

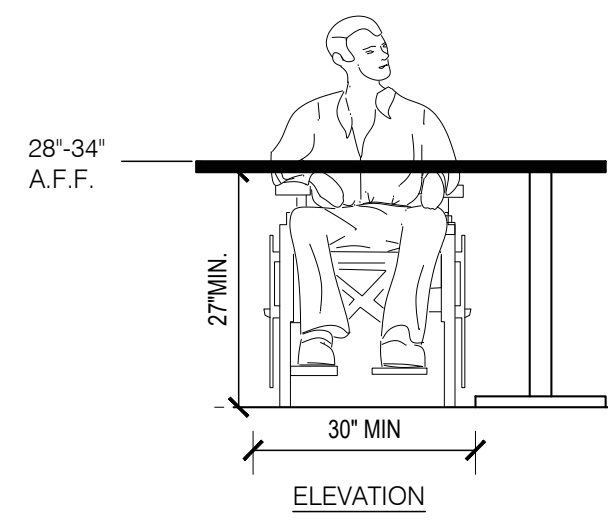
# RESPONSIBILITIES

NOTE: ALL ITEMS OF WORK ARE TO BE PROVIDED BY THE CONTRACTOR EXCEPT AS NOTED OTHERWISE IN THIS SCHEDULE.

WORK SCOPE ITEM	OWNER FURNISH	OWNER INSTALL	VENDOR INSTALL	G.C. FURNISH	G.C. INSTALL	N/A	REMARKS
<b>GENERAL</b>							
BUILDERS RISK - PROP. INS.							
CONSTRUCTION FACILITIES & TEMPORARY CONTROLS							
TEMPORARY UTILITIES							
PROGRESS AND FINAL CLEAN-UP							
UNLOADING/STORAGE OF EQUIP. & BOOTH PACKAGE							
<b>WOOD AND PLASTICS</b>							
INTERIOR ARCHITECTURAL CABINETS & COUNTERTOPS	●			●			G.C. TO PROVIDE ALL REQUIRED DIMENSIONS TO MILLWORK CO.
<b>SPECIALTIES</b>							
ARTIFACTS DECORATION	●			●			VERIFY INSTALL WITH OWNER
<b>BUILDING SIGNAGE AND AWNINGS</b>							
SMALLWARES	●	●					FINAL CONNECTIONS BY GC
FIRE EXTINGUISHERS AND CABINETS				●	●		LOCATION TBD BY FIRE MARSHALL GC TO PROVIDE 2 MIN.)
TOILET ACCESSORIES IN TOILETS							SEE TOILET FIXTURE SCHEDULE SHEET A401
ADA IDENTIFYING SIGNAGE				●	●		RESTROOMS
ADA IDENTIFYING DEVICES				●	●		
<b>EQUIPMENT</b>							
FOOD SERVICE EQUIPMENT	●			●			G.C. TO UNLOAD & INSTALL IN BUILDING
OFFICE EQUIPMENT	●			●			G.C. TO PROVIDE FINAL CONNECTIONS
OFFICE SHELVING, STANDARDS AND DESK				●	●		
KITCHEN SHELVING (WALL)	●			●			
KITCHEN MONITOR BRACKETS	●	●					
STAINLESS CORNER GUARDS				●	●		
STAINLESS PANELS IN COOK LINE				●	●		
ROOF LADDER				●	●		
DRIVE-UP WINDOW(S) & AIR CURTAIN	●			●			
CUSTARD MACHINE (VERIFY TYPE W/ OWNER)	●			●			TAYLOR OR STOELTING
KITCHEN CLEANING EQUIP. (ECOLAB, VEGGIE WASH)	●			●			VERIFY WITH OWNER FOR EXACT INSTALL LOCATION
GARBAGE DISPOSAL - InSinkErator-SS100 w/ Control Center	●			●			
<b>FURNISHINGS</b>							
HIGH TOP TABLES	●			●			
TABLES	●			●			
BAR STOOLS	●			●			
CHAIRS	●			●			
SITE BENCHES				●	●		EXTERIOR PATIO TABLES
SITE DRIVE THRU MENU BOARDS & CANOPIES	●			●			
SAFE	●			●			G.C. TO BOLT TO FLOOR
DECORATIVE TILE BANDS	●			●			
<b>MECHANICAL</b>							
MAKE UP AIR UNITS & CURBS	●			●			REFER TO SCHEDULES ON MECHANICAL SHEETS
KITCHEN EXHAUST HOODS, FANS AND THEIR SWITCHES & CURBS	●			●			
RESTROOM EXHAUST FANS				●	●		PROVIDED & INSTALLED BY ELECTRICAL CONTRACTOR MECHANICAL CONTRACTOR TO MAKE DUCTWORK CONNECTION
ANSUL SYSTEM	●			●			
GRILLES, REGISTERS AND DIFFUSERS	●			●			
DUCTWORK	●			●			
HVAC ROOFTOP UNITS & CURBS	●			●			
SMOKE DETECTORS IN DUCTWORK	●			●			
ALL NECESSARY ACCESS PANELS	●			●			
PLUMBING SYSTEM, FIXTURES	●			●			
KITCHEN FAUCETS, SINKS, FIXTURES & MOP BASIN	●			●			CHEMICAL SYSTEM FURNISHED BY OWNER, INSTALLED BY G.C. F.V.
REFRIGERATION EQUIPMENT (WALK-IN)	●			●			G.C. TO ASSEMBLE WALK-IN FREEZER & COOLER, INCLUDE CHASES TO ROOF W/ WEATHER TIGHT SEAL WITH ALL ELECTRICAL & REFRIGERANT LINES. G.C. RESPONSIBLE FOR FINAL OPERATIONAL UNIT.
WALK-IN COOLER/FREEZER	●			●			
RESTROOM FAUCETS, SINKS & FIXTURES	●			●			
FIRE SPRINKLER DESIGN/SYSTEM	●			●			WHEN SPECIFIED ON PLANS
<b>ELECTRICAL</b>							
INTERIOR & EXTERIOR LIGHTING FIXTURES	●			●			G.C. TO PROVIDE ALL CONDUIT, AND PROVIDE OUTLETS AS NOTED ON PLANS
POS SYSTEM	●			●			
ELECTRONIC INDOOR MENU BOARDS	●			●			
SWITCHES, PANELS AND BREAKERS	●			●			
AV EQUIPMENT, MUZAK, SATELLITE	●			●			G.C. TO PROVIDE CONDUIT WITH PULL STRING
ELECTRICAL SERVICE/SYSTEM	●			●			G.C. TO INVENTORY SHIPMENT UPON RECEIPT
SECURITY ALARM / CAMERA SYSTEM	●			●			G.C. TO PROVIDE ALL CONDUIT FOR SYSTEM, W/PULL WIRE
TELEPHONE SYSTEM	●			●			G.C. TO PROVIDE 2 LINE PHONE SYSTEM TO POINT OF TERMINATION TO INCLUDE WALL JACKS & TO PROVIDE WORKING/OPERATING SYSTEM
SITE LIGHTING	●			●			
FIRE ALARM SYSTEM	●			●			G.C. TO PROVIDE WORKING/OPERATING SYSTEM
CABLE (INTERNET ACCESS)	●			●			G.C. TO COORDINATE CONDUIT REQUIREMENTS AND LOCATION
TELEPHONE CONDUIT / PUNCH DOWN	●			●			
<b>MISCELLANEOUS</b>							
SODA SYSTEM	●			●			G.C. TO PROVIDE PVC CHASE REF. PLANS

# VENDORS:

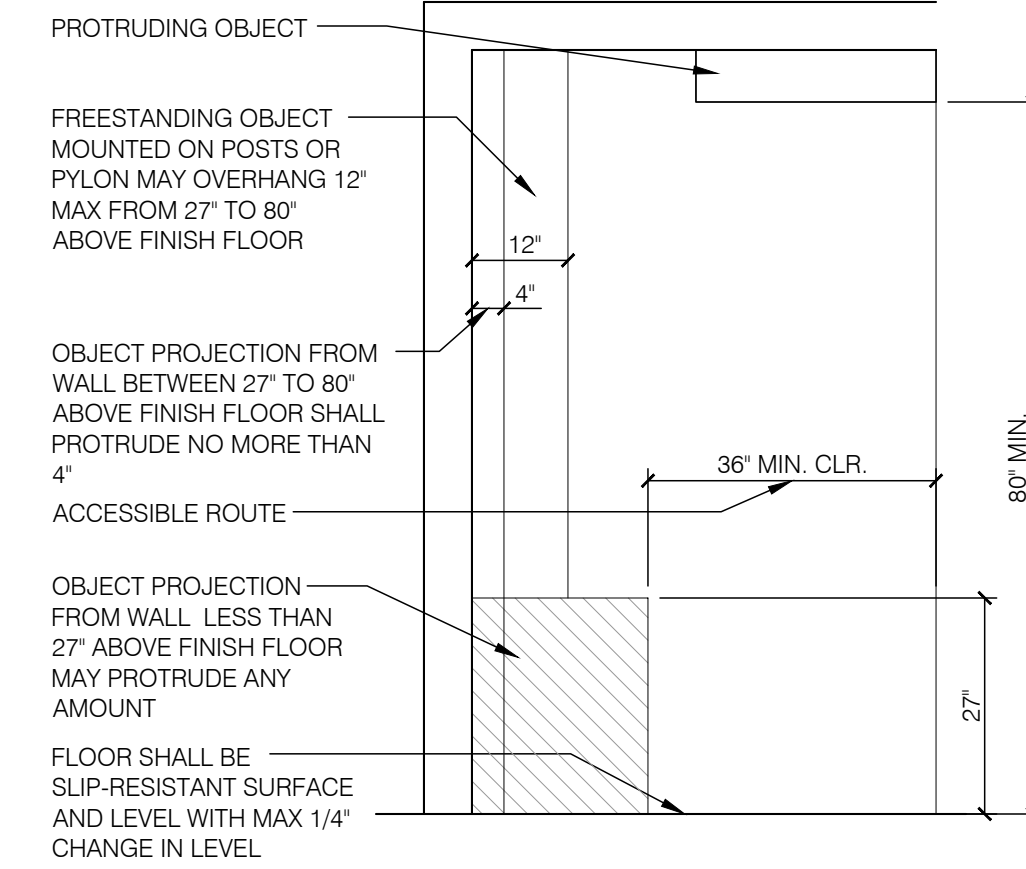
- SIGNAGE**  
Ron's Sign Company  
1326 S. Handley Street  
Wichita, KS 67213  
Attn: Alex Smith (316) 267-8914  
graphicsronsignco@aol.com
- OWNER PROVIDED LIGHT FIXTURES**  
Accent Lighting  
2929 N. Rock Road  
Wichita, KS 67226  
Attn: Paul Graf (316) 636-1278  
paulg@accentlightinginc.com
- FURNISHINGS**  
Wooten Enterprises L.L.C.  
312 E. 1st  
Halstead, KS. 67056 Ph: (316) 830-2328  
Attn: Todd Wooten or Amanda Hahn  
todd@wootenenterprises.com  
amanda@wootenenterprises.com
- FLOOR TILE**  
Daltile  
2010 S. Edwards St.  
Wichita, KS 67213  
Attn: Kevin Jenks Ph: (316) 941-9800  
freddys@daltile.com  
Account Representative:  
Attn: Brett McLeroy Ph: (214) 309-3111  
brett.mcleroy@daltile.com
- EIFS CONE**  
Midway Wholesale  
4308 Southwest Blvd.  
Wichita, Kansas 67215  
Attn: Adam Pechin Ph: (316) 944-3999  
apechin@midwaywholesale.com  
OR  
Ace Foam  
519 Carolina  
San Antonio, Texas 78210  
Attn: Mike Bass Ph: (210) 532-2626  
mike@acefoam.com
- STO - EIFS SYSTEM**  
Architects local Sales Rep Sto Corp.  
24072 West 112th Court  
Olathe, KS, 66061  
Attn: Steve J. Capeluto Ph: (913) 208-7477
- NOT USED**
- TEST AND BALANCE**  
National Tab / Air Solutions  
Office: (513) 860-5555x1  
Company Vender:  
Attn: Dan Hertenstein Ph: c(816)  
215-1593 dan@nationaltab.com  
Scheduling: Attn: Jason Neises  
Ph: c(513) 678-0653  
jason@nationaltab.com
- EXTERIOR FURNISHINGS**  
Wausau Tile  
PO Box 1520  
Wausau, WI 54402-1520  
Attn: Sarah Smith Ph: 800-388-8728 x  
311  
ssmith@wausautile.com
- PROTECT ALL FLOORING SYSTEM**  
Attn: Scott Haeger Ph:  
(989)-739-6900x6019  
shaeger@protect-allflooring.com
- TOILET PARTITIONS**  
Construction Specialties  
(National Accounts)  
4005 Royal Drive NW, Suite 100  
Kennesaw, GA 30144  
Ph: 888-424-6287  
orders@impactspecialties.com  
www.impactspecialties.com
- KOHLER FIXTURES**
- SHERWIN WILLIAMS PAINT**  
1705 N. Wabash Ave  
Wichita, KS 67214  
Attn: Nick D. Oestmann PH: (316) 265-6291
- TRANE**  
445 Bryant Street, Unit 5  
Denver, CO 80204  
Attn: Tony Fischels Ph: 303-209-3239  
tony.fischels@trane.com
- LENNOX**  
National Accounts and Pricing  
Attn: Black Team Ph: 800-367-6285 opt.1  
blackteam@lennoxind.com  
Account Manager  
Attn: Dave Ebner Ph: (612) 860-5933  
dave.ebner@lennoxind.com
- READY ACCESS**  
Drive-Thru Window: Reference Window  
Types, Sheet A603  
Provided by owner - Installed by G.C.



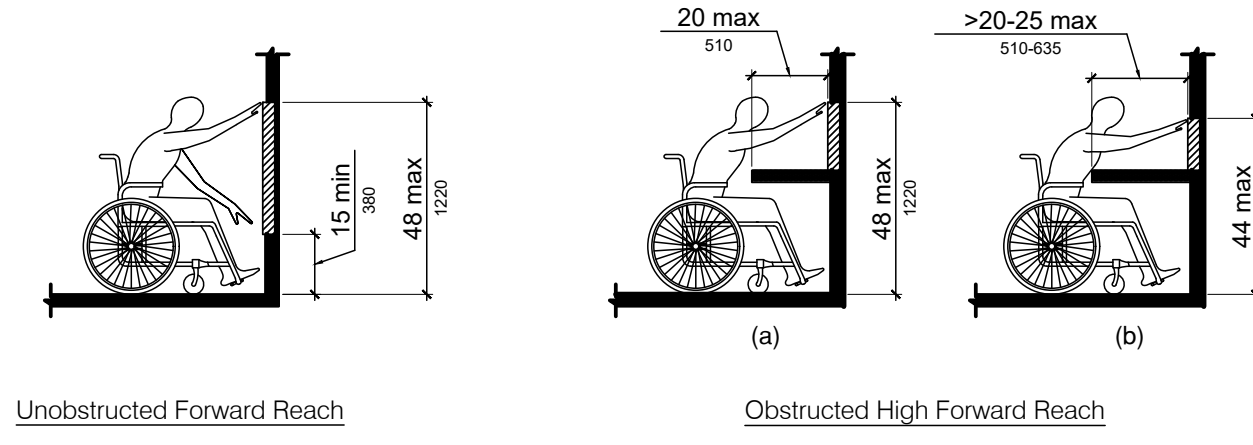
SEATING AT FIXED TABLES

TOTAL SEATS	ACCESSIBLE SEATS
1 - 20	1
21 - 40	2
41 - 60	3
61 - 80	4
81 - 100	5
101 - 120	6
121 - 140	7

NUMBER OF ACCESSIBLE SEATS

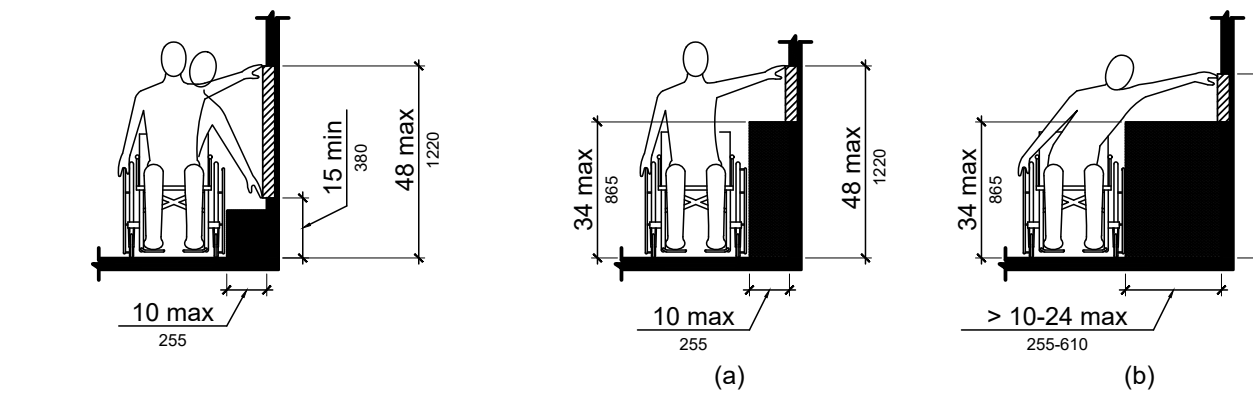


INT. ACCESS. ROUTE CLEARANCES



Unobstructed Forward Reach

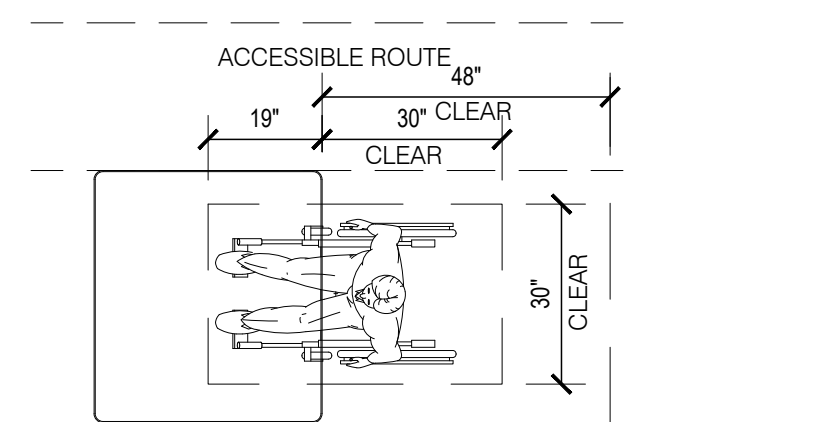
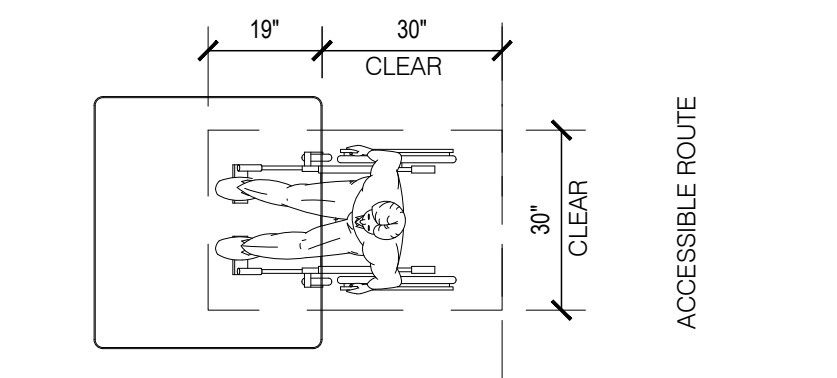
Obstructed High Forward Reach



Unobstructed Side Reach

Obstructed High Side Reach

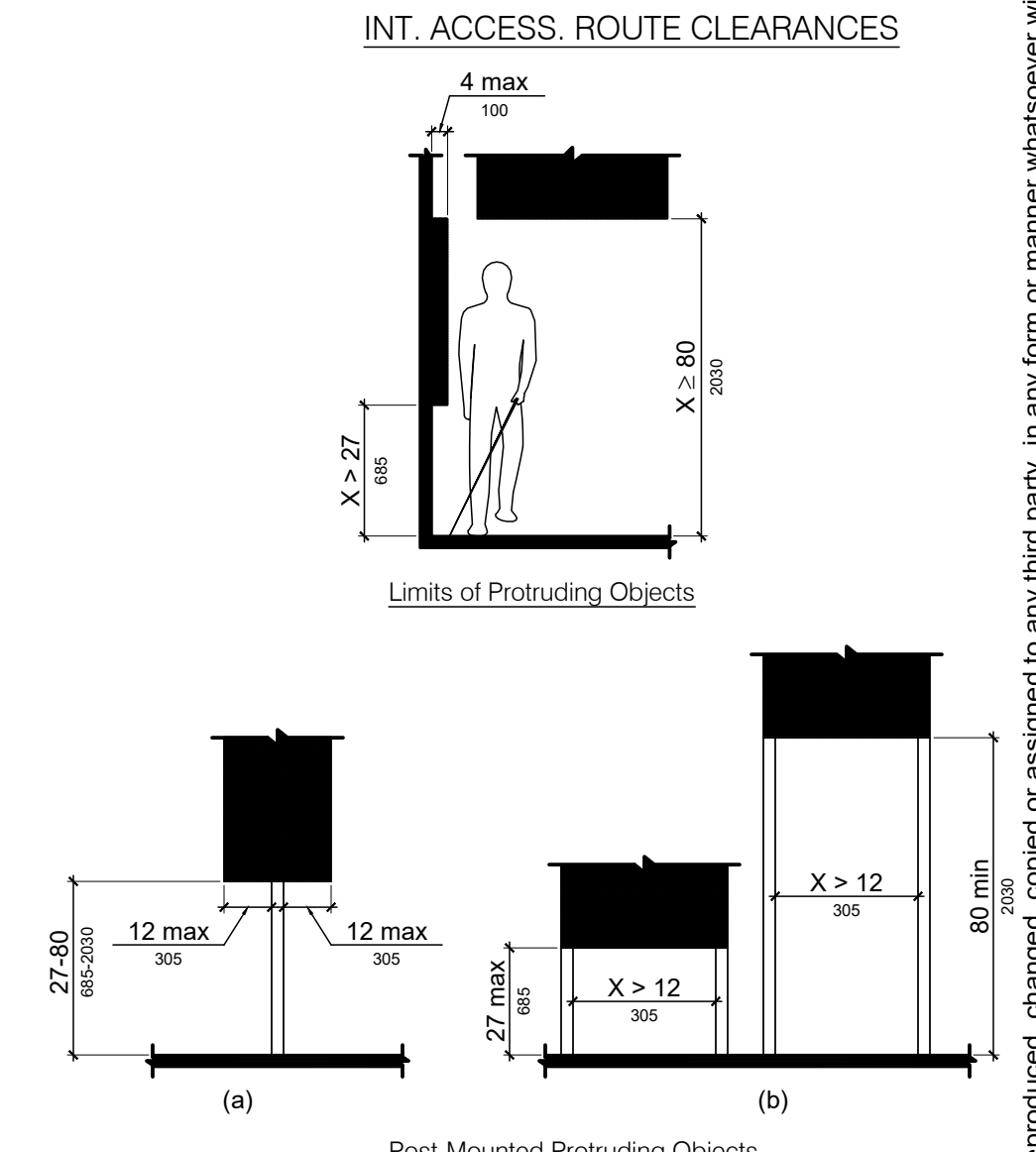
REACH RANGES



NOTE: MAINTAIN 44" MIN. CLEAR AISLE EGRESS PATHS TO EXIT DOORS.

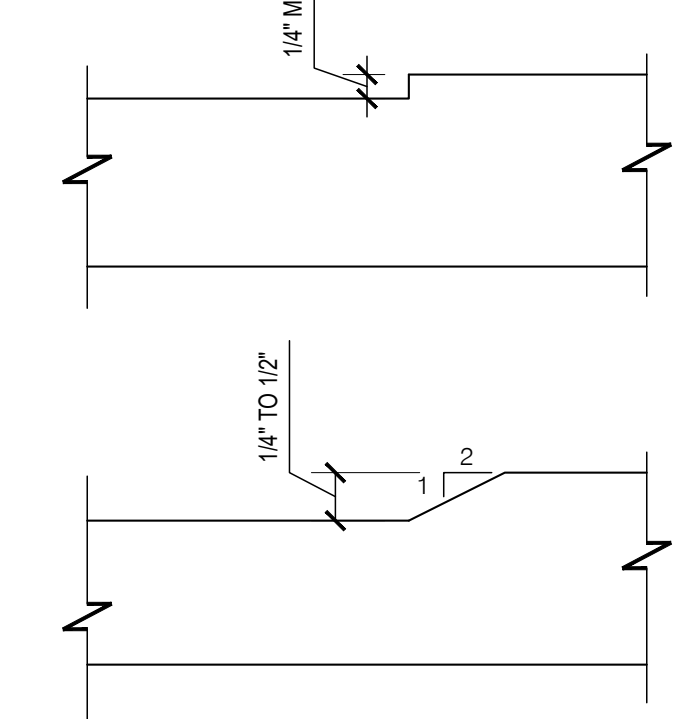
DINING ROOM SEATING CLEARANCES

NOTE: INDICATED DIMENSIONS, HEIGHTS, DEPTHS, AREAS AND OTHER GRAPHIC INFORMATION ARE PROVIDED AS MINIMUMS THAT MUST BE MAINTAINED. THESE MINIMUMS ARE BASED UPON AND MAY EXCEED ADA REQUIREMENTS.



Limits of Protruding Objects

Post-Mounted Protruding Objects



CHANGES IN LEVELS

**PLAN4**  
ARCHITECTURE DESIGN  
www.plan4arch.com  
303 north main street, mcpherson kansas 620.241.4353

**RESPONSIBILITIES / ADA**

Freddy's Frozen Custard & Steakhburgers  
Rushmore Crossing II Addition - Lot 1  
Egin Street, Rapid City, SD

Contract Date	
Rev No. 1	
Rev No. 2	
Rev No. 3	
Rev No. 4	
Rev No. 5	
Rev No. 6	
Project Number:	22.02
DWG File	G003.dwg
Designed By:	plan4
Drawn By:	CJH
Approved By:	
Date:	06.21.24



SHEET NUMBER

# G002

11 x 17 = 1/2 scale

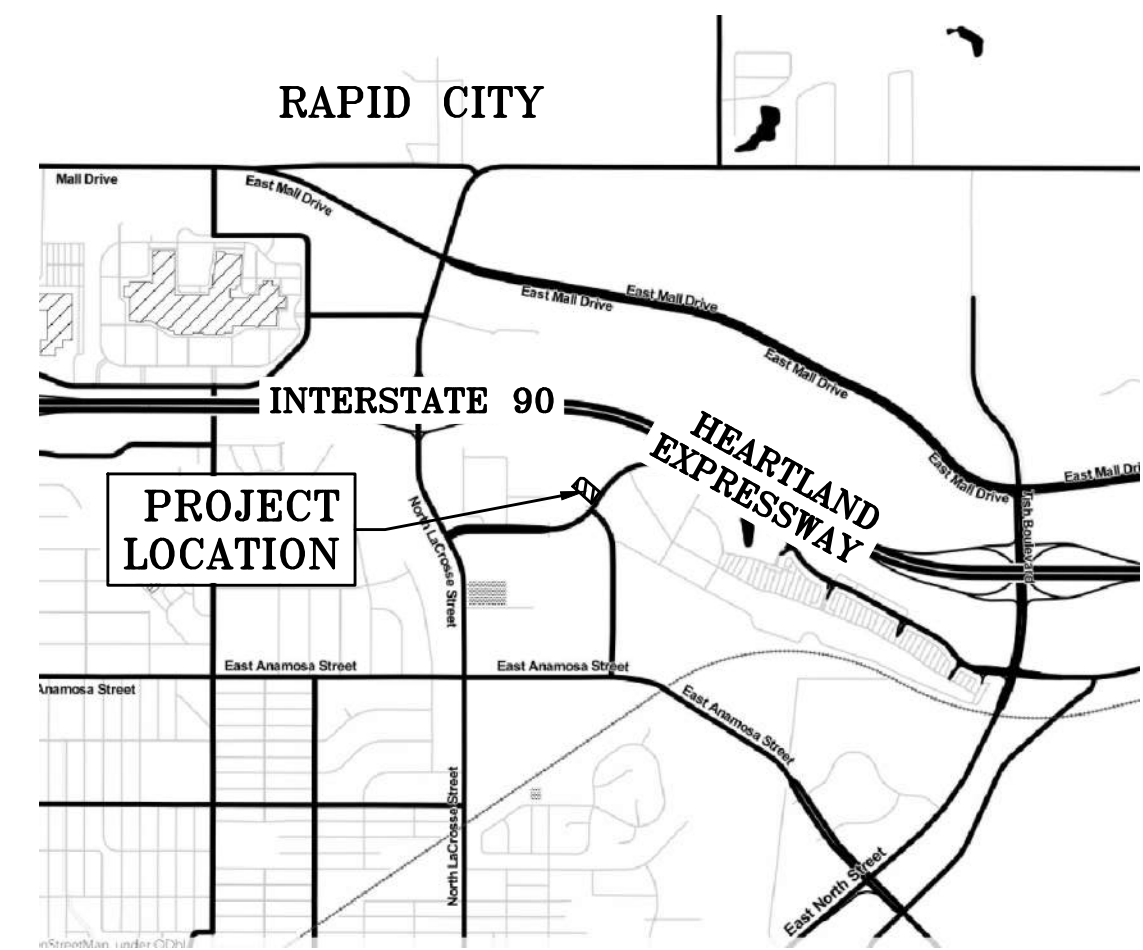
**GENERAL NOTES:**

- VERIFICATION BEFORE PROCEEDING TO LAYOUT THE WORK. REGA ENGINEERING GROUP DID NOT CONDUCT A BOUNDARY SURVEY ON THIS PROPERTY. THE PROPERTY LINES SHOWN ARE ASSUMED AND SHALL BE VERIFIED PRIOR TO LAYOUT OF ALL WORK. ENGAGE A LAND SURVEYOR TO LOCATE THE BOUNDARY PROPERTY LINES AND EASEMENTS BEFORE LAYING OUT THE WORK. PRIOR TO CONSTRUCTION CONTRACTOR OR CONTRACTORS SUB SHALL VERIFY SURVEYORS COORDINATES, OFFSETS, CONSTRUCTION STAKES AND ANY OTHER INFORMATION THE SURVEYOR MAY HAVE PROVIDED AS A MEANS TO LAY OUT THE WORK USING THE SIGNED DRAWING, ELEVATIONS, PROPERTY BOUNDARY SURVEY LOCATED BY CONTRACTORS SURVEYOR, EXISTING BENCHMARK INFORMATION AND ELEVATIONS. CONTACT REGA ENGINEERING IMMEDIATELY WITH ANY CONFLICTS.
- PROVIDE POSITIVE DRAINAGE AT ALL TIMES WITHIN THE CONSTRUCTION AND PROJECT AREAS. NO PONDING OF WATER SHALL BE ALLOWED EXCEPT AS DESIGNATED ON THE SITE GRADING AND EROSION CONTROL PLAN MAINTAIN ALL EXISTING DRAINAGE PATTERNS ANY COSTS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS (NO ADDITIONAL PAYMENT WILL BE MADE). MAKE ARRANGEMENTS FOR DISPOSAL OF ALL WATER AND SEWAGE RECEIVED ON THE SITE FROM TEMPORARY CONNECTIONS OR STOPPAGES. DO NOT DISCHARGE ANY WATER OR SEWAGE ONTO PRIVATE PROPERTY OUTSIDE THE CONSTRUCTION RIGHT-OF-WAY.
- STRIP TOP SOIL AND SEPARATELY STORE TO PROVIDE DEPTH OF TOP SOIL REPLACEMENT AS SPECIFIED.
- CONTRACTOR IS RESPONSIBLE FOR LIAISON WITH UTILITY COMPANIES AND FOR REPAIRING UTILITIES AND SERVICES WHICH ARE NOT IN DIRECT CONFLICT WITH THE WORK, AND IS RESPONSIBLE FOR DAMAGE DURING CONSTRUCTION AT NO EXPENSE TO THE OWNER, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND PAYMENT FOR PRIVATE UTILITY LOCATES NOT COVERED BY THE ONE-CALL.
- UTILITIES SHOWN ON DRAWINGS, IN DIRECT LINE AND GRADE, WHICH CONFLICT WITH THE WORK, SHALL BE RELOCATED BY OTHERS AT NO EXPENSE TO THE CONTRACTOR, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- FOR UTILITIES NOT SHOWN ON THE DRAWINGS AND WHICH ARE IN DIRECT CONFLICT WITH THE WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE CONFLICT. WHEN DIRECTED, THE CONTRACTOR SHALL PERFORM THE WORK. THE CONTRACTOR SHALL BE ENTITLED TO PAYMENT FOR ANY EXTRA WORK IN ACCORDANCE WITH THE GENERAL CONDITIONS.
- UTILITY REMOVAL. BEFORE THE CONTRACTOR BEGINS WORK, HE SHALL CONFER WITH THE OWNERS OF ANY UNDERGROUND OR OVERHEAD UTILITIES WHICH MAY BE ON OR IN CLOSE PROXIMITY TO THE WORK AREAS AND SHALL ARRANGE FOR THE NECESSARY DISCONNECTION OF THE UTILITIES IN ACCORDANCE WITH THE UTILITY COMPANY REGULATIONS. THE UTILITY COMPANY OR OWNER OF THE UTILITY SHALL PERFORM THE WORK OF REMOVING, REPAIRING, RECONDITIONING, OR REVISION OF THE UTILITY UNLESS OTHERWISE SPECIFIED OR INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES SO THAT WORK CAN BE EXPEDITED TO THE BEST INTERESTS OF ALL CONCERNED.
- REMOVE PAVEMENT TO A MINIMUM OF 1' - 0" FROM EDGE OF TRENCH. NO UNDERCUTTING WILL BE PERMITTED. REMOVE PAVEMENT ON STRAIGHT LINES APPROXIMATELY PARALLEL TO THE CENTER LINE OF THE TRENCH. CUT PAVEMENT AND DRIVES WITH A CONCRETE SAW AND PROVIDE A MINIMUM VERTICAL CUT OF 1 INCH.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL STREETS AND HIGHWAYS INVOLVED IN CONSTRUCTION.
- CONTRACTOR SHALL DISPOSE OF SURFACE MATERIALS, BUILDING CONSTRUCTION DEBRIS AND TREES IN ACCORDANCE WITH LOCAL ORDINANCES AND AT A SITE APPROVED BY THE OWNER. BURNING OF REFUSE WILL NOT BE PERMITTED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF UTILITY SERVICE ABANDONMENT AS REQUIRED BY THE CITY OF RAPID CITY.
- ALL FILL AND BACKFILL MATERIALS SHALL BE IMPORTED GRANULAR ENGINEERED FILL APPROVED BY THE GEOTECHNICAL ENGINEER AND FREE OF RUBBLE AND ORGANICS. THE FILL MATERIAL SHALL HAVE A LIQUID LIMIT OF LESS THAN 25 PERCENT. WHEN UNSUITABLE MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN ACCORDANCE WITH THE GENERAL CONDITIONS. IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL EXCAVATE AND REPLACE WITH SUITABLE MATERIAL. SUITABLE MATERIAL FOR BACKFILL SHALL BE OBTAINED FROM OFF-SITE BORROW AS APPROVED BY THE ENGINEER AND SOIL ENGINEER. FOR FURTHER INFORMATION REFER TO GEOTECHNICAL ENGINEERING REPORT AS PREPARED BY AMERICAN ENGINEERING TESTING (REPORT P-0020904 -DATED APRIL 5, 2023).
- TOP SOIL SHALL BE CLEAN, FERTILE, FRIABLE SOIL. TOPSOIL SHALL BE A MIXTURE OF SOIL AND ORGANIC MATTER AND SHALL BE FREE OF STONES OVER ONE-HALF INCH IN DIAMETER, HARD CLAY CLUMPS, REFUSE, PLANT MATERIAL OR THEIR ROOTS, STICKS, NOXIOUS WEEDS, SALTS, SOIL STERILANTS OR OTHER MATERIAL THAT IS DETRIMENTAL TO PLANT GROWTH. THE PH RANGE SHALL BE 5.0 TO 7.5, 25% ORGANIC MATERIAL MINIMUM AS DETERMINED BY LOSS ON IGNITION OF MOISTURE FREE SAMPLES DRIED AT 100 DEGREES CENTIGRADE. TOPSOIL SHALL CONFORM TO ASTM D 5268. OBTAIN FROM NATURALLY WELL DRAINED SITES FREE OF FLOODING WHERE TOPSOIL OCCURS AT LEAST 4 INCHES DEEP. DO NOT OBTAIN FROM BOGS OR MARSHES. TOPSOIL SHALL NOT BE DELIVERED OR USED WHILE IN A FROZEN OR SATURATED CONDITION.
- STRIP TOPSOIL AND VEGETATION TO A DEPTH OF 2 TO 4 INCHES OR BELOW THE ROOT CROWN. THE CONTRACTOR SHALL CONSULT THE ENGINEER DURING STRIPPING OPERATIONS TO AVOID REMOVING MORE TOPSOIL THAN IS NECESSARY.
- REMOVE EXISTING MATERIAL INSIDE BUILDING 2' BELOW FINISHED FLOOR SUBGRADE AND 5' OUTSIDE OF BUILDING ENVELOPE PRIOR TO THE PLACEMENT OF ANY NEW FILL; THE TOP NINE (9) INCHES OF THE EXISTING MATERIAL SHALL BE SCARIFIED AND RECOMPACTED BEFORE PLACEMENT OF ANY FILL IF REQUIRED. THE REWORKED SOIL SHALL BE COMPACTED TO MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS RECOMMENDED BY ASTM D698. UNSUITABLE AREAS OBSERVED AT THIS TIME SHALL BE IMPROVED BY SCARIFICATION AND RECOMPACTION OR BY UNDERCUTTING AND PLACEMENT WITH STRUCTURAL FILL. PROOFROLLING SHALL BE ACCOMPLISHED WITH A FULLY LOADED TANDEM-AXLE DUMP TRUCK OR OTHER EQUIPMENT PROVIDING AN EQUIVALENT SUBGRADE LOADING. A MINIMUM GROSS WEIGHT OF 25 TONS IS REQUIRED FOR THE PROOFROLLING EQUIPMENT.
- COMPACTION OF FILL; ALL FILL AND BACKFILL SHALL BE WETTED OR DRIED BY AERATION, AND THEN COMPACTED TO THE FOLLOWING PERCENTAGE OF MAXIMUM DENSITY AT A MOISTURE CONTENT WITHIN THE LIMITS SPECIFIED ABOVE OR BELOW OPTIMUM MOISTURE CONTENT, AS DETERMINED BY TESTING PROCEDURE ASTM D 698, (STANDARD PROCTOR) AND ASTM D1557 (MODIFIED PROCTOR), UNLESS OTHERWISE NOTED. FOR FURTHER INFORMATION REFER TO GEOTECHNICAL ENGINEERING REPORT AS PREPARED BY AMERICAN ENGINEERING TESTING (REPORT P-0020904 -DATED APRIL 5, 2023):

MATERIAL	PERCENT OF MAXIMUM (COHESIVE SOIL ONLY)	ASTM	PERCENT ABOVE OR BELOW OPTIMUM MOISTURE CONTENT
* RANDOM FILL	95% MINIMUM	D698	-1% TO +3%
* UPPER 6" OF SUBGRADE BENEATH SIDEWALKS	95% MINIMUM	D698	-1% TO +3%
* TRENCH BACKFILL UNDER PAVEMENT	98% MINIMUM	D698	-1% TO +3%
* TRENCH BACKFILL GRASS AREA	95% MINIMUM	D698	-1% TO +3%
* BACKFILL AROUND FOUNDATIONS/RETAINING WALLS	98% MINIMUM	D698	-1% TO +3%
* UPPER 12" OF SUBGRADE BENEATH PAVEMENT	98% MINIMUM	D698	-1% TO +3%
* UPPER 12" OF SUBGRADE BENEATH BUILDING	98% MINIMUM	D698	-1% TO +3%

- CONTRACTOR SHALL SOD ALL DISTURBED AREAS AFTER CONSTRUCTION WITH RTF TALL FESCUE SOD. OR APPROVED EQUAL. AFTER CONSTRUCTION THE CONTRACTOR SHALL SOD ALL DISTURBED AREAS NOT DESIGNATED FOR PAVING OR LANDSCAPING.
- UPON COMPLETION OF ROUGH GRADING, THE CONTRACTOR SHALL SPREAD (6) INCHES OF TOPSOIL. CONTRACTOR SHALL FINE GRADE SITE WITH NO MORE THAN TWO (2) PASSES. ESTABLISH VEGETATIVE COVER IMMEDIATELY AFTER FINISH GRADING. IN AREAS WHERE COMPOST IS NOT TO BE USED, THE CONTRACTOR SHALL SPREAD TOPSOIL. BEFORE SPREADING TOPSOIL, GRADED AREAS SHALL BE SCARIFIED FOR A DEPTH OF 6 INCHES, AND ALL SETTLEMENTS AND WASHES SHALL BE REPAIRED. FINISH GRADE SHALL BE HELD 1 INCH BELOW ADJACENT SIDEWALKS, CURBS AND PAVEMENT. TOPSOIL SHALL BE FREE OF ROCKS, RUBBLE, WOOD AND OTHER UNDESIRABLE MATERIAL.
- PERFORM FINISH GRADING OF TOPSOIL ADEQUATELY FOR SOD, SEED, PLANTING, OR GROUND COVER. FINISHED SURFACE SHALL BE REASONABLY SMOOTH, COMPACTED AND FREE FROM IRREGULAR SURFACE CHANGES. THE DEGREE OF FINISH SHALL BE THAT ORDINARILY OBTAINABLE FROM BLADE GRADER OPERATIONS, EXCEPT AS OTHERWISE NEEDED. FINISHED SURFACE SHALL BE NOT MORE THAN 0.10 FEET ABOVE OR BELOW ESTABLISHED GRADE OR APPROVED CROSS SECTION. ALL SWALES SHALL BE FINISHED SO AS TO DRAIN READILY. PRIOR TO THE INSTALLATION OF SEEDING OR SOD, A FINAL WALK THRU OF THE SITE SHALL BE CONDUCTED AND ANY MODIFICATIONS TO THE SITE GRADING SHALL BE MADE TO ENSURE THE ENTIRE SITE HAS POSITIVE DRAINAGE. THESE GRADING MODIFICATIONS SHALL BE CONDUCTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- FINAL TOPSOIL THICKNESS SHALL BE AS FOLLOWS:  
LOCATION THICKNESS (INCHES)  
SOD AREAS 4 MIN.  
TREE AND SHRUB BEDS 12 MIN.  
GROUND COVER AREAS 12 MIN.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SDDOT STANDARD SPECIFICATIONS FOR HWY CONSTRUCTION AND THE CITY OF RAPID CITY SPECIFICATIONS, AND ITS MOST CURRENT REVISIONS EXCEPT AS MODIFIED BY THE DETAILED SPECIFICATIONS. IF A CONFLICT EXISTS BETWEEN EITHER THE SDDOT SPECIFICATIONS AND THE DETAILED SPECIFICATIONS THE MORE STRINGENT SPECIFICATION SHALL GOVERN AS DETERMINED BY THE PROJECT ENGINEER.
- THE LOCATIONS OF ALL AERIAL AND UNDERGROUND UTILITY FACILITIES ARE APPROXIMATE OR MAY NOT BE INDICATED IN THESE PLANS. UNDERGROUND FACILITIES, WHETHER INDICATED OR NOT, WILL BE LOCATED AND FLAGGED BY THE UTILITIES AT THE REQUEST OF THE CONTRACTOR. NO EXCAVATION WILL BE PERMITTED IN THE AREA UNTIL ALL SUCH UNDERGROUND UTILITY FACILITIES HAVE BEEN LOCATED AND IDENTIFIED TO THE SATISFACTION OF ALL PARTIES, AND THEN ONLY WITH EXTREME CARE TO AVOID ANY POSSIBILITY OF DAMAGE TO THE UTILITY FACILITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, PAVEMENT, AND OTHER IMPROVEMENTS NOT DESIGNATED FOR REMOVAL OR ABANDONMENT. ANY DAMAGE TO EXISTING UTILITIES AND/OR PAVED STREETS NOT DESIGNATED FOR REMOVAL OR ABANDONMENT CAUSED BY CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE. IN ALL CASES, WITH NO EXCEPTION THE CONTRACTOR, BEFORE BEGINNING CONSTRUCTION OF ANY NEW UNDERGROUND FACILITIES, SHALL LOCATE, UNCOVER AND DETERMINE THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND FACILITIES WHICH MAY POTENTIALLY CONFLICT WITH HIS WORK, OR ARE TO BE INCORPORATED INTO THE NEW WORK. BEFORE PROCEEDING, THE CONTRACTOR SHALL CONFIRM THAT A CONFLICT DOES NOT EXIST AND THE UNDERGROUND WORK MAY BE PERFORMED AS SHOWN ON THE PLANS. IF THE CONTRACTOR DETERMINES THAT A PROBLEM DOES EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER WHO WILL MAKE THE FINAL DETERMINATION FOR RESOLVING THE CONFLICT. THE CONTRACTOR WILL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR WORK RESULTING FROM A CONFLICT WHICH HAS NOT THOROUGHLY BEEN INVESTIGATED PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR MAY REQUEST ADDITIONAL COMPENSATION FOR ANY ADDITIONAL WORK PERFORMED TO DIRECTLY RESOLVE THE CONFLICT AS DIRECTED IN WRITING BY THE ENGINEER. THE TIME LIMIT TO COMPLETE THE WORK IS AS STATED IN THE SPECIFICATIONS.
- THE CONTRACTOR SHALL CALL FOR THE EXISTING UTILITY LOCATION STAKES (1-800-781-7474) 48 HOURS PRIOR TO DIGGING. CALL ALL APPLICABLE UTILITY COMPANIES.
- THE CONTRACTOR SHALL ADJUST TO GRADE ALL WATER AND GAS VALVE BOXES AND MANHOLES THAT FALL WITHIN THE LIMITS OF THIS CONTRACT (NO PAY ITEM). THE CONTRACTOR SHALL KEEP ALL SAID WATER, GAS, AND EXISTING SEWERS AND THEIR APPURTENANCES FREE OF DEBRIS AND OPERABLE AT ALL TIMES DURING CONSTRUCTION. INSPECTION DURING CONSTRUCTION SHALL BE PAID FOR BY THE OWNER. THE CITY CONSTRUCTION ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS BEFORE THE START OF CONSTRUCTION.
- BENCHMARK ELEVATIONS SHALL BE REFERENCED AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL PROVIDE, FURNISH AND MAINTAIN ALL NECESSARY BARRICADES, WARNING SIGNS, LIGHTS AND FLAGMAN AS PER THE "MUTCD MANUAL TRAFFIC CONTROL GUIDELINES FOR STREET CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS" AND AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROTECT, BY WHATEVER MEANS REQUIRED, ALL TRAFFIC SIGNALS, MAILBOXES, FENCES, SIGNS, STRUCTURES, DRIVEWAYS, SIDEWALKS, STREETS, POLES, BUSHES, TREES, IRRIGATION SYSTEMS, ETC. WHICH ARE NOT DESIGNATED FOR REMOVAL OR ARE OUTSIDE THE LIMITS OF CONSTRUCTION. ANY DAMAGE OR DESTRUCTION CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT A MINIMUM TO THE ORIGINAL CONDITION, AS DIRECTED BY THE ENGINEER, AND AT THE COST OF THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION CONTROL DEVICES, AS SHOWN ON THE PLANS IN CONFORMANCE WITH THE CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR MUNICIPAL CONSTRUCTION OR AS MANDATED BY THE ENGINEER. UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UNLESS DIRECTED OTHERWISE BY THE ENGINEER. AFTER SUFFICIENT GROUND COVER HAS BEEN ESTABLISHED AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION CONTROL DEVICES INCLUDING SILT FENCING AND SEDIMENT CONTROL BASINS, AND ESTABLISH GROUND COVER IN DISTURBED AREAS.
- SHOP DRAWING SUBMITTALS SHALL INCLUDE, BUT ARE NOT LIMITED TO: SANITARY SEWER PIPING, WATER PIPING, CONCRETE MIX DESIGN, FIRE HYDRANTS, WATER VALVES, MANHOLES, MANHOLE RING AND COVERS, SEEDING, SOD, PAINT STRIPING, JOINT SEALANT, TOP SOIL MIX, TRACER WIRE, ALL PIPE FITTINGS, GROUND RODS, STORM SEWER PIPING, STORM SEWER INLET GRATES AND INLETS, CLEANOUTS AND CLEANOUT COVERS, ALL SERVICE LINE TAPS, CRUSHED ROCK OR LIMESTONE, CRUSHED CONCRETE, FENCING AND RECORD DRAWINGS AS REQUIRED.
- A DIAMOND EDGE SAW BLADE SHALL BE USED FOR CUTTING ALL REQUIRED CONTRACTION AND LONGITUDINAL PAVEMENT JOINTS AND CONCRETE REMOVAL. ALL REMOVAL SHALL BE FULL DEPTH SAW CUT.
- PAVING DIMENSIONS ARE SHOWN ON THE PLANS. ALL DIMENSIONS ARE BACK-OF-CURB TO BACK-OF-CURB.
- ALL CONCRETE SHALL BE 4000 PSI 47B CONCRETE WITH 1PF CEMENT AND FOLLOW SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE AND SHALL OBTAIN ALL PERMITS FOR WORK DONE WITHIN SITE AND CITY OF RAPID CITY RIGHT-OF-WAY.
- THE CONTRACTOR SHALL CONSTRUCT ALL PAVEMENTS TO CONFORM WITH THE CORRECT CROSS SECTIONS, LINES AND FINISH GRADES AS INDICATED ON THE PLANS, NO PONDING OF WATER SHALL BE ALLOWED.
- CONTRACTOR SHALL SEAL ALL JOINTS WITH SEALANT SHOWN ON DETAIL 5/C200.

DESIGNATED AREA	TESTING FREQUENCY
* ALL LIFTS OF FILL	1 TEST PER 3000 SF OR PER SMALLER SEPARATE AREA PREPARED.
* CONCRETE	OBTAIN AT LEAST 1 COMPOSITE SAMPLE FOR EACH 100 CU. YD. (76 CU. M) OR FRACTION THEREOF OF EACH CONCRETE MIX PLACED EACH DAY. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN FIVE COMPRESSIVE-STRENGTH TESTS FOR EACH CONCRETE MIXTURE, TESTING SHALL BE CONDUCTED FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE ARE USED.
* SLUMP	ONE TEST AT POINT OF DISCHARGE FOR EACH DAY'S POUR OR ONE PER 50 YARDS OF EACH TYPE OF CONCRETE AND WHEN CONSISTENCY SEEMS TO HAVE CHANGED. TESTS SHALL ADHERE TO ASTM C 143.
* AIR CONTENT	ONE TEST FOR EACH DAY'S POUR OR PER 50 YARDS OF EACH TYPE OF AIR ENTRAINED CONCRETE AND WHENEVER COMPRESSIVE STRENGTH SPECIMENS ARE CAST. TESTS SHALL ADHERE TO ASTM C 231, PRESSURE METHOD.
* CONCRETE TEMPERATURE	ONE TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEG F (4.4 DEG C) AND BELOW AND WHEN 80 DEG F (27 DEG C) AND ABOVE, AND ONE TEST FOR EACH COMPOSITE SAMPLE. TESTS SHALL ADHERE TO ASTM C 1064.
* COMPRESSION TEST SPECIMENS	ONE SET OF THREE (3) STANDARD 6 X12 CYLINDERS FOR EACH DAY'S POUR, PLUS ADDITIONAL SETS FOR EACH 50 CUBIC YARDS. TESTS SHALL ADHERE TO ASTM C 39.
* COMPRESSIVE-STRENGTH TESTS	TEST 1 SPECIMEN AT 7 DAYS AND 2 SPECIMENS AT 28 DAYS. A COMPRESSIVE-STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM 2 SPECIMENS OBTAINED FROM SAME COMPOSITE SAMPLE AND TESTED AT 28 DAYS. TESTS SHALL ADHERE TO ASTM C 39/C 39M.



**VICINITY MAP**  
**SEC.30, T2N, R8E**  
NORTH

**SHEET INDEX:**

C100	GENERAL INFORMATION
C101	DEMOLITION PLAN
C102	LAYOUT PLAN
C103	GRADING PLAN
C104	UTILITY PLAN
C105	STORM SEWER PLAN
C106	FIRE TRUCK ACCESS PLAN
C200	CONSTRUCTION DETAILS
C201	CONSTRUCTION DETAILS
C202	CONSTRUCTION DETAILS
C203	CONSTRUCTION DETAILS
C204	CONSTRUCTION DETAILS
C205	CONSTRUCTION DETAILS
L100	LANDSCAPE PLAN
L101	LANDSCAPE DETAILS AND NOTES
I100	IRRIGATION PLAN AND SCHEDULE
I101	IRRIGATION DETAILS



ISSUED FOR:	DATE:
FINAL PLANNED DEVELOPMENT REVIEW	03/07/24
CONSTRUCTION PLANS	05/24/24

601 OLD CHENEY RD., SUITE A  
LINCOLN, NEBRASKA 68512  
(402) 484.7342  
• ENGINEERING  
• PLANNING

**PLAN4**  
ARCHITECTURE DESIGN  
www.plan4arch.com  
303 north main street, mcpheerson kansas 620.241.4353

**GENERAL INFORMATION**

**Freddy's Frozen Custard & Steamburgers**  
**Rushmore Crossing II Addition - Lot 1**  
**Eglin Street, Rapid City, SD**

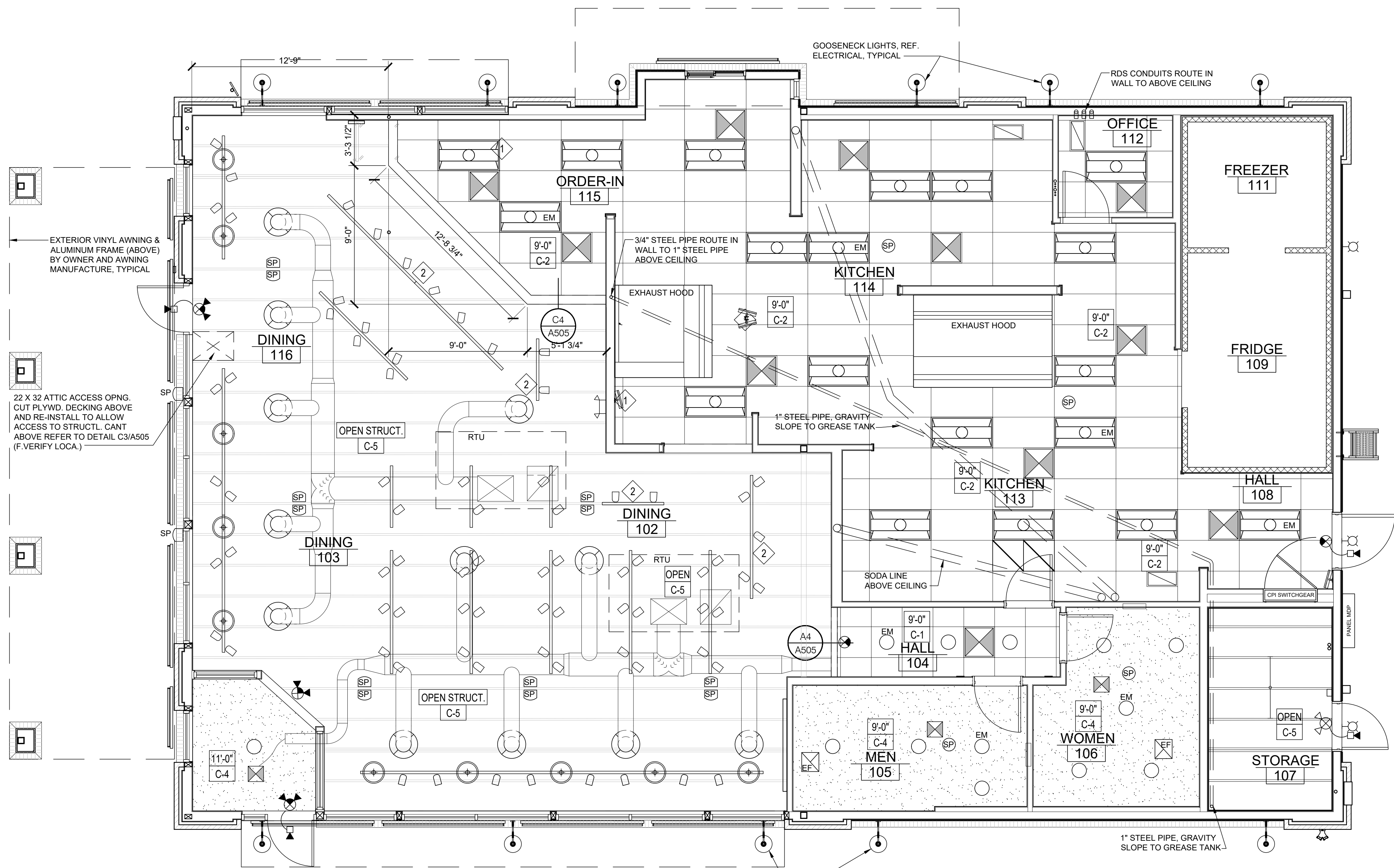
Contract Date	
Rev No. 1	
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Rev No. 5	
Rev No. 6	
Project Number:	22.02
DWG File	
Designed By:	plan4
Drawn By:	CJH
Approved By:	plan4
Date:	



SHEET NUMBER  
**C100**

**11 x 17 = 1/2 scale**

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EXTERIOR VINYL AWNING & ALUMINUM FRAME (ABOVE) BY OWNER AND AWNING MANUFACTURE, TYPICAL

22 X 32 ATTIC ACCESS OPNG. CUT PLYWD. DECKING ABOVE AND RE-INSTALL TO ALLOW ACCESS TO STRUCTL. CANT ABOVE REFER TO DETAIL C3/A505 (F. VERIFY LOCA.)

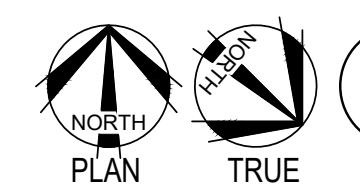
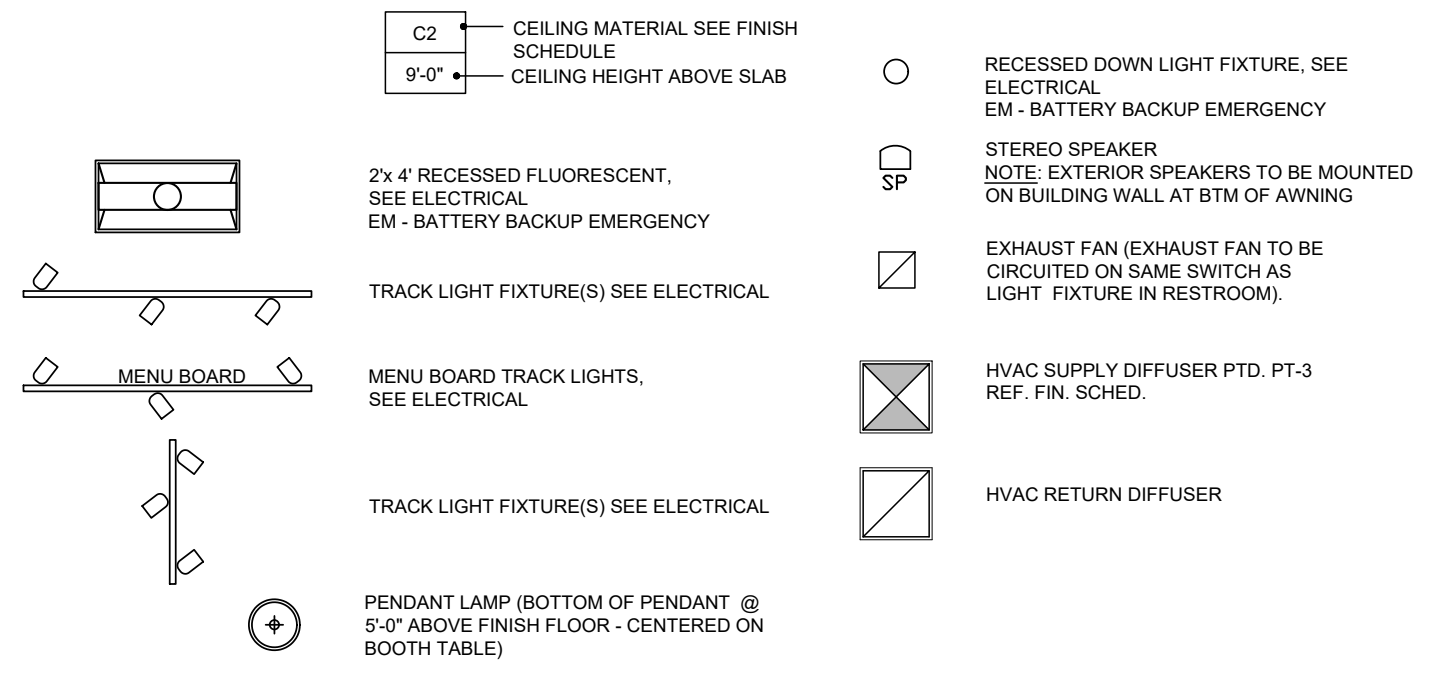
**GENERAL NOTES**

1. REFERENCE ELECTRICAL DRAWINGS FOR FIXTURE TYPES
2. REFERENCE MECHANICAL DRAWINGS FOR SUPPLY AND RETURN AIR GRILL & DIFFUSER LOCATIONS NOT SHOWN.
3. CONTRACTOR TO VERIFY ALL DINING AREA LIGHTING LOCATIONS WITH OWNER PRIOR TO INSTALLATION.

**KEYNOTES**

1. 3' X 3' X 3/4" PLYWOOD SHEET ABOVE CEILING GRID FOR MONITOR MOUNTING - VERIFY WITH EQUIPMENT, COORDINATE WITH OWNER.
2. THE TRACK LIGHTING OVER THE DINING ROOM SERVICE COUNTERS AND THE CUSTARD COUNTER MUST BE SHIELDED OR HAVE SHATTERPROOF LIGHT BULBS

**CEILING LEGEND**



**A3 REFLECTED CEILING PLAN (RCP)**

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



**REFLECTED CEILING PLAN**

Freddy's Frozen Custard & Steakhburgers  
Rushmore Crossing II Addition - Lot 1  
Eglin Street, Rapid City, SD

Contract Date	
Rev No. 1	
Rev No. 2	
Rev No. 3	
Rev No. 4	
Rev No. 5	
Rev No. 6	
Project Number:	22.02
DWG File	A111.dwg
Designed By:	BJM/4
Drawn By:	CJH
Approved By:	CAD
Date:	06.21.24



SHEET NUMBER

**A111**

11 x 17 = 1/2 scale

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**PIPING MATERIAL & INSULATION SCHEDULE**

PIPING SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION	
							TYPE	THICKNESS
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2"
DOMESTIC HOT WATER & HW RETURN	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1"
DOM. HOT & COLD BELOW GRADE	1/2"-1-1/4"	K	COPPER	CONTINUOUS TUBING, BRAZED	130 PSI - 1/2HR	YES	ELASTOMERIC	3/4" (HOT ONLY)
DOMESTIC COLD WATER	3"-6"	L	COPPER	BRAZED, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2"
DOMESTIC HOT WATER	3"-6"	L	COPPER	BRAZED, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1-1/2"
NATURAL GAS - ABOVE GRADE	2-1/2" & Up	SCH. 40	STEEL - SEEMED	WELDED	75 PSI - 1HR	YES	----	----
NATURAL GAS - ABOVE GRADE	1/2"-2"	SCH. 40	STEEL - SEEMLESS	THREADED IRON	75 PSI - 1HR	YES	----	----
NATURAL GAS BELOW GRADE	ALL	SDR-11	POLYETHYLENE	FUSION JOINTS	100 PSI - 1HR	NO	----	----
SOIL & WASTE ABOVE GRADE	1-1/2"-6"	NO HUB / SERVICE WT.	CAST IRON	NO HUB	10 FT - 1/2HR	YES	----	----
SOIL & WASTE ABOVE GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----
SOIL & WASTE BELOW GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----
CONDENSATE DRAIN ON ROOF	3/4"-2"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	----	----
CONDENSATE DRAIN INTERIOR	1/2"-2"	L	COPPER	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2" (PLENUM ONLY)
FIRE SERVICE BELOW GRADE	4"-8"	AWWA C151	DUCTILE IRON	AWWA C111, MECH JOINTS	130 PSI - 1/2HR	YES	----	----
DOM. WATER SERVICE BELOW GRADE	4"-8"	AWWA C151	DUCTILE IRON	AWWA C111, MECH JOINTS	130 PSI - 1/2HR	YES	----	----
DOM. WATER SERVICE BELOW GRADE	1"-3"	K	COPPER	CONTINUOUS TUBING, BRAZED	130 PSI - 1/2HR	YES	----	----
DOM. WATER SERVICE BELOW GRADE	1"-3"	DR 9	HDPE	CONTINUOUS TUBING, FUSED	130 PSI - 1/2HR	NO	----	----

NOTES  
 1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.  
 2. ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2007 REQUIREMENTS AT A MINIMUM.  
 3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

**FLOOR DRAIN SCHEDULE**

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	TOP/GRADE SIZE	WASTE SIZE	REMARKS
FD-1	SILOUX CHIEF	842-PB	FLOOR DRAIN	5-1/2"Ø	2"	1,3
FS-1	SILOUX CHIEF	861	FLOOR SINK	12"x12"	3"	2
FS-2	SILOUX CHIEF	861	FLOOR SINK	12"x12"	4"	4
TD-1	ZURN	Z886-PS	TRENCH DRAIN	40"x6"	2"	
TD-2	ZURN	Z886-PS	TRENCH DRAIN	80"x6"	2"	

REMARKS:  
 1. PROVIDE WITH NICKEL BRONZE STRAINER.  
 2. PROVIDE WITH STAINLESS STEEL SCREEN AND PVC HALF OPEN STRAINER  
 3. PROVIDE WITH TRAP SEAL  
 4. PROVIDE WITH STAINLESS STEEL SCREEN

**GENERAL PLUMBING NOTES**

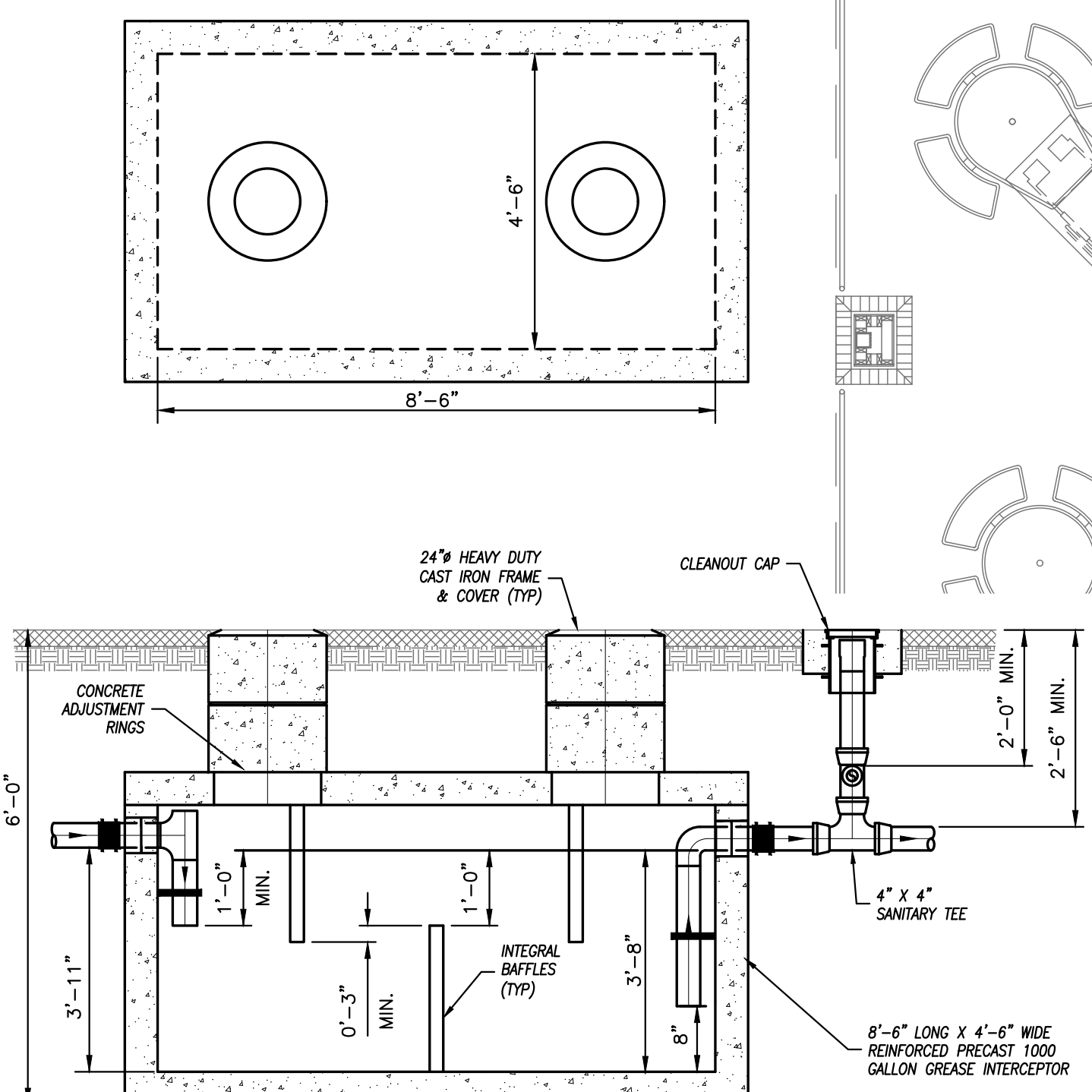
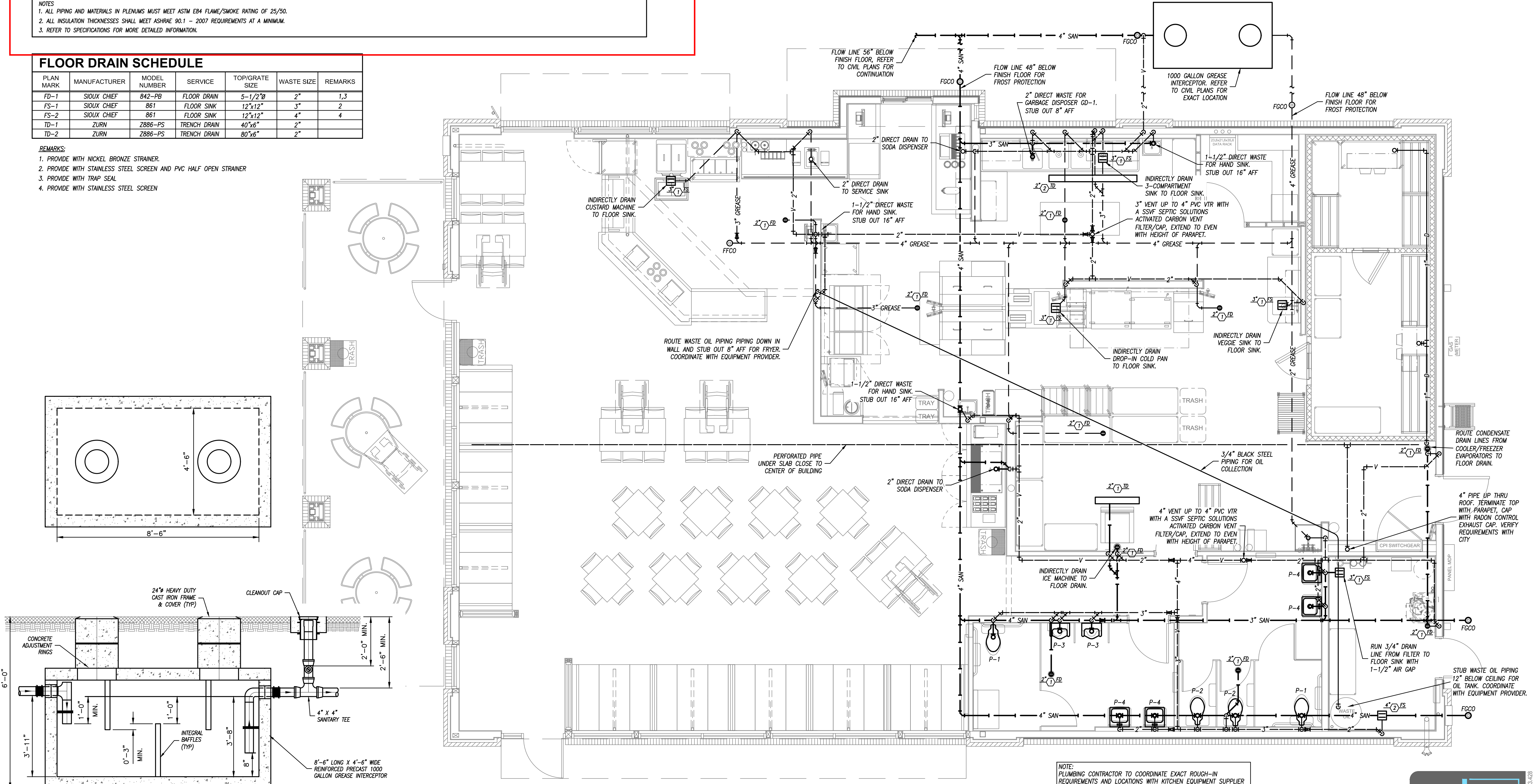
- COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHI.
- NO PIPING SHALL BE INSTALLED WHERE IT WILL BE SUBJECT TO FREEZING TEMPERATURES. PIPING IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF BUILDING INSULATION, INSULATED AND THE CHASE SHALL BE VENTILATED WITH GRILLES ALLOWING INDOOR AMBIENT CONDITIONS TO CIRCULATE THROUGH THE CHASE.
- PROVIDE CLEANOUTS IN THE FOLLOWING LOCATIONS:
  - IN ALL HORIZONTAL DRAINS (WITHIN THE BUILDING) NOT MORE THAN 100 FEET APART.
  - IN BUILDING SEWERS LOCATED NO MORE THAN 100 FEET APART MEASURED FROM THE UPSTREAM ENTRANCE OF THE CLEANOUT.
  - EACH CHANGE OF DIRECTION OF THE BUILDING DRAIN OR HORIZONTAL WASTE OR SOIL LINES GREATER THAN 45 DEGREES WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE CLEANOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH OF THE DRAINAGE PIPING.
  - AT THE BASE OF EACH WASTE OR SOIL STACK.
  - NEAR THE JUNCTION OF THE BUILDING DRAIN AND BUILDING SEWER.

**GREASE INTERCEPTOR SIZING**

GREASE INTERCEPTOR CALCULATIONS:

EQUIPMENT	QTY	DFU (EA)	DFU (TOTAL)	EQUIVALENT GPM
MOP SINK	1	3	3	1.5
HAND SINK	1	1	1	0.5
FLOOR SINK	6	5	30	15
FLOOR DRAIN	5	2	10	5
TOTALS =			44	22

\*PER 2018 IPC SECTION 709.3 DRAINAGE FIXTURE UNIT VALUES FOR CONTINUOUS OR SEMI-CONTINUOUS FLOW INTO A DRAINAGE SYSTEM SHALL BE COMPUTED ON THE BASIS THAT 1 GPM OF FLOW IS EQUAL TO 2 FIXTURE UNITS.  
 \*PER THE 2018 IPC SECTION 1003.3.6 THE REQUIRED CAPACITY OF GRAVITY GREASE INTERCEPTORS SHALL BE DETERMINED BY THE PEAK FLOW IN GPM MULTIPLIED BY 30 MINUTES RETENTION TIME.  
 22 GPM \* 30 MIN = 660 GALLONS MINIMUM VOLUME



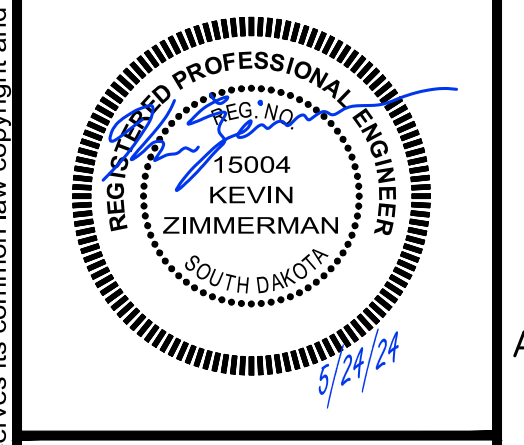
**PLUMBING FIXTURE UNITS**  
 TOTAL DRAINAGE FIXTURE UNITS = 100  
 MIN BUILDING SANITARY SIZE = 4"

**FLOOR PLAN - WASTE & VENT**  
 1/4" = 1'-0"

NOTE:  
 PLUMBING CONTRACTOR TO COORDINATE EXACT ROUGH-IN REQUIREMENTS AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER AND/OR OWNER. VERIFY ANY ACCESSORIES THAT WILL BE REQUIRED FOR COMPLETE INSTALLATION OF KITCHEN EQUIPMENT.



Contract Date	
Rev No. 1	9/22/23
Rev No. 2	
Rev No. 3	
Rev No. 4	
Rev No. 5	
Rev No. 6	
Project Number:	22.02
DWG File	
Designed By:	plan4
Drawn By:	NSG
Approved By:	SWM
Date:	5/24/24



**PLUMBING FIXTURE SCHEDULE**

PLAN MARK	FIXTURE MODEL	FIXTURE DESCRIPTION	FITTINGS MODEL	FITTINGS DESCRIPTION	PIPE SIZES			
					WASTE	VENT	DCW	DHW
P-1	AMERICAN STANDARD 2305.100 CHURCH 9500C	ADA COMPLIANT WATER CLOSET: FLUSH VALVE, WHITE ELONGATED BOWL, FLOOR MOUNTED, 1.6 GALLON SIPHON JET FLUSHING ACTION SEAT: WHITE, SOLID PLASTIC, OPEN FRONT, ELONGATED	SLOAN ROYAL 111 SFSM-1.6	BATTERY POWERED, SENSOR ACTIVATED, FLUSH METER CHROME PLATED WITH SENSOR UNIT AND BATTERIES WITH VACUUM BREAKER FLUSH CONNECTION, AND SPUD COUPLING FOR 1 1/2" TOP SPUD. PROVIDE WITH WALL AND SPUD FLANGES. 1.6 GALLON FLUSH WITH OVERRIDE COVER.	4"	2"	1-1/4"	--
P-2	AMERICAN STANDARD 2305.100 CHURCH 9500C	WATER CLOSET: FLUSH VALVE, WHITE ELONGATED BOWL, FLOOR MOUNTED, 1.6 GALLON SIPHON JET FLUSHING ACTION SEAT: WHITE, SOLID PLASTIC, OPEN FRONT, ELONGATED	SLOAN ROYAL 111 SFSM-1.6	BATTERY POWERED, SENSOR ACTIVATED, FLUSH METER CHROME PLATED WITH SENSOR UNIT AND BATTERIES WITH VACUUM BREAKER FLUSH CONNECTION, AND SPUD COUPLING FOR 1 1/2" TOP SPUD. PROVIDE WITH WALL AND SPUD FLANGES. 1.6 GALLON FLUSH WITH OVERRIDE COVER.	4"	2"	1-1/4"	--
P-3	AMERICAN STANDARD 6042.001EC	ADA COMPLIANT URINAL: WHITE WALL HUNG URINAL 0.5 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 17" ABOVE FLOOR WITH FLOOR MOUNTED, HEAVY DUTY TUBULAR STEEL SUPPORT CARRIER	SLOAN ROYAL 186 SFSM-0.5	BATTERY POWERED, SENSOR ACTIVATED, FLUSH METER CHROME PLATED WITH SENSOR UNIT AND BATTERIES WITH VACUUM BREAKER FLUSH CONNECTION, AND SPUD COUPLING FOR 3/4" TOP SPUD. PROVIDE WITH WALL AND SPUD FLANGES. 0.5 GALLON FLUSH.	2"	2"	1"	--
P-4	AMERICAN STANDARD 0355.012	ADA COMPLIANT LAVATORY: WHITE WALL HUNG LAVATORY 20"x18" WITH 4" BACK FAUCET HOLES ON 4" CENTERS, WITH CONCEALED ARM CARRIER. PROVIDE HANDLE STOP VALVES AND FLEXIBLE METAL WATER RISERS. MOUNT TOP OF RIM AT 34" ABOVE FLOOR	SLOAN SF-2450	SENSOR OPERATED ELECTRONICS FAUCET: CHROME FINISH 1/2" CONNECTIONS, VANDAL RESISTANT 0.5 GPM, NO POP UP HOLE CHROME PLATED BRASS GRID DRAIN, TAILPIECE, AND P-TRAP INSULATE THE TAILPIECE, P-TRAP, AND WATER RISERS PROVIDE WITH THERMOSTATIC MIXING VALVE AND BATTERIES	2"	2"	1/2"	1/2"

**WATER HEATER SCHEDULE**

PLAN MARK	MANUFACTURER	MODEL NUMBER	GALLONS	CAPACITY	ELECTRICAL	NOTES
WH-1	NAVIEN	NPE-240A	TANKLESS	199,000 BTUH MAX	120V, 200W	1,2

NOTES LEGEND  
 1 - PROVIDE INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS, INCLUDING INTAKE AND EXHAUST VENTING.  
 2 - PROVIDE WITH INTERNAL RETICULATION PUMP.

**GARBAGE DISPOSAL**

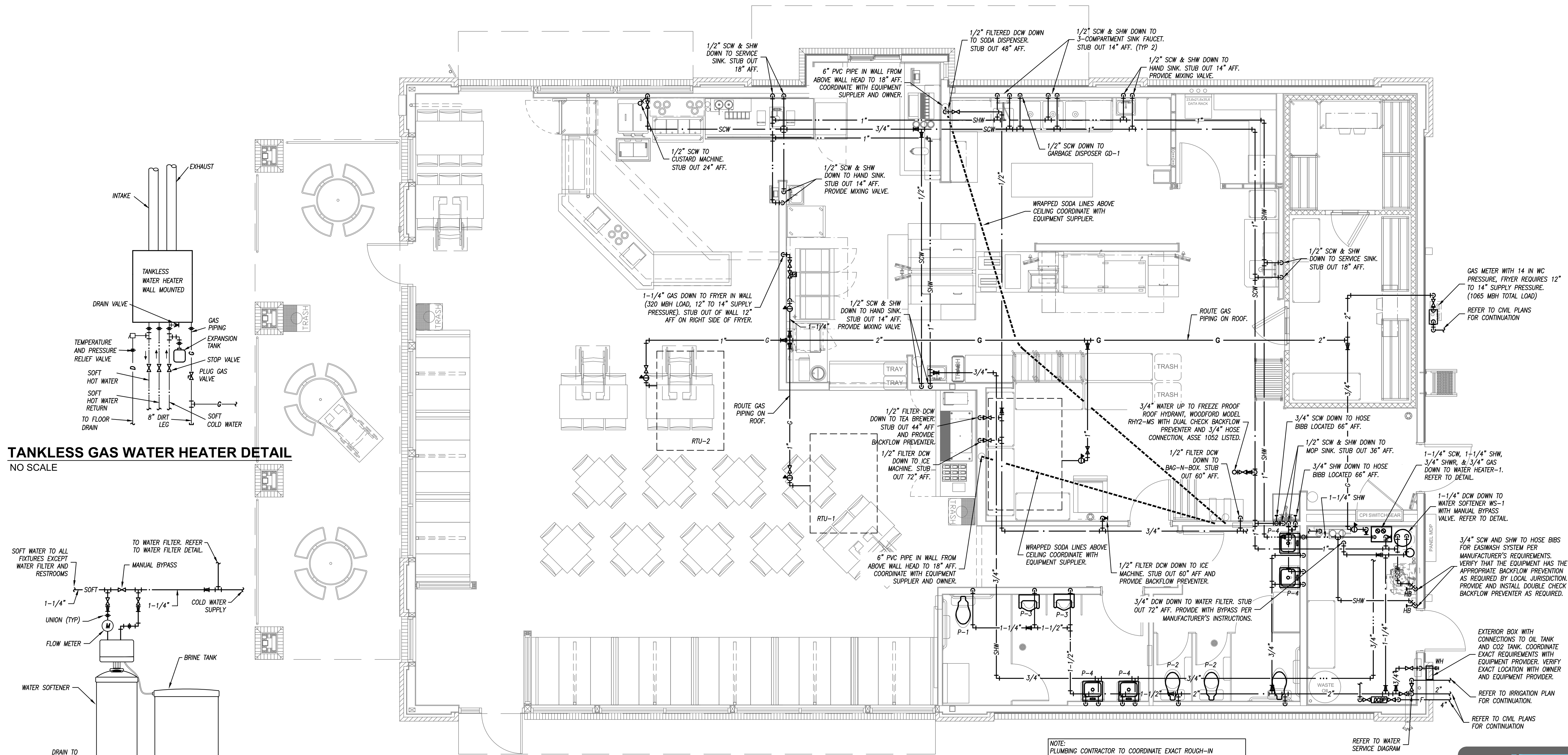
PLAN MARK	MANUFACTURER	MODEL NUMBER	ELECTRICAL CHARACTERISTICS	MAX. RPM
GD-1	INSINKERATOR	SS100	12A, 120V, 1Φ	1725

NOTES LEGEND  
 1. PROVIDE WITH CONTROL PANEL

**WATER SOFTENER SCHEDULE**

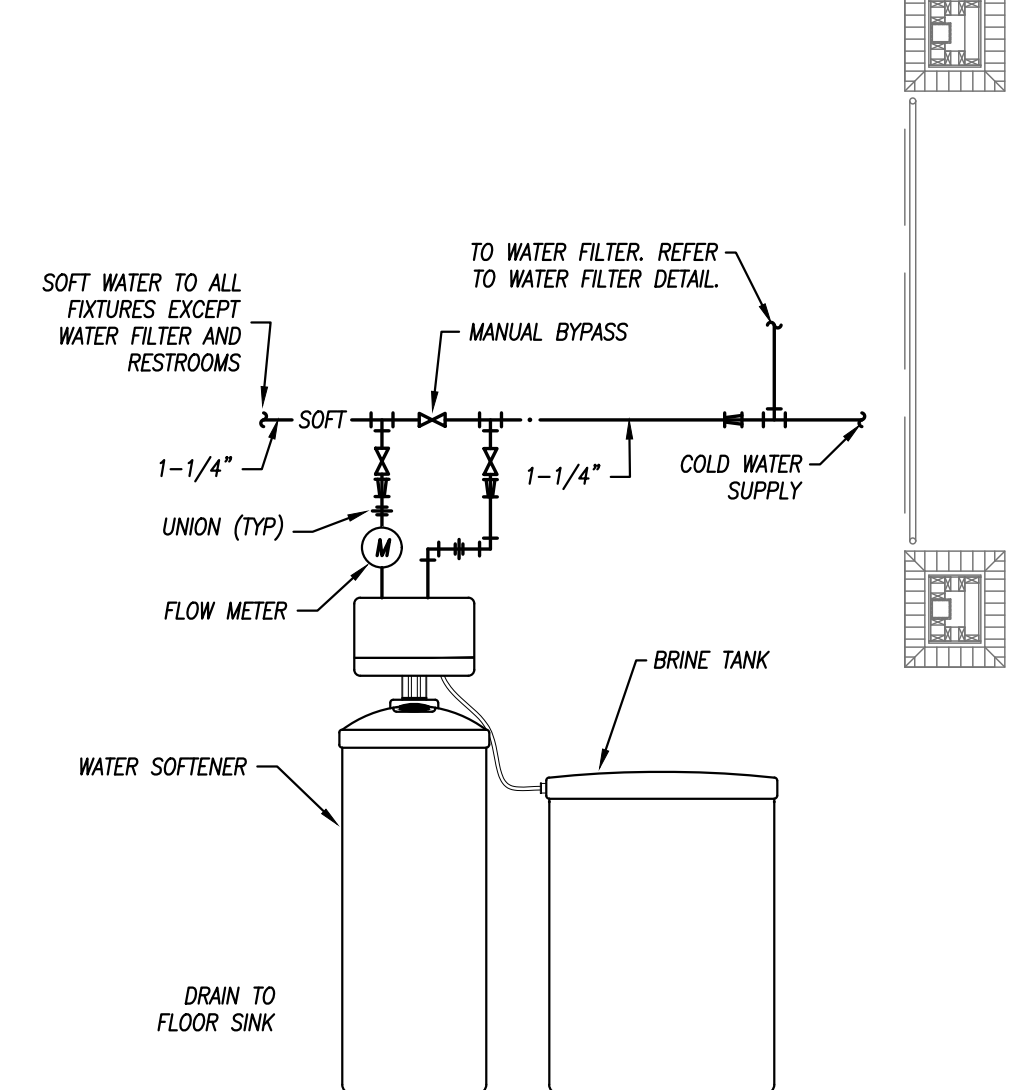
PLAN MARK	MANUFACTURER	MODEL NUMBER	GRAINS	DIMENSIONS
WS-1	3M PURIFICATION	CFSM1254	56,800	37" X 63"H X 15"D

NOTES LEGEND  
 1. PROVIDE (2) BAGS OF SALT, AND START-UP WHEN REQUIRED



**TANKLESS GAS WATER HEATER DETAIL**

NO SCALE



**WATER SOFTENER DETAIL**

NOT TO SCALE



**PLUMBING FIXTURE UNITS**

TOTAL DOMESTIC WATER FIXTURE UNITS = 82  
 BUILDING WATER PIPING SIZE = 2"



**FLOOR PLAN - DOMESTIC WATER & GAS**

1/4" = 1'-0"

NOTE:  
 PLUMBING CONTRACTOR TO COORDINATE EXACT ROUGH-IN REQUIREMENTS AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER AND/OR OWNER. VERIFY ANY ACCESSORIES THAT WILL BE REQUIRED FOR COMPLETE INSTALLATION OF KITCHEN EQUIPMENT.

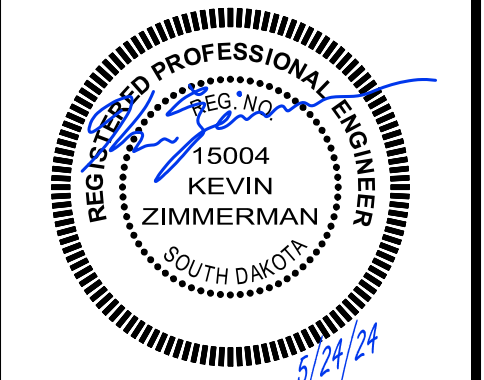


11 x 17 = 1/2 scale

**Plumbing Water & Gas Plan**

Freddy's Frozen Custard & Steakhouses  
 Rushmore Crossing II Addition - Lot 1  
 Egin Street, Rapid City, SD

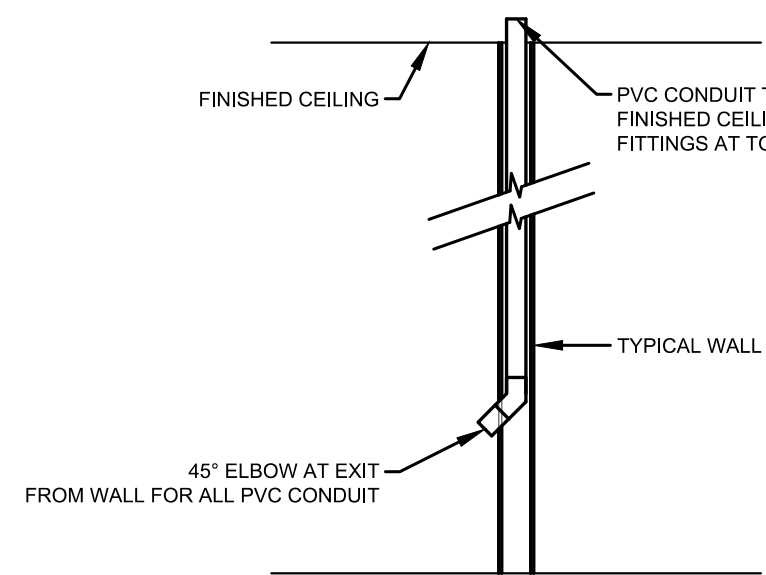
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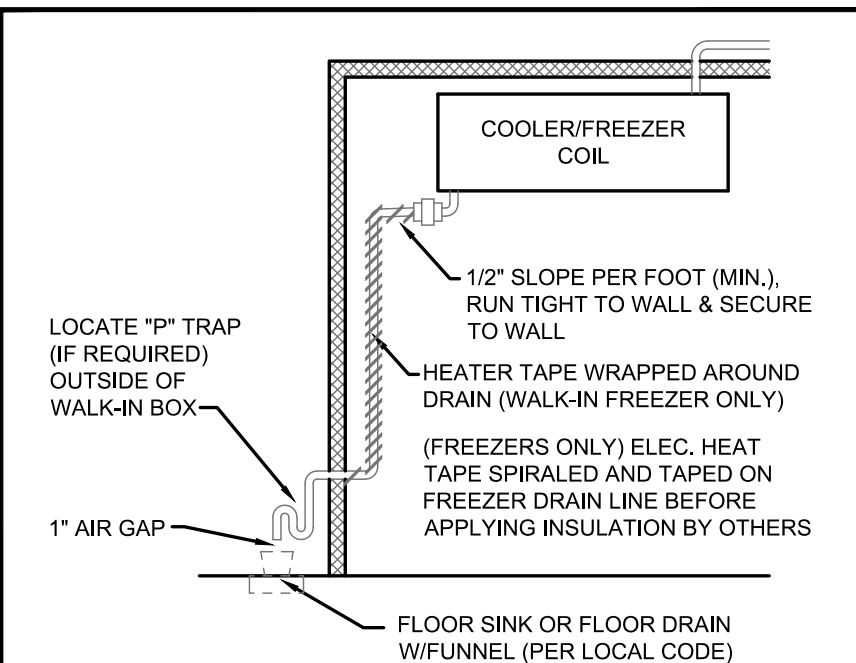
SHEET NUMBER

**M101**

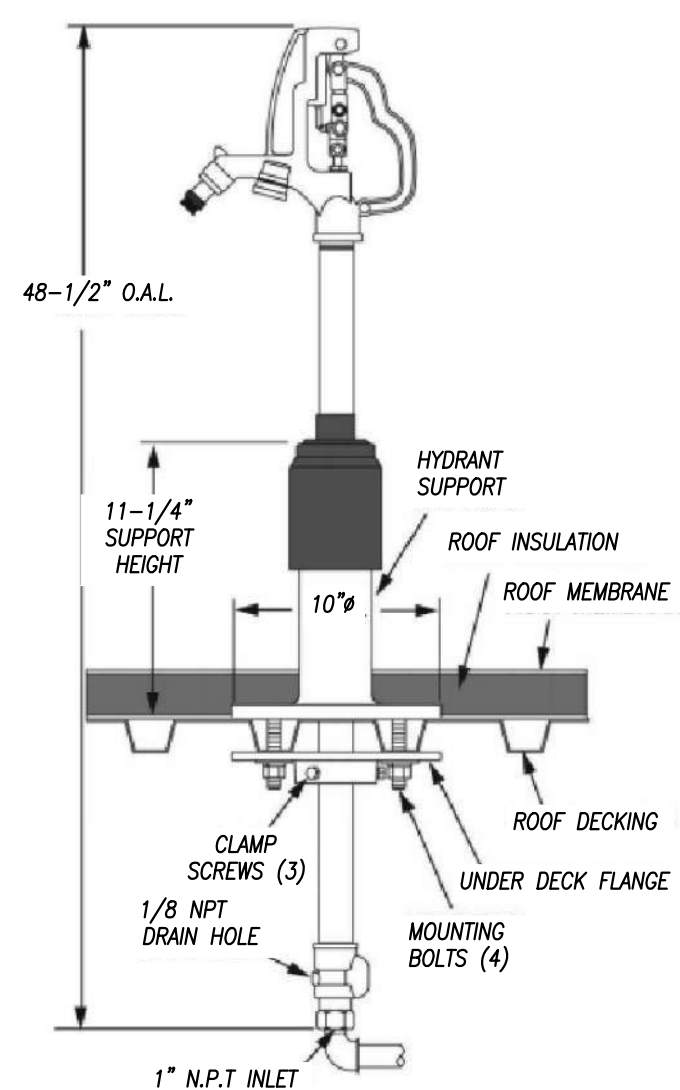
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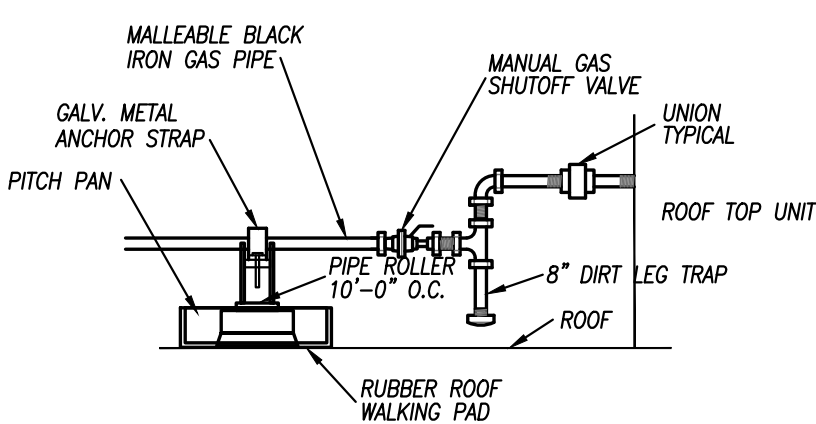
**SODA & REFRIG. CONDUIT IN WALL DETAIL**  
NO SCALE



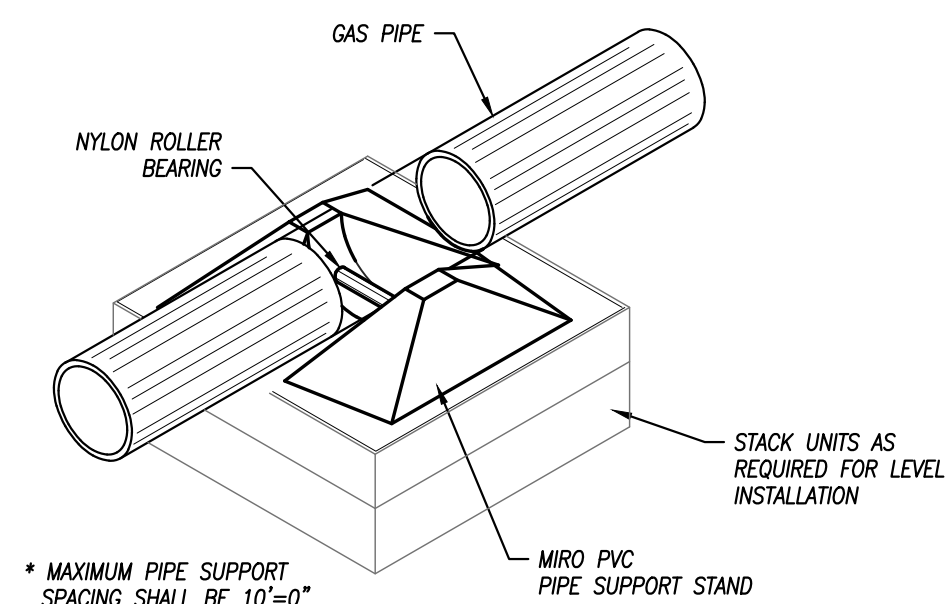
**WALK-IN DRAIN LINE DETAIL**  
NO SCALE



**ROOF HYDRANT DETAIL**  
SCALE: NONE



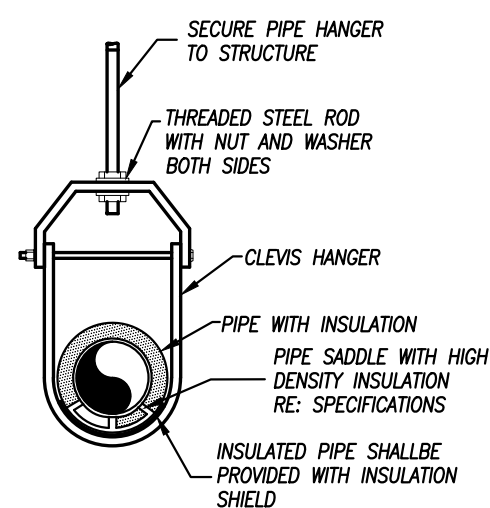
**ROOF TOP UNIT GAS CONNECTION DETAIL**  
NO SCALE



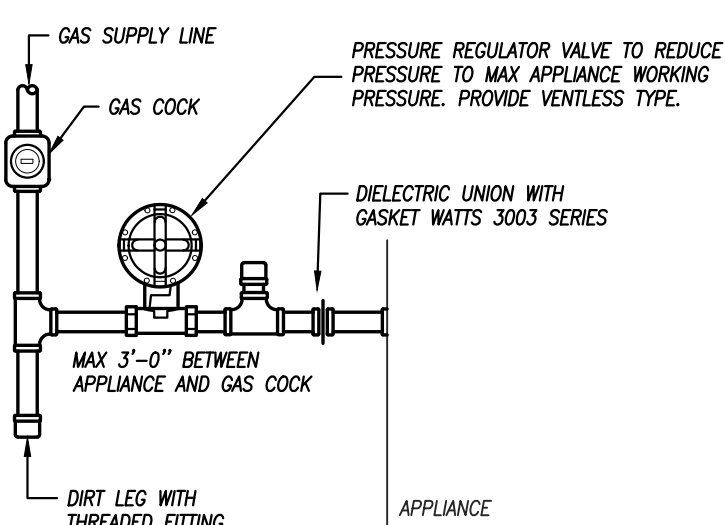
**ROOF SUPPORT FOR GAS LINE**  
NO SCALE

**NOTES:**  
CONDUIT AND BUILDING PENETRATIONS SHALL BE THE RESPONSIBILITY OF THE BUILDING TRADES AND FINISHED CEILING WITH NO ADDITIONAL FITTINGS AT TOP.  
EXACT LINE RUNS SHALL BE DETERMINED IN COORDINATION WITH THE BEVERAGE SYSTEM INSTALLER. LINE RUN SHOWN ON PLAN INDICATES DESIRED CONNECTION AND NOT THE ACTUAL LINE RUN.  
PROVIDE 6" (MIN.) P.V.C. CONDUIT, AS INDICATED ON PLAN, THRU SLAB, WALLS OR CEILINGS, WITH 24" (MIN.) RADIUS MINIMUM SWEEPING BENDS, INTERNALLY SMOOTH AND WATERTIGHT. EXACT DIAMETER OF CONDUIT TO BE DETERMINED ON PER PROJECT BASIS - VERIFY BEFORE CONSTRUCTION.  
FURNISH P.V.C. CONDUIT AS DESCRIBED IN ARTICLE 347 OF THE NATIONAL ELECTRIC CODE, STANDARD 851 NEMA SPEC. 7-22 ROBINTECH P.V.C. DUCT AND SWEEP ELBOWS OR EQUAL. CAUTION: PLUMBING STYLE P.V.C. SHORT RADIUS FACTORY "ELLS" ARE NOT ACCEPTABLE.  
A PULL BOX SHALL BE INSTALLED AFTER EVERY TWO RADIUS BENDS OR 75 FEET OF CONDUIT.  
ALL JOINTS SHALL BE SOLVENT CEMENTED AS RECOMMENDED BY THE MANUFACTURER AND PRESSURE TESTED FOR LEAKS PRIOR TO BACKFILLING, TO CREATE A LIQUID TIGHT CONDITION.  
CONDUIT SHALL BE EXTENDED A MINIMUM OF 6" ABOVE FINISHED FLOOR AND CAPPED AND SEALED DURING CONSTRUCTION. BEER CONDUIT IN COOLER TO EXTEND UP 6" ABOVE COOLER FLOOR.  
AFTER PRODUCT LINES ARE INSTALLED, OPEN ENDS OF THE CONDUIT ARE TO BE FILLED WITH EXPANDING FOAM APPROXIMATELY 2 TO 4 INCHES AT EACH END.

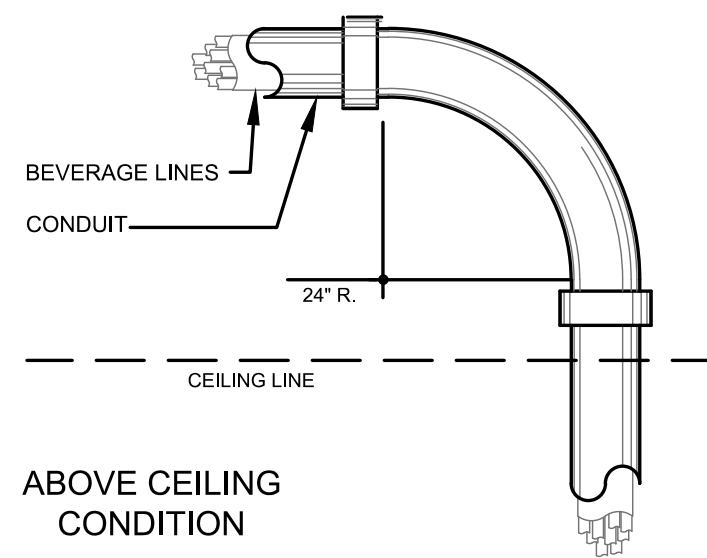
**BEVERAGE SYSTEM CONDUIT DETAIL**  
NO SCALE



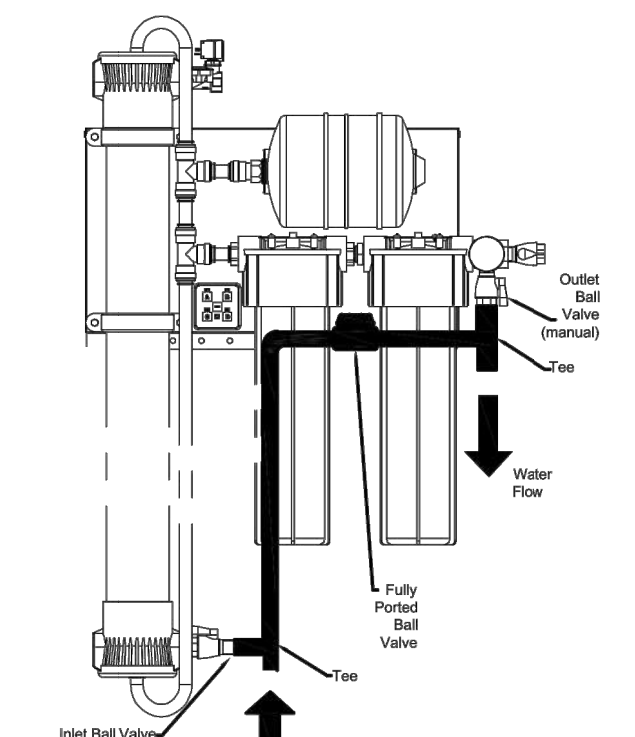
**PIPE HANGER DETAIL**  
NO SCALE



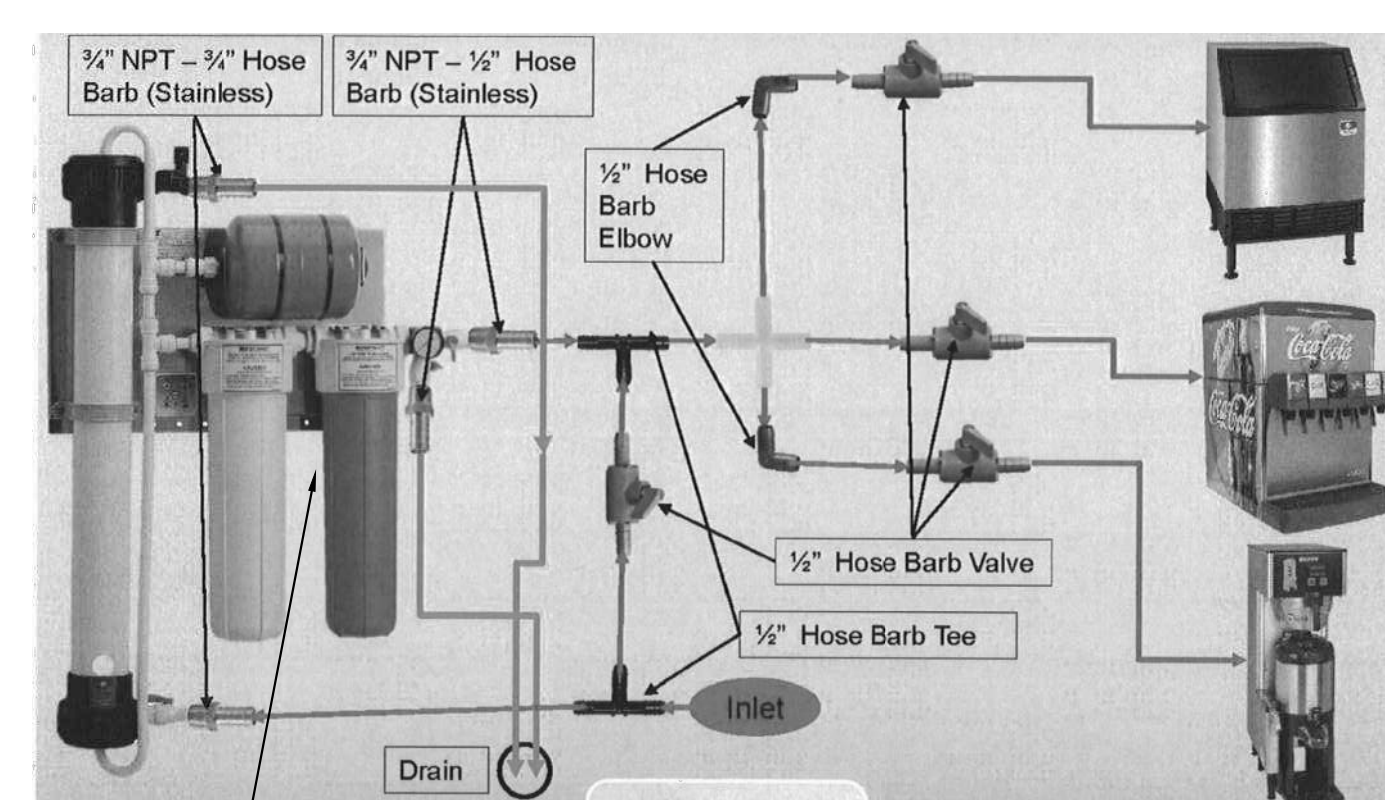
**TYPICAL GAS CONNECTION**  
NO SCALE



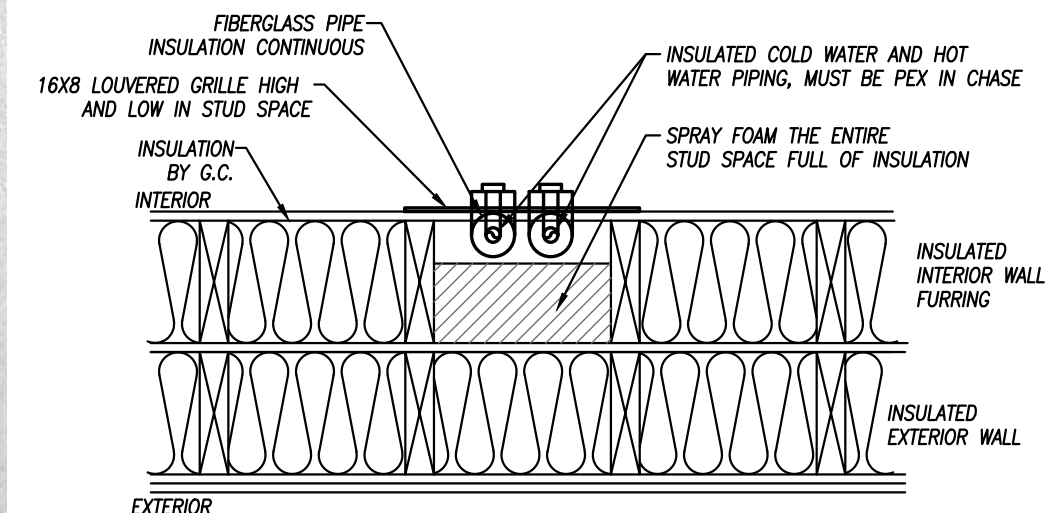
**ABOVE CEILING CONDITION**



**WATER FILTER BY-PASS DETAIL**  
NOT TO SCALE



**WATER FILTER DETAIL**  
NO SCALE

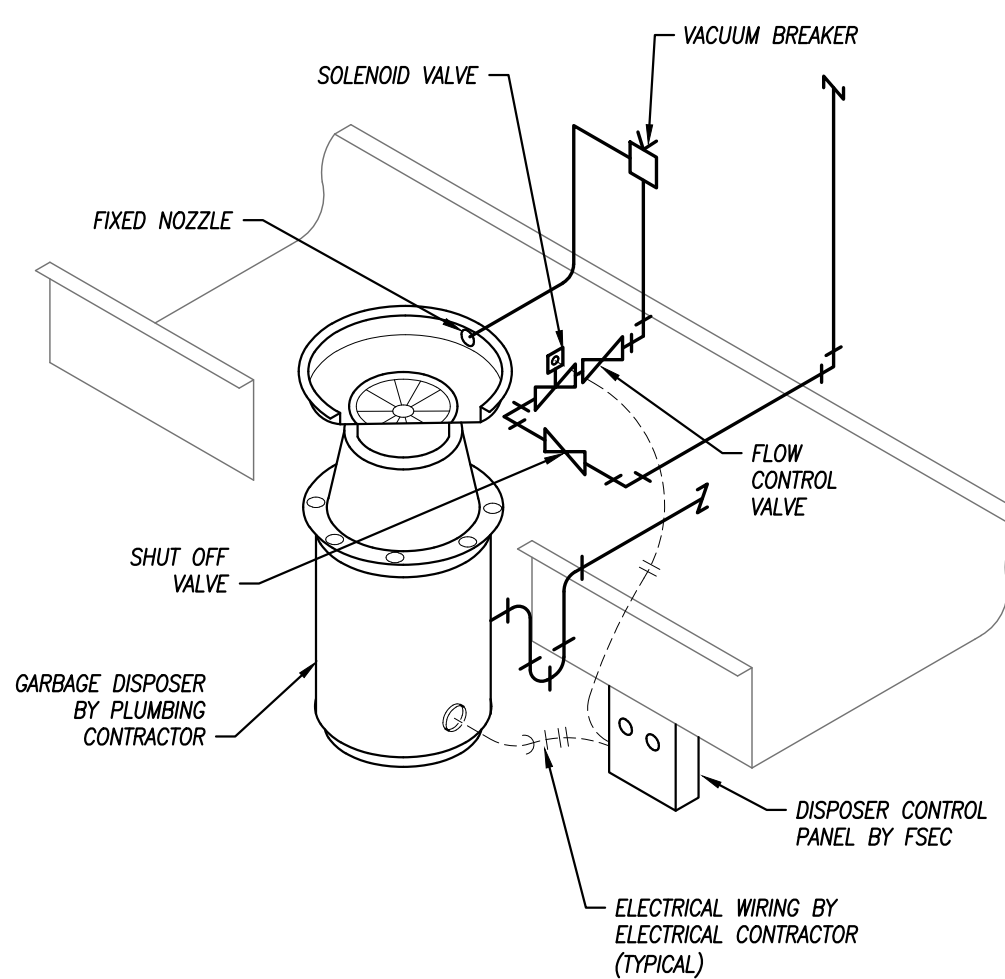


**EXTERIOR WALL WATER PIPING DETAIL**  
NO SCALE

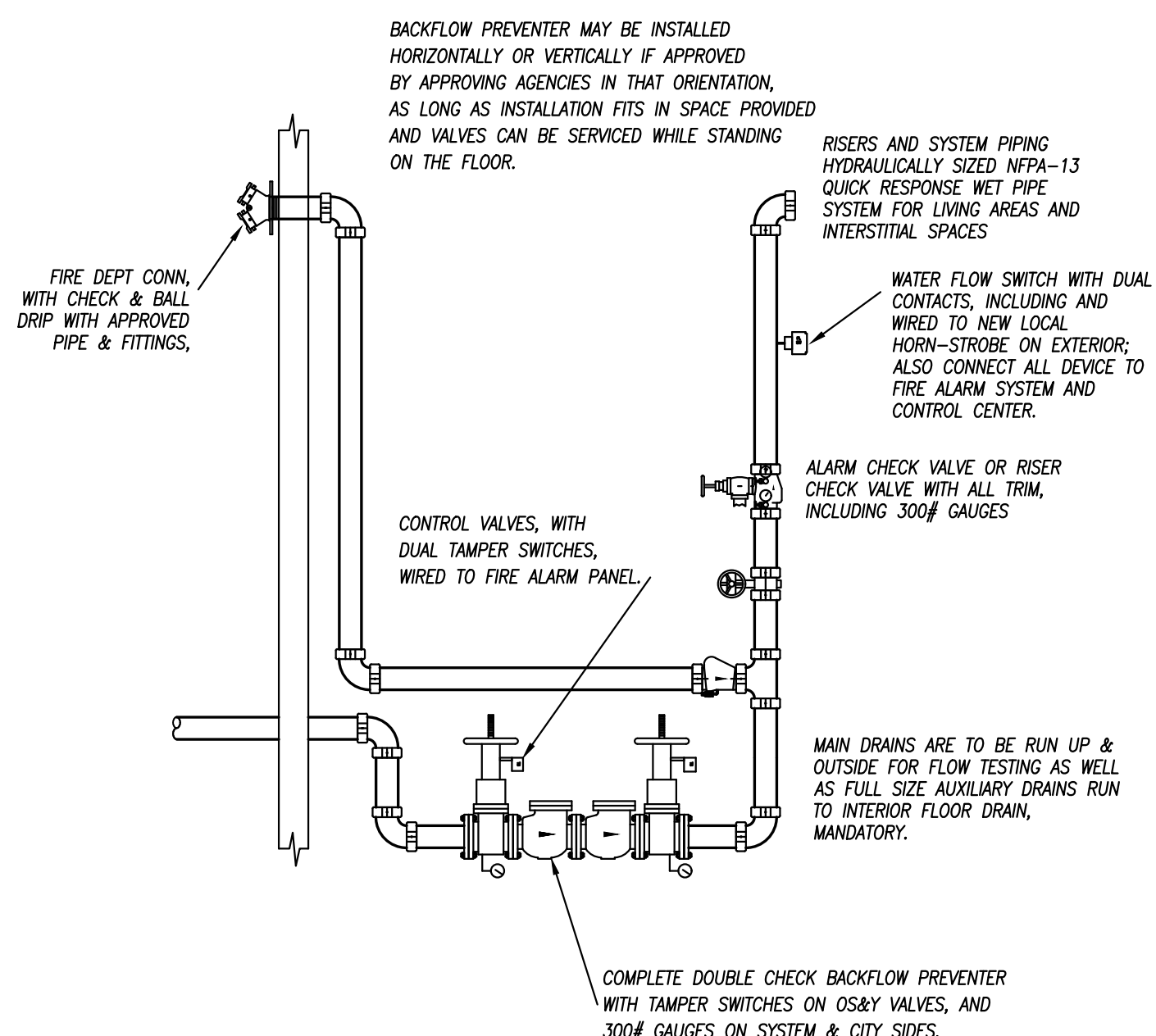
**NOTES:**

1. ALL AREAS OF THE BUILDING ARE TO BE SPRINKLED, INCLUDING ALL ATTIC AREAS AND INTERSTITIAL SPACES. THIS INCLUDES WOOD TRUSS SPACES, ATTIC SPACES, MECHANICAL CHASES, AND ALL OTHER AREAS REQUIRED TO BE PROTECTED UNDER THE SCOPE OF NFPA-13.

- NOTES:**
1. MOUNT VACUUM BREAKER ABOVE FIXTURE BACKSPASH, MINIMUM OF 6" ABOVE FLOOD RIM. DRILL BACKSPASH FOR PIPES. PROVIDE SILICONE SEALANT AROUND PIPE THRU BACKSPASH. USE CHROME-PLATED PIPING WHEN EXPOSED ABOVE BACKSPASH.
  2. ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. WIRING IS BY ELECTRICAL CONTRACTOR.

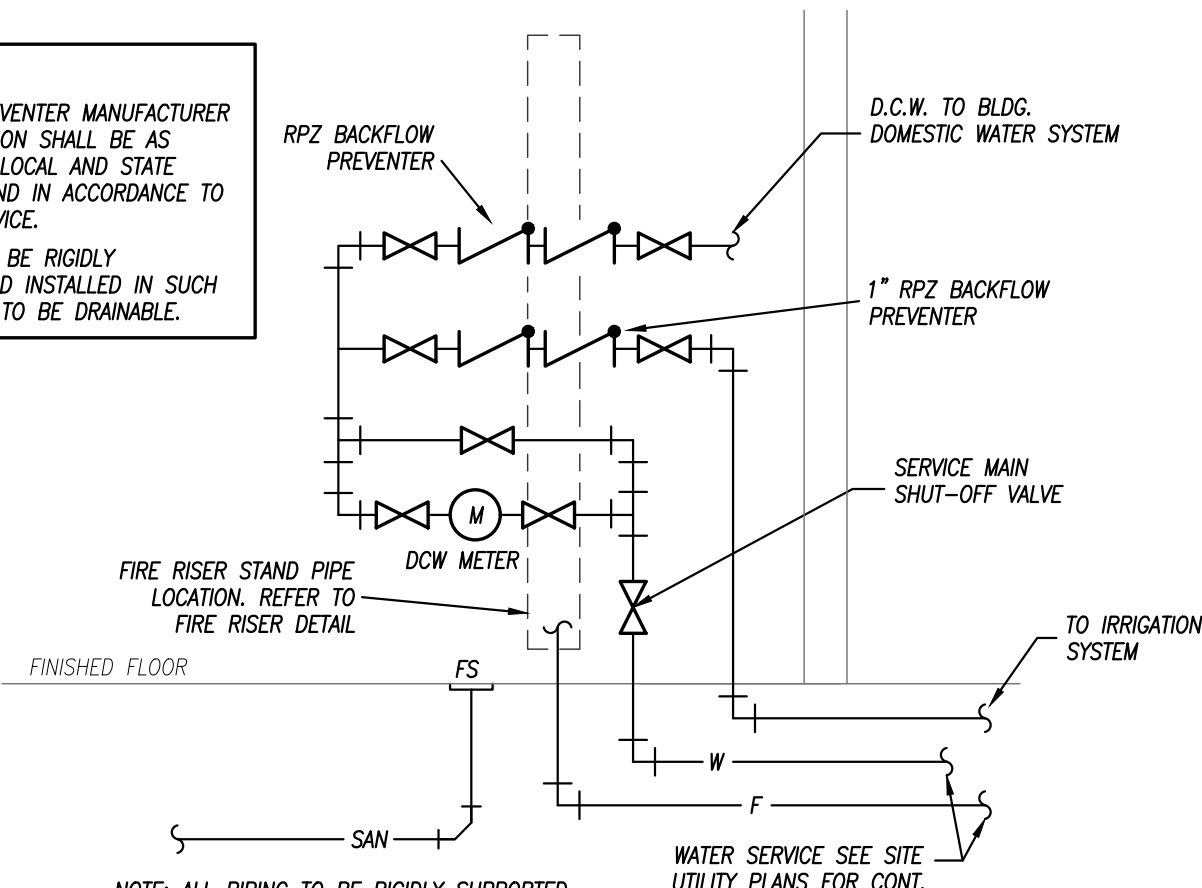


**GARBAGE DISPOSER CONNECTION DETAIL**  
NO SCALE

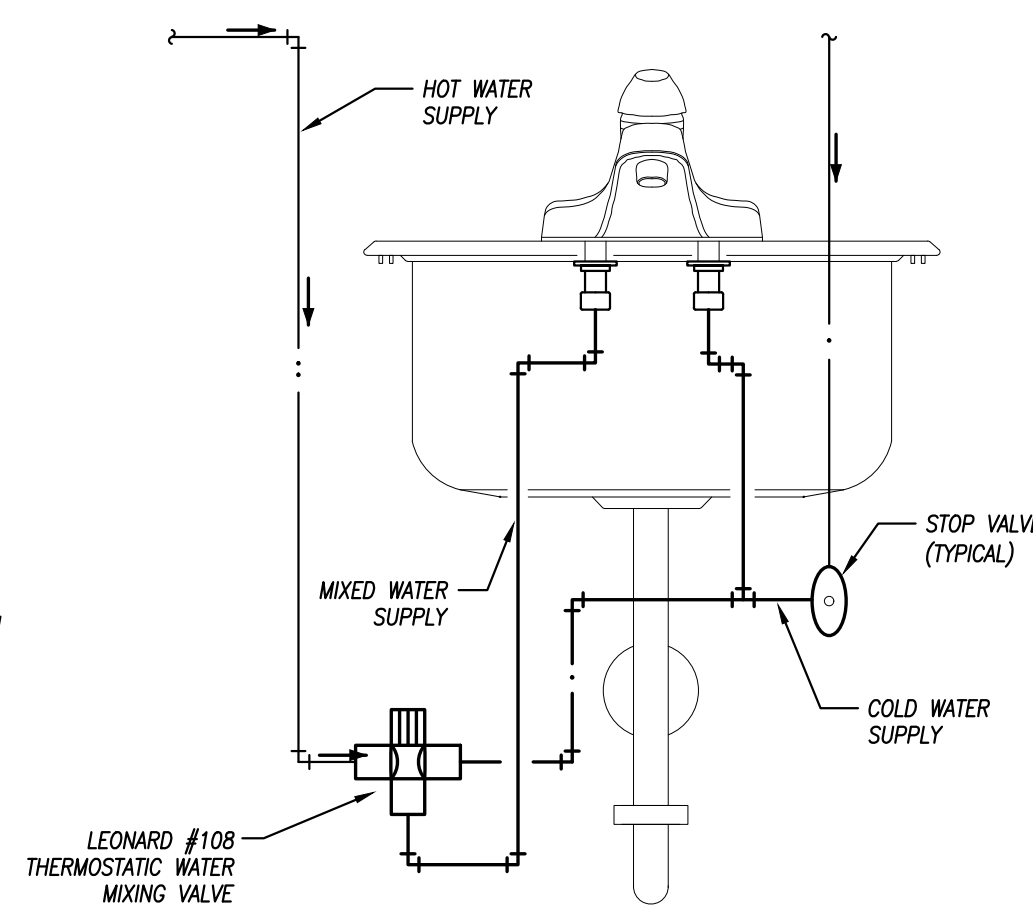


**FIRE SPRINKLER RISER DETAIL**  
NO SCALE

- NOTES:**
1. BACKFLOW PREVENTER MANUFACTURER AND INSTALLATION SHALL BE AS APPROVED BY LOCAL AND STATE AUTHORITIES AND IN ACCORDANCE TO LISTING OF DEVICE.
  2. ALL PIPING TO BE RIGIDLY SUPPORTED AND INSTALLED IN SUCH A MANNER AS TO BE DRAINABLE.



**WATER SERVICE PIPING DIAGRAM**  
NO SCALE



**MIXING VALVE SCHEMATIC**  
NO SCALE



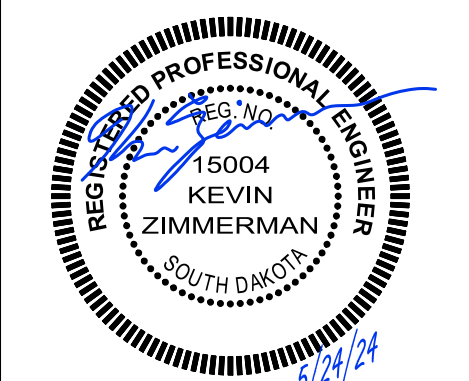
11 x 17 = 1/2 scale

**PLAN4**  
ARCHITECTURE DESIGN  
www.plan4arch.com  
303 north main street, mcpherson, kansas 67201-4353

**Plumbing Details**

Freddy's Frozen Custard & Steakhouses  
Rushmore Crossing II Addition - Lot 1  
Egin Street, Rapid City, SD

Contract Date	
Rev No. 1	
Rev No. 2	
Rev No. 3	
Rev No. 4	
Rev No. 5	
Rev No. 6	
Project Number:	22.02
DWG File	
Designed By:	plan4
Drawn By:	NSG
Approved By:	SWM
Date:	5/24/2024



SHEET NUMBER  
**M102**

**ROOF TOP UNIT SCHEDULE - THREE PHASE ELECTRIC WITH GAS HEAT**

PLAN MARK	MANUFACTURER	MODEL NUMBER	SIZE	REFRIGERANT	MINIMUM EFFICIENCY	AIRFLOW	COMPRESSORS	COOLING CAPACITY	CFM	OA CFM	EXTERNAL STATIC	HEATING CAPACITY	ELECTRICAL	WEIGHT	FILTER	NOTES
RTU-1	CARRIER	48FCDN08AZMK-6U0C0	7.5 TON	R-410A	15.0 IEER	DOWN	(2) SCROLLS	89,600 BTUH	3,000	500	0.8"	125 MBH	208 V, 3 PH, 50 AMP	1000 LBS	MERV 4	1,2,3,4
RTU-2	CARRIER	48FCDN08AZMK-6U0C0	7.5 TON	R-410A	15.0 IEER	DOWN	(2) SCROLLS	89,600 BTUH	3,000	500	0.8"	125 MBH	208 V, 3 PH, 50 AMP	1000 LBS	MERV 4	1,2,3,4

- NOTES LEGEND
1. PROVIDE TALL ROOF CURB TO TRANSITION DUCT BETWEEN 24" O.C. ROOF TRUSSES, DISCONNECT SWITCH, HAIL GUARDS, AND ECONOMIZER
  2. PROVIDE WALL MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT
  3. PROVIDE INTERNAL VIBRATION ISOLATION FOR THE RTU FAN AND COMPRESSORS
  4. PROVIDE WITH HUMIDIFIER, PROVIDE WALL SENSORS AND COMPLETE WIRING PER MANUFACTURER'S INSTRUCTION.

**EXHAUST FAN SCHEDULE**

PLAN MARK	MANUFACTURER	MODEL NUMBER	MOUNTING	SERVICE	CFM	STATIC PRESSURE	ELECTRICAL	DRIVE	DISCONNECT	DAMPER	NOTES
EF-1	COOK	GC-184	CEILING	EXHAUST	225	1/4"	183W, 120V, 1 PH.	DIRECT	YES	BACKDRAFT	1,2
EF-2	COOK	GC-184	CEILING	EXHAUST	225	1/4"	183W, 120V, 1 PH.	DIRECT	YES	BACKDRAFT	1,2

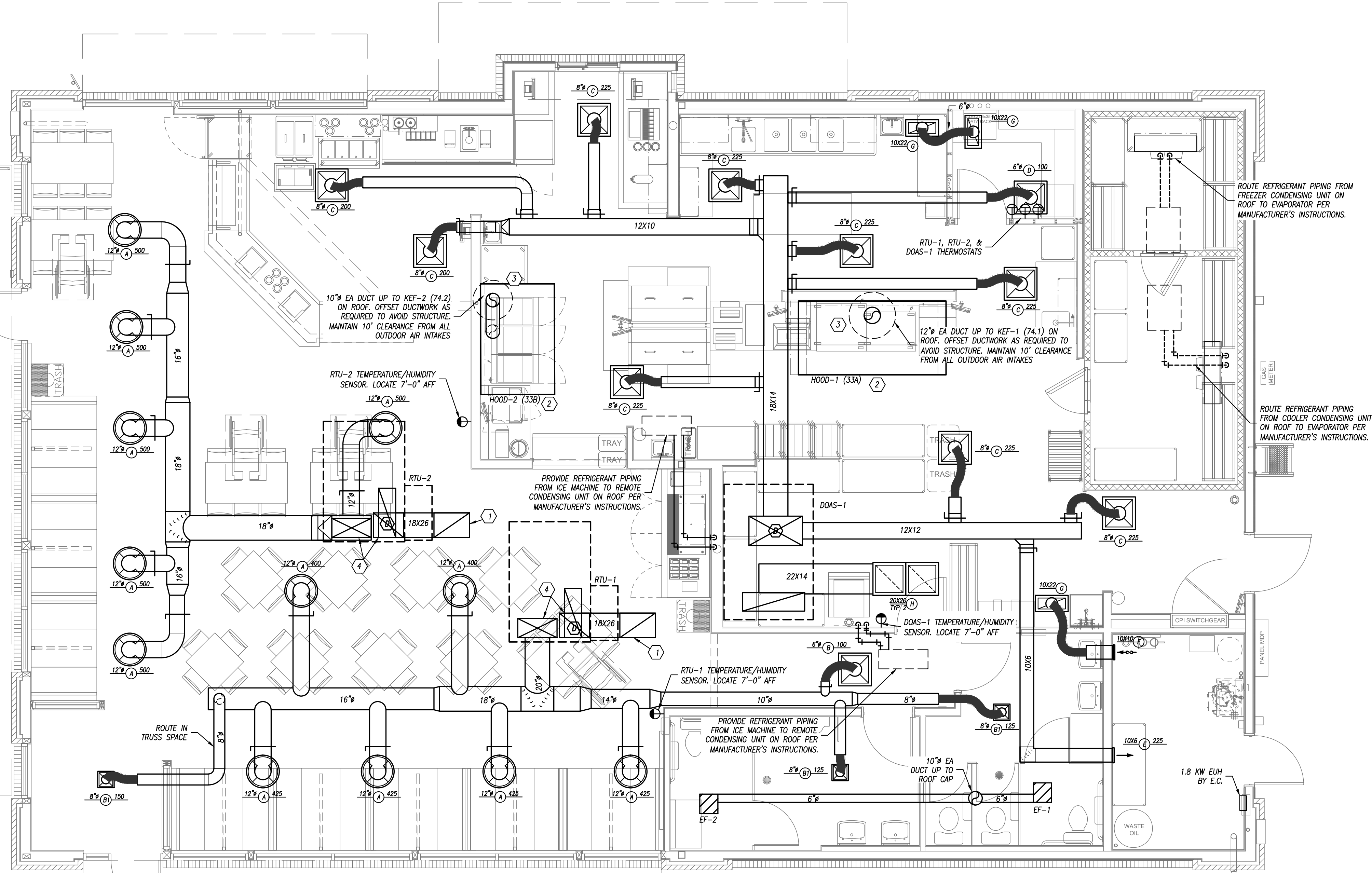
- NOTES LEGEND
1. PROVIDE CEILING GRILLE AND INTEGRAL BACK DRAFT DAMPER
  2. PROVIDE ACTIVE VENTILATION PRODUCTS KV-10-TP ROOF JACK FOR EF-1 & EF-2

**GRILLE, REGISTER & DIFFUSER SCHEDULE**

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	MOUNT TYPE	VOLUME DAMPER	MATERIAL	MATERIAL COLOR	NOTES
A	TITUS	TMR	SUPPLY	FLANGE	NO	STEEL	WHITE	
B	TITUS	TMS/3	SUPPLY	GRID	YES	STEEL	WHITE	2
B1	TITUS	TMS/3	SUPPLY	FLANGE	YES	STEEL	WHITE	3
C	TITUS	PAS/3	SUPPLY	GRID	YES	STEEL	WHITE	2
D	TITUS	T3S04	SUPPLY	GRID	YES	STEEL	WHITE	2
E	TITUS	300RL	SUPPLY	FLANGE	YES	STEEL	WHITE	
F	TITUS	350RL	REUTRN	FLANGE	NO	STEEL	WHITE	
G	TITUS	PAR/3	REUTRN	FLANGE	NO	STEEL	WHITE	1
H	AMER LOUVER CO	STRATUS	REUTRN	FLANGE	NO	STEEL	WHITE	1,4

- NOTES LEGEND
1. PROVIDE WITHOUT SCREW HOLES WHERE USED IN A GRID CEILING
  2. PAN TO FIT A 2'X2' GRID.
  3. 12"X12" FACE
  4. PROVIDE WITH PLASTIC FILTER, AMERICAN AIR FILTER FRONTLINE GREEN 1", WITH FRAME SIZE 20X20X1

- HVAC NOTES:**
1. DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
  2. RTU-1, RTU-2, & DOAS-1 FANS TO BE RUNNING WHILE EXHAUST HOODS ARE IN OPERATION.
  3. MECHANICAL CONTRACTOR SHALL INSTALL THE CAPTIVE AIRE EQUIPMENT THAT THE OWNER IS PURCHASING FROM TRIMARK. CONTACT SAM SIEBER AT TRIMARK, 913-998-7583 TO COORDINATE PRICING, DELIVERY, SCHEDULE, AND MISCELLANEOUS PIECES AND PARTS REQUIRED FOR INSTALL.
  4. NO COMBUSTIBLE MATERIALS ARE ALLOWED IN THE RETURN AIR PLENUM.
  5. ALL KITCHEN DUCTWORK IS INTENDED TO BE ROUTED THROUGH OR BETWEEN TRUSSES. COORDINATE EXACT ROUTING WITH TRUSS DURING INSTALLATION.
  6. EXPOSED DUCTWORK SHALL BE OF PAINTLOCK CONSTRUCTION AND PAINTED PER ARCHITECT'S INSTRUCTIONS.
  7. COORDINATE ROUTING OF DUCTWORK WITH LIGHTING AND STRUCTURE.



**FLOOR PLAN - HVAC**  
1/4" = 1'-0"

**HVAC PLAN KEYED NOTES**

1. RETURN AIR DUCT LOCATED BETWEEN TRUSSES. TURN OPEN END OF DUCTWORK UP TOWARD STRUCTURE WITH A MINIMUM 8" CLEARANCE.
2. EXHAUST HOOD PROVIDED BY OTHERS, INSTALLED BY M.C. PER MANUFACTURER'S INSTRUCTIONS. HOOD SHALL BE PROVIDED WITH FACTORY PER-WIRE PACKAGE AND PRE-ENGINEERED UL-300 FIRE SUPPRESSION SYSTEM, SEE HOOD DRAWINGS.
3. GC TO INSTALL CAPTIVE AIRE WBE WINDBAND EXTENSION FOR KEF-1 AND KEF-2 PROVIDED BY KITCHEN EQUIPMENT SUPPLIER.
4. 28X14 SA & 18X22 RA DUCT UP TO RTU, TRANSITION DUCTWORK AS REQUIRED. COORDINATE WITH TRUSSES. TRUSSES ARE 1'-1/2" WIDE AND 24" ON CENTER. TRANSITION DUCTS FROM RTU TO IN BETWEEN ROOF TRUSSES UP IN ROOF CURB.



11 x 17 = 1/2 scale

**PLAN4**  
ARCHITECTURE DESIGN  
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303 north main street, mcpherson kansas 620.241.4353

**HVAC Plans**

Freddy's Frozen Custard & Steakburgers  
Rushmore Crossing II Addition - Lot 1  
Egin Street, Rapid City, SD

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Drawn By:	NSG
Approved By:	SWM
Date:	5/24/2024



SHEET NUMBER  
**M200**

OUTDOOR AIR CALCULATIONS									
UNIT	AREA (SQFT)	OCCUPANCY CLASSIFICATION	OCCUPANT DENSITY #/1000 SQFT	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE, (Rp) CFM/PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE, (Ra) CFM/SQFT	EXHAUST AIRFLOW RATE CFM/SQFT	BREATHING ZONE OUTDOOR AIRFLOW (Vbz)	ZONE AIR DISTRIBUTION EFFECTIVENESS (EZ)	ZONE OUTDOOR AIRFLOW (CFM)
RTU-1	545	DINING ROOMS	70	7.5	0.18		384	0.8	482
	170	CORRIDORS	0	0	0.06		10	0.8	13
								TOTAL	495
RTU-2	545	DINING ROOMS	70	7.5	0.18		384	0.8	482
	170	CORRIDORS	0	0	0.06		10	0.8	13
								TOTAL	495

AIR BALANCE SCHEDULE						
SUPPLY AIR UNIT	OUTSIDE AIRFLOW (CFM)	RETURN AIRFLOW (CFM)	SUPPLY AIRFLOW (CFM)	O/A/S/A %	EXHAUST AIR UNIT	EXHAUST AIRFLOW (CFM)
RTU-1	500	2500	3000	16.7%	KEF-1	1600
RTU-2	500	2500	3000	16.7%	KEF-2	775
DOAS-1	2200	0	2200	100.0%	EF-1, EF-2	450
TOTAL	3200	5000	8200	39.0%	TOTAL	2825

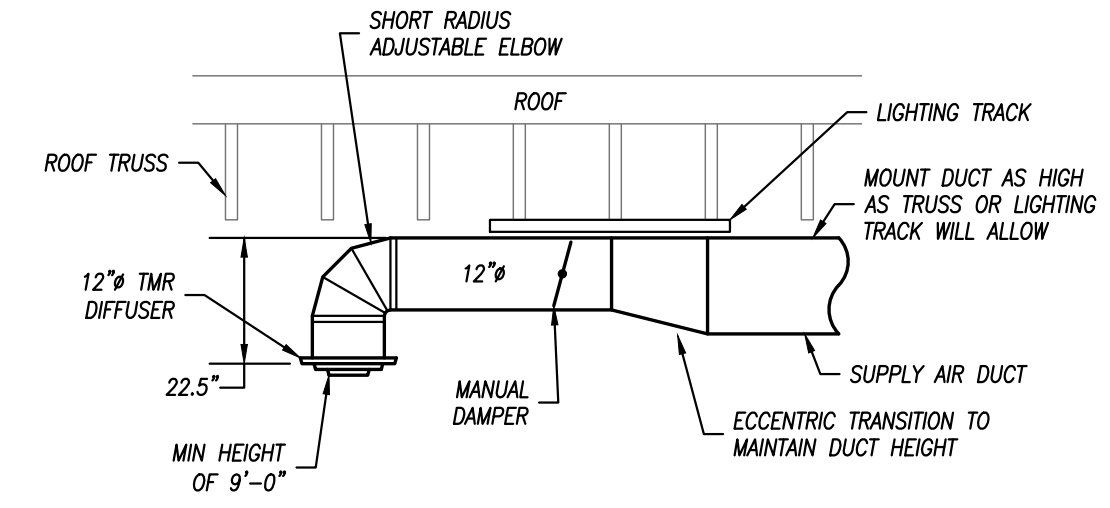
RESULTING BUILDING PRESSURIZATION: 375CFM

THE BUILDING HVAC SYSTEM SHALL BE BALANCED BY NATIONAL TAB HIRED BY THE OWNER. CONTACT JASON NESES NATIONAL TAB AT 885-682-6822 x 703

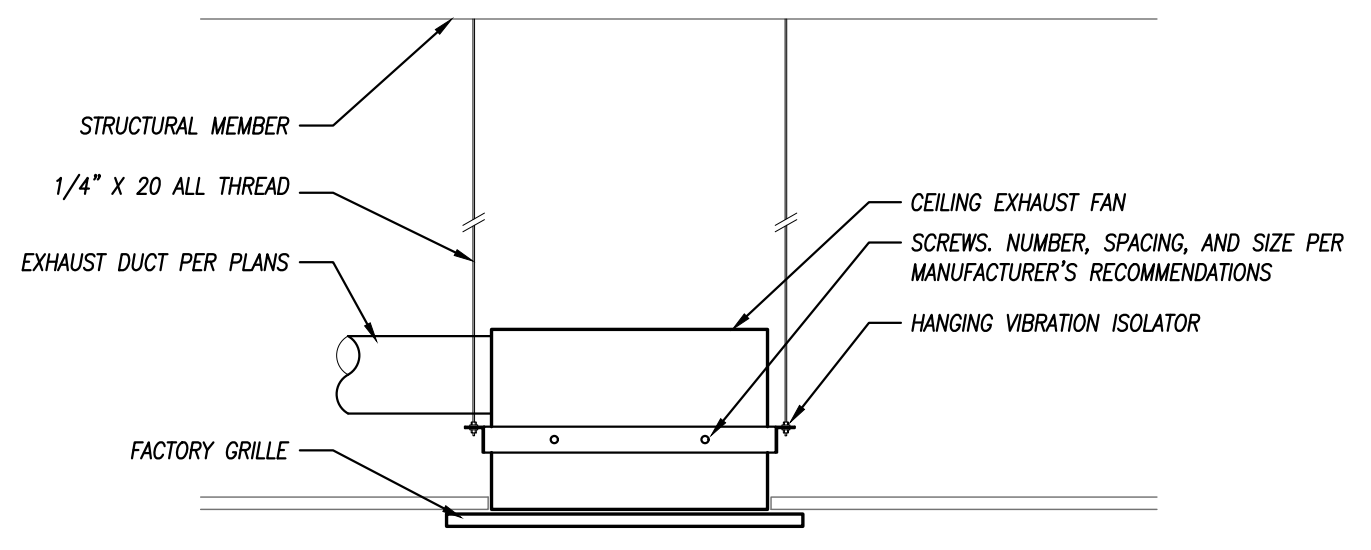
PURPOSE	DUTY	DUCT		INSULATION			NOTES
		LOCATION	STYLE	MATERIAL	APPLICATION	THICKNESS	
SUPPLY	LOW PRESSURE/VELOCITY	CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
		CONCEALED	ROUND	MINERAL FIBER	WRAPPED	1-1/2"	----
		EXPOSED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
	ALL	EXPOSED	ROUND	FIBERGLASS	LINED	1/2"	----
		UNCONDITIONED ATTICS	ALL	MINERAL FIBER	WRAPPED	1-1/2"	1
		EXTERIOR	ALL	FLEXIBLE ELASTOMERIC	WRAPPED	2"	----
RETURN	LOW PRESSURE/VELOCITY	CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
		CONCEALED	ROUND	MINERAL FIBER	WRAPPED	1-1/2"	----
		EXPOSED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
	ALL	EXPOSED	ROUND	FIBERGLASS	LINED	1/2"	----
		RETURN/TRANSFER BOOTS	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
		UNCONDITIONED ATTICS	ALL	MINERAL FIBER	WRAPPED	1-1/2"	1
EXHAUST	LOW PRESSURE/VELOCITY	EXTERIOR	ALL	FLEXIBLE ELASTOMERIC	WRAPPED	2"	----
		CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
		CONCEALED	ROUND	FIBERGLASS	LINED	1/2"	2
		EXPOSED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
	GREASE HOOD EXHAUST	ALL	ALL	FIBERGLASS	LINED	1/2"	2
						2 HOUR UL LISTED FIRE RATED WRAP SYSTEM	----

NOTES:  
 1. IN ADDITION TO OTHER SCHEDULED INSULATION.  
 2. PROVIDE LINER ONLY WITHIN 10' OF FAN FOR ACOUSTICS.  
 3. INSTALL FROM UNIT DISCHARGE TO FIRST DUCT ELBOW, THEN 10' FURTHER. NOT REQUIRED INSIDE CHASES OR MECHANICAL ROOMS, BUT SHALL BE INSTALLED ON REMAINING DUCTWORK WHEN 10' DIMENSION FALLS OUTSIDE ROOM.

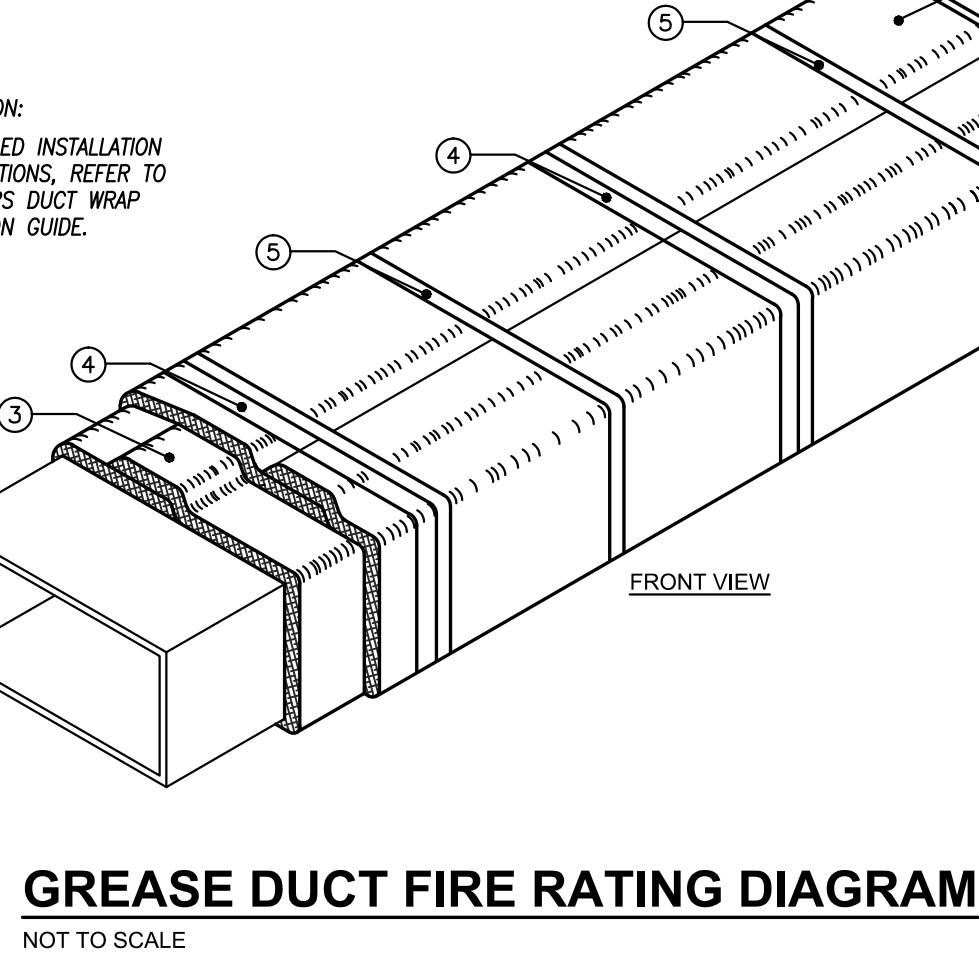
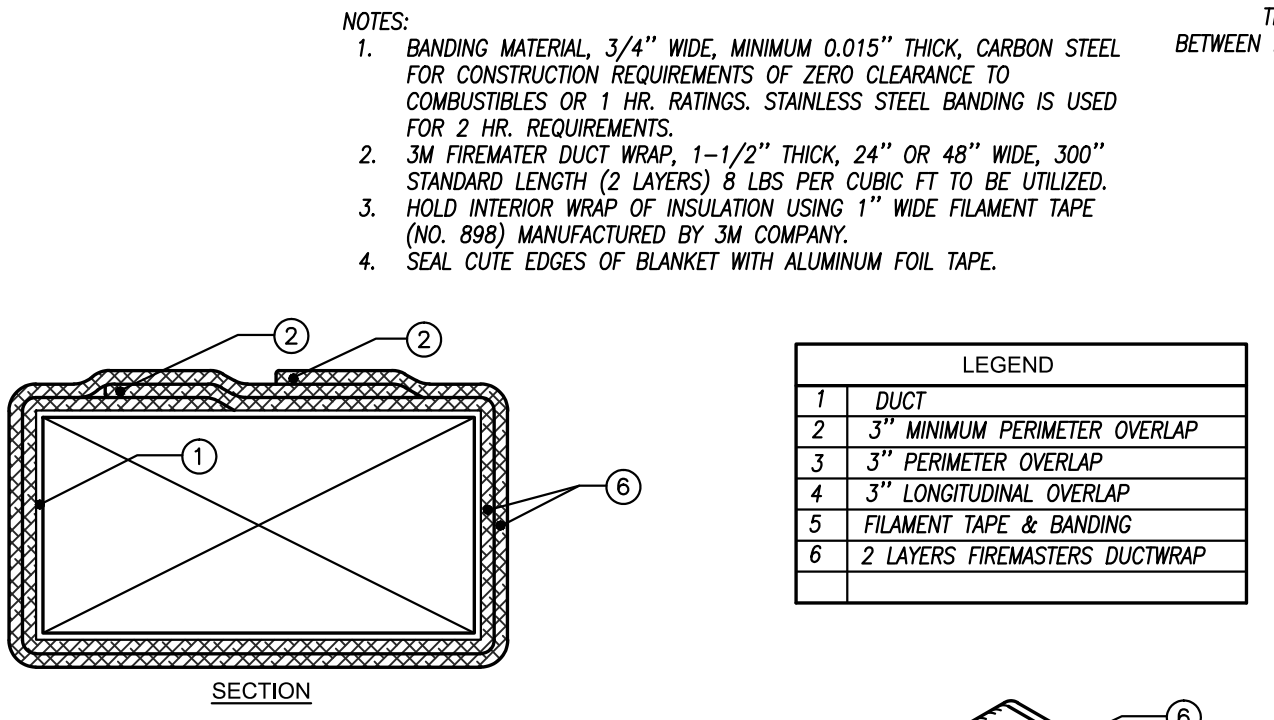
GENERAL REMARKS (APPLICABLE TO ALL TYPES):  
 1) ALL DUCTWORK, INSULATION AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.  
 2) ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2010 REQUIREMENTS AT A MINIMUM.  
 3) REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION FOR INSULATION PRODUCTS AND SYSTEMS.



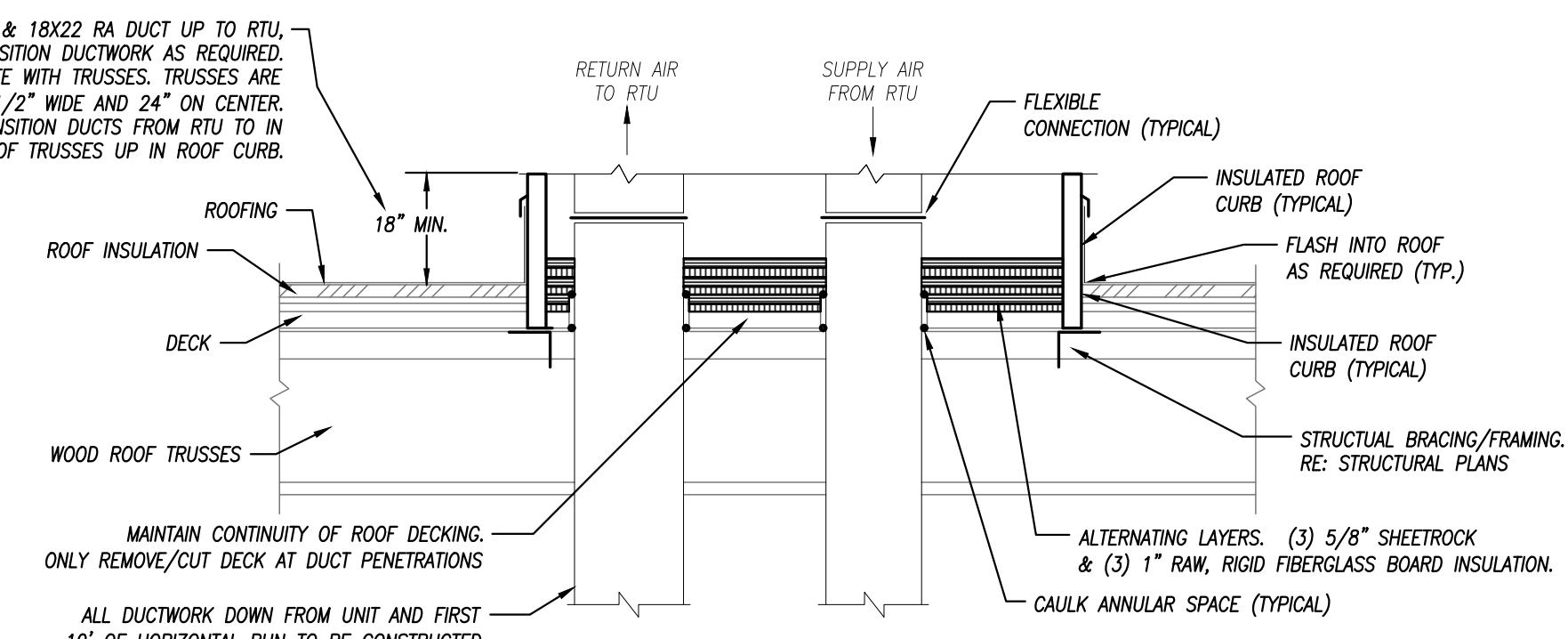
**DINING ROOM DIFFUSER DETAIL**  
NOT TO SCALE



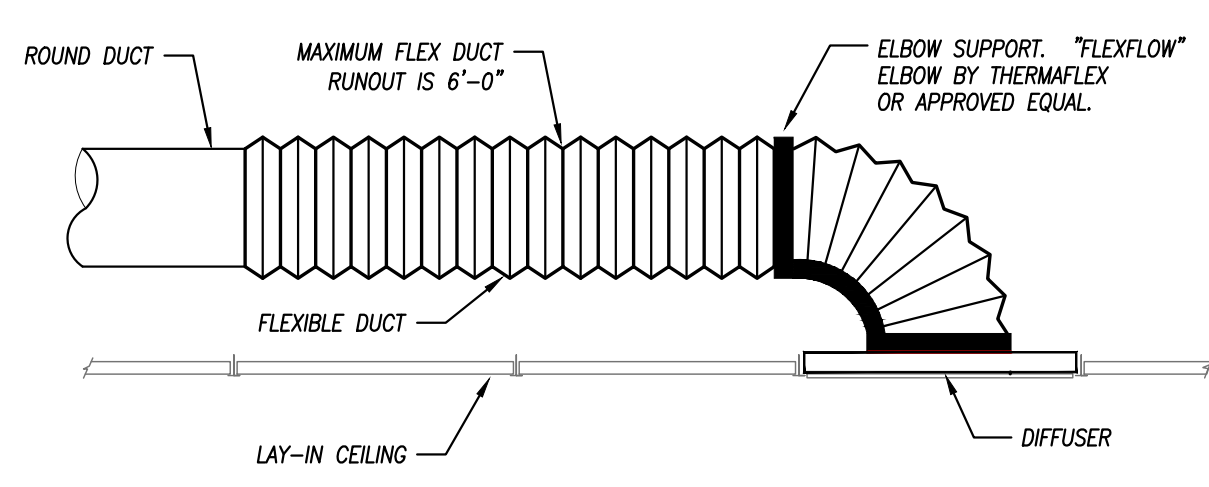
**CABINET EXHAUST FAN MOUNTING DETAIL**  
NOT TO SCALE



**GREASE DUCT FIRE RATING DIAGRAM**  
NOT TO SCALE

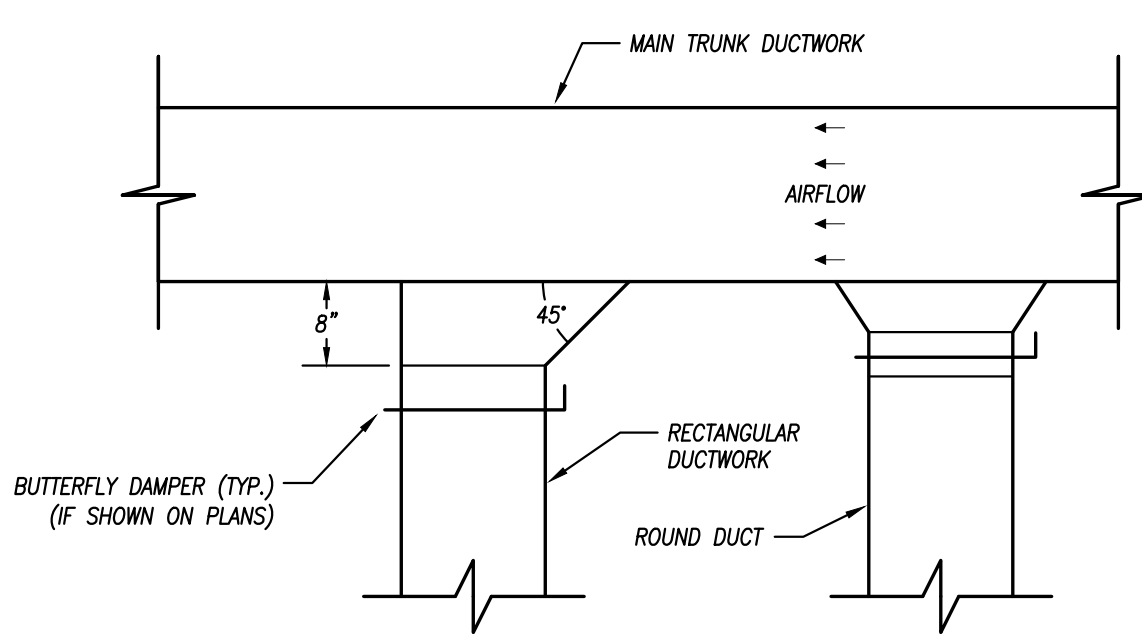


**RTU / DOAS UNIT CURB DETAIL**  
NOT TO SCALE



NOTES:  
 1. NOTE: INSTALL FLEXIBLE DUCTWORK SUPPORTS AT ALL ROUND NECK OUTLETS/INLETS UNLESS OTHERWISE NOTED ON DRAWINGS.  
 2. FLEXIBLE DUCTWORK IS NOT TO BE USED IN UNACCESSIBLE LOCATIONS. (ABOVE GYP. BOARD CEILINGS, ETC.)

**FLEXIBLE DUCT CONNECTION TO DIFFUSER**  
NOT TO SCALE



**DUCTWORK TAKEOFF**  
NOT TO SCALE

HVAC Details & Schedules

Freddy's Frozen Custard & Steakhouses  
 Rushmore Crossing II Addition - Lot 1  
 Egin Street, Rapid City, SD

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SHEET NUMBER

M201

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FAN UNIT NO.	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
1	ITEM 74.1	1	CASREIBDD	CAPTIVEAIRE	1600	1.500	1170	DIP-PREMIUM	1.000	0.6820	3	208	3.8	928 FPM	261	17.2
2	ITEM 74.2	1	BURSHFA	CAPTIVEAIRE	1946	1.250	1329	TEAD-ECH	1.000	0.3770	1	208	6.9	331 FPM	100	11

**DDAS/RTU FAN SCHEDULE - JOB#6570092**

FAN UNIT NO.	TAG	QTY	DDAS/RTU MODEL #	FAN INFORMATION	BLOWER	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	WEIGHT (LBS)	ELECTRICAL INFORMATION										COOLING INFORMATION				REHEAT INFORMATION				GAS HEAT INFORMATION		NOTES							
										ESP	HP	PHASE	VOLT	MCA	MDCP	OUTSIDE AIR DB	OUTSIDE AIR WB	MIXED AIR DB	MIXED AIR WB	LEAVING AIR DB	LEAVING AIR WB	IP	TOTAL	SENS.	IEER	ISHRE	DISCHARGE DB	DISCHARGE WB	CAPACITY DESIRED		CAPACITY MAX	MOISTURE REMOVAL RATE	GAS TYPE	INPUT BTU/h	OUTPUT BTU/h	TEMP RISE	REQUIRED INPUT GAS PRESSURE
3	ITEM 74.3	1	CASRTU3-L400-18-12ST	CAPTIVEAIRE	18P-3	0	2600	2600	2390	0.500	2.00	3	208	57.1A	60A	77.9°F	69.5°F	77.9°F	69.5°F	52.2°F	52.2°F	52.3°F	131.7 MBH	64.2 MBH	21.3	4.1	70.0°F	38.9°F	46.3 MBH	101 MBH	61.8 LBS/HR	NATURAL	299223	242371	84°F	7 IN. W.C. - 14 IN. W.C.	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15

- NOTES:**
- INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR. DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL.
  - DIRECT DRIVE PLENUM BLOWER. BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE.
  - INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER.
  - REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE.
  - EC MOTOR CONDENSING FANS.
  - ELECTRONIC EXPANSION VALVE. TXV NOT ACCEPTABLE.
  - SUCTION LINE ACCUMULATOR.
  - FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER.
  - AVERAGING INTAKE, EVAP AND DISCHARGE TEMPERATURE SENSORS (DISCHARGE SENSOR TO BE FACTORY MOUNTED WITHIN UNIT).
  - 2" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION-MINIMUM 60GA EXTERIOR W/ 14GA BASE.
  - 85% EFFICIENT FURNACE WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE. 64 TURNDOWN WITH NG AND 51 TURNDOWN WITH LP.
  - SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE.
  - FULLY MODULATING HEAT GAS REHEAT.
  - HAUL GUARD FOR CONDENSING COIL.
  - DOWN DISCHARGE/DOWN RETURN.

**FAN OPTIONS**

FAN UNIT NO.	TAG	QTY	DESCRIPTION
1	ITEM 74.1	1	UTILITY SET GREASE CUP
		1	2 YEAR PARTS WARRANTY
		1	GREASE BOX
		1	EXHAUST FAN HEAT BAFFLE
2	ITEM 74.2	1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	ECH WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREVIEW (TELCD MOTOR), CCV ROTATION
		1	2 YEAR PARTS WARRANTY
		1	RTU HEATED FURNACE CONDENSATE DRAIN KIT. REQUIRED FOR WINTER DESIGN TEMP OF 0 DEGREES F AND LOWER
		1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE
		1	INTAKE FIRESTAT SET TO 135°F
		1	FIRESTAT
		1	DISCHARGE FIRESTAT SET TO 240°F
		1	SHIP LOOSE GAS STRAINER 1"
		1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU 750VA TRANSFORMER USED IF A NON-DCV PREVIEW CONTROLS THIS UNIT, THE #89, #47, #44, OR #22 PREVIEW OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREVIEW.
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED
		1	RTU3 DOWN DISCHARGE, 400, 500 MBH
		1	2" MERV 13 FILTERS FOR RTU3 (QTY. 4)
		1	2" MERV 8 FILTERS FOR RTU3 (QTY. 4)
3	ITEM 74.3	1	CONTROL PANEL ENCLOSURE HEATER 100W - RECOMMENDED FOR WINTER DESIGN TEMPERATURES LESS THAN 0°F
		1	SPECIAL ORIFICES FOR IF HEATERS ABOVE 2,000"
		1	24VAC FIRE INPUT
		1	RTU3 DOWN RETURN
		1	RTU RETURN MOUNTED SMOKE DETECTOR AND SAMPLING TUBE - FACTORY INSTALLED
		1	OCCUPIED SCHEDULING
		1	CLOGGED FILTER SWITCH - NOTIFICATION ON HMI
		1	12.5 TON MODULATING COOLING OPTION, 208/230V, R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECH CONDENSING FANS
		1	12.5 TON MODULATING REHEAT OPTION - SPACE DEWPOINT CONTROL
		1	RTU INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI
		1	RTU3 HAIL GUARD
		1	RTU3 CURB DUCT HANGER
		1	UNIT MOUNTED VFD CONFIGURED FOR DCV
		1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS)

**FAN ACCESSORIES**

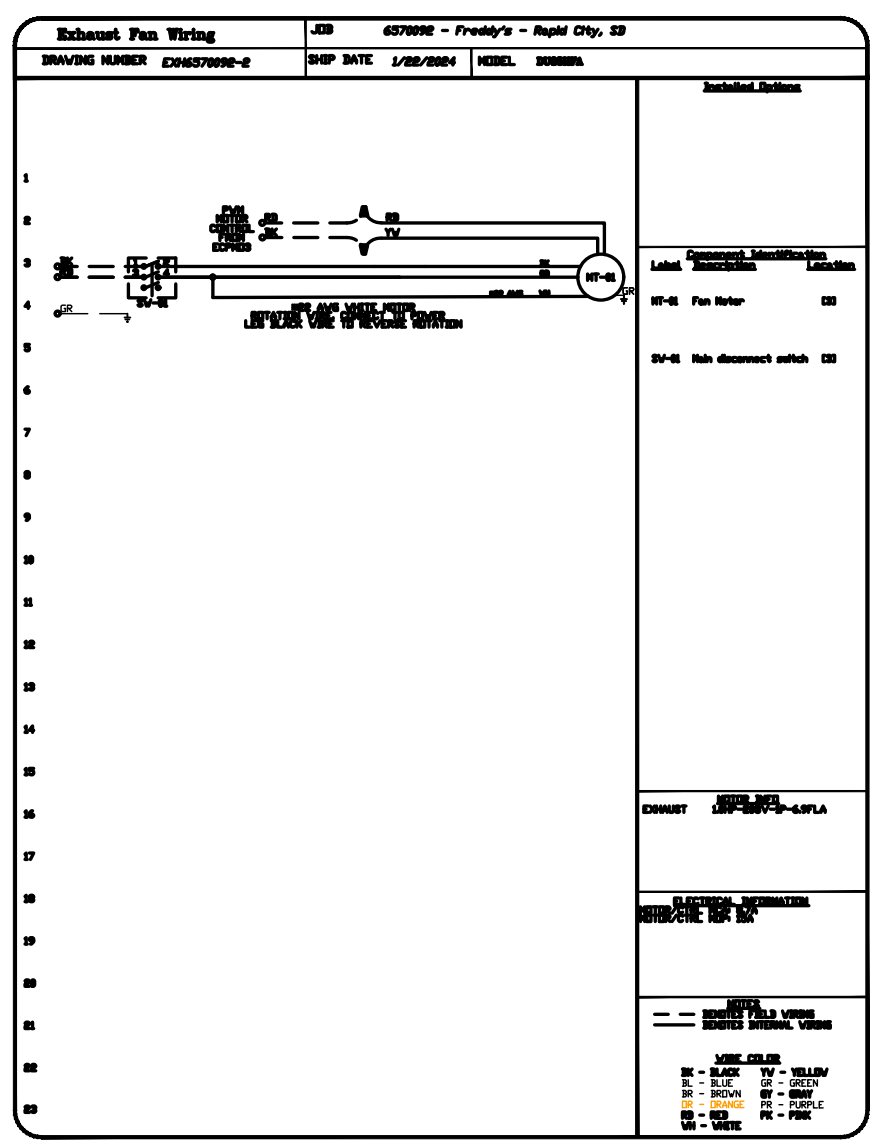
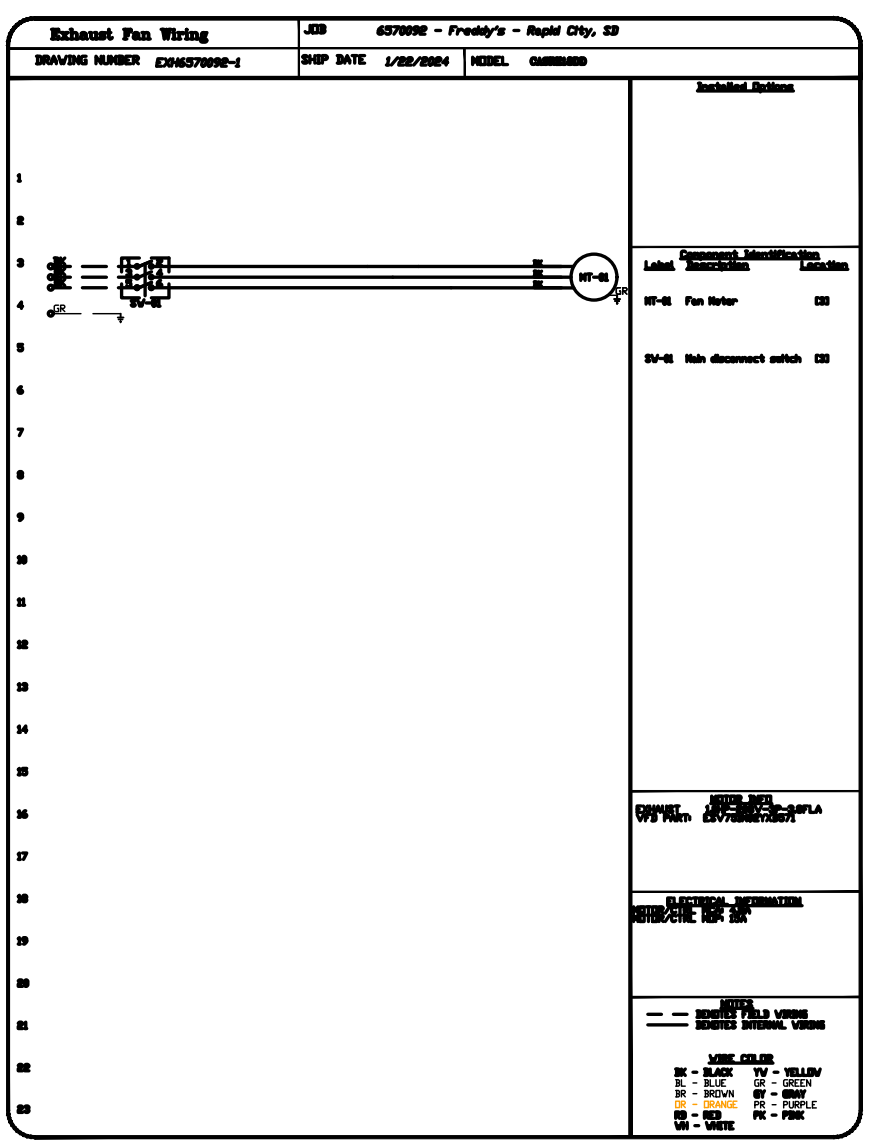
FAN UNIT NO.	TAG	EXHAUST			SUPPLY		
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	ITEM 74.1	YES					
2	ITEM 74.2	YES					

**CURB ASSEMBLIES**

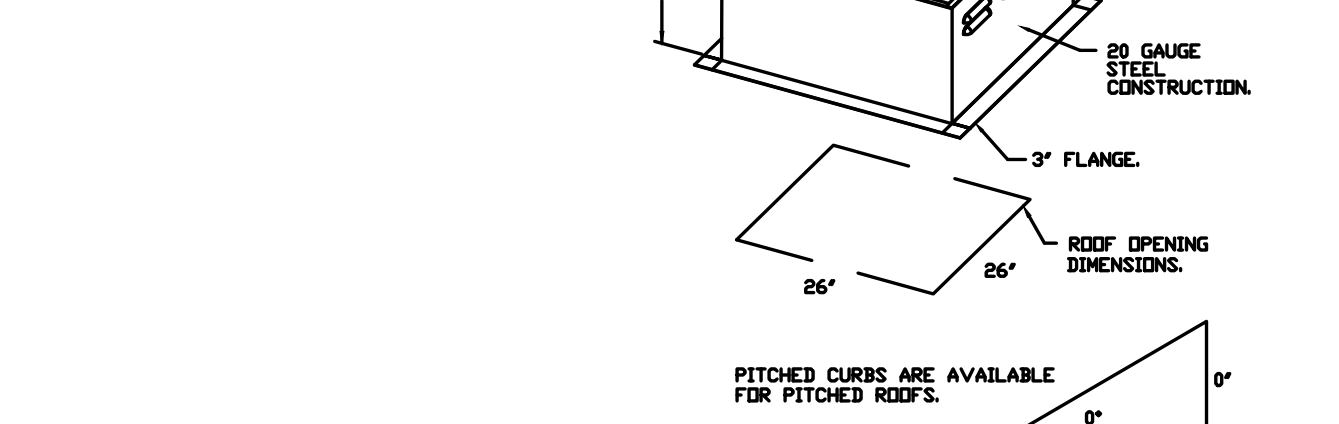
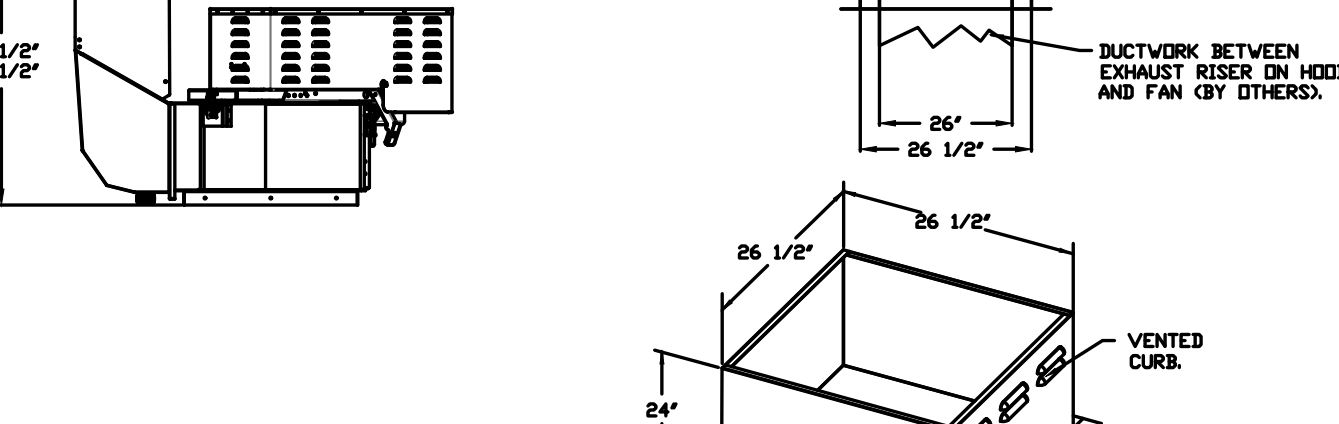
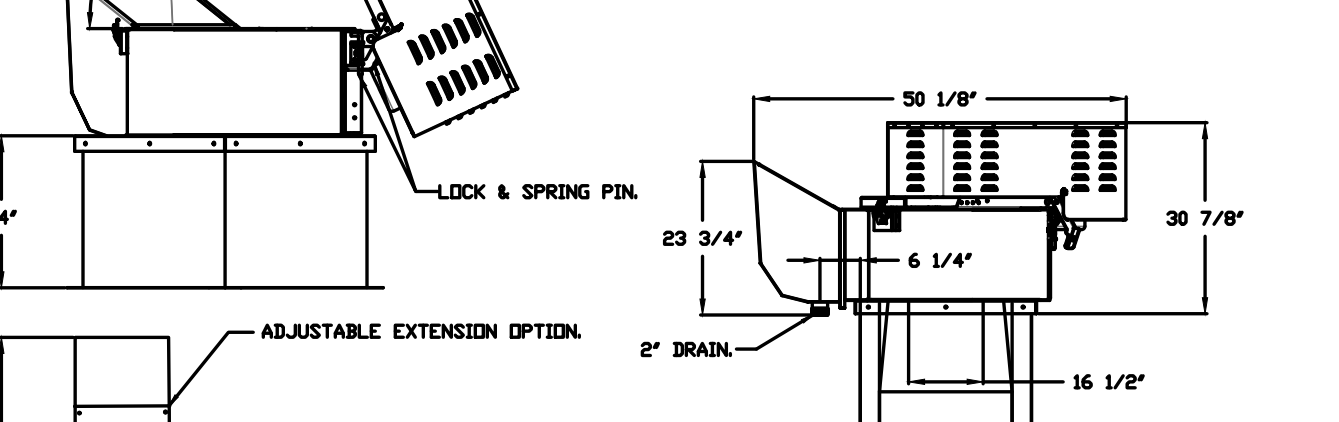
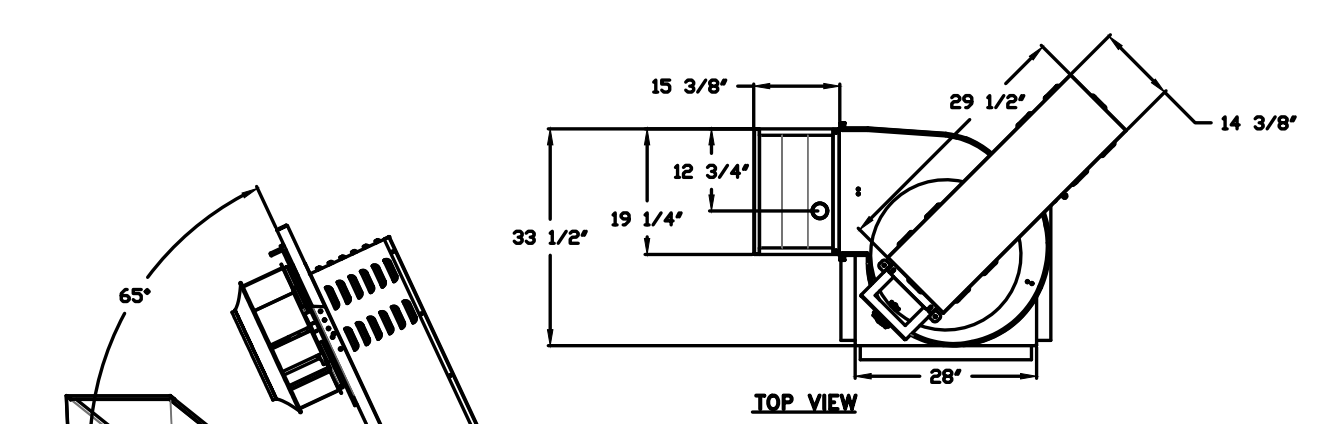
NO.	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	ITEM 74.1	52 LBS	CURB	26.500"W X 26.500"L X 24.000"H VENTED HINGED.
2	# 2	ITEM 74.2	36 LBS	CURB	23.000"W X 23.000"L X 20.000"H VENTED HINGED.
3	# 3	ITEM 74.3	104 LBS	CURB	59.500"W X 91.000"L X 14.000"H INSULATED.

**HMI SCHEDULE**

UNIT NUMBER	HMI #	HMI LOCATION	TEMP AVERAGING	MODBUS ADDRESS
FAN #3	HMI #1 - UNIT	HMI # 1	MOUNTED IN UNIT	55
FAN #3	HMI #2 - SPACE	HMI # 1	KITCHEN	56
FAN #3	HMI #3 - SPACE	HMI # 2	OFFICE	57



FAN #1 CASREIBDD - EXHAUST FAN (ITEM 74.1)



**FEATURES:**

- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL752 AND UL-C-564S.
- HIGH HEAT OPERATION DIRECT DRIVE 300°F (149°C).
- HEAT SLINGER.
- GREASE CLASSIFICATION TESTING.
- TILT DUT WHEEL.
- LOCKING PIN FOR POWER PACK.
- MOTOR WEATHER COVER.
- INTERLOCKED DISCONNECT SWITCH.
- NEMA 4X SAFETY DISCONNECT SWITCH.

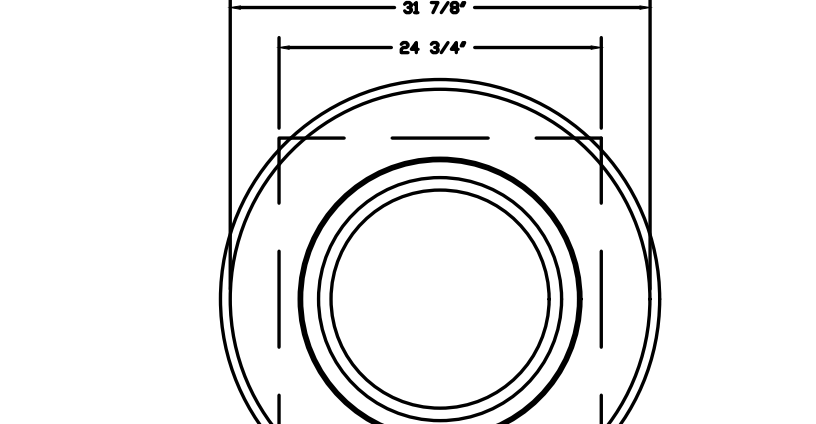
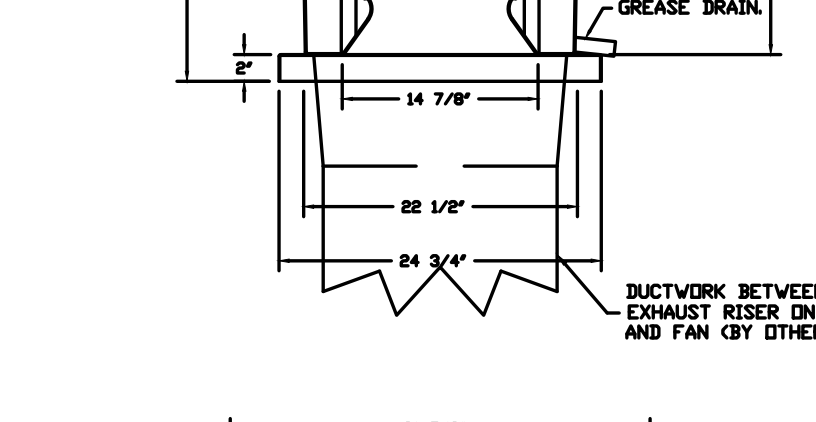
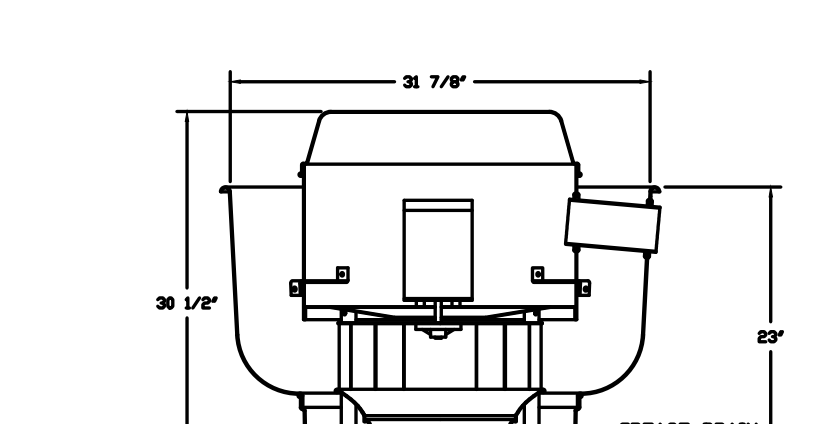
**NORMAL TEMPERATURE TEST DIRECT DRIVE EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.**

**ABNORMAL FLARE-UP TEST BELT & DIRECT DRIVE EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.**

**OPTIONS:**

- UTILITY SET GREASE CUP.
- REHEAT - DISCHARGE EXTENSION ASSEMBLY WITH HANGARS.
- 2 YEAR PARTS WARRANTY.

FAN #2 BURSHFA - EXHAUST FAN (ITEM 74.2)



**TOP VIEW**

**FEATURES:**

- DIRECT DRIVE CONSTRUCTION ON BELTS/PULLEYS.
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL752 AND UL-C-564S.
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION SINGLE PHASE.
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 4X SAFETY DISCONNECT SWITCH.

**NORMAL TEMPERATURE TEST EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.**

**ABNORMAL FLARE-UP TEST EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.**

**OPTIONS:**

- GREASE BOX.
- EXHAUST FAN HEAT BAFFLE.
- FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS
- ECH WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREVIEW (TELCD MOTOR), CCV ROTATION
- 2 YEAR PARTS WARRANTY.

**REVISIONS**

DESCRIPTION	DATE

**CAPTIVEAIRE**

www.captiveaire.com

HBT Foodservice

104 W 9th St Suite 204, Kansas City, MO, 64105 PHONE: (816) 221-8575 FAX: (816) 221-8511 EMAIL: reg@captivair.com

Freddy's - Rapid City, SD  
RAPID CITY, SD, 57701

DATE: 1/22/2024

DWG.#: 6570092

DRAWN BY: michael.co

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

MASTER DRAWING

SHEET NO. 2



11 x 17 = 1/2 scale

**PLAN4**

ARCHITECTURE DESIGN www.plan4arch.com

303 north main street, mcpheerson kansas 620,241,4353

Freddy's Frozen Custard & Steaksburgers  
Rushmore Crossing II Addition - Lot 1  
Eglin Street, Rapid City, SD

HVAC Details & Schedules

Contract Date	
Rev No. 1	
Rev No. 2	
Rev No. 3	
Rev No. 4	
Rev No. 5	
Rev No. 6	
Project Number:	22.02
DWG File	
Designed By:	plan4
Drawn By:	NSG
Approved By:	SWM
Date:	5/24/2024



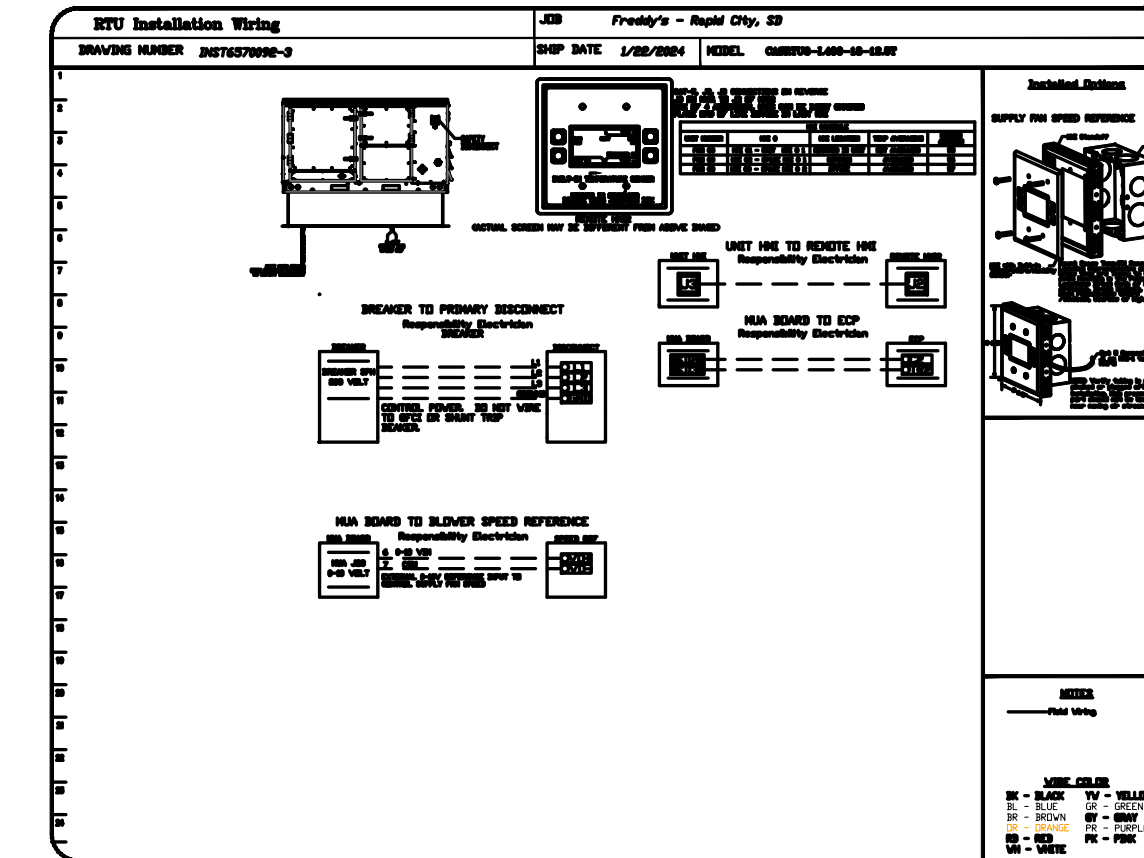
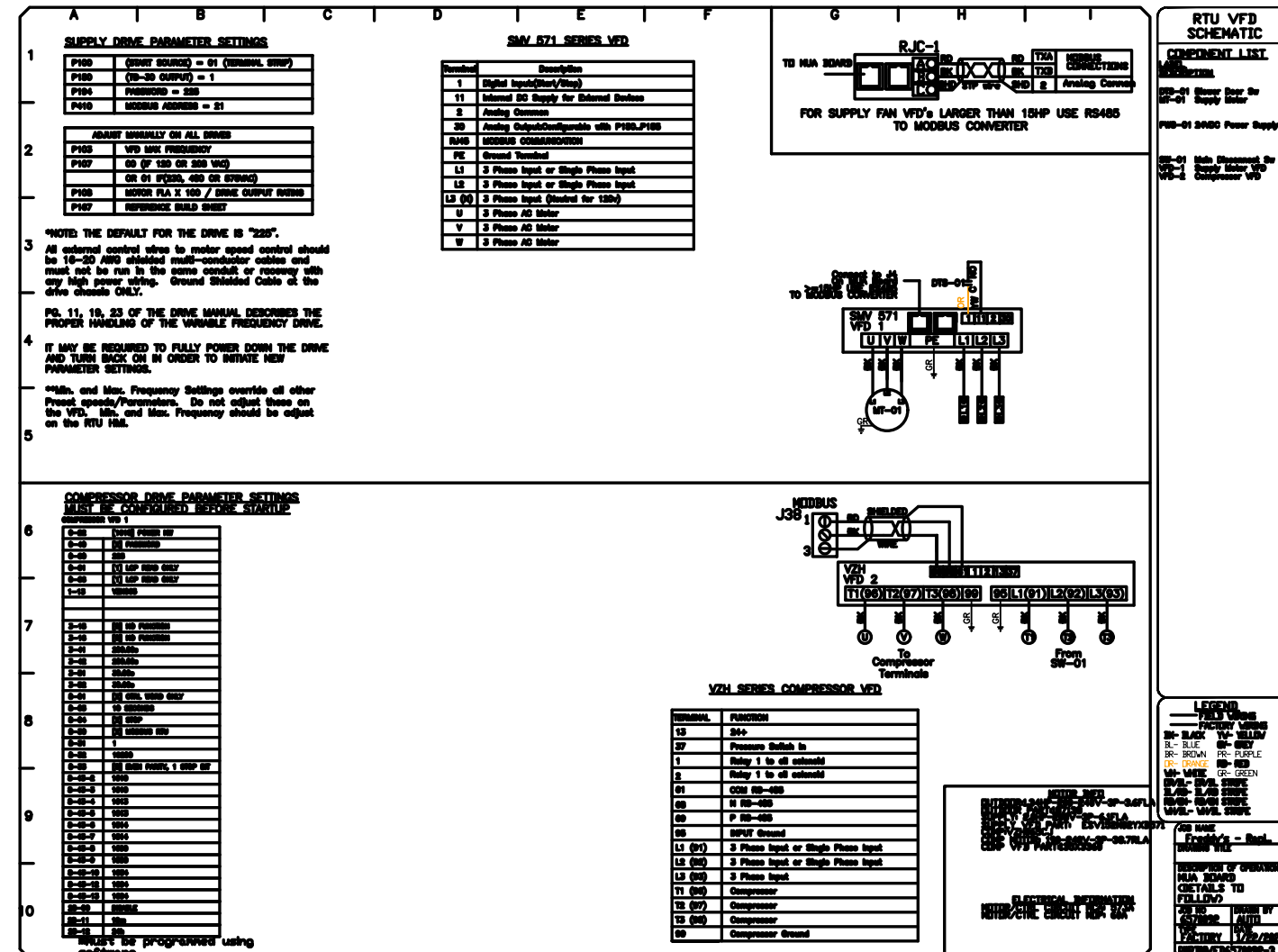
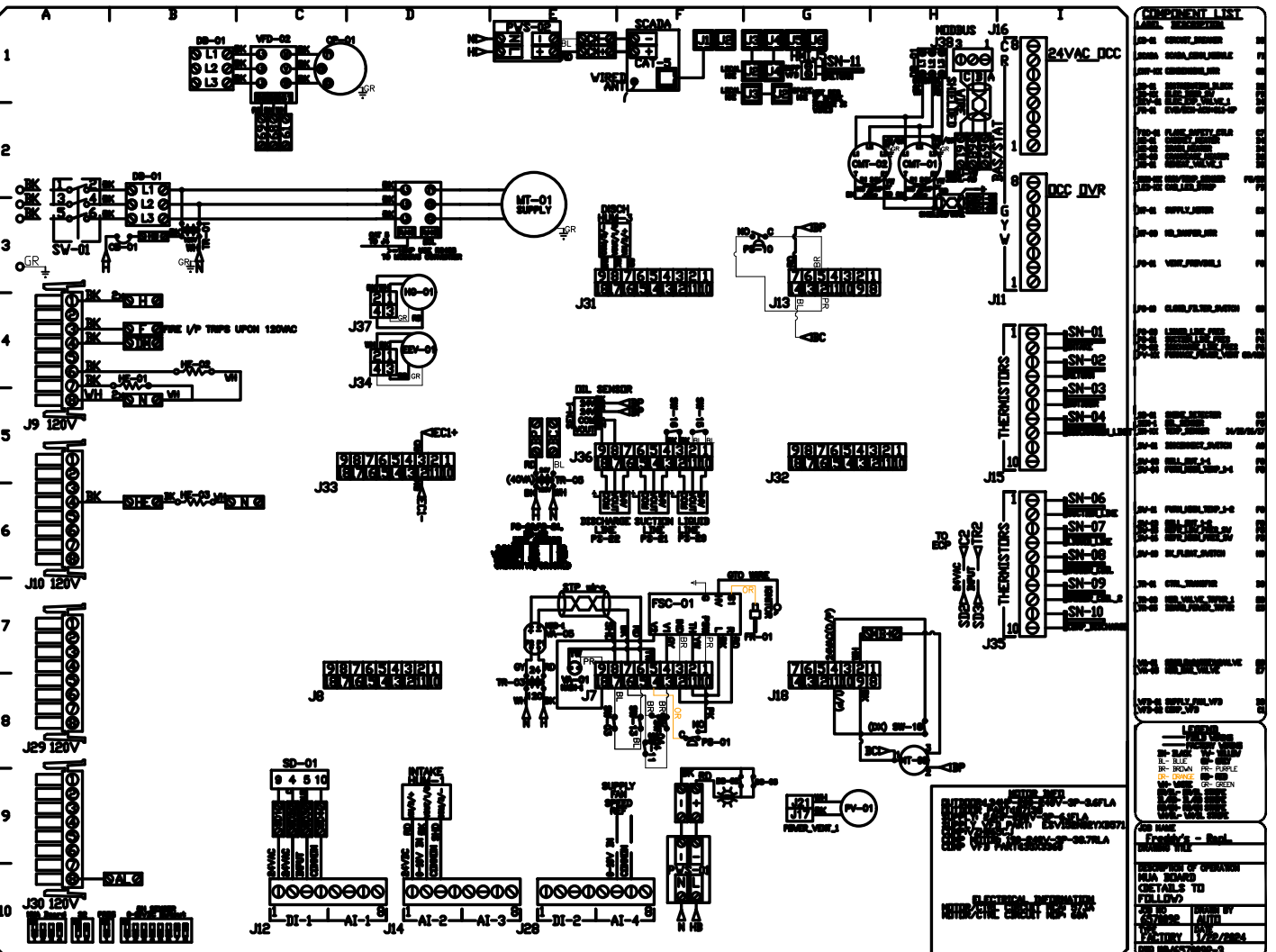
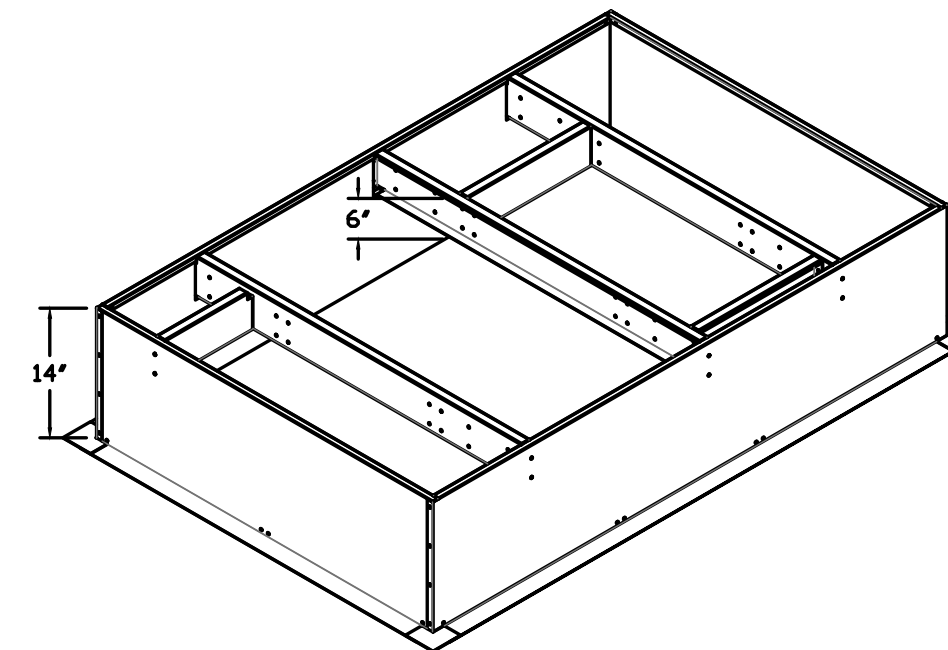
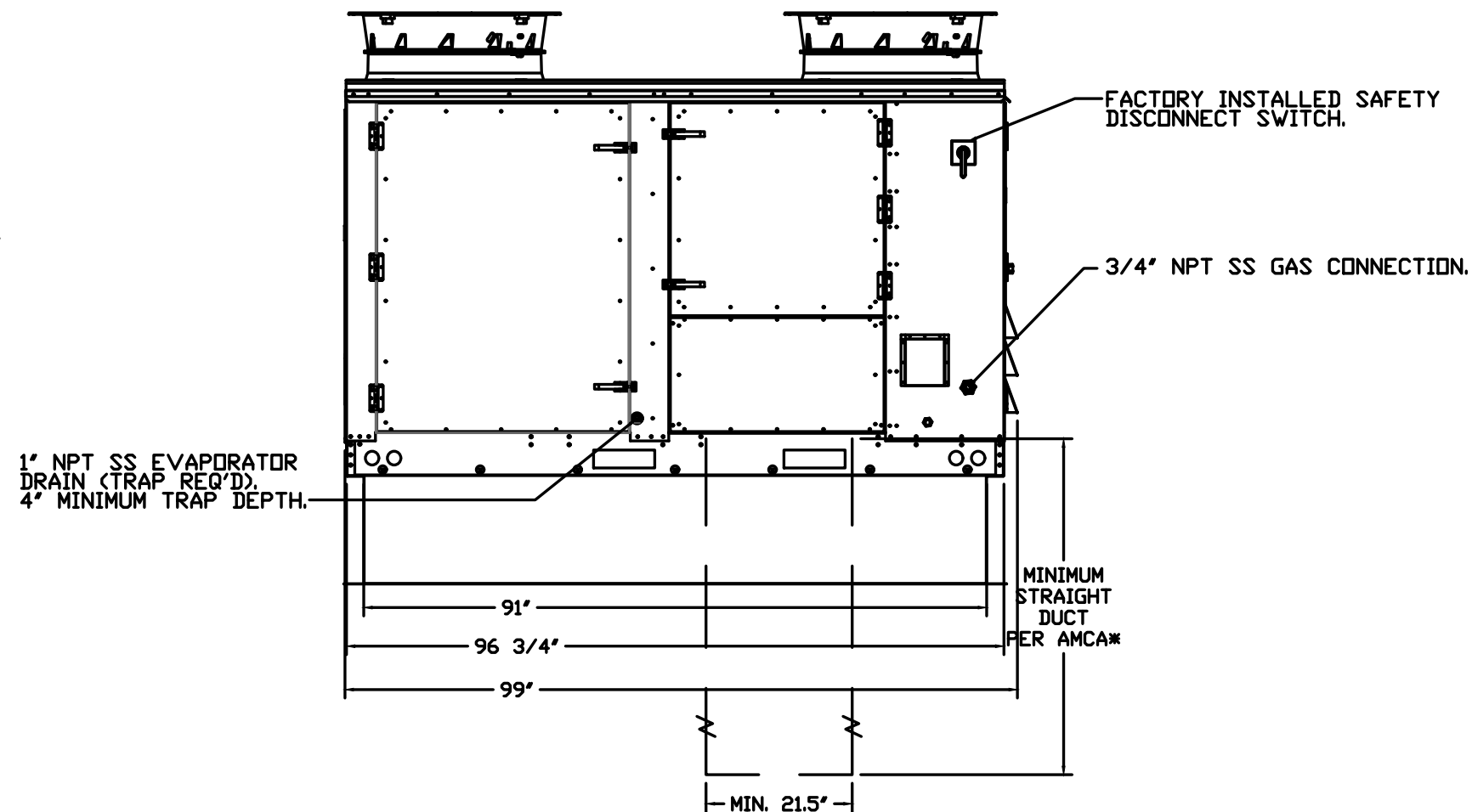
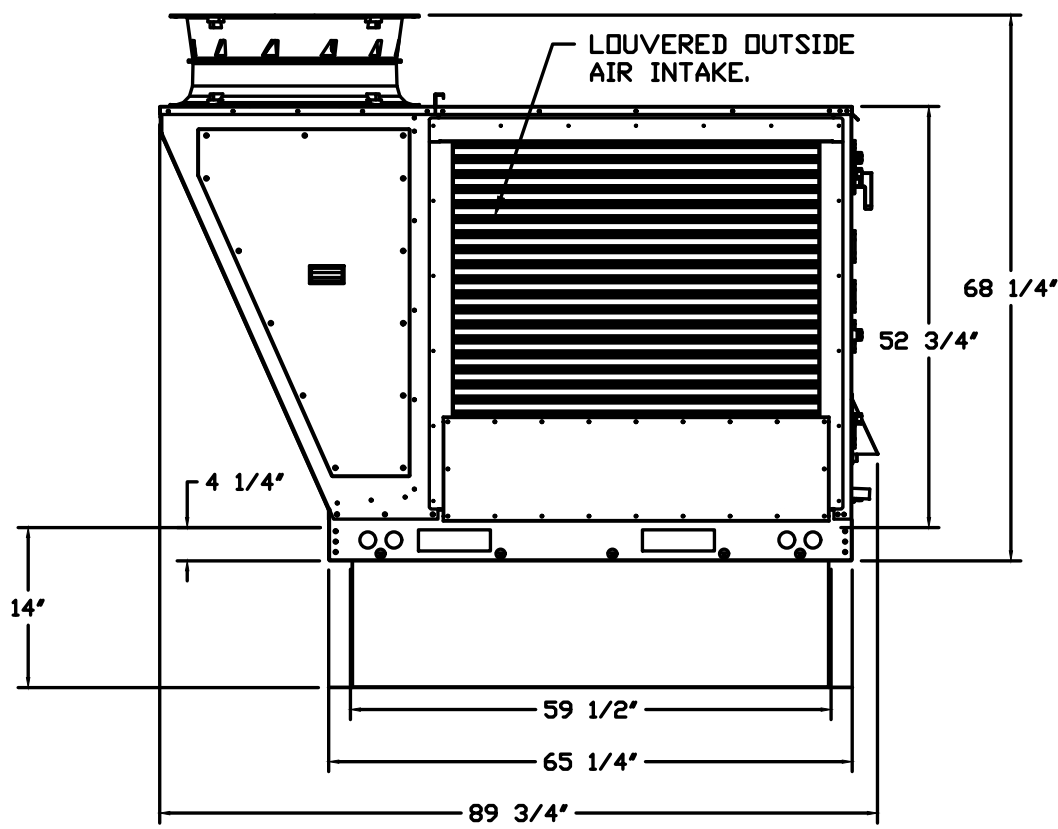
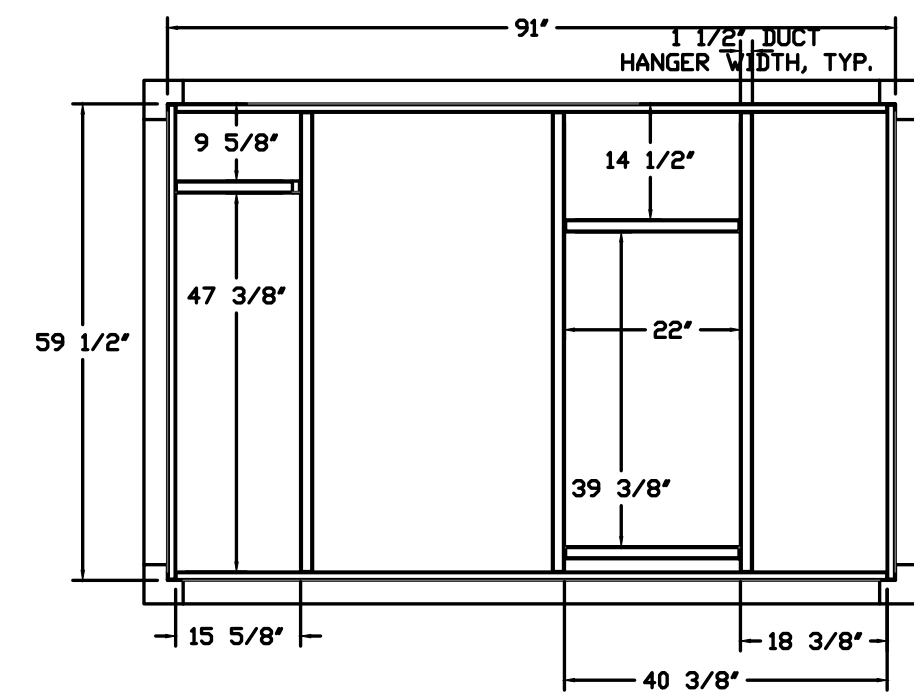
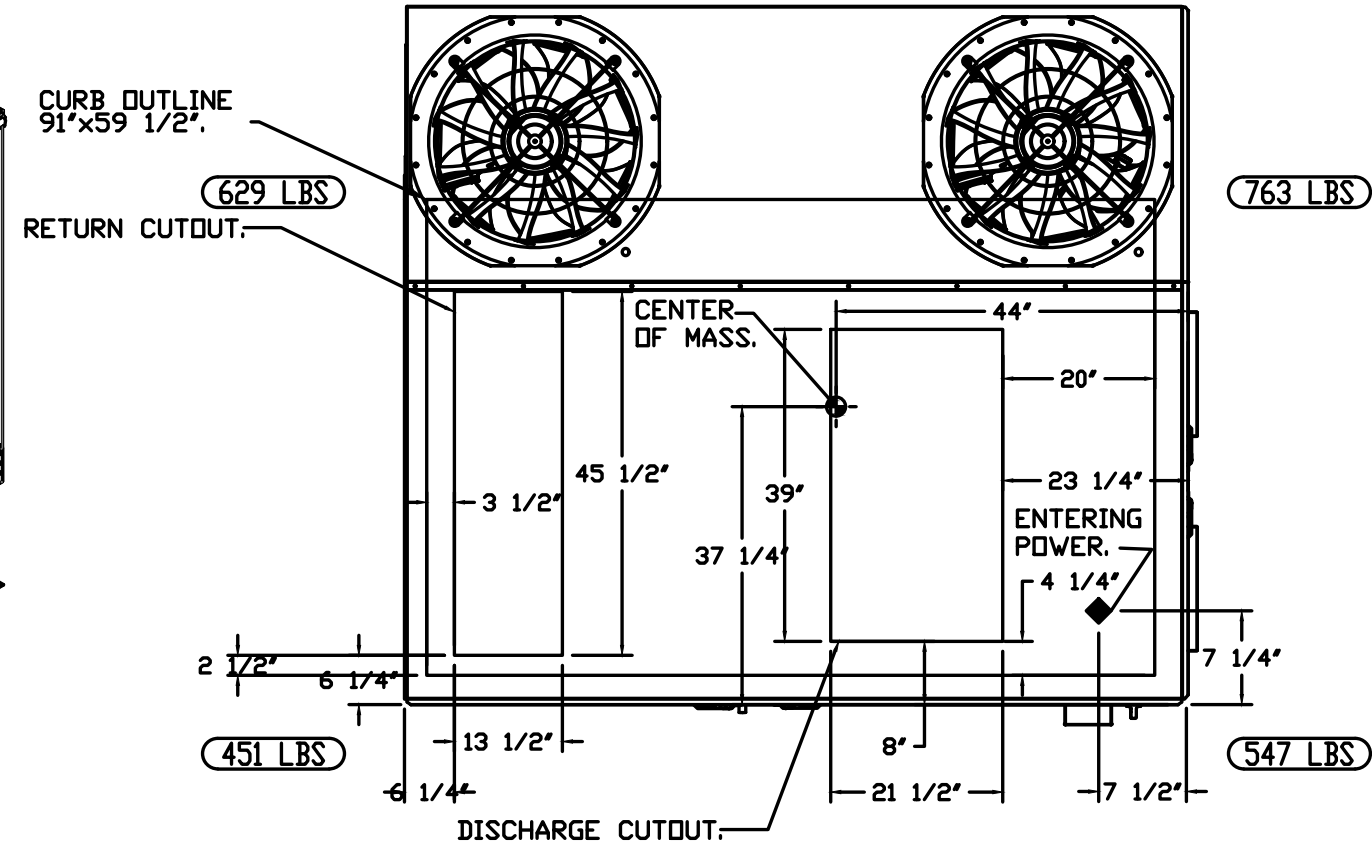
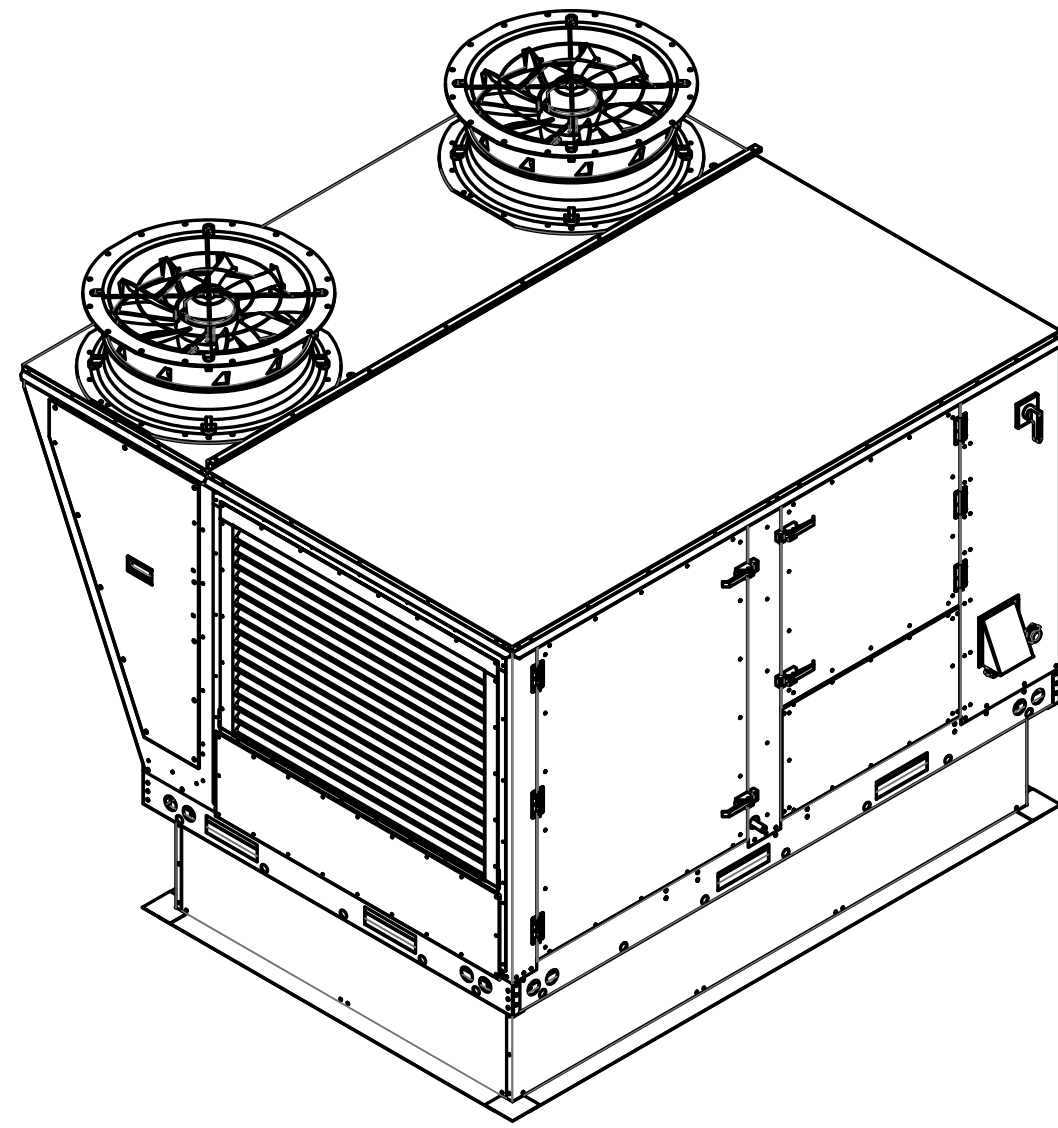
SHEET NUMBER

**M203**

FAN #3 CASRTU3-I.400-18-12.5T - HEATER (ITEM 74.3)

- NOTES:
- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
  - ⌒ DENOTES CORNER WEIGHT.
  - ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS IN BOTH DIRECTIONS.
  - CONNECTION FROM BREAKER TO UNITS SAFETY DISCONNECT SWITCH TO BE COPPER WIRE ONLY.

\*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 21.5" x 39".



**REVISIONS**

DESCRIPTION	DATE

**CAPTIVE**

www.captiveair.com

**HBT Foodservice**

104 W 9th St Suite 204, Kansas City, MO, 64106 PHONE: (816) 221-8575 FAX: (816) 221-8311 EMAIL: reg98@captivaire.com

Freddy's - Rapid City, SD  
RAPID CITY, SD, 57701

DATE: 1/22/2024  
DWG.#: 6570092  
DRAWN BY: michael.co  
SCALE: 1/2" = 1'-0"  
MASTER DRAWING  
SHEET NO. 3

**pkmr** ENGINEERS

PERSONNEL: MICHAEL RYAN ENGINEERS LLC  
2949 SW WANNAMAKER DR., TOPEKA, KANSAS 66614  
783.273.8447 WWW.PKMRNG.COM

**PLAN4** ARCHITECTURE DESIGN

www.plan4arch.com

303 north main street, mcpherson kansas 620.241.4353

**Freddy's Frozen Custard & Steakhburgers**  
Rushmore Crossing II Addition - Lot 1  
Eglin Street, Rapid City, SD

Contract Date

Rev No. 1
Rev No. 2
Rev No. 3
Rev No. 4
Rev No. 5
Rev No. 6

Project Number: 22.02

DWG File

Designed By: plan4

Drawn By: NSG

Approved By: SWM

Date: 5/24/2024



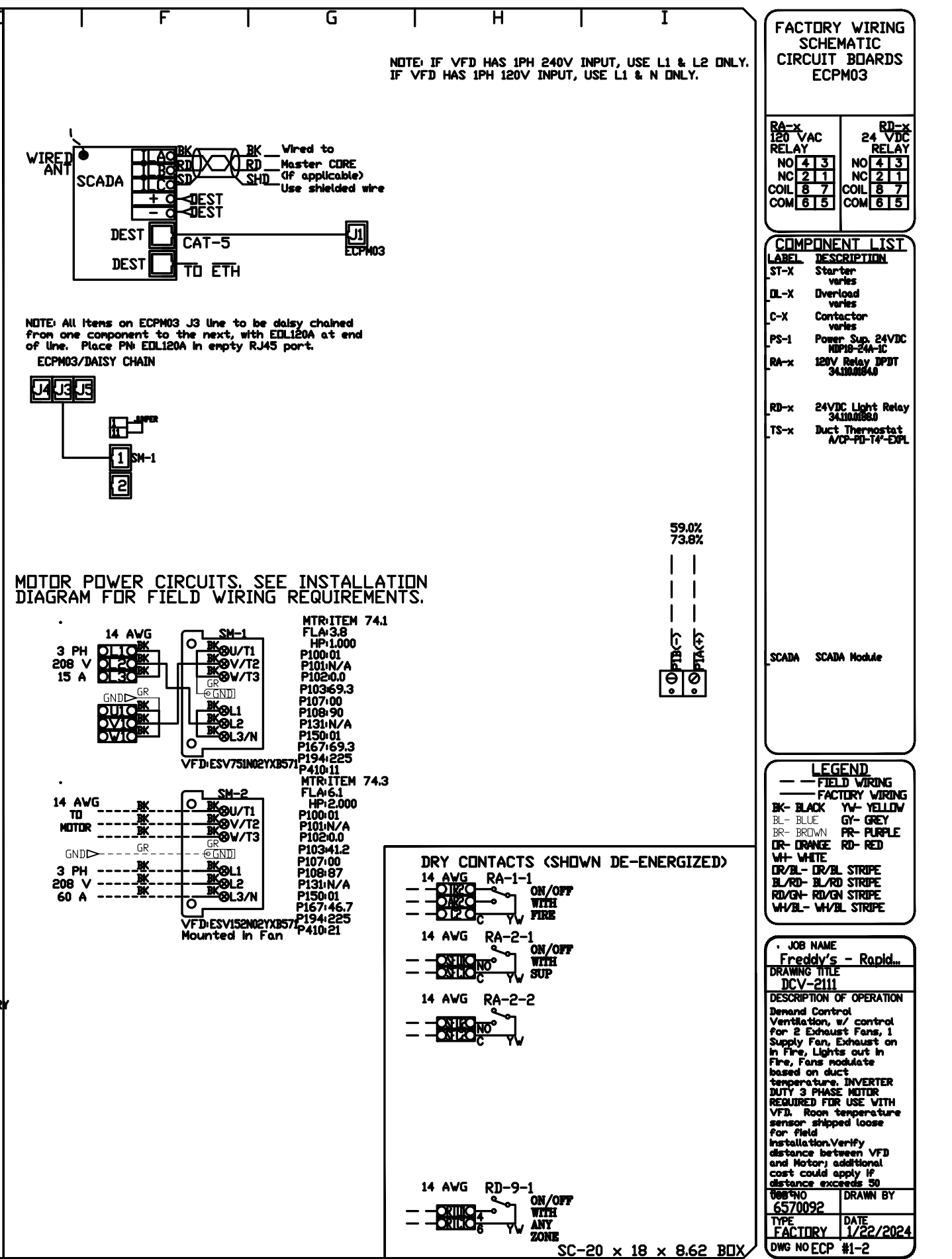
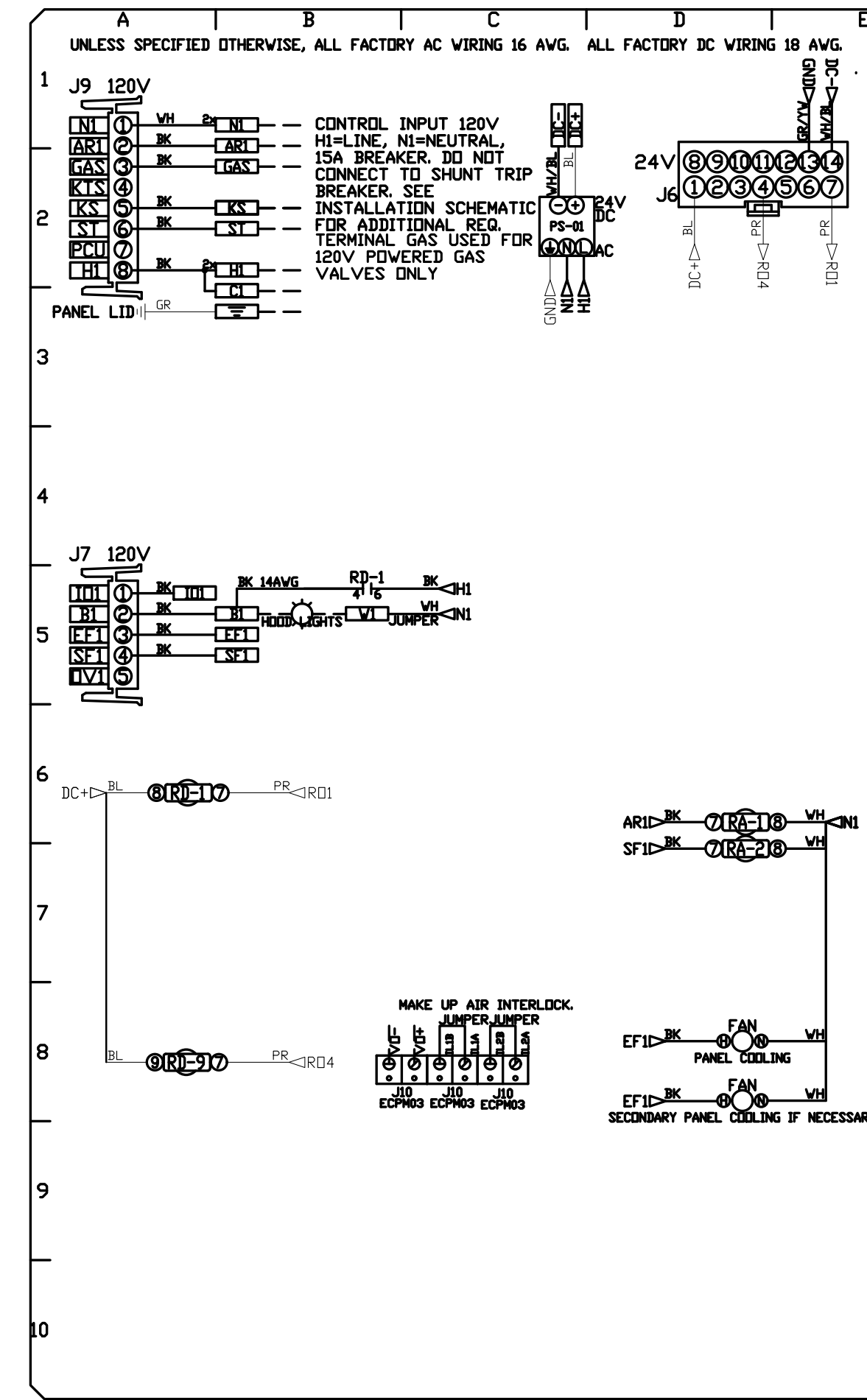
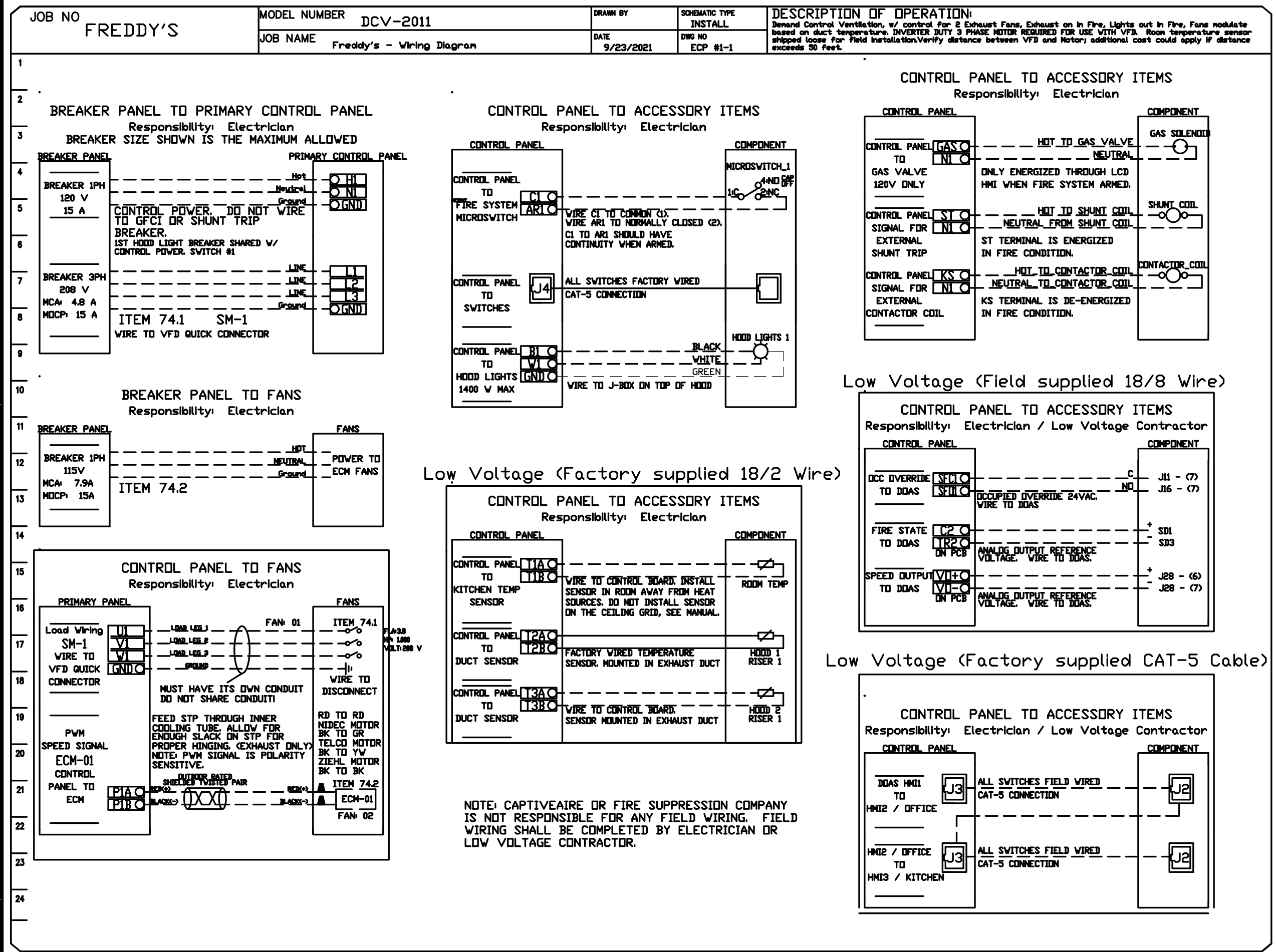
SHEET NUMBER

**M204**

11 x 17 = 1/2 scale

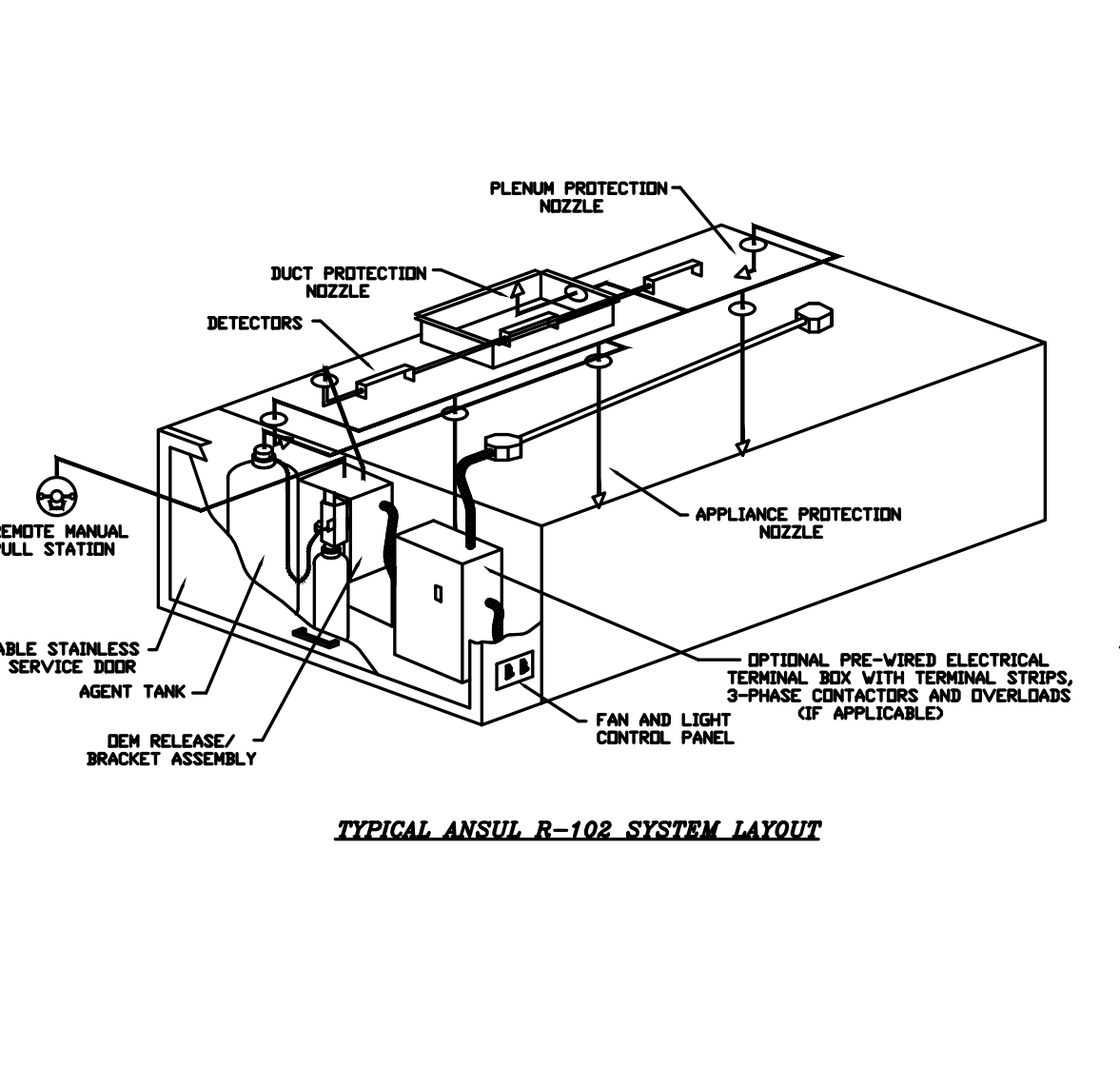
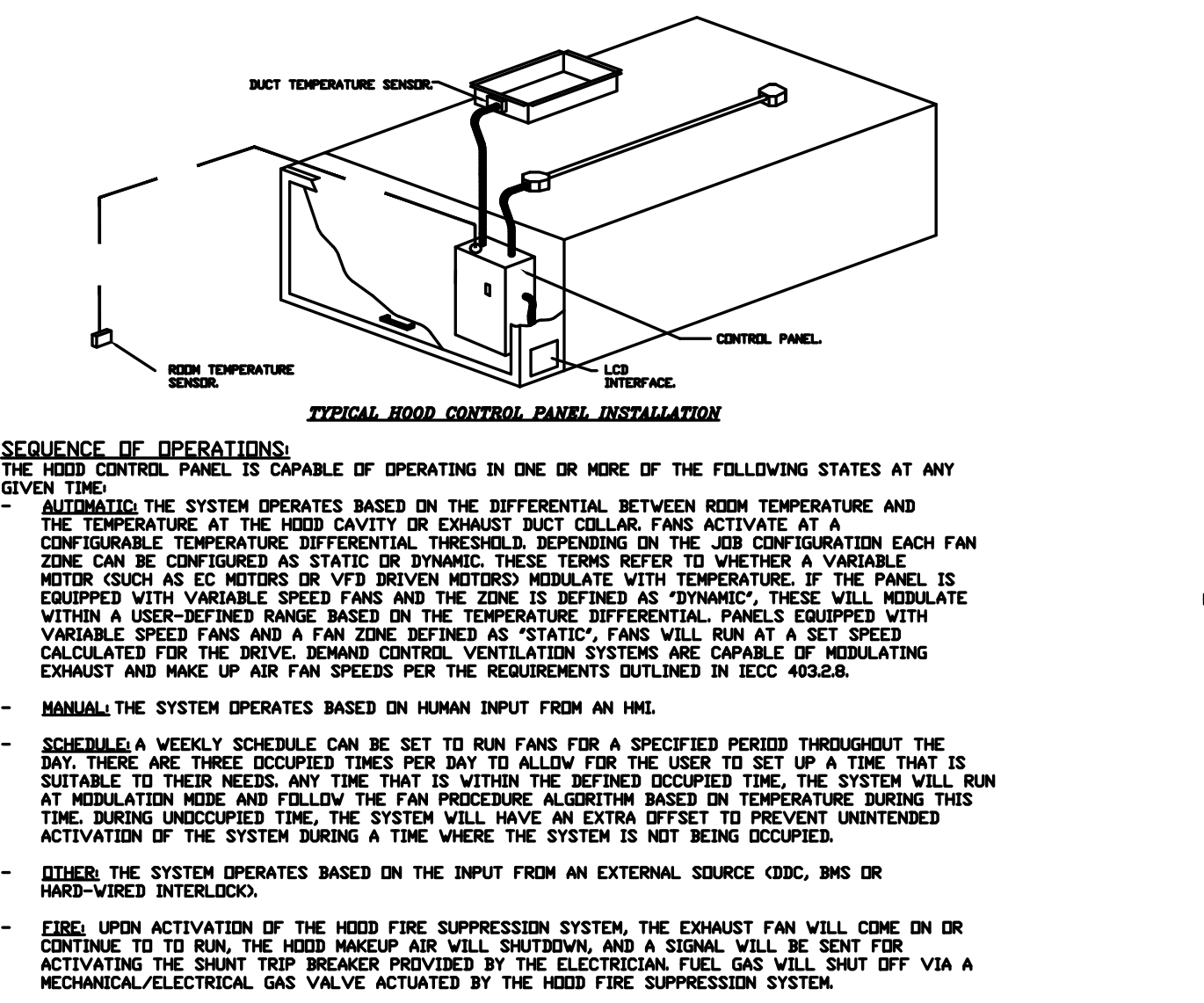
NO	TAG	PACKAGE	LOCATION	SWITCHES	QUANTITY	OPTION
1	EXP-1	DCV-211	UTILITY CABINET LEFT	1 LIGHT	SMART CONTROL DCV	
			HOOD # 1	1 FAN		

FANS CONTROLLED		FAN CONTROLLED	
FAN TAG	TYPE	FAN TAG	TYPE
ITEM 741	EXHAUST 1	ITEM 741	EXHAUST 1
ITEM 742	EXHAUST 1	ITEM 742	EXHAUST 1
ITEM 743	SUPPLY 3	ITEM 743	SUPPLY 3



**DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS:**

- CONTROLS SHALL BE LISTED BY ETL OR UL 508A AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM TURNDOWN REQUIREMENTS OUTLINED IN IECC 403.2.8 (2015).
- THE CONTROL ENCLOSURE SHALL BE NEMA 1 RATED AND LISTED FOR INSTALLATION INSIDE OF THE EXHAUST HOOD UTILITY CABINET. THE CONTROL ENCLOSURE MAY BE CONSTRUCTED OF STAINLESS STEEL OR PAINTED STEEL.
- TEMPERATURE PROBES(S) LOCATED IN THE EXHAUST DUCT RISER(S) SHALL BE CONSTRUCTED OF STAINLESS STEEL.
- A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FANS DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURES. THIS FUNCTION SHALL MEET THE REQUIREMENTS OF IMC 507.1.1.
- A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST SYSTEM IS REDUCED.
- A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN CYCLING.
- VARIABLE FREQUENCY DRIVES (VFDs) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE DIGITAL CONTROLLER SHALL MODULATE THE VFDs BETWEEN A MINIMUM SETPOINT AND A MAXIMUM SETPOINT ON DEMAND. THE DUCT TEMPERATURE SENSOR INPUT(S) TO THE DIGITAL CONTROLLER SHALL BE USED TO CALCULATE THE SPEED REFERENCE SIGNAL.
- THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.
- AN INTERNAL ALGORITHM TO THE DIGITAL CONTROLLER SHALL MODULATE SUPPLY FAN VFD SPEED PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN.
- THE SYSTEM SHALL OPERATE IN PREP MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN SUFFICIENT HEAT REMAINS UNDERNEATH THE HOOD SYSTEM AFTER COOKING OPERATIONS HAVE COMPLETED OPERATION DURING EITHER OF THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE AN EXHAUST FAN SPEED THAT IS EQUAL TO THE MINIMUM VENTILATION REQUIREMENT.
- A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FAN(S), ACTIVATE THE EXHAUST FAN(S), ACTIVATE THE APPLIANCE SHUNT TRIP, AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION IS DETECTED ON A COVERED HOOD.
- A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL VIA DRY CONTACT (EXTERNAL CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).
- AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:
  - INVERT PUSH BUTTON FAN & LIGHT SWITCH ACTIVATION.
  - INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES AND RESET RELAY REQUIRED.
  - VFD FAN/T SPEED DISPLAY WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
  - DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
  - MIS-WIRED DUCT TEMPERATURE SENSOR DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
  - A SINGLE LOW VOLTAGE CAT-5 PLUG WIRING CONNECTION.
  - AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED KWH FROM THE VFDs.



**REVISIONS**

NO.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

**DATE: 1/22/2024**

**DWG.#: 6570092**

**DRAWN BY: michael.co**

**SCALE: 1/2" = 1'-0"**

**MASTER DRAWING**

**SHEET NO. 4**

**CAPTIVEAIRE**

**HBT Foodservice**

104 W 9th St Suite 204, Kansas City, MO, 64108. PHONE: (816) 221-2272. FAX: (816) 221-6511. EMAIL: reg@captivaire.com

**Freddy's - Rapid City, SD**

**RAPID CITY, SD, 57701**

**DATE: 1/22/2024**

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**MASTER DRAWING**

**SHEET NO. 4**

**pkmr ENGINEERS**

PERSONNEL MONKEY RAMP ENGINEERS LLC  
2949 SW MANAWAKEE DR., TOPEKA, KANSAS 66614  
783.273.8407 WWW.PKMR.COM

**11 x 17 = 1/2 scale**

**PLAN4 ARCHITECTURE DESIGN**

303 north main street, mcpherson kansas 672.241.4353

**Freddy's Frozen Custard & Steakhburgers**

**Rushmore Crossing II Addition - Lot 1**

**Eglin Street, Rapid City, SD**

**HVAC Details & Schedules**

Contract Date	Rev No.	Project Number:	DWG File	Designed By:	Drawn By:	Approved By:	Date:
	1	22.02		plan4	NSG	SWM	5/24/2024
	2						
	3						
	4						
	5						
	6						

**REGISTERED PROFESSIONAL ENGINEER**

15004 KEVIN ZIMMERMAN

**SHEET NUMBER M205**