

# FOOD SERVICE EQUIPMENT STANDARD & TYPICAL ELECTRICAL & PLUMBING NOTES AND DETAILS

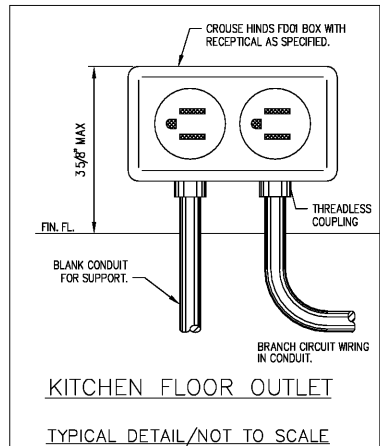
## ELECTRICAL

## PLUMBING

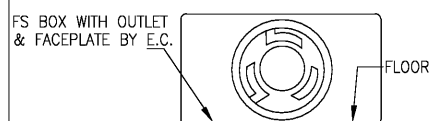
### LEGEND -- ELECTRICAL CONNECTIONS

- DUPLEX RECEPT., 20-AMP, 120-VOLT, GROUND TYPE, HORIZONTAL/VERTICAL MOUNT
- SIMPLEX RECEPT., 20-AMP, 120-VOLT, GROUND TYPE, HORIZONTAL/VERTICAL MOUNT
- SPECIAL PURPOSE OUTLET, 120-VOLT, GROUND TYPE, HORIZONTAL/VERTICAL MOUNT
- SPECIAL PURPOSE OUTLET, 208/240-VOLT AS INDICATED, GROUND TYPE, HORIZONTAL/VERTICAL MOUNT
- JUNCTION BOX
- ELECTRICAL CONDUIT, STUB AS INDICATED FOR DIRECT CONNECTION
- FLOOR/CEILING RECEPTACLE AS INDICATED
- FIELD WIRING, EXPOSED RIGID WATERTIGHT CONDUIT
- FIELD WIRING, CONCEALED IN WALL, FLOOR, OR CEILING

TYPICAL DETAIL/NOT TO SCALE



KITCHEN FLOOR OUTLET  
TYPICAL DETAIL/NOT TO SCALE



FLOOR RECEPTACLE/50 AMP  
TYPICAL DETAIL/NOT TO SCALE

### GENERAL NOTES

- DIMENSIONS INDICATED ARE TO BE VERIFIED AND ADJUSTED AS REQUIRED BY THE EQUIPMENT OR FIELD CONDITIONS. DIMENSIONS SHOWN DO NOT ALLOW FOR OBSTRUCTIONS ON WALLS AT FIXTURE HEIGHTS. ALL DIMENSIONS ARE FROM FINISHED WALL AND FLOOR LINES AND ARE AS ACCURATE AS CAN BE DETERMINED AT THIS TIME. NO RESPONSIBILITY IS ACCEPTED OR IMPLIED FOR ANY DISCREPANCIES BETWEEN DIMENSIONS SHOWN AND ACTUAL FINISHED DIMENSIONS, NOR FOR ANY VARIATIONS IN SERVICE REQUIREMENTS ON FIXTURES DELIVERED TO THE JOBSITE.
- PLUMBING AND ELECTRICAL CONTRACTORS TO FURNISH ALL LABOR AND MATERIALS TO MAKE FINAL CONNECTIONS FROM SERVICE STUBS TO OUTLETS ON FIXTURES, INCLUDING ALL VALVES, FAUCETS, TRAPS, DISCONNECTS, CONTROL PANELS, CORDS, PLUGS, ETC.
- UTILITIES SHOWN SUPPLY FOOD SERVICE ITEMS ONLY, ARCHITECT TO PROVIDE FOR ALL OTHER MECHANICAL REQUIREMENTS, CONVENIENCE OUTLETS, HAND SINKS, LIGHTS, ETC.

### ELECTRICAL CONTRACTOR TO PROVIDE THE FOLLOWING:

- VERIFY ALL ELECTRICAL CHARACTERISTICS WITH ARCHITECT'S ENGINEERING DRAWINGS.
- DIMENSIONS INDICATED ARE TO BE VERIFIED BY THE CONTRACTOR AND ADJUSTED AS REQUIRED BY THE FOOD SERVICE EQUIPMENT AND/OR FIELD CONDITIONS.
- REFER TO ARCHITECT'S ENGINEERING DRAWINGS AND/OR SPECIFICATION (DIVISION 16) FOR THE FOLLOWING:
  - FIELD INSTALLATION OF ACCESSORIES & FITTINGS PROVIDED LOOSE WITH THE FOOD SERVICE EQUIPMENT.
  - SEE WALK-IN NOTES FOR ELECTRICAL REQUIREMENTS.
  - CONDUIT AND (2) WIRES FROM EXHAUST HOOD FIRE EXTINGUISHING SYSTEM TO MAIN ELECTRICAL PANEL SHUNT TRIP FOR POWER SHUT-OFF OF ALL ELECTRICAL EQUIPMENT UNDER HOOD.
  - CONDUIT AND WIRING FROM DISPOSER CONTROL TO TIME DELAY RELAY, MAGNETIC STARTER, MOTOR AND SOLENOID VALVE; ALL BELOW DISHABLE OR CONTROL TOP.
  - WALL SWITCHES, CONDUIT AND WIRING FOR: EXHAUST FAN, SUPPLY AIR FAN AND EXHAUST HOOD LIGHT FIXTURES.
  - ALL CONDUIT, WATERPROOF SINGLE RECEPTABLES AND WIRING FOR WALK-IN COOLER/FREEZER LIGHTS, DOOR HEATERS, BLOWER COILS AND CONDENSATE LINE HEAT TAPES. LIGHTS IN WALK-IN UNITS ARE FURNISHED LOOSE AND MUST BE MOUNTED AND WIRED BY ELECTRICAL CONTRACTOR.

### ELECTRICAL NOTES

- THE FOLLOWING RELATED WORK IS NOT INCLUDED WITHIN SECTION 11400 FOODSERVICE EQUIPMENT AND IS TO BE COORDINATED WITH DIVISION 16 -- ELECTRICAL.
- ROUGHING-IN AND FINAL CONNECTIONS OF ELECTRICAL SYSTEMS TO FOODSERVICE EQUIPMENT.
  - COMMUNICATION SYSTEMS, CLOCKS AND SYSTEM TIME CLOCKS IN FOODSERVICE AREAS.
  - CONDUIT AND WIRING FROM DISPOSER SWITCH TO TIME DELAY, MAGNETIC STARTER, MOTOR AND SOLENOID VALVE; ALL BELOW DISHABLE OR CONTROL TOP.
  - WALL SWITCH FOR LIGHT FIXTURES IN EXHAUST HOODS.
  - WALL SWITCH FOR FAN MOTOR FOR EXHAUST HOODS SYSTEM.
  - WIRING TO AND INSTALLATION OF ALL ACCESSORIES FURNISHED LOOSE WITH FOODSERVICE EQUIPMENT.
  - EMERGENCY LIGHTING AND/OR POWER SYSTEMS.
  - ALL DISCONNECT SWITCHES AS REQUIRED. (NEMA 4, WATERPROOF SUGGESTED.)

### ELECTRICAL NOTES

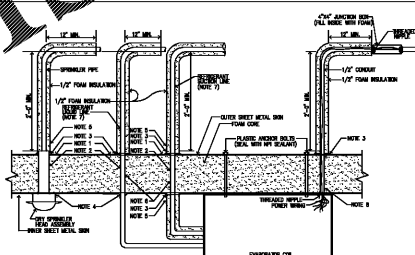
- ELECTRICAL CONTRACTOR IS TO VERIFY ENLARGED SCALE KITCHEN PLAN REQUIREMENTS.
- ELECTRICAL CONTRACTOR IS TO MAKE ALL EQUIPMENT OPERABLE ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
- ELECTRICAL CONTRACTOR IS TO VERIFY WITH FOOD SERVICE CONTRACTOR'S SUBMITTALS TO ENSURE PROPER INSTALLATION.
- ELECTRICAL CONTRACTOR IS TO PROVIDE FIELD WIRING FROM WALK-IN CONDENSOR TO WALK-IN EVAPORATOR. ELECTRICAL CONTRACTOR IS TO SEAL ANY AND ALL CONDUIT WHICH PENETRATE COOLER & FREEZER COMPARTMENTS TO PREVENT AIR CIRCULATION AND SURENESS OF CONDENSATION BUILD-UP WITHIN CONDUIT AND/OR EQUIPMENT.
- VERIFY ALL REQUIREMENTS FOR EXISTING EQUIPMENT.
- VERIFY REQUIREMENTS FOR ALL EQUIPMENT NOT SUPPLIED BY FOOD SERVICE CONTRACTOR.
- ALL 120 VOLT EQUIPMENT NOT SUPPLIED WITH CORD AND PLUG BY MANUFACTURER IS TO BE CONNECTED TO JB OR ELECTRICAL CONTRACTOR IS TO SUPPLY CORD AND PLUG.
- CONVENIENCE OUTLETS ARE NOT SHOWN.
- REQUIREMENTS UNDER HOOD ARE BASED ON CENTERLINE OF HOOD.
- ROUGHING IN WHERE EXPOSED PIPES AND CONDUITS ARE NECESSARY, THEY SHOULD BE MOUNTED 1 TO 2 INCHES OFF THE WALL AND 6 INCHES OFF THE FLOOR TO ALLOW FOR CLEANING.

### MECHANICAL NOTES

- VERIFY HOOD LOCATION.
- ALL DUCTWORK, FANS, CURBS, PENETRATIONS AND CONNECTIONS BEYOND VENTILATOR EXHAUST AND SUPPLY COLLAR SHALL BE SUPPLIED BY OTHERS.
- EXHAUST DUCTWORK MUST BE WATER-TIGHT AND GREASE-PROOF TO CONFORM TO ALL APPLICABLE CODES.
- CALCULATED DUCTWORK SYSTEM STATIC PRESSURE MUST BE ADDED TO EXHAUST AND SUPPLY OUTLET STATIC PRESSURE AT DUCT COLLAR TO DETERMINE TOTAL SYSTEM STATIC PRESSURE.
- FOOD SERVICE EQUIPMENT CONTRACTOR SHALL NOT BE RESPONSIBLE, OR LIABLE FOR IMPROPER FUNCTION ATTRIBUTABLE TO STATIC PRESSURE OR AIR VOLUME OTHER THAN THAT INDICATED.
- ELECTRICAL CONTRACTOR TO WIRE FROM SWITCH ON WALL TO "J" BOX ON HOOD FOR LIGHTS. ALL WIRING, CONDUIT, STARTERS, SWITCHES, ETC. FOR FANS TO BE PROVIDED BY ELECTRICAL CONTRACTOR. SWITCHES TO BE LOCATED AS SHOWN BY ENGINEER.
- SPECIAL NOTE:  
ANSUL FIRE SUPPRESSION SYSTEM TO BE CONNECTED TO CORRESPONDING SHUNT TRIP BREAKERS FOR SHUT DOWN OF COOKING EQUIPMENT BELOW VENTILATOR DURING FIRE. --- IN ADDITION, THE SUPPRESSION SYSTEM SHALL BE REQUIRED TO BE INTERCONNECTED WITH MECHANICAL GAS SHUT OFF DURING FIRE. ACTUAL CONNECTION TO GAS VALVE AT ISLAND COOKING TO BE MADE INSIDE GAS VALVE HOUSING.

### WALK-IN NOTES

- ELECTRICAL CONTRACTOR TO BRING ELECTRICAL SERVICE IN FROM ABOVE WALK-IN AND CONNECT TO "J" BOX INSIDE WALK-IN. ELECTRICAL CONTRACTOR TO MOUNT EXTRA LIGHTS AS SHOWN ON LAYOUT PLAN AND PROVIDE WATERTIGHT CONDUIT AND WIRING ACCORDING TO LOCAL CODES. CONDUIT TO BE ABOVE CEILING OF WALK-IN WHERE POSSIBLE.
- FREEZER:  
ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND (2) WIRES (3) #10 (8) #12 & (1) GROUND FROM CONDENSING UNIT AND TIME CLOCK TO BLOWER COIL IN WALK-IN FREEZER FOR TIRED OPERATION OF DEFROST COILS. WIRING TO TIMER BY ELECTRICAL CONTRACTOR.
- COOLER:  
ELECTRICAL CONTRACTOR TO PROVIDE, MOUNT AND WIRE DUPLEX RECEPTABLE FOR BLOWER COIL ON WALK-IN COOLER. ELECTRICAL CONTRACTOR TO PROVIDE (5) #12 WIRES (1) RED (1) BLACK (1) WHITE (1) GREEN & (1) GROUND. FIELD NOTIFICATION OF THERMOSTAT WIRING FOR MULTI-COIL INSTALLATION: THE EVAPORATOR COILS PROVIDED IN THIS COOLER (FREEZER) HAVE EACH BEEN MANUFACTURED WITH INDIVIDUAL THERMOSTATS AND SOLENOIDS. WHEN WIRING THESE COILS IN FIELD MAKE CERTAIN TO CONNECT ALL SOLENOIDS IN PARALLEL TO A SINGLE THERMOSTAT. IT IS RECOMMENDED THAT THE THERMOSTAT LOCATED CLOSEST TO THE ENTRANCE DOOR BE USED AS THE PRIMARY WALK-IN COOLER & FREEZER FINAL CONNECTIONS AND INTERCONNECTION WIRING REQUIRED FOR ALL INTERIOR LIGHTING FIXTURES SHALL BE BY THIS ELECTRICAL CONTRACTOR.
- CONDENSING UNITS ARE TO BE ROOF MOUNTED. GENERAL CONTRACTOR IS TO PROVIDE ROOF SUPPORT & PITCH BRACKETS TO ACCEPT REFRIGERATION & ELECTRICAL SUPPLY LINES TO CONDENSING UNITS.
- ALL CONDUIT TO RUN OUTSIDE THE ASSEMBLY. ALL PENETRATIONS IN PANELS TO BE WITH SLEEVES. BACKFILL SLEEVES WITH LIQUID URETHANE AFTER THEY HAVE BEEN INSTALLED.
- AT 10' AFF PROVIDE (2) 4" IN DIAMETER ELBOWS THE THICKNESS OF WALL TO HOUSE REFRIGERATION LINES

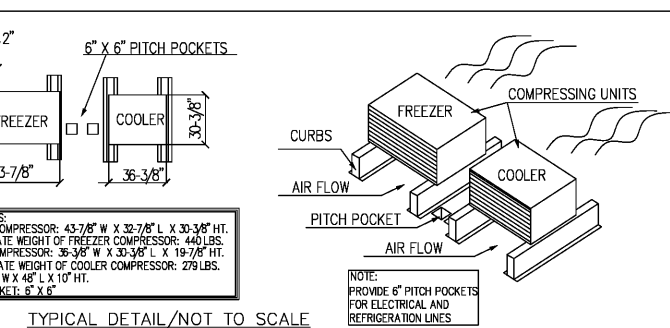
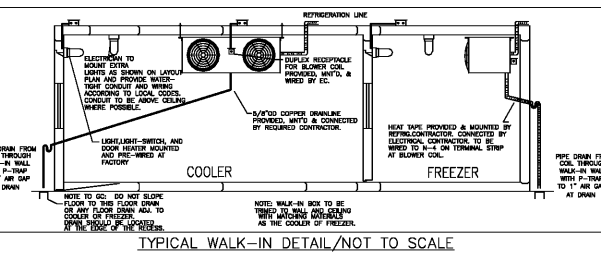
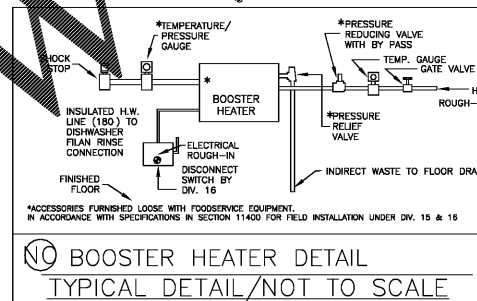
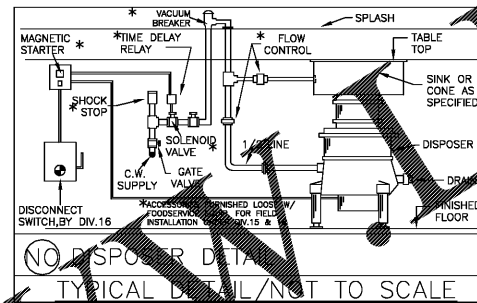


COOLER/FREEZER PENETRATION DETAIL  
COOLER PENETRATION NOTES: (APPLIES TO THIS DETAIL ONLY)  
1. CUT SHEET METAL SKIN, NOT THE FOAM CORE, 1/2" DIA. LARGER THAN PENETRATION SIZE ON INSIDE AND OUTSIDE.  
2. BORE FOAM CORE 1/4" DIA. SMALLER THAN PENETRATION SIZE TO INSURE A TIGHT FIT.  
3. SEAL THE PIPE INSULATION TO SHEET METAL WITH NPI SEALANT ONLY. MATCH SEALANT COLOR TO ADJACENT METAL SURFACE.  
4. SEAL THE TOP AND BOTTOM HOLE IN THE METAL AROUND PIPES WITH NPI SEALANT ONLY. MATCH SEALANT COLOR TO ADJACENT METAL SURFACE.  
5. PIPE INSULATION STOPS AT THE SHEET METAL ON BOTH INSIDE AND OUTSIDE OF COOLER/FREEZER WALL. PIPE INSULATION IS NOT TO GO THROUGH THE WALL.  
6. THERE SHALL NOT BE ANY WELD JOINTS INSEPARATE COOLER/FREEZER WALLS.  
7. RUN REFRIGERANT LINES IN SEPARATE PENETRATIONS.  
8. CUT 1" HOLE IN INNER AND OUTER SHEET METAL SURFACES, BORE A 1/2" DIA. HOLE THROUGH FOAM CORE FOR POWER AND CONTROL WIRING. FILL CAVITY WITH NPI SEALANT. WIRING WITH INSIDE AND OUTER METAL SURFACES. DO NOT RUN CONDUIT THRU FOAM CORE.  
TYPICAL DETAIL/NOT TO SCALE

### LEGEND -- PLUMBING CONNECTIONS

- HW--HOT WATER, OR CW--COLD WATER
- GAS
- WASTE, DIRECT--CONNECTED UNLESS NOTED "OPEN HUB"
- FLOOR DRAIN
- FLOOR DRAIN W/ATTACHED FUNNEL
- FLOOR SINK WITH HALF GRATE UNLESS NOTED OTHERWISE

--- FIELD CONNECTIONS  
TYPICAL DETAIL/NOT TO SCALE



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- UTILITIES SHOWN SUPPLY FOOD SERVICE ITEMS ONLY, ARCHITECT TO PROVIDE FOR ALL OTHER MECHANICAL REQUIREMENTS, CONVENIENCE OUTLETS, HAND SINKS, LIGHTS, ETC.
- DRAIN LINE TO BE WRAPPED TIGHTLY WITH HEAT TAPE AND INSULATED WITH 1/2\"/>

### PLUMBING / MECHANICAL NOTES

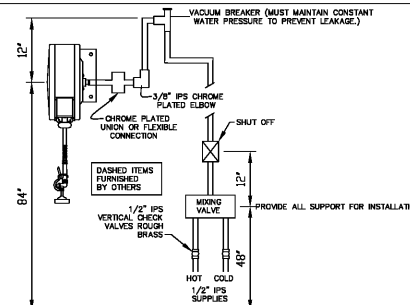
- THE FOLLOWING RELATED WORK IS NOT INCLUDED WITHIN SECTION 11400 FOODSERVICE EQUIPMENT AND IS TO BE COORDINATED WITH DIVISION 15 -- PLUMBING / MECHANICAL.
- ROUGHING-IN AND FINAL CONNECTIONS OF FOODSERVICE EQUIPMENT, DUCTS, OR FLUES OF SIZE AND CAPACITY REQUIRED TO OPERATE FOODSERVICE EQUIPMENT.
  - DRAIN TRAPS AND GREASE INTERCEPTORS CONNECTED TO FOODSERVICE EQUIPMENT.
  - INSULATED DEGREE HOT WATER LINE FROM BOOSTER HEATER TO DISHWASHING MACHINE, AND/OR UTENSIL WARE. PIPE SLEEVES TO BE PROVIDED FOR REFRIGERATION UNITS LOCATED BY DIVISION 11 CONTRACTOR SHOP DRAWINGS. FLUSHING OUT ALL PIPING AND DRAINAGE SYSTEMS PRIOR TO FINAL CONNECTION TO FOODSERVICE EQUIPMENT.
  - VENTILATING REFRIGERATION MACHINES PROVIDE TO ACCOMMODATE 40-50 AIR CHANGES PER HOUR.
  - INSULATING DRY COILS TO PROVIDE 70 DEGREE MAXIMUM TEMPERATURE.
  - INSULATING OF DISHWASHERS TO PROVIDE 70 DEGREE MAXIMUM TEMPERATURE.
  - EXHAUST DUCTS AND WIRING TO EXTRACTOR-TYPE EXHAUST HOODS SHALL NOT SERVE ANY OTHER APPLIANCE OR THE DUCTS OF SIMILAR EXTRACTOR-TYPE EXHAUST HOODS INDICATED ON ELECTRICAL CONNECTIONS PLAN TO HAVE A SINGLE CONTROL PANEL AND SHALL BE INTEGRAL FOR USE WITH A SINGLE EXHAUST FAN.
  - WATERPROOF EXHAUST DUCTS FROM VENT CONNECTIONS OF DISHWASHING MACHINES, UTENSIL WASHERS AND EXHAUST HOODS.
  - INSTALLATION OF FIRE SUPPRESSION GAS SOLENOID

### PLUMBING NOTES

- PLUMBING CONTRACTOR IS TO VERIFY ENLARGED SCALE KITCHEN PLAN REQUIREMENTS.
- PLUMBING CONTRACTOR IS TO MAKE ALL EQUIPMENT OPERABLE ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
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- VERIFY ALL REQUIREMENTS FOR EXISTING EQUIPMENT.
- VERIFY REQUIREMENTS FOR ALL EQUIPMENT NOT SUPPLIED BY FOOD SERVICE CONTRACTOR.
- HOSE REEL IS TO HAVE 1/2" HW & 1/2" CW CONNECTED THROUGH CHECK VALVE AND VACUUM BREAKER. TEMPERED WATER LINE IS TO GO THROUGH WALL AND CONNECT TO SPRAY WHEEL, CENTERLINE OF WHICH IS 7'-0" ABOVE FINISHED FLOOR.
- PULPER REQUIRES A 1-1/2" RECIRCULATING COLD WATER LINE FROM THE PULPER TO THE NOZZLES ON THE SOILED DISH TABLE. PLUMBER IS TO SUPPLY PIPING NEEDED FOR PROPER OPERATION OF PULPER, INCLUDING THE LINE BETWEEN THE PULPER AND THE SOILED DISHABLE.
- CONVENIENCE PLUMBING FIXTURES ARE NOT SHOWN.
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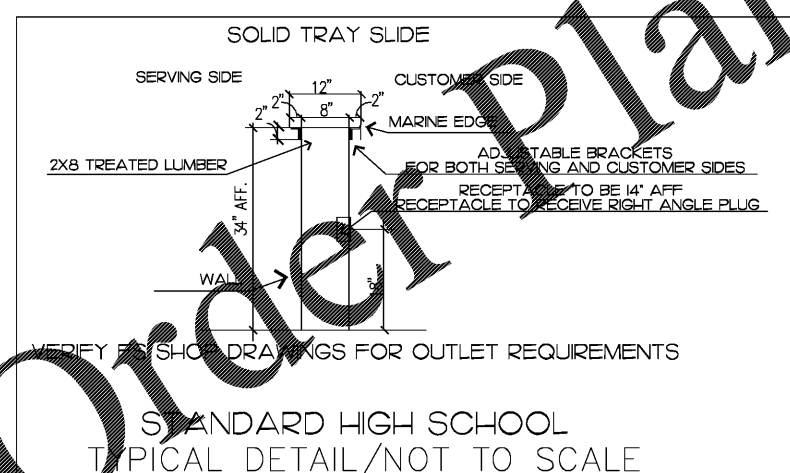
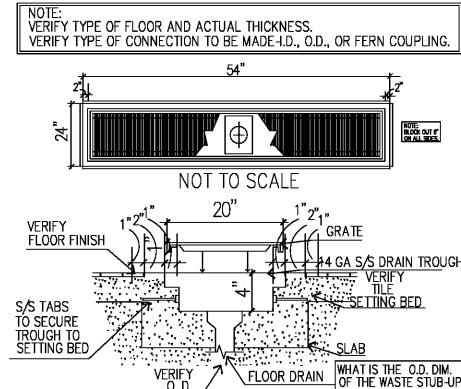
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HOSE REEL INSTALLATION DIAGRAM  
TYPICAL DETAIL/NOT TO SCALE

### TYPICAL FLOOR TROUGH DETAIL



STANDARD HIGH SCHOOL  
TYPICAL DETAIL/NOT TO SCALE

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ROOTED COFFEE HOUSE  
EVANS, GA

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DWG. ROOTED COFFEE NO. 170517  
SCALE: 1/4"=1'-0"  
DRAWN BY: NANC'  
CHECKED BY:  
APPROVED BY:  
DATE: 07/25/2017  
REVISION:

SHEET #2 OF #5