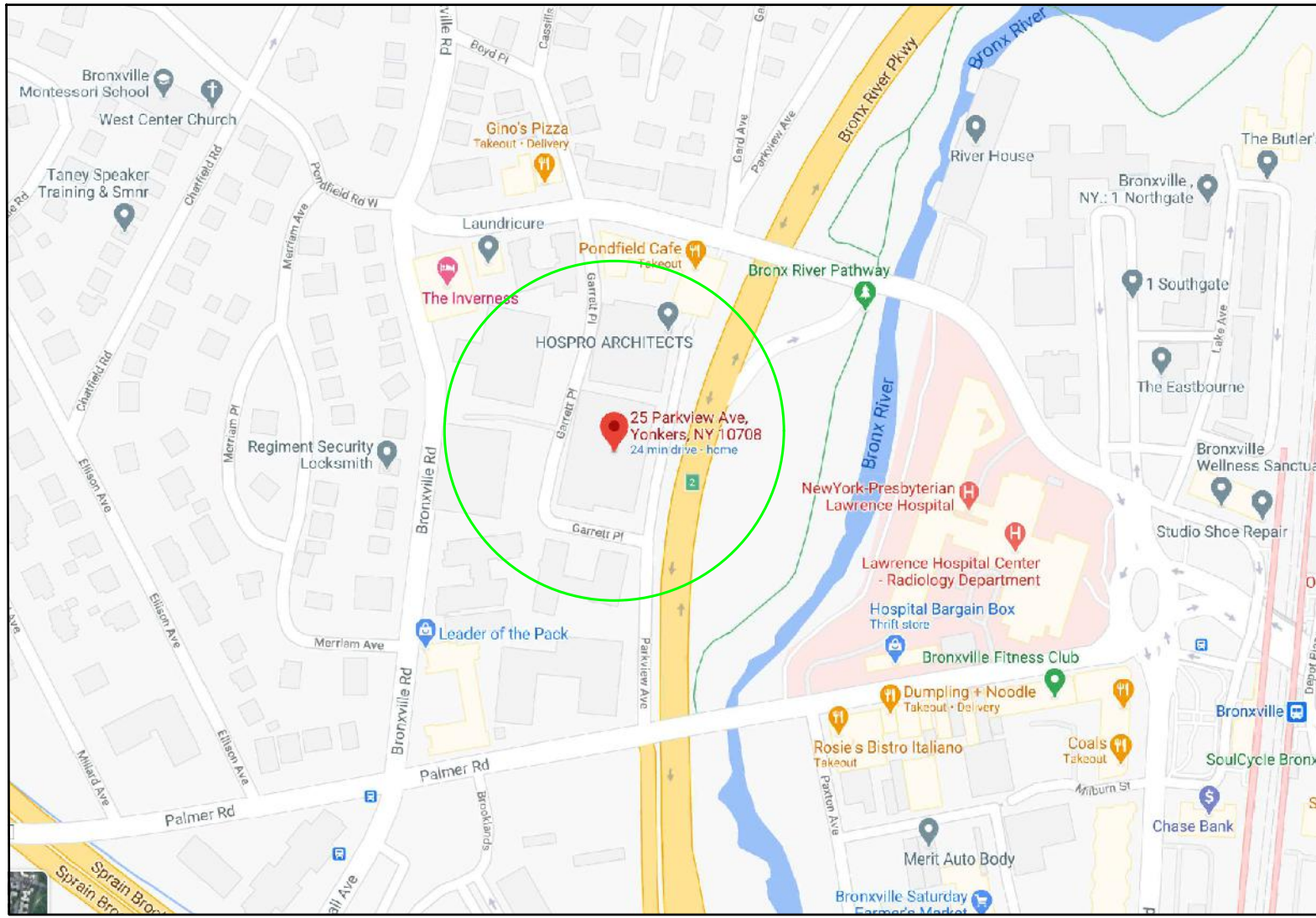


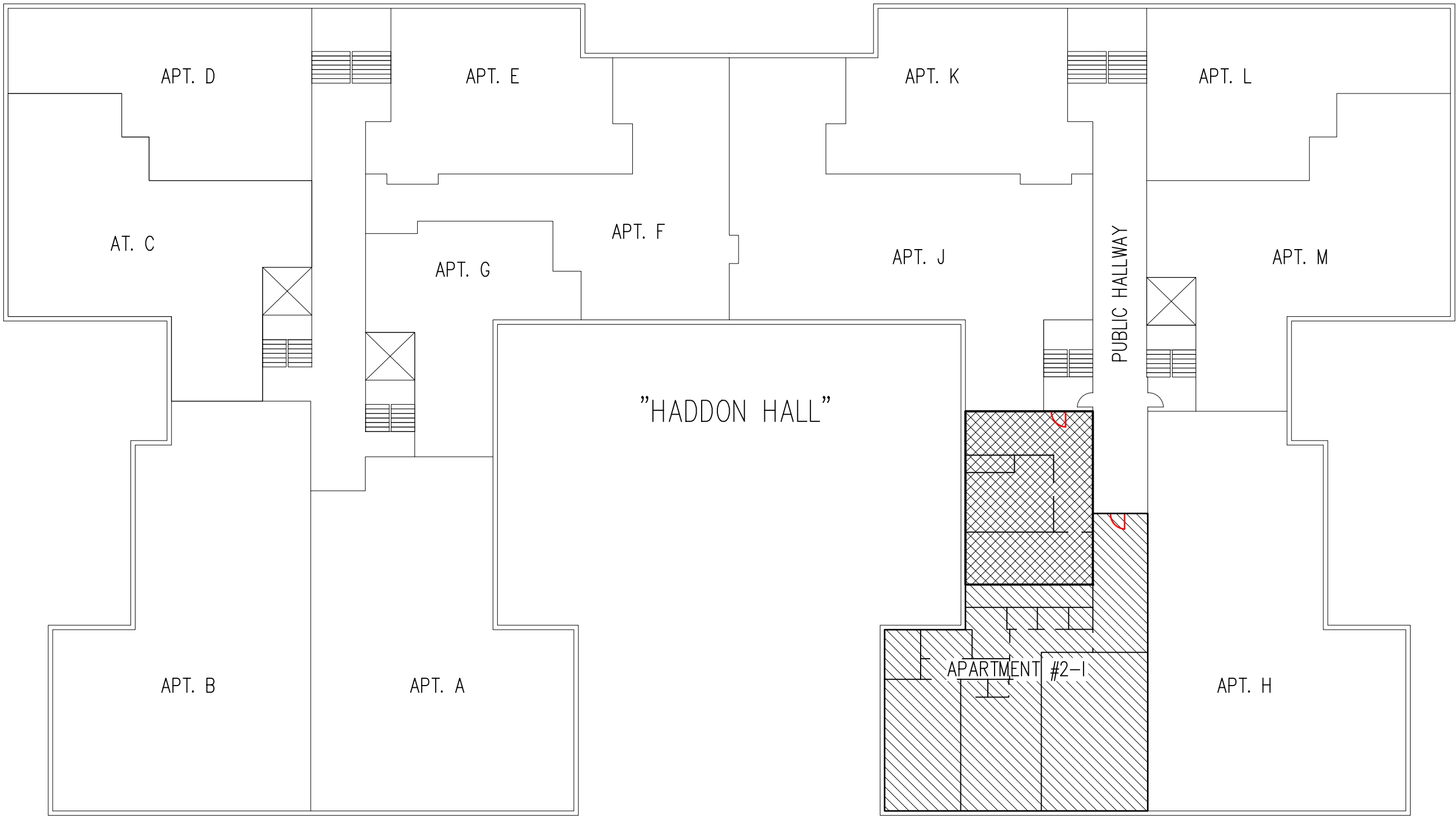
TAX MAP
WESTCHESTER COUNTY GIS



LOCATION
GOOGLE MAPS



STREET VIEW
GOOGLE MAPS



BUILDING LAYOUT
NOT TO SCALE

- PROPOSED WORK AREA
APARTMENT #2-1
APARTMENT ENTRY/EGRESS

DRAWING INDEX

| DRAWING NAME: | NUMBER |
|------------------|--------|
| COVER SHEET | C.01 |
| DEMOLITION | S.01 |
| CONSTRUCTION | S.01 |
| ELECTRICAL | S.02 |
| FINISHES/KITCHEN | S.02 |
| FIRE AND SMOKE | S.03 |

HADDON HALL JOB RULES

- WORKERS CAN ONLY BE IN THE BUILDING BETWEEN THE HOURS OF 8:00 A.M. AND 5:00 P.M., MONDAYS THROUGH FRIDAYS. WORK SHALL NOT BE PERFORMED ON SATURDAYS, SUNDAYS, OR HOLIDAYS (EXCEPT FOR QUIET WORK WHICH IS SELF-CONTAINED WITHIN THE APARTMENT). NO WORK WHICH CAN CREATE LOUD NOISE OR OTHERWISE DISTURB NEIGHBORS, SHALL BE PERFORMED BEFORE 10:00 A.M.
- WORKERS MUST CHECK IN AND OUT WITH THE SUPERINTENDENT ON A DAILY BASIS. THEY MUST COME IN AND LEAVE THROUGH THE BASEMENT. THEY ARE NOT TO USE THE LOBBY.
- WORKERS MUST CLEAN UP ON A DAILY BASIS ALL DUST AND DEBRIS THE JOB CREATES ANYWHERE IN THE BUILDING (OUTSIDE THE APARTMENT) EG. ELEVATORS AND HALLS AND MUST REMOVE ALL DEBRIS FROM THE BUILDING ON A DAILY BASIS.
- WORKERS MUST NOT STORE THEIR TOOLS, EQUIPMENT, OR SUPPLIES IN THE BASEMENT.
- WORKERS MUST PROTECT THE ELEVATOR FROM SCRATCHING OR OTHER MARKING BY USING EITHER PADS OR CONSTRUCTION PAPER. HALLWAY FLOORS AND WALLS MUST BE SIMILARLY PROTECTED.

SCOPE:
THE PROPOSED PROJECT IS A FLOOR PLAN ALTERATION AS FOLLOWS:
REMOVE EXISTING KITCHEN COUNTERTOPS, CABINETS, FIXTURES, APPLIANCES AND FINISHES; REMOVE EXISTING NON-LOAD BEARING WALLS; BUILD NEW WALLS TO PROVIDE ALTERED FLOOR PLAN AND RELOCATED BEDROOM AND KITCHEN; INSTALL NEW KITCHEN CABINETS, COUNTERTOPS, FIXTURES AND APPLIANCES; INSTALL NEW FINISHES.

- THE FOLLOWING CODES APPLY TO THIS PROJECT:**
- THE CODE OF THE CITY OF YONKERS, PART VI: FIRE AND BUILDINGS; CHAPTER 56 BUILDING AND ELECTRICAL CODE.
 - THE 2020 BUILDING CODE OF NEW YORK STATE (2015 IBC WITH AMENDMENTS) AND ALL OTHER CODES REFERENCED THEREIN
 - THE NATIONAL ELECTRIC CODE 2017 OF NEW YORK STATE (NFPA 2017 WITH AMENDMENTS)
 - THE 2020 EXISTING BUILDING CODE OF NEW YORK STATE (2015 EBC WITH AMENDMENTS)
- UNLESS OTHERWISE STATED, CODE REFERENCES HEREIN ARE TO THE 2020 BUILDING CODE OF THE STATE OF NEW YORK.

CONSTRUCTION TYPE: TYPE IIIA, AS DEFINED IN TABLE 601

OCCUPANCY CLASSIFICATION: RESIDENTIAL, R-2; PERMANENT MULTIPLE DWELLING STRUCTURE, AS DEFINED IN 310.3

ALTERATION LEVEL: THIS IS AN ALTERATION-LEVEL 2 AND WILL COMPLY WITH THE PROVISIONS OF CHAPTERS 7 (LEVEL 1) AND 8 (LEVEL 2) OF THE 2020 EXISTING BUILDING CODE OF NEW YORK STATE.

AUTHORITY HAVING JURISDICTION:
THE AUTHORITY HAVING JURISDICTION, AS DEFINED IN (NY) 103.1 OF THE BUILDING CODE, AND WHICH SHALL PROVIDE FOR ADMINISTRATION AND ENFORCEMENT OF THE UNIFORM CODE AND ENERGY CODE BY LOCAL LAW, ORDINANCE, OTHER APPROPRIATE REGULATION, OR COMBINATION THEREOF, IS THE CITY OF YONKERS.

LIGHT AND VENTILATION:
BEDROOM AREA: 7X12.5 = 87.5 S.F. WINDOW LIGHT AREA: 2X2.5X2.3 = 11.5 S.F. OPENABLE AREA: 2.7X2.5 = 6.75 S.F.
REQUIRED, PER 1204.2, MINIMUM GLAZED AREA = 8% OF THE FLOOR AREA = 7.0 S.F. (11.5 S.F. SUPPLIED)
REQUIRED, PER 1202.5.1, MINIMUM OPENABLE AREA TO THE OUTDOORS = 4% OF THE FLOOR AREA = 3.5 S.F. (6.75 S.F. SUPPLIED)

- THE CONTRACTOR SHALL:**
- VERIFY ALL SITE DIMENSIONS AND CONDITIONS AND REPORT ANY DISCREPANCIES TO THE OWNER AND ARCHITECT IN WRITING BEFORE PROCEEDING WITH ANY WORK.
 - OBTAIN AND PAY FOR ALL REQUIRED PERMITS - UNLESS OTHERWISE STIPULATED.
 - BE A LICENSED HOME IMPROVEMENT CONTRACTOR IN WESTCHESTER COUNTY.
 - BE CERTIFIED AS A LEAD SAFE FIRM BY THE EPA PER 40 CFR 745.226.
 - CARRY LIABILITY INSURANCE TO THE LIMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION AND ISSUE CERTIFICATE(S) OF INSURANCE AS REQUIRED BY THE HOMEOWNER AND/OR THAT AUTHORITY.
 - CARRY WORKMAN'S COMPENSATION AND DISABILITY INSURANCE AS REQUIRED THE LAW AND ISSUE CERTIFICATE(S) AS REQUIRED BY THE HOMEOWNER AND/OR THE AUTHORITY HAVING JURISDICTION.

PERMITS, PERMISSIONS AND INSPECTIONS MAY BE COORDINATED WITH:

| | | |
|--|-----------------|--------------------------|
| CITY OF YONKERS, DEPARTMENT OF HOUSING & BUILDINGS | CLEBER GENEROSO | (914) 377-6500 |
| BUILDING SUPERINTENDENT | ANTHONY MALI | (914) 589-1370 |
| BUILDING BOARD | NANCY RIVERA | (914) 282-1063 |
| BUILDING MANAGEMENT (BARHITE & HOLZINGER) | | (914) 337-1312, EXT. 315 |

- STATEMENT OF DESIGN PROFESSIONAL:**
- THESE PLANS HAVE BEEN PREPARED IN CONFORMANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE.
 - TO THE BEST OF MY KNOWLEDGE AND PROFESSIONAL JUDGEMENT, THESE PLANS ARE IN CONFORMANCE WITH THE 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE
 - I HAVE EXAMINED THE STRUCTURAL ELEMENTS OF THIS APARTMENT THAT WILL BE AFFECTED BY THIS ALTERATION; THOSE ELEMENTS TO BE REMOVED ARE NON-LOAD BEARING; THE PROPOSED PARTITION REMOVALS WILL NOT AFFECT THE BUILDING STRUCTURE.

VINCENT COAKLEY, P.E.
(STAMP AFFIXED AND SIGNED)

ENERGY EFFICIENCY

ECCCNYS 2020 COMPLIANCE:

- PER EBCNYS 810.1 MINIMUM REQUIREMENTS, LEVEL 2 ALTERATIONS TO EXISTING BUILDINGS OR STRUCTURES ARE PERMITTED WITHOUT REQUIRING THE ENTIRE BUILDING OR STRUCTURE TO COMPLY WITH THE ENERGY REQUIREMENTS OF THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE OR RESIDENTIAL CODE OF NEW YORK STATE. THE ALTERATIONS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE OR RESIDENTIAL CODE OF NEW YORK STATE AS THEY RELATE TO NEW CONSTRUCTION ONLY.
- ALL EXPOSED CAVITIES ARE TO BE FILLED WITH INSULATION (PER (NY) R503.1.1, EXCEPTION 1.3.)
- KITCHEN HOOD IS COMPLIANT WITH CHAPTER C4 OF ECCNYS 2020. HOOD IS SELF-VENTING; PER COOPERATIVE APARTMENT RULES, NO PENETRATIONS ARE ALLOWED IN THE EXTERIOR WALLS. SEE MANUFACTURER'S SPECIFICATIONS ON S.02
- TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

Vincent Coakley, P.E.

COST EVALUATION

PER EXISTING BUILDING CODE 2020 SECTION 305.7(1), AT LEAST 20% OF THE PROJECT BUDGET WILL GO TOWARD THE FOLLOWING HANDICAP ACCESSIBILITY IMPROVEMENTS:

THE EXISTING LAYOUT HAS A NARROW (LESS THAN 2'-0" WIDE) ACCESS TO THE HALLWAY AT THE ENTRY, SERVES BOTH THE KITCHEN AND BEDROOM. THIS EXISTING OPENING ALSO HAS A 2'-0" (H) STEP. THE NEW LAYOUT REMOVES EXISTING PARTITIONS, LEAVES A FLUSH (FLOOR) TRANSITION TO THE HALLWAY. THE HALLWAY OPENING IS 1'-3'-4" WIDE AND PROVIDES A 3'-0" DOOR AND FLUSH TRANSITION TO THE BEDROOM.

TOTAL ESTIMATED COST OF PROJECT: \$81,000

THE TOTAL ESTIMATED COST INCLUDES COSTS OF HANDICAP ACCESSIBILITY IMPROVEMENTS AS FOLLOWS:

| | |
|--|--------|
| REMOVE TILED FINISH TO ELIMINATE STEP AT KITCHEN AND AT BEDROOM; FLUSH TRANSITION(S) | 8,800 |
| WIDEN OPENING TO HALLWAY AND INSTALL WIDER DOOR AT BEDROOM: | 7,200 |
| | 2,500 |
| TOTAL COST OF HANDICAP ACCESSIBILITY IMPROVEMENTS: | 18,500 |
| AS PERCENTAGE OF PROJECT BUDGET: | 22.8% |

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CLIENT:

DATE: 04.19.2021
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09.25.2021 **REVISED**
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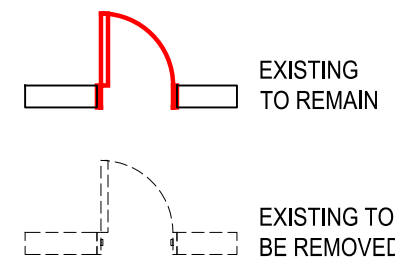
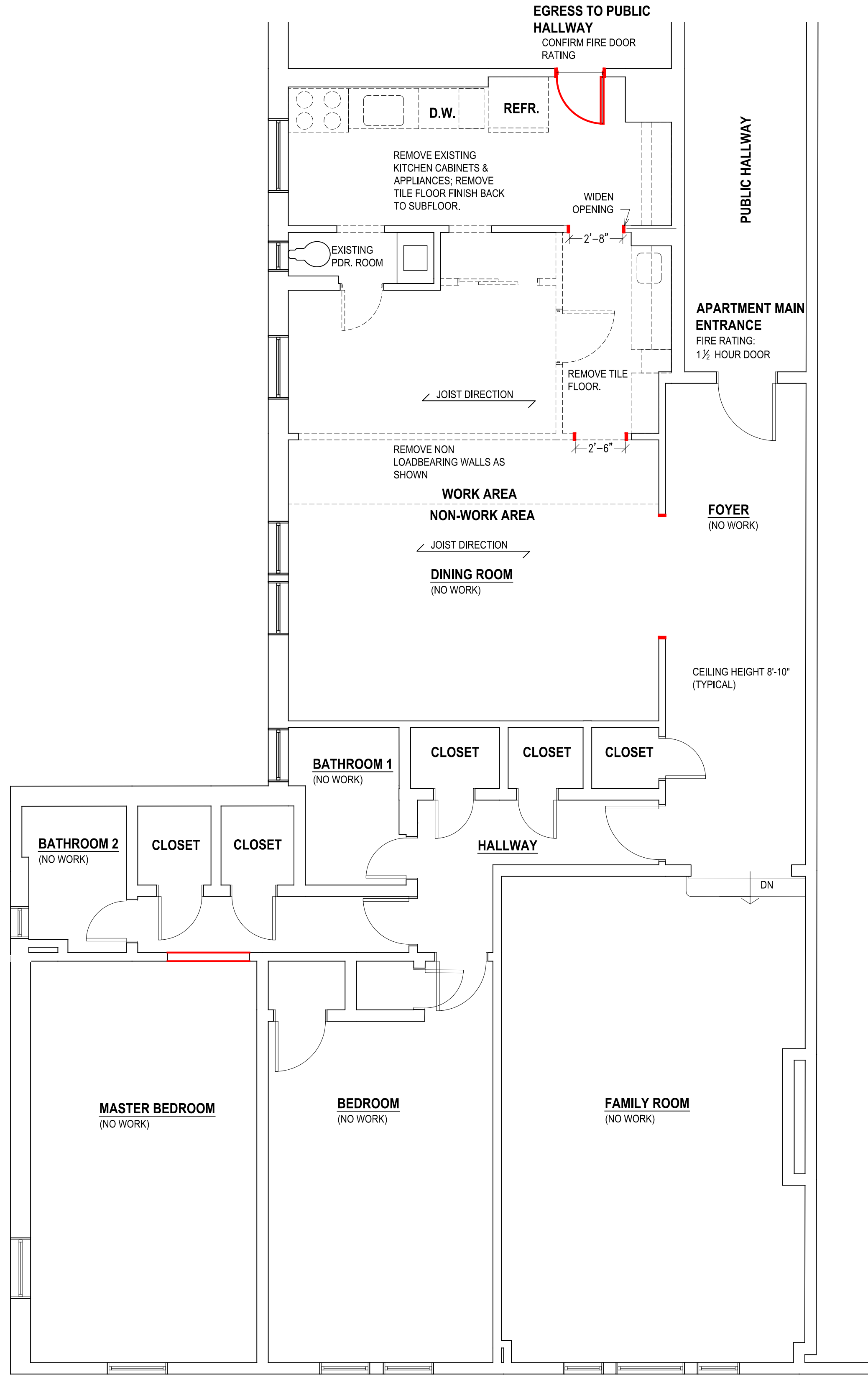
PROJECT NAME:
KITCHEN ADDITION

DRAWING NAME:
COVER SHEET

DRAWING NUMBER:
G.01

SCALE: AS NOTED
DATE: 04.19.2021

NOTE:
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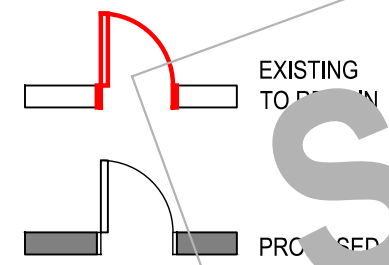
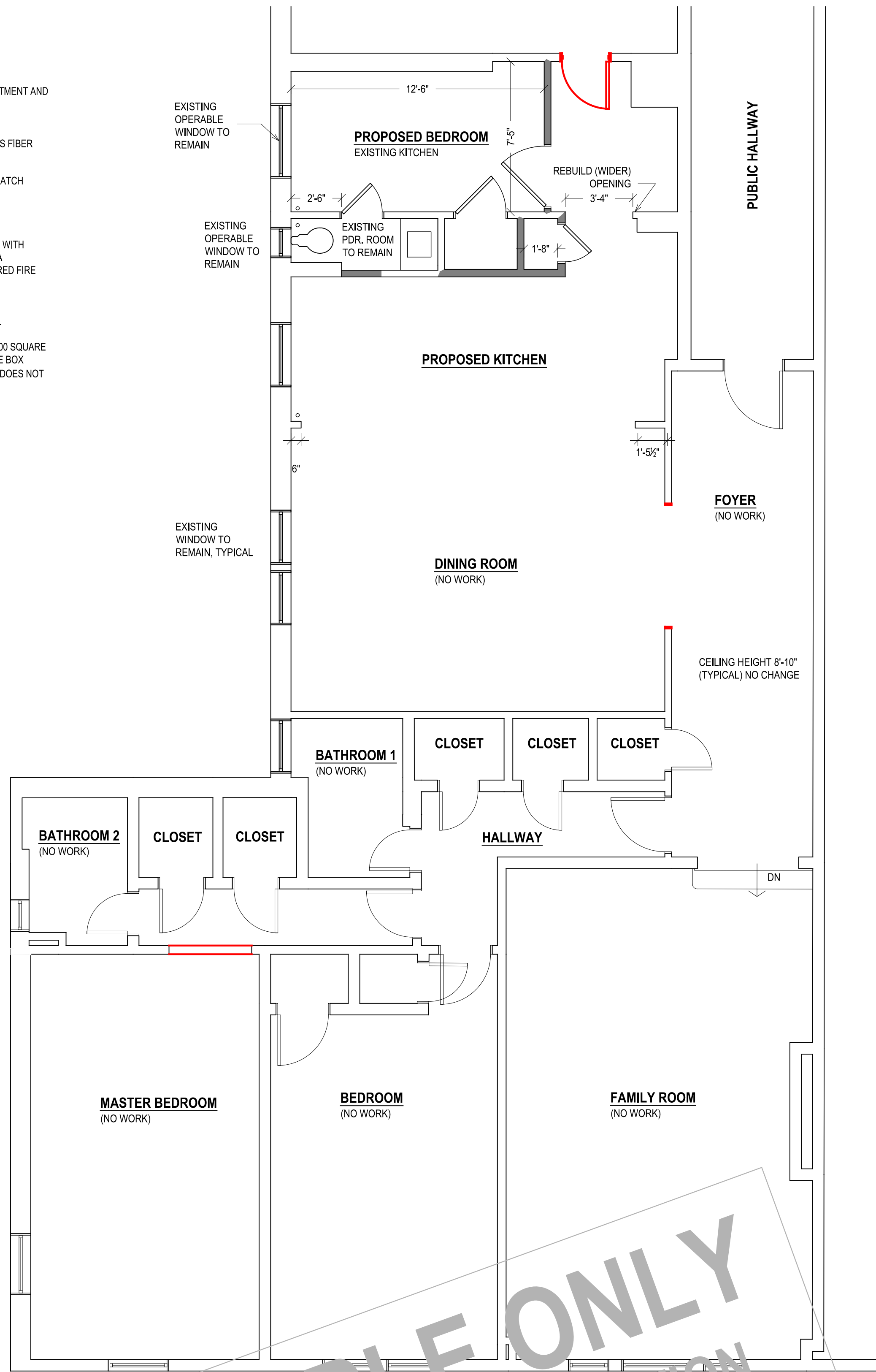
EXISTING AND DEMOLITION
1/4" = 1'-0"

- DEMOLITION:**
1. ALL DEMOLITION AND DEBRIS REMOVAL TO BE COORDINATED WITH THE BUILDING SUPERINTENDENT, BUILDING MANAGEMENT AND BOARD.
 2. ALL DEMOLITION AND DISPOSAL METHODS SHALL COMPLY WITH STATE AND LOCAL CODES AND REGULATIONS.
 3. DEBRIS WILL BE REMOVED FROM THE PREMISES ON A DAILY BASIS. NO MATERIALS OR DEBRIS OF ANY KIND MAY BE LEFT - EVEN TEMPORARILY - ON THE SIDEWALK OR IN THE LOBBY OR COMMON AREAS OF THE BUILDING.
 4. APPROPRIATE PROTECTION MUST BE PROVIDED IN ALL AREAS THAT WILL BE ACCESSED BY THE CONSTRUCTION CREW.

- FIRE RATING FEATURES**
1. FIRE RATING TO BE INSTALLED WHERE NEW WORK JOINTS EXIST
 2. THE HORIZONTAL AND VERTICAL FIRE SEPARATION(S) THAT EXISTS BETWEEN THIS APARTMENT AND ADJACENT APARTMENTS AND COMMON AREAS IS TO BE MAINTAINED.
 3. INTUMESCENT FIRE BARRIER SEALANT TO BE INSTALLED IN PIPE OPENINGS AND JOINTS
 4. UL DESIGN DESIGNATION FOR ALL NEW FIRE RATED WALLS IS (**UL U419**)
 - 4.1. 5/8" GYPSUM BOARD, 3-1/2" STEEL STUDS, 20 GAUGE STEEL, 24" O.C., 3-1/2" THICK GLASS FIBER BATT INSULATION
 5. DESIGN OPTION FOR FIRE RATED RECESSED LIGHTING
 - 5.1. ELCO 2-HOUR FIRE RATING HOUSING. THIS HOUSING IS FOR NEW CONSTRUCTION. PATCH CEILING TO MATCH EXISTING (OR GREATER FIRE RATING.
 - 5.2. LOW-PROFILE SURFACE -MOUNTED LUMINAIRE. INSTALL IN STANDARD CEILING BOX

CEILING (ELECTRICAL) PENETRATIONS:
PENETRATIONS OF MEMBRANES THAT ARE PART OF A HORIZONTAL ASSEMBLY SHALL COMPLY WITH SECTION 714.5.1.1 OR 714.5.1.2. WHERE FLOOR/CEILING ASSEMBLIES ARE REQUIRED TO HAVE A FIRE-RESISTANCE RATING, RECESSED FIXTURES SHALL BE INSTALLED SUCH THAT THE REQUIRED FIRE RESISTANCE WILL NOT BE REDUCED.

EXCEPTIONS:
CEILING MEMBRANE PENETRATIONS OF MAXIMUM 2-HOUR HORIZONTAL ASSEMBLIES BY STEEL ELECTRICAL BOXES THAT DO NOT EXCEED 16 SQUARE INCHES IN AREA, PROVIDED THAT THE AGGREGATE AREA OF SUCH PENETRATIONS DOES NOT EXCEED 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF CEILING AREA, AND THE ANNULAR SPACE BETWEEN THE CEILING MEMBRANE AND THE BOX DOES NOT EXCEED 1/8" INCH. ANNULAR SPACE BETWEEN THE CEILING MEMBRANE AND THE BOX DOES NOT EXCEED 1/8" INCH.



CONSTRUCTION PLAN
1/4" = 1'-0"

- CONSTRUCTION:**
1. ALL EXISTING WINDOWS ARE TO REMAIN
 2. ALL NEW WALLS TO BE 3-1/2" * 20" O.C., 5/8" GYPSUM BOARD ON EACH SIDE
 3. ALL NEW DOORS TO MATCH EXISTING
 4. ALL NEW GYPSUM BOARD TO ALIGN WITH EXISTING
 5. ALL PENETRATIONS AND DAMAGE TO EXISTING FIRE RATED ELEMENTS TO BE REPAIRED SO AS TO PROVIDE AN EQUAL LEVEL OF FIRE RATING.
 6. NEW BASE, CASING AND TRIM TO MATCH EXISTING
 7. MINIMUM THREE-COAT PLASTER/TAPE AND SPACKLE TO NEW AND REPAIRED GYPSUM BOARD AND SURFACES.

- PLUMBING:**
1. ALL PLUMBING WORK IS TO BE PERFORMED BY A PLUMBER LICENSED TO WORK IN THE CITY OF YONKERS.
 2. PLUMBING CONTRACTOR TO FILE FOR AND OBTAIN A PLUMBING PERMIT AND ALL NECESSARY INSPECTIONS.
 3. ALL ABANDONED PIPING MUST BE REMOVED TO A POINT OF CONCEALMENT AND PROPERLY CAPPED.
 4. ALL EXPOSED EXISTING AND NEW HOT AND COLD WATER AND HEATING PIPES MUST BE PROPERLY INSULATED.
 5. ALL NEW PLUMBING FIXTURES MUST BEAR THE EPA WATERSENSE LABEL.

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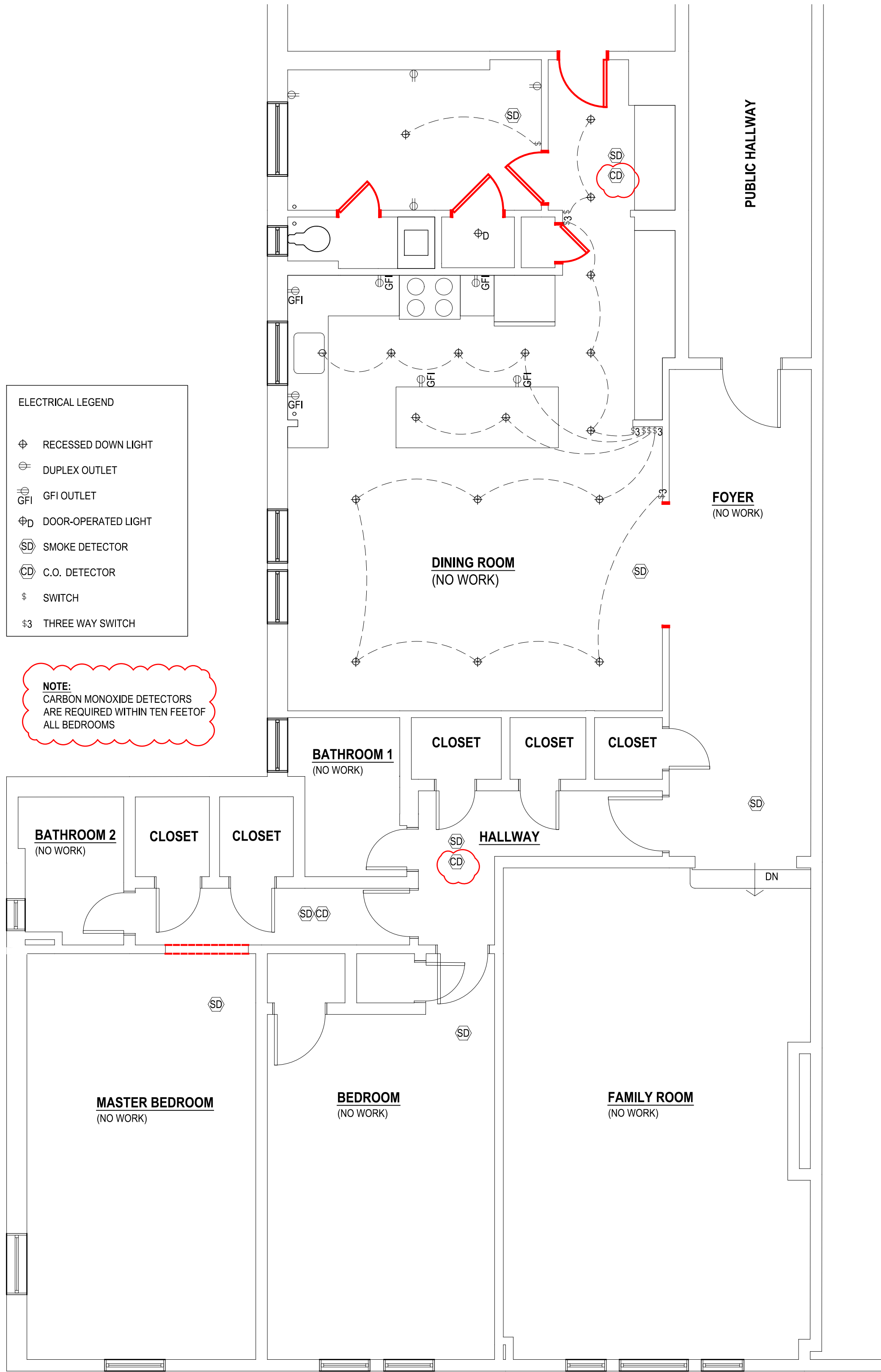
09.25.2021
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PER BLD. DEPT.
NO REVISIONS
THIS SHEET

PROJECT NAME:
KITCHEN ADDITION

DRAWING NAME:
**FLOORPLANS - DEMOLITION
& CONSTRUCTION**
DRAWING NUMBER:
S.01

SCALE: AS NOTED
DATE: 04.19.2021

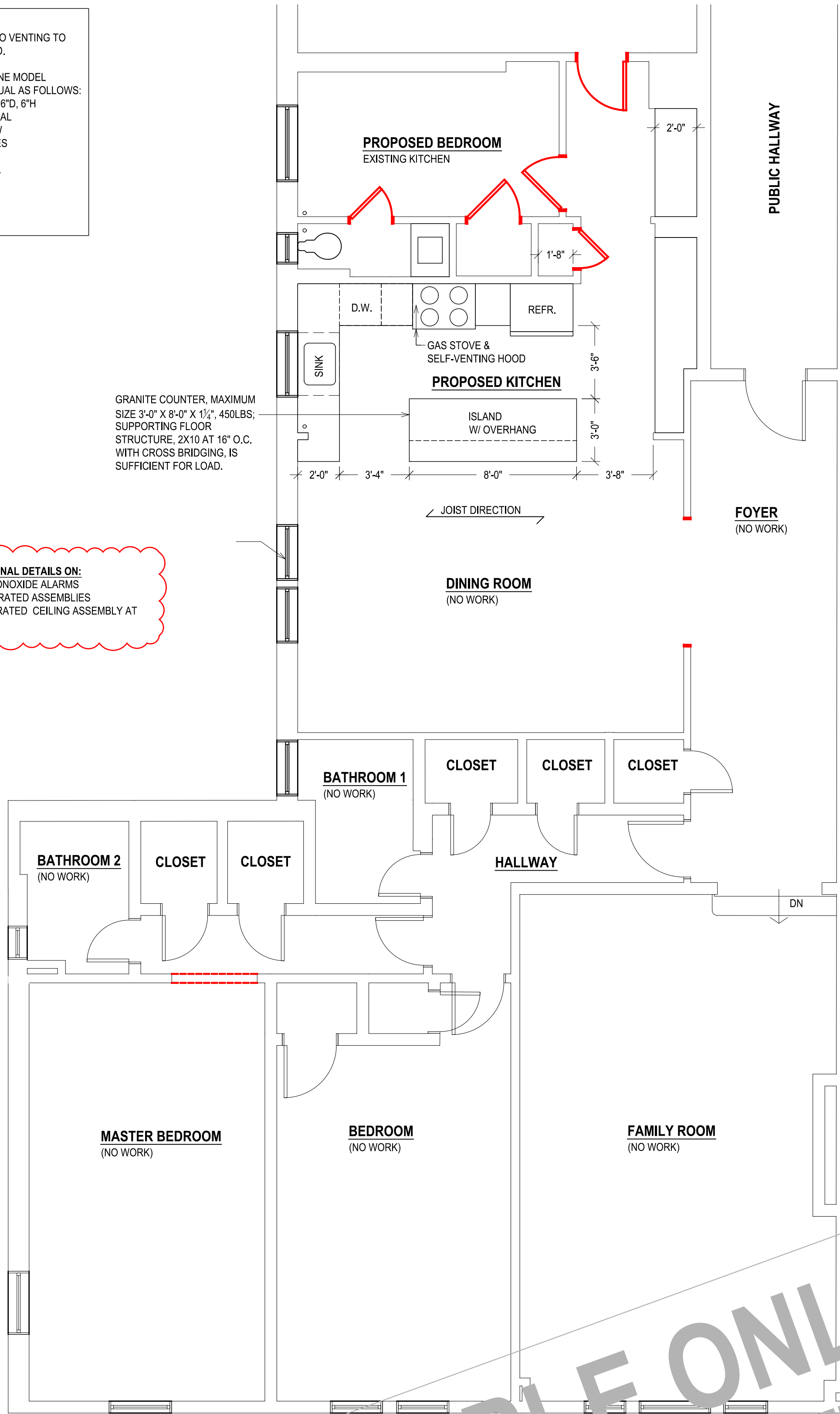
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SELF-VENTING HOOD:
PER HADDON HALL RULES, NO VENTING TO THE EXTERIOR IS PERMITTED.

RANGE HOOD WILL BE NUTONE MODEL RL623SSS OR APPROVED EQUAL AS FOLLOWS:
DIMENSIONS: 30"W, 19.6"D, 6'H
FILTER TYPE: CHARCOAL
LIGHTING TYPE: LED 4.5W
SOUND LEVEL: 1.5 SONES
WATTAGE: 78W
CFM: 300 MAX.
UL LISTED
ADA COMPLIANT
ENERGY STAR CERTIFIED
HVI CERTIFIED

SEE SHEET S.03 FOR ADDITIONAL DETAILS ON:
1. SMOKE AND CARBON MONOXIDE ALARMS
2. PENETRATIONS IN FIRE-RATED ASSEMBLIES
3. MAINTENANCE OF FIRE-RATED CEILING ASSEMBLY AT RECESSED FIXTURES



KITCHEN AND DINING ROOM FINISHES

- KITCHEN:**
- PROVIDE DEDICATED APPLIANCE (REFRIGERATOR AND DISHWASHER) OUTLETS PER CODE AND PER MANUFACTURER'S INSTRUCTIONS.
 - PROVIDE GFCI OUTLETS (20.8(A)(3) KITCHENS) WHERE THE RECEPTACLES ARE INSTALLED TO SERVE THE COUNTERTOP RECEPTACLES (20.8(A)(1) KITCHENS) — WHERE RECEPTACLES ARE INSTALLED WITHIN 1.8 M (6 FT) FROM THE TOP INSIDE EDGE OF THE BOWL OF THE SINK.

FINISHES:
INSTALL NEW HARDWOOD FLOOR IN (PROPOSED) BEDROOM AREA FLUSH WITH EXISTING.

PENETRATIONS IN EXTERIOR WALLS:
PER HADDON HALL'S CONDOMINIUM RULES, THERE MAY BE NO WALL PENETRATIONS TO EXTERIOR WALLS OR TO COMMON AREAS AND THERE MAY BE NO EXTERIOR VENTING.

PENETRATIONS:
PER HADDON HALL'S CONDOMINIUM RULES, THERE MAY BE NO WALL PENETRATIONS TO BE ADDED TO EXTERIOR WALLS, COMMON AREAS ADJACENT TO OTHER UNITS, OUTSIDE VENTING, EXTERIOR VENTING, OR VENTS TO EXTERIOR

- ELECTRICAL:**
- ALL ELECTRICAL WORK IS TO BE PERFORMED BY AN ELECTRICAL CONTRACTOR LICENSED TO WORK IN THE CITY OF YONKERS.
 - ELECTRICAL CONTRACTOR TO OBTAIN AN ELECTRICAL PERMIT AND ALL REQUIRED INSPECTIONS.
 - ALL ELECTRICAL WORK, WIRING AND EQUIPMENT SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE 2017 OF NEW YORK STATE (NFPA 70, 2017 WITH AMENDMENTS) AND ALL OTHER REGULATING AGENCIES.
 - THE ELECTRICAL CONTRACTOR SHALL SUPPLY ALL REQUIRED WIRING, DEVICES, CIRCUIT BREAKERS AND OTHER MATERIALS AS REQUIRED BY CODE.
 - UNLESS STIPULATED OTHERWISE, ALL LIGHT FIXTURES AND LAMPS TO BE SUPPLIED AND INSTALLED BY THE ELECTRICIAN; ALL NEW LIGHT FIXTURES TO BE LED TYPE.
 - PROVIDE GFCI OUTLETS IN KITCHEN PER CODE.
 - PROVIDE DEDICATED APPLIANCE (REFRIGERATOR AND DISHWASHER) OUTLETS PER CODE AND PER MANUFACTURER'S INSTRUCTIONS.
 - PROVIDE ARC FAULT PROTECTED OUTLETS IN BEDROOM PER CODE; PROVIDE UNDER-CABINET LIGHTING PER OWNER AND DESIGNER'S REQUIREMENTS.

- FIRE PROTECTION & SMOKE ALARMS:**
- THE BUILDING DOES NOT HAVE A SPRINKLER SYSTEM (BUILT 1927).
 - MULTIPLE-STATION SMOKE DETECTING ALARM DEVICES TO BE INSTALLED TO CONFORM WITH THE BUILDING CODE AS FOLLOWS:
 - ON THE CEILING OR WALL OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS
 - IN EACH ROOM USED FOR SLEEPING PURPOSES
 - AT LEAST 3 FT OUTSIDE EACH BATHROOM
 - ALARMS TO BE INTERCONNECTED, SUCH THAT THE ACTIVATION OF ONE ALARM ACTIVATES ALL ALARMS PER 907.2.10.5 INTERCONNECTION
 - CARBON MONOXIDE ALARMS AND CARBON MONOXIDE DETECTION SHALL BE INSTALLED IN NEW AND EXISTING BUILDINGS IN ACCORDANCE WITH SECTION 915 OF THE FIRE CODE OF NEW YORK STATE.
 - IN DWELLING UNITS AND SLEEPING UNITS WHERE A FUEL-BURNING APPLIANCE IS LOCATED IN A KITCHEN OR KITCHENETTE, A CARBON MONOXIDE DETECTOR SHALL BE INSTALLED OUTSIDE OF THE SLEEPING AREAS AND WITHIN 10 FEET (3048 MM) OF THE ENTRANCE TO THE SLEEPING AREAS.
 - COMBINATION ALARM TO BE INSTALLED IN COMPLIANT LOCATIONS

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PROJECT NAME:
KITCHEN ADDITION

DRAWING NAME:
FLOORPLANS - ELECTRICAL
FINISHES & KITCHEN
DRAWING NUMBER:
S.02

SCALE: AS NOTED
DATE: 04.19.2021

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| | | |
|-------------|-----------|------|
| Project | Catalog # | Type |
| Prepared by | Notes | Date |



HALO

H450FR2ICATD010

4" Fire Safe Housing
2 Hours Fire Rated

Typical Applications

- For Use in Installed Ceilings
- For Direct Contact with Insulation
- AIR-TITE Housing Restricts Airflow Between Conditioned and Unconditioned Areas

Interactive Menu

- Order Information page 2
- Product Warranty

Product Certification



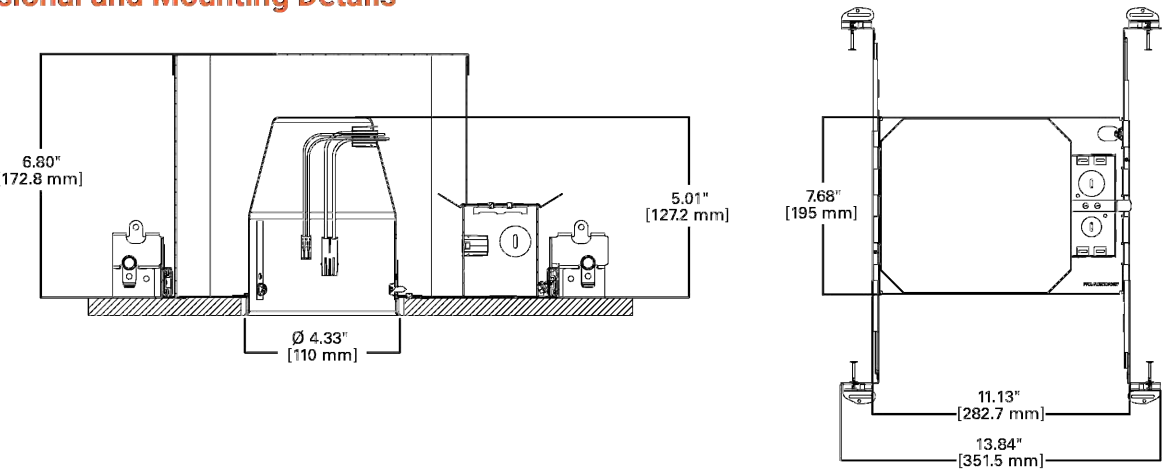
Product Features



Top Product Features

- Compatible with both phase-cut dimming and 0-10V dimming LED retrofit modules
- Fire rated in accordance to UL 263 for up to 2 hours of protection from the passage of flames and toxic gases into ceiling plenums
- Suitable for use in multi-family and mixed-use applications requiring up to 2 hours of protection
- 120-277V Universal Voltage
- Compatible with phase cut and 0-10V dimmable modules
- AIR-TITE™ per ASTM E283

Dimensional and Mounting Details



P6518172EN page 1
February 5, 2021 12:14 PM

HALO

Order Information

SAMPLE ORDER NUMBER: H450FR2ICATD010, ML4009PL9306210
A complete luminaire consists of a housing, LED integrated trim or LED module and trim, order separately.

| Housing | Compatible Trims |
|--|---|
| H450FR2ICATD010 - 4" fire safe new construction housing for phase cut and 0-10V LED retrofit modules, 120-277V | BLD4: RS04, SM04, SL04, LFL, LAL, RL4, RAL and ML4 series |

Product Specifications

Housing

- Die formed galvanized steel housing with noncombustible fiber insulation
- Sound transmission class (STC) and Impact Insulation class (IIC) tested by a certified acoustical testing lab. STC and IIC exceeds recommendations for reducing noise including spoken word and footfalls in multifamily and mixed-use structures
- Outer housing painted red for fire safe identification
- Inner housing painted matte black for a visually dark interior
- Housing provides up to 2 hours of protection in 1500, L505, L511, L536, L538, L541, L556, L577, M500, M510, M521 and M543 Floor-Ceiling construction

Plaster Frame

- Galvanized steel plaster frame with integral bar hanger receivers

Bar Hangers

- No Flex® Bar hangers with pre-installed nail support housing at any point along span
- Captive nail penetrates standard and engineered lumber
- Adjusts up to 24" wide
- Nail-less barb and locator lip provide consistent installation height

Junction Box

- Compact galvanized steel junction box with 24 in³ internal volume
- (5) conduit knock-outs positioned to allow straight conduit runs
- Accepts 1/4, 1/2, 3/4, 1, 1 1/2, 2, 2 1/2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 102, 104, 106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000

Connector

- Two-conductor wire mount connector is rated for 120-277V and mates with HALO LED integrated trims.

Code Compliance

- Type IC inherently protected, suitable for direct contact to air permeable insulation and eULus 1598 listed for damp locations
- UL263 listed for up to 2 hours in L500, L505, L511, L536, L538, L541, L556, L577, M500, M510, M521 and M543 Floor-Ceiling construction
- Not for use in direct contact with spray foam insulation, consult NEMA L5D57-2013
- Wet location listed in covered ceilings and IP44 certified with select trims
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- Contains no mercury or lead and RoHS compliant

Warranty

- Five-year limited warranty, consult website for details www.cooperlighting.com



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Providence, RI 02909
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www.cooperlighting.com

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Specifications and dimensions
subject to change without notice.

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DESCRIPTION

The Halo Backlit LED Downlight (BLD) incorporates state of the art lighting technology to create an ultra-low profile surface mounting luminaire with the performance and look of a traditional downlight. BLD4 is designed for installation in many 3-1/2" and 4" round or octagon junction boxes including pancake boxes. It can also retrofit in 4" aperture IC and Non-IC recessed housings. Suitable for residential or commercial installations.

SPECIFICATION FEATURES

CONSTRUCTION

- Stamped aluminum housing and frame

OPTICS

- Precision engineered optic provides uniform luminance from a low profile convex lens

LED

- Backlit LED technology
- Color Temperature options include: standard 3000K, dedicated or Selectable CCT configuration including 2700K, 3000K, 3500K, 4000K and 5000K options.
- 90 CRI is standard
- L70 at 50,000 hours projected in accordance with TM-21

DRIVER

- Integral 120V 60Hz constant current driver provides virtually noise free operation.
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers. See dimming guide.
- Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)
- Inline electrical quick connect and E26 adapter (provided) provides mains connections.

ELECTRICAL JUNCTION BOX MOUNTING

- BLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Suitable for installation in many 3-1/2" and 4" octagon and round electrical junction boxes.
- Dedicated CCT SKUs are compatible with compact (pancake) junction boxes
- Selectable CCT configuration, driver consumes 3 cubic inches of junction box, selectable CCT configuration is not compatible with pancake junction boxes
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building code

RECESSED HOUSING MOUNTING

- Can be installed in industry standard 4-inch recessed housings using friction mounting springs and (E26) medium base adapter provided.
- Not for use in recessed housings in direct contact with spray foam insulation refer to NEMA L5D 57-2013

WARRANTY

- Five year limited warranty, consult website for details, www.cooperlighting.com



IEC

T24

T20

RoHS

UL

Dimmable

Air-Tite



HALO

| Catalog # | Type |
|-------------|------|
| Project | |
| Comments | Date |
| Prepared by | |



BLD4 Series

90 CRI

4" Backlit LED Downlight

Suitable for ceiling or wall electrical junction boxes

Suitable for 4" recessed housing retrofit (IC, Non-IC & AIR-TITE™)

| 3000K - dedicated | |
|-------------------|-------------|
| Lumens | 690 |
| Wattage | 8.2W |
| Input current | 0.07 |
| Efficacy | 84.1 LPW |
| THD | 15.1% |
| Frequency | 60 Hz |
| T Ambient | -30 - +40°C |
| Voltage | 120V |
| Sound Rating | Class A |
| Power Factor | 0.99 |

| SeleCCTable 2700K – 5000K | |
|---------------------------|-------------|
| Lumens | 802 |
| Wattage | 10.3W |
| Input current | 0.087 |
| Efficacy | 77.9 LPW |
| THD | 11.9% |
| Frequency | 60 Hz |
| T Ambient | -30 - +40°C |
| Voltage | 120V |
| Sound Rating | Class A |
| Power Factor | 0.99 |

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LIGHTING ALTERNATIVE #2

LOW-PROFILE SURFACE-MOUNTED LUMINAIRE.
INSTALL IN STANDARD CEILING BOX; SEE PENETRATION REQUIREMENT.

PENETRATION:
THE AGGREGATE AREA OF SUCH PENETRATIONS SHALL NOT EXCEED 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF CEILING AREA, AND THE ANNULAR SPACE BETWEEN THE CEILING MEMBRANE AND THE BOX SHALL NOT EXCEED 1/8 INCH.

FIRE AND SMOKE PROTECTION FEATURES & LIFE SAFETY SYSTEMS:

FIRE AND SMOKE PROTECTION FEATURES:

GENERAL:

THE PROVISIONS OF CHAPTER 7 OF THE 2020 BUILDING CODE OF NEW YORK STATE SHALL GOVERN THE MATERIALS, SYSTEMS AND ASSEMBLIES USED FOR STRUCTURAL FIRE RESISTANCE AND FIRE-RESISTANCE-RATED CONSTRUCTION SEPARATION OF ADJACENT SPACES TO SAFEGUARD AGAINST THE SPREAD OF FIRE AND SMOKE WITHIN A BUILDING AND THE SPREAD OF FIRE TO OR FROM BUILDINGS.

MAINTENANCE OF FIRE RATING OF WALLS AND CEILINGS:

PENETRATIONS OF MEMBRANES THAT ARE PART OF A HORIZONTAL ASSEMBLY SHALL COMPLY WITH SECTION 714.5.2 AND AS NOTED AND DETAILED HEREIN.

PENETRATIONS OF MEMBRANES THAT ARE PART OF A FIRE-RATED WALL OR PARTITION SHALL COMPLY WITH SECTION 714.4.2 AND AS NOTED AND DETAILED HEREIN.

AUTOMATIC-CLOSING FIRE DOOR ASSEMBLIES:

AUTOMATIC-CLOSING FIRE DOOR ASSEMBLIES SHALL BE SELF-CLOSING IN ACCORDANCE WITH NFPA 80. APARTMENT SELF-CLOSING FIRE DOORS SHALL BE MAINTAINED OPERATIONAL FOR FINAL INSPECTION.

FIRE PROTECTION AND LIFE SAFETY:

GENERAL:

THE PROVISIONS OF CHAPTER 9 OF THE 2020 BUILDING CODE OF NEW YORK STATE SHALL GOVERN THE FIRE PROTECTION AND LIFE SAFETY SYSTEMS ARE REQUIRED. ALL SHALL APPLY TO THE DESIGN, INSTALLATION AND OPERATION OF FIRE PROTECTION SYSTEMS.

SINGLE OR MULTIPLE ALARMS SHALL BE INSTALLED AND MAINTAINED AS NOTED ON PLANS AND AS FOLLOWS:
1. ON THE CEILING OR WALL OUTSIDE OF EACH BEDROOM, DETECTOR SHALL BE INSTALLED IN THE IMMEDIATE VICINITY OF BEDROOMS.
2. IN EACH ROOM USED FOR SLEEPING, A DETECTOR SHALL BE INSTALLED OUTSIDE OF THE SLEEPING AREAS AND WITHIN 10 FEET OF THE ENTRANCE TO THE SLEEPING AREAS.

THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE BUILDING. A MANUAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.

2. CARBON MONOXIDE (CO) ALARMS AND CARBON MONOXIDE DETECTION SHALL BE INSTALLED IN NEW AND EXISTING BUILDINGS IN ACCORDANCE WITH SECTION 915 OF THE FIRE CODE OF NEW YORK STATE AS NOTED ON PLANS AND AS FOLLOWS:
IN DWELLING UNITS AND SLEEPING UNITS WHERE A FUEL BURNING APPLIANCE IS LOCATED IN A KITCHEN OR KITCHENETTE, A CARBON MONOXIDE DETECTOR SHALL BE INSTALLED OUTSIDE OF THE SLEEPING AREAS AND WITHIN 10 FEET OF THE ENTRANCE TO THE SLEEPING AREAS.

SMOKE AND CO ALARMS TO BE INSTALLED AND MAINTAINED THROUGHOUT UNIT PER CODE FOR FINAL INSPECTION.

LIGHTING ALTERNATIVE #1

HALO 2-HOUR FIRE RATED HOUSING.
THIS HOUSING IS FOR NEW CONSTRUCTION.
PATCH CEILING TO MATCH EXISTING (OR GREATER) FIRE RATING.

PER 2020 BUILDING CODE OF NEW YORK STATE; CHAPTER 7 FIRE AND SMOKE PROTECTION FEATURES:

714.5.2 HORIZONTAL MEMBRANE (CEILING) PENETRATIONS

PENETRATIONS OF MEMBRANES THAT ARE PART OF A HORIZONTAL ASSEMBLY SHALL COMPLY WITH SECTION 714.5.1.1 OR 714.5.1.2.
WHERE FLOOR/CEILING ASSEMBLIES ARE REQUIRED TO HAVE A FIRE-RESISTANCE RATING, RECESSED FIXTURES SHALL BE INSTALLED SUCH THAT THE REQUIRED FIRE RESISTANCE WILL NOT BE REDUCED.

EXCEPTIONS:

- MEMBRANE PENETRATIONS BY STEEL, FERROUS OR COPPER CONDUITS, PIPES, TUBES OR VENTS, OR CONCRETE OR MASONRY ITEMS WHERE THE ANNULAR SPACE IS PROTECTED EITHER IN ACCORDANCE WITH SECTION 714.5.1 OR TO PREVENT THE FREE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION. THE AGGREGATE AREA OF THE OPENINGS THROUGH THE MEMBRANE SHALL NOT EXCEED 100 SQUARE INCHES (64 500 MM²) IN ANY 100 SQUARE FEET (9.3 M²) OF CEILING AREA IN ASSEMBLIES TESTED WITHOUT PENETRATIONS.
- CEILING MEMBRANE PENETRATIONS OF MAXIMUM 2-HOUR HORIZONTAL ASSEMBLIES BY STEEL ELECTRICAL BOXES THAT DO NOT EXCEED 16 SQUARE INCHES (10 323 MM²) IN AREA, PROVIDED THAT THE AGGREGATE AREA OF SUCH PENETRATIONS DOES NOT EXCEED 100 SQUARE INCHES (64 500 MM²) IN ANY 100 SQUARE FEET (9.3 M²) OF CEILING AREA, AND THE ANNULAR SPACE BETWEEN THE CEILING MEMBRANE AND THE BOX DOES NOT EXCEED 1/8 INCH (3.2 MM).
- MEMBRANE PENETRATIONS BY ELECTRICAL BOXES OF ANY SIZE OR TYPE, THAT HAVE BEEN LISTED AS PART OF AN OPENING PROTECTIVE MATERIAL SYSTEM FOR USE IN HORIZONTAL ASSEMBLIES AND ARE INSTALLED IN ACCORDANCE WITH THE INSTRUCTIONS INCLUDED IN THE LISTING.
- MEMBRANE PENETRATIONS BY LISTED ELECTRICAL BOXES OF ANY MATERIAL, PROVIDED THAT SUCH BOXES HAVE BEEN TESTED FOR USE IN FIRE-RESISTANCE-RATED ASSEMBLIES AND ARE INSTALLED IN ACCORDANCE WITH THE INSTRUCTIONS INCLUDED IN THE LISTING.
- THE CEILING MEMBRANE OF 1- AND 2-HOUR FIRE-RESISTANCE-RATED HORIZONTAL ASSEMBLIES IS PERMITTED TO BE INTERRUPTED WITH THE DOUBLE WOOD TOP PLATE OF A WALL ASSEMBLY THAT IS SHEATHED WITH TYPE X GYPSUM WALLBOARD, PROVIDED THAT ALL PENETRATING ITEMS THROUGH THE DOUBLE TOP PLATES ARE PROTECTED IN ACCORDANCE WITH SECTION 714.5.1.1 OR 714.5.1.2 AND THE CEILING MEMBRANE IS TIGHT TO THE TOP PLATES.
- CEILING MEMBRANE PENETRATIONS BY LISTED LUMINAIRES (LIGHT FIXTURES) OR BY LUMINAIRES PROTECTED WITH LISTED MATERIALS, WHICH HAVE BEEN TESTED FOR USE IN FIRE-RESISTANCE-RATED ASSEMBLIES AND ARE INSTALLED IN ACCORDANCE WITH THE INSTRUCTIONS INCLUDED IN THE LISTING.

714.4.2 MEMBRANE PENETRATIONS IN FIRE-RESISTANCE-RATED WALLS:

MEMBRANE PENETRATIONS SHALL COMPLY WITH SECTION 714.4.1.
WHERE WALLS OR PARTITIONS ARE REQUIRED TO HAVE A FIRE-RESISTANCE RATING, RECESSED FIXTURES SHALL BE INSTALLED SUCH THAT THE REQUIRED FIRE RESISTANCE WILL NOT BE REDUCED.

EXCEPTIONS:

- MEMBRANE PENETRATIONS OF MAXIMUM 2-HOUR FIRE-RESISTANCE-RATED WALLS AND PARTITIONS BY STEEL ELECTRICAL BOXES THAT DO NOT EXCEED 16 SQUARE INCHES IN AREA, PROVIDED THAT THE AGGREGATE AREA OF THE OPENINGS THROUGH THE MEMBRANE DOES NOT EXCEED 100 SQUARE FEET OF WALL AREA. THE ANNULAR SPACE BETWEEN THE WALL MEMBRANE AND THE BOX SHALL NOT EXCEED 1/8 INCH. SUCH BOXES ON OPPOSITE SIDES OF THE WALL OR PARTITION SHALL BE SEPARATED BY ONE OF THE FOLLOWING:
 - BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES WHERE THE WALL OR PARTITION IS CONSTRUCTED WITH INDIVIDUAL NONCOMMUNICATING STUD CAVITIES.
 - BY A HORIZONTAL DISTANCE OF NOT LESS THAN THE DEPTH OF THE WALL CAVITY WHERE THE WALL CAVITY IS FILLED WITH CELLULOSE LOOSE-FILL, ROCKWOOL OR SLAG MINERAL WOOL INSULATION.
 - BY SOLID FIREBLOCKING IN ACCORDANCE WITH SECTION 718.2.1.
 - BY PROTECTING BOTH OUTLET BOXES WITH LISTED PUTTY PADS.
 - BY OTHER LISTED MATERIALS AND METHODS.
- MEMBRANE PENETRATIONS BY LISTED ELECTRICAL BOXES OF ANY MATERIAL, PROVIDED THAT SUCH BOXES HAVE BEEN TESTED FOR USE IN FIRE-RESISTANCE-RATED ASSEMBLIES AND ARE INSTALLED IN ACCORDANCE WITH THE INSTRUCTIONS INCLUDED IN THE LISTING. THE ANNULAR SPACE BETWEEN THE WALL MEMBRANE AND THE BOX SHALL NOT EXCEED 1/8 INCH UNLESS LISTED OTHERWISE. SUCH BOXES ON OPPOSITE SIDES OF THE WALL OR PARTITION SHALL BE SEPARATED BY ONE OF THE FOLLOWING:
 - BY THE HORIZONTAL DISTANCE SPECIFIED IN THE LISTING OF THE ELECTRICAL BOXES.
 - BY SOLID FIREBLOCKING IN ACCORDANCE WITH SECTION 718.2.1.
 - BY PROTECTING BOTH BOXES WITH LISTED PUTTY PADS.
 - BY OTHER LISTED MATERIALS AND METHODS.
- MEMBRANE PENETRATIONS BY ELECTRICAL BOXES OF ANY SIZE OR TYPE, THAT HAVE BEEN LISTED AS PART OF A WALL OPENING PROTECTIVE MATERIAL SYSTEM FOR USE IN FIRE-RESISTANCE-RATED ASSEMBLIES AND ARE INSTALLED IN ACCORDANCE WITH THE INSTRUCTIONS INCLUDED IN THE LISTING.
- MEMBRANE PENETRATIONS BY BOXES OTHER THAN ELECTRICAL BOXES, PROVIDED THAT SUCH PENETRATING ITEMS AND THE ANNULAR SPACE BETWEEN THE WALL MEMBRANE AND THE BOX, ARE PROTECTED BY AN APPROVED MEMBRANE PENETRATION FIRESTOP SYSTEM INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E814 OR UL 1479, WITH A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH (2.49 PA) OF WATER, AND SHALL HAVE AN F AND T RATING OF NOT LESS THAN THE REQUIRED FIRE-RESISTANCE RATINGS OF THE WALL PENETRATED AND BE INSTALLED IN ACCORDANCE WITH THEIR LISTING.
- THE ANNULAR SPACE CREATED BY THE PENETRATION OF AN AUTOMATIC SPRINKLER, PROVIDED THAT IT IS COVERED BY A METAL ESCUTCHEON PLATE.
- MEMBRANE PENETRATIONS OF MAXIMUM 2-HOUR FIRE-RESISTANCE-RATED WALLS AND PARTITIONS BY STEEL ELECTRICAL BOXES THAT EXCEED 16 SQUARE INCHES IN AREA, OR STEEL ELECTRICAL BOXES OF ANY SIZE HAVING AN AGGREGATE AREA THROUGH THE MEMBRANE EXCEEDING 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL AREA, PROVIDED THAT SUCH PENETRATING ITEMS ARE PROTECTED BY LISTED PUTTY PADS OR OTHER LISTED MATERIALS AND METHODS, AND INSTALLED IN ACCORDANCE WITH THE LISTING.