

NOTE: THIS IS AN EXISTING FACILITY WHICH HAS EXISTING SANITARY AND WATER DISTRIBUTION SYSTEMS. ALTERATIONS TO EXISTING WORK BEING OF SUCH NATURE THAT ALL FACETS OF THE WORK ARE IMPOSSIBLE TO DETAIL AND SPECIFY. IT IS THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE CONDITIONS AND RELATE THESE CONDITIONS TO THE SCOPE OF THE PROPOSED NEW WORK. ALL BIDS ARE EXPECTED TO ENCOMPASS THE TOTAL WORK SCOPE NEEDED TO PLACE THE COMPLETED SYSTEM IN WORKING CONDITION.

PLUMBING SYMBOLS LEGEND

●	FLOOR DRAIN
HD	HUB DRAIN (NEW)
HD-S	HUB DRAIN (NEW) COOLER/FREEZER COND. DRAIN
EXHD	HUB DRAIN (EXIST. TO REMAIN)
EXHD-S	FLOOR DRAIN (EXIST. TO REMAIN)
EXFD	FLOOR SINK (EXIST. TO REMAIN)
EXFD-S	TRENCH DRAIN (EXIST. TO REMAIN)
CL	CLEANOUT
RV	RELIEF VALVE
AC	AIR CHAMBER
UN	UNION
SWL	SOIL OR WASTE LINE
SVL	SANITARY VENT LINE
DWC	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DWR	DOMESTIC WATER RECIRCULATION
PT	PRESSURE & TEMP. RELIEF LINE
CDL	CONDENSATE DRAIN LINE
RWL	RAIN WATER LEADER
GL	GAS LINE
SFL	SAFEGWASTE LINE
FP	FIRE PROTECTION
SOV	SHUT OFF VALVE
SFL	SAFEPAN LINE
FSH	FIRE SPRINKLER HEAD
PTU	PIPE TURN UP
PTD	PIPE TURN DOWN
PT	P-TRAP
EM	PIPING TO BE REMOVED

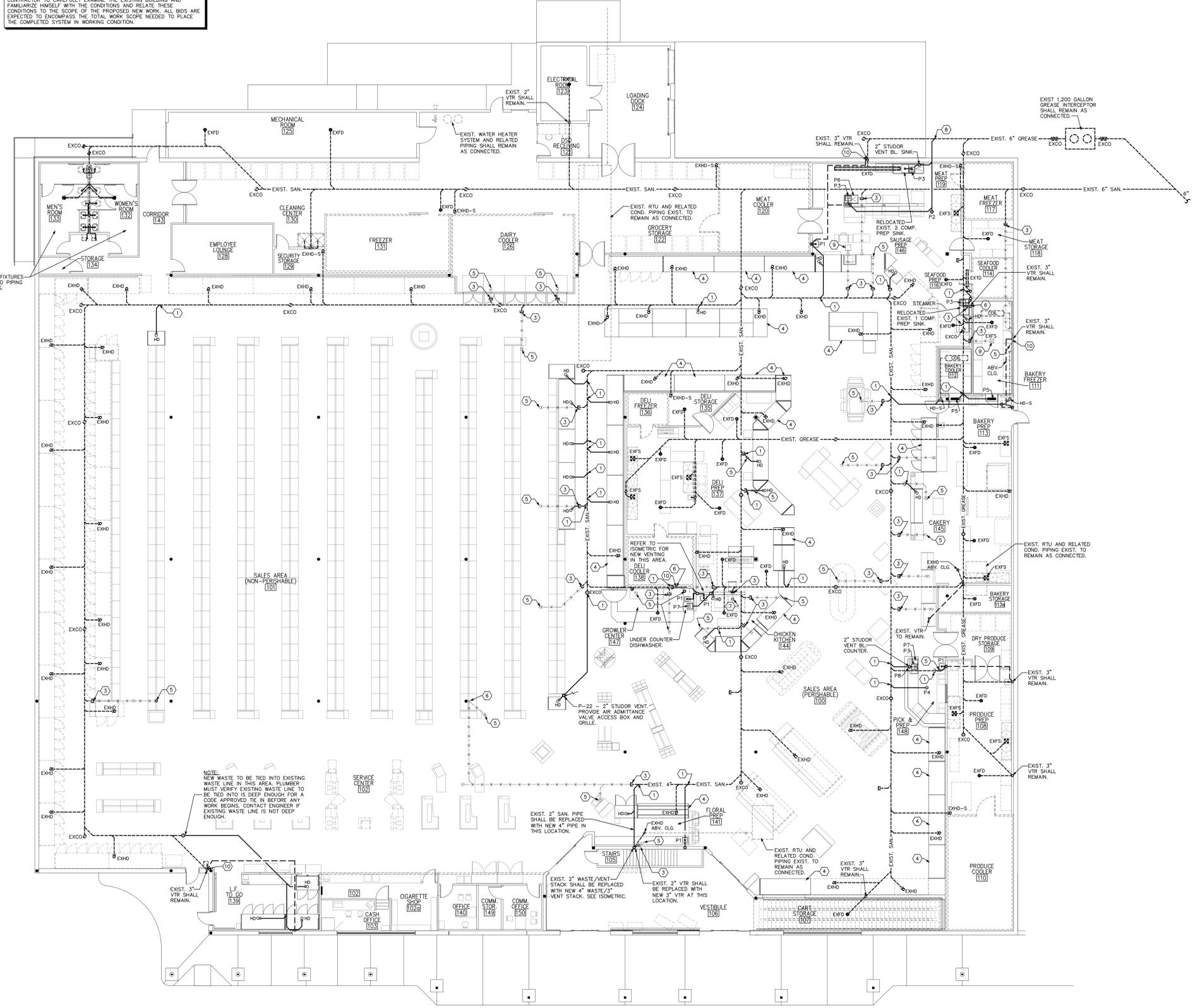
PLUMBING ABBREVIATION LEGEND

DN.	DOWN	C.C.	CENTER TO CENTER	F.U.	FIXTURE UNITS
EXT.	EXTERIOR	N.T.S.	NOT TO SCALE	H.B.	HOSE BIBBS
F.D.	FLOOR DRAIN	MFG.	MANUFACTURER	C.O.	CLEANOUT
F.F.	FINISH FLOOR	S.O.V.	SHUT OFF VALVE	E.W.H.	ELECTRIC WATER HEATER
A.F.F.	ABOVE FINISH FLOOR	W.C.	WATER CLOSET	JAN.SK.	JANITOR SINK
V.T.R.	VENT THRU ROOF	LAV.	LAVATORY	P & T	PRESSURE & TEMPERATURE
TYR	TYPICAL	SK	SINK	RWL	RAIN WATER LEADER
R.D.	ROOF DRAIN	D.W.	DISH WASHER		
REV.	REVISION	E.D.F.	ELECTRIC DRINKING FOUNTAIN		
O.C.	ON CENTER	UR	URINAL		

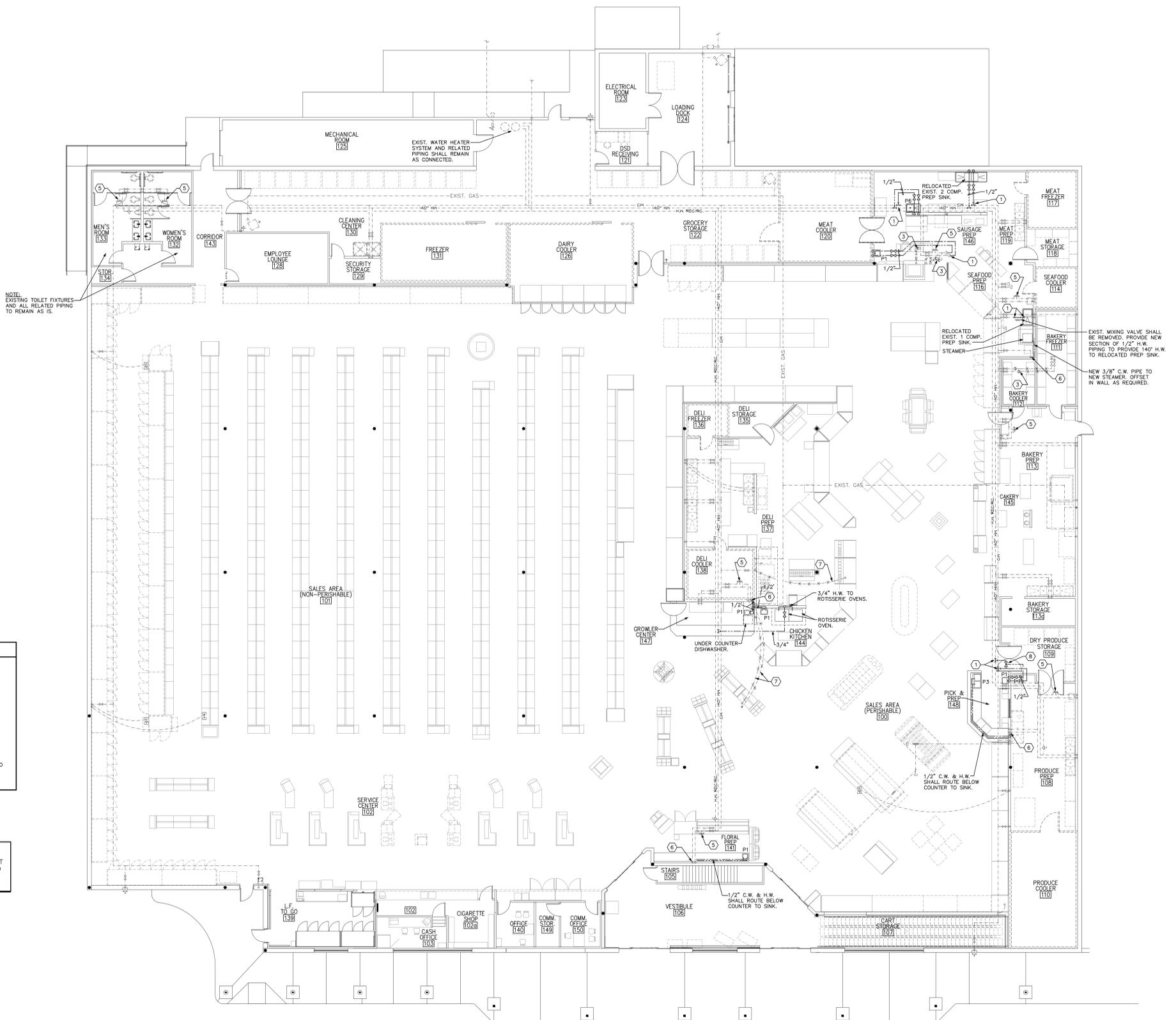
SPECIFIC PLUMBING NOTES

- CONNECT TO EXISTING SANITARY PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
- CONNECT TO EXISTING GREASE WASTE PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
- EXISTING PIPING BELOW FLOOR SLAB SHALL BE CAPPED IN THIS AREA. EXISTING PIPE MUST BE CAPPED IN A MANNER THAT DOES NOT LEAVE ANY DEAD-ENDS. ANY BRANCHES LONGER THAN 2' MUST HAVE CLEANOUTS INSTALLED. CONTRACTOR SHALL REPAIR FLOOR SLAB AS REQUIRED. EXISTING PIPING BEYOND POINT OF CAP SHALL BE ABANDONED IN PLACE.
- NEW/RELOCATED EQUIPMENT SHALL DRAIN TO EXISTING HUB DRAIN IN THIS AREA. CONTRACTOR SHALL CONNECT AS REQUIRED.
- EXISTING HUB DRAIN IN THIS AREA SHALL BE REMOVED.
- EXISTING WASTE/VENT STACK SHALL BE REMOVED. EXISTING VTR TO REMAIN. VENT PIPE SHALL BE CAPPED IN JOIST SPACE.
- EXISTING FLOOR DRAIN IN THIS AREA SHALL BE REMOVED.
- CONNECT TO EXISTING GREASE WASTE PIPING BELOW GRADE IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
- EXISTING FLOOR SINK IN THIS AREA SHALL BE REMOVED.
- CONNECT TO EXISTING VENT PIPING ABOVE CEILING IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ALL CASE ROUGH-IN DIMENSIONS WITH THE CASE MANUFACTURER. CONTRACTOR SHALL LAY-OUT ALL ROUGH-INS FOR APPROVAL BY LOWES FOOD AND CASE MANUFACTURER PRIOR TO ANY WORK. DIMENSIONS SHOWN MAY OR MAY NOT BE ACCURATE FOR THE SPECIFIC CASES TO BE SUPPLIED ON THIS PROJECT.



(SANITARY AND GREASE WASTE PIPING)
1 FLOOR PLAN - PLUMBING
 SCALE: 3/32"=1'-0"



NOTE: THIS IS AN EXISTING FACILITY WHICH HAS EXISTING SANITARY AND WATER DISTRIBUTION SYSTEMS. ALTERATIONS TO EXISTING WORK BEING OF SUCH NATURE THAT ALL FACETS OF THE WORK ARE IMPOSSIBLE TO DETAIL AND SPECIFY. IT IS THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE CONDITIONS AND RELATE THESE CONDITIONS TO THE SCOPE OF THE PROPOSED NEW WORK. ALL BIDS ARE EXPECTED TO ENCOMPASS THE TOTAL WORK SCOPE NEEDED TO PLACE THE COMPLETED SYSTEM IN WORKING CONDITION.

- SPECIFIC PLUMBING NOTES**
- ① CONNECT TO EXISTING WATER PIPING ABOVE CEILING IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - ② CONNECT TO EXISTING C.W. PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - ③ EXISTING WATER PIPING SHALL BE CAPPED ABOVE CEILING AT THIS LOCATION. ALL PIPING BEYOND THIS POINT SHALL BE REMOVED. NO CAP IF NEW WATER PIPING IS CONNECTING AT THIS POINT.
 - ④ EXISTING C.W. PIPING SHALL BE CAPPED BELOW FLOOR.
 - ⑤ EXISTING MIXING VALVE SHALL REMAIN AS CONNECTED.
 - ⑥ CONNECT TO EXISTING WATER PIPING IN WALL IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - ⑦ EXISTING WATER PIPING BELOW FLOOR SHALL BE REMOVED.
 - ⑧ NEW HAND SINKS AND BAR SINK (UNLESS OTHERWISE NOTED) SHALL HAVE MIXING VALVES INSTALLED TO TEMPER HOT WATER. MIXING VALVE SHALL BE A "SPARCO" MODEL AM9000. INSTALL CHECK VALVES ON SUPPLY LINES TO MIXING VALVES. REFER TO MIXING VALVE DETAIL ON SHEET P-21.

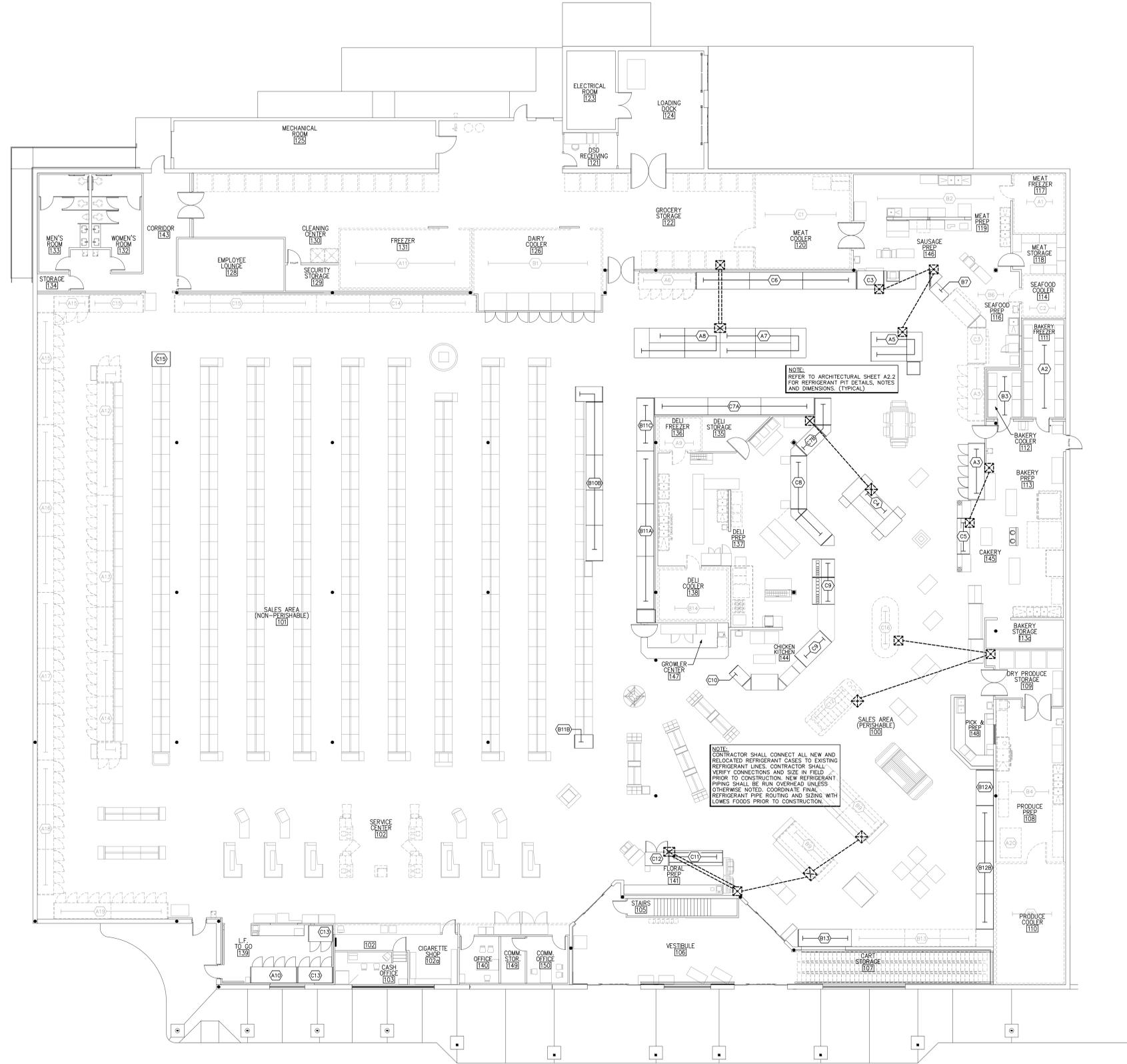
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(WATER PIPING)
1 FLOOR PLAN - PLUMBING
 SCALE: 3/32"=1'-0"

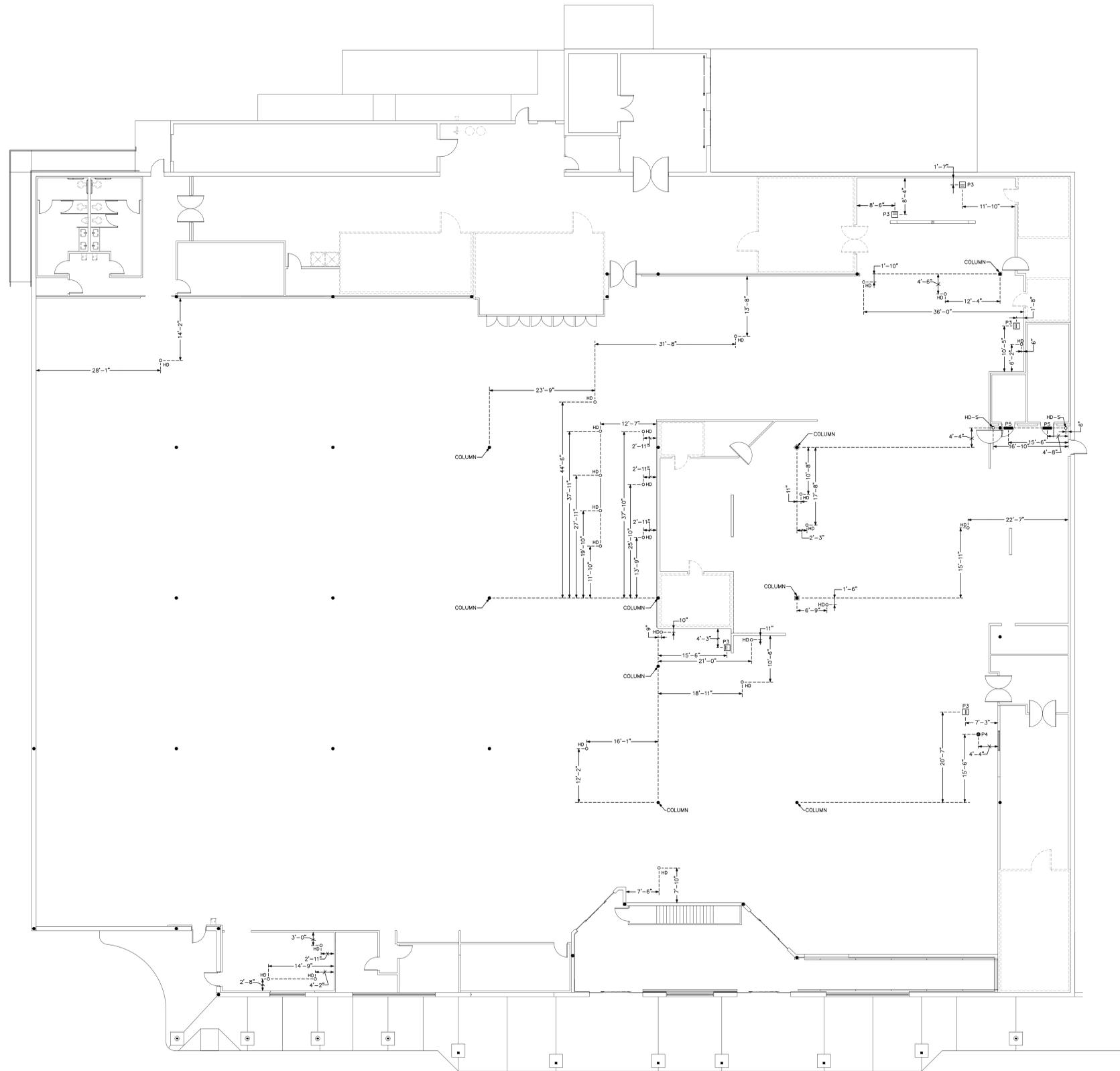
NOTE:
 NEW REFRIGERANT PIPING FOR THE FOLLOWING REFRIGERATION CIRCUITS A2, A3, B3, B7, B10B, B11A, B11B, B11C, B12A, B12B, B13, C6, C7A, C7B, C8, C10, C81. SHALL BE RUN OVERHEAD UNLESS OTHERWISE NOTED. COORDINATE FINAL REFRIGERANT PIPE ROUTING AND SIZING WITH LOWES FOODS PRIOR TO CONSTRUCTION.

LEGEND	
	2'-0" x 2'-0" x 1'-6" DEEP REFRIGERATION PIT
	6" SCHED. 40 UNDER FLOOR DUCTS FOR REFRIGERANT LINE. COORDINATE FINAL QUANTITY, SIZE AND LOCATION WITH LOWES FOODS PRIOR TO CONSTRUCTION.
	6" SCHED. 40 UNDER FLOOR DUCTS FOR REFRIGERANT LINE. COORDINATE FINAL QUANTITY, SIZE AND LOCATION WITH LOWES FOODS PRIOR TO CONSTRUCTION.

- REFRIGERATION NOTES**
1. ALL UNDER FLOOR DUCT FOR REFRIGERATION LINES SHALL BE SCHEDULE 40 PVC, 6" IN DIAMETER UNLESS OTHERWISE NOTED.
 2. REFRIGERATION LINES BY LOWES FOODS.
 3. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO REFRIGERANT PITS.
 4. CONTRACTOR SHALL TAKE EXTREME CARE TO ENSURE DUCTS SLOPE FROM 2' x 2' PIT DOWN TO THE REFRIGERATION PIPING ACCESS AREA. SLOPE SHALL BE A MINIMUM OF 1/8" PER FOOT.
 5. SWEEP-UP 6" PVC AT 45 DEGREE ANGLE, REFER TO DETAIL ON THIS SHEET.
 6. INSTALLATION OF UNDER FLOOR DUCT IS BY PLUMBING CONTRACTOR. COORDINATE DUCT INSTALLATION WITH GENERAL CONTRACTOR.
 7. INSTALLATION OF REFRIGERATION PITS BY ANOTHER CONTRACTOR, NOT PLUMBING CONTRACTOR. COORDINATE DUCT INSTALLATION WITH GENERAL CONTRACTOR.
 8. AVOID INTERFERENCES WITH FOOTINGS AND COLUMNS WITH UNDERGROUND DUCT. MODIFY UNDER FLOOR DUCT SLOPE TO AVOID ROUTING IN FOOTER AS NECESSARY.
 9. SEAL OPEN END OF 6" PVC TO PREVENT SAND FROM ENTERING CONDUIT IN ALL ACCESS PITS.



1 REFRIGERATION PIPING PLAN - PLUMBING
 SCALE: 3/32"=1'-0"



PLUMBING SYMBOLS LEGEND	
○ HD	HUB DRAIN (NEW)
○ HD-S	HUB DRAIN (NEW)
● P4	FLOOR DRAIN (NEW)
□ P3	FLOOR SINK (NEW)
▬ P5	TRENCH DRAIN (NEW)

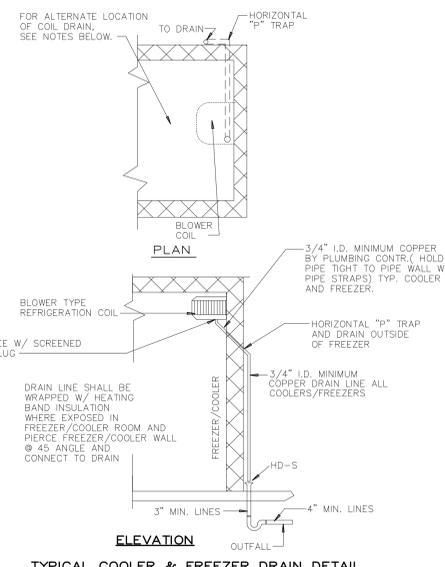
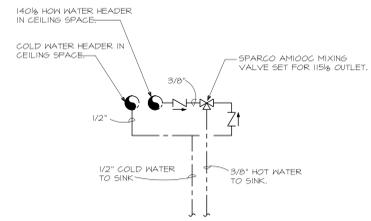
1 DIMENSION PLAN - PLUMBING
 SCALE: 3/32"=1'-0"

GENERAL PLUMBING NOTES

- DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES, EQUIPMENT, ETC. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE AND ACCEPTABLE WORKING INSTALLATION. CONTRACTOR IS RESPONSIBLE TO INSTALL ALL FIXTURES AND EQUIPMENT IN STRICT COMPLIANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. THIS REQUIREMENT IS TO SUPERSEDE ANY DETAILS OR INFORMATION CONTAINED ON THESE DRAWINGS.
- ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL, STATE, AND ALL LOCAL CODES AND ORDINANCES HAVING JURISDICTION.
- THE PLUMBING CONTRACTOR SHALL VISIT THE SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS. ALL EXECUTION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
- ALL MATERIAL SHALL BE NEW.
- ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/ARCHITECT.
- ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OR PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- THE PLUMBING CONTRACTOR SHALL SECURE AND PAY ALL PERMIT FEES, INSPECTIONS, AND TESTS.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- THE PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN (1) ONE YEAR FROM DATE OF ACCEPTANCE. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
- VERIFY LOCATION, SIZE AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. ADVISE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
- ALL FIXTURES SHALL BE PROVIDED WITH READILY ACCESSIBLE STOPS.
- WATER PIPING SHALL BE TYPE "L" COPPER FOR UP TO AND INCLUDING 2" AND SHALL BE TYPE "K" FOR 2 1/2" AND LARGER.
- SOIL, WASTES AND VENT PIPING SHALL BE PVC #40 DMV. WASTE AND VENT PIPING ABOVE SLAB SHALL BE PVC, IF APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION, OTHERWISE CAST IRON. PVC SHALL NOT BE INSTALLED IN A/C RETURN AIR PLENUM OR PENETRATE FIRE RATED WALLS OR FLOORS.
- AIR CONDITIONING CONDENSATE DRAIN PIPING SHALL BE PVC #40 OR COPPER DRAIN WASTE AND BENT PIPE AND FITTINGS. INSULATE ALL CONDENSATE PIPING EXCEPT EXTERIOR PIPING. INSTALL ALL CONDENSATE PIPING FOR AIR CONDITIONING UNITS AS REQUIRED PER LOCAL CODES.
- FURNISH AND INSTALL APPROVED WATER HAMMER ARRESTORS AT EACH GROUP OF FIXTURES. INSTALLATION OF WATER HAMMER ARRESTORS SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE AND INSTALL AN APPROVED WATER HAMMER ARRESTOR AT EACH FIXTURE OR DEVICE THAT HAS A SOLENOID WATER CONTROL VALVE.
- PROVIDE CHROME PLATED COMBINATION COVERED PLATE AND CLEANOUT PLUG FOR ALL WALL CLEANOUTS, JOSAM 58890.
- INSULATE LINES AS FOLLOWS:
 - 1" THICK ARMAFLEX PREFORMED INSULATION SHALL BE PROVIDED ON BOTH C.W. & H.W. WHEN PIPING IS LOCATED OUTSIDE OF THE INSULATED BUILDING ENVELOPE.
 - 1/2" THICK ARMAFLEX PREFORMED INSULATION SHALL BE PROVIDED ON HW PIPING & H.W. RECIRC. PIPING ONLY WHEN THERE IS A H.W. RECIRCULATING PIPING SYSTEM.
 - CONDENSATE PIPING: 1/2" THICK ARMAFLEX PREFORMED OR APPROVED EQUAL.

MIXING VALVE FOR HAND SINKS AND LAV'S DETAIL

1 NO SCALE

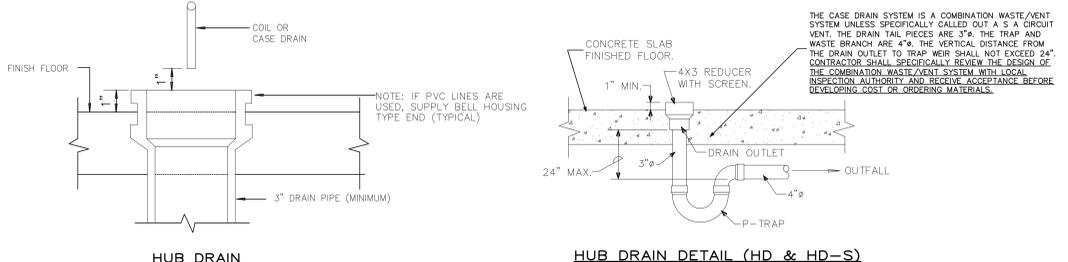


TYPICAL COOLER & FREEZER DRAIN DETAIL

- NOTES:
- SLOPE FLOOR FROM INSIDE COOLER WALLS TO FLOOR DRAINS OUTSIDE COOLERS.
 - SEE PLUMBING PLAN FOR NUMBER AND LOCATION OF BLOWER TYPE REFRIGERATION COILS. REFRIGERATION COILS ARE FURNISHED AND INSTALLED BY REFRIGERATION CONTRACTOR. REFRIGERATION CONTRACTOR SHALL MAKE ALL PLUMBING CONNECTIONS.
 - CONDENSATE DRAINS FOR FREEZERS SHALL BE LOCATED OUTSIDE FREEZER.

2 TYP. COOLER & FREEZER DRAIN DETAIL

2 NO SCALE



HUB DRAIN

HUB DRAIN DETAIL (HD & HD-S)

3 HUB DRAIN DETAILS

3 NO SCALE

PLUMBING FIXTURE SCHEDULE									
SYM.	FIXTURE	CW	HW	DRAIN	STOPS & VALVES	MANUF.	MODEL	REMARKS	ACCEPTABLE ALTERNATIVE MANUFACTURERS, SEE NOTE 6
P-1	HAND SINK STAINLESS STEEL	1/2"	1/2"	1-1/4"	1/2"x3/8" ANGLE	-	-	SINK AND FAUCET SUPPLIED BY LOWES FOODS. PLUMBER SHALL INCLUDE ALL EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION THAT DOES NOT COME WITH SINK. PROVIDE MIXING VALVE. REFER TO MIXING VALVE DETAIL ON THIS SHEET.	-
P-2	FINISHED FLOOR CLEANOUT (FOOT TRAFFIC AREAS)	-	-	4"	-	SIOUX CHEF	834-4PNR	COMPLETE ASSEMBLY WITH PVC BASE AND NICKEL BRONZE TOP.	NO ALTERATIONS
P-3	FLOOR SINK	-	-	3"	-	MFAB	FS1720-150-5	HALF TOP GRATE, 12" X 12" TOP AND SEDIMENT BUCKET.	-
P-4	FLOOR DRAIN (PREP) (NON WASHDOWN AREAS)	-	-	3"	-	MFAB	F1000-R8-7	NICKEL BRONZE, DEEP SEAL TRAP. PROVIDE PRIMER TAP. SEE NOTE 4	-
P-5	TRENCH DRAIN (PREP AREAS)	-	-	4"	-	ACC	K100-425/426	DEEP SEAL TRAP SLOTTED LOAD CLASS "C" GALVANIZED STEEL GRATE.	-
P-6	1 COMP. PREP SINK STAINLESS STEEL	1/2"	1/2"	1-1/4"	1/2"x3/8" ANGLE	-	-	SINK AND FAUCET SUPPLIED BY LOWES FOODS. PLUMBER SHALL INCLUDE ALL EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION THAT DOES NOT COME WITH SINK.	-
P-7	2 COMP. PREP SINK STAINLESS STEEL	1/2"	1/2"	1-1/4"	1/2"x3/8" ANGLE	-	-	SINK AND FAUCET SUPPLIED BY LOWES FOODS. PLUMBER SHALL INCLUDE ALL EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION THAT DOES NOT COME WITH SINK.	NO ALTERATIONS
P-8	STUDOR VENT	-	-	2"	-	IPS CORP.	MINI-VENT	* http://www.ipscorp.com/plumbing/studor/mini-vent	-

- NOTES:
- MATERIAL AND INSTALLATION SHALL BE PER STATE HANDICAP CODE REQUIREMENTS AND ADA REQUIREMENTS.
 - TOILETS SHALL FLUSH ON A MAXIMUM OF 1.28 GALLONS PER FLUSH.
 - LAVATORIES SHALL HAVE 5 GPM FLOW AERATORS.
 - INDICATED FLOOR DRAINS SHALL BE PRIMED WITH 1/2" COPPER LINE FROM NEARBY CLEAR WATER FIXTURE (LAVATORY). TAP CLEAR WATER FIXTURE TAIL PIECE WITH WATER SAVER TRAP PRIMER AND ROUTE COPPER SUPPLY LINE UNDER SLAB TO DRAIN PRIMER CONNECTION.
 - WATER SENSITIVE TRAP PRIMER SHALL BE ACCESSIBLE AND CODE APPROVED. IF A CLEAR WATER FIXTURE SUCH AS A LAVATORY IS NOT AVAILABLE, TAP NEARBY COLD WATER LINE AND ROUTE 1/2" PRIMER LINE THROUGH PRIMER VALVE CODE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE AND INSTALLED ON WALL ABOVE FLOOR SINK OR CLOSEST PREP SINK.
 - INSTALL CHECK VALVE ON COLD AND HOT WATER SUPPLY LINES SERVING MOP SINK AND CLEANING CENTER.
 - FIXTURES BY ALTERNATE MANUFACTURERS MUST BE APPROVED BY LOWES FOODS ENGINEERING PRIOR TO PURCHASE.

