

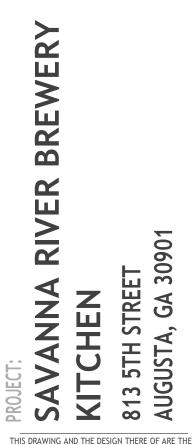
# **KITCHEN ADDITION for** SAVANNAH RIVER BREWING CO. 813 5th STREET AUGUSTA, GEORGIA 30901

| CODE ANALYSIS:   |   |   |  |                                    |
|--|---|---|--|------------------------------------|
| APPLICABLE CODES:  |   |   |  |                                    |
| BUILDING CODES:  | 2018 IBC, WITH GEORGIA AMENDMENTS<br>NFPA 101 LIFE SAFETY 2018 EDITION  | OCCUPANT LOAD: (LSC TABLE 7.3.1.2) (EX                                    | (ISTING BUILDING)  |                                    |
| FIRE CODE:<br>ACCESSIBILITY CODE:  | 2018 IFC WITH GEORGIA AMENDMENTS<br>2010 ADA STANDARDS FOR ACCESSIBLE DESIGN  | BREWERY - WAREHOUSE (EXISTING)<br>BUSINESS - ANCILLARY OFFICE<br>RETAIL - | 14,885 SQ.FT @100 GROSS<br>486 SQ.FT @150 GROSS<br>654 SQ.FT @30 GROSS | 149 (4 ACTUAL<br>4 (2 ACUTAL<br>22 |
| MECHANICAL CODE:<br>ELECTRICAL CODE:   | 2018 IMC, WITH GEORGIA AMENDMENTS<br>2020 NATIONAL ELECTRIC CODE WITH GEORGIA AMENDMENTS  | ASSEMBLY (TAP ROOM)<br>CALCULATED OCCUPANT LOAD (EX                       | 2425 SQ.FT @15 (NET)   | <u>162</u><br>337                  |
| PLUMBING CODE:<br>ENERGY CODE:   | 2018 IPC, WITH GEORGIA AMENDMENTS<br>2015 IECC, WITH GEORGIA SUPPLEMENTS AND AMENDMENTS   | THIS PROJECT: KITCHEN : 320 SQ. FT. (L<br>SELF CONTAINED KITCHEN (PROPOSE | •  | 1                                  |
| OCCUPANCY CLASSIFICATION:  |   | CALCULATED OCCUPANT   |  | <u>4</u><br>4                      |
| THIS PROJECT: (KITCHEN)  | SPECIAL PURPOSE INDUSTRIAL OCCUPANCY (2018 NFPA 101 CH. 40)<br>LOW HAZARD   | INTERIOR FINISHES: (LSC T. A.10.2.2)                                      |  |                                    |
|  | GROUP F-1 (MODERATE HAZARD INDUSTRIAL - 2018 IBC)   | STORAGE SPACE (LSC CH 42.3.3)   |  |                                    |
|  | A) ASSEMBLY - EXISTING (2018 NFPA 101 CH. 13)<br>GROUP A-2 (303.3 - 2018 IBC)   | EXITS WALL & CEILING<br>EXITS FLOORS                                      | CLASS A OR CLASS B<br>I OR II  |                                    |
| (BREWERY)  | ) SPECIAL PURPOSE INDUSTRIAL OCCUPANCY (2018 NFPA 101 CH. 40)<br>LOW HAZARD<br>GROUP F-2 ( LOW HAZARD INDUSTRIAL - 2018 IBC)            | OTHER SPACESS<br>OTHER SPACESS FLOOR                                      | CLASS A,CLASS B OR C<br>N/A  | LASS C                             |
|  |   | EXIT ACCESS CORRIDORS   | CLASS A,CLASS B OR C   | LASS C                             |
| TYPE OF CONSTRUCTION:  | II B, UNPROTECTED, FULLY SPRINKLERED  | OFFICE SPACE (LSC CH 38.3.3)  |  |                                    |
|  | MENTS FOR BUILDING ELEMENTS: (HOURS) IBC TABLE 601)   |   |  |                                    |
| TYPE II (B)<br>STRUCTURAL FRAME  | 0   | EXITS WALL & CEILING<br>EXITS FLOORS                                      | CLASS A OR CLASS B   |                                    |
| BEARING WALLS- EXT.  | 0<br>0  | EXITSTEOORS   | I OK II  |                                    |
| BEARING WALLS INT.   | 0   | OTHER SPACESS   | CLASS A,CLASS B OR C   | LASS C                             |
| NON-BEARING WALLS  | 0   | OTHER SPACESS FLOOR   | N/A  |                                    |
| FLOOR CONSTRUCTION   | 0   |   |  |                                    |
| ROOF CONSTRUCTION  | 0   | EXIT ACCESS CORRIDORS   | CLASS A OR CLASS B   |                                    |
| ALLOWABLE BUILDING AREA & HEIG   | HT:   |   |  |                                    |
| ALLOWABLE BUILDING AREA=   |   | CLASS A: FLAME SPREAD 0-25; SMOK  |  |                                    |
| EQUATION 5-1   | Aa = [At+(NS x lf)]<br>Aa=[62,000 + (62,000 x 0.75)]<br>Aa=[62,000 + 45,500]  | CLASS B: FLAME SPREAD 26-75; SMO<br>CLASS C: FLAME SPREAD 76-200; SMO     |  |                                    |
| EQUATION 5-4   | Aa= 108,500 S.F.  | CLASS I: INTERIOR FLOOR FINISH SHA<br>RADIANT FLUX NOT LESS THAN 0.45 V   | W/cm2/   |                                    |
| $W = (L_1 \times W_1 + L_2) \\ W = (620 \times 30') / \\ W = 30$   | x w <sub>2</sub> + L <sub>3</sub> x w <sub>3</sub> ) /F<br>620  | CLASS II: INTERIOR FLOOR FINISH SHA<br>RADIANT FLUX NOT MORE THAN 0.22    |  |                                    |
| EQUATION 5-5   | V/20  |   |  |                                    |
| I <sub>f</sub> = [F/P - 0.25] V<br>I <sub>f</sub> = [620 / 620 - 0<br>I <sub>f</sub> = 0.75                                    |   |   |  |                                    |
| ALLOWABLE HEIGHT =<br>ALLOWABLE STORIES =<br>EXISTING BUILDING =<br>ACTUAL PROJECT AREA =<br>ACTUAL HEIGHT=<br>ACTUAL STORIES= | 75'-0" (IBC T 504.3)<br>FOUR (4) (IBC T 504.4)<br>21,008 Sq.Ft.<br>320 SQ. FT. (THIS PROJECT)<br>±29'-5" (EXISTING BUILDING)<br>ONE (1) |   |  |                                    |
|  |   |   |  |                                    |

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12/03/23

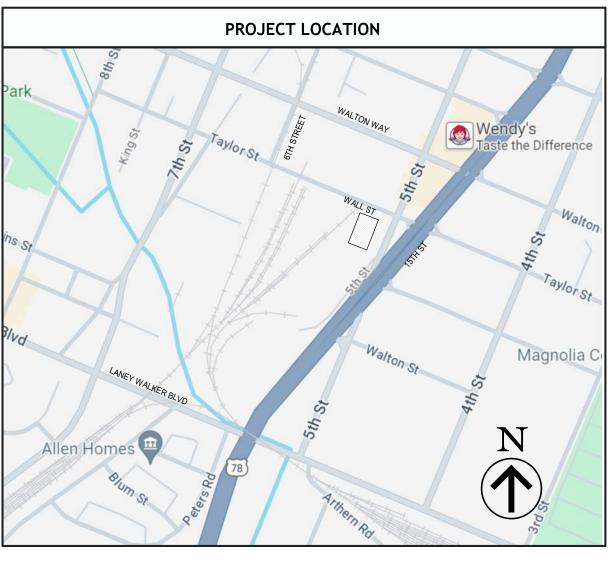


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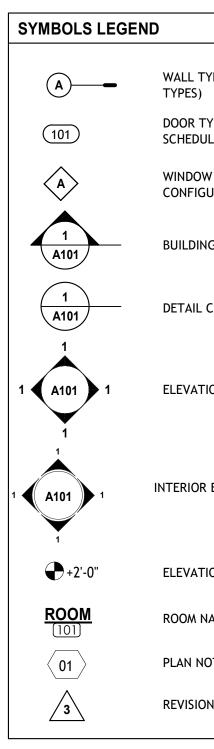


|    | DRAWING AND DIMENSION NOTES   |     | GENERAL PROJECT NOTES  |   |
|----|---|-----|--|---|
| 1. | THE CONTRACT DOCUMENT DRAWINGS HAVE BEEN PREPARED USING REVIT® SOFTWARE IN A<br>MICROSOFT WINDOWS ENVIRONMENT. A BUILDING INFORMATION MODEL (BIM) WAS DEVELOPED<br>SOLELY TO COMMUNICATE THE DESIGN TO THE OWNER AND IS NOT SUITABLE FOR ANY OTHER<br>PURPOSE. FOR EXAMPLE THE REVIT MODEL IS NOT SUITABLE FOR COST ESTIMATING,   | 1.  | ATTENTION ALL USERS OF THESE DRAWINGS, GENERAL CONTRACTORS,<br>SUB CONTRACTORS, MANUFACTURERS, SUPPLIERS: CAREFULLY AND<br>THOROUGHLY REVIEW THESE GENERAL NOTES. IT IS YOUR RESPONSIBILITY<br>TO KNOW AND ADHERE TO THESE REQUIREMENTS.   |   |
| 2. | SYSTEMS PERFORMANCE, COORDINATION, SCHEDULING, OR FACILITIES MANAGEMENT.<br>THESE DOCUMENTS WERE PRODUCED USING THE CONSTRUCTION SPECIFICATIONS INSTITUTE'S<br>UNIFORM DRAWING SYSTEM AND THE NATIONAL CAD STANDARD AS GUIDES.  | 2.  | DO NOT PRESUME THAT YOUR SCOPE OF WORK IS SINGULARLY DEFINED.<br>YOUR SCOPE OF WORK IS DEFINED THROUGHOUT THE ENTIRE SET OF<br>DRAWINGS AND SPECIFICATIONS AND IS NOT CONTAINED IN JUST ONE  |   |
| 3. | ANY INDICATION OF PROJECT LIMITS OR LINES OF DEMARCATION ARE SHOWN FOR THE<br>CONVENIENCE OF THE CONTRACTOR, AND ARE NOT TO BE TAKEN LITERALLY. ACTUAL CONTRACT<br>LIMITS ARE TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER BEFORE   |     | SERIES OF DRAWINGS OR DIVISION OF SPECIFICATIONS. YOU MUST REVIEW<br>THE ENTIRE SET OF CONTRACT DOCUMENTS TO DETERMINE YOUR SCOPE<br>OF WORK.  |   |
|    | ACTUAL CONSTRUCTION WORK BEGINS.<br>DRAWINGS ARE PREPARED USING DIMENSIONS AND PRODUCT CONFIGURATIONS OR DETAILS OF<br>SPECIFIC MANUFACTURERS. DIMENSIONS AND DETAILS FOR SPECIFIC PRODUCTS MAY CHANGE<br>BEFORE THEY ARE ACTUALLY INCORPORATED INTO THE WORK, AND PRODUCTS BY OTHER<br>MANUFACTURERS ARE ALSO ACCEPTABLE. THEREFORE, ACTUAL INSTALLATION DETAILS AND<br>DIMENSIONS MAY DIFFER FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY INSTALLATION<br>REQUIREMENTS FOR ALL PRODUCTS TO BE INCORPORATED IN THE WORK (INCLUDING THICKNESSES<br>FOR RECESSED OR SEMI-RECESSED PRODUCTS), AND IS RESPONSIBLE FOR ACCOMMODATING AND | 3.  | EVERY EFFORT HAS BEEN MADE TO MAKE THESE DOCUMENTS CONCISE<br>AND COORDINATED, TO DEFINE WORK IN THE MOST LOGICAL PLACE AND<br>TO ELIMINATE REDUNDANCY. KEEP IN MIND HOWEVER THAT YOUR SCOPE<br>OF WORK CAN BE CONTAINED IN VARIOUS PLACES, WITH VARYING<br>DESCRIPTIONS. DO NOT CONSIDER THAT THERE IS ONE CUSTOMARY<br>PLACE TO LOCATE YOUR WORK. THERE IS A DANGER OF OMITTING WORK<br>FROM YOUR SCOPE BECAUSE THE ENTIRE SET OF DOCUMENTS WAS NOT<br>REVIEWED. | RCHITES<br>CHITES   |
|    | COORDINATING CHANGES TO OTHER MATERIALS OR PRODUCTS THAT ARE NECESSARY BECAUSE OF<br>THESE DIFFERENCES.<br>THE DRAWINGS AND SPECIFICATIONS ARE SEPARATED INTO DISCIPLINES FOR CONVENIENCE. THE  | 4.  | MECHANICAL AND ELECTRICAL DRAWINGS SHOW INFORMATION IN A<br>DIAGRAMMATIC FASHION WITHOUT DIMENSIONING. THE GENERAL<br>CONTRACTOR IS TO COORDINATE THE LOCATIONS OF ALL MECHANICAL<br>AND ELECTRICAL EQUIPMENT WITH RESPECT TO THE ARCHITECTURAL AND  | BOX 126 GIBSON, GA 3081   |
|    | SEPARATIONS USED ARE USED ONLY FOR THE PURPOSES OF CONVENIENCE AND REFERENCE AND IN<br>NO WAY DO THEY DEFINE OR LIMIT THE SCOPE OR INTENT OF ANY PART OF THE DRAWINGS, OR<br>OF THE DRAWINGS AND SPECIFICATIONS AS A WHOLE. THE FACT THAT THE DRAWINGS ARE<br>SEPARATED IN NO WAY SUGGESTS THAT THE WORK IS NOT TO BE CONSTRUCTED AS A COMPLETE,<br>INTEGRATED AND UNIFIED WHOLE.   | 5.  | STRUCTURAL DETAILING OF SHAFTS, CHASES, AND SUCH.<br>THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH SITE<br>CONDITIONS AS THEY MAY AFFECT CARRYING OUT THE WORK AS<br>DESCRIBED IN THESE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL  | (706) 551-3812 <sup>©21</sup><br>FLDESIGN.ARCH@GMAIL.COM<br>3587 BEALL SPRINGS ROAD GIBSON, GA 3081 |
|    | THE DRAWINGS AND SPECIFICATIONS, INCLUDING DRAWINGS PREPARED BY SPECIFIC ENGINEERING<br>DISCIPLINES (SUCH AS CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, ETC.) ARE<br>COMPLEMENTARY; ITEMS SHOWN IN ANY ONE LOCATION IN THE DRAWINGS SHALL BE CONSIDERED<br>TO BE REQUIREMENTS OF THE CONTRACT FOR CONSTRUCTION. IN THE EVENT OF AN  | 6.  | INVESTIGATE, VERIFY, AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE<br>PROJECT, AND NOTIFY THE ARCHITECT OF ANY CONDITIONS THAT REQUIRE<br>MODIFICATION BEFORE PROCEEDING WITH THE WORK.<br>THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOR,  |   |
|    | INCONSISTENCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT,<br>THE CONTRACTOR SHALL SEEK CLARIFICATION OR INTERPRETATION FROM THE ARCHITECT PRIOR<br>TO BIDDING. WHERE INCONSISTENCIES ARE NOT CLARIFIED PRIOR TO BIDDING, AND WHERE THE<br>ACTUAL SOLUTION OR INTENT CANNOT BE REASONABLY INFERRED, THE CONTRACTOR SHALL   | 7.  | AND SERVICES NECESSARY TO COMPLETE THE WORK.<br>ALL PERSONS DIRECTLY OR INDIRECTLY ASSOCIATED WITH THE PROJECT<br>SHALL BE FAMILIAR WITH THE RULES AND REGULATIONS OF THE  | ATION   |
|    | PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK.<br>USE OF THE WORD "VERIFY" POINTS OUT A SITUATION WHICH MUST BE<br>CONFIRMED PRIOR TO PROCEEDING WITH THE WORK, FABRICATION OF<br>EQUIPMENT, OR ORDERING MATERIAL. NOTIFY THE ARCHITECT OF ANY   | 8.  | OCCUPATIONAL SAFETY AND HEALTH ACT, AND IMPLEMENT THOSE RULES<br>AS THEY APPLY TO THIS PROJECT.<br>ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE BUILDING<br>CODES AS NOTED ON CODE SHEETS.   | L LOC   |
|    | DISCREPANCY DISCOVERED.<br>THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE<br>ARCHITECT IMMEDIATELY SHOULD ANY DISCREPANCIES BE FOUND IN THE<br>DRAWINGS AND SPECIFICATIONS.  | 9.  | CONTRACTOR SHALL SUBMIT CONFIRMATION OF ORDERED MATERIALS OR<br>ITEMS NECESSARY TO COMPLETE THE PROJECT WITH PROJECTED<br>DELIVERY DATE GREATER THAN FOUR WEEKS.   | TES AND   |
|    | THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL FIELD<br>CONDITIONS AND DIMENSIONS AS THEY RELATE TO THIS PROJECT. SHOULD<br>DISCREPANCIES EXIST BETWEEN THE WORK INDICATED AND ACTUAL FIELD CONDITIONS NOTIFY   | 10. | ALL SUBCONTRACTORS SHALL SUBMIT SHOP DRAWINGS AS REQUIRED FOR<br>APPROVAL PRIOR TO COMMENCING ANY WORK.<br>THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE   | DATE: 02/05/24  |
| D. | THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.<br>DO NOT SCALE THE DRAWINGS. DRAWING SCALES AS INDICATED ARE FOR<br>REFERENCE ONLY AND ARE NOT INTENDED TO ACCURATELY DEPICT ACTUAL OR DESIGNATED   | 12. |  | PROJECT NO:2208REVISIONDATE   |
| 1. | CONDITIONS. WRITTEN DIMENSIONS SHALL GOVERN.<br>ALL EXTERIOR WALLS ARE DIMENSIONED TO THE EXTERIOR FACE OF STUD OR CMU. ALL INTERIOR<br>WALLS ARE DIMENSIONED TO THE CENTERLINE OF METAL STUDS OR FACE OF CMU. INTERIOR   |     | PROTECTING ALL UTILITY LINES. LOCATIONS SHOWN ARE APPROXIMATE.<br>REPAIR ALL DAMAGE TO UTILITY LINES CAUSED BY CONSTRUCTION<br>OPERATIONS AT NO COST TO THE OWNER.   |   |
| 2. | DIMENSIONS FROM EXTERIOR WALLS START AT THE INTERIOR FACE OF METAL STUD OR<br>CMU. (UNLESS NOTED OTHERWISE)<br>THE TERM "ALIGN" REFERS TO LOCATING DIFFERENT COMPONENTS OF  | 13. | PROVIDE SEALANT AT ALL JOINTS OR CRACKS THAT OCCUR WHERE<br>DISSIMILAR MATERIALS INTERSECT PERPENDICULAR TO EACH OTHER, AND<br>THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE ON<br>THE DRAWINGS.   | NOTES:  |
| 3. | CONSTRUCTION TO PROVIDE A FLUSH FINISH SURFACE.<br>SHOULD DIMENSIONS BE MISSING OR CONFLICTING, NOTIFY ARCHITECT PRIOR TO PROCEEDING<br>WITH RELATED WORK.  | 14. | ALL PENETRATIONS AT SMOKE AND FIRE RATED WALLS, FLOORS, OR<br>CEILINGS, SHALL BE PROTECTED, SEALED OR DAMPERED USING ONLY U.L.<br>AND/OR I.C.B.O. APPROVED METHODS, MATERIALS AND INSTALLATION.  |   |
| 4. | SEE ENLARGED FLOOR PLANS FOR ANY & ALL DIMENSIONS AND WALL TYPES THAT MAY NOT BE<br>REFERENCED ON THE OVERALL FLOOR PLAN (UNLESS NOTED OTHERWISE)   | 15. | CONTRACTOR SHALL TAKE CARE TO MAINTAIN FIRE PROTECTION<br>SYSTEMS. REPLACE FIRE-PROOFING AND SEALANTS TO ORIGINAL STATE<br>WHERE DISTURBED BY CONSTRUCTION.  | KE KE   |
|    |   | 16. | PROVIDE FINISHED COAT OF PAINT ALL EXPOSED STEEL - COORDINATE<br>WITH FINISH SCHEDULE.<br>CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING AND  | BRE   |
|    |   | 17. | TYPICAL DETAILS MAY NOT NECESSARILY BE REFERENCED ON THE<br>DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE.  | <sup>2</sup> IVER   |
|    |   | 19. | SECURITY AND SAFETY ARE THE CONTRACTOR'S RESPONSIBILITY.<br>COORDINATE WITH CONTRACTING OFFICER'S REPRESENTATIVE.  | NA RIV<br>EN<br>REET<br>GA 30901  |
|    |   |     | PROJECT LOCATION   | PROJECT:<br>SAVANN<br>KITCHE<br>813 5TH STF<br>813 5TH STF<br>AUGUSTA, G                            |



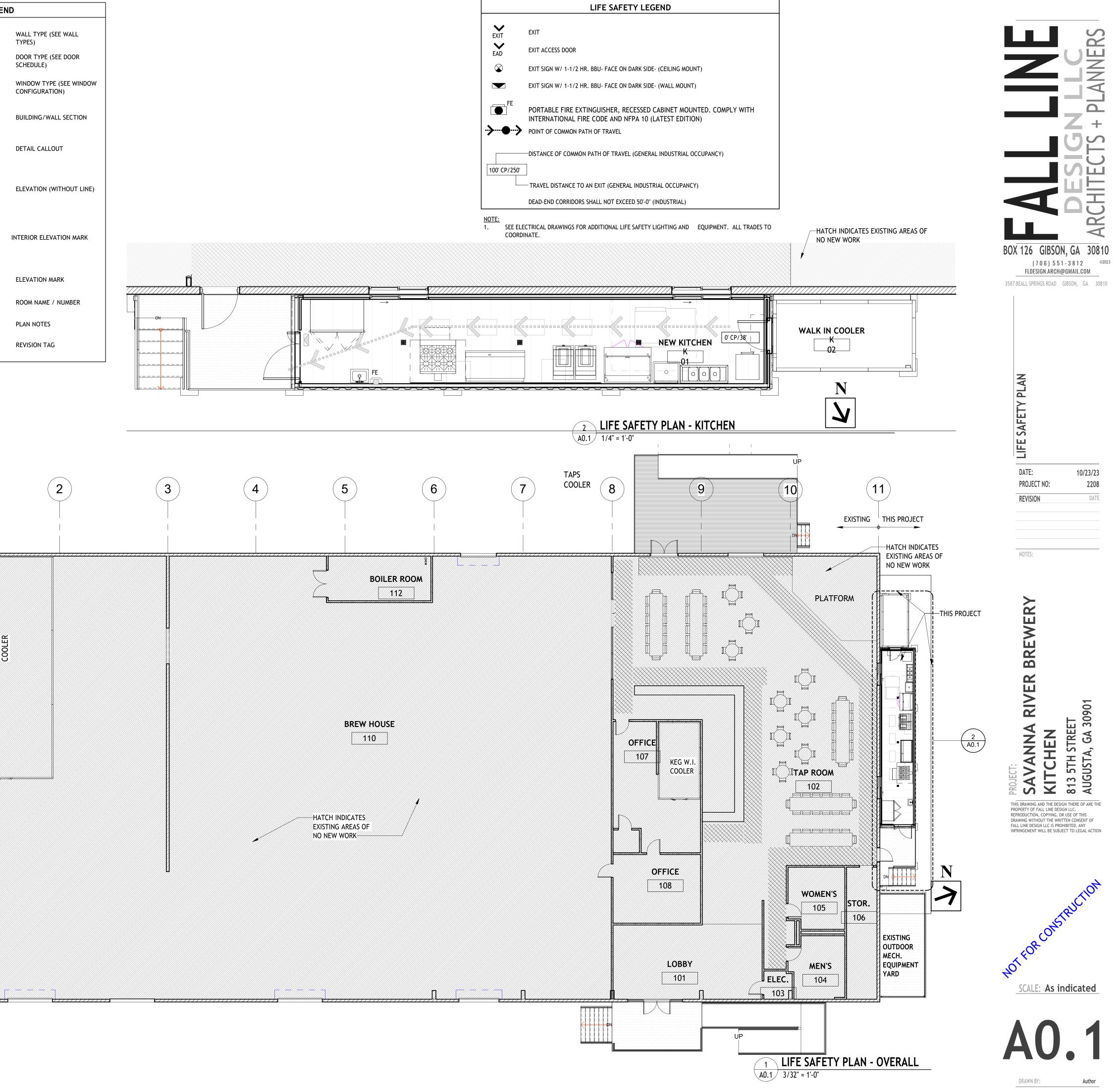






WALK IN COOLER

1



DETAIL CALLOUT

WINDOW TYPE (SEE WINDOW

CONFIGURATION)

#### **DEMOLITION NOTES:**

9

- ALL DIMENSIONS SHOULD BE FIELD VERIFIED BY G.C. BEFORE ANY 1. DEMOLITION TO EXISTING STRUCTURE PHASE, OR NEW CONSRTUCTION PHASE IS STARTED.
- ALL EXISTING INTERIOR/EXTERIOR WALL DIMENSIONS ARE SHOWN 2 TO THE EXISTING FINISHED FACE OF WALLS UNLESS NOTED OTHERWISE.
- THE GENERAL CONTRACTOR SHALL FURNISH ALL LABOR AND 3 MATERIALS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL.
- THE GENERAL CONTRACTOR SHALL SEAL OFF, REMOVE OR RENDER 4 INACTIVE ALL EXISTING TELECOMMUNICATION, ELECTRICAL, PLUMBING LINES, DUCTWORK, FIXTURES AND OUTLETS THAT ARE INACTIVE AND/OR CANNOT BE INCORPORATED IN THE RENOVATION.
- 5 THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ADEQUATE PRECAUTIONS TO PROTECT BUILDING OCCUPANTS, MATERIALS AND EXISTING FINISHES THROUGHOUT ALL PHASES OF CONSTRUCTION AREAS AND OCCUPIED OR PUBLIC AREAS TO MAINTAINED BY CONTRACTOR. DAMAGE TO EXISTING-TO-REMAIN CONSTRUCTION, MATERIALS OR EQUIPMENT TO BE RESTORED TO ORIGINAL CONDITION.
- ALL WORK DEMOLISHED SHALL BE REMOVED FROM PREMISES DAILY. 6. 7. THE GENERAL CONTRACTOR SHALL REMOVE ALL WALL CONDUITS, SWITCH PLATES, TELEPHONE OR ELECTRICAL WIRING OR EQUIPMENT,

ECT. TO THE SOURCE AFTER WALL DEMOLITION.

- REFER TO ATTACHED FLOOR PLANS FOR EXISTING CONSTRUCTION TO 8
- REMAIN, EXTENT OR DEMOLITION, AND SCHEDULED ITEMS FOR RELOCATION.
- REMOVE EXISTING MECHANICAL COMPONENTS AS REQUIRED TO

DESCRIPTION OF WORK:

REQUIRED TO ACCOMMODATE NEW CONSTRUCTION ADDITIONS.

JOB CONDITIONS:

CONDITION OF STRUCTURES: OWNER ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITIONS OF ITEMS OR STRUCTURES TO BE DEMOLISHED.

PARTIAL DEMOLITION AND REMOVAL:

ALL MATERIAL AND EQUIPMENT FROM DEMOLITION, NOT RETAINED BY THE OWNER, SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE JOB SITE COMPLETELY.

DEMOLITION WORK.

PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING, OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF STRUCTURE OR ELEMENT TO BE DEMOLISHED, AND ADJACENT FACILITIES OR WORK TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL DESIGN OF ALL PROTECTIVE DEVICES.

INSPECTION:

|   | 10. REMOVE ALL ABANDO | HVAC DESIGN AND DUE TO C<br>NED/UNUSED LOW-VOLTAGE<br>THE SOURCE TO SOURCE TH | , TELEPHONE AND | PRIOR TO COMMENCEMENT<br>EQUIPMENT OR TO SURROL<br>STARTING WORK. |
|---|-----------------------|---|-----------------|---|
| 1 |                       | 2   |                 | 3   |
| / | 23' - 9 1/2"          |   | 24' - 3 1/2"    |   |
|   |                       |   |                 |   |

/\_\_\_\_///\_\_\_///\_\_\_///\_\_\_///\_\_\_///\_\_\_///\_\_\_///\_\_\_///

#### SELECTIVE DEMOLITION SPECIFICATION:

EXTENT OF SELECTIVE DEMOLITION WORK IS INDICATED ON DRAWINGS.

TYPE OF SELECTIVE DEMOLITION WORK REQUIRED INCLUDES BUT IS NOT LIMITED TO THE SELECTIVE REMOVAL AND SUBSEQUENT OFF SITE DISPOSAL OF THE FOLLOWING:

PORTIONS OF EXISTING BUILDING, CONCRETE PADS, AND WALKS, CONCRETE STEPS, HANDRAILS AND OTHER MISCELLANEOUS ITEMS INDICATED ON THE DRAWINGS TO BE REMOVED AND AS

STORAGE OF REMOVED ITEMS ON SITE, WHICH ARE NOT TO BE REINSTALLED, WILL NOT BE PERMITTED.

PROTECTIONS: PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE

CONTRACTOR SHALL PROVIDE, INSTALL, AND OTHERWISE BE RESPONSIBLE FOR ANY AND ALL MATERIALS, EQUIPMENT, TOOLS, DEVICES, AND/OR APPARATUS REQUIRED TO PROTECT AND MAINTAIN EXISTING STRUCTURES IN A STATIONARY AND SAFE CONDITION.

PROTECT FROM DAMAGE EXISTING FINISH WORK THAT IS TO REMAIN IN PLACE AND BECOMES EXPOSED DURING DEMOLITION OPERATIONS.

DAMAGES: PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION WORK AT NO COST TO OWNER.

T OF SELECTIVE DEMOLITION WORK, INSPECT AREA IN WHICH WORK WILL BE PERFORMED. PHOTOGRAPH EXISTING CONDITIONS TO STRUCTURE SURFACES, UNDING PROPERTIES WHICH COULD BE MISCONSTRUED AS DAMAGE RESULTING FROM SELECTIVE DEMOLITION WORK; FILE WITH OWNER'S REPRESENTATIVE PRIOR TO PREPARATION:

PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING, OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURES TO BE DEMOLISHED AND ADJACENT FACILITIES TO REMAIN.

MADE FOR CONTINUING OPERATIONS.

DEMOLITION:

CLEAN-UP AND REPAIR:

GOVERNING REGULATIONS.

DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS. CUT CONCRETE AND MASONRY AT JUNCTURES WITH CONSTRUCTION TO REMAIN USING POWER-DRIVEN MASONRY SAW OR HAND TOOLS; DO NOT USE POWER DRIVEN IMPACT TOOLS.

COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FORM DEMOLITION WORK. PROVIDE FILL CONSISTING OF APPROVED EARTH, GRAVEL OR SAND, FREE OF TRASH AND DEBRIS, STONE OVER 6" DIAMETER, ROOTS OR OTHER ORGANIC MATTER.

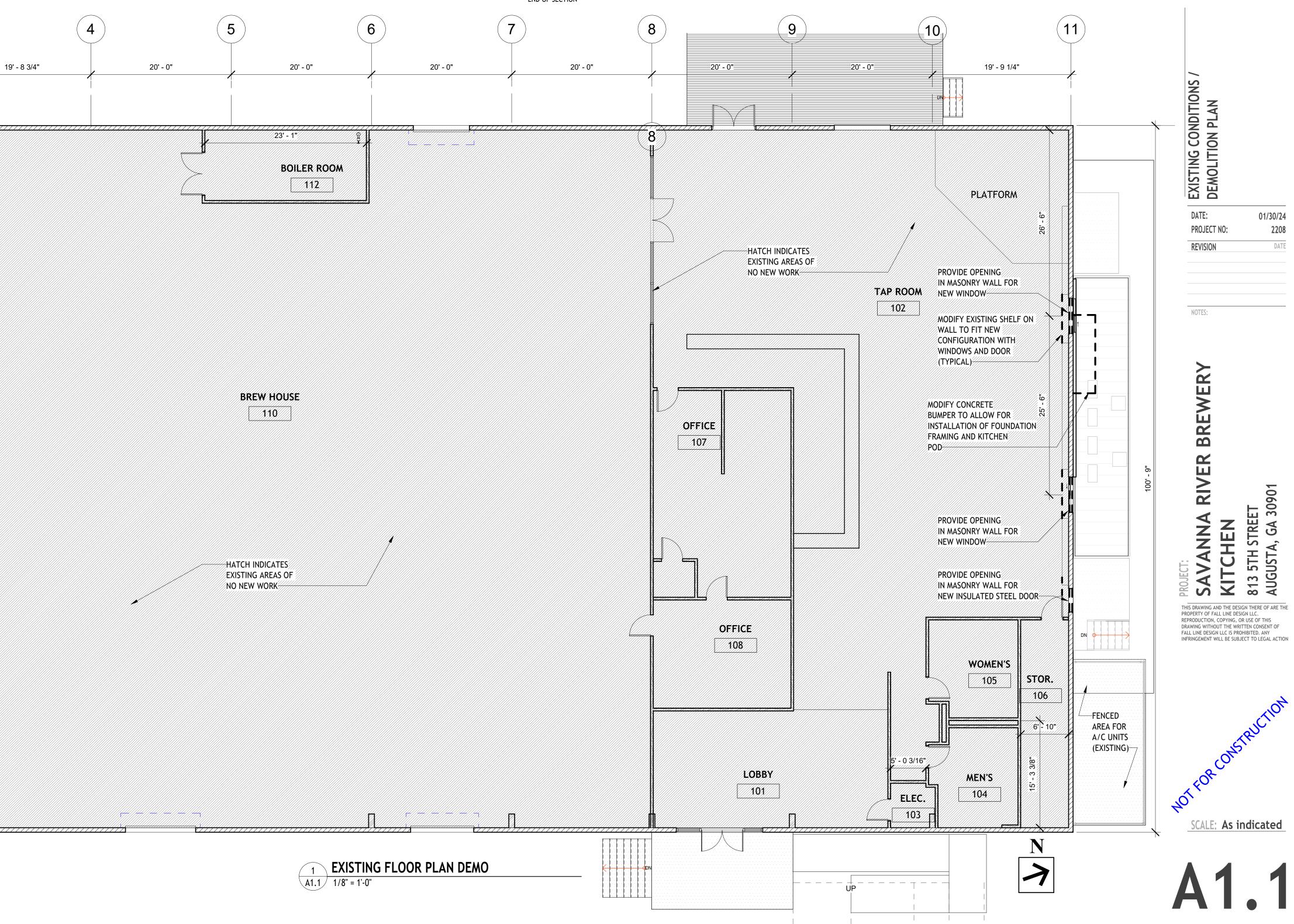
IF UNANTICIPATED MECHANICAL, ELECTRICAL OR STRUCTURAL ELEMENTS WHICH CONFLICT WITH INTENDED FUNCTION OF DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE BOTH NATURE AND EXTENT OF THE CONFLICT. SUBMIT REPORT TO OWNER'S REPRESENTATIVE IN WRITTEN, ACCURATE DETAIL. DISPOSAL OF DEMOLISHED MATERIALS:

REMOVE DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS FROM BUILDING SITE. TRANSPORT AND LEGALLY DISPOSE OF MATERIALS REFUSED BY THE OWNER OFF SITE. REMOVE ALL HAZARDOUS MATERIALS DURING DEMOLITION OPERATIONS PER ENVIRONMENT REPORT, COMPLY WITH APPLICABLE REGULATIONS, LAWS, AND ORDINANCES CONCERNING REMOVAL, HANDLING AND PROTECTION AGAINST EXPOSURE OR ENVIRONMENTAL POLLUTION.

BURNING OR REMOVED MATERIALS IS NOT PERMITTED ON PROJECT SITE.

UPON COMPLETION OF DEMOLITION WORK, REMOVE TOOLS, EQUIPMENT AND DEMOLISHED MATERIALS FROM SITE. REMOVE PROTECTIONS AND LEAVE INTERIOR AREAS BROOM CLEAN. REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. RETURN STRUCTURES AND SURFACES TO REMAIN TO CONDITION EXISTING PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION WORK. REPAIR ADJACENT CONSTRUCTION OR SURFACES SOILED OR DAMAGED BY SELECTIVE DEMOLITION WORK.

END OF SECTION



CEASE OPERATIONS AND NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF SAFETY OF STRUCTURE APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO SUPPORT STRUCTURE UNTIL DETERMINATION IS

PERFORM SELECTIVE DEMOLITION WORK IN A SYSTEMATIC MANNER. USE SUCH METHODS AS REQUIRED TO COMPLETE WORK INDICATED ON DRAWINGS IN ACCORDANCE WITH DEMOLITION SCHEDULE AND



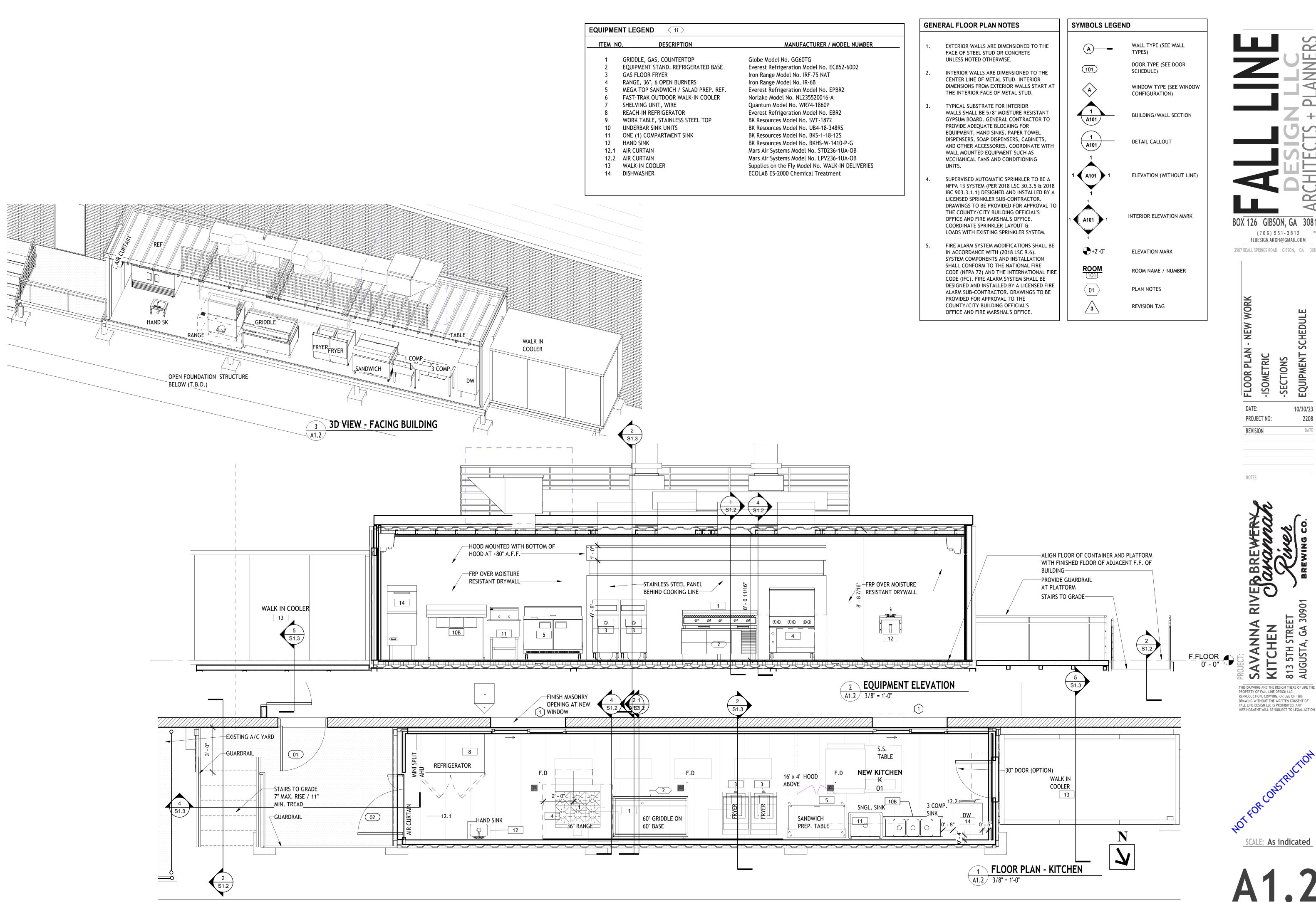
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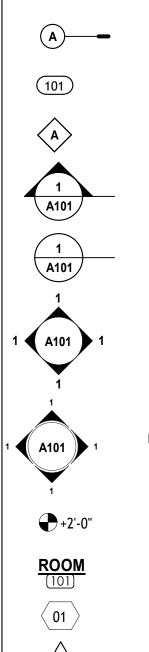
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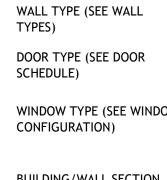
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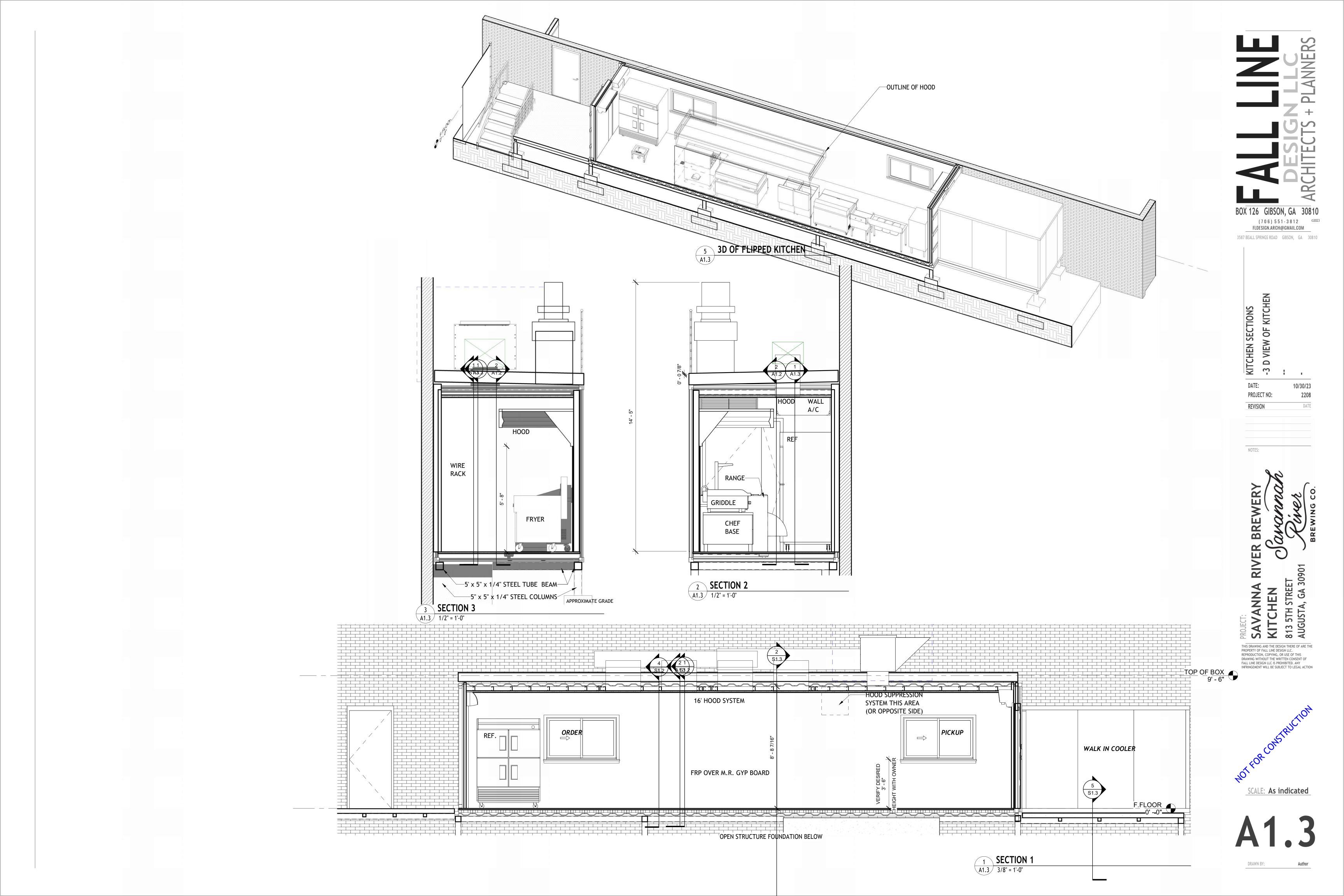


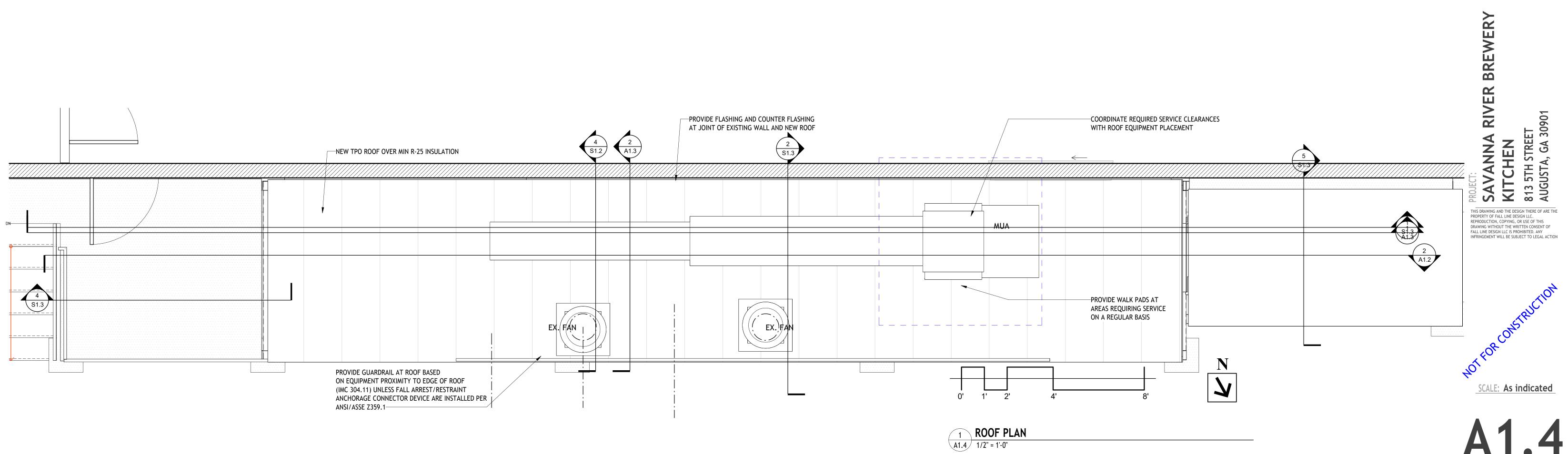






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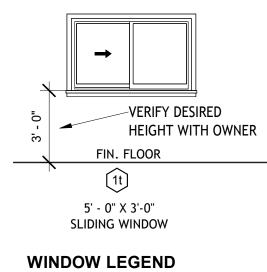


|             |                 |             | FINI       | SH S   | SCHE   | EDUL      | F      |         |         |
|-------------|-----------------|-------------|------------|--------|--------|-----------|--------|---------|---------|
| ROOM        |                 | FLOOR       | BASE       |        |        | DIRECTION |        | CEILING |         |
| NO.         | ROOM NAME       | MATERIAL    | MATERIAL   | NORTH  | SOUTH  | EAST      | WEST   | FINISH  | REMARKS |
|             |                 |             |            |        |        |           |        |         |         |
| K 01        | NEW KITCHEN     | NON SLIP    |            | FRP    | FRP    | FRP       | FRP    | FRP     |         |
| K 02        | WALK IN COOLER  | BY MFR.     |            | BY MFR | BY MFR | BY MFR    | BY MFR | BY MFR  |         |
|             |                 |             |            |        |        |           |        |         |         |
| <u>NOTE</u> | :.<br><u>-</u>  |             |            |        |        |           |        |         |         |
| 1.          | ALL COLORS TO E | BE APPROVED | BY THE OWN | ER.    |        |           |        |         |         |

- OTHERWISE.

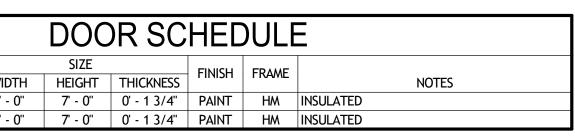
| MATERIAL | CONF. | WID    |
|----------|-------|--------|
| METAL    |       | 3' - ( |
| METAL    |       | 4' - ( |
|          | METAL | METAL  |

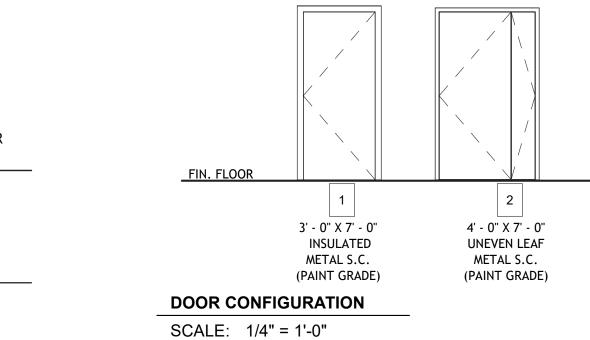
NOTE: 1. ALL HOLLOW METAL (HM) DOOR FRAMES TO BE PAINTED. 2. NEW DOOR TO MATCH EXISTING DOORS



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

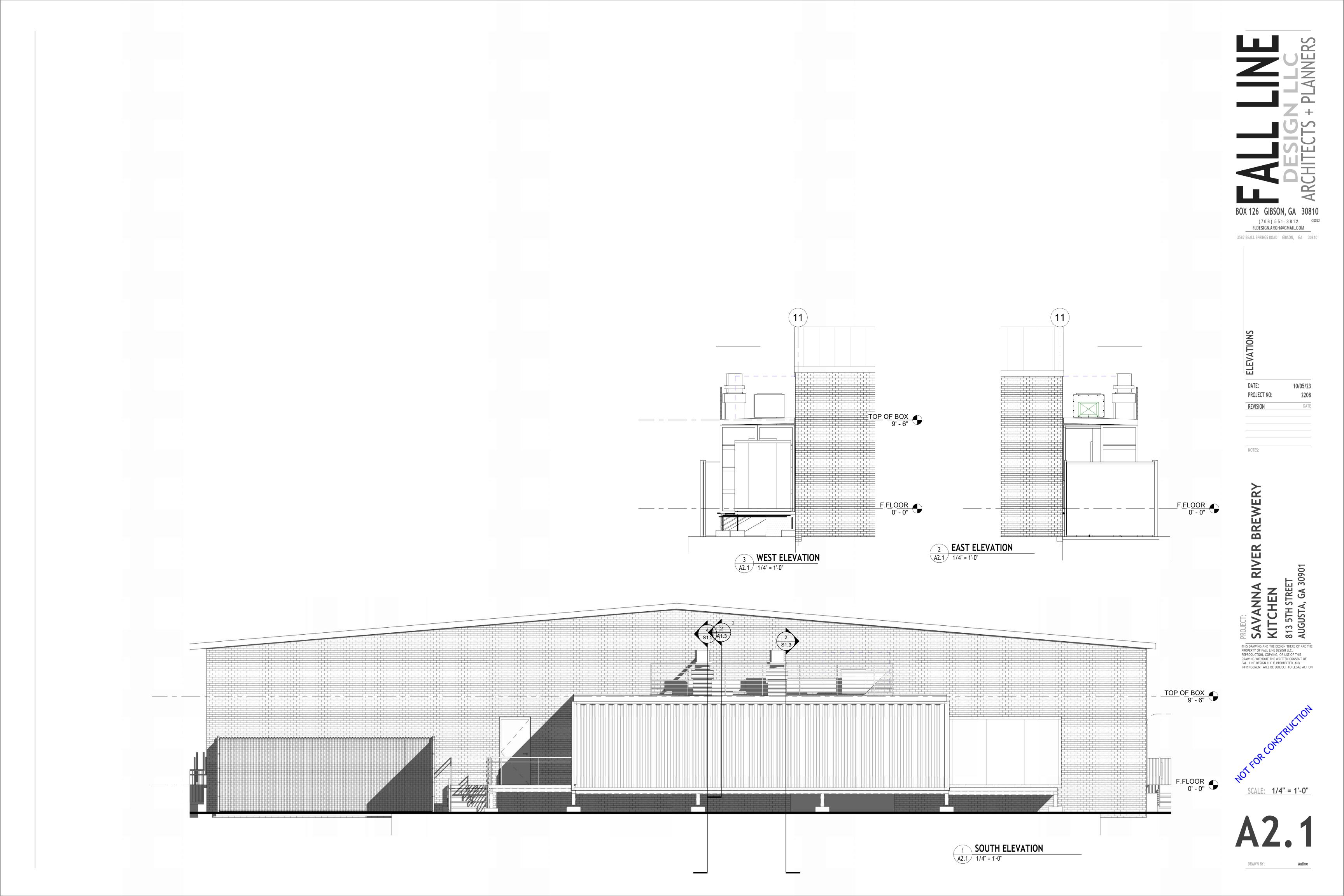
2. INTERIOR WALL FINISHES ARE BASED ON THE INTENTION THAT ALL FLOOR PLANS ARE ORIENTED PLAN NORTH, UNLESS NOTED 3. ALL FLOORING TRANSITIONS TO OCCUR BENEATH DOORS.

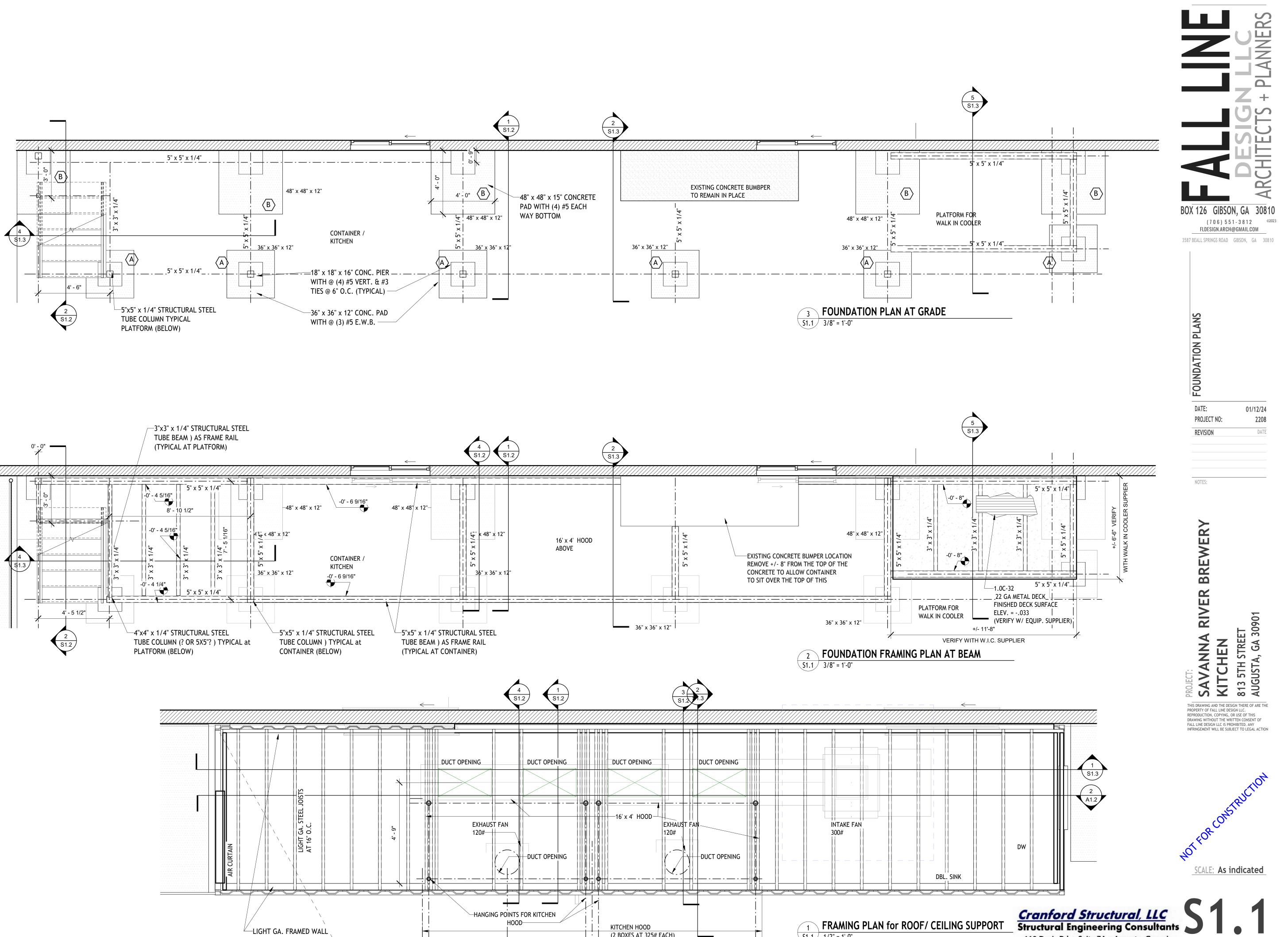


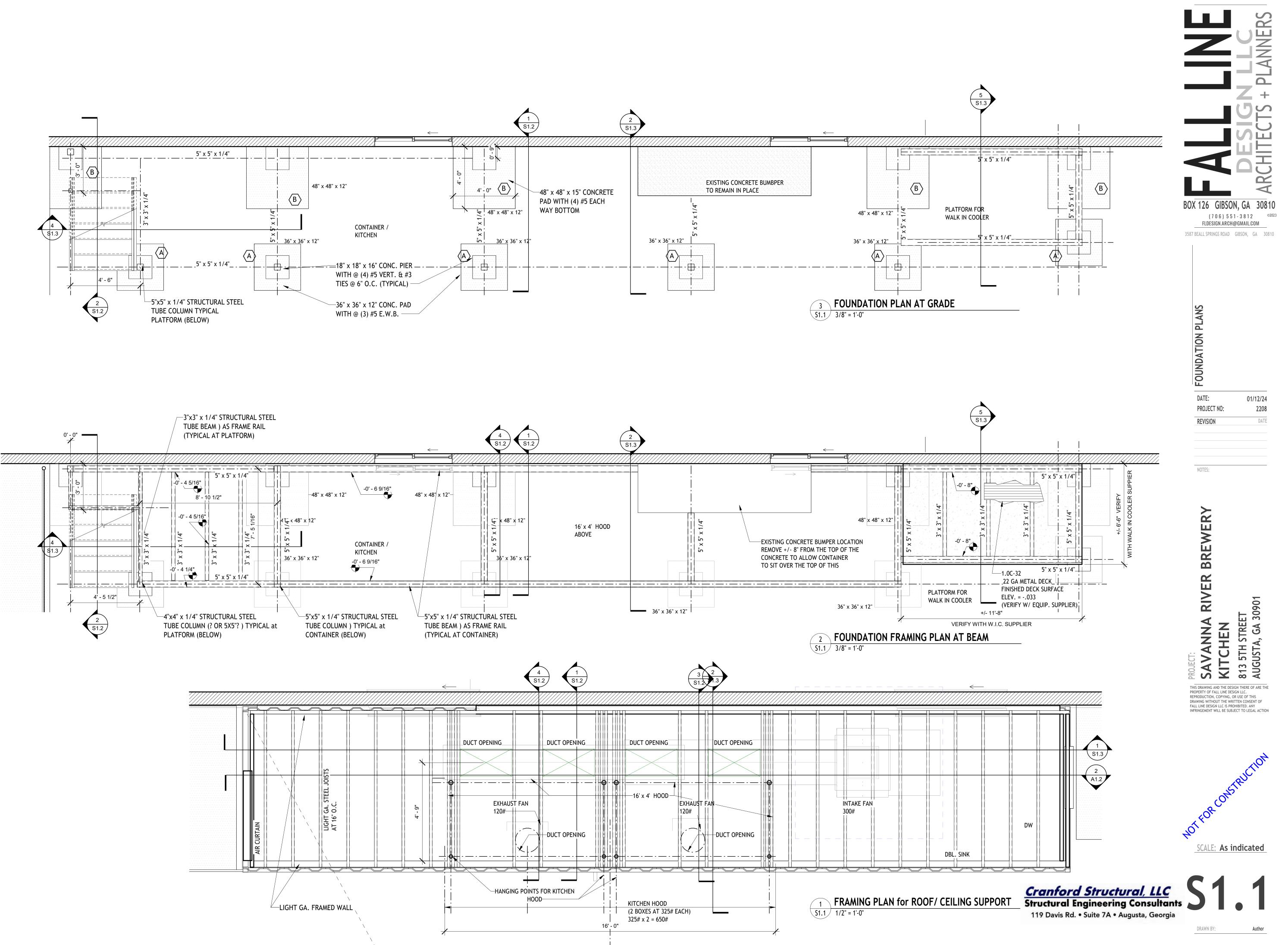


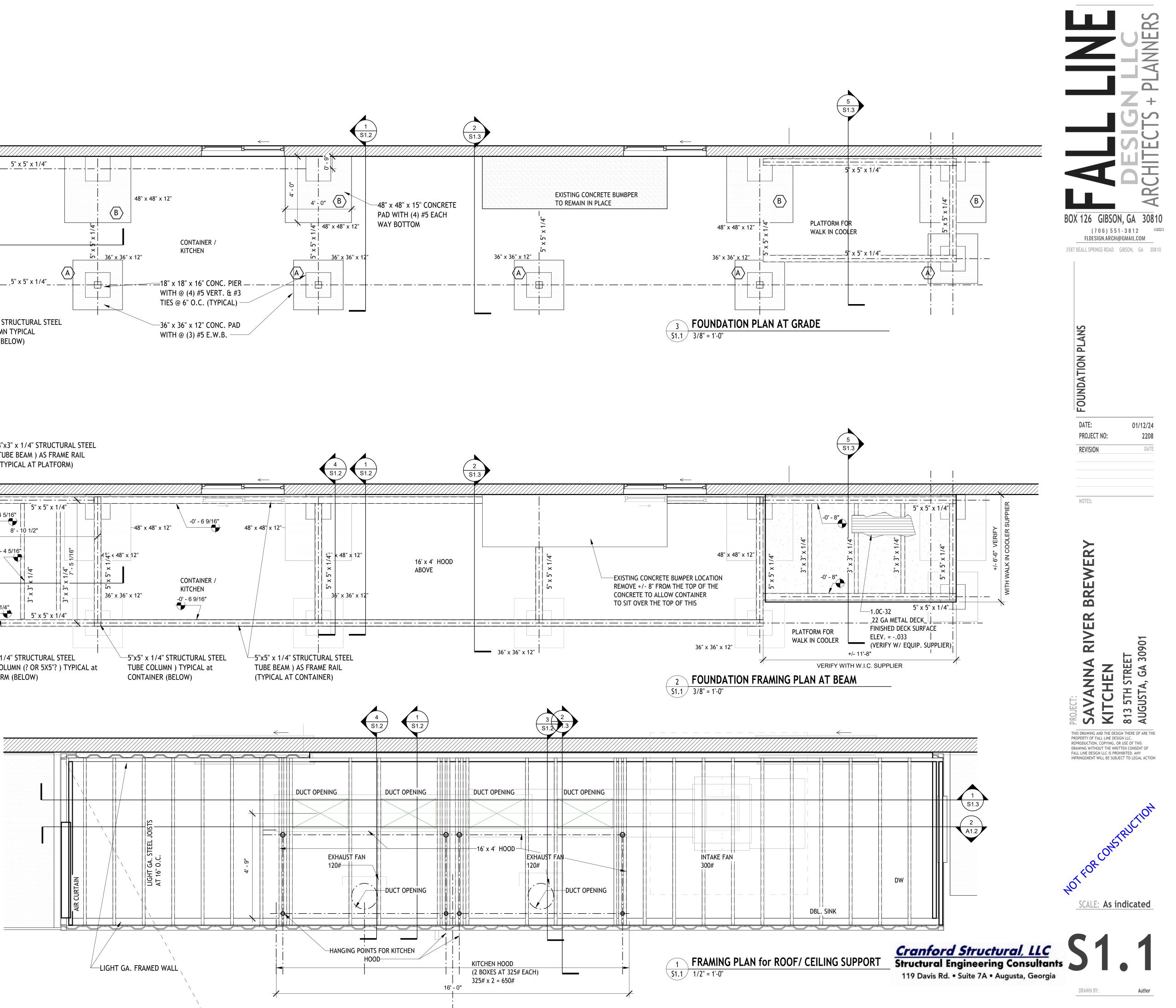


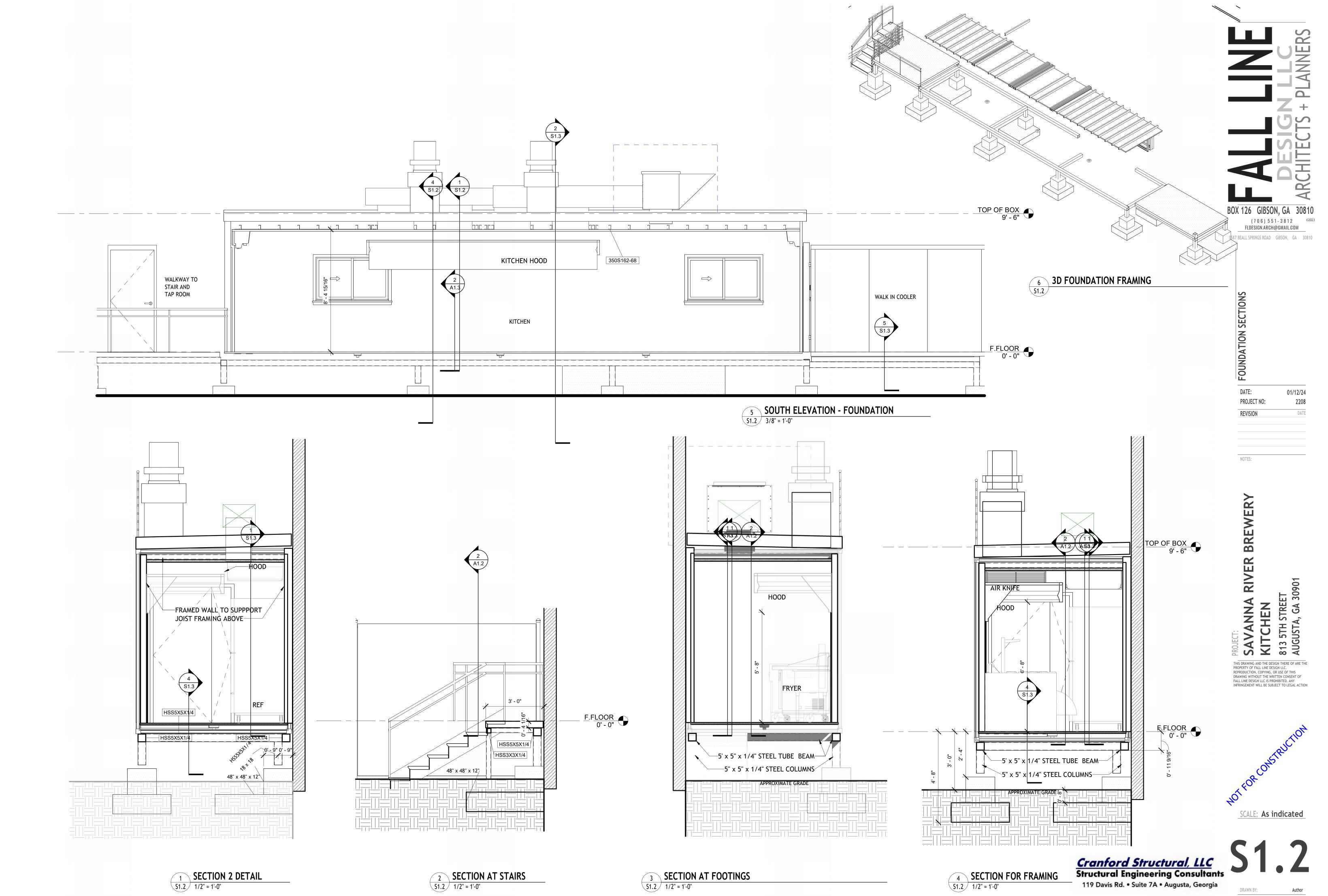
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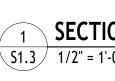


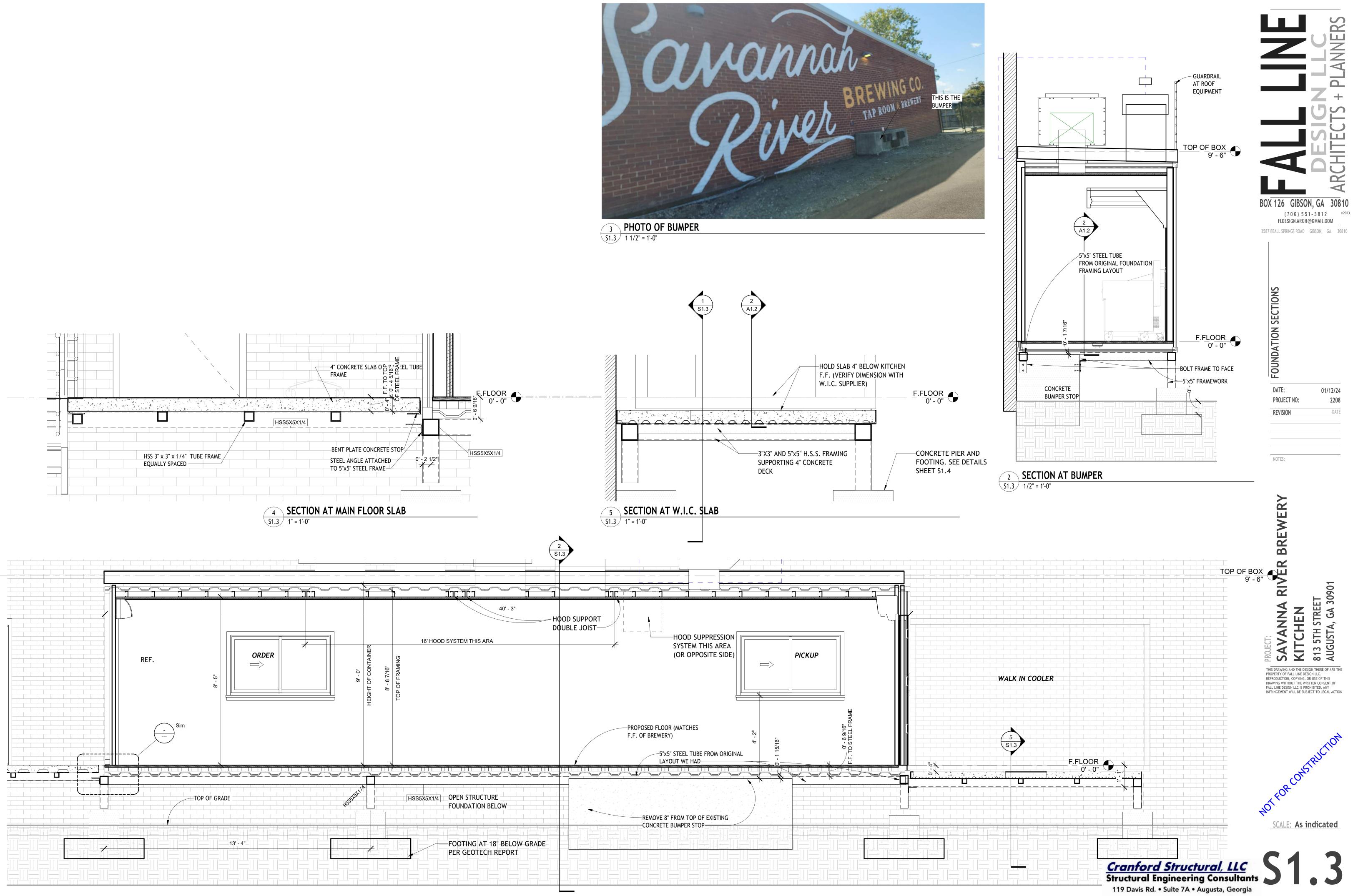


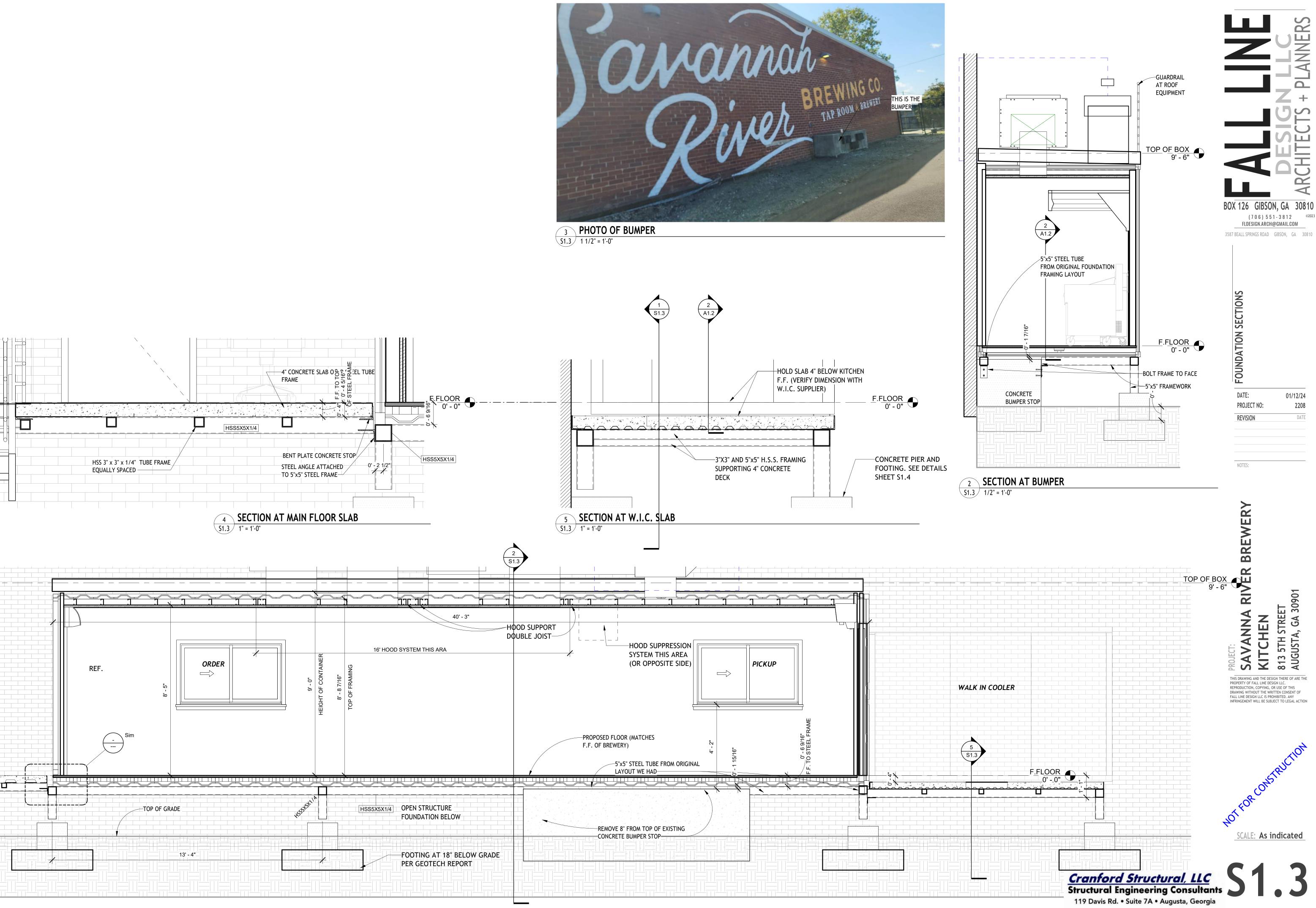




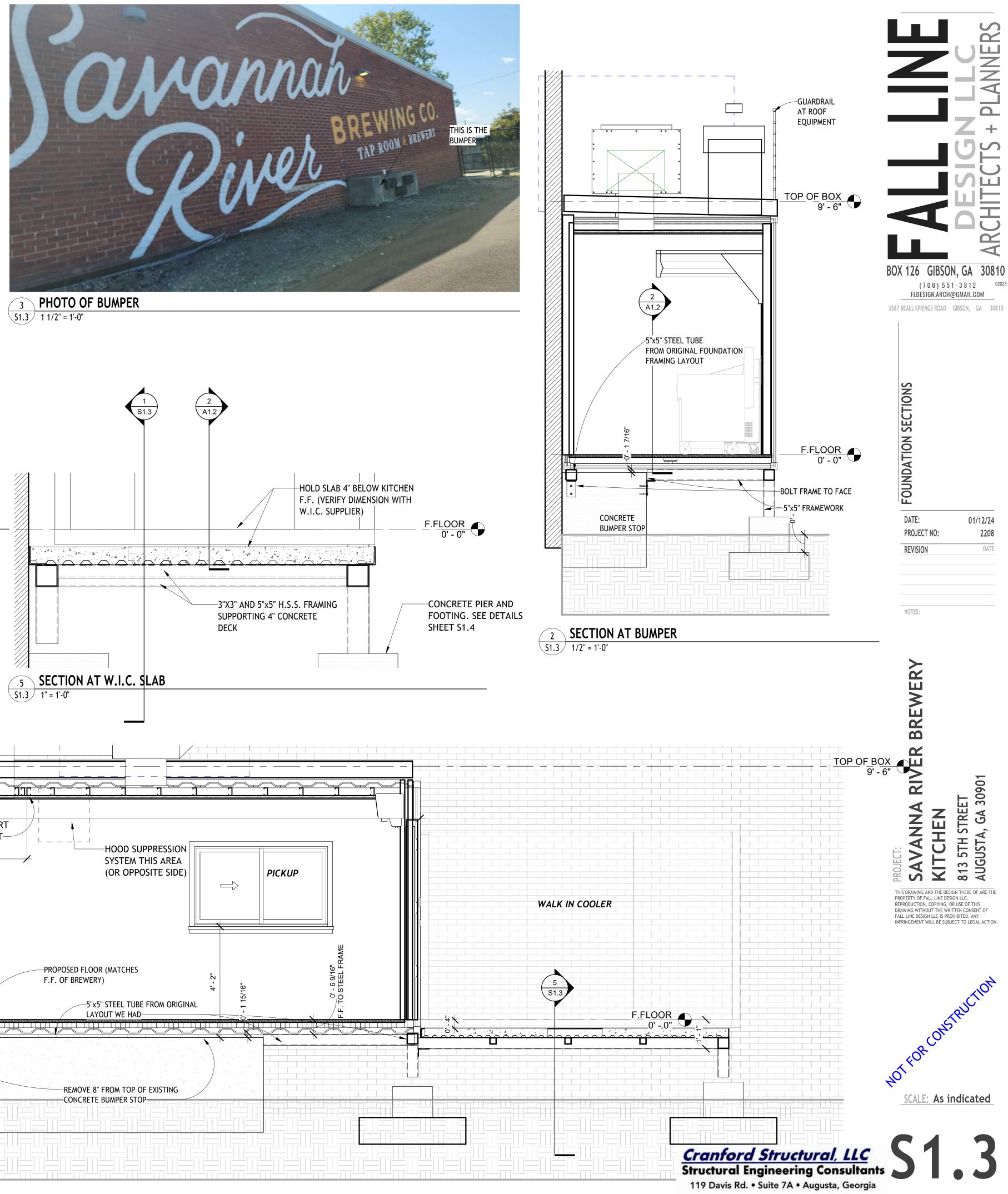








# 1SECTION Wide across Bumper\$1.31/2" = 1'-0"



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# GENERAL STRUCTURAL NOTES

**GENERAL REQUIREMENTS** 1. WHERE A SECTION OR DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APP SIMILAR CONDITIONS.

- 2. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMP SUPPORTS, ETC. SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- DO NOT SCALE DRAWINGS. FOLLOW DIMENSIONS SHOWN ON PLANS. 3. 4. CONTRACTOR SHALL COORDINATE AND VERIFY ALL DIMENSIONS AND ELEVAT SHOWN HEREIN WITH PLANS, SECTIONS, AND DETAILS PRIOR TO CONSTRUCT MATERIAL PURCHASE. SEE DRAWINGS FOR ALL DIMENSIONS AND ELEVATION
- SHOWN HEREIN. SPECIFIED ANCHOR SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE W 5 MANUFACTURER'S WRITTEN INSTRUCTIONS. SPECIAL ATTENTION SHALL BE ( THE DRILLING, CLEANING, AND PREPARATION OF HOLES. WHERE ADHESIVE ARE SHOWN, SPECIAL ATTENTION SHALL BE GIVEN TO THE REQUIRED MIXING PPLICATION, AND CURING TIME OF ADHESIVE TYPE SPECIFIED.

#### CAST-IN-PLACE REINFORCED CONCRETE

THE FOLLOWING ACI STANDARDS (LATEST EDITION) APPLY: A. ACI 318 - CODE

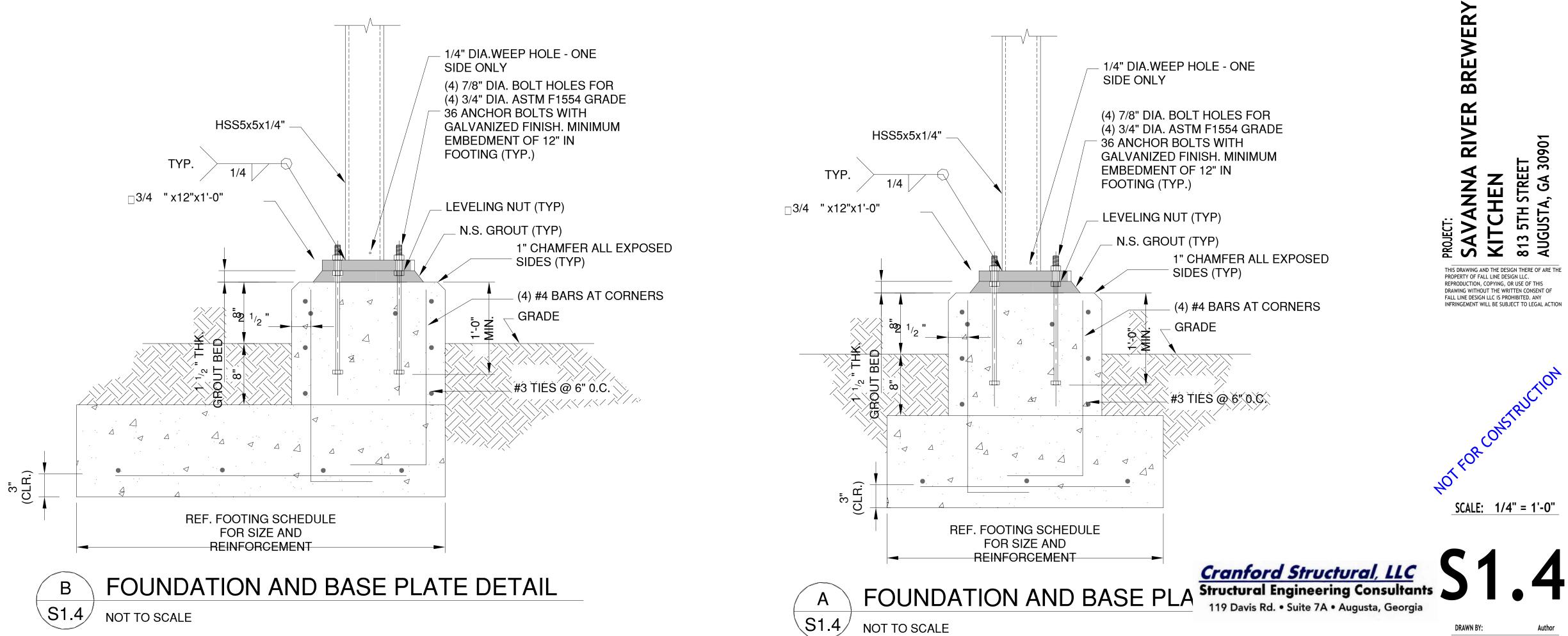
- B. ACI 315 DETAILING
- C. ACI 301 SPECIFICATIONS
- ACI 304 PLACING D
- E. ACI 347 FORMWORK
- F. ACI 211.1 MIX PROPORTIONING G. ACI 305 - HOT WEATHER CONCRETING
- H. ACI 306 COLD WEATHER CONCRETING
- ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE (145 PCF) WITH MIXES THE FOLLOWING CRITERIA:

STRUCTURAL ELEMENT 28 DAY COMPRESSIVE STRENGTH FOOTINGS 3,000 psi SLABS 4,000 psi

SLUMP SHALL CONFORM TO MIX DESIGN SUBMITTED BY CONTRACTOR AND AF BY ENGINEER. SLUMP TESTS SHALL BE PERFORMED ON EACH TRUCK LOAD AN CONFORM TO ASTM C143.

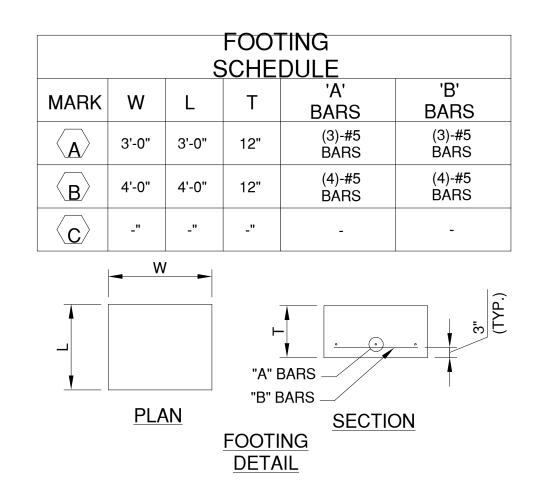
REINFORCING STEEL

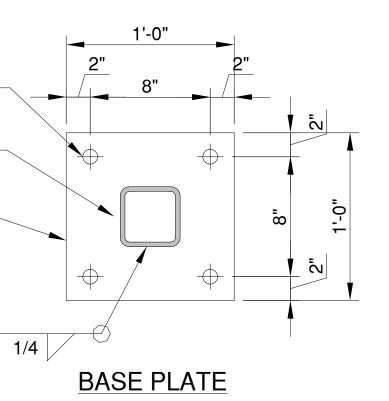
- ALL REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60, UNLESS NOTED C REINFORCING IS TO BE SUPPORTED IN FORMS AND SPACED WITH WIRE BAR S ACCORDING TO CRSI "PLACING REINFORCING BARS", UNLESS NOTED OTHERW
- MINIMUM REINFORCING STEEL CLEAR COVERS ARE AS FOLLOWS: 3.
- A. CONCRETE CAST DIRECTLY AGAINST EARTH.....
- B. EXTERIOR SLABS... ...1 1/2"



TYP.

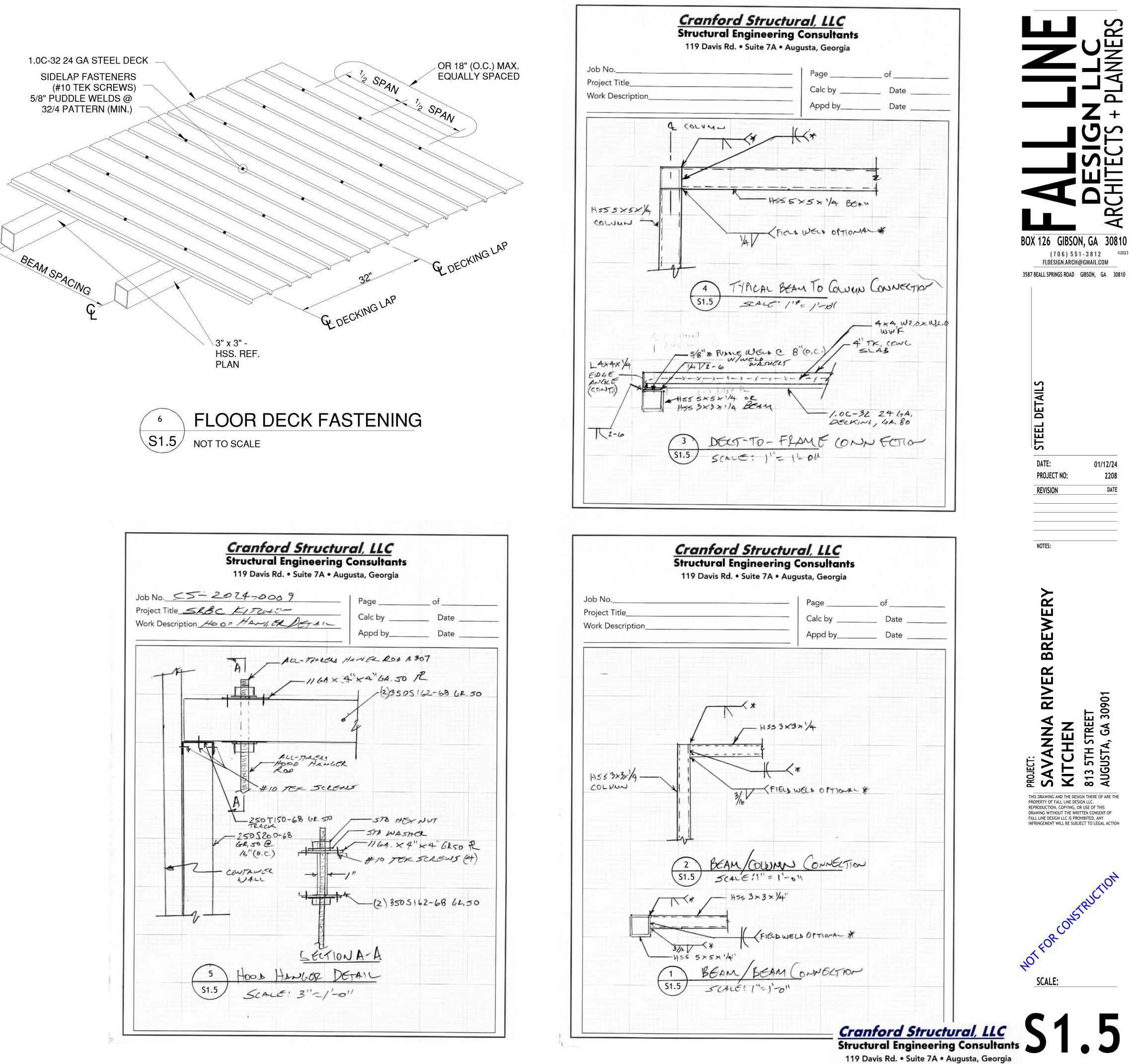
|                     | <u>STRU</u> | ICTURAL STEEL  | ст |  |
|---------------------|-------------|--|----|--|
| PPLY TO ALL         | 1.          | APPLICABLE STRUCTURAL STEEL CODES:   | 21 | RUCTURAL DESIGN CRITERIA   |
|                     |             | A. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, 15TH EDITION           | 1. | BUILDING CODES:  |
| EMPORARY            | n           | B. AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES            |    | 2018 INTERNATIONAL BUILDING CODE (IBC)   |
| PR.                 | 2.          |  |    |  |
|                     |             | STEEL TUBING ASTM A1085, GRADE A<br>ALL OTHER ASTM A36                       | 2. | WIND LOADS (ASCE 7-16):  |
|                     |             |  |    | BASIC WIND SPEED (3 SEC GUST) = 115 MPH  |
| CTION OR<br>DNS NOT |             | ANCHOR BOLTS ASTM A307 (GALV.)<br>HIGH STRENGTH BOLTS ASTM A325              |    | RISK CATEGORY = II   |
|                     |             | WELDING ELECTRODES E70 SERIES  |    | MWFRS EXPOSURE = B   |
| WITH                | 3.          | STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED ACCORDING TO THE LATEST     |    |  |
| E GIVEN TO          | 5.          | EDITION OF AISC "SPECIFICATION, DESIGN, AND ERECTION OF STRUCTURAL STEEL FOR | 3. | SEISMIC CRITERIA (ASCE 7-16):  |
| /E ANCHORS          |             | BUILDINGS" AND RELATED PUBLICATIONS SPECIFIED THEREIN.                       |    | RISK CATEGORY = II   |
| NG, A               | 4.          | ALL SHEAR AND TENSION TYPE BOLTED CONNECTIONS SHALL BE MADE WITH 3/4"        |    | IMPORTANCE FACTOR = 1.0  |
| NO, A               | 4.          | DIAMETER ASTM A325N HIGH STRENGTH BOLTS. DESIGN TORQUE TO BE DEVELOPED       |    | DESIGN CATEGORY = C  |
|                     |             | USING LOAD INDICATOR WASHERS AS MANUFACTURED BY BETHLEHEM STEEL              |    | SITE CLASS = D   |
|                     |             | CORPORATION OR APPROVED EQUIVALENT. INSTALL AS PER MANUFACTURER'S            |    | S/s = 0.266  |
|                     |             | PUBLISHED INSTRUCTIONS. ALL OTHER BOLTED CONNECTIONS MAY BE MADE WITH        |    | S/1 = 0.097  |
|                     |             | ASTM A307 BOLTS AND WASHERS.   |    | S/DS = 0.282   |
|                     | 5.          | STEEL FRAMING ERECTION INCLUDING ALL BOLTED AND WELDED CONNECTIONS,          |    | S/D1 = 0.156   |
|                     |             | BRACING, AND ANCHORAGES SHALL BE COMPLETED AND PLUMB PRIOR TO PLACEMENT      |    | SEISMIC FORCE RESISTING SYSTEM = ORDINARY STEEL MOMENT FRAMES                          |
|                     |             | OF DECK.   |    | SEISMIC RESPONSE COEFFICIENT, Cs = 0.0806  |
|                     | 6.          | NON-SHRINK, NON-METALLIC GROUT WITH A 28 DAY COMPRESSIVE STRENGTH OF 5000    |    | RESPONSE MODIFICATION FACTOR, R = 3.5<br>ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE |
|                     |             | PSI SHALL BE USED UNDER BASE PLATES.   |    | SEISMIC BASE SHEAR = CSW, WHERE W = WEIGHT OF STRUCTURE                                |
|                     | 7.          | ENGINEER SHALL BE CONTACTED FOR APPROVAL OF ANY FIELD MODIFICATIONS OF       |    | SEISMIC DASE SHEAR - CSW, WHERE W - WEIGHT OF STRUCTURE                                |
|                     |             | ANCHOR BOLTS OR RODS AND COLUMN BASE PLATES.                                 |    |  |
| ES MEETING          | 8.          | TEMPORARY BRACING OF STEEL STRUCTURAL ELEMENTS IS THE RESPONSIBILITY OF THE  |    |  |
|                     |             | CONTRACTOR. STRUCTURAL STABILITY SHALL BE MAINTAINED AT ALL TIMES DURING     |    |  |
|                     |             | THE ERECTION PROCESS.  |    |  |
|                     | 9.          | FRAMING CONNECTIONS NOT DETAILED, OR CONNECTIONS THAT ARE MODIFIED FROM      |    |  |
|                     |             | THOSE DETAILED SHALL BE DESIGNED BY SUPPLIER FOR THE END REACTION SHOWN      |    |  |
|                     |             | ON THE PLAN. IF NO REACTION IS PROVIDED, CONNECTIONS SHALL BE DESIGNED FOR   |    |  |
| APPROVED            |             | 1/2 THE BEAM MAXIMUM UNIFORM LOAD PER AISC MANUAL FOR STEEL CONSTRUCTION.    |    |  |
| APPROVED            | 10.         | SHOP CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED. USE 3/16" FILLET   |    |  |
| AND                 |             | WELD MINIMUM.  |    |  |
|                     | 11.         | FIELD CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED AS DETAILED. NO    |    |  |
|                     |             | FIELD WELDING OF HOT-DIPPED GALVANIZED MEMBERS IS ALLOWED. USE 3/16" FILLET  |    |  |
| OTHERWISE.          | 40          | WELD MINIMUM.  |    |  |
| SUPPORTS            | 12.         | ALL EXTERIOR ELEMENTS AND THOSE ELEMENTS NOTED TO BE GALVANIZED SHALL BE     |    | (4) 7/8" DIA. HOLES FOR 3/4"   |
| RWISE.              |             | HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER SANDBLAST           |    | DIA. BOLTS W/ A 12"  |
| VVIJL.              |             | CLEANING PER SSPC-SP10. USE ASTM A325 BOLTS HOT DIPPED GALVANIZED WITH       |    | EMBEDMENT (TYP.)   |
|                     |             | GALVANIZED HARDENED WASHERS AND GALVANIZED HEAVY HEX NUTS FOR BOLTING OF     |    |  |
|                     | 10          | GALVANIZED ITEMS.  |    | HSS 5 x 5 x 1/4"   |
|                     | 13.         | STEEL COLUMNS, BASE PLATES, AND ALL STEEL BELOW GRADE SHALL HAVE A MINIMUM   |    |  |
|                     | 1 4         | 3" CONCRETE COVER PROTECTION.  |    |  |
|                     | 14.         | ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY A CERTIFIED WELDER IN         |    | PLATE 3/4" x 12" x 1 <u>'-0</u> "  |
|                     |             | ACCORDANCE WITH AWS D1.1.  |    |  |



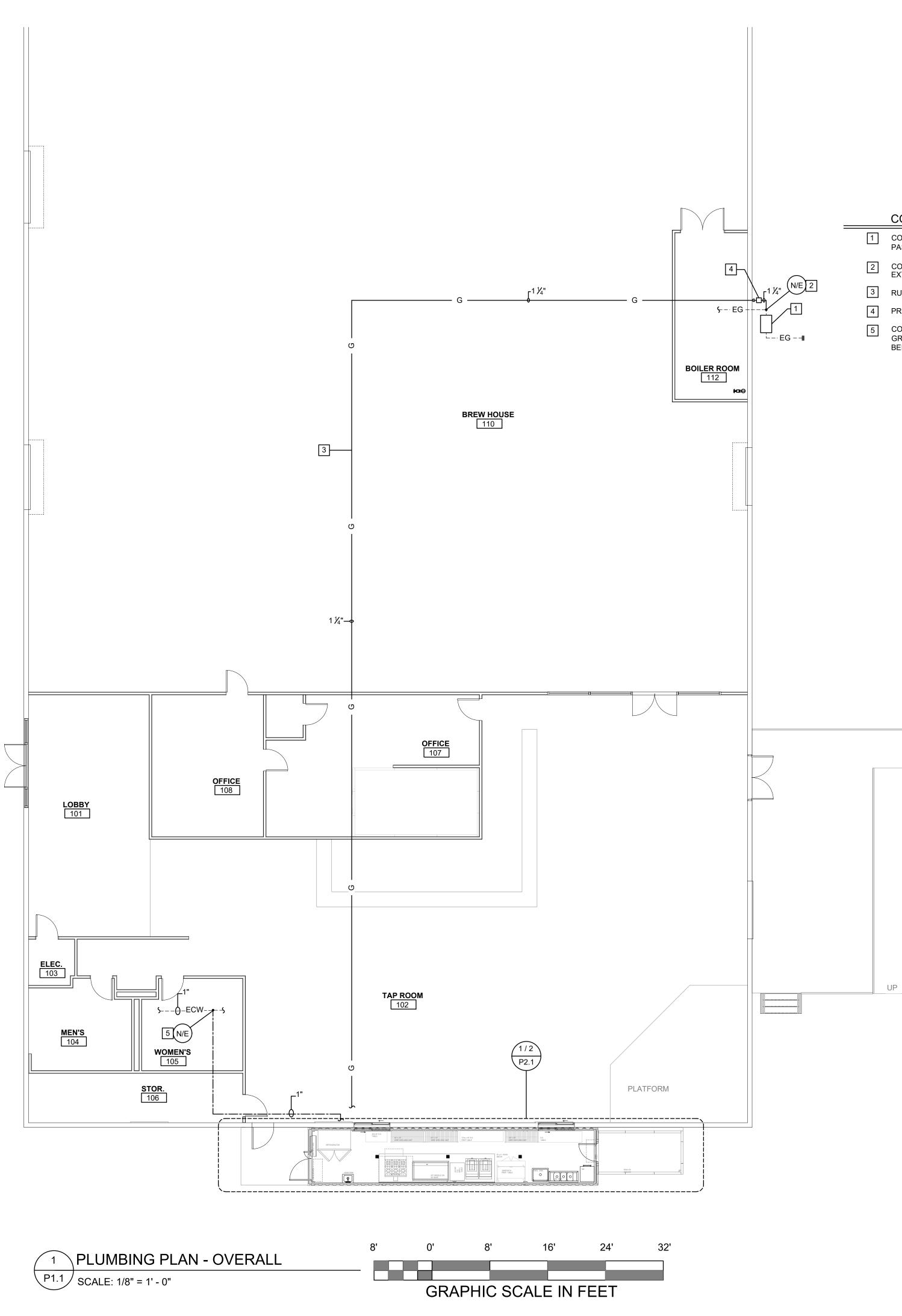


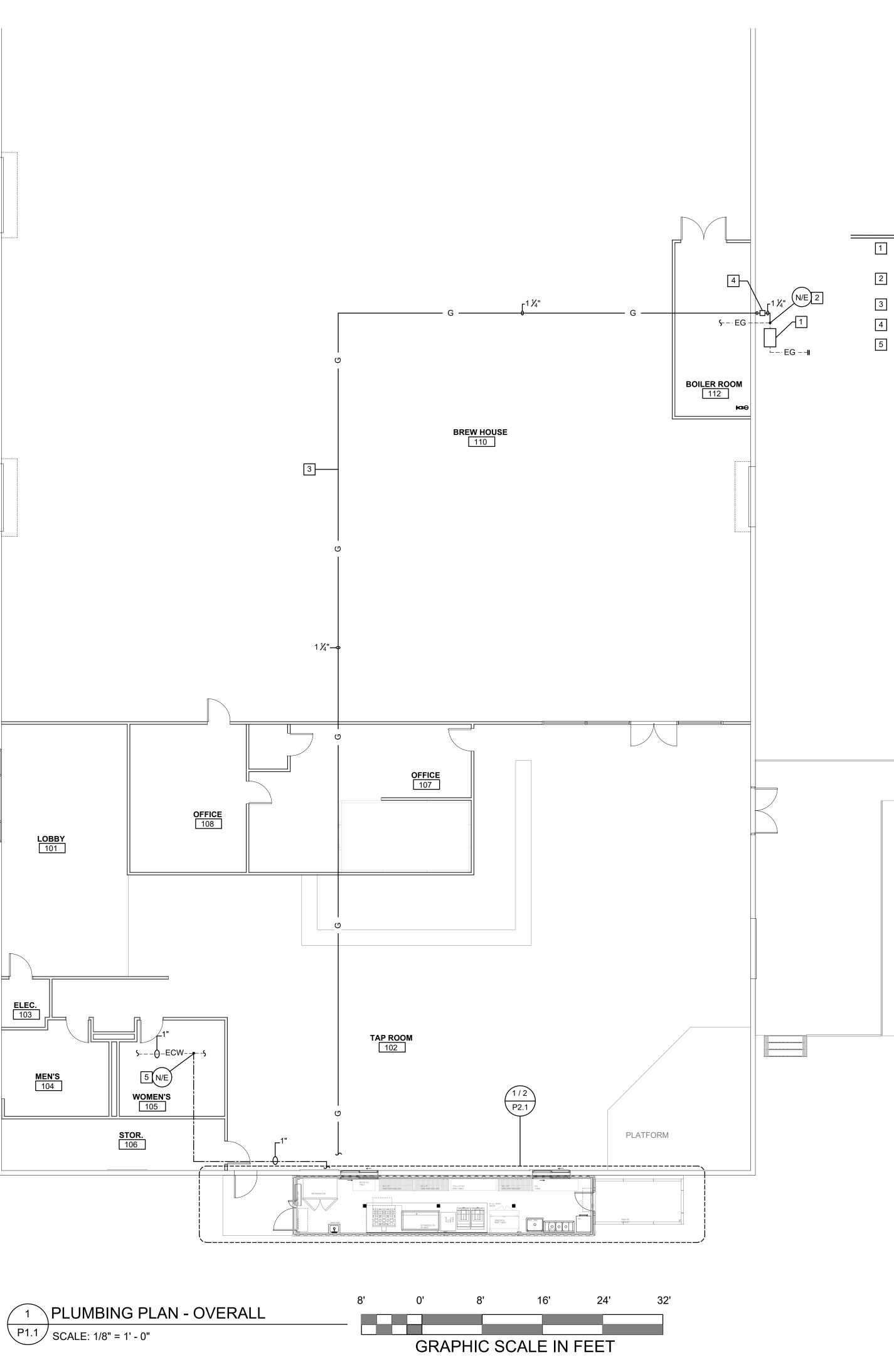
2  $\triangleleft$ BOX 126 GIBSON, GA 30810 (706) 551-3812 <sup>©2023</sup> FLDESIGN.ARCH@GMAIL.COM 3587 BEALL SPRINGS ROAD GIBSON, GA 30810 FOUNDATION DETAILS -STRUCTURAL NOTES DATE: 01/12/24 PROJECT NO: 2208 DATE REVISION NOTES:

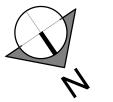
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## **CONSTRUCTION KEY NOTES - THIS SHEET**

1 CONNECT TO EXISTING GAS TRAIN. GAS TRAIN SHALL BE CAPABLE OF PASSING AN ADDITIONAL 1165 CFH AT 2LB. GAS.

2 CONNECT NEW 1 ¼" GAS TO EXISTING GAS TRAIN. RISE UP AND SECURE TO EXTERIOR WALL BEFORE ENTERING BUILDING. SEE DETAIL 10/P3.1. 3 RUN GAS PIPING HIGH AT STRUCTURE. SEE PIPE HANGER DETAIL 6/P3.1.

4 PROVIDE GAS REGULATOR AT 11" W.C. REGULATOR SHALL PASS 1165 CFH.

5 CONNECT NEW 1" CW TO NEAREST EXISTING CW PIPING OF 1" OR GREATER SIZE. VERIFY SIZE AND LOCATION OF EXISTING CW PIPING BEFORE STARTING WORK.







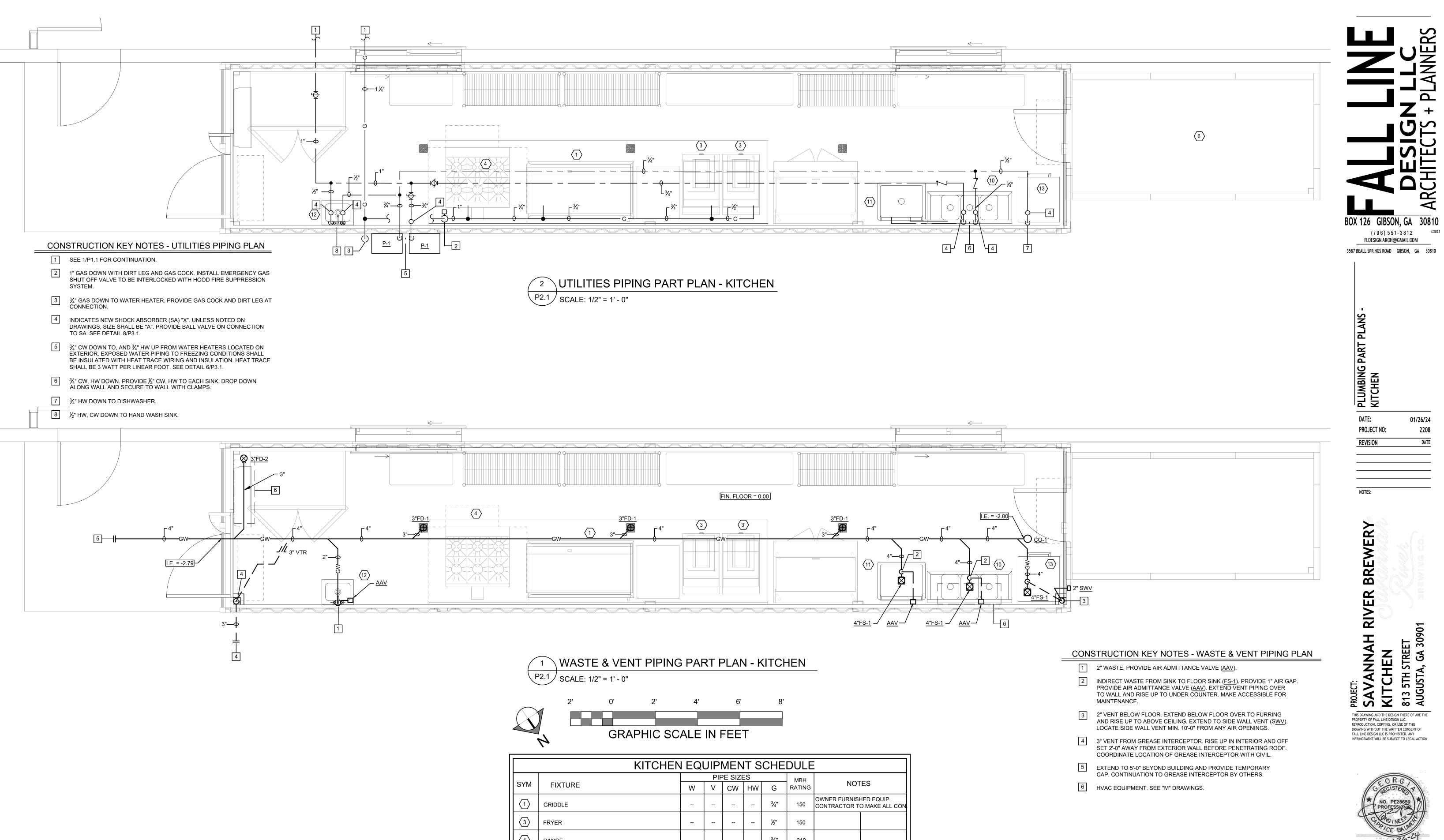
NOTES:



## SCALE: AS INDICATED







|                     |                         |    | PIF | PE SIZE | ES               |                  | MBH    | NOT           |                              |
|---------------------|-------------------------|----|-----|---------|------------------|------------------|--------|---------------|------------------------------|
| SYM                 | FIXTURE                 | W  | V   | CW      | HW               | G                | RATING | NOT           | ES                           |
|                     | GRIDDLE                 |    |     |         |                  | <sup>3</sup> ⁄4" | 150    | OWNER FURNISH | HED EQUIP.<br>O MAKE ALL CON |
| 3                   | FRYER                   |    |     |         |                  | 1⁄2"             | 150    |               |                              |
| $\langle 4 \rangle$ | RANGE                   |    |     |         |                  | <sup>3</sup> ⁄4" | 210    |               |                              |
| (10)                | THREE COMPARTMENT SINK  | FS | AAV | 1⁄2"    | 1⁄2"             |                  |        |               |                              |
| (11)                | SINGLE COMPARTMENT SINK | FS | AAV | 1/2"    | 1⁄2"             |                  |        |               |                              |
| (12)                | HAND WASH SINK          | 2" | AAV | 1⁄2"    | 1⁄2"             |                  |        |               |                              |
| (13)                | DISH MACHINE            | FS |     |         | <sup>3</sup> ⁄4" |                  |        |               |                              |

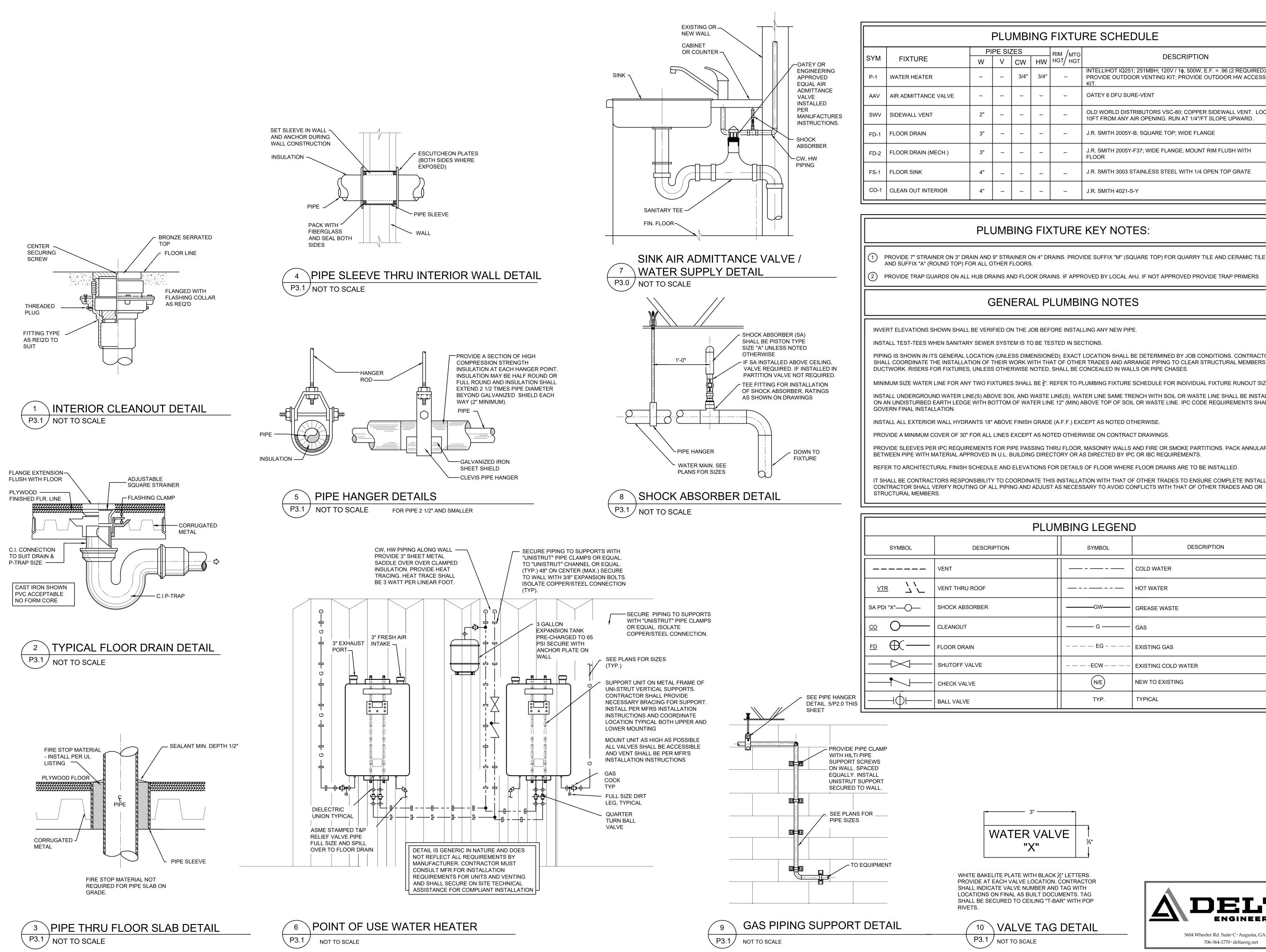
## SCALE: AS INDICATED

2023-189

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| PI | PE SIZ | ZES  |      | RIM /MTG | DECODIDITION   |
|----|--------|------|------|----------|--|
| W  | V      | CW   | HW   | HGT/ HGT | DESCRIPTION  |
|    |        | 3/4" | 3/4" |          | INTELLIHOT IQ251; 251MBH; 120V / 1¢, 500W, E.F. = .96 (2 REQUIRED);<br>PROVIDE OUTDOOR VENTING KIT; PROVIDE OUTDOOR HW ACCESSORY<br>KIT. |
|    |        |      |      |          | OATEY 6 DFU SURE-VENT  |
| 2" |        |      |      |          | OLD WORLD DISTRIBUTORS VSC-80; COPPER SIDEWALL VENT. LOCATE<br>10FT FROM ANY AIR OPENING. RUN AT 1/4"/FT SLOPE UPWARD.                   |
| 3" |        |      |      |          | J.R. SMITH 2005Y-B; SQUARE TOP; WIDE FLANGE  |
| 3" |        |      |      |          | J.R. SMITH 2005Y-F37; WIDE FLANGE; MOUNT RIM FLUSH WITH<br>FLOOR   |
| 4" |        |      |      |          | J.R. SMITH 3003 STAINLESS STEEL WITH 1/4 OPEN TOP GRATE  |
| 4" |        |      |      |          | J.R. SMITH 4021-S-Y  |

# PLUMBING FIXTURE KEY NOTES:

PROVIDE 7" STRAINER ON 3" DRAIN AND 9" STRAINER ON 4" DRAINS. PROVIDE SUFFIX "M" (SQUARE TOP) FOR QUARRY TILE AND CERAMIC TILE FLOORS

PROVIDE TRAP GUARDS ON ALL HUB DRAINS AND FLOOR DRAINS. IF APPROVED BY LOCAL AHJ. IF NOT APPROVED PROVIDE TRAP PRIMERS

# **GENERAL PLUMBING NOTES**

PIPING IS SHOWN IN ITS GENERAL LOCATION (UNLESS DIMENSIONED). EXACT LOCATION SHALL BE DETERMINED BY JOB CONDITIONS. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THEIR WORK WITH THAT OF OTHER TRADES AND ARRANGE PIPING TO CLEAR STRUCTURAL MEMBERS AND

MINIMUM SIZE WATER LINE FOR ANY TWO FIXTURES SHALL BE  $\frac{3}{4}$ ". REFER TO PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL FIXTURE RUNOUT SIZES. INSTALL UNDERGROUND WATER LINE(S) ABOVE SOIL AND WASTE LINE(S). WATER LINE SAME TRENCH WITH SOIL OR WASTE LINE SHALL BE INSTALLED ON AN UNDISTURBED EARTH LEDGE WITH BOTTOM OF WATER LINE 12" (MIN) ABOVE TOP OF SOIL OR WASTE LINE. IPC CODE REQUIREMENTS SHALL

PROVIDE SLEEVES PER IPC REQUIREMENTS FOR PIPE PASSING THRU FLOOR, MASONRY WALLS AND FIRE OR SMOKE PARTITIONS. PACK ANNULAR SPACE

REFER TO ARCHITECTURAL FINISH SCHEDULE AND ELEVATIONS FOR DETAILS OF FLOOR WHERE FLOOR DRAINS ARE TO BE INSTALLED.

IT SHALL BE CONTRACTORS RESPONSIBILITY TO COORDINATE THIS INSTALLATION WITH THAT OF OTHER TRADES TO ENSURE COMPLETE INSTALLATION.

| PLUM        | IBING LEGENE       | )                   |
|-------------|--------------------|---------------------|
| DESCRIPTION | SYMBOL             | DESCRIPTION         |
|             |                    | COLD WATER          |
| OOF         |                    | HOT WATER           |
| RBER        | GW                 | GREASE WASTE        |
|             | G                  | GAS                 |
|             | – — — — EG – — — – | EXISTING GAS        |
| VE          |                    | EXISTING COLD WATER |
|             | N/E                | NEW TO EXISTING     |
|             | TYP.               | TYPICAL             |







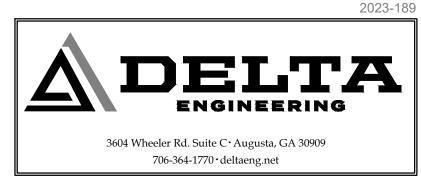


DRAWING WITHOUT THE WRITTEN CONSENT OF

FALL LINE DESIGN LLC IS PROHIBITED. ANY INFRINGEMENT WILL BE SUBJECT TO LEGAL ACTION

## SCALE: AS INDICATED







## PLUMBING SPECIFICATIONS:

## <u>GENERAL:</u>

- A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS APPLY TO THIS SECTION
- B. PLUMBING WORK SHALL BE PERFORMED AS OUTLINED BELOW
- C. THESE SPECIFICATIONS AND ACCOMPANYING PLUMBING DRAWINGS ARE INTENDED TO PROVIDE FOR ALL LABOR. MATERIALS AND EQUIPMENT NECESSARY FOR THE INSTALLATION COMPLETE OF ALL PLUMBING FIXTURES, EQUIPMENT, ROUGH-INS, WASTE VENT SYSTEMS, COLD WATER SYSTEMS, HOT WATER SYSTEMS AND ACCESSORIES INCLUDING NECESSARY APPARATUS, VALVES AND FITTINGS HEREINAFTER DESCRIBED OR CALLED FOR ON THE PLUMBING DRAWINGS ACCOMPANYING THESE SPECIFICATIONS. WHERE CONFLICTS ARISE BETWEEN ARCHITECTURAL DRAWINGS AND PLUMBING DRAWINGS, CONTRACTOR SHALL COORDINATE CORRECT CONFIGURATION AND ADJUST AS NECESSARY FOR COMPLIANT INSTALLATION.
- D. ALL PLUMBING WORK SHALL BE INSTALLED WITH IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE LATEST ADDITION OR IN COMPLIANCE WITH AUTHORITY HAVING JURISDICTION REQUIREMENTS.
- E. THE CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS AND INSPECTION FEES NECESSARY FOR THIS WORK.
- F. THE ACCOMPANYING DRAWINGS ARE SCHEMATIC ONLY AND ARE NOT INTENDED TO SHOW ALL FITTINGS, BOLTS, CONNECTIONS, OFFSETS, ETC., UNLESS SPECIFICALLY SHOWN. FOLLOW DRAWINGS AS CLOSELY AS POSSIBLE, PROVIDE ALL ADJUSTMENTS AS NECESSARY TO CONFORM TO THE STRUCTURAL CONDITIONS, EQUIPMENT, WORK OF OTHER TRADES AND THE INTENT OF THE DRAWINGS, WITHOUT COST TO THE OWNER. PLUMBING DRAWINGS SHOULD NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO DRAWINGS OF OTHER TRADES AND COORDINATE. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

#### SCOPE OF WORK:

- A. THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL OF THE FOLLOWING WORK IN GENERAL AND PROVIDING A COMPLETE PLUMBING SYSTEM AS SHOWN ON THE PLANS. THE ITEMS IN GENERAL ARE TO BE AS FOLLOWS:
- 1. FURNISH AND INSTALL COMPLETE WASTE AND VENT SYSTEM WITH CONNECTIONS TO SERVICES AS SHOWN ON THE PLUMBING DRAWINGS AND HEREIN SPECIFIED.
- FURNISH AND INSTALL HOT WATER SYSTEM COMPLETE WITH CONNECTIONS TO POINT AS SHOWN ON THE PLUMBING DRAWINGS AND HEREIN SPECIFIED.
- FURNISH AND INSTALL COLD WATER SYSTEM COMPLETE WITH CONNECTIONS TO POINT AS SHOWN ON THE PLUMBING DRAWINGS AND HEREIN SPECIFIED.

#### CONNECTION TO EXISTING UTILITIES:

A. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND SHALL NOT BE DETERMINED TO BE EXACT CONNECTION LOCATIONS. CONTRACTOR MUST VERIFY EXACT LOCATIONS, SIZES, INVERTS, AND CONDITION OF EXISTING UTILITIES PRIOR TO CONNECTIONS. FAILURE TO ACCURATELY LOCATE AND IDENTIFY EXISTING UTILITIES SHALL NOT INCUR ADDITIONAL COST FOR REPAIRS OR RECONNECTIONS OF NEW TO EXISTING UTILITIES.

#### LIST OF MATERIALS, FIXTURES, AND EQUIPMENT:

- A. THE PLUMBING CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ENGINEER/ ARCHITECT FOR THE USE OF SUBSTITUTE MATERIALS CLAIMED AS EQUAL TO THOSE SPECIFIED. SUCH APPROVAL MUST BE OBTAINED AS SOON AFTER CONTRACT AWARDS AS POSSIBLE AND BEFORE ANY MATERIALS ARE ORDERED. APPLICATIONS FOR APPROVAL SHALL BE MADE BY THE PLUMBING CONTRACTOR ONLY AND NO OTHER APPLICATIONS SHALL BE ACCEPTED. THE PLUMBING CONTRACTOR SHALL SUBMIT FOR APPROVAL WITHIN TEN (10) DAYS FOLLOWING AWARD OF CONTRACT AND WRITTEN NOTICE TO BEGIN THE WORK A COMPLETE LIST OF MATERIALS PROPOSED FOR THE JOB. ALL LIKE ITEMS SHALL BE BY ONE MANUFACTURER. NO FURTHER SUBSTITUTIONS SHALL BE ACCEPTED AFTER APPROVED BY ENGINEER / ARCHITECT. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL COST ASSOCIATED WITH INSTALLATION OF UNAPPROVED FIXTURES AND REMOVAL AND REPLACEMENT OF SUCH AT NO COST TO OWNER.
- B. THE PLUMBING CONTRACTOR SHALL SUBMIT AN ELECTRONIC SET OF SHOP DRAWINGS TO THE ARCHITECTS WITHIN 20 DAYS AFTER AWARD OF THE CONTRACT, AND BEFORE ANY MATERIALS, FIXTURES, AND EQUIPMENT TO BE INCORPORATED IN THE WORK HAS BEEN ORDERED. SHOP DRAWINGS SHALL INCLUDE THE NAME AND ADDRESS OF THE MANUFACTURER AND THEIR CATALOG NUMBERS AND TRADE NAMES CLEARLY MARKED. ALL ITEMS SHALL BE REFERENCED TO THE PLANS AND SPECIFICATIONS BY FIXTURE NUMBER. SUBMIT SHOP DRAWINGS AND / OR CATALOG DATA FOR THE FOLLOWING:
  - 2. WATER PIPING, FITTINGS AND EQUIPMENT
  - 3. GATE VALVES, BALL VALVES, PLUG VALVES, BACK FLOW PREVENTERS 4. VENT CAPS
  - 5. EMERGENCY DRAIN PANS 6. PIPING INSULATION
- 7. HANGER SUPPORTS AND HANGERS 8. FIXTURES
- C. APPROVAL OF SHOP DRAWINGS AND / OR SUBMITTED DATA SHALL NOT RELIEVE THE PLUMBING CONTRACTOR OF THE RESPONSIBILITY TO COMPLY WITH THE REQUIREMENTS AND INTENT OF THE PLANS AND SPECIFICATIONS WITH REGARD TO DIMENSIONS, CAPACITIES, QUALITY, QUANTITY, PERFORMANCE CHARACTERISTICS, ETC. IF DATA SUBMITTED DEVIATES FROM THE CONTRACT DOCUMENTS, THE PLUMBING CONTRACTOR SHALL POINT OUT SUCH DEVIATIONS IN WRITING AND ALSO STATE REASONS FOR SAME.

## D. <u>FIXTURES</u>

- WATER HEATERS, (ELECTRIC) SHALL BE A.O.SMITH, STATE, RHEEM, VAUGHN, BRADFORD WHITE, AMERICAN, AND HTP. GAS WATER HEATERS SHALL BE A.O. SMITH, INTELLIHOT, BRADFORD WHITE VAUGHN, PVI AND HTTP. ENGINEERING APPROVAL FOR OTHERS NOT LISTED SHALL BE REQUIRED.

## DEMOLITION:

- DETERMINE THE EXTENT OF DEMOLITION WORK REQUIRED TO PROPERLY COMPLETE THE WORK UNDER THIS CONTRACT.
- B. PROTECTION OF MATERIALS AND WORK: BEFORE BEGINNING ANY CUTTING OR DEMOLITION WORK, THE CONTRACTOR SHALL CAREFULLY SURVEY THE EXISTING WORK AND EXAMINE THE DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF WORK REQUIRED. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE AGAINST DAMAGE TO EXISTING WORK TO REMAIN IN PLACE, TO BE REUSED, OR TO REMAIN THE PROPERTY OF THE OWNER AND ANY DAMAGE TO SUCH WORK SHALL BE REQUIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.

#### 1. WASTE PIPING, FITTINGS AND COUPLINGS

#### WATER CLOSETS, URINALS, LAVATORIES, SINKS, MOP SINKS, FLUSH VALVES, AND FAUCETS SHALL BE ALL ONE MANUFACTURER AND SHALL BE EQUALS OF AMERICAN STANDARD, KOHLER SLOAN, ZURN, SYMMONS, ELKAY, DAYTON. ENGINEERING APPROVAL FOR OTHERS NOT LISTED SHALL BE REQUIRED.

#### A. GENERAL REQUIREMENTS; THE WORK INCLUDES THE DEMOLITION OR REMOVAL OF ALL CONSTRUCTION IDENTIFIED ON DRAWINGS NECESSARY TO ACCOMPLISH THE WORK. THE DRAWINGS DEFINE THE SCOPE OF THE WORK BUT IT IS NOT INTENDED THAT ALL ITEMS OF DEMOLITION WORK BE SPECIFICALLY INDICATED. AFTER CAREFULLY REVIEWING THE CONTRACT DRAWINGS AND SPECIFICATIONS TO DETERMINE THE INTENT, THE CONTRACTOR SHALL VISIT THE SITE AND

# WORKMANSHIP

- A. LAYOUT
- DRAWINGS INDICATE GENERAL LOCATIONS OF FIXTURES. EXACT LOCATIONS SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.
- FURNISH AND INSTALL ALL NECESSARY SLEEVES, INSERTS, BOLTS, ETC., FOR CONCRETE FLOOR SLABS, ROOF, WALLS, AND PARTITIONS. FAILURE TO INSTALL SUCH ITEMS IN TIME TO AVOID DELAYING THE GENERAL CONTRACTOR SHALL RESULT IN THE CONTRACTOR DOING ANY NECESSARY CUTTING AND REPAIRING AT HIS EXPENSE.
- SLEEVES AS HEREINAFTER SPECIFIED SHALL BE INSTALLED ON ALL THROUGH THE FLOOR PIPING ABOVE SLAB ON GRADE EXCEPT WATER CLOSET ROUGH-INS. WATER CLOSET ROUGH-INS SHALL BE CAST IN PLACE. CORE DRILLING OF SLABS SHALL BE SEALED WITH APPROVED FIRE RETARDANT CAULKING AND SEALED WATERTIGHT.
- 4. ALL FIXTURES AND EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- DRAINAGE, WASTE, AND VENT PIPING: B
- 1. SLOPE ALL LINES 2" AND SMALLER AT 1/4" / FOOT
- 2. SLOPE ALL LINES 3" AND LARGER AT 1/8" / FOOT
- RUN ALL PIPING AS DIRECTLY AS POSSIBLE, AVOIDING UNNECESSARY BENDS AND TURNS SO AS NOT TO INTERFERE WITH PROPER INSTALLATION.
- TAPPED TEES AND CROSSES WILL NOT BE PERMITTED. TAPPED SANITARY TEES AND CROSSES SHALL BE USED.
- C. WATER SYSTEM:
- CONCEAL WATER SUPPLY IN WALLS, BELOW FLOOR OR ABOVE CEILING EXCEPT WHERE EXPOSED FOR CONNECTIONS TO FIXTURES OR OTHERWISE INDICATED.
- ALL WATER PIPING SHALL BE ROUTED WITH A MINIMUM CLEARANCE OF TEN (10) FEET FROM ANY ELECTRICAL SWITCHBOARDS, PANEL BOARDS OR TELEPHONE BACKBOARDS.
- ALL SUPPLY TO FIXTURES SHALL HAVE INDIVIDUAL STOP VALVES
- PROVIDE WATER HAMMER SHOCK ARRESTORS (PD) AS REQUIRED OR AS SHOWN TO PREVENT WATER HAMMER. ARRESTERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND AS DETAILED ON CONTRACT DRAWINGS MANUFACTURERS OF URN, JOAN, J.R. SMITH SHALL BE ACCEPTABLE. PROVIDE 12" X 12" ACCESS DOORS FOR ALL SHOCK ARRESTORS INSTALLED ABOVE HARD CEILINGS.
- 5. ALL EXPOSED PIPING TO FIXTURES SHALL BE CHROME PLATED.
- INSULATE ALL WATER PIPING INSIDE BUILDING AND HEREINAFTER SPECIFIED.
- D. INSULATION:
- ALL PIPE INSULATION JOINTS SHALL BE SEALED TO MAINTAIN INTEGRITY OF THE VAPOR JACKET AND SHALL PASS THRU ALL SLEEVES UNBROKEN EXCEPT FOR FIRE STOPS.
- PIPE INSULATION AT ALL FIRE SEPARATIONS SHALL BE BUTTED TIGHTLY TO THE FIREWALL OR TO THE FLOOR AFTER FIR STOP MATERIAL HAS BEEN INSTALLED.

#### CUTTING, PATCHING, AND CHASING:

- ALL CUTTING AND PATCHING SHALL BE GENERAL CONDITIONS OF THE ARCHITECTURAL SPECIFICATIONS. PLUMBING CONTRACTOR SHALL CUT ALL FLOORS NECESSARY TO INSTALL ALL PIPING AND SHALL REPAIR FLOOR TO MATCH THAT OF EXISTING.
- WASTE AND VENT SYSTEMS
- A. PIPING:
- WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC-DWV SOLID WALL PIPING CONFORMING TO ASTM D-2665-68 AND C.S. 272-65 WITH NS SEAL. NO FOAM CORE PIPING WILL BE ACCEPTABLE.
- WASTE PIPING SLEEVES SHALL BE SCHEDULE 40 PVC-DWV OR CAST IRON SOLID WALL AS IDENTIFIED AS ABOVE BUT SHALL BE ONE PIPE DIAMETER LARGER FILLED WITH FIRESTOP MATERIAL FOR FIRE WALLS.
- FITTINGS: B
- FITTINGS FOR PVC-DWV PIPING SHALL BE PVC-DWV FITTINGS CONFORMING TO PIPING SPECIFICATIONS LISTED ABOVE.
- C. JOINTS:
- JOINTS FOR PVC-DWV PIPING SHALL BE MADE USING PIPING MANUFACTURERS APPROVED SOLVENT CEMENT.
- 2. ANY FLASHING OF PLUMBING VENTS IF USED SHALL BE PROVIDED BY THE GENERAL CONTRACTOR AND SHALL BE COORDINATED WITH SUCH.

#### HOT AND COLD WATER SYSTEMS

- A. WATER PIPING:
- WATER PIPING 4" AND SMALLER ABOVE GRADE INSIDE BUILDING SHALL BE TYPE "L" HARD COPPER CONFORMING ASTM B-88
- B. FITTINGS:
- FITTINGS FOR COPPER PIPING SHALL BE WROUGHT COPPER, SOLDER JOINT FITTINGS CONFORMING TO ANSI B 16.22
- C. JOINTS:
- ALL COPPER PIPING JOINTS, 1 1/4" AND SMALLER SHALL BE MADE USING LEAD FREE SOLDER WITH A MINIMUM MELTING POINT OF 410 DEGREES FAHRENHEIT.
- ALL COPPER PIPING JOINTS, 1 1/2" AND LAGER SHALL BE MADE USING SIL-PHOS-COPPER SILVER ALLOY MATERIAL WITH A MINIMUM MELTING POINT OF 1000 DEGREE F.

#### GAS PIPING:

A. ALL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL, THREADED JOINTS IN ACCORDANCE INTERNATIONAL FUEL GAS CODE (IFGC) AND TEST PER IFGC. NO PIPING SHALL BE RUN IN WALLS OR PARTITION UNLESS INSTALLED IN SLEEVES, OR WITH NO JOINTS TO AVOID LEAKS. GAS PIPING SHALL NOT BE INSTALLED BELOW SLAB UNLESS VENTED AS OUTLINED IN IFGC AND TESTED AND APPROVED. ALL EXPOSED GAS PIPING SHALL BE PAINTED WITH 2 COATS OF GRAY FLAT RUST PREVENTATIVE PAINT.

#### CLEANOUTS

A. CLEANOUT INSTALLED IN FLOORS AND WALKS SHALL HAVE ADJUSTABLE CAST IRON BODY WITH CAST BRASS PLUG, LEAD SEAL AND SQUARE NICKEL BRONZE TOP WITH WATERTIGHT CASKETED COVER. CLEANOUTS SHALL BE J.R. SMITH, JOSAM, ZURN OR ENGINEERING APPROVED EQUAL.

#### VALVES:

- A. VALVES SHALL BE INSTALLED AS NOTED ON CONTRACT DOCUMENTS. EXISTING VALVES IN PLACE SHALL BE VERIFIED FOR SAFE OPERATIONS AND SHALL BE REPLACED WITH THAT OF NEW IF DETERMINED TO BE UN-USABLE.
- B. DOMESTIC COLD AND HOT WATER SYSTEM VALVES 1 1/4" AND SMALLER SHALL BE CAST BRONZE BODY, FULL PORTED, SOLDERED END GATE VALVES RATED FOR CLASS 150, 200 WOG SERVICES. DOMESTIC COLD AND HOT WATER SYSTEMS VALVES 1 1/2" AND 2" SHALL BE CAST BRONZE, FULL PORTED, THREADED END GATE VALVES RATED FOR CLASS 150, 200 WOG SERVICES. VALVES SHALL BE PROVIDED WITH STEM EXTENSION FOR INSULATION THICKNESS SPECIFIED. VALVES SHALL BE NIBCO OR JENKINS. VALVE NOT LISTED SHALL REQUIRE ENGINEERING APPROVED EQUAL

#### PIPE INSULATION:

- A. ALL PLUMBING PIPE INSULATION SYSTEMS, INCLUDING JACKETING, COVERINGS, ADHESIVES WHEN USED, SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING TWENTY-FIVE (25) AND A SMOKE DEVELOPMENT RATING NOT EXCEEDING FIFTY (50) WHEN THE INSULATION ASSEMBLY IS TESTED AS COMPOSITE.
- 1. INSULATE ALL COLD AND HOT WATER PIPING IN ACCORDANCE WITH IECC 2015 ADDITION
- 2. COLD WATER PIPING: INSULATION SHALL BE  $\frac{1}{2}$ " FOR PIPING BELOW 1  $\frac{1}{2}$ " DIAMETER AND 1 $\frac{1}{2}$ " FOR PIPING ABOVE 1  $\frac{1}{2}$ " DIAMETER
- 3. HOT WATER PIPING: INSULATION SHALL BE: 1" FOR PIPING BELOW 1  $\frac{1}{2}$ " DIAMETER, AND 1 $\frac{1}{2}$ " FOR PIPING ABOVE 1 ½" DIAMETER
- 4. ALL PIPE INSULATION FOR PIPE FITTINGS SHALL BE PRE-MOLDED TO FIT FITTINGS AND SHALL BE ENCLOSED UNDER PRE-MOLDED PVC FITTING JACKET.

#### HANGERS:

- A. HANGERS FOR HORIZONTAL PIPING SHALL BE CLEVIS TYPE AND SHALL BE MANUFACTURED BY MODERN, ANVIL OR ENGINEERING APPROVED EQUAL.
- HANGERS FOR INSULATED PIPING SHALL EXTEND AROUND INSULATION. PROVIDE 16 GAGE GALVANIZED STEEL INSULATION PROTECTION SADDLES 12" LONG AT EACH HANGER ON ALL NSULATED LINES
  - PIPE SIZE 1 1/2" AND SMALLER 6'-0" O.C. 2" AND LARGER 10'-0"
- C. A HANGER SHALL BE PROVIDED WITHIN ONE (1) FOOT OF EACH BEND IN HORIZONTAL PIPING. VERTICAL PIPING SHALL BE SUPPORTED AT EACH FLOOR OR AT INTERVALS NOT EXCEEDING TEN (10) FEET.
- D. HANGERS SHALL BE FASTENED BY MEANS OF THREADED RODS TO STEEL BEAM CLAMPS, CENTER OF BAR JOIST, CENTER OF TRUSSES, ETC. ALL HANGERS SHALL PERMIT ADEQUATE ADJUSTMENT AFTER ERECTION WHILE STILL SUPPORTING THE LOAD.

#### PROTECTION OF WORK AND EQUIPMENT:

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WORK DAMAGED DURING CONSTRUCTION, ANY PLUMBING WORK DAMAGED BY ANY OTHER CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AND IN PERFECT WORKING CONDITION WITHOUT EXTRA COST TO THE OWNER. ALL FIXTURES AND FITTINGS SHALL BE ADEQUATELY PROTECTED BEFORE, DURING AND AFTER INSTALLATION.
- B. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PLUMBING FIXTURES AT TIME OF FINAL INSPECTION. ANY BROKEN FIXTURES WILL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER REGARDLESS OF BY WHOM THE FIXTURE WAS BROKEN.

#### TESTING

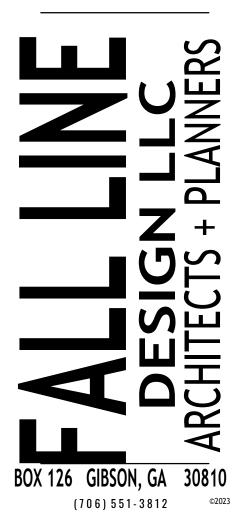
- A. THE CONTRACTOR SHALL NOTIFY ENGINEER TWENTY FOUR (24) HOURS IN ADVANCE OF ALL TESTING. THE CONTRACTOR SHALL MAKE ALL NECESSARY PRELIMINARY TEST TO INSURE A TIGHT SYSTEM, ANY JOINTS FOUND TO LEAK UNDER PRESSURE SHALL BE CLEANED AND REMADE.
- B. ALL SANITARY WASTE, AND VENT PIPING SHALL BE TESTED IN ACCORDANCE WITH INTERNATIONAL PLUMBING CODE (IPC) REQUIREMENTS.
- C. ALL WATER PIPING HOT AND COLD SHALL BE TESTED IN ACCORDANCE WITH INTERNATIONAL PLUMBING CODE (IPC) REQUIREMENTS.
- D. CONTRACTOR SHALL FURNISH ALL EQUIPMENT NECESSARY TO PERFORM TEST IN ACCORDANCE WITH CODE REQUIREMENTS.

#### STERILIZATION:

- A. WATER PIPING SHALL BE CHARGED WITH A CHLORINE SOLUTION CONTAINING NOT LESS THEN 50-PPM AVAILABLE CHLORINE. THE SOLUTION SHALL REMAIN IN PIPING FOR A MINIMUM PERIOD OF 6 HOURS, DURING WHICH TIME VALVES SHALL BE OPENED AND CLOSED TO PERMIT A SMALL FLOW OF THE SOLUTION. AT END OF SIX (6) HOURS THE SOLUTION SHALL BE TESTED AND MUST CONTAIN A RESIDUAL OF AT LEAST 5 TO 10 PPM. THE SYSTEM SHALL THEN BE DRAINED AND FLUSHED TO PROVIDE SATISFACTORY POTABLE WATER BEFORE FINAL CONNECTION IS MADE TO THE EXISTING DISTRIBUTION SYSTEM.
- B. THE CONTRACTOR SHALL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY FOR A CERTIFICATION LETTER THAT THE SYSTEM STERILIZATION MEETS OR EXCEEDS STANDARDS FOR POTABLE WATER.

#### PLACING IN SERVICE:

- A. UPON COMPLETION OF THE ENTIRE SYSTEM INSTALLATION, THE ENTIRE SYSTEM AND EQUIPMENT SHALL BE TESTED BY ACTUAL OPERATIONS TO PROVIDE THAT ALL FIXTURES OPERATE AS INTENDED.
- B. THE CONTRACTOR SHALL FLUSH ALL WASTE PIPING PRIOR TO FINAL CONNECTION TO EXISTING SYSTEM, TO ENSURE THAT NO FOREIGN MATERIALS ARE IN THE LINES, AND CONTINUOUS FLOW OF WATER AND WASTE CAN BE AFFECTED.
- C. THE CONTRACTOR SHALL FLUSH ALL WATER PIPING PRIOR TO THE CONNECTION OF FLUSH VALVE, AND FAUCET AERATORS TO PROVIDE A CLEAN AND OPERATIONAL WATER SYSTEM.
- D. THE CONTRACTOR SHALL PLACE THE ENTIRE SYSTEM IN A SATISFACTORY OPERATING CONDITION AND SHALL FURNISH ALL ASSISTANCE AND INSTRUCTIONS REQUIRED.
- E. IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE ALL FLOOR DRAINS AND CLEANOUTS ARE IN A CLEAN CONDITION.



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| BING SPECIFICATION   |                  |
|----------------------|------------------|
| PLUM                 |                  |
| DATE:                | 01/26/24         |
| DATE:<br>PROJECT NO: | 01/26/24<br>2208 |



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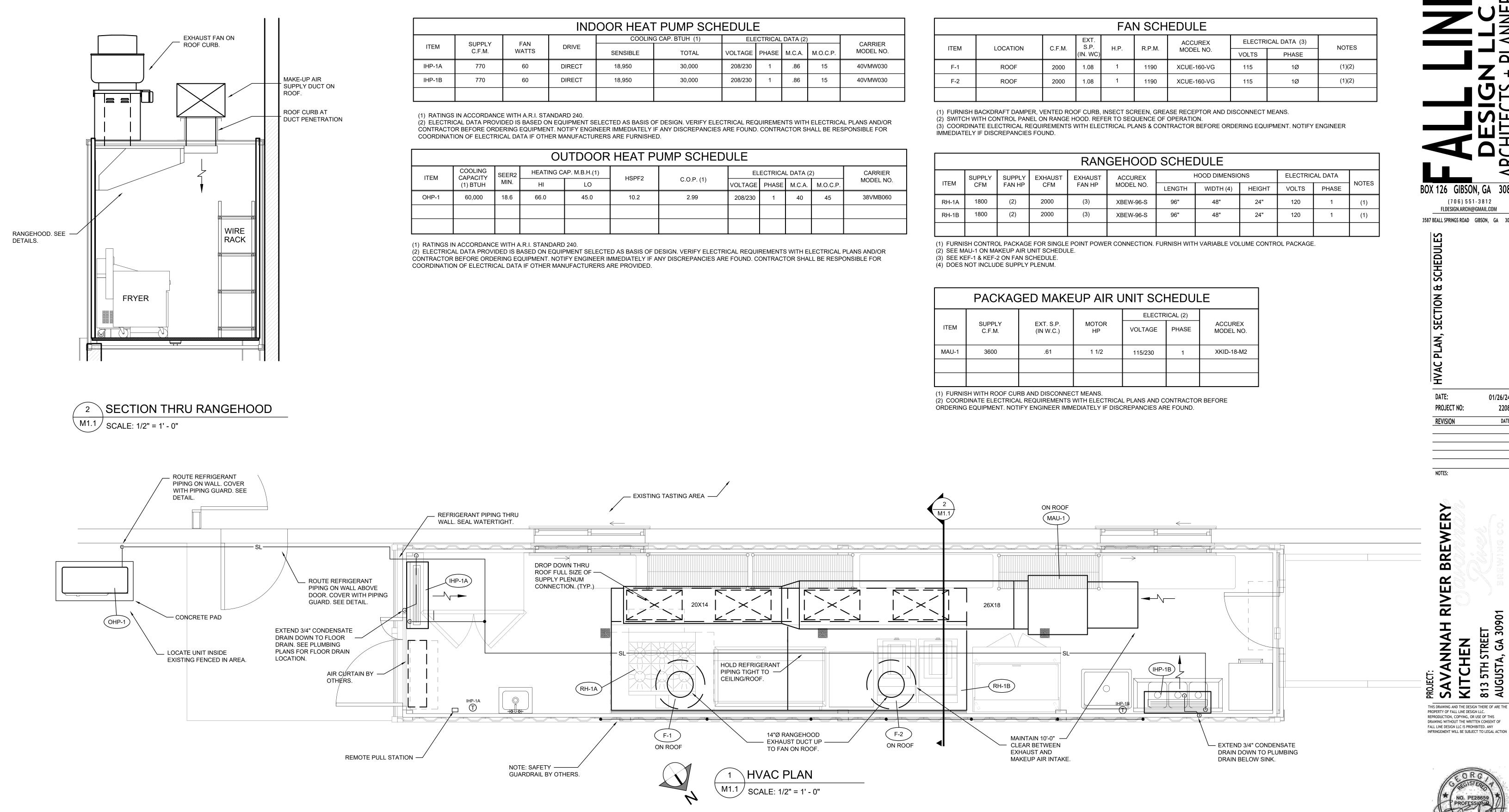


## SCALE: AS INDICATED

2023-189







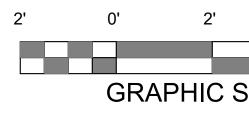
|              |        |          |                 | -       |         |          |          |                      |
|--------------|--------|----------|-----------------|---------|---------|----------|----------|----------------------|
|              |        | COOLIN   | G CAP. BTUH (1) | ELE     | CTRICAL | DATA (2) |          |                      |
| FAN<br>WATTS | DRIVE  | SENSIBLE | TOTAL           | VOLTAGE | PHASE   | M.C.A.   | M.O.C.P. | CARRIER<br>MODEL NO. |
| 60           | DIRECT | 18,950   | 30,000          | 208/230 | 1       | .86      | 15       | 40VMW030             |
| 60           | DIRECT | 18,950   | 30,000          | 208/230 | 1       | .86      | 15       | 40VMW030             |
|              |        |          |                 |         |         |          |          |                      |

|      | HEATING CA | AP. M.B.H.(1) | HSPF2 |            | EL      | ECTRICA | CARRIER |          |           |  |  |  |  |  |
|------|------------|---------------|-------|------------|---------|---------|---------|----------|-----------|--|--|--|--|--|
| MIN. | HI         | LO            | HOFFZ | C.O.P. (1) | VOLTAGE | PHASE   | M.C.A.  | M.O.C.P. | MODEL NO. |  |  |  |  |  |
| 18.6 | 66.0       | 45.0          | 10.2  | 2.99       | 208/230 | 1       | 40      | 45       | 38VMB060  |  |  |  |  |  |
|      |            |               |       |            |         |         |         |          |           |  |  |  |  |  |
|      |            |               |       |            |         |         |         |          |           |  |  |  |  |  |

|      | FAN SCHEDULE |         |              |      |        |             |        |              |        |  |  |  |  |
|------|--------------|---------|--------------|------|--------|-------------|--------|--------------|--------|--|--|--|--|
| ITEM | LOCATION     | C.F.M.  | EXT.<br>S.P. | H.P. | R.P.M. | ACCUREX     | ELECTR | CAL DATA (3) | NOTES  |  |  |  |  |
|      | LOCATION     | U.F.IM. | (IN. WC)     |      |        | MODEL NO.   | VOLTS  | PHASE        | NOTED  |  |  |  |  |
| F-1  | ROOF         | 2000    | 1.08         | 1    | 1190   | XCUE-160-VG | 115    | 1Ø           | (1)(2) |  |  |  |  |
| F-2  | ROOF         | 2000    | 1.08         | 1    | 1190   | XCUE-160-VG | 115    | 1Ø           | (1)(2) |  |  |  |  |
|      |              |         |              |      |        |             |        |              |        |  |  |  |  |

|       | RANGEHOOD SCHEDULE |        |         |                   |                      |                                 |           |        |       |       |       |  |  |  |
|-------|--------------------|--------|---------|-------------------|----------------------|---------------------------------|-----------|--------|-------|-------|-------|--|--|--|
|       | M SUPPLY<br>CFM    | SUPPLY | EXHAUST | EXHAUST<br>FAN HP | ACCUREX<br>MODEL NO. | HOOD DIMENSIONS ELECTRICAL DATA |           |        |       |       | NOTEO |  |  |  |
| ITEM  |                    | FAN HP | CFM     |                   |                      | LENGTH                          | WIDTH (4) | HEIGHT | VOLTS | PHASE | NOTES |  |  |  |
| RH-1A | 1800               | (2)    | 2000    | (3)               | XBEW-96-S            | 96"                             | 48"       | 24"    | 120   | 1     | (1)   |  |  |  |
| RH-1B | 1800               | (2)    | 2000    | (3)               | XBEW-96-S            | 96"                             | 48"       | 24"    | 120   | 1     | (1)   |  |  |  |
|       |                    |        |         |                   |                      |                                 |           |        |       |       |       |  |  |  |

|       | PACKAGED MAKEUP AIR UNIT SCHEDULE |                        |             |               |           |                      |  |  |  |  |  |  |  |
|-------|-----------------------------------|------------------------|-------------|---------------|-----------|----------------------|--|--|--|--|--|--|--|
|       |                                   |                        |             | ELECTR        | RICAL (2) | ACCUREX<br>MODEL NO. |  |  |  |  |  |  |  |
| ITEM  | SUPPLY<br>C.F.M.                  | EXT. S.P.<br>(IN W.C.) | MOTOR<br>HP | VOLTAGE       | PHASE     |                      |  |  |  |  |  |  |  |
| MAU-1 | 3600                              | 3600 .61               |             | 115/230       | 1         | XKID-18-M2           |  |  |  |  |  |  |  |
|       |                                   |                        |             |               |           |                      |  |  |  |  |  |  |  |
|       |                                   |                        |             |               |           |                      |  |  |  |  |  |  |  |
|       |                                   | RB AND DISCONNEC       |             | L PLANS AND C | ONTRACTO  | RBEFORE              |  |  |  |  |  |  |  |





NOTES:

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## SCALE: AS INDICATED

4' **GRAPHIC SCALE IN FEET** 





INSTALL DUCTWORK AND PIPING ABOVE CEILINGS WHERE POSSIBLE AND IN CHASES TO PROVIDE MAXIMUM POSSIBLE CLEARANCE'S FOR MAINTENANCE ACCESS. INSTALL PIPING AND DUCTWORK IN EQUIPMENT ROOMS PARALLEL OR PERPENDICULAR TO WALLS AND CEILINGS UNLESS SHOWN OTHERWISE.

ALL DUCTWORK AND PIPING SHALL BE CONCEALED UNLESS NOTED OTHERWISE.

COORDINATE THE INSTALLATION OF DUCTWORK AND PIPING WITH THAT OF OTHER TRADES TO PROVIDE THE BEST POSSIBLE ARRANGEMENT. REFER TO PLUMBING, ELECTRICAL, AND STRUCTURAL DRAWINGS AND SPRINKLER SHOP DRAWINGS. ARRANGE PIPING AND DUCTWORK TO AVOID CONFLICTS WITH OTHER BUILDING TRADES.

UNLESS DIMENSIONED, PIPING, DUCTWORK, AND EQUIPMENT ARE SHOWN IN APPROXIMATE LOCATIONS. EXACT CONFIGURATION SHALL BE DETERMINED IN THE FIELD TO COORDINATE WITH OTHER TRADES AND TO ALLOW FOR A MINIMUM NUMBER OF OFFSETS AS POSSIBLE WHILE ALLOWING FOR ADEQUATE MAINTENANCE ACCESS.

FURNISH FLEXIBLE DUCT CONNECTIONS TO ALL AIR HANDLING EQUIPMENT. FURNISH FLANGED OR UNION CONNECTIONS IN PIPING AT ALL EQUIPMENT

AND CONTROL VALVES, AND AS REQUIRED FOR SERVICE.

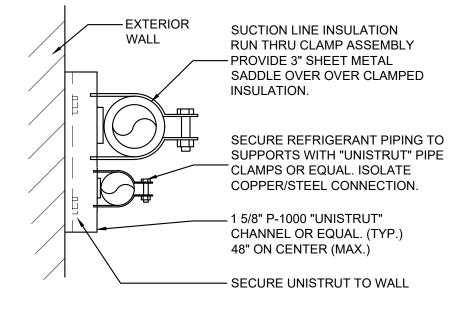
EXACT LOCATION OF AIR DEVICES SHALL BE DETERMINED IN THE FIELD. COORDINATE WITH ARCHITECTURAL REQUIREMENTS AND LIGHTING. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELECTRICAL PLANS FOR LIGHT LOCATIONS. AIR DEVICE LOCATIONS SHALL BE INSTALLED WITH A UNIFORM APPEARANCE AND SHALL BE SYMMETRICAL.

DUCT ACCESS DOORS SHALL BE FURNISHED AT ALL FIRE AND SMOKE DAMPERS, DUCT MOUNTED COILS, AND AT ALL DUCT MOUNTED CONTROL DEVICES.

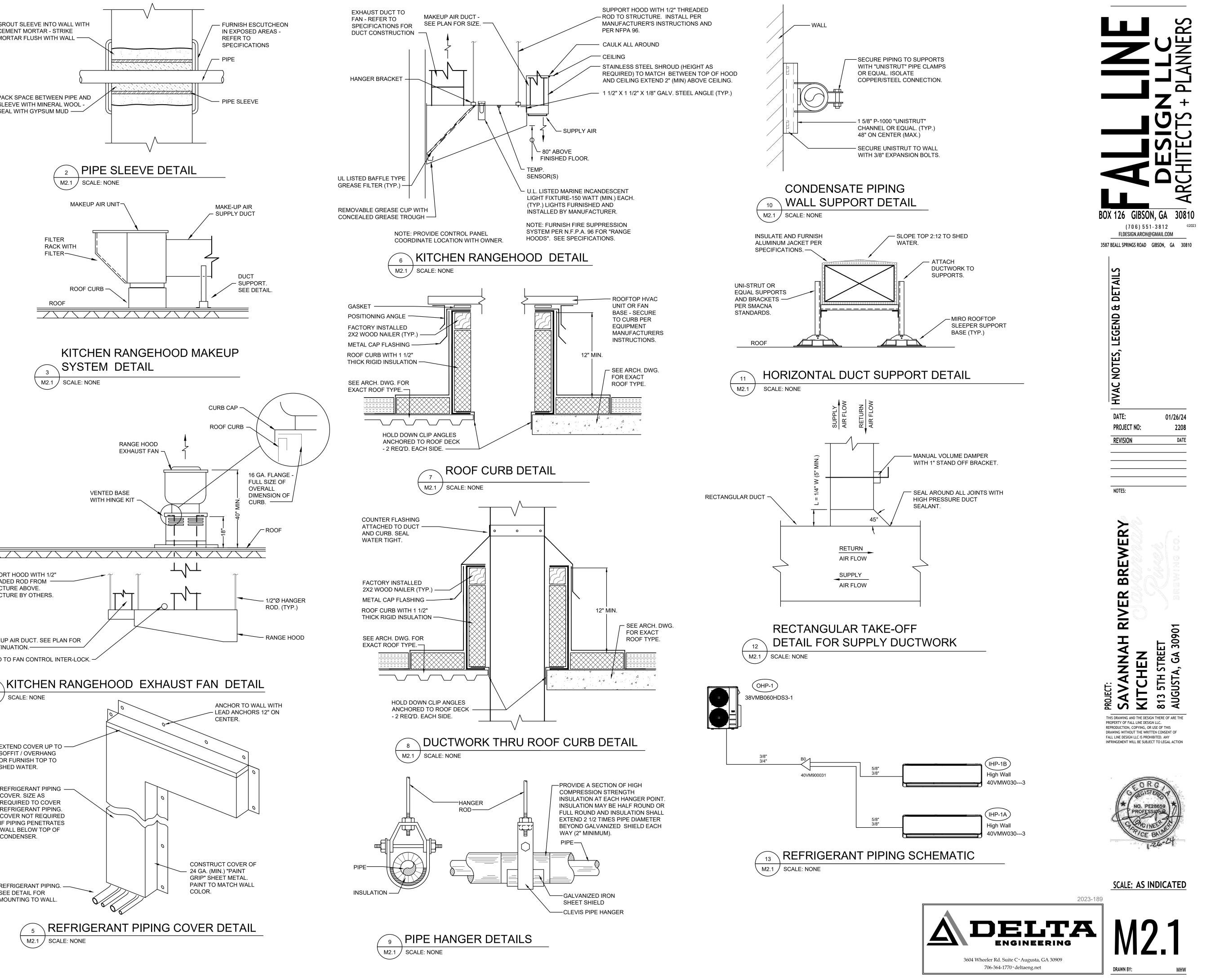
SLOPE DRAIN LINE TOWARDS DRAIN WITH A MINIMUM SLOPE OF 1/4" PER FOOT.

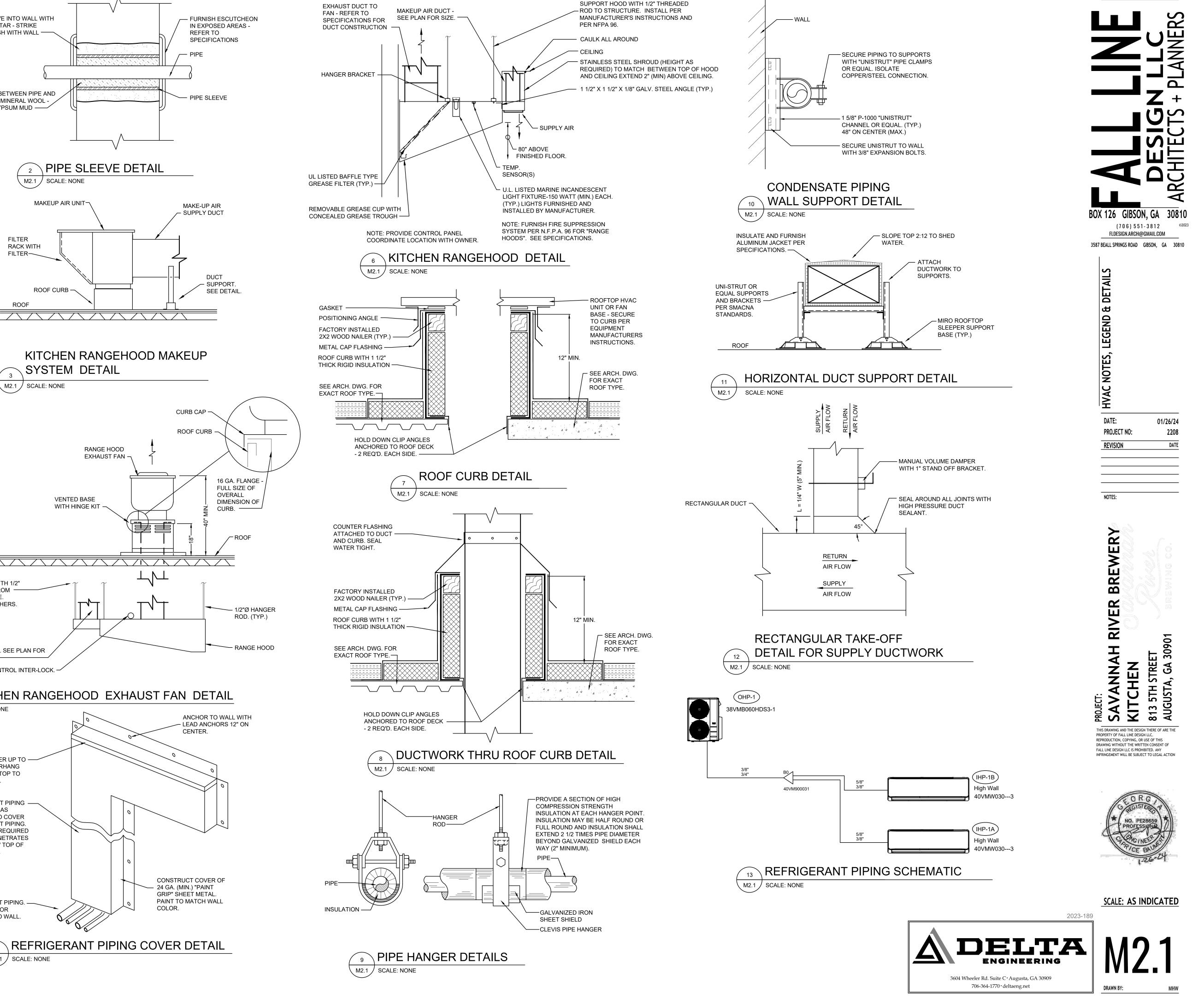
THERMOSTAT LOCATIONS SHALL BE A MINIMUM OF 8" AWAY FROM DOOR FRAMES. COORDINATE LOCATION OF THERMOSTATS WITH LIGHT SWITCHES AND OTHER WALL DEVICES FOR SYMMETRY. MOUNT AT 4'-0" A.F. UNLESS NOTED OTHERWISE.

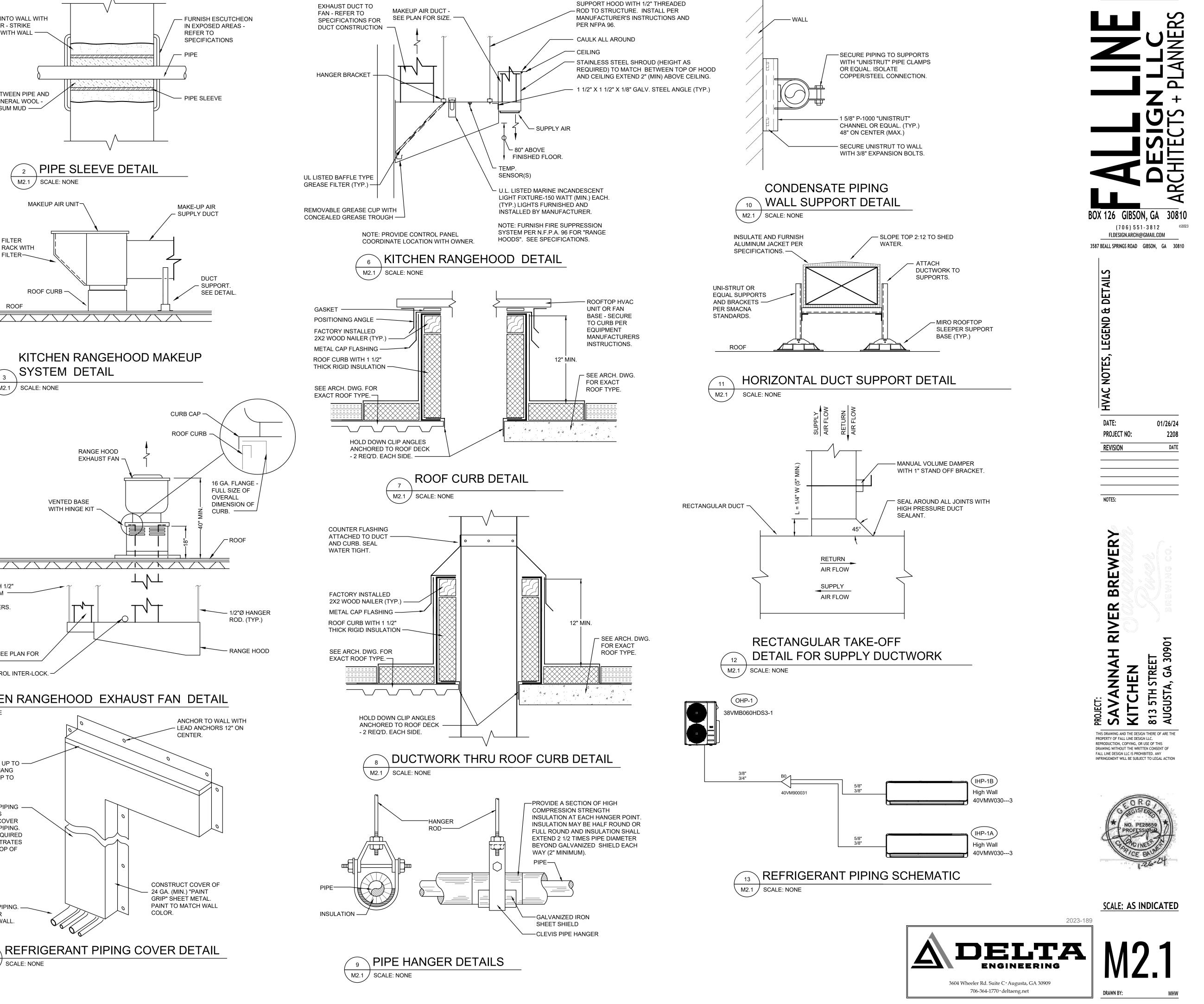
|             | H.V.A.C. LEGEND   |
|-------------|---|
| SYMBOL      | DESCRIPTION   |
| S/L         | REFRIGERANT SUCTION / LIQUID  |
| D           | CONDENSATE DRAIN  |
| Ū           | THERMOSTAT 4'-0" A.F.   |
| \$          | WALL SWITCH   |
|             | FLEXIBLE DUCT CONNECTION AT UNIT  |
| •/////      | LINED DUCT (SIZE SHOWN IS METAL SIZE)   |
| Caller      | FLEXIBLE DUCT CONNECTION  |
|             | SUPPLY DIFFUSER   |
|             | RETURN / EXHAUST GRILLE   |
| ◀ FD        | FIRE DAMPER   |
| SD          | SMOKE DAMPER  |
| F/SD        | FIRE / SMOKE DAMPER   |
| AD          | ACCESS DOOR   |
| ♦ CRD       | CEILING RADIATION DAMPER  |
|             | SQUARE ELBOW WITH TURNING VANES   |
| ₩VD         | MANUAL VOLUME DAMPER  |
| <b>┼┼</b> M | MOTOR OPERATED DAMPER   |
| A<br>8      | - SEE AIR DEVICE SCHEDULE FOR TYPE<br>- NECK CONNECTION SIZE UNLESS NOTED OTHERWISE |
| ∮ C.F.M.    | CUBIC FEET PER MINUTE   |
| (F-1)       | EQUIPMENT NUMBER - SEE SCHEDULES  |
|             | AIRFLOW DIRECTION   |
| Ø           | DIAMETER  |
|             | AIR EXTRACTOR   |
| OBD         | OPPOSED BLADE DAMPER  |
| TYP.        | TYPICAL   |
| ENT.        | ENTERING  |
| LVG.        | LEAVING   |
| S.P.        | STATIC PRESSURE   |
| A.P.D.      | AIR PRESSURE DROP   |
| OA          | OUTDOOR AIR   |

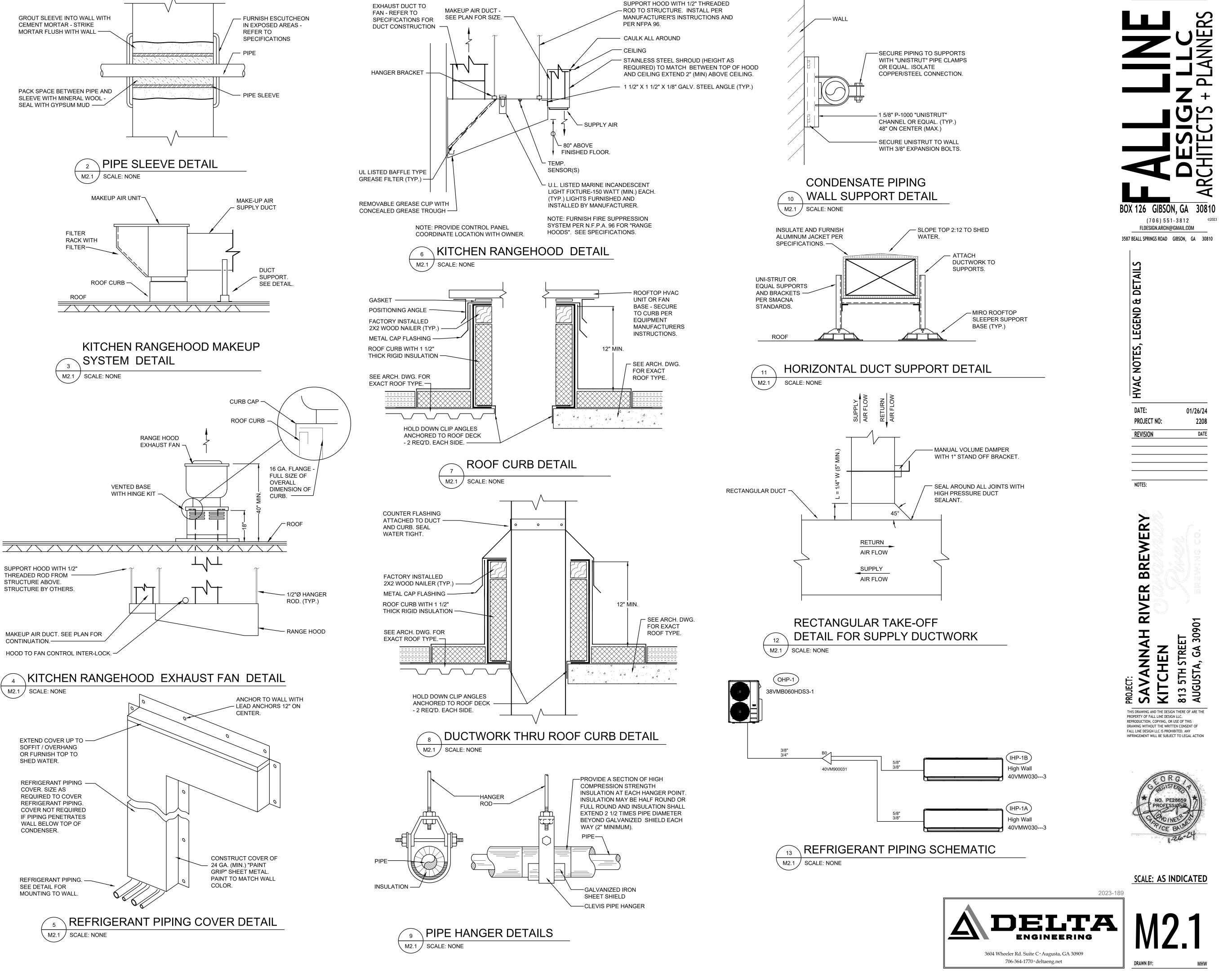


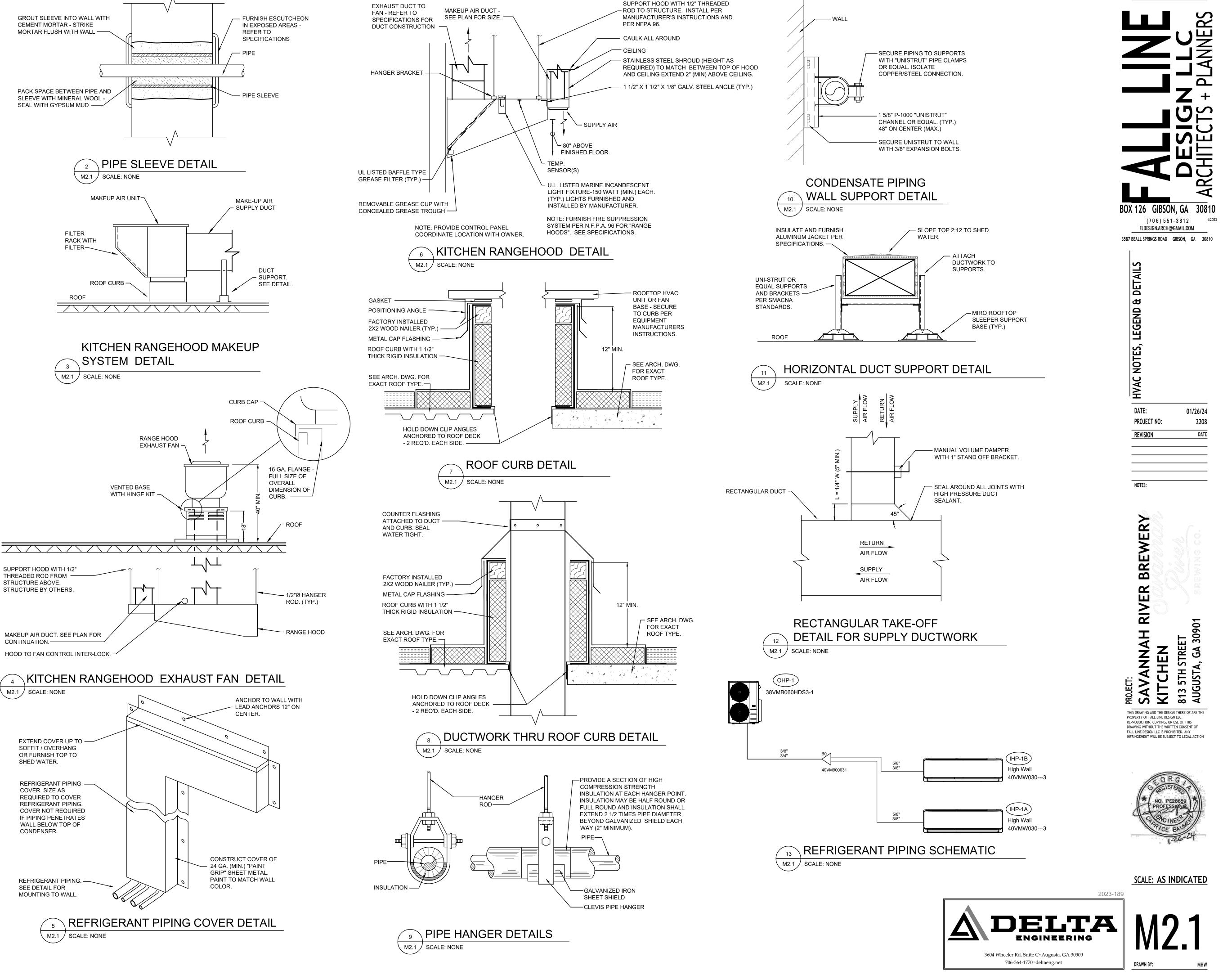


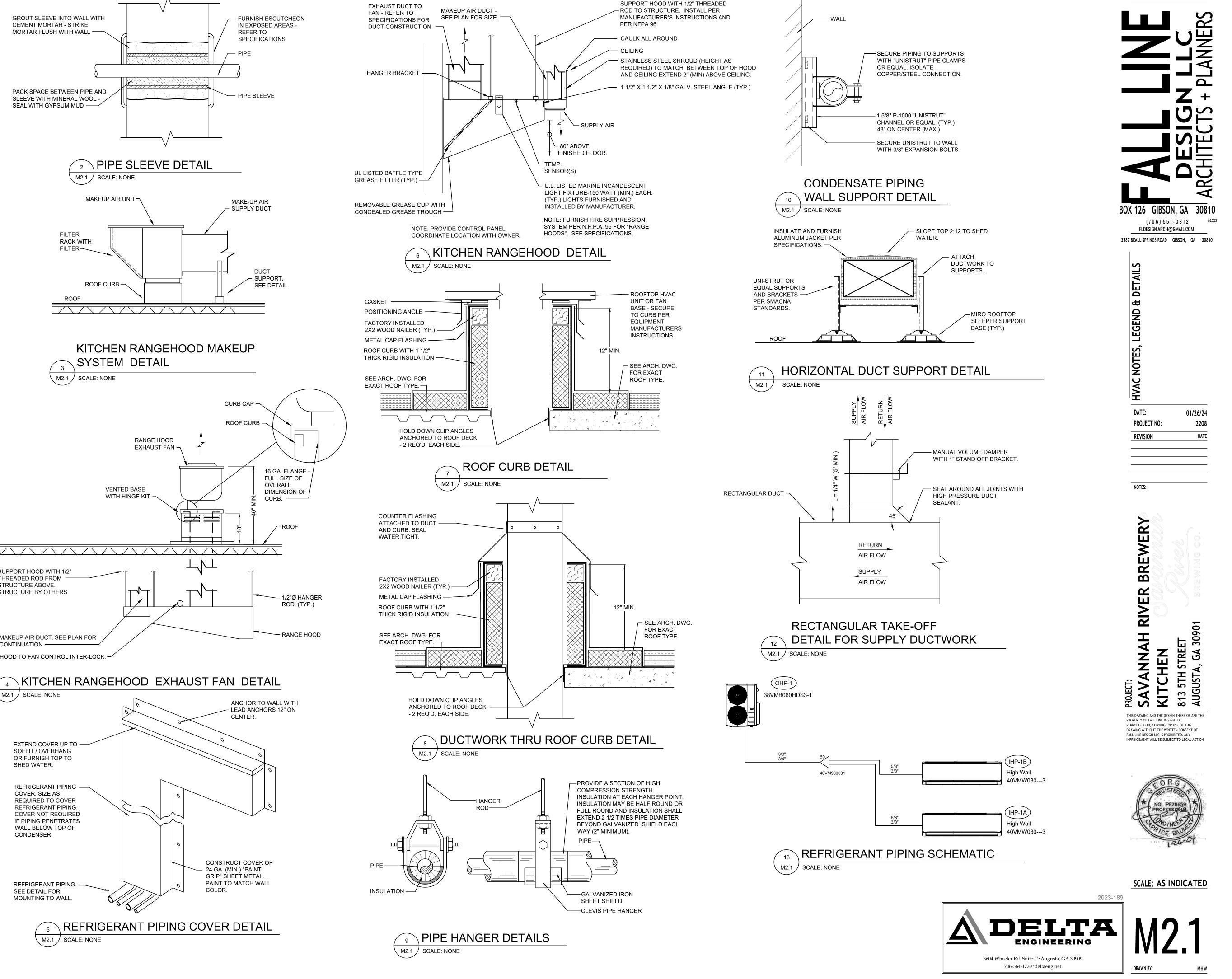












#### H.V.A.C. SPECIFICATIONS

#### GENERAL:

A. Entire system shall be installed to meet all applicable Local, State and National Codes, current requirements of NFPA, State of Georgia Heating and Air Conditioning Code and National Electric Code.

B. HVAC Subcontractor shall have a current Class II Conditioned Air Contractors License for the state in which the project is being constructed.

C. These specifications and all accompanying HVAC drawings are intended to provide for all labor, materials, and equipment necessary for the installation of a complete and functioning HVAC system.

D. All equipment shall be installed in accordance with the manufacturer's written instructions. Installing contractor shall furnish fully functioning systems.

E. The accompanying drawings are schematic only and are not intended to show all fittings, transitions, connections, offsets, etc. unless specifically shown. Install work as closely as possible to conform to the structural conditions, equipment, and work of other trades and the intent of the drawings, without addition cost to the owner.

F. Drawings shall not be scaled. Refer to architectural drawings for dimensions. Refer to drawings of other trades and coordinate all equipment be installed in accordance with manufacturer's installation instructions.

G. Furnish concrete pad for equipment where designated on the plan. Pads shall have chamfered edges. Concrete pads shall extend 6" beyond all sides of unit.

H. All equipment shall be labeled with black plastic engraved equipment tags with minimum 1" lettering.

I. Furnish a digital copy of Operating and Maintenance Instructions on each piece of HVAC equipment at project closeout.

J. Furnish formal training to familiarize the Owner in the operation and maintenance of all the HVAC Systems including controls.

#### SHOP DRAWINGS:

A. Submit pdf set of Shop Drawings for approval of all HVAC equipment, accessories, insulation materials, and controls to be used on this project. Shop drawings shall be submitted before any materials or equipment incorporated in this work has been ordered. Shop drawings shall include the name and address of the manufacturer with items to be furnished and capacities and characteristics clearly marked.

B. Contractor shall obtain written approval from the engineer/ architect for the use of substitute materials claimed as equal to those specified 10 days prior to the bid date.

C. Equipment of greater or larger power, dimensions, capacities, and ratings may be furnished provided such proposed equipment is approved in writing and connecting mechanical and electrical services, circuit breakers, conduit, motors, bases, and equipment spaces are increased. No additional costs will be approved for these increases, if larger equipment is approved. If minimum energy ratings or efficiencies of the equipment are specified, the equipment must meet the design requirements and commissioning requirements.

D. The equipment listed on the Drawings is considered basis of design equipment and has been used for the physical arrangement of the mechanical systems. When other equipment listed in the specifications as acceptable, equal or equipment which has received "prior approval" is used, it shall be the Contractor's responsibility to provide structural, ductwork, electrical, service clearances, or other changes required to accommodate the substituted equipment. Changes to use non basis of design equipment shall be made at no additional cost to the Owner. Submit a list of required changes along with all prior approval requests and shop drawing submittals.

E. Approval of shop drawings and or submitted data shall not relieve the contractor of the responsibility to comply with the requirements and intent of the plans and specifications with regard to dimensions, capacities, quantities, performance characteristics, etc.

#### ELECTRICAL:

A. All line and low voltage control wiring shall be furnished by the HVAC Contractor. Provide complete wiring diagrams and all switches, starters, controls, relays, etc. necessary for a complete system. Run all wiring in EMT raceways.

B. Voltage and phase of mechanical equipment requiring power shall be designated by the Owner. Model numbers listed in mechanical equipment schedule shall not be construed to indicate electrical characteristics.

C. Piping, equipment, and other mechanical installations shall not be located within 42" of the front or 36" of the side of any electrical switchboards, panelboards, power panels, motor control centers, electrical transformers or similar electrical equipment. Piping and ductwork shall not pass through or above electrical equipment rooms except as required to serve those rooms.

#### DUCTWORK:

A. Low Pressure, Metal: Fabricate of galvanized steel as per SMACNA Manual for HVAC Duct Construction Standards, tables 1-3 through 1-19 including associated details. Use water based joint and seam sealant, resistant to UV light when cured, UL 723 listed, and complying with NFPA requirements for class 1 ducts to seal joints. Duct tape is not an acceptable product. Seal duct in accordance with ASHRAE standard 90.1.

Low Pressure round duct shall be rated for 1 inch positive pressure per SMACNA (snap-lock ductwork is acceptable

Insulated flexible round duct: Shall be Flexmaster Type 3M or equal products by Thermoflex, Cleveflex or Atco. Reinforced with steel wire helix encapsulated in the inner liner with silver mylar, glass reinforced outer jacket. Rated for 10" wg, positive pressure. Minimum R value = 6.0. Met UL 181 Class 1 air duct requirements. Flexible duct shall not exceed 4 feet in length and shall be supported 3 feet maximum on center with 3" wide by 26 gauge galvanized hangers. Duct shall be secured to branch ducts and outlets with stainless steel worm drive strap or nylon self-locking strap around the inner liner only.

D. All ductwork shall be supported in accordance with SMACNA Standards.

E. Fabricate kitchen hood exhaust ducts with 16-gage, carbon steel sheets for concealed ducts and 18-gage stainless steel for exposed ducts. Weld all seams and joints. Conform to NFPA Standard 96. Slope ducts a minimum of 1" per foot downward toward the hood. Provide for thermal expansion of ductwork through 2,000-deg F temperature range. Install without dips or traps that may collect residues, except where traps have continuous or automatic residue removal. Install access openings at each change in direction and at 50-foot intervals. Locate on sides of duct 1-1/2 inches minimum from bottom, and fit with grease-tight covers of same material as duct. Do not penetrate fire-rated assemblies.

#### DUCT ACCESSORIES:

A. Turning Vanes: Use single thick vanes in square elbows. Fabricate according to SMACNA HVAC Duct Construction Standards, Figures 2-2 through 2-7.

B. Manual Dampers: For rectangular duct: Opposed blade, constructed with galvanized gauge steel blades and equal to SMACNA DCS Fig. 2-15. End of damper operating rod shall be square to accommodate damper operator. Manual dampers 12" or smaller in height may be single blade type equal to SMACNA DCS Fig 2-14 constructed of galvanized sheet metal.

C. Round damper shall be SMACNA DCS Fig 2-14 with blade gauge as follows: 8" and smaller = 22 gauge, 9" - 12" = 20 gauge, 13" and larger = 18 gauge.

D. Access Doors: As per SMACNA Fig. 2-12.

E. Grille and register connections: As per SMACNA Fig. 2-16.

PIPING:

Refrigerant piping shall be ACR nitrogen charged tubing with joints made with Sil-fos or equal high temperature (1200 degrees F.) brazing compound. Α. Bleed dry nitrogen through piping during brazing process. After satisfactory leak test, piping and system shall be evacuated and charged in accordance with the manufacturer's printed instructions.

B. Condensate drain piping: Type "L" drawn-temper copper tubing with soldered joints.

#### INSULATION:

A. Ductwork: Insulate lined and unlined supply, outdoor air, and return ductwork within building envelope with 3/4 lb. 2" thick fiberglass blanket insulation with FSK jacket. (Use 3" insulation for duct outside of building envelope) Lap all joints 2" minimum, staple 4" o.c. and seal with vapor barrier adhesive reinforced with fiber glass mesh ("glas-fab"). Use Stik-clips 24" on center on bottom of 30" wide and larger ducts. Insulate top of all air device surfaces.

B. Refrigerant Pipe: Insulate with 3/4" thick flexible elastomeric insulation. Seal all joints with adhesive. Slip whole sections of insulation on piping before pipe joints are made. Miter all elbows. Paint outdoor insulation two coats of manufacturer's recommended coating.

C. Duct Liner: 1 1/2 lbs. density, 1" thick with surface coated to prevent glass fibers from getting into airstream. Flame spread rating less than 25 and smoke spread rating less than 50. Adhere liner and cover entire surface with thick coat of adhesive that complies with NFPA 90A and ASTM C916. Fasten liner with weld pins 12" o.c. in accordance with SMACNA Duct Liner Application Standard.

D. Air conditioning Condensate Piping: 3/8" flexible elastomeric insulation for interior applications.

E. Fire-Rated Blanket: High temperature, flexible, blanket insulation with FSK-jacket that is tested and certified to provide 2-hour fire rating by an NRTL acceptable to authorities having jurisdiction and UL listed for rating on grease duct applications.

#### H.V.A.C. SPECIFICATIONS CONTINUED:

#### HANGERS:

A. Support piping from structure above with Grinnell CT-99 hanger, all thread rod and Figure 86 C-Clamp. Provide supplementary steel for upper attachment. hanger shall fit around insulated pipe and shall have 24 gauge galvanized sheet metal saddle.

#### TESTS:

A. Refrigerant Piping: Pressure test with dry nitrogen to 200 psig in accordance with ASME B31.5, Chapter VI. Perform final tests at 27-psig vacuum and 200 psig using halide torch or electronic leak detector. Test to no leakage.

B. Heat Pump Units: Record all motor and heater nameplate amps and running amps during Heating and Cooling cycle (below 60 degrees F. cooling). Complete manufacturer's installation and startup checks. Furnish startup sheets to owner at project closeout.

C. Air Side: Record air quantities at supply outlets, return grilles, exhaust grilles, and outside air duct. All airflow quantities shall be balanced to be within + or - 10% of design air quantity. Test and balance shall be performed by an AABC certified agent. Submit reports on AABC forms to engineer to review.

SPLIT SYSTEM HEAT PUMP:

A. Unit shall be of size, type and capacity as indicated on the Drawings and shall be manufactured by Carrier. Equal units by Mitsubishi, Sanyo or

## Daikin-McQuay will be acceptable.

B. The following accessories shall be furnished: Condenser Coil Guard, 5-minute Anti-Recycle Timer, Hard Start Kit for Single Phase Units and Defrost Thermostat for Indoor Coil.

C. Unit shall be a split system design with Variable Speed Inverter Compressor technology. The system shall consist of a horizontal discharge, single phase outdoor unit, a matched capacity indoor section that shall be equipped with a wired wall mounted, wireless wall mounted or wireless handheld remote controller.

#### RANGEHOOD

TYPE I EXHAUST HOOD FABRICATION

A. Units shall be of size, type and capacity as indicated on the Drawings and shall be manufactured by Accurex. Equal products by Greenheck, Duo-Aire, Inc., Captive-Aire Systems, Gaylord Industries, Inc, Grease Master; a division of Custom Industries, Inc., or Vent Master; Div. of Garland Commercial Ranges, Ltd. are acceptable.

B. Hood shall be factory fabricated and tested for compliance with UL 710.

#### C. Hood Material: Stainless Steel.

D. Weld all joints exposed to grease with continuous welds, and make filters/baffles or grease extractors and makeup air diffusers easily accessible for cleaning.

E. Fabricate hoods according to NSF 2, "Food Equipment."

F. Hoods shall be designed, fabricated, and installed according to NFPA 96.

G. Duct Collars: Minimum 0.0598-inch- thick steel at least 3 inches long, continuously welded to top of hood and at corners. Fabricate a collar with a 0.5-inchwide duct flange.

H. Hood Configuration: Exhaust and makeup air.

- I. Makeup air shall be introduced through face supply grilles on side of hood.

K. Filters/Baffles: Removable, stainless-steel, with spring-loaded fastening. Fabricate stainless steel for filter frame and removable collection cup and pitched trough. Exposed surfaces shall be pitched to drain to collection cup. Filters/baffles shall be tested according to UL 1046, "Grease Filters for Exhaust Ducts," by an NRTL acceptable to authorities having jurisdiction. Size of filters shall be no larger than 20"x 20" and selected for 0.5" w.c. clean pressure drop.

L. Lighting Fixtures: incandescent fixtures and lamps with lenses sealed vaportight. Wiring shall be installed in conduit on hood exterior. Number and location of fixtures shall provide a minimum of 70 fc at 30 inches above finished floor.

- M. Light switches shall be mounted in hood control panel.
- N. Lighting Fixtures: Incandescent complying with UL 1598.

O. Hood Controls: Hood-mounting control cabinet, fabricated of stainless steel. Exhaust Fan: On-off switches shall start and stop the exhaust fan. Interlock exhaust fan with makeup air supply fan to operate simultaneously. Interlock exhaust fan with fire-suppression system to operate fan(s) during fire-suppression-agent release and to remain in operation until manually stopped. Include red pilot light to indicate fan operation. Fan and light controls shall be nounted on face of canopy in factory installed stainless steel wireway system similar to Wiremold boxes with a stainless steel vertical raceway welded to the hood face. All surfaces to have No. 3 finish. High-Temperature Control: Alarm shall sound and cooking equipment shall shut down before hood discharge temperature rises to actuation temperature of fire-suppression system. Temperature sensor and fan delay relay shall be installed in exhaust duct collar of hood to turn on exhaust fan with setpoint is reached. The prewired remote control center shall include but not be limited to, an integral master disconnect switch with fuse blocks for the main power connection, magnetic motor starters with thermal overloads and manual reset, fused 120 volt control transformer, and distribution terminal control strip for control wiring connection. All electrical components shall be UL Listed or classified where applicable and wired in compliance with the National Electrical Code. Wiring shall be complete, requiring only one point for field connection for power service and one point for field connection for control voltage. Factory wiring shall be provided in conduit conforming to NFPA Standard 70 and designed to withstand the effects of heat, vapor and grease on the equipment. Wiring shall include control wiring to conduit to the opening in the top of canopy, connecting wiring and conduit from master electric control panel to the exhaust and makeup air fans.

#### EXHAUST FAN

A. Furnish hinged upblast exhaust fan of size and capacity listed on drawings. Fan shall be constructed of all aluminum and shall conform to AMCA, U.L. 762 Listed for use with restaurant exhaust applications. Fan shall have grease drain container with tight fitting lid.

B. Furnish pre-fabricated roof curb constructed of minimum 18 gauge galvanized steel with integral non-combustible nailer, run-off cant and 1" rigid insulation. Furnish extensions as required for exhaust fan to meet N.F.P.A. requirements for discharge height. Roof curb shall be approved by the National Roofing Contractors Association.

C. Master electric pre wired weatherproof control panel, factory mounted on rooftop fan package with: Main power source fused disconnects switch; control circuit terminal strip; magnetic motor starters with motor overload protection, relays, transformers and fused control circuit. Furnish heat detection sensor and controls to automatically energize exhaust fan when heat is detected in the hood shell. Panel shall be mounted on exterior of the unit and shall be weather proof construction

D. Furnish grease guard system to protect roof around kitchen range hood exhaust fan. System shall protect all four sides of the base of the fan and shall consist of: Grease deflecting flashing at a base of fan with three layer filter assembly contained in an anodized aluminum frame. Three layers shall consist of upper layer to trap large debris, middle layer to absorb grease and allow rainwater to pass thru and lower layer to keep assembly above standing water and allow air to circulate thru the assembly. Manufactured by Grease Guard, Inc. or equivalent.

H.V.A.C. SPECIFICATIONS CONTINUED: ROOF MOUNTED FAN PACKAGE

# shall include the following:

B. Supply air fan package shall be constructed of weatherproof baked enamel finished 16 gauge galvanized steel. Supply fan shall be forward curved centrifugal type with adjustable belt drive and mounted on vibration isolators. Fan wheel shall be constructed of galvanized steel and fan bearings shall be sized for an average life of 200,000 hours. Unit shall be complete with adjustable angle iron support legs and mounted on an equipment rail. The inlet shall contain a bird screen and 1 inch washable U.L. Listed aluminum filters sized for 500 fpm max. face velocity. Provide motorized 2-position multi-shutter outside air damper. Filters shall be easily removable. Shop drawings submittal shall include fan curves. Access panels shall be side access. (Top access is not acceptable.)

C. Furnish pre-fabricated roof curb constructed of minimum 18 gauge galvanized steel with integral non-combustible nailer, run-off cant and 1" rigid insulation. Provide extensions as required for exhaust fan to meet N.F.P.A. requirements for discharge height. Roof curb shall be approved by the National Roofing Contractors Association.

D. Master electric pre-wired weatherproof control panel, factory mounted on rooftop fan package with: Main power source fused disconnect switch; control circuit terminal strip; magnetic motor starters with motor overload protection, relays, transformer and fused control circuit. Furnish heat detection sensors and controls to automatically energize fans when heat it detected in the hood shell. Panel shall be mounted on exterior of unit and single disconnect shall control both supply and exhaust fan. Panel shall be weather proof.

E. Factory wiring shall be provided in conduit conforming to NFPA Standard 70 and designed to withstand effects of heat, vapor and grease on the equipment. Wiring shall include control wiring to conduit to the opening in top of canopy, connecting wiring and conduit from master electric control panel to supply and exhaust fans.

F. The installer shall certify to the authority having jurisdiction that the installation is in complete agreement with the terms of the listing and the manufacturer's instructions and/or approved design.

G. Contractor shall submit a layout of the hood, fan package and connecting ductwork. Structural steel and ceiling height locations will be indicated on drawings.

reduce the clearance to combustibles.

A. Manufacturers: provide products by one of the following: Ansul Incorporated; a Tyco International Ltd. Company., Badger Fire Protection., Kidde Fire Systems., Pyro Chem., Safety First.

B. Description: Engineered distribution piping designed for automatic detection and release or manual release of fire-suppression agent by hood operator. Fire-suppression system shall be listed and labeled for complying with NFPA 17A, "Wet Chemical Extinguishing Systems," by a qualified testing agency acceptable to authorities having jurisdiction.

D. Malleable-Iron Threaded Fittings: ASME B16.3, Classes 150 and 300.

E. Piping, fusible links and release mechanism, tank containing the suppression agent, and controls shall be factory installed. Controls shall be in stainless-steel control cabinet mounted on wall. Furnish manual pull station for wall mounting. Exposed piping shall be covered with chrome-plated aluminum tubing. Exposed fittings shall be chrome plated.

F. All piping except for nozzle drops, piping shall be run above the hood. Hood penetration shall be made with Ansul "quick-seal" adapters or equivalent. G. Liquid Extinguishing Agent: Noncorrosive, low-pH liquid.

I. The regulated release mechanism shall be the spring loaded type capable of providing the expellant gas supply to the agent tank. The regulated release mechanism shall have the following actuation capabilities: automatic actuation by fusible link detection system; remote manual actuation by a mechanical pull station' local manual actuation by a push button located at the front of the release mechanism enclosure.

J. The tank and bracket assembly shall contain a chrome-plated, welded steel bracket and an agent tank.

K. Each discharge nozzle shall be tested and listed with a restaurant system for specific applications. Nozzle placement shall be determined by the size of the orifice in the nozzle tip.

N. Furnish electric-operated U.L. listed gas shutoff valve to shut off all equipment under the hood upon activation of fire suppression system

O. Furnish U.L. listed electric switch to shut off electrical power to appliances or to activate electrically operated devices and fire alarm system to shut off all equipment under the hood upon activation of the fire suppression system.

P. Fire-suppression system controls shall be integrated with controls for fans, lights, and fuel supply and located in a single cabinet for each group of hoods immediately adjacent.

Q. Wiring shall have color-coded, numbered terminal blocks and grounding bar. Spare terminals for fire alarm, optional wiring to start fan with fire alarm, red pilot light to indicate fan operation, and control switches shall all be factory wired in control cabinet with relays or starters. Include spare terminals for fire alarm, and wiring to start fan with fire alarm.

R. The fire extinguishing system shall also meet the requirements of the State Fire Marshal. Submit copies of Drawings bearing the stamp of Approval of the State Fire Marshal; one copy of which shall remain at the job site.

CONTROLS:

A. Installation shall be in accordance with HVAC equipment manufacturer's wiring diagrams. Control components shall form a fully functional system.

B. HVAC unit thermostats shall be manufacturer's standard electronic 7-day programmable model having an Off-Em-Ht.-Heat-Auto-Cool System switch and an Auto-On Fan switch. Provide multi-stage heating and cooling thermostat where controlled unit has multi-stage capability. Outdoor thermostat shall prevent strip heat from being energized above 45 degrees F. (Emergency heat position not required for non-heat pump unit.) Furnish unit with the following features: Override function, Proportional plus integral control, Automatic changeover, and Keypad lockout. Furnish remote return temperature sensor where shown on plans

C. Sequence of Operation:

Heat Pump Units: Units shall be controlled by programmable heat pump thermostats. The compressor, heat/cool reversing valve and supply fan shall energize in heating or cooling mode as required to satisfy the thermostat set point. Occupied and unoccupied set points shall be coordinated with the owner.

Fans: Refer to fan schedule.

Commercial Kitchen Ventilation: Range Hood control panel shall have separate switches for supply fan and exhaust fan. Fans shall be interlocked such that supply (makeup air) fan cannot run unless exhaust fan is running. Exhaust fan (and makeup unit) shall energize whenever switched on manually or when heat is detected in the hood. Equipment under range hood shall be interlocked such that all fuel and power sources are shut off in the event of a fire suppression system discharge.

J. Hood Style: Wall-mounted canopy with tapered front for low ceiling application.

A. Provide roof mounted pre-engineered supply fan package of size and capacity as indicated on the plans. The assembly shall be a complete system and

H. Hood, grease extractors and ducts shall have a clearance of at least 18 inches to combustible material. See NFPA 96 Appendix for protection required to

WET-CHEMICAL FIRE-SUPPRESSION SYSTEM

C. Steel Pipe, NPS 2 and Smaller: ASTM A 53/A 53M, Type S, Grade A, Schedule 40, plain ends.

H. Agent tank shall be chrome-plated carbon steel.

L. The fusible link shall be selected and installed according to the operating temperature in the ventilating system.

## M. Furnish a manual remote pull station as the primary means of actuation.





3587 BEALL SPRINGS ROAD GIBSON, GA 30810







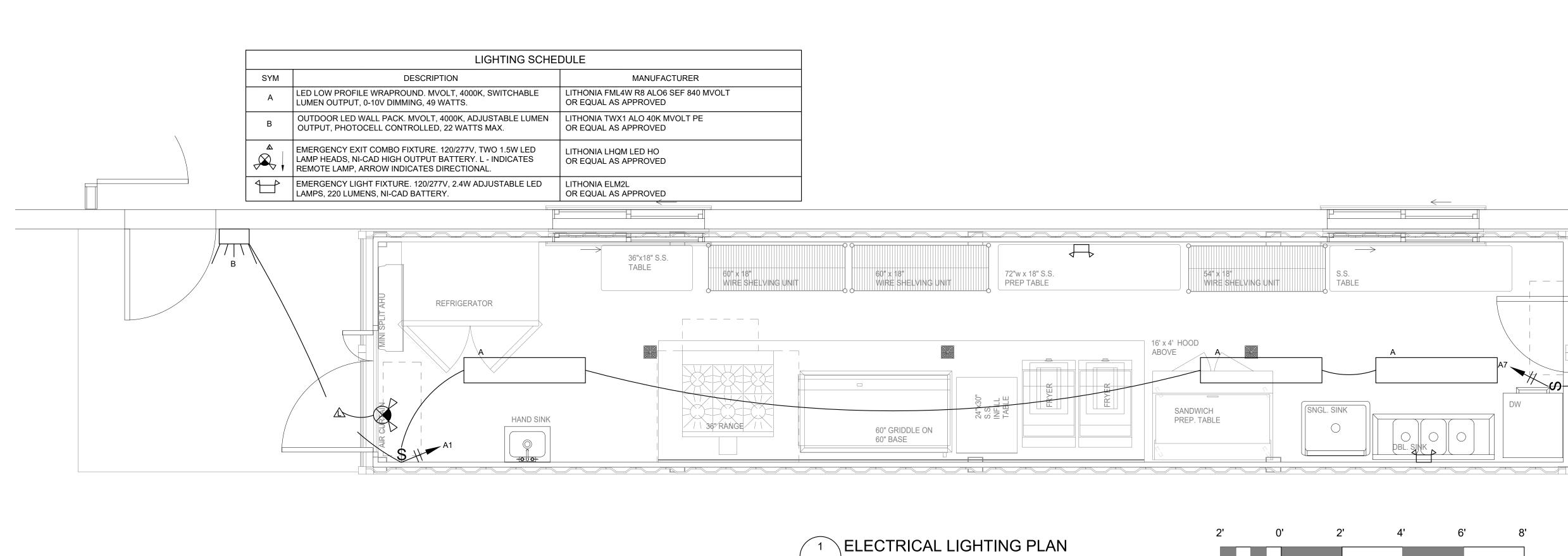
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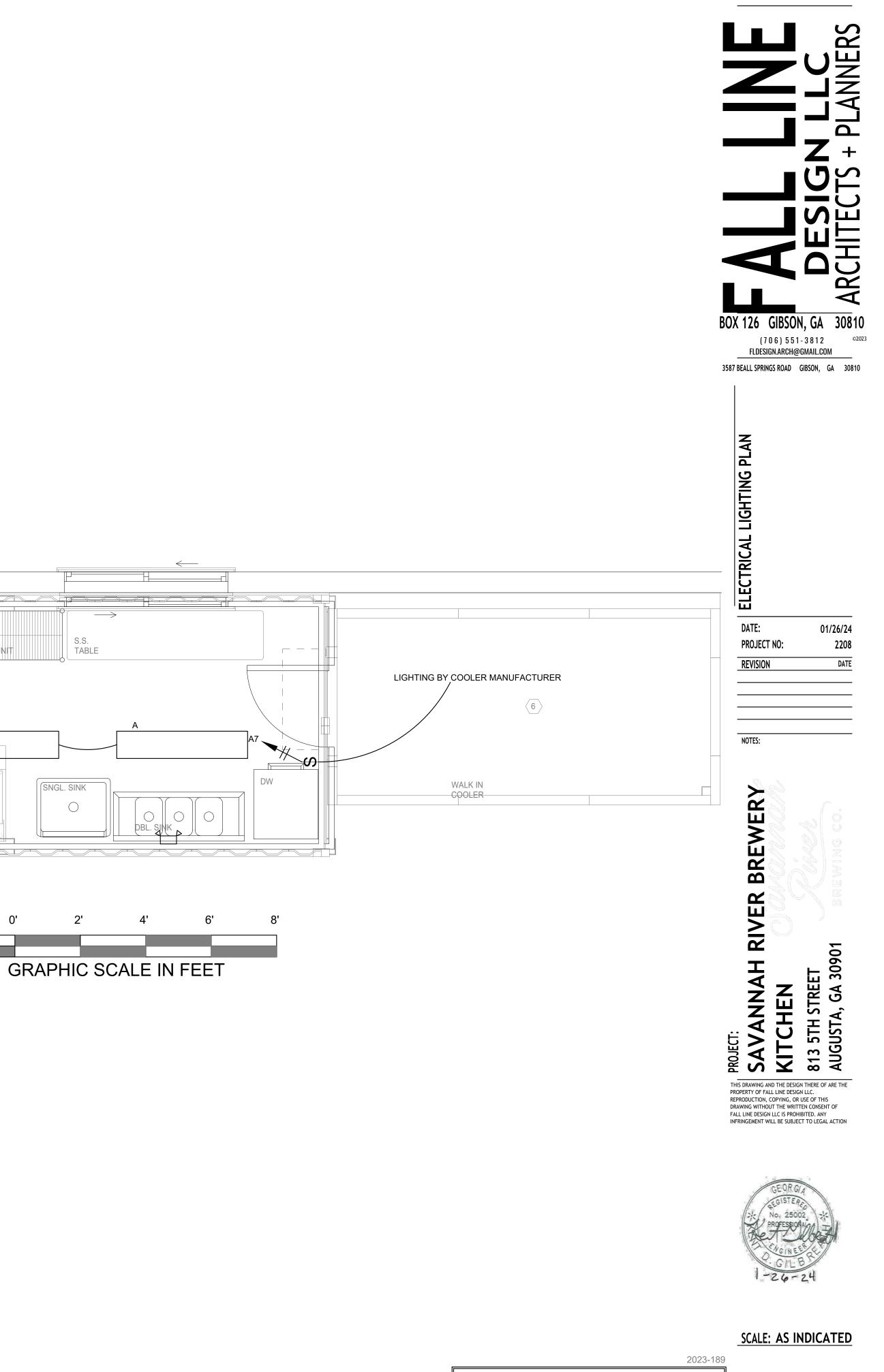
## SCALE: AS INDICATED

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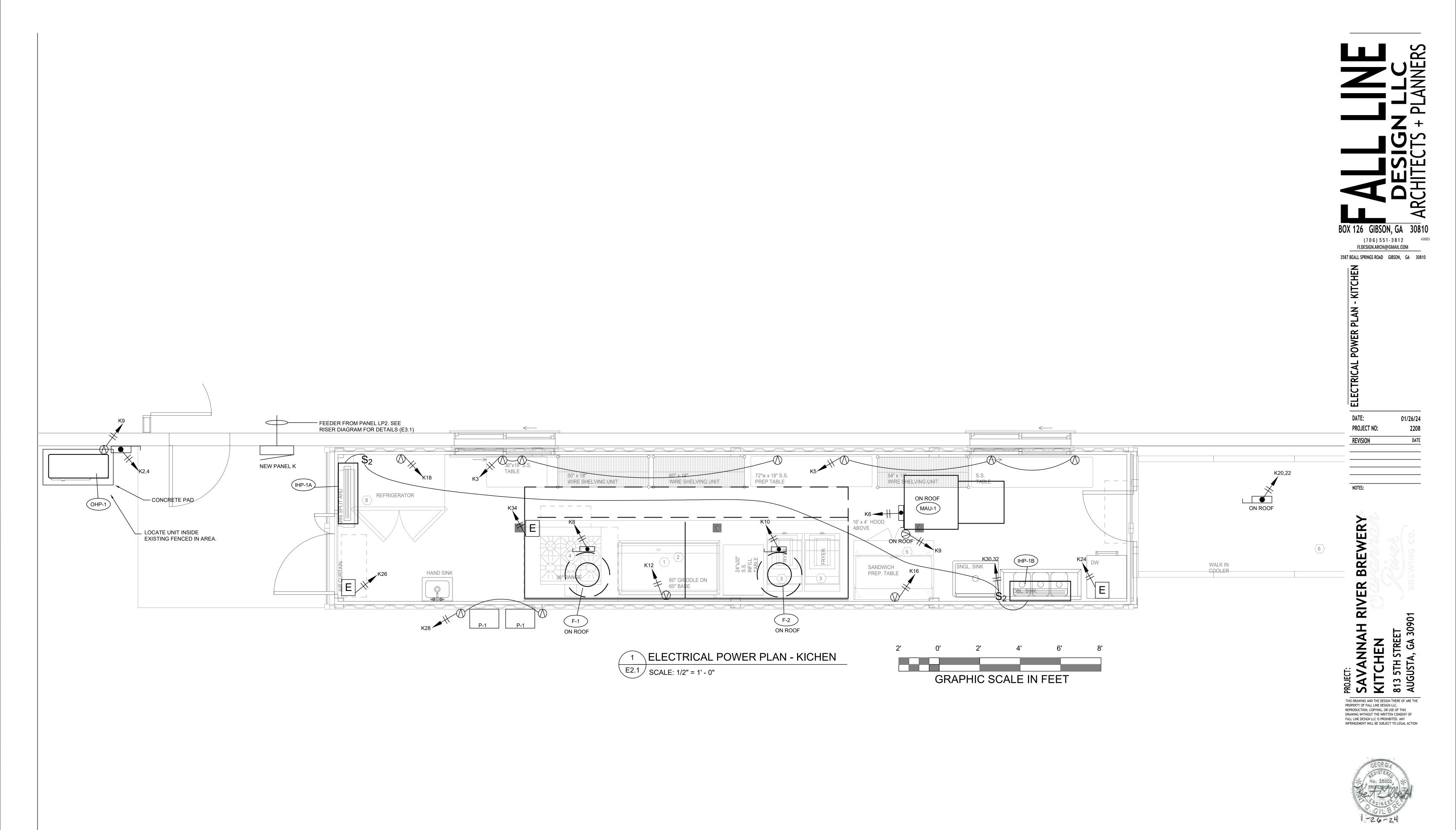


E1.1 SCALE: 1/2" = 1' - 0"

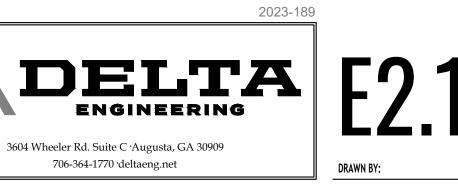




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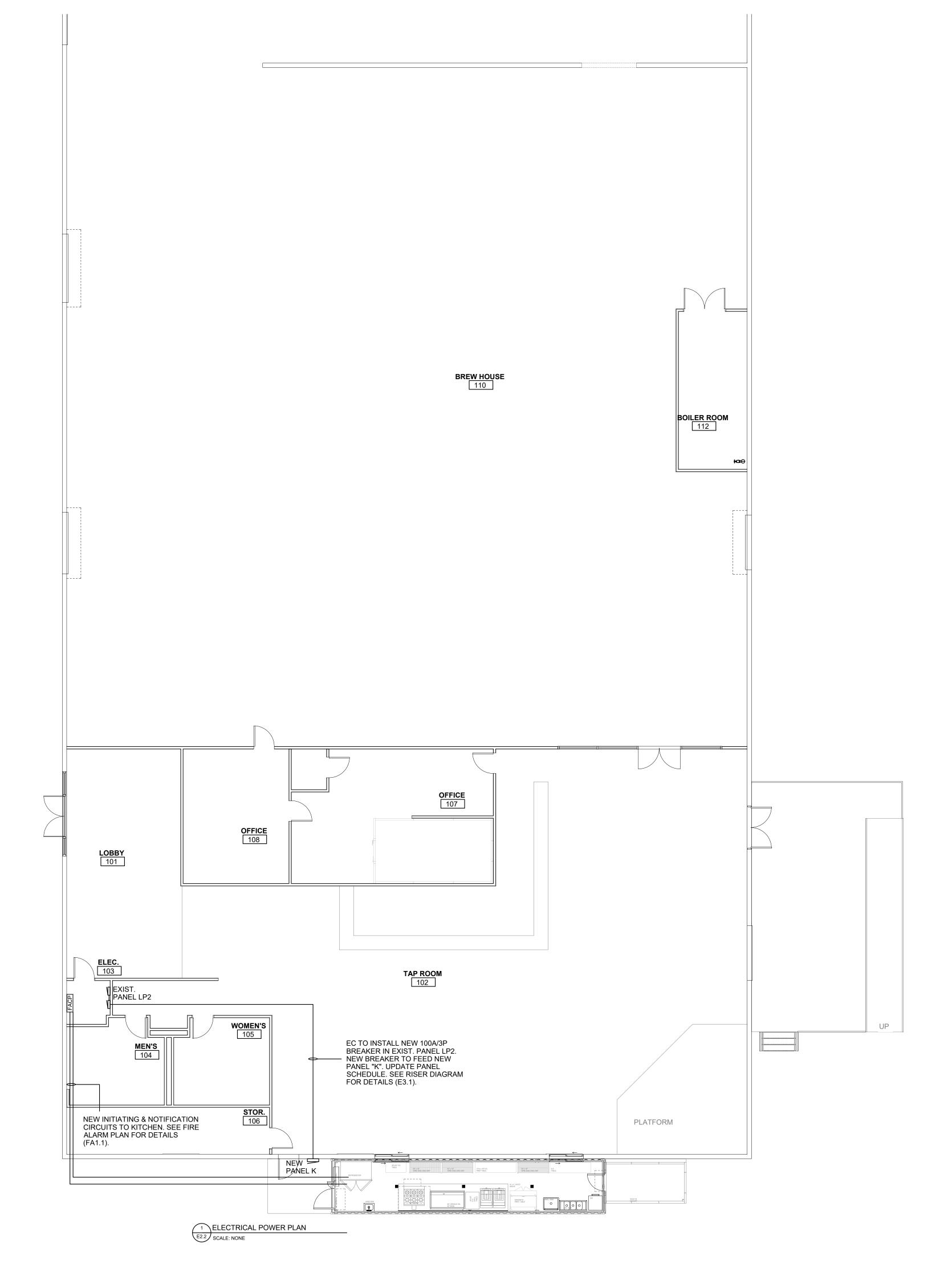


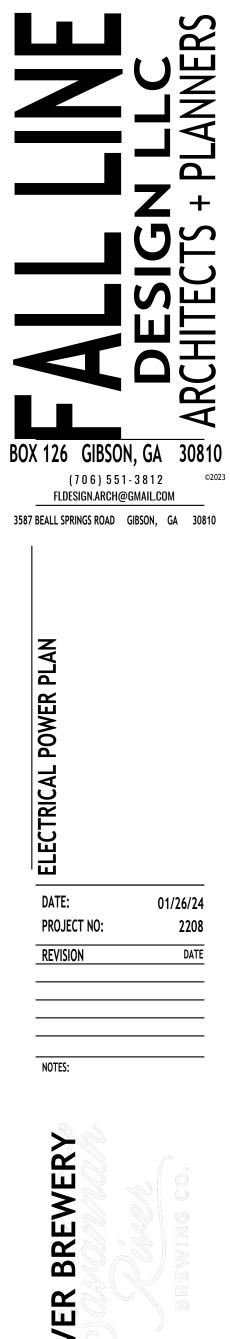
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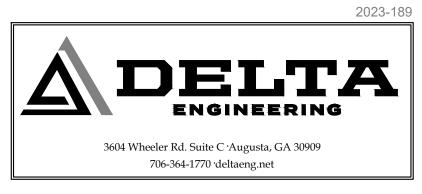






# SCALE: AS INDICATED





|   | ELECTRICAL SYMBOLS  |
|---|---|
| SYMBOL  | DESCRIPTION   |
| * *   | BRANCH CIRCUIT OR FEEDER CONDUIT CONCEALED IN WALLS OR ABOVE CEILING WITH<br>GROUND. ARROW DENOTES HOME RUN TO PANEL. CROSS HATCHES DENOTE NUMBER OF<br>CONDUCTORS IF OTHER THAN TWO, BUT DO NOT INCLUDE SWITCH LEGS OR THE EQUIPMENT<br>GROUND WIRE. NUMBER 12 MINIMUM SIZE. SEE PANEL SCHEDULE FOR WIRE SIZE.   |
| \$ \$ <sub>3</sub> \$4<br>\$ <sub>F</sub> \$ <sub>P</sub> \$ <sub>P</sub><br>\$ <sub>WP</sub> | 120-277V/20A SINGLE POLE LIGHTING SWITCH, MOUNT AT 48" ABOVE FINISHED FLOOR. 3 -<br>DESIGNATES 3-WAY CONNECTORS, 4 - DESIGNATES 4-WAY CONNECTORS, P - DESIGNATES<br>INTEGRATED OCCUPANCY SENSOR. F - DESIGNATES WALL MOUNTED OCCUPANCY<br>CONTROLLED DUAL LIGHT & EXHAUST FAN SWITCH (SENSOR SWITCH WSX 2P FAN OR EQUAL).<br>WP - INDICATES WEATHER PROOF SWITCH OR WEATHER PROOF HOUSING SUITABLE FOR<br>OUTDOOR ENVIRONMENTS. |
| \$ \$P  | 120V, 0-10 VOLT DIMMER SWITCH, SLIDE CONTROL W/ ON-OFF FEATURE. MUST BE<br>COMPATIBLE WITH LED FIXTURE CHOSEN. SEE LIGHTING SCHEDULE FOR DETAILS. P -<br>DESIGNATES INTEGRATED OCCUPANCY SENSOR.  |
|   | WALL MOUNTED LIGHT FOR OUTDOOR APPLICATION (TYP.)   |
| 0   | LED RECESSED DOWNLIGHT FIXTURE, SEE LIGHTING SCHEDULE.  |
| A   | LED LINEAR FIXTURE, FLAT PANEL, OR DROP IN TROFFER 120V (UNLESS NOTED OTHERWISE,<br>SEE LIGHTING SCHEDULE)<br>A = FIXTURE TYPE (SEE LIGHTING SCHEDULE)  |
| 어   | WALL MOUNTED LIGHT FIXTURE. SEE LIGHTING SCHEDULE.  |
| a   | CEILING MOUNTED LIGHT FIXTURE. SEE LIGHTING SCHEDULE.   |
|   | EMERGENCY EXIT LIGHT WITH FACES AND ARROWS AS INDICATED. SHADED AREA DENOTES<br>FACES. SEE LIGHT FIXTURE SCHEDULE. CONNECT TO CONTINUOUS (UNSWITCHED) POWER<br>SUPPLY SERVING LIGHTING IN THE PARTICULAR SPACE. MOUNTED 9'-0" AFF.  |
|   | EMERGENCY LIGHTS - SURFACE MOUNTED LED EMERGENCY FIXTURE W/ BATTERY BACKUP.<br>SEE LIGHT FIXTURE SCHEDULE. CONNECT TO CONTINUOUS (UNSWITCHED) POWER SERVING<br>LIGHTING IN THE PARTICULAR SPACE. MOUNTED 8'-0" AFF.   |
| TEL   | TELEPHONE CABINET BACKBOARD SHALL BE 3/4" PLYWOOD   |
|   | ENCLOSED DISCONNECT SWITCH, NEMA 3R FOR OUTDOOR, NEMA 1 FOR INDOOR, MOUNTED 30"AFF TO BUILDING, EXCEPT AS NOTED ON PRINTS. SIZE DISCONNECT AND FUSE TO MEET HVAC MFRS SPECIFICATIONS.   |
|   | UNDERGROUND OR UNDER STRUCTURE RIGID METAL CONDUIT. BURY AT A DEPTH OF 24"<br>BELOW GRADE.  |
|   | ELECTRICAL PANELBOARD (RECESSED OR FLUSH MOUNTED). SEE RISER AND PANEL SCHEDULE FOR RATINGS.  |
| OHP#<br>IHP#  | HEAT PUMP UNIT, # - INDICATES SPECIFIC UNIT, I - INDICATES INDOOR, O - INDICATES<br>OUTDOOR. (SEE MECHANICAL SCHEDULE FOR CORRECT UNIT)   |
| L   | WALL / CEILING MOUNTED JUNCTION BOX OR EQUIPMENT JUNCTION BOX WHEN FURNISHED WITH COVER. MINIMUM SIZE 4" x 4" x 1-1/2". SIZE PER NEC.   |
| E   | EQUIPMENT CONNECTION (EXACT LOCATION TO BE DETERMINED BY KITCHEN/ EQUIPMENT MANUFACTURER' S SPECIFICATIONS.)  |
| €€€   | 20A,120VOLT DUPLEX CONVENIENCE OUTLET, CENTERED VERTICALLY 18" AFF UNLESS<br>OTHERWISE NOTED. S - DENOTES SPLIT WIRED FOR 2 CIRCUIT OPERATION. WIRE TOP<br>RECEPTACLE FOR SWITCH OPERATION AS SHOWN. C - DENOTES CEILING MOUNTED OR<br>MOUNTED JUST ABOVE WINDOW FOR SHOW WINDOWS.  |
| 0   | 20A,120VOLT GFI DUPLEX CONVENIENCE OUTLET, CENTERED VERTICALLY 18" AFF UNLESS<br>OTHERWISE NOTED. IF LOCATED OUTSIDE, RECEPTACLE WILL HAVE INTEGRAL GROUND<br>FAULT INTERRUPTER AND WEATHERPROOF COVER. "GFI" DENOTES INTEGRAL GROUND FAULT<br>INTERRUPTER. MOUNT GFI'S IN BATHROOMS OR SINKS, 6" ABOVE COUNTER TOPS.   |
| <b>•</b>  | 20A,120VOLT QUAD CONVENIENCE OUTLET, CENTERED VERTICALLY 18" AFF UNLESS<br>OTHERWISE NOTED.   |
| M   | WALL MOUNTED DATA/TELEPHONE JACK LOCATION. RUN 1" CONDUIT W/ PULL STRING TO ABOVE CEILING.  |
| K   | FLOOR MOUNTED DATA/TELEPHONE JACK LOCATION. RUN 1" CONDUIT W/ PULL STRING TO ABOVE CEILING.   |
| ₽   | 20A,120VOLT DUPLEX CONVENIENCE OUTLET, MOUNTED 6" ABOVE COUNTERTOP, UNLESS OTHERWISE NOTED.   |
| ₩   | 20A,120VOLT QUAD CONVENIENCE OUTLET, MOUNTED 6" ABOVE COUNTERTOP, UNLESS OTHERWISE NOTED.   |
|   |   |

## ELECTRICAL NOTES

- 1. OUTLET BOXES ON OPPOSITE SIDES OF FIRE RESISTANT WALL OR SHAFT ENCLOSURE SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24" MINIMUM.
- 2. ALL CONVENIENCE OUTLETS INSTALLED TO SERVE A KITCHEN COUNT TOP SHALL BE GFI PROTECTED PER NEC.
- 3. INSTALL SMOKE DETECTORS PER NFPA 72 AND IBC. SEE ELECTRICAL SYMBOLS.
- 4. MAINTAIN CONTINUOUS GROUNDS ON ALL RECEPTACLES.
- 5. USE FIRE RATED MATERIALS IN RATED WALLS. FOR STOP PER NFPA.
- 6. CEILING PENETRATIONS SHALL MEET THE REQUIREMENT OF NEC AND IBC.
- 7. GROUND ELECTRICAL SERVICE PER NEC250-66 AND AS APPROVED BY LOCAL AHJ.
- 8. MAINTAIN 3 FT. MINIMUM CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT PER NEC 110.26 (A)
- 9. CONSULT LOCAL UTILITY AND BUILDING AUTHORITY FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION OF ELECTRICAL EQUIPMENT. VERIFY AVAILABLE FAULT CURRENT IS LESS THAN EQUIPMENT RATING SPECIFIED. ELECTRICAL CONTRACTOR MAY REDUCE INTERRUPTING RATING OF EQUIPMENT IF LOCAL UTILITY AVAILABLE FAULT CURRENT IS SUBSTANTIALLY LOWER THAN ANTICIPATED AND SHALL GAIN APPROVAL IN WRITING FROM ENGINEER PRIOR TO PURCHASE AND INSTALLATION. INSTALLATION SHALL MEET THE REQUIREMENTS OF NEC 110.9 AND 110.10.
- 10. FIRE ALARM. GAIN APPROVAL FROM LOCAL FIRE MARSHALL ON FIRE PROTECTION EQUIPMENT LAYOUT PRIOR TO INSTALLATION AND APPROVAL. FIRE MARSHAL MAY REQUIRE ADDITIONAL EQUIPMENT (SMOKE DETECTORS, EXIT SIGNS, EGRESS LIGHTS, ETC) GREATER THAN THAT SHOWN. IF ADDITIONAL EQUIPMENT IS REQUESTED OTHER THAN THAT SHOWN, CONTRACTOR SHALL CONSULT ARCHITECT / ENGINEER PRIOR TO CONTINUING. CONTRACTOR SHALL BE RESPONSIBLE FOR FAILURE TO INFORM ENGINEER AND ARCHITECT AND SHALL INCUR ALL COST FOR ADDITIONAL CHANGES WITHOUT PRIOR APPROVAL. INSTALL FIRE ALARM EQUIPMENT PER NFPA 72.
- 11. HOME RUNS FOR ALL 20 AMP BRANCH CIRCUITS LONGER THAN 75 FEET SHALL BE AT LEAST 10 AWG.
- 12. ALL 10,000 AIC RATED BREAKERS SHALL BE SERIES RATED FOR 22,000 AIC W/ MAIN CB.

## **ELECTRICAL MATERIALS**

- 1. FURNISH ALL NECESSARY MATERIALS, TOC COMPLETE AND FULLY OPERABLE SYSTEM AS ALL OUTLETS SHALL BE LEFT READY FOR US FREE OF DEFECTS AND BE UL LISTED.
- 2. ALL WORK SHALL BE IN ACCORDANCE WIT ORDINANCES AND THE REQUIREMENTS OF TH SHALL GOVERN IN THE EVENT OF A CONFLICT.
- 3. APPLY AND PAY FOR ALL REQUIRED PERMITS,
- 4. UNLESS OTHERWISE NOTED, ALL WIRING OUTLETS SHALL BE FLUSH MOUNTED IN WALLS
- 5. OUTLET BOXES SHALL BE SIZED AND INSTALL CODES.
- 6. PANELS SHALL HAVE INSULATED NEUTRAL BU GROUNDING BUSSES. PROVIDE CIRCUIT INDEX
- 7. LIGHTING FIXTURES SHALL BE COMPLET APPLICABLE) AND MOUNTING ACCESSORIES PER NEC ARTICLE 410-20.
- 8. ALL POWER WIRING AND CONNECTIONS TO M PROVIDED BY THIS CONTRACTOR.
- 9. SEAL ALL PENETRATIONS IN FIRE RATED ASS STOP MATERIAL. INSTALL PER MANUFACTURE
- 10. AT THE COMPLETION OF THIS WORK, THIS RUBBISH CAUSED BY HIS WORK AND ELECTRICAL EQUIPMENT.
- 11. GROUND SYSTEMS PER NEC ARTICLE 250 AND LOCAL CODES.
- 12. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND LABOR FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OR FIRS BENEFICIAL USE BY THE OWNER, WHICHEVER COMES FIRST. THE ENTIRE SYSTEM SHALL BE FREE OF SHORTS AND GROUNDS. CORRECTIONS TO THE WIRING SYSTEM, DUE TO DEFECTIVE MATERIALS AND WORKMANSHIP, WITHIN THE GUARANTEE PERIOD, SHALL BE MADE BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 13. ALL HEATING, VENTILATION , AND AC BREAKERS SHALL BE HACR TYPE PER MANUFACTURER'S SPECIFICATIONS.
- FOLLOWS: 120/208 3Ø,4W: ØA BLACK, ØB RED, ØC -BLUE, NEUTRAL WHITE, EQUIPMENT GROUND - GREEN. 277/480 3Ø,4W: ØA - BROWN, ØB - ORANGE, ØC -YELLOW, NEUTRAL - GRAY, EQUIPMENT GROUND-GREEN.
- 15. USE OF NM, NMC AND NMS CABLE IN LIEU OF CONDUIT AND STRANDED THHN, THWN WIRE FOR BRANCH CIRCUITS PER CURRENT NEC IS ALLOWED PROVIDED LOCAL AHJ APPROVES OF ITS USE. RESIDENTIAL CLASSIFICATIONS ONLY.
- 16. CONDUITS CONCEALED IN WALLS AND ABOVE CEILING SHALL BE EMT. UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40, EXPOSED CONDUITS SHALL BE RIGID STEEL. CONDUITS SHALL BE RUN AT RIGHT ANGLES TO BUILDING WALLS. USE OF MC CABLE IS ALLOWED PER NEC APPROVED LOCATIONS & AHJ.
- 17. DEVICES AND DEVICE BOXES SHALL BE INSTALLED LEVEL AND PLUMB. DUPLEX RECEPTACLES SHALL BE INSTALLED SO THAT GROUNDS ARE AT BOTTOM. SINGLE POLE TOGGLE SWITCHES SHALL BE INSTALLED SO THAT OFF POSITION IS DOWN.
- 18. DEVICE AND DEVICE PLATE MATERIALS AND COLORS SHALL BE AS SPECIFIED BY OWNER / ARCHITECT.
- 19. ALL FUSES SHALL BE CLASS RK1 OR RK5 FUSES OR EQUAL WITH CURRENT LIMITING CHARACTERISTICS.
- 20. LABEL ALL PANELS AND DISCONNECTS PER NEC ARC FLASH PROTECTION REQUIREMENTS.
- 21. AFFIX MAXIMUM FAULT CURRENT TO MAIN CIRCUIT PANEL OR DISCONNECT AT FACILITY PER NEC 110.16 AND 24.



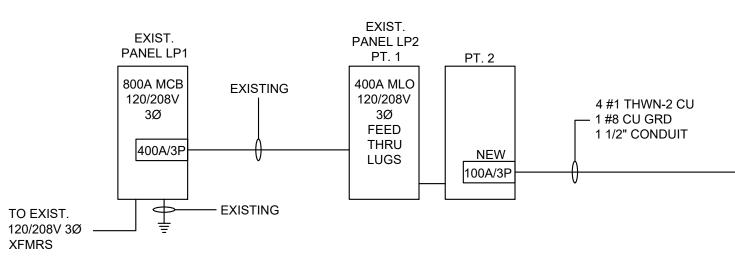
| OLS AND LABOR, AND INSTALL A<br>S SHOWN OR REASONABLY IMPLIED.<br>SE. ALL MATERIALS SHALL BE NEW |  |
|--|--|
| TH NEC 2020, LOCAL CODES AND<br>HE UTILITY COMPANY. LOCAL CODES                                  |  |
| , INSPECTIONS, ETC.  |  |
| SHALL BE RUN CONCEALED AND<br>S, CEILINGS OR FLOORS.   |  |
| LED PER NEC AND MEET ALL LOCAL   |  |
| USSES AND SEPARATE EQUIPMENT<br>X CARDS.   |  |
| TE WITH LAMPS, BALLASTS (IF<br>AS REQUIRED. GROUND FIXTURES                                      |  |
| MECHANICAL EQUIPMENT SHALL BE  |  |
| SEMBLIES WITH 3-M, OR EQUAL FIRE<br>R'S INSTALLATION INSTRUCTIONS.                               |  |
| CONTRACTOR SHALL REMOVE ALL<br>SHALL THOROUGHLY CLEAN ALL  |  |
|  |  |

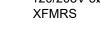
|            |            |            |                     | (222)                |           |         | WER/LIGHTING PANEL: |          |             |                      |                            |            |            |           |
|------------|------------|------------|---------------------|----------------------|-----------|---------|---------------------|----------|-------------|----------------------|----------------------------|------------|------------|-----------|
|            | 1          |            | 120,                |                      | VLO 100   |         | ACH BREAKER 22,000  | SQ D PAN | EL (OR EQUA | -                    | NTED                       | 1          |            | T         |
| LOAD A     | LOAD B     | LOAD C     | LOAD SERVED         | WIRE/CONDUIT<br>SIZE | SIZE/POLE | СКТ NO. | BUSS                | CKT NO.  | SIZE/POLE   | WIRE/CONDUIT<br>SIZE | LOAD SERVED                | LOAD A     | LOAD B     | LOAD C    |
| 100        |            | LIGH       | ITING               | #12 - 1/2"           | 20/1      | 1       |                     | 2        | 45/2        | #8 - 3/4"            | OHP - 1                    | 3330       |            |           |
|            | 600        | RECI       | EPTACLES            |                      |           | 3       |                     | 4        | 45/2        | #0 - 3/4             |                            |            | 3330       |           |
|            |            | 600 RECI   | EPTACLES            |                      |           | 5       |                     | 6        | 45/1        | #10 - 1/2"           | MAU - 1                    |            |            | 2400      |
| 100        |            | LIGH       | ITING - WALK IN     |                      |           | 7       |                     | 8        | 35/1        | #12 - 1/2"           | F-1                        | 1920       |            |           |
|            | 400        | OUT        | DOOR GFCI RECEPT.   | ▼                    |           | 9       |                     | 10       | 35/1        |                      | F - 2                      |            | 1920       |           |
|            |            |            | SPARE               |                      |           | 11      |                     | 12       | - 15/1      |                      | #2 REF. EQUP. STAND (SHUNT |            |            | 420       |
|            |            |            |                     |                      |           | 13      |                     | 14       | 15/1        |                      | TRIP BREAKER)              | 0          |            |           |
|            |            |            |                     |                      |           | 15      |                     | 16       | 15/1        |                      | #5 SAND. PREP TABLE        |            | 420        |           |
|            |            |            |                     |                      |           | 17      |                     | 18       | 15/1        |                      | #8 REACH IN REF.           |            |            | 360       |
|            |            |            |                     |                      |           | 19      |                     | 20       | 15/2        |                      | WALK-IN COOLER             | 780        |            |           |
|            |            |            |                     |                      |           | 21      |                     | 22       | 15/2        |                      | REFRIGERATION              |            | 780        |           |
|            |            |            |                     |                      |           | 23      |                     | 24       | 15/1-GFI    |                      | DISHWASHER - GFCI BREAKER  |            |            | 1440      |
|            |            |            |                     |                      |           | 25      |                     | 26       | 20/1        |                      | AIR CURTAIN                | 1200       |            |           |
|            |            |            |                     |                      |           | 27      |                     | 28       | 20/1        |                      | WATER HEATERS              |            | 1000       |           |
|            |            |            |                     |                      |           | 29      |                     | 30       | - 15/2      |                      | IHP - 1A & 1B              |            |            | 180       |
|            |            |            |                     |                      |           | 31      |                     | 32       | 15/2        |                      |                            | 180        |            |           |
|            |            |            |                     |                      |           | 33      |                     | 34       | 15/1        |                      | HOOD POWER/LIGHTING        |            | 500        |           |
|            |            |            |                     |                      |           | 35      |                     | 36       | 20/1        | ·                    | SPARE                      |            |            |           |
|            |            |            |                     |                      |           | 37      |                     | 38       |             |                      |                            |            |            |           |
|            |            |            |                     |                      |           | 39      |                     | 40       |             |                      |                            |            |            |           |
|            |            |            |                     |                      |           | 41      |                     | 42       |             |                      |                            |            |            |           |
| TOTAL LOAD | TOTAL LOAD | TOTAL LOAD | TOTAL PANEL VA:     | 26850                |           |         |                     |          |             |                      |                            | TOTAL LOAD | TOTAL LOAD | TOTAL LOA |
| 200        | 1000       | 600        |                     |                      |           |         |                     |          |             |                      |                            | 7410       | 7950       | 4800      |
|            |            |            | TOTAL LOAD CURRENT: | 75                   |           |         |                     |          |             |                      |                            |            |            |           |
|            |            |            |                     |                      |           |         |                     |          |             |                      |                            |            |            |           |

\* ELECTRICAL CONTRACTOR TO VERIFY ALL HVAC ELECTRICAL EQUIPMENT SPECS PRIOR TO PURCHASE AND INSTALLATION. CONTACT ENGINEER IF ELECTRICAL LOADS DIFFERENT THAN SHOWN. ELECTRICAL CONTRACTOR SHALL VERIFY ALL HACR BREAKER SIZES AND ASSOCIATED WIRE SIZE WITH HVAC EQUIPMENT PRIOR TO PURCHASE AND INSTALLATION. FAILURE TO DO SO WILL NOT RESULT IN ANY ADDITIONAL COST TO THE OWNER, ARCH, OR ENGINEER.

\*\* INSTALL EQUIPMENT GROUND WIRE PER NEC ART. 250 TABLE 122.

14. CONDUCTORS SHALL BE THHN/ THWN-2 COPPER, 10WG & SMALLER SHALL BE \*\*\* ELECTRICAL CONTRACTOR SHALL VERIFY ALL KITCHEN EQUIPMENT ELECTRICAL BREAKER SIZES AND ASSOCIATED WIRE SIZE WITH KITCHEN EQUIPMENT SUPPLIER PRIOR SOLID, 8 AWG AND LARGER SHALL BE STRANDED. COLOR CODE SHALL BE AS TO PURCHASE AND INSTALLATION. FAILURE TO DO SO WILL NOT RESULT IN ANY ADDITIONAL COST TO THE OWNER, ARCH, OR ENGINEER.

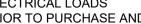


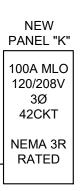


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