TO MAKE SUCH A REQUEST, NO EXCUSE WILL THEREFORE BE ENTERTAINED FOR FAILURE TO PROVIDE FIRST-CLASS WORKABLE SYSTEMS.
- ALL NEW ELECTRICAL DEVICES AND ASSOCIATED OUTLET BOXES SHALL BE FLUSH MOUNTED UNLESS NOTED OTHERWISE. ALL CONDUIT AND WIRING SHALL BE CONCEALED. SURFACE RACEWAY AND ASSOCIATED BOXES SHALL ON BE PERMITTED WHERE NOTED AND/OR ON EXISTING WALLS THAT ARE NOT ACCESSIBLE.
- WHERE DATA/TELE/INTERCOM OUTLETS ARE NOTED CONTRACTOR IS TO PROVIDE AND INSTALL (1) 4" x 4" x 2" DEEP FLUSH MOUNTED JUNCTION BOX AT SAME HEIGHT AS RECEPTACLES UNLESS OTHERWISE ON PLANS. J.B. SHALL BE PROVIDED WITH PLASTIC BLANK COVER PLATE. COLOR SHALL BE WHITE. RUN 3/4" CONDUIT WITH ROOM NUMBER, NAME AND USE FROM EACH BOX TO ACCESSIBLE CEILING SPACE. PROVIDE "PULL WIRES" IN CONDUIT FOR FUTURE USE. TERMINATE ALL CONDUITS WITH BUSHINGS.
- ALL DEVICE PLATES FOR RECEPTACLES AND SWITCHES SHALL BE WHITE, BREAK PROOF PLASTIC.
- COMPUTER RECEPTACLES, EQUAL TO "HUBBELL" OR "SLATER" DUPLEX COMPUTER OUTLET, 120 VOLT, 20 AMP, SPECIFICATION GRADE, WITH ISOLATED GROUND AND SURGE SUPPRESSION, BLUE OR ORANGE IN COLOR.
- VERIFY KITCHEN EQUIPMENT KW, VOLTAGE, PHASE AND CONNECTION TYPE PRIOR TO INSTALLATION AND CONNECT ACCORDINGLY. EXACT SPECIFICATIONS WERE NOT AVAILABLE AT TIME OF DESIGN.
- NO PLUMBING LINES AND/OR DUCTWORK IS TO RUN NEAR ELECTRICAL PANELS. KEEP PANEL AREA CLEAR FROM 15" ON EITHER SIDE OF PANEL AND FOR 36" IN FRONT OF PANEL FROM FLOOR TO ROOF DECK. COORDINATE WITH CONTRACTORS PRIOR TO CONSTRUCTION. LACK OF COORDINATION BETWEEN CONTRACTORS WILL NOT RESULT IN EXTRA MONEYS AWARDED FOR RELOCATION OF LINES AND/OR PANELS.
- ELECTRICAL CONTRACTOR IS TO REFER TO THE TEMPERATURE CONTROL SECTION OF THE SPECIFICATIONS AND THE MECHANICAL EQUIPMENT SCHEDULE FOR DEFINITION OF WHICH TRADES ARE RESPONSIBLE FOR HVAC INTERLOCKS AND OPERATIONAL SWITCHES.
- CONTRACTOR SHALL MAINTAIN AND KEEP UP-TO-DATE SET OF DRAWINGS REFLECTING "AS BUILT" CONDITIONS OF THEIR WORK. CONTRACTOR SHALL INDICATE EXACT DIMENSIONS AND ELEVATIONS OF ALL UNDERGROUND AND/OR CONCEALED WORK. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL DELIVER TO THE C.M. OR GENERAL CONTRACTOR THE AS-BUILT DRAWINGS.



EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
400 Burnage St #653
Detroit, MI 48201
313-965-4200 / Fax 313-965-7678



Airna Associates, Inc. Electrical Engineering
24175 Northway Dr.
Southfield, MI 48075
313-999-8821

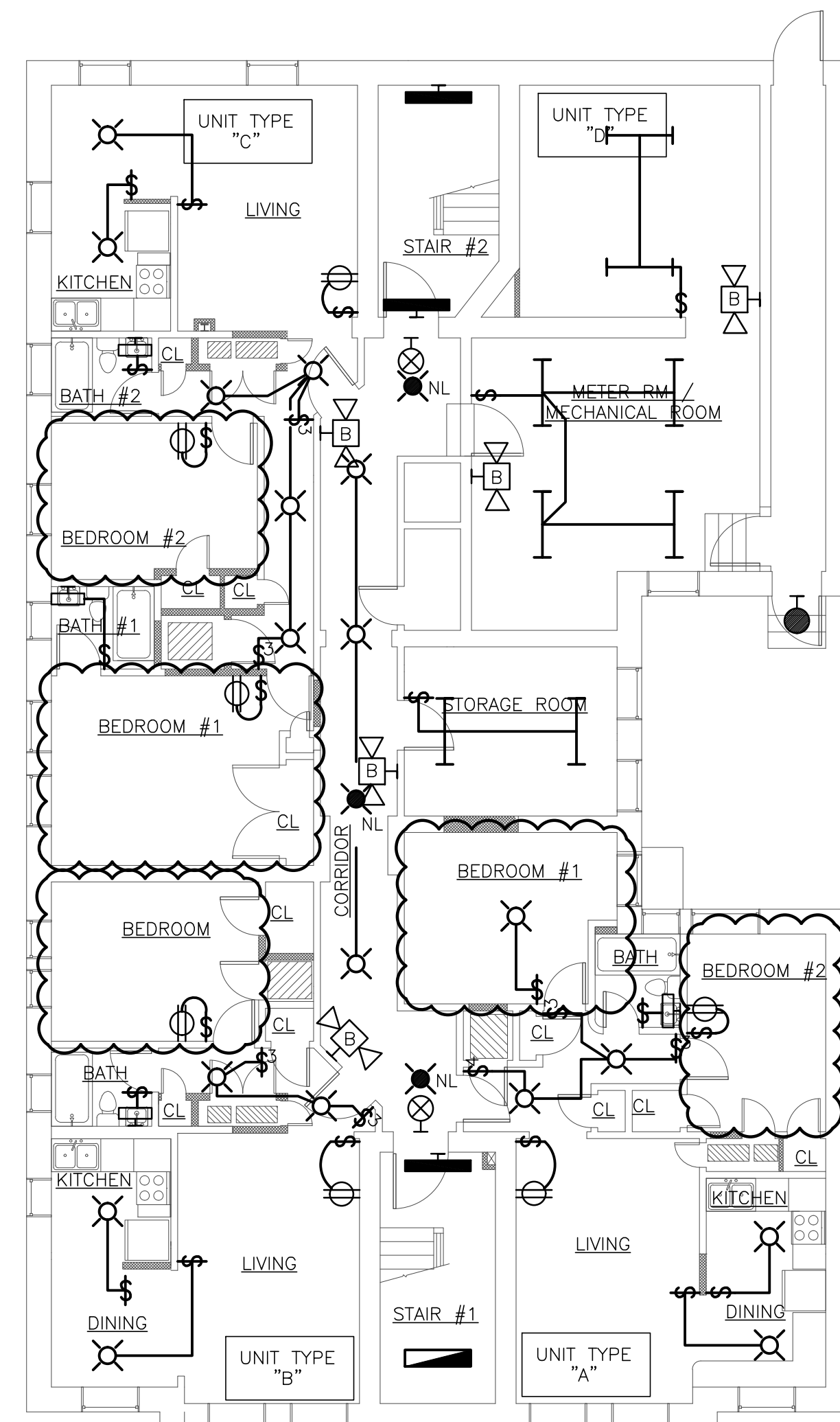
BASEMENT AND 1ST FLOOR
[tbq] FLOOR PLANS
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

ISSUE DATES:

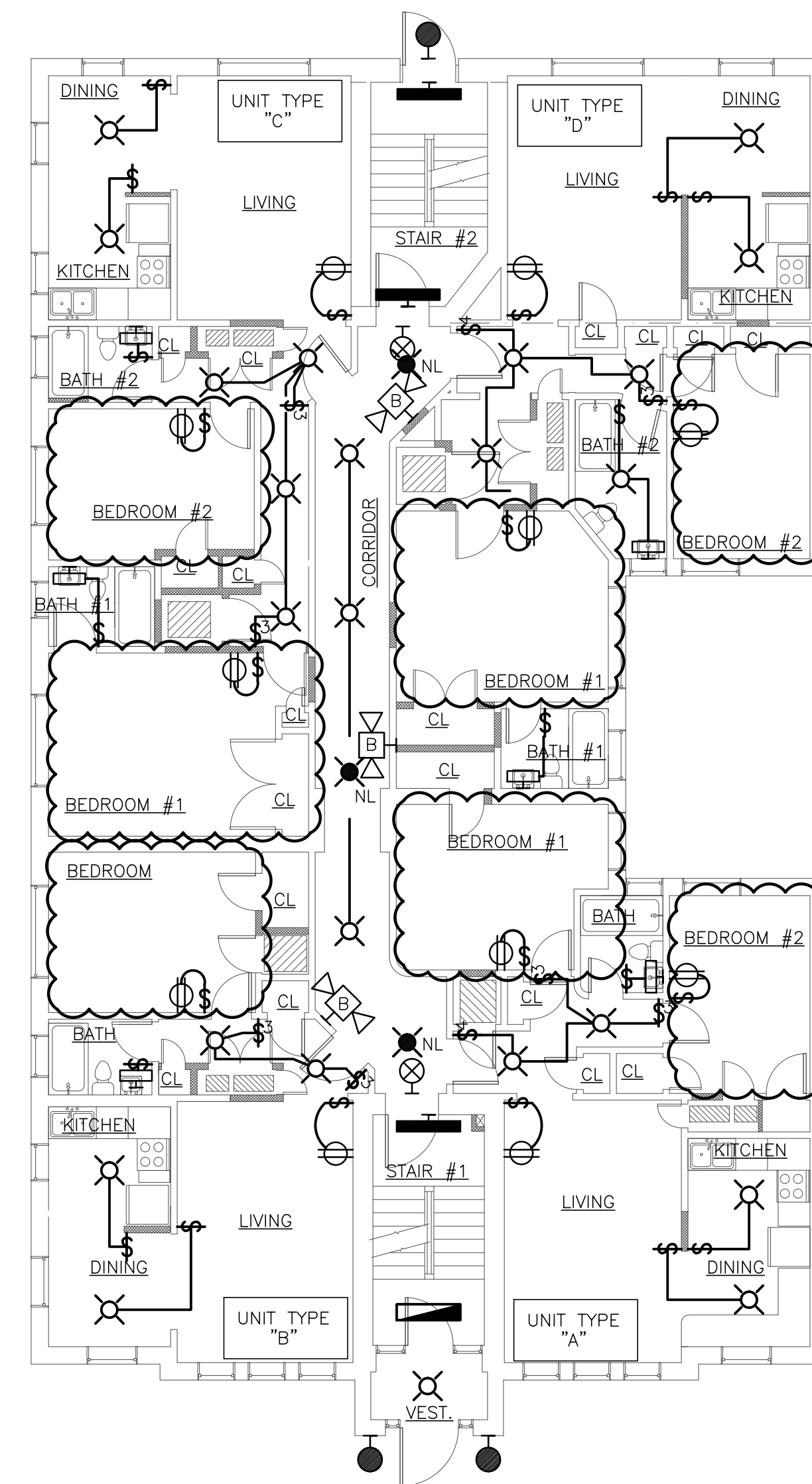
REVIEW
AUG-11-2016
BACKGROUND
AUG-14-2016
PERMIT
SEPT-23-2016

DWG FILENAME
E.01.DWG

EO.1



BASEMENT LIGHTING FLOOR PLAN
1/8" = 1'-0"



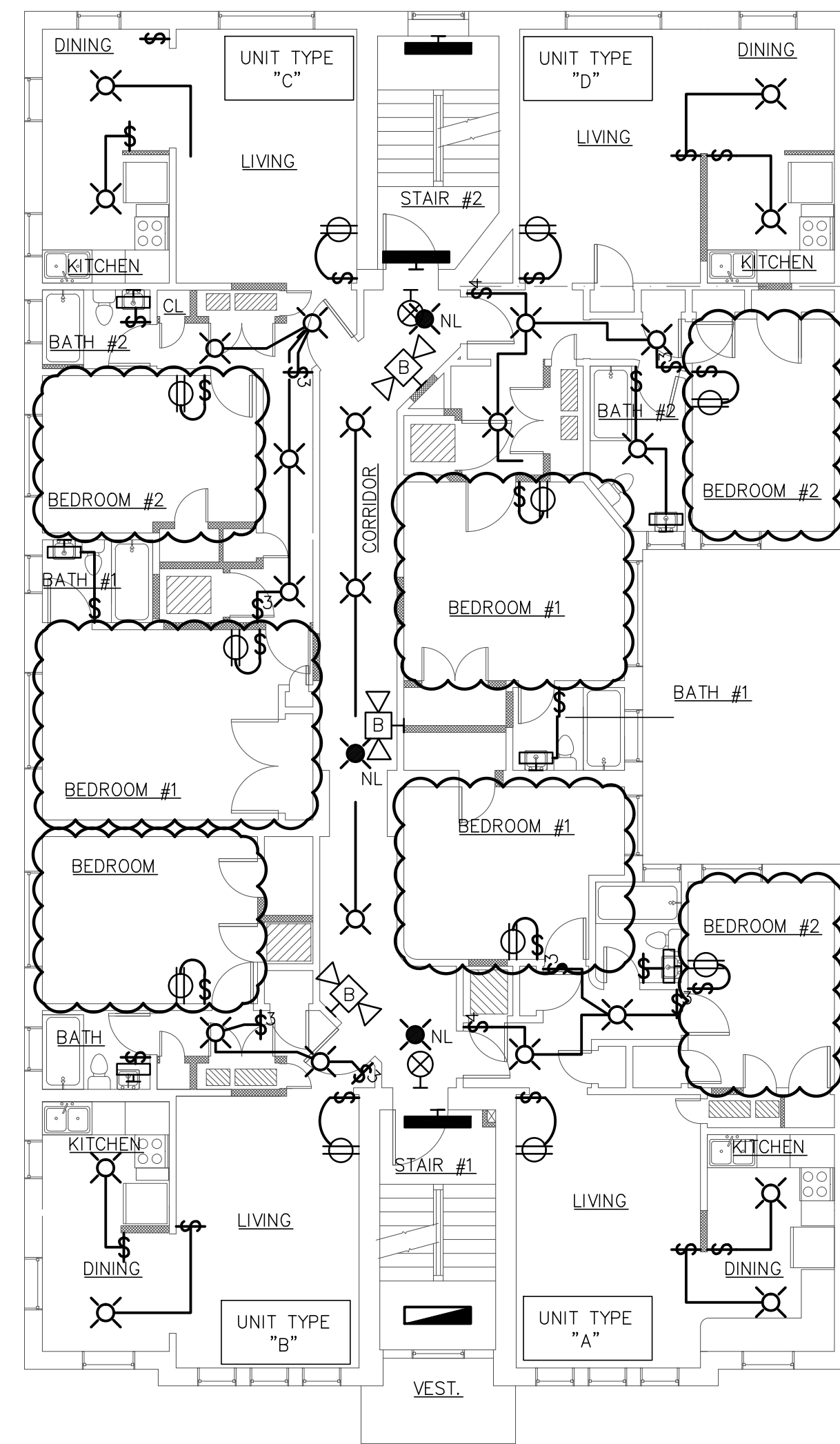
1ST FLOOR LIGHTING FLOOR PLAN
1/8" = 1'-0"

NOTES:

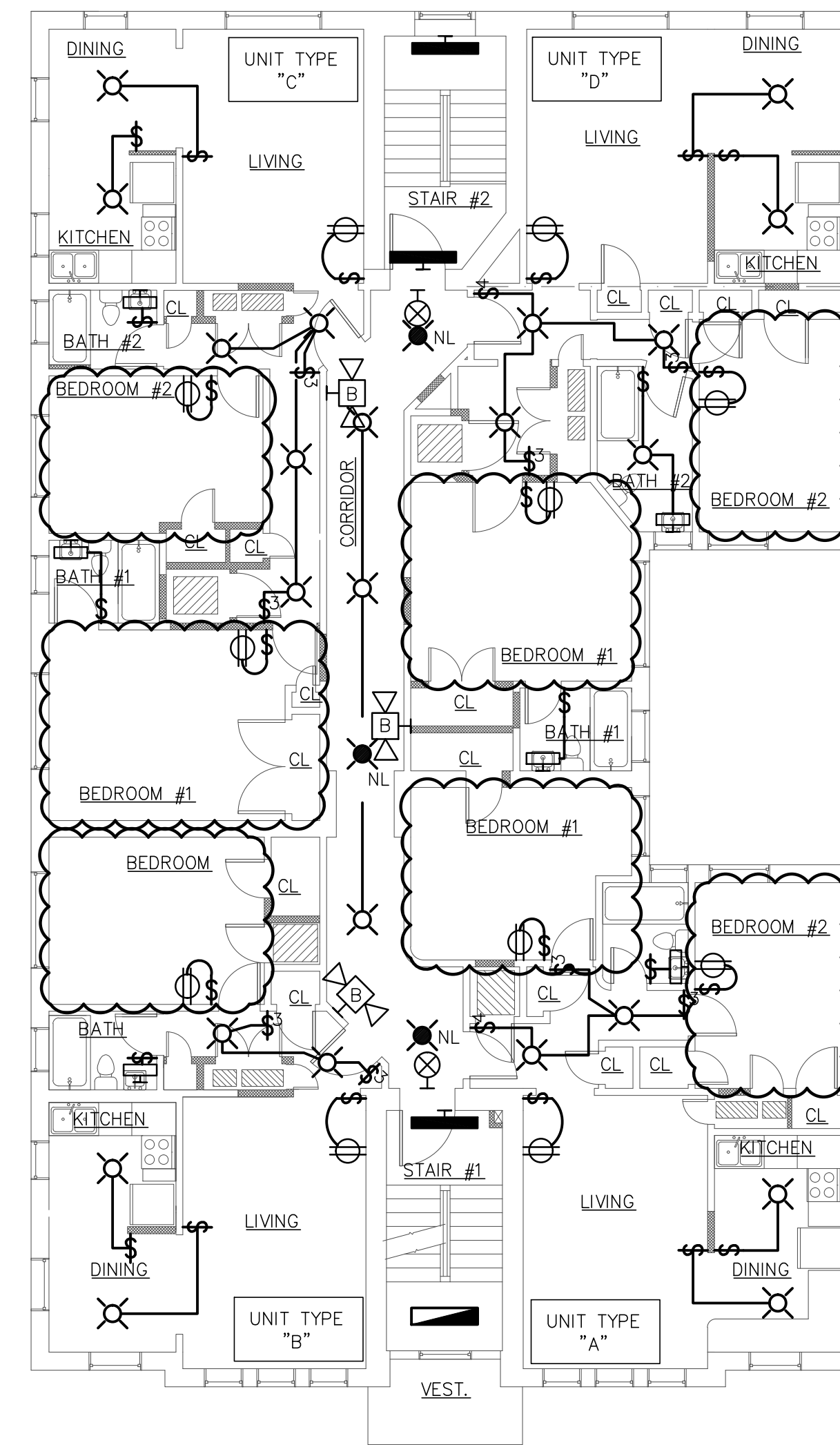
- SEE DRAWING E0.1 FOR DRAWING LIST, ABBREVIATION, GENERAL NOTES, SYMBOL LIST AND LIGHT FIXTURE SCHEDULE.
- SEE DRAWING E0.2 FOR PANEL SCHEDULE AND POWER RISER DIAGRAM.
- CONNECT THE EMERGENCY AND EXIT SIGN TO THE SAME BRANCH CIRCUIT SERVING THE NORMAL LIGHTING IN THE SAME AREA BUT AHEAD OF THE LOCAL LIGHT SWITCHE(S)

ISSUE DATES:

REVIEW	AUG-11-2016
BACKGROUND	AUG-14-2016
PERMIT	SEPT-23-2016
ADDENDUM 3	NOV-14-2018



2ND FLOOR LIGHTING FLOOR PLAN
1/8" = 1'-0"



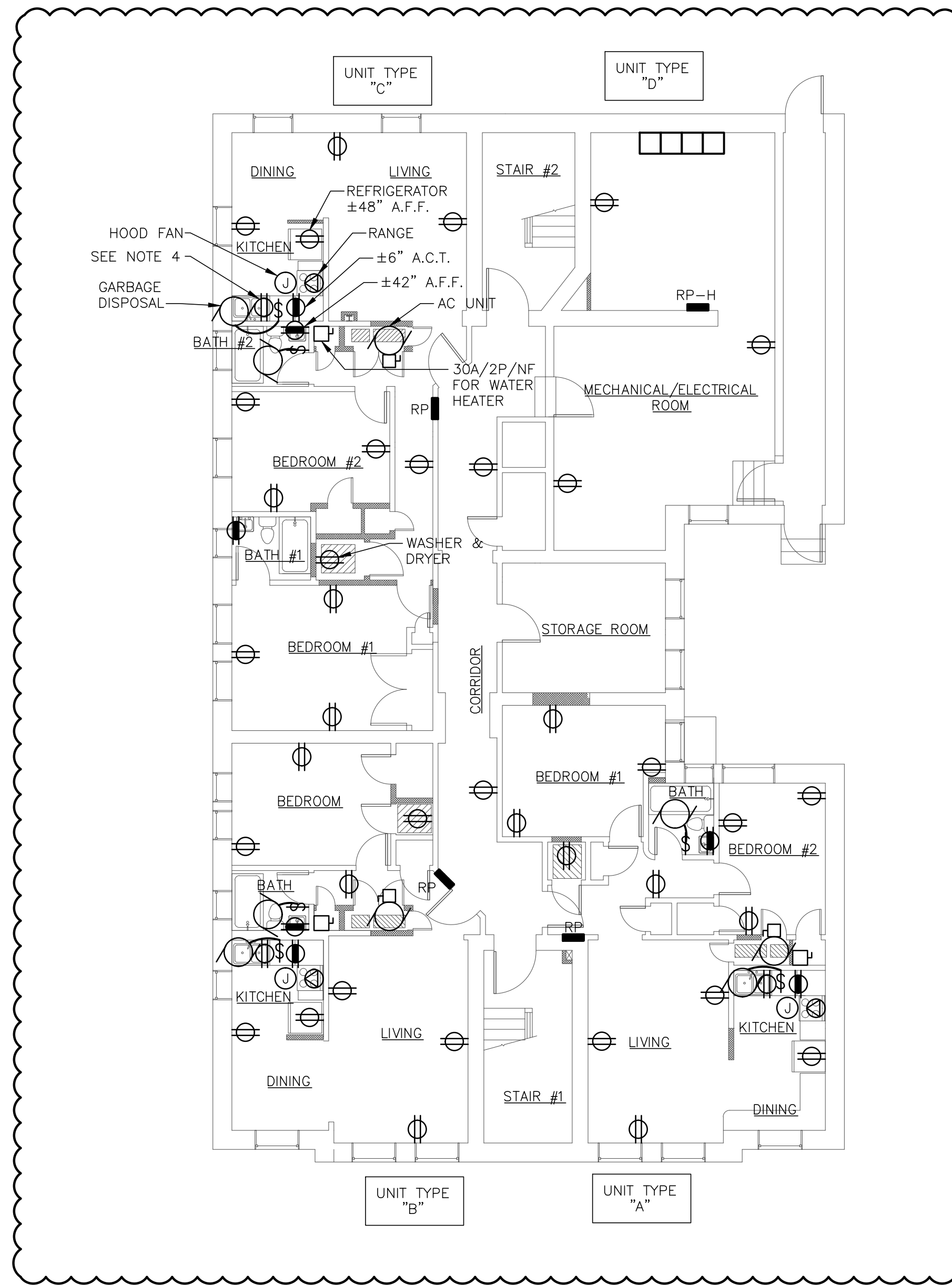
3RD FLOOR LIGHTING FLOOR PLAN
1/8" = 1'-0"

NOTES:

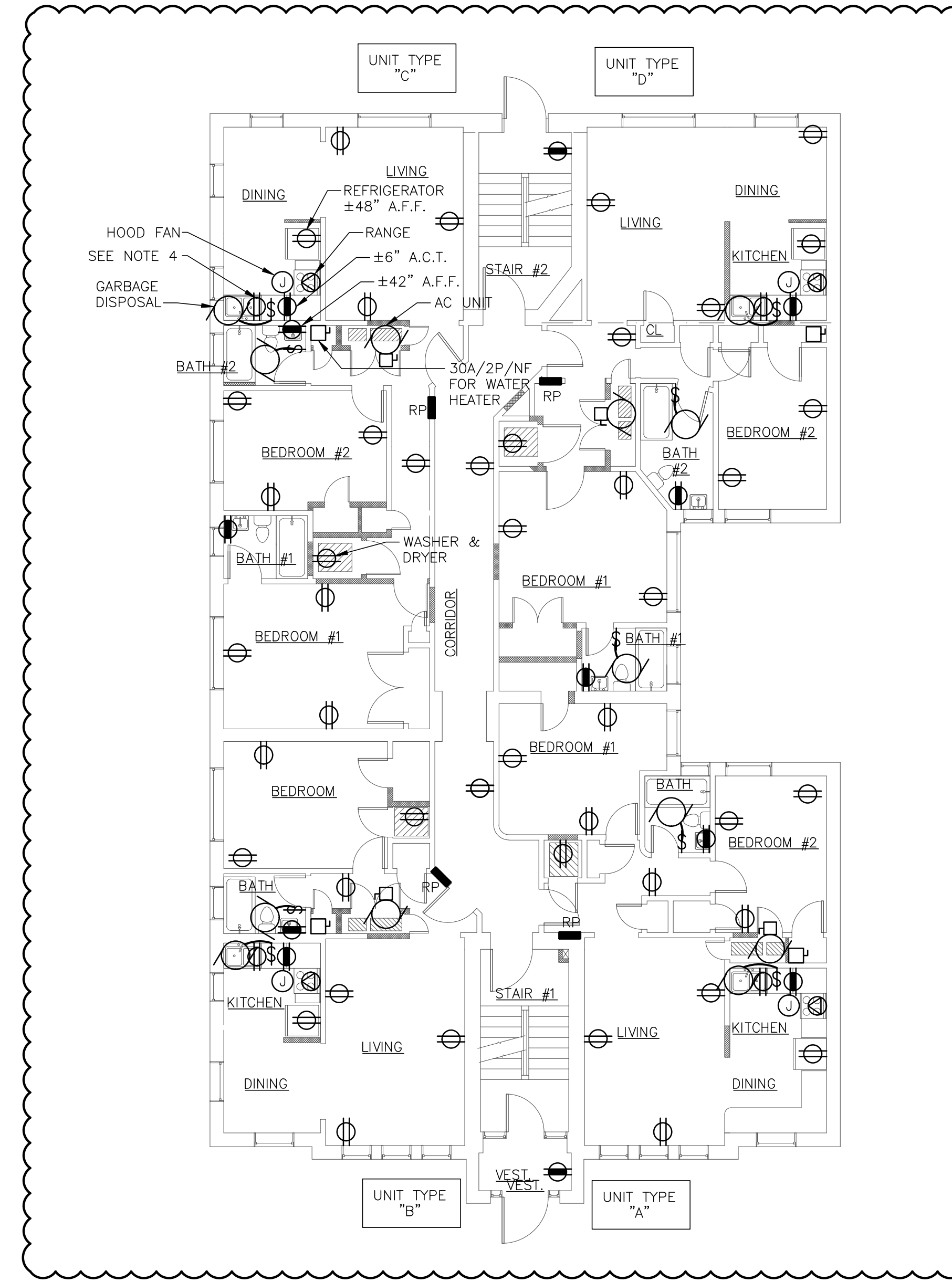
1. SEE DRAWING E0.1 FOR DRAWING LIST, ABBREVIATION, GENERAL NOTES, SYMBOL LIST AND LIGHT FIXTURE SCHEDULE.
2. SEE DRAWING E0.2 FOR PANEL SCHEDULE AND POWER RISER DIAGRAM.
3. CONNECT THE EMERGENCY AND EXIT SIGN TO THE SAME BRANCH CIRCUIT SERVING THE NORMAL LIGHTING IN THE SAME AREA BUT AHEAD OF THE LOCAL LIGHT SWITCHE(S)

ISSUE DATES:

REVIEW	AUG-11-2016
BACKGROUND	AUG-14-2016
PERMIT	SEPT-23-2016
ADDENDUM 3	NOV-14-2018



BASEMENT POWER FLOOR PLAN
 1/8" = 1'-0"



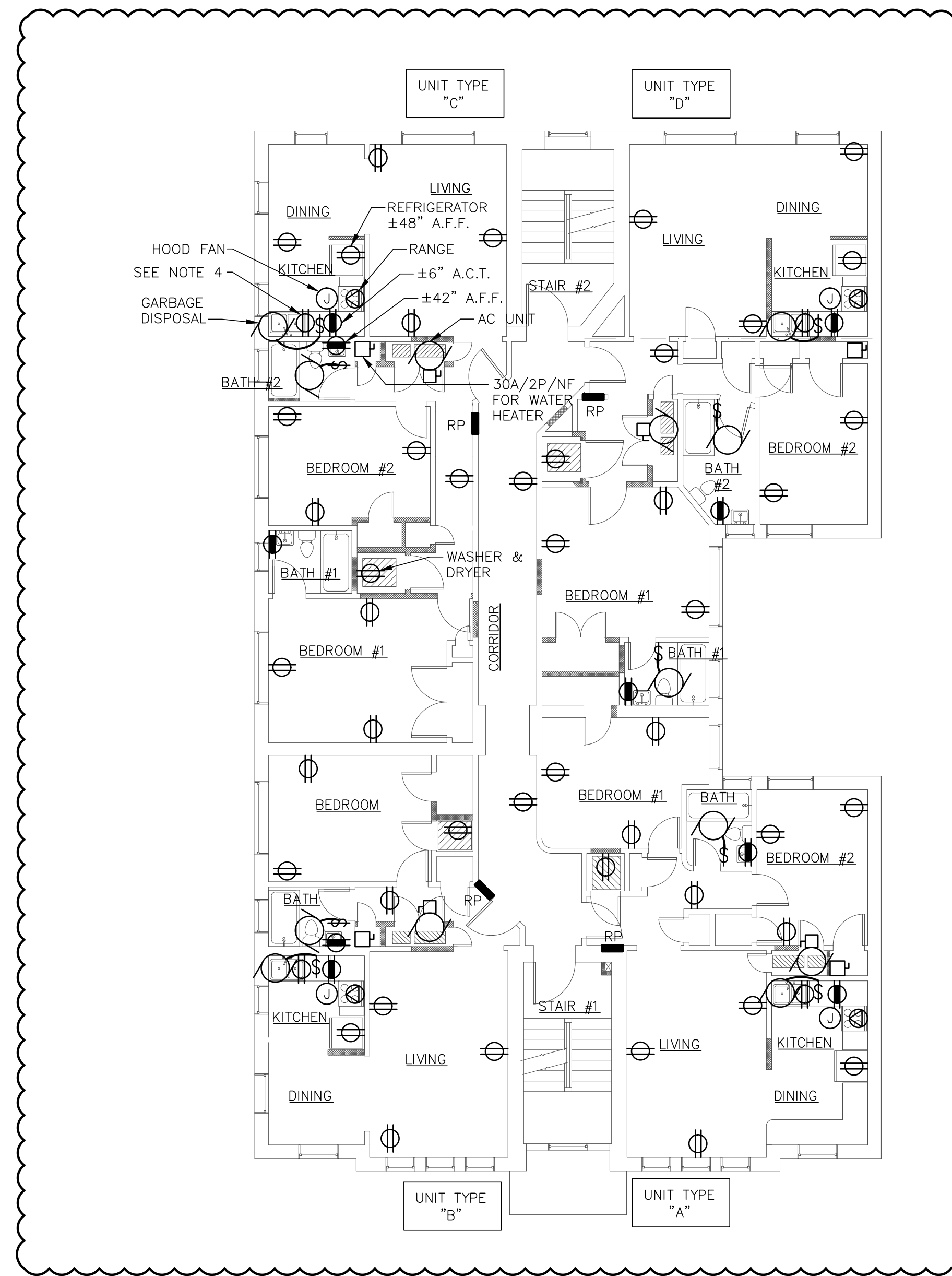
1ST FLOOR POWER FLOOR PLAN
 1/8" = 1'-0"

NOTES:

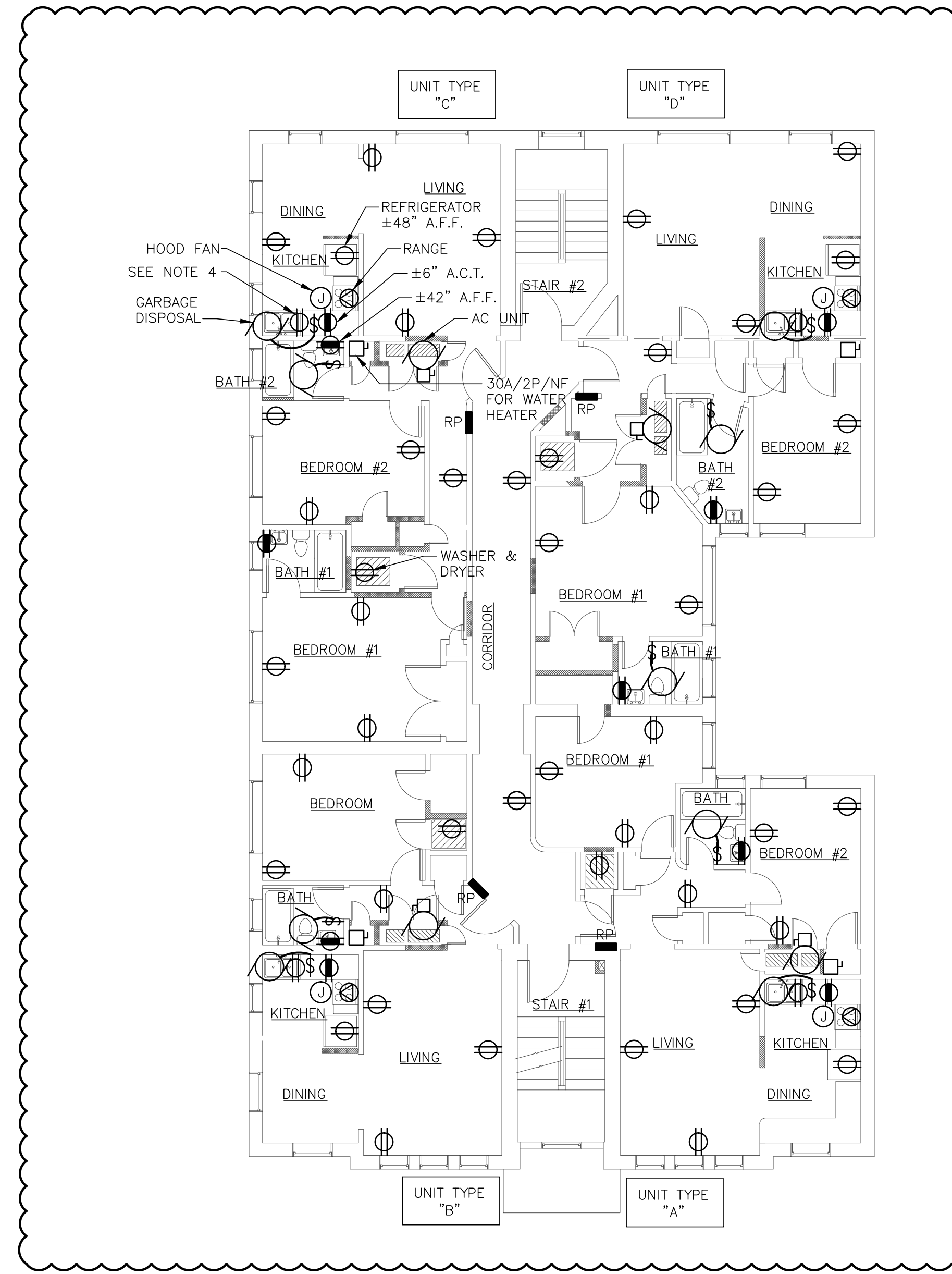
1. SEE DRAWING E-1 FOR DRAWING LIST, ABBREVIATION, GENERAL NOTES, SYMBOL LIST AND LIGHT FIXTURE SCHEDULE.
2. SEE DRAWING E-2 FOR PANEL SCHEDULE AND POWER RISER DIAGRAM.
3. CONTRACTOR SHALL PROVIDE NEW 600A ELECTRICAL SERVICE FEEDERS FOR THE ELECTRICAL SYSTEM.
4. CONTRACTOR SHALL PROVIDE NEW 200A HOUSE PANEL HP-A.
5. CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL TRADE CONTRACTOR FOR THE LOCATION OF THE NEW APARTMENT UNITS WATER HEATER. PROVIDE POWER TO THE NEW WATER HEATER FROM THE NEW APARTMENT PANEL.
6. PROVIDE ARC-FAULT CIRCUIT INTERRUPTER ON BRANCH CIRCUIT SUPPLY POWER TO RECEPTACLES LOCATED IN LIVING/DINING ROOM, BEDROOMS, HALLWAY PER N.E.C. 210.12(B).
7. ALL RECEPTACLES SERVING THE KITCHEN COUNTER TOP SHALL HAVE GFI PROTECTION PER N.E.C. 210(A)(6).

ISSUE DATES:

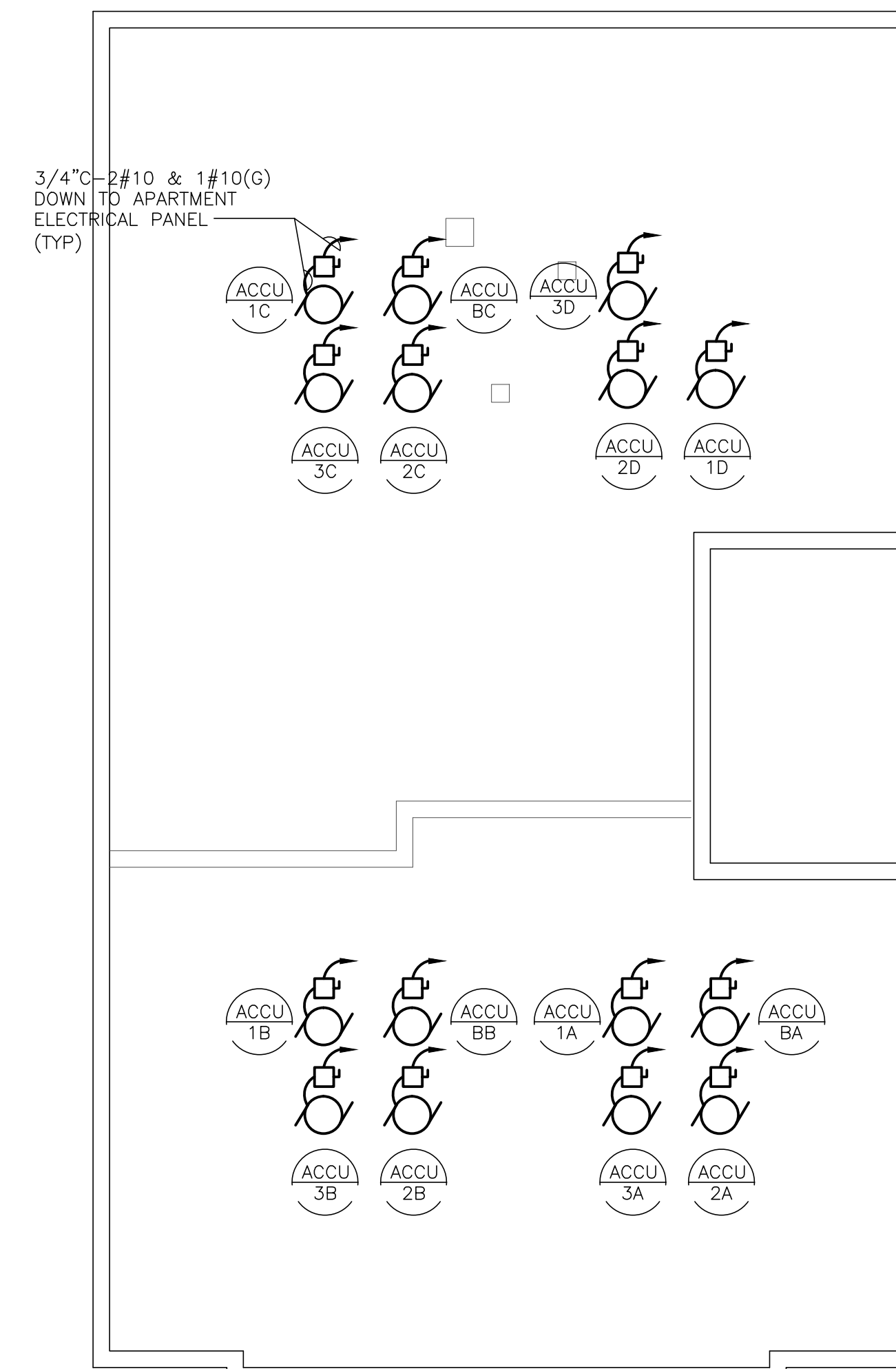
REVIEW
AUG-11-2016
BACKGROUND
AUG-14-2016
PERMIT
SEPT-23-2016



2ND FLOOR POWER FLOOR PLAN
1/8" = 1'-0"



3RD FLOOR POWER FLOOR PLAN
1/8" = 1'-0"



ROOF POWER FLOOR PLAN
1/8" = 1'-0"

- NOTES:**
- SEE DRAWING E-1 FOR DRAWING LIST, ABBREVIATION, GENERAL NOTES, SYMBOL LIST AND LIGHT FIXTURE SCHEDULE.
 - SEE DRAWING E-2 FOR PANEL SCHEDULE AND POWER RISER DIAGRAM.
 - CONTRACTOR SHALL PROVIDE NEW 600A ELECTRICAL SERVICE FEEDERS FOR THE ELECTRICAL SYSTEM.
 - CONTRACTOR SHALL PROVIDE NEW 200A HOUSE PANEL HP-A.
 - CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL TRADE CONTRACTOR FOR THE LOCATION OF THE NEW APARTMENT UNITS WATER HEATER. PROVIDE POWER TO THE NEW WATER HEATER FROM THE NEW APARTMENT PANEL.
 - PROVIDE ARC-FAULT CIRCUIT INTERRUPTER ON BRANCH CIRCUIT SUPPLY POWER TO RECEPTACLES LOCATED IN LIVING/DINING ROOM, BEDROOMS, HALLWAY PER N.E.C. 210.12(B).
 - ALL RECEPTACLES SERVING THE KITCHEN COUNTER TOP SHALL HAVE GFI PROTECTION PER N.E.C. 210.(A)(6).
 - MOUNT DISCONNECT SWITCHES FOR ROOF MOUNTED ACCU UNITS TO MISCELLANEOUS STRUCTURAL STEEL SUPPORT SYSTEM. SEAL ALL ROOF PENETRATION - COORDINATE WITH MECHANICAL AND ARCHITECTURAL TRADES.

EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
Detroit, MI 48202
313-965-4200 / Fax 313-965-7678

AMEC
Airco Associates, Inc.
Mechanical Electrical Engineering
24175 NorthWestern Hwy
311-999-8523

**2ND AND 3RD FLOOR
POWER FLOOR PLANS**
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

DRAWN BY: E. YOUNG

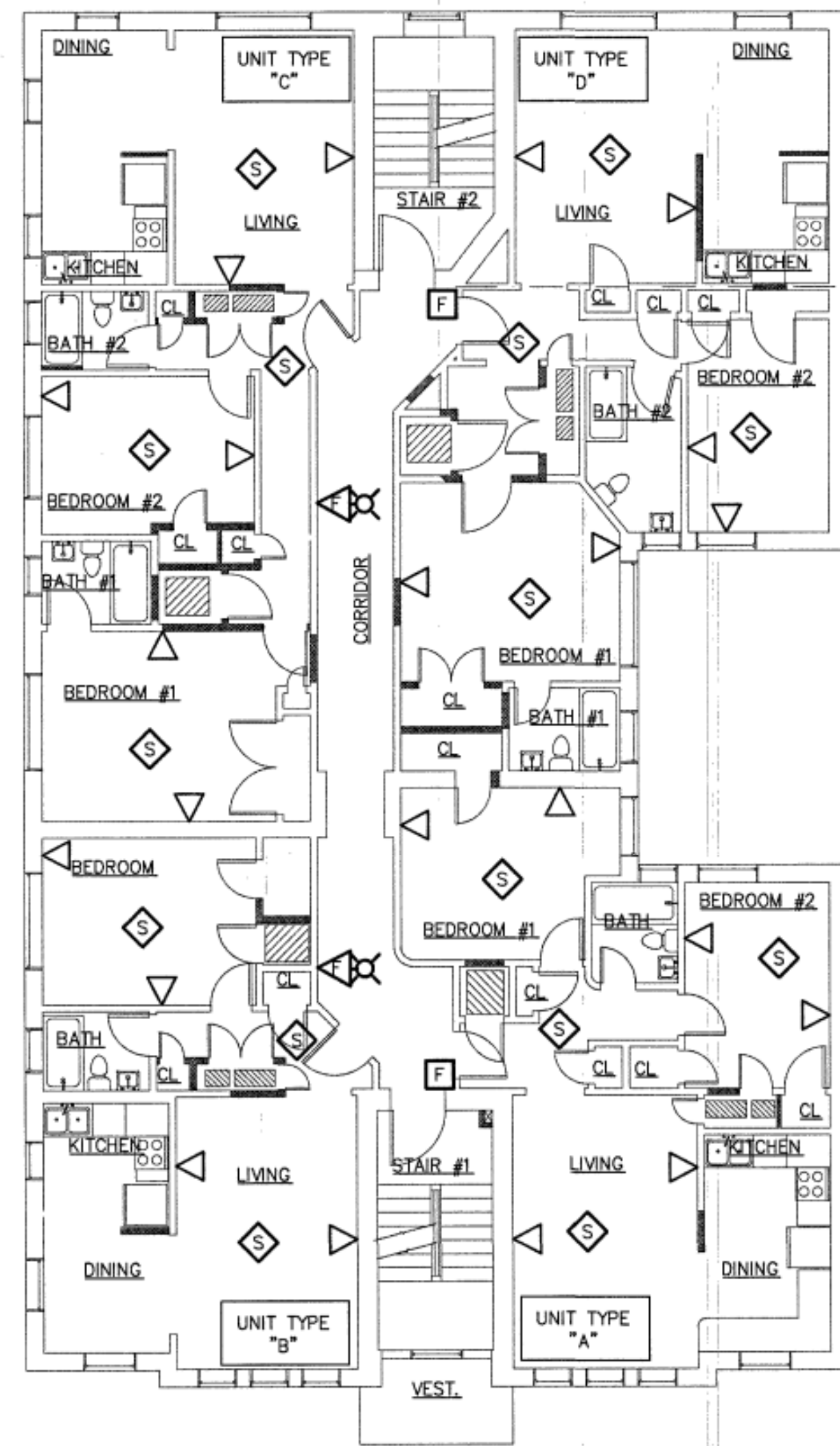
MARLBORO APARTMENTS
BUILDING RENOVATION

ISSUE DATES:

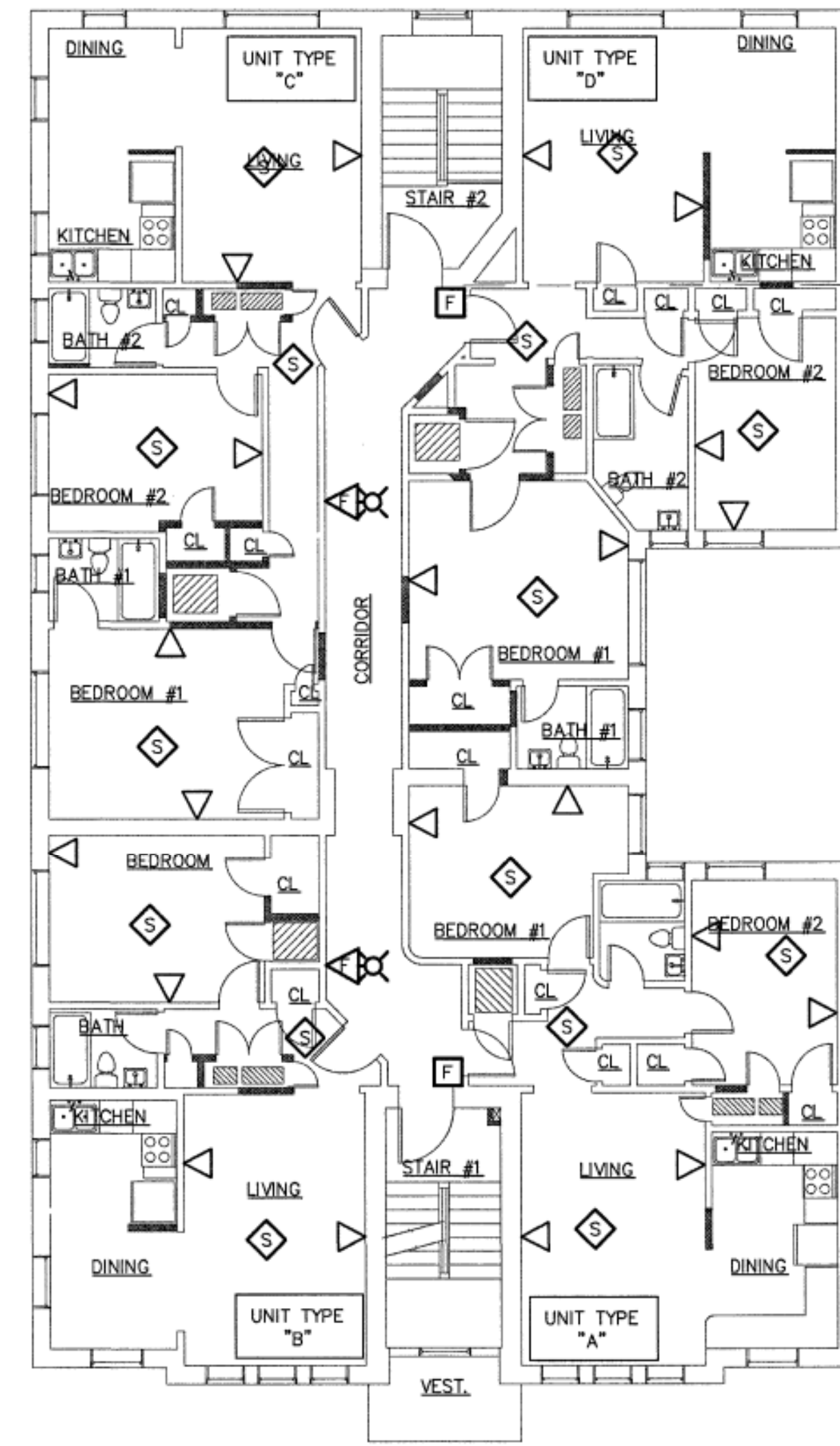
REVIEW
AUG-11-2016
BACKGROUND
AUG-14-2016
PERMIT
SEPT-23-2016

E3.2.DWG
1031 MARLBOROUGH

E3.2



2ND FLOOR AUXILIARY SYSTEMS FLOOR PLAN
1/8" = 1'-0"



3RD FLOOR AUXILIARY SYSTEMS FLOOR PLAN
1/8" = 1'-0"

NOTES:

1. SEE DRAWING E0.1 FOR DRAWING LIST, ABBREVIATION, GENERAL NOTES, SYMBOL LIST AND LIGHT FIXTURE SCHEDULE.
2. SEE DRAWING E0.2 FOR PANEL SCHEDULE AND AUXILIARY SYSTEMS RISER DIAGRAM.
3. CONNECT THE EMERGENCY AND EXIT SIGN TO THE SAME BRANCH CIRCUIT SERVING THE NORMAL AUXILIARY SYSTEMS IN THE SAME AREA BUT AHEAD OF THE LOCAL LIGHT SWITCHE(S)



EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
440 Burroughs St #603
313-965-4200 / Fax 313-965-7678

ama
Aina Associates, Inc.
Mechanical | Electrical | Engineering
24750 N. Main St.
Southfield, MI 48075
313-999-6625

**2ND AND 3RD FLOOR
AUXILIARY SYSTEMS FLOOR PLANS**
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

DRAWN BY: E. YOUNG

MARLBORO APARTMENTS
BUILDING RENOVATION

ISSUE DATES:

REVIEW	
AUG-11-2016	
BACKGROUND	
AUG-14-2016	
PERMIT	
SEPT-23-2016	

E2.2.DWG
1031 MARLBOROUGH

LOAD CALCULATIONS

I. TWO BEDROOM UNITS (686 SQ FT)

A. GENERAL LOAD

1. GENERAL LIGHTING LOAD 686 SQ FT @ 3VA PER SQ FT	= 2058VA
2. SMALL APPLIANCE LOAD THREE (3) 20 AMP APPLIANCE CIRCUITS @ 1500VA EACH	= 4500VA
3. AC UNIT	= 1200VA
4. WATER HEATER	= 2000VA
5. WASHER/DRYER	= 1560VA
6. RANGER	= 11500VA
TOTAL	= 17,423VA

B. DEMAND LOAD

1. GENERAL LOAD	
1ST 10,000VA @ 100%	= 10,000VA
REMAINDER (17,423-10,000) @ 40%	= 2969VA
TOTAL	= 12,969VA
	= 54.03AMP @ 240V, 1PH

II. SMALL ONE BEDROOM UNITS (572 SQ FT)

A. GENERAL LOAD

1. GENERAL LIGHTING LOAD 572 SQ FT @ 3VA PER SQ FT	= 1716VA
2. SMALL APPLIANCE LOAD THREE (3) 20 AMP APPLIANCE CIRCUITS @ 1500VA EACH	= 4500VA
3. AC UNIT	= 1200VA
4. WATER HEATER	= 2000VA
5. WASHER/DRYER	= 1560VA
6. RANGER	= 11500VA
TOTAL	= 17,081VA

B. DEMAND LOAD

1. GENERAL LOAD	
1ST 10,000VA @ 100%	= 10,000VA
REMAINDER (17,081-10,000) @ 40%	= 2832VA
TOTAL	= 12,832VA
	= 53.47AMP @ 240V, 1PH

III. TWO BEDROOM UNITS (831 SQ FT)

A. GENERAL LOAD

1. GENERAL LIGHTING LOAD 831 SQ FT @ 3VA PER SQ FT	= 2493VA
2. SMALL APPLIANCE LOAD THREE (3) 20 AMP APPLIANCE CIRCUITS @ 1500VA EACH	= 4500VA
3. AC UNIT	= 1200VA
4. WATER HEATER	= 2000VA
5. WASHER/DRYER	= 1560VA
6. RANGER	= 11500VA
TOTAL	= 17,858VA

B. DEMAND LOAD

1. GENERAL LOAD	
1ST 10,000VA @ 100%	= 10,000VA
REMAINDER (17,858-10,000) @ 40%	= 3143VA
TOTAL	= 13,143VA
	= 54.76AMP @ 240V, 1PH

IV. TWO BEDROOM UNITS (850 SQ FT)

A. GENERAL LOAD

1. GENERAL LIGHTING LOAD 850 SQ FT @ 3VA PER SQ FT	= 2550VA
2. SMALL APPLIANCE LOAD THREE (3) 20 AMP APPLIANCE CIRCUITS @ 1500VA EACH	= 4500VA
3. AC UNIT	= 1200VA
4. WATER HEATER	= 2000VA
5. WASHER/DRYER	= 1560VA
6. RANGER	= 11500VA
TOTAL	= 17,915VA

B. DEMAND LOAD

1. GENERAL LOAD	
1ST 10,000VA @ 100%	= 10,000VA
REMAINDER (17,915-10,000) @ 40%	= 3166VA
TOTAL	= 13,166VA
	= 54.85AMP @ 240V, 1PH

V. HOUSE LOAD CALCULATION

1. LIGHTING LOAD	= 1353VA
2. RECEPTACLES LOAD	= 3180VA
3. MOTOR LOAD	= 2785VA
CALCULATED DEMAND LOAD	= 1353(1.25) + 3180 + (2785 + 480)
	= 8,136VA
	= 33.9AMP @ 240V, 1PH

MINIMUM SIZE FEEDERS FROM SERVICE EQUIPMENT TO METER BANK (15 APARTMENT UNITS)

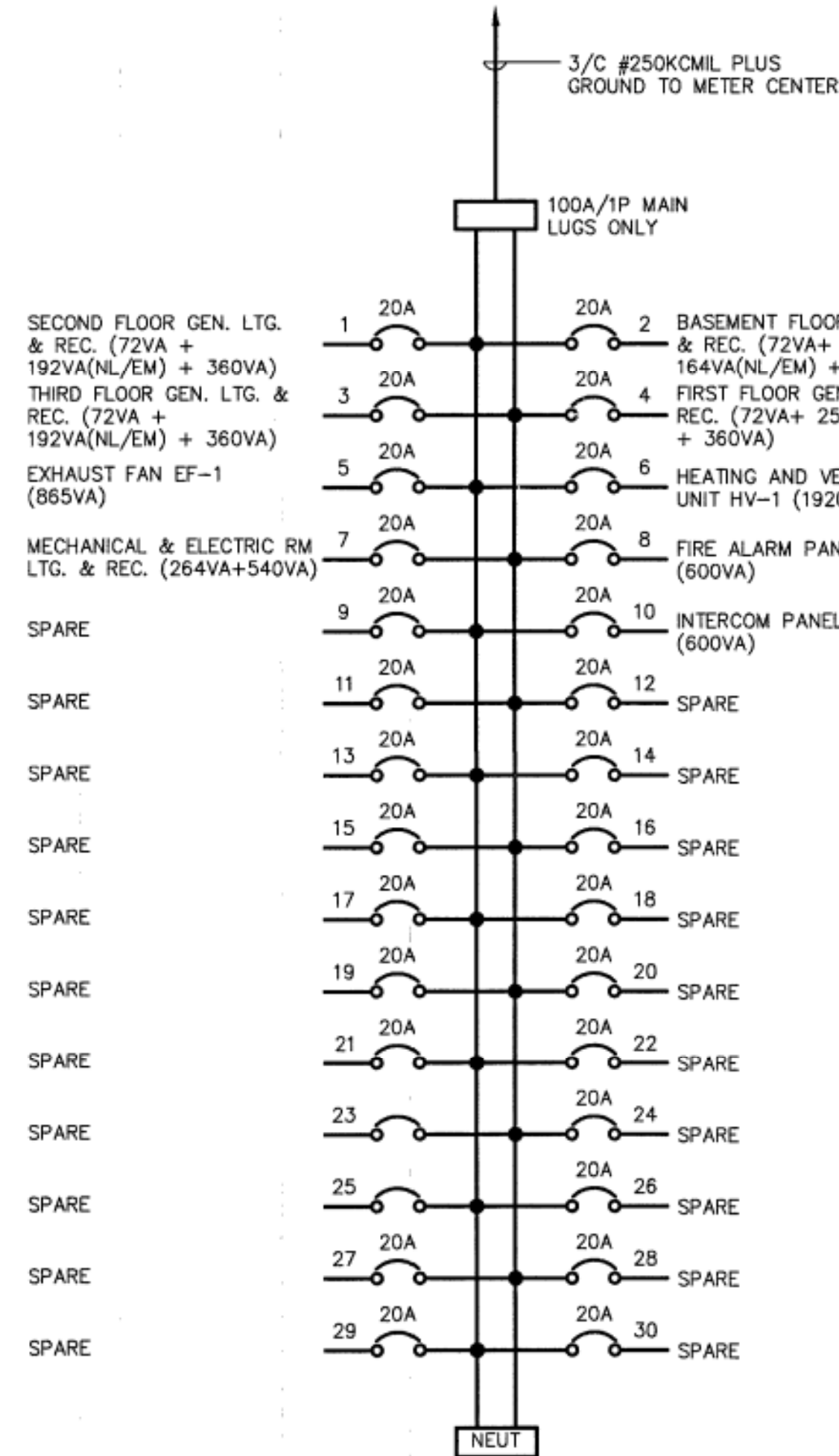
TOTAL CALCULATION LOAD:

1. LIGHTING AND SMALL APPLIANCES (4 X 2058 + 4 X 1716 + 4 X 2493 + 3 X 2550) + (15 X 4500)	= 102,018VA
2. WASHER/DRYER (15 X 1560)	= 27,000VA
3. WATER HEATER (15 X 2000)	= 30,000VA
4. AC UNIT (15 X 1200)	= 18,000VA
5. RANGERS (15 X 5000)	= 75,000VA

NET CALCULATED LOAD (15 APARTMENT UNITS) = 264,993VA
 NET DEMAND LOAD (PER NEC TABLE 220.84): 309,993 X 40% = 105,997VA
 = 441.66AMP @ 240V, 1PH

MINIMUM SIZE FEEDERS FROM DTE

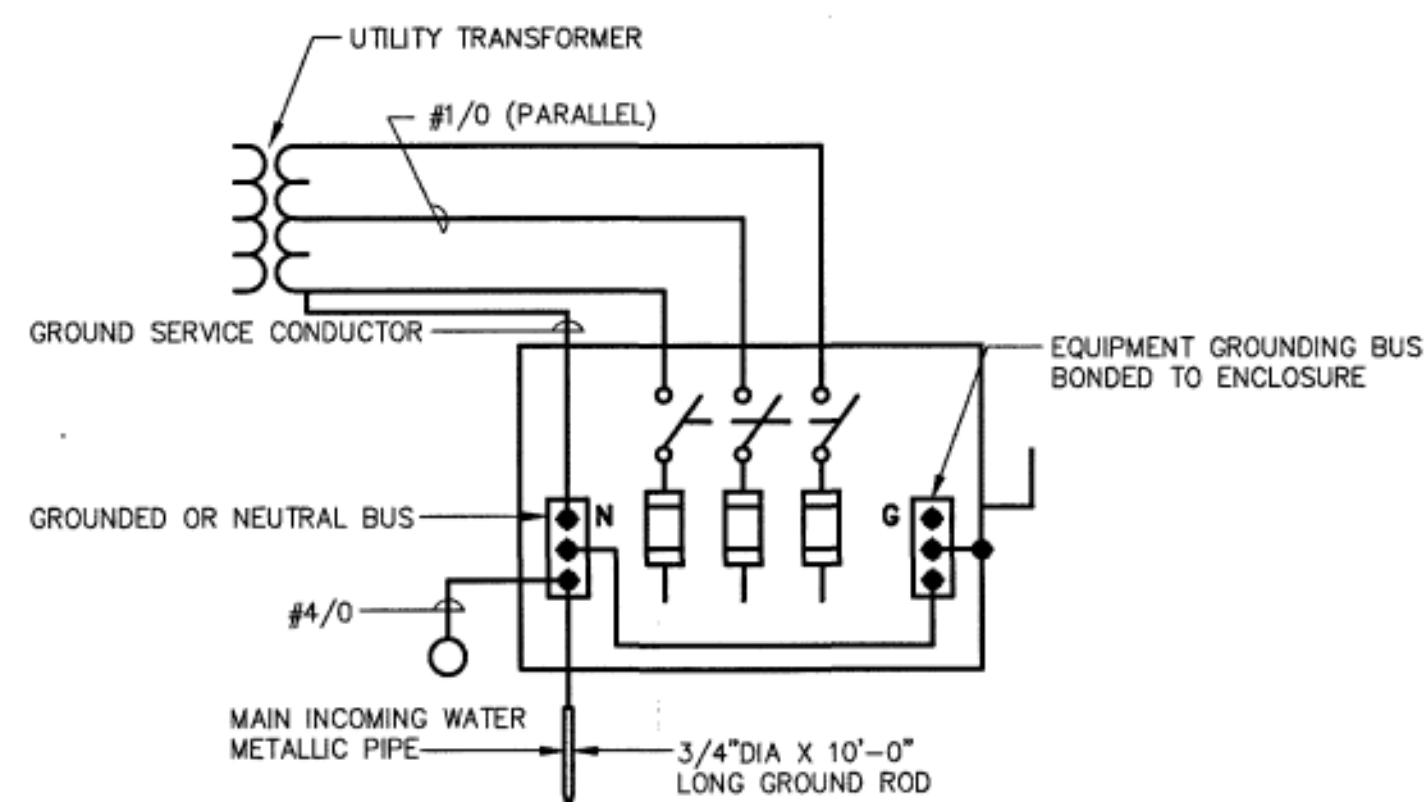
TOTAL CALCULATION LOAD:	
1. HOUSE LOAD	= 33.9AMP @ 240V, 1PH
2. APARTMENT LOAD	= 441.66AMP @ 240V, 1PH
TOTAL DEMAND LOAD (HOUSE + 15 APARTMENT UNITS)	= 475.56AMP @ 240V, 1PH



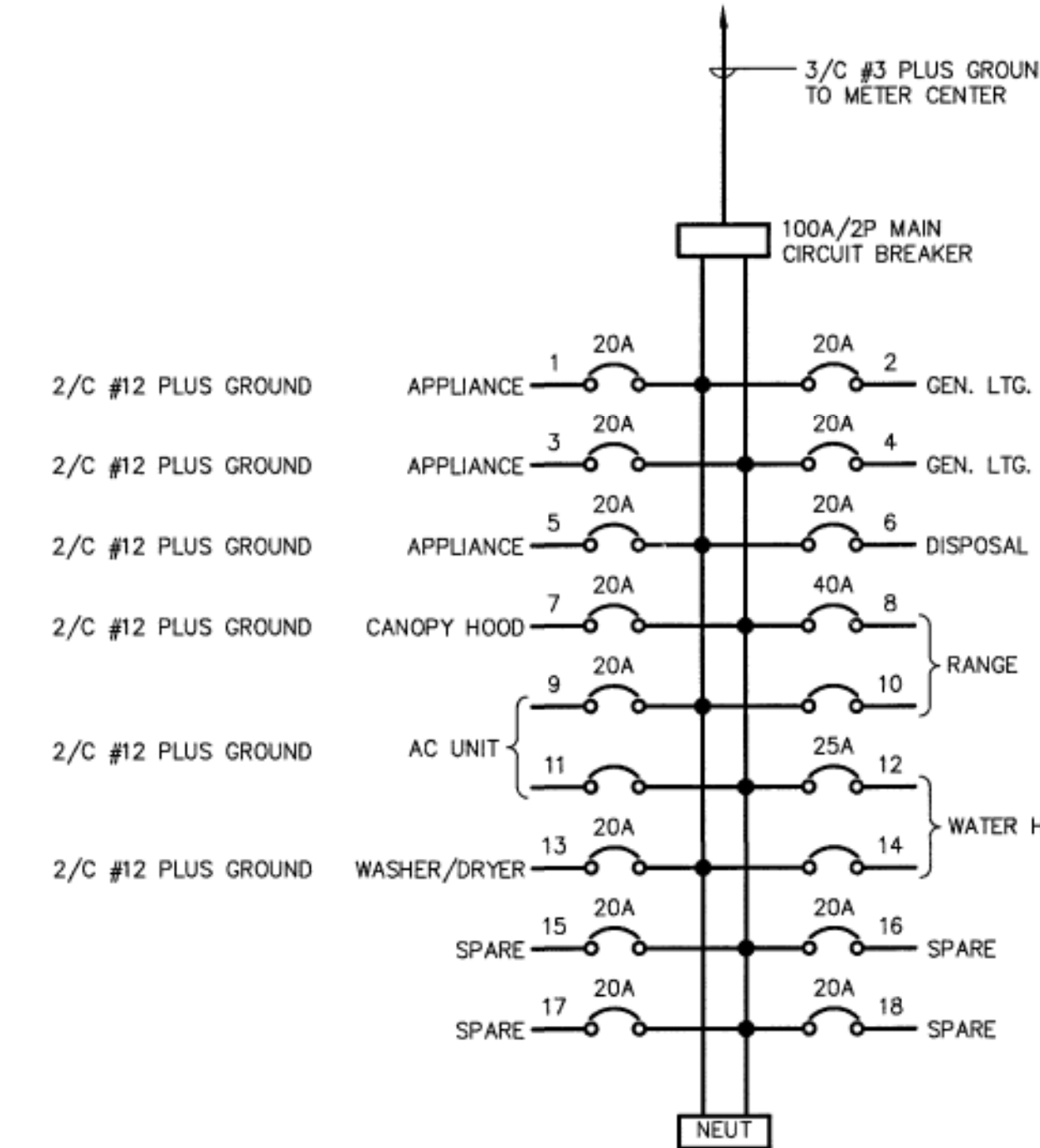
HOUSE RECEPTACLE PANEL (RP-H) DIAGRAM

(100A, 240/120V, 1-PHASE, 3-WIRE)

TOTAL CONNECTED LOAD = 7,317VA
 = 30.5A @ 240V, 1PH
 PROVIDE "LOCK-ON" BREAKER ON BRANCH CIRCUIT BREAKER SERVING THE FIRE ALARM PANEL

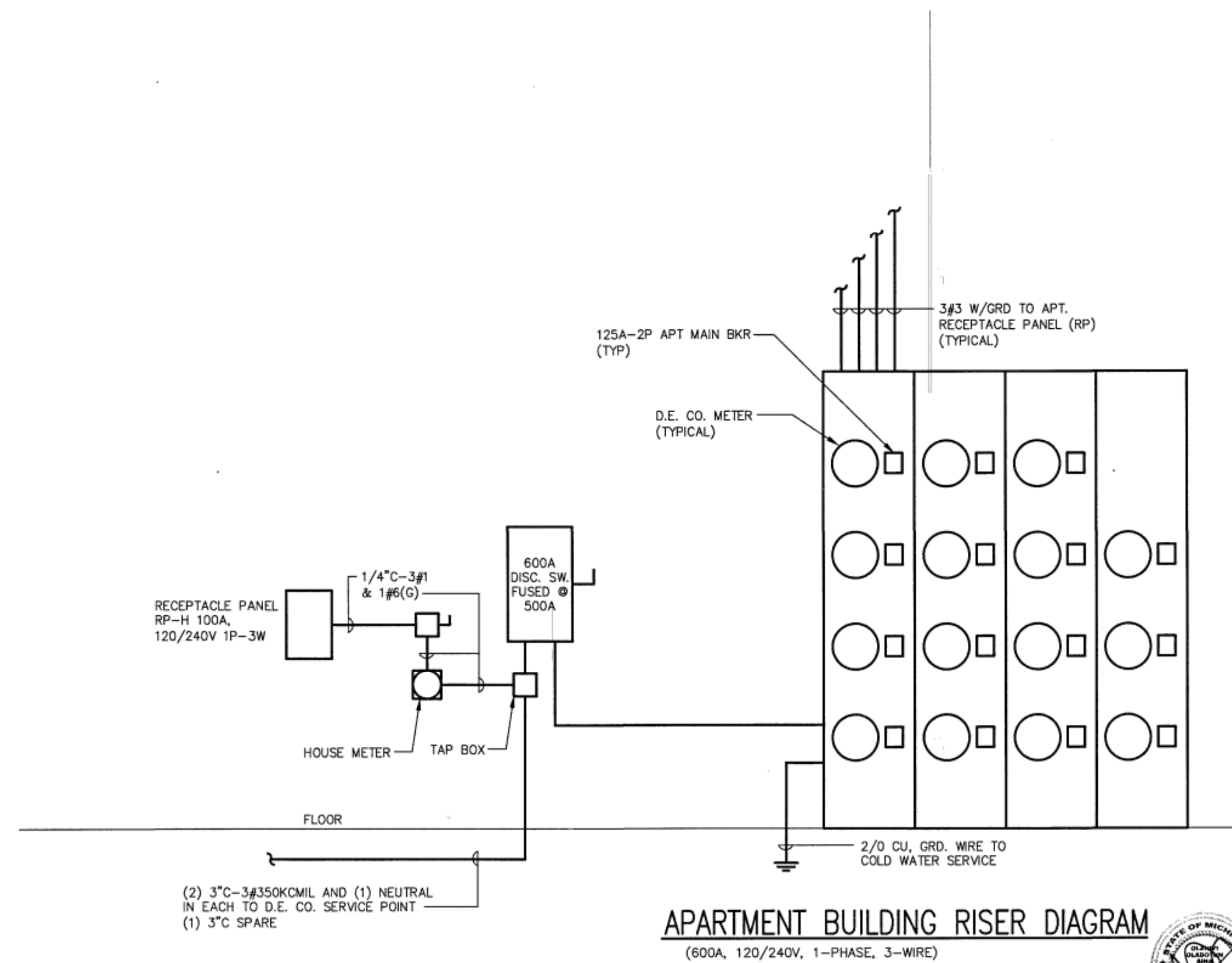


GROUNDING SYSTEM TYPICAL DIAGRAM



APARTMENT UNIT TYPICAL PANEL (RP) DIAGRAM

(100A, 120/240V, 1-PHASE, 3-WIRE)



APARTMENT BUILDING RISER DIAGRAM

(600A, 120/240V, 1-PHASE, 3-WIRE)

EDWARDS GROUP INTERNATIONAL, INC.
 Engineering Solutions
 440 BROADWAY ST #603
 DETROIT, MI 48202
 313-966-4200 / Fax 313-966-7878



Aina Associates, Inc.
 Mechanical - Electrical Engineering
 2417E Northwestern Ave
 Detroit, MI 48205
 313-999-6632

ONE LINE DIAGRAMS, PANEL SCHEDULES AND
 LOAD CALCULATIONS
 1031 MARLBOROUGH ST.
 DETROIT, MICHIGAN

DRAWN BY: R. EDWARDS

MARLBORO APARTMENTS
 BUILDING RENOVATION

ISSUE DATES:

REVIEW	AUG-11-2016
BACKGROUND	AUG-14-2016
PERMIT	SEPT-23-2016

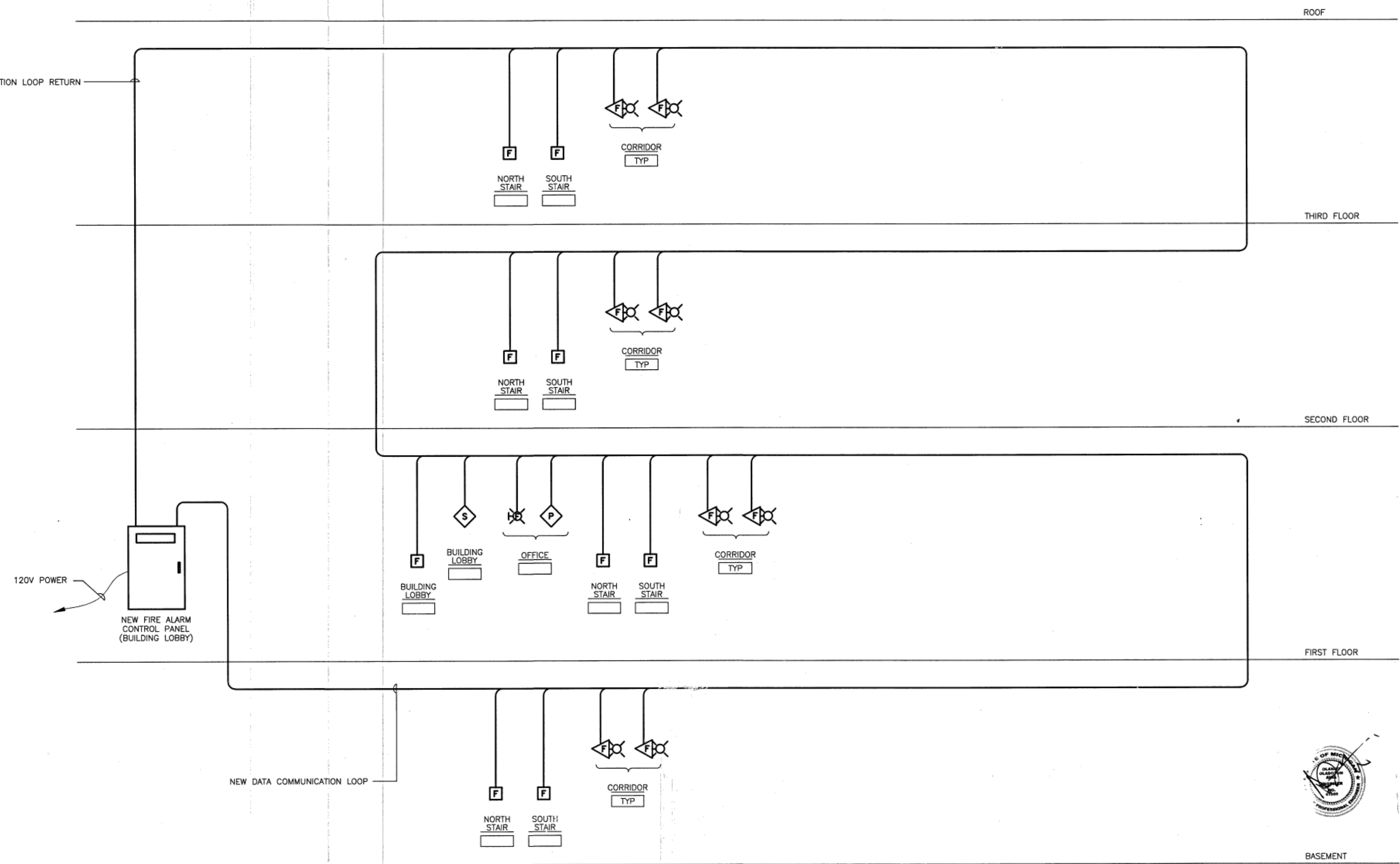
E5.1.DWG
 1031 MARLBOROUGH

E5.1

FIRE ALARM SYSTEM RISER DIAGRAM NOTES:

1. FIRE ALARM SYSTEM RISER DIAGRAM IS SHOWN TO ILLUSTRATE DESIGN INTENT AND DEVICE INTERCONNECTION ONLY. SEE PLANS FOR LOCATION AND QUANTITIES OF DEVICES. FURNISH AND INSTALL ALL EQUIPMENT AND DEVICES REQUIRED TO MEET THE INTENT OF SPECIFICATION SECTION 16721.
2. INSTALL ALL WIRING AND DEVICES PER MANUFACTURERS CERTIFIED AND APPROVED SHOP DRAWINGS.
3. REFER TO SPECIFICATION SECTION 16721 FOR FIRE ALARM SYSTEM SEQUENCE OF OPERATION.
4. WHEN WIRING FIRE ALARM DEVICES, OBSERVE DEVICES POLARITIES IN ORDER OR ASSURE PROPER OPERATION. REFER TO DEVICE CUT SHEETS, INSTALLATION INSTRUCTION OR DETAILS FOR WIRING INSTRUCTIONS FOR RESPECTIVE DEVICES.
5. THE SYSTEM SHALL BE TESTED FREE FROM ANY OPENS, SHORTS AND GROUNDS BEFORE ANY CIRCUITS ARE CONNECTED TO ANY FIRE ALARM CONTROL EQUIPMENT.
6. THE SYSTEM SHALL BE TESTED FOR PROPER OPERATION BEFORE SCHEDULING ANY TESTING WITH THE OWNERS REPRESENTATIVE OR AHJ.
7. ALL FIRE ALARM SYSTEM OUTLET BOX COVERS AND PULL BOX COVERS SHALL BE PAINTED RED.

- NOTES:**
1. SEE DRAWING E0.1 FOR DRAWING LIST, ABBREVIATION, GENERAL NOTES, SYMBOL LIST AND LIGHT FIXTURE SCHEDULE.
 2. CONTRACTOR SHALL PROVIDE NEW FIRE ALARM PANEL, FIRE ALARM DEVICES AND WIRES FOR A COMPLETE FIRE ALARM SYSTEM.



ROOF
THIRD FLOOR
SECOND FLOOR
FIRST FLOOR
BASEMENT



EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
Detroit, MI 48202
313-965-4200 / Fax 313-965-7678

AMEC
Aing Associates, Inc.
Mechanical - Electrical Engineering
24175 Northwestern Hwy
313-998-8632

BASMENT AND 1ST FLOOR [1bq] FLOOR PLANS
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

DRAWN BY: R. EDWARDS

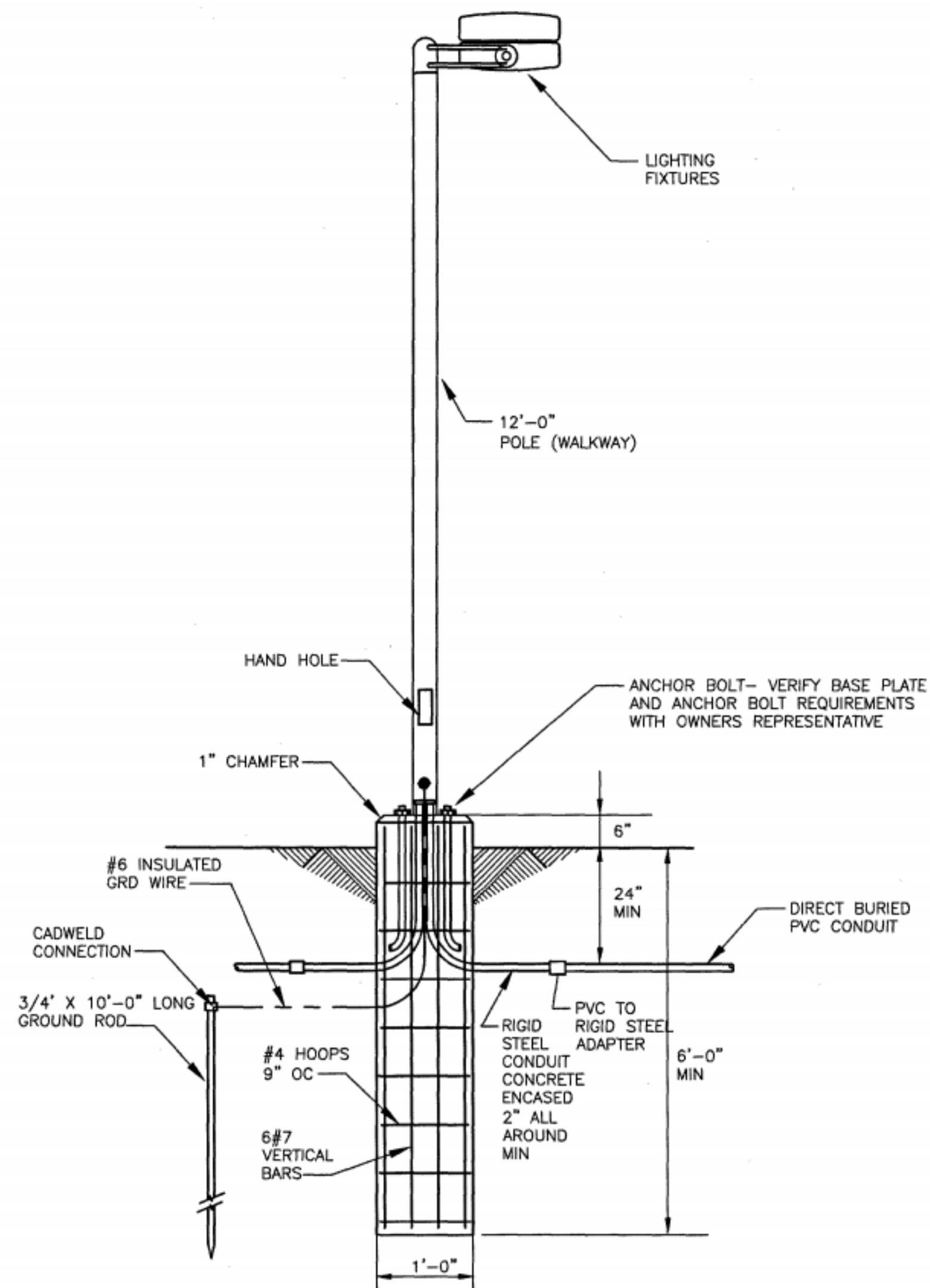
MARLBORO APARTMENTS
BUILDING RENOVATION

ISSUE DATES:

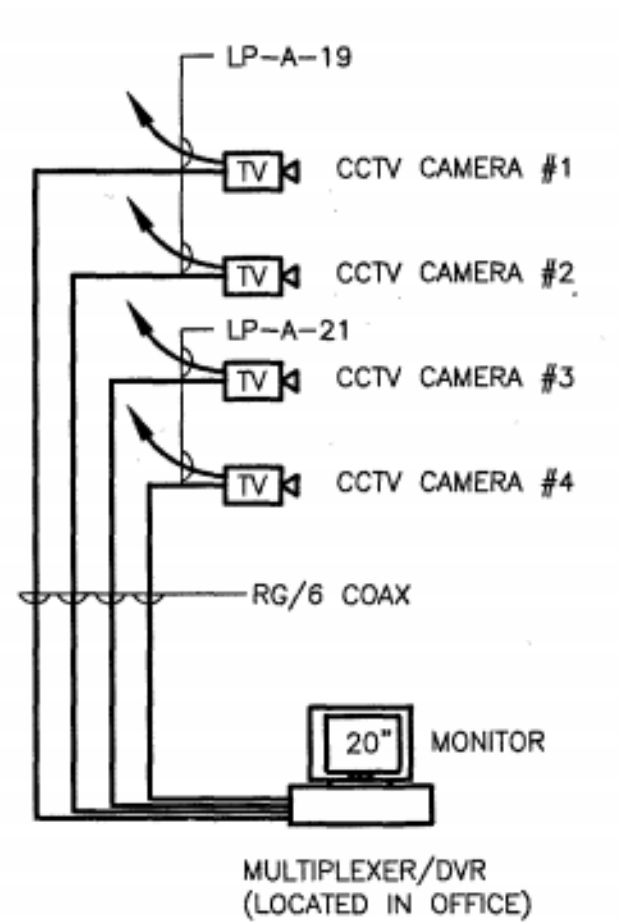
REVIEW	AUG-11-2016
BACKGROUND	AUG-14-2016
PERMIT	SEPT-23-2016

E5.2.DWG
1031 MARLBOROUGH

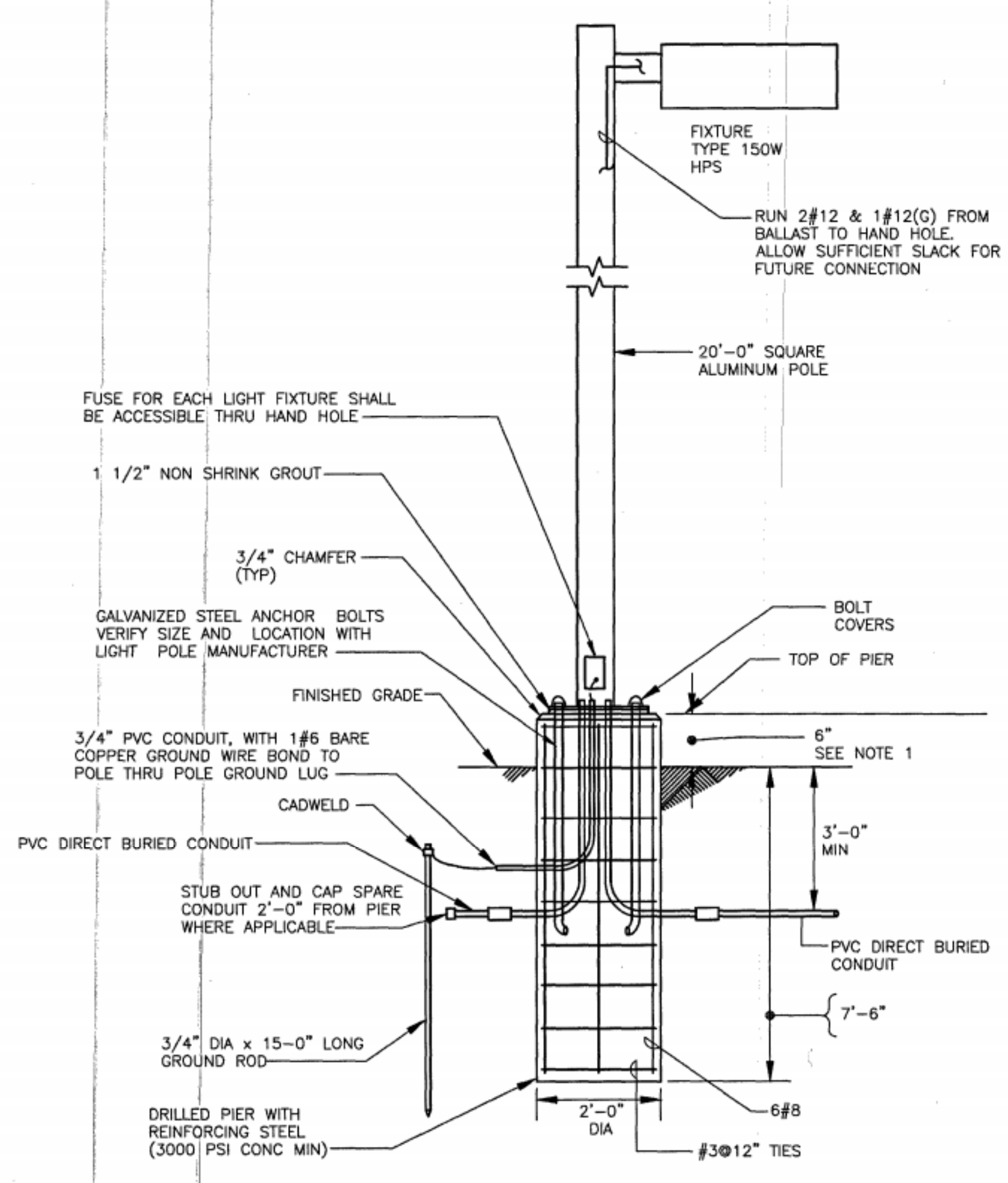
E5.2



2E WALKWAY LIGHTING POLE DETAIL
N.T.S.

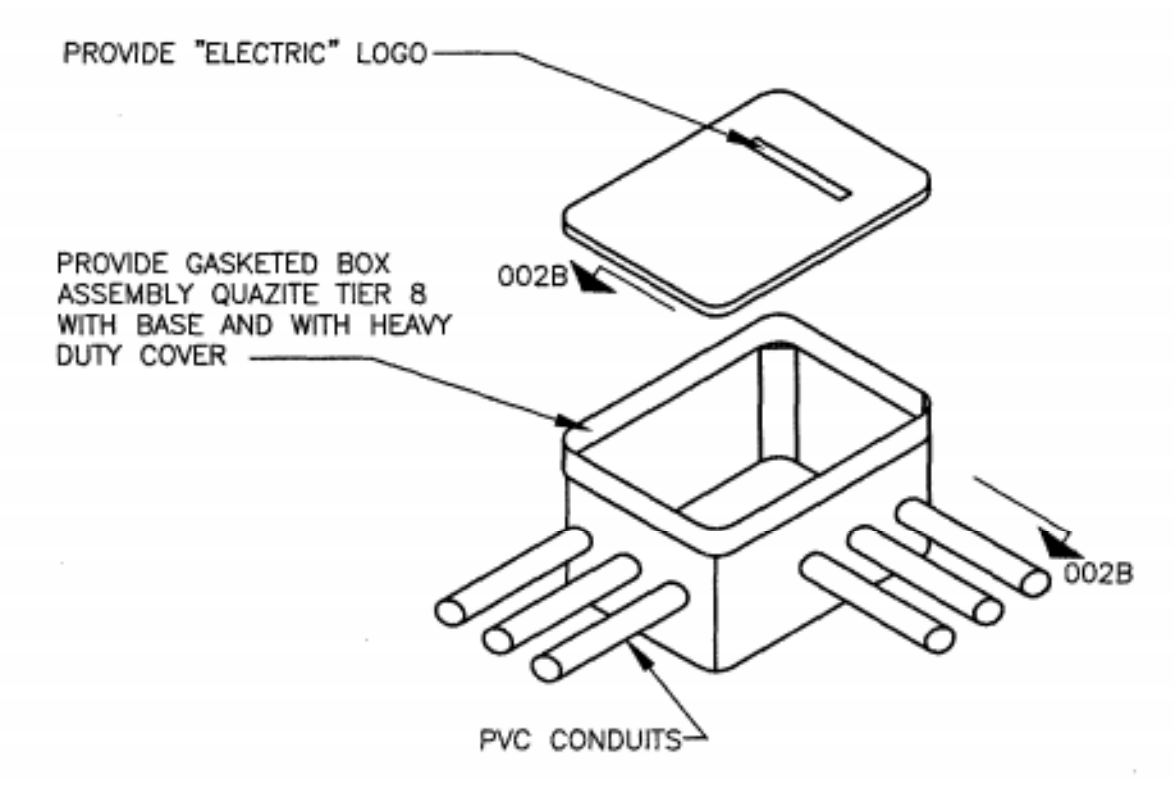


CCTV RISER DIAGRAM
N.T.S.

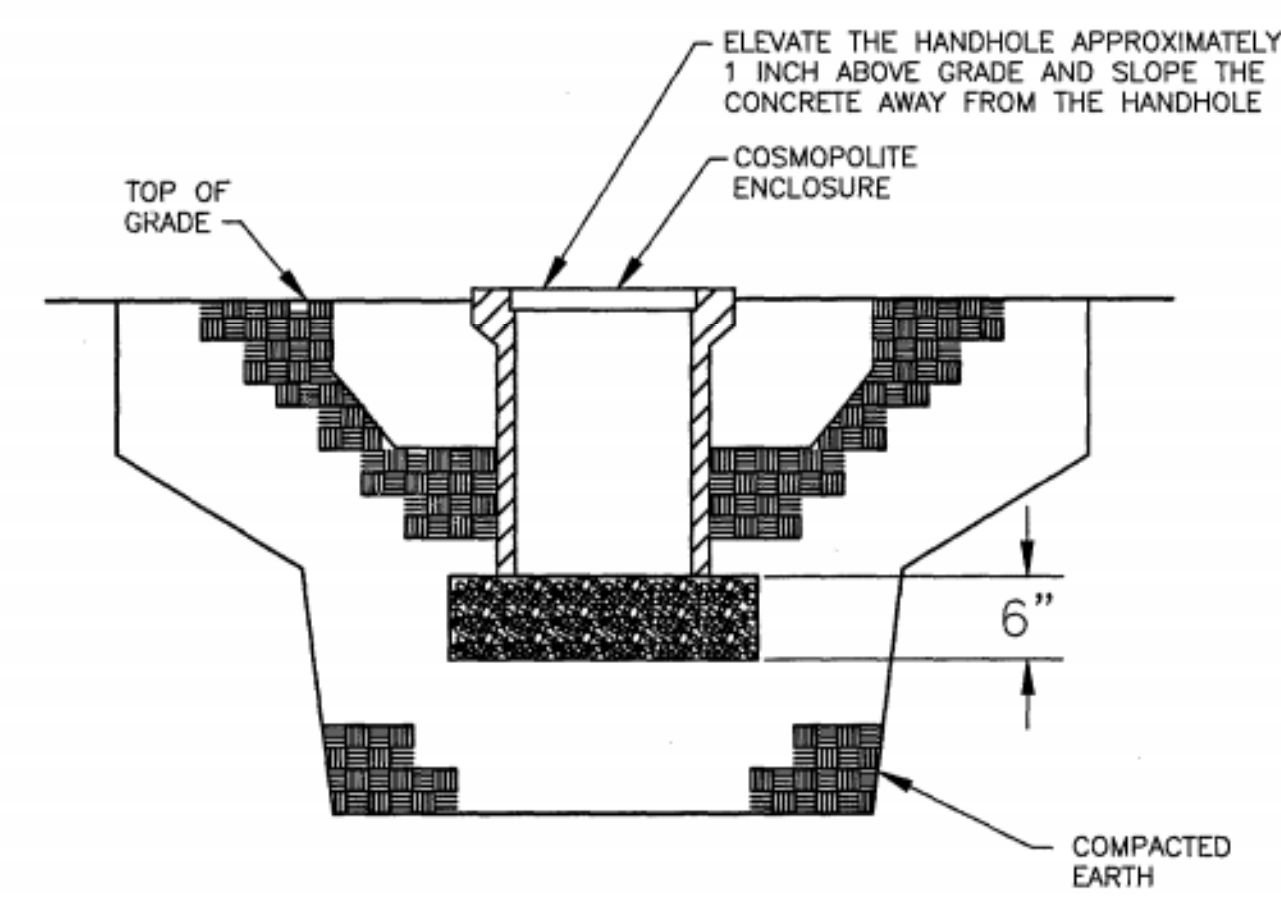


2D PARKING LOT LIGHTING INSTALLATION DETAIL
N.T.S.

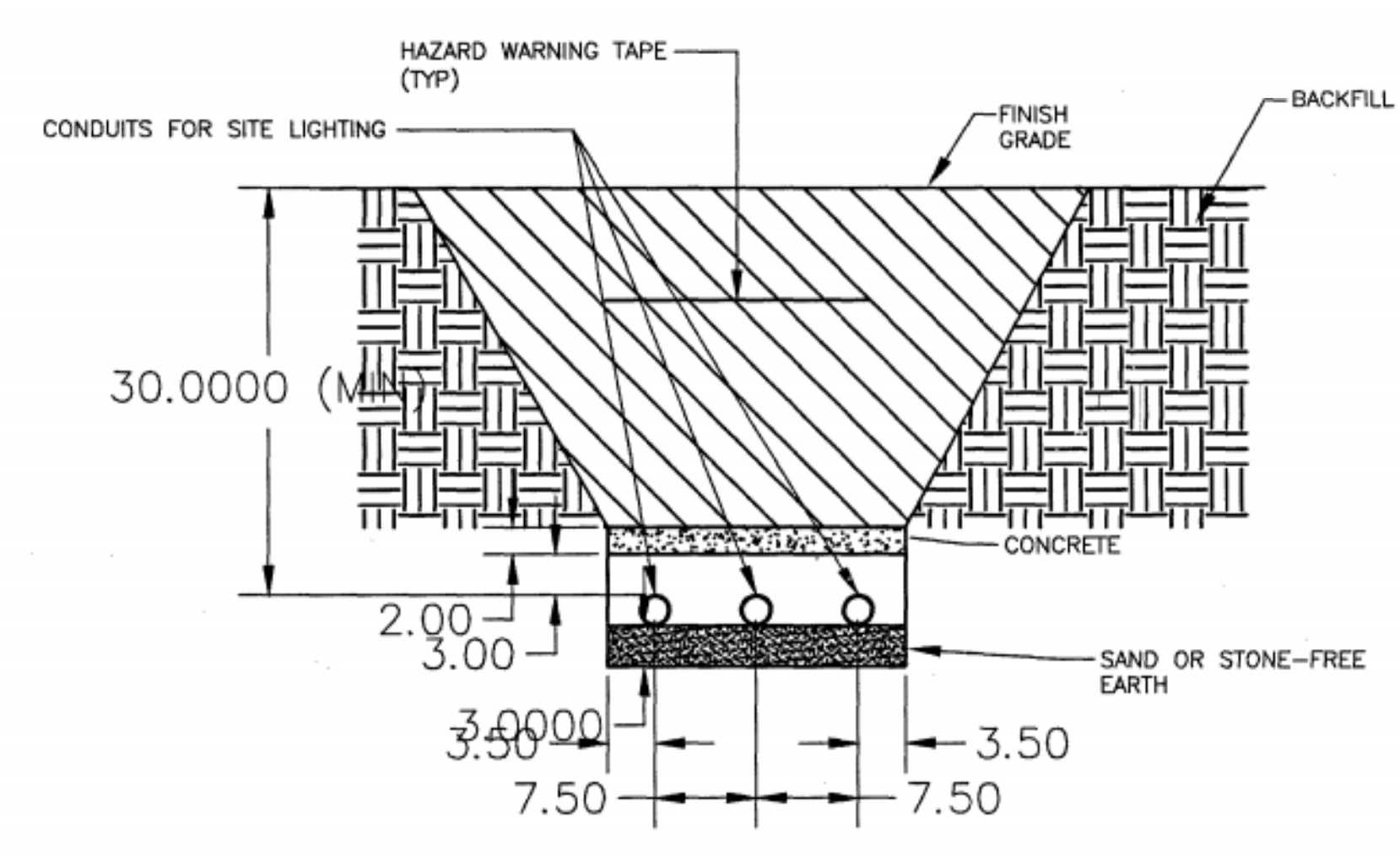
NOTE:
1. ADJUST THE TOP ELEVATION OF EACH LIGHTING POLE CONCRETE FOUNDATION SUCH THAT THE TOPS OF ALL LIGHTING POLES ARE RELATIVELY ON AN EVEN HORIZONTAL PLANE.



2A HANDHOLE DETAIL
N.T.S.



2B HANDHOLE SECTION
N.T.S.



2C TYPICAL DIRECT BURIED CONDUIT INSTALLATION DETAIL
N.T.S.

NOTES:
A. CLEAR AND FINAL GRADE BOTTOM OF TRENCH NOT LESS THAN 3 INCHES BELOW THE LEVEL AT WHICH CONDUIT IS TO BE INSTALLED. PROVIDE A 3 INCH MINIMUM SAND BED IN BOTTOM OF TRENCH PREPARATORY TO INSTALLING CONDUIT. INSTALL CONDUIT AS SPECIFIED, WITH SPACING AS INDICATED, ON THE SAND BED, AND COVER WITH A MINIMUM OF 3 INCHES OF SAND. MAKE CONDUIT JOINTS WATERTIGHT. USE TYPE NS SAND PER SECTION 01640. REFER TO SECTION 01640 FOR COMPACTION METHODS AND REQUIREMENTS.
B. PROVIDE A CONCRETE COVER NOT LESS THAN 2 INCHES THICK AND OF A WIDTH EQUAL TO THE OVERALL DIMENSION OF THE INSTALLED CONDUIT ON TOP OF THE SAND COVER.
C. PROVIDE UNDERGROUND HAZARD TAPE 12 INCHES BELOW GRADE AND ABOVE CONCRETE PER SECTION 16050.
D. FILL THE REMAINDER OF THE TRENCH, AND CAREFULLY TAMP, WITH MATERIALS AND COMPACTION METHODS TO SUIT PROJECT CONDITIONS PER SECTION 01640.
E. ALL DIMENSION SHOWN ARE MINIMUM.



EDWARDS GROUP INTERNATIONAL, INC.
Architecture | Design | Planning Solutions
4100 Woodward Ave., Suite 200
Detroit, Michigan 48202
313-965-7200 / Fax 313-965-7678

Alma Associates, Inc.
Michigan Electrical Engineering
2475 Northway Dr.
Southfield, MI 48075
313-997-9422

BASMENT AND 1ST FLOOR
[redacted] FLOOR PLANS
1031 MARLBOROUGH ST.
DETROIT, MICHIGAN

ISSUE DATES:
REVIEW
AUG-11-2016
BACKGROUND
AUG-14-2016
PERMIT
SEPT-23-2016

DWG FILENAME
E6.1.DWG
E6.1