Code Improvements
Riverfront Boathouse

252 Welles Street
Glastonbury, CT. 06033

ISSUED: NOVEMBER 16, 2021

ARCHITECTS:
NORTHEAST COLLABORATIVE ARCHITECTS, LLC
500 PLAZA MIDDLESEX
MIDDLETOWN, CT. 06457
v: 860.344.9332

MEP/ FP ENGINEERS:
CONSULTING ENGINEERING SERVICES (CES)
811 MIDDLE STREET
MIDDLETOWN, CT. 06457
v: 860.632.1682

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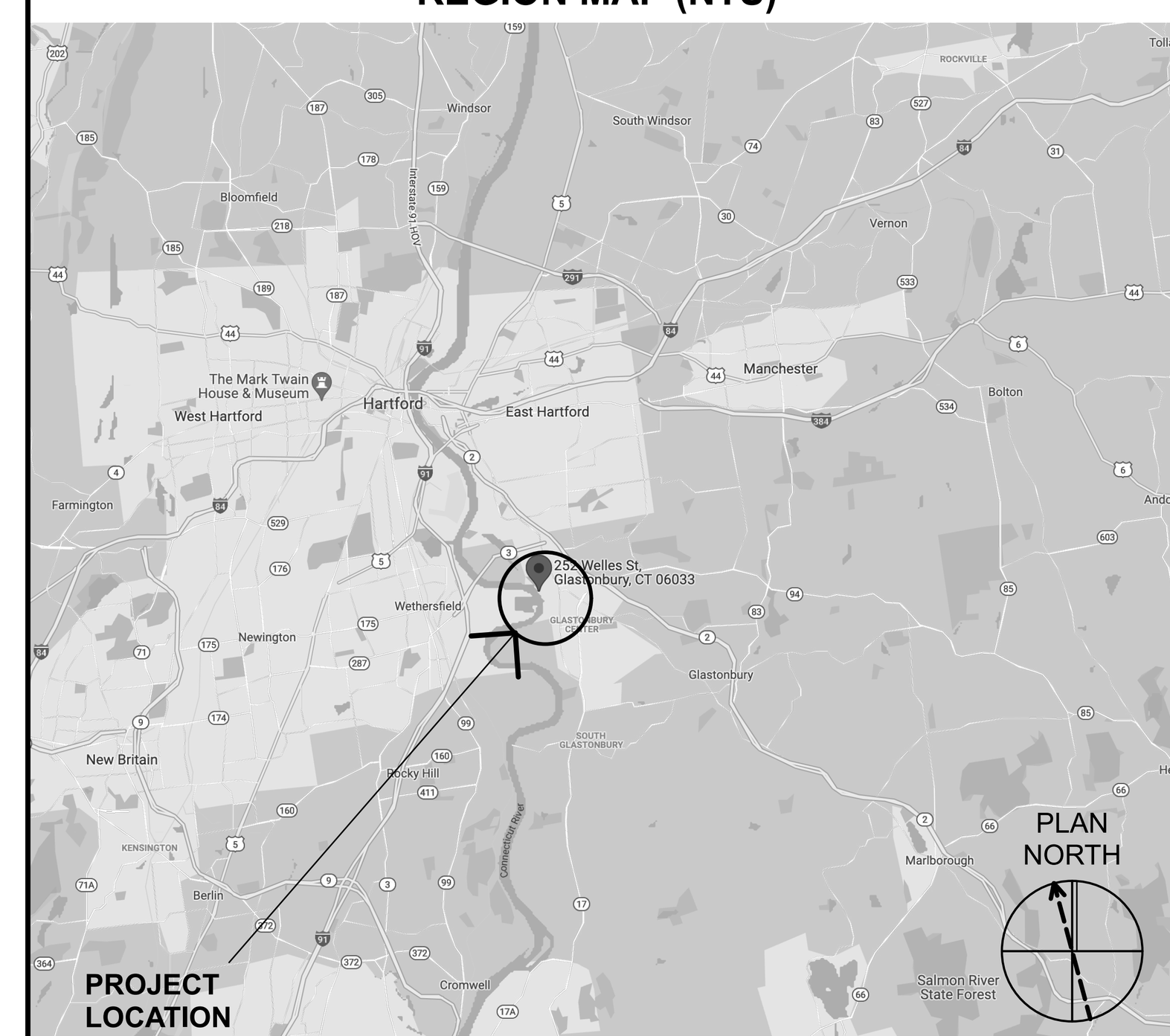
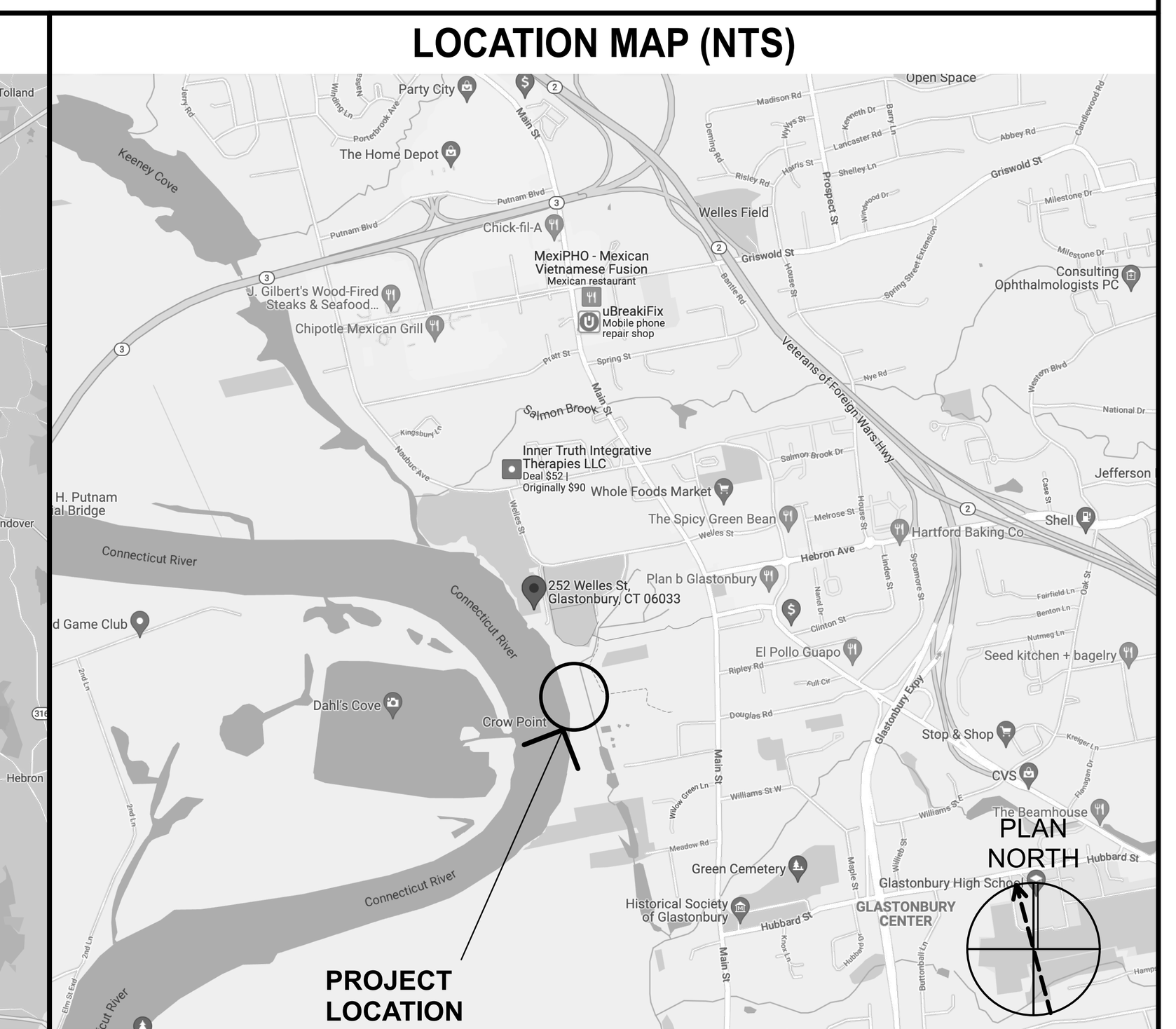
DRAWING LIST

REGION MAP (NTS)



LOCATION MAP (NTS)



ABBREVIATIONS

&	And
L	Metal Angle
@	At
#	Pound or Number
A, AMP	Ampere or Amperage
AB	Anchor Bolt
A/C	Air Conditioning
ACOUS	Acoustical
ACT	Acoustical Ceiling Tile
ACU	Air Conditioning Unit
ADDN	Addition
ADDN'L	Additional
ADJ	Adjustable
AFF	Above Finish Floor
AHU	Air Handling Unit
ALT	Alternate
ALUM	Aluminum
ANCH	Anchor, Anchorage
ANOD	Anodized
ARCH	Architect, Architectural
BD	Board
BIT	Bituminous
BLDG	Building
BLK(G)	Blocking
BM	Beam
BM	Bench Mark
BOT	Bottom
BRG	Bearing
BRK	Brick
BSMT	Basement
BUR	Built Up Roof
C	Course
CAB	Cabinet
CD	Condensate Drain
CEF	Ceiling Exhaust Fan
CEM	Cement
CFM	Cubic Feet Per Minute
CG	Corner Guard
CHP	Cabinet Heat Pump
CI	Cast Iron
CJ	Control Joint
CKT	Circuit
CLG	Ceiling
C	Center Line
CLR	Clear
CMU	Concrete Masonry Unit
CO	Clean Out
COL	Column
CONC	Concrete
CONN	Connection
CONST	Construction
CONT	Continuous
CONTR	Contract(or)
CP	Condensate Pump
CPT	Carpet
CR	Ceiling Register
CT	Ceramic Tile
CTR	Center
CUH	Cabinet Unit Heater
CW	Cold Water
D	Diffuser
DBL	Double
DET	Detail
DF	Drinking Fountain
DIA	Diameter
DIM	Dimension
DISP	Dispenser
DL	Dead Load
DN	Down
DO	Ditto
DP	Distribution Point
DR	Door
DWG	Drawing
E	East
EA	Each
EB	Electric Baseboard
EF	Exhaust Fan
EJ	Expansion Joint
EL	Elevation
ELEC	Electrical
ELEV	Elevator
EMERG	Emergency
ENCL	Enclosure
ENGR	Engineer
EP	Electrical Panel
EQ	Equal
EWC	Electric Water Cooler
EXH	Exhaust
EXIST	Existing
EXP	Expansion
EXT	Exterior
FA	Fire Alarm
FACP	Fire Alarm Control Panel
FC(U)	Fan Coil Unit
FD	Floor Drain
FDN	Foundation
FE	Fire Extinguisher
FEC	Fire Extinguisher & Cabinet
FF	Finished Floor
FLUOR	Fluorescent
FOS	Fuel Oil Supply
FOR	Fuel Oil Return
FPRF(G)	Fireproofing
FR	Frame
FT	Foot, Feet
FTG	Footing
FURN	Furnish(ed)
FURR	Furring
GA	Gauge, Gage
GALV	Galvanized
GB	Gypsum Board
GC	General Contractor
GFI	Ground Fault Interrupter
GL	Glass, Glazing
GND	Ground
GR	Grade
GYP	Gypsum
HB	Hose Bibb
HDWD	Hard Wood
HDWE	Hardware
HGT	Height
HID	High Intensity Discharge
HM	Hollow Metal
HORIZ	Horizontal
HP	High Point, Horse POWER & EYE WASH
HTG	Heating
HTR	Heater
HVAC	Heat, Vent, & A/C
HVU	Heating & Vent. Unit
HW	Hot Water
HWH	Hot Water Heater
HZ	Hertz
ID	Inside Diameter
IN	Inch
INCAND	Incandescent
INCL	Include(d), (ing)
INS	Insulate(d), (ing)
INT	Interior
INV	Invert
JB, JBOX	Junction Box
JST	Joist
JT	Joint
K	Kip (1,000 lbs)
K-FT	Kip Feet
KVA	Kilovolt Amps
KW	Kilowats
LAM	Laminated
LAV	Lavatory
LB	Pound
LCC	Lead Coated Copper
LF	Linear Feet
LH	Left Hand
LL	Live Load
LP	Lighting Panel
LT(G)	Lighting
LVL	Laminated Veneer Lumber
MAS	Masonry
MAX	Maximum
MCM	Metal Composite Material
MDP	Main Distribution Panel
MECH	Mechanical
MED	Medium
MEMB	Membrane
MET	Metal
MFR	Manufacturer
MIN	Minimum
MISC	Miscellaneous
MO	Masonry Opening
MR	Moisture Resistant
MTD	Mounted
N	North
NIC	Not In Contract
NOM	Nominal
NTS	Not To Scale
O/A	Outdoor Air
OC	On Center
OD	Outside Diameter
OPG	Opening
OPP	Opposite
OZ	Ounce
PA	Public Address
PCF	Pounds Per Cubic Foot
PERF	Perforated
PG	Paint Grade
PL	Plate
PLAM	Plastic Laminate
PLAS	Plaster
PLBG	Plumbing
PLYWD	Plywood
PNL	Panel
POL	Polished
PP	POWER & EYE WASH Panel
PR	Pair
PRTN	Partition
PSF	Pounds Per Square Foot
PSI	Pounds Per Square Inch
PT	Paint/ Painted
PV	Plumbing Vent
PVMT	Pavement
QT	Quarry Tile
QTY	Quantity
R	Riser, Register
R/ A	Return Air
RAD	Radius
RCP	Reinforced Concrete Pipe
RD	Roof Drain
RECPT	Receptacle
RE	Recycle
REF	Reference
REFIN	Refinish
REINF	Reinforce(d), (ing)
REQ	Required
RL	Roof Leader
RESIL	Resilient
RET	Return
REV	Revisions, Revised
RFG	Roofing
RH	Right Hand
RM	Room
RO	Rough Opening
RPM	Revolutions Per Minute
RWL	Rain Water Leader
RV	Roof Vent
S	South
S/ A	Supply Air
S&R	Supply & Return
SAFB	Sound Attenuating Fiber Blanket
SAN	Sanitary
SCHED	Schedule
SERV	Service
SF	Square Feet
SGFT	Structural Glazed Facing Tile
SHT	Sheet
SIM	Similar
SP	Static Pressure
SPEC	Specifications
SQ	Square
SS	Stainless Steel
ST	Storm
STD	Standard
STL	Steel
STRUCT	Structural
SW, SW BD	Switch, Switch Board
SWGR	Switchgear
SYM	Symmetrical
T	Tread, Thermostat
TBH	Thousand BTU per Hour
T&B	Top & Bottom
T&G	Tongue & Groove
T/ F	Top of Frame
T/ M	Top of Masonry
T/ S	Top of Steel
T/ W	Top of Wall
TEL or TELE	Telephone
TEMP	Temperature
THK	Thick(ness)
THRES	Threshold
TR	Trash
TRANS	Transformer
TYP	Typical
UG	Under Ground
UH	Unit Heater
UON	Unless Otherwise Noted
UNO	Unless Noted Otherwise
UV	Unit Ventilator
V	Vent, Volt
AV	Variable Air Volume
VCT	Vinyl Composition Tile
VERT	Vertical
VENT	Ventilator
VHP	Vertical Heat Pump
VIF	Verify in Field
VIN	Vinyl
VWC	Vinyl Wallcovering
W	Watts, West
WB	Wet Bulb
W/	With
W/O	Without
WC	Water Closet
WD	Wood
WP	Waterproof
WR	Water Resistant
Wains	Wainscot
WT	Weight
WWF	Welded Wire Fabric
YD	Yard

GRAPHIC LEGEND

- ROOM NUMBER
- DOOR NUMBER
- INTERIOR ELEVATIONS — ELEVATION ID; SHEET ON WHICH ELEVATION APPEARS
- WINDOW TYPE
- WORK SCOPE NOTE
- REVISION MARK
- ACCESSIBILITY SYMBOL
- ELEVATION ID; SHEET ON WHICH ELEVATION APPEARS
- BUILDING SECTION — SECTION ID; SHEET ON WHICH SECTION APPEARS
- WALL SECTION — SECTION ID; SHEET ON WHICH SECTION APPEARS
- COLUMN LINE GRID
- REFERENCE POINT
- WALL TYPE

MATERIALS LEGEND

- CONCRETE
- CONCRETE MASONRY UNITS
- BRICK
- METALS
- COMPACTED GRAVEL
- COMPACTED SOIL
- NEW METAL STUD PARTITION
- EXISTING TO REMAIN, UON
- ITEM TO BE REMOVED, UON
- PLYWOOD
- ACOUSTICAL TILE
- WOOD FRAMING - THROUGH MEMBER
- WOOD FRAMING - BLOCKING
- FINISHED WOOD
- BATT INSULATION
- RIGID INSULATION

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Middletown, CT 06457
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CODE IMPROVEMENTS RIVERFRONT BOATHOUSE
252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:

INFO SHEET

DATE:	11-16-2021
NCA JOB NO.:	21031
DRAWING NO.:	A-001

2. DIVISION 02: SELECTIVE DEMOLITION

2.1 DEMOLITION AND REMOVAL - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO COMPLETE THE WORK. IF SIGNIFICANT DEMOLITION BEYOND THE SCOPE INDICATED ON THE DRAWINGS IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL, INCLUDING ALL COSTS FOR CARTING AND DUMPING, OF ALL MATERIALS DEMOLISHED FROM THE PROJECT. THE OWNER RESERVES THE RIGHT TO REVIEW AND RECLAIM ANY ITEMS BEING REMOVED.

2.2 THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ALL EXISTING WORK DISTURBED OR OTHERWISE IN NEED OF REPAIRING IN ORDER TO MAKE THE PROJECT A COMPLETE AND FINISHED PROJECT. THIS REPAIR INCLUDES ALL FINISHES TO MATCH ADJACENT SURFACES.

2.3 IF A WALL OR SURFACE IS WORKED ON, THAT WALL OR SURFACE SHALL BE REPAIRED WITH A COMPLETE FINISH, TO THE NEAREST CORNER, CHANGE OF PLANE, OR OTHER JUNCTURE. PROVIDE A SMOOTH AND CLEAN TRANSITION FROM THE NEW FINISHED SURFACE TO THE SURROUNDING EXISTING SURFACES, THE INTENT IS TO ELIMINATE THE APPEARANCE OF A REPAIRED CONDITION.

2.4 ANY AND ALL DEMOLISHED PLUMBING FIXTURES AND RELATED PIPING WHICH ARE BEING DISCARDED SHALL BE REMOVED, CAPPED AND ALL RELATED WORK REQUIRED ON FLOOR SLAB OR WALL SURFACES, SHALL BE REPAIRED AND FINISHED TO MATCH ADJACENT SURFACES AND/OR TO FINISH SCHEDULE.

2.5 ALL ITEMS SHOWN TO BE DEMOLISHED SHALL BE REMOVED & DISCARDED, UNLESS OTHERWISE NOTED.

2.6 ALL ITEMS SHOWN TO BE REMOVED AND STORED FOR RE-INSTALLATION SHALL BE REMOVED WITH THE INTENT TO REUSE THE PRODUCT, HANDLED WITH CARE TO PREVENT DAMAGE OR BREAKAGE, STORED IN A DRY ENVIRONMENT, AND PLACED/STACKED PER MANUFACTURER'S ORIGINAL REQUIREMENTS. PRODUCT SHALL BE REVIEWED BY OWNER TO CONFIRM PROPER STORAGE REQUIREMENTS ARE BEING MAINTAINED THROUGHOUT THE PERIOD SUCH PRODUCT IS STORED. ANY PRODUCT THAT IS DAMAGED EITHER DURING THE REMOVAL PROCESS OR WHILE IN STORAGE SHALL BE REPLACED WITH NEW, MATCHING PRODUCT BY CONTRACTOR.

6 DIVISION 06: WOOD, PLASTIC AND COMPOSITES

6.1 ROUGH CARPENTRY - COMPLY WITH AWI REQUIREMENTS FOR ANY ROUGH CARPENTRY ASSOCIATED WITH BLOCKING, FRAMING, FURRING AND/OR ANY OTHER REQUIREMENTS OF THE CONSTRUCTION THAT MAY REQUIRE ANY ROUGH CARPENTRY.

6.2 SHEATHING

6.2.1 FURNISH AND INSTALL 3/4" MARINE-GRADE VENEER (A-B) PLYWOOD AT ALL EXPOSED WALL SURFACES INDICATED.

6.3 INTERIOR ARCHITECTURAL WOODWORK:

6.3.1 FURNISH AND INSTALL ALL INTERIOR ARCHITECTURAL WOODWORK INDICATED ON DRAWINGS

6.3.2 INTERIOR RUNNING OR STANDING TRIM SHALL BE PREMIUM GRADE POPLAR, SHAPED TO SIZE AND PROFILE INDICATED ON DRAWINGS

6.3.3 ANCHOR WOODWORK TO ANCHORS OR BLOCKING BUILT IN OR DIRECTLY ATTACHED TO SUBSTRATES. SECURE WITH COUNTERSUNK, CONCEALED FASTENERS AND BLIND NAILING AS REQUIRED FOR COMPLETE INSTALLATION. USE FINE FINISHING NAILS FOR EXPOSED FASTENING, COUNTERSUNK AND FILLED FLUSH WITH WOODWORK AND MATCHING FINAL FINISH IF TRANSPARENT FINISH IS INDICATED.

6.3.4 STANDING AND RUNNING TRIM: INSTALL WITH MINIMUM NUMBER OF JOINTS POSSIBLE, USING FULL-LENGTH PIECES (FROM MAXIMUM LENGTH OF LUMBER AVAILABLE) TO GREATEST EXTENT POSSIBLE. DO NOT USE PIECES LESS THAN 96 INCHES LONG, EXCEPT WHERE SHORTER SINGLE LENGTH PIECES ARE NECESSARY. SCARF RUNNING JOINTS AND STAGGER IN ADJACENT AND RELATED MEMBERS.

6.3.5 FILL GAPS, IF ANY, BETWEEN TOP OF BASE AND WALL WITH PLASTIC WOOD FILLER, SAND SMOOTH, AND FINISH SAME AS WOOD TRIM FINISH. INSTALL STANDING AND RUNNING TRIM WITH NO MORE VARIATION FROM A STRAIGHT LINE THAN 1/8 INCH IN 96 INCHES

7 DIVISION 07: MOISTURE, THERMAL PROTECTION

7.1 THERMAL INSULATION:

7.1.1 MINERAL WOOL BLANKET INSULATION (SOUND ATTENUATION) AT ALL INTERIOR FRAMED WALLS BEING RECONSTRUCTED TO APPLY SFRM TO STRUCTURAL FRAMING

7.1.2 Subject to compliance with requirements, provide one of the following:
1. Johns Manville; MinWool Sound Attenuation Fire Batts (SAFB).
2. Rockwool; AFB.
3. Thermafiber; SAFB.

7.1.3 Unfaced, Mineral-Wool Blanket Insulation: ASTM C 665, Type I (blankets without membrane facing); consisting of fibers; with maximum flame-spread and smoke-developed indexes of 0, per ASTM E 84; passing ASTM E 136 for combustion characteristics.
1. R-Value: Minimum 3.7 per inch.
2. NRC: 1.05 for 3 inch thickness.
3. Nominal density of 2.5 lb/cu. ft minimum.
4. Thickness: As indicated, not less than 3- inches.

7.1.4. MINERAL-WOOL-BOARD INSULATION (FIRE SAFING)

7.1.5 Subject to compliance with requirements, provide products by one of the following:
1. Johns Manville; MinWool Safing.
2. Rockwool; SAFE.
3. Thermafiber; Safing Insulation.

7.1.6 Unfaced, Mineral-Wool Board Insulation: ASTM C 612; water repellant rigid insulation board with a rigid upper surface, with maximum flame-spread and smoke-developed indexes of zero, per ASTM E 84; passing ASTM E 136 for combustion characteristics. Nominal density of 4.5 lb/cu. ft. minimum.

7.1.7 FURNISH AND INSTALL BASIS-OF-DESIGN: ICYNENE CLOSED-CELL SPRAY FOAM INSULATION AT UNDERSIDE OF FLOOR DECK AFTER PROPER INSTALL AND CURING OF SFRM PRODUCT

7.1.8 INSTALL AT THICKNESS REQUIRED TO ACHIEVE R-30 INSULATION AT UNDERSIDE OF FLOOR DECK AND MIN. 2" AROUND ALL SURFACES OF STEEL BEAMS TO FULLY-ENCAPSULATE THE SFRM.

7.2 SPRAY-APPLIED FIRE RESISTIVE MATERIAL (SFRM):

7.2.1 FURNISH AND INSTALL BASIS-OF-DESIGN: CAFCO BLAZE-SHIELD II (ISOLATEK INTERNATIONAL) PER ASTM E119 AND ANSI/UL 263 REQUIREMENTS:

7.2.2 PROVIDE SFRM APPLICATION AT FLOOR-CEILING ASSEMBLY (UNDERSIDE OF STEEL DECK AND BEAMS) PER UL DESIGN No. D832. NOTE CAFCO/ISOLATEK INTERNATIONAL DESIGN D832 FOR APPLICABLE THICKNESS REQUIRED AT SPECIFIC ELEMENTS. NOTE PRESENCE OF ELECTRICAL FLOOR BOXES ABOVE AS INDICATED.

7.2.3 PROVIDE SFRM APPLICATION AT COLUMNS PER UL DESIGN No. X827. NOTE APPLICABLE CAFCO/ISOLATEK INTERNATIONAL DESIGN X827 FOR APPLICABLE THICKNESS REQUIRED AT SPECIFIC COLUMN SHAPE, SIZES & THICKNESSES. SEE DRAWINGS FOR GUIDANCE ON INSTALLATION AT EXISTING COLUMNS.

7.2.4 FOLLOW ALL MANUFACTURER'S REQUIREMENTS ON THE PREPARATION AND CLEANING OF EXISTING SURFACES TO RECEIVE SFRM, PROPER INSTALLATION, ACHIEVING MINIMUM THICKNESSES REQUIRED FOR THE APPLICATION, AND PREPARATION FOR INSTALLATION OF INSULATION AND OTHER CONSTRUCTION FOLLOWING PROPER CURING OF THE SFRM PRODUCT.

7.3 PENETRATION FIRESTOPPING

7.3.1 FURNISH AND INSTALL PENETRATION FIRESTOPPING AS REQUIRED TO ACHIEVE OR EXCEED RATINGS INDICATED ON DRAWINGS. ALL PENETRATION FIRESTOPPING MUST UL RATED AT SEPARATION RATINGS INDICATED. LOCAL CODE OFFICIAL SHALL BE OFFERED OPPORTUNITY TO REVIEW ALL PENETRATION FIRESTOPPING PRIOR TO ENCLOSURE

7.4 JOINT SEALANTS

7.4.1 PROVIDE NEW JOINT SEALANTS AT ANY AND ALL NEW WORK, OR WHERE NEW WORK MEETS EXISTING, UNLESS OTHERWISE NOTED. INTERIOR JOINTS SHALL BE ACRYLIC LATEX; EXTERIOR SHALL BE SILICONE IN COLOR SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLORS.

9 DIVISION 09: DRYWALL AND FINISHES

9.1 ALL FLOOR AND WALL SURFACES SHALL BE PREPARED PROPERLY FOR FINISHES. BLEND ALL BLEMISHES, BUMPS AND OTHER DEFECTS INTO A SMOOTH AND FLAT SURFACE.

9.1.1 CONTRACTOR SHALL PREPARE/LEVEL ALL SURFACES AT ALL REMOVALS FOR NEW FINISHES AS PER MANUFACTURERS' INSTRUCTIONS.

9.1.2 REPAIR & REFINISH ALL AREAS' SURFACES OPENED UP OR DAMAGED BY OTHER TRADES, AND NOT LIMITED TO WORK LIMIT AREAS SHOWN.

9.1.3 ALL DIMENSIONS ARE TO FACE OF NOMINAL STUD UNLESS OTHERWISE NOTED. ANY DIMENSIONS INDICATED AS "CLEAR" OR "FINISH" ARE CRITICAL AND SHALL BE BUILT AS NOTED.

9.1.4 ALL DRYWALL WORK SHALL CONFORM TO INDUSTRY STANDARDS, THE REQUIREMENTS OF THE LATEST "APPLICATION AND FINISHING OF GYPSUM BOARD" BY THE GYPSUM ASSOCIATION, EXCEPT WHERE MORE DETAILED OR MORE STRINGENT REQUIREMENTS ARE INDICATED, INCLUDING THE RECOMMENDATIONS OF THE MANUFACTURER. PROVIDE LEVEL 4 FINISH ON ALL EXPOSED GYPSUM BOARD SURFACES.

9.2 GYPSUM BOARD SHAFT WALL ASSEMBLIES - SEE DRAWINGS

9.3 PATCH AND/OR REPAIR ALL CEILING SURFACES WHERE ANY NEW FIRE PROTECTION OR ANY OTHER RELATED MEP WORK IS REQUIRED.

9.4 ACOUSTICAL PANEL CEILING

9.4.3 ATTIC STOCK: PROVIDE OWNER WITH ONE (1) CARTON EACH OF THE FOLLOWING FINISH ITEMS: ACOUSTICAL CELING PANELS.

9.5 INTERIOR PAINTING

9.5.1 PAINT FINISHES

9.5.2 ALL NEW CONSTRUCTION SHALL BE PAINTED ONE COAT PRIMER, TWO COATS FINISH, UNLESS NOTED OTHERWISE.

9.5.3 ALL DISTURBED EXISTING CONSTRUCTION TO BE PAINTED SHALL BE CLEANED AND PREPPED, THEN REPAINTED WITH TWO COATS UNLESS NOTED OTHERWISE.

9.5.4 ALL EXPOSED METAL SURFACES TO BE PAINTED SEMI-GLOSS FINISH.

9.5.5 ALL PAINT SHALL BE SHERWIN WILLIAMS. ALL WALLS TO RECEIVE FLAT FINISH, METALS AND WOOD TRIM: SEMIGLOSS.

9.5.6 HEAVY DUTY BLOCK FILLER TO BE USED ON INTERIOR OF ALL CONCRETE BLOCK WALLS. PROVIDE 1 ADDITIONAL COAT OF BLOCK FILLER BEYOND MANUFACTURER'S RECOMMENDATION.

9.5.7 ALL COLORS TO MATCH EXISTING UNLESS OTHERWISE NOTED.

9.6 STAINING AND TRASPARENT FINISHING

9.6.1 COLOR : TBD - STAIN TO BE BENJAMIN MOORE OF SHERWIN WILLIAMS STAIN FROM FULL RANGE OF MANUFACTURERS STANDARD COLORS.

9.6.2 FINISH SHALL BE TWO COATS OF STAIN, TWO COATS OF LOW VOC POLYURETHANE, SATIN FINISH UNLESS NOTED.

9.7 INTUMESCENT COATINGS:

9.7.1 PROVIDE FIRE-BARRIER INTUMESCENT COATINGS WHERE INDICATED. BASIS OF DESIGN: FLAMEOFF COATINGS, INC., COMPLIANT WITH ASTM E 119 AND UL 263. AT STEEL COLUMNS INDICATED, PROVIDE INTUMESCENT COATINGS PER UL DESIGN No. Y616 TO RATING INDICATED. USE PRODUCTS ONLY BEARING THE UL CERTIFICATION MARK. STEEL COLUMNS SHALL BE FREE OF DIRT, LOOSE SCALE AND OIL. COLUMNS SHALL BE PRIMED WITH A METAL ALKYD OR EPOXY PRIMER AT NOMINAL THICKNESS OF 1 MIL. INTUMESCENT COATING SPRAY OR BRUSH-APPLIED DIRECTLY FROM CONTAINERS TO REQUIRED THICKNESS FOR THE APPLICABLE RATING. SEE UL PRODUCT iQ FOR UL DESIGN No. Y616 FOR THE REQUIRED MINIMUM FINAL DRY THICKNESS AT APPLICABLE RATING. OTHER MANUFACTURERS INCLUDE: GREENTECH THERMAL INSULATION PRODUCTS MFG CO, LLC, AND ISOLATEK INTERNATIONAL.

11. DIVISION 11: EQUIPMENT

11.1 CONTRACTOR SHALL REMOVE ALL EXISTING BOAT STORAGE RACK EQUIPMENT AS REQUIRED FOR THE PROPER EXECUTION OF THE PROJECT, PER MANUFACTURER'S INSTRUCTIONS. CONTRACTOR SHALL MODIFY BOAT STORAGE RACK EQUIPMENT AS REQUIRED FOR THE INSTALLATION OF THE NEW SPRINKLER SYSTEM, PER MANUFACTURER'S INSTRUCTIONS. CONTRACTOR SHALL RE-INSTALL, AFTER INSTALLATION OF SFRM, THERMAL INSULATION, AND NEW SPRINKLER SYSTEM, IN COORDINATION WITH THE INSTALLATION OF THE NEW SPRINKLER SYSTEM AND ACOUSTICAL PANEL CEILING SYSTEM, PER MANUFACTURER'S INSTRUCTIONS.

11.2 CONTRACTOR SHALL FOLLOW SPECIFIC INSTALLATION GUIDELINES FOR THE RE-INSTALL OF BOAT STORAGE RACKS' STRUCTURAL CONNECTION CLIPS TO EXISTING STEEL FRAMING RECEIVING NEW SFRM AND THERMAL INSULATION. ALL CODE REQUIREMENTS AND UL DESIGN REQUIREMENTS SHALL BE FOLLOWED AS PERTAINS TO THE COVERAGE REQUIRED TO MAINTAIN THE 1-HR RATING ON THE STRUCTURAL STEEL SURFACES.

FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL SPECIFICATIONS ARE FOUND ON MEP/FP DRAWING SHEETS.

NCA

NORTHEAST COLLABORATIVE ARCHITECTS
500 Plaza Middlesex
Middletown, CT. 06457
v: 860-344-9332

MEP/FP Engineers:
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CODE IMPROVEMENTS RIVERFRONT BOATHOUSE

252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:

STATE OF CONNECTICUT · JOHN D. SCHOLL · No. ARI.0009??? · LICENSED ARCHITECT

OUTLINE SPECIFICATIONS

DATE: 11–16–2021
NCA JOB NO.: 21031
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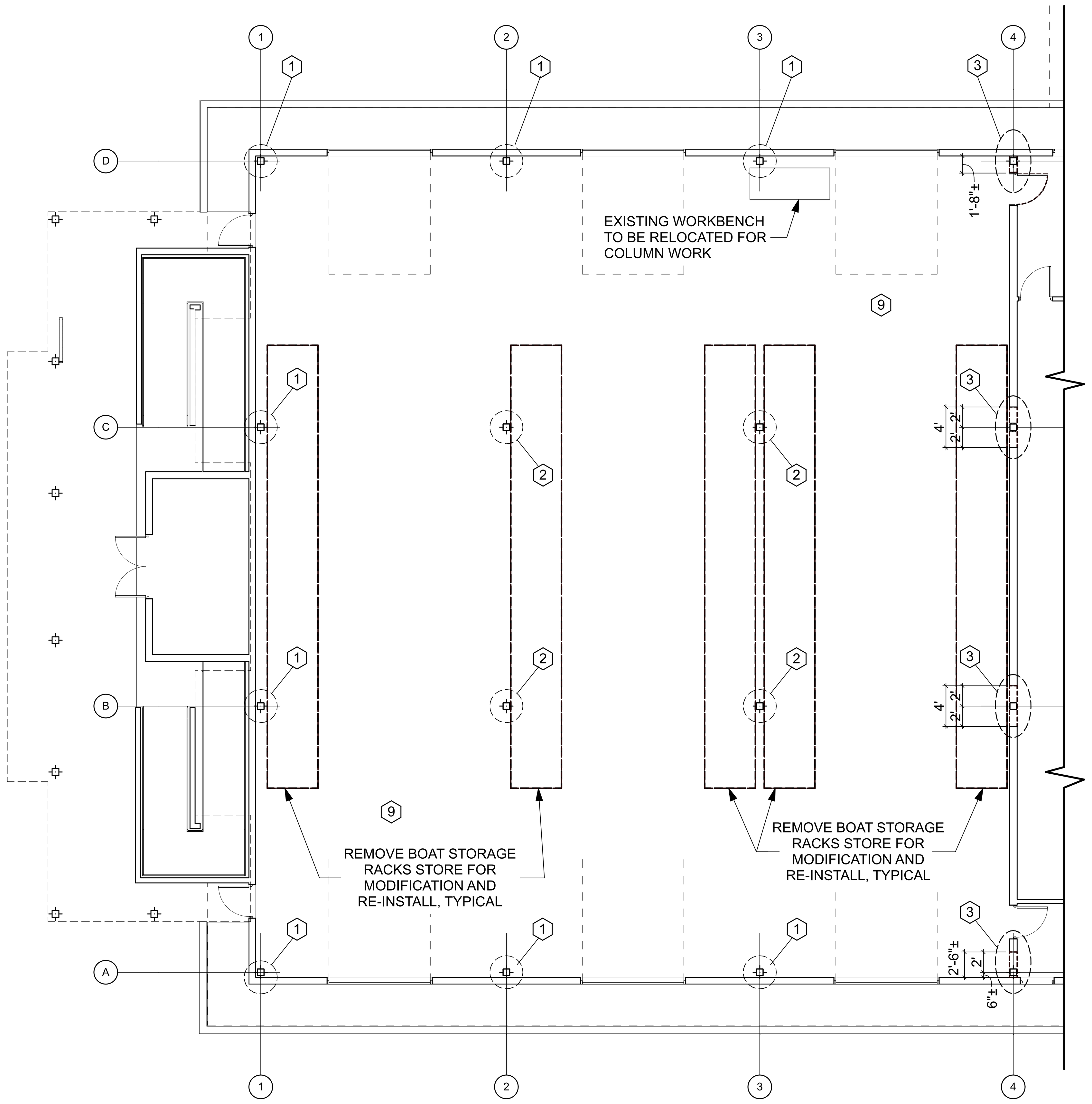
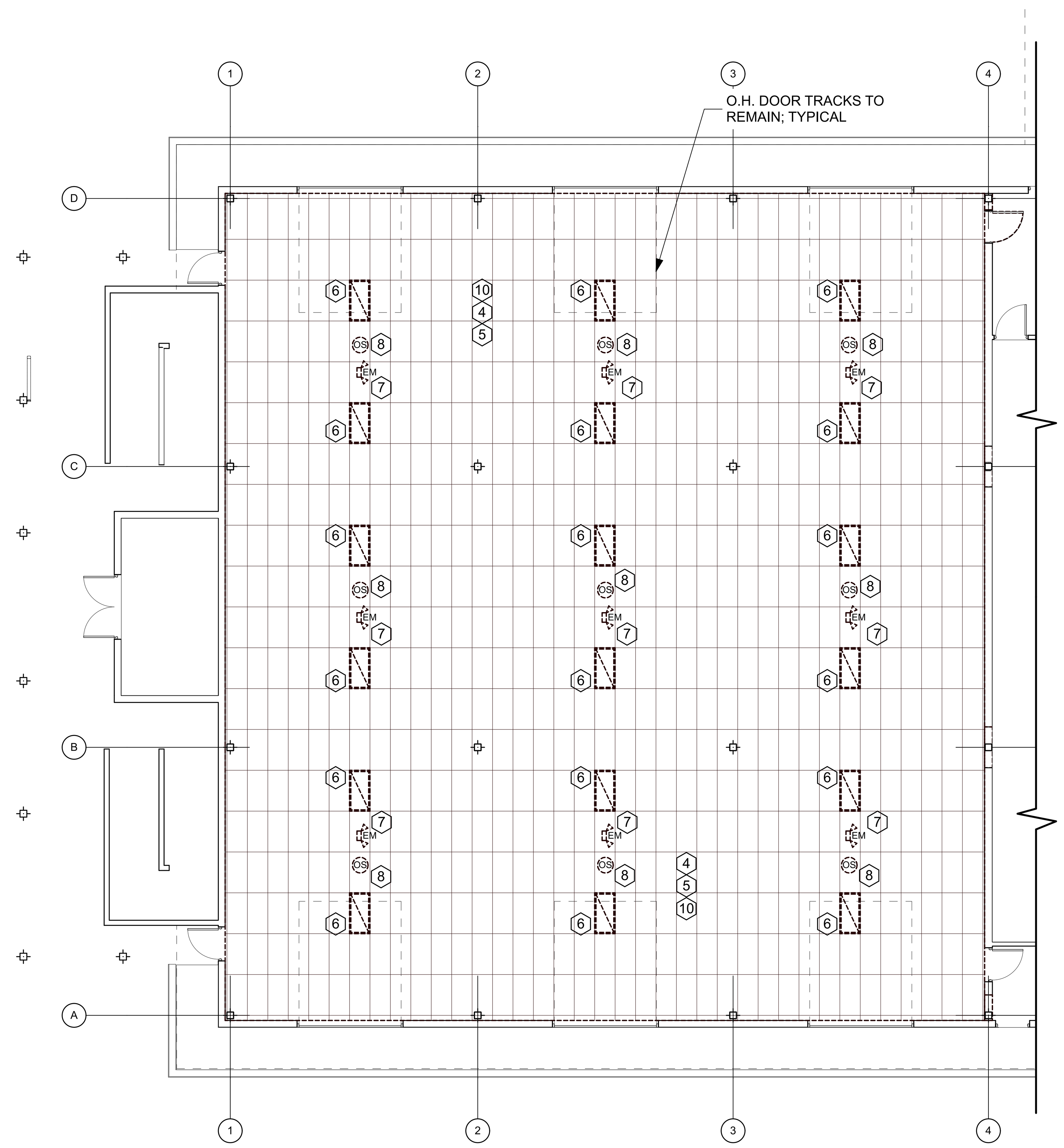


1 GROUND FLOOR DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



BASE BID:
- REMOVE EXISTING CEILING GRID AND TILE, STORE IN A SAFE, DRY ENVIRONMENT FOR RE-INSTALL AT CONCLUSION OF PROJECT.

ALTERNATE #1:
- DEMO AND REMOVE GRID AND CEILING TILES. PREP FOR REPLACEMENT WITH NEW

2 REFLECTED CEILING DEMOLITION PLAN @ GROUND FLOOR

SCALE: 1/8" = 1'-0"

DEMOLITION NOTES

1. CONTRACTOR SHALL COORDINATE ALL ARCHITECTURAL, AND STRUCTURAL DRAWINGS PRIOR TO COMMENCEMENT OF DEMOLITION.
2. DRAWINGS DO NOT PURPORT TO SHOW ALL OBJECTS EXISTING AT THE SITE. BEFORE WORK IS TO COMMENCE, CONTRACTOR SHALL FIELD VERIFY ALL (V.I.F.) EXISTING CONDITIONS AND ELEMENTS TO BE PRESERVED AND REPORT TO THE ARCHITECT ANY DISCREPANCIES OR QUESTIONABLE ITEMS FOR DISCREPANCY RESOLUTION.
3. REFER TO DEMOLITION PLANS AND ELEVATIONS, NOT ALL DEMOLITION ITEMS
4. THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PROTECT AND PRESERVE EXISTING CONDITIONS AND OBJECTS DESIGNATED TO REMAIN. IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY.
5. THE CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO EXISTING ITEMS TO REMAIN. ALL CUTTING IN WALLS TO REMAIN SHALL BE DONE WITH MINIMAL DAMAGE TO ADJACENT AREAS/SURFACES.
6. NOTIFY THE ARCHITECT AT LEAST (2) TWO FULL DAYS PRIOR TO COMMENCING DEMOLITION WORK.
7. REMOVE ALL ELECTRICAL ITEMS INCLUDING BUT NOT LIMITED TO LIGHTING, OUTLETS, CONDUITS, JUNCTION BOXES, PANELS, ETC. REMOVE ALL ATTACHMENTS AS WELL, INCLUDING BRACKETS, CLAMPS, BOLTS, AND LAG SCREWS. DAMAGED EXISTING WOOD OR MASONRY THAT IS TO REMAIN SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO OWNER.
8. PATCH ALL HOLES IN REMAINING CONSTRUCTION WITH NEW MATERIALS THAT MATCH EXISTING. (INCLUDING PIPE HOLES, CONDUIT HOLES, ETC.)
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY.
10. CONTRACTOR SHALL VISIT SITE TO DETERMINE TYPES OF ITEMS TO BE REMOVED, AND APPROPRIATE METHODS FOR THEIR REMOVAL.
11. CONTRACTOR SHALL PROVIDE WALL & FLOOR PROTECTION AS REQUIRED TO NOT DAMAGE SAME.
12. RETURN ALL REUSABLE DEMOLISHED ITEMS TO OWNER U.O.N. OR AS PER OWNER'S INSTRUCTIONS.
13. ALL ITEMS TO REMAIN SHALL BE LEFT IN 'AS FOUND' CONDITION.

KEY NOTES

1. CLEAN AND PREPARE PERIMETER COLUMN INCLUDING CLEAR VOID TO WALL
2. CLEAN AND PREPARE INTERIOR COLUMN
3. DEMO ADJACENT WALL DOWN TO METAL STUD, REMOVE SPRAY INSULATION AS NEEDED.
4. REMOVE CEILING CEILING GRID AND TILES (RETAIN FOR POTENTIAL REUSE); SEE BASE BID AND ALTERNATE #1 DESCRIPTIONS
5. REMOVE EXISTING SPRAY INSULATION AND CLEAN UNDERSIDE OF METAL COMPOSITE DECK.
6. REMOVE LIGHTING FIXTURE, SAVE FOR RE-INSTALLATION; TYPICAL
7. REMOVE EMERGENCY FIXTURE PACK, SAVE FOR RE-INSTALLATION; TYPICAL
8. REMOVE OCCUPANCY SENSOR, SAVE FOR RE-INSTALLATION; TYPICAL
9. CLEAN AND PREPARE CONCRETE FLOOR FOR STRIPPING
10. REMOVE EXISTING SPRINKLER PIPING AND HEADS; SEE FIRE PROTECTION DRAWINGS

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500 Plaza Middlesex
Middletown, CT. 06457
v: 860-344-9332

MEP/FP Engineers:
Consulting Engineering Services (CES)
811 Middle Street
Middletown, CT 06457
Phone: (860) 632-1682

CODE IMPROVEMENTS RIVERFRONT BOATHOUSE

252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

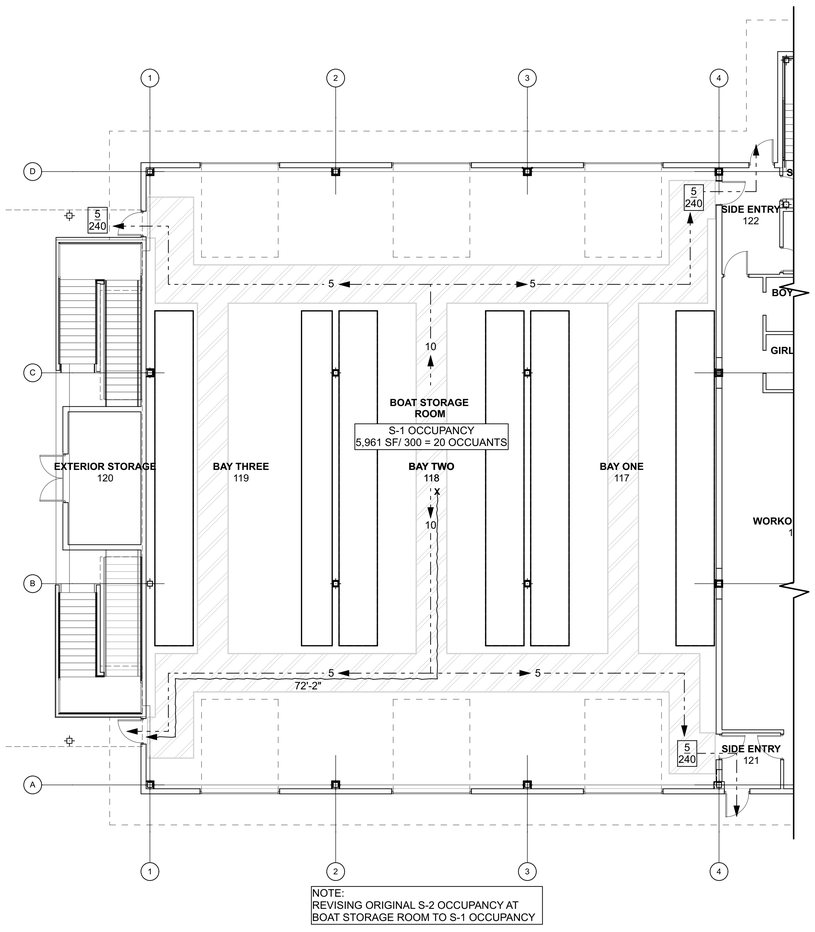
#	DESCRIPTION	DATE

REVISIONS:

GROUND FLOOR DEMOLITION PLANS

DATE: 11-16-2021
NCA JOB NO.: 21031
DRAWING NO.: AD-101

PRINTED: Monday, November 22, 2021, 12:05 PM



1 GROUND FLOOR CODE PLAN

SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CODE NOTES:

1. ALL PENETRATIONS BETWEEN GROUND FLOOR AND UPPER FLOOR SHALL BE SMOKE TIGHT
2. ALL PENETRATIONS BETWEEN GROUND FLOOR (BOAT STORAGE AREA) AND UPPER FLOOR SHALL MEET A 1-HR FIRE RATING

CODE LEGEND:

ACTUAL MUNBER OF OCCUPANTS / CAPACITY OF EGRESS COMPONENT — 5 / 240

PATH OF EGRESS — 5

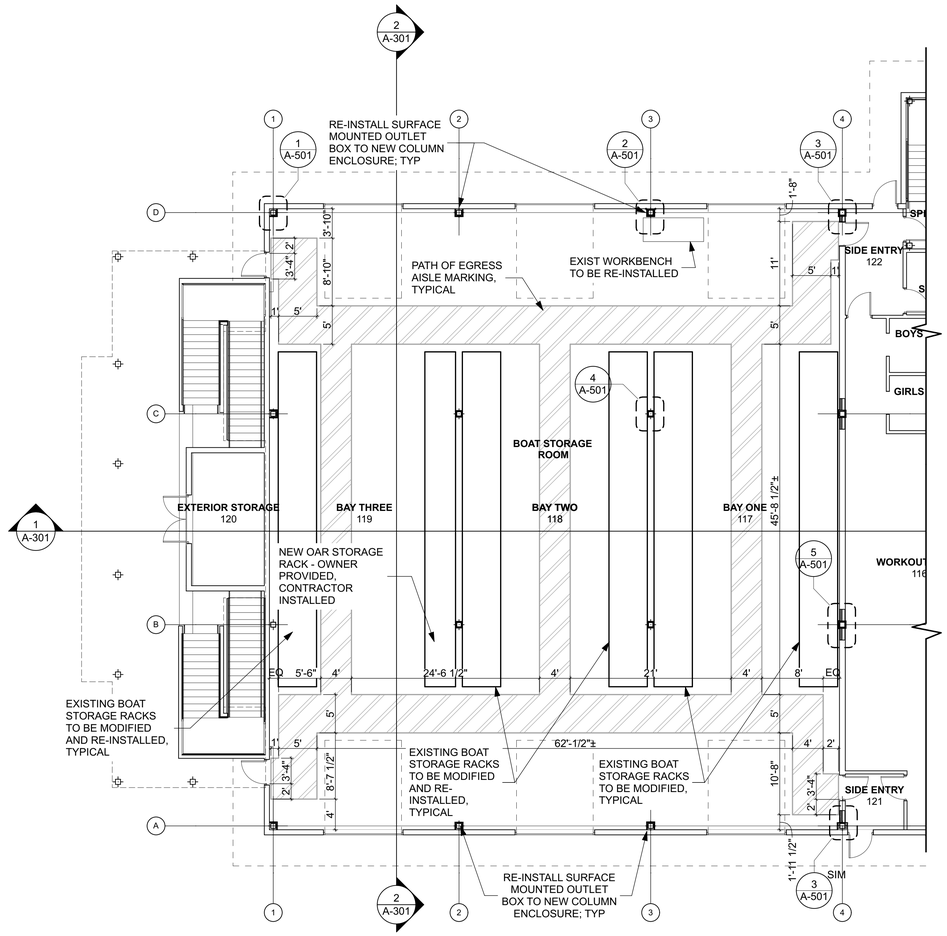
EXIST ACCESS TRAVEL DISTANCE (250' ALLOWABLE) — 90'-0"

STATE BUILDING CODE
International Building Code 2003
Connecticut Supplement 2005, 2009, 2011

International Energy Conservation Code, 2009, With 2011 Amendment
State Public Health Code
2003 ICC / ANSI A117.1

STATE FIRE SAFETY CODE
International Fire Code 2003
NFPA 1, Uniform Fire Code 2003
NFPA 101, Life Safety Code 2003
NFPA 70, 2005
Connecticut Supplement 2005, 2009

1.0	CLASSIFICATION OF OCCUPANCY (Chapter 6):	Mixed (Assembly, Storage)
2.0	CONSTRUCTION CLASSIFICATION:	New
3.0	MINIMUM CONSTRUCTION TYPE REQUIRED:	Type II-000
4.0	ACTUAL CONSTRUCTION TYPE PROVIDED:	Type II-000
5.0	NOTIFICATIONS/ALARMS (Chapter 9):	Audible/Visual
6.0	DETECTION (Chapter 9):	Smoke/Heat Where Required
7.0	EXTINGUISHMENT REQUIREMENTS (Chapter 9):	Automatic Sprinkler System



2 GROUND FLOOR CONSTRUCTION PLAN

SCALE: 1/8" = 1'-0"

0 4' 8' 16'

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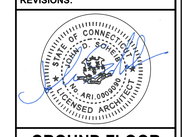
CODE IMPROVEMENTS RIVERFRONT BOATHOUSE

252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:



GROUND FLOOR CODE PLAN AND CONSTRUCTION PLAN

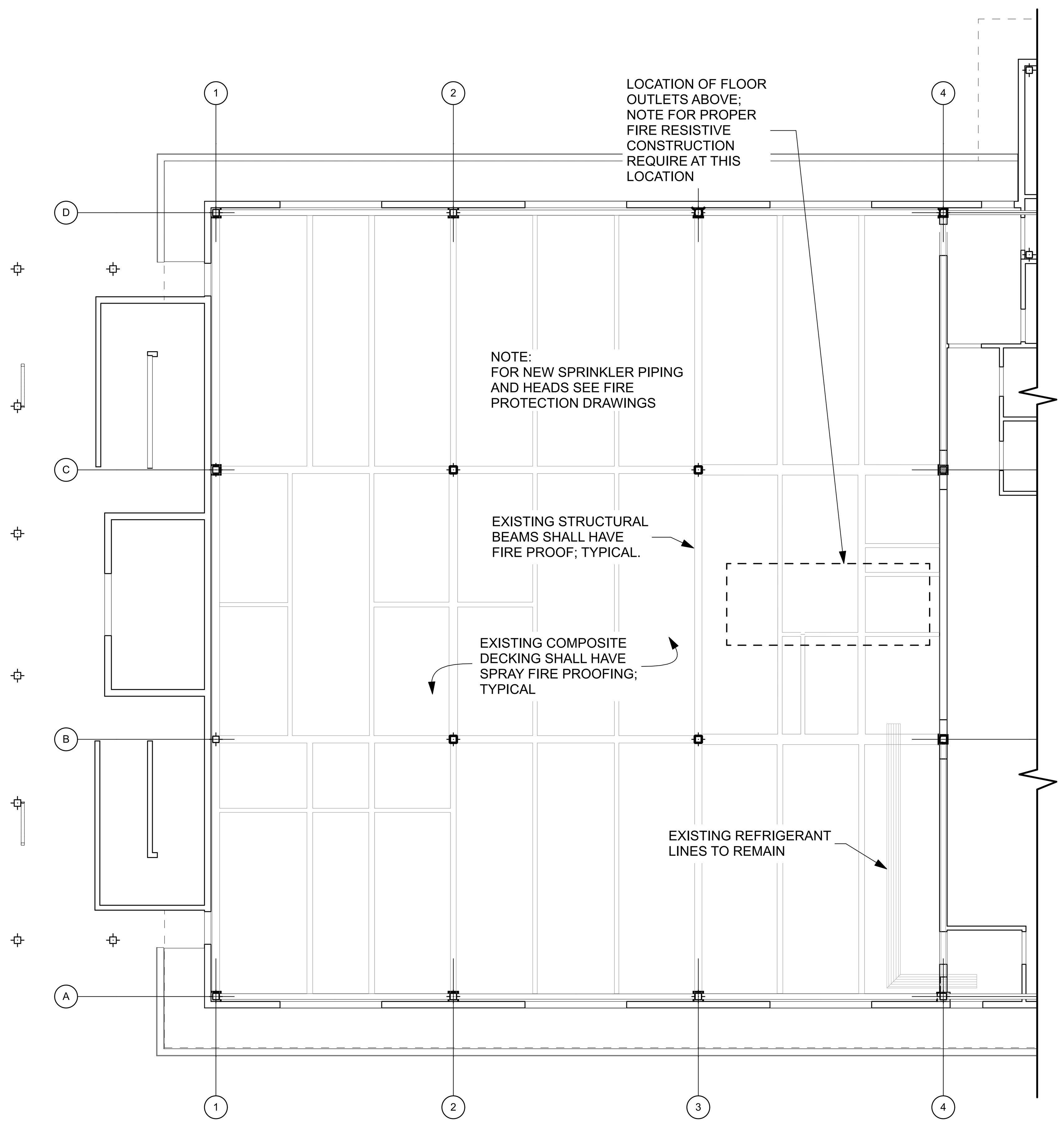
DATE: 11–16–2021

NCA JOB NO.: 21031

DRAWING NO.:

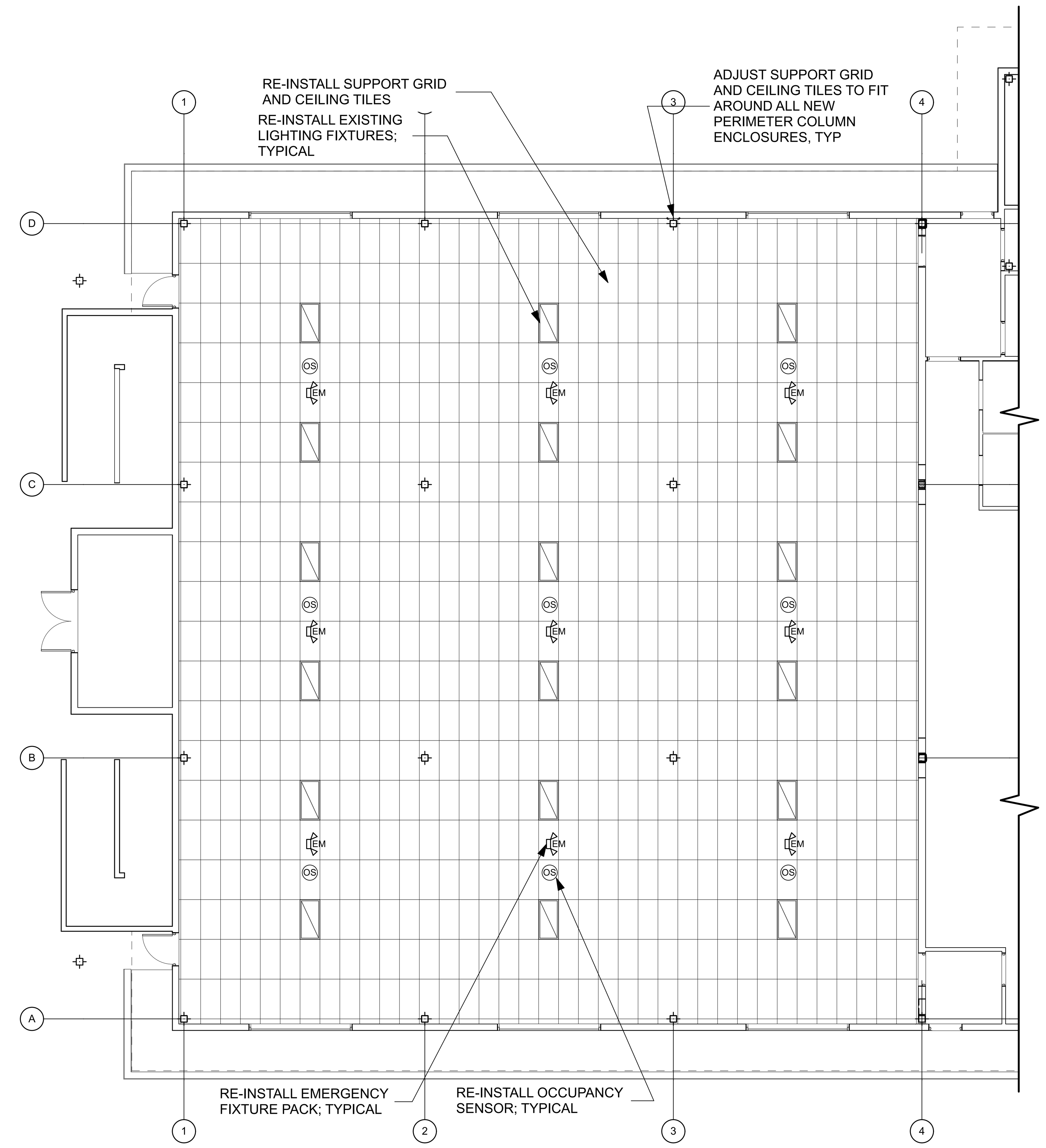
A-101

PRINTED: Monday, November 22, 2021, 12:05 PM



1 GROUND FLOOR @ ABOVE CEILING

SCALE: 1/8" = 1'-0"



BASE BID:
- RE-INSTALL EXISTING AT GRID, CEILING TILES.

ALTERNATE #1:
- NEW SUSPENDED ACOUSTICAL CEILING GRID
- NEW CEILING TILES TO MATCH EXISTING

2 GROUND FLOOR REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

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500 Plaza Middlesex
Middletown, CT. 06457
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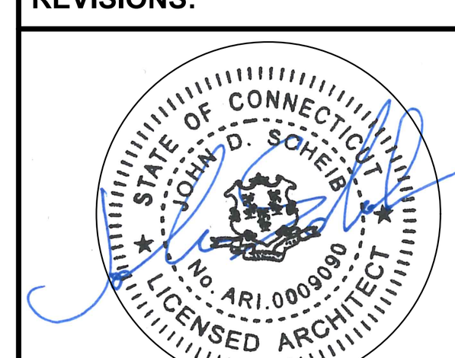
252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:

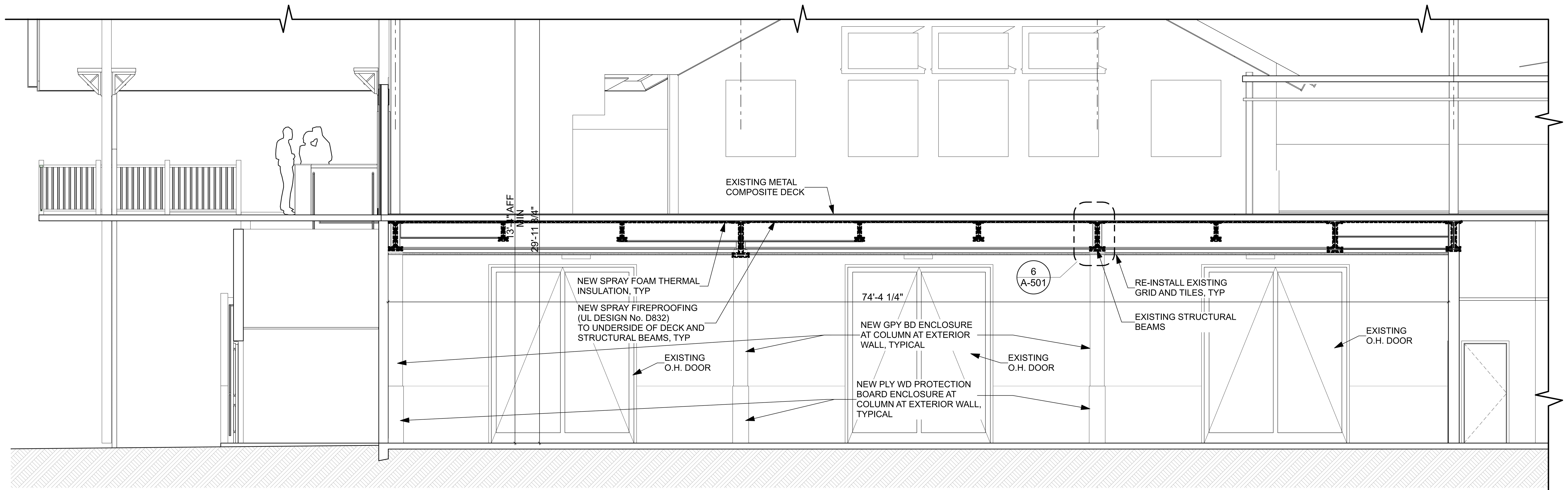


GROUND FLOOR CEILING PLANS

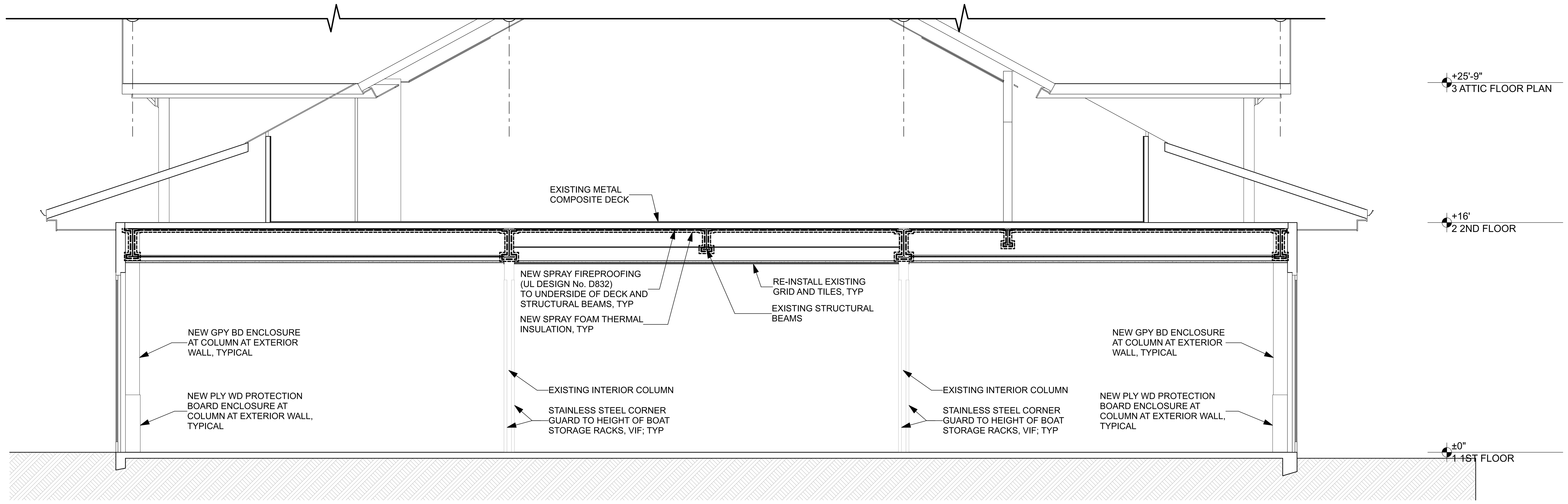
DATE: 11–16–2021
NCA JOB NO.: 21031
DRAWING NO.:

A-102

PRINTED: Monday, November 22, 2021, 12:05 PM



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



2 BUILDING SECTION
SCALE: 1/4" = 1'-0"

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500 Plaza Middlesex
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GLASTONBURY, CT. 06033

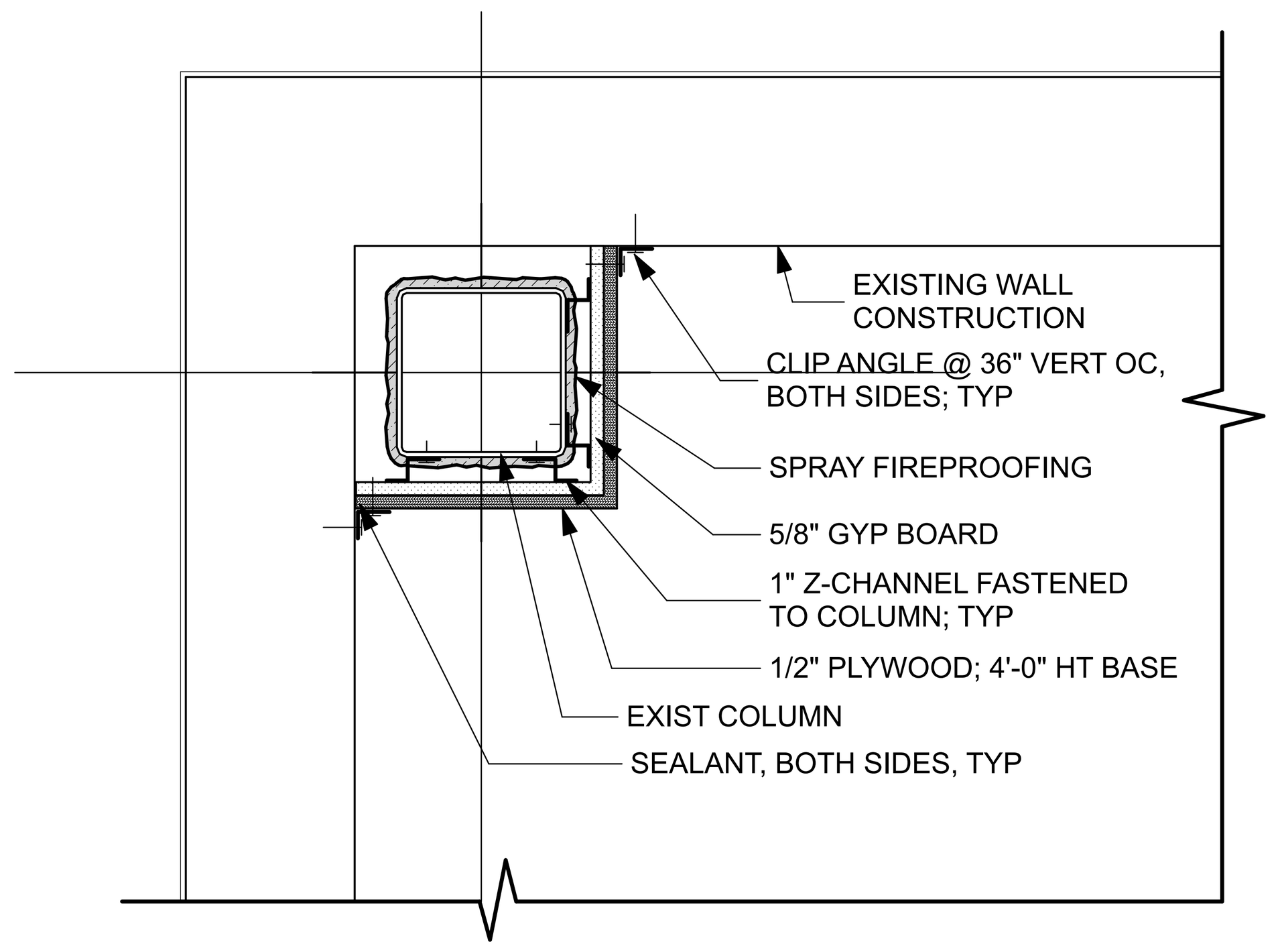
OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

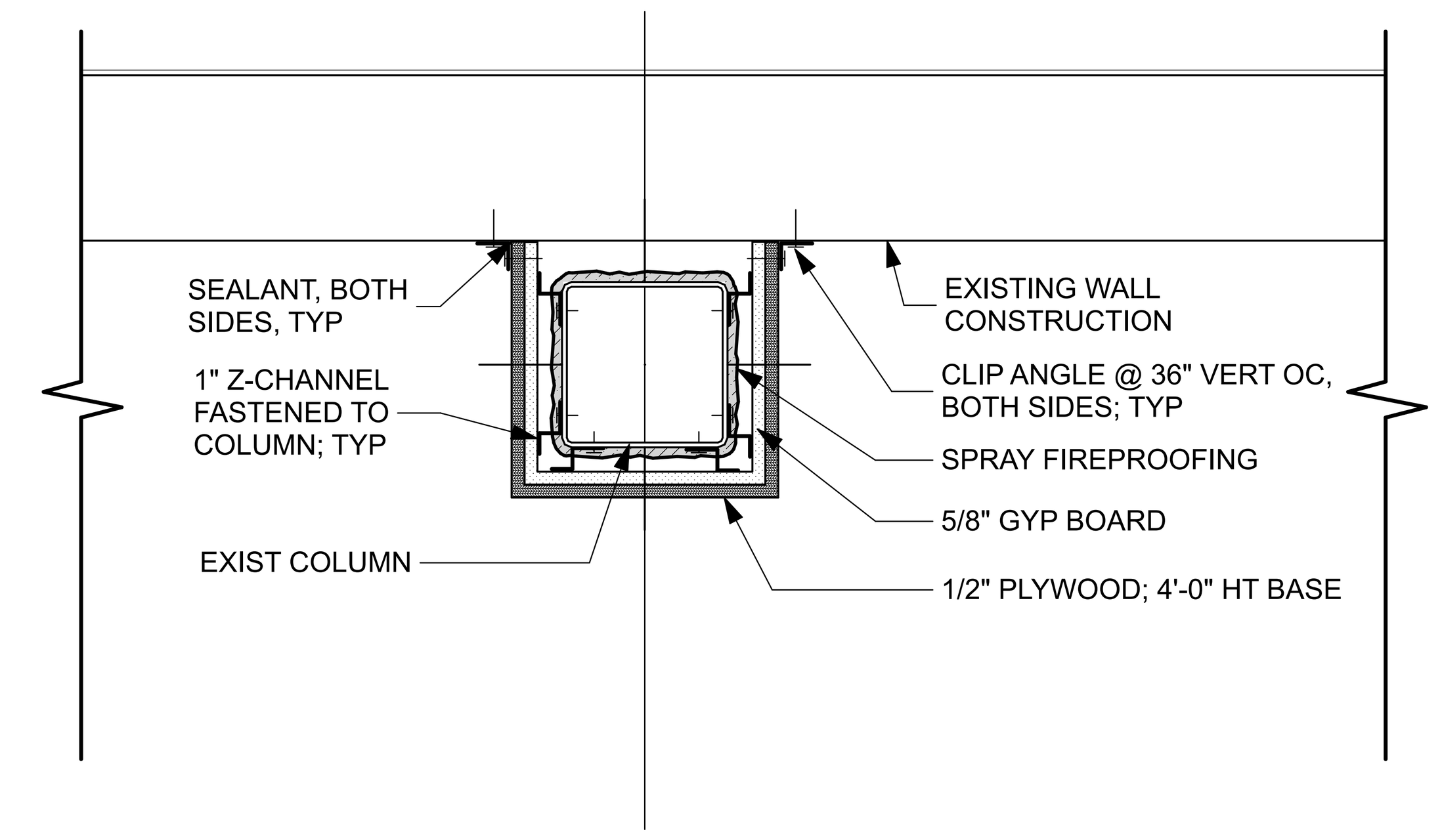
REVISIONS:

BUILDING SECTIONS

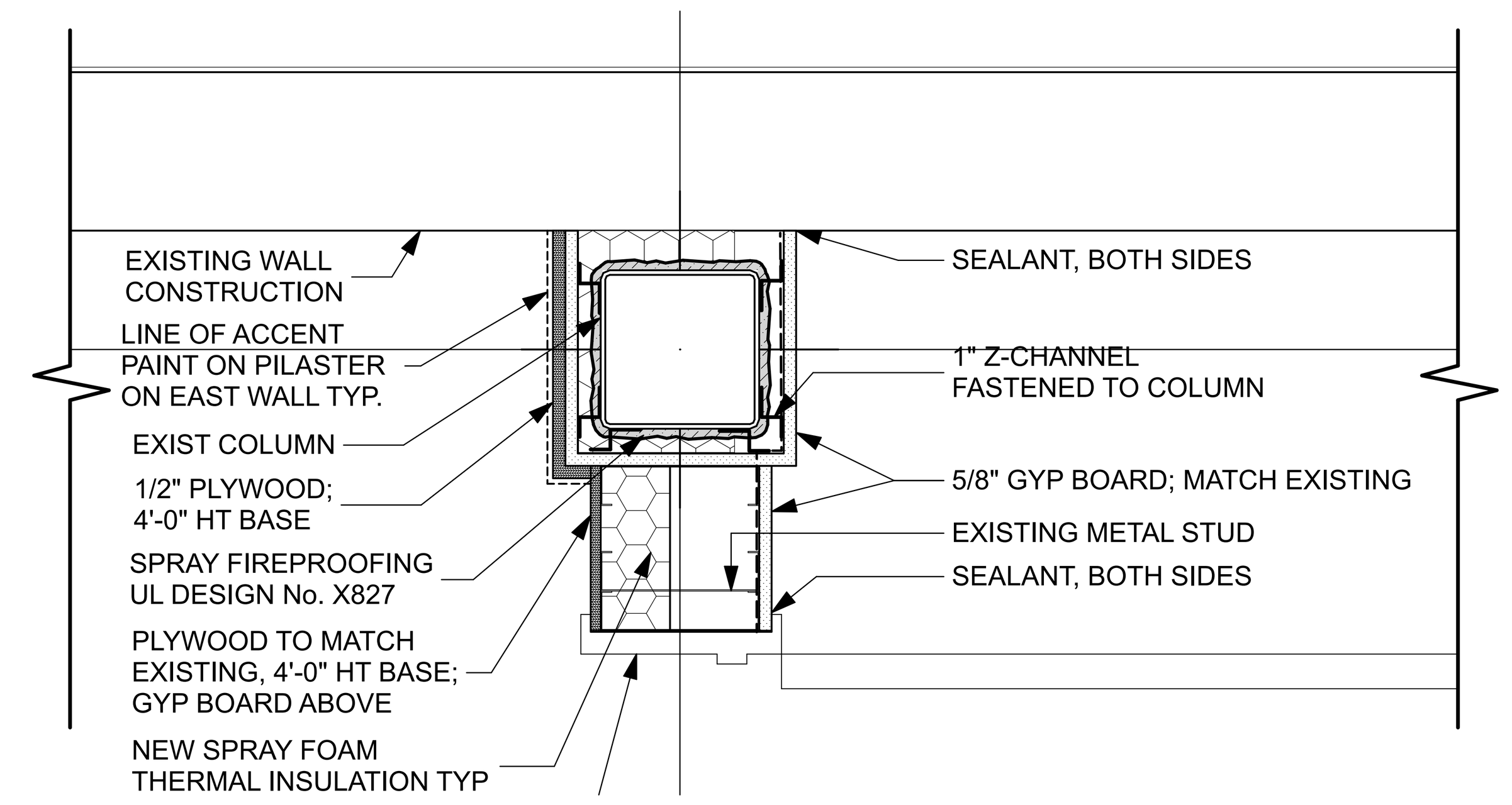
DATE: 11–16–2021
NCA JOB NO.: 21031
DRAWING NO.: **A-301**



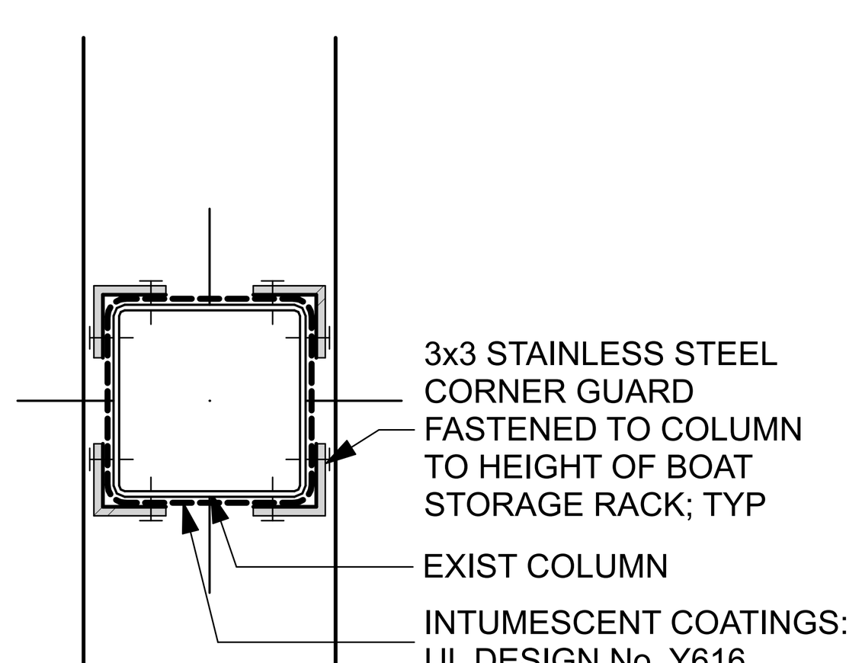
1 ENLARGED FLOOR PLAN @ 1 1/2"
SCALE: 1 1/2"= 1'-0"



2 ENLARGED FLOOR PLAN @ 1 1/2"
SCALE: 1 1/2"= 1'-0"

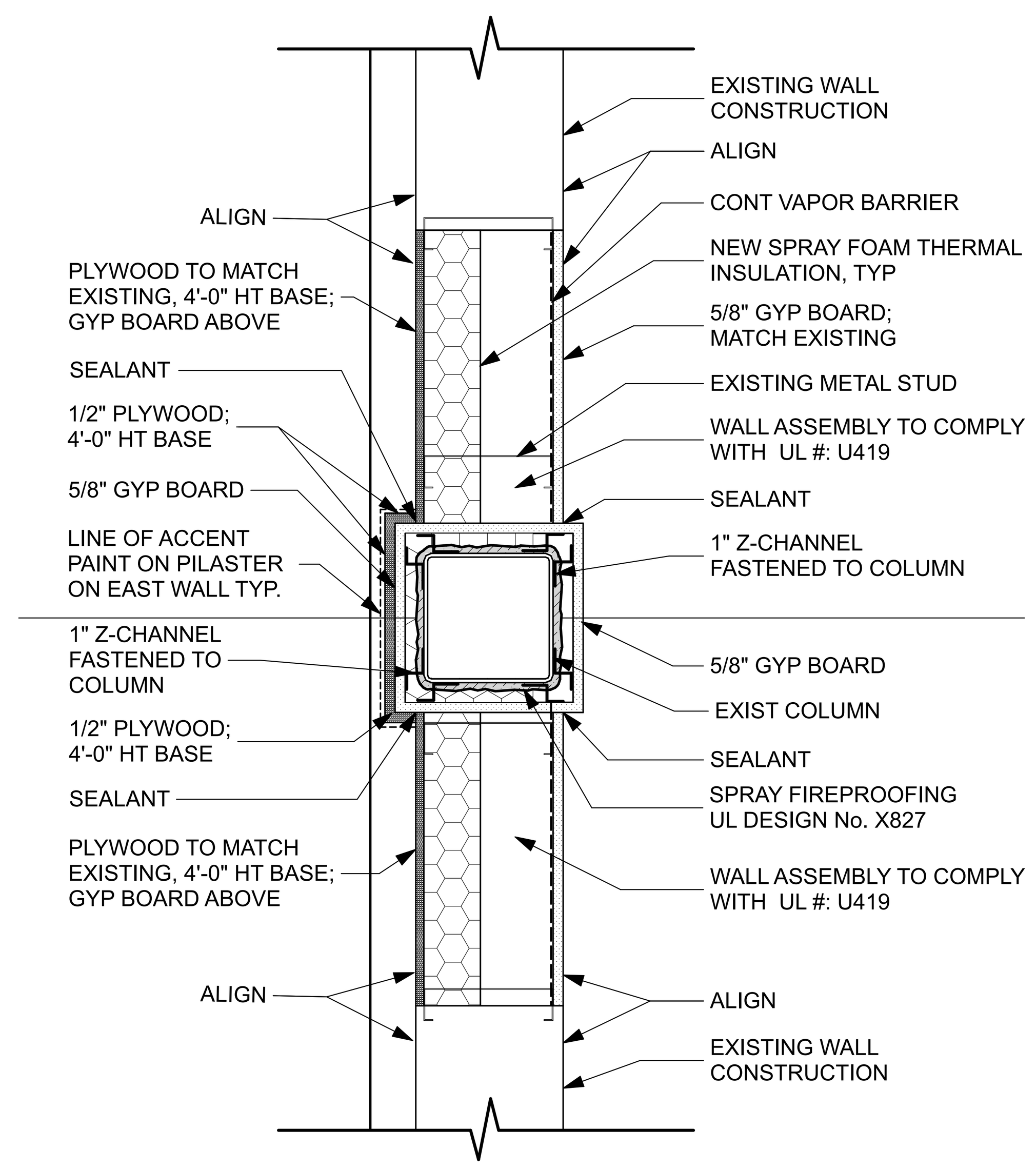


3 ENLARGED FLOOR PLAN @ 1 1/2"
SCALE: 1 1/2"= 1'-0"

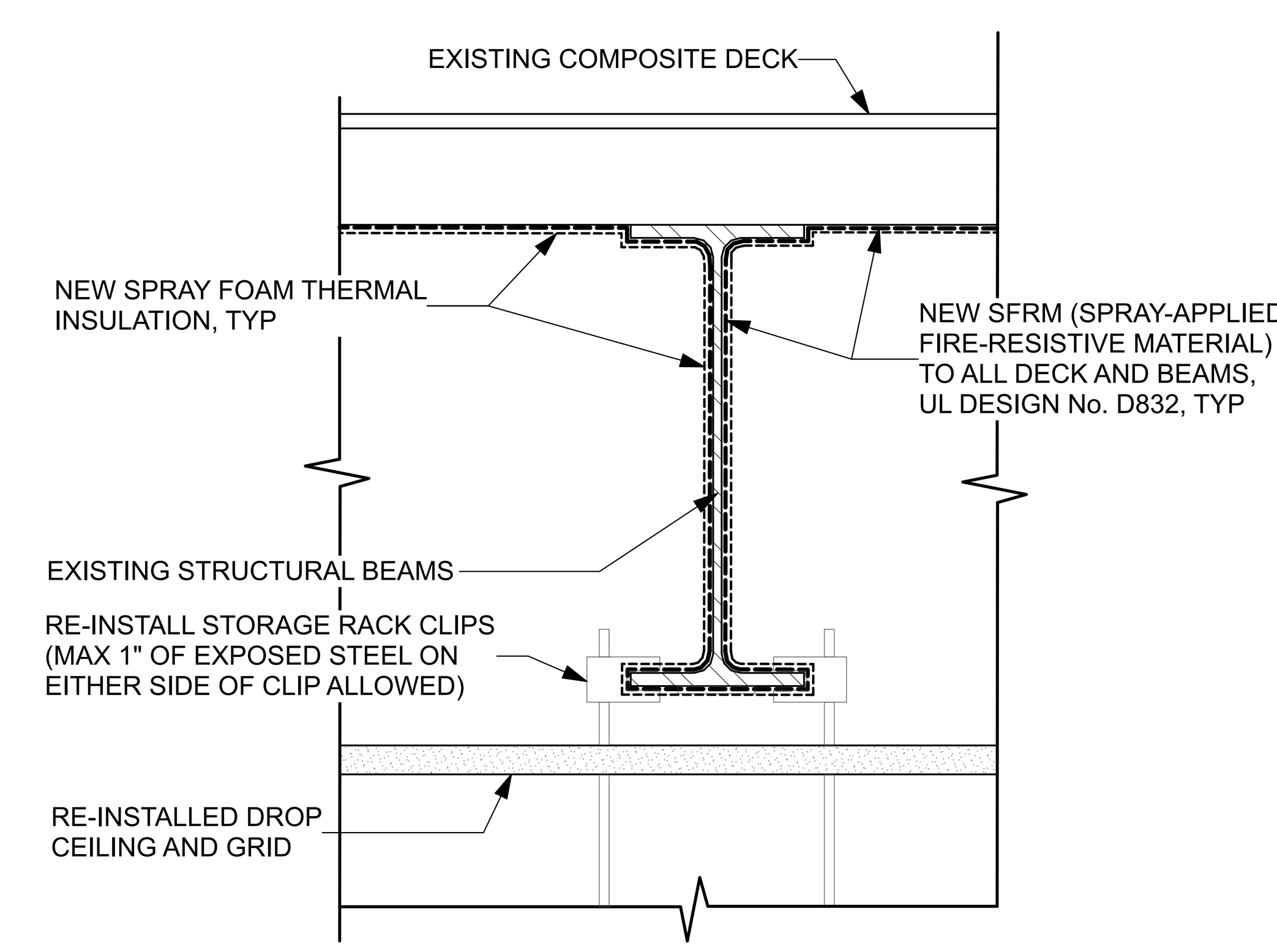


NOTE:
ALL CONNECTIONS TO STEEL COLUMNS MUST BE COMPLIANCE WITH REQUIREMENTS OF THE UL DESIGN ASSEMBLY AND NFPA CODE REQUIREMENTS

4 ENLARGED FLOOR PLAN @ 1 1/2"
SCALE: 1 1/2"= 1'-0"



5 ENLARGED FLOOR PLAN @ 1 1/2"
SCALE: 1 1/2"= 1'-0"



6 TYP. SECTION DETAIL @ O.H. BEAMS
SCALE: 1 1/2"= 1'-0"

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NORTHEAST COLLABORATIVE ARCHITECTS
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252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:

STATE OF CONNECTICUT LICENSED ARCHITECT No. ARI.0[illegible]

PLAN DETAILS AND SECTION DETAIL

DATE: 11-16-2021
NCA JOB NO.: 21031
DRAWING NO.:
A-501

PRINTED: Monday, November 22, 2021, 12:05 PM

FIRE PROTECTION SYMBOL LEGEND

SYMBOL	DESCRIPTION
DRY	SPRINKLER MAIN (DRY)
WET	SPRINKLER MAIN (WET)
	ALARM BELL
	"WET" ALARM VALVE RISER
	"DRY" ALARM VALVE RISER
	"DRY" PREACTION, DELUGE VALVE RISER
	ANGLE VALVE
	SITE GLASS
	FIRE DEPARTMENT CONNECTION
	POST INDICATOR VALVE
	FLUSH MOUNTED FIRE PUMP TEST HEADER
	SURFACE MOUNTED FIRE PUMP TEST HEADER
	90° ELBOW DOWN
	90° ELBOW UP
	TEE UP
	TEE DOWN
	DROP AND RUN
	UNION
	OS&Y GATE VALVE
	GATE VALVE
	CHECK VALVE
	BALL VALVE/DRAIN VALVE
	BUTTERFLY VALVE
	RELIEF VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY AND DRAIN
	STRAINER
	PRESSURE GAUGE
	PRESSURE REDUCING VALVE
	CONNECT NEW TO EXISTING
	POST MOUNTED FIRE DEPARTMENT CONNECTION
	STORZ FIRE DEPARTMENT CONNECTION
FS	FLOW SWITCH
TS	TAMPER SWITCH
PS	PRESSURE SWITCH
ATS	AUTOMATIC TRANSFER SWITCH
FPC	FIRE PUMP CONTROLLER
JPC	JOCKEY PUMP CONTROLLER
PAC	PREACTION ALARM ASSEMBLY CABINET
HVC	HOSE VALVE CABINET

SPRINKLER SYSTEM NOTES

1. THESE GENERAL NOTES ARE APPLICABLE TO ALL FIRE PROTECTION DRAWINGS.
2. DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL INTENT OF WORK, SEE DETAILS, RISERS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. THE DRAWINGS INDICATE A SUGGESTED SPRINKLER HEAD LAYOUT AND THAT EACH AREA IS COVERED BY SPRINKLER PROTECTION AS REQUIRED BY ALL APPLICABLE STATE OF [CT] BUILDING AND FIRE CODES. THE SPRINKLER QUANTITIES SHALL NOT BE COUNTED. AS A TAKE OFF OR AS EXACT LOCATIONS. EXACT SPACING, DENSITY, AND LOCATION REQUIREMENTS SHALL BE AS DICTATED BY NFPA 13.
4. FLOW DATA PERFORMED ON NOVEMBER 3, 2020 AT A HYDRANT LOCATED AT GLASTONBURY BOATHOUSE WAS RECORDED AS FOLLOWS:

   STATIC PRESSURE: 106 PSI
   RESIDUAL PRESSURE: 100 PSI
   FLOW RATE: 1550 GPM

   THIS FLOW DATA SHALL BE USED AS A GUIDE BY THE CONTRACTOR. THE CONTRACTOR SHALL PERFORM AN ADDITIONAL FLOW TEST TO VERIFY THIS INFORMATION. INFORMATION FROM THE CONTRACTOR'S FLOW TEST SHALL BE USED FOR HYDRAULIC CALCULATIONS.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS INCLUDING EXISTING TEE OUTLET SIZE FOR ALL RETURN BEND ASSEMBLIES. BEFORE ANY NEW WORK STARTS, THE CONTRACTOR SHALL DETERMINE THAT ALL EXISTING OUTLETS ARE A MINIMUM OF ONE INCH. IF IT IS DETERMINED THAT THE EXISTING OUTLET SIZE IS LESS THAN ONE INCH, ALL SPRINKLER WORK SHALL STOP AND IT SHALL BE BROUGHT TO THE ARCH/ENGINEERS ATTENTION. THE CONTRACTOR SHALL NOT PROCEED WITH WORK UNTIL DIRECTION IS GIVEN BY THE ARCH/ENGINEER.
6. COMBINED INSIDE AND OUTSIDE HOSE STREAM ALLOWANCE FOR HYDRAULIC CALCULATIONS SHALL BE 250 GPM.
7. HYDRAULIC CALCULATIONS SHALL INCLUDE A SAFETY FACTOR OF 10 PSI.
8. PIPE VELOCITY AT ANY POINT OF THE SYSTEM SHALL NOT EXCEED 18 FPS.
9. INSTALLATION OF SPRINKLERS SHALL BE BASED ON THE FOLLOWING:

AREA	OCCUPANCY CLASSIFICATION	DENSITY (GPM/SF)	AREA OF APPLICATION (SF)
STORAGE BAYS	ORDINARY HAZARD GROUP 2	0.30	2000

FIRE PROTECTION ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
ATS	AUTOMATIC TRANSFER SWITCH
CR	CORROSION RESISTANT
D	DRY
DCV	DOUBLE CHECK VALVE
EC	EXTENDED COVERAGE
ELEV	ELEVATION
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FD	FIRE DEPARTMENT
FDC	FIRE DEPARTMENT CONNECTION
FHV	FIRE HOSE VALVE
FP	FIRE PROTECTION
FPC	FIRE PUMP CONTROLLER
FPM	FEET PER MINUTE
FS	FLOW SWITCH
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	TOTAL DEVELOPED HEAD
HTC	HIGH TEMPERATURE CLASSIFICATION
HVC	HOSE VALVE CABINET
ITC	INTERMEDIATE TEMPERATURE CLASSIFICATION
JP	JOCKEY PUMP
JPC	JOCKEY PUMP CONTROLLER
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
OS&Y	OUTSIDE SCREW AND YOLK
PA	PREACTION
PAC	PREACTION ALARM VALVE CABINET
PD	PRESSURE DROP
PIV	PRESSURE INDICATOR VALVE
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
SS	SUPERVISORY SWITCH
TS	TAMPER SWITCH
TYP	TYPICAL
V	VOLTS
VEL	VELOCITY
WG	WIRE GUARD

FIRE PROTECTION DEMOLITION NOTES

1. THE FIRE PROTECTION CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING SYSTEM AND CONDITIONS IN AREAS OF RENOVATION.
2. ALL EXISTING PIPING AND EQUIPMENT SHOWN HAS BEEN TAKEN FROM THE BEST AVAILABLE EXISTING INFORMATION. THE DRAWINGS ARE DIAGRAMMATIC AND ALL PIPING AND DEVICES MAY NOT BE SHOWN. THE INTENT OF THESE DRAWINGS IS THAT IN ALL AREAS OF RENOVATION THAT THESE SYSTEMS ARE REMOVED UNLESS OTHERWISE INDICATED WHETHER OR NOT SHOWN.
3. THE FIRE PROTECTION CONTRACTOR SHALL REMOVE ALL FIRE PROTECTION PIPING SYSTEM INCLUDING BUT NOT LIMITED TO SPRINKLER/STANDPIPE, SPRINKLER HANGERS, VALVE, SWITCHES, AND DEVICES UNLESS OTHERWISE INDICATED. COORDINATE WITH ELECTRICAL CONTRACTOR ALL WIRING WORK RELATED TO DEVICES BEING REMOVED.
4. ALL PIPING TO BE REMOVED SHALL BE REMOVED COMPLETELY OR CAPPED AS SHOWN WITHOUT LEAVING ANY DEAD ENDED PIPING OR ABANDONED PIPING.
5. NO FIRE PROTECTION EQUIPMENT OR DEVICES THAT HAVE BEEN DISCONNECTED OR ABANDONED SHALL REMAIN.
6. IT IS THE INTENT OF THESE DRAWINGS THAT ANY AND ALL DEVICES REMOVED SHALL NOT BE REUSED SUCH AS SPRINKLERS, BUT ONLY NEW SHALL BE INSTALLED.
7. ANY SYSTEM OR EQUIPMENT TO REMAIN ACTIVE DURING RENOVATION SHALL BE KEPT IN OPERATION BY PROVIDING TEMPORARY CONNECTIONS AS REQUIRED UNTIL NEW SYSTEMS ARE INSTALLED AND OPERATIONAL.
8. ALL SERVICE INTERRUPTIONS SHALL BE COORDINATED WITH THE OWNER A MINIMUM OF 3 DAYS IN ADVANCE, THE FIRE MARSHALL MUST BE CONTACTED IN ADVANCE PRIOR TO COMMENCEMENT OF ANY WORK.
9. THE FIRE MARSHALL AND OR THE INSURANCE UNDERWRITER SHALL BE CONTACTED TO REVIEW AND APPROVE THE EXTENT OR PHASING OF THE FIRE PROTECTION DEMOLITION IN ORDER TO PROTECT THE OCCUPANTS AND PROPERTY. THESE DOCUMENTS DO NOT ADDRESS THE PHASING OF THE SYSTEM REMOVAL, ONLY THE EXTENT.
10. THE FIRE PROTECTION CONTRACTOR SHALL ALSO REVIEW THE ARCHITECTURAL DEMOLITION DRAWINGS AS PART OF THIS CONTRACT FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FIRE PROTECTION DEMOLITION LEGEND

ABBREVIATION	DESCRIPTION
	REMOVE PIPE, FIXTURE OR EQUIPMENT
ETR	EXISTING TO REMAIN
ER	EXISTING TO BE RELOCATED
R	REMOVE

COMMERCIAL SPRINKLER HEAD SCHEDULE

SYMBOL	K-FACTOR	STANDARD (STR) OR QUICK RESPONSE (QR)	UPRIGHT	PENDENT	RECESSED	CONCEALED PENDENT	HORIZONTAL SIDEWALL	WITH GUARD	ABOVE CEILING	DRY	INSTITUTIONAL	EXTENDED COVERAGE	UL-LISTED	FM-APPROVED	MANUFACTURER & MODEL	MAXIMUM LISTED COVERAGE AREA L x W (FT)	MINIMUM REQUIRED PRESSURE (PSI)	GENERAL LOCATION OF SPRINKLER HEADS (REFER TO DRAWINGS FOR ACTUAL LOCATIONS)	NOTE: *ALL FINISHES ARE SUBJECT TO APPROVAL BY ARCHITECT. FINISH*	CLASSIFICATION
$\bullet_D$	8.0	QR		∘						∘			∘		VIKING MODEL# VK290	15 x 15	7 PSI	STORAGE	BRASS	LIGHT & ORDINARY HAZARD
$\boxtimes_D$	8.0	QR	∘					∘		∘			∘	∘	VIKING MODEL# VK566 WITH #E-1 WATER SHIELD & #D-1 SPRINKLER GUARD	15 x 15	7 PSI	IN RACK	BRASS	LIGHT & ORDINARY HAZARD

NOTES:
1. ALL TYPES OF SPRINKLER HEADS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDED SPRINKLER GUARDS IN MECHANICAL ROOMS, ELECTRICAL & TELECOM (I.T.) CLOSETS, UPS ROOMS AND ALL ROOMS WHERE SPRINKLERS MAY BE SUBJECT TO ACCIDENTAL DAMAGE.
3. ALL SPRINKLER HEADS THROUGHOUT SHALL BE OF ORDINARY TEMPERATURE RATING (135 - 170 DEG. F.), WITH THE FOLLOWING EXCEPTIONS:
   A. SPECIFIED IN TABLE BELOW AS INTERMEDIATE OR HIGH TEMPERATURE RATING.
   B. SPRINKLER HEADS LOCATED CLOSE TO KITCHEN EQUIPMENT, HEATERS, STEAM PIPE OR LOW-PRESSURE BLOW-OFF VALVE SHALL BE OF THE TEMPERATURE RATING AS REQUIRED BY APPLICABLE EDITION OF NFPA - 13. DRAWINGS, PREPARED BY THE FIRE PROTECTION CONTRACTOR SHALL BE COORDINATED WITH THE HVAC CONTRACTOR AND ALL HVAC EQUIPMENT WHICH CAN AFFECT THE RATING OF THE SPRINKLER HEADS. SPRINKLER HEADS SHALL BE CLEARLY IDENTIFIED ON THE SHOP DRAWINGS PRIOR TO SUBMISSION FOR APPROVAL.
4. ALL SPRINKLER HEAD SYMBOLS NOT SHOWN ON PLANS. REFER TO "GENERAL LOCATION" COLUMN FOR ESTIMATING.
5. SPRINKLER SELECTIONS ARE BASED ON PRODUCTS MANUFACTURED BY VIKING. RELIABLE AND/OR TYCO PRODUCTS SHALL BE CONSIDERED APPROVED EQUAL PRODUCTS AND ARE SUBJECT TO THE APPROVAL OF THE ENGINEER AND ARCHITECT.
6. SPRINKLER CONTRACTOR SHALL COORDINATE THE LOCATIONS OF SPRINKLER HEADS WITH STRUCTURAL ELEMENTS AND HVAC DUCTWORK.

NCA
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500 Plaza Middlesex
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v: 860-344-9332

MEP/FP Engineers:
Consulting Engineering Services (CES)
811 Middle Street
Middletown, CT 06457
Phone: (860) 632-1682

CES Consulting Engineering Services, Inc.
811 Middle Street
Middletown, CT 06457
T (860) 632-1682
F (860) 632-1768
www.cesct.com

CES #2021548.00

CODE IMPROVEMENTS
252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:

STATE OF CONNECTICUT — ROBERT SMITH JR. — No. 18073 — LICENSED PROFESSIONAL ENGINEER

FIRE PROTECTION ABBREVIATIONS, NOTES AND SYMBOLS

DATE: 11–16–2021
NCA JOB NO.: 21031
DRAWING NO.: FP0.00

x:PRINTED: Wednesday, November 17, 2021 , 11:46 AM

21 00 00 - GENERAL

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

B. THESE SPECIFICATIONS ARE APPLICABLE TO ALL PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS UNLESS NOTED OTHERWISE. REVIEW THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING DRAWINGS FOR NOTES, DIMENSIONS, ETC., AND COORDINATE WITH OTHER TRADES INVOLVED.

C. DESCRIPTION

1. THIS PROJECT COMPRISES ALTERATIONS AND RENOVATIONS TO THE EXISTING BUILDING. THE EXISTING BUILDING IS CURRENTLY OCCUPIED AND THE PROJECT SHALL PROCEED IN A MANNER THAT MINIMIZES ANY INCONVENIENCE TO THE BUILDING OCCUPANTS.
2. SCOPE OF WORK CONSISTS OF INSTALLATION OF MATERIALS TO BE FURNISHED UNDER THE CONTRACT DOCUMENTS AND WITHOUT LIMITING GENERALITY THEREOF CONSISTS OF FURNISHING LABOR, MATERIALS, EQUIPMENT, HOISTING, TRANSPORTATION, RIGGING, STAGING, APPURTENANCES, AND SERVICES NECESSARY AND/OR INCIDENTAL TO PROPERLY COMPLETE ALL WORK AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.

D. DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY TO THIS CONTRACT

1. FURNISH: THE TERM "FURNISH" MEANS TO "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS"
2. INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."
3. PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."
4. REMOVE: THE TERM "REMOVE" MEANS TO DISCONNECT FROM ITS PRESENT POSITION, REMOVE FROM THE PREMISES AND TO DISPOSE OF IN A LEGAL MANNER."
5. SUBSTITUTIONS: "SUBSTITUTIONS" ARE REQUESTS FOR CHANGES IN PRODUCTS, MATERIALS AND/OR METHODS OF CONSTRUCTION AS PROPOSED BY THE CONTRACTOR AFTER AWARD OF THE CONTRACT."

E. DRAWINGS

1. DRAWINGS ARE DIAGRAMMATIC. THE FINAL PLACEMENT OF EQUIPMENT OR DEVICES IN THE FIELD MAY NOT DIRECTLY CORRESPOND TO THAT WHICH IS SHOWN ON THE DRAWINGS. THOUGH SOME OFFSETS & TRANSITIONS MAY BE SHOWN IN PIPING & SHEET METAL TO HELP INDICATE THE PHYSICAL RELATIONSHIP BETWEEN THEM, IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW ALL PIPING & SHEET METAL OFFSETS & TRANSITIONS REQUIRED. THE CONTRACTOR SHALL FULLY COORDINATE THE WORK AND PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK OUTLINED ON THESE CONTRACT DOCUMENTS. IF A CONFLICT IN POSITIONING OCCURS THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY TO ASCERTAIN WHAT THE INTENT WAS BY THE DESIGN PROFESSIONAL.

F. CODES AND STANDARDS: WORK SHALL CONFORM TO THE CURRENT EDITIONS OF THE FOLLOWING:

1. NFPA 13 - INSTALLATION OF SPRINKLER SYSTEMS.
2. NFPA 13R - STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS IN RESIDENTIAL OCCUPANCIES UP TO AND INCLUDING FOUR STORIES IN HEIGHT.
3. NFPA STANDARD 14 - STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS.
4. NFPA 24 - INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES.
5. STATE BUILDING AND FIRE CODES.
6. LOCAL AUTHORITIES HAVING JURISDICTION.

G. PERMITS AND FEES:

1. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS; AND PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH THE WORK, FILE ALL NECESSARY DRAWINGS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK, AND DELIVER A COPY TO THE OWNER AND ENGINEER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

H. EXISTING SYSTEMS AND EQUIPMENT

1. EXISTING TO BE REUSED/RELOCATED EQUIPMENT: REPORT ANY EXISTING EQUIPMENT DEFICIENCIES TO THE OWNER AND THE ARCHITECT AND/OR ENGINEER.
2. CONNECT WORK TO VARIOUS EXISTING SYSTEMS AS INDICATED ON THE DRAWINGS. WORK SHALL BE COMPATIBLE WITH THE EXISTING SYSTEM CONDITIONS. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED AS WELL AS WITH EXISTING SYSTEMS, THE STRUCTURE, AND OTHER OBSTRUCTIONS.

I. SURVEY AND MEASUREMENTS

1. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. CONTRACTORS, BY SUBMITTING A BID, SHALL BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITION OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED. NO COMPENSATION WILL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS.
2. DO NOT SCALE DRAWINGS. SCALE INDICATED ON DRAWINGS IS FOR ESTABLISHING REFERENCE POINTS ONLY. ACTUAL FIELD CONDITIONS SHALL GOVERN ALL DIMENSIONS.
3. PRIOR TO ORDERING ANY MATERIALS AND EQUIPMENT, THOROUGHLY REVIEW THE SITE CONDITIONS TO DETERMINE IF ADEQUATE CLEARANCES AND ACCESS IS ALLOWED TO INSTALL THE COMPONENTS. ORDER EQUIPMENT BROKEN DOWN AS NECESSARY TO ALLOW FOR PROPER RIGGING THROUGH THE PROJECT AREA. PROVIDE ALL NECESSARY ALTERATIONS TO THE STRUCTURE OF THE BUILDING AS NECESSARY TO RIG THE EQUIPMENT IN PLACE.
4. CONTRACTORS SHALL VERIFY, LAYOUT AND BE RESPONSIBLE FOR ALL MEASUREMENTS OF ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND SHALL NOTIFY ARCHITECT AND/OR ENGINEER IF A CONDITION EXISTS THAT PREVENTS THE CONTRACTOR FROM ACCOMPLISHING THE INTENT OF THE DRAWINGS.

J. SUBMITTALS AND SHOP DRAWINGS

1. SUBMIT FOR REVIEW, ELECTRONIC SHOP DRAWINGS IN SEARCHABLE PDF FORMAT FOR THE FOLLOWING.
   a. SUBMITTAL DATA FOR ALL MATERIAL AND EQUIPMENT. CLEARLY IDENTIFY DEVIATIONS OF THE SUBMITTED PRODUCTS FROM THE DESIGN.
   b. SHOP DRAWINGS: DRAWN TO ACCURATE SCALE OF 1/4"=1'0". HIGHLIGHT, ENCIRCLE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
   c. HYDRAULIC CALCULATIONS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13.
2. DO NOT USE SHOP DRAWINGS WITHOUT AN APPROPRIATE FINAL STAMP INDICATING ACTION TAKEN IN CONNECTION WITH CONSTRUCTION.
3. DO NOT ORDER ANY MATERIALS OR EQUIPMENT PRIOR TO RECEIVING FINAL APPROVED SUBMITTALS.
4. SCHEDULE AT LEAST TEN WORKING DAYS EXCLUSIVE OF TRANSMITTAL TIME, FOR SUBMITTAL REVIEW.

K. AS-BUILT DRAWINGS

A. MAINTAIN ONE SET OF PRINTS ON THE SITE AND NOTE ALL CHANGES OR DEVIATIONS FROM THE ORIGINAL DESIGN THEREON. AT THE COMPLETION OF THE PROJECT, INCORPORATE ALL CHANGES INTO RECORD AS-BUILT DRAWINGS IN ELECTRONIC FORMAT AND SUBMIT FOR APPROVAL.

L. OPERATION AND MAINTENANCE

1. UPON COMPLETION OF ALL WORK AND TESTS, THE CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE OPERATION, ADJUSTMENT AND MAINTENANCE OF ALL EQUIPMENT FURNISHED. THE CONTRACTOR SHALL GIVE AT LEAST SEVEN (7) DAYS NOTICE TO THE OWNER AND THE ENGINEER IN ADVANCE OF THIS PERIOD.
2. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A COMPLETE OPERATION AND MAINTENANCE MANUAL, BOUND IN BOOKLET FORM. ORGANIZE OPERATING AND MAINTENANCE DATA INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPERLY INDEXED DATA IN INDIVIDUAL HEAVY-DUTY 3-RING VINYL-COVERED BINDERS, WITH POCKET FOLDERS FOR FOLDED SHEET INFORMATION AND DESIGNATION PARTITIONS WITH IDENTIFICATION TABS. MARK APPROPRIATE IDENTIFICATION ON FRONT AND SPINE OF EACH BINDER.
3. MAINTENANCE AND INSTRUCTION MANUALS SHALL BE SUBMITTED TO THE OWNER AT THE SAME TIME AS THE SEVEN (7) DAY NOTICE IS GIVEN PRIOR TO THE INSTRUCTION PERIOD.

M. CLEANING

1. EQUIPMENT: AFTER COMPLETION OF PROJECT, CLEAN THE EXTERIOR SURFACE OF EQUIPMENT INCLUDED IN THIS SECTION, INCLUDING REMOVAL OF CONCRETE RESIDUE.
2. WORK AREA: AFTER COMPLETION OF PROJECT, REMOVE ALL CONSTRUCTION DEBRIS, TEMPORARY FACILITIES AND EQUIPMENT FROM WORK AREA. CLEAN WORK AREA TO PERMIT OCCUPATION.

N. GUARANTEE

1. GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITING FOR NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL NOTICE OF ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN THIS PERIOD, PROMPT AND TO OWNER'S SATISFACTION AND CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE WITHIN CONTRACT PRICE.

N. MEANS AND METHODS ALL TRADES

1. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPOSE OF IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STATE AND FEDERAL REGULATIONS.
3. MATERIALS AND EQUIPMENT SHALL BE UL LISTED WHERE STANDARD HAS BEEN ESTABLISHED.
4. CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTTING OR DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAINT SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS REQUIRED TO RESTORE THEM TO THEIR ORIGINAL CONDITION.
5. SCAFFOLDING, RIGGING, HOISTING: THE CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES ANY EQUIPMENT AND APPARATUS FURNISHED UNDER THIS DIVISION. REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.
6. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
7. WATERPROOFING: WHERE ANY WORK PIERCES WATERPROOFING, INCLUDING WATERPROOF CONCRETE, ROOFS, EXTERIOR WALL AND FLOORS IN WET AREAS, THE METHOD OF INSTALLATION SHALL BE REVIEWED BY THE ENGINEER BEFORE WORK IS DONE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY SLEEVES, CAULKING AND FLASHING REQUIRED TO MAKE OPENINGS ABSOLUTELY WATERTIGHT.
8. PROVIDE FIRESTOPPING AROUND ALL FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE RATED PARTITIONS. PROVIDE ASBESTOS FREE FIRESTOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME AND GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH ASTM E 814.
9. PROVIDE ACCESS PANELS IN WALLS, FLOORS AND GYPSUM WALL BOARD CEILINGS TO ALLOW ACCESS TO: VALVES AND OTHER APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AND INSPECTION. NOT ALL ACCESS PANELS ARE INDICATED ON THE PLANS. REVIEW ARCHITECTURAL AND MECHANICAL PLANS TO DETERMINE THE LOCATION AND QUANTITY OF ACCESS PANELS REQUIRED. COORDINATE TYPE AND LOCATION WITH ARCHITECTURAL PLANS.

21 05 00 - COMMON WORK RESULTS FOR FIRE SUPPRESSION SYSTEMS

A. WORKMANSHIP AND QUALIFICATIONS: MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH NFPA AND APPLICABLE LOCAL CODES AND ORDINANCES. THE SPRINKLER CONTRACTOR SHALL BE STATE LICENSED TO INSTALL SPRINKLER SYSTEMS. FIRE PROTECTION DEVICES USED SHALL BE LISTED AND APPROVED BY UNDERWRITERS LABORATORIES (UL) AND/OR FACTORY MUTUAL (FM).

B. GROOVED JOINT COUPLINGS, FITTINGS, VALVES, AND SPECIALTIES SHALL BE THE PRODUCTS OF A SINGLE MANUFACTURER. GROOVING TOOLS SHALL BE OF THE SAME MANUFACTURER AS THE GROOVED COMPONENTS.

C. VALVES: SHALL BEAR UL AND/OR FM LABEL OR MARKING. PROVIDE MANUFACTURER'S NAME AND PRESSURE RATING MARKED ON VALVE BODY. ITEMS OF SIMILAR CLASS SHALL BE THE PRODUCTS OF THE SAME MANUFACTURER. MANUFACTURERS: KENNEDY VALVE MFG. CO., VICTAULIC, STOCKHAM, NIBCO, WATTS, HAMMOND, MILWAUKEE.

D. PIPE & FITTINGS (ABOVE GRADE)

1. STEEL PIPING: ASTM A53, SCHEDULE 40 SEAMLESS CARBON STEEL. SCHEDULE 10 PIPE SHALL BE ALLOWED FOR PIPE SIZES LARGER THAN 1-1/4" DIAMETER WHEN ROLL GROOVED MECHANICAL COUPLINGS ARE USED.
2. CAST IRON FITTINGS: ANSI/ASME B16.1, FLANGES AND FLANGED FITTINGS, ANSI/ASME B16.4, SCREWED FITTINGS.
3. MALLEABLE IRON FITTINGS: ANSI/ASME B16.3, SCREWED CLASS 300 TYPE. THREADS SHALL CONFORM TO ANSI/ASTM A47.
4. GROOVED MECHANICAL FITTINGS: ANSI A21.10/AWWA C-110 DUCTILE IRON, ASTM A536 GRADE 65-45-12 DUCTILE IRON, ASTM A234 GRADE WPB, OR FACTORY FABRICATED FROM CARBON STEEL PIPE CONFORMING TO ASTM A53, WITH GROOVES OR SHOULDERS DESIGNED TO ACCEPT GROOVED END COUPLINGS. FITTINGS SHALL BE OF THE SAME MANUFACTURER AS THE ADJOINING COUPLINGS.
5. GROOVED MECHANICAL COUPLINGS: ASTM A536 GRADE 65-45-12, DUCTILE IRON HOUSING, ELASTOMER GASKET WITH NUTS AND BOLTS TO SECURE ROLL GROOVED PIPE AND FITTINGS.
6. RIGID TYPE COUPLINGS: HOUSINGS CAST WITH OFFSETTING, ANGLE-PATTERN BOLT PADS TO PROVIDE RIGIDITY AND SYSTEM SUPPORT AND HANGING IN ACCORDANCE WITH NFPA-13.
   a. 1-1/4" THROUGH 4": FACTORY ASSEMBLED FOR INSTALLATION WIHTOUT FIELD DISASSEMBLY. VICTAULIC STYLE 009 EZ.
   b. 5" THROUGH 8": VICTAULIC FIRELOCK STYLE 005.
   c. 10" AND LARGER: VICTAULIC ZERO-FLEX STYLE 07.
7. FLEXIBLE TYPE COUPLINGS: USE IN LOCATIONS WHERE VIBRATION ATTENUATION AND STRESS RELIEF ARE REQUIRED, AND FOR SEISMIC CONSIDERATIONS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. VICTAULIC STYLE 75.

E. GASKETS

1. WET SYSTEMS: C-SHAPE OR EZ STYLE 009.
2. DRY SYSTEMS: FLUSHSEAL OR EZ STYLE 009, DESIGN GRADE EPDM, TYPE A.
3. FREEZERS: FLUSHSEAL GRADE L, SILICONE.

F. JOINTS

1. GROOVED MECHANICAL COUPLINGS: ASTM A536 GRADE 65-45-12, DUCTILE IRON HOUSING, FLUSHSEAL OR QUICKVIC ELASTOMER GASKET WITH NUTS AND BOLTS TO SECURE ROLL GROOVED PIPE AND FITTINGS. HOUSINGS CAST WITH OFFSETTING, ANGLE-PATTERN BOLT PADS TO PROVIDE RIGIDITY, AND MANUFACTURED TO CONNECT COPPER TUBING AND FITTINGS WITHOUT FLARING. VICTAULIC STYLE 606 OR STYLE 607 QUICKVIC STAB-ON COUPLINGS.
2. ASTM B32, SOLDER, GRADE 95TA OR ANSI/AWS A5.8 BCUP SILVER BRAZE.
3. CAST IRON: AWWA C151 PIPING WITH AWWA C110 STANDARD THICKNESS FITTINGS AND AWWA C111 RUBBER GASKET JOINTS OR MECHANICAL GROOVED COUPLINGS WITH DUCTILE IRON HOUSING CLAMPS TO ENGAGE AND LOCK, "C" SHAPED COMPOSITION SEALING GASKET, STEEL BOLTS, NUTS, AND WASHERS, GALVANIZED FOR GALVANIZED PIPE.

G. GATE VALVES

1. UP TO AND INCLUDING 2": BRONZE BODY AND TRIM, 175 LB, COLD WATER NON-SHOCK WORKING PRESSURE, RISING STEM, HAND WHEEL, SOLID WEDGE OR DISC, THREADED ENDS.
2. OVER 2": IRON BODY, BRONZE TRIM, 175 LB, COLD WATER NON-SHOCK WORKING PRESSURE, RISING STEM PRE-GREASED NUT MOUNTING TAMPER SWITCH, HAND WHEEL, OUTSIDE SCREW AND YOKE, SOLID TAPER BRONZE OR CAST IRON WEDGE, GROOVED OR FLANGED ENDS.
3. OVER 4": IRON BODY, BRONZE TRIM, 175 POUND COLD WATER, NON-SHOCK WORKING PRESSURE. VALVE SHALL HAVE SOLID TAPER WEDGE; OUTSIDE SCREW AND YOKE, RISING STEM; FLANGED BONNET WITH BODY AND BONNET CONFORMING TO ASTM A126 CLASS B; REPLACEABLE BRONZE WEDGE FACING RINGS; GROOVED OR FLANGED ENDS; AND A PACKING ASSEMBLY CONSISTING OF A CAST IRON GLAND FLANGE, BRASS GLAND, PACKING, BONNET AND BRONZE BONNET BUSHING. VALVE SHALL BE CAPABLE OF BEING REPACKED UNDER PRESSURE, WITH VALVE WIDE OPEN.

H. GLOBE VALVES

1. UP TO AND INCLUDING 2 INCHES (50 MM): CLASS 125, BRONZE BODY, BRONZE TRIM, RISING STEM AND HAND WHEEL, INSIDE SCREW, RENEWABLE RUBBER DISC, THREADED ENDS, WITH BACK SEATING CAPACITY, PACKABLE UNDER PRESSURE.
2. OVER 2 INCHES (50 MM): IRON BODY, BRONZE TRIM, RISING STEM, HAND WHEEL, OS&Y, PLUG-TYPE DISC, FLANGED ENDS, RENEWABLE SEAT AND DISC.

I. ANGLE VALVES

1. UP TO AND INCLUDING 2": CLASS 125, BRONZE BODY, BRONZE TRIM, RISING STEM AND HAND WHEEL, INSIDE SCREW, RENEWABLE RUBBER DISC, THREADED ENDS, WITH BACK SEATING CAPACITY, PACKABLE UNDER PRESSURE.
2. OVER 2": IRON BODY, BRONZE TRIM, RISING STEM, HAND WHEEL, OS&Y, PLUG-TYPE DISC, FLANGED ENDS, RENEWABLE SEAT AND DISC.

J. BALL VALVES

1. UP TO AND INCLUDING 2": BRONZE TWO PIECE BODY, STANDARD PORT, CHROME PLATED BRASS BALL, 316 STAINLESS STEEL STEM, TEFLON SEATS BRASS STEM NUT, DIE-CAST BRASS GEAR BOX WITH SUPERVISORY SWITCHES, THREADED OR GROOVED ENDS.
2. OVER 2": MANUFACTURERS: CAST STEEL BODY, CHROME PLATED STEEL BALL, TEFLON SEAT AND STUFFING BOX SEALS, LEVER HANDLE.

K. BUTTERFLY VALVES

1. DUCTILE IRON BODY, DUCTILE IRON DISC WITH EPDM DISC COATING AND INTEGRALLY CAST STEM, GROOVED ENDS.
2. CAST BRONZE BODY, DUCTILE IRON DISC WITH EPDM DISC COATING AND INTEGRALLY CAST STEM, COPPER-TUBING DIMENSIONED GROOVED ENDS.
3. CAST IRON WITH RESILIENT REPLACEABLE EPDM SEAT, WAFER OR LUG ENDS, EXTENDED NECK WITH 316 STAINLESS STEEL STEM, MSS-SP-67, 200 PSI.
4. DISC: EPDM COATED DUCTILE IRON OR ALUMINUM BRONZE.
5. OPERATOR: NOTCHED PLATE LEVER HANDLE, HANDWHEEL OR GEAR DRIVE, AND WEATHERPROOF ACTUATOR WITH SUPERVISORY SWITCHES.

L. CHECK VALVES

1. UP TO AND INCLUDING 2": CLASS 125, BRONZE SWING DISC, SCREWED ENDS.
2. HORIZONTAL SWING OVER 2": 300 PSI CWP, DUCTILE IRON BODY AND COUPLED CAP CONFORMING TO ASTM A536, GRADE 65-45-12; HORIZONTAL SWING, WITH STAINLESS STEEL DISC, ELASTOMER SEAT, AND GROOVED ENDS.
3. CLASS 175, CAST IRON BODY AND BOLTED CAP CONFORMING TO ASTM A126, CLASS B; HORIZONTAL SWING, WITH A BRONZE DISC OR CAST IRON DISC WITH BRONZE DISC RING, AND FLANGED ENDS.VALVE SHALL BE CAPABLE OF BEING REFITTED WHILE THE VALVE REMAINS IN LINE.
4. SPRING ACTUATED OVER 2": 300 PSI CWP, DUCTILE IRON BODY CONFORMING TO ASTM A536, GRADE 65-45-12; VERTICAL OR HORIZONTAL CHECK, WITH STAINLESS STEEL SPRING AND SHAFT.
5. 2-1/2" AND 3": ALUMINUM BRONZE DISC WITH DISC MOUNTED ELASTOMER SEAL AND PPS (POLYPHENYLENE SULFIDE) COATED SEAT.
6. 4" AND LARGER: ELASTOMER COATED DUCTILE IRON DISC WITH WELDED-IN NICKEL SEAT.

M. DRAIN VALVES: COMPRESSION STOP: BRONZE WITH HOSE THREAD NIPPLE AND CAP.

N. BALL VALVE: BRASS WITH CAP AND CHAIN, 3/4" HOSE THREAD

O. BACKFLOW PREVENTERS

1. REDUCED PRESSURE BACKFLOW PREVENTERS: ANSI/ASSE 1013, AWWA C511, BRONZE BODY, TWO INDEPENDENTLY OPERATING SPRING LOADED CHECK VALVES, DIAPHRAGM TYPE DIFFERENTIAL PRESSURE RELIEF VALVE LOCATED BETWEEN CHECK VALVES, TWO GATE VALVES, STRAINER, TEST COCKS AND AIR GAP FITTING.
2. REDUCED PRESSURE DETECTOR CHECK VALVE ASSEMBLIES: ANSI/ASSE 1047, AWWA C511, BRONZE BODY, TWO INDEPENDENTLY OPERATING SPRING LOADED CHECK VALVES, DIAPHRAGM TYPE DIFFERENTIAL PRESSURE RELIEF VALVE LOCATED BETWEEN CHECK VALVES, METERED BYPASS, TWO GATE VALVES, STRAINER, TEST COCKS AND AIR GAP FITTING.
3. DOUBLE CHECK VALVE ASSEMBLY: ANSI/ASSE 1015, AWWA C510, BRONZE BODY, TWO INDEPENDENTLY OPERATING SPRING LOADED CHECK VALVES, TWO GATE VALVES, STRAINER, AND TEST COCKS.
4. DOUBLE CHECK DETECTOR CHECK VALVE ASSEMBLIES: ANSI/ASSE 1048, AWWA C510, BRONZE BODY, TWO INDEPENDENTLY OPERATING SPRING LOADED CHECK VALVES, METERED BYPASS, TWO GATE VALVES, STRAINER, TEST COCKS.

P. UNIONS & DIELECTRIC CONNECTIONS

1. UNIONS FOR PIPE 2" AND UNDER:
   a. FERROUS PIPING: 150 PSIG (1034 KPA) MALLEABLE IRON, THREADED.
   b. COPPER PIPE: BRONZE, SOLDERED JOINTS.
2. DIELECTRIC CONNECTIONS: WATERWAY FITTING WITH WATER IMPERVIOUS ISOLATION BARRIER, VICTAULIC STYLE 47 OR APPROVED EQUAL.

Q. PIPE HANGERS AND SUPPORTS

1. CONFORM TO NFPA 13 AND NFPA 14.
2. HANGERS: MALLEABLE IRON, CARBON STEEL, ADJUSTABLE SWIVEL, SPLIT RING, CARBON STEEL, ADJUSTABLE, CLEVIS.
3. MULTIPLE OR TRAPEZE HANGERS: STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.
4. WALL SUPPORT FOR PIPE SIZES TO 3": CAST IRON HOOK.
5. WALL SUPPORT FOR PIPE SIZES 4" AND OVER: WELDED STEEL BRACKET AND WROUGHT STEEL CLAMP.
6. VERTICAL SUPPORT: STEEL RISER CLAMP [ANGLE RING].
7. FLOOR SUPPORT: CAST IRON ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.

R. GENERAL INSTALLATION REQUIREMENTS FOR PIPE AND FITTINGS

1. INSTALL PIPING IN ACCORDANCE WITH NFPA 13 FOR SPRINKLER SYSTEMS, NFPA 14 FOR STANDPIPE AND HOSE SYSTEMS, AND NFPA 24 FOR SERVICE MAINS.
2. PLACE PIPING IN CONCEALED SPACES ABOVE FINISHED CEILINGS UNLESS NOTED OTHERWISE.
3. ROUTE PIPING IN ORDERLY MANNER, PLUMB AND PARALLEL TO BUILDING STRUCTURE. MAINTAIN GRADIENT.
4. INSTALL PIPING TO CONSERVE BUILDING SPACE, TO NOT INTERFERE WITH USE OF SPACE AND OTHER WORK.
5. GROUP PIPING WHENEVER PRACTICAL AT COMMON ELEVATIONS.
6. INSTALL PIPE SLEEVE AT PIPING PENETRATIONS THROUGH FOOTINGS, PARTITIONS, WALLS, AND FLOORS. SEAL PIPE AND SLEEVE PENETRATIONS TO MAINTAIN FIRE RESISTANCE EQUIVALENT TO FIRE SEPARATION.
7. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS, OR CONNECTED EQUIPMENT. USE VICTAULIC STYLE 77 OR 75 COUPLINGS IN ACCORDANCE WITH VICTAULIC INSTRUCTIONS FOR EXPANSION AND CONTRACTION OF PIPE.
8. GROOVED JOINT COUPLINGS AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. GROOVED ENDS SHALL BE CLEAN AND FREE FROM INDENTATIONS, PROJECTIONS, AND ROLL MARKS IN THE AREA FROM PIPE END TO GROOVE. GASKETS SHALL BE VERIFIED AS SUITABLE FOR THE INTENDED SERVICE PRIOR TO INSTALLATION. GASKETS SHALL BE MOLDED AND PRODUCED BY THE COUPLING MANUFACTURER. THE GROOVED COUPLING MANUFACTURER'S FACTORY TRAINED REPRESENTATIVE SHALL PROVIDE ON-SITE TRAINING FOR CONTRACTOR'S FIELD PERSONNEL IN THE USE OF GROOVING TOOLS, APPLICATION OF GROOVE, AND INSTALLATION OF GROOVED JOINT PRODUCTS. THE MANUFACTURER'S REPRESENTATIVE SHALL PERIODICALLY VISIT JOB SITE AND REVIEW INSTALLATION. CONTRACTOR SHALL REMOVE AND REPLACE ANY JOINTS DEEMED IMPROPERLY INSTALLED.
9. PITCH PIPING AND ARRANGE SYSTEMS TO DRAIN AT LOW POINTS. USE ECCENTRIC REDUCERS TO MAINTAIN TOP OF PIPE LEVEL.
10. PREPARE PIPE, FITTINGS, SUPPORTS, AND ACCESSORIES FOR FINISH PAINTING. WHERE PIPE SUPPORT MEMBERS ARE WELDED TO STRUCTURAL BUILDING FRAMING, SCRAPE, BRUSH CLEAN, AND APPLY ONE COAT OF ZINC RICH PRIMER TO WELDING.
11. DO NOT PENETRATE BUILDING STRUCTURAL MEMBERS UNLESS INDICATED.
12. WHERE MORE THAN ONE PIPING SYSTEM MATERIAL IS SPECIFIED, INSTALL COMPATIBLE SYSTEM COMPONENTS AND JOINTS. INSTALL FLANGES, UNION, AND COUPLINGS AT LOCATIONS REQUIRING SERVICING.
13. DIE CUT THREADED JOINTS WITH FULL CUT STANDARD TAPER PIPE THREADS WITH RED LEAD AND LINSEED OIL OR OTHER NON-TOXIC JOINT COMPOUND APPLIED TO MALE THREADS ONLY.
14. PROVIDE DIELECTRIC FITTINGS WHENEVER JOINING TWO DISSIMILAR METALS.
15. PROVIDE SURGE RESTRAINERS ON ALL END OF BRANCHES AND ARM OVERS IN EXCESS OF 12".

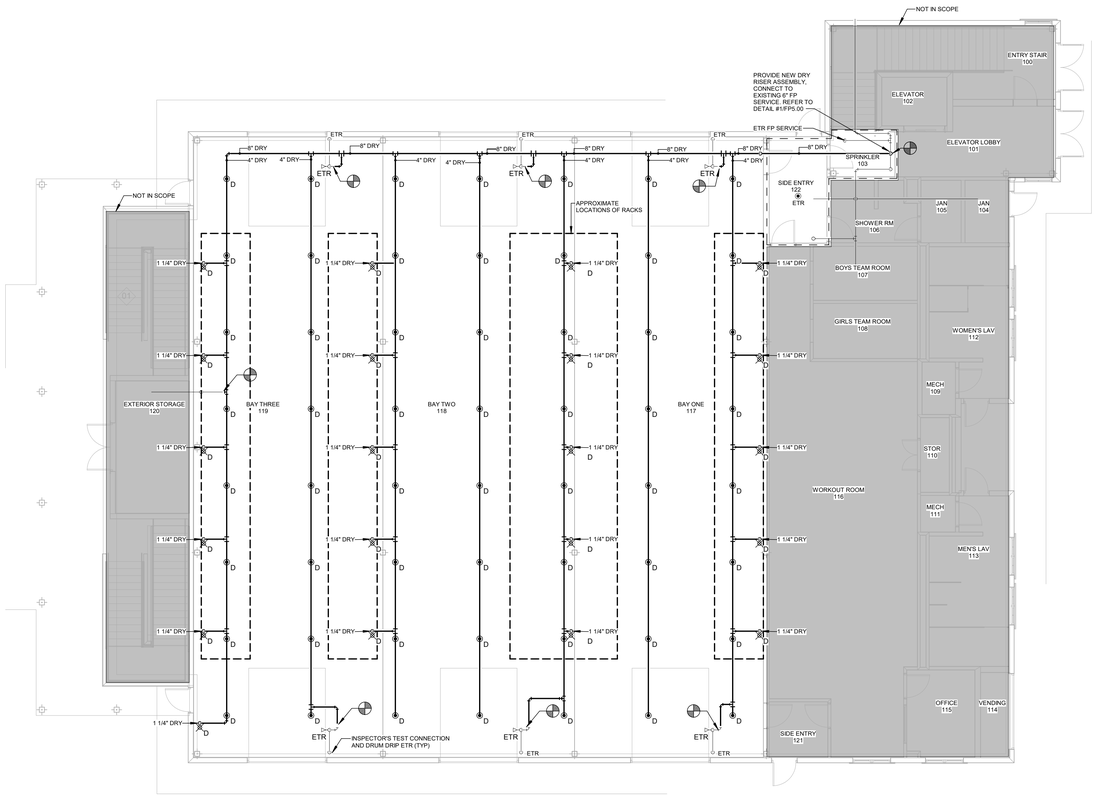
S. GENERAL INSTALLATION REQUIREMENTS FOR VALVES

1. INSTALL DRAIN VALVES AT MAIN SHUT-OFF VALVES, LOW POINTS OF PIPING AND APPARATUS.
2. VALVES SHALL BE ACCESSIBLE FOR OPERATION AND SERVICING. PROVIDE ACCESS PANELS WHERE REQUIRED.
3. INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED. REMOVE PROTECTIVE COATINGS AFTER INSTALLATION.
4. INSTALL GATE OR BUTTERFLY VALVES FOR SHUT-OFF OR ISOLATING SERVICE.
5. INSTALL BURIED SHUT OFF VALVES IN VALVE BOX.
6. PROVIDE BACKFLOW PREVENTER ASSEMBLY AT SPRINKLER SYSTEM WATER SOURCE CONNECTION. INSTALL A DRAIN LINE FROM THE AIR GAP FITTING AND TERMINATE AT THE NEAREST FLOOR DRAIN. THE BACKFLOW PREVENTER SHALL BE INSTALLED AT A MINIMUM HEIGHT TO ALLOW INSTALLATION OF THE AIR GAP FITTING, BUT SHALL NOT BE INSTALLED AT MORE THAN 5'0" ABOVE FINISHED FLOOR FOR MAINTENANCE.

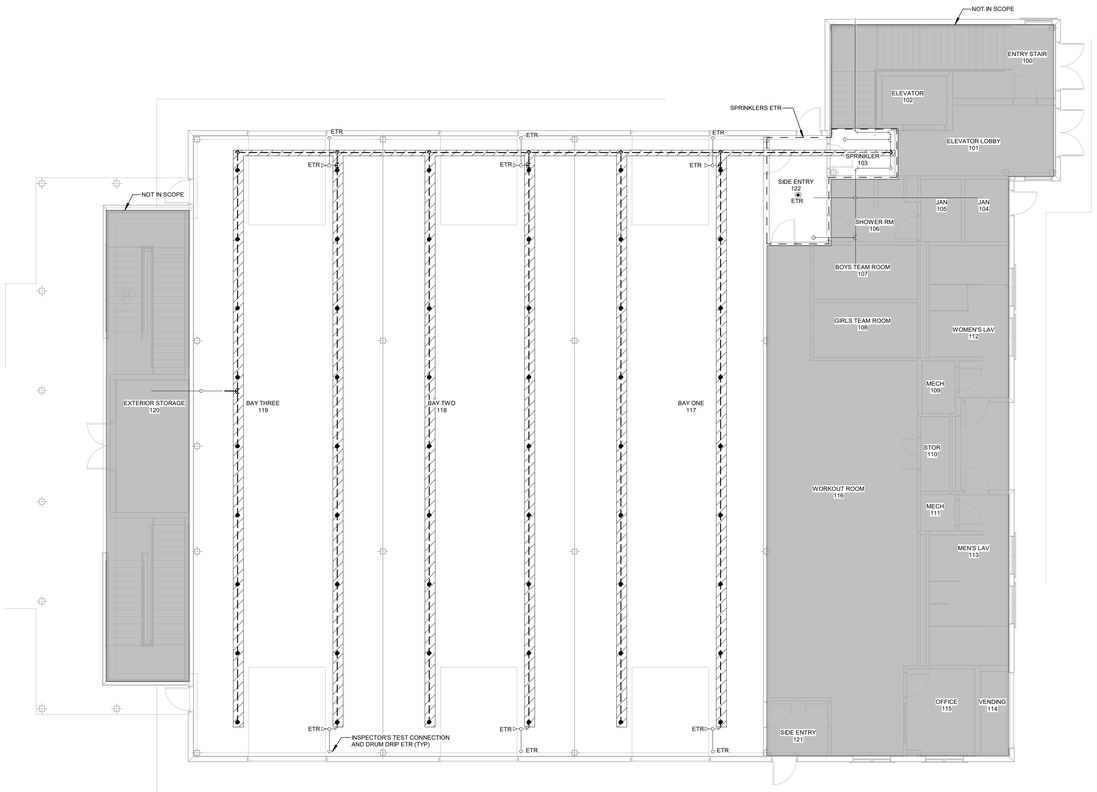
T. GENERAL INSTALLATION REQUIREMENTS FOR PIPE HANGERS AND SUPPORTS

1. INSTALL IN ACCORDANCE WITH NFPA 13 AND NFPA 14.
2. INSTALL HANGERS TO WITH MINIMUM 1/2" SPACE BETWEEN FINISHED COVERING AND ADJACENT WORK.
3. PLACE HANGERS WITHIN 12" OF EACH HORIZONTAL ELBOW.
4. USE HANGERS WITH 1-1/2" MINIMUM VERTICAL ADJUSTMENT. DESIGN HANGERS FOR PIPE MOVEMENT WITHOUT DISENGAGEMENT OF SUPPORTED PIPE.
5. SUPPORT VERTICAL PIPING AT EVERY FLOOR. SUPPORT RISER PIPING INDEPENDENTLY OF CONNECTED HORIZONTAL PIPING.
6. WHERE INSTALLING SEVERAL PIPES IN PARALLEL AND AT SAME ELEVATION, PROVIDE MULTIPLE OR TRAPEZE HANGERS.
7. INSTALL COPPER PLATED HANGERS AND SUPPORTS FOR COPPER PIPING.
8. PRIME COAT EXPOSED STEEL HANGERS AND SUPPORTS. HANGERS AND SUPPORTS LOCATED IN CRAWL SPACES, PIPE SHAFTS, AND SUSPENDED CEILING SPACES ARE NOT CONSIDERED EXPOSED.

U. TESTING: PRESSURE TEST THE ABOVE GROUND SYSTEM IN ACCORDAN



2 FIRE PROTECTION GROUND FLOOR
1/8" = 1'-0"



1 FIRE PROTECTION GROUND FLOOR DEMOLITION
1/8" = 1'-0"

NCA
NORTHEAST COLLABORATIVE ARCHITECTS
500 Plaza Middlesex
Middletown, CT. 06457
v: 860-344-9332

MEP/FP Engineers:
Consulting Engineering Services (CES)
811 Middle Street
Middletown, CT 06457
Phone: (860) 632-1682

CES Consulting Engineering Services, Inc.
811 Middle Street
Middletown, CT 06457
T (860) 632-1682
F (860) 632-1768
www.cesct.com

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CODE IMPROVEMENTS RIVERFRONT BOATHOUSE

252 WELLES STREET
GLASTONBURY, CT. 06033

OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:

STATE OF CONNECTION
ROBERT SMITH
No. 18073
LICENSED
PROFESSIONAL ENGINEER

FIRE PROTECTION GROUND FLOOR PLAN

DATE: 11–16–2021
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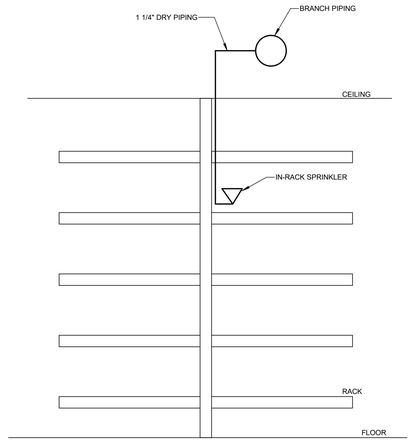
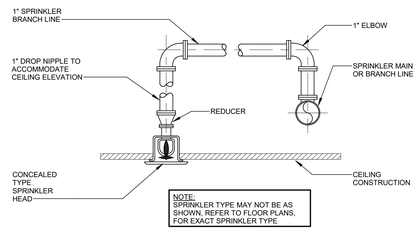
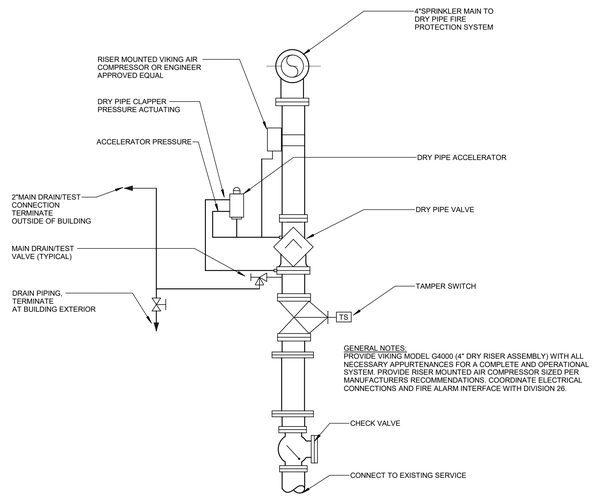


3 IN-RACK SPRINKLER
NTS



2 ARMOVER DETAIL
NTS



1 DRY SYSTEM RISER DETAIL
NTS

NCA
NORTHEAST
COLLABORATIVE
ARCHITECTS
500 Plaza Middlesex
Middletown, CT. 06457
v: 860-344-9332

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Consulting Engineering Services (CES)
811 Middle Street
Middletown, CT 06457
Phone: (860) 632-1682

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811 Middle Street
Middletown, CT 06457
T (860) 632-1682
F (860) 632-1768
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CODE IMPROVEMENTS RIVERFRONT BOATHOUSE

252 WELLES STREET
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OWNER'S PROJECT #: GL-2022-16

#	DESCRIPTION	DATE

REVISIONS:

STATE OF CONNECTION
ROBERT SMITH
No. 16073
LICENSED
PROFESSIONAL ENGINEER

FIRE PROTECTION DETAILS

DATE: 11–16–2021

NCA JOB NO.: 21031

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