

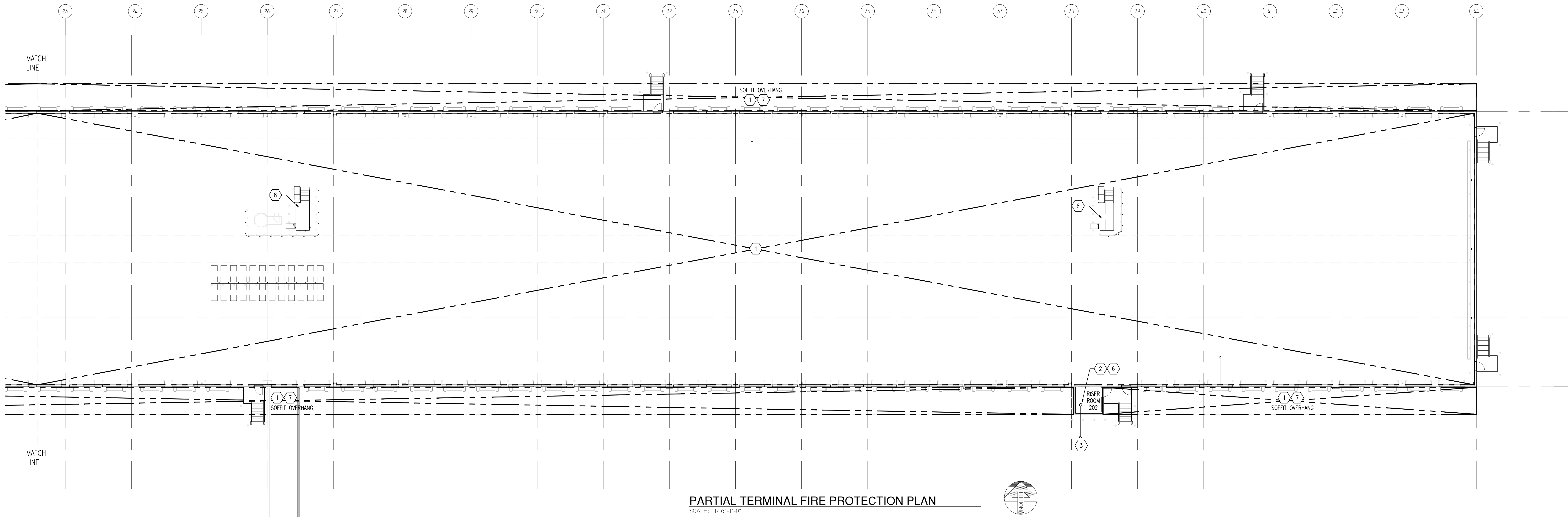
PARTIAL OFFICE/TERMINAL FIRE PROTECTION PLAN
SCALE: 1/16"=1'-0"

GENERAL NOTES

- A. CONTRACTOR SHALL REFER TO FIRE PROTECTION SPECIFICATIONS.
- B. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.
- C. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA OR OTHERS, THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.
- D. FIRE PROTECTION SYSTEM SHALL BE DESIGNED IN COMPLIANCE WITH THE LATEST EDITION OF NFPA 13 AND LOCAL FIRE CODE REQUIREMENTS.
- E. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FLOW TEST DATA AND PREPARING ALL REQUIRED HYDRAULIC CALCULATIONS.
- F. SPRINKLER AND PIPING LAYOUT SHOWN FOR REFERENCE PURPOSES ONLY. CONTRACTOR SHALL CONFIRM STRUCTURAL AND WATER SUPPLY HYDRAULIC INFORMATION PRIOR TO SYSTEM FABRICATION AND INSTALLATION.
- G. WHERE REQUIRED BY CODE OR DIRECTED BY LOCAL AUTHORITIES, CONTRACTOR SHALL PROVIDE SEISMIC HANGING & CONSTRAINTS ON ALL PIPING IN COMPLETE ACCORDANCE WITH THE LATEST ISSUE OF THE STATE MECHANICAL BUILDING CODE, LOCAL CODES AND NFPA.
- H. FIRE PROTECTION CONTRACTOR SHALL PROVIDE A GUARANTEE COVERING ALL MATERIAL AND WORKMANSHIP FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE BY OWNER.
- I. FLOW TEST RESULTS TO BE CALCULATED FROM TEST LOCATION NEAREST TO THE FIRE RISER.

KEY NOTES

1. PROVIDE DRY-PIPE FIRE PROTECTION SYSTEM AS REQUIRED. INSTALL QUICK OPENING DEVICES IF NECESSARY TO CHARGE SYSTEM WITHIN NFPA TIME CONSTRAINTS. FIRE PROTECTION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 13, OWNER'S INSURANCE CARRIER, LOCAL FIRE MARSHALL.
2. PROVIDE NEW WET FIRE PROTECTION RISER IN FIRE RISER ROOM. ROUTE DRAIN TO EXTERIOR WALL. COORDINATE EXACT LOCATION OF FIRE DEPARTMENT CONNECTION WITH LOCAL FIRE MARSHALL.
3. SEE CIVIL PLANS FOR CONTINUATION OF UNDERGROUND 8" FIRE WATER LINE. COORDINATE EXACT TIE-IN LOCATION AND INVERT WITH SITE UTILITY CONTRACTOR.
4. SEE CIVIL PLANS FOR CONTINUATION OF UNDERGROUND 6" FIRE WATER LINE. COORDINATE EXACT TIE-IN LOCATION AND INVERT WITH SITE UTILITY CONTRACTOR.
5. PROVIDE WET FIRE PROTECTION SYSTEM AS REQUIRED. FIRE PROTECTION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 13, OWNER'S INSURANCE CARRIER, LOCAL FIRE MARSHALL.
6. PROVIDE AIR COMPRESSOR AND NEW DRY-PIPE FIRE PROTECTION RISER TO FEED ALL OF THE SPRINKLER HEADS IN THE TERMINAL BUILDING AND ROOF OVERHANGS.
7. REFER TO DETAIL 4 ON SHEET FP2.5 FOR LOCATION OF SPRINKLER PIPING AND HEADS IN THE ROOF OVERHANG TO AVOID DAMAGE FROM TIPPED TRAILERS.
8. PROVIDE FIRE PROTECTION UNDER DOCK STANDS IN ACCORDANCE WITH NFPA 13 AND LOCAL FIRE MARSHALL.



PARTIAL TERMINAL FIRE PROTECTION PLAN
SCALE: 1/16"=1'-0"

SECTION 21 0000 - FIRE PROTECTION

THE REQUIREMENTS OF THE "GENERAL CONDITIONS" AND "DIVISION 1" SECTIONS OF THE SPECIFICATIONS SHALL APPLY TO THIS SECTION OF THE SPECIFICATIONS.

PART 1 - GENERAL

1.01 SUMMARY

- THE CONTRACTOR SHALL PROVIDE A COMPLETE AND FULLY FUNCTIONAL FIRE PROTECTION SYSTEM INCLUDING BUT NOT LIMITED TO ALL MATERIALS AND EQUIPMENT AS NOTED IN DOCUMENTS.
- THE SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH CURRENT NFPA DOCUMENTS, ALL APPLICABLE LOCAL CODES AND SHALL CONFORM TO THE REGULATIONS AND REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION.
- THE SPRINKLER SYSTEM SHALL BE A GRID TYPE DESIGN AND SHALL BE HYDRAULICALLY CALCULATED PER NFPA 13. THE CONTRACTOR'S FIRE SPRINKLER CONTRACTOR SHALL VERIFY AVAILABLE WATER SUPPLY FROM CONTRACTOR'S PROVIDED FLOW TEST AND SUBMIT FINAL SPRINKLER SYSTEM DESIGN DRAWINGS AND HYDRAULIC CALCULATIONS TO FIRE PROTECTION ENGINEER AND LOCAL FIRE OFFICIAL FOR APPROVAL.

1.02 REQUIREMENTS

- DESIGN AND OBTAIN APPROVAL FROM AUTHORITY HAVING JURISDICTION FOR FIRE PROTECTION SYSTEMS SPECIFIED.
- MINIMUM PIPE SIZES: NOT SMALLER THAN 1-INCH AND SIZES INDICATED FOR CONNECTION TO WATER SUPPLY PIPING, STANDPIPES, AND BRANCHES FROM STANDPIPES TO SPRINKLERS.
- CONDUCT FIRE HYDRANT FLOW TESTS AS REQUIRED TO OBTAIN HYDRAULIC DATA NEEDED TO PREPARE DESIGN FOR HYDRAULICALLY CALCULATED SYSTEMS.

1.03 SUBMITTALS

- PRODUCT DATA FOR FIRE PROTECTION SYSTEM COMPONENTS. INCLUDE THE FOLLOWING:
 - VALVES.
 - SPECIALTY VALVES, ACCESSORIES, AND DEVICES.
 - ALARM DEVICES, INCLUDE ELECTRICAL DATA.
 - FIRE DEPARTMENT CONNECTIONS, INCLUDE TYPE OF FIRE DEPARTMENT CONNECTION, NUMBER, SIZE, TYPE AND ARRANGEMENT OF INLETS; SIZE AND DIRECTION OF OUTLET; AND FINISH.
 - SPRINKLERS, ESOUTCHEONS AND GUARDS, INCLUDE SPRINKLER FLOW CHARACTERISTICS, MOUNTING, FINISH AND OTHER DATA.
- SPRINKLER SYSTEM DRAWINGS IDENTIFIED AS "WORKING PLANS," PREPARED ACCORDING TO NFPA 13, SUBMIT REQUIRED NUMBER OF SETS TO AUTHORITY HAVING JURISDICTION FOR REVIEW, COMMENT, AND APPROVAL. INCLUDE SYSTEM HYDRAULIC CALCULATIONS WHERE APPLICABLE.
- TEST REPORTS AND CERTIFICATES AS DESCRIBED IN NFPA 13. INCLUDE "CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR ABOVEGROUND PIPING" AND "CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR UNDERGROUND PIPING."
- MAINTENANCE DATA FOR EACH TYPE OF FIRE PROTECTION SPECIALLY SPECIFIED, FOR INCLUSION IN "OPERATING AND MAINTENANCE MANUAL," SPECIFIED IN DIVISION 1 SECTION "PROJECT CLOSEOUT."
- AT THE END OF THE PROJECT TURN OVER TO THE OWNER THE FOLLOWING:
 - ONE (1) SET OF APPROVED SHOP DRAWINGS FOR SPRINKLER DESIGN.
 - WRITTEN STATEMENT OF APPROVAL OF SPRINKLER SYSTEM TESTING SIGNED BY LOCAL JURISDICTIONAL AUTHORITY.
 - ONE (1) COPY OF LITERATURE AND INSTRUCTIONS FROM THE SYSTEM EQUIPMENT MANUFACTURER DESCRIBING THE PROPER OPERATION AND MAINTENANCE OF EQUIPMENT. ONE (1) COMPLETE COPY OF NFPA DOCUMENT 25 STANDARDS FOR THE INSPECTION IN A THREE RING BINDER.

1.04 QUALITY ASSURANCE

- MANUFACTURER QUALIFICATIONS: FIRMS WHICH EQUIPMENT, SPECIALTIES, AND ACCESSORIES ARE LISTED BY PRODUCT NAME AND MANUFACTURER IN UL FIRE PROTECTION EQUIPMENT DIRECTORY AND FM APPROVAL GUIDE AND THAT CONFORM TO OTHER REQUIREMENTS INDICATED.
- LISTING/APPROVAL STAMP, LABEL OR OTHER MARKING: ON EQUIPMENT, SPECIALTIES AND ACCESSORIES MADE TO SPECIFIED STANDARDS.
- COMPLY WITH REQUIREMENTS OF AUTHORITY HAVING JURISDICTION FOR SUBMITTALS, APPROVALS, MATERIALS, HOSE THREADS, INSTALLATION, INSPECTIONS AND TESTING.
- INSTALLER'S QUALIFICATIONS: FIRMS QUALIFIED TO INSTALL AND ALTER FIRE PROTECTION PIPING, EQUIPMENT, SPECIALTIES AND ACCESSORIES, AND REPAIR AND SERVICE EQUIPMENT. A QUALIFIED FIRM IS ONE THAT IS EXPERIENCED (MINIMUM OF 5 PREVIOUS PROJECTS SIMILAR IN SIZE AND SCOPE TO THIS PROJECT) IN SUCH WORK, FAMILAR WITH PRECAUTIONS REQUIRED AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. SUBMIT EVIDENCE OF QUALIFICATIONS TO THE ARCHITECT UPON REQUEST. REFER TO DIVISION 1 SECTION "REFERENCE STANDARDS AND DEFINITIONS" FOR DEFINITION OF "INSTALLER."
- NFPA STANDARDS: EQUIPMENT, SPECIALTIES, ACCESSORIES, INSTALLATION AND TESTING COMPLYING WITH THE FOLLOWING:
 - NFPA 13 "STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS".
 - NFPA 26 "RECOMMENDED PRACTICE FOR THE SUPERVISION OF VALVES CONTROLLING WATER SUPPLIES FOR FIRE PROTECTION".
 - NFPA 70 "NATIONAL ELECTRICAL CODE".

1.05 COORDINATION

- COORDINATE ROUGHING-IN AND FINAL PIPING AND SPRINKLER LOCATIONS WITH LIGHTS, DUCTWORK AND OTHER PIPING. VERIFY THAT SYSTEM CAN BE INSTALLED TO COMPLY WITH ORIGINAL DESIGN AND REFERENCED STANDARDS.
- COORDINATE LOCATION AND INSTALLATION OF ELECTRICAL DEVICES TO BE WIRED BY ELECTRICAL CONTRACTOR.

PART 2 - PRODUCTS

2.01 GENERAL

- ALL MATERIALS AND DEVICES REQUIRED FOR A COMPLETE AND OPERATIONAL FIRE PROTECTION AND SPRINKLER SYSTEM SHALL BE U.L. LISTED FOR FIRE PROTECTION SERVICE AS REQUIRED BY NFPA 13. ALL SYSTEM COMPONENTS SHALL BE RATED FOR A MAXIMUM WORKING PRESSURE OF 175 PSI OR THE MAXIMUM ACTUAL SYSTEM PRESSURE, WHICHEVER IS GREATER.
- SPRINKLER PIPING, FITTINGS AND OTHER PIPING MATERIALS SHALL BE IN COMPLIANCE WITH NFPA 13 REQUIREMENTS FOR ABOVE GROUND AND UNDER GROUND PIPING. PIPING JOINTS SHALL BE EITHER WELDED, THREADED OR GROOVED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- VALVES FOR SPRINKLER OPERATION SHALL BE THE LISTED, INDICATING TYPE, AS REQUIRED BY NFPA 13. VALVES INSIDE THE BUILDING SHALL BE OUTSIDE-SCREW-AND-YOKE (OS&Y) TYPE, SHALL BE NORMALLY OPEN AND SHALL INCLUDE SUPERVISORY SWITCHES. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED ELECTRICAL CONNECTIONS. CHECK VALVES SHALL BE AN APPROVED PATTERN AND BE INSTALLED IN COMPLIANCE WITH LISTING REQUIREMENTS.
- BACKFLOW PREVENTION ASSEMBLIES SHALL BE PROVIDED AS REQUIRED BY THE JURISDICTIONAL AUTHORITIES AND SHALL BE IN COMPLIANCE WITH THE ASSEMBLY LISTING. RECOMMENDED ARRANGEMENT IS A DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY APPROVED FOR VERTICAL INSTALLATION AND LOCATED INSIDE THE BUILDING AT THE SPRINKLER RISER WITH INTEGRAL GATE VALVES OF THE WALL POST INDICATOR TYPE. A SEPARATE ALARM CHECK VALVE IS REQUIRED. ASSEMBLY CONTROL VALVES SHALL BE IN ACCORDANCE WITH NFPA 13.
- ALL OTHER VALVES SHALL BE EITHER BRONZE OR IRON-BODY FLANGED VALVES OR IRON-BODY FLANGED OS&Y GATE VALVES.
- PIPE HANGERS SHALL CONFORM TO THE REQUIREMENTS OF NFPA 13. ADJUSTABLE SWIVEL-RING HANGERS SHALL BE PROVIDED FOR PIPING 3 INCHES IN DIAMETER AND SMALLER AND ADJUSTABLE CLEVIS HANGERS SHALL BE PROVIDED FOR PIPING FOR 4 INCHES IN DIAMETER AND LARGER. PIPING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AS NECESSARY TO MAINTAIN REQUIRED ELEVATION AND PITCH OF PIPE, TO PREVENT VIBRATION, AND TO SECURE PIPING IN PLACE. HANGER RODS SHALL HAVE MACHINE THREADS.
- CONTRACTOR SHALL PROVIDE A "KNOX BOX" OR "SUPRA" IF REQUIRED BY THE LOCAL JURISDICTION AND/OR LOCAL FIRE DEPARTMENT. LOCATION OF KEY BOX SHALL BE COORDINATED WITH LOCAL JURISDICTION AND THE OWNER.
- FURNISH AND INSTALL OUTSIDE BELL/HORN AND LIGHT/STROBE, 120V, TO SIGNAL INITIATION OF RISER FLOW SWITCH. WIRING BY ELECTRICAL CONTRACTOR.

2.02 SPRINKLERS

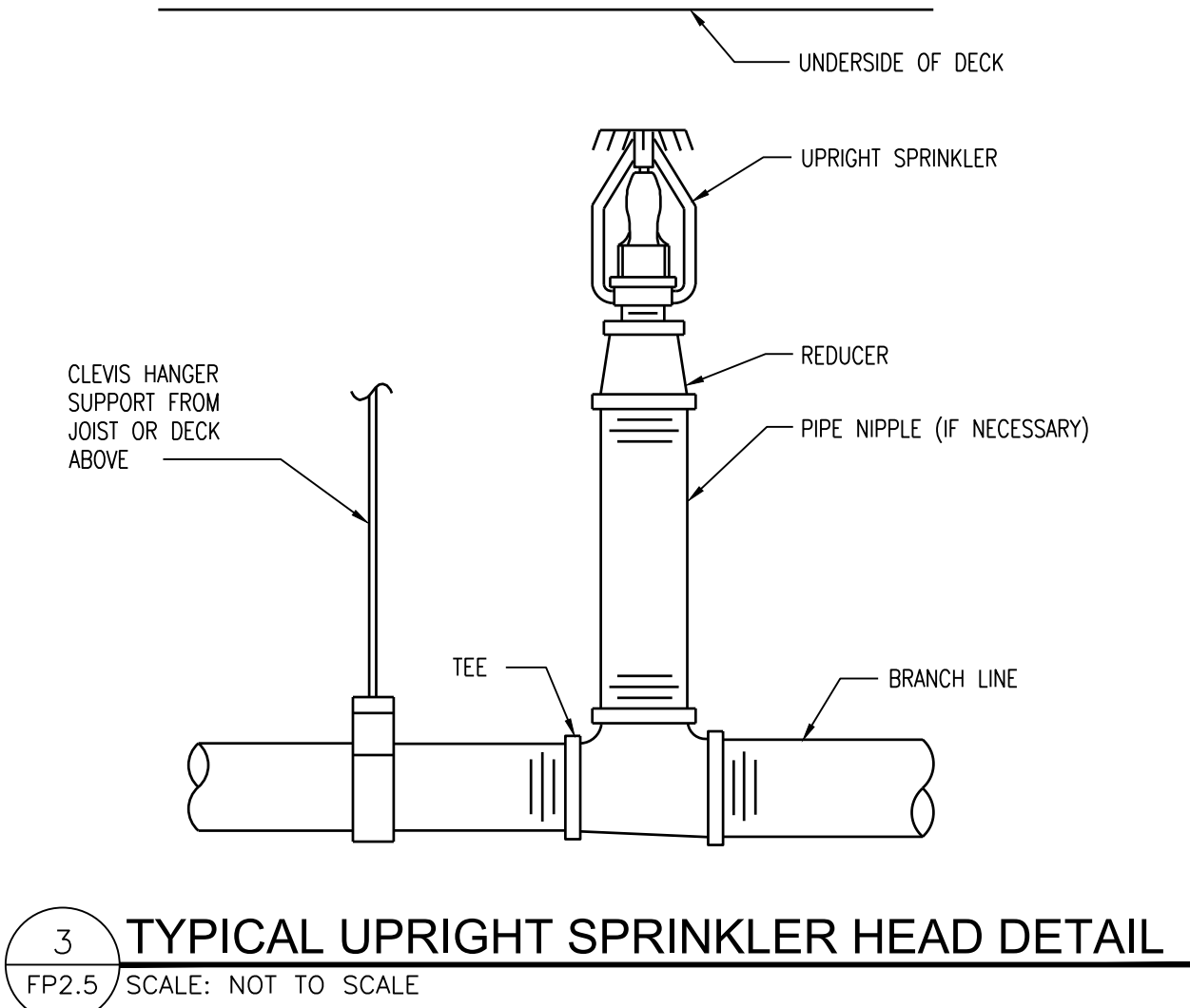
- SPRINKLERS SHALL BE IN CONFORMANCE WITH NFPA 13. SPRINKLERS IN LIGHT HAZARD AREAS SHALL HAVE A TEMPERATURE RATING OF 165 DEGREES F. IN AREAS SUBJECT TO ABNORMAL HEATING CONDITIONS, SPRINKLERS SHALL HAVE A TEMPERATURE RATING ADEQUATE TO PREVENT ACCIDENTAL DISCHARGE.
- SPRINKLERS SHALL BE THE UPRIGHT TYPE IN AREAS WITHOUT SUSPENDED CEILINGS AND SHALL BE THE RECESSED, PENDANT TYPE IN AREAS WITH SUSPENDED CEILINGS. SPRINKLERS IN SUSPENDED CEILING AREAS SHALL BE LOCATED AS CLOSE TO CENTER OF CEILING TILES AS POSSIBLE.
- AT PROJECT COMPLETION, THE CONTRACTOR SHALL PROVIDE SIX (6) SPARE UPRIGHT-TYPE SPRINKLERS, TWO (2) RECESSED, PENDANT TYPE SPRINKLERS AND NECESSARY PIPE WRENCHES) IN A METAL CABINET NEXT TO SPRINKLER RISER. THE SPARE SPRINKLERS SHALL CORRESPOND TO THE TYPES AND TEMPERATURE RATINGS OF THE SPRINKLERS INSTALLED. METAL CABINET AT SPRINKLER RISER LOCATION SHALL BE PROVIDED BY CONTRACTOR.

PART 3 - EXECUTION

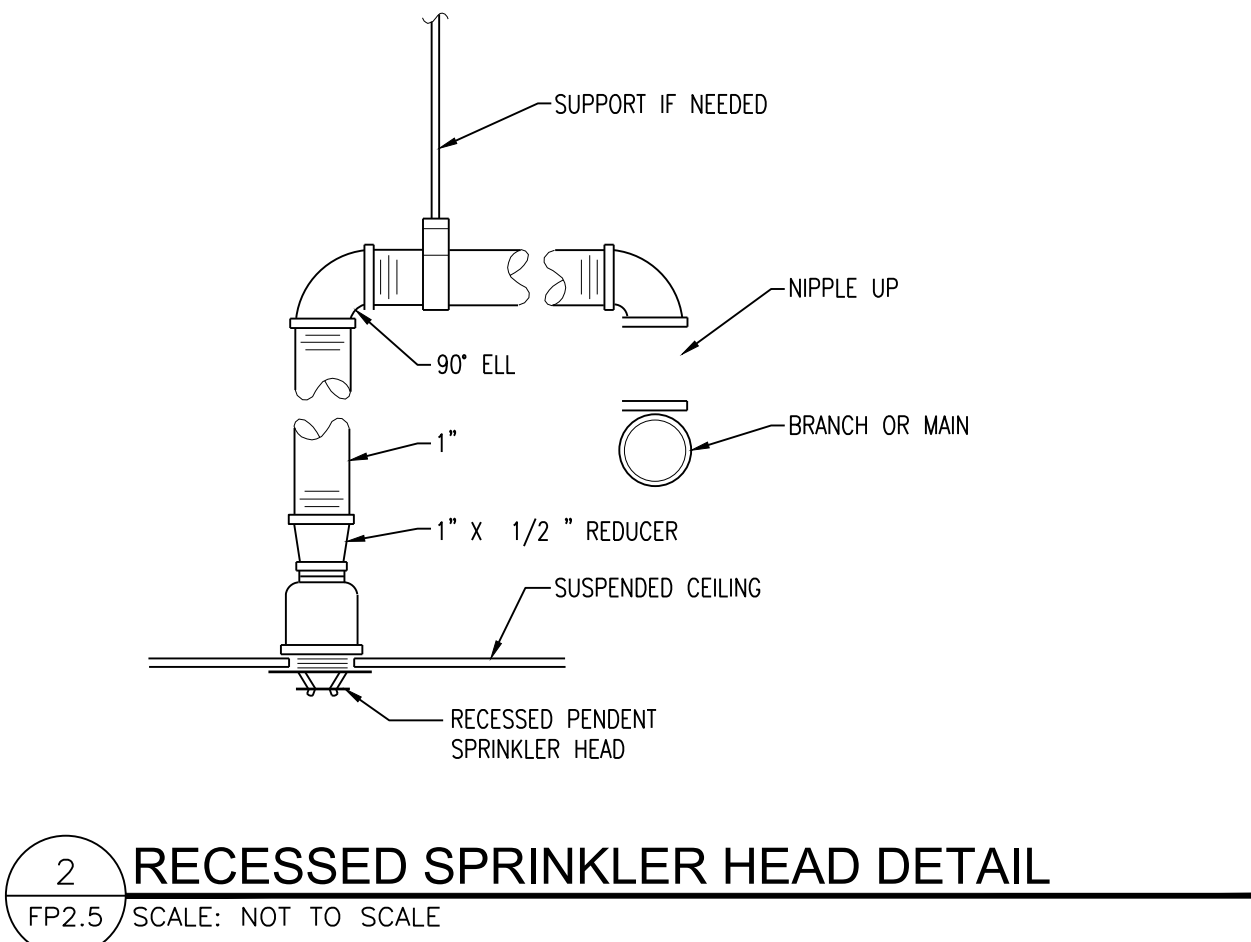
3.01 GENERAL

- SPRINKLER SYSTEM TESTING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13 AND JURISDICTIONAL AUTHORITIES. SPRINKLER PIPING SHALL BE TESTED AND MADE WATERTIGHT PRIOR TO PAINTING AND CONCEALMENT AS REQUIRED DURING PROGRESS OF WORK. SPRINKLER SYSTEM SHALL BE TESTED UNDER A PRESSURE OF 200 PSI OR 50 PSI ABOVE MAXIMUM SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, FOR TWO HOURS. ALL LEAKS SHALL BE IMMEDIATELY CORRECTED. CAULKING IS NOT ALLOWED FOR SPRINKLER SYSTEM LEAK PREVENTION. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE LOCAL JURISDICTIONAL AUTHORITIES PRIOR TO SYSTEM TESTING.
- PRIOR TO FINAL COMPLETION, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THE FOLLOWING:
 - WRITTEN STATEMENT OF APPROVAL OF SPRINKLER SYSTEM TESTING SIGNED BY LOCAL JURISDICTIONAL AUTHORITIES.
 - COPIES OF LITERATURE AND INSTRUCTIONS FROM SYSTEM EQUIPMENT MANUFACTURERS DESCRIBING PROPER OPERATION AND MAINTENANCE OF EQUIPMENT, AND A COMPLETED COPY OF NFPA DOCUMENT 25, "STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS", BOUND IN A THREE-RING BINDER PROPERLY LABELED.
 - CONTRACTOR SHALL PROVIDE TWO (2) COPIES OF THE APPROVED SPRINKLER SYSTEM DESIGN PLANS, BEARING THE APPROVAL OF THE JURISDICTIONAL AUTHORITY. ONE (1) COPY SHALL BE INCLUDED WITH AS-BUILT DRAWINGS AND ONE (1) COPY PROVIDED WITH PROJECT CLOSEOUT.

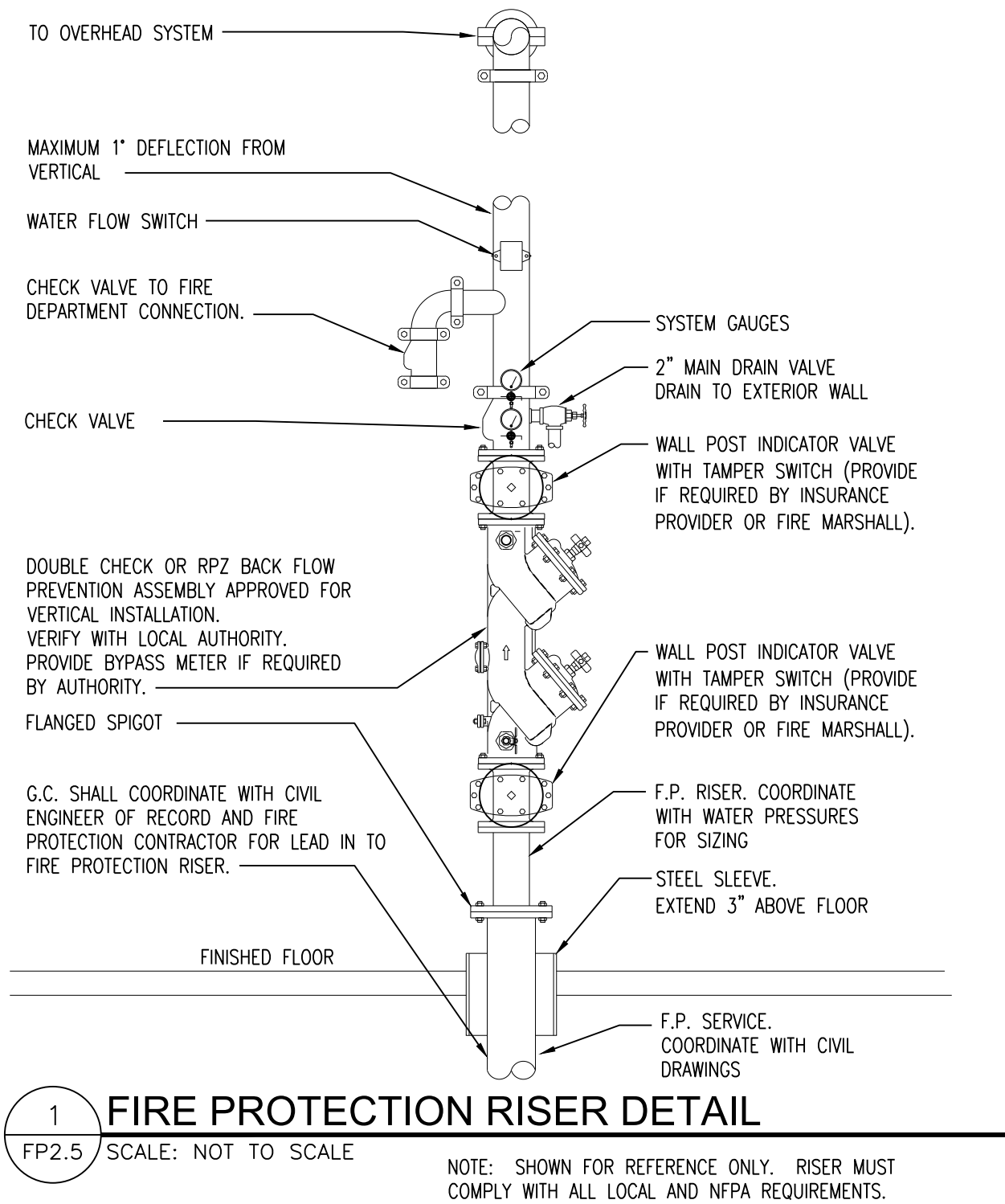
END OF SECTION 21 0000



3 TYPICAL UPRIGHT SPRINKLER HEAD DETAIL
FP2.5 SCALE: NOT TO SCALE



2 RECESSED SPRINKLER HEAD DETAIL
FP2.5 SCALE: NOT TO SCALE



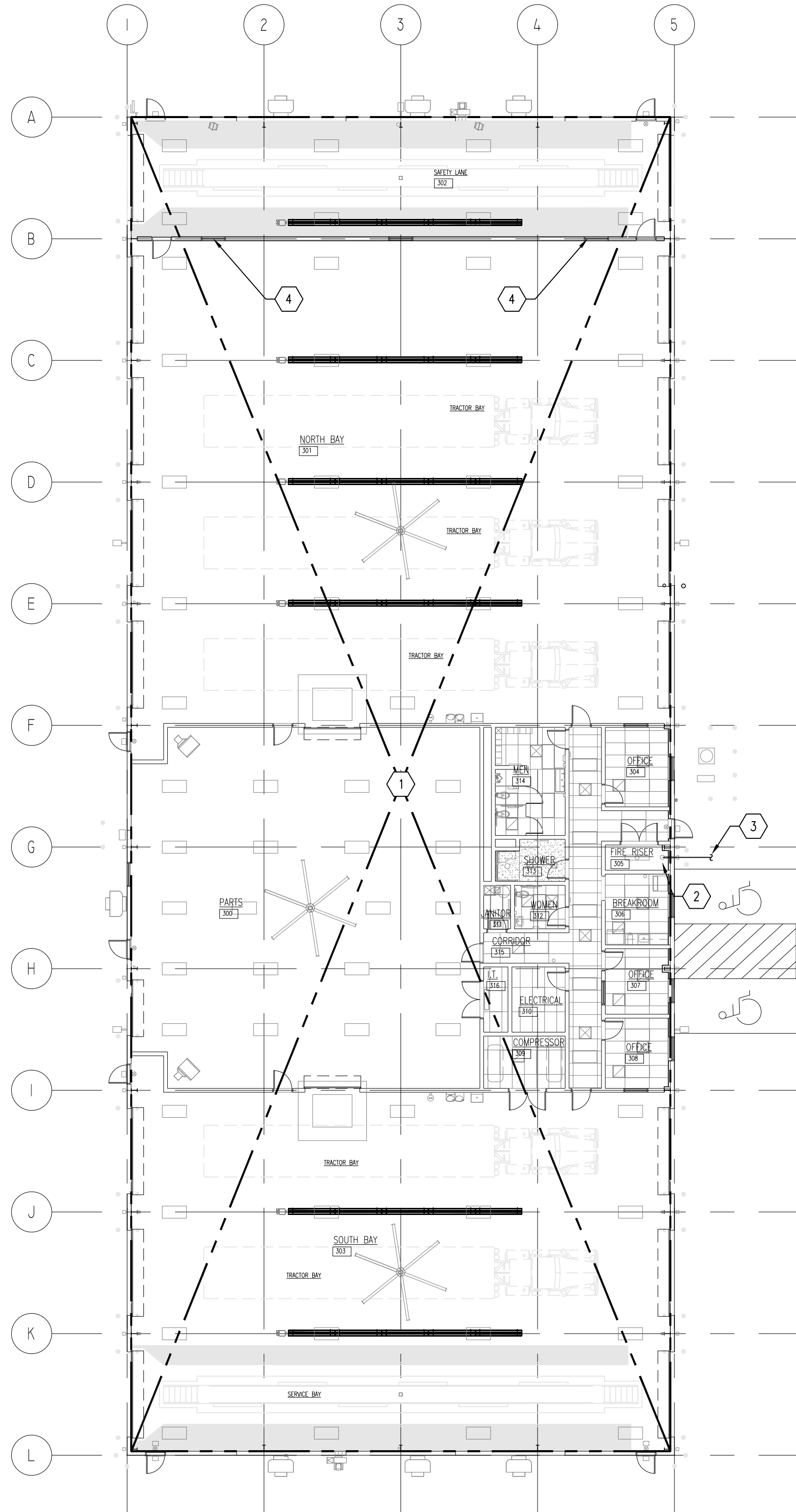
1 FIRE PROTECTION RISER DETAIL
FP2.5 SCALE: NOT TO SCALE
NOTE: SHOWN FOR REFERENCE ONLY. RISER MUST COMPLY WITH ALL LOCAL AND NFPA REQUIREMENTS.

GENERAL NOTES

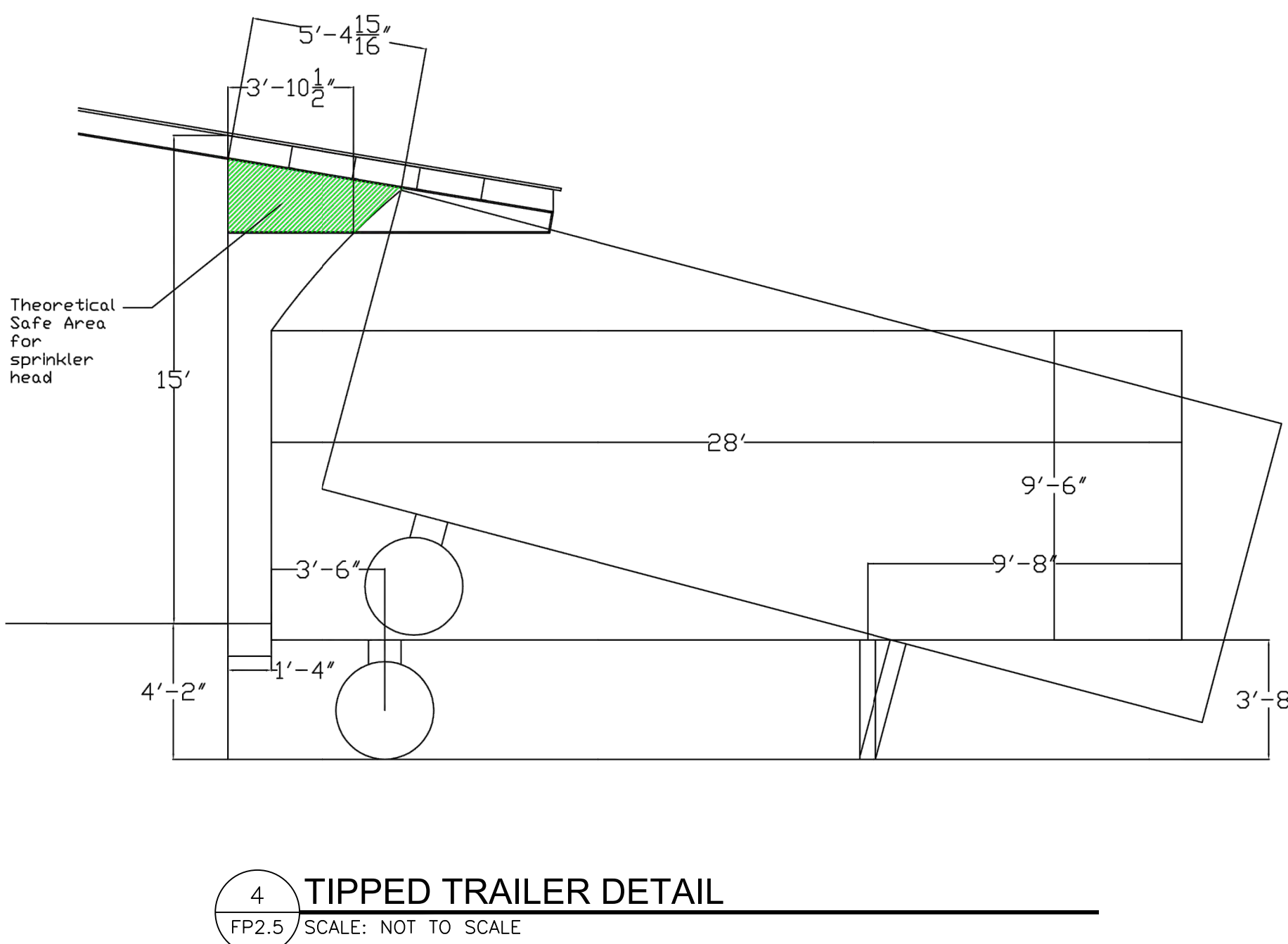
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- WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA OR OTHERS, THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.
- FIRE PROTECTION SYSTEM SHALL BE DESIGNED IN COMPLIANCE WITH THE LATEST EDITION OF NFPA 13 AND LOCAL FIRE CODE REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FLOW TEST DATA AND PREPARING ALL REQUIRED HYDRAULIC CALCULATIONS.
- SPRINKLER AND PIPING LAYOUT SHOWN FOR REFERENCE PURPOSES ONLY. CONTRACTOR SHALL CONFIRM STRUCTURAL AND WATER SUPPLY HYDRAULIC INFORMATION PRIOR TO SYSTEM FABRICATION AND INSTALLATION.
- WHERE REQUIRED BY CODE OR DIRECTED BY LOCAL AUTHORITIES, CONTRACTOR SHALL PROVIDE SEISMIC HANGING & CONSTRAINTS ON ALL PIPING IN COMPLETE ACCORDANCE WITH THE LATEST ISSUE OF THE STATE MECHANICAL BUILDING CODE, LOCAL CODES AND NFPA.
- FIRE PROTECTION CONTRACTOR SHALL PROVIDE A GUARANTEE COVERING ALL MATERIAL AND WORKMANSHIP FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE BY OWNER.
- FLOW TEST RESULTS TO BE CALCULATED FROM TEST LOCATION NEAREST TO THE FIRE RISER.

KEY NOTES

- PROVIDE WET FIRE PROTECTION SYSTEM AS REQUIRED. FIRE PROTECTION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 13, OWNER'S INSURANCE CARRIER, LOCAL FIRE MARSHALL.
- PROVIDE NEW WET FIRE PROTECTION RISER IN FIRE RISER ROOM. ROUTE DRAIN TO EXTERIOR WALL, COORDINATE EXACT LOCATION OF FIRE DEPARTMENT CONNECTION WITH LOCAL FIRE MARSHALL.
- SEE CIVIL PLANS FOR CONTINUATION OF UNDERGROUND 6" FIRE WATER LINE. COORDINATE EXACT TIE-IN LOCATION AND INVERT WITH SITE UTILITY CONTRACTOR.
- PROVIDE LONG-THROW SIDEWALL FIRE SUPPRESSION HEADS IN WALL TO SPRINKLE THE SAFETY LANE.



MAINTENANCE BUILDING
FIRE PROTECTION PLAN
SCALE: 1/16" = 1'-0"



4 TIPPED TRAILER DETAIL
FP2.5 SCALE: NOT TO SCALE

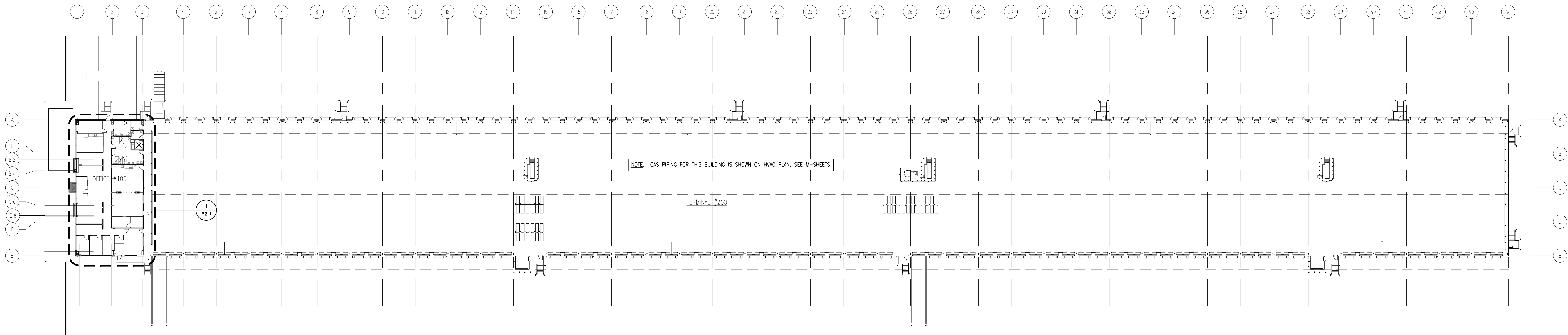
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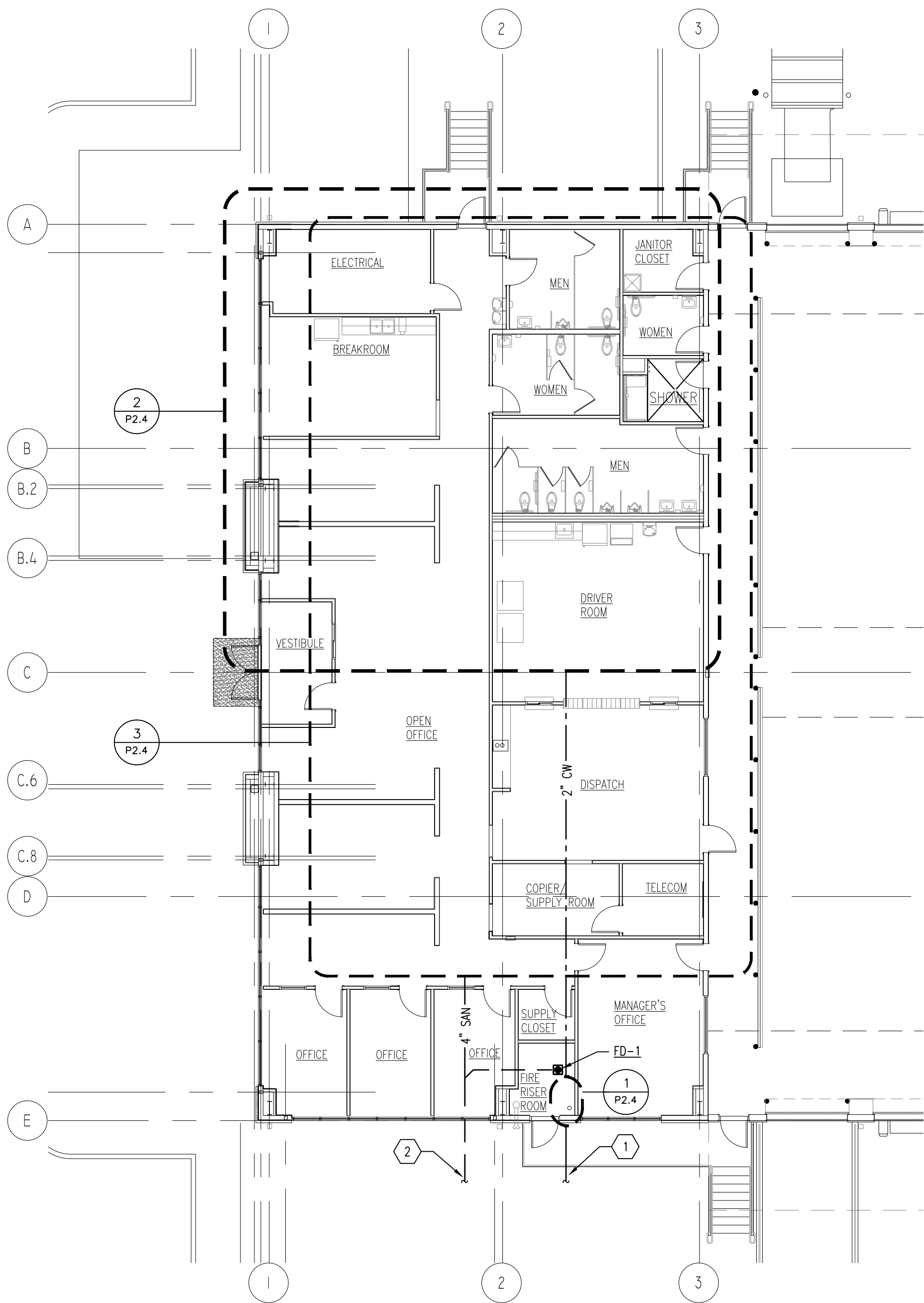
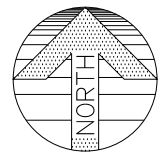
PROJECT
R + L CARRIERS
EEDNBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

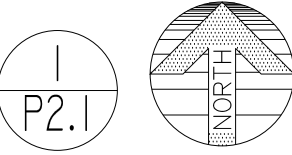
Job Number
5147
SHEET TITLE
MAINTENANCE BUILDING FIRE PROTECTION PLAN
Sheet Number
FP2.5



OVERALL OFFICE/TERMINAL PLUMBING PLAN
SCALE: 1/32"=1'-0"



OFFICE BUILDING PLUMBING PLAN
SCALE: 3/32"=1'-0"



- # KEY NOTES
1. SEE CIVIL PLANS FOR CONTINUATION OF 2" DOMESTIC WATER PIPING. COORDINATE EXACT TIE-IN LOCATION AND INVERT WITH SITE UTILITY CONTRACTOR.
 2. SEE CIVIL PLANS FOR CONTINUATION OF 4" SANITARY WASTE PIPING. COORDINATE EXACT TIE-IN LOCATION AND INVERT WITH SITE UTILITY CONTRACTOR.

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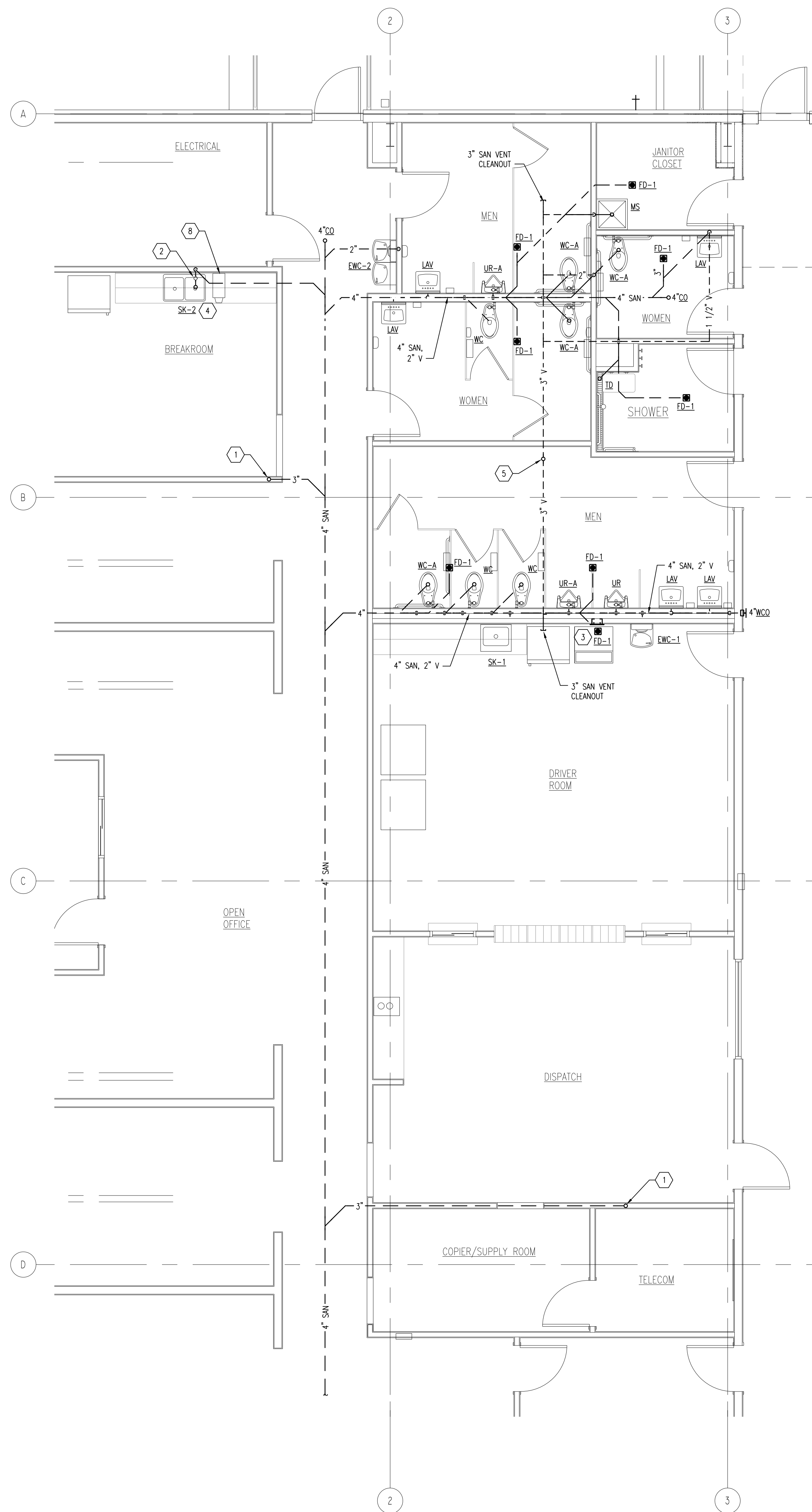
Woh Yee Associates
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PHONE 248-897-160

PROJECT
R + L CARRIERS
EDMURGH, INDIANA

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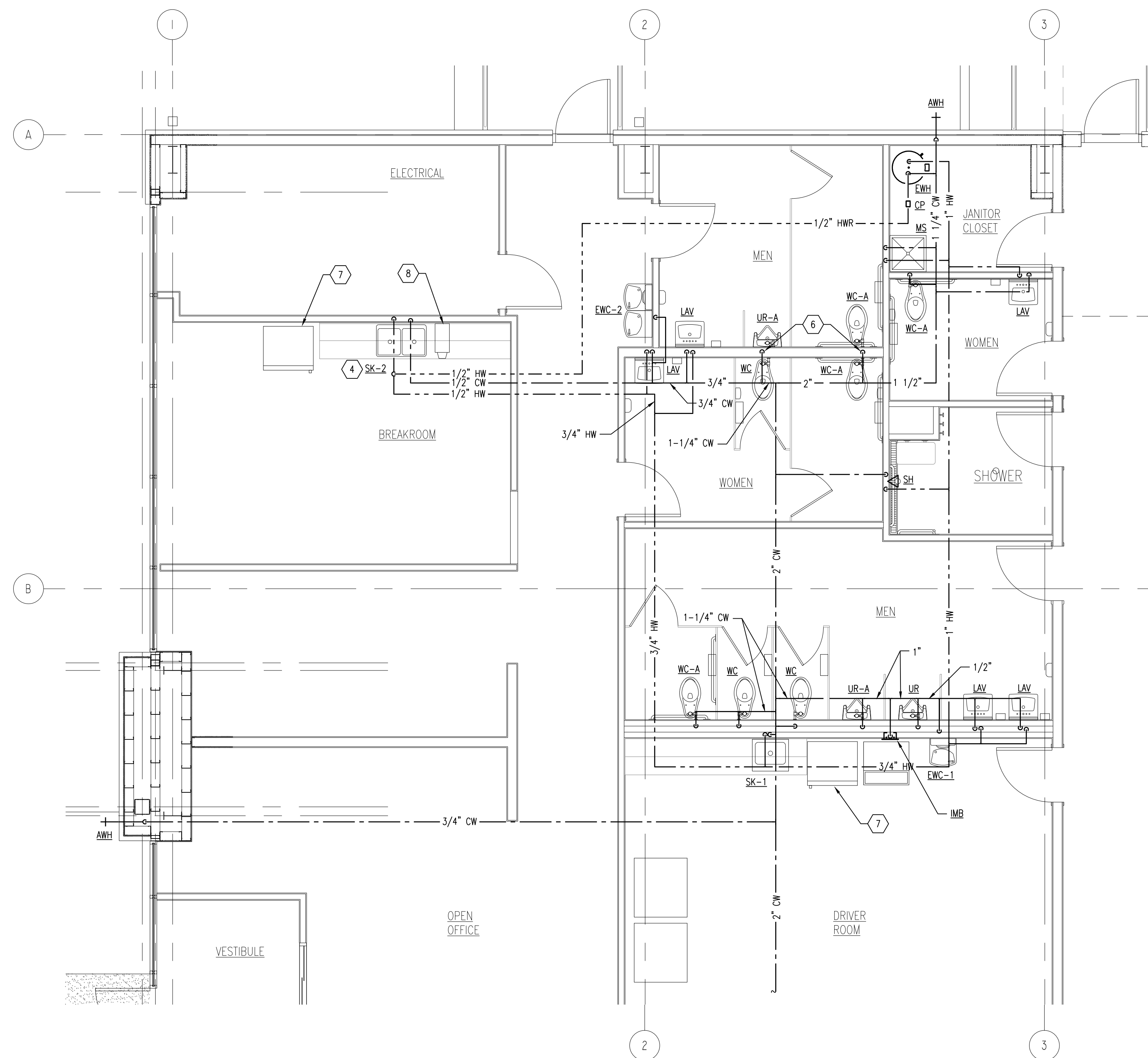
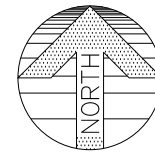
Job Number
5147
SHEET TITLE
OFFICE &
TERMINAL
BUILDING
PLUMBING
PLAN
Sheet Number
P2.1

Do not scale drawings - Use figured dimensions. CAD DWG P2.1 OFFICE & TERMINAL BUILDING PLUMBING PLAN DWG



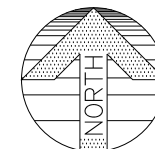
ENLARGED WASTE & VENT PLAN
SCALE: 1/4" = 1'-0"

3
P2.1



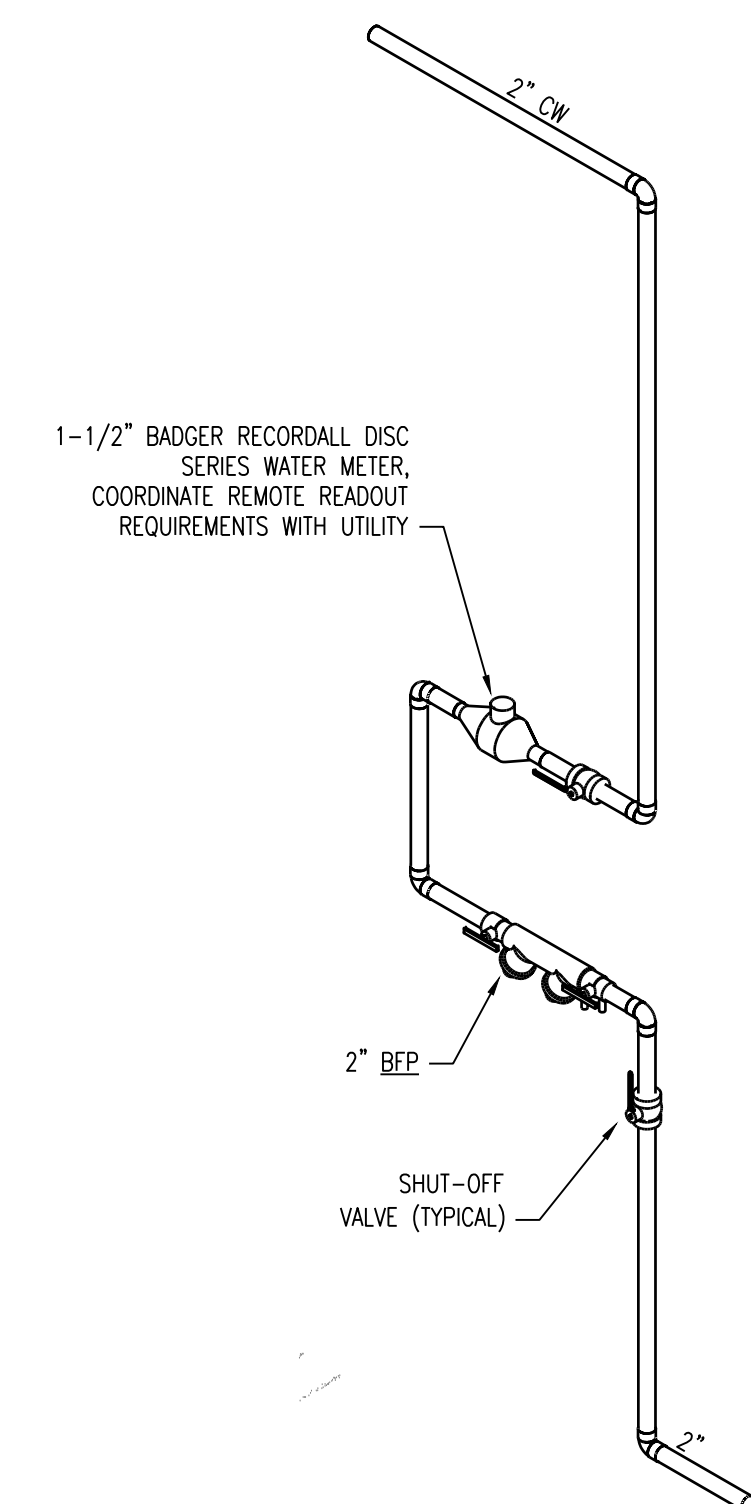
ENLARGED DOMESTIC WATER PLAN
SCALE: 1/4" = 1'-0"

2
P2.1



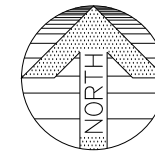
KEY NOTES

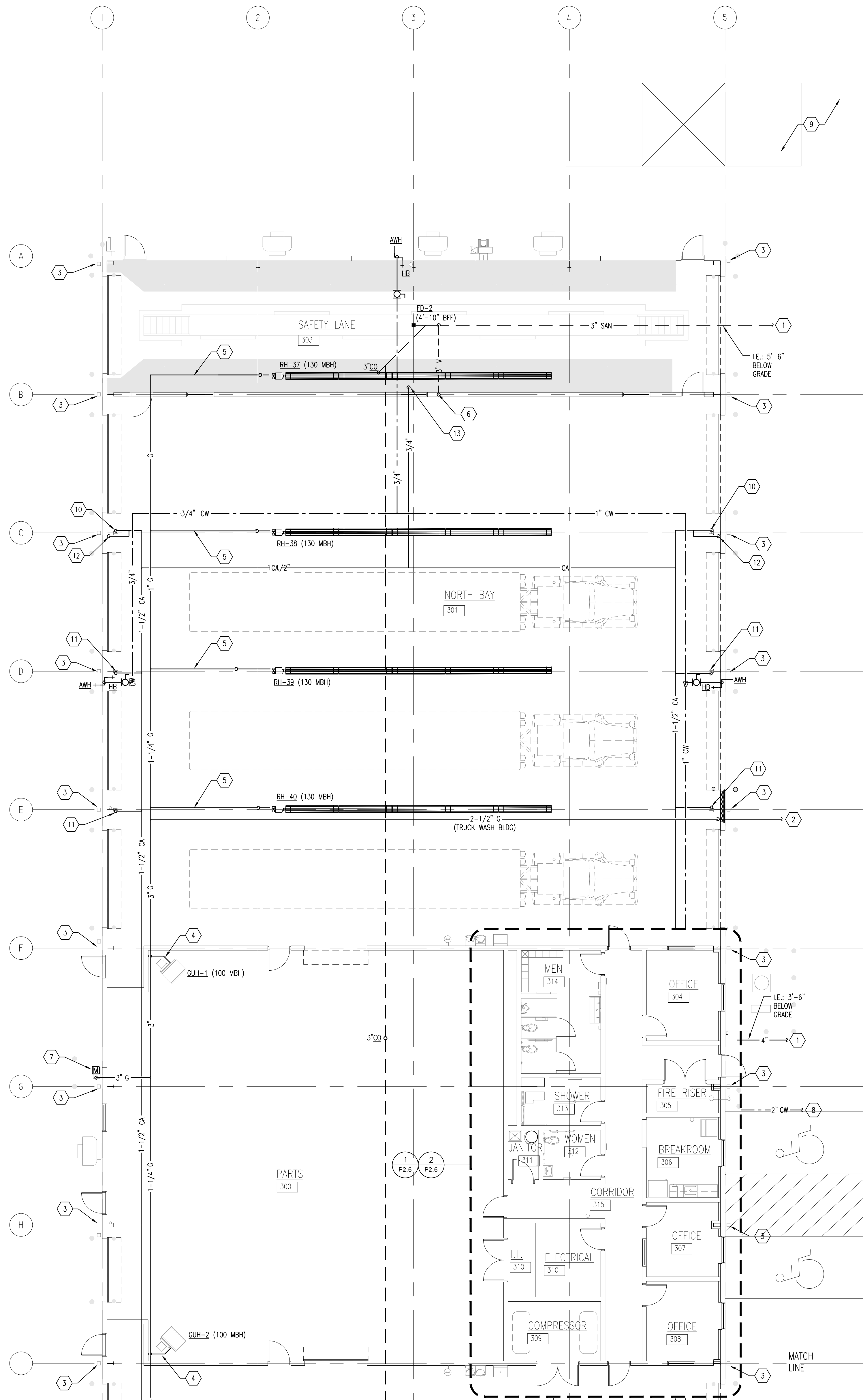
- 3" TRAPPED SANITARY WASTE STAND PIPE FOR AIR HANDLER CONDENSATE DRAINAGE. ROUTE TO ABOVE CEILING, COORDINATE EXACT TIE-IN LOCATION WITH MECHANICAL CONTRACTOR.
- PROVIDE AIR ADMITTANCE VALVE. INSTALL UNDER CABINET OR IN WALL WITH ACCESS PANEL.
- PROVIDE FLOOR DRAIN WITH OPTIONAL FUNNEL, ROUTE ICE MAKER DRAINAGE INTO FUNNEL.
- PROVIDE COLD WATER AND DRAINAGE AS REQUIRED FOR COUNTERTOP COFFEE MAKER. COORDINATE REQUIREMENTS WITH OWNER, COFFEE MAKER PROVIDED BY OWNER.
- EXTEND 3" VENT TO 3" VENT-THRU-ROOF.
- 1-1/4" COLD WATER DOWN TO TWO PLUMBING FIXTURES.
- OWNER-PROVIDED FRIDGE. COORDINATE WITH OWNER IF A WATER CONNECTION IS NECESSARY AND PROVIDE ICE MACHINE BOX (IMB) WITH 1/2" COLD WATER CONNECTION IF REQUIRED.
- PROVIDE COLD WATER AND WASTE CONNECTION FOR OWNER-PROVIDED COFFEE MAKER. WASTE MAY DRAIN INTO THE SINK DRAIN PIPING, WATER CONNECTION MAY BE TAPPED OFF THE SINK COLD WATER PIPING.



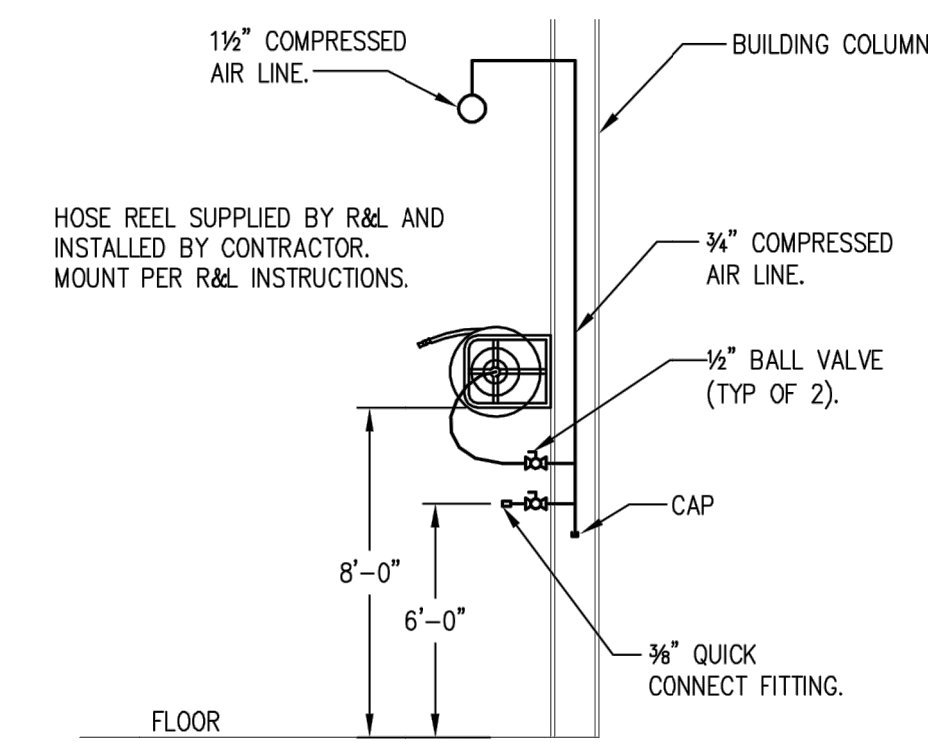
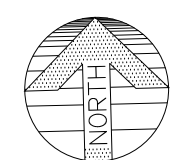
DOMESTIC WATER ENTRY ISOMETRIC
SCALE: 1/4" = 1'-0"

1
P2.1

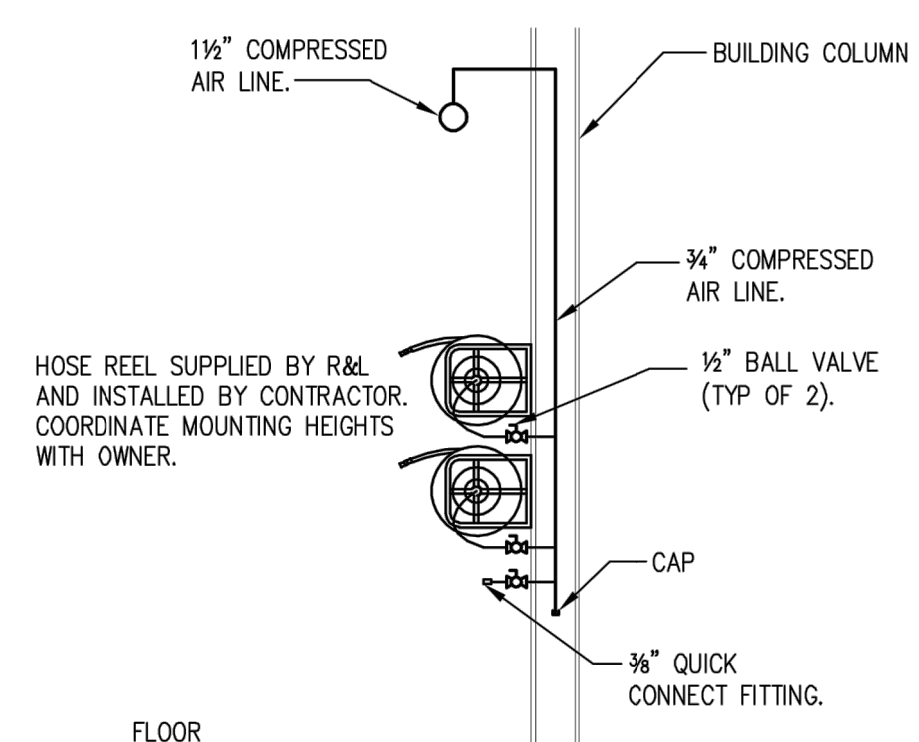




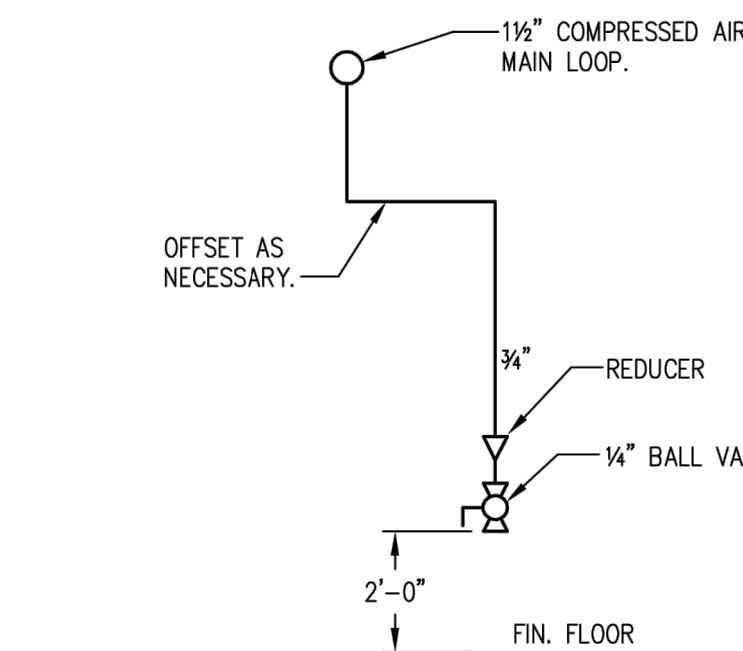
MAINTENANCE BUILDING PLUMBING PLAN
SCALE: 1/8" = 1'-0"



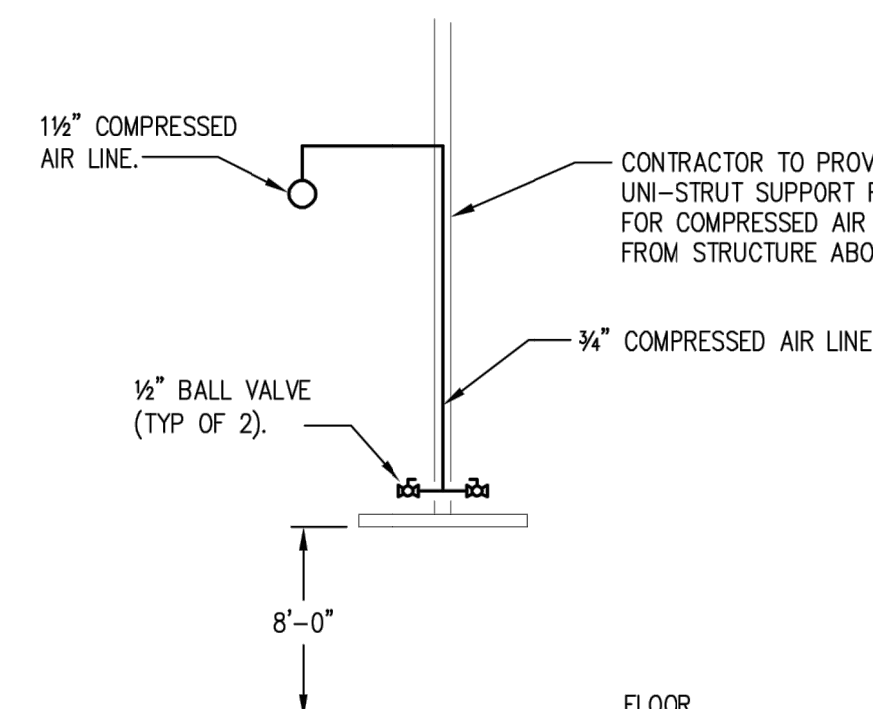
1 SINGLE HOSE REEL
COMPRESSED AIR DROP
SCALE: NOT TO SCALE



2 DOUBLE HOSE REEL
COMPRESSED AIR DROP
SCALE: NOT TO SCALE



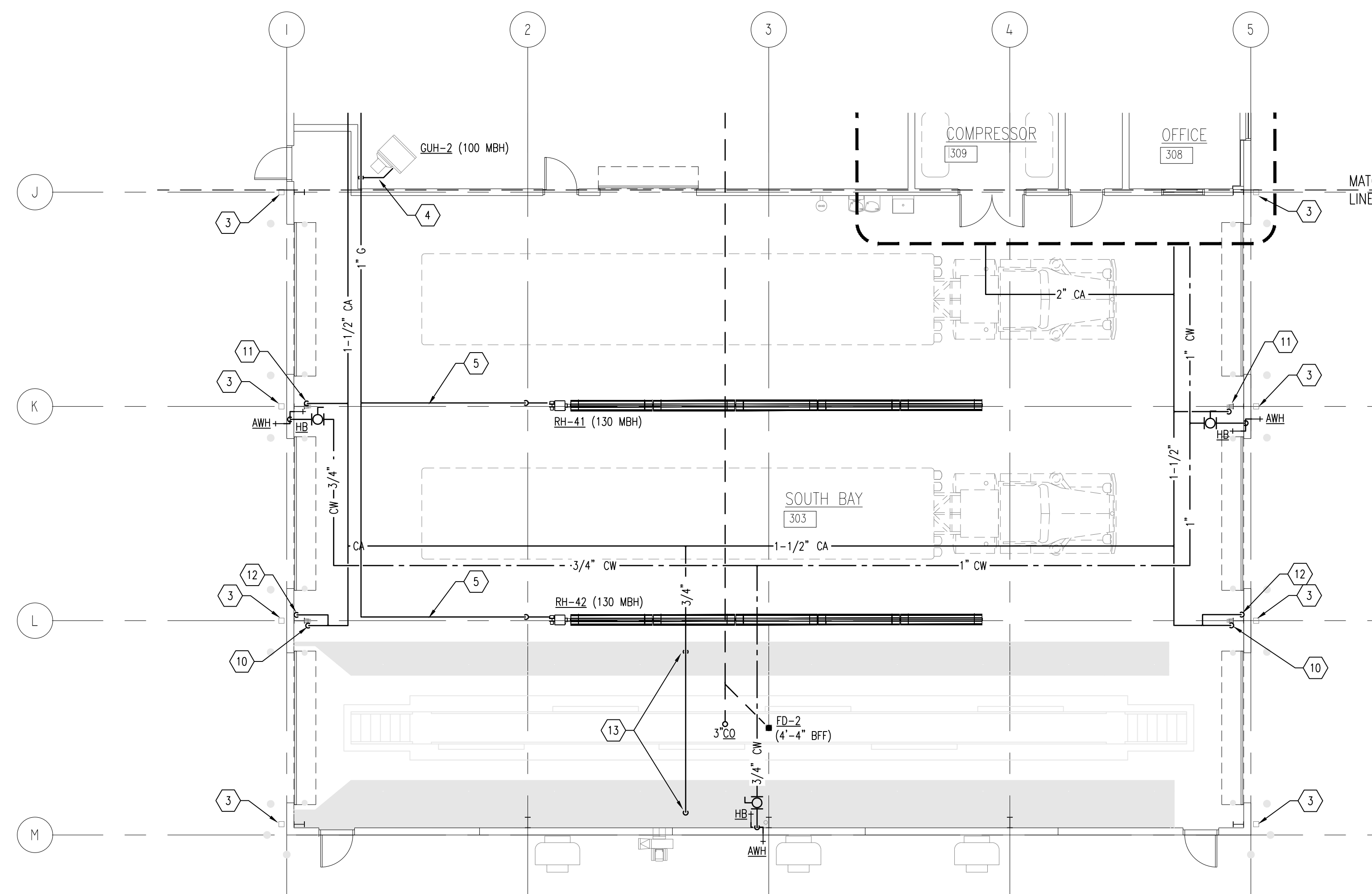
3 COMPRESSED AIR
BLOW DOWN LINE
SCALE: NOT TO SCALE



4 T-STATION
COMPRESSED AIR DROP
SCALE: NOT TO SCALE

KEY NOTES

- SEE CIVIL PLANS FOR CONTINUATION OF 4" SANITARY WASTE. COORDINATE INVERT AND EXACT TIE-IN LOCATION WITH SITE UTILITY CONTRACTOR.
- ROUTE 2-1/2" NATURAL GAS PIPING UNDERGROUND TO THE TRUCK WASH BUILDING, SEE SHEET P2.8 FOR CONTINUATION.
- DOWNSPOUT BY GENERAL CONTRACTOR.
- 1/2" NATURAL GAS TO UNIT HEATER, PROVIDE WITH DIRT LEG AND ISOLATION PLUG VALVE.
- 3/4" NATURAL GAS TO RADIANT HEATER, PROVIDE WITH DIRT LEG AND ISOLATION PLUG VALVE.
- 3" SANITARY VENT TO VENT-THRU-ROOF.
- COORDINATE WITH UTILITY FOR INSTALLATION OF NEW NATURAL GAS METER. GAS METER SHALL BE SIZED FOR 1,579 MBH AT 7" WATER COLUMN.
- SEE CIVIL PLANS FOR CONTINUATION OF 2" DOMESTIC WATER. COORDINATE INVERT AND EXACT TIE-IN LOCATION WITH SITE UTILITY CONTRACTOR.
- STORM DRAINAGE FROM WEIGH SCALE PIT TO STORMCEPTER BY SITE UTILITY CONTRACTOR.
- COMPRESSED AIR DROP TO AIR HOSE REEL. REFER TO DETAIL 1 THIS SHEET.
- COMPRESSED AIR DROP TO TWO AIR HOSE REELS. REFER TO DETAIL 2 THIS SHEET.
- COMPRESSED AIR BLOWDOWN LINE. REFER TO DETAIL 3 THIS SHEET.
- T-STATION COLD AIR DROP TO OWNER-PROVIDED EQUIPMENT. COORDINATE EXACT LOCATION OF AIR DROP WITH OWNER. REFER TO DETAIL 4 THIS SHEET.

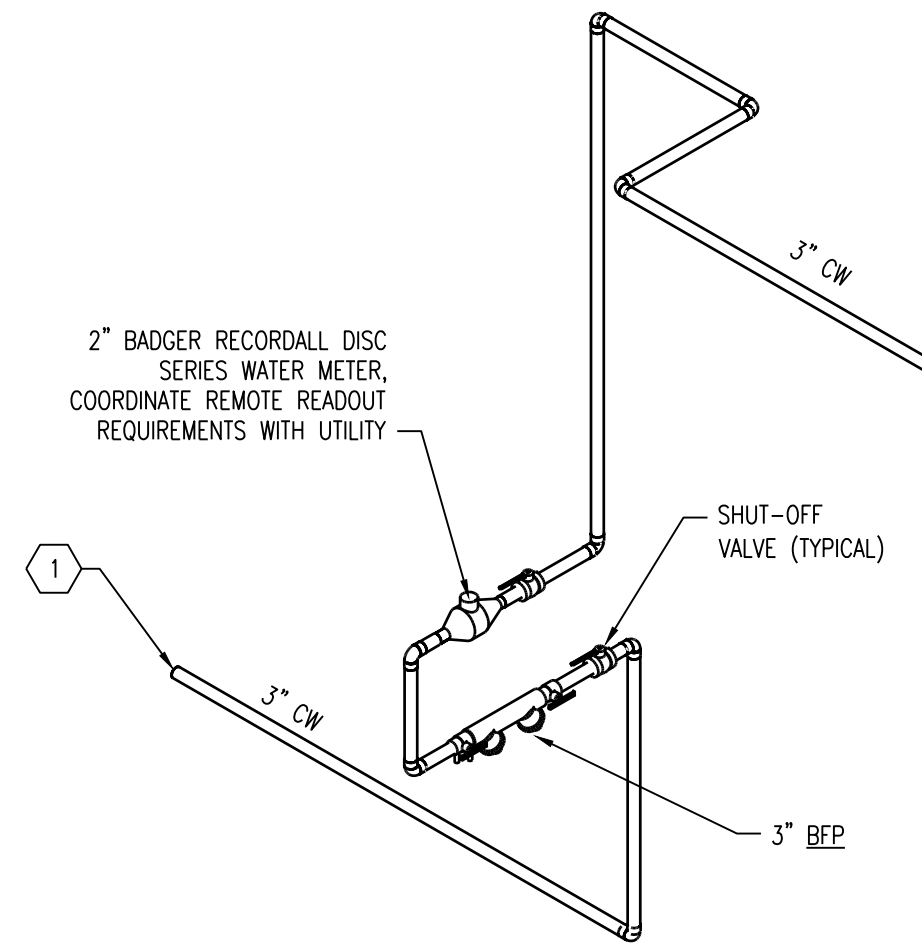




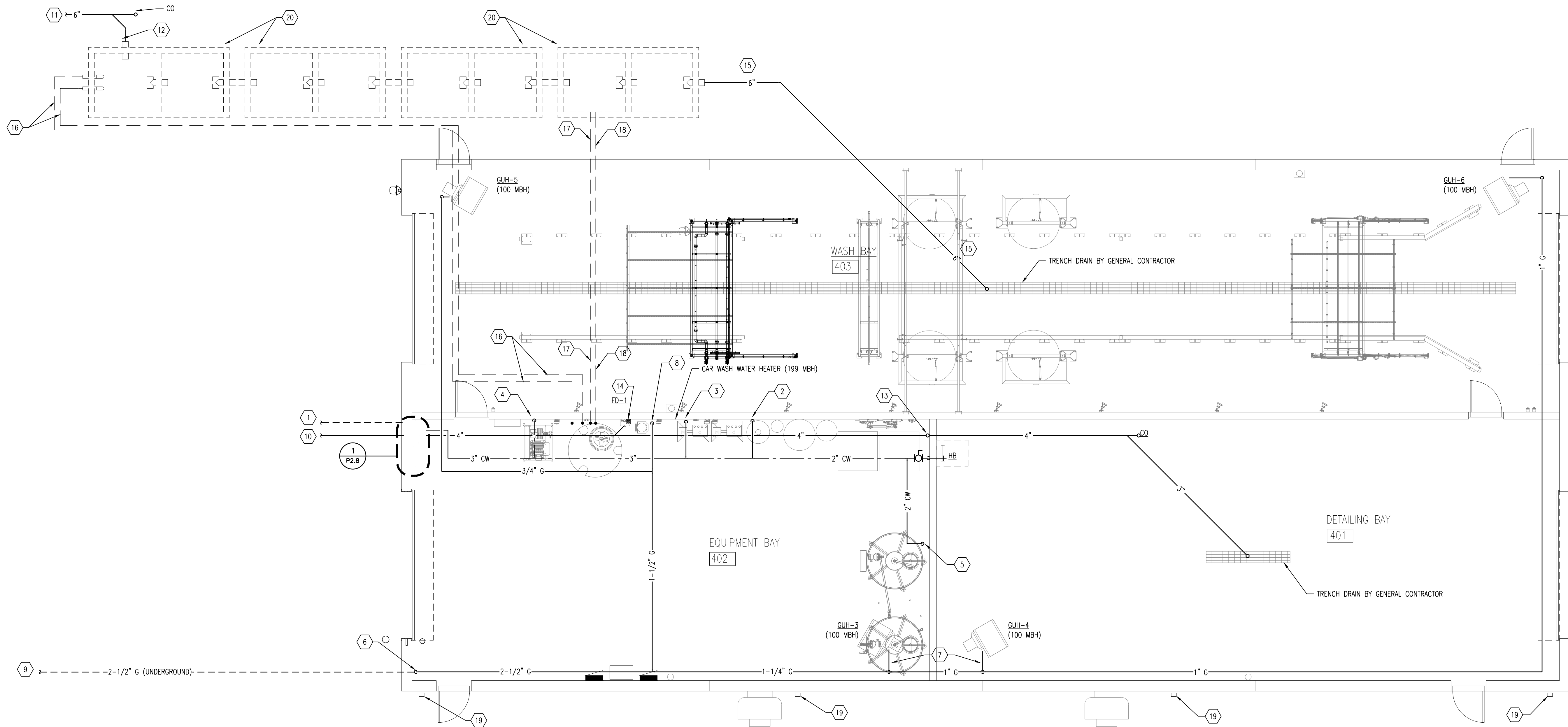
- 2.6

KEY NOTES

1. SEE CIVIL PLANS FOR CONTINUATION OF 3" DOMESTIC WATER PIPING. COORDINATE EXACT INVERT AND TIE-IN LOCATION WITH SITE UTILITY CONTRACTOR.
2. 2" COLD WATER DOWN TO CAR WASH RINSE SYSTEM, COORDINATE EXACT TIE-IN LOCATION AND REQUIREMENTS WITH CAR WASH VENDOR/CONTRACTOR.
3. 2" COLD WATER DOWN TO CAR WASH WATER HEATER, COORDINATE EXACT TIE-IN LOCATION AND REQUIREMENTS WITH CAR WASH VENDOR/CONTRACTOR.
4. 1" COLD WATER DOWN TO CAR WASH RECLAIM SYSTEM, COORDINATE EXACT TIE-IN LOCATION AND REQUIREMENTS WITH CAR WASH VENDOR/CONTRACTOR.
5. 2" COLD WATER DOWN TO CAR WASH RECLAIM TANK, COORDINATE EXACT TIE-IN LOCATION AND REQUIREMENTS WITH CAR WASH VENDOR/CONTRACTOR.
6. ROUTE 2-1/2" NATURAL GAS PIPING FROM BELOW GROUND TO ABOVE GROUND, ROUTE ABOVE GROUND PIPING AS HIGH AS POSSIBLE.
7. 1/2" NATURAL GAS TO UNIT HEATER, PROVIDE WITH DIRT LEG AND ISOLATION PLUG VALVE.
8. 1-1/4" NATURAL GAS DOWN TO CAR WASH WATER HEATER, COORDINATE EXACT TIE-IN LOCATION AND REQUIREMENTS WITH CAR WASH VENDOR/CONTRACTOR.
9. ROUTE 2-1/2" NATURAL GAS PIPING UNDERGROUND TO THE MAINTENANCE BUILDING, SEE SHEET P2.5 FOR CONTINUATION.
10. SEE CIVIL PLANS FOR CONTINUATION OF 4" SANITARY PROCESS DRAIN. COORDINATE EXACT INVERT AND TIE-IN LOCATION WITH SITE UTILITY CONTRACTOR. OIL INTERCEPTOR SHOWN ON CIVIL PLANS AND PROVIDED BY SITE UTILITY CONTRACTOR.
11. SEE CIVIL PLANS FOR CONTINUATION OF 4" SANITARY PROCESS DRAIN. COORDINATE EXACT INVERT AND TIE-IN LOCATION WITH SITE UTILITY CONTRACTOR. OIL INTERCEPTOR AND BACKWATER VALVE IS SHOWN ON CIVIL PLANS AND PROVIDED BY SITE UTILITY CONTRACTOR.
12. EXTEND 6" SANITARY PROCESS DRAIN FROM THE OVERFLOW PIPE OF THE LAST CLARIFIER PIT AS SHOWN.
13. 2" SANITARY VENT TO 3" VENT-THRU-ROOF. ROUTE ALONG BLOCK WALL OF EQUIPMENT BAY.
14. PROVIDE FLOOR DRAIN WITH FUNNEL FOR CAR WASH WATER SOFTENER, COORDINATE EXACT DRAIN LOCATION WITH CAR WASH VENDOR/CONTRACTOR.
15. PROVIDE 6" PROCESS DRAIN FROM TRUCK WASH TRENCH DRAIN TO INLET PIPE OF FIRST CLARIFIER TANK.
16. PROVIDE 1-1/2" SCHEDULE 80 PVC SUCTION LINE TO LAST CLARIFIER TANK.
17. PROVIDE 1-1/2" SCHEDULE 80 PVC DRAIN LINE TO FIRST CLARIFIER TANK.
18. PROVIDE 1-1/2" SCHEDULE 80 PVC RE-CIRCULATION LINE TO FIRST CLARIFIER TANK.
19. DOWNSPOUT BY GENERAL CONTRACTOR.
20. PROVIDE FOUR (4) PRECAST CONCRETE CLARIFIER TANKS. REFER TO DUBOIS REFERENCE DRAWINGS FOR TANK REQUIREMENTS.



1 WATER ENTRY DETAIL
P2.8 SCALE: NOT TO SCALE



TRUCK WASH
BUILDING PLUMBING PLAN
SCALE: 3/16" = 1'-0"

ALL PLUMBING AND CONDUIT LINES
ARE TO BE RUN ABOVE SLAB
(WASH BAY TO EQUIPMENT AREA)
EXCEPT AS NOTED

PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

Job Number
5147

SHEET TITLE
**TRUCK WASH
BUILDING
PLUMBING
PLAN**

Sheet Number
P2.8

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CONSULTING ENGINEERS
NOVEMBER 2019, SITE 200
NOVEMBER 2019, SITE 200
PHONE 248.489.7160

EM/RESP.	DESCRIPTION	SPECIFICATION	PRESSURE	DRAWING REFERENCE
1	DFW RINSE PUMP OUTLET TO RINSE ARCH IN WASH BAY	2" GALV SCH80	400 P.S.I.	20-0132-04 P-1.0
2	DFW BLASTER PUMP OUTLET TO BLASTER ARCH IN WASH BAY	1" GALV SCH80	1000 P.S.I.	20-0132-04 P-1.0
3	MC BACK FLUSH DRAIN FROM RECLAIM TO 1st CLARIFIER PIT	1-1/2" PVC SCH80	GRAVITY	20-0132-04 P-1.0
4	DFW CHEMICAL INJECTION SYSTEM TO BRUSH ARCH BRUSH WETTER	1" PVC SCH80	200 P.S.I.	20-0132-04 P-1.0
5	DFW CHEMICAL INJECTION SYSTEM TO CHEMICAL ARCH ACTIVATOR	1" PVC SCH80	200 P.S.I.	20-0132-04 P-1.0
6	DFW CHEMICAL INJECTION SYSTEM TO CHEMICAL ARCH DETERGENT	1" PVC SCH80	200 P.S.I.	20-0132-04 P-1.0
7	MC RECIRCULATION LINE FROM RECLAIM TO 1st CLARIFIER PIT	1-1/2" PVC SCH80	80 P.S.I.	20-0132-04 P-1.0
8	MC WATER SOFTENER DRAIN TO SANITARY (NOT TO TRENCH)	1-1/2" PVC SCH40	30 P.S.I.	20-0132-04 & 6 P-1.0 & 2.0
9	DFW AIR FROM AIR TRIO TO RINSE ARCH & CHEMICAL INJECTOR	1/2" PVC SCH80	40 P.S.I.	20-0132-04 P-1.0
10	MC 1-1/4" L.P. GAS LINE WITH SHUT OFF VALVE	1-1/4"	7.5"-9" W.C.	20-0132-04 P-1.0
11	MC WATER HEATER VENT STACK TO OUTSIDE W/DRAFT HOOD	8" DIAMETER		20-0132-04 P-1.0
12	DFW HYDRAULIC PIPING FROM POWER UNIT TO BRUSH ARCH	1/2" DS SCH80	800 P.S.I.	20-0132-04 P-1.0
13	MC RECLAIM SYSTEM TO LAST CLARIFIER PIT (SUCTION)	1-1/2" PVC SCH80	80 P.S.I.	20-0132-04 & 6 P-1.0 & 2.0
14	DFW COMPRESSED AIR SUPPLY LINE TO DFW AIR TRIO FROM COMPR.	1/2" COPPER OR PVC	80 P.S.I.	20-0132-04 & 6 P-1.0 & 2.0
15	MC 2" MAIN WATER SUPPLY WITH BACKFLOW PREVENTOR & VALVE	2" COPPER	100 P.S.I.	20-0132-06 P-3.0
16	DFW 2" WATER LINE W/VALVE TO RINSE TANK	2" COPPER	100 P.S.I.	20-0132-06 P-3.0
17	DFW 1" WATER LINE W/VALVE TO RECLAIM SYSTEM POST BACKFLOW	1" COPPER	100 P.S.I.	20-0132-06 P-3.0
18	MC INSTALL DFW SUPPLIED UNDER CARRIAGE PRE-CONCRETE POUR	1" GALV SCH80	1000 P.S.I.	20-0132-04 & 6 P-1.0 & 2.0
19	DFW RINSE TANK TO SHHP RINSE PUMP INLET	3" PVC SCH80 & HOSE	SUCTION	N/A
20	DFW RINSE TANK TO SHHP BLASTER PUMP INLET	2" PVC SCH80 & HOSE	SUCTION	N/A
21	DFW SHHP PUMP TO CHEMICAL INJECTION SYSTEM	1-1/2" HOSE	200 P.S.I.	N/A
22	DFW RECLAIM REACTION TANK PUMP OUTLET TO STORAGE TANK	1-1/2" PVC SCH80	60 P.S.I.	N/A
23	DFW RECLAIM STORAGE TANK PUMP TO RINSE TANK	1-1/2" PVC SCH80	60 P.S.I.	N/A
24	DFW RECLAIM SUCTION LINE STUB UP TO REACTION TANK PUMP	1-1/2" PVC SCH80	60 P.S.I.	N/A
25	DFW RECLAIM RECIRCULATION LINE STUB UP TO RECLAIM SYSTEM	1-1/2" PVC SCH80	60 P.S.I.	N/A
26	DFW RECLAIM DRAIN TO STUB UP TO 1st CLARIFIER PIT STUB UP	1-1/2" PVC SCH80	60 P.S.I.	N/A
27	DFW BLASTER PUMP TO BLASTER ARCH	1-1/2" PVC SCH80	60 P.S.I.	N/A
28	DFW 50HP RINSE PUMP TO RINSE ARCH	2" GALV SCH80	400 P.S.I.	20-0132-04 P-1.0
29	DFW HYDRAULIC PIPING FROM POWER UNIT TO BRUSH ARCH	1/2" DS SCH80	800 P.S.I.	20-0132-04 P-1.0
30	DFW BLASTER ARCH WHEEL WASH TO UNDER CARRIAGE BAR	1" HOSE	1000 P.S.I.	N/A

WORK REQUIRED BY CONTRACTOR

(DUBOIS FLEET WASH WILL NOT FURNISH THE FOLLOWING.)

1. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR AND FURNISH ALL PERMITS, PERMIT FEES, INSPECTIONS, ALL OTHER FEES AND SALES TAXES RELATING TO ALL PLUMBING WORK.

2. THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL WATER SUPPLY PIPING FROM BUILDING WATER SUPPLY ENTRANCE TO EQUIPMENT ROOM WITH A BACKFLOW PREVENTER AND ISOLATION VALVE.

3. THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING IN WALLS, EXPOSED AND UNDER FLOOR SLABS.

4. PLUMBING CONTRACTOR SHALL INSULATE ALL FRESH WATER PIPING WHEN NECESSARY.

MECHANICAL CONTRACTOR AND/ OR OWNER SHALL FURNISH THE FOLLOWING:

(DUBOIS FLEET WASH WILL NOT FURNISH THE FOLLOWING.)

1. MECHANICAL CONTRACTOR AND/ OR OWNER SHALL BE RESPONSIBLE FOR AND FURNISH ALL PERMITS, PERMIT FEES, INSPECTIONS, ALL OVERFEES AND SALES TAXES RELATING TO ALL MECHANICAL WORK.

2. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL EXTERNAL PLUMBING (PER CODE).

ALL PLUMBING AND CONDUIT LINES
ARE TO BE RUN ABOVE SLAB
(WASH BAY TO EQUIPMENT AREA).
EXCEPT AS NOTED

REQUIREMENTS:

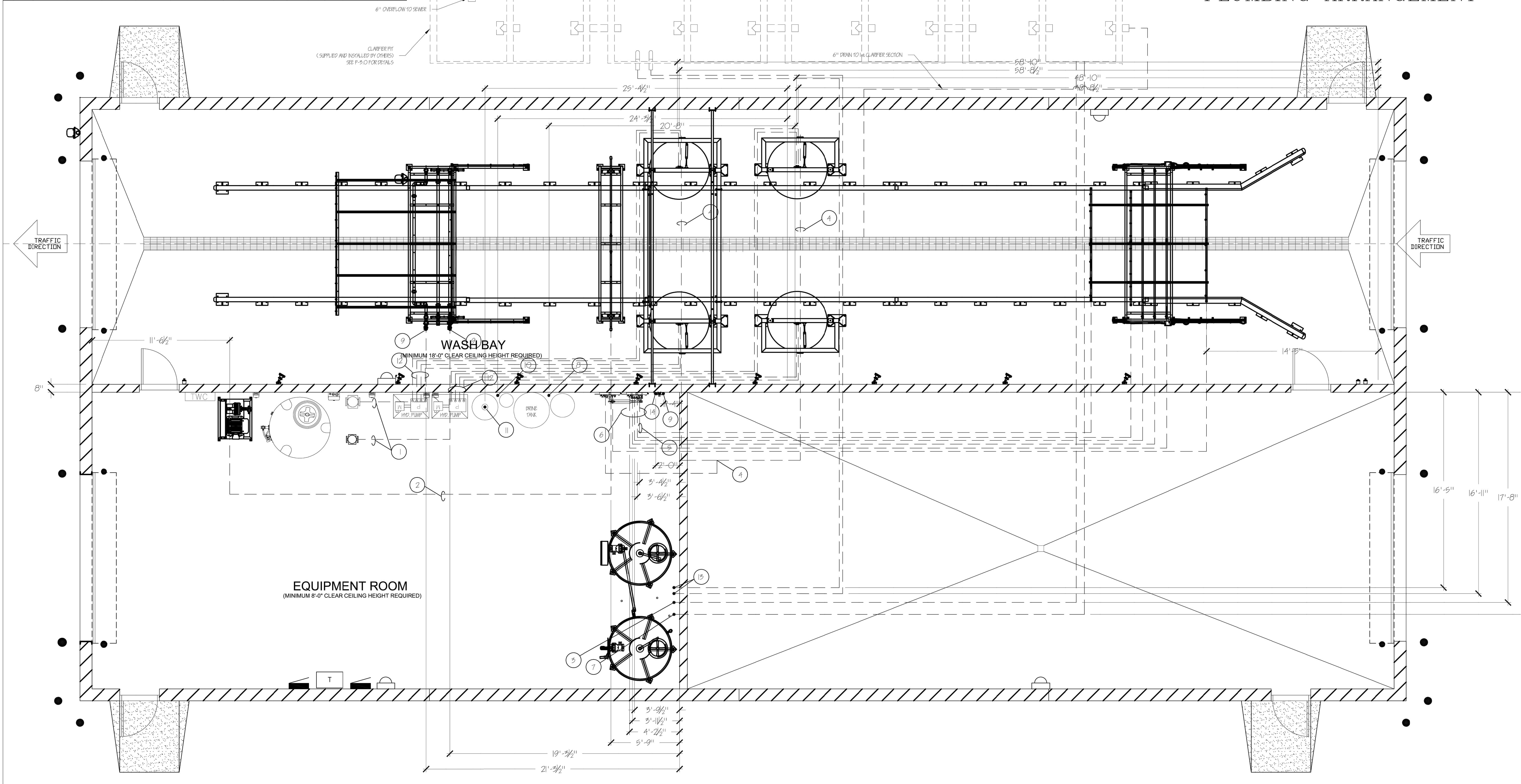
GAS PIPING SHOULD INCLUDE A FULL SIZE ORB FITTING OR TEE AT EACH END OF THE MANUAL SHUT OFF VALVE AND BE INSTALLED IN ACCORDANCE WITH THE NATIONAL BOARD OF FIRE UNDERWRITERS' PANHANDLE 94 AND ANY OTHER LOCAL CODES WHICH MAY APPLY. ALL GAS PIPING SHOULD BE TESTED AFTER INSTALLATION WITH AIR PRESSURE OR INERT GAS TO AT LEAST THREE TIMES THE MAXIMUM OPERATING PRESSURE. MANUAL MAIN GAS SHUT OFF VALVE SHOULD BE LOCATED OUTSIDE DOOR OR JACKET WHEN CODES REQUIRED.

NOTE 1:
2" FRESH WATER LINE SHOULD MAINTAIN 50-70 PSI WITH LINE OPEN (NON-STATIC PRESSURE).

NOTE 2:
PLUMBING CONNECTION AT PUMP OUTLETS TO HAVE SPRING CHECK VALVES. (SUPPLIED & INSTALLED BY PLUMBING CONTRACTOR)

ALL EQUIPMENT AND DRAWINGS ARE
THE PROPERTY OF
DUBOIS FLEETWASH
ANY DUPLICATION REQUIRES THE EXPRESS
WRITTEN CONSENT FROM
DUBOIS FLEETWASH

This drawing is for concept only.
Not for construction use
Submittal drawings will follow
site inspection and verification.



REVISION RECORD	
NO.	DATE

TRUCK WASH FACILITY FOR:
R & L CARRIERS, INC.
EDINBURGH, IN.

DRAWN BY: Martin Elliott	DATE: 6/3/2021	JOB NUMBER: 20-0141-04
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DRAWING NO.
P-1.0

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DUBOIS
Fleet Wash Chemicals • Equipment • Service

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PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued
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Job Number
5147
SHEET TITLE
DUBOIS
TRUCK WASH
REFERENCE
PLANS

Sheet Number
P2.8-1



ALL PLUMBING AND CONDUIT LINES
ARE TO BE RUN ABOVE SLAB
(WASH BAY TO EQUIPMENT AREA).
EXCEPT AS NOTED



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Submittal drawings will follow
site inspection and verification.



DuBois
Fleet Wash Chemicals • Equipment • Service


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TRUCK WASH FACILITY FOR:
R & L CARRIERS, INC.
EDINBURG, IN.

JOB NUMBER
21-0153-05

P-2.0

NOTE 3: CLARIFIER PITS CAN BE CONSTRUCTED OF PRE-CAST CONCRETE.



PROJECT
R + L CARRIERS
EDINBURGH, INDIA

Date Issued _____
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Bids & Permit Oct 08, 2021 _____

Job Number
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SHEET TITLE
DUBOIS
TRUCK WASH
REFERENCE
PLANS

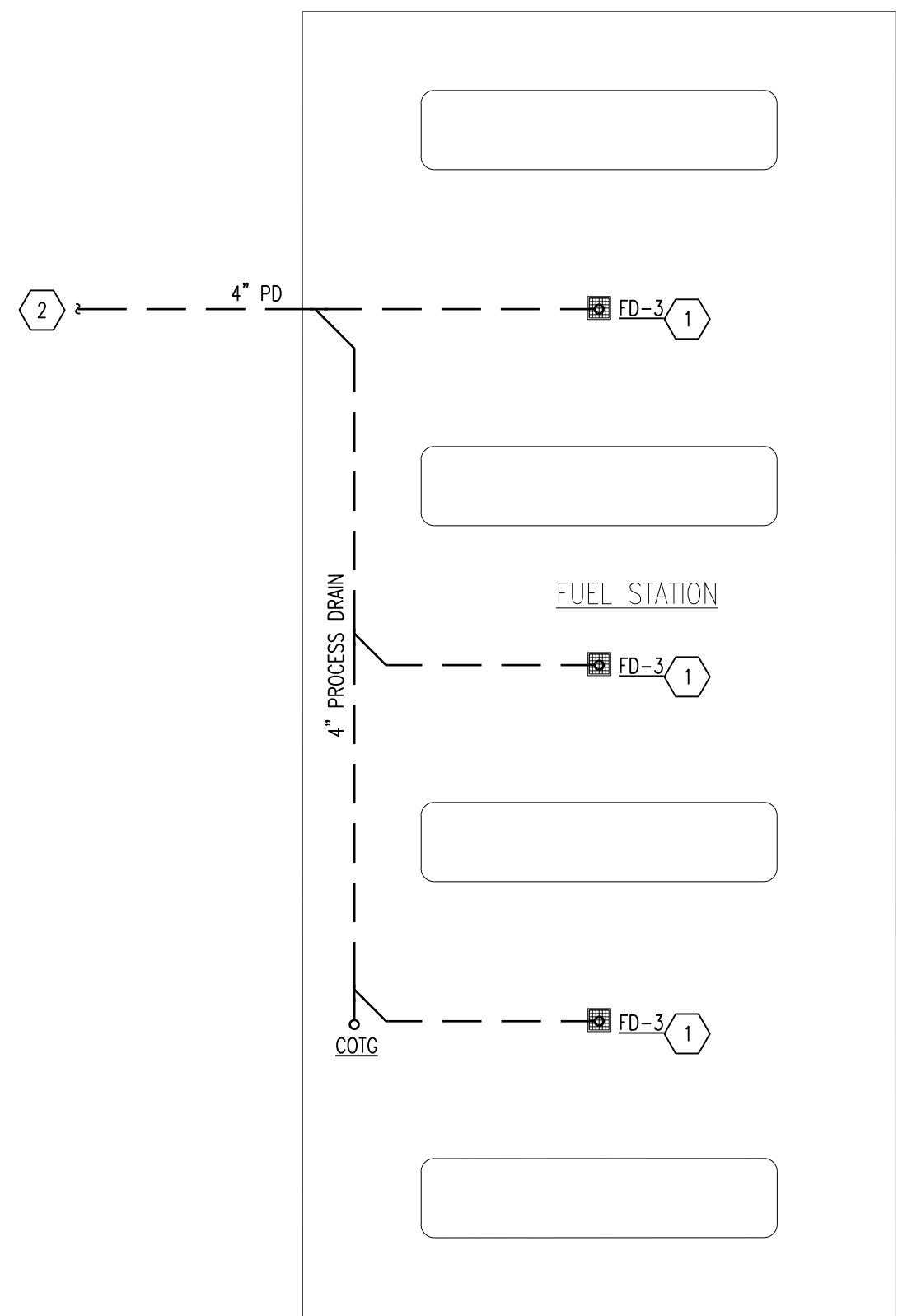
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Do not scale drawings - Use figured dimensions CAD DWG P2.8-2 DUBOIS TRUCK WASH REFERENCE PLANS,DWG

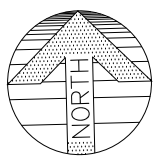


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P-3.0

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Job Number	
5147	
SHEET TITLE	
DUBOIS	
TRUCK WASH	
REFERENCE	
PLANS	
Sheet Number	
P2.8-3	



FUEL STATION PLUMBING PLAN
SCALE: 1/8" = 1'-0"



FUEL STATION PLUMBING KEY NOTES

1. PROVIDE FLOOR DRAIN AS SCHEDULED. DO NOT TRAP DRAIN. EXTEND 4" PROCESS DRAIN AS SHOWN ON PLANS. COORDINATE INSTALLATION WITH FUEL STATION INSTALLATION.
2. SEE CIVIL PLANS FOR CONTINUATION OF 4" PROCESS DRAIN. COORDINATE WITH SITE UTILITY CONTRACTOR FOR EXACT TIE-IN LOCATION AND INVERT.

ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
AWH	ANTI-FREEZE WALL HYDRANT
BFF	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
CD	CONDENSATE DRAIN
CI	CAST IRON
CO	FLOOR CLEANOUT
CW	DOMESTIC COLD WATER
DN	DOWN
ED	EQUIPMENT DRAIN
EL	ELEVATION
FCD	FLOOR CLEAN OUT
FD	FLOOR DRAIN
HB	HOSE BIBB
HD	HUB DRAIN
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RETURN
I.E.	INVERT ELEVATION
NG	NATURAL GAS
NTS	NOT TO SCALE
OD	OVERFLOW DRAIN
PRV	PRESSURE REDUCING VALVE
PRD	PRIMARY ROOF DRAIN
PRDC	PRIMARY ROOF DRAIN CONDUCTOR
SRDC	SECONDARY ROOF DRAIN CONDUCTOR
SRD	SECONDARY ROOF DRAIN
SS	SANITARY SEWER
SSV	SANITARY SEWER VENT
THW	TEMPERED HOT WATER
THWR	TEMPERED HOT WATER RETURN
TYP	TYPICAL
UG	UNDERGROUND
VAC	VACUUM
VTR	VENT THRU ROOF
WCO	WALL CLEAN OUT
WHA	WATER HAMMER ARRESTER
YCO	YARD CLEAN OUT

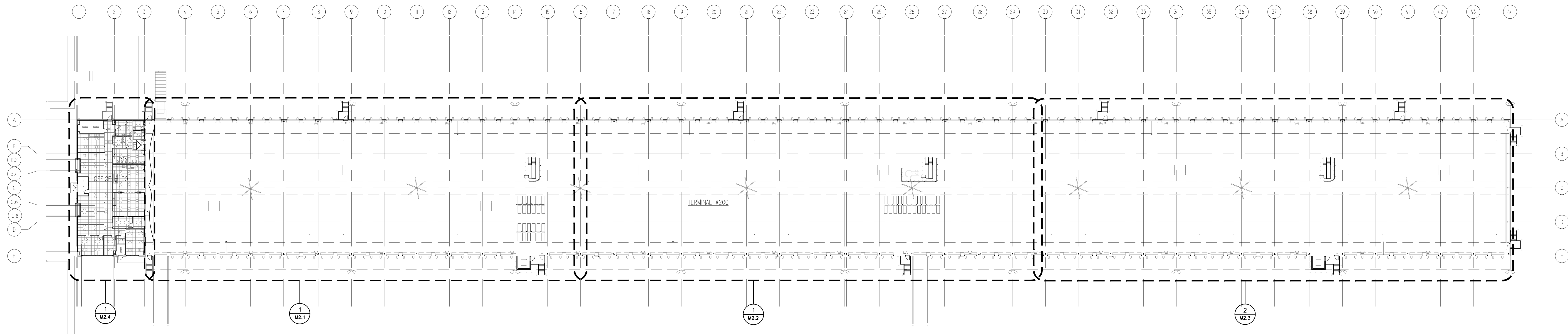
PLUMBING LEGEND	
— CW —	COLD WATER
— CW —	COLD WATER BURIED
— HW —	140°F HOT WATER
— 165 —	165°F HOT WATER
— THW —	110°F TEMPERED HOT WATER
— TPHW —	85°F TEPID WATER
— SS —	SANITARY SEWER
— SS —	SANITARY SEWER BURIED OR BELOW FLOOR
— PD —	PROCESS DRAIN TO INTERCEPTOR
— — — —	SANITARY SEWER VENT
— LP —	PROPANE GAS
— CA —	COMPRESSED AIR

SYMBOLS	
⋈	SHUT-OFF/GATE VALVE
⋈	SHUT-OFF/BALL VALVE
⋈	CHECK VALVE
⋈	BACKFLOW PREVENTER
⋈	HOSE BIBB/WALL HYDRANT
⋈	WATER HAMMER ARRESTER
⋈	FLOOR DRAIN
⋈	SANITARY FLOOR SINK
⋈	HUB DRAIN
⋈	TIE POINT
⋈	CLEANOUT PLUG
⋈	FLOOR CLEAN OUT
⋈	WALL CLEAN OUT
⋈	PIPE DOWN
⋈	PIPE UP
⋈	PIPE UP OR DROP
⋈	PLUG VALVE
⋈	PRESSURE REGULATOR
⋈	BRANCH-TOP CONNECTION
⋈	BRANCH-BOTTOM CONNECTION
⋈	CAP ON END OF PIPE
⋈	ELBOW
⋈	TEE
⋈	UNION
⋈	SANITARY FITTING

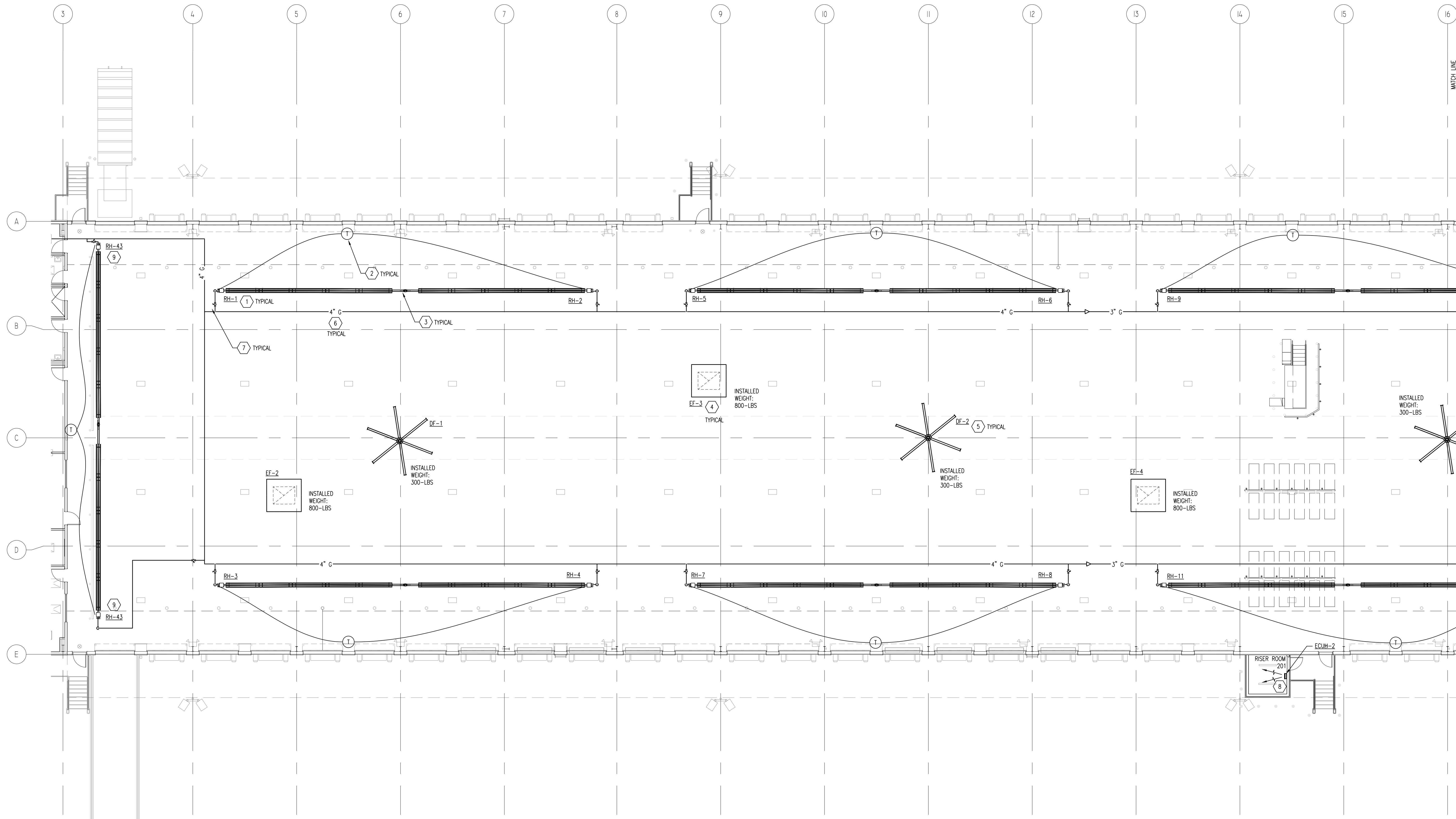
PLUMBING GENERAL NOTES:

1. PLUMBING CONTRACTOR SHALL APPLY AND PAY FOR ALL REQUIRED FEES, PERMITS AND INSPECTIONS, LICENSES & UTILITY CONNECTIONS REQUIRED FOR THE INSTALLATION AND COMPLETION OF THE WORK.
2. ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR UTILIZING EXPERIENCED LABOR. PLUMBING CONTRACTOR TO FURNISH ALL LABOR, NEW MATERIALS, EXCAVATION, BACKFILL AND EQUIPMENT REQUIRED FOR COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH DRAWINGS. ALL WORK TO COMPLY WITH THE STATE BUILDING CODE.
3. PRIOR TO RUNNING ANY PIPING THE PLUMBING CONTRACTOR SHALL VERIFY EXACT SIZES, LOCATIONS, INVERTS AND ELEVATIONS IN THE FIELD. PLUMBING DESIGN IS SCHEMATIC IN NATURE, REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND FOR EXACT LOCATIONS OF FIXTURES/EQUIPMENT.
4. VERIFY ALL EQUIPMENT CONNECTIONS, DETAILS AND INSTALLATION PROCEDURES WITH MANUFACTURER'S CERTIFIED DRAWINGS. CONTRACTOR TO VERIFY COMPATIBILITY OF FIXTURES, MOUNTING SURFACES AND CONTROLS.
5. COORDINATE CLOSELY WITH MECHANICAL, ELECTRICAL AND SITE WORK CONTRACTORS, AS WELL AS, GENERAL CONTRACTOR FOR WORK ASSOCIATED WITH THIS PROJECT TO AVOID INTERFERENCES.
6. ALL WASTE AND VENT LINES SHALL BE CONCEALED IN BUILDING CONSTRUCTION. COORDINATE EXACT LOCATION OF ALL ROOF PENETRATIONS WITH ARCHITECT AND/OR THE GENERAL CONTRACTOR.
7. COORDINATE INSTALLATION OF WATER METERS, DOUBLE CHECK VALVE ASSEMBLIES, BACKFLOW PREVENTERS, SEWER CONNECTIONS & GREASE AND OIL TRAPS WITH LOCAL WATER SEWER UTILITY. PLUMBING CONTRACTOR SHALL DETERMINE LOCAL UTILITY REQUIREMENTS PRIOR TO INSTALLATIONS OR ORDERING EQUIPMENT. REFER TO SITE PLAN & GENERAL CONTRACTOR FOR EXACT LOCATIONS.
8. INSTALL AND MAKE ALL NECESSARY CONNECTIONS REQUIRED FOR THE COMPLETE SUPPLY, RECIRCULATION, WASTE AND VENT SYSTEMS INDICATED ON THE ENGINEERED DRAWINGS, DETAILS AND SPECIFICATIONS INCLUDING: ALL PIPING, FITTINGS, VALVES, FLEXIBLE CONNECTIONS, ARRESTORS, INSULATION, SLEEVES, FASTENERS, HANGERS, SEISMIC & CABLE RESTRAINTS, VIBRATION ISOLATORS, SUPPORTS AND OTHER ITEMS REQUIRED.
9. COORDINATE ALL ELECTRICAL EQUIPMENT WITH ELECTRICAL CONTRACTOR BEFORE ORDERING. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL CONTROL WIRING. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL POWER WIRING. PIPING & EQUIPMENT SHALL NOT OBSTRUCT OR BE INSTALLED ABOVE ELECTRICAL PANELS.
10. PLUMBING FIXTURES FOR THE HANDICAPPED SHALL MEET THE REQUIREMENTS OF ANSI A117.1 AND THE AMERICANS WITH DISABILITIES ACT (ADA) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
11. PROVIDE CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS AND GUIDES AS NECESSARY TO PREVENT STRESS ON THE PIPING AND THE WEIGHT OF THE PIPING BEING PLACED ON THE EQUIPMENT OR FIXTURES. PROVIDE VENTS AT HIGH POINTS IN PIPING SYSTEMS AND DRAIN VALVES AT LOW POINTS.
12. ALL PIPING SHALL BE SUPPORTED AS REQUIRED BY THE STATE BUILDING CODES. PIPING SHALL NOT BE ALLOWED TO SAG. PIPING SHALL GENERALLY RUN AT 90° ANGLES PARALLEL AND PERPENDICULAR TO BUILDING WALLS. SEISMIC SUPPORTS SHALL BE DESIGNED AND INSTALLED IF EARTHQUAKE LOADS ARE APPLICABLE.
13. ALL PIPING PENETRATING EXTERIOR WALLS AND ROOFS SHALL BE FLASHED AND COUNTER FLASHED IN A CODE APPROVED MANNER AND SHALL BE SEALED WEATHER TIGHT. VERIFY EXACT LOCATIONS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
14. WATER HEATERS TO BE EQUIPPED WITH ASME PRESSURE AND TEMPERATURE RELIEF VALVE AND OVERFLOW PAN, PIPE TO SERVICE SINK, FLOOR DRAIN, OVERFLOW PAN OR BUILDING EXTERIOR TO GRADE.
15. PLUMBING CONTRACTOR TO VERIFY PLENUM TYPE AND PIPING REQUIREMENTS PRIOR TO THE PIRING, PURCHASING, OR INSTALLATION OF PIPING IN PLENUM SPACES.

PLUMBING FIXTURE & PIPE CONNECTION SCHEDULE											
TAG	BASIS OF DESIGN		DESCRIPTION	FAUCETS AND FITTINGS		PIPE CONNECTION DATA				VOLTAGE	NOTES
	MANUFACTURER	MODEL		MANUFACTURER	MODEL No.	COLD WATER	HOT WATER	VENT	SANITARY		
AAV	STUDOR	-	AIR ADMITTANCE VALVE			-	-	SEE PLANS	-		PROVIDE ONLY WHERE TRADITIONAL VENT PIPING CANNOT BE INSTALLED
AWH	JOSAM	71050	ANTI-FREEZE WALL HYDRANT			3/4"	-	-	-		FROST-PROOF
BFP	WATTS	LF809	REDUCED PRESSURE ZONE BACKFLOW PREVENTER			SEE PLANS	-	-	-		LEAD FREE, PROVIDE AS REQUIRED BY LOCAL REQUIREMENTS
CP	TACO	9	HOT WATER CIRCULATION PUMP			-	1/2"	-	-	120 / 1	
EEW	GUARDIAN	G1814	EMERGENCY EYEWASH STATION			1/2"	1/2"	-	2"		OSHA AND ANSI COMPLIANT, PROVIDE G6020 MIXING VALVE. CHROME PLATED BRASS TAILPIECE. AND STAINLESS STEEL AUTOMATICALLY RETRACTING BOWL COVER
EW-C-1	ELKAY	LZ58WSLK	SINGLE HEIGHT ELECTRIC WATER COOLER WITH BOTTLE FILLER			1/2"	-	-	2"	120 / 1	FILTERED, REFRIGERATED 8GPH
EW-C-2	ELKAY	LZ5TL6WSLK	HIGH-LOW ELECTRIC WATER COOLER WITH BOTTLE FILLER			1/2"	-	-	2"	120 / 1	FILTERED, REFRIGERATED 8GPH
FD-1	MIFAB	F1000	6" ROUND STRAINER FLOOR DRAIN			-	-	-	3"		PROVIDE TRAP PRIMER DEVICE
FD-2	MIFAB	F1100-XS	10"x10" SQUARE STRAINER FLOOR DRAIN			-	-	-	3"		PROVIDE TRAP PRIMER DEVICE
FD-3	MIFAB	F1440-C-Y-5-4	12"x12" SQUARE STRAINER HEAVY DUTY FLOOR DRAIN			-	-	-	4"		CAST IRON SUMP AND STRAINER
TD	MIFAB	T275	4.75" WIDE, 2.75" DEEP TRENCH DRAIN			-	-	-	3"		40" STANDARD LENGTH, PROVIDE CUSTOM 80" LENGTH TO FIT IN SHOWER. EPOXY-COATED STEEL BODY. HEEL-PROOF STAINLESS STEEL PERFORATED GRATES
HB	T&S BRASS	B-0736-POL	INTERIOR HOSE BIB			3/4"	-	-	-		
LAV	KOHLER	K-2005 "KINGSTON"	WALL-MOUNT 21"x18" VITRIOUS CHINA LAVATORY	MOEN	CA8302	1/2"	1/2"	1-1/2"	2"		WHITE WALL-MOUNT. SENSOR BATTERY FAUCET, ASSE 1070 MIXING VALVE
LAV-A	JUST MANUFACTURING	JH-ADA-4820-S-CP	STAINLESS STEEL DOUBLE LAVATORY	JUST MFG	JSL-46-B	1/2"	1/2"	1-1/2"	2"		SENSOR BATTERY FAUCET, ASSE 1070 MIXING VALVE
MS	FLORESTONE	MSR-2424	MOB BASIN	T&S BRASS	B-0655-BSTP	1/2"	1/2"	1-1/2"	3"		MR-370 HOSE & CLAMP. MR-372 MOP HANGER. MR-373 STAINLESS STEEL RIM GUARD. MR-377 WALL GUARD PANELS
US	FLORESTONE	FM	UTILITY SINK	T&S BRASS	B-0574-RGH	1/2"	1/2"	1-1/2"	2"		8" WALL MOUNT UTILITY FAUCET W/ VACUUM BREAKER & GARDEN HOSE OUTLET
SK-1	ELKAY	LRAD-2219	"LUSTERONE" 1-COMP. SS DROP-IN SINK	MOEN	8940	1/2"	1/2"	1-1/2"	2"		3-HOLE. 6" DEEP STAINLESS STEEL SINK WITH CENTERED REAR OUTLET. ADA COMPLIANT. 1.2-GPM. PROVIDE OFFSET TAILPIECE AND INSULATION KIT WHERE TRIM IS EXPOSED AND <u>IMV</u>
SK-2	ELKAY	LRAD-3321	"LUSTERONE" 2-COMP. SS DROP-IN SINK	MOEN	7430	1/2"	1/2"	1-1/2"	2"		3-HOLE. 6" DEEP STAINLESS STEEL SINK WITH CENTERED REAR OUTLET. ADA COMPLIANT. 1.2-GPM. PROVIDE OFFSET TAILPIECE AND INSULATION KIT WHERE TRIM IS EXPOSED AND <u>IMV</u>
UR	KOHLER	K-4951-ET "BARDON"	FLUSH VALVE URINAL	ZURN	ZER6003-CPM	3/4"	-	1-1/2"	2"		WHITE WALL-MOUNT. BATTERY FLUSH VALVE 1.0 GPF
UR-A	KOHLER	K-4951-ET "BARDON"	FLUSH VALVE URINAL, ADA HEIGHT	ZURN	ZER6003-CPM	3/4"	-	1-1/2"	2"		WHITE WALL-MOUNT. BATTERY FLUSH VALVE 1.0 GPF
WC	KOHLER	K-4302 "HIGHCREST"	FLUSH VALVE TOILET	ZURN	ZER6000AV-TM	1"	-	2"	4"		WHITE ELONGATED BOWL. OPEN-FRONT BEMIS SEAT LESS LID. BATTERY FLUSH VALVE 1.28 GPF
WC-A	KOHLER	K-4302 "HIGHCREST"	FLUSH VALVE TOILET, ADA HEIGHT	ZURN	ZER6000AV-TM	1"	-	2"	4"		WHITE ELONGATED BOWL. OPEN-FRONT BEMIS SEAT LESS LID. BATTERY FLUSH VALVE 1.28 GPF
IMB	OATEY	I2K	ICE MAKER BOX			1/2"	-	-	-		
EW-H	A.O. SMITH	DEN-40	40-GALLON VERTICAL ELECTRIC WATER HEATER	AMTROL	ST-5 EXP TANK	1"	1"	-	-	208 / 1	4500W. PROVIDE AMTROL ST-5 EXPANSION TANK. VACUUM RELIEF VALVE
WHA	SILOUX CHIEF	HYDRA-RESTER SERIES 650	WATER HAMMER ARRESTOR			1/2"	1/2"	-	-		NOT SHOWN ON PLANS. PROVIDE WHERE REQUIRED
CO	MIFAB	C1000-R-3	FLOOR CLEANOUT			-	-	-	SEE PLANS		CAST IRON BODY. BRASS TOP
COTG	MIFAB	C1100-XR	CLEANOUT TO GRADE			-	-	-	SEE PLANS		CAST IRON BODY. HEAVY DUTY ROUND TOP
WCO	MIFAB	C1460-RD	WALL CLEANOUT			-	-	-	SEE PLANS		CAST IRON BODY WITH PLUG. SMOOTH STAINLESS STEEL ACCESS COVER
SHWR	MOEN	T2900	SHOWER VALVE	MOEN	2521	1/2"	1/2"	-	-		3-WAY DIVERTER VALVE, 3888EP HANDHELD SHOWER WITH SLIDEBAR, 6302EP15 FIXED SHOWERHEAD. ASSE 1017 MIXING VALVE



OVERALL OFFICE/TERMINAL HVAC PLAN
SCALE: 1/32" = 1'-0"



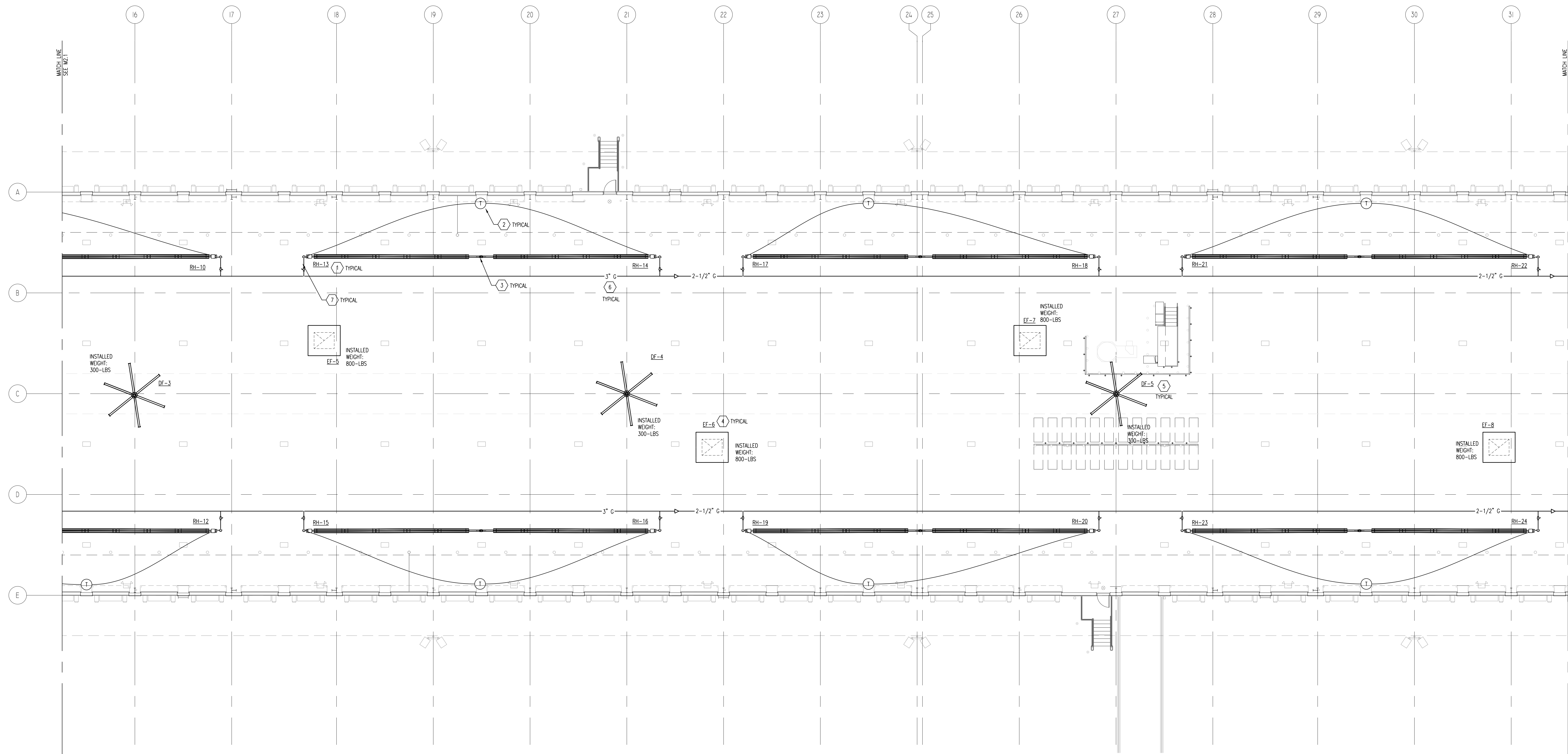
TERMINAL BUILDING HVAC PLAN
SCALE: 3/32" = 1'-0"

KEY NOTES

1. PROVIDE NATURAL GAS INFRARED RADIANT HEATER AS SCHEDULED. SUSPEND FROM STRUCTURE AT 13'-6" ABOVE FINISH FLOOR, VERIFY INSTALLATION HEIGHT WITH OWNER AND OTHER TRADES.
2. PROVIDE ENERGY-CODE COMPLIANT HEATING-ONLY THERMOSTAT AT 4'-0" ABOVE FINISH FLOOR ON BUILDING COLUMN. EXTEND 24V CONTROL WIRING TO TWO INFRARED RADIANT HEATERS. ALL HEATERS SHARING A COMMON FLUE VENT MUST ALSO SHARE A COMMON THERMOSTAT. COORDINATE SET POINT WITH OWNER.
3. COMBINE TWO 4" RADIANT HEATER FLUES INTO A COMMON 6" FLUE VENT WITH A FACTORY 4x4x6 DUAL VENT Y-COUPLER AND EXTEND UP THRU ROOF AND TERMINATE WITH 6" WEATHERPROOF ROOF VENT CAP MINIMUM 2'-0" ABOVE ROOF. COORDINATE ROOF FLASHING REQUIREMENTS WITH ROOFING CONTRACTOR.
4. PROVIDE EXHAUST FAN AS SCHEDULED. SUSPEND FROM STRUCTURE AT 15'-8" ABOVE FINISH FLOOR, VERIFY INSTALLATION HEIGHT WITH OWNER AND OTHER TRADES.
5. PROVIDE DESTRATIFICATION FAN AS SCHEDULED. SUSPEND FROM STRUCTURE AT 15'-8" ABOVE FINISH FLOOR, VERIFY INSTALLATION HEIGHT WITH OWNER AND OTHER TRADES.
6. ROUTE NEW NATURAL GAS PIPING AS HIGH AS POSSIBLE, PAINT GAS PIPING 'SAFETY YELLOW'. SUPPORT NEW NATURAL GAS PIPING PER CODE REQUIREMENTS.
7. EXTEND 1/2" NATURAL GAS PIPING WITH PLUG VALVE AND DIRT LEG TO EACH INFRARED RADIANT HEATER. EXTEND 1/2" FLEXIBLE GAS PIPING TO EACH INFRARED RADIANT HEATER (MAXIMUM LENGTH OF FLEX PIPING SHALL NOT EXCEED ONE (1) FEET).
8. PROVIDE ELECTRIC CABINET HEATER AT 1'-0" ABOVE FINISH FLOOR. COORDINATE EXACT INSTALLATION LOCATION WITH ELECTRICAL AND FIRE PROTECTION CONTRACTOR. OTHER TRADES HAVE PRIORITY, RELOCATE AS REQUIRED. COORDINATE SET POINT WITH OWNER.
9. PROVIDE ANGLE BRACKET DEFLECTOR KIT TO ALLOW HEATER TO BE INSTALLED AT A 15°, 30°, OR 45° ORIENTATION. INSTALL HEATER AT 15° FROM VERTICAL ORIENTATION.

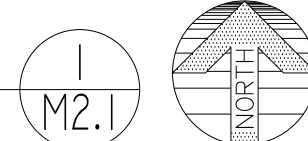
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4. PROVIDE EXHAUST FAN AS SCHEDULED ON 12" MINIMUM PITCHED ROOF CURB. EXTEND FULL-SIZE EXHAUST DUCTWORK DOWN TO 1'-0" BELOW ROOF DECK.
5. PROVIDE DESTRATIFICATION FAN AS SCHEDULED. SUSPEND FROM STRUCTURE AT 15'-8" ABOVE FINISH FLOOR, VERIFY INSTALLATION HEIGHT WITH OWNER AND OTHER TRADES.
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7. EXTEND 1/2" NATURAL GAS PIPING WITH PLUG VALVE AND DIRT LEG TO EACH INFRARED RADIANT HEATER. EXTEND 1/2" FLEXIBLE GAS PIPING TO EACH INFRARED RADIANT HEATER (MAXIMUM LENGTH OF FLEX PIPING SHALL NOT EXCEED ONE (1) FEET).



TERMINAL BUILDING HVAC PLAN

SCALE: 3/32" = 1'-0"



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PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued

Owner Review Aug 26, 2021

Bids & Permit Oct 08, 2021

Job Number

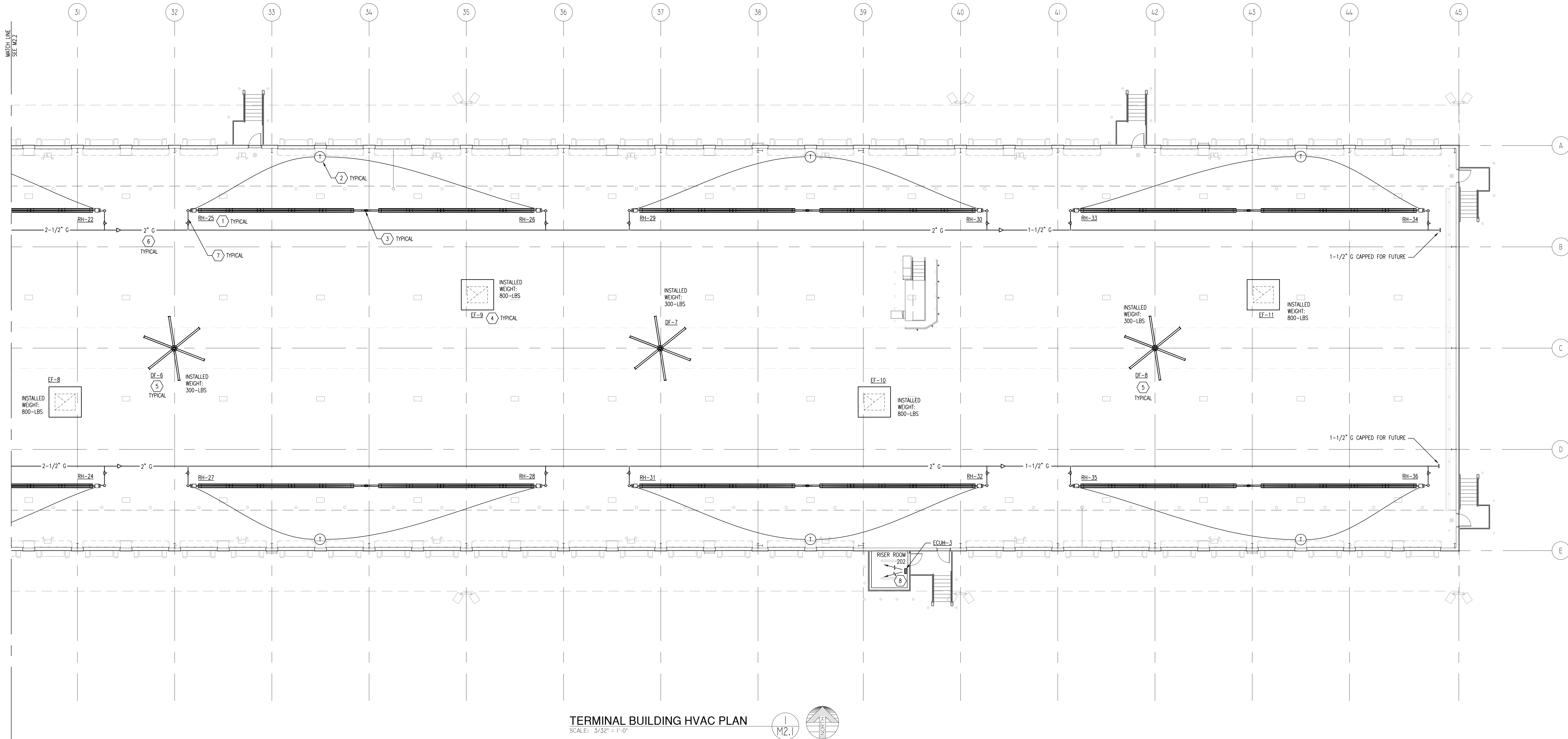
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SHEET TITLE
TERMINAL
BUILDING
HVAC PLAN

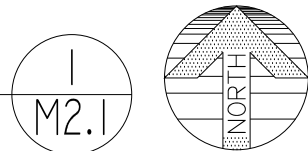
Sheet Number

M2.2

Do not scale drawings - Use figured dimensions. CAD DWG M2.2 TERMINAL BUILDING HVAC PLAN.DWG



TERMINAL BUILDING HVAC PLAN
SCALE: 3/32" = 1'-0"



- KEY NOTES**
1. PROVIDE NATURAL GAS INFRARED RADIANT HEATER AS SCHEDULED. SUSPEND FROM STRUCTURE AT 13'-6" ABOVE FINISH FLOOR, VERIFY INSTALLATION HEIGHT WITH OWNER AND OTHER TRADES.
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 8. PROVIDE ELECTRIC CABINET HEATER AT 1'-0" ABOVE FINISH FLOOR. COORDINATE EXACT INSTALLATION LOCATION WITH ELECTRICAL AND FIRE PROTECTION CONTRACTOR. OTHER TRADES HAVE PRIORITY, RELOCATE AS REQUIRED. COORDINATE SET POINT WITH OWNER.

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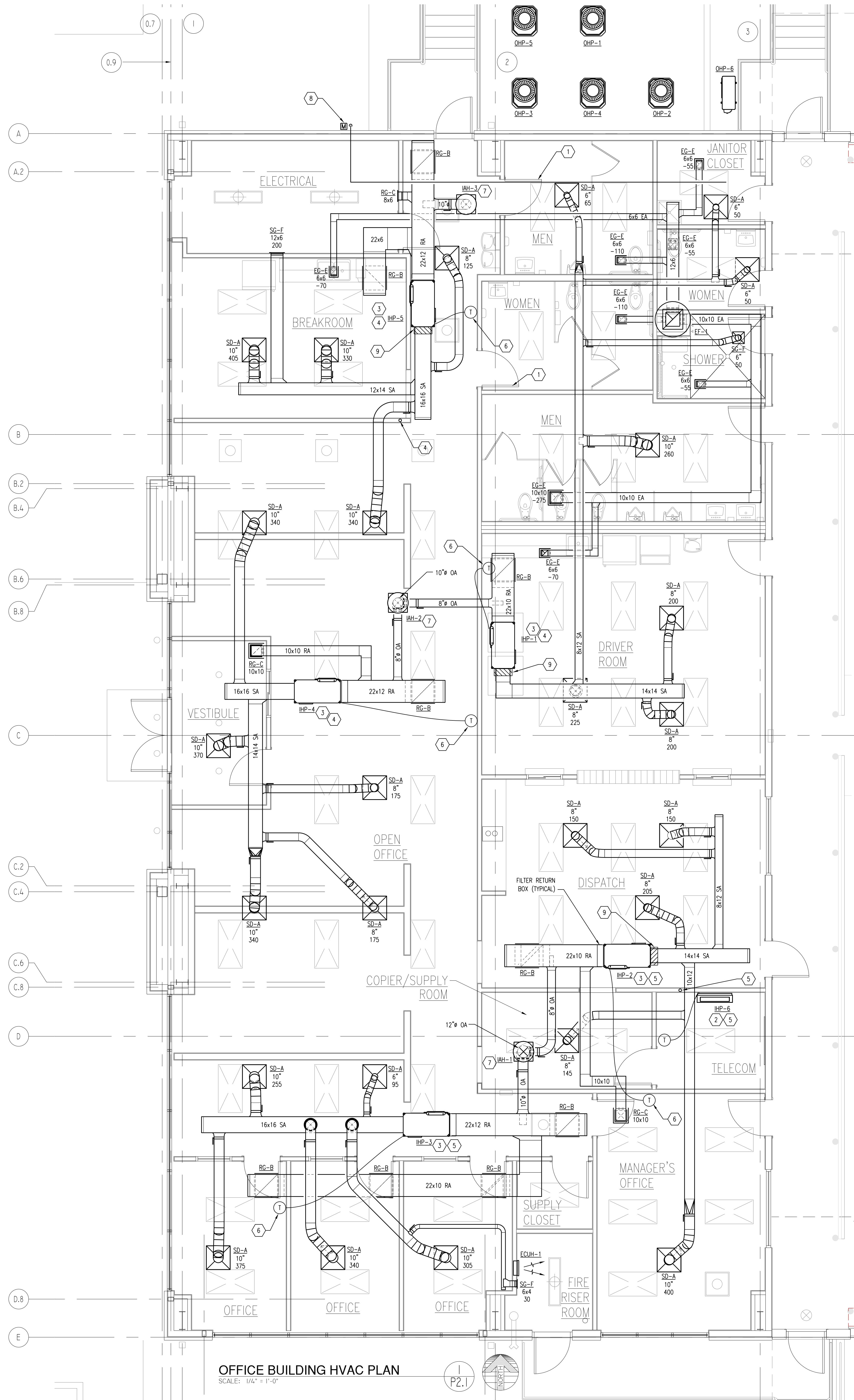
PROJECT
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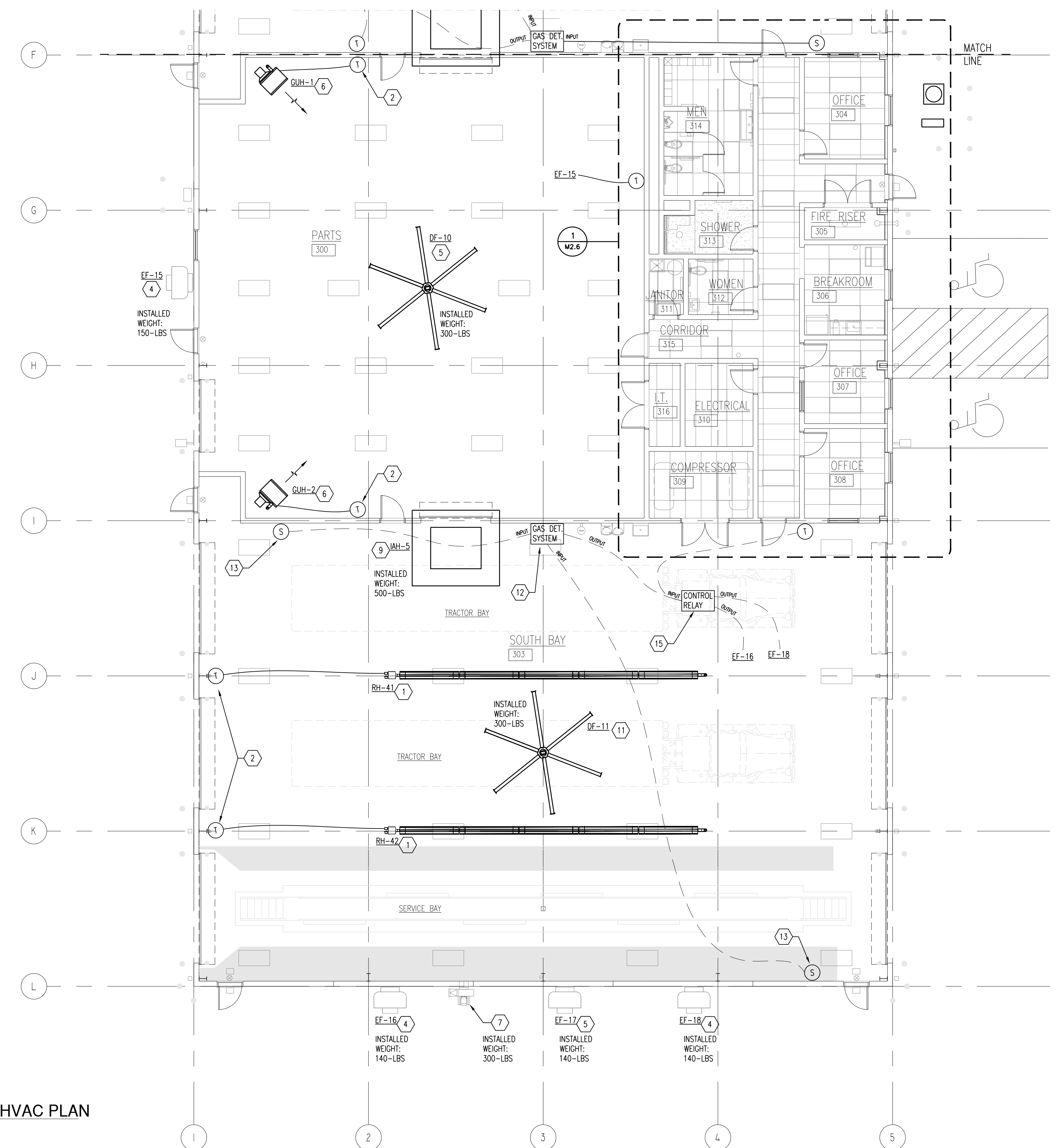
Do not scale drawings - Use figured dimensions. CAD DWG M2.3 TERMINAL BUILDING HVAC PLAN.DWG



- # KEY NOTES
- COORDINATE WITH GENERAL CONTRACTOR TO UNDERCUT DOOR 3/4".
 - PROVIDE HEAT PUMP ON WALL AT 9'-0" ABOVE FINISH FLOOR. ROUTE REFRIGERANT LINE SETS TO ASSOCIATED OUTDOOR UNIT SIZED PER MANUFACTURER'S INSTRUCTIONS BASED ON LENGTH OF RUN.
 - PROVIDE HEAT PUMP ABOVE CEILING SUSPENDED FROM STRUCTURE. ROUTE REFRIGERANT LINE SETS TO ASSOCIATED OUTDOOR UNIT SIZED PER MANUFACTURER'S INSTRUCTIONS BASED ON LENGTH OF RUN. INSTALL HEAT PUMP HIGH ENOUGH TO ALLOW FOR GRAVITY FALL OF CONDENSATE DRAINAGE.
 - ROUTE CONDENSATE DRAINAGE TO WASTE STAND PIPE. COORDINATE WITH PLUMBER FOR EXACT INSTALLATION LOCATION OF WASTE STAND PIPE.
 - ROUTE CONDENSATE DRAINAGE TO WASTE STAND PIPE. COORDINATE WITH PLUMBER FOR EXACT INSTALLATION LOCATION OF WASTE STAND PIPE.
 - INSTALL WALL THERMOSTAT AT 4'-0" ABOVE FINISH FLOOR AND EXTEND CONTROL WIRING TO ASSOCIATED INDOOR HEAT PUMP UNIT.
 - PROVIDE INTAKE AIR HOOD AND EXTEND OUTDOOR AIR TO EACH INDOOR HEAT PUMP AIR HANDLING UNIT. PROVIDE BALANCE DAMPER ON ALL BRANCHES.
 - COORDINATE WITH UTILITY FOR INSTALLATION OF NEW NATURAL GAS METER. GAS METER SHALL BE SIZED FOR 3,000 MBH AT 7" WATER COLUMN.
 - PROVIDE ELECTRIC REHEAT COIL ON DISCHARGE OF AIR HANDLER. REFER TO HEAT PUMP SCHEDULE FOR SIZING AND CONTROLS REQUIREMENTS. REHEAT COIL IS POWERED SEPARATELY, COORDINATE WITH ELECTRICAL CONTRACTOR. PROVIDE NATIONAL ELECTRIC CODE CLEARANCE IN FRONT OF CONTROL PANEL.

OFFICE BUILDING HVAC PLAN

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



1. PROVIDE NATURAL GAS INFRARED RADIAN HEATER AS SCHEDULED. SUSPEND FROM STRUCTURE AT 14'-2" ABOVE FINISH FLOOR, VERIFY INSTALLATION HEIGHT WITH OWNER AND OTHER TRADES. REFER TO VENTING PLANS FOR GAS PIPING. EXTEND FUE FLUE UP THRU ROOF PER MANUFACTURER'S INSTRUCTIONS.
2. PROVIDE ENERGY-CODE COMPLIANT HEATING-ONLY THERMOSTAT AT 4'-0" ABOVE FINISH FLOOR ON BUILDING COLUMN OR WALL. EXTEND 24V CONTROL WIRING TO HEATER. COORDINATE SET POINT WITH OWNER.
3. PROVIDE ANGLE BRACKET DEFLECTOR KIT TO ALLOW HEATER TO BE INSTALLED AT A 15', 30', OR 45' ORIENTATION. INSTALL HEATER AT 15" FROM VERTICAL ORIENTATION.
4. PROVIDE SIDEWALL EXHAUST FAN AS SCHEDULED, REFER TO ARCHITECTURAL/ELEVATIONS FOR INSTALLATION HEIGHT. EXTEND FULL-SIZE EXHAUST OUTCUTWTH THRU WALL INTO INTERIOR. COORDINATE EXHAUST DETECTION FROM DETECTING MONITORING OR HARK DETECTOR. PROVIDE SERVICES: WIRE THERMOSTAT INTO GAS DETECTION CONTROL BOX SO EXHAUST FAN WILL ENGAGE FROM EITHER THE THERMOSTAT SET POINT OR BY DETECTION OF EXCESS CO OR NO₂.
5. PROVIDE SIDEWALL EXHAUST FAN AS SCHEDULED, REFER TO ARCHITECTURAL/ELEVATIONS FOR INSTALLATION HEIGHT. EXTEND FULL-SIZE EXHAUST OUTCUTWTH THRU WALL INTO INTERIOR. COORDINATE WITH ELECTRICAL CONTRACTOR, ELECTRICAL SHALL FEI TO TIME CLOCK TO PROVIDE CONTINUOUS ON/OFF OPERATION. COORDINATE WITH ELECTRICAL, ELECTRICIAN SHALL PROVIDE INTERLOCK WITH INTAKE AIR HOOD MOTORIZED DAMPER.
6. INSTALL UNIT HEATER AT 12'-0" ABOVE FINISH FLOOR, EXTEND FUE FLUE THRU ROOF. REFER TO PLUMBING PLANS FOR GAS PIPING. EXTEND FUE FLUE UP THRU ROOF PER MANUFACTURER'S INSTRUCTIONS.
7. VEHICLE EXHAUST SYSTEM FAN, OUTCUTWTH, AND HOSE DROPS SHALL BE PROVIDED AND INSTALLED ON THIS CONTRACT, REFER TO VENDOR DRAWING ON SHEET M25-1 FOR LAYOUT AND INSTALLATION REQUIREMENTS. FAN SHALL BE A CIRCUMFAT FAN MACHSPR/PACENT OF SERIES 5-HP FAN.
8. INSTALL AXIAL FAN WITH DOUBBLE ARTICULATING WALL-MOUNT ARM AT 12'-0" ABOVE FINISH FLOOR. BOTH FANS SHALL BE CONTROLLED BY A SINGLE WALL SWITCH, COORDINATE WITH ELECTRICAL CONTRACTOR. SET AT LOW-SPEED SETPOINT.
9. INSTALL GRAVITY MAKE-UP AIR INTAKE AIR HOOD ON ROOF. PROVIDE MOTORIZED BACKDRIFT DAMPER INTERLOCKED WITH ASSOCIATED EXHAUST FAN.
10. INSTALL WALL LOUVER AT 14'-0" ABOVE FINISH FLOOR.
11. PROVIDE DETRIFICATION FAN AS SCHEDULED. SUSPEND FROM STRUCTURE AT 20'-7" ABOVE FINISH FLOOR, VERIFY INSTALLATION HEIGHT WITH OWNER AND OTHER TRADES. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.
12. PROVIDE SINGLE-ZONE GAS DETECTION SYSTEM BY ARMSTRONG MONITORING, MODEL AME-100A. COORDINATE WITH ELECTRICAL CONTRACTOR WITH ELECTRICAL CONTRACTOR. INSTALL UNIT AT 4'-6" ABOVE FINISH FLOOR.
13. PROVIDE CARBON MONOXIDE (CO) AND NITROGEN DIOXIDE (NO₂) LOW-VOLTAGE GAS DETECTION SENSOR BY ARMSTRONG MONITORING, MODEL AME-1222. INSTALL SENSOR ON WALL AT 4'-6" ABOVE FINISH FLOOR, LOW-VOLTAGE WIRING SHALL BE PROTECTED IN METAL CONDUIT.
14. MECHANICAL CONTRACTOR SHALL PROVIDE AND WIRE CONTROL RELAY AS REQUIRED FOR EXHAUST FANS (FF-172 AND FF-114) TO ENGAGE UPON DETECTION OF HIGH LEVEL OF CARBON MONOXIDE (CO) OR NITROGEN DIOXIDE (NO₂) DETECTED IN THE NORTH BAY OR SAFETY LAKE GAS SENSORS OR UPON HIGH SET POINT REACHED IN THERMOSTAT.
15. MECHANICAL CONTRACTOR SHALL PROVIDE AND WIRE CONTROL RELAY AS REQUIRED FOR PURGE EXHAUST FANS (FF-116 AND FF-118) TO ENGAGE UPON DETECTION OF HIGH LEVEL OF CARBON MONOXIDE (CO) OR NITROGEN DIOXIDE (NO₂) DETECTED IN THE SOUTH BAY GAS SENSORS OR UPON HIGH SET POINT REACHED IN THERMOSTAT.

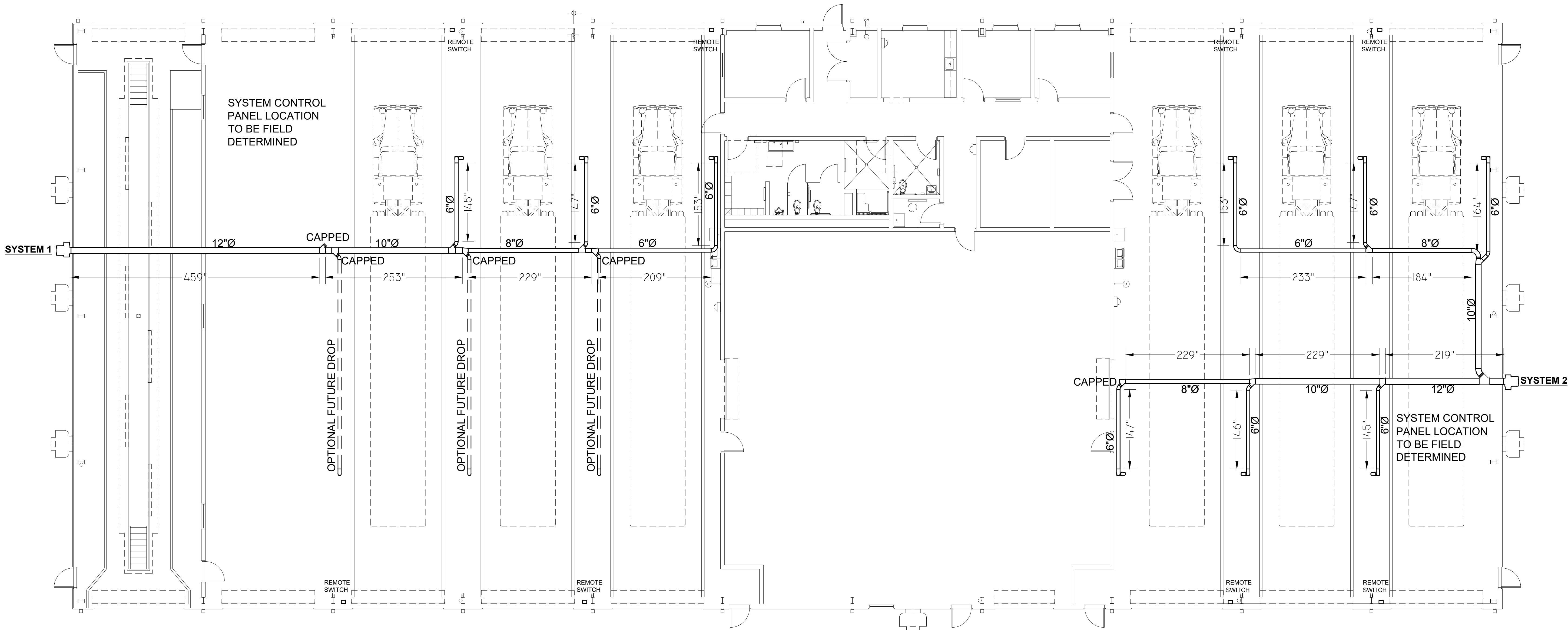
MAGNEGRIP GROUP

JACK ROSSMAN – PRESIDENT

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NOTE:
GENERAL CONTRACTOR HAS THE OPTION TO CONTRACT MAGNEGRIP GROUP DIRECTLY TO FURNISH AND INSTALL THE VEHICLE EXHAUST SYSTEM IN ENTIRETY OR THE OPTION TO PURCHASE THE EQUIPMENT AND COMPONENTS FROM MAGNEGRIP GROUP AND INSTALL THEMSELVES PER THE PROVIDED DESIGN ON THIS SHEET.



GENERAL CONSTRUCTION NOTES:

- FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY DRAWINGS ARE DIAGRAMMATIC AND DESIGN INTENT ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE BEGINNING ANY FABRICATION OR CONSTRUCTION.
- ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES IN ACCORDANCE WITH 2018 ICC (IBC, IMC).
- ALL NEW MATERIAL METHODS, AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE BUILDING STANDARDS AS APPROVED.
- CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- CONTRACTOR SHALL COORDINATE EXACT LOCATION OF EXHAUST FANS, DUCTWORK, AND EXHAUST DROPS WITH EXISTING IN-PLACE CITY FIRE DEPARTMENTS EQUIPMENT, LIGHTING, AND ALL EXISTING CONDITIONS.
- ALL EXHAUST DUCTWORK SHALL BE SPIRAL SEAM GALVANIZED STEEL FABRICATED AND INSTALLED IN ACCORDANCE WITH CHAPTER 6 OBBC MC AND SMACNA STANDARD MANUAL.
- SHEETMETAL DUCT DIMENSIONS SHOWN ARE AIRWAY DIMENSIONS.
- BALANCE EXHAUST SYSTEM AND EACH EXHAUST DROP MEET AIR QUANTITIES AS REQUIRED FOR 600 CFM PER DROP.
- CONTRACTOR SHALL COORDINATE WITH CITY FIRE DEPARTMENT PRIOR TO ANY PENETRATION OR ROOF CUTTING.

FAN SCHEDULE								
FAN TYPE	ID#	AIRFLOW (CFM)	RPM	STATIC PRESSURE (IN - WC)	VOLTS / PHASE	HP	BREAKER	WIRE
MAGNEGRIP	CF363-5	3300	3450	6 SP	460v / 3ph	5	30 AMP	#8THHN
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REMARKS:								
A. ITEM HAS BEEN SPECIFIED FOR QUALITY AND PERFORMANCE ANY APPROVED SUBSTITUTION IS AT THE RISK OF THE OWNER.								
B. FAN SHALL BE UL LISTED AND AMCA CERTIFIED.								
C. FAN SHALL BE CONTROLLED BY VES CONTROL PANEL. PROVIDE SENSORS, TRANSMITTERS, RECEIVERS, AND OTHER ITEMS REQUIRED FOR ALL FULLY AUTOMATIC SYSTEM.								
D. PROVIDE RAIN CAP, BACKDRAFT DAMPER AND OTHER ITEMS REQUIRED FOR A COMPLETE INSTALLATION.								
E. ELECTRICAL INFORMATION SHALL BE VERIFIED BY NAMEPLATE RATINGS. COORDINATE WITH EXISTING ELECTRICAL SERVICE FOR THE BUILDING.								

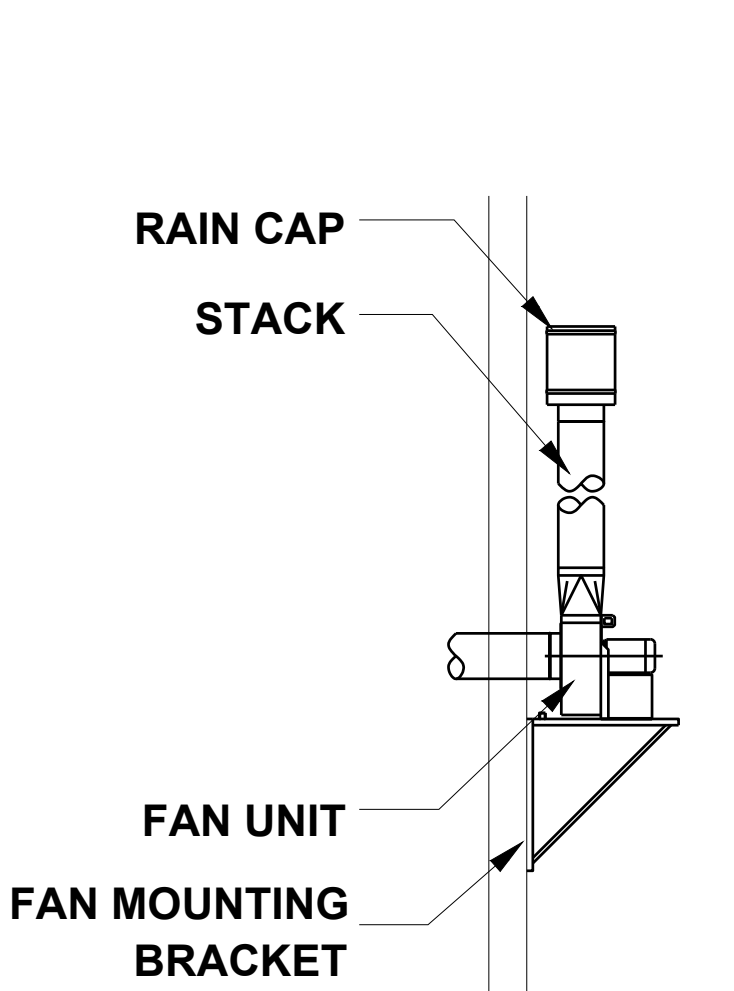
EQUIPMENT SUPPLIED BY CLEAN AIR CONCEPTS

SYSTEM 1
3 - COMPLETE SHDD-523 DROP INCLUDES, LEG, RISER
BALANCER, NOZZLES BLASTGATES, HOSES
SADDLES, TRANSITIONS AND REDUCERS
06" TO 05"

- CONTROL PANEL W/ MOTOR STARTER
- 5-HP 3PH FAN
- 540499-01 DAN STARTER SWITCHES
- EXHAUST CANE

SYSTEM 2
6 - COMPLETE SHDD-523 DROP INCLUDES, LEG, RISER
BALANCER, NOZZLES BLASTGATES, HOSES
SADDLES, TRANSITIONS AND REDUCERS
06" TO 05"

- CONTROL PANEL W/ MOTOR STARTER
- 5-HP 3PH FAN
- 540499-01 DAN STARTER SWITCHES
- EXHAUST CANE



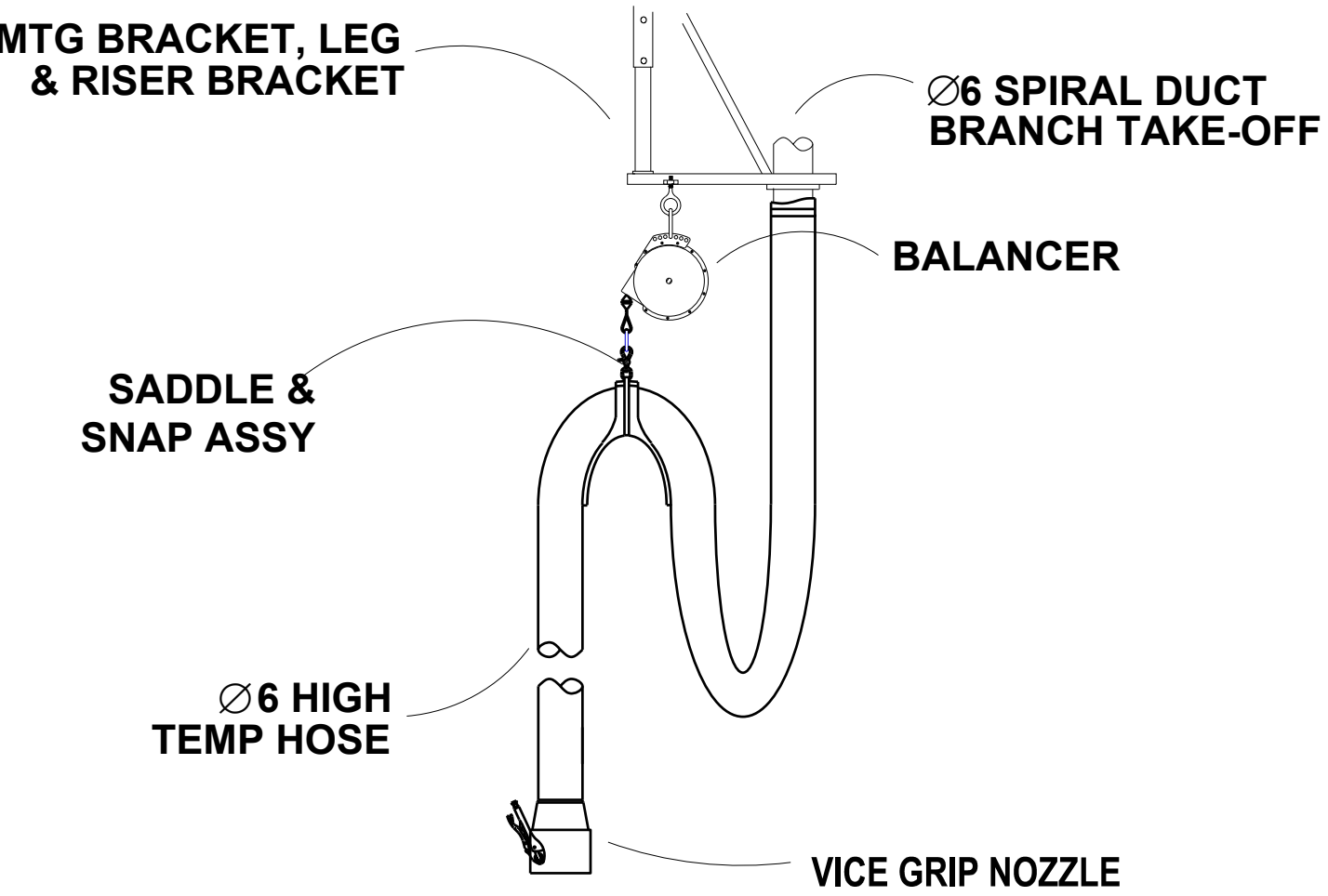
FAN DETAIL

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HOSE DROP DETAIL

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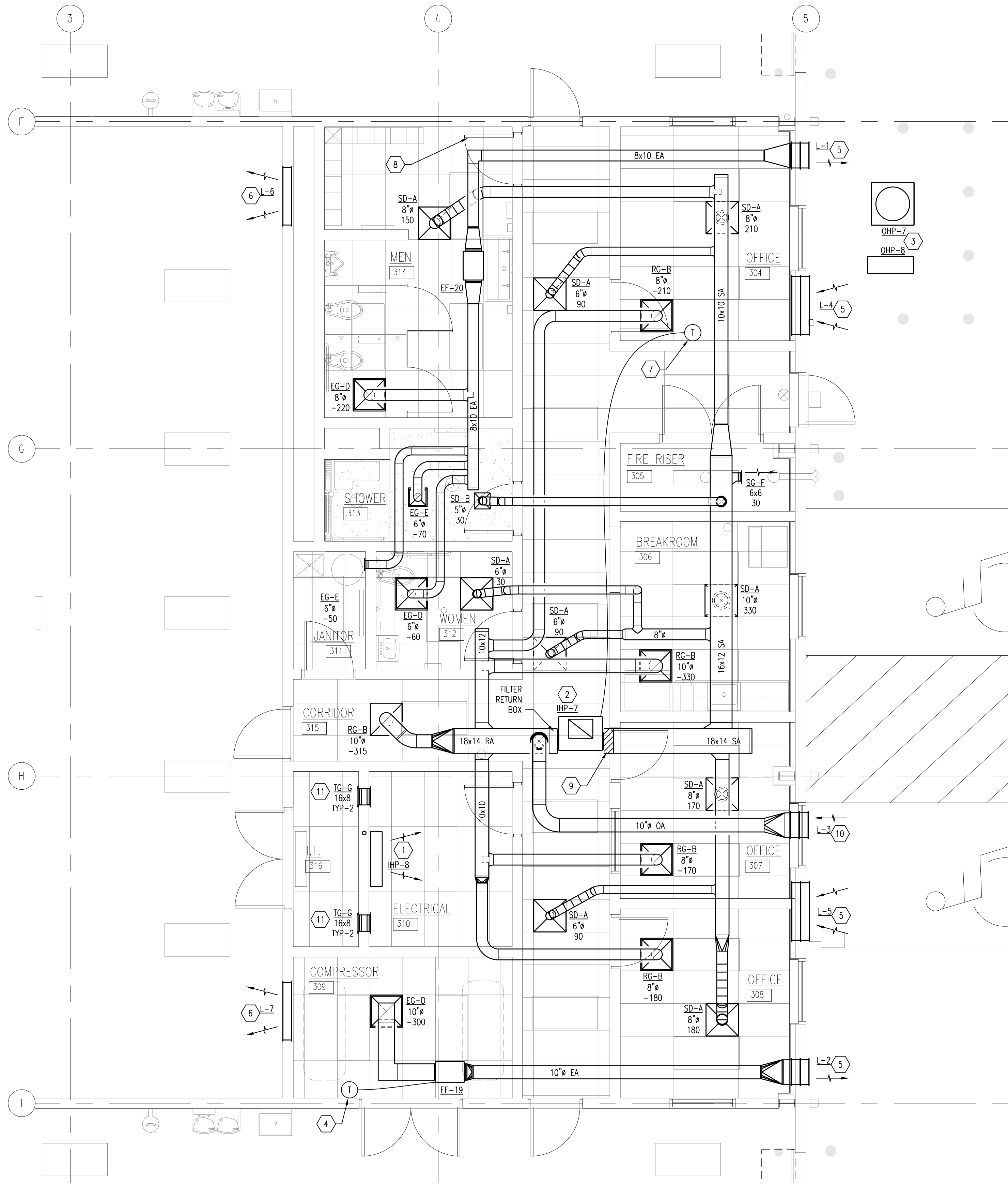
PROJECT
R + L CARRIERS
EDMUNBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

Job Number
5147
SHEET TITLE
VEHICLE
EXHAUST
REFERENCE
PLANS

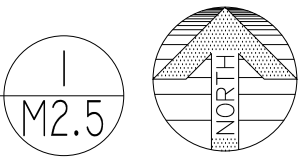
Sheet Number
M2.5-1

Do not scale drawings - Use figured dimensions - CAD DWG M2.5-1 VEHICLE EXHAUST REFERENCE PLANS.DWG



MAINTENANCE BUILDING 300
ENLARGED HVAC PLAN

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



KEY NOTES

1. INSTALL HEAT PUMP AT 8'-0" ABOVE FINISH FLOOR. PROVIDE INSULATED LINE-SETS BETWEEN INDOOR AND OUTDOOR HEAT PUMP. SIZED PER MANUFACTURER'S INSTRUCTIONS. ROUTE CONDENSATE DRAIN TO STANDPIPE, COORDINATE WITH PLUMBER AND PLUMBING PLANS.
2. PROVIDE INSULATED LINE-SETS BETWEEN INDOOR AND OUTDOOR HEAT PUMP. SIZED PER MANUFACTURER'S INSTRUCTIONS. ROUTE CONDENSATE DRAIN TO EITHER THE STANDPIPE LOCATED BEHIND AHU-2 OR THE MOP SERVICE SINK.
3. COORDINATE WITH GENERAL CONTRACTOR TO INSTALL 4" THICK CONCRETE PAD FOR OUTDOOR HEAT PUMP CONDENSERS, INSTALL PER MANUFACTURER'S CLEARANCE REQUIREMENTS.
4. PROVIDE ENERGY-CODE COMPLIANT COOLING-ONLY THERMOSTAT AT 4'-0" ABOVE FINISH FLOOR ON WALL. EXTEND 24V CONTROL WIRING TO EE-19. COORDINATE SET POINTS WITH OWNER.
5. PROVIDE EXTERIOR LOUVER AT 13'-0" ABOVE FINISH FLOOR. PROVIDE MOTORIZED DAMPER TO BE INTERLOCKED WITH ASSOCIATED EXHAUST FAN. COORDINATE WITH ELECTRICAL CONTRACTOR.
6. PROVIDE INTERIOR LOUVER AT 13'-0" ABOVE FINISH FLOOR.
7. INSTALL WALL THERMOSTAT AT 4'-0" ABOVE FINISH FLOOR AND EXTEND CONTROL WIRING TO ASSOCIATED INDOOR HEAT PUMP UNIT.
8. COORDINATE WITH GENERAL CONTRACTOR TO UNDERCUT DOOR 1".
9. PROVIDE ELECTRIC REHEAT COIL ON DISCHARGE OF AIR HANDLER. REFER TO HEAT PUMP SCHEDULE FOR SIZING AND CONTROLS REQUIREMENTS. REHEAT COIL IS POWERED SEPARATELY FROM THE AIR HANDLER, COORDINATE WITH ELECTRICAL CONTRACTOR.
10. PROVIDE EXTERIOR LOUVER AT 13'-0" ABOVE FINISH FLOOR. PROVIDE MOTORIZED DAMPER TO BE INTERLOCKED WITH ASSOCIATED HEAT PUMP. COORDINATE WITH ELECTRICAL CONTRACTOR.
11. INSTALL TRANSFER GRILLES AT 8'-0" ABOVE FINISH FLOOR. CONNECT WITH 12x8 TRANSFER DUCT.

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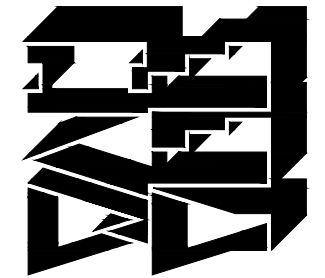
SHEET TITLE
MAINTENANCE
BUILDING
ENLARGED
HVAC PLAN

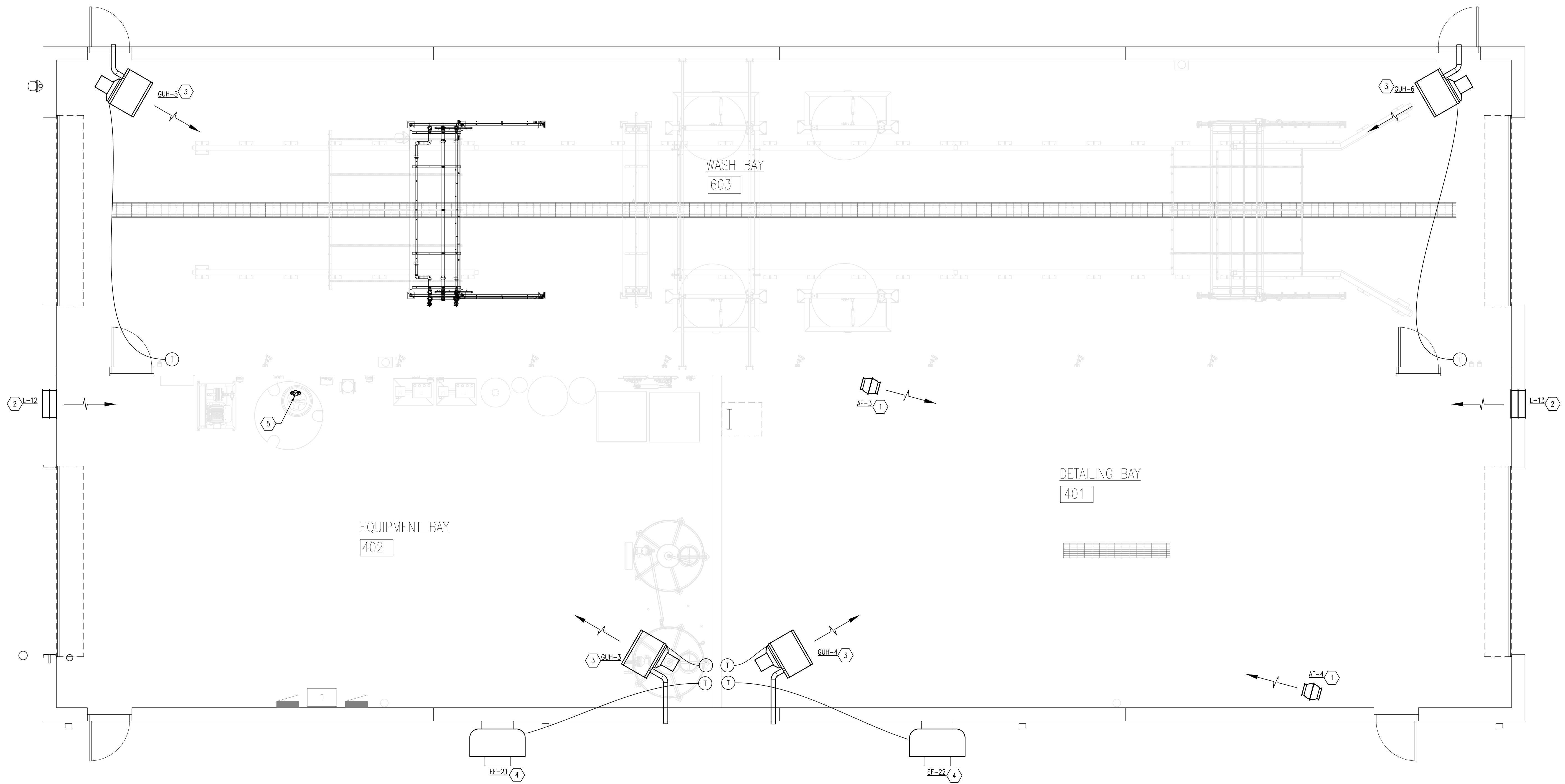
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- # KEY NOTES
1. INSTALL AXIAL FAN WITH DOUBLE ARTICULATING WALL-MOUNT ARM AT 12'-0" ABOVE FINISH FLOOR. BOTH FANS SHALL BE CONTROLLED BY A SINGLE WALL SWITCH, COORDINATE WITH ELECTRICAL CONTRACTOR. SET AT LOW SPEED SETTING.
 2. PROVIDE EXTERIOR LOUVER AT 2'-0" ABOVE FINISH FLOOR. PROVIDE MOTORIZED DAMPER TO BE INTERLOCKED WITH ASSOCIATED EXHAUST FAN. COORDINATE WITH ELECTRICAL CONTRACTOR.
 3. INSTALL UNIT HEATER AT 12'-0" ABOVE FINISH FLOOR. EXTEND FLUE THRU WALL WITH WALL HOOD RAIN CAP. DO NOT INSTALL UNIT HEATER WITHIN THE DRIVING PATH OF TRUCKS. REFER TO PLUMBING PLANS FOR GAS PIPING.
 4. PROVIDE SIDEWALL EXHAUST FAN AS SCHEDULED, REFER TO ARCHITECTURAL ELEVATIONS FOR INSTALLATION HEIGHT. EXTEND FULL-SIZE EXHAUST DUCTWORK THRU WALL INTO INTERIOR. INTERLOCK FAN WITH THERMOSTAT, COORDINATE SET POINT WITH OWNER.
 5. PROVIDE CONCENTRIC VENT-THRU-ROOF KIT FOR CAR WASH WATER HEATER.

TRUCK WASH
BUILDING MECHANICAL PLAN
SCALE: 1/4" = 1'-0"



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5147
SHEET TITLE
**TRUCK WASH
BUILDING
MECHANICAL
PLAN**

Sheet Number
M2.8

Do not scale drawings - Use figured dimensions. CAD DWG 102.3 TRUCK WASH BUILDING MAINTENANCE PLANDWG

VENTILATION CALCULATIONS (ASHRAE 62.1 COMPLIANCE)

HVAC	ROOMS SERVED	SQUARE FOOTAGE	VENTILATION SQ FT	VENTILATION FOR AREA	NUMBER OF PEOPLE	VENTILATION PER PERSON	VENTILATION FOR PEOPLE	TOTAL VENTILATION REQUIREMENTS	CEILING SUPPLY CEILING RETURN 20% DERATE	TOTAL RTU OUTSIDE AIR & SUPPLY AIR	SUPPLY CFM (FROM PLANS)	PERCENTAGE OF OUTSIDE TO SUPPLY AIR (OA / SA)	CFM OF OA TO SPACE
HP-1	DRIVER ROOM	470	0.06	28	8	7.5	60	88.2	110.3		625	17.73	110.8
HP-2	DISPATCH	406	0.06	24	4	5	20	44.4	55.5		505		75.8
	COPIER SUPPLY	145	0.12	17	0	0	0	17.4	21.8		145	15.00	21.8
	MANAGERS OFFICE	271	0.06	16	2	5	10	26.3	32.8		400		60.0
HP-3	OFFICE 101	130	0.06	8	1	5	5	12.8	16.0		375		29.5
	OFFICE 102	128	0.06	8	1	5	5	12.7	15.9		340	7.86	26.7
	OFFICE 103	120	0.06	7	1	5	5	12.2	15.3		305		24.0
	OPEN OFFICE (PARTIAL)	200	0.06	12	2	5	10	22.0	27.5		350		27.5
HP-4	OPEN OFFICE (PARTIAL)	888	0.06	53	8	5	40	93.3	116.6		1030	11.43	117.7
	VESTIBULE	282	0.12	34	0	0	0	33.8	42.3		370		42.3
HP-5	OPEN OFFICE (PARTIAL)	348	0.06	21	4	5	20	40.9	51.1		340		51.0
	BREAKROOM	281	0.18	51	5	7.5	37.5	88.1	110.1		735	15.00	110.3
	ELECTRICAL	102	0.12	12	0	0	0	12.2	15.3		200		30.0
	CORRIDOR	130	0.12	16	0	0	0	15.6	19.5		140		21.0
HP-7	CORRIDOR	444	0.06	27	0	0	0	26.6	33.3		270		37.6
	BREAKROOM	121	0.18	22	2	7.5	15	36.8	46.0		330		46.0
	OFFICE 504	137	0.06	8	1	5	5	13.2	16.5		210	13.93	29.3
	OFFICE 507	112	0.06	7	1	5	5	11.7	14.7		170		23.7
	OFFICE 508	121	0.06	7	1	5	5	12.3	15.3		180		25.1
ROOMS BEING EXHAUSTED THAT DO NOT REQUIRE VENTILATION CALCULATIONS: ALL RESTROOMS, SHOWERS, AND JANITOR'S CLOSETS									OA REQUIRED		OA PROVIDED		

HEATING CALCULATIONS FOR RL CARRIERS EDINBURGH

BASIS OF DESIGN: TRANE		COOLING (TONS)	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	% OF OUTSIDE AIR	WINTER DESIGN AMBIENT TEMP (°F)	RETURN AIR TEMP (°F)	ENTERING / MIXED AIR TEMP (°F)	LEAVING AIR TEMP (°F)	HEAT PUMP OUTPUT (BTU)	HEAT PUMP TEMPERATURE RISE	ELECTRIC HEAT ADDED (KW)	HP + ELEC HEAT BTU OUTPUT	HP + ELEC HEAT TEMPERATURE RISE	HP + ELEC HEAT LEAVING AIR TEMP
LOCATION	INDOOR MODEL														
TERMINAL BUILDING OFFICES	IHP-1	3.0	1100	195	0.177	0	70	57.59	87.99	36,286	30.4	2.0	43,110	43	93.71
	IHP-2	3.0	1100	165	0.150	0	70	59.50	89.90	36,286	30.4	2.0	43,110	43	95.62
	IHP-3	4.0	1400	110	0.079	0	70	64.50	95.21	46,654	30.7	0.0	46,654	36	95.21
	IHP-4	4.0	1400	160	0.114	0	70	62.00	92.71	46,654	30.7	0.0	46,654	36	92.71
	IHP-5	4.0	1400	210	0.150	0	70	59.50	90.21	46,654	30.7	2.0	53,478	41	94.71
MAINTENANCE OFFICE	IHP-7	4.0	1400	195	0.139	0	70	60.25	90.96	46,654	36.2	2.0	53,478	41	95.46

LOUVER SCHEDULE

TAG	SERVES	MOTORIZED DAMPER	INTERLOCK	MANUFACTURER	MODEL	AIRFLOW	PRESSURE DROP	LOUVER SIZE (W x H)	NOTES
L-1	MAINTENANCE BLDG TOILET ROOMS	YES	EF-20	RUSKIN	ELF637SDX	400	0.08	18" x 12"	1, 2
L-2	MAINTENANCE BLDG AIR COMPRESSOR	YES	EF-19	RUSKIN	ELF637SDX	300	0.06	18" x 12"	1, 2
L-3	MAINTENANCE BLDG IHP-7 OUTSIDE AIR	YES	IHP-7	RUSKIN	ELF637SDX	255	0.05	18" x 12"	1, 2
L-4	MAINTENANCE BLDG PARTS ROOMS	YES	EF-15	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1, 2
L-5	MAINTENANCE BLDG PARTS ROOMS	YES	EF-15	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1, 2
L-6	MAINTENANCE BLDG PARTS ROOMS	NO	-	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1
L-7	MAINTENANCE BLDG PARTS ROOMS	NO	-	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1
L-8	MAINTENANCE BLDG NORTH BAY	NO	-	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1
L-9	MAINTENANCE BLDG NORTH BAY	NO	-	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1
L-10	MAINTENANCE BLDG NORTH BAY	NO	-	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1
L-11	MAINTENANCE BLDG NORTH BAY	NO	-	RUSKIN	ELF637SDX	4000	0.05	42" x 42"	1
L-12	TRUCK WASH EQUIPMENT BAY	YES	EF-21	RUSKIN	ELF637SDX	3000	0.05	25" x 48"	1, 2
L-13	TRUCK WASH DETAILING BAY	YES	EF-22	RUSKIN	ELF637SDX	3000	0.05	25" x 48"	1, 2

- INSECT SCREEN
- PROVIDE MOTORIZED DAMPER AND INTERLOCK WITH SPECIFIED MECHANICAL EQUIPMENT

UNIT HEATER SCHEDULE

TAG	SERVES	CFM	FAN HP	MANUFACTURER	MODEL	HEATING INPUT	HEATING OUTPUT	VOLTAGE / PHASE	NOTES
GUH-1	MAINTENANCE BLDG PARTS ROOMS	1600	1 / 10	TRANE	GHPE-100	100 MBH	83 MBH	115 / 1	1
GUH-2	MAINTENANCE BLDG PARTS ROOMS	1600	1 / 10	TRANE	GHPE-100	100 MBH	83 MBH	115 / 1	1
GUH-3	TRUCK WASH EQUIPMENT BAY	1600	1 / 10	TRANE	GHPE-100	100 MBH	83 MBH	115 / 1	1
GUH-4	TRUCK WASH EQUIPMENT BAY	1600	1 / 10	TRANE	GHPE-100	100 MBH	83 MBH	115 / 1	1
GUH-5	TRUCK WASH EQUIPMENT BAY	1600	1 / 10	TRANE	GHPE-100	100 MBH	83 MBH	115 / 1	1
GUH-6	TRUCK WASH DETAILING BAY	1600	1 / 10	TRANE	GHPE-100	100 MBH	83 MBH	115 / 1	1

- PROVIDE THERMOSTAT, INSECT SCREEN, TOTALLY ENCLOSED MOTOR (NOT ODP), STAINLESS STEEL HEAT EXCHANGER, AND 10 YEAR WARRANTY

GRAVITY INTAKE HOOD SCHEDULE

TAG	SERVES	MANUFACTURER	MODEL	CFM	THROAT VELOCITY	PRESSURE DROP	NOTES
IAH-1	IHP-2, IHP-3	GREENHECK	GRSI-10	275	482 FT/MIN	0.05" WG	1, 5, 6
IAH-2	IHP-1, IHP-4	GREENHECK	GRSI-12	350	427 FT/MIN	0.05" WG	1, 5, 6
IAH-3	IHP-3	GREENHECK	GRSI-8	110	267 FT/MIN	0.05" WG	1, 5, 6
IAH-4	EF-13	GREENHECK	FABRA HOOD FGI-64X78	16000	462 FT/MIN	0.05" WG	1, 2, 3, 4
IAH-5	EF-17	GREENHECK	FABRA HOOD FBH-64X78	16000	462 FT/MIN	0.05" WG	1, 2, 3, 4

- GALVANIZED BIRDSCREEN - 0.5 INCH MESH
- PROVIDE GREENHECK GFI-G12 12" HIGH ROOF CURB
- PROVIDE MOTORIZED INTAKE DAMPER INTERLOCKED WITH ASSOCIATED EXHAUST FAN

- PROVIDE FACTORY 2" ALUMINUM FILTERS
- PROVIDE FACTORY PITCHED ROOF CURB
- PROVIDE BACKDRAFT DAMPER

DESTRATIFICATION FAN SCHEDULE (OWNER PROVIDED, CONTRACTOR INSTALLED)

TAG	BASIS OF DESIGN		# OF BLADES	BLADE DIAMETER	INSTALLATION HEIGHT	WEIGHT	MAX SPEED	SOUND	ELECTRICAL DATA				DISCONNECT DATA		NOTES
	MANUFACTURER	MODEL OR SERIES							AMPS	HP	VOLTAGE	PHASE	M.T.C.	E.T.C.	
DF-1 THRU DF-11	GO FAN YOURSELF	GFY-Z-16	8	16 FEET	12'-8" AFF ③	276 LBS	89 RPM	55 dba	2.65	1.5	480	3		√	①②③

- COORDINATE INSTALLATION WITH GENERAL CONTRACTOR FOR ALL SUPPORT REQUIREMENTS. PROVIDE FACTORY ACCESSORIES WHEN POSSIBLE
- PROVIDE GFY-3 PHASE VFD CONTROLLER
- VERIFY MOUNTING HEIGHT WITH OWNER AND FIELD CONDITIONS.

ELECTRIC CABINET UNIT HEATER SCHEDULE

TAG	BASIS OF DESIGN		FLOW RATE (CFM)	HEATING DATA	ELECTRICAL DATA			DISCONNECT DATA		NOTES
	MANUFACTURER	MODEL OR SERIES			KW	AMPS	VOLTAGE	M.T.C.	E.T.C.	
ECUH-1	MARKEL	F3323TD-RP	175	5120 BTU	1.5	12.5	120 / 1	√		①②③
ECUH-2	MARKEL	F3323TD-RP	175	5120 BTU	1.5	12.5	120 / 1	√		①②④
ECUH-3	MARKEL	F3323TD-RP	175	5120 BTU	1.5	12.5	120 / 1	√		①②④

- INTEGRAL 50-90°F THERMOSTAT, COORDINATE SET POINT WITH OWNER
- FACTORY DISCONNECT SWITCH, AUTOMATIC FAN DELAY CIRCUIT, AUTOMATIC RESET THERMAL LIMIT, POWER COATED 18-GAUGE STEEL GRILLE
- RECESS MOUNT, ROUGH-IN DIMENSIONS: 14-31/16" WIDE, 19-71/16" HEIGHT, 4" DEEP
- SURFACE MOUNT

RADIANT TUBE HEATER SCHEDULE

TAG	BASIS OF DESIGN		CONFIGURATION	INSTALLATION HEIGHT	WEIGHT	OVERALL LENGTH	HEATING MBH	FUEL	NOTES
	MANUFACTURER	MODEL OR SERIES							
RH-1 THRU RH-44	SOLARONICS	GOG 130-40CN	STRAIGHT TUBE	14'-0" AFF	196 LBS	41'-3"	130.0	NATURAL GAS	①②③

- 115V, 3A MAX CURRENT DRAW. COORDINATE PLUG AND RECEPTACLE REQUIREMENTS WITH ELECTRICIAN, REFER TO ARCHITECTURAL ELEVATIONS FOR INSTALLATION.
- PROVIDE ALL VENTING, ACCESSORIES, SUPPORTS, BRACKETS, REFLECTORS, END CAPS, CHAINS, ETC REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION.
- PROVIDE NATURAL GAS PLUG VALVE, DIRT LEG, AND ANY ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION.

MINI SPLIT HEAT PUMP

TAG	BASIS OF DESIGN			COOLING DATA		HEATING DATA		ELECTRICAL DATA			NOTES	
	MANUFACTURER	MODEL	LOCATION	CAPACITY (BTU)	SEER	CAPACITY (BTU)	HSPF	MCA	MOCP	VOLTAGE		
IHP-6	mitsubishi trane	TPKA04024KA70A	ELEC / I.T. ROOM	24,000.0	21.4	28,000.0	11.0	POWERED BY OUTDOOR UNIT			①③	
OHP-6	mitsubishi trane	TRUZA0241HA70NA	OUTSIDE OFFICE BLDG					19	25	208 / 1	①②	
IHP-8	mitsubishi trane	TPKA040241KA70A	ELEC / I.T. ROOM	24,000.0	21.4	COOLING ONLY		POWERED BY OUTDOOR UNIT			①③	
OHP-8	mitsubishi trane	TRUYA0241HA70NA	OUTSIDE MAINT. BLDG					19	25	208 / 1	①②	

- INSTALL REFRIGERANT AND CONDENSATE PER MANUFACTURER'S WRITTEN INSTRUCTIONS
- ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECT, COORDINATE WITH ELECTRICAL
- PROVIDE FACTORY PERMANENT WALL THERMOSTAT CONTROLLER, COORDINATE WITH OWNER
- PROVIDE WIND BAFFLE
- PROVIDE 12" TALL EQUIPMENT RAILS

SPLIT SYSTEM HEAT PUMP SCHEDULE

TAG	BASIS OF DESIGN			COOLING DATA		HEATING DATA		ELECTRICAL DATA			AIRFLOW			ELECTRIC HEAT COIL	NOTES
	MANUFACTURER	MODEL	LOCATION	CAPACITY (BTU)	SEER	CAPACITY (BTU)	COP	MCA	MOCP	VOLTAGE	SUPPLY	RETURN	OUTDOOR		
IHP-1	MITSUBISHI TRANE	TPVFYP036AM141A	OFFICE BLDG	36000	20.03	40000	4.08	5.63	15	208 / 1	1100	905	195	2.0-KW 208 / 1	①②③④⑤
OHP-1		TUMYH0361AK41NA						36	40	208 / 1	-	-	-		①②
IHP-2	MITSUBISHI TRANE	TPVFYP036AM141A	OFFICE BLDG	36000	20.03	40000	4.08	5.63	15	208 / 1	1100	935	165	2.0-KW 208 / 1	①②③④⑤
OHP-2		TUMYH0361AK41NA						36	40	208 / 1	-	-	-		①②
IHP-3	MITSUBISHI TRANE	TPVFYP048AM141A	OFFICE BLDG	48000	19.55	54000	4.08	5.63	15	208 / 1	1400	1290	110	-	①②③
OHP-3		TUMYH0481AK41NA						36	40	208 / 1	-	-	-		①②
IHP-4	MITSUBISHI TRANE	TPVFYP048AM141A	OFFICE BLDG	48000	19.55	54000	4.08	5.63	15	208 / 1	1400	1240	160	-	①②③
OHP-4		TUMYH0481AK41NA						36	40	208 / 1	-	-	-		①②
IHP-5	MITSUBISHI TRANE	TPVFYP048AM141A	OFFICE BLDG	48000	19.55	54000	4.08	5.63	15	208 / 1	1400	1190	210	2.0-KW 208 / 1	①②③④⑤
OHP-5		TUMYH0481AK41NA						36	40	208 / 1	-	-	-		①②
IHP-7	MITSUBISHI TRANE	TPVFYP048AM141A	MAINTENANCE BUILDING	48000	19.55	54000	4.08	5.63	15	208 / 1	1400	1205	195	2.0-KW 208 / 1	①②③④⑤
OHP-7		TUMYH0481AK41NA						36	40	208 / 1	-	-	-		①②