SCHEMMER
Design with Purpose. Build with Confidence.

DATE: April 26, 2024

FROM:
The Schemmer Associates
Architects-Engineers-Planners
1044 North 115th Street, Suite 300
Omaha, Nebraska 68154-4436
Phone: (402) 493-4800
Telefax: (402) 493-7951

TO: Prospective Bidders and Plan Holders

RE: Addendum No. 1 to the Bidding Documents for:
Grand Island Fire Station No. 3
Schemmer Project No. 09285.001

This addendum is issued by the Architect to the Contractor. This Addendum shall be made a part of the Contract Documents. Acknowledge receipt of this Addendum shall be provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

Prior approval of manufacturers is a general approval only for bidding purposes. Final approval of the products is contingent upon the submittal of product data and/or shop drawings which will have to meet the specific design requirements and the specifications.

This addendum consists of six (6) pages of written addendum items, including this sheet, and twenty-three (23) pages of supplemental drawings.

THE SCHEMMER ASSOCIATES INC.

PROJECT MANUAL

ARCHITECTURAL

Item No. SA-1
The Project is tax exempt.

Item No. SA-2
The City will provide Builders Risk Insurance for the project.

Item No. SA-3
In Specification Section 08-7100, Assa Abloy/Sargent is an acceptable manufacture for door hardware.

Item No. SA-4
In Specification Section 08-3613 Upward Acting Sectional Doors, make the following revisions:

- Provide ½”, insulated, clear, tempered glass in sectional doors.
- Provide lift clearance doors with jackshaft operators.
- Provide NEMA 4 environment for buttons and photo eyes.

Item No. SA-5
In Specification Section 07-2713, add Henry, Blueskin VP160 as an approved product.

Item No. SA-6
In Specification Section 07-4800, add Cascadia Clip as an approved product for façade attachment.

Item No. SA-7
In the Table of Contents, Delete 06-1600 Sheathing.

Item No. SA-8
In Specification Section 06-1000, add the following sections:

2.07 COMPOSITE NAIL BASE INSULATED ROOF SHEATHING

A. Vented, **Plywood,** Polyisocyanurate-Foam Sheathing: ASTM C1289, Type II, Class 1, with DOC PS 2, Exposure 1 oriented strand board adhered to spacers on one face.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. GAF Cornell; Thermacal 1
    - b. Kurt Building Matertials; Techvent Pro.
    - c. Rmax, Inc; Vented Nailable Base 3.
2. Polyisocyanurate-Foam Thickness: 5-1/2 inches, with minimum R-value of 32.5.

3. Plywood Sheathing: 3/4 inch, DOC PS 1, Exterior Exposure 1, Structural I sheathing
4. Spacers: Wood furring strips or blocks 1 inch thick and spaced not more than 12 inches (300 mm) o.c.

2.05 Accessories

G. Screws for Fastening Vented, Insulated Nail Base Sheathing to Roof Deck: Steel drill screws, in type and length recommended by sheathing manufacturer for thickness of sheathing to be attached, with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117. Provide washers or plates if recommended by sheathing manufacturer.

1. Size fasteners to meet the minimum penetration into decking required. In areas of roof deck exposed to view from below, do not use fasteners that are long enough to penetrate the lower flutes of the metal roof decking.

Item No. SA-9
In Specification Section 01-3233, Photographic Documentation is not to be provided as an Allowance. Photographic Documentation shall be provided as part of the Base Bid.

Item No. SA-10
Door Hardware sets will be issued in Addendum 2.

Item No. SA-11
Regarding phasing for construction and the 360 days' Time of Completion, Phase 1 shall be 360 days for the construction of the fire station. Phase 2 will be 90 days for demolition of the existing fire station and construction of related sitework. Phase 1 will begin upon the awarded contractor being provided a notice to proceed.

Item No. SA-12
The cost of the building permit is not to be included in the Base Bid.

Item No. SA-13
The Architect will submit drawings to the State Fire Marshal. Bidders do not need to account for those permit fees in the Base Bid.

Item No. SA-14
Clarification for Unit Price No. 1: Unsatisfactory soil is soil that does not meet the requirements of the Geotechnical Report. It does not include hazardous or profiled waste.

Item No. SA-15
Clarification for Unit Price No. 4: Please provide material costs for primed miscellaneous and primed structural steel.

MECHANICAL

Item No. SM-1

1. In Specification Section 233439, Greenheck is an acceptable manufacturer for High-Volume Low Speed fans.
2. In Specification Section 233300, Nailor Industries is an acceptable manufacturer for Air Duct Accessories.
3. In Specification Section 233423, Twin City Fan and Blower is an acceptable manufacturer for HVAC Power Ventilators.
4. In Specification Section 233700, Nailor Industries is an acceptable manufacturer for Air Outlets and Inlets.
5. In Specification Section 233813, Captiveaire is an acceptable manufacturer for Commercial Kitchen Hoods.

DRAWINGS

CIVIL

Item No. DC-1, Sheet C102
North edge of overexcavation area has been adjusted.

Item No. DC-2, Sheet C104
Note added to plan to address modifications of the SWPPP to accommodate phasing.

ARCHITECTURAL

Item No. DA-1, Sheet A401
In the Door Types, provide ½", insulated, clear, tempered glass in Door Type H2.

Item No. DA-2, Sheet A401
In the Door Schedule, revise sectional door thickness to be 1 ¾" thick.

Item No. DA-3, Sheet A701
Update Window Treatment Designation for WT1 and WT2 and remove WT3. All window treatments are to be manual window shades single or double rolls.

Item No. DA-4, Sheet A901
Update revise manual shade designation to match Window Treatment Designation for WT1 and WT2. All window treatments are to be manual window shades single or double rolls.

Item No. DA-5, Sheet A100
Partition Types A, D and F are to be listed as "Combustible."

Item No. DA-6, Sheet A101
Revise window designation at dorm rooms to be W3A. W3A are the only operable windows.

Item No. DA-7, Sheet A402
Add Window Type W3A. W3A are the only operable windows.

MECHANICAL

Item No. DM-1, Sheet FP101
Add fire sprinkler piping for the fire department connection. Replace dry pipe sprinkler system with a wet pipe sprinkler system for the attic space. Remove Air compressor serving dry pipe system.

Item No. DM-2, Sheet P00
Remove general notes C,F,G.

Item No. DM-3, Sheet P101
Adjust vent routing serving 2nd floor floors sinks and floor drain. Adjust vent routing near stairs serving floor sink and washer machine. Add keynote 6 for pipe sleeving in Bunker Gear Storage.

Item No. DM-4, Sheet P102
Add keynote 13 for underfloor piping serving kitchen sinks. Add keynote 14 for pipe sleeving in Bunker Gear Storage. Adjust recirc pipe routing. Relocate southern exterior wall hydrant.

Item No. DM-5, Sheet P301
Delete detail #2 and detail #14. Remove PRV from detail #12.

Item No. DM-6, Sheet P401
Adjust water softener, expansion tank, and plumbing fixture schedule. Adjust sanitary riser to reflect new vent routing and pipe sizes.

Item No. DM-7, Sheet M00
Remove general notes A,D,I,K.

Item No. DM-8, Sheet M101

- Adjusted dryer vent to avoid stairwell and modified keynote to specify aluminum duct.
- Added instruction to drain dehumidifier to floor sink.
- Added missing tag to EF-9 duct.
- Adjusted routing of supply air ducts to rooms 106, 127, and 130 to not pass through storm shelter.
- Changed VFV-114 to be a ducted unit. Added diffusers, return, modified ducts accordingly
- Added FEMA louvers to storm shelter, adjusted ductwork accordingly
- Added inline fan in ceiling of bunker to provide required storm shelter ventilation.
- Changed EF-6 to be sidewall fan, modified keynotes as needed.
- Lowered EF-7 to be installed 16’ A.F.F. and routed exhaust ductwork down into app bay as needed.
- Added EF-10 next to EF-7 to pull outside air through the attic space for cooling.
- Added LV-7 to eastern wall of App bay in attic space.
- Added supply air to attic space in various places for temperature control.
- For the Vehicle Exhaust System, the Contractor shall carry an allowance of $15,000.00 for the mechanical and electrical installation of the system. The mechanical portion is for labor installation and shall include any incidental installation accessories (hangers, etc.). The electrical portion is to include labor and materials associated with the system.

Item No. DM-9, Sheet M201

- Changed VFV-114 to be a ducted unit. Modified refrigerant and condensate pipes accordingly.
- Fixed several small visibility issues.

Item No. DM-10, Sheet M401

- Modified metal shroud detail for in-slab piping.
- Added internal housekeeping pad detail

Item No. DM-11, Sheet M501
Revised High-Volume Low-Speed Fan Schedule to be 1 phase, Added notes to the Ductless Split System Air Conditioning Schedule, added notes to the VFV Schedule, Modified notes on the Fan Schedule, Added supply fan to fan schedule, Modified notes on the Dedicated Outdoor Air Unit Schedule. Increased gas input on DOAS-1, modified gas riser to reflect change.

ELECTRICAL

Item No. SE-1, Sheet E201
Sheet name changed.
‘VRV-X’ equipment type changed from 120v to 208v. Circuit numbers changed.
‘BS-X’ equipment type changed from 120v to 208v. Circuit numbers changed.
‘EF-10’ equipment added to Apparatus Bay 132.
‘SF-1’ equipment added to Bunker/Gear Storage 129.
‘EF-6’ relocated from roof to Exercise Room 126.

Item No. SE-1, Sheet E202
Sheet name changed.

Item No. SE-1, Sheet E301
PIV Monitoring added to plans.

Item No. SE-1, Sheet E501
New equipment added to Equipment Schedule.

Item No. DE-3, Sheet E601
Updated circuit breakers to reflect correct power phase for VRV and BS equipment.

END OF ADDENDUM NO. 1

STORM SEWER STRUCTURE TABLE(ⓢⓧ):

STRUCTURE NAME	TYPE	DETAILS	LOCATION
S1	INLET STRUCTURE WITH WEIR, SEE 10/C201 AND C202	RIM: 1796.73 (PFG) I.E. 8": 1793.21 (W)	N: 94065.01 E: 113483.77
S2	PVC MANHOLE, SEE 10/C201	RIM: 1796.15 (PFG) I.E. 8": 1793.63 (W) I.E. 8": 1793.63 (E)	N: 94097.10 E: 113405.86
S3	PVC MANHOLE, SEE 10/C201	RIM: 1795.97 (PFG) I.E. 8": 1793.70 (W) I.E. 8": 1793.70 (E)	N: 94097.10 E: 113392.32
S4	PVC MANHOLE, SEE 10/C201	RIM: 1796.81 (PFG) I.E. 8": 1794.10 (S) I.E. 8": 1794.10 (E)	N: 94070.31 E: 113316.32
S5	PVC MANHOLE, SEE 10/C201	RIM: 1797.17 (PFG) I.E. 8": 1794.28 (SE) I.E. 8": 1794.28 (N)	N: 94033.97 E: 113316.47
S6	PVC DRAIN BASIN, SEE 10/C201	RIM: 1796.82 (PFG) I.E. 8": 1794.41 (NW)	N: 94017.17 E: 113335.89
S7	INLET STRUCTURE WITH WEIR, SEE 10/C201 AND C202	RIM: 1796.25 (PFG) I.E. 12": 1793.21 (E)	N: 94065.01 E: 113531.68
S8	PVC CURB INLET, SEE 9/C201	RIM: 1795.97+ (PFG) I.E. 12": 1793.35 (W)	N: 94071.70 E: 113557.64
S9	OUTLET STRUCTURE WITH WEIR, SEE C202	RIM: 1796.57 (PFG) I.E. 12": 1793.21 (E)	N: 94007.72 E: 113527.52
S10	FLARED END SECTION PER NDOT STANDARD PLAN 410-R4	I.E. 12": 1793.00* (W)	N: 94011.73 E: 113580.18

+ RIM ELEVATION OF CURB INLET IS TO GRATE ELEVATION, NOT TOP OF CURB

STORM SEWER PIPE TABLE(ⓟⓧ):

NAME	SIZE	LENGTH	SLOPE
P1	8"	84.26'	0.50%
P2	8"	13.54'	0.50%
P3	8"	80.58'	0.50%
P4	8"	36.34'	0.50%
P5	8"	25.67'	0.50%
P6	12"	26.80'	0.52%
P7	12"	52.82'	0.40%

LEGEND

—— XX ——	PROPOSED CONTOUR
— — XX — —	EXISTING CONTOUR
═══	PROPOSED STORM SEWER
TC	TOP OF CURB ELEVATION
G	GUTTER ELEVATION
TP	TOP OF PAVEMENT ELEVATION
PFG	FINISH GRADE ELEVATION
*	FIELD VERIFY EXISTING ELEVATION
—— RD ——	ROOF DRAIN
∼→	GRADE SWALE
▨	AREA OF OVEREXCAVATION

NORTH

10 0 10

1 inch = 10 ft.

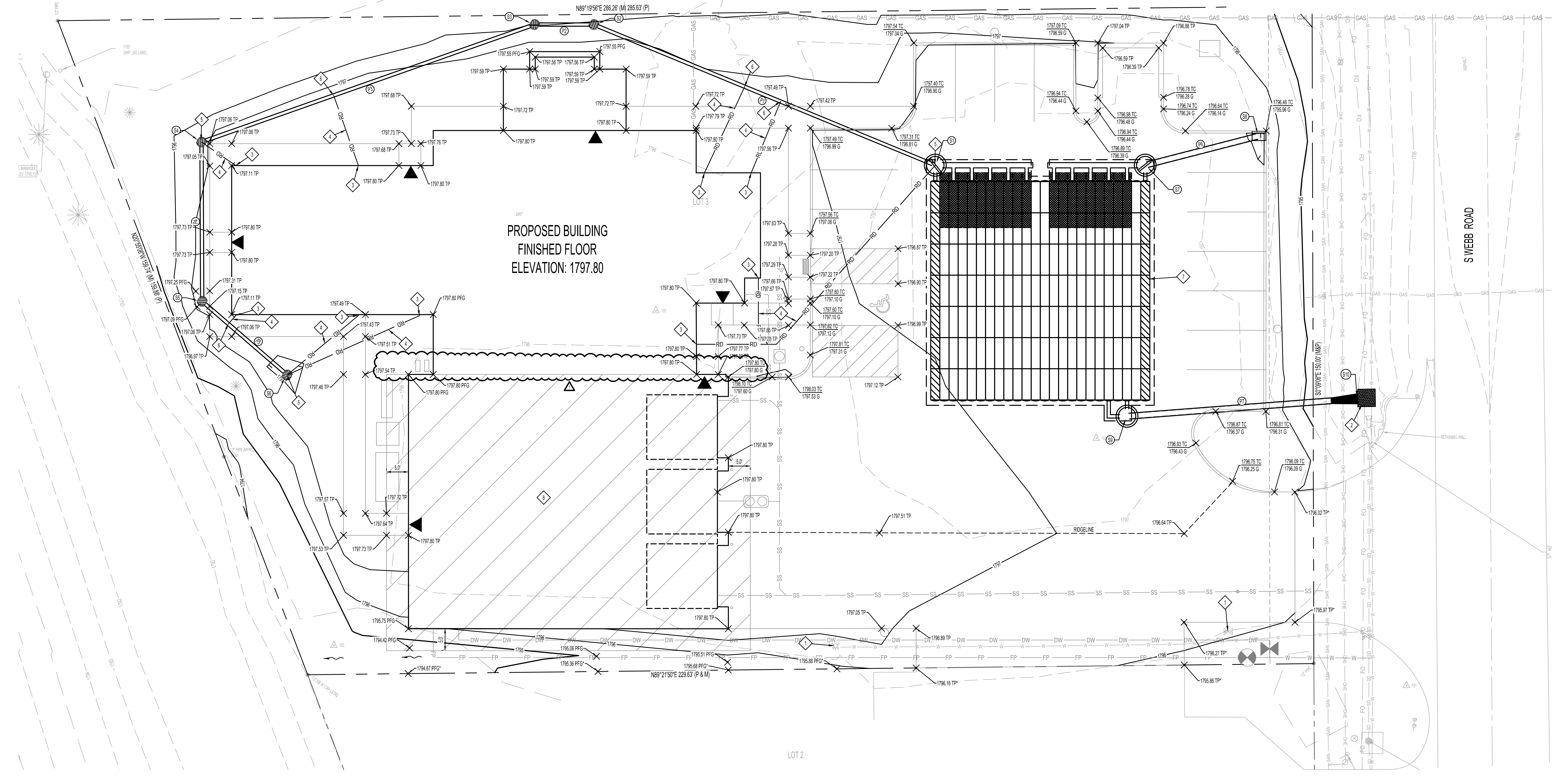
REFERENCED CONSTRUCTION NOTES(◇):

1. ADJUST VALVE AND HYDRANT TO GRADE.
2. CONSTRUCT 5.5' LONG X 5.0' WIDE OUTLET ARMORING, SEE 11/C201. OUTLET ARMORING SHALL BE FLEXAMAT OR APPROVED EQUAL.
3. CONSTRUCT DOWNSPOUT CONNECTION AT BUILDING DOWNSPOUT, SEE 6/C201.
4. CONSTRUCT 8" ROOF DRAIN PIPING FROM DOWNSPOUT CONNECTION TO STORM SEWER PIPING AS SHOWN, SLOPE AT 1% MINIMUM.
5. TAP ROOF DRAIN DIRECTLY INTO STORM SEWER STRUCTURE USING WATERTIGHT CONNECTION.
6. TAP ROOF DRAIN PIPING INTO STORM SEWER USING INSERTA TEE (www.insertatee.com) LATERAL CONNECTION OR APPROVED EQUAL.
7. CONSTRUCT BELOW GRADE CHAMBER STORMWATER DETENTION SYSTEM, SEE C202.
8. OVEREXCAVATE EXISTING SOILS TO ELEVATION 1792.00. SIDE SLOPES OF OVEREXCAVATION SHALL OCCUR OUTSIDE OF THE LIMITS SHOWN. BACKFILL OVEREXCAVATED AREA WITH STRUCTURAL FILL AS SPECIFIED.

NOTES:

A. ALL STORM SEWER CONSTRUCTION SHALL CONFORM TO THE CITY OF GRAND ISLAND STANDARD SPECIFICATIONS DIVISION V, 2023 EDITION, WITH THE EXCEPTION THAT STORM SEWER PIPING MAY BE HDPE. CONTRACTOR SHALL PERFORM TESTING PER ABOVE-REFERENCED SPECIFICATIONS.

B. HDPE PIPING, IF USED, SHALL BE DUAL WALL, SMOOTH INTERIOR PIPING CONFORMING TO ASTM F2306. JOINTS SHALL BE INTEGRAL BELL AND GASKETED SPIGOT SOIL-TIGHT JOINTS. CONTRACTOR SHALL OBTAIN A PIPE BEDDING DESIGN SPECIFIC TO THIS PROJECT FROM THE PIPE MANUFACTURED AND SUBMIT TO THE ENGINEER FOR APPROVAL.



DESIGNED: MJH
DRAWN: JAD
CHECKED: MJS

ISSUE DATE: 03/25/2024

REVISIONS:

No.:	DATE:	BY:	DESCRIPTION:
1	04/26/2024	JAD	ADDENDUM NO.1

PROFESSIONAL CIVIL ENGINEER
MATTHEW J. HUBEL
E-12955
STATE OF NEBRASKA
04/26/2024

BRWARCHITECTS
175 CENTURY SQUARE DRIVE
SUITE 350
COLLEGE STATION, TEXAS 77840
979-694-1791
BRWARCH.COM
CA-4970

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GRAND ISLAND FIRE DEPARTMENT
STATION NUMBER 3
2310 S WEBB ROAD
GRAND ISLAND, NE 68803

SITE GRADING & DRAINAGE PLAN

PROJECT NO.: **09285.001**

C102

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GENERAL EROSION CONTROL NOTES

A. THE CONTRACTOR SHALL COMPLY WITH THE NEBRASKA DEPARTMENT OF ENVIRONMENT AND ENERGY GENERAL NPDES CONSTRUCTION STORMWATER PERMIT EROSION CONTROL PROCEDURES AND THE EROSION CONTROL PROCEDURES SET FORTH ON THESE PLANS AND IN THE SPECIFICATIONS. ALL EROSION CONTROL EFFORTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. THIS INCLUDES REMOVAL OF ACCUMULATED SEDIMENT.

B. IF SEDIMENT IS TRACKED ON PUBLIC AREAS, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SEDIMENT IMMEDIATELY. THIS ITEM WILL BE STRICTLY ENFORCED.

C. WHEN EROSION CONTROL DEVICES ARE CLEANED OUT, SEDIMENT MUST EITHER BE DISTRIBUTED OVER THE SITE OR PLACED UPSTREAM OF THE STRUCTURE. SEDIMENT MUST NEVER BE PLACED DOWNSTREAM OF THE STRUCTURE.

D. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION CONTROL DEVICES AS SHOWN ON THE DRAWINGS UNTIL THE SITE IS STABILIZED.

E. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES. ANY CONSTRUCTION OR MAINTENANCE ISSUES REGARDING EROSION CONTROL METHODS WILL BE DIRECTED TO THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR WILL HAVE 24 HOURS AFTER NOTIFICATION TO REMEDY ANY ITEMS THAT ARE ADDRESSED.

F. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EROSION CONTROL. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING STREETS OPEN TO TRAFFIC AND THEY SHALL BE KEPT CLEAN AND FREE OF SILT AND MUD AT ALL TIMES. ALL DISTURBED AREAS SHALL BE SEEDED ONCE FINAL GRADE HAS BEEN ESTABLISHED.

G. THE CONTRACTOR SHALL FURNISH WATER FOR DUST CONTROL AND COMPACTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING DUST CONTROL. THE WATER SUPPLY AND DISTRIBUTION SHALL BE SUFFICIENT TO APPLY THE AMOUNT OF WATER WITHIN THE TIME INTERVAL NECESSARY TO ENSURE THAT THE AMOUNT OF DUST OR BLOWING DIRT IS KEPT TO A MINIMUM AND IS SATISFACTORY TO THE OWNER.

H. THE CONTRACTOR WILL BE RESPONSIBLE FOR MODIFYING THE BMPS SHOWN AS NEEDED TO FACILITATE PROJECT PHASING. ALL MODIFICATIONS MUST BE DONE SUCH THAT BMPS ARE IN PLACE TO PREVENT RUNOFF OF POLLUTANTS FROM THE SITE AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE ANY CHANGES TO THE SWPPP WITH THE SWPPP INSPECTOR. △1

REFERENCED CONSTRUCTION NOTES(◇X):

1. PROVIDE, INSTALL, AND MAINTAIN INLET PROTECTION PER CITY OF GRAND ISLAND STANDARD DETAIL MISC. 304.
2. PROVIDE, INSTALL, AND MAINTAIN CONCRETE WASHOUT PER 2/C103.
3. PROVIDE, INSTALL, AND MAINTAIN CONSTRUCTION ENTRANCE PER 1/C103.
4. PROVIDE, INSTALL, AND MAINTAIN EROSION CONTROL BLANKET PER NDOT STANDARD PLAN 501-R7.
5. PROVIDE, INSTALL, AND MAINTAIN SILT FENCE PER CITY OF GRAND ISLAND STANDARD DETAIL MISC. 302.

EROSION CONTROL DEVICES SCHEDULE

NAME	TYPE
CE-1	CONSTRUCTION ENTRANCE
ECB-1	EROSION CONTROL BLANKET
IP-1 TO IP-3	INLET PROTECTION
CW-1	CONCRETE WASHOUT
SF-1 TO SF-2	SILT FENCE

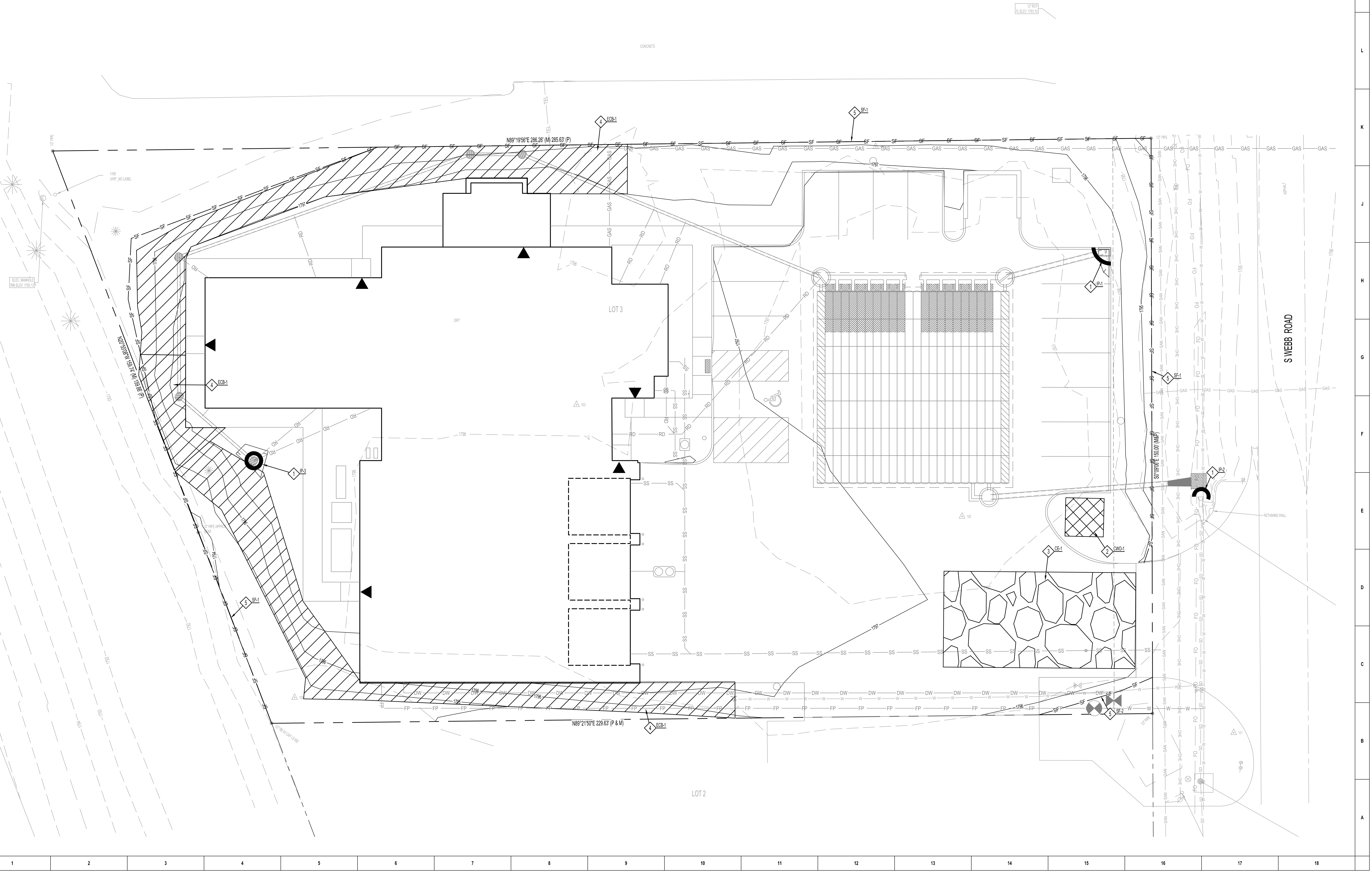
LEGEND

—— XX ——	PROPOSED CONTOUR
— — XX — —	EXISTING CONTOUR
═══	PROPOSED STORM SEWER
—— SF ——	SILT FENCE
▨	CONSTRUCTION ENTRANCE
▩	CONCRETE WASHOUT
▧	EROSION CONTROL BLANKET
━━━	INLET PROTECTION

NORTH

10 0 10

1 inch = 10 ft.



GRAND ISLAND FIRE DEPARTMENT
STATION NUMBER 3
2310 S WEBB ROAD
GRAND ISLAND, NE 68803

STORM WATER POLLUTION PREVENTION PLAN
SITE MAP (SWPPP-SM)

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BRW ARCHITECTS
175 CENTURY SQUARE DRIVE
SUITE 350
COLLEGE STATION, TEXAS 77840
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PROFESSIONAL CIVIL ENGINEER
04/26/2024
MATTHEW J. HUBEL
E-12955
STATE OF NEBRASKA

DESIGNED:	MJH
DRAWN:	JAD
CHECKED:	MJS

ISSUE DATE: 03/25/2024

REVISIONS:

No.:	DATE:	BY:	DESCRIPTION:
△1	04/26/2024	JAD	ADDENDUM NO. 1

PROJECT NO.: 09285.001

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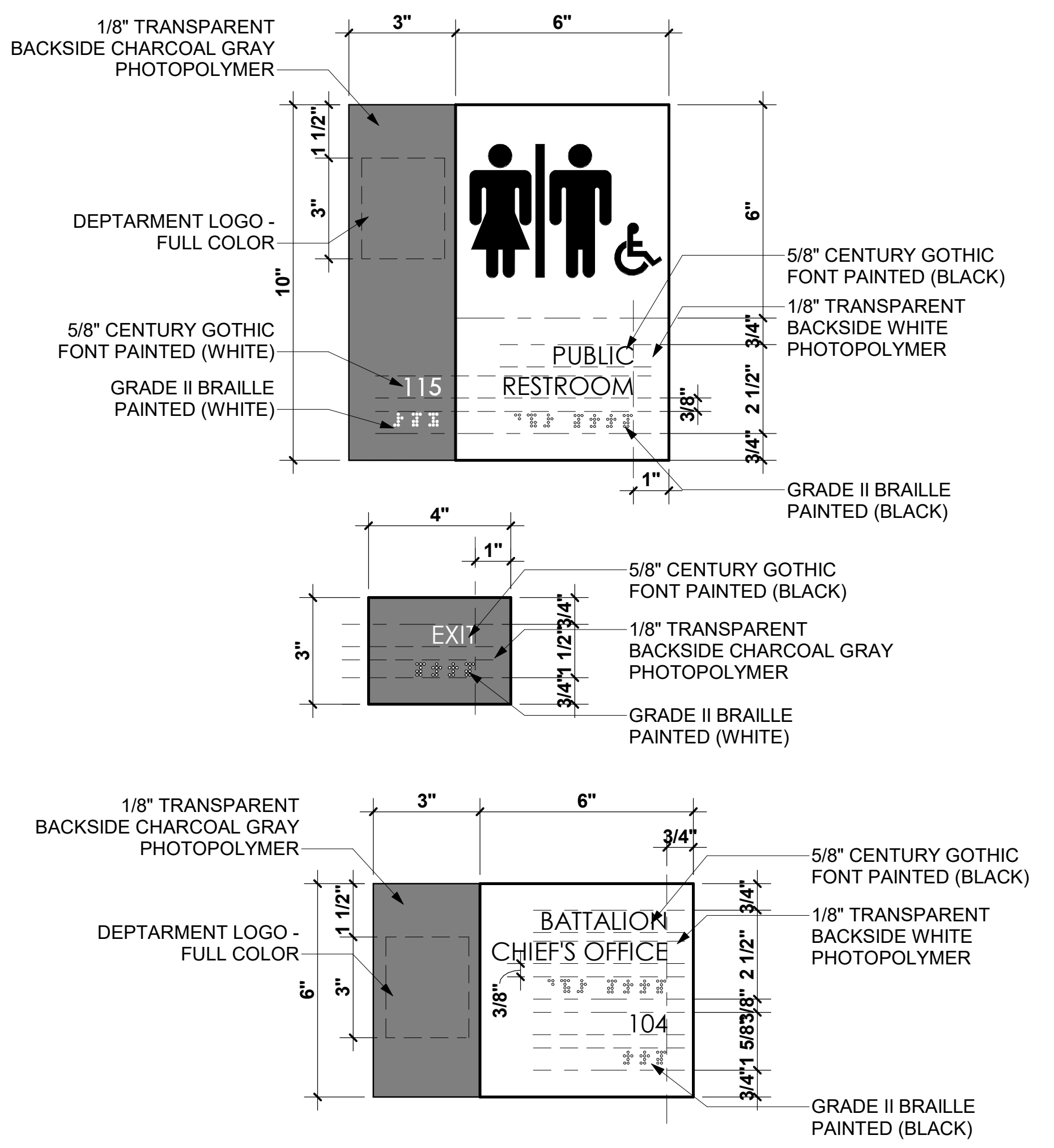

3"
6"
1/8" TRANSPARENT BACKSIDE CHARCOAL GRAY PHOTOPOLYMER
DEPTARMENT LOGO - FULL COLOR
5/8" CENTURY GOTHIC FONT PAINTED (WHITE)
GRADE II BRAILLE PAINTED (WHITE)
10"
1 1/2"
115
PUBLIC RESTROOM
5/8" CENTURY GOTHIC FONT PAINTED (BLACK)
1/8" TRANSPARENT BACKSIDE WHITE PHOTOPOLYMER
GRADE II BRAILLE PAINTED (BLACK)
3/4"
2 1/2"
3/8"
1"
4"
EXIT
5/8" CENTURY GOTHIC FONT PAINTED (BLACK)
1/8" TRANSPARENT BACKSIDE CHARCOAL GRAY PHOTOPOLYMER
GRADE II BRAILLE PAINTED (WHITE)
BATTALION CHIEF'S OFFICE
104
1 5/8"

ROOM SIGNAGE

1. BACKGROUND (COLORS TO BE SELECTED BY ARCHITECT). USE 1/32" RAISED LETTERS. USE GRADE 2 BRAILLE POSITIONED DIRECTLY BELOW TEXT. LOCATE ON WALL NEXT TO ROOM ENTRY. SIGNAGE MOUNTED ON GLASS SHALL HAVE A COORDINATED LAMINATE BACK.

2. ALL ROOMS TO HAVE INTERIOR SIGN EXCEPT FOR:
- ALL CORRIDORS

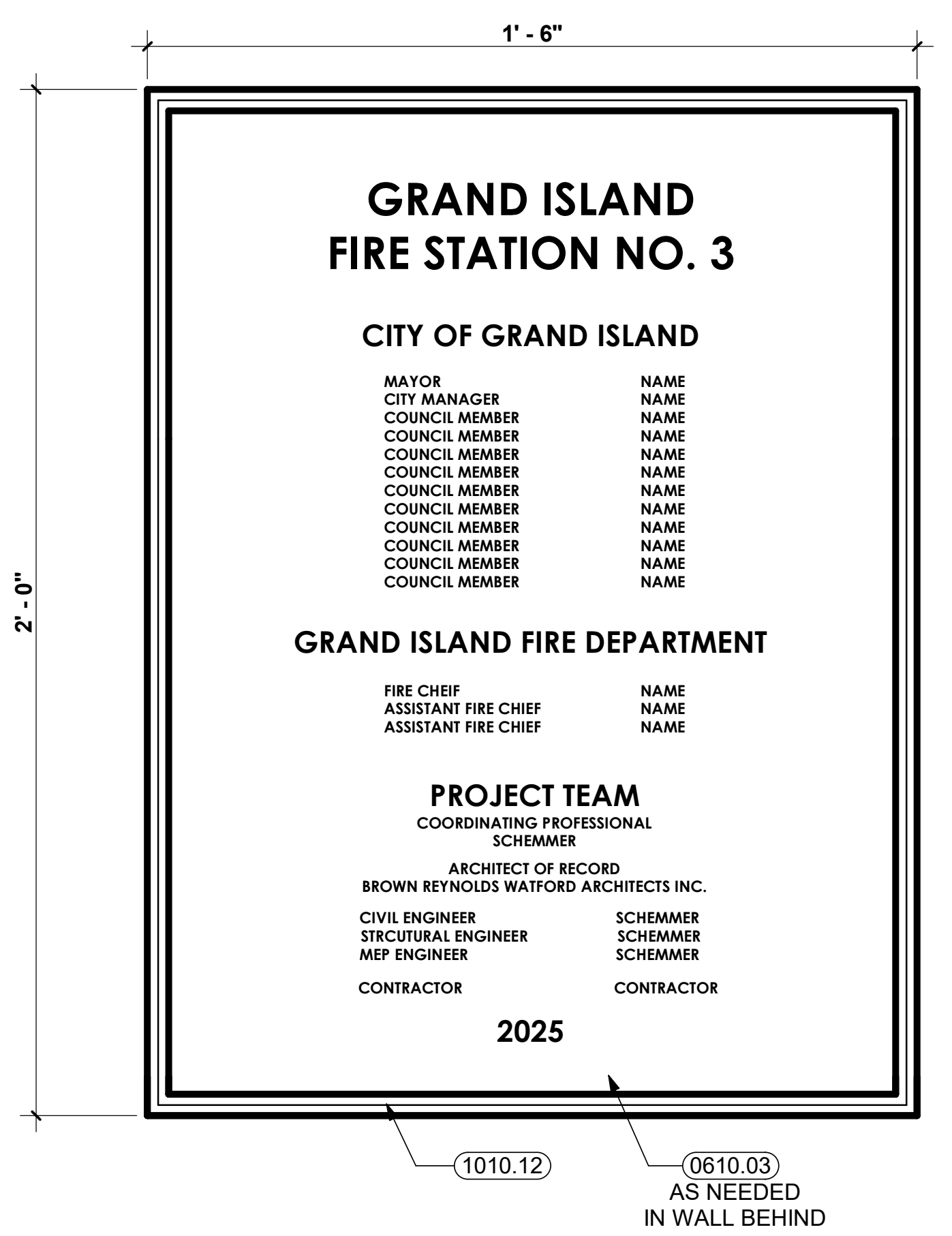
3. PROVIDE REQUIRED FIRE MARSHAL APPROVED EXTERIOR RATED SIGNAGE FOR FIRE RISER ROOM.

4. EXIT/EGRESS SIGNAGE: PROVIDE INTERIOR TACTILE ROOM SIGNAGE AT ALL DOORS ALONG PASSAGEWAYS, EXIT STAIRWAYS, AND EXIT DISCHARGE LEADING TO ACCESSIBLE MEANS OF EGRESS. REFER TO LIFE SAFETY PLAN.

5. ROOMS LISTED BELOW ARE TO HAVE MULTIPLE ROOM SIGNS (QTY):
- DAY ROOM (2)
- APPARATUS BAY (2)

2 INTERIOR SIGNAGE

3" = 1'-0"



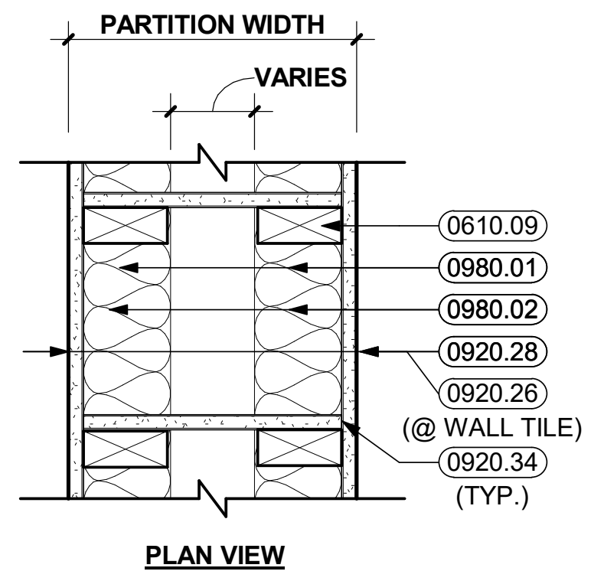
NOTE: WORDING ON PLAQUE TO BE VERIFIED BY ARCHITECT & FIRE DEPARTMENT PRIOR TO FABRICATION.

3 BUILDING PLAQUE1

3" = 1'-0"

D SERIES

1 COMBUSTIBLE



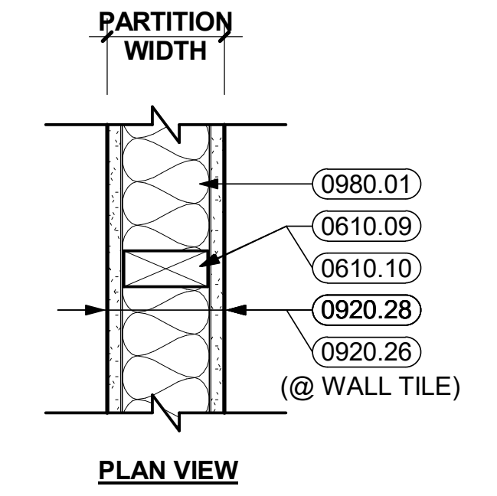
TYPE	STUD	PARTITION WIDTH	PARTITION HEIGHT	STC RATING	NOTES
D1	3 1/2" AT 16" O.C.	2' - 2"	TO DECK	52	1 LAYER GYPSUM BOARD EACH SIDE
D2	3 1/2" AT 16" O.C.	1' - 0"	TO DECK	52	1 LAYER GYPSUM BOARD EACH SIDE
D3	3 1/2" AT 16" O.C.	1' - 4"	TO DECK	52	1 LAYER GYPSUM BOARD EACH SIDE

NOTES:
1. PROVIDE SOUND ATTENUATION BATT INSULATION AT ALL PARTITIONS, U.N.O.
2. REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS TO ACHIEVE SPECIFIED ACOUSTICAL RATINGS
3. SEAL PARTITIONS TO FLOOR AND DECK WHERE LOCATED BETWEEN CONDITIONED AND UNCONDITIONED OR TEMPERED SPACE

A SERIES

1 COMBUSTIBLE

AVAILABLE 1 HOUR FIRE RATING: PROVIDE UL ASSEMBLY U407 WHERE RATING IS INDICATED ON PLANS



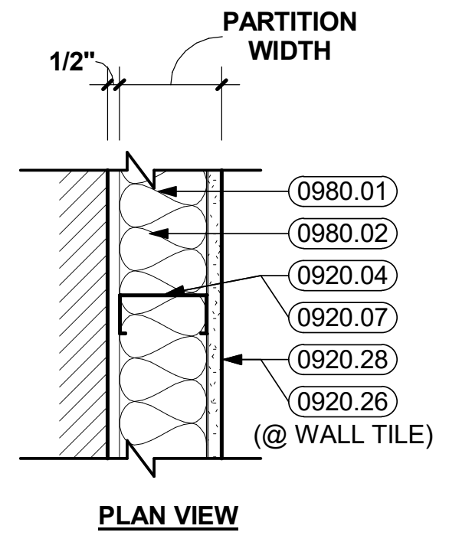
TYPE	STUD	PARTITION WIDTH	PARTITION HEIGHT	NOTES
A1	3 1/2" AT 16" O.C.	4 3/4"	TO DECK	
A2	3 1/2" AT 16" O.C.	4 3/4"	6" ABOVE CEILING	NO SOUND BATT INSULATION
A3	5 1/2" AT 16" O.C.	6 3/4"	TO DECK	
A4	5 1/2" AT 16" O.C.	6 3/4"	TO DECK	NO SOUND BATT INSULATION
A5	3 5/8" AT 16" O.C.	4 3/4"	TO DECK	1/2 HOUR RATED
A6	5 1/2" AT 16" O.C.	6 3/4"	TO DECK	1/2 HOUR RATED

NOTES:
1. PROVIDE SOUND ATTENUATION BATT INSULATION AT ALL PARTITIONS, U.N.O.
2. SEAL PARTITIONS TO FLOOR AND DECK WHERE LOCATED BETWEEN CONDITIONED AND UNCONDITIONED OR TEMPERED SPACE

F SERIES

1 COMBUSTIBLE

AVAILABLE 1 HOUR FIRE RATING:
AT F10 AND F11 ONLY
PROVIDE UL ASSEMBLY WHERE RATING IS INDICATED ON PLANS



TYPE	STUD	PARTITION WIDTH	PARTITION HEIGHT	NOTES
F1	3 1/2" AT 16" O.C.	4 1/8"	6" ABOVE CEILING	NO SOUND BATT INSULATION
F2	3 1/2" AT 16" O.C.	4 1/8"	TO DECK	
F3	5 1/2" AT 16" O.C.	6 1/8"	6" ABOVE CEILING	NO SOUND BATT INSULATION
F4	5 1/2" AT 16" O.C.	6 1/8"	TO DECK	

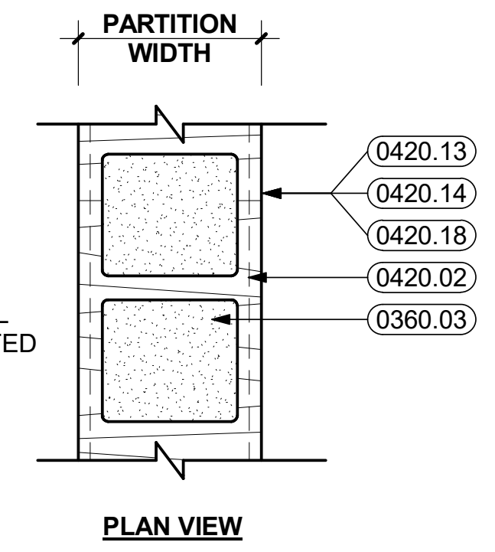
NOTES:
1. PROVIDE SOUND ATTENUATION BATT INSULATION AT ALL PARTITIONS, U.N.O.

E SERIES

NONCOMBUSTIBLE

AVAILABLE FIRE RATINGS: PROVIDE UL ASSEMBLY WHERE RATING IS INDICATED ON PLANS

AVAILABLE 2 HOUR FIRE RATING: PROVIDE UL ASSEMBLY U905 OR U906

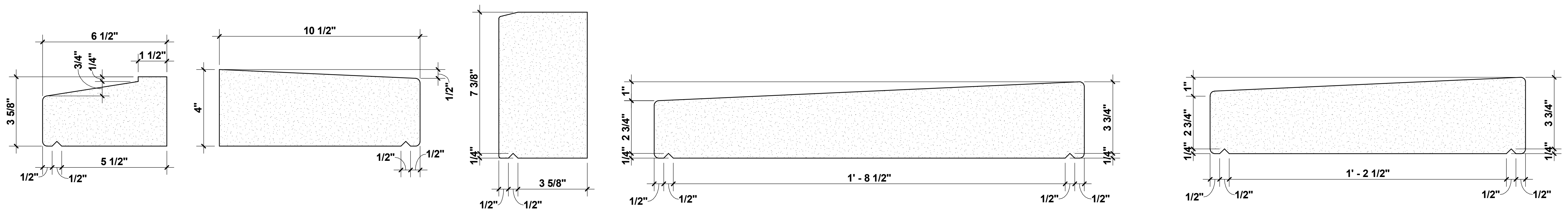


TYPE	CONCRETE MASONRY UNITS	PARTITION WIDTH	PARTITION HEIGHT	STC RATING	NOTES
E1	8" NOM. CMU	7 5/8"	TO DECK	45	FULLY GROUTED
E2	8" NOM. CMU	7 5/8"	TO DECK	55	FULLY GROUTED
E3	12" NOM. CMU	11 5/8"	TO DECK	49	
E4	12" NOM. CMU	11 5/8"	TO DECK	61	FULLY GROUTED

NOTES:
1. PROVIDE FULLY GROUTED CELLS AS NOTED ABOVE TO ACHIEVE THE SPECIFIED FIRE AND / OR STC RATING. THESE REQUIREMENTS ARE IN ADDITION TO STRUCTURAL REQUIREMENTS FOR GROUTED CMU LOCATIONS. REFER TO STRUCTURAL DRAWINGS
2. EXTERIOR CMU WALLS TO RECEIVE INSULATING FILL.
3. INTERIOR CMU WALLS BETWEEN CONDITIONED AND NOT-CONDITIONED SPACES TO RECIEVE INSULATING FILL.

1 PARTITION TYPES

N.T.S.



PROFILE A

PROFILE B

PROFILE C

PROFILE D

PROFILE E

CAST STONE PROFILES

3" = 1'-0'

KEYNOTES

0360.03	FILL WITH GROUT
0420.02	CONCRETE MASONRY UNIT HORIZONTAL REINFORCING
0420.13	6" CONCRETE MASONRY UNITS
0420.14	8" CONCRETE MASONRY UNITS
0420.18	12" CONCRETE MASONRY UNITS
0610.03	2X WOOD BLOCKING
0610.09	2 X 4 WOOD STUDS AT 16" O.C.
0610.10	2 X 6 WOOD STUDS AT 16" O.C.
0920.04	3 5/8" METAL STUDS (20 GAUGE MINIMUM) AT 16" O.C.
0920.07	6" METAL STUDS (20 GAUGE MINIMUM) AT 16" O.C.
0920.26	5/8" CEMENTITIOUS BACKER BOARD
0920.28	5/8" GYPSUM BOARD (TYPE X)
0920.34	GYPSUM BOARD GUSSETS AT 16" O.C. VERTICALLY
0980.01	3 1/2" FIBERGLASS SOUND ATTENUATION BATT INSULATION
0980.02	4” MINERAL WOOL SOUND ATTENUATION BATT INSULATION
1010.12	BUILDING DEDICATION PLAQUE

PARTITION GENERAL NOTES:

1. PARTITION REQUIREMENTS SHOWN ARE MINIMUM STANDARDS
2. NOT ALL TYPES LISTED ABOVE MAY BE REQUIRED IN THE PROJECT
3. PARTITIONS SHALL BE TYPE "A1" UNLESS OTHERWISE NOTED
4. TYPICAL FLOOR PLAN DIMENSIONS OF PARTITIONS ARE TO THE NOMINAL FINISH FACE OF GYPSUM BOARD
5. WHERE A CLEAR DIMENSION OR OPENING IS REQUIRED OR NOTED, MEASURE DIMENSION TO FACE OF PARTITION FINISH
6. WHERE PARTITIONS AND / OR FURRING MEET, MAINTAIN A FLUSH SURFACE ON THE SIDE WHERE THE FINISH IS STRAIGHT OR CONTINUOUS UNLESS NOTED OTHERWISE
7. PROVIDE STUD BRACING AT 4'-0" O.C. STAGGERED IN ALTERNATING DIRECTIONS. BRACING SHALL ATTACH TO STUDS 1'-0" MAX. ABOVE CEILING UNLESS NOTED OTHERWISE
8. PROVIDE CEMENTITIOUS BACKER BOARD IN LIEU OF TOP LAYER OF GYPSUM BOARD INDICATED IN PARTITION TYPES, AT ALL AREAS THAT ARE SCHEDULED TO RECEIVE CERAMIC TILE FINISH AND AT AREAS SO REQUIRED BY CODE
9. INSTALL BLOCKING OR BACKER MATERIAL FOR ATTACHMENT / MOUNTING OF WALL HUNG ITEMS OR EQUIPMENT DESCRIBED IN THE DOCUMENTS. PROVIDE FIRE RETARDANT TREATED BLOCKING WHERE INDICATED OR REQUIRED BY APPLICABLE BUILDING CODE
10. PROVIDE ABUSE / IMPACT RESISTANT GYPSUM BOARD IN LIEU OF TOP LAYER OF GYPSUM BOARD INDICATED IN PARTITION TYPES WHERE INDICATED IN SPECIFICATIONS OR AT LOCATIONS INDICATED IN DRAWINGS
11. PROVIDE INTERIOR MOLD AND MILDEW RESISTANT GLASS MAT FACED GYPSUM BOARD IN LIEU OF TOP LAYER OF GYPSUM BOARD INDICATED IN PARTITION TYPES WHERE INDICATED IN SPECIFICATIONS OR AT LOCATIONS INDICATED IN DRAWINGS
12. WHEREVER THERMAL OR ACOUSTICAL BATT INSULATION IS INDICATED IN WALL CAVITIES, PACK VOIDS IN LIGHT GAUGE METAL FRAMING THAT WILL NOT BE ACCESSIBLE AFTER ERECTION (INCLUDING BUT NOT LIMITED TO HEADERS AND STUD PACKS). FILL VOIDS AS FRAMING IS ERECTED WITH SAME TYPE AND RATING BATT INSULATION AS INDICATED IN CAVITY. WHERE VOIDS ARE SUBJECT TO GETTING WET PRIOR TO BUILDING DRY-IN, USE MINERAL FIBER BATTS FOR PACKING VOIDS. [ALTERNATIVELY, WHERE APPROVED BY ARCHITECT, EQUIVALENT SPRAY FOAM INSULATION MAY BE PROVIDED IN VOIDS AFTER ERECTION]
13. INSTALLATION OF GYPSUM BOARD, BACKER BOARD AND BASE BOARD SHALL CONFORM TO REQUIREMENTS FOR FIRE RATINGS AND ACOUSTICAL RATINGS
14. PENETRATIONS IN RATED PARTITIONS AND CONNECTIONS OF THE PARTITIONS TO OTHER PORTIONS OF THE WORK SHALL BE IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDED DETAILS AND IN COMPLIANCE WITH APPLICABLE TESTING AGENCY REQUIREMENTS
15. AT FIRE RATED PARTITIONS, PROVIDE FIRESTOPPING AT PENETRATIONS, JOINTS, AND OTHER JUNCTIONS BETWEEN FIRE RATED PARTITIONS AND ADJACENT ASSEMBLIES, COMPLIANT WITH APPLICABLE BUILDING CODE AND TESTING AGENCY REQUIREMENTS
16. FIRE AND / OR ACOUSTICAL TEST REFERENCES CALLED OUT MAY VARY DEPENDING ON THE MANUFACTURER OF ASSEMBLIES AND COMPONENTS USED IN ACTUAL CONSTRUCTION
17. ALL FIRE / SMOKE RATED PARTITIONS SHALL BE LABELED PER APPLICABLE BUILDING CODE AND TESTING AGENCY REQUIREMENTS
18. ALL ELEMENTS OF ACOUSTICALLY RATED PARTITIONS SHALL EXTEND TO ROOF OR FLOOR DECK ABOVE AND ALL JOINTS AND PENETRATIONS OF ACOUSTICALLY RATED PARTITIONS SHALL BE FILLED AND SEALED. SEAL TOP AND BOTTOM OF PARTITION TO STRUCTURE

ISSUE DATE: 04/26/2024

REVISIONS:

No.:	DATE:	BY:	DESCRIPTION:
1	04/26/2024	MG	ADDENDUM NO.1

DESIGNED: MG, AH, KW, ST
DRAWN: MW, RH
CHECKED:

Ray Holliday
RAY W. HOLLIDAY
A-5412
04/26/2024

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SUITE 350
COLLEGE STATION, TEXAS 77840
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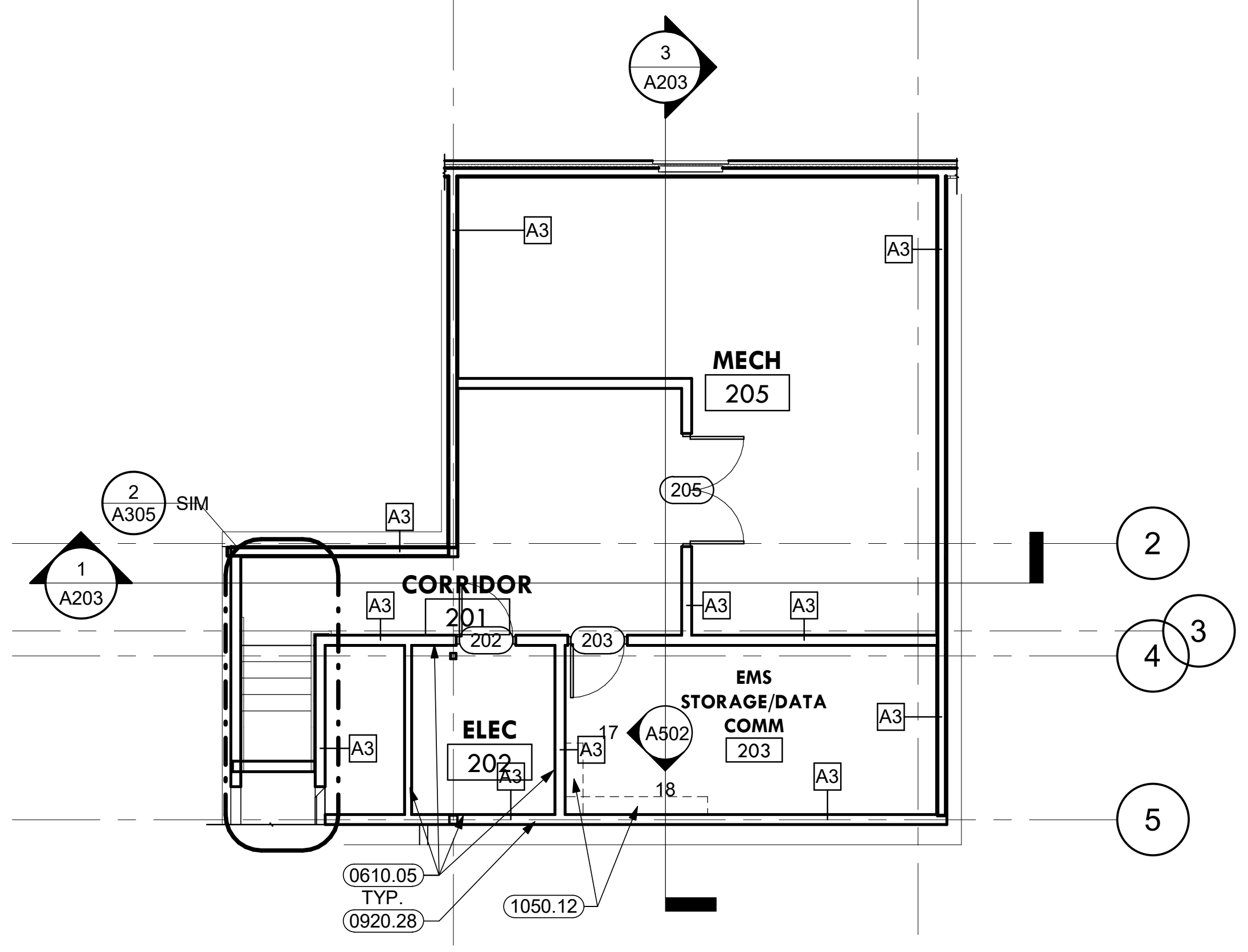
CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

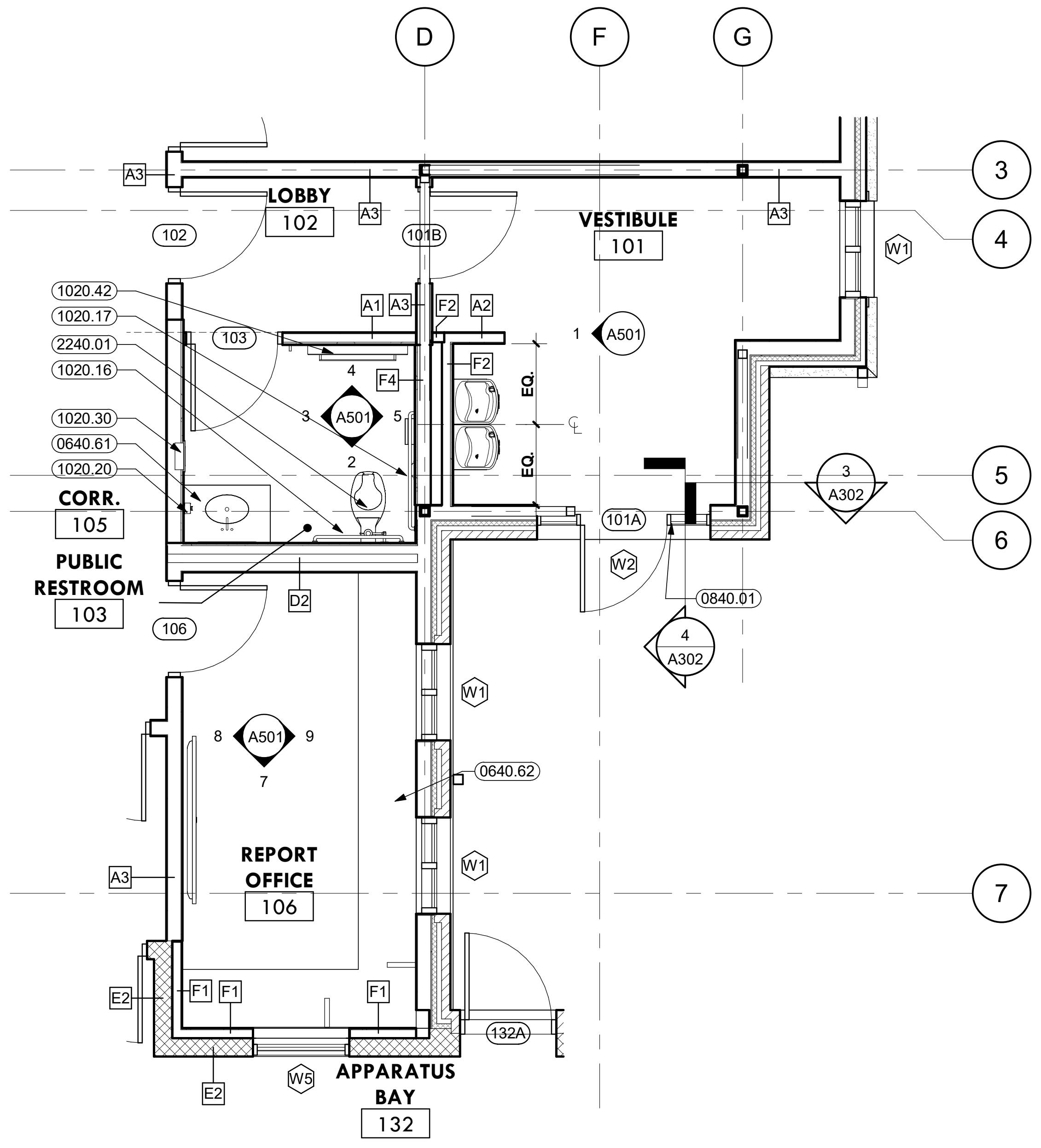
PARTITION TYPES

PROJECT NO.: 223134.00

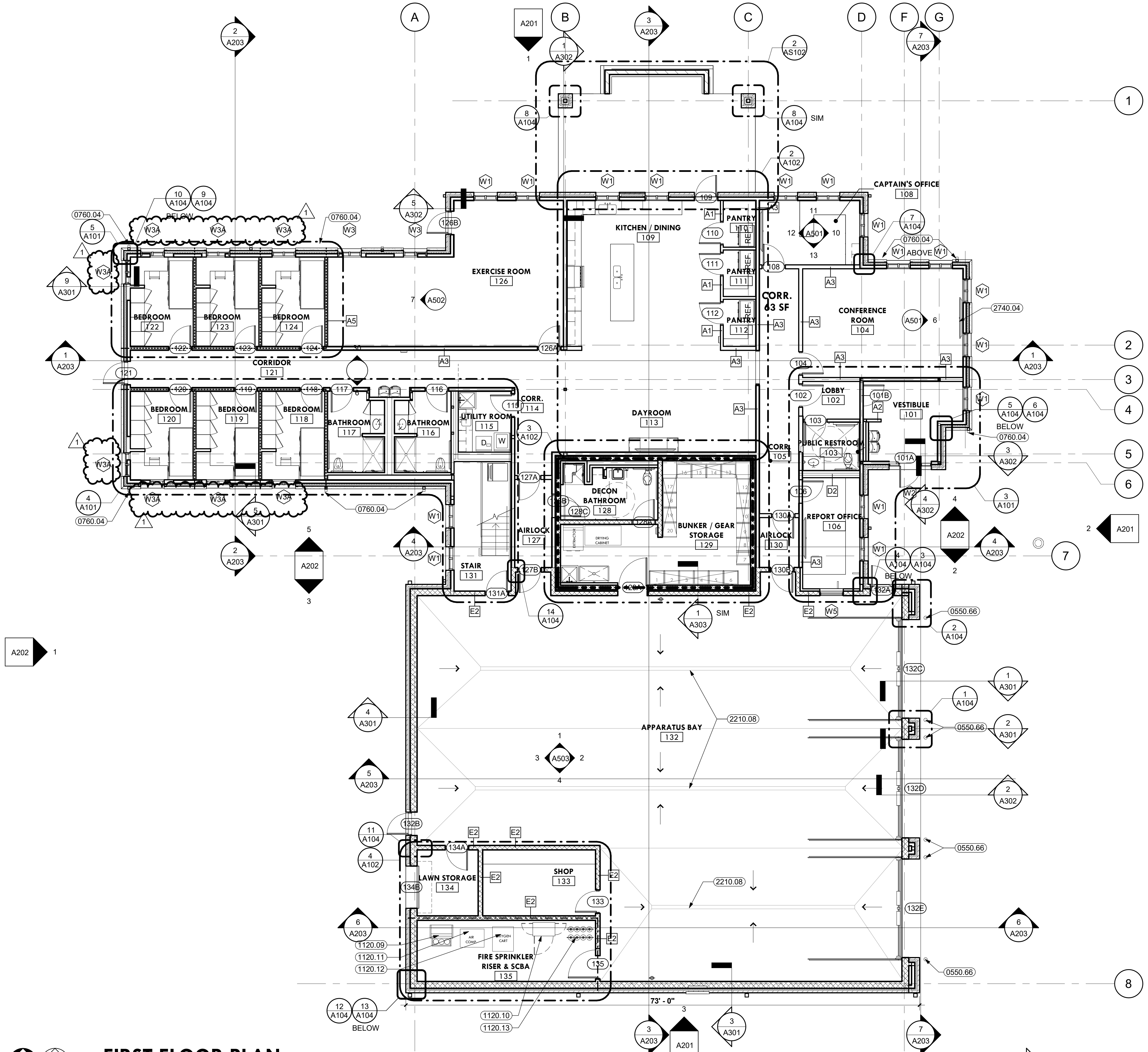
A100



2 SECOND FLOOR PLAN
1/8" = 1'-0"

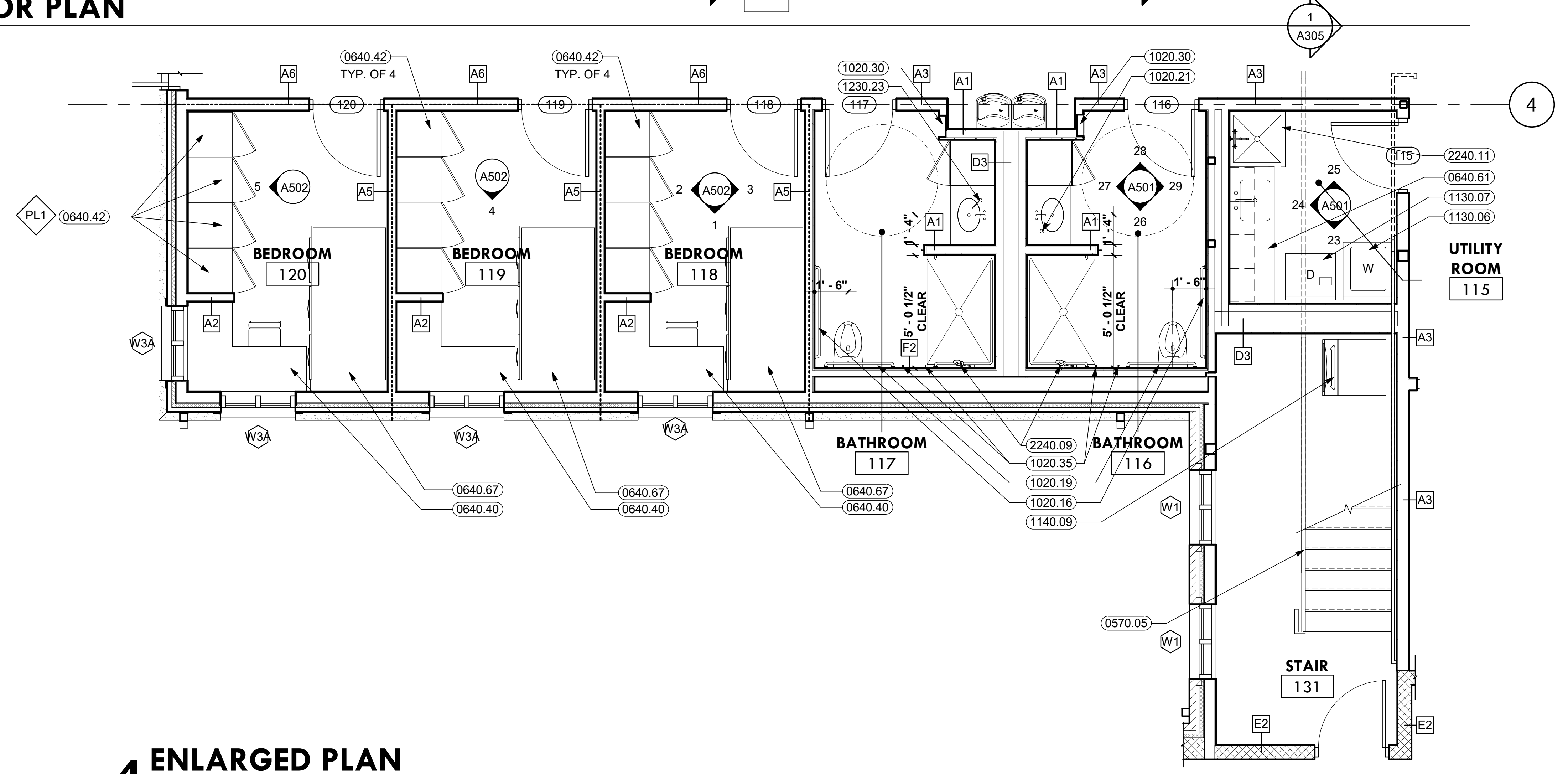


3 ENLARGED PLAN
1/4" = 1'-0"

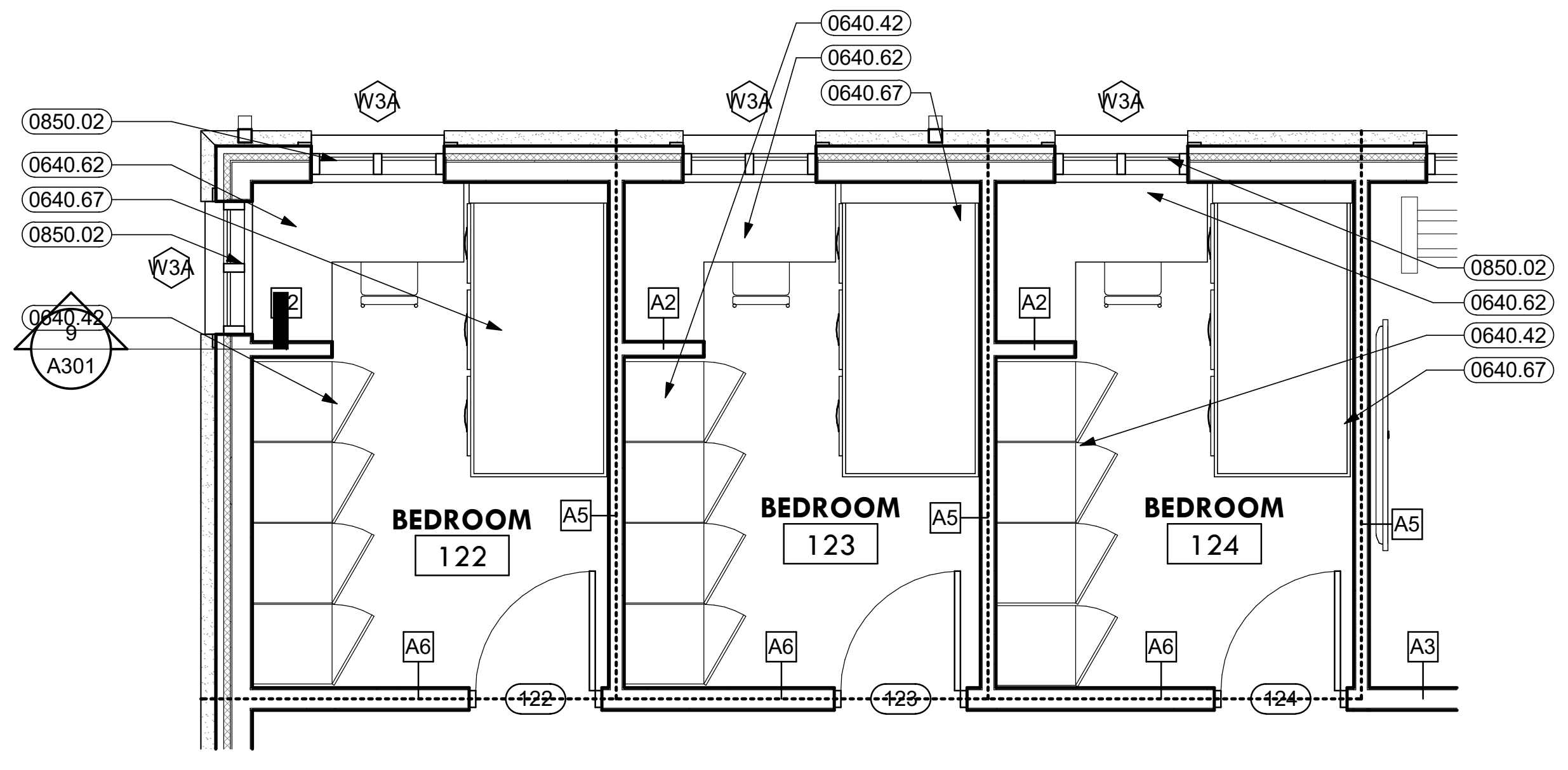


PLAN NORTH
TRUE NORTH

1 FIRST FLOOR PLAN
1/8" = 1'-0"



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



5 ENLARGED PLAN
1/4" = 1'-0"

KEYNOTES

0550.66	6" STEEL PIPE BOLLARD. FILL WITH CONCRETE (GALVANIZED AT EXTERIOR LOCATIONS), WITH DECORATIVE BOLLARD COVER
0570.05	2" X 3/4" DECORATIVE STEEL BAR CANE DETECTION RAIL
0610.05	1/2" EXTERIOR GRADE PLYWOOD
0640.40	PLASTIC LAMINATE CLAD DESK
0640.42	PLASTIC LAMINATE CLAD WARDROBE
0640.61	QUARTZ SURFACE COUNTERTOP WITH 4" SPLASH AS SHOWN
0640.62	QUARTZ SURFACE COUNTERTOP
0640.67	HARDWOOD VENEER BED FRAME WITH DRAWERS
0760.04	PREFINISHED METAL DOWNSPOUT
0840.01	ALUMINUM STOREFRONT
0850.02	OPERABLE ALUMINUM WINDOW
0920.28	5/8" GYPSUM BOARD (TYPE X)
1020.16	STAINLESS STEEL 1 1/2" DIAMETER GRAB BAR (36" LONG)
1020.17	STAINLESS STEEL 1 1/2" DIAMETER GRAB BAR (42" LONG)
1020.19	STAINLESS STEEL 1 1/2" DIAMETER GRAB BAR (L-SHAPED)
1020.20	SOAP DISPENSER (SURFACE-MOUNTED)
1020.21	SOAP DISPENSER (COUNTER-MOUNTED)
1020.30	STAINLESS STEEL RECESSED PAPER TOWEL DISPENSER / TRASH RECEPTACLE
1020.35	ROBE / TOWEL HOOK
1020.42	SURFACE MOUNTED BABY CHANGING STATION
1050.12	STAINLESS STEEL ADJUSTABLE WALL MOUNTED SHELVES
1120.09	SCBA FILL STATION
1120.10	SCBA COMPRESSOR (O.F.O.I.)
1120.11	AIR COMPRESSOR (O.F.O.I.)
1120.12	OXYGEN CART STORAGE O.F.O.I.)
1120.13	SCBA BOTTLE STORAGE O.F.O.I.)
1130.06	WASHING MACHINE (O.F.O.I.)
1130.07	CLOTHES DRYER (O.F.O.I.)
1140.09	ICE MACHINE
1230.23	HARDWOOD VENEER WALL CABINET CASEWORK WITH ADJUSTABLE SHELVES
2210.08	TRAFFIC RATED TRENCH DRAIN
2240.01	WATER CLOSET. ORIENT FLUSH VALVE TOWARDS ACCESSIBLE SPACE AT ACCESSIBLE STALLS / RESTROOMS
2240.09	SHOWER HEAD
2240.11	MOP SINK
2740.04	TELEVISION OR MONITOR, O.F.O.I.

ISSUE DATE: 04/26/2024
REVISIONS:

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1	04/26/2024	MG	ADDENDUM NO.1

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DRAWN: MG, AH, KW, ST
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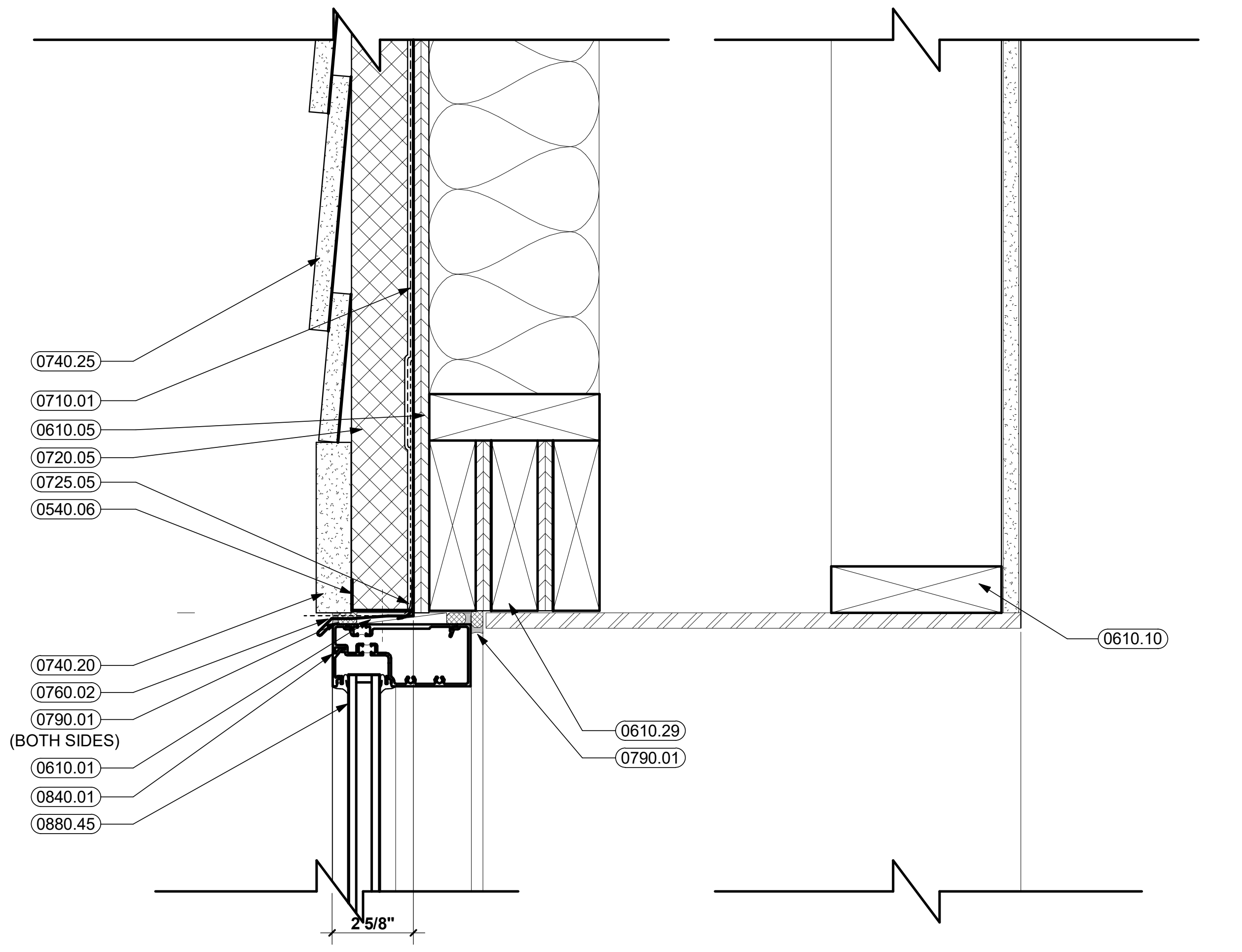
CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

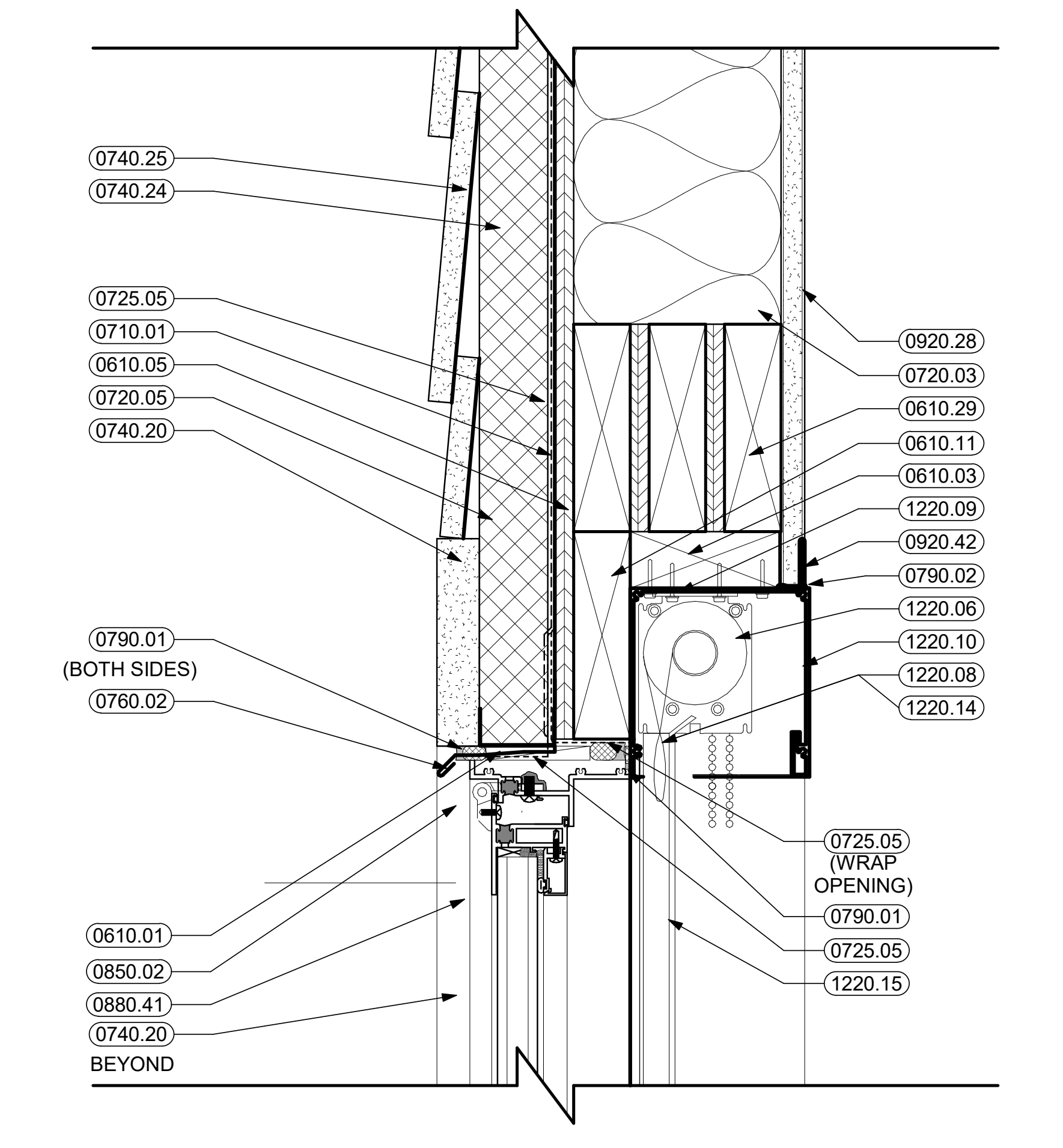
FIRST & SECOND FLOOR PLANS

PROJECT NO.: 223134.00

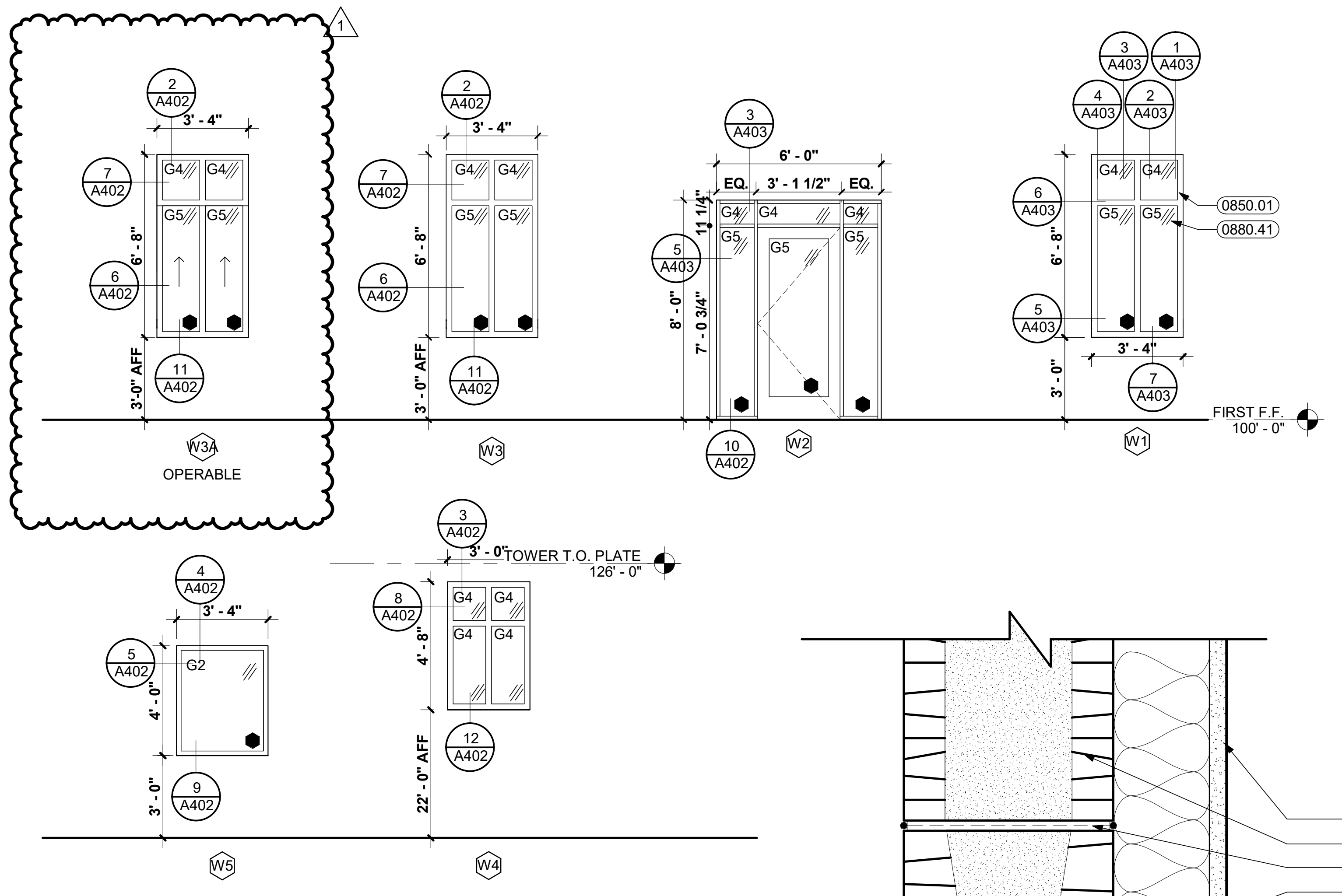
A101



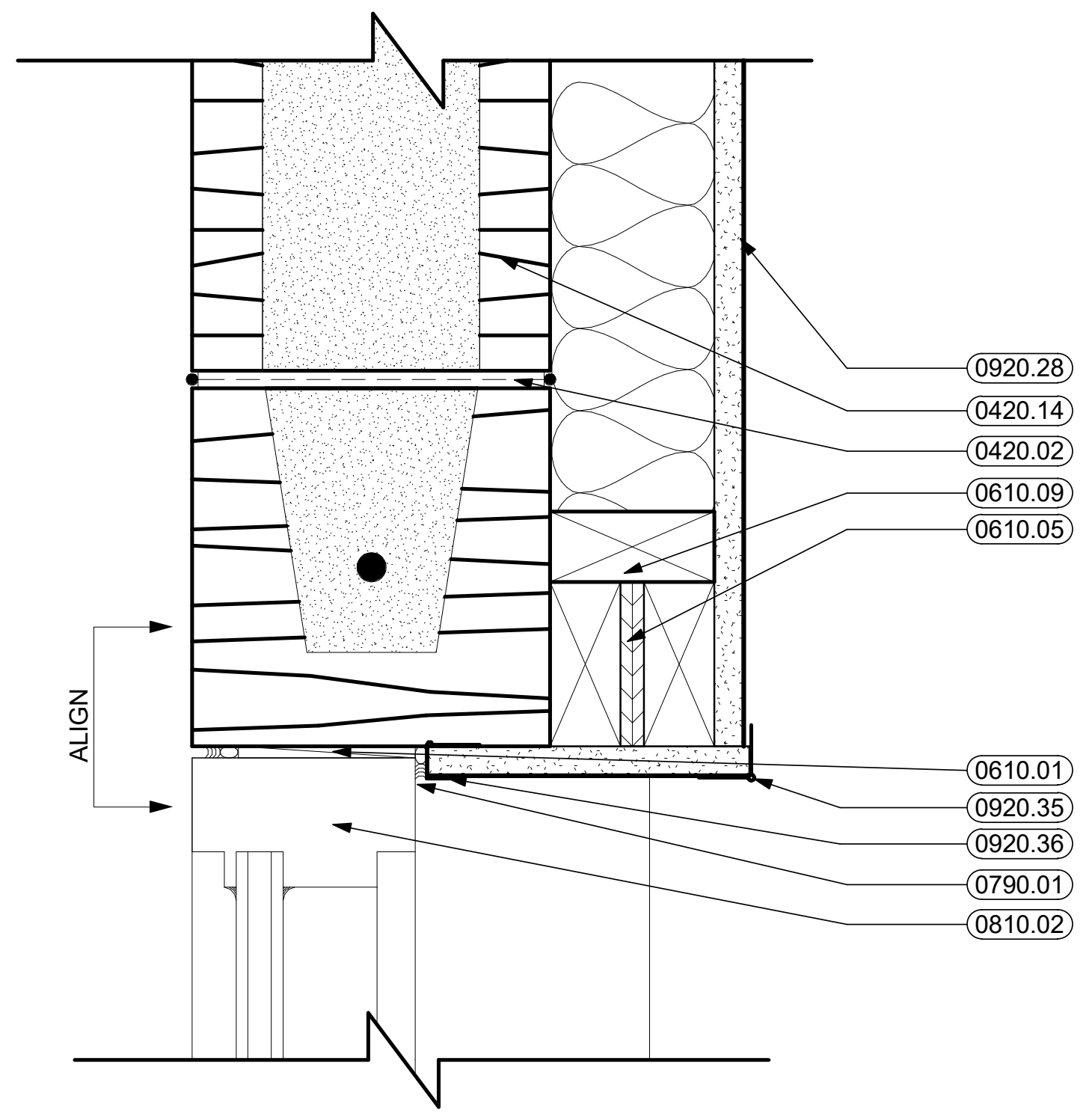
3 WINDOW HEAD
3" = 1'-0"



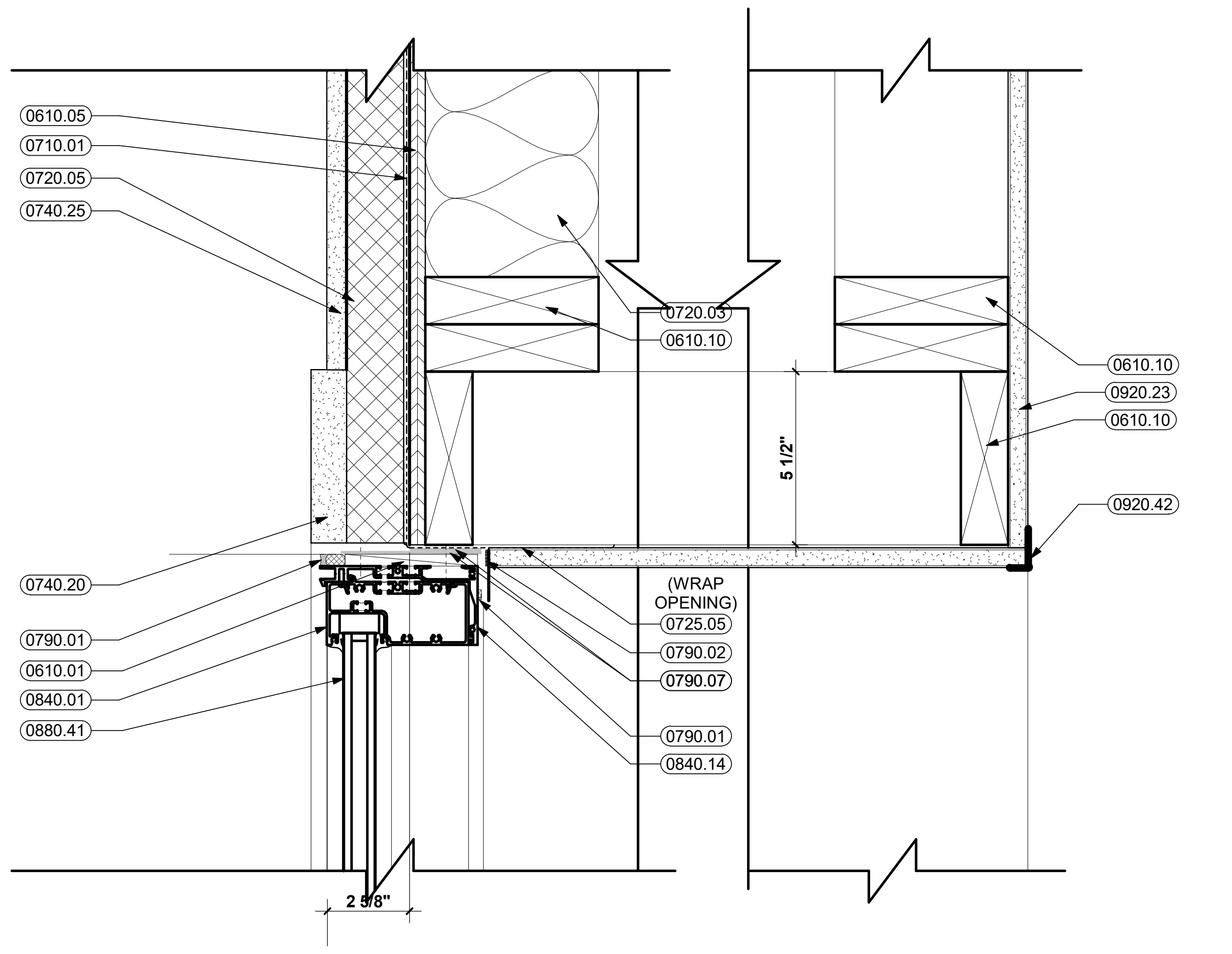
2 WINDOW HEAD
3" = 1'-0"



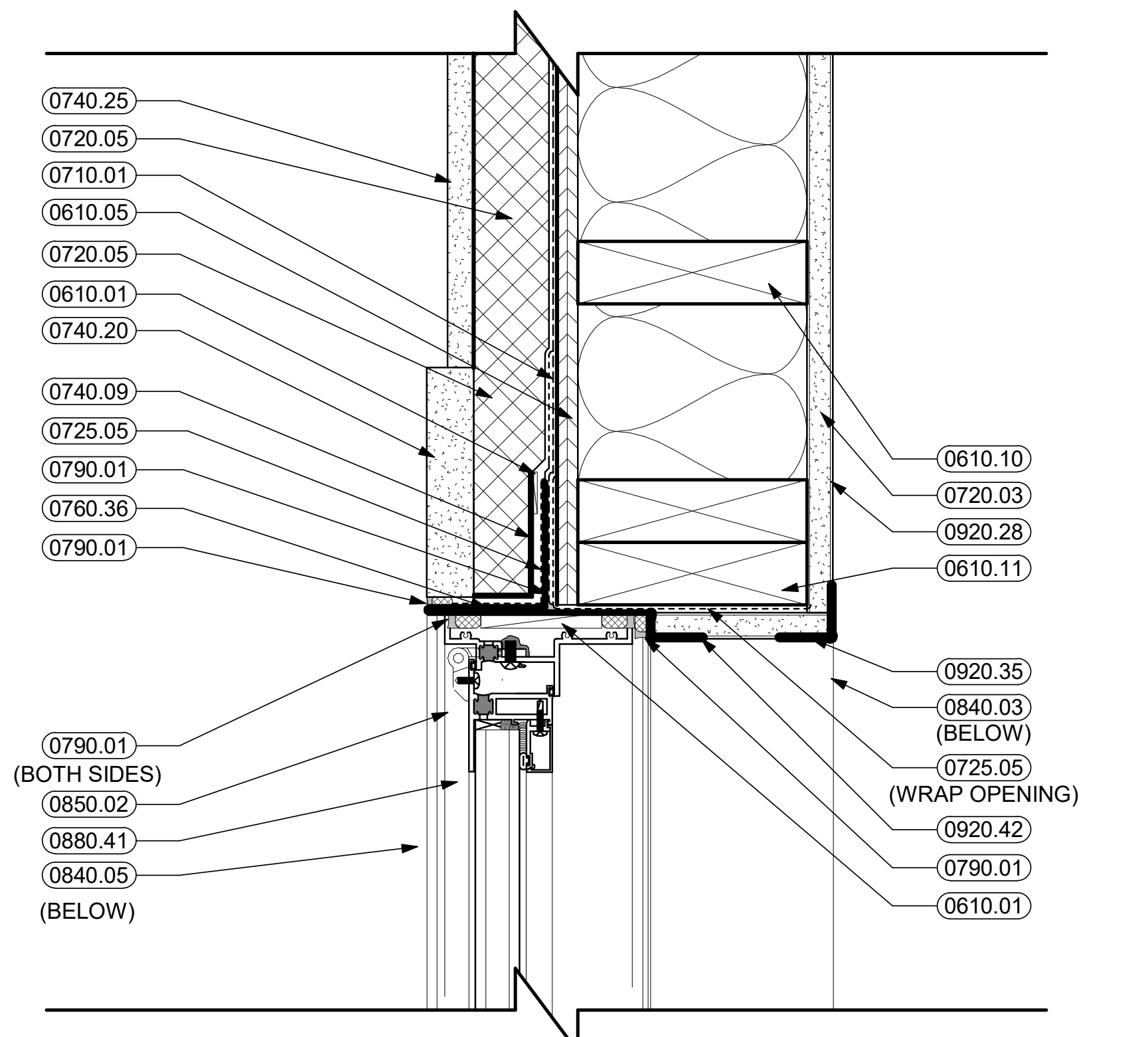
1 WINDOW TYPES
1/4" = 1'-0"



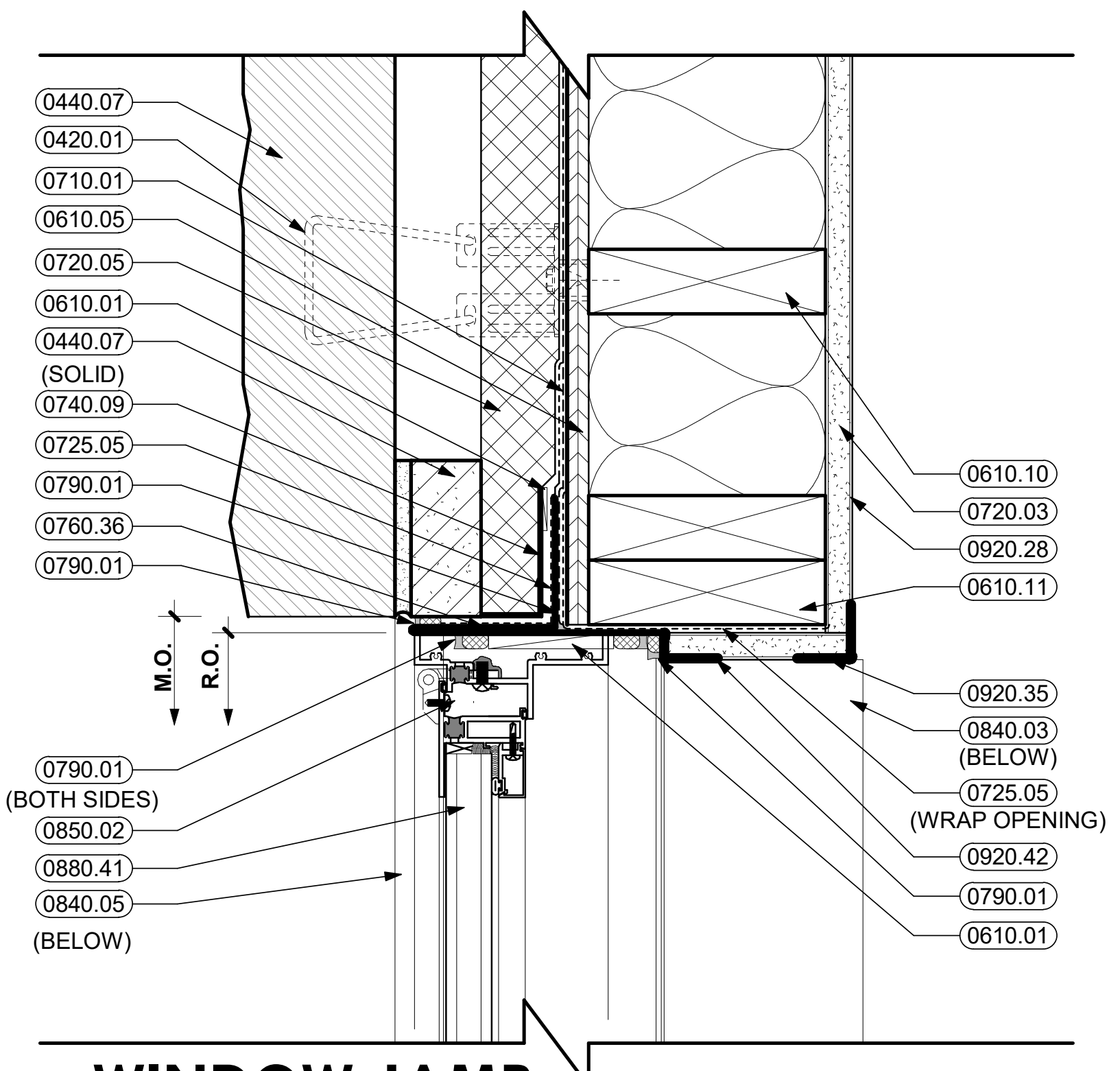
4 HEAD DETAIL
3" = 1'-0"



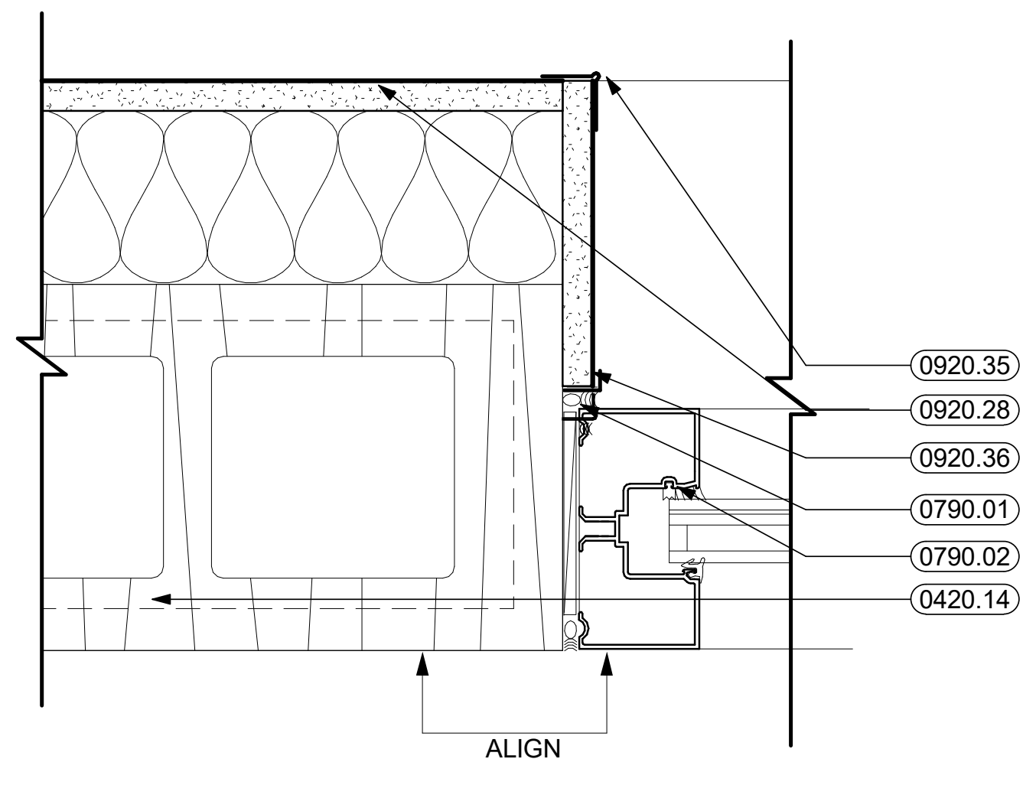
8 WINDOW JAMB
3" = 1'-0"



7 WINDOW JAMB
3" = 1'-0"



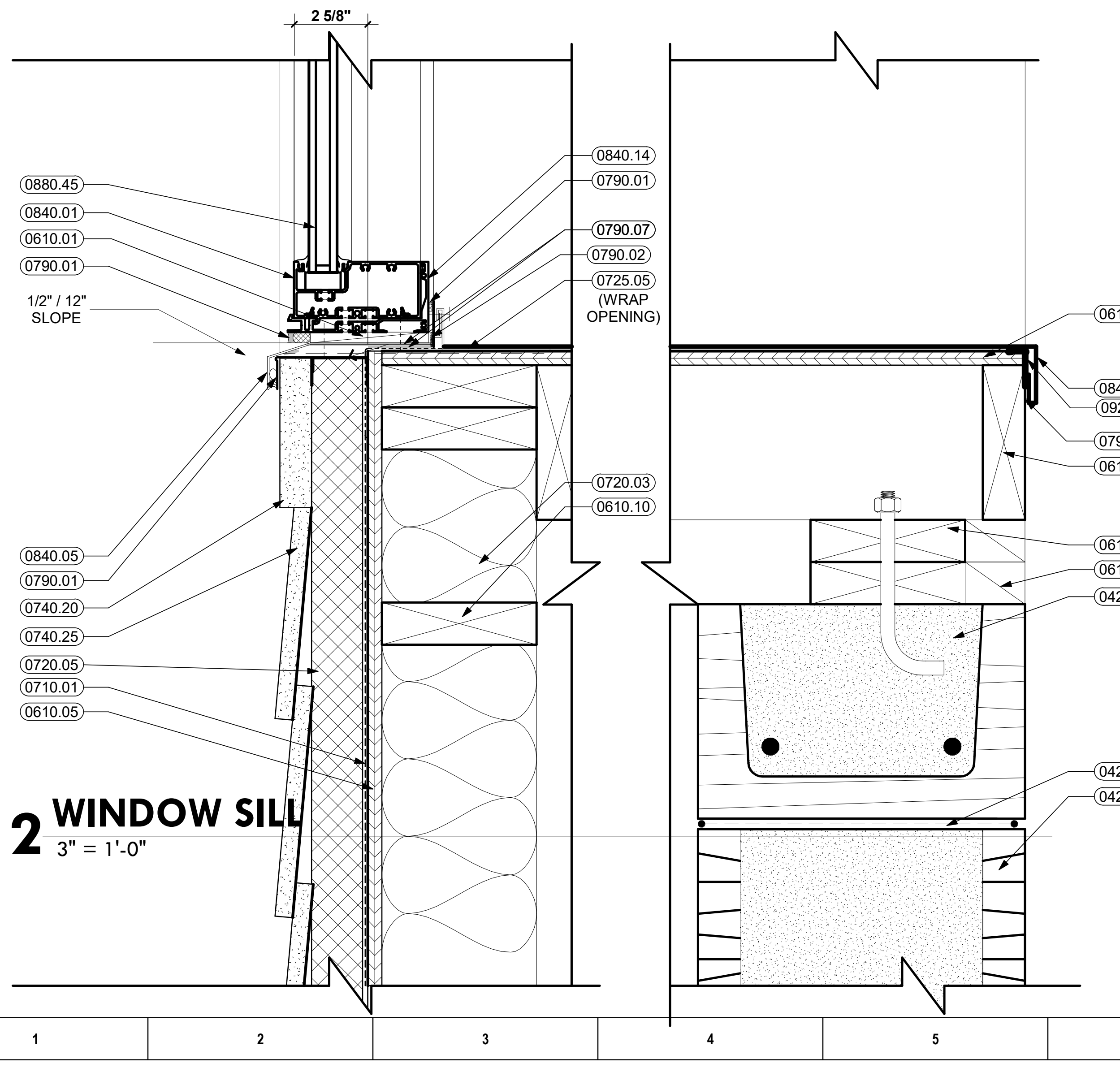
6 WINDOW JAMB
3" = 1'-0"



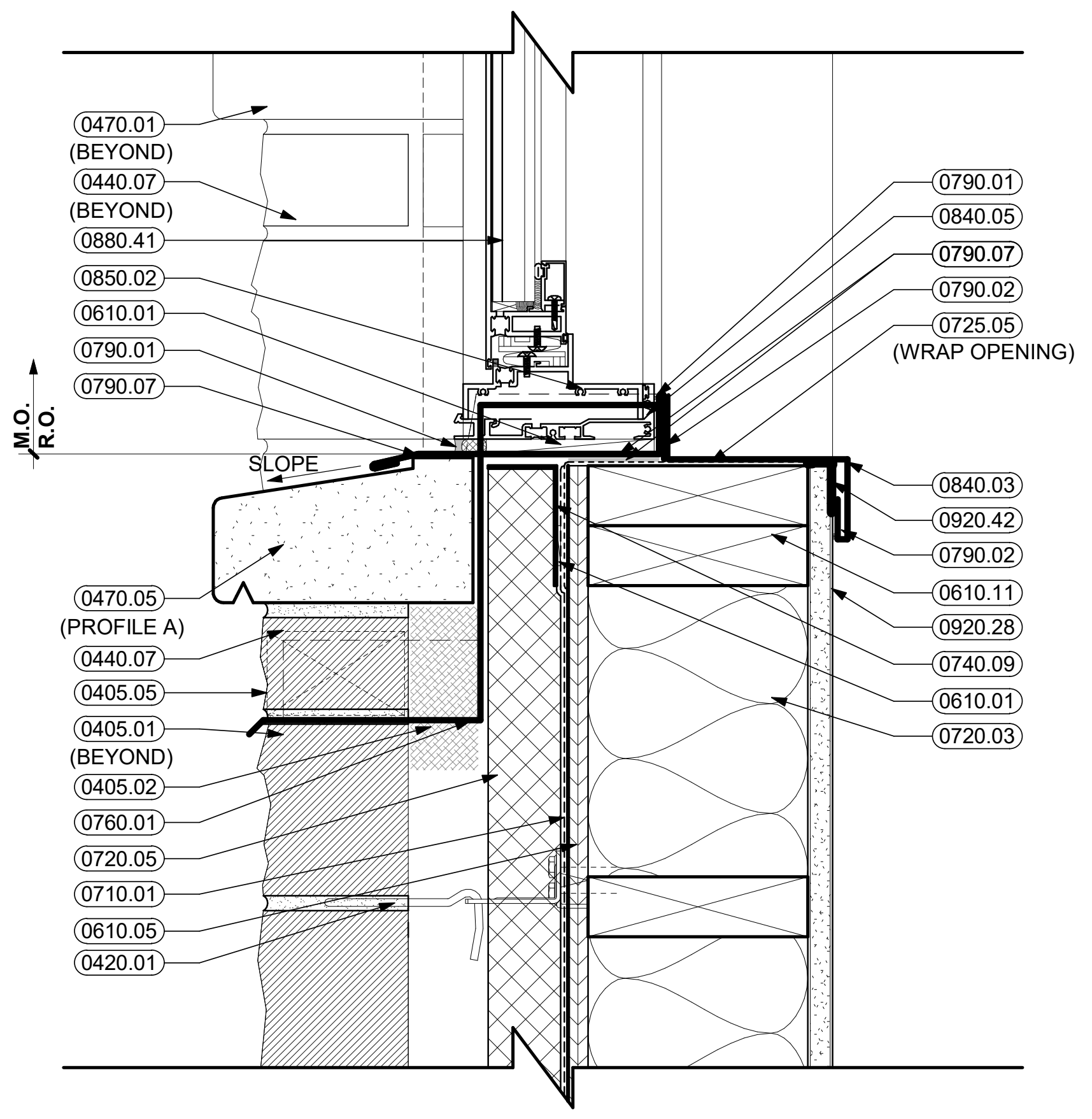
5 JAMB DETAIL
3" = 1'-0"

KEYNOTES

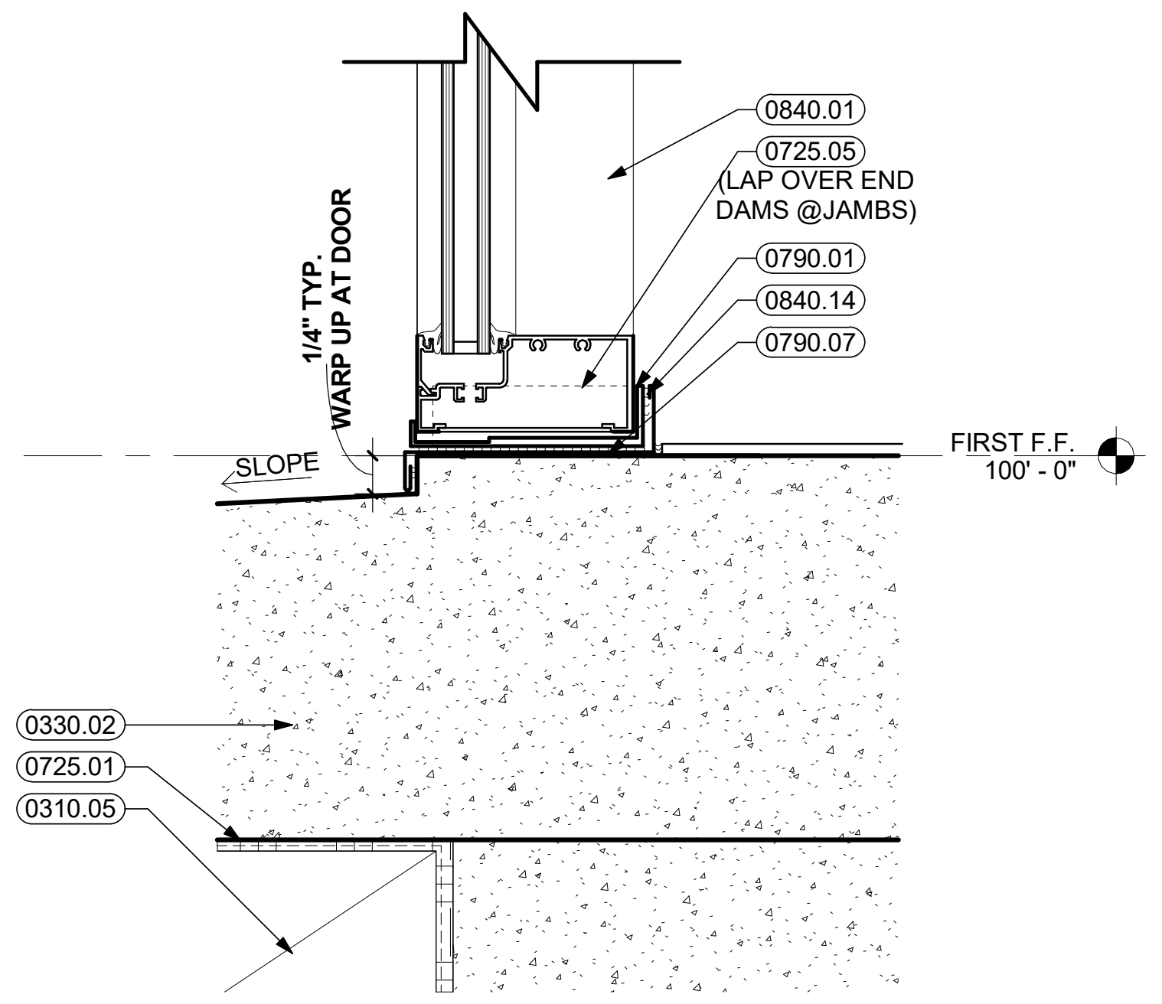
0310.05	VOID FORMS
0330.02	CONCRETE SLAB
0405.01	FLASHING END DAM
0405.02	MORTAR NET
0405.05	MASONRY VENEER WEEP / VENT
0420.01	ADJUSTABLE MASONRY WALL TIES AT 16" O.C.E.W.
0420.02	CONCRETE MASONRY UNIT HORIZONTAL REINFORCING
0420.14	8" CONCRETE MASONRY UNITS
0420.18	12" CONCRETE MASONRY UNITS
0420.23	CONCRETE MASONRY BOND BEAM
0440.07	STONE VENEER
0470.01	CAST STONE
0470.05	CAST STONE SILL WITH DRIP
0540.06	2" COLD-FORMED METAL FURRING CHANNEL
0610.01	SHIM AS REQUIRED
0610.03	2X WOOD BLOCKING
0610.05	1/2" EXTERIOR GRADE PLYWOOD
0610.09	2 X 4 WOOD STUDS AT 16" O.C.
0610.10	2 X 6 WOOD STUDS AT 16" O.C.
0610.11	2 X 6 WOOD FRAMING
0610.29	2X WOOD HEADER (RE: STRUCTURAL)
0610.39	CONTINUOUS DOUBLE WOOD 2X TOP PLATE
0710.01	BITUMINOUS DAMPPROOFING
0720.03	5 1/2" BATT INSULATION
0720.05	2" CONTINUOUS INSULATION
0725.01	UNDERSLAB VAPOR BARRIER
0725.05	SELF-ADHERING DETAIL TRANSITION MEMBRANE
0740.09	COMPOSITE FRAMING SUPPORT SYSTEM
0740.20	FIBER REINFORCED CEMENTITIOUS TRIM
0740.24	RAINSCREEN ATTACHMENT SYSTEM
0740.25	FIBER REINFORCED CEMENTITIOUS LAP SIDING
0760.01	THROUGH-WALL FLASHING WITH WEEPS AT 2'-0" O.C. AND MORTAR NET
0760.02	THROUGH-WALL FLASHING (WITH WEEPS AT 2'-0" O.C. AS REQUIRED)
0760.36	PREFINISHED METAL FLASHING CLOSURE
0790.01	SEALANT WITH BACKER ROD AS REQUIRED
0790.02	CAULKING
0790.07	SET IN BED OF SEALANT
0810.02	HOLLOW METAL FRAME
0840.01	ALUMINUM STOREFRONT
0840.03	ALUMINUM SILL WITH HEMMED AND CLOSED ENDS
0840.05	CONTINUOUS ALUMINUM SILL PAN FLASHING WITH BACK AND END DAMS
0840.14	ALUMINUM STOREFRONT SUBSILL
0850.01	FIXED ALUMINUM WINDOW
0850.02	OPERABLE ALUMINUM WINDOW
0880.41	GLASS TYPE IG#7 (INSULATED TINTED, LOW-E)
0880.45	GLASS TYPE IG#10B (INSULATED LOW-E SPANDREL)
0920.23	5/8" MOLD AND MOISTURE RESISTANT GYPSUM BOARD
0920.28	5/8" GYPSUM BOARD (TYPE X)
0920.35	CORNER BEAD, TYPICAL
0920.36	J-MOULD, TYPICAL
0920.42	L-BEAD, TYPICAL
1220.06	MANUAL WINDOW SHADE
1220.08	BLACKOUT WINDOW SHADE
1220.09	ROLLER SHADE CEILING POCKET
1220.10	ROLLER SHADE FASCIA (WITH CLOSED ENDS AT OPEN SIDES)
1220.14	SHEER WINDOW SHADE (RE:FURNISHING PLAN)
1220.15	EXTRUDED ALUMINUM ROOM DARKENING SIDE CHANNEL AT BLACKOUT SHADE



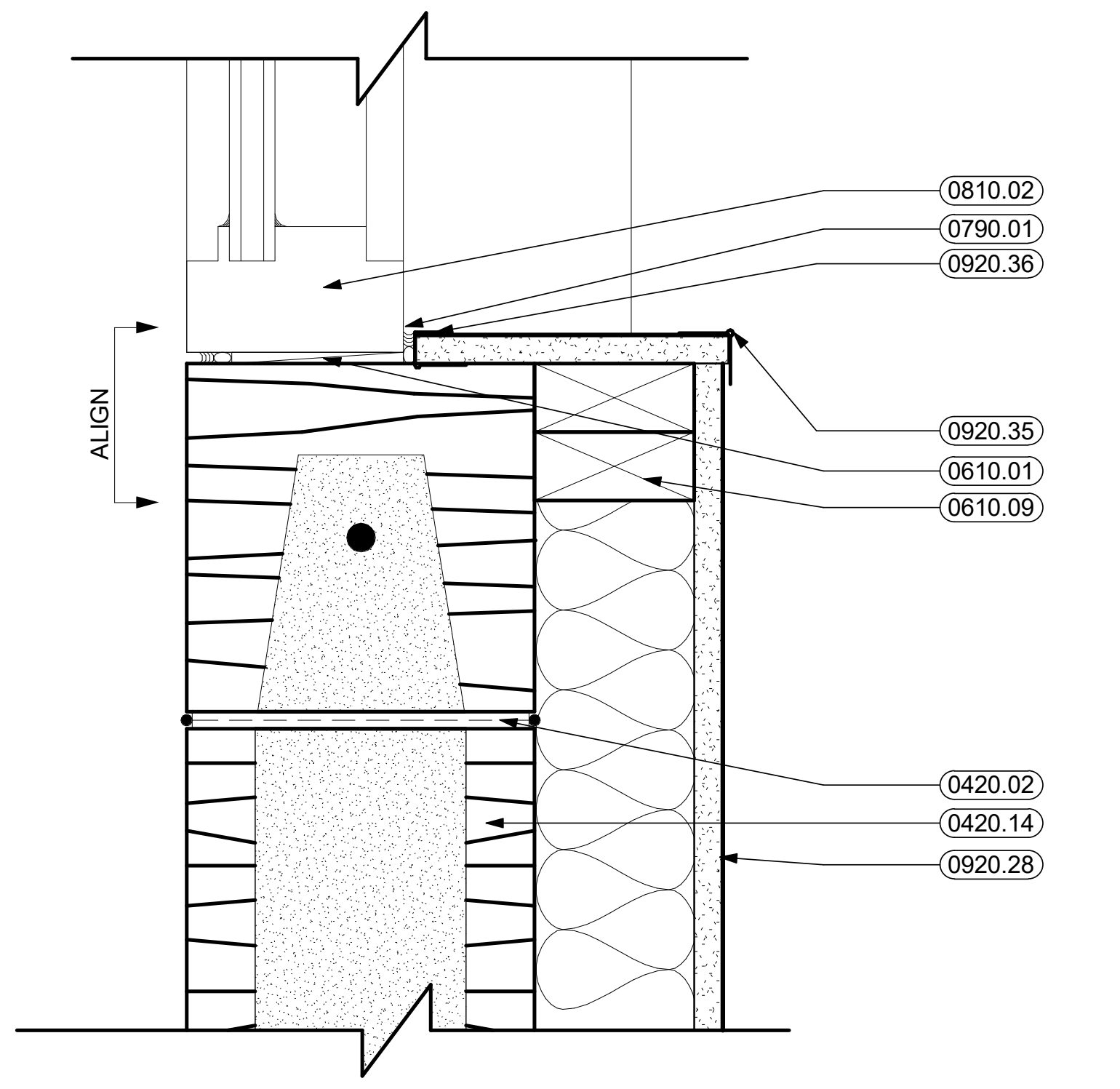
12 WINDOW SILL
3" = 1'-0"



11 WINDOW SILL
3" = 1'-0"



10 STOREFRONT SILL DETAIL
3" = 1'-0"



9 SILL DETAIL
3" = 1'-0"

GLAZING LEGEND

PATTERN	DESCRIPTION
▭	CLEAR GLAZING
⬢	TEMPERED GLAZING

GLAZING SCHEDULE

PATTERN DESCRIPTION

G1 - 1/4" CLEAR FLOAT
G2 - 1/4" FULLY TEMPERED CLEAR FLOAT
G3 - 3/16" FIRE RATED
G4 - 1" LOW-E TINTED INSULATING
G5 - 1" LOW-E TINTED INSULATING FULLY TEMPERED

DESIGNED:	MG, AH, KW, ST	ISSUE DATE:	04/26/2024
DRAWN:		REVISIONS:	
CHECKED:	MW, RH		

No.:	DATE:	BY:	DESCRIPTION:
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ARCHITECT
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A-5412
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04/26/2024

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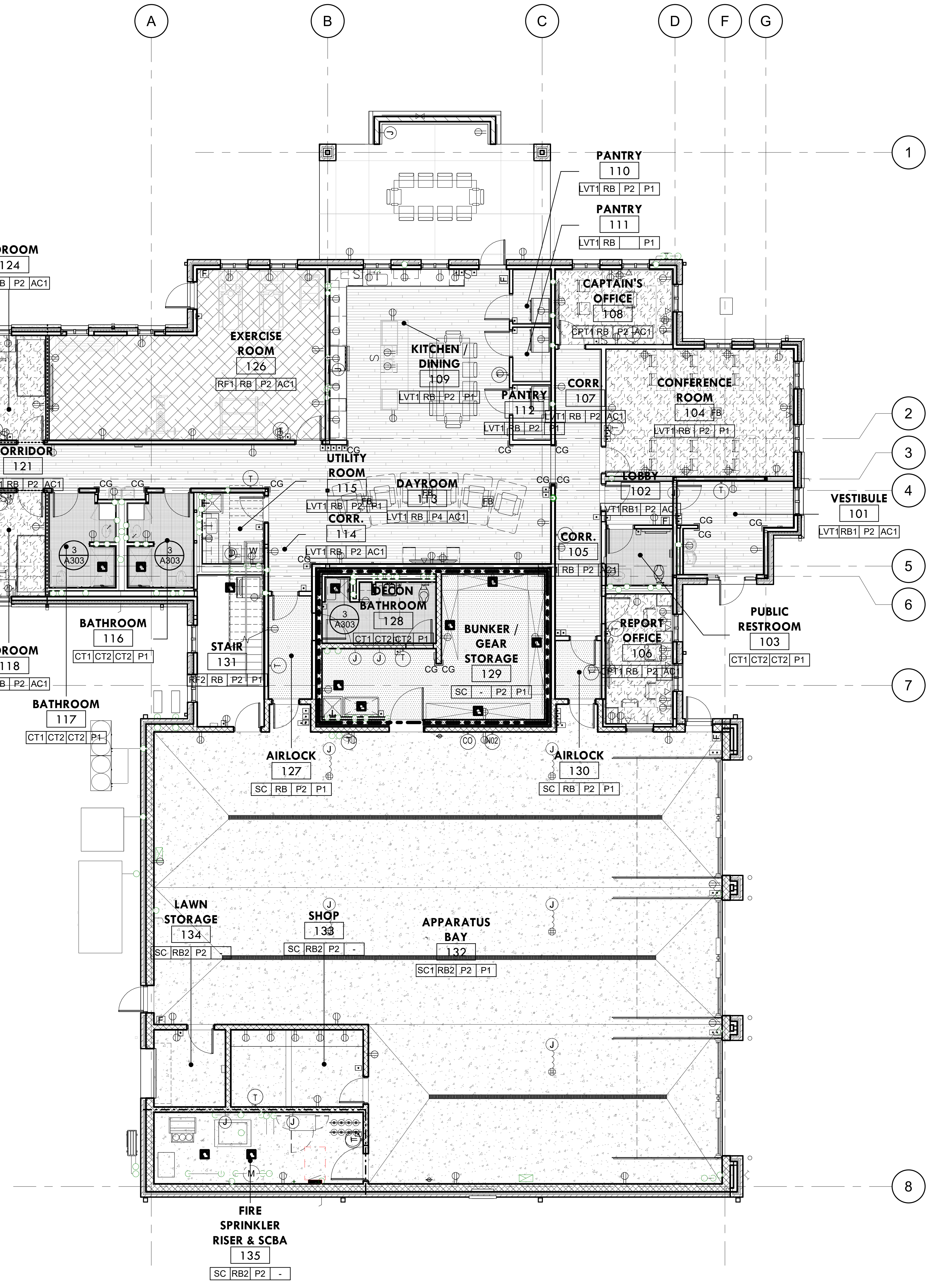
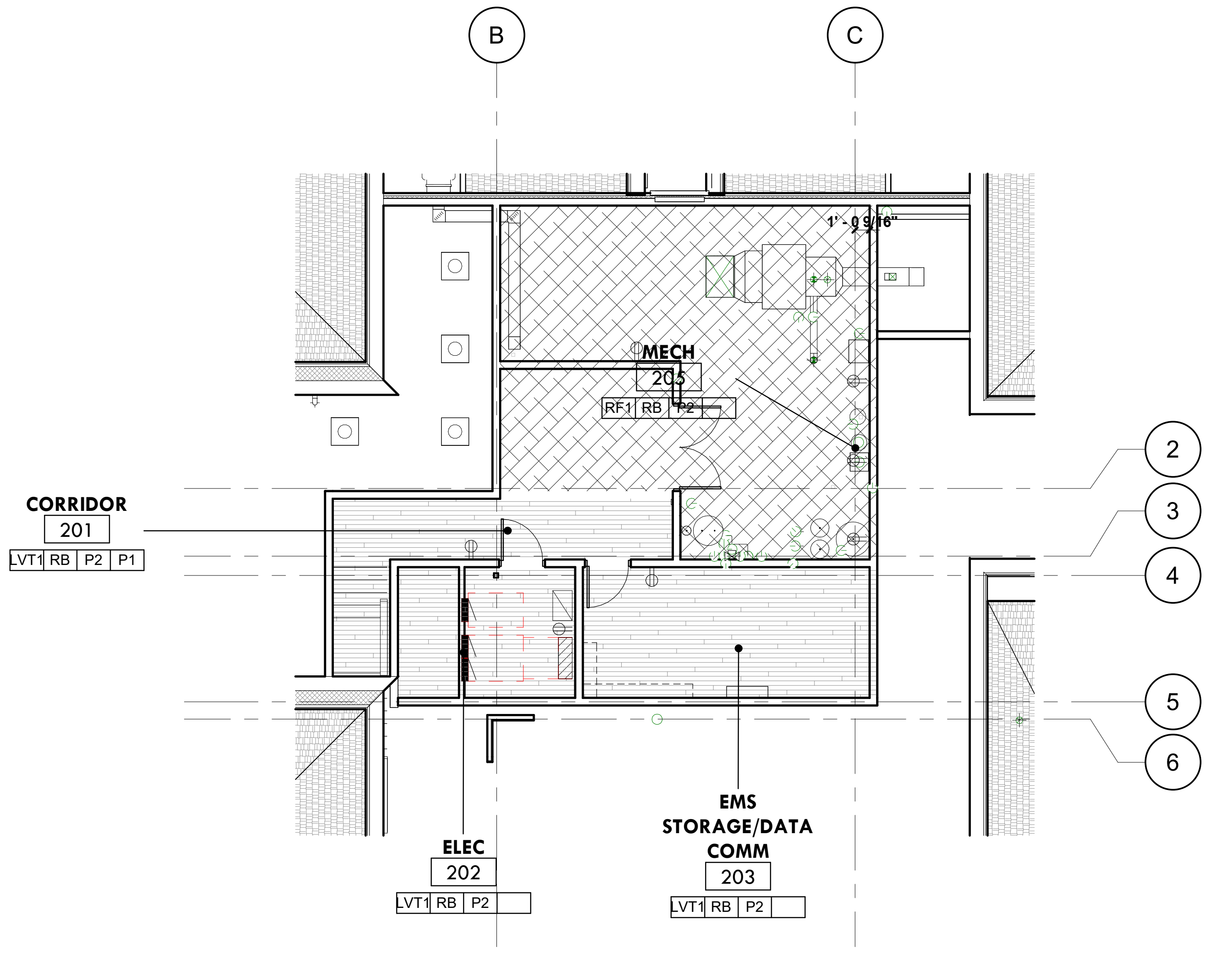
CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

STOREFRONT AND CURTAINWALL TYPES

PROJECT NO.: 223134.00

A402





PLAN NORTH TRUE NORTH

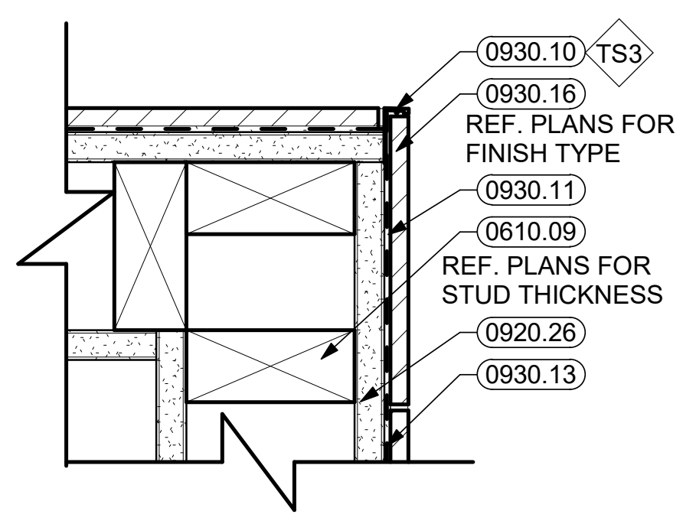
2 SECOND FLOOR FINISH PLAN

1/8" = 1'-0"

PLAN NORTH TRUE NORTH

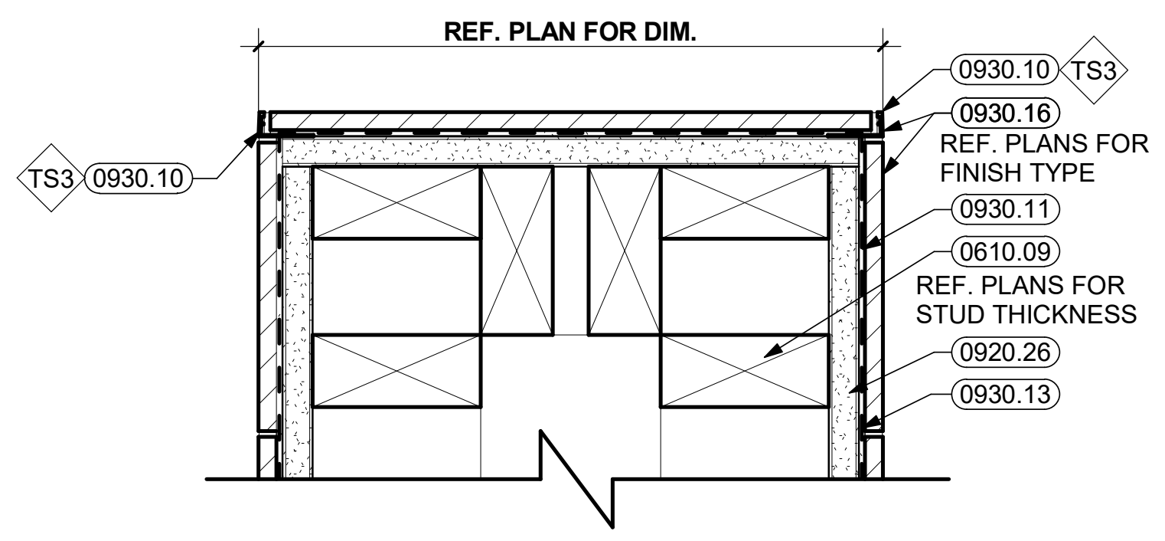
1 FIRST FLOOR FINISH PLAN

1/8" = 1'-0"



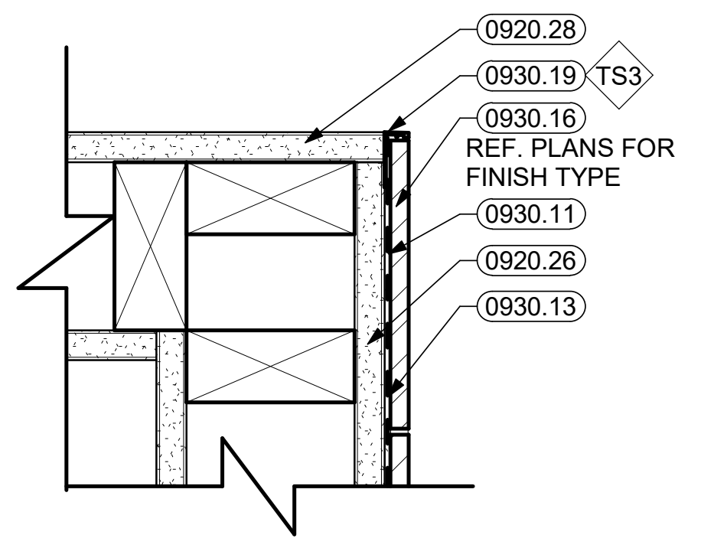
6 TRANSITION DETAIL

3" = 1'-0"



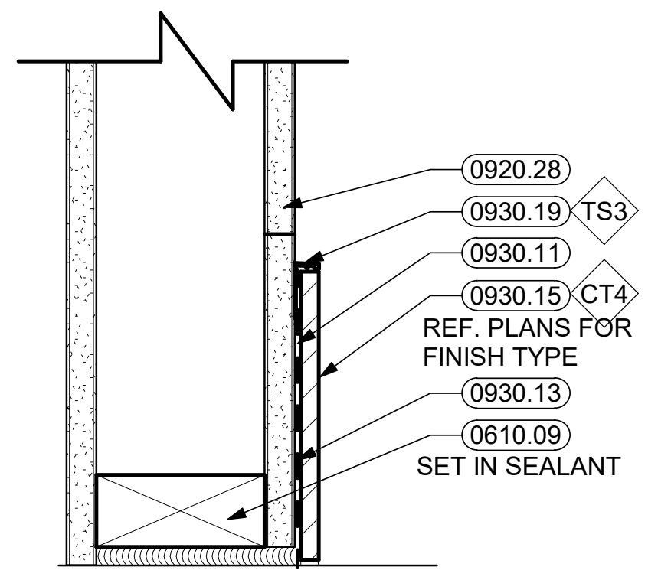
5 TRANSITION DETAIL

3" = 1'-0"



4 TRANSITION DETAIL

3" = 1'-0"



3 TRANSITION DETAIL

3" = 1'-0"

FINISH LEGEND

XX | XX | XX | XX
- FLOOR FINISH
- BASE FINISH
- WALL FINISH
- CEILING FINISH

◇X → ACCENT FINISH KEY

PATTERN		DESCRIPTION
▦	**AC** **AC1**	**ACOUSTICAL CEILING** **ACOUSTICAL CEILING TILE** ARMSTRONG #1774 "DUNE" 24" X 24" TEGULAR TILE COLOR: WHITE
▨	**CON** **SC**	**CONCRETE** **SEALED CONCRETE** CLEAR CONCRETE SEALER
▨	**SC1**	**POLISHED CONCRETE** SEE SPEC SECTION 03-35356.
▨	**CPT** **CPT1**	**CARPET** **CARPET TILE** 18" X 36" J+J FLOORING ADJUST, ASHLAR PATTERN COLOR: CRYSTAL OASIS, 3268
▤	**LVT1**	**LUXURY VINYL TILE** 6" X 48" J+J FLOORING OVERLOOK, 1/3 DROP PATTERN COLOR: SETTLEMENT, 1095
	P **P1** **P2** **P3** **P4** **P5**	**PAINT** **FIELD: CEILING** MATCH SW7007 **ACCENT: CEILING WALL** MATCH SW7056 **ACCENT: CEILING WALL** MATCH SW6235 **ACCENT: CEILING WALL** MATCH SW6236 **HOLLOW METAL DOORS AND FRAMES, MISC. METALS** MATCH SW7048
	PL **PL1**	**PLASTIC LAMINATE** **PLASTIC LAMINATE CLAD MILLWORK** WILSONART COLOR: VERANDA TEAK
	Q **Q1**	**QUARTZ** **QUARTZ AGGLOMERATE COUNTERTOP** WILSONART COLOR: CARRERA CODENA, Q6022
	RB **RB1**	**RESILIENT BASE** **RESILIENT BASE** FLEXCO: BLISS PROFILE (4") COLOR: 078 UMBER
▨	**RF** **RF1**	**RESILIENT FLOORING** **RESILIENT ATHLETIC FLOORING** RUBBER SHEET FLOORING ECOSURFACES COLOR: 1216 FINAL CUT
	RF2:	**RUBBER FLOORING** FLEXCO, DISTINCT DESIGNS RADIAL III, UMBER, 078
	RF3:	**RUBBER FLOORING-STAIRS STRINGER** **FLEXCO, DISTINCT DESIGNS** **RADIAL III, UMBER 078** 10" STRINGER
▦	**SS** **SS1**	**STAINLESS STEEL** **STAINLESS STEEL COUNTERTOP** MARINE EDGE
▥ ▦	**CT** **CT1** **CT2** **CT3** **CT4**	**CERAMIC TILE** **FLOOR TILE** PORCELAIN, 2" X 2" DALTILE COLOR: BLACK/EBONY D311 **WALL TILE** PORCELAIN, 4" X 16" DALTILE COLOR: DESERT GREY X114 **WALL TILE ACCENT** PORCELAIN, 2" X 8" DALTILE COLOR: DESERT GREY X114 **COVE BASE** PORCELAIN, C833 COLOR: BLACK/EBONY D311
┐CG	**WD** **WD1**	**WOOD** **WOOD DOORS** STAIN: TOASTED BARREL, MW407
	WP **CG**	**WALL PROTECTION** **CORNER GUARDS** FULL WALL HEIGHT STAINLESS STEEL
△1	**WT** **WT1** **WT2**	**WINDOW TREATMENT** **MANUAL ROLLER SHADES** COLOR: TO BE SELECTED BY ARCHITECT **DUAL MANUAL ROLLER SHADES** FABRIC 1: COLOR TO BE SELECTED BY ARCHITECT FABRIC 2: BLACKOUT

TRANSISITIONS / EDGE PROFILES

TS1	**TILE EDGE PROFILE** SCHLUTER, JOLLY, ALUMINUM FINISH: SATIN NICKEL ANODIZED

FINISH NOTES

1. PROVIDE FLOOR LEVELING COMPOUND UNDER FINISH FLOORING AS REQUIRED TO PROVIDE LEVEL AND CONSISTENT SURFACE.
2. PROVIDE CONTROL JOINTS AT CONCRETE SLAB, AS REQUIRED PER SPECIFICATIONS AND AS SHOWN ON FINISH PLAN.
3. PROVIDE EPOXY PAINT AT ALL INTERIOR PAINTED CMU.
4. PROVIDE TRANSITION STRIPS BETWEEN FINISH MATERIALS AS INDICATED IN TYPICAL DETAILS.
5. LINE OF TRANSITION FROM POLISHED OR COLORED CONCRETE TO SEALED CONCRETE SHALL BE A STRAIGHT SAWCUT JOINT. LOCATE JOINTS AT DOORS SO THAT SEALED CONCRETE IS NOT VISIBLE FROM THE DIAMOND POLISHED CONCRETE SIDE OF DOOR, TYP.
6. ALL WOOD DOORS TO BE STAINED XXX XXXX.
7. ALL PAINT COLOR TRANSITIONS TO OCCUR AT INSIDE CORNERS U.N.O.
8. PROVIDE FRP AT LOCATIONS INDICATED ON FINISH PLAN TO 48" A.F.F., U.N.O.
9. ALL WALLS TO BE P2 U.N.O.
10. ALL GYPSUM BOARD CEILINGS TO BE P1 U.N.O.
11. ALL MILLWORK CABINETS TO BE PL1 U.N.O.
12. ALL COUNTERTOPS TO BE Q1 U.N.O.

DESIGNED:	MG, AH, KW, ST
DRAWN:	
CHECKED:	MW, RH

ISSUE DATE: 04/26/2024

REVISIONS:

No.:	DATE:	BY:	DESCRIPTION:
1	04/26/2024	MG	ADDENDUM NO. 1

Ray Holliday
RAY W. HOLLIDAY
A-5412
04/26/2024

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

FINISH PLANS

PROJECT NO.: **223134.00**

A701

Autodesk Docs://Grand Island Fire Station No. 3/223134.00_Grand Island FS 3_v24.rvt
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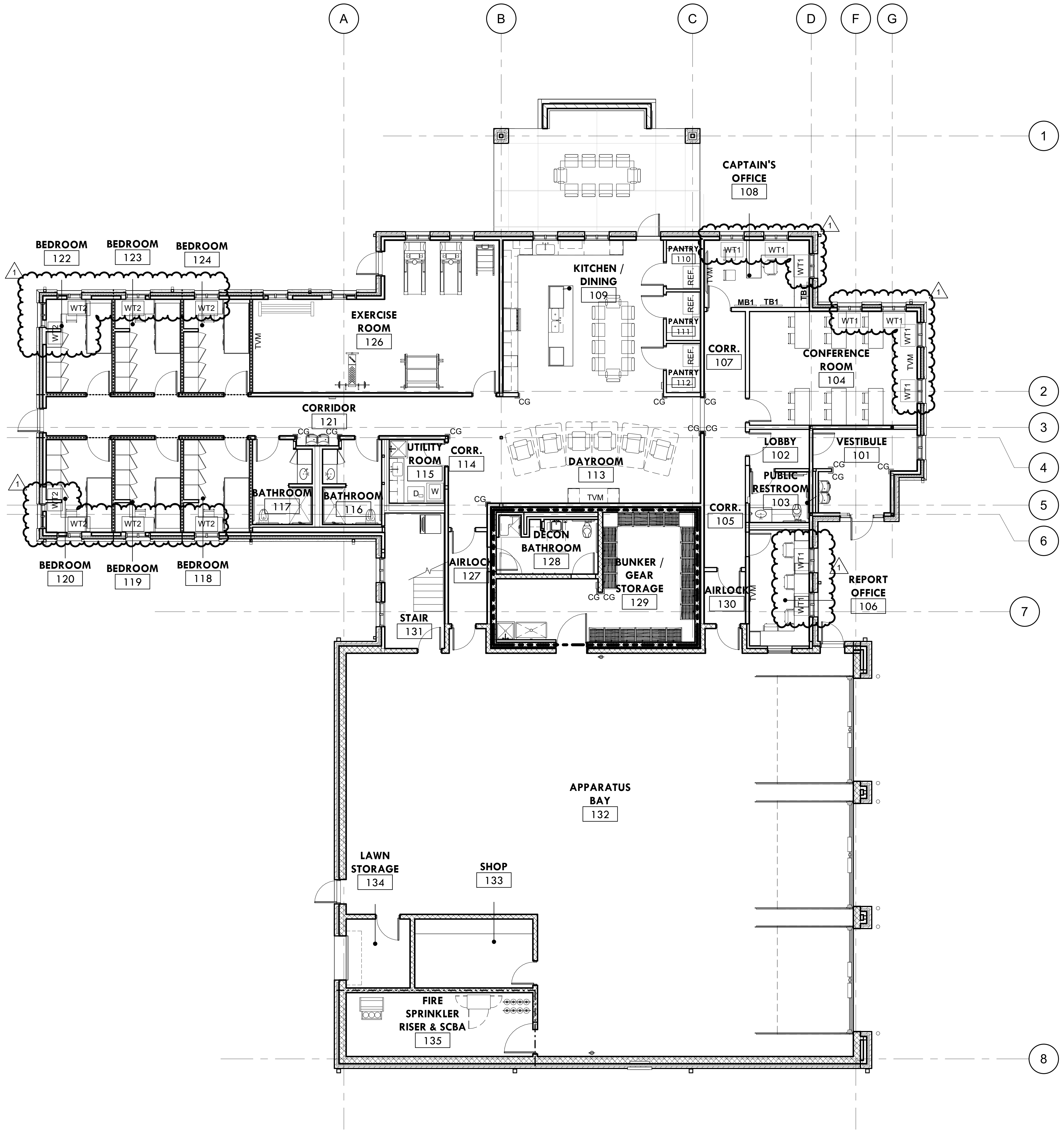

PLAN NORTH TRUE NORTH

1 FIRST FLOOR FURNISHING PLAN - FOR INFORMATION ONLY
1/8" = 1'-0"

AV LEGEND

SYMBOL	DESCRIPTION
TVM	TV / MONTOR MOUNT

MARKERBOARD AND TACKBOARD LEGEND

SYMBOL	DESCRIPTION
MB1	MARKERBOARD / TACKBOARD WIDTH - 48", HEIGHT - 48" **N.I.C.**

MANUAL SHADE LEGEND (C.F.C.I)

1

SYMBOL	DESCRIPTION
WT1	**WINDOW TREATMENT** **WT1: MANUAL SHADE** SHEER SHADE
WT2	**WINDOW TREATMENT** **WT2: DUAL MANUAL SHADE** SHEER SHADE AND BLACKOUT SHADE

FURNITURE LEGEND

SYMBOL	DESCRIPTION
▫	TASK CHAIR **N.I.C.**
⌐	OFFICE DESK
▫	RECLINER **N.I.C.**
⊓	OFFICE DESK
▭	SHOP BENCH
▫	DINING CHAIR **N.I.C.**
▭	DINNING TABLE **N.I.C.**
▯	BEDROOM DESK
▭	BUILT IN BED
▱	LOCKERS
▱	BATHROOM LOCKER

DESIGNED:
DRAWN: MG, AH, KW, ST
CHECKED: MW, RH

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ISSUE DATE: 04/26/2024
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1	04/26/2024	MG	ADDENDUM NO.1

Ray Holliday
ARCHITECT
RAY W. HOLLIDAY
A-5412
STATE OF NEBRASKA
04/26/2024

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

FIRST FLOOR FURNISHING PLAN (FOR INFORMATION ONLY)

PROJECT NO.: 223134.00

A901

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4/29/2024 10:23:16 AM

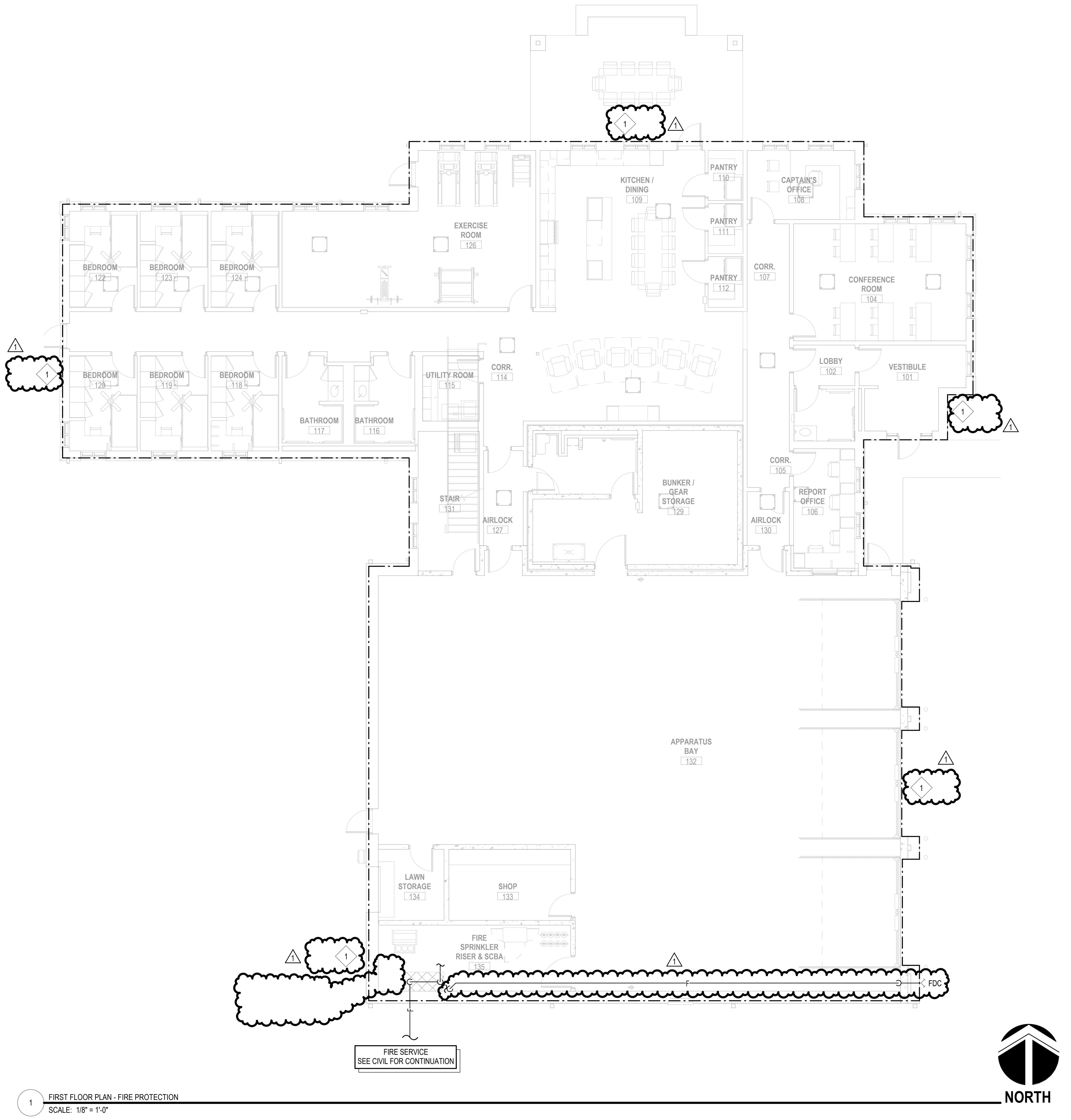
A901_Rev 1

FIRST FLOOR FURNISHING PLAN (FOR INFORMATION ONLY)

REF. NOTES (X):

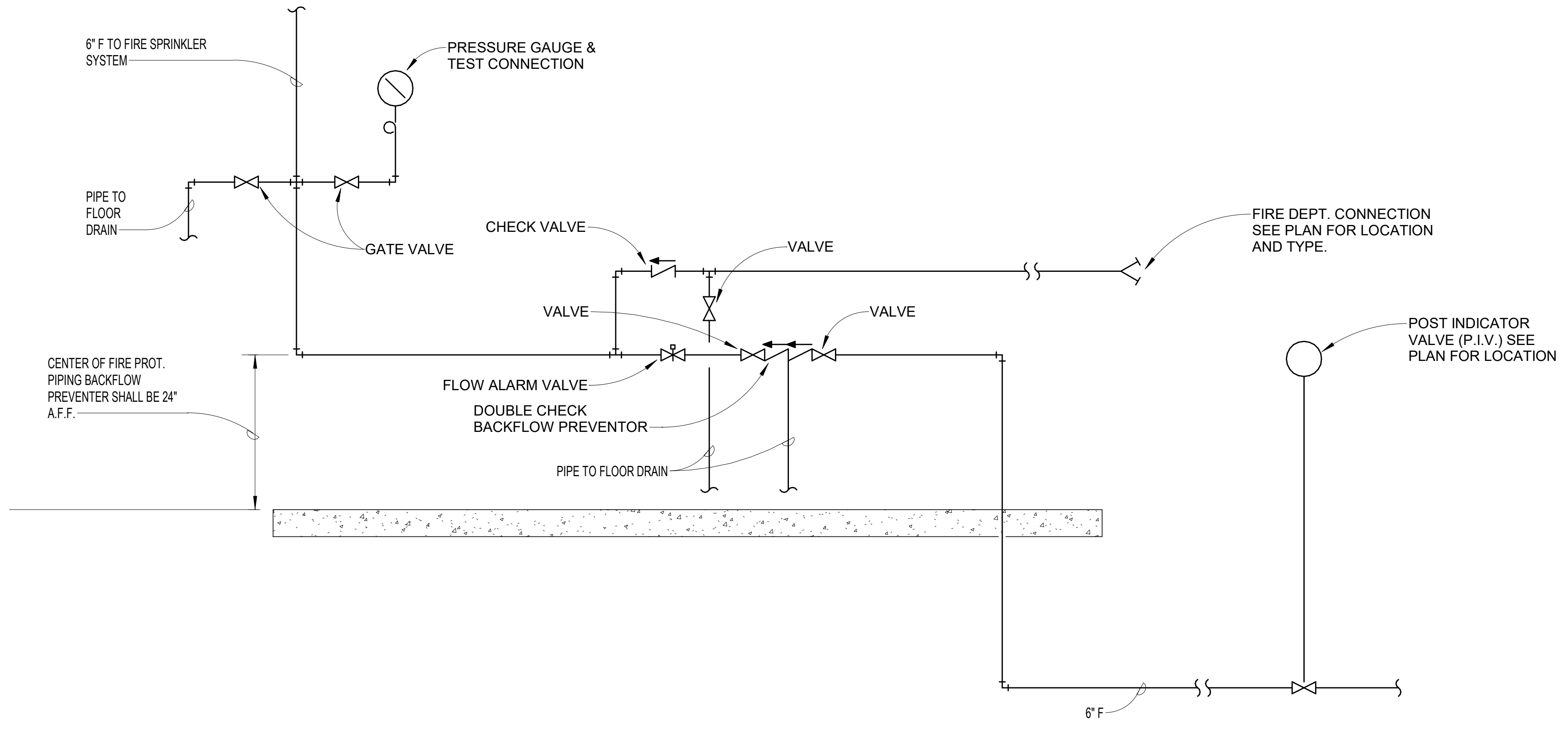
1 PROVIDE WET-PIPE FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13 FOR FIRST FLOOR, SECOND FLOOR, AND ATTIC SPACE. CONTRACTOR IS RESPONSIBLE FOR SELECTION OF COMPONENTS BASED ON THIS CRITERION, AND THOSE SET FORTH IN THE SPECIFICATIONS.

2 NOT USED



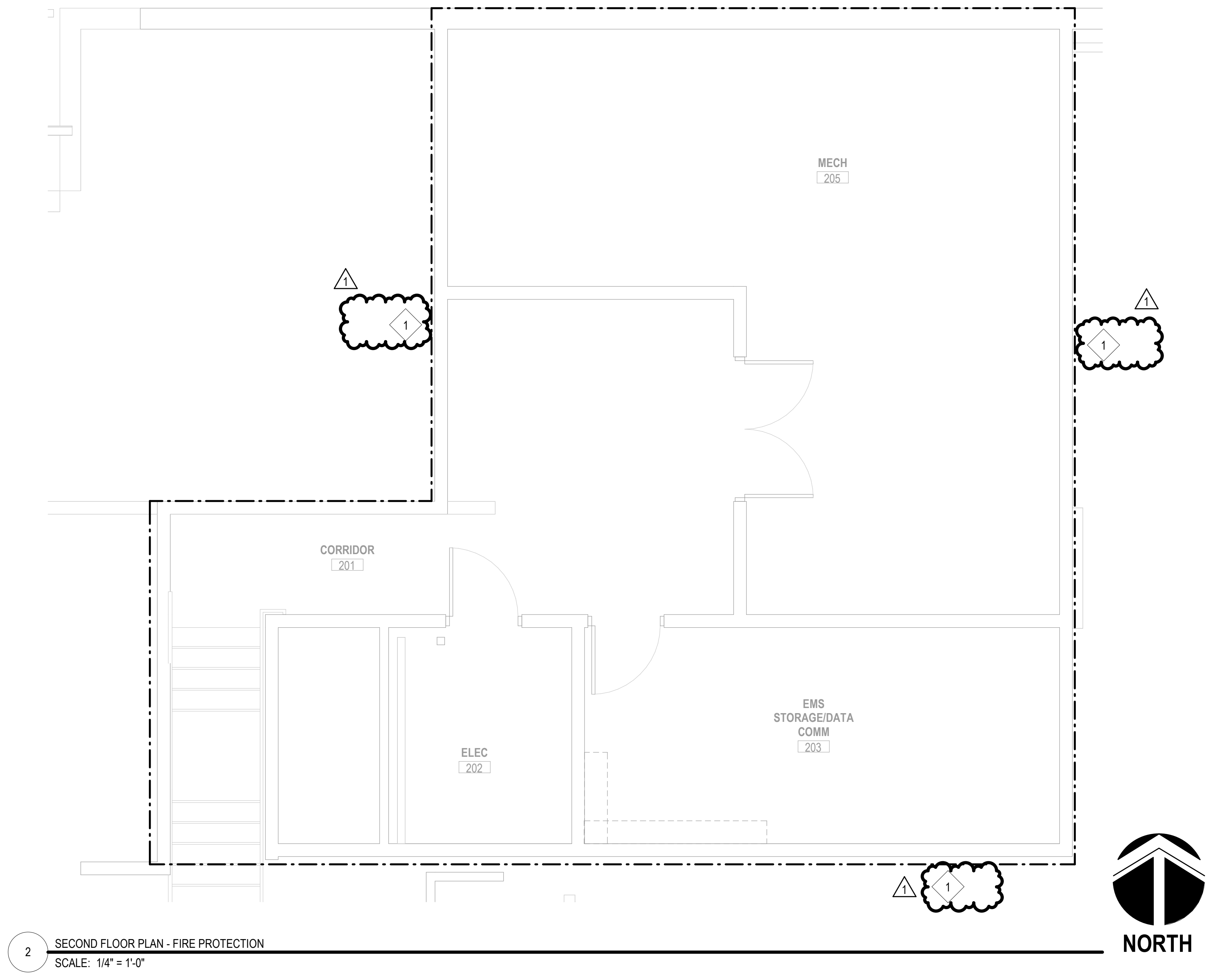
1 FIRST FLOOR PLAN - FIRE PROTECTION

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


6" F TO FIRE SPRINKLER SYSTEM
PRESSURE GAUGE & TEST CONNECTION
PIPE TO FLOOR DRAIN
GATE VALVE
CHECK VALVE
VALVE
VALVE
VALVE
FIRE DEPT. CONNECTION SEE PLAN FOR LOCATION AND TYPE.
POST INDICATOR VALVE (P.I.V.) SEE PLAN FOR LOCATION
CENTER OF FIRE PROT. PIPING BACKFLOW PREVENTER SHALL BE 24" A.F.F.
FLOW ALARM VALVE
DOUBLE CHECK BACKFLOW PREVENTOR
PIPE TO FLOOR DRAIN
6" F

3 FIRE PROTECTION BACKFLOW PREVENTION PIPING DETAIL

SCALE: NOT TO SCALE



2 SECOND FLOOR PLAN - FIRE PROTECTION

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

ISSUE DATE: 03/25/2024

REVISIONS:

No.:	DATE:	BY:	DESCRIPTION:
1	04/26/2024		Addendum No. 1

DESIGNED: ZSB
DRAWN: ZSB
CHECKED: SEF

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JEFFREY E. KULHANEK
E-11823
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CITY OF GRAND ISLAND

FIRE STATION NO. 3

2310 S WEBB RD, GRAND ISLAND, NE 68803

FLOOR PLAN - FIRE PROTECTION

PROJECT NO.: 223134.00

FP101

SYMBOL LEGEND

HVAC PIPING

LPS	LOW PRESSURE STEAM
LPR	LOW PRESSURE RETURN
MPS	MEDIUM PRESSURE STEAM
MPR	MEDIUM PRESSURE RETURN
HPS	HIGH PRESSURE STEAM
HPR	HIGH PRESSURE RETURN
PC	PUMPED CONDENSATE
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
HPWS	HEAT PUMP WATER SUPPLY
HPWR	HEAT PUMP WATER RETURN
GHWS	GLYCOL HOT WATER SUPPLY
GHWR	GLYCOL HOT WATER RETURN
BBD	BOILER BLOW DOWN
ES	EXHAUST STEAM
CWS	CHILLED WATER SUPPLY
CWR	CHILLED WATER RETURN
GCWS	GLYCOL CHILLED WATER SUPPLY
GCWR	GLYCOL CHILLED WATER RETURN
RL	REFRIGERANT LIQUID LINE
RS	REFRIGERANT SUCTION LINE
RDL	REFRIGERANT DISCHARGE
CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
HCWS	HOT/CHILLED WATER SUPPLY
HCWR	HOT/CHILLED WATER RETURN
CD	CONDENSATE DRAIN
G	NATURAL GAS
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT
FOF	FUEL OIL FILL
FOG	FUEL OIL GAGE
LPG	LIQUEFIED PETROLEUM GAS

PLUMBING PIPING

	SANITARY DRAIN (ABOVE FLOOR)
	SANITARY DRAIN (BELOW FLOOR)
ST/OST	STORM DRAIN
ST/OST	STORM DRAIN (BELOW FLOOR)
	SANITARY VENT
AW	ACID WASTE
AV	ACID VENT
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	DOMESTIC HOT WATER RECIRCULATING (DHWR)
TW	TEPID WATER
TWR	TEPID WATER RECIRCULATING
DSCW	SOFTENED COLD WATER
DSHW	SOFTENED HOT WATER
W	BURIED EXTERIOR WATER
DS	DISTILLED WATER
DI	DEIONIZED WATER
RO	REVERSE OSMOSIS WATER
A	COMPRESSED AIR
VAC	VACUUM
OX	OXYGEN
N	NITROGEN
WAGD	WASTE AND ANESTHETIC GAS DISPOSAL
MA	MEDICAL AIR

FIRE PROTECTION

D	SPRINKLER DRAIN
F	FIRE SUPPRESSION PIPING
	FIRE DEPARTMENT CONNECTION
FS	FLOW SWITCH
TS	TAMPER SWITCH

VALVES

- MANUAL BALANCING VALVE
- ISOLATION VALVE
- CHECK VALVE
- CONTROL VALVE (2 WAY)
- CONTROL VALVE (3 WAY)
- AUTO FLOW CONTROL VALVE
- HOSE END DRAIN VALVE
- PRESSURE REDUCING VALVE
- SOLENOID VALVE
- TEMP & PRESS RELIEF (OR) SAFETY VALVE-STEAM
- THERMOSTATIC MIXING VALVE

PIPING SPECIALTIES AND FITTINGS

CO / WCO	CLEANOUT / WALL CLEANOUT
GCO	GRADE CLEANOUT
DGCO	DOUBLE - GRADE CLEANOUT
VTR	PLUMBING VENT THRU ROOF
FD-_	FLOOR DRAIN
FS-_	FLOOR SINK
RD-_	ROOF DRAIN
ORD-_	OVERFLOW ROOF DRAIN
	TRENCH DRAIN
MH	MANHOLE
Ⓧ	OXYGEN OUTLET
Ⓥ	VACUUM OUTLET
Ⓐ	AIR OUTLET
Ⓝ	NITROGEN OUTLET
Ⓥ	WASTE AND ANESTHETIC GAS DISPOSAL OUTLET
MA	MEDICAL AIR OUTLET
	PIPE CAP
	ELBOW UP
	ELBOW DOWN
	TEE
	TEE UP
	TEE DOWN
	STRAINER
	UNION
	AIR VENT
	FLEXIBLE PIPE CONNECTION
	EXPANSION JOINT
	PIPE ANCHOR
	PIPE GUIDE
	THERMOMETER
	PRESSURE GAUGE
HB	HOSE BIBB
RHY	ROOF HYDRANT
WH	WALL HYDRANT
	STEAM TRAP

MISCELLANEOUS SYMBOLS

DEMO / EXISTING	DEMO TO EXISTING CONNECTION
NEW / EXISTING	NEW TO EXISTING CONNECTION

HVAC DUCTWORK AND SPECIALTIES

18x10	RECT DUCT-1ST FIG IS SIDE SHOWN
18 Ø	ROUND DUCT
18/10	FLAT OVAL DUCT-1ST FIG IS SIDE SHOWN
	ACOUSTICAL DUCT LINER

HVAC DUCTWORK AND SPECIALTIES (CONT.)

	FLEXIBLE DUCTWORK CONNECTION
	VOLUME DAMPER
	TURNING VANES
	HIGH EFFICIENCY TAKEOFF
	HIGH EFFICIENCY TAKOFF WITH VOLUME DAMPER
	SUPPLY AND FRESH AIR DUCT UP
	SUPPLY AND FRESH AIR DUCT DOWN
	RETURN DUCT UP
	RETURN DUCT DOWN
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
	ROUND DUCT UP / DOUBLE LINE PIPE
	ROUND DUCT DOWN / DOUBLE LINE PIPE
SIZE/TYPE / FLOW	AIR TERMINAL (VERTICAL MOUNTING)
SIZE/TYPE / FLOW	ROUND AIR TERMINAL (HORIZONTAL MOUNTING)
SIZE/TYPE / FLOW	RECTANGULAR SUPPLY AIR TERMINAL (HORIZONTAL MOUNTING)
SIZE/TYPE / FLOW	RECTANGULAR RETURN AIR TERMINAL (HORIZONTAL MOUNTING)
SIZE/TYPE / FLOW	RECTANGULAR EXHAUST AIR TERMINAL (HORIZONTAL MOUNTING)
AFS	AIR FLOW STATION
M	MOTORIZED DAMPER-PARALLEL BLADE
M	MOTORIZED DAMPER-OPPOSED BLADE
	GRAVITY DAMPER
F	FIRE DAMPER-HORIZ FIRE SEPARATION
S	SMOKE DAMPER
FS	FIRE/SMOKE DAMPER
	FLEXIBLE DUCT
T	THERMOSTAT
H	HUMIDISTAT
S	TEMPERATURE SENSOR
CO	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
NO2	NITROGEN DIOXIDE SENSOR
'X'	SENSOR WITH GUARD

REFERENCE LEGEND

DUCT SIZE	X" ∅	DIAMETER
	X"xX"	WIDTH x HEIGHT
	X"/X"	WIDTH / HEIGHT
PIPE SIZE	X"	PIPE SIZE (DIAMETER)
PLUMBING FIXTURES	XXX-1	PLUMBING FIXTURE DESIGNATION
ROOM / SPACE NUMBER	ROOM NAME	ROOM NAME DESIGNATION
	101	ROOM NUMBER DESIGNATION
EQUIPMENT NUMBER	XX-1	EQUIPMENT NUMBER
REFERENCE DEMOLITION NOTE	X	DEMOLITION DESIGNATION
REFERENCE NOTE	X	REFERENCE DESIGNATION
PLAN DETAIL	X	DETAIL NUMBER
	XXXX	SHEET NUMBER
SECTION/ DETAIL	X / SIM/OPP	SECTION/DETAIL NUMBER
	XXXX	SHEET NUMBER
		INDICATES DIRECTION OF VIEW
NEW COLUMN	X	LETTER/NUMBER INDICATES NEW COLUMN LINE
EXISTING COLUMN	X	LETTER/NUMBER INDICATES EXISTING COLUMN LINE
MATCHLINE	AREA A / AREA B	
LEVEL	NAME	LEVEL CALLOUT DESIGNATION
	ELEVATION	ELEVATION DESIGNATION
TITLE MARKER		GRAPHIC AREA FOR DRAWING
	1	DRAWING/DETAIL NUMBER
	VIEW NAME	TITLE
	SCALE: 1/8" = 1'-0"	SCALE OF THE DRAWING
NORTH ARROW	NORTH / PLAN NORTH / TRUE NORTH	

ABBREVIATIONS

A	COMPRESSED AIR
AC	AIR COMPRESSOR
ACC	AIR COOLED CONDENSER
ACCU	AIR COOLED CONDENSING UNIT
AD	AIR DOOR
AFCV	AUTO FLOW CONTROL VALVE
AHU	AIR HANDLING UNIT
AMP	AMPERE
APD	AIR PRESSURE DROP
ARU	AIR ROTATION UNIT
AS	AIR SEPARATOR
ASHP	AIR SOURCE HEAT PUMP
AV	ACID VENT
AW	ACID WASTE
B	BOILER
BC	BLOWER COIL
BD	BIDET
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BHP	BRAKE HORSEPOWER
BLKG	BLOCKING
BLV	BALANCING VALVE
BT	BATHTUB
BV	BALL VALVE
BW	BEDPAN WASHER
CH	CHILLER
CC	COOLING COIL
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CMU	CONCRETE MASONRY UNITS
CR	CONDENSER WATER RETURN
CRAC	COMPUTER ROOM AIR CONDITIONER
CS	CONDENSER WATER SUPPLY
CSS	CLINICAL SERVICE SINKS
CT	COOLING TOWER
CU	CONDENSING UNIT - SPLIT SYSTEM
CUH	CABINET UNIT HEATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
DB	DRY-BULB TEMPERATURE
DCW	DOMESTIC COLD WATER
DEG	DEGREE
DF	DRINKING FOUNTAIN
DGCO	DOUBLE GRADE CLEANOUT
DH	EMERGENCY DRENCH HOSES
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RECIRCULATING
DHWP	DOMESTIC HOT WATER RECIRCULATING PUMP
DI	DEIONIZED WATER
DOAS	DEDICATED OUTDOOR AIR SYSTEM
DS	DISTILLED WATER
DSA	DUCT SOUND ATTENUATORS
DSCW	DOMESTIC SOFT COLD WATER
DSHW	DOMESTIC SOFT HOT WATER
DSHWR	DOMESTIC SOFT HOT WATER RECIRCULATING
DSS	DUCTLESS SPLIT SYSTEM
DST	DOMESTIC STORAGE TANK
DTW	DOMESTIC TEPID WATER
DTWR	DOMESTIC TEPID WATER RECIRCULATING
DWET	DOMESTIC WATER EXPANSION TANK
EA.	EACH
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRIC DUCT HEATER
EEW	EMERGENCY EYE WASH
EEWS	EMERGENCY EYE WASH/SHOWER
EF	EXHAUST FAN
EFF	EFFICIENCY
EFW	EMERGENCY FACE WASH
EH	EXHAUST HOOD
ERV	ENERGY RECOVERY VENTILATOR
ES	EMERGENCY SHOWER
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EWT	ENTERING WATER TEMPERATURE
F	FIRE SUPPRESSION PIPING
F-_	FURNACE
FC	FLUID COOLER
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOV	FUEL OIL VENT
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FSD	FIRE/SMOKE DAMPER
FT	FINNED TUBE
G	GAS
GCWR	GLYCOL CHILLED WATER RETURN
GCWS	GLYCOL CHILLED WATER SUPPLY
GD	GARBAGE DISPOSAL
GDH	GAS DUCT HEATER
GHCR	GLYCOL HOT/CHILLED WATER RETURN
GHCS	GLYCOL HOT/CHILLED WATER SUPPLY
GHWR	GLYCOL HOT WATER RETURN
GHWS	GLYCOL HOT WATER SUPPLY
GI	GREASE INTERCEPTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GV	GAS VENT
GWH	GAS WATER HEATER
H	HUMIDIFIER
HB	HOSE BIBB
HC	HEATING COIL
HCR	HOT/CHILLED WATER RETURN
HCS	HOT/CHILLED WATER SUPPLY
HP	HORSEPOWER
HP-_	HEAT PUMP
HPR	HIGH PRESSURE RETURN
HPS	HIGH PRESURE STEAM
HRC	HEAT RECOVERY COIL
HVLS	HIGH VOLUME LOW SPEED
HWR	HOT WATER RETURN (HEATING)
HWS	HOT WATER SUPPLY (HEATING)
HX	HEAT EXCHANGER
HY	HYDRANTS
IH	INTAKE HOOD
IRH	INFRARED RADIANT HEATER
KH	KITCHEN HOOD
KW	KILOWATT
KWH	KILOWATT HOURS
L	LAVATORY
LAT	LEAVING AIR TEMPERATURE
LPR	LOW PRESSURE RETURN
LPG	LIQUIFIED PETROLEUM GAS
LPS	LOW PRESSURE STEAM
LRA	LOCKED ROTOR AMPS
LS	LAUNDRY SINK
LV	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	1000 BTUH
MCA	MINIMUM CIRCUIT AMPS
MD	MOTORIZED DAMPER
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
MPR	MEDIUM PRESSURE RETURN
MPS	MEDIUM PRESSURE STEAM
MS	MOP SINK
N	NITROGEN
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NPCW	NONPOTABLE COLD WATER
NPHW	NONPOTABLE HOT WATER
NPHWR	NONPOTABLE HOT WATER RECIRCULATING
OA	OUTSIDE AIR
OB	OUTLET BOX
OI	OIL INTERCEPTOR
ORD	OVERFLOW ROOF DRAIN
OST	OVERFLOW STORM WATER
OX	OXYGEN
P	PUMP
PHC	PREHEAT COIL
PIV	POST INDICATING VALVE
PRV	PRESSURE REGULATING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH, GAUGE
PTAC	PACKAGED TERMINAL AIR CONDITIONER
RA	RETURN AIR
RCP	RADIANT CEILING PANEL
RD	ROOF AREA DRAINS
RF	RETURN FAN
RH	RELIEF HOOD
RHC	REHEAT COIL
RH	ROOF HYDRANT
RL	REFRIGERANT LIQUID LINE
RLA	RELIEF AIR
RLF	RELIEF FAN
RO	REVERSE OSMOSIS WATER
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION LINE
RTU	ROOF TOP UNIT
RV	RELIEF VALVE
S	SINK
SA	SUPPLY AIR
SAN	SANITARY SEWER
SD	SMOKE DAMPER
SF	SUPPLY FAN
SFU	SANITARY FIXTURE UNIT
SH	SHOWER
SOI	SAND OIL INTERCEPTOR
SP	STATIC PRESSURE
SP	SUMP PUMP
SSS	SURGICAL SCRUB SINK
ST	STORM WATER
T	THERMOSTAT
TD	TRENCH DRAIN
TMV	THERMOSTATIC MIXING VALVE
TONS	TONS OF REFRIGERATION
TSP	TOTAL STATIC PRESSURE
UH	UNIT HEATER
UR	URINAL
V	VENT
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THRU ROOF
WB	WET BULB
WC	WATER CLOSETS
WCO	WALL CLEANOUT
WF	WASH FOUNTAINS
WFU	WATER FIXTURE UNITS
WH	WALL HYDRANT
WMB	WASHING MACHINE BOX
WPD	WATER PRESSURE DROP
WS	WATER SOFTENER
WSHP	WATER SOURCE HEAT PUMP
WWHP	WATER TO WATER HEAT PUMP
YH	YARD HYDRANT

GENERAL DEMOLITION NOTES

GENERAL NOTES

1

A. ALL CONTRACTORS ARE RESPONSIBLE FOR REVIEWING ENTIRE SET OF DOCUMENTS TO DETERMINE THEIR FULL SCOPE OF WORK. CONTRACTOR SHALL NOT BE ALLOWED EXTRA COSTS DUE TO FAILURE TO REVIEW ENTIRE SET OF DOCUMENTS.

B. CONTRACTOR SHALL TAKE ALL MEASUREMENTS FOR WORK AND BE RESPONSIBLE FOR SAME. CONTRACTOR SHALL ADJUST FOR ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO OWNER. COORDINATE THE WORK AND SHOP DRAWINGS WITH ALL OTHER TRADES AFFECTED.

C. ALL PIPING IN CONCEALED LOCATIONS SHALL BE ROUTED AT RIGHT ANGLES AND PARALLEL TO BUILDING WALLS UNLESS OTHERWISE INDICATED.

D. ALL PLUMBING INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.

REF. DEMO NOTES (X)

PROJECT PLUMBING REFERENCED DEMOLITION NOTES

SEE INDIVIDUAL SHEETS FOR REFERENCE NOTES.

REF. NOTES (X)

PROJECT PLUMBING REFERENCED NOTES

SEE INDIVIDUAL SHEETS FOR REFERENCE NOTES.

PLUMBING SHEET LIST

P 00	PLUMBING INFO SHEET
P101	FIRST & SECOND FLOOR PLAN - PLUMBING - SANITARY
P102	FIRST & SECOND FLOOR PLAN - PLUMBING - DOMESTIC WATER & COMPRESSED AIR
P301	DETAILS - PLUMBING
P401	SCHEDULES & RISER - PLUMBING

DESIGNED: ZSB	**ISSUE DATE:** 03/25/2024			
DRAWN: ZSB	**REVISIONS:**			
CHECKED: SEF	**No.:**	**DATE:**	**BY:**	**DESCRIPTION:**
	1	04/26/2024		Addendum No. 1

JEFFREY E. KULHANEK
E-11823
4/30/24

BRWARCHITECTS
175 CENTURY SQUARE DRIVE
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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

PLUMBING INFO SHEET

PROJECT NO.: 223134.00

P 00

Autodesk Docs://Grand Island Fire Station No. 3/GRAND ISLAND FS 3_MECH_v24.rvt
4/26/2024 1:30:18 PM

REF. NOTES (◇):

1 THIS SPACE IS RESERVED FOR FIRE PROTECTION SERVICE.

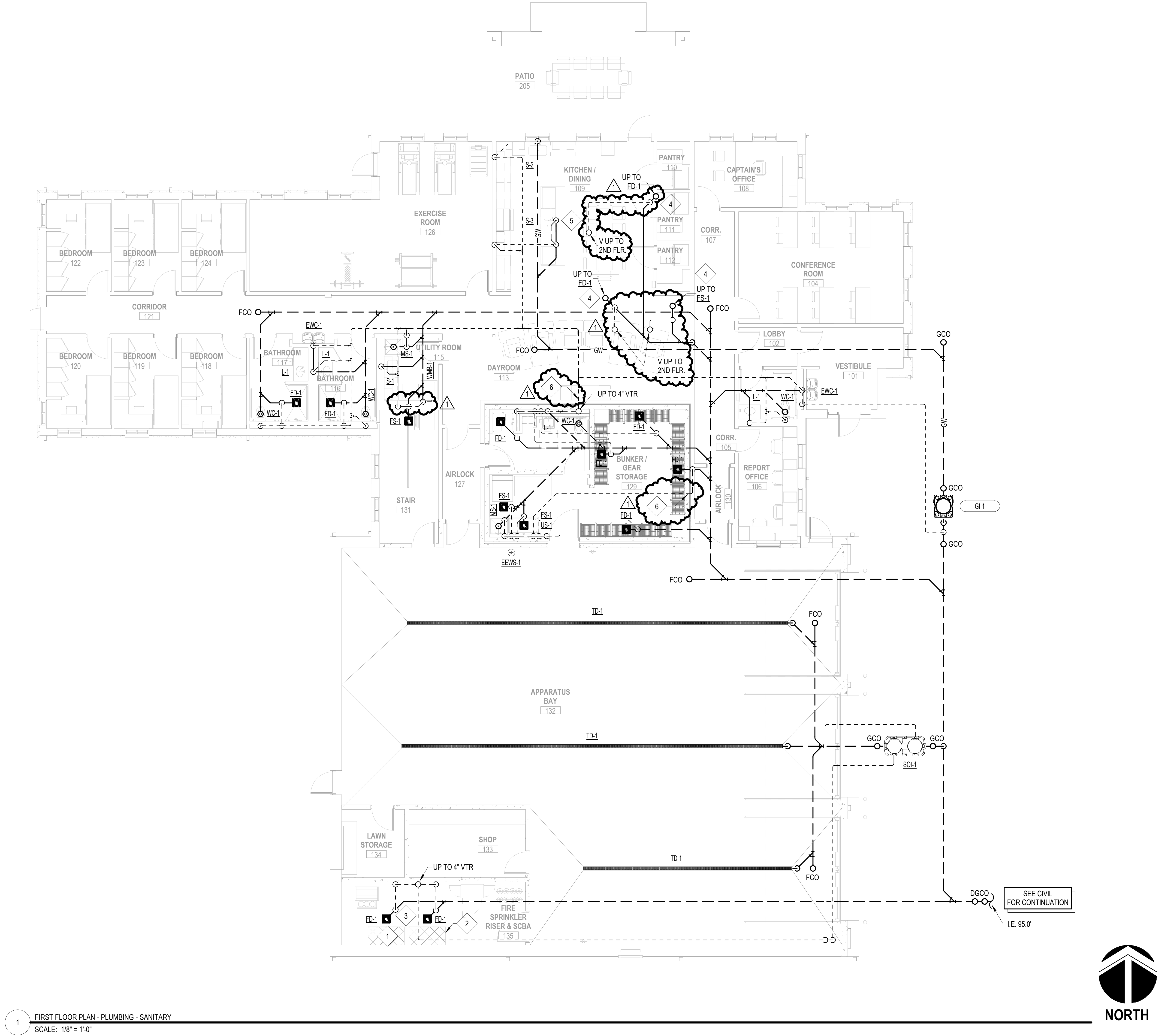
2 THIS SPACE IS RESERVED FOR DOMESTIC WATER SERVICE.

3 COORDINATE FLOOR DRAIN LOCATIONS, IN FIRE SPRINKLER 135, WITH SERVICE ENTRANCES AND AIR COMPRESSOR.

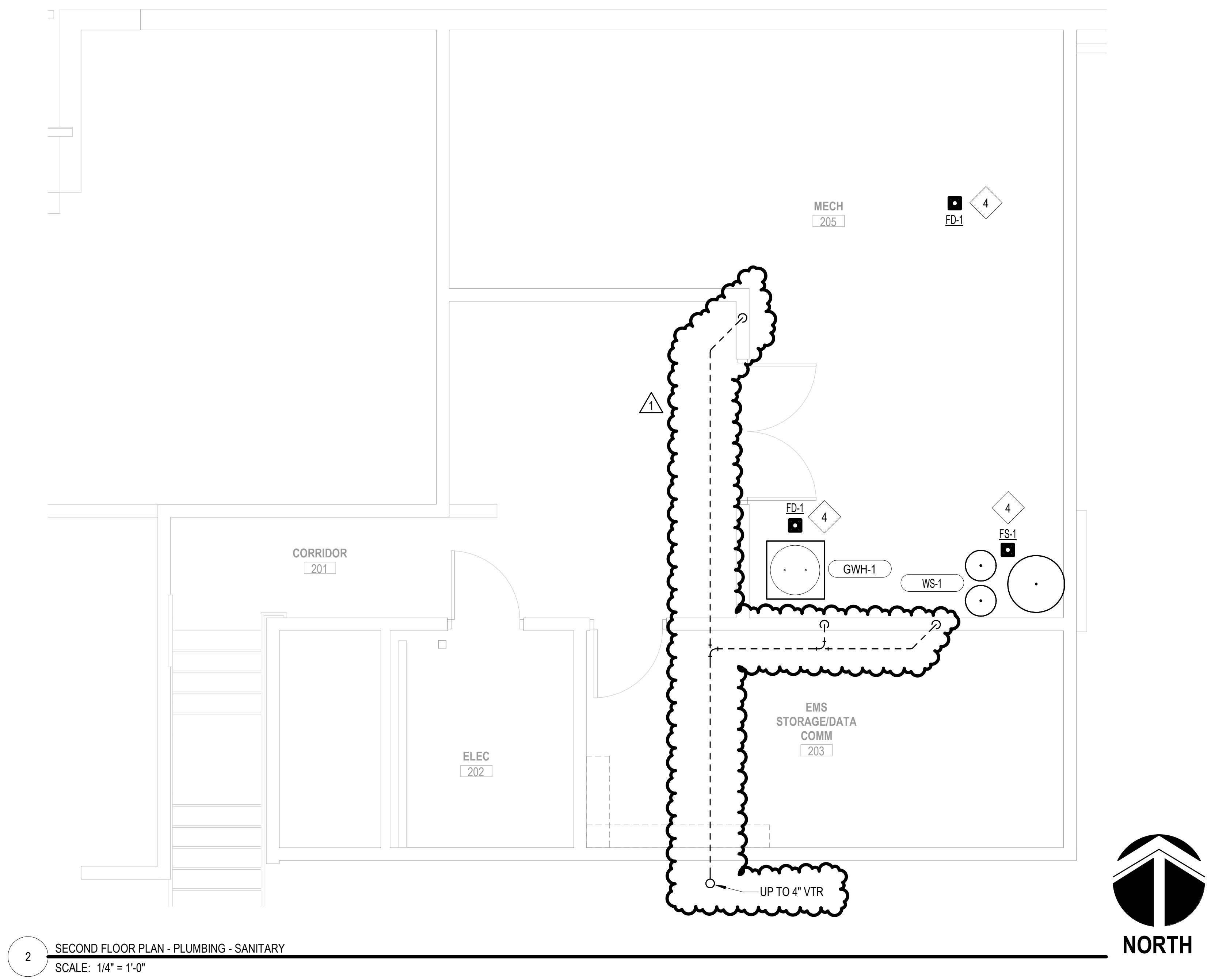
4 COORDINATE FLOOR DRAIN AND FLOOR SINK LOCATIONS, IN MECH 205, WITH GWH-1, WS-1, AND DOAS-1.

5 INSTALL DRAIN HOSE FROM OWNER PROVIDED DISHWASHER TO TAILPIECE OF SINK, S-3, UPSTREAM OF TRAP.

6 PROVIDE FEMA RATED PIPE SLEEVE FOR ANY PIPE PENETATION INTO BUNKER GEAR STORAGE 129.



1 FIRST FLOOR PLAN - PLUMBING - SANITARY
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN - PLUMBING - SANITARY
SCALE: 1/4" = 1'-0"

DESIGNED: ZSB
DRAWN: ZSB
CHECKED: SEF

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

FIRST & SECOND FLOOR PLAN - PLUMBING - SANITARY

PROJECT NO.: 223134.00

P101

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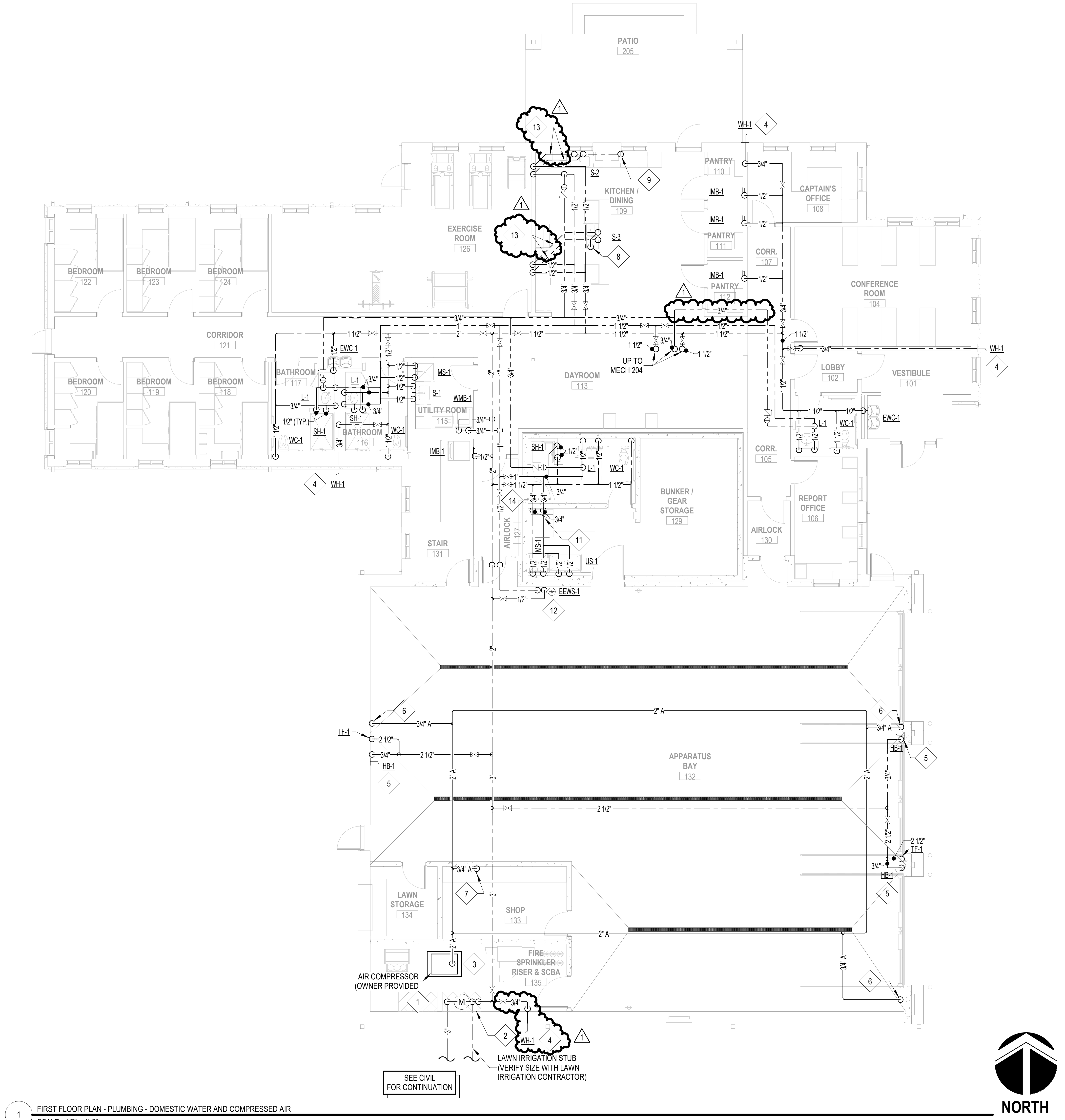
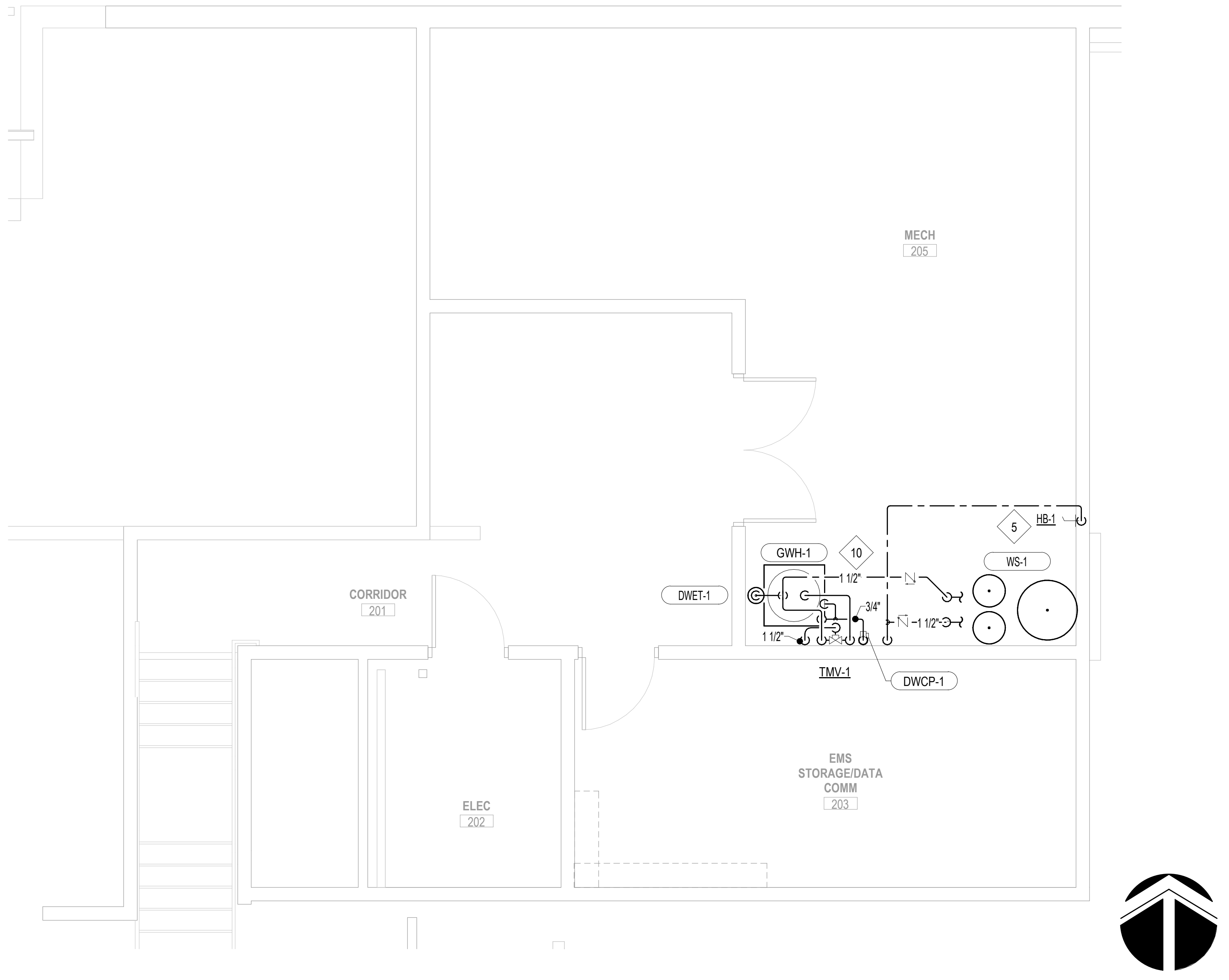
4/26/2024 1:30:19 PM



1 FIRST FLOOR PLAN - PLUMBING - DOMESTIC WATER AND COMPRESSED AIR
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN - PLUMBING - DOMESTIC WATER
SCALE: 1/4" = 1'-0"

REF. NOTES (X):

1 THIS SPACE IS RESERVED FOR FIRE PROTECTION SERVICE.

2 THIS SPACE IS RESERVED FOR DOMESTIC WATER SERVICE.

3 INSTALL OWNER PROVIDED AIR COMRESSOR PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE HOUSEKEEPING PAD AND ROUTE CONDENSATE TO NEAREST FLOOR DRAIN.

4 INSTALL FREEZLESS WALL HYDRANT, WH-1, AT 3'-0" A.F.F.

5 INSTALL HOSE BIBB, HB-1, AT 3'-0" A.F.F. PROVIDE ISOLATION VALVE AT 3'-6" A.F.F. VERIFY HEIGHT WITH OWNER.

6 PROVIDE HOSE REEL WITH 30'-0" OF HOSE ASSEMBLY AT 7'-8" A.F.F. PROVIDE SHUT-OFF UPSTREAM OF ASSEMBLY. VERIFY FINAL LOCATION WITH OWNER.

7 PROVIDE 3/4" COMPRESSED AIR DROP TERMINATING AT 4'-0" A.F.F. WITH QUICK COUPLING AT END OF DROP. PROVIDE DRAIN AND SHUTOFF VALVE. VERIFY COUPLING TYPE AND FINAL LOCATION WITH OWNER.

8 PROVIDE 1/2" DOMESTIC HOT WATER LINE WITH QUARTER TURN SHUTOFF VALVE FROM SINK, S-3, TO OWNER PROVIDED DISHWASHER.

9 PROVIDE 1/4" DOMESTIC COLD WATER LINE WITH QUARTER TURN SHUTOFF VALVE FROM SINK, S-2, TO OWNER PROVIDED COFFEE MACHINE.

10 INSTALL GWH-1, WS-1, DWCP-1, DWET-1, AND TMV-1 PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE HOUSEKEEPING PAD FOR GWH-1.

11 PROVIDE 3/4" DOMESTIC HOT AND COLD WATER LINES TO OWNER PROVIDED EXTRACTOR. PIPING SHALL BE SURFACE MOUNTED AND HAVE ISOLATION VALVES IN DROP.

12 INSTALL EMERGENCY EYE WASH STATION, EEWS-1, WITH POINT OF USE MIXING VALVE. PIPING SHALL BE SURFACE MOUNTED.

1 13 ROUTE PIPING UNDERFLOOR. UNDERFLOOR PIPING TO BE TYPE K FLEXIBLE WITH NO JOINTS.

14 PROVIDE FEMA RATED PIPE SLEEVE FOR ANY PIPE PENETATION INTO BUNKER GEAR STORAGE 129.

DESIGNED: ZSB
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CHECKED: SEF

ISSUE DATE: 03/25/2024
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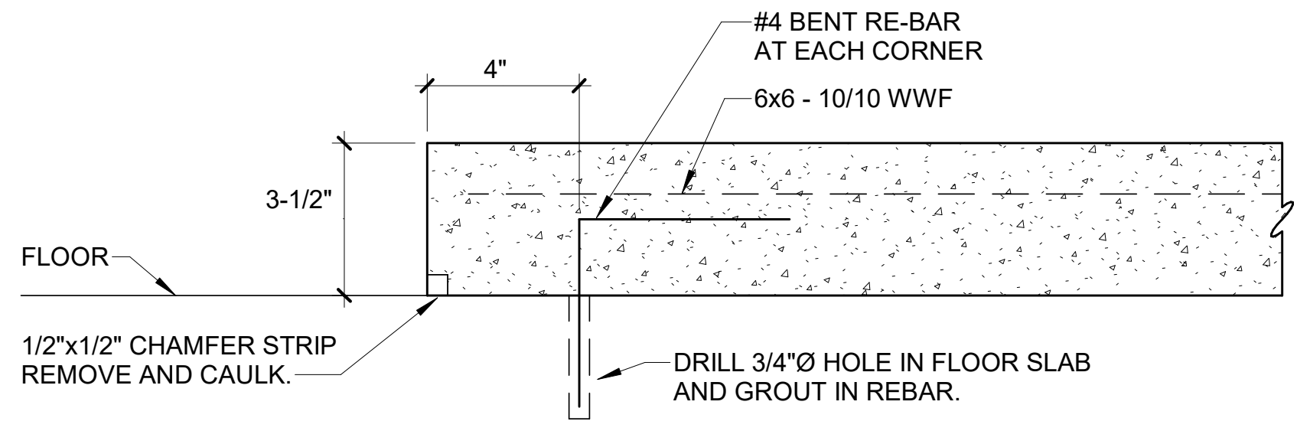
CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

FIRST & SECOND FLOOR PLAN - PLUMBING - DOMESTIC WATER & COMPRESSED AIR

PROJECT NO.: 223134.00

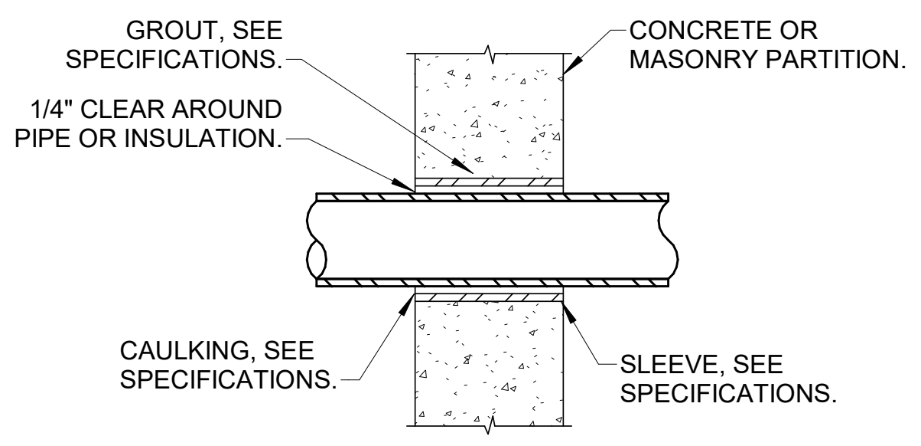
P102


4"
3-1/2"
#4 BENT RE-BAR AT EACH CORNER
6x6 - 10/10 WWF
FLOOR
1/2"x1/2" CHAMFER STRIP REMOVE AND CAULK.
DRILL 3/4"Ø HOLE IN FLOOR SLAB AND GROUT IN REBAR.

NOTES:

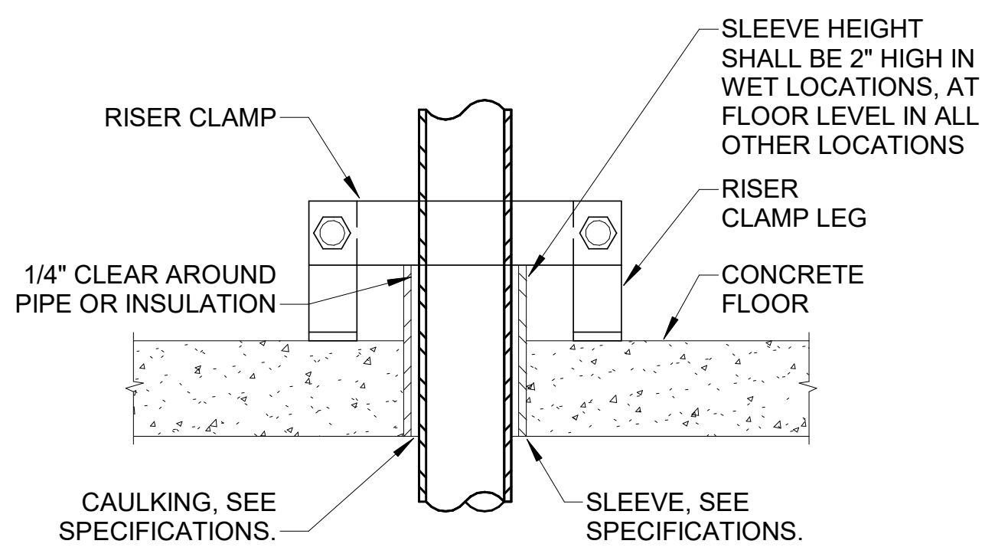
1. INSTALL NEW HOUSEKEEPING PADS AS INDICATED ON PLANS. VERIFY DIMENSIONS WITH EQUIPMENT SIZES.
2. VERIFY SIZE AND LOCATION OF EQUIPMENT ANCHOR BOLTS.
3. PROVIDE DOWEL RODS 18" ON CENTER AROUND FULL PERIMETER OF PAD IF LONG DIMENSION IS GREATER THAN 72".

1 HOUSEKEEPING PAD DETAIL
SCALE: NOT TO SCALE


GROUT, SEE SPECIFICATIONS.
CONCRETE OR MASONRY PARTITION.
1/4" CLEAR AROUND PIPE OR INSULATION.
CAULKING, SEE SPECIFICATIONS.
SLEEVE, SEE SPECIFICATIONS.

NOTE:
1. CAULK FULL PERIMETER OF PIPE AT BOTH INSIDE & OUTSIDE OF WALL.

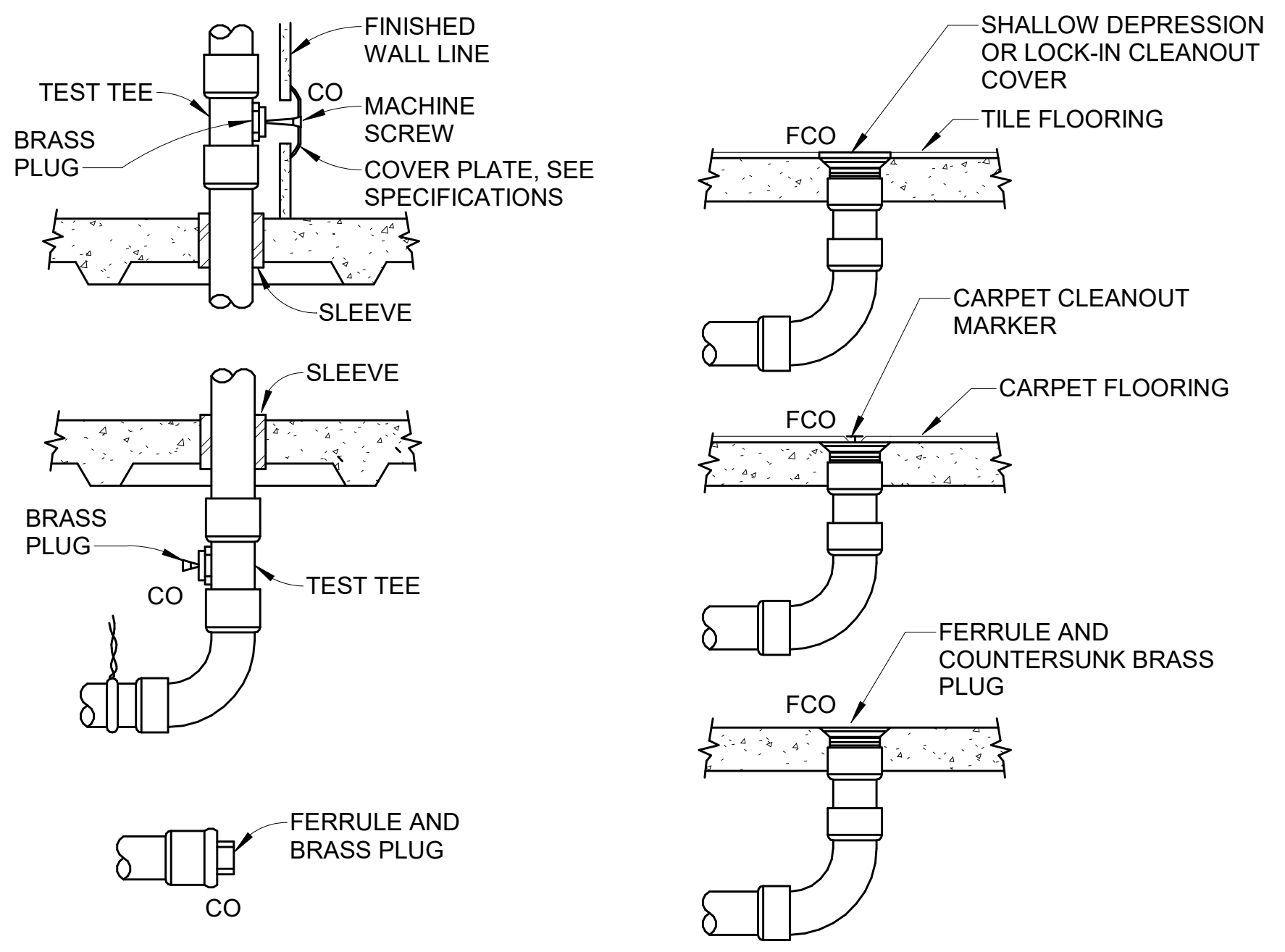
DETAIL OF SLEEVE FOR PIPING PENETRATION OF VERTICAL PARTITIONS


SLEEVE HEIGHT SHALL BE 2" HIGH IN WET LOCATIONS, AT FLOOR LEVEL IN ALL OTHER LOCATIONS
RISER CLAMP
RISER CLAMP LEG
1/4" CLEAR AROUND PIPE OR INSULATION
CONCRETE FLOOR
CAULKING, SEE SPECIFICATIONS.
SLEEVE, SEE SPECIFICATIONS.

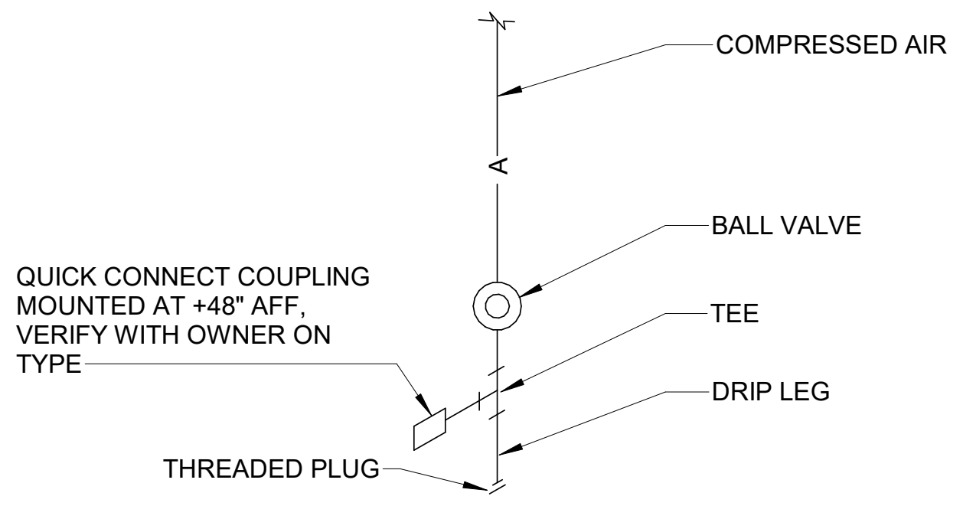
NOTE:
1. CAULK FULL PERIMETER OF PIPE AT BOTH TOP AND BOTTOM OF FLOOR.

DETAIL OF SLEEVE FOR PIPING PENETRATION OF FLOOR

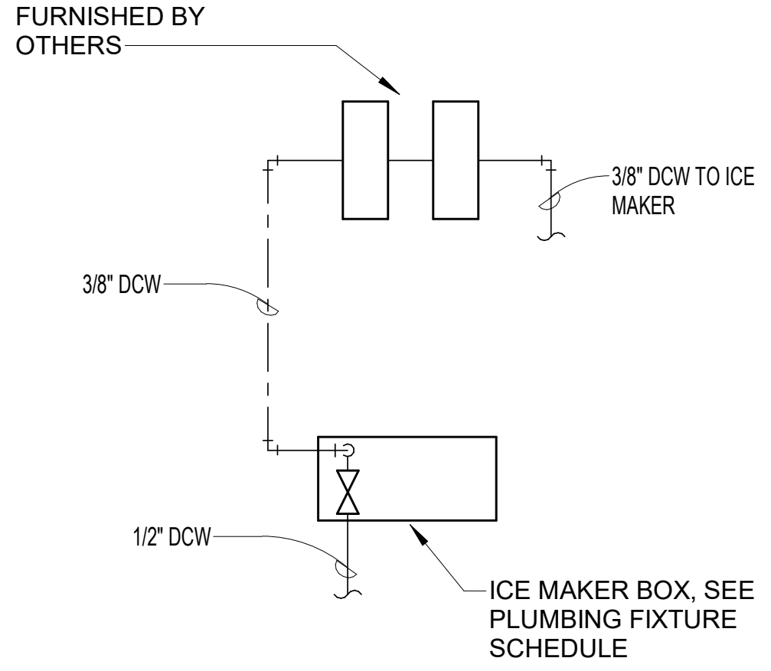
3 INTERIOR PIPE SLEEVE DETAILS
SCALE: NOT TO SCALE



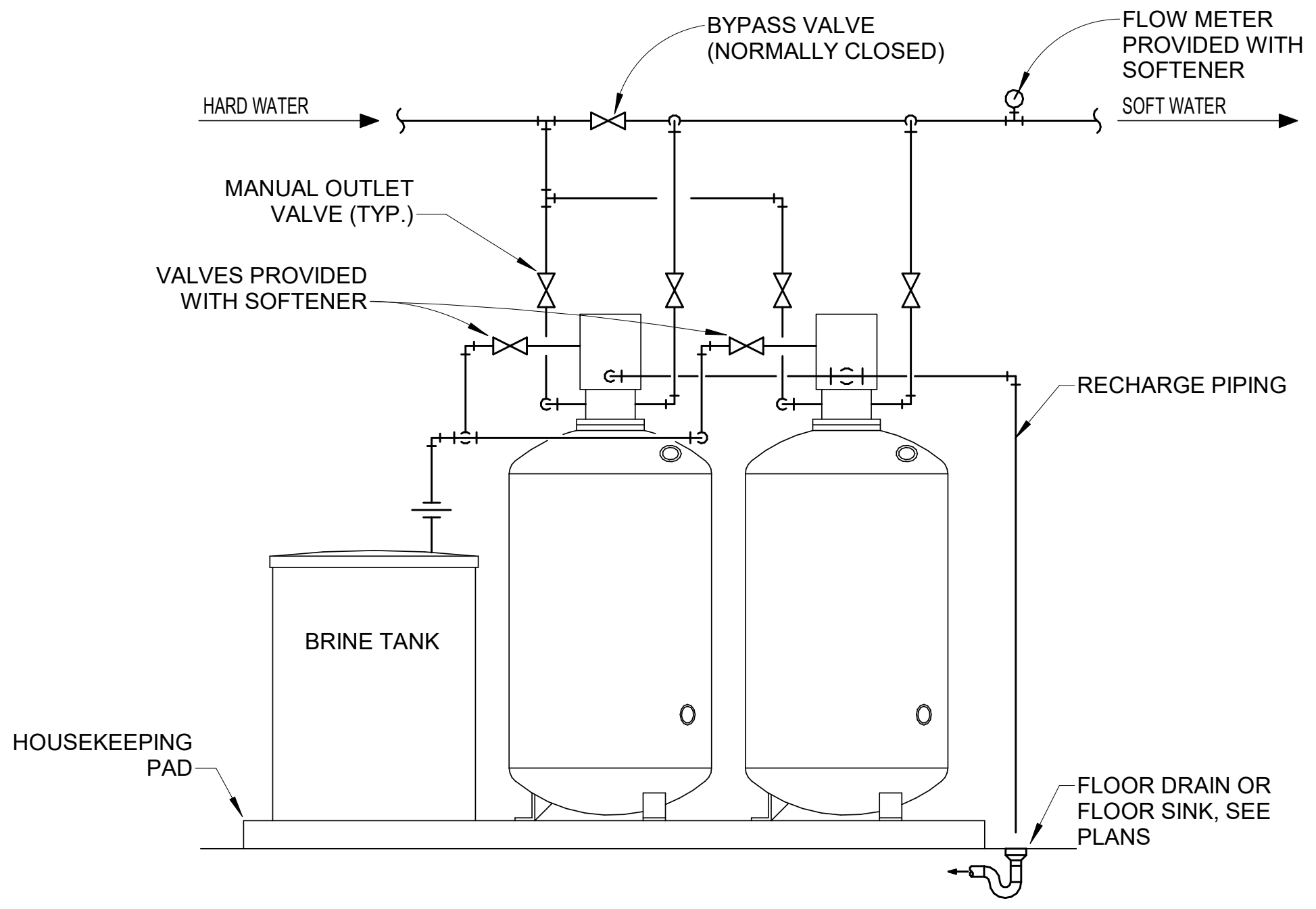
4 TYPICAL CLEANOUT DETAIL
SCALE: NOT TO SCALE


COMPRESSED AIR
A
BALL VALVE
QUICK CONNECT COUPLING MOUNTED AT +48" AFF, VERIFY WITH OWNER ON TYPE
TEE
DRIP LEG
THREADED PLUG

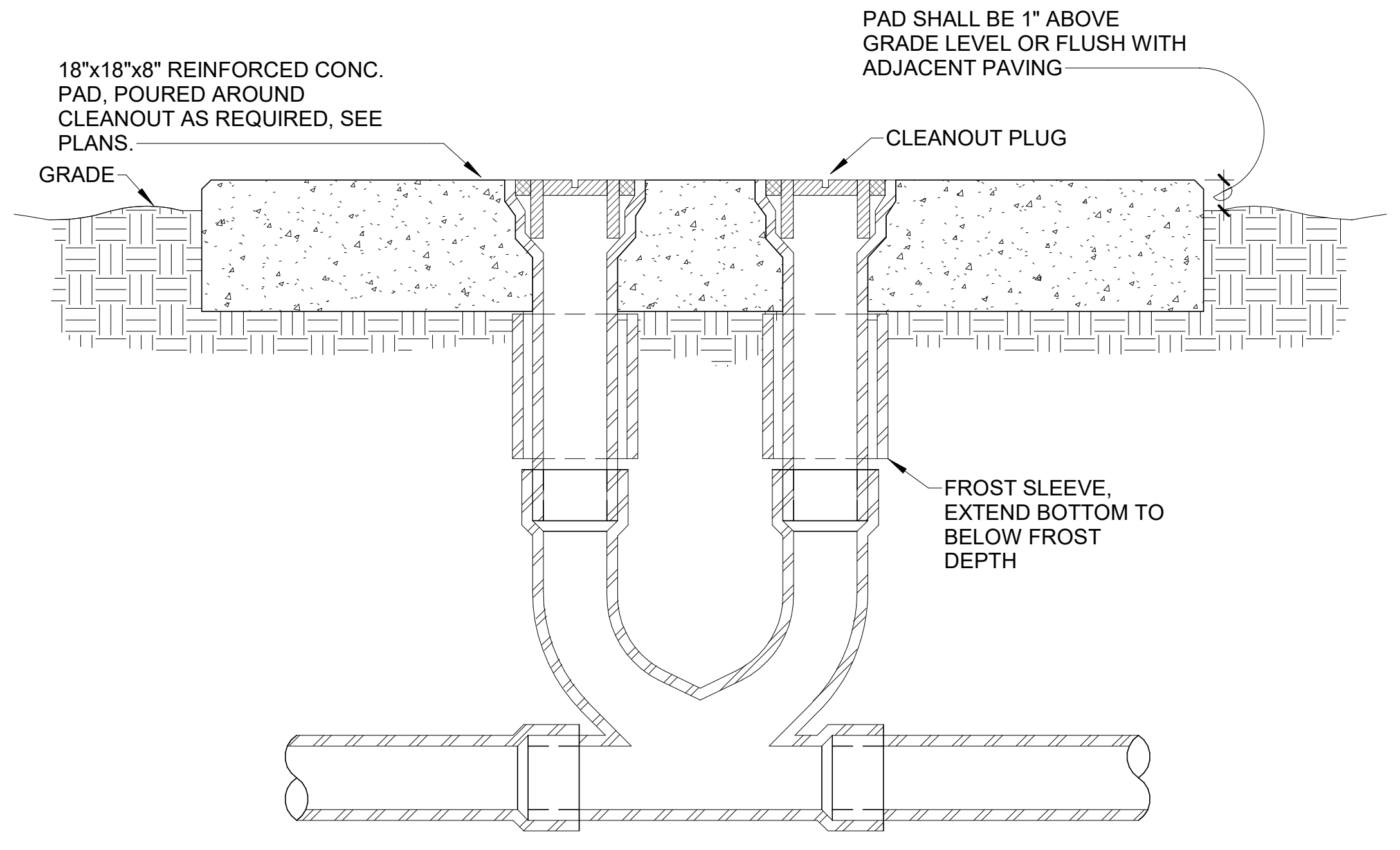
5 COMPRESSED AIR DROP DETAIL
SCALE: NOT TO SCALE


FILTER SYSTEM, FURNISHED BY OTHERS
3/8" DCW TO ICE MAKER
3/8" DCW
1/2" DCW
ICE MAKER BOX, SEE PLUMBING FIXTURE SCHEDULE

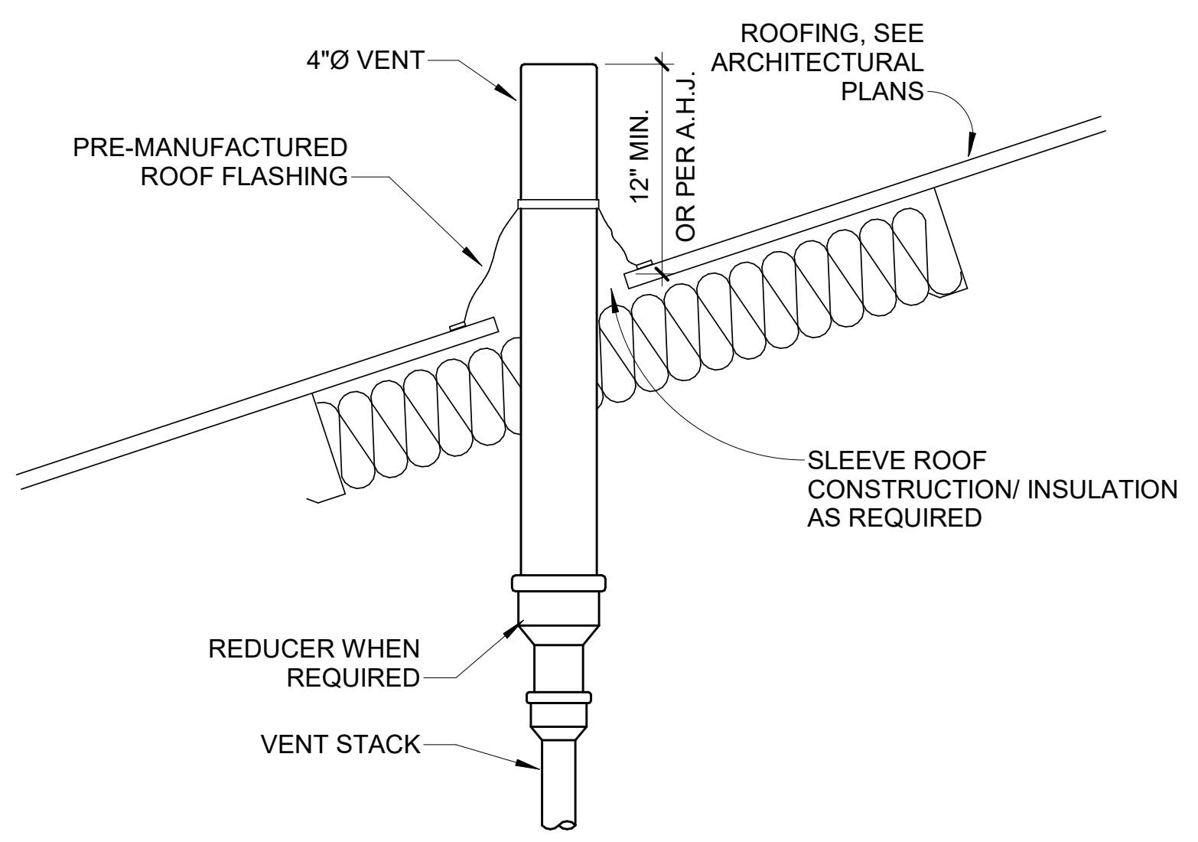
6 ICE MACHINE CONNECTION DETAIL
SCALE: NOT TO SCALE


BYPASS VALVE (NORMALLY CLOSED)
FLOW METER PROVIDED WITH SOFTENER
HARD WATER
SOFT WATER
MANUAL OUTLET VALVE (TYP.)
VALVES PROVIDED WITH SOFTENER
RECHARGE PIPING
BRINE TANK
HOUSEKEEPING PAD
FLOOR DRAIN OR FLOOR SINK, SEE PLANS

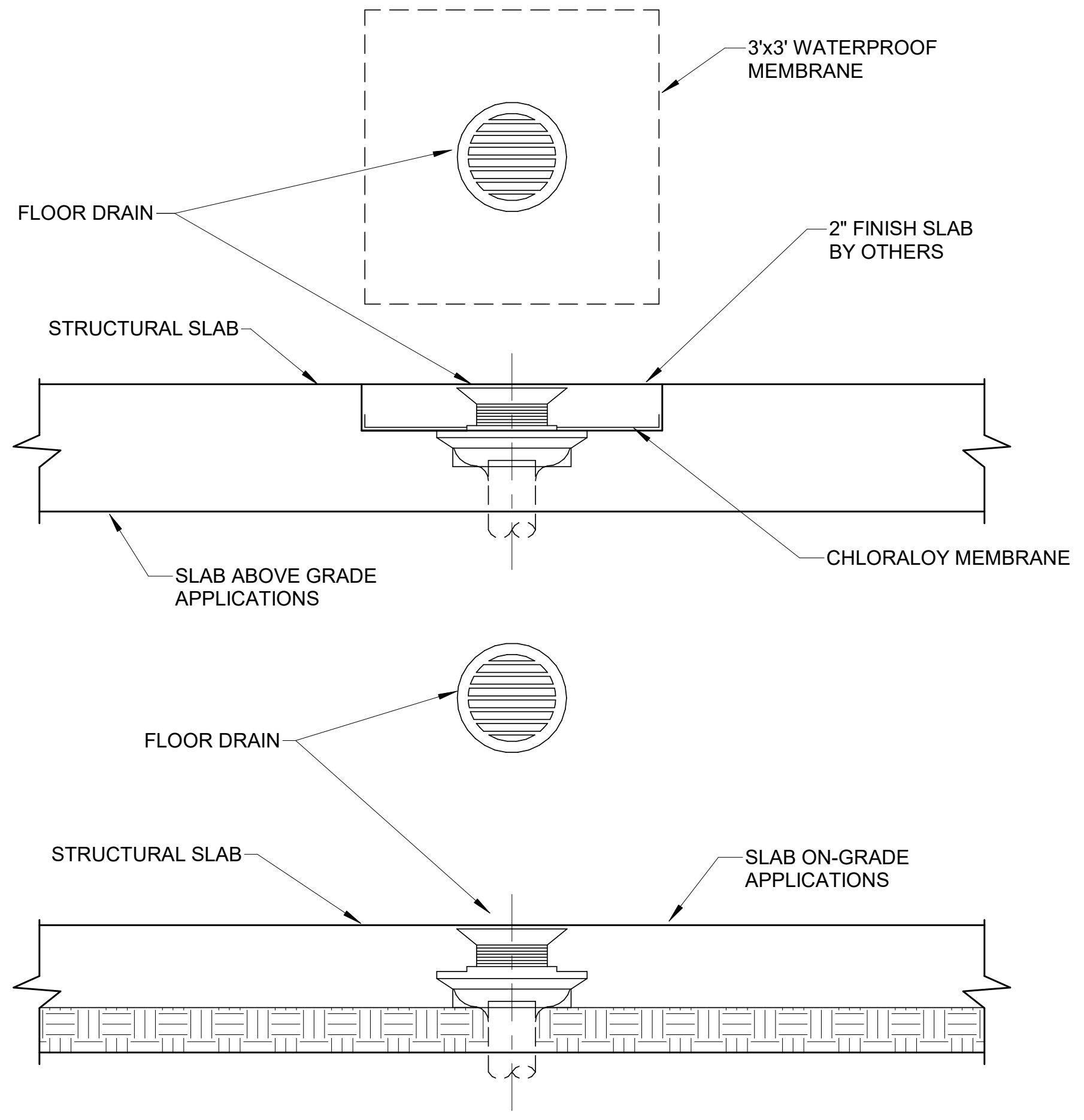
7 ALTERNATING DUPLEX WATER SOFTENER DETAIL
SCALE: NOT TO SCALE


18"x18"x8" REINFORCED CONC. PAD, POURED AROUND CLEANOUT AS REQUIRED, SEE PLANS.
GRADE
PAD SHALL BE 1" ABOVE GRADE LEVEL OR FLUSH WITH ADJACENT PAVING
CLEANOUT PLUG
FROST SLEEVE, EXTEND BOTTOM TO BELOW FROST DEPTH

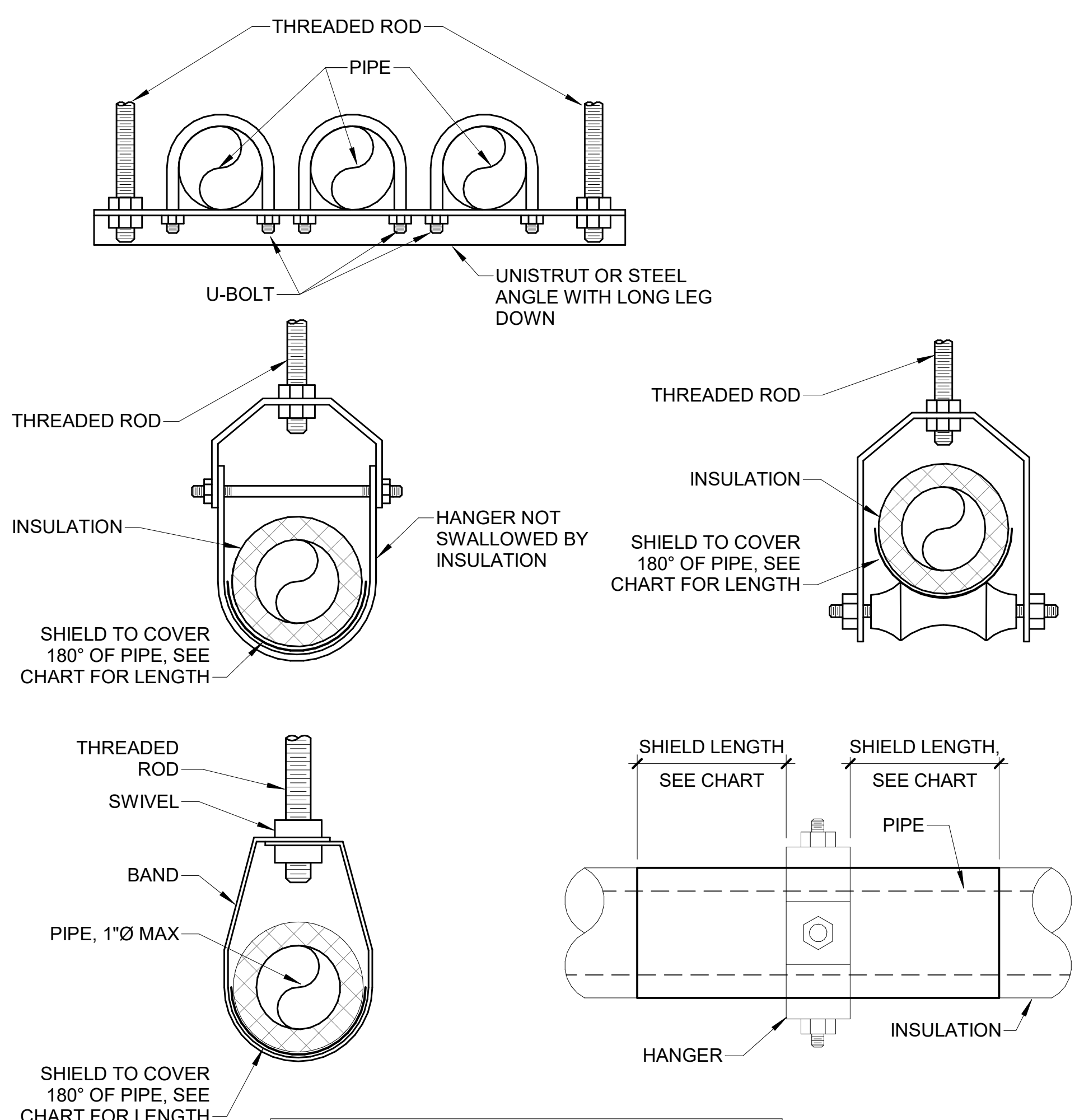
8 DOUBLE GRADE CLEANOUT DETAIL
SCALE: NOT TO SCALE


4"Ø VENT
ROOFING, SEE ARCHITECTURAL PLANS
PRE-MANUFACTURED ROOF FLASHING
12" MIN. OR PER A.H.J.
SLEEVE ROOF CONSTRUCTION/ INSULATION AS REQUIRED
REDUCER WHEN REQUIRED
VENT STACK

9 SLOPED ROOF VENT PIPING DETAIL
SCALE: NOT TO SCALE



10 FLOOR DRAIN DETAIL
SCALE: NOT TO SCALE

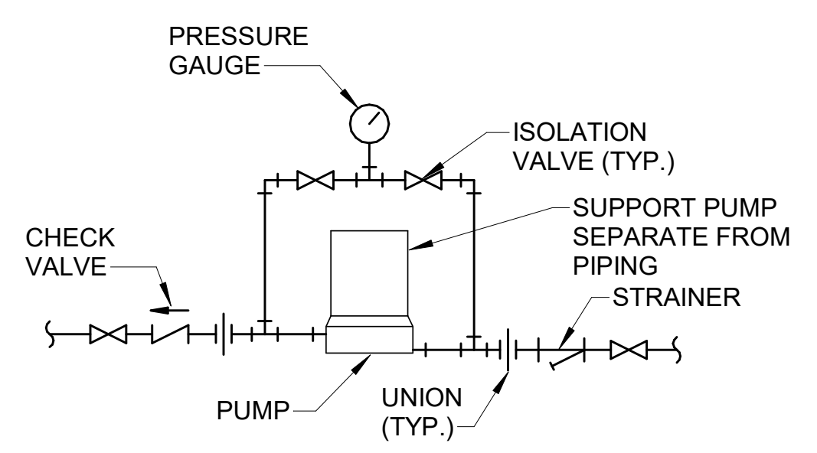

THREADED ROD
PIPE
U-BOLT
UNISTRUT OR STEEL ANGLE WITH LONG LEG DOWN
THREADED ROD
INSULATION
HANGER NOT SWALLOWED BY INSULATION
SHIELD TO COVER 180° OF PIPE, SEE CHART FOR LENGTH
THREADED ROD
INSULATION
SHIELD TO COVER 180° OF PIPE, SEE CHART FOR LENGTH
THREADED ROD
SWIVEL
BAND
PIPE, 1"Ø MAX
SHIELD TO COVER 180° OF PIPE, SEE CHART FOR LENGTH
SHIELD LENGTH, SEE CHART
SHIELD LENGTH, SEE CHART
PIPE
HANGER
INSULATION

SHIELD LENGTH FOR PIPE - NOT LESS THAN THE FOLLOWING:

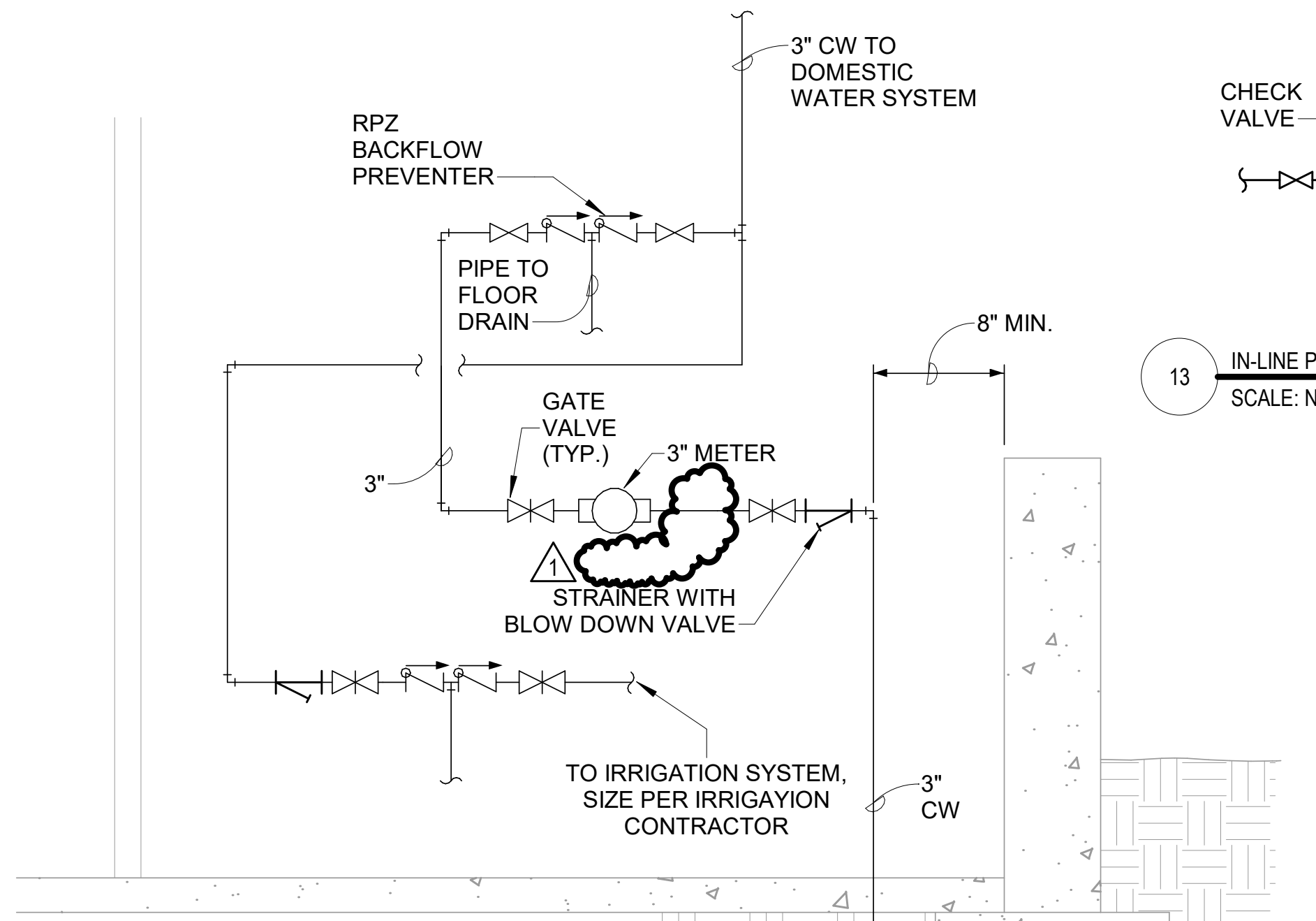
a.	NPS 1/4" TO 3-1/2"	12" LONG AND .048" THICK
b.	NPS 4"	12" LONG AND .06" THICK
c.	NPS 5" TO 6"	18" LONG AND .06" THICK
d.	NPS 8" TO 14"	24" LONG AND .075" THICK
e.	NPS 16" TO 24"	24" LONG AND .105" THICK

NOTE:
1. PIPES NPS 8" AND LARGER: INCLUDE WOOD OR REINFORCED CALCIUM-SILICATE-INSULATION INSERTS OF LENGTH AT LEAST AS LONG AS PROTECTIVE SHIELD.
2. THERMAL-HANGER SHIELDS: INSTALL WITH INSULATION SAME THICKNESS AS PIPING INSULATION.

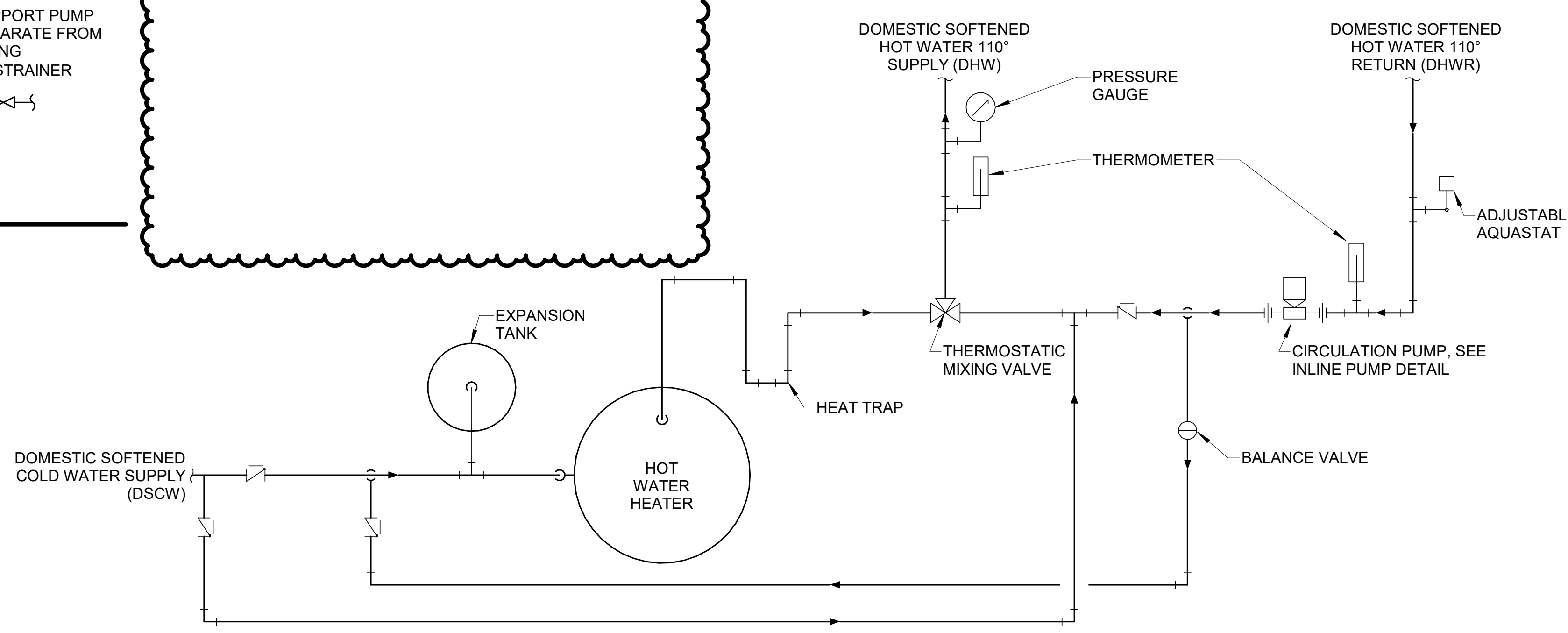
11 PIPE HANGER DETAIL
SCALE: NOT TO SCALE



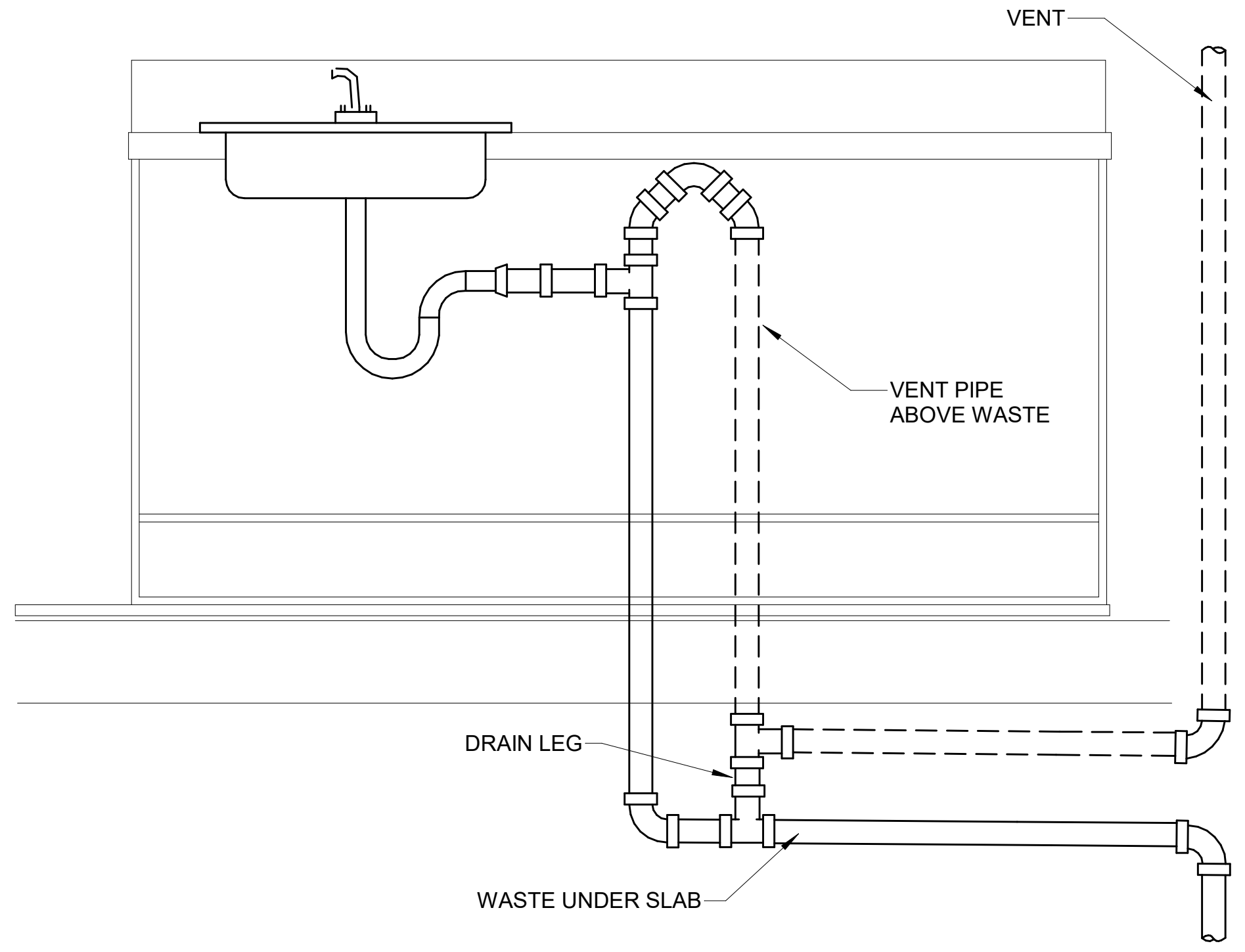
13 IN-LINE PUMP DETAIL
SCALE: NOT TO SCALE


3" CW TO DOMESTIC WATER SYSTEM
RPZ BACKFLOW PREVENTER
PIPE TO FLOOR DRAIN
8" MIN.
GATE VALVE (TYP.)
3" METER
3"
1
STRAINER WITH BLOW DOWN VALVE
TO IRRIGATION SYSTEM, SIZE PER IRRIGAYION CONTRACTOR
3" CW

12 DOMESTIC WATER SERVICE PIPING SCHEMATIC
SCALE: NOT TO SCALE


DOMESTIC SOFTENED HOT WATER 110° SUPPLY (DHW)
PRESSURE GAUGE
THERMOMETER
DOMESTIC SOFTENED HOT WATER 110° RETURN (DHWR)
ADJUSTABLE AQUASTAT
EXPANSION TANK
HEAT TRAP
THERMOSTATIC MIXING VALVE
CIRCULATION PUMP, SEE INLINE PUMP DETAIL
DOMESTIC SOFTENED COLD WATER SUPPLY (DSCW)
HOT WATER HEATER
BALANCE VALVE

15 THERMOSTATIC MIXING VALVE DETAIL
SCALE: NOT TO SCALE



16 ISLAND SINK INSTALLATION
SCALE: NOT TO SCALE

DESIGNED: ZSB
DRAWN: ZSB
CHECKED: SEF

ISSUE DATE: 03/25/2024
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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

DETAILS - PLUMBING

PROJECT NO.: 223134.00

P301

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4/26/2024 1:30:21 PM

WATER SOFTENER SCHEDULE

MARK	SERVES	CONTINUOUS FLOW (GPM)	PRESSURE LOSS (PSI)	MAXIMUM CAPACITY, KGR, EACH (@ 30 LBS. SALT)	BRINE TANK SIZE (DIAxHEIGHT)	MANUFACTURER AND MODEL NUMBER	REMARKS
WS-1	HOT WATER SYSTEM	34	15	81,000	24 x 41	CLACK WS1.25EE	1 , 2

NOTES:
1. PROVIDE DUPLEX SYSTEM AND BRINK TANK. PROVIDE TIMECLOCK AND WATER METER FOR RECHARGE. 1
2. VALVE MODEL SHALL BE A SW1.25EE 96K TWIN

EXPANSION TANK SCHEDULE

MARK	SERVES	LOCATION	TYPE	TOTAL SYSTEM GALLONS	TEMP RANGE (°F)	FILL PRESSURE (PSIG)	MAX OPER. PRESSURE (PSIG)	MANUFACTURER AND MODEL NUMBER	REMARKS
DWET-1	DHW	MECH 205	DIAPHRAGM	2	200	---	150	B & G PT-5	---

1

PUMP SCHEDULE

MARK	LOCATION	SERVES	TYPE	FLOW GPM	HEAD FT WG	MIN % EFF	ELECTRICAL DATA					MANUFACTURER AND MODEL NUMBER	REMARKS
							RPM	HP	VOLTS	PH	HZ		
DWCP-1	MECH 205	DHW	INLINE	3	6	---	---	1/8	115	1	60	TACO IL 0010	1

NOTES: 1. PROVIDE WITH STAINLESS STEEL CONSTRUCTION AND AQUASTAT WITH 7-DAY TIMER.

PLUMBING FIXTURE SCHEDULE

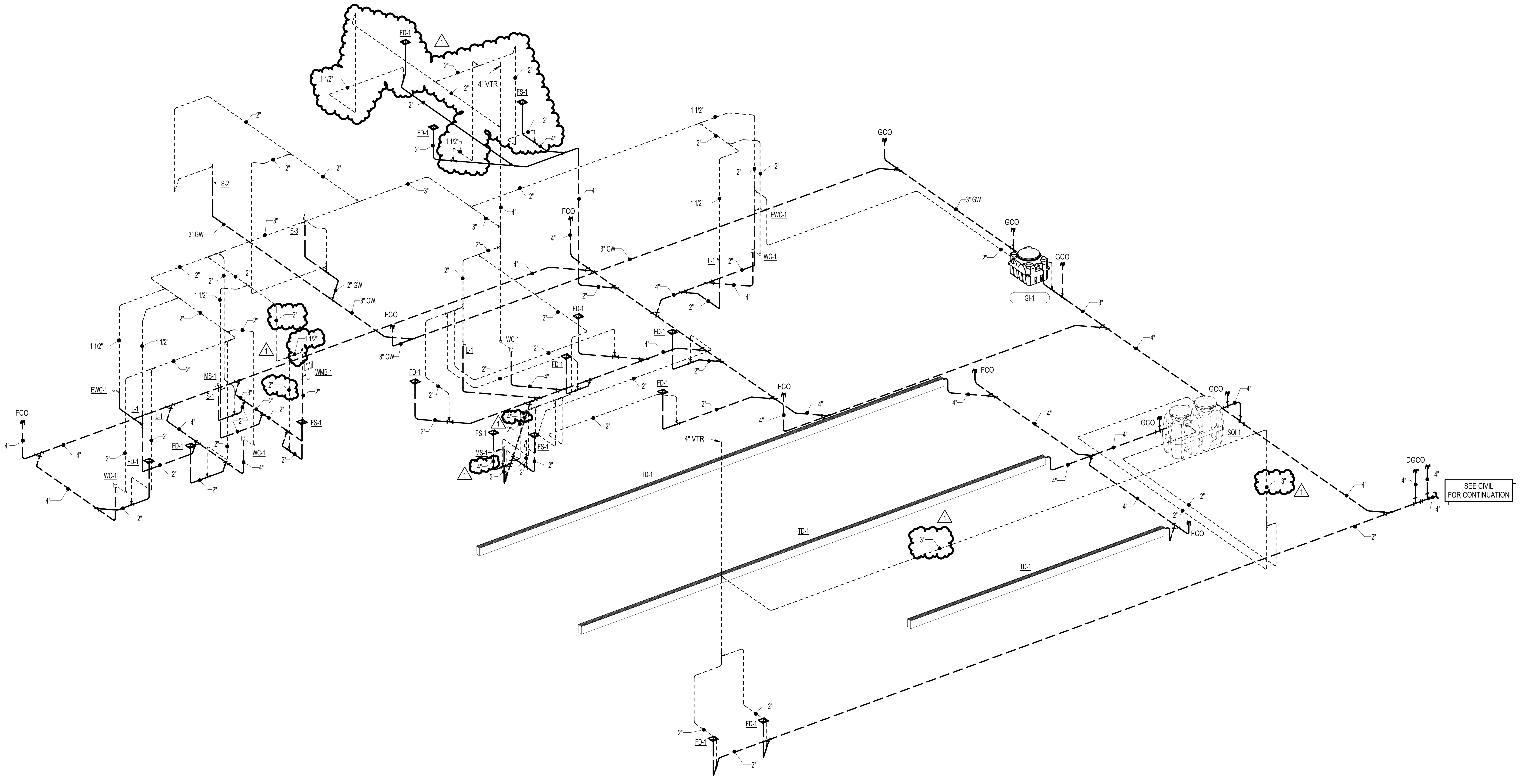
MARK	DESCRIPTION	FIXTURE CONNECTIONS					MOUNTING HEIGHT	FLOW RATE	MANUFACTURER AND MODEL NUMBER				REMARKS
		HOT WATER	COLD WATER	WASTE	VENT	OTHER			FIXTURE	FAUCET/FLUSH VALVE	ACCESSORY #1	ACCESSORY #2	
EEWS-1	EMERGERNCY EYE WASH STATION	1/2"	1/2"	---	---	---	---	3 GPM	SPEAKMAN SE-545	---	---	---	6
EWC-1	ELECTRIC WATER COOLER	---	1/2"	1-1/2"	1-1/2"	---	SEE ARCH.	8 GPH	ELKAY LZSTL8WSLP	---	BOTTLE FILLING STATION	---	---
FD-1	1 FLOOR DRAIN	---	---	2"	2"	---	---	---	1 J.R. SMITH 2005-NB	---	---	---	---
FS-1	FLOOR SINK	---	--- 1	4"	2"	---	FLOOR	---	J.R. SMITH PVCEPTOR	---	---	---	---
GI-1	GREASE INTERCEPTOR	---	---	3"	2"	---	---	---	SCHIER GB-50	---	---	---	4
HB-1	HOSE BIBB	---	3/4"	---	---	---	36" A.F.F.	---	WOODFORD 24/B24	---	---	---	---
IMB-1	ICE MAKER BOX	---	1/2"	---	---	---	48" A.F.F.	---	OATEY F1807	---	---	---	---
L-1	LAVATORY, UNDER-COUNTER	1/2"	1/2"	1-1/2"	1-1/2"	---	SEE ARCH.	1.2 GPM	AMERICAN STANDARD RELIANT 0496200	AMERICAN STANDARD BECKLOW 7429801	TRUEBRO #100 E_Z	---	1,2
MS-1	MOP SINK	1/2"	1/2"	2"	2"	---	FLOOR	6.0 GPM	MUSTEE 63M	MUSTEE 63.600A	---	---	---
S-1	COUNTER SINK, SINGLE BOWL	1/2"	1/2"	1-1/2"	1-1/2"	---	COUNTER MOUNT	2.2 GPM	AMERICAN STANDARD EDGEWATER 18SB.9252211.075	AMERICAN STANDARD PEKOE 4332	---	---	1
S-2	COUNTER SINK, SINGLE BOWL	1/2"	1/2" 1	3"	1-1/2"	---	COUNTER MOUNT	2.2 GPM	AMERICAN STANDARD EDGEWATER 18SB.9332211.075	AMERICAN STANDARD PEKOE 4332	BADGER 5	---	1
S-3	COUNTER SINK, ADA, DOUBLE BOWL	1/2"	1/2"	2"	1-1/2"	---	COUNTER MOUNT	2.2 GPM	AMERICAN STANDARD EDGEWATER 18DB6332211.075	AMERICAN STANDARD PEKOE 4332	BADGER 5		1
SH-1	SHOWER	1/2"	1/2"	2"	1-1/2"	---	SEE ARCH.	1.8 GPM	SEE ARCH.	AMERICAN STANDARD SPECTRA 9138073	FD-1	---	--- 1
SOI-1	SAND/OIL INTERCEPTOR	---	---	4"	3"	---	BELOW GRADE	---	STRIEM OS-100	---	---	---	4
TD-1	TRENCH DRAIN	---	---	4"	---	---	---	---	ZURN Z886	---	---	---	5
TF-1	TRUCK FILL	---	2-1/2"	---	---	---	48" A.F.F.	---	DIXON AV251	---	---	---	---
TMV-1	THERMOSTATIC MIXING VALVE	3/4"	3/4""	---	---	---	---	---	LAWLER 801	---	---	---	---
US-1	UTILITY SINK	1/2"	1/2"	---	---	---	SEE ARCH.	---	MEDINA LT.1E4.210	---	---	---	---
WC-1	WATER CLOSET, ADA, FLUSH VALVE	---	1"	4"	2"	---	FLOOR	1.6 GPF	AMERICAN STANDARD MADERA 3043.001	SLOAN ROYAL 111-1.6	BEMIS SEAT	---	---
WH-1	WALL HYDRANT (FREEZELESS)	---	3/4"	---	---	---	36" A.F.F.	---	WOODFORD B65	---	---	---	3
WMB-1	WASHER MACHINE BOX	1/2"	1/2"	1-1/2"	1-1/2"	---	48" A.F.F.	---	GUY GRAY FRM12SSHA	---	HAMMER ARRESTER	---	---

NOTES:
1 1. PROVIDE 1/4 TURN STOPS AND SOLID COPPER WITH CHROME PLATED SUPPLY LINES AT PLUMBING FIXTURE.
2. PROVIDE INSULATED SUPPLIES AND DRAIN PER ADA.
3. PROVIDE EXPOSED NON-FREEZING ANTI-SIPHON AUTOMATIC DRAINING WALL FAUCET, WITH KEY ACCESS.
4. PROVIDE WITH ADJUSTABLE ADAPTER WITH H-20 RATED CAST IRON COVER.
5. PROVIDE WITH A DUCTILE IRON SLOTTED CLASS C GRATE.
6. PROVIDE POINT OF USE MIXING VALVE AT FIXTURE.
1 7. USE ROUND DRAINS FOR POURED FLOORS AND SQUARE DRAINS FOR TILE FLOORS.

GAS-FIRED WATER HEATER SCHEDULE

MARK	LOCATION	FUEL TYPE	INPUT RATING (MBH)	MINIMUM RECOVERY AT RISE SHOWN (GPH)	EWT (°F)	LWT (°F)	STORAGE CAPACITY (GALLONS)	MANUFACTURER AND MODEL NUMBER	REMARKS
GWH-1	MECH 205	NG	150	178 @ 100°F	40	140	100	AO SMITH BTH-150 MXI CYCLONE	1,2,3

NOTES:
1. PROVIDE AND INSTALL WATER HEATER ON HOUSEKEEPING PAD.
2. PROVIDE UNIT WITH CONCENTRIC VENT KIT.
3. PROVIDE UNIT WITH CONDENSATE NEUTRALIZATION KIT.



1 SANITARY RISER
NOT TO SCALE

DESIGNED: ZSB
DRAWN: ZSB
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ISSUE DATE: 03/25/2024

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1	04/26/2024		Addendum No. 1

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

SCHEDULES & RISER - PLUMBING

PROJECT NO.: 223134.00

P401

Autodesk Docs://Grand Island Fire Station No. 3/GRAND ISLAND FS 3_MECH_v24.rvt
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SYMBOL LEGEND

HVAC PIPING

LPS	LOW PRESSURE STEAM
LPR	LOW PRESSURE RETURN
MPS	MEDIUM PRESSURE STEAM
MPR	MEDIUM PRESSURE RETURN
HPS	HIGH PRESSURE STEAM
HPR	HIGH PRESSURE RETURN
PC	PUMPED CONDENSATE
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
HPWS	HEAT PUMP WATER SUPPLY
HPWR	HEAT PUMP WATER RETURN
GHWS	GLYCOL HOT WATER SUPPLY
GHWR	GLYCOL HOT WATER RETURN
BBD	BOILER BLOW DOWN
ES	EXHAUST STEAM
CWS	CHILLED WATER SUPPLY
CWR	CHILLED WATER RETURN
GCWS	GLYCOL CHILLED WATER SUPPLY
GCWR	GLYCOL CHILLED WATER RETURN
RL	REFRIGERANT LIQUID LINE
RS	REFRIGERANT SUCTION LINE
RDL	REFRIGERANT DISCHARGE
CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
HCWS	HOT/CHILLED WATER SUPPLY
HCWR	HOT/CHILLED WATER RETURN
CD	CONDENSATE DRAIN
G	NATURAL GAS
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT
FOF	FUEL OIL FILL
FOG	FUEL OIL GAGE
LPG	LIQUEFIED PETROLEUM GAS

PLUMBING PIPING

	SANITARY DRAIN (ABOVE FLOOR)
	SANITARY DRAIN (BELOW FLOOR)
ST/OST	STORM DRAIN
ST/OST	STORM DRAIN (BELOW FLOOR)
	SANITARY VENT
AW	ACID WASTE
AV	ACID VENT
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	DOMESTIC HOT WATER RECIRCULATING (DHWR)
TW	TEPID WATER
TWR	TEPID WATER RECIRCULATING
DSCW	SOFTENED COLD WATER
DSHW	SOFTENED HOT WATER
W	BURIED EXTERIOR WATER
DS	DISTILLED WATER
DI	DEIONIZED WATER
RO	REVERSE OSMOSIS WATER
A	COMPRESSED AIR
VAC	VACUUM
OX	OXYGEN
N	NITROGEN
WAGD	WASTE AND ANESTHETIC GAS DISPOSAL
MA	MEDICAL AIR

FIRE PROTECTION

D	SPRINKLER DRAIN
F	FIRE SUPPRESSION PIPING
	FIRE DEPARTMENT CONNECTION
FS	FLOW SWITCH
TS	TAMPER SWITCH

VALVES

	MANUAL BALANCING VALVE
	ISOLATION VALVE
	CHECK VALVE
M	CONTROL VALVE (2 WAY)
M	CONTROL VALVE (3 WAY)
	AUTO FLOW CONTROL VALVE
	HOSE END DRAIN VALVE
	PRESSURE REDUCING VALVE
S	SOLENOID VALVE
	TEMP & PRESS RELIEF (OR) SAFETY VALVE-STEAM
	THERMOSTATIC MIXING VALVE

PIPING SPECIALTIES AND FITTINGS

CO WCO	CLEANOUT / WALL CLEANOUT
GCO	GRADE CLEANOUT
DGCO	DOUBLE - GRADE CLEANOUT
VTR	PLUMBING VENT THRU ROOF
FD-_	FLOOR DRAIN
FS-_	FLOOR SINK
RD-_	ROOF DRAIN
ORD-_	OVERFLOW ROOF DRAIN
	TRENCH DRAIN
MH	MANHOLE
Ⓧ	OXYGEN OUTLET
Ⓥ	VACUUM OUTLET
Ⓐ	AIR OUTLET
Ⓝ	NITROGEN OUTLET
Ⓥ	WASTE AND ANESTHETIC GAS DISPOSAL OUTLET
MA	MEDICAL AIR OUTLET
	PIPE CAP
	ELBOW UP
	ELBOW DOWN
	TEE
	TEE UP
	TEE DOWN
	STRAINER
	UNION
	AIR VENT
	FLEXIBLE PIPE CONNECTION
	EXPANSION JOINT
	PIPE ANCHOR
	PIPE GUIDE
	THERMOMETER
	PRESSURE GAUGE
HB	HOSE BIBB
RHY	ROOF HYDRANT
WH	WALL HYDRANT
	STEAM TRAP

MISCELLANEOUS SYMBOLS

DEMO EXISTING	DEMO TO EXISTING CONNECTION
NEW EXISTING	NEW TO EXISTING CONNECTION

HVAC DUCTWORK AND SPECIALTIES

18x10	RECT DUCT-1ST FIG IS SIDE SHOWN
18 Ø	ROUND DUCT
18/10	FLAT OVAL DUCT-1ST FIG IS SIDE SHOWN
	ACOUSTICAL DUCT LINER

HVAC DUCTWORK AND SPECIALTIES (CONT.)

	FLEXIBLE DUCTWORK CONNECTION
	VOLUME DAMPER
	TURNING VANES
	HIGH EFFICIENCY TAKEOFF
	HIGH EFFICIENCY TAKOFF WITH VOLUME DAMPER
	SUPPLY AND FRESH AIR DUCT UP
	SUPPLY AND FRESH AIR DUCT DOWN
	RETURN DUCT UP
	RETURN DUCT DOWN
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
	ROUND DUCT UP / DOUBLE LINE PIPE
	ROUND DUCT DOWN / DOUBLE LINE PIPE
SIZE/TYPE FLOW	AIR TERMINAL (VERTICAL MOUNTING)
SIZE/TYPE FLOW	ROUND AIR TERMINAL (HORIZONTAL MOUNTING)
SIZE/TYPE FLOW	RECTANGULAR SUPPLY AIR TERMINAL (HORIZONTAL MOUNTING)
SIZE/TYPE FLOW	RECTANGULAR RETURN AIR TERMINAL (HORIZONTAL MOUNTING)
SIZE/TYPE FLOW	RECTANGULAR EXHAUST AIR TERMINAL (HORIZONTAL MOUNTING)
AFS	AIR FLOW STATION
M	MOTORIZED DAMPER-PARALLEL BLADE
M	MOTORIZED DAMPER-OPPOSED BLADE
	GRAVITY DAMPER
F	FIRE DAMPER-HORIZ FIRE SEPARATION
S	SMOKE DAMPER
FS	FIRE/SMOKE DAMPER
	FLEXIBLE DUCT
T	THERMOSTAT
H	HUMIDISTAT
S	TEMPERATURE SENSOR
CO	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
NO2	NITROGEN DIOXIDE SENSOR
'X'	SENSOR WITH GUARD

REFERENCE LEGEND

DUCT SIZE	X" ∅ X"xX" X"/X"	DIAMETER WIDTH x HEIGHT WIDTH / HEIGHT
PIPE SIZE	X"	PIPE SIZE (DIAMETER)
PLUMBING FIXTURES	XXX-1	PLUMBING FIXTURE DESIGNATION
ROOM / SPACE NUMBER	ROOM NAME 101	ROOM NAME DESIGNATION ROOM NUMBER DESIGNATION
EQUIPMENT NUMBER	XX-1	EQUIPMENT NUMBER
REFERENCE DEMOLITION NOTE	X	DEMOLITION DESIGNATION
REFERENCE NOTE	X	REFERENCE DESIGNATION
PLAN DETAIL	X XXXX	DETAIL NUMBER SHEET NUMBER
SECTION/ DETAIL	SIM/OPP X XXXX	SECTION/DETAIL NUMBER SHEET NUMBER INDICATES DIRECTION OF VIEW
NEW COLUMN	X	LETTER/NUMBER INDICATES NEW COLUMN LINE
EXISTING COLUMN	X	LETTER/NUMBER INDICATES EXISTING COLUMN LINE
MATCHLINE	AREA A AREA B	
LEVEL	NAME ELEVATION	LEVEL CALLOUT DESIGNATION ELEVATION DESIGNATION
TITLE MARKER	1 VIEW NAME SCALE: 1/8" = 1'-0"	GRAPHIC AREA FOR DRAWING DRAWING/DETAIL NUMBER TITLE SCALE OF THE DRAWING
NORTH ARROW	NORTH PLAN NORTH TRUE NORTH	

ABBREVIATIONS

A	COMPRESSED AIR
AC	AIR COMPRESSOR
ACC	AIR COOLED CONDENSER
ACCU	AIR COOLED CONDENSING UNIT
AD	AIR DOOR
AFCV	AUTO FLOW CONTROL VALVE
AHU	AIR HANDLING UNIT
AMP	AMPERE
APD	AIR PRESSURE DROP
ARU	AIR ROTATION UNIT
AS	AIR SEPARATOR
ASHP	AIR SOURCE HEAT PUMP
AV	ACID VENT
AW	ACID WASTE
B	BOILER
BC	BLOWER COIL
BD	BIDET
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BHP	BRAKE HORSEPOWER
BLKG	BLOCKING
BLV	BALANCING VALVE
BT	BATHTUB
BV	BALL VALVE
BW	BEDPAN WASHER
CH	CHILLER
CC	COOLING COIL
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CMU	CONCRETE MASONRY UNITS
CR	CONDENSER WATER RETURN
CRAC	COMPUTER ROOM AIR CONDITIONER
CS	CONDENSER WATER SUPPLY
CSS	CLINICAL SERVICE SINKS
CT	COOLING TOWER
CU	CONDENSING UNIT - SPLIT SYSTEM
CUH	CABINET UNIT HEATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
DB	DRY-BULB TEMPERATURE
DCW	DOMESTIC COLD WATER
DEG	DEGREE
DF	DRINKING FOUNTAIN
DGCO	DOUBLE GRADE CLEANOUT
DH	EMERGENCY DRENCH HOSES
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RECIRCULATING
DHWP	DOMESTIC HOT WATER RECIRCULATING PUMP
DI	DEIONIZED WATER
DOAS	DEDICATED OUTDOOR AIR SYSTEM
DS	DISTILLED WATER
DSA	DUCT SOUND ATTENUATORS
DSCW	DOMESTIC SOFT COLD WATER
DSHW	DOMESTIC SOFT HOT WATER
DSHWR	DOMESTIC SOFT HOT WATER RECIRCULATING
DSS	DUCTLESS SPLIT SYSTEM
DST	DOMESTIC STORAGE TANK
DTW	DOMESTIC TEPID WATER
DTWR	DOMESTIC TEPID WATER RECIRCULATING
DWET	DOMESTIC WATER EXPANSION TANK
EA.	EACH
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRIC DUCT HEATER
EEW	EMERGENCY EYE WASH
EEWS	EMERGENCY EYE WASH/SHOWER
EF	EXHAUST FAN
EFF	EFFICIENCY
EFW	EMERGENCY FACE WASH
EH	EXHAUST HOOD
ERV	ENERGY RECOVERY VENTILATOR
ES	EMERGENCY SHOWER
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EWT	ENTERING WATER TEMPERATURE
F	FIRE SUPPRESSION PIPING
F-_	FURNACE
FC	FLUID COOLER
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOV	FUEL OIL VENT
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FSD	FIRE/SMOKE DAMPER
FT	FINNED TUBE
G	GAS
GCWR	GLYCOL CHILLED WATER RETURN
GCWS	GLYCOL CHILLED WATER SUPPLY
GD	GARBAGE DISPOSAL
GDH	GAS DUCT HEATER
GHCR	GLYCOL HOT/CHILLED WATER RETURN
GHCS	GLYCOL HOT/CHILLED WATER SUPPLY
GHWR	GLYCOL HOT WATER RETURN
GHWS	GLYCOL HOT WATER SUPPLY
GI	GREASE INTERCEPTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GV	GAS VENT
GWH	GAS WATER HEATER
H	HUMIDIFIER
HB	HOSE BIBB
HC	HEATING COIL
HCR	HOT/CHILLED WATER RETURN
HCS	HOT/CHILLED WATER SUPPLY
HP	HORSEPOWER
HP-_	HEAT PUMP
HPR	HIGH PRESSURE RETURN
HPS	HIGH PRESURE STEAM
HRC	HEAT RECOVERY COIL
HVLS	HIGH VOLUME LOW SPEED
HWR	HOT WATER RETURN (HEATING)
HWS	HOT WATER SUPPLY (HEATING)
HX	HEAT EXCHANGER
HY	HYDRANTS
IH	INTAKE HOOD
IRH	INFRARED RADIANT HEATER
KH	KITCHEN HOOD
KW	KILOWATT
KWH	KILOWATT HOURS
L	LAVATORY
LAT	LEAVING AIR TEMPERATURE
LPR	LOW PRESSURE RETURN
LPG	LIQUIFIED PETROLEUM GAS
LPS	LOW PRESSURE STEAM
LRA	LOCKED ROTOR AMPS
LS	LAUNDRY SINK
LV	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	1000 BTUH
MCA	MINIMUM CIRCUIT AMPS
MD	MOTORIZED DAMPER
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
MPR	MEDIUM PRESSURE RETURN
MPS	MEDIUM PRESSURE STEAM
MS	MOP SINK
N	NITROGEN
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NPCW	NONPOTABLE COLD WATER
NPHW	NONPOTABLE HOT WATER
NPHWR	NONPOTABLE HOT WATER RECIRCULATING
OA	OUTSIDE AIR
OB	OUTLET BOX
OI	OIL INTERCEPTOR
ORD	OVERFLOW ROOF DRAIN
OST	OVERFLOW STORM WATER
OX	OXYGEN
P	PUMP
PHC	PREHEAT COIL
PIV	POST INDICATING VALVE
PRV	PRESSURE REGULATING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH, GAUGE
PTAC	PACKAGED TERMINAL AIR CONDITIONER
RA	RETURN AIR
RCP	RADIANT CEILING PANEL
RD	ROOF AREA DRAINS
RF	RETURN FAN
RH	RELIEF HOOD
RHC	REHEAT COIL
RH	ROOF HYDRANT
RL	REFRIGERANT LIQUID LINE
RLA	RELIEF AIR
RLF	RELIEF FAN
RO	REVERSE OSMOSIS WATER
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION LINE
RTU	ROOF TOP UNIT
RV	RELIEF VALVE
S	SINK
SA	SUPPLY AIR
SAN	SANITARY SEWER
SD	SMOKE DAMPER
SF	SUPPLY FAN
SFU	SANITARY FIXTURE UNIT
SH	SHOWER
SOI	SAND OIL INTERCEPTOR
SP	STATIC PRESSURE
SP	SUMP PUMP
SSS	SURGICAL SCRUB SINK
ST	STORM WATER
T	THERMOSTAT
TD	TRENCH DRAIN
TMV	THERMOSTATIC MIXING VALVE
TONS	TONS OF REFRIGERATION
TSP	TOTAL STATIC PRESSURE
UH	UNIT HEATER
UR	URINAL
V	VENT
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THRU ROOF
WB	WET BULB
WC	WATER CLOSETS
WCO	WALL CLEANOUT
WF	WASH FOUNTAINS
WFU	WATER FIXTURE UNITS
WH	WALL HYDRANT
WMB	WASHING MACHINE BOX
WPD	WATER PRESSURE DROP
WS	WATER SOFTENER
WSHP	WATER SOURCE HEAT PUMP
WWHP	WATER TO WATER HEAT PUMP
YH	YARD HYDRANT

GENERAL DEMOLITION NOTES

GENERAL NOTES

1

A. ALL CONTRACTORS ARE RESPONSIBLE FOR REVIEWING ENTIRE SET OF DOCUMENTS TO DETERMINE THEIR FULL SCOPE OF WORK. CONTRACTOR SHALL NOT BE ALLOWED EXTRA COSTS DUE TO FAILURE TO REVIEW ENTIRE SET OF DOCUMENTS.

B. CONTRACTOR SHALL TAKE ALL MEASUREMENTS FOR WORK AND BE RESPONSIBLE FOR SAME. CONTRACTOR SHALL ADJUST FOR ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO OWNER. COORDINATE THE WORK AND SHOP DRAWINGS WITH ALL OTHER TRADES AFFECTED.

C. SCREENED HALF-TONE LINES INDICATE EXISTING CONSTRUCTION TO REMAIN. FULL-TONE LINES INDICATED NEW OR RELOCATED CONSTRUCTION.

D. MAINTAIN MANUFACTURER'S REQUIRED CLEARANCE AROUND ALL EQUIPMENT TO ALLOW FOR MAINTENANCE ACCESS.

E. ALL PIPING IN CONCEALED LOCATIONS SHALL BE ROUTED AT RIGHT ANGLES AND PARALLEL TO BUILDING WALLS UNLESS OTHERWISE INDICATED.

F. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.

G. ALL RUNOUTS TO AIR TERMINALS SHALL MATCH INLET SIZE UNLESS OTHERWISE NOTED.

REF. DEMO NOTES (X)

PROJECT MECHANICAL REFERENCED DEMOLITION NOTES

SEE INDIVIDUAL SHEETS FOR REFERENCE NOTES.

REF. NOTES (X)

PROJECT MECHANICAL REFERENCED NOTES

SEE INDIVIDUAL SHEETS FOR REFERENCE NOTES.

MECHANICAL SHEET LIST

M 00	MECHANICAL INFO SHEET
M101	FLOOR PLAN - MECHANICAL
M201	HVAC PIPING FLOOR PLAN - MECHANICAL
M401	DETAILS - MECHANICAL
M501	SCHEDULE - MECHANICAL

DESIGNED:	TMJ	**ISSUE DATE:**	03/25/2024
DRAWN:	TMJ	**REVISIONS:**	
CHECKED:	SEF		

No.:	DATE:	BY:	DESCRIPTION:
1	04/26/2024		Addendum No. 1

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FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

MECHANICAL INFO SHEET

PROJECT NO.: 223134.00

M 00

VEHICLE EXHAUST SEQUENCE OF CONTROL FOR APPARATUS BAY

GENERAL: THE EXHAUST FAN'S CONTROL CIRCUIT SHALL INCLUDE A MOTOR STARTER WITH A MANUAL ON-OFF SELECTOR SWITCH FOR LOCAL CONTROL. THE FAN SHALL NOT BE CONTROLLED BY THE BUILDING HVAC CONTROL SYSTEM.

GAS DETECTION SYSTEM SEQUENCE OF CONTROL

GENERAL: THE GAS DETECTION SYSTEM SHALL OPERATE CONTINUOUSLY TO SAMPLE THE AIR. UPON DETECTION OF EITHER CARBON MONOXIDE OR NITROGEN DIOXIDE, THE FOLLOWING ACTIONS SHALL BE EXECUTED:

- OUTSIDE AIR DAMPER AT LOUVER (L-3) SHALL FULLY OPEN TO MAXIMIZE FRESH AIR INTAKE.
- EXHAUST FAN (EF-7) SHALL TURN ON TO EFFICIENTLY REMOVE CONTAMINATED AIR.

THIS SEQUENCE SHALL REAMIN ACTIVE UNTIL THE GAS ALARM IS SUCCESSFULLY CLEARED, INDICATING A RETURN TO SAFE AND NORMAL CONDITIONS. WHEN THE GAS DETECTION SYSTEM RETURNS TO NORMAL OPERATION, EXHAUST FAN (EF-7) SHALL TURN OFF AND OUTSIDE DAMPER SHALL CLOSE.

THE APPARATUS BAY SHALL BE PROVIDED WITH A VEHICLE EXHAUST SYSTEM. THE VEHICLE EXHAUST SYSTEM SHALL BE FURNISHED BY OWNER AND INSTALLED BY MECHANICAL CONTRACTOR. THE VEHICLE EXHAUST SYSTEM MANUFACTURER WILL BE PLYMOVENT. THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL COMPONENTS AND LOCATION WITH OWNER. COMPONENTS SHALL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: EXHAUNST FAN, EXHAUST RAIL, FLEX HOSE, MAGNETIC EXHAUST COUPLING, AND VEHICLE EXHAUST CONTROL PANEL. THE OWNER SHALL PROVIDE CONTACT INFORMATION TO THE MECHANICAL CONTRACTOR FOR THE PLYMOVENT SUPPLIER TO COORDINATE ALL COMPONENTS AND LOCATION OF THE COMPONENTS.

REF. NOTES (◇X):

1 DAMPER TO BE INTERLOCKED WITH EH-1 OPERATION TO PROVIDE MAKE UP AIR. BALANCE DAMPER TO PROVIDE 500 CFM.

2 MOUNT BOTTOM OF EXHAUST AIR GRILLE AT 12" A.F.F.

3 MOUNT BOTTOM OF OA LOUVER AT 10' A.F.F.

4 MOUNT BOTTOM OF EXHAUST LOUVER AT 10' A.F.F.

5 INSTALL CONDENSING UNIT ON CONCRETE HOUSEKEEPING PAD. ANCHOR UNIT TO PAD AS REQUIRED.

6 ROUTE 4" VENT FROM UNIT HEATER UP THROUGH ROOF. TERMINATE VENT ABOVE ROOF WITH MANUFACTURER APPROVED CAP.

7 ROUTE 3" FLUE GAS VENT FROM BOILER UP THROUGH ROOF. TERMINATE VENT ABOVE ROOF WITH MANUFACTURER APPROVED CAP.

8 ROUTE 3" OUTSIDE AIR INTAKE FROM BOILER UP THROUGH ROOF. TERMINATE VENT ABOVE ROOF WITH MANUFACTURER APPROVED CAP.

9 TRANSITION DUCT TO FIT DOAS UNIT AS REQUIRED.

1

10 MOUNT DEHUMIDIFIER ON WALL 6" BELOW CEILING. DRAIN CONDENSATE TO FLOOR SINK BELOW.

11 33 INCHES REQUIRED CLEARANCE.

12 PROVIDE 6" EXHAUST DUCT FOR FUTURE DRYING CABINET. CAP IN SPACE JUST BELOW CEILING. TERMINATE ON ROOF WITH MANUFACTURER APPROVED ROOF CAP.

13 ROUTE 3" OA INTAKE AND FLUE GAS FOR WATER HEATER UP THROUGH ROOF TO CONCENTRIC VENT AS REQUIRED.

14 ROUTE DOAS-1 FLUE GAS AND COMBUSTION AIR INTAKE THROUGH ROOF AS REQUIRED BY MANUFACTURER. TERMINATE PIPES WITH MANUFACTURER APPROVED ROOF CAPS.

15 ROUTE 2-1/2" PVC AIR INTAKE PIPE FOR SCBA COMPRESSOR AS REQUIRED. PROVIDE GOOSENECK FITTING ON EXTERIOR OF WALL AND DRAIN ON INTERIOR OF WALL.

1

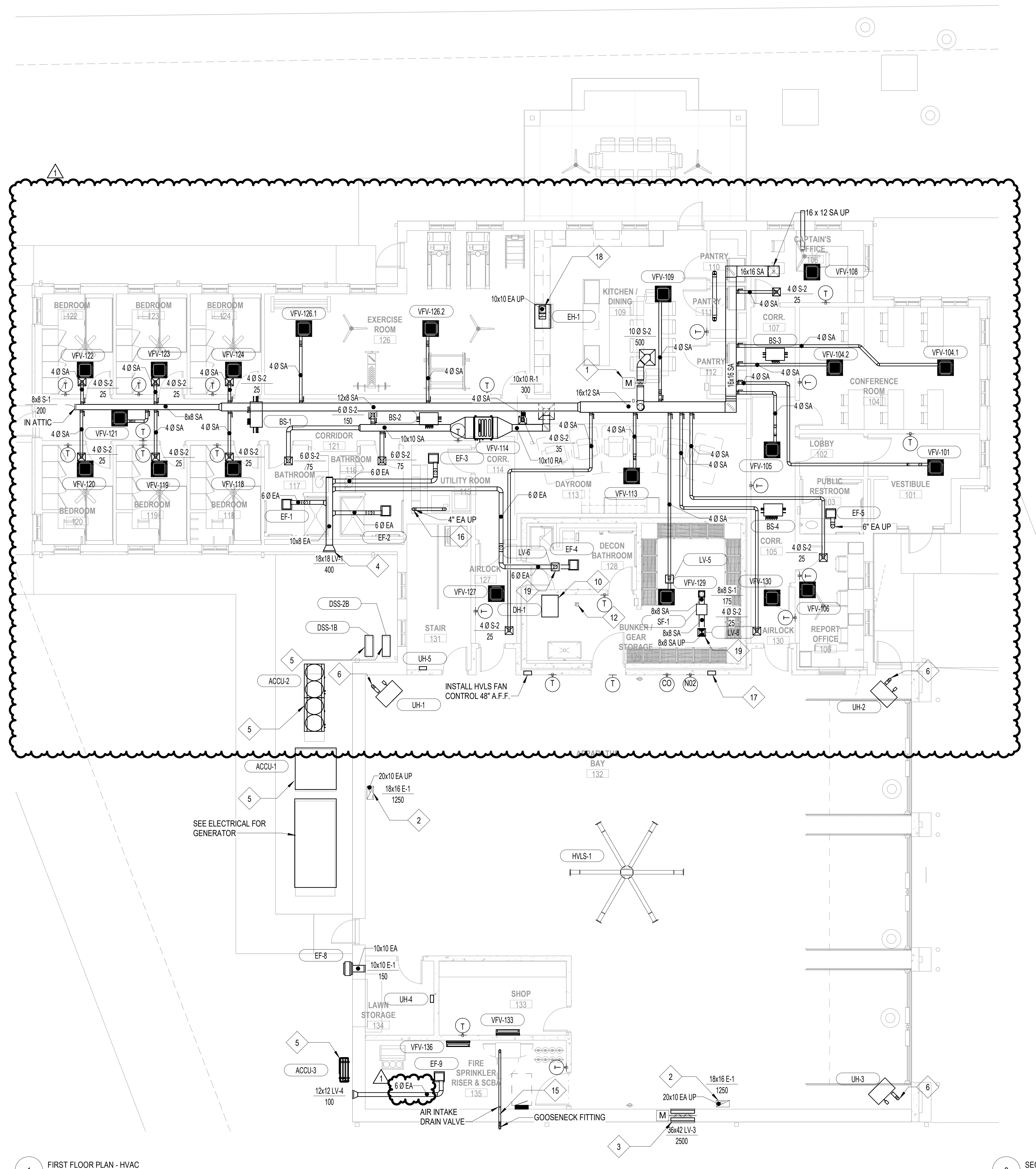
16 ROUTE 4" ALUMINUM DUCT DRYER EXHAUST VENT THROUGH ROOF. TERMINATE WITH MANUFACTURER APPROVED ROOF CAP.

17 MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL GAS DETECTION CONTROL PANEL. THE WIRING FROM THE GAS DETECTORS AND CONTROL PANEL SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. ALL CONTROL WIRING SHALL BE IN CONDUIT WHICH WILL BE PROVIDED BY ELECTRICAL. SEE ELECTRICAL SPECIFICATIONS FOR CONDUIT REQUIREMENTS.

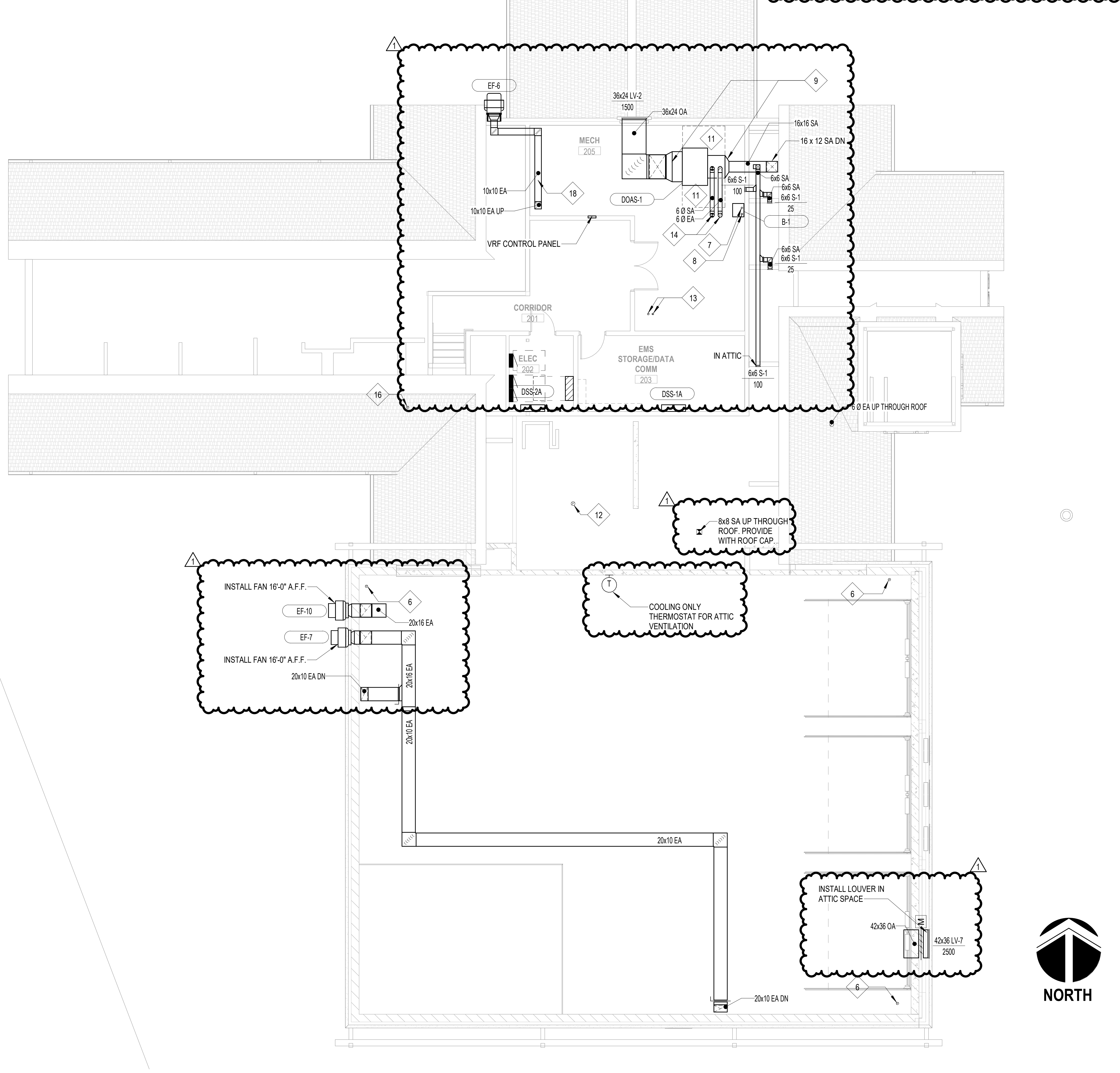
1

18 INSTALL GREASE DUCTWORK WITH 3" INSULATION PER NFPA 96. PROVIDE GREASE DUCT CLEANOUT AT EVERY 90 DEGREE TURN.

19 INSTALL FEMA LOUVER HORIZONTALLY IN TOP LID OF STORM SHELTER. TRANSITION DUCTS TO FIT LOUVER AS REQUIRED.



1 FIRST FLOOR PLAN - HVAC
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN - HVAC
SCALE: 1/8" = 1'-0"

DESIGNED: TMJ
DRAWN: TMJ
CHECKED: SEF

ISSUE DATE: 03/25/2024

REVISIONS:

No.:	DATE:	BY:	DESCRIPTION:
1	04/26/2024		Addendum No. 1

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

FLOOR PLAN - MECHANICAL

PROJECT NO.: 223134.00

M101

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REF. NOTES (X):

1 DRAIN CONDENSATE FROM DUCTLESS SPLIT SYSTEM INDOOR UNITS TO FLOOR SINK IN MECHANICAL ROOM.

2 SEE IN SLAB HEADER DETAIL FOR PIPE CONNECTIONS TO IN SLAB HEATING SYSTEM.

3 ROUTE GAS TO WATER HEATER AS REQUIRED.

4 DRAIN CONDENSATE FROM CEILING MOUNTED VFV UNITS TO MOP SINK.

5 ROUTE GAS TO OVEN RANGE AS REQUIRED.

6 DRAIN CONDENSATE FROM WALL MOUNTED VFV UNITS TO FLOOR DRAIN.

7 SIZE AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S REQUIREMENTS AND THE SPECIFICATIONS. ALL PIPE PENETRATIONS SHALL BE DONE VIA A CORE DRILL TO BE NEAT AND CLEAN.

8 SEE CIVIL FOR CONTINUATION.

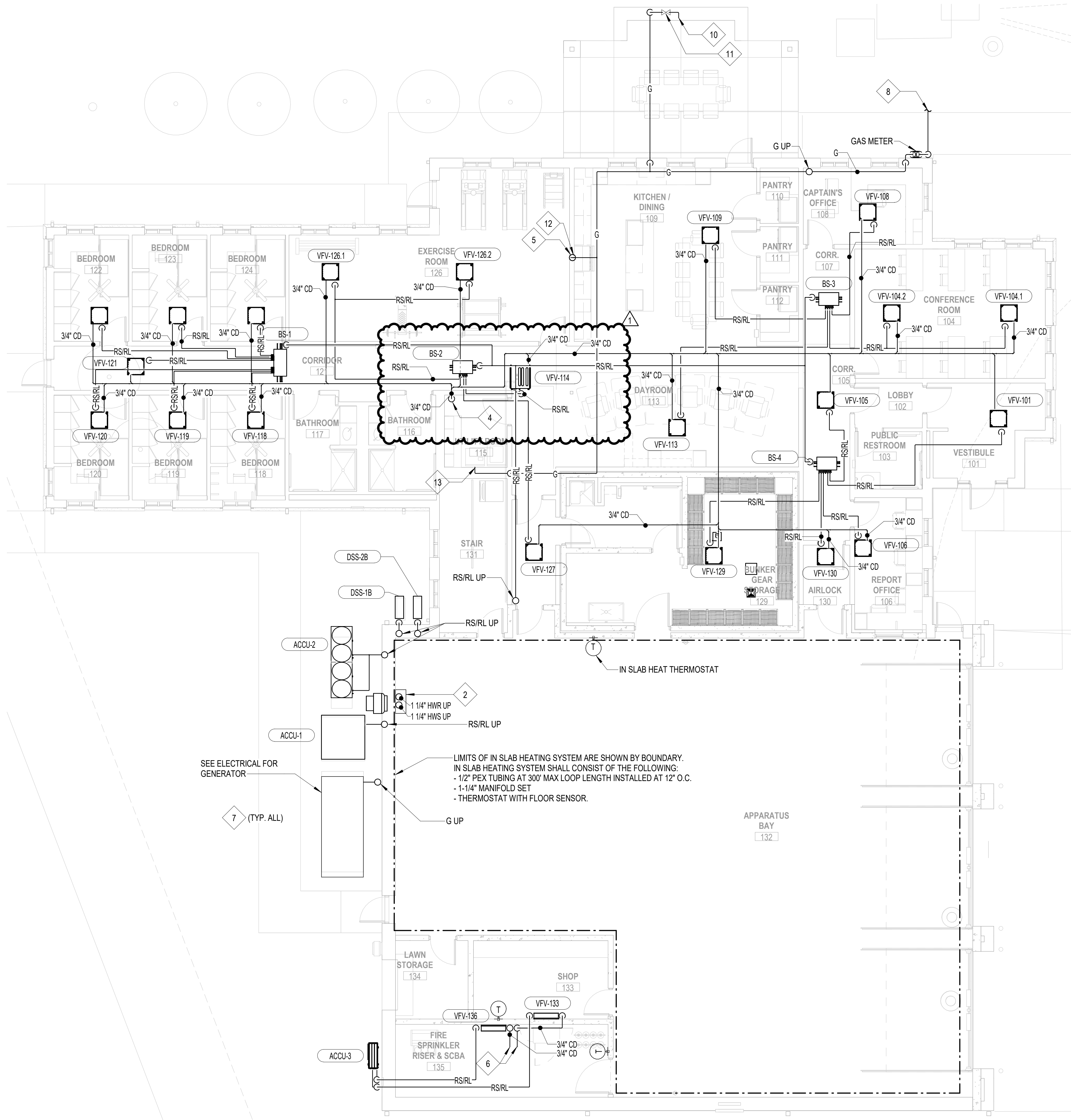
9 33 INCHES REQUIRED CLEARANCE.

10 ROUTE GAS UNDERGROUND, ACROSS PAITO TO OUTLET CONNECTION FOR PATIO GRILL. PROVIDE WITH GAS SHUTOFF VALVE. REFER TO ARCHITECTURAL PLANS FOR CONNECTION BOX LOCATION.

11 INSTALL AUTOMATIC GAS SHUTOFF VALVE. INTERLOCK WITH FIRE ALARM.

12 INSTALL NFPA 54 GAS VALVE. INTERLOCK WITH FIRE ALARM.

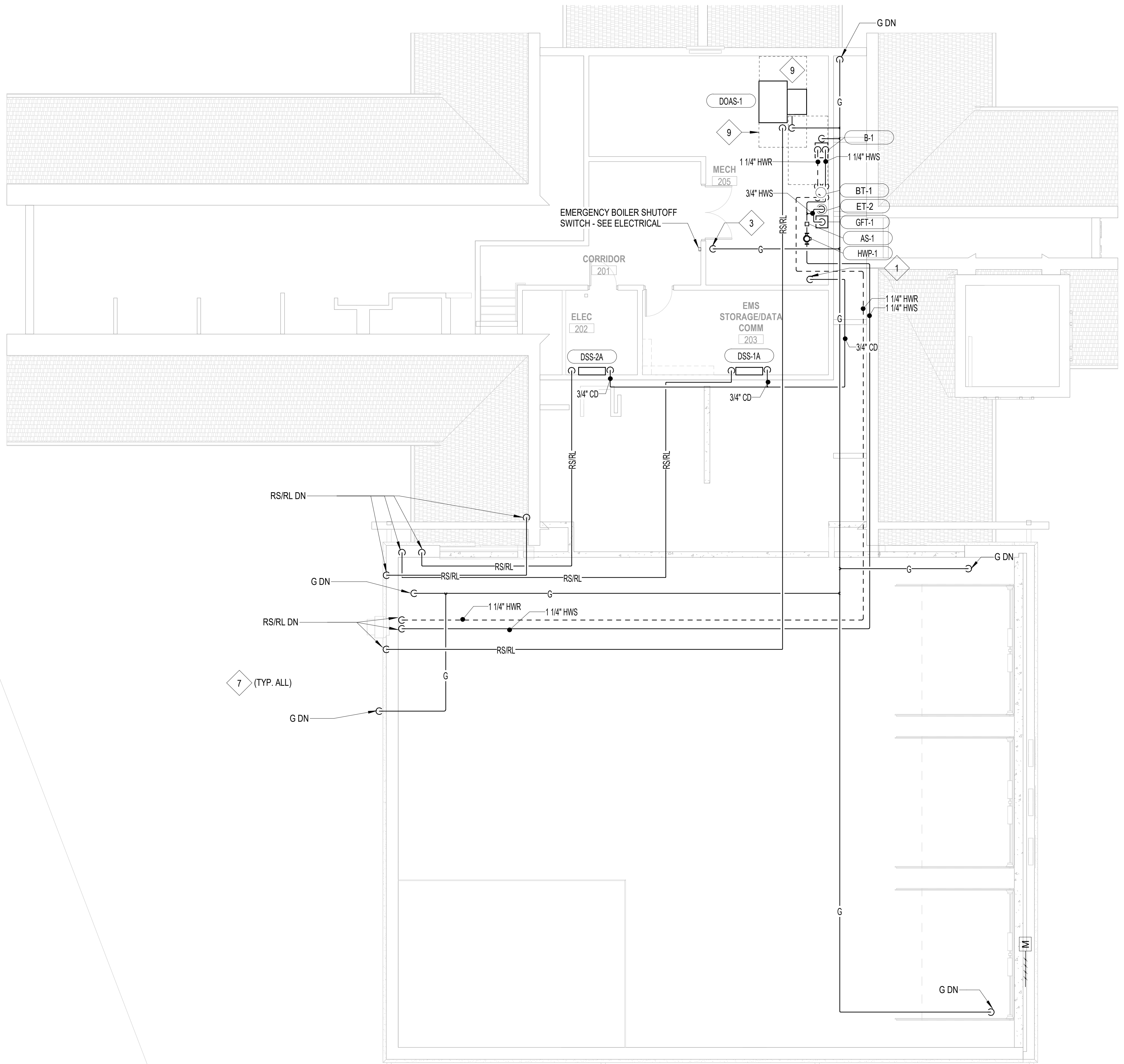
13 PROVIDE GAS FOR DOMESTIC DRYER AS REQUIRED.



SEE ELECTRICAL FOR GENERATOR

LIMITS OF IN SLAB HEATING SYSTEM ARE SHOWN BY BOUNDARY. IN SLAB HEATING SYSTEM SHALL CONSIST OF THE FOLLOWING:
- 1/2" PEX TUBING AT 300' MAX LOOP LENGTH INSTALLED AT 12" O.C.
- 1-1/4" MANIFOLD SET
- THERMOSTAT WITH FLOOR SENSOR.

1 FIRST FLOOR PLAN - HVAC PIPING
SCALE: 1/8" = 1'-0"



EMERGENCY BOILER SHUTOFF SWITCH - SEE ELECTRICAL

2 SECOND FLOOR PLAN - HVAC PIPING
SCALE: 1/8" = 1'-0"

NORTH

DESIGNED: TMJ
DRAWN: TMJ
CHECKED: SEF

ISSUE DATE: 03/25/2024

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

HVAC PIPING FLOOR PLAN - MECHANICAL

PROJECT NO.: 223134.00

M201

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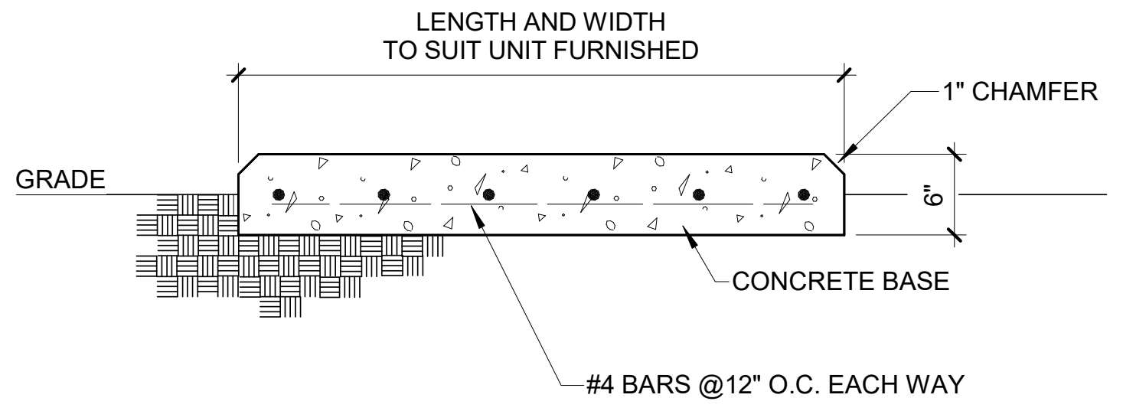
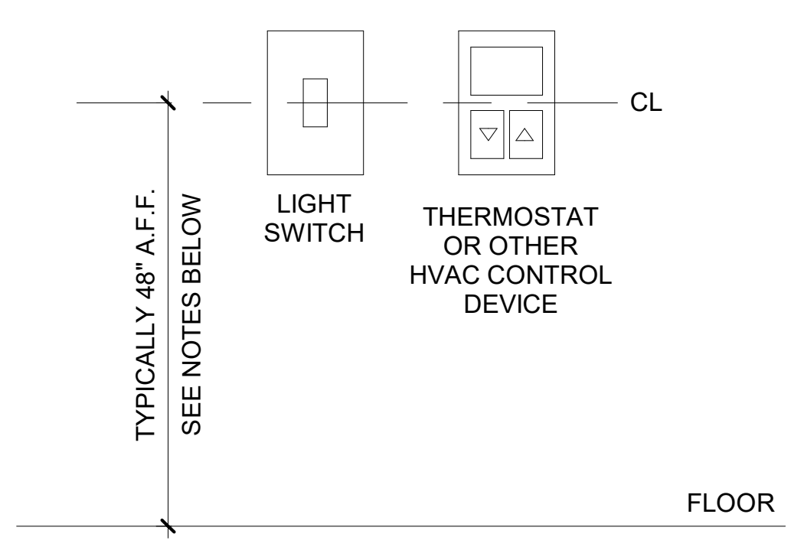


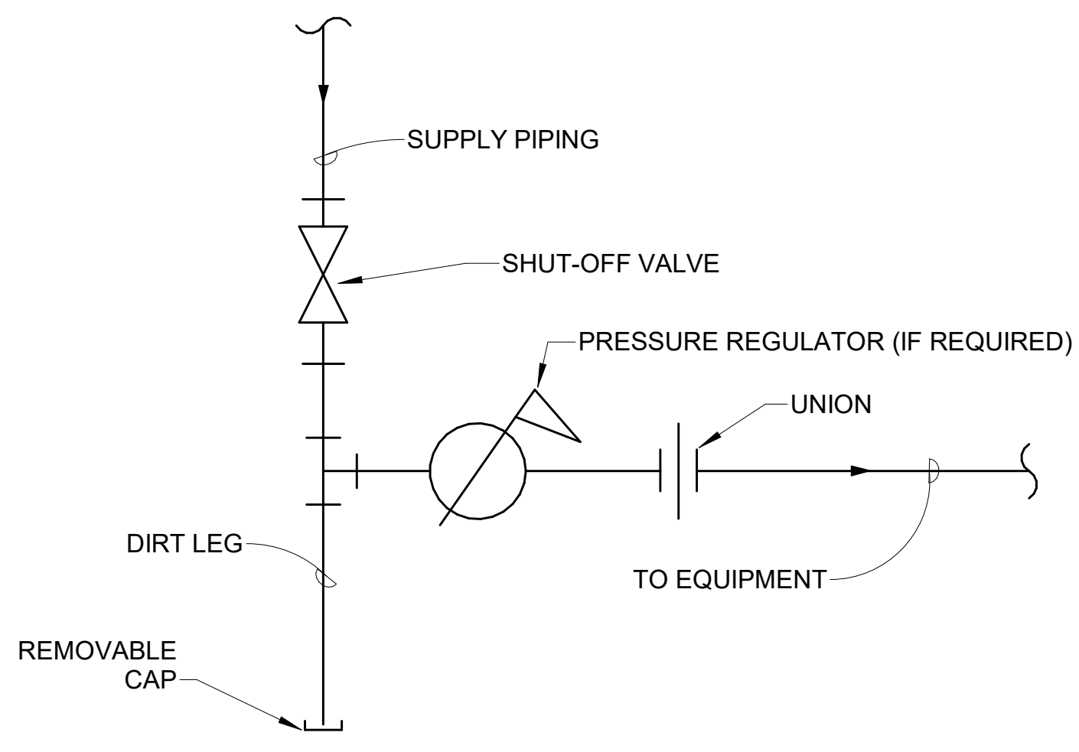
1 EXTERIOR EQUIPMENT PAD DETAIL
SCALE: NOT TO SCALE

TYPICAL HVAC CONTROL DEVICE INSTALLATION

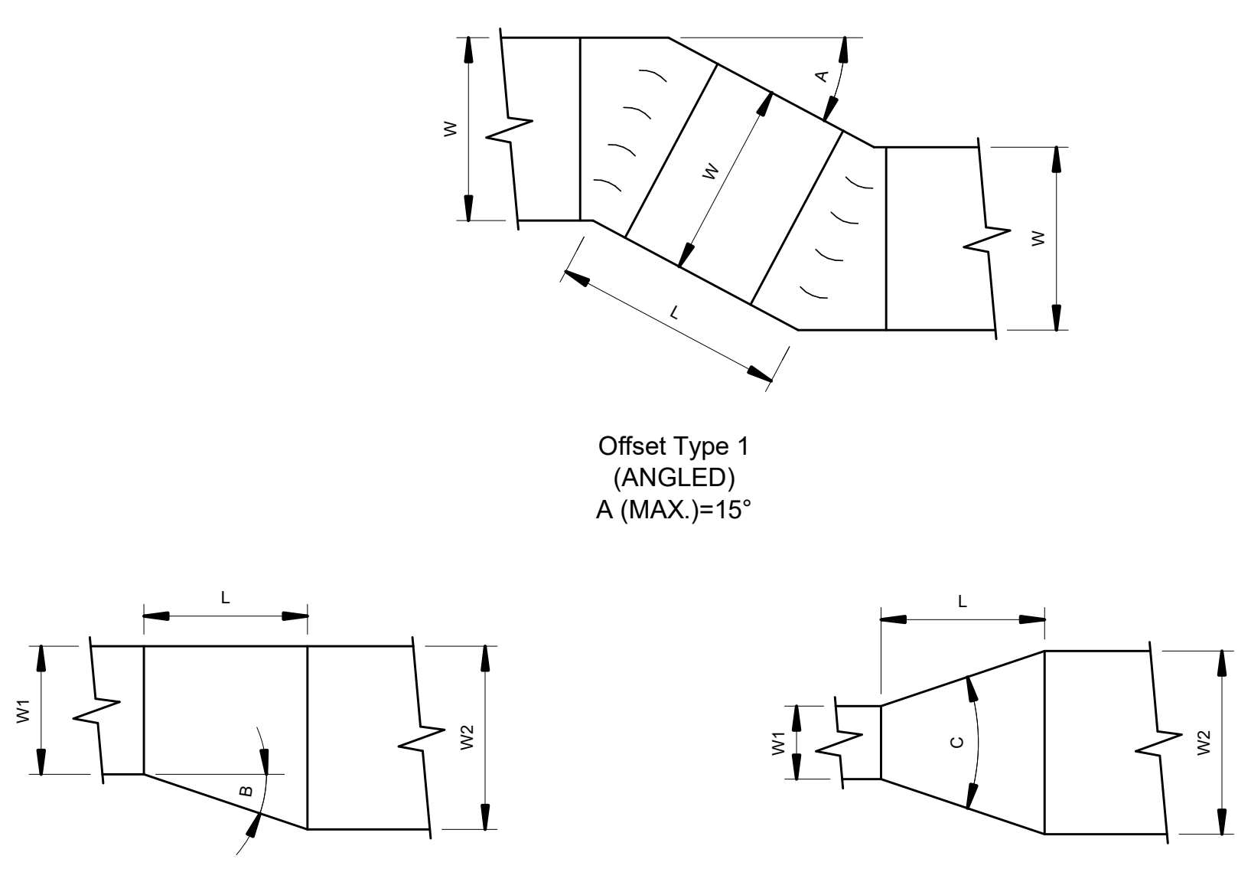


NOTES:
1) WHEN THERMOSTAT IS LOCATED ADJACENT TO LIGHT SWITCH OR OTHER WALL MOUNTED ELECTRICAL OR CONTROL DEVICE, DEVICES TO BE INSTALLED AT THE SAME ELEVATION.
2) ALL USER INPUT BUTTONS OR SWITCHES ON CONTORL DEVICE TO BE LOCATED BELOW 48" A.F.F. TO MEET ADA REQUIREMENTS.
3) WHEN INSTALLED NEAR DOOR, LIGHT SWITCH SHALL BE DEVICE CLOSEST TO DOOR FRAME.
4) IF DEVICE IS LOCATED ABOVE COUNTER, INSTALL AT 40" A.F.F.

2 Thermostat Detail
NOT TO SCALE



3 TYPICAL GAS PIPING DETAIL
SCALE: NOT TO SCALE

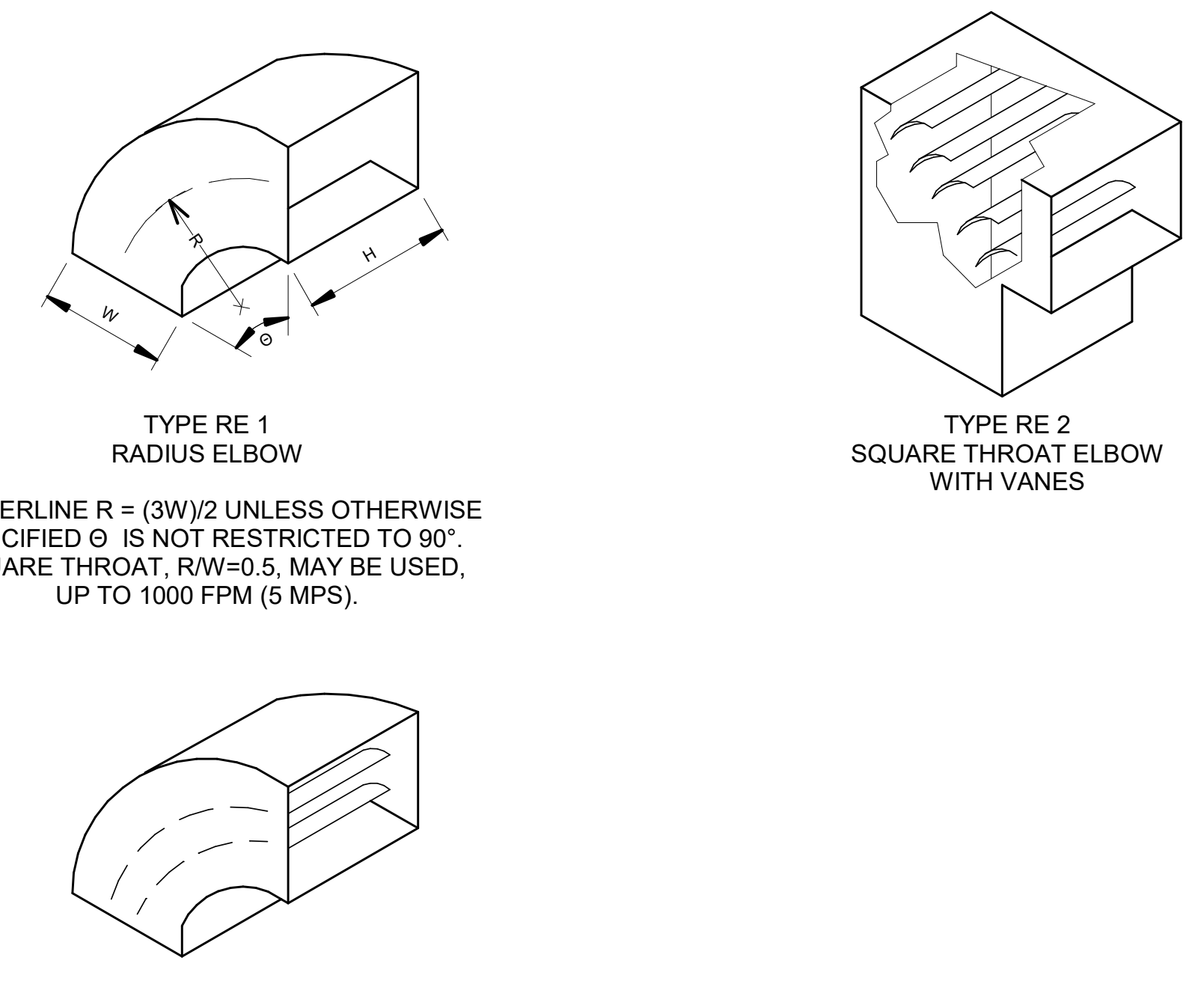


Offset Type 1
(ANGLED)
A (MAX.)=15°

ECCENTRIC TRANSITION
B (MAX.)=30°
(EXCEPT 45° IS PERMITTED
AT ROUND TO FLAT OVAL)

CONCENTRIC TRANSITION
C (MAX.)=45° DIVERGING, 60° CONVERGING

4 OFFSETS AND TRANSITIONS DETAIL
SCALE: NOT TO SCALE



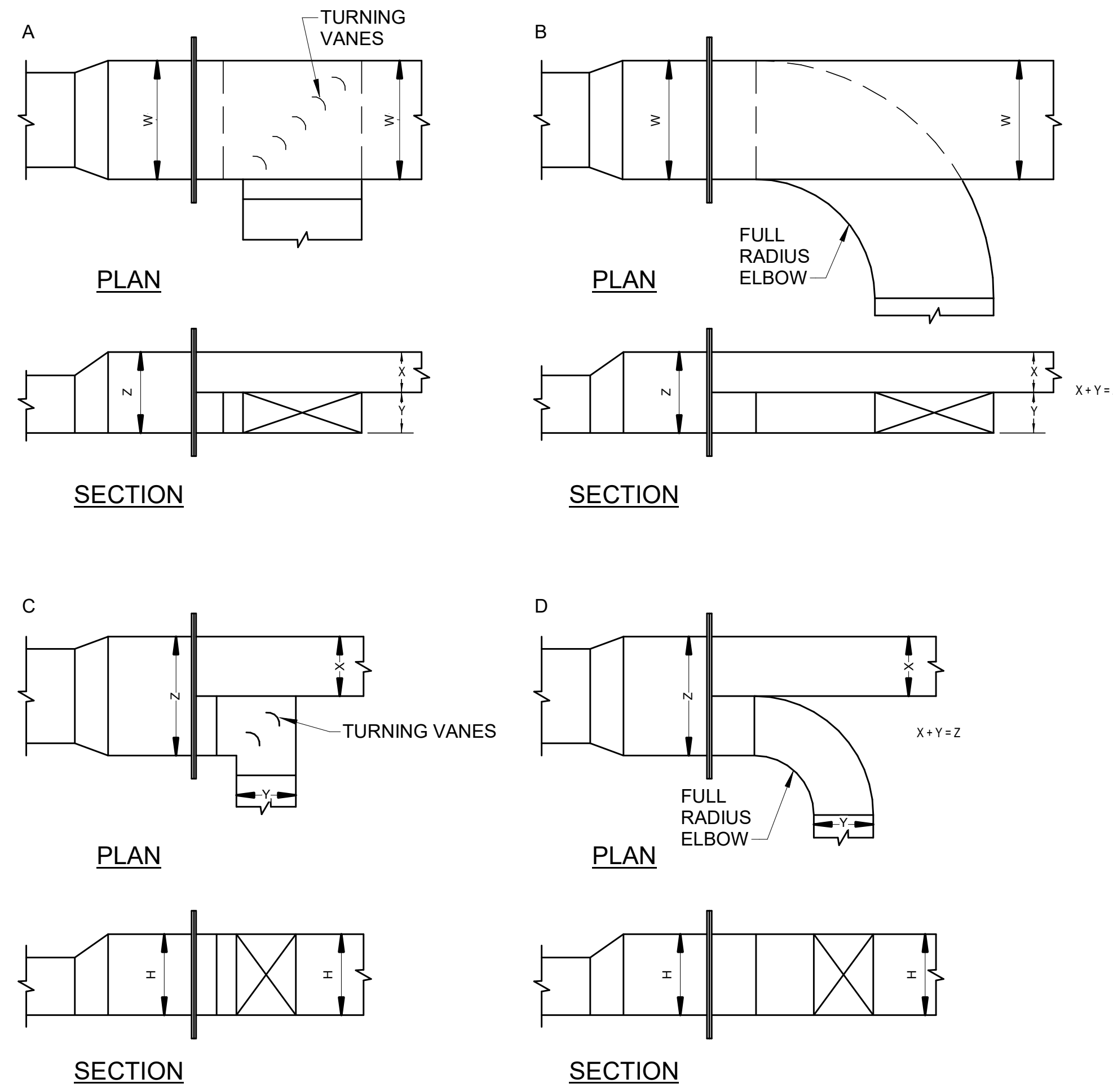
TYPE RE 1
RADIUS ELBOW

CENTERLINE R = (3W)/2 UNLESS OTHERWISE SPECIFIED Θ IS NOT RESTRICTED TO 90°. SQUARE THROAT, R/W=0.5, MAY BE USED, UP TO 1000 FPM (5 MPS).

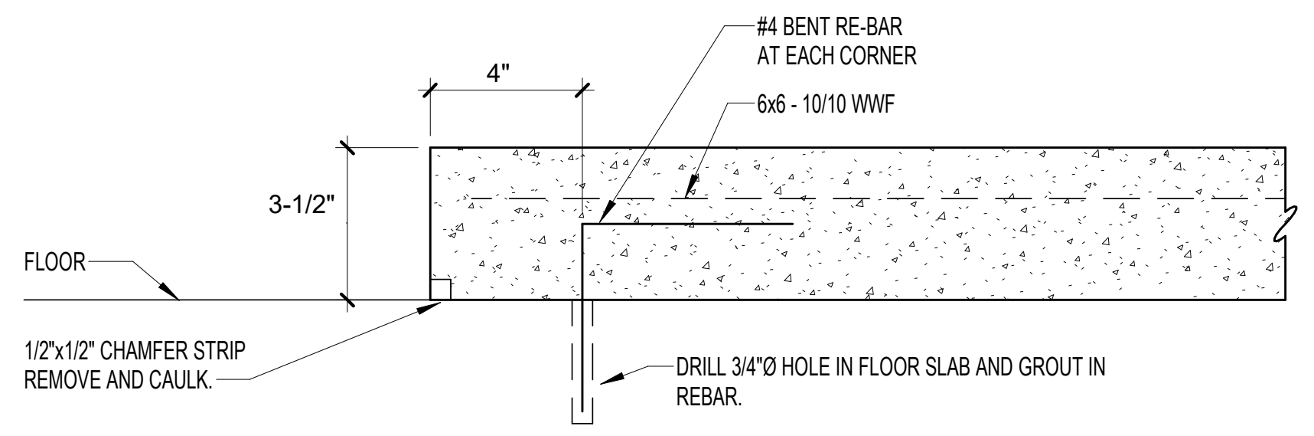
TYPE RE 2
SQUARE THROAT ELBOW
WITH VANES

TYPE RE 3
RADIUS ELBOW WITH VANES

5 DUCT ELBOW DETAIL
SCALE: NOT TO SCALE



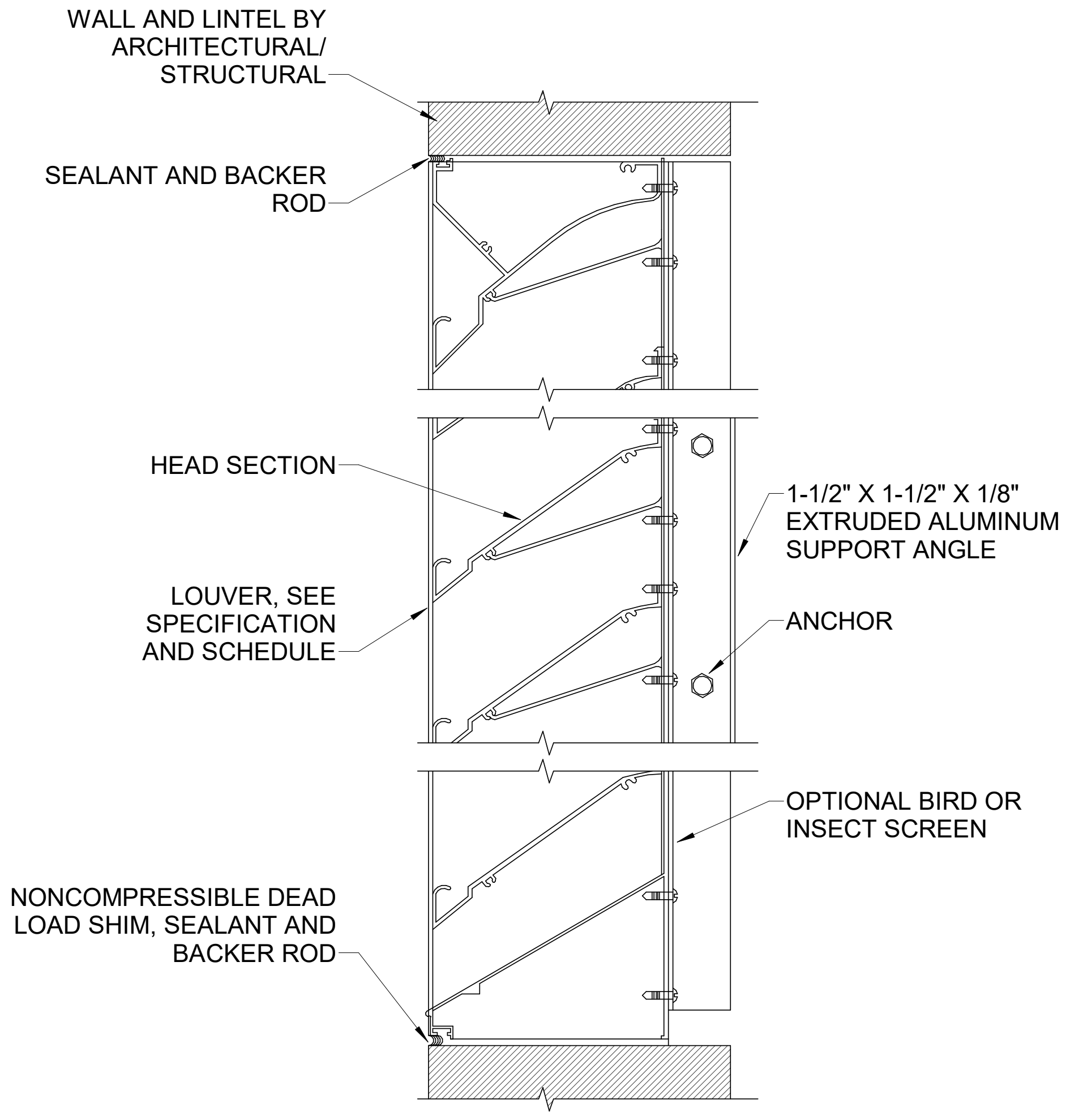
6 PARALLEL FLOW BRANCH DETAIL
SCALE: NOT TO SCALE



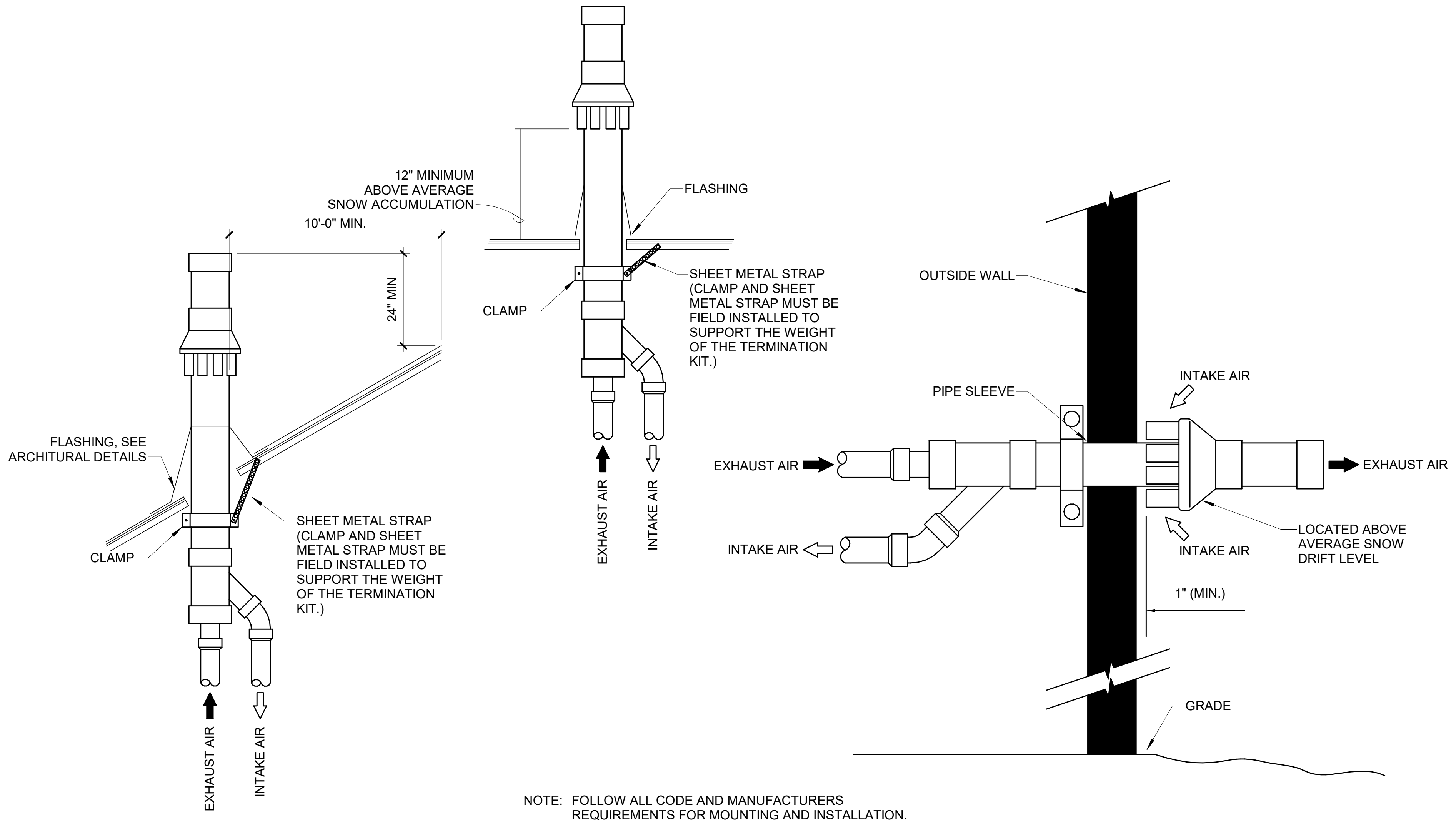
NOTES:

1. INSTALL NEW HOUSEKEEPING PADS AS INDICATED ON PLANS. VERIFY DIMENSIONS WITH EQUIPMENT SIZES.
2. VERIFY SIZE AND LOCATION OF EQUIPMENT ANCHOR BOLTS.
3. PROVIDE DOWEL RODS 18" ON CENTER AROUND FULL PERIMETER OF PAD IF LONG DIMENSION IS GREATER THAN 72".

16 HOUSEKEEPING PAD DETAIL
SCALE: NOT TO SCALE

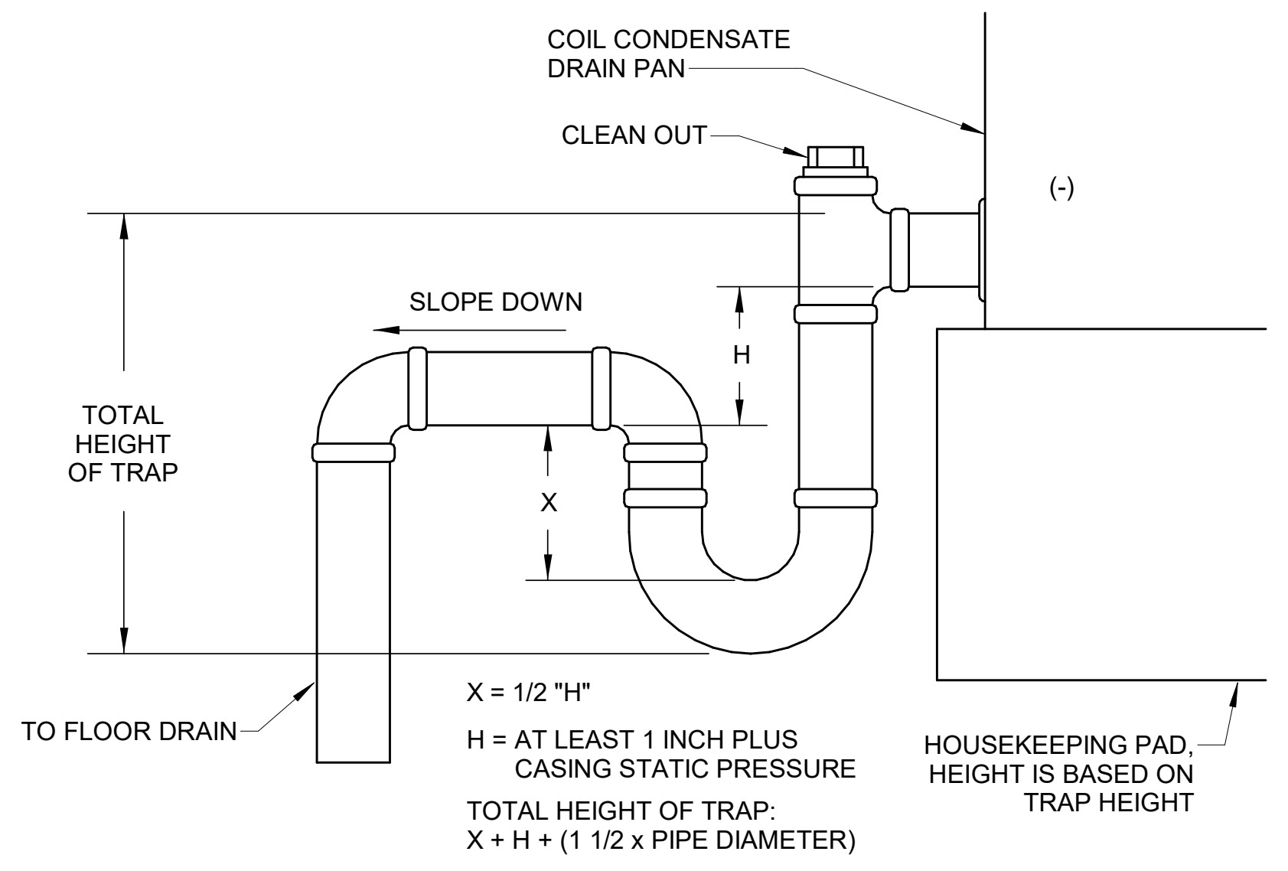


7 LOUVER DETAIL
SCALE: 3" = 1'-0"



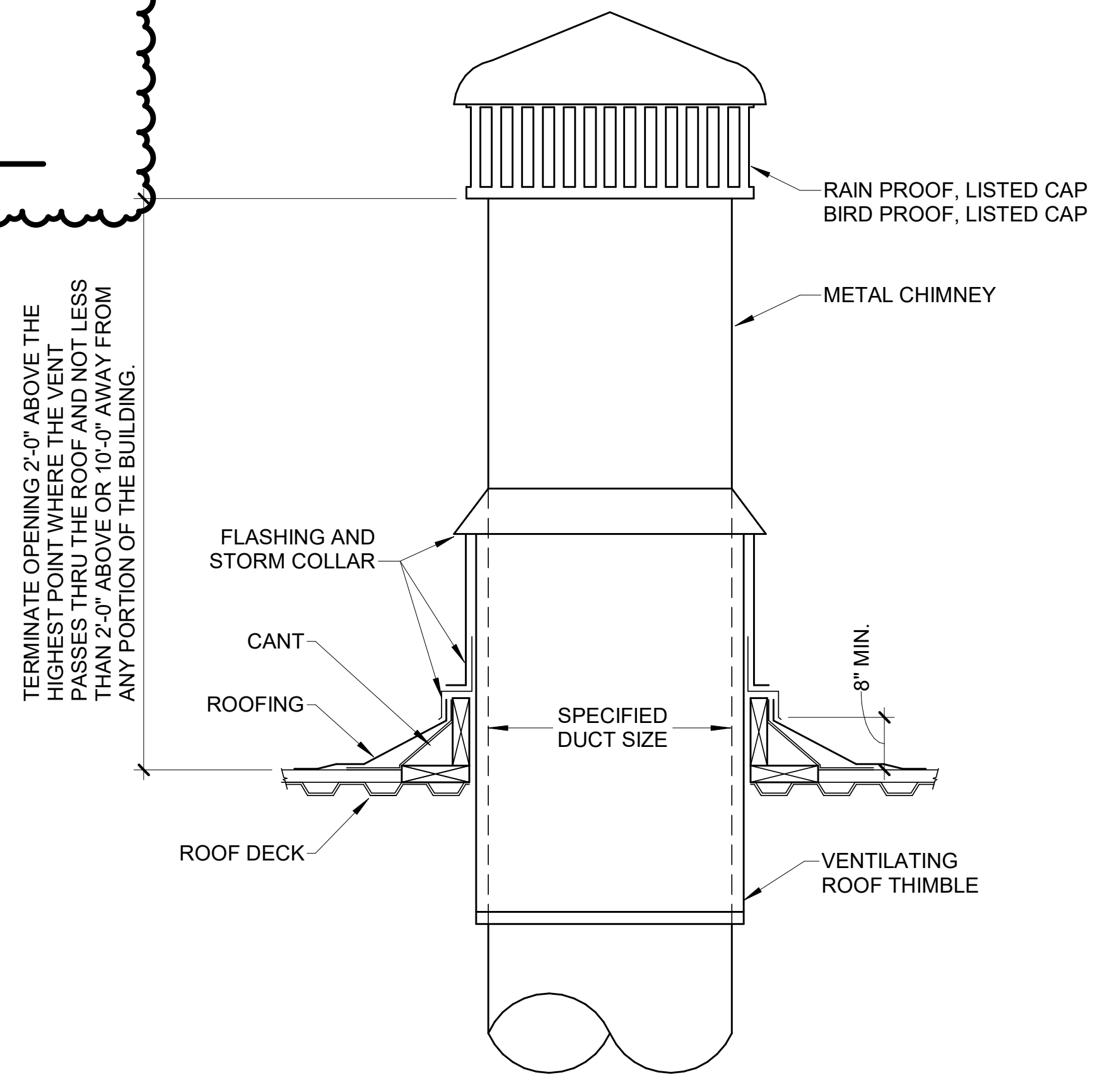
NOTE: FOLLOW ALL CODE AND MANUFACTURERS REQUIREMENTS FOR MOUNTING AND INSTALLATION.

8 CONCENTRIC GAS FLUE DETAILS
SCALE: NOT TO SCALE



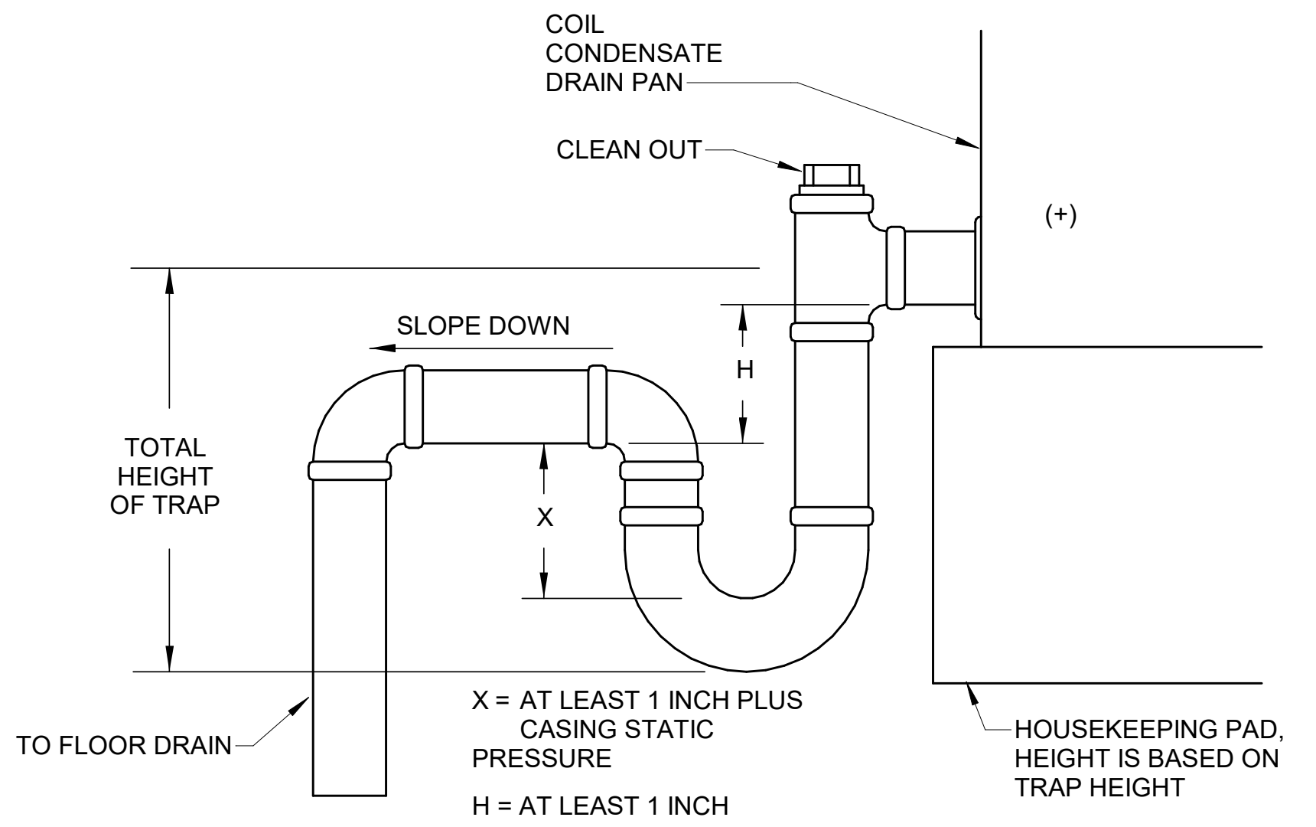
X = 1/2 "H"
H = AT LEAST 1 INCH PLUS CASING STATIC PRESSURE
TOTAL HEIGHT OF TRAP:
X + H + (1 1/2 x PIPE DIAMETER)

9 CONDENSATE DRAIN TRAP NEGATIVE STATIC PRESSURE
SCALE: NOT TO SCALE


TERMINATE OPENING 2'-0" ABOVE THE HIGHEST POINT WHERE THE VENT PASSES THRU THE ROOF AND NOT LESS THAN 2'-0" ABOVE OR 10'-0" AWAY FROM ANY PORTION OF THE BUILDING.
RAIN PROOF, LISTED CAP
BIRD PROOF, LISTED CAP
METAL CHIMNEY
FLASHING AND
STORM COLLAR
CANT
ROOFING
SPECIFIED
DUCT SIZE
8" MIN.
ROOF DECK
VENTILATING
ROOF THIMBLE

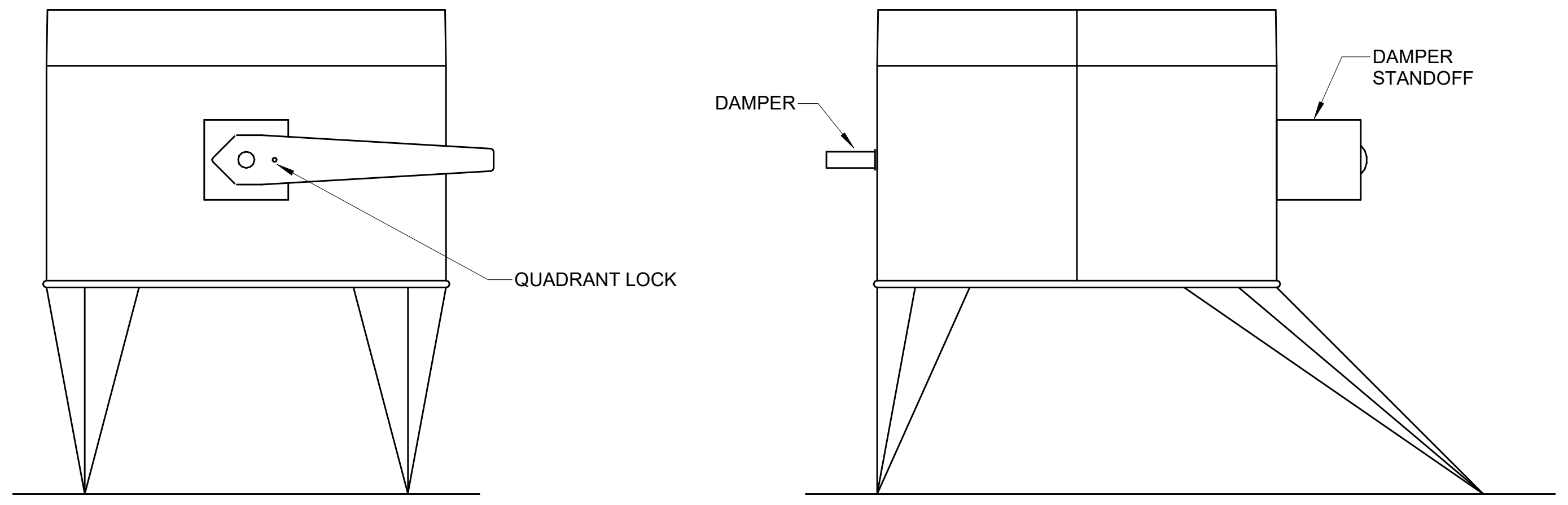
NOTE:
GAS FLUE AND TERMINATION SHALL COMPLY WITH ALL LOCAL CODES AND MANUFACTURERS RECOMMENDATION.

15 GAS FLUE THRU ROOF DETAIL
SCALE: NOT TO SCALE



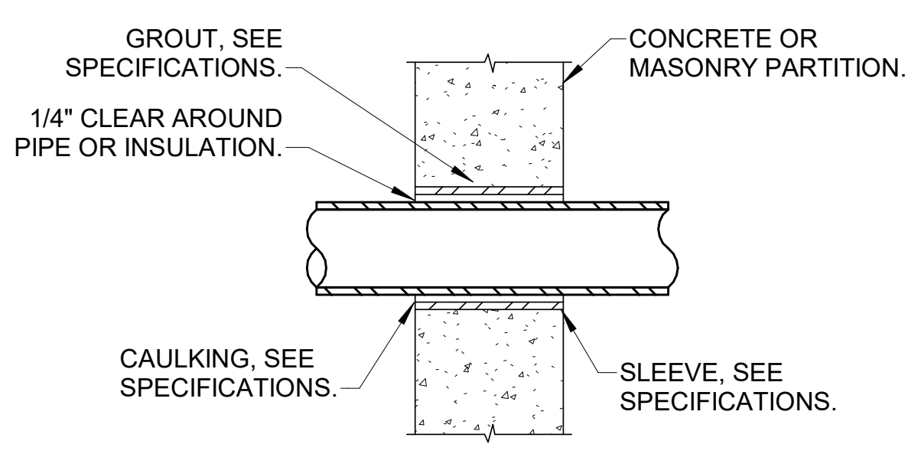
X = AT LEAST 1 INCH PLUS CASING STATIC PRESSURE
H = AT LEAST 1 INCH
TOTAL HEIGHT OF TRAP:
X + H + (1 1/2 x PIPE DIAMETER)

10 CONDENSATE DRAIN TRAP POSITIVE STATIC PRESSURE
SCALE: NOT TO SCALE



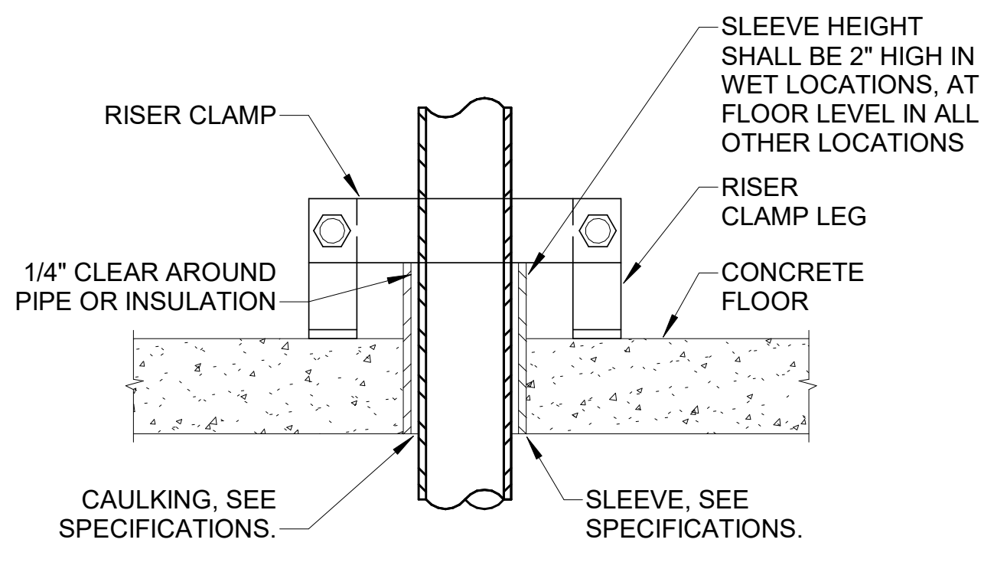
NOTE:
ALL TAPS TO AIR TERMINALS REQUIRING BALANCING AT DUCT SHALL BE MADE USING A HIGH EFFICIENCY TAKEOFF.

11 HIGH EFFICIENCY TAKEOFF DETAIL
SCALE: NOT TO SCALE



NOTE:
1. CAULK FULL PERIMETER OF PIPE AT BOTH INSIDE & OUTSIDE OF WALL.

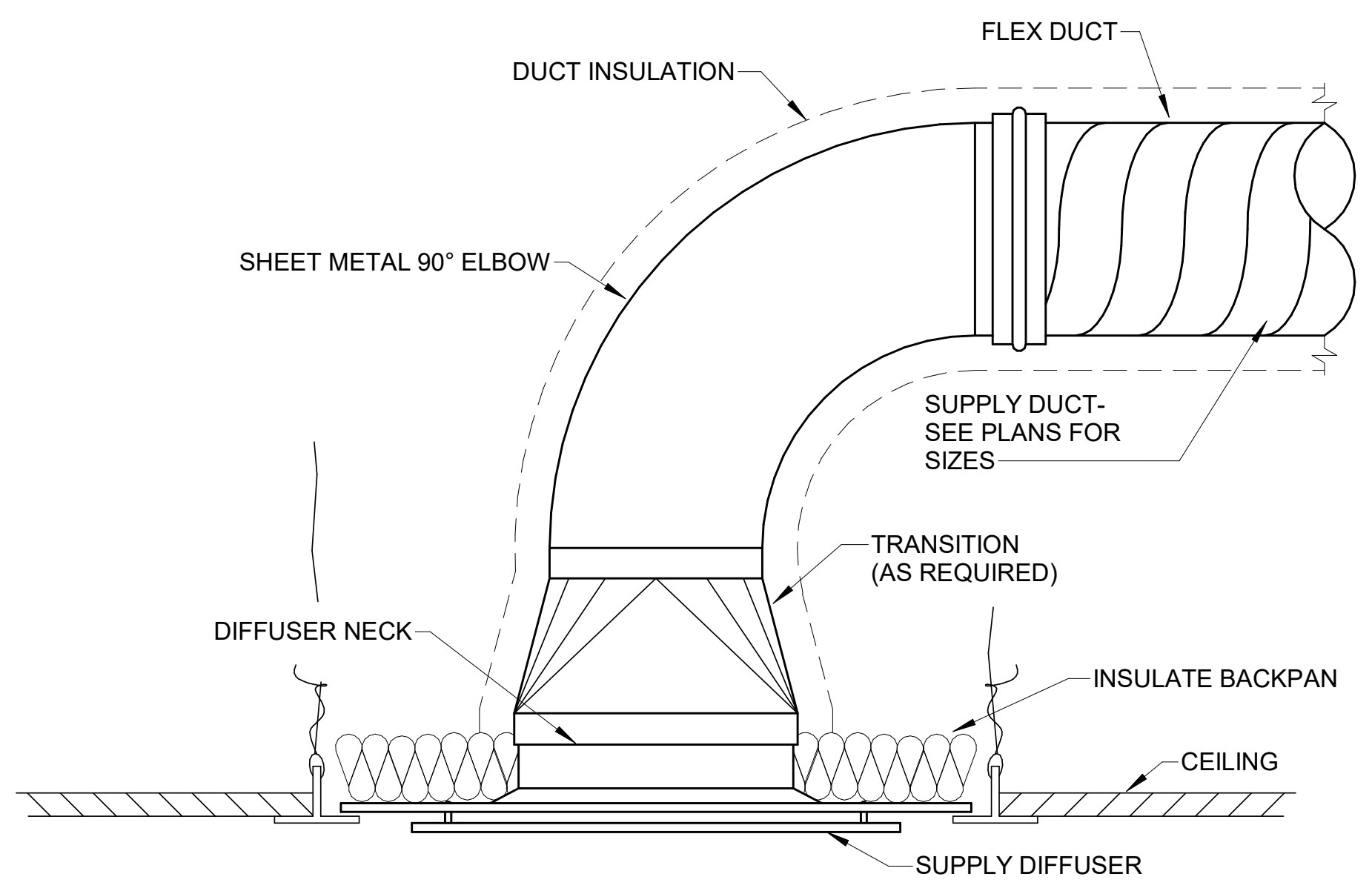
DETAIL OF SLEEVE FOR PIPING
PENETRATION OF VERTICAL PARTITIONS



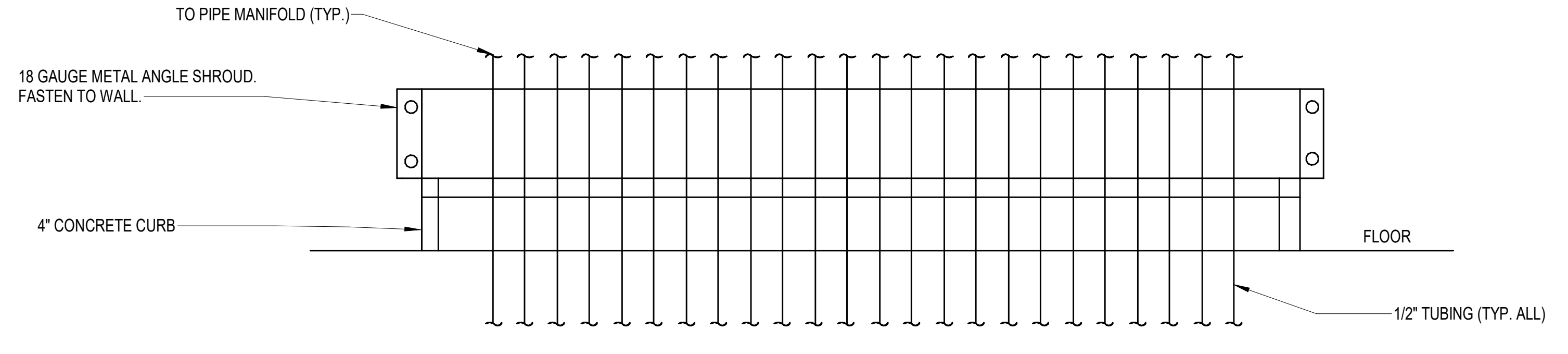
NOTE:
1. CAULK FULL PERIMETER OF PIPE AT BOTH TOP AND BOTTOM OF FLOOR.

DETAIL OF SLEEVE FOR PIPING
PENETRATION OF FLOOR

12 INTERIOR PIPE SLEEVE DETAILS
SCALE: NOT TO SCALE



13 SUPPLY DIFFUSER/ DUCT CONNECTION DETAIL
SCALE: NOT TO SCALE



14 IN SLAB HEADER DETAIL
NOT TO SCALE

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

DETAILS - MECHANICAL

PROJECT NO.: 223134.00

M401

DIFFUSER, REGISTER, AND GRILLE SCHEDULE

MARK	SERVES	TYPE	FACE SIZE (IN.)	NECK SIZE (IN.)	FINISH	MAX PD (IN WG)	MAX NC AT PD SHOWN	KRUEGER MODEL NUMBER	REMARKS
S-1	SUPPLY	SURFACE MOUNTED	12 x 12	SEE PLANS	WHITE	0.10	25	880	1, 2
S-2	SUPPLY	LAY-IN	24 x 24	SEE PLANS	WHITE	0.10	25	PLQ	1
R-1	RETURN	LAY-IN	24x24	SEE PLANS	WHITE	0.10	25	EGC-10	1
E-1	EXHAUST	SURFACE MOUNTED	SEE PLANS	---	WHITE	0.10	25	S-580	1

NOTES: 1. NOISE CRITERIA (NC) SHALL BE LESS THAN 25 ON ALL DIFFUSERS LOCATED IN OCCUPIED SPACES.
2. DOUBLE DEFLECTION GRILLE WITH 3/4" BLADE SPACING

LOUVER SCHEDULE

MARK	SERVES	MATERIAL	CFM	MAX SP (IN WG)	SIZE (INCHES) W	H	D	FINISH	MANUFACTURER AND MODEL NUMBER	REMARKS
LV-1	RESTROOMS	ALUMINUM	400	0.04	18	18	6	MILLED	RUSKIN ELF6375DX	1
LV-2	DOAS-1	ALUMINUM	1500	0.04	24	36	6	MILLED	RUSKIN ELF6375DX	1, 2
LV-3	APP. BAY	ALUMINUM	2500	0.04	36	42	6	MILLED	RUSKIN ELF6375DX	1
LV-4	FIRE RISER	ALUMINUM	100	0.04	12	12	6	MILLED	RUSKIN ELF6375DX	1
LV-5	STORM SHELTER	ALUMINUM	50	0.04	12	12	6	MILLED	RUSKIN XP500	3
LV-6	STORM SHELTER	ALUMINUM	100	0.04	12	12	6	MILLED	RUSKIN XP500	3
LV-7	APP. BAY ATTIC	ALUMINUM	2500	0.04	42	36	6	MILLED	RUSKIN ELF6375DX	1
LV-8	STORM SHELER	ALUMINUM	175	0.04	12	12	6	MILELD	RUSKING XP500	3

NOTES: 1. PROVIDE WITH BIRD SCREEN.
2. PROVIDE WITH INSECT SCREEN.
3. LOUVER TO BE RATED FOR ICC500 STORM SHELTERS.

DUCTLESS SPLIT SYSTEM AIR CONDITIONING SCHEDULE

INDOOR UNIT DATA												OUTDOOR UNIT DATA					ELECTRICAL DATA					
			COOLING COIL DATA																			
			AIRSIDE DATA EAT (°F)																			
MARK	LOCATION	CFM	DB	WB	CAPACITY (MBH)	EFF. (SEER)	HEATER @ 47°F (MBH)	HEATER @ 17°F (MBH)	HEATING EFF. (HSPF)	MANUFACTURER AND MODEL NUMBER		MARK	LOCATION	AMB TEMP (°F)	REFER TYPE	MANUFACTURER AND MODEL NUMBER	MCA	MOCP	VOLTS	PH	HZ	REMARKS
DSS-1A	ELECTRICAL	300	80	67	12	20.8	18	12	10.2	MITSUBISHI TPKA0A0121HA70A		DSS-1B	OUTSIDE	95	R-410A	MITSIBUSHI TRUZA0121KA70	11	28	208	1	60	1, 2
DSS-2A	EMS STORAGE / DATA	300	80	67	12	20.8	18	12	10.2	MITSUBISHI TPKA0A0121HA70A		DSS-2B	OUTSIDE	95	R-410A	MITSIBUSHI TRUZA0121KA70	11	28	208	1	60	1, 2

NOTES: 1. PROVIDE WITH WALL MOUNTED HARD WIRED THERMOSTAT, CONDENSATE PUMP, AND LOW AMBIENT CONTROLS DOWN TO -20 DEGREES F.
2. PROVIDE REFRIGERANT LINE SET SIZED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

DEDICATED OUTDOOR AIR UNIT SCHEDULE

		VENTILATION AIR SIDE		DX COOLING COIL CAPACITY				NATURAL GAS HEATING COIL CAPACITY			ELECTRICAL DATA						
MARK	LOCATION	CFM	ESP (IN WG)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EAT DB / WB (°F)	LAT DB / WB (°F)	N.G. INPUT (MBH)	TOTAL CAPACITY (MBH)	LAT (°F)	MCA	MOCP	VOLTS	PH	HZ	MANUFACTURER AND MODEL NUMBER	REMARKS
DOAS-1	MECH 204	1700	1.39	103.8	65.2	95/75	53.5/53.2	200	162	80	5.7	15	208	3	60	NEXGEN MAOA0096BA2FA23CT62GA1	1, 2, 3

NOTES: 1. INSTALL UNIT ON HOUSEKEEPING PAD WITH VIBRATION ISOLATORS.
2. UNIT TO OPERATE VIA MANUFACTURER'S CONTROLS
3. PROVIDE MERV 13 FILTERS, DIGITAL SCROLL OR VARIABLE SPEED COMPRESSORS, MODULATIONG HOT GAS REHEAT, EC MOTOR, AND MODULATING GAS HEAT WITH 10:1 TURNDOWN.

VFV SCHEDULE

MARK	ASSOCIATED BRANCH SELECTOR	DESIGN AIRFLOW CFM	OUTSIDE AIR CFM	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	VOLTS	PHASE	FREQUENCY (HZ)	MANUFACTURER AND MODEL NUMBER	REMARKS
VFV-101	BS-4	255	25	7.5	8.7	208	1	60	SAMSUNG AM007NNNDCH	1
VFV-104.1	BS-3	225	40	9.5	10.5	208	1	60	SAMSUNG AM009NNNDCH	1
VFV-104.2	BS-3	225	40	9.5	10.5	208	1	60	SAMSUNG AM009NNNDCH	1
VFV-105	BS-4	100	25	5	6	208	1	60	SAMSUNG AM005NNNDCH	1
VFV-106	BS-4	310	---	9.5	10.5	208	1	60	SAMSUNG AM009NNNDCH	1
VFV-108	BS-3	220	---	7.5	8.7	208	1	60	SAMSUNG AM007NNNDCH	1
VFV-109	BS-3	405	100	12	13.5	208	1	60	SAMSUNG AM0012NNNDCH	1
VFV-113	BS-3	245	50	9.5	10.5	208	1	60	SAMSUNG AM009NNNDCH	1
VFV-114	BS-2	300	30	7.5	8.7	208	1	60	SAMSUNG AM007ANMDCH	1
VFV-118	BS-1	260	---	7.5	8.7	208	1	60	SAMSUNG AM007ANMDCH	1
VFV-119	BS-1	170	---	5	6	208	1	60	SAMSUNG AM005NNNDCH	1
VFV-120	BS-1	300	---	9.5	10.5	208	1	60	SAMSUNG AM009NNNDCH	1
VFV-121	BS-1	100	25	5	6	208	1	60	SAMSUNG AM005NNNDCH	1
VFV-122	BS-1	225	---	7.5	8.7	208	1	60	SAMSUNG AM007ANMDCH	1
VFV-123	BS-1	100	---	5	6	208	1	60	SAMSUNG AM005NNNDCH	1
VFV-124	BS-1	125	---	5	6	208	1	60	SAMSUNG AM005NNNDCH	1
VFV-126.1	BS-2	230	55	7.5	8.7	208	1	60	SAMSUNG AM007ANMDCH	1
VFV-126.2	BS-2	230	55	7.5	8.7	208	1	60	SAMSUNG AM007ANMDCH	1
VFV-127	BS-2	20	---	5	6	208	1	60	SAMSUNG AM005NNNDCH	1
VFV-129	BS-4	150	50	7.5	8.7	208	1	60	SAMSUNG AM007ANMDCH	1
VFV-130	BS-4	15	---	5	6	208	1	60	SAMSUNG AM005NNNDCH	1
VFV-133	HP-2	60	---	7	7.5	208	1	60	SAMSUNG AR07CSDAFWKNCV	1
VFV-136	HP-2	140	---	7	7.5	208	1	60	SAMSUNG AR07CSDAFWKNCV	1

NOTES: 1. PROVIDE WITH INTEGRAL CONDENSATE PUMP AND ELECTRO-STATIC WASHABLE PLEATED FILTER WITH FASCIA PANEL

HOOD SCHEDULE

MARK	LOCATION	SERVES	TYPE	CFM	MAX SP (IN WG)	THROAT SIZE WIDTH (IN)	THROAT SIZE LENGTH (IN)	MANUFACTURER AND MODEL NUMBER	REMARKS
EH-1	KITCHEN 109	GREASE EXHAUST	TYPE 1	500	91	24	36	GREENHECK GRRS-W-36	1-6

NOTES: 1. UNIT SHALL HAVE FACTORY MOUNTED 8"ø EXHAUST COLLARS.
2. PROVIDE GREASE GRABBER FILTER RACK.
3. PROVIDE WITH INTEGRATED SELF-CLEANING SYSTEM.
4. PROVIDE WITH INTEGRATED LED LIGHT FIXTURES.
5. INTERLOCK OPERATION WITH EF-6.
6. PROVIDE WITH CORE FLOOD FIRE SUPPRESSION SYSTEM WITH LINEAR HEAT DETECTION, INTERCONNECTED GAS SHUT-OFF VALVE, AND REMOTE RING-PULL RELEASE MECHANISM. SEE PLANS FOR LOCATION OF RING-PULL RELEASE MECHANISM.

MISCELLANEOUS MECHANICAL EQUIPMENT SCHEDULE

MARK	DESCRIPTION	LOCATION	SERVES	REFR.	HUMIDITY REMOVAL PINTS PER DAY	CFM	OPERATING CONDITIONS	ELECTRICAL DATA AMP	MCA	MOP	VOLTS	PH	HZ	CONTROLER	MANUFACTURER AND MODEL NUMBER	REMARKS
DH-1	DEHUMIDIFIER	BUNKER / GEAR STORAGE 129	---	410A	335	900	80F/60% RH	7.9	15	20	208	1	60	DIGITAL ONBOARD	QUEST 335	1
GFT-1	GLYCOL FEED TANK	MECH ROOM	B-1	---	---	---	---	---	---	---	120	1	60	---	JL. WINGERT CGL17	---
AS-1	AIR SEPARATOR	MECH ROOM	B-1	---	---	---	12 GPM	---	---	---	---	---	---	---	TACO 49-125	
BT-1	BOILER TANK	MECH ROOM	B-1	---	---	---	---	---	---	---	---	---	---	---	BOILER BUDDY BB-30	---

NOTES: 1. PROVIDE 20"X22"X2" MERV 13 FILTER.

BRANCH SELECTOR SCHEDULE

MARK	LOCATION	COOLING MAX CAP TOTAL MBH	ELECTRICAL VOLTS	PH	HZ	MCA	MOP	MANUFACTURER AND MODEL NUMBER	REMARKS
BS-1	SEE PLANS	290	208	1	60	2	15	SAMSUNG MCU-S8NEK1UN	1, 2
BS-2	SEE PLANS	216	208	1	60	2	15	SAMSUNG MCU-S4NEK3N	1, 2
BS-3	SEE PLANS	216	208	1	60	2	15	SAMSUNG MCU-S4NEK3N	1, 2
BS-4	SEE PLANS	216	208	1	60	2	15	SAMSUNG MCU-S6NEK2UN	1, 2

NOTES: 1. FIELD COORDINATE EXACT SYSTEM PIPING ARRANGEMENT.
2. PROVIDE UNIT WITH SAMSUNG VRF CONTROL SYSTEM. INSTALL UNIT PER SAMSUNG'S RECOMMENDATIONS AND IN ACOORDANCE WITH LOCAL AHJ.

EXPANSION TANK SCHEDULE

MARK	SERVES	LOCATION	TYPE	TOTAL SYSTEM GALLONS	TEMP RANGE (°F)	FILL PRESSURE (PSIG)	MAX OPER. PRESSURE (PSIG)	MANUFACTURER AND MODEL NUMBER	REMARKS
ET-1	B-1	MECH 205	DIAPHRAGM	8	240	10	125	TACO CX30-125	---

GAS FIRED HOT WATER BOILER SCHEDULE

MARK	LOCATION	TYPE	RATING MBH	RATING HP	INPUT MBH (NAT GAS)	COMBUSTION EFFICIENCY (%)	WATERSIDE DATA GPM	EWT (°F)	LWT (°F)	MAX PD (FT WAT)	MANUFACTURER AND MODEL NUMBER	REMARKS
B-1	MECH.	WALL HUNG	199	5.4	199	95	12	100	120	30	LAARS MFTHW199	1

NOTES: 1. PROVIDE WITH INTERNAL CIRCULATOR, CONDENSATE NEUTRALIZER, WALL KIT, AND SELF CONTAINED CONTROLS.

PUMP SCHEDULE

MARK	LOCATION	SERVES	TYPE	FLOW GPM	HEAD FT WG	ELECTRICAL DATA RPM	HP	VOLTS	PH	HZ	MANUFACTURER AND MODEL NUMBER	REMARKS
HWP-1	MECH 205	IN-FLOOR HEATING	INLINE	12	20	830	1/8	115	1	60	TACO 0034E-F2	

NOTES:

FAN SCHEDULE

MARK	LOCATION	FAN DATA TYPE	CFM	EXT SP (IN WG)	DRIVE	RPM	MAX SONES	ELECTRICAL DATA HP	VOLTS	PH	HZ	UNIT WEIGHT (LBS)	FAN CONTROL	MANUFACTURER AND MODEL NUMBER	REMARKS
EF-1, 2 ,3 ,4	RESTROOM	CEILING	100	0.95	DIRECT	1050	4.5	0.25	120	1	60	10	SWITCH WITH DELAY	GREENHECK SP-B150	1
EF-5	RESTROOM	CEILING	100	0.95	DIRECT	1050	4.5	0.25	120	1	60	10	SWITCH WITH DELAY	GREENHECK SP-B150	2
EF-6	EXERCISE ROOM SIDEWALL	UPBLAST	500	1.5	DIRECT	1740	10.6	1	208	3	60	89	CONTROLLED WITH HOOD	GREENHECK CUE-160XP-VG	3, 4
EF-7	APP. BAY	SIDEWALL	2500	1	DIRECT	1725	13	1	208	3	60	84	GAS DETECTION	GREENHECK CUE-140-A	4
EF-8	LAWN STORAGE	SIDEWALL	150	0.56	DIRECT	1550	7.8	0.05	120	1	60	34	SWITCH	GREENHECK CUE-080-D	4
EF-9	FIRE SPRINKLER	CEILING	100	0.95	DIRECT	1050	4.5	0.25	120	1	60	10	SWITCH WITH DELAY	GREENHECK SP-B150	1
EF-10	APP. BAY ATTIC	SIDEWALL	2500	0.62	DIRECT	1725	17.7	1	208	3	60	84	THERMOSTAT	GREENHECK CUE-140-A	4
SF-1	BUNKER	INLINE	175	0.25	DIRECT	1550	7.3	1/12	120	1	60	49	SWITCH	GREENHECK SQ-80	4

NOTES: 1. PROVIDE WITH INTEGRAL BACKDRAFT.
2. PROVIDE WITH GREENHECK RJ-4 ROOF CAP AND INTEGRAL BACKDRAFT DAMPER.
3. PROVIDE WITH WALL SLEEVE AND GREASE CUP
4. PROVIDE WITH SPEED CONTROLLER AND MOTORIZED BACKDRAFT DAMPER.

AIR COOLED CONDENSING UNIT SCHEDULE

MARK	LOCATION	SERVES	REFER TYPE	CAPACITY MBH	AMBIENT TEMP (°F)	COMPRESSOR DATA NO	RLA (EA)	LRA (EA)	VOLT	PH	HZ	CONDENSER DATA FAN NO.	VOLTS	PH	HZ	MANUFACTURER AND MODEL NUMBER	REMARKS
ACCU-1	SEE PLANS	DOAS-1	R-410A	96	95	2	16.1	110	208	3	60	2	208	3	60	NEXGEN MCOA0096BA2	1
ACCU-2	SEE PLANS	OFFICE VRF	R-410A	144	95	4	18	---	208	3	60	4	208	3	60	SAMSUNG AM144BXVTFR/AA	1
ACCU-3	SEE PLANS	SHOP VRF	R-410A	20	95	1	25.6	---	208	3	60	2	208	3	60	SAMSUNG AJ020CXS3CH/AA	1

NOTES: 1. MOUNT UNIT ON HOUSEKEEPING PAD.

HIGH-VOLUME LOW-SPEED FAN SCHEDULE

MARK	LOCATION	DIA (FT)	RPM	ELECTRICAL DATA HP	VOLTS	PH	HZ	MANUFACTURER AND MODEL NUMBER	REMARKS
HVLS-1	132 APPARATUS BAY	12	100	2	208	1	60	VIVID AIR GFY-12	---

GAS FIRED UNIT HEATER SCHEDULE

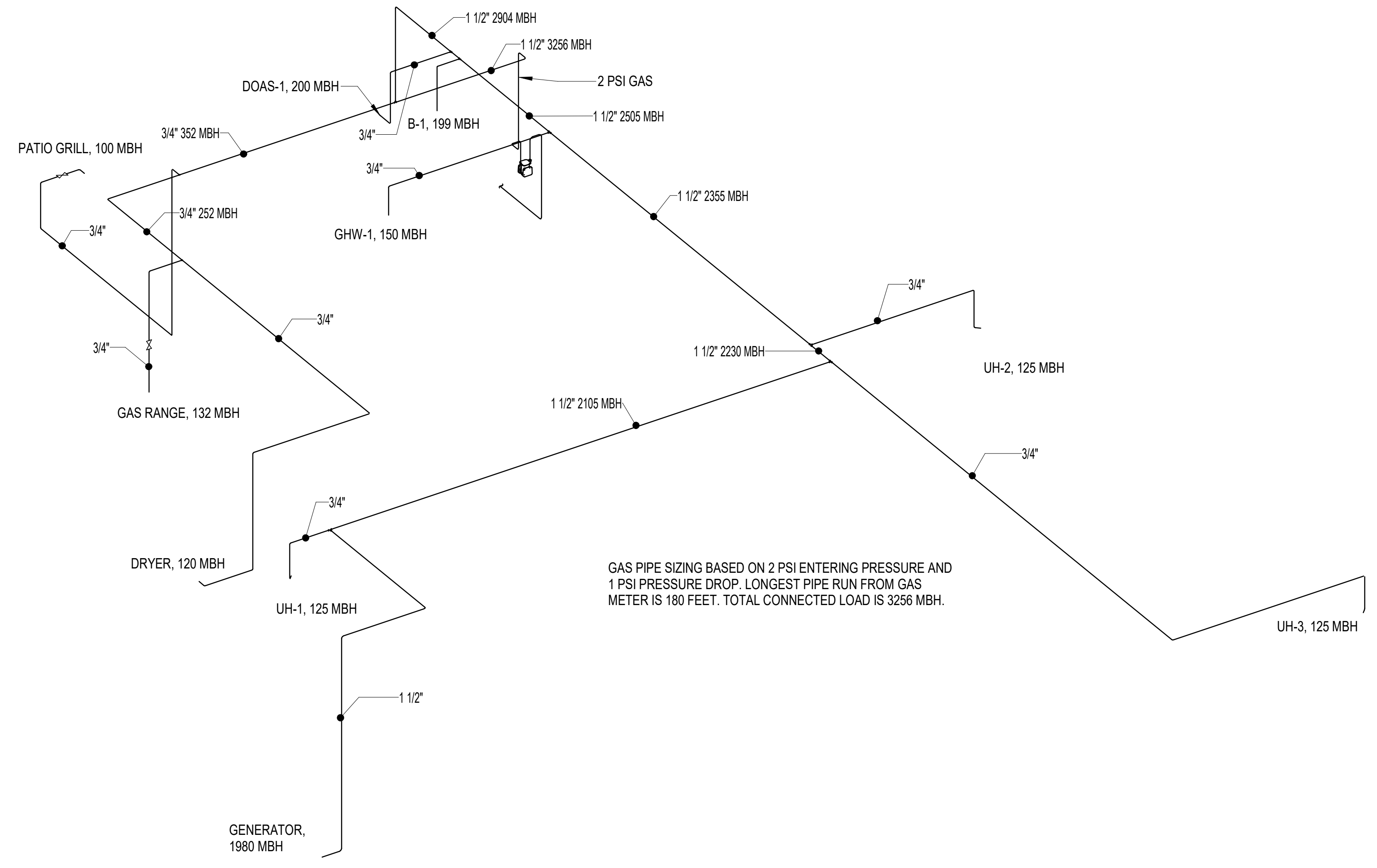
MARK	LOCATION	CFM	HEATING MBH INPUT	OUTPUT	MOTOR DATA HP	VOLT	PH	HZ	MANUFACTURER AND MODEL NUMBER	REMARKS
UH-1	APPARATUS BAY	1980	125	102.5	1/8	115	1	60	MODINE HD 125	1
UH-2	APPARATUS BAY	1980	125	102.5	1/8	115	1	60	MODINE HD 125	1
UH-3	APPARATUS BAY	1980	125	102.5	1/8	115	1	60	MODINE HD 125	1

NOTES: 1. PROVIDE THERMOSTAT AND WALL BRACKET

ELECTRIC UNIT HEATER SCHEDULE

MARK	DESCRIPTION	SERVES	DIMENSIONS LENGTH	HEIGHT	DEPTH	ELECTRICAL DATA WATTS	FLA	VOLT	PH	HZ	MANUFACTURER AND MODEL NUMBER	REMARKS
UH-4	ELECTRIC UNIT HEATER	LAWN STORAGE	10-5/8"	12-1/8"	4"	750	6.25	120	1	60	QMARK CWH1151DSF	1, 2
UH-5	ELECTRIC UNIT HEATER	STAIR	10-5/8"	12-1/8"	4"	750	6.25	120	1	60	QMARK CWH1151DSF	1, 2

NOTES: 1. COORDINATE WITH ELECTRICAL FOR INSTALLATION.
2. MOUNT 18" A.F.F.



GAS PIPE SIZING BASED ON 2 PSI ENTERING PRESSURE AND 1 PSI PRESSURE DROP. LONGEST PIPE RUN FROM GAS METER IS 180 FEET. TOTAL CONNECTED LOAD IS 3256 MBH.

1 3d RISER - GAS
SCALE:

DESIGNED: TMJ
DRAWN: TMJ
CHECKED: SEF

ISSUE DATE: 03/25/2024

REVISIONS: No.:	DATE:	BY:	DESCRIPTION:
1	04/26/2024		Addendum No. 1

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E-11823
4/30/24

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

SCHEDULE - MECHANICAL

PROJECT NO.: 223134.00

M501

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ALL POWERED RECEPTACLES, DEVICES, AND EQUIPMENT SHOWN SHALL BE CIRCUITED AS OUTLINED IN THIS NOTE, UNLESS INDICATED OTHERWISE. PANELBOARD CIRCUITING, INCLUDING IDENTIFYING SEPARATE PANELBOARDS' BRANCH CIRCUIT AREAS, IS DELINEATED WITH A DASH-DOT LINE BOUNDARY, WITH PANEL NAMES IDENTIFIED AT BOUNDARY LINE. CIRCUIT NUMBERS ARE IDENTIFIED ADJACENT TO RECEPTACLE, DEVICE, OR EQUIPMENT. REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.

— · — · — PANELBOARD CIRCUITING

REF. NOTES (◇X):

20 PANEL AND CIRCUIT NUMBER SHOWN IN BEDROOM WILL BE USED FOR ALL RECEPTACLES WITHIN THE SPACE.

21 'U' INDICATES A RECEPTACLE WITH AN ADDITIONAL USB-C OUTLET.

22 PROVIDE MASTER SWITCH FOR OHD-1S. REFER TO VENDOR SPECS. COORDINATE WITH OWNER FOR FINAL PLACEMENT OF SWITCH.

23 PROVIDE CAT5 CABLE FROM FAN CONTROL BOARD TO MANUFACTURER SUPPLIED CONTROLLER. PROVIDE BACKBOX AND CONDUIT UP TO 10' AFF FOR CONTROL CABLE ROUTING.

24 PROVIDE ELECTRICAL CONNECTIONS FOR FIRE SUPPRESSION SYSTEM, INCLUDING SHUNT TRIP BREAKERS, GAS SOLENOID VALVE, CONTROL DEVICES, AND FIRE ALARM CONTROL PANEL.

27 EXHAUST FAN TO BE CONTROLLED WITH LIGHTING WITHIN THE SPACE.

28 CONNECT EQUIPMENT TO LIGHTING CIRCUIT SERVING THE SPACE. REFER TO E101 FOR LIGHTING CIRCUIT INFORMATION.

29 PROVIDE NECESSARY WIRING FOR CO2 DETECTING. SUBMIT DETAILS OF CIRCUITING TO ENGINEER FOR APPROVAL.

32 INSTALL SWITCH FOR DISPOSAL ON FACE OF CASEWORK.

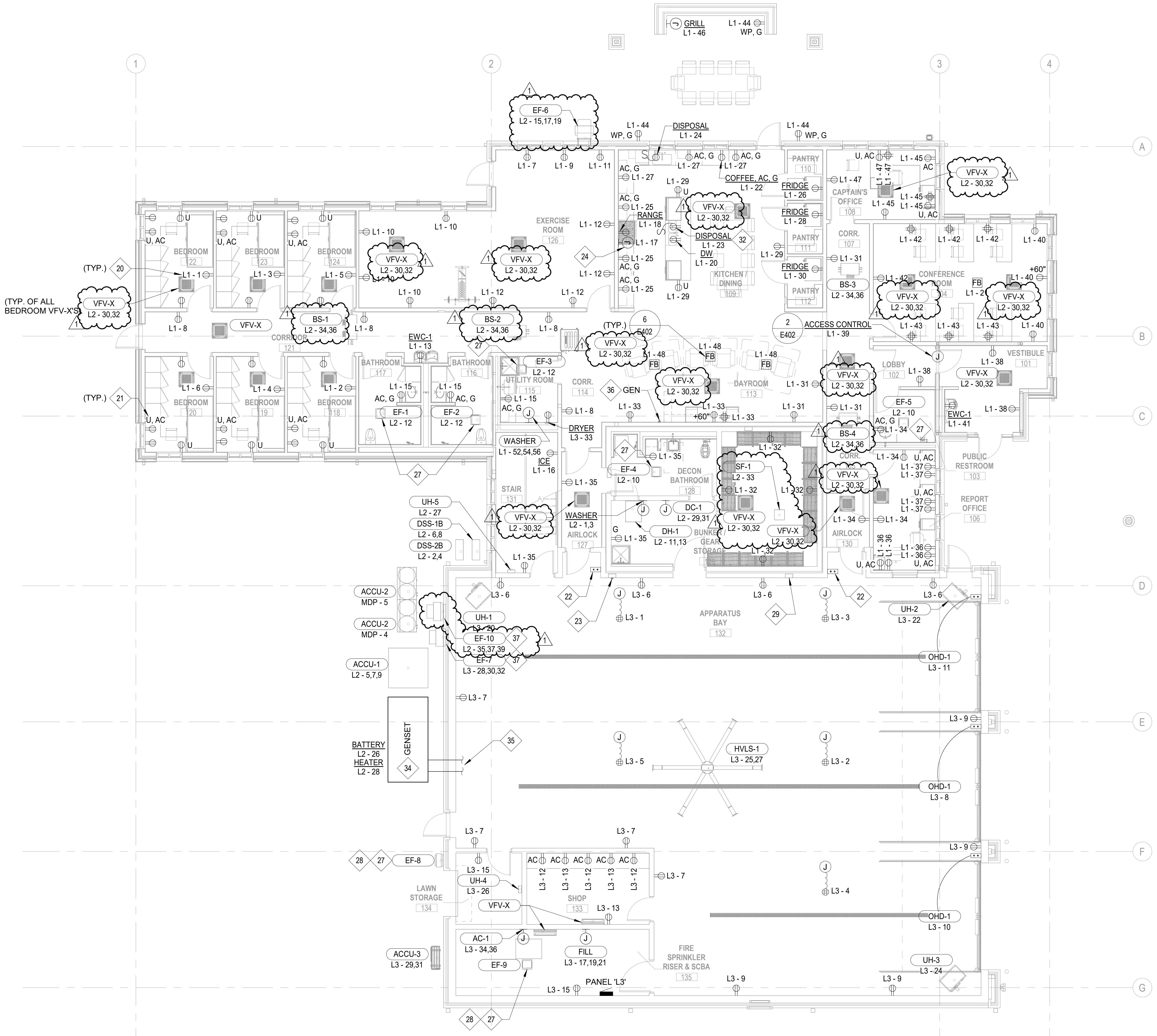
33 PROVIDE RED, MUSHROOM STYLE, TWIST TO RESET PUSH BUTTON WITH NORMALLY CLOSED CONTACTS LABELED "EMERGENCY BOILER SHUDOWN". RUN CIRCUIT SERVING BOILER THROUGH PUSH BUTTON.

34 PROVIDE MINIMUM OF 4' BETWEEN BUILDING AND GENERATOR FOR WORKING CLEARANCE.

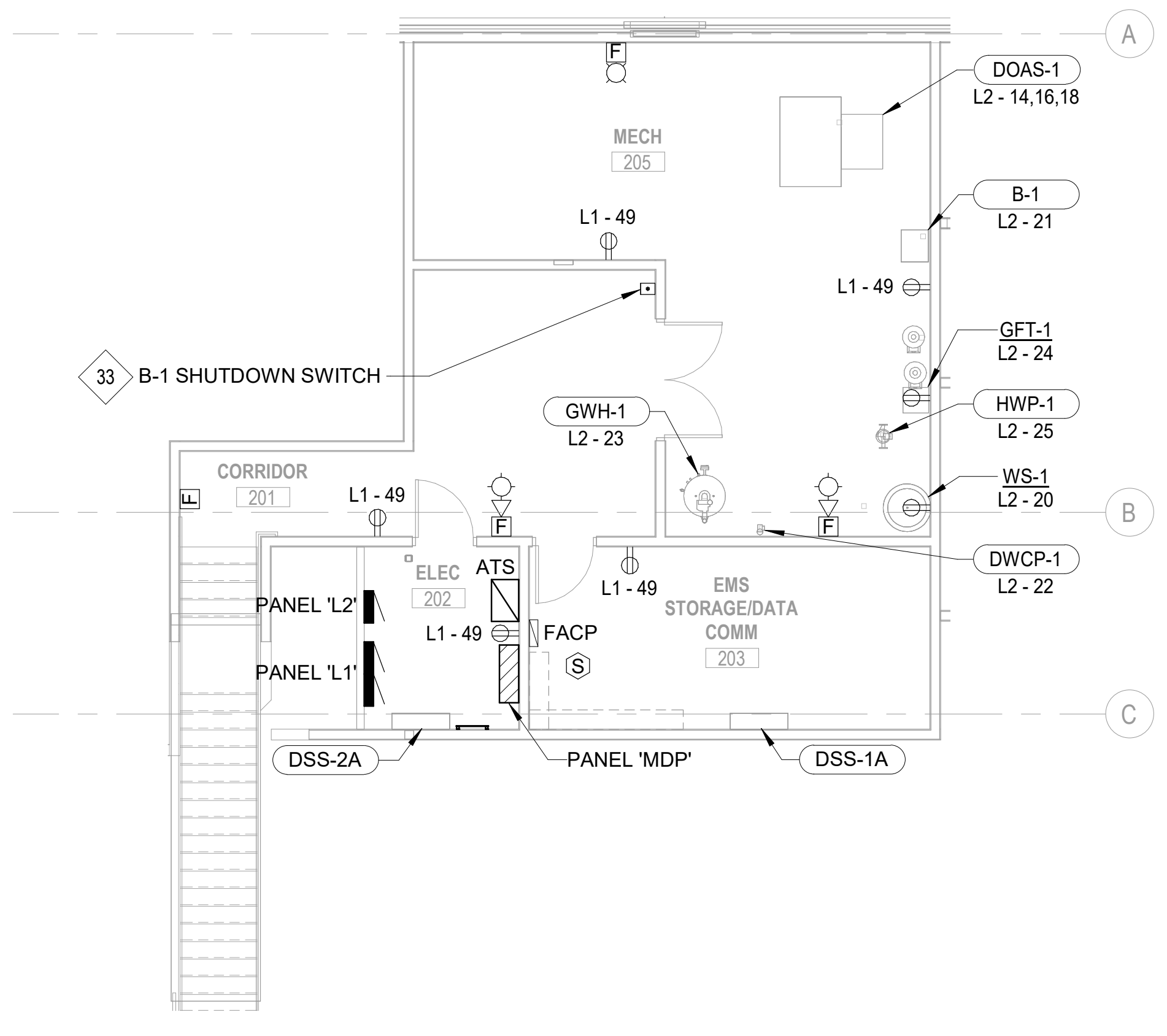
35 PROVIDE (1) 2" CONDUIT FROM GENERATOR TO TRANSFER SWITCH AND (1) 2" CONDUIT FROM GENERATOR TO REMOTE ANNUNCIATOR. PROVIDE CONDUCTORS PER MANUFACTURER'S REQUIREMENTS.

36 PROVIDE GENERATOR REMOTE ANNUNCIATOR; VERIFY LOCATION WITH OWNER AND ROUTE CONDUIT ACCORDINGLY.

37 MOUNT FVNR MOTOR STARTER ON INTERIOR BAY WALL UNDERNEATH EQUIPMENT AT 48" AFF.



1 FIRST FLOOR PLAN - POWER & AUXILIARY SYSTEMS
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN - POWER & AUXILIARY SYSTEMS
SCALE: 1/8" = 1'-0"

NORTH

DESIGNED: CRW
DRAWN: CRW
CHECKED: JCB

ISSUE DATE: 03/25/2024

REVISIONS:

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

FLOOR PLAN - POWER

PROJECT NO.: 223134.00

E201

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FLOOR PLAN - POWER

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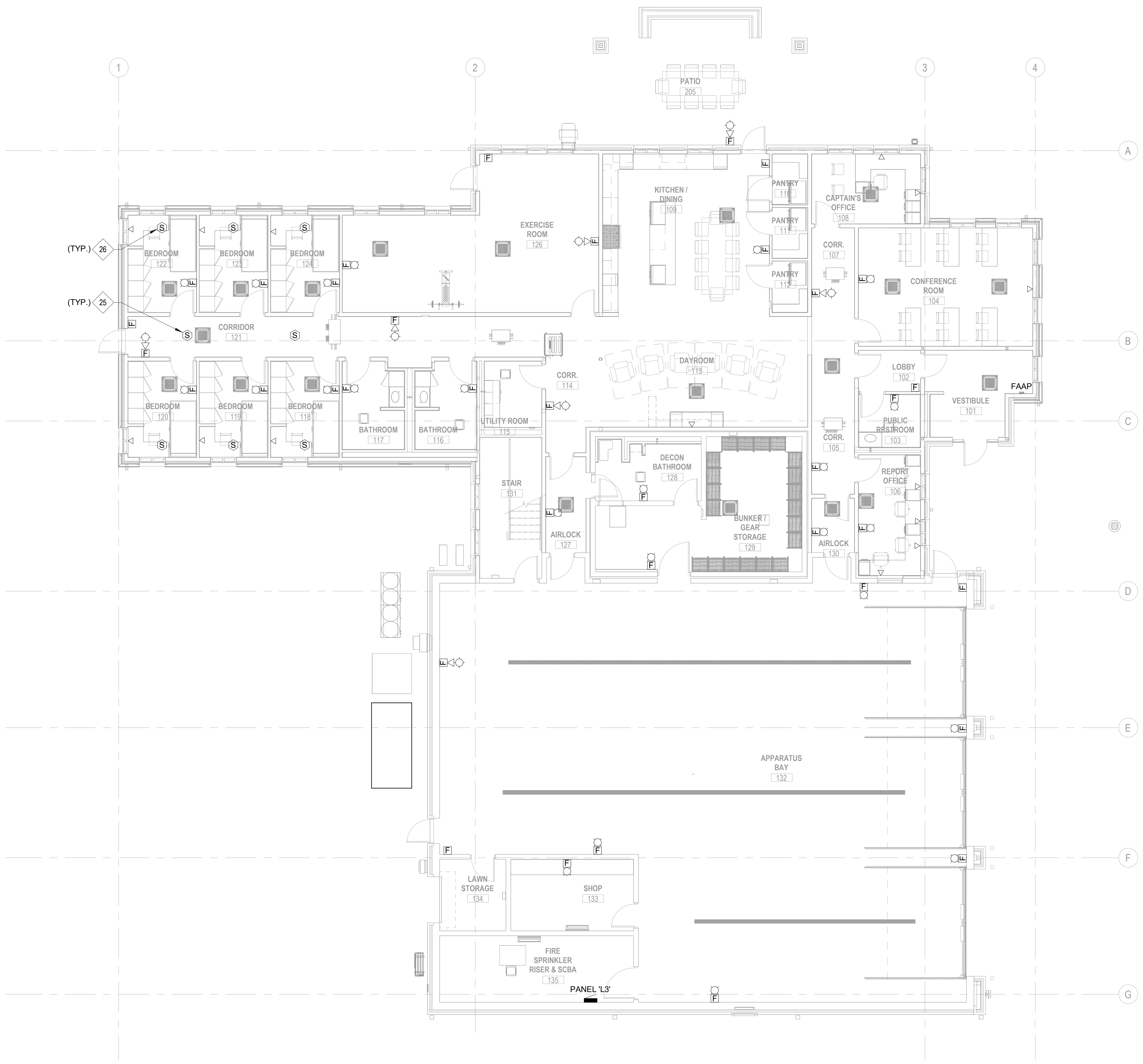
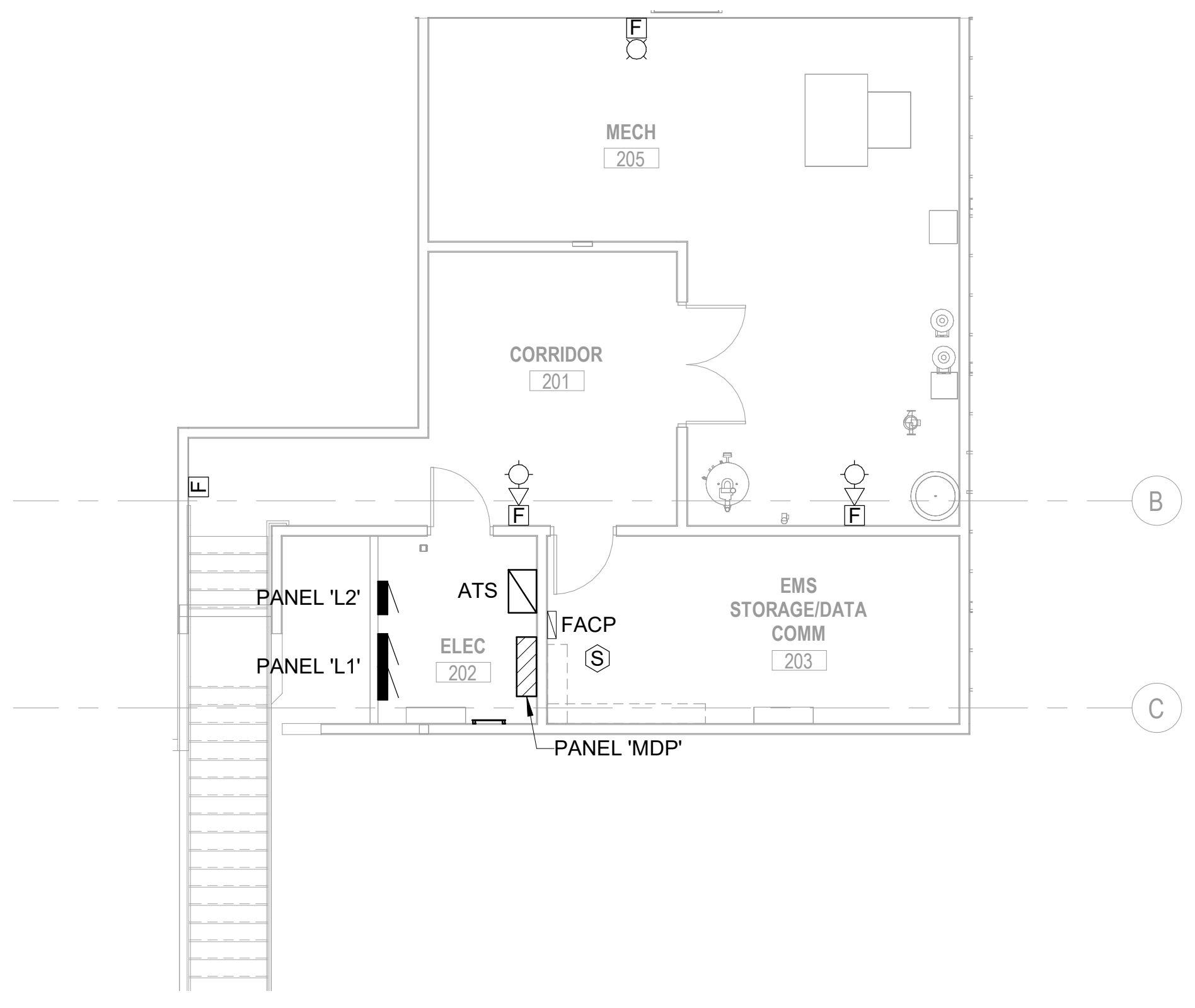
—·—·—·— PANELBOARD CIRCUITING

REF. NOTES (◇X):

25	PROVIDE COMBINATION SMOKE/CARBON MONOXIDE SMOKE DETECTORS WHEN LOCATED OUTSIDE BEDROOMS.
26	PROVIDE LOW FREQUENCY SOUNDER BASE FOR ALL DETECTORS LOCATED IN SLEEPING ROOMS.



1 FIRST FLOOR PLAN - AUXILIARY SYSTEMS
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN - AUXILIARY SYSTEMS
SCALE: 1/8" = 1'-0"

NORTH

DESIGNED: CRW
DRAWN: CRW
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04/30/2024

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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

FLOOR PLAN - AUXILIARY SYSTEMS

1

PROJECT NO.: 223134.00

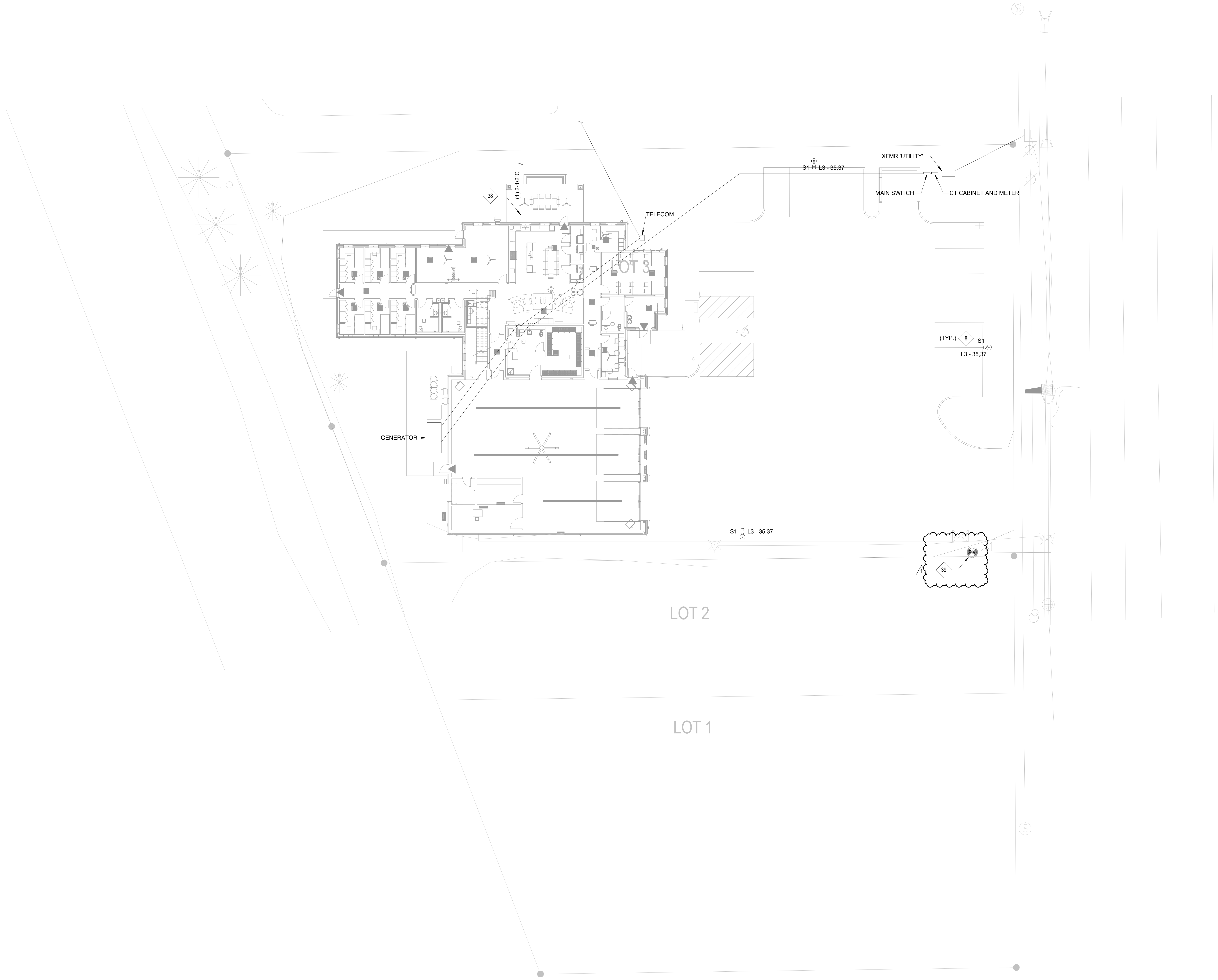
E202

REF. NOTES (X):

8 POLE LIGHTS SHALL OPERATE ON TIMECLOCK FUNCTION, WHERE TOTAL WATTAGE SHALL BE REDUCED BY NOT LESS THAN 30 PERCENT BY DIMMING LUMINAIRES FROM [NOT LATER THAN MIDNIGHT TO NOT EARLIER THAN 6 A.M.] OR [NOT LATER THAN ONE HOUR AFTER BUSINESS CLOSE TO NOT EARLIER THAN ONE HOUR BEFORE BUSINESS OPENING]. DURING THE DIMMED TIMEFRAME, LUMINAIRES SHALL OPERATE USING OCCUPANCY SENSING MODE (COORDINATE WITH VENDOR), AND SHALL BE SET AT 100% LUMEN OUTPUT UPON SENSING OCCUPANCY, AND SHALL REVERT TO BEING REDUCED BY NOT LESS THAN 30 PERCENT AFTER SENSING VACANCY OF 15 MINUTES OR MORE.

38 PROVIDE STUBBED CONDUIT FROM IT ROOM FOR FUTURE USE WITH ANTENNA. COORDINATE FINAL LOCATION WITH OWNER.

1 39 PROVIDE CONDUIT TO CONNECT PIV MONITORING TO FIRE ALARM CONTROL PANEL.



1 SITE PLAN - ELECTRICAL
SCALE: 1/16" = 1'-0"

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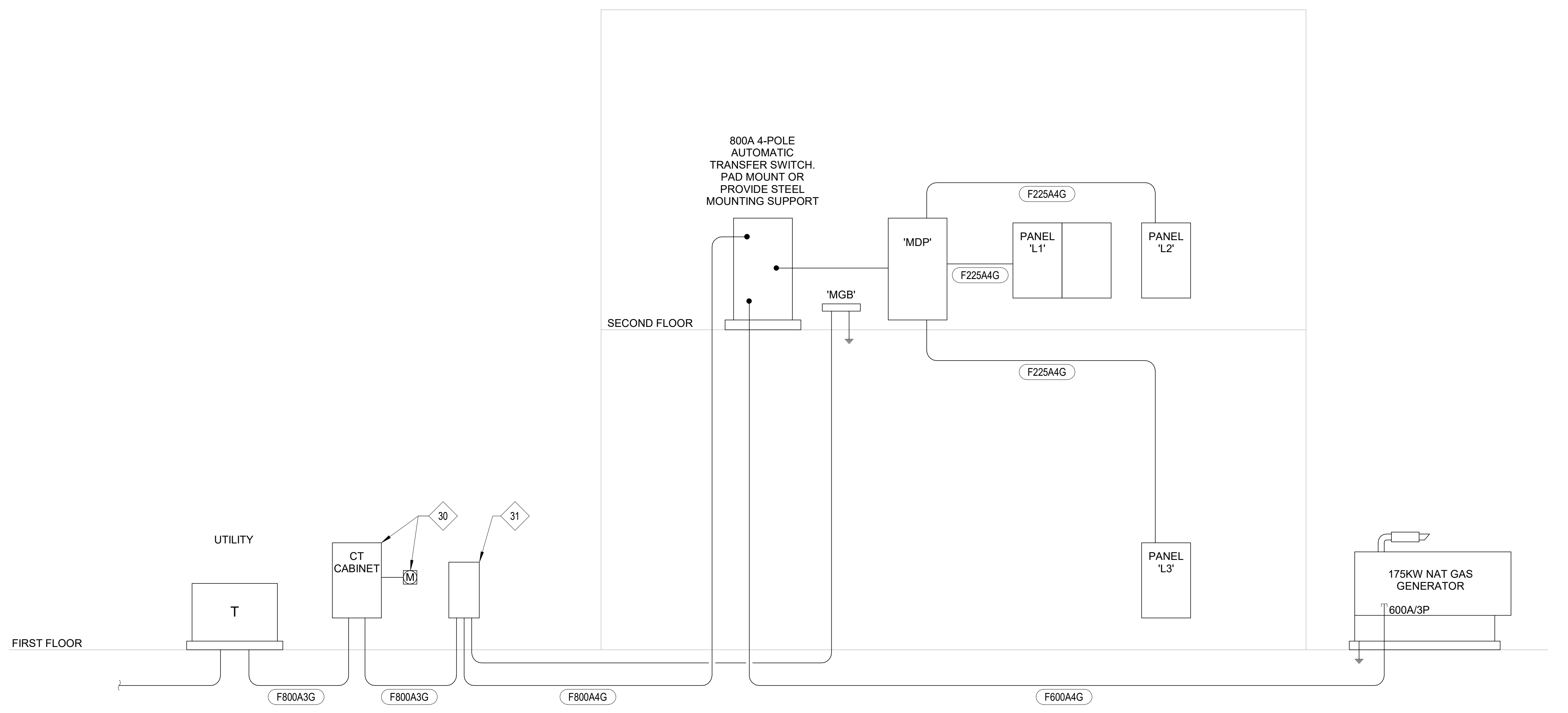
SITE PLAN - ELECTRICAL

PROJECT NO.: 223134.00

E301



① POWER RISER DIAGRAM
SCALE: NOT TO SCALE

REF. NOTES (◇X):

30 COORDINATE CT CABINET AND METER REQUIREMENTS WITH GRAND ISLAND UTILITIES.

31 800A, 3P, 65KAIC SERVICE RATED CIRCUIT BREAKER AND 3R LOCKABLE ENCLOSURE.

FEEDER SCHEDULE (FXXXXXXX):

F225A4G	4#4/0, 1#4G - 2-1/2"C
F600A4G	2 SETS OF 4#350, 1#1G - 3"C
F800A3G	3 SETS OF 3#300, 1#1/0G - 3-1/2"C
F800A4G	3 SETS OF 4#300, 1#1/0G - 3"C

EQUIPMENT SCHEDULE

DEVICE	DEVICE DESCRIPTION	VOLTAGE	PH	KW	FLA	HP	STARTER / DISCONNECT TYPE	SIZE	FUSE	PLUG CONFIG	RECEPT CONFIG	FEEDER SIZE	NOTES
AC-1	AIR COMPRESSOR	208 V	1	-	-	-	-	-	-	-	-		2
ACCU-1	CONDENSING UNIT	208 V	3	-	39.6	-	NFD	60A/3P	-	-	-	3#6, 1#10G - 1"C	
ACCU-2	CONDENSING UNIT	208 V	3	-	44.4	-	NFD	60A/3P	-	-	-	3#6, 1#10G - 1"C	
ACCU-3	CONDENSING UNIT	208 V	1	-	13.6	-	NFD	60A/2P	-	-	-	2#8, 1#10G - 3/4"C	
B-1	BOILER	120 V	1	-	4	-	NFD	30A/2P	-	-	-	2#12, 1#12G - 3/4"C	
BS-1	BRANCH SELECTOR	208 V	1	-	1.7	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	4
BS-2	BRANCH SELECTOR	208 V	1	-	1.7	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	4
BS-3	BRANCH SELECTOR	208 V	1	-	1.7	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	4
BS-4	BRANCH SELECTOR	208 V	1	-	1.7	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	4
DC-1	DRYING CABINET	208 V	1	-	28	-	FD	-	35A	-	-	2#8, 1#10G - 3/4"C	
DH-1	DEHUMIDIFIER	208 V	1	-	7.9	-	PLUG	-	-	6-15P	6-15R	2#12, 1#12G - 3/4"C	
DOAS-1	AIR HANDLING UNIT	208 V	3	-	4.6	-	NFD	30A/3P	-	-	-	3#12, 1#12G - 3/4"C	
DSS-1B	SPLIT SYSTEM	208 V	1	-	7.9	-	NFD	30A/2P	-	-	-	2#12, 1#12G - 3/4"C	1
DSS-2B	SPLIT SYSTEM	208 V	1	-	7.9	-	NFD	30A/2P	-	-	-	2#12, 1#12G - 3/4"C	1
DWCP-1	WATER CIRCULATION PUMP	120 V	1	-	1.2	-	BCU	-	1.5	-	-	2#12, 1#12G - 3/4"C	
EF-1	EXHAUST FAN	120 V	1	-	1.8	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	
EF-2	EXHAUST FAN	120 V	1	-	1.8	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	
EF-3	EXHAUST FAN	120 V	1	-	1.8	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	
EF-4	EXHAUST FAN	120 V	1	-	1.8	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	
EF-5	EXHAUST FAN	120 V	1	-	1.8	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	
EF-6	EXHAUST FAN	208 V	3	-	-	1	CS/NFD	30A/3P	-	-	-	3#12, 1#12G - 3/4"C	
EF-7	EXHAUST FAN	208 V	3	-	4.6	-	NFD	30A/3P	-	-	-	3#12, 1#12G - 3/4"C	3
EF-8	EXHAUST FAN	120 V	1	-	-	1/20	BCU	-	-	-	-	2#12, 1#12G - 3/4"C	
EF-9	EXHAUST FAN	120 V	1	-	1.8	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	
EF-10	EXHAUST FAN	208 V	3	-	4.6	-	NFD	30A/3P	-	-	-	3#12, 1#12G - 3/4"C	3
FILL	FILL STATION	208 V	3	-	-	20	NFD	90A/3P	-	-	-	3#2, 1#8G - 1-1/4"C	
GWH-1	GAS WATER HEATER	120 V	1	-	5	-	NFD	30A/2P	-	-	-	2#12, 1#12G - 3/4"C	
HVLS-1	HIGH VOLUME LOW SPEED FAN	208 V	1	-	-	1/5	NFD	30A/2P	-	-	-	2#12, 1#12G - 3/4"C	
HWP-1	IN FLOOR HEATING PUMP	120 V	1	-	1.5	-	CS/NFD	30A/2P	2	-	-	2#12, 1#12G - 3/4"C	
OHD-1	OVERHEAD DOOR	120 V	1	-	-	3/4	-	-	-	-	-	2#12, 1#12G - 3/4"C	
SF-1	SUPPLY FAN	120 V	1	-	-	1/12	BCU	-	-	-	-	2#12, 1#12G - 3/4"C	
UH-1	UNIT HEATER	120 V	1	-	-	1/8	NFD	30A/1P	-	-	-	2#12, 1#12G - 3/4"C	
UH-2	UNIT HEATER	120 V	1	-	-	1/8	NFD	30A/1P	-	-	-	2#12, 1#12G - 3/4"C	
UH-3	UNIT HEATER	120 V	1	-	-	1/8	NFD	30A/1P	-	-	-	2#12, 1#12G - 3/4"C	
UH-4	UNIT HEATER	120 V	1	-	12.5	-	INT	-	-	-	-	2#12, 1#12G - 3/4"C	
UH-5	UNIT HEATER	120 V	1	-	12.5	-	INT	-	-	-	-	2#12, 1#12G - 3/4"C	
VFV-X	VARIABLE FLOW VALVE	208 V	1	-	.2	-	BCU	-	15	-	-	2#12, 1#12G - 3/4"C	4
WASHER	WASHER	208 V	3	-	7	-	NFD	30A/3P	-	-	-	3#12, 1#12G - 3/4"C	

GENERAL EQUIPMENT SCHEDULE NOTES:

A. THIS SCHEDULE DISPLAYS SIZING INFORMATION THAT IS GENERIC IN NATURE. SCHEDULE DOES NOT ITEMIZE ALL INSTANCES OF EQUIPMENT. CONTRACTOR SHALL REFER TO THE PLANS FOR FINAL QUANTITIES AND LOCATIONS.

B. MOUNT ALL DISCONNECTS AND STARTERS ON ASSOCIATED EQUIPMENT UNLESS SHOWN OTHERWISE. MAINTAIN WORKING CLEARANCES PER NEC; COORDINATE WITH MECHANICAL CONTRACTOR.

C. BCU = BOX COVER UNIT (COOPER #SSY / #STY OR EQUAL) WITH FUSE.

D. NFD OR FD = NON-FUSED OR FUSED DISCONNECT SWITCH.

E. CS/NFD, FD = COMBINATION STARTER/ NON OR FUSED DISCONNECT SWITCH.

F. INT = INTEGRAL DISCONNECT FURNISHED WITH EQUIPMENT.

G. FHPMC = FRACTIONAL HORSEPOWER MANUAL CONTROLLER.

H. IHPMC = INTEGRAL HORSEPOWER MANUAL CONTROLLER.

I. STE = THERMAL ELEMENT SWITCH. PROVIDE THERMAL UNIT.

J. EXP = DEVICE TO BE EXPLOSION-PROOF.

K. ALL SWITCHES, DISCONNECTS, ETC SHALL BE LOCKABLE.

L. ALL SWITCHES, DISCONNECTS, ETC SHALL BE NEMA 3R WHERE REQUIRED.

M. PROVIDE FUSES AS SHOWN; REVISE SIZES PER ACTUAL NAMEPLATE DATA.

N. STARTER ACCESSORIES:STARTER ACCESSORIES:
   1. CONTROL TRANSFORMER
   2. H-O-A SWITCH
   3. RED RUN LIGHT
   4. 2 NO CONTACTS; 2 NC CONTACTS

EQUIPMENT SCHEDULE NOTES:

1. INDOOR UNIT POWERED FROM OUTDOOR UNIT. PROVIDE CONDUIT, WIRING, AND ACCESSORIES AS REQUIRED FOR POWER AND CONTROL CONNNECTIONS BETWEEN OUTDOOR AND INDOOR UNITS.

2. OWNER PROVIDED. SUBMIT EQUIPMENT ELECTRICAL DETAILS TO ENGINEER FOR CIRCUITING INSTRUCTION.

3. PROVIDE FVNR MOTOR STARTER. REFERENCE E/201 FOR LOCATION AND FURTHER INSTRUCTION.

4. REFER TO MECHANICAL SHEETS FOR FURTHER IDENTIFICATION AND COORDINATE WITH VENDOR TO VERIFY EQUIPMENT REQUIREMENTS.

LUMINAIRE SCHEDULE

TYPE NO	DESCRIPTION / SPEC NO	TOTAL WATTS	VOLT	MOUNTING	NOTES
A	2X2 RECESSED ALS TRA-2(35/35)-WH-UD	35 VA	MVOLT	CEILING	
A1	2X2 RECESSED ALS TRA-2(35/35)-WH-UD-MOUNT-LP-22-FGK	35 VA	MVOLT	CEILING	
A1E	2X2 RECESSED - EMERGENCY ALS TRA-2(35/35)-WH-UD-MOUNT-LP-22-FGK-EMB-2000	35 VA	MVOLT	CEILING	
AE	2X2 RECESSED - EMERGENCY ALS TRA-2(35/35)-WH-UD-EMB-2000	35 VA	MVOLT	CEILING	
CF1	CEILING FAN - BEDROOM KICHLER LUCIAN 330241SBK	48 VA	120 V	SURFACE	
CF2	CEILING FAN OXYGEN 3-110-XX	48 VA	120 V	SURFACE	3
D1	6" SQUARE CAN KIRLIN LSR-04142-2000L-WFL	20 VA	MVOLT	CEILING	
D1E	6" SQUARE CAN - EMERGENCY KIRLIN LSR-04142-2000L-EL-WFL	20 VA	MVOLT	CEILING	
D2	6" SQUARE CAN KIRLIN LRS-04142-2000L-45-WFL	20 VA	MVOLT	CEILING	
H	2X4 RECESSED HIGHBAY ALS LHN-130-40-CL-WH-UD	130 VA	MVOLT	CEILING	
H2	2X4 RECESSED HIGHBAY - PHOTOCELL ALS LHN-130-40-CL-WH-UD-SENSOR-LSXR-6-ADC	130 VA	MVOLT	CEILING	
H2E	2X4 RECESSED HIGHBAY - EMERGENCY & PHOTOCELL ALS LHN-130-40-CL-WH-UD-EMB-2700-SENSOR-LSXR6-ADC	130 VA	MVOLT	CEILING	
HE	2X4 RECESSED HIGHBAY - EMERGENCY ALS LHN-130-40-CL-WH-UD-EMB-2700	130 VA	MVOLT	CEILING	
J	INDUSTRIAL STRIP LED - 4' ALS IL-4-30-40K-F-JM-WH-UD	30 VA	MVOLT	SURFACE / CABLE	1,2
JE	INDUSTRIAL STRIP LED - 4' - EMERGENCY ALS IL-4-30-40K-F-JM-WH-UD-EMLED	30 VA	MVOLT	SURFACE / CABLE	
LR4	4' RECESSED LINEAR PINNACLE EV3DPM3-A-835-04-MOUNTING-U-FSD-1-W-FIL	17 VA	MVOLT	CEILING	
LR8	8' RECESSED LINEAR PINNACLE EV3DPM3-A-835-08-MOUNTING-U-FSD-1-W-FIL	34 VA	MVOLT	CEILING	
LW	6' SUSPENDED LINEAR PINNACLE EX3DI-A-WHE-835-835-04-WA-U-FSD-1-W	50 VA	MVOLT	SURFACE / CABLE	1,2
S1	SITE POLE LIGHT ALS ALV-150-TOT3-XX-UNVD	147 VA	MVOLT	POLE (SEE DETAIL FOR SPECIFICATION)	3
SL	STEP LIGHT HYDREL HSL13-3INCH-LED-2700K-MVOLT-L-MIN5-BB-XX	29 VA	MVOLT	CEILING	3
W1	WALL SCONCE WAC WS-W45720	20 VA	MVOLT	WALL / SURFACE	4
WP	WALL PACK LITHONIA WDGE3 LED P2 70 R4 40K	59 VA	MVOLT	WALL / SURFACE	4
X1	EXIT SIGN LITHONIA LQM S W 3 R 120/277 EL N SD	2 VA	MVOLT	WALL / CEILING	
Y	FLAG POLE LIGHT KIRLIN LWR-09490-6500L-VOLT-POLE-XX	74 VA	MVOLT	POLE	4

LUMINAIRE SCHEDULE NOTES:

1. VERIFY CABLE / CHAIN LENGTH AND ADJUST ACCORDINGLY.

2. COORDINATE MOUNTING HEIGHT BEFORE ROUGH-IN.

3. VERIFY FINISH WITH ARCHITECTURAL.

4. SEE ARCHITECTURAL EXTERIOR BUILDING ELEVATIONS.

5. PROVIDE GYPSUM TRIM RING WHERE REQUIRED. (SUPPORT TRIM RING FROM STRUCTURE.) SEE ARCH A6 SERIES SHEETS FOR REFLECTED CEILING PLANS.

DESIGNED:	CRW	ISSUE DATE:	03/25/2024		
DRAWN:	CRW	REVISIONS:			
CHECKED:	JCB	No.:	DATE:	BY:	DESCRIPTION:
		1	04/25/2024		ADDENDUM NO. 1

JOSEPH C. BINGE
E-11337
04/30/2024

BRWARCHITECTS
175 CENTURY SQUARE DRIVE
SUITE 350
COLLEGE STATION, TEXAS 77840
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CITY OF GRAND ISLAND
FIRE STATION NO. 3
2310 S WEBB RD, GRAND ISLAND, NE 68803

POWER RISER & ELECTRICAL SCHEDULES

PROJECT NO.: 223134.00

E501

Power Panel: MDP

Location: ELEC 202
Supply From:
Mounting:
Volts: 208Y/120
Phases: 3
Wires: 4
A.I.C. Rating: 42,000
MLO / MCB: MCB
FCB / MCB Rating: 800 A

CKT	Circuit Description	# of Poles	Trip Rating	Load	Remarks
1	L2	3	225 A	40400 VA	
2	L1	3	225 A	42313 VA	
3	L3	3	225 A	47228 VA	
4	ACCU-2	3	60 A	16000 VA	
5	ACCU-2	3	60 A	16000 VA	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
				161941 VA	
				450 A	

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LTG	7932 VA	100.00%	7932 VA	**Total Est. Demand:**	152541 VA
REC	28080 VA	67.81%	19040 VA	**Total Est. Demand Current (100% Rated):**	423 A
EQP_CONT	121949 VA	100.00%	121949 VA		
EQP_NON CONT	1400 VA	100.00%	1400 VA	**Non-Cont. Current @ 100%:**	62 A
NOT DEFINED	180 VA	100.00%	180 VA	**Continuous Current @ 125%:**	451 A
EQP_INT	2400 VA	85.00%	2040 VA		
				Total Est. Demand Current (80% Rated):	513 A

Legend:

FCB:	Feeder Circuit Breaker	MCCB:	Molded Case Circuit Breaker
GFI:	GFCI Circuit Breaker	MLO:	Main Lug Only
LOCK:	Lockable Circuit Breaker		
MCB:	Main Circuit Breaker		

Notes:

Branch Panel: L1

Location: ELEC 202
Supply From: MDP
Mounting:
Volts: 208Y/120
Phases: 3
Wires: 4
A.I.C. Rating: 42,000
MLO / MCB: MCB
FCB / MCB Rating: 225 A

CKT	Circuit Description	Trip	P	A		B		C		P	Trip	Circuit Description	CKT
1	(AFCI) REC BEDROOM 122	20 A	1	900	900					1	20 A	(AFCI) REC BEDROOM 118	2
3	(AFCI) REC BEDROOM 123	20 A	1			900	900			1	20 A	(AFCI) REC BEDROOM 119	4
5	(AFCI) REC BEDROOM 124	20 A	1					900	900	1	20 A	(AFCI) REC BEDROOM 120	6
7	REC EXERCISE ROOM 126	20 A	1	600	720					1	20 A	(AFCI) REC CORRIDOR 121	8
9	REC EXERCISE ROOM 126	20 A	1			600	720			1	20 A	REC EXERCISE ROOM 126	10
11	REC EXERCISE ROOM 126	20 A	1					600	720	1	20 A	REC EXERCISE ROOM 126	12
13	(GFI) EWC-1 CORRIDOR 121	20 A	1	600	96					1	20 A	EXT SIGNAGE LTG	14
15	REC UTILITY ROOM 115	20 A	1			540	1000			1	20 A	ICE STAIR 131	16
17	FIRE PROTECTION KITCHEN / DINING 109	15 A	1					180	600	1	20 A	RANGE KITCHEN / DINING 109	18
19	EXT SIGNAGE LTG	20 A	1	32	1200					1	20 A	DW CONT KITCHEN / DINING 109	20
21	REC CONFERENCE ROOM 104	20 A	1			360	1000			1	20 A	COFFEE KITCHEN / DINING 109	22
23	DISPOSAL KITCHEN / DINING 109	20 A	1					1200	1200	1	20 A	DISPOSAL KITCHEN / DINING 109	24
25	REC KITCHEN / DINING 109	20 A	1	540	800					1	20 A	FRIDGE PANTRY 110	26
27	REC KITCHEN / DINING 109	20 A	1			540	800			1	20 A	FRIDGE PANTRY 111	28
29	REC KITCHEN / DINING 109	20 A	1					540	800	1	20 A	FRIDGE PANTRY 112	30
31	REC CORR. 105	20 A	1	720	720					1	20 A	REC BUNKER/GEAR STORAGE 129	32
33	REC DAYROOM 113	20 A	1			720	720			1	20 A	REC REPORT OFFICE 106	34
35	REC AIRLOCK 127	20 A	1					720	720	1	20 A	REC REPORT OFFICE 106	36
37	REC REPORT OFFICE 106	20 A	1	720	540					1	20 A	REC VESTIBULE 101	38
39	ACCESS CONTROL LOBBY 102	20 A	1			200	540			1	20 A	REC CONFERENCE ROOM 104	40
41	(GFI) EWC-1 VESTIBULE 101	20 A	1					600	1260	1	20 A	REC CONFERENCE ROOM 104	42
43	REC CONFERENCE ROOM 104	20 A	1	1080	540					1	20 A	REC PATIO 205	44
45	REC CAPTAIN'S OFFICE 108	20 A	1			900	500			1	20 A	REC PATIO 205	46
47	REC CAPTAIN'S OFFICE 108	20 A	1					720	1080	1	20 A	REC DAYROOM 113	48
49	REC	20 A	1	900	1672					1	20 A	LTG CAPTAIN'S OFFICE 108	50
51	LTG BEDROOM 122	20 A	1			1494	841			3	20 A	WASHER UTILITY ROOM 115	52
53	LTG	20 A	1					1337	841	--	--	--	54
55					841					--	--	--	56
57													58
59													60
61													62
63													64
65													66
67													68
69													70
71													72
73													74
75													76
77													78
79													80
81													82
83													84
			Total Load:	14121 VA		13275 VA		14918 VA					
			Total Amps:	119 A		111 A		125 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LTG	4631 VA	100.00%	4631 VA	**Total Est. Demand:**	35613 VA
REC	22680 VA	72.05%	16340 VA	**Total Est. Demand Current (100% Rated):**	99 A
EQP_CONT	11022 VA	100.00%	11022 VA		
EQP_NON CONT	1400 VA	100.00%	1400 VA	**Non-Cont. Current @ 100%:**	55 A
NOT DEFINED	180 VA	100.00%	180 VA	**Continuous Current @ 125%:**	54 A
EQP_INT	2400 VA	85.00%	2040 VA		
				Total Est. Demand Current (80% Rated):	109 A

Legend:

FCB:	Feeder Circuit Breaker	MCCB:	Molded Case Circuit Breaker
GFI:	GFCI Circuit Breaker	MLO:	Main Lug Only
LOCK:	Lockable Circuit Breaker	AFCI:	AFCI Circuit Breaker
MCB:	Main Circuit Breaker		

Notes:

Branch Panel: L2

Location: ELEC 202
Supply From: MDP
Mounting:
Volts: 208Y/120
Phases: 3
Wires: 4
A.I.C. Rating: 42,000
MLO / MCB: MCB
FCB / MCB Rating: 225 A

CKT	Circuit Description	Trip	P	A		B		C		P	Trip	Circuit Description	CKT
1	WASHER BUNKER/GEAR STORAGE 129	20 A	2	650	822					2	15 A	DSS-1B	2
3	--	--	--			650	822			--	--	--	4
5	ACCU-1	50 A	3					4767	822	2	15 A	DSS-2B	6
7	--	--	--	4767	822					--	--	--	8
9	--	--	--			4767	440			1	20 A	EF-4,5	10
11	DH-1 BUNKER/GEAR STORAGE	15 A	2					822	660	1	20 A	EF-1,2,3	12
13	--	--	--	822	557					3	15 A	DOAS-1	14
15	EF-6	15 A	3			433	557			--	--	--	16
17	--	--	--					433	557	--	--	--	18
19	--	--	--	433	200					1	15 A	WS-1	20
21	B-1	15 A	1			480	200			1	15 A	DWCP-1	22
23	GWH-1	15 A	1					600	240	1	15 A	GFT-1	24
25	HWP-1	15 A	1	180	1200					1	20 A	BATTERY CHARGER - GENERATOR	26
27	UH-5 STAIR 131	15 A	1			1500	1200			1	20 A	COOLANT HEATER - GENERATOR	28
29	DC-1 BUNKER/GEAR STORAGE	20 A	2					2912	650	2	20 A	VFV-X	30
31	--	--	--	2912	650					--	--	--	32
33	SF-1 BUNKER/GEAR STORAGE 129	20 A	1			400	408			2	20 A	BS-1,2,3,4 CORR. 105	34
35	EF-10	20 A	3					553	408	--	--	--	36
37	--	--	--	553									38
39	--	--	--			553							40
41													42
			Total Load:	14567 VA		12409 VA		13423 VA					
			Total Amps:	123 A		103 A		113 A					

1

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
EQP_CONT	40400 VA	100.00%	40400 VA	**Total Est. Demand:**	40400 VA
				Total Est. Demand Current (100% Rated):	112 A
				Non-Cont. Current @ 100%:	0 A
				Continuous Current @ 125%:	140 A
				Total Est. Demand Current (80% Rated):	140 A

Legend:

FCB:	Feeder Circuit Breaker	MCCB:	Molded Case Circuit Breaker
GFI:	GFCI Circuit Breaker	MLO:	Main Lug Only
LOCK:	Lockable Circuit Breaker		
MCB:	Main Circuit Breaker		

Notes:

Branch Panel: L3

Location: FIRE SPRINKLER RISER &...
Supply From: MDP
Mounting:
Volts: 208Y/120
Phases: 3
Wires: 4
A.I.C. Rating: 22,000
MLO / MCB: MCB
FCB / MCB Rating: 225 A

CKT	Circuit Description	Trip	P	A		B		C		P	Trip	Circuit Description	CKT
1	REC APPARATUS BAY 132	30 A	1	360	360					1	30 A	REC APPARATUS BAY 132	2
3	REC APPARATUS BAY 132	30 A	1			360	360			1	30 A	REC APPARATUS BAY 132	4
5	REC APPARATUS BAY 132	30 A	1					360	720	1	20 A	REC APPARATUS BAY 132	6
7	REC APPARATUS BAY 132	20 A	1	720	1656					1	20 A	OHD-1 APPARATUS BAY 132	8
9	REC APPARATUS BAY 132	20 A	1			720	1656			1	20 A	OHD-1 APPARATUS BAY 132	10
11	OHD-1 APPARATUS BAY 132	20 A	1					1656	540	1	20 A	REC SHOP 133	12
13	REC SHOP 133	20 A	1	540	344					2	20 A	LTG	14
15	REC LAWN STORAGE 134	20 A	1			360	344			--	--	--	16
17	FILL FIRE SPRINKLER RISER & SCBA 135	20 A	3					7458	1560	1	20 A	LTG	18
19	--	--	--	7458	500					1	15 A	UH-1 APPARATUS BAY 132	20
21	--	--	--			7458	500			1	15 A	UH-2 APPARATUS BAY 132	22
23	LTG	20 A	1					760	500	1	15 A	UH-3 APPARATUS BAY 132	24
25	HVLS-1 APPARATUS BAY 132	20 A	2	1040	1500					1	15 A	UH-4 LAWN STORAGE 134	26
27	--	--	--			1040	553			3	15 A	EF-7	28
29	ACCU-3	40 A	2					1415	553	--	--	--	30
31	--	--	--	1415	553					--	--	--	32
33	DRYER UTILITY ROOM 115	20 A	1			1116	250			2	20 A	AC-1 FIRE SPRINKLER RISER & SCBA 135	34
35	POLE LIGHTS	20 A	2					147	250	--	--	--	36
37	--	--	--	147									38
39													40
41													42
			Total Load:	16593 VA		14717 VA		15919 VA					
			Total Amps:	140 A		123 A		134 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LTG	3301 VA	100.00%	3301 VA	**Total Est. Demand:**	47228 VA
REC	5400 VA	100.00%	5400 VA	**Total Est. Demand Current (100% Rated):**	131 A
EQP_CONT	38527 VA	100.00%	38527 VA		
				Non-Cont. Current @ 100%:	15 A
				Continuous Current @ 125%:	145 A
				Total Est. Demand Current (80% Rated):	160 A

Legend:

FCB:	Feeder Circuit Breaker	MCCB:	Molded Case Circuit Breaker
GFI:	GFCI Circuit Breaker	MLO:	Main Lug Only
LOCK:	Lockable Circuit Breaker		
MCB:	Main Circuit Breaker		

Notes:

DESIGNED:	CRW	**ISSUE DATE:**	03/25/2024
DRAWN:	CRW	**REVISIONS:**	
CHECKED:	JCB		

No.:	DATE:	BY:	DESCRIPTION:
1	04/25/2024		ADDENDUM NO. 1

PROFESSIONAL ELECTRICAL ENGINEER
JOSEPH C. BINGE
E-11337
04/30/2024
STATE OF NEBRASKA

BRWARCHITECTS
175 CENTURY SQUARE DRIVE
SUITE 350
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CITY OF GRAND ISLAND

FIRE STATION NO. 3

2310 S WEBB RD, GRAND ISLAND, NE 68803

ELECTRICAL PANEL SCHEDULES

PROJECT NO.: 223134.00

E601