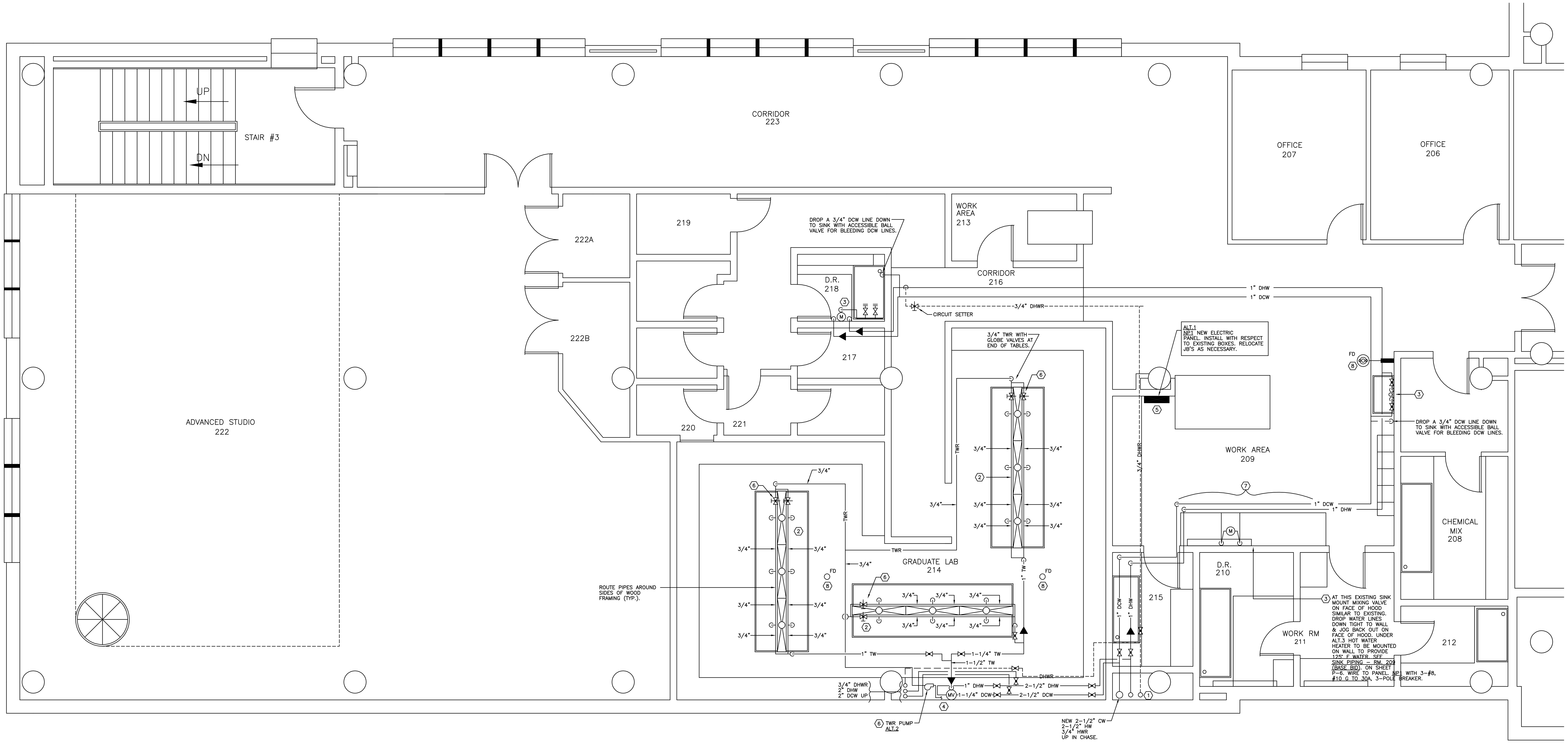
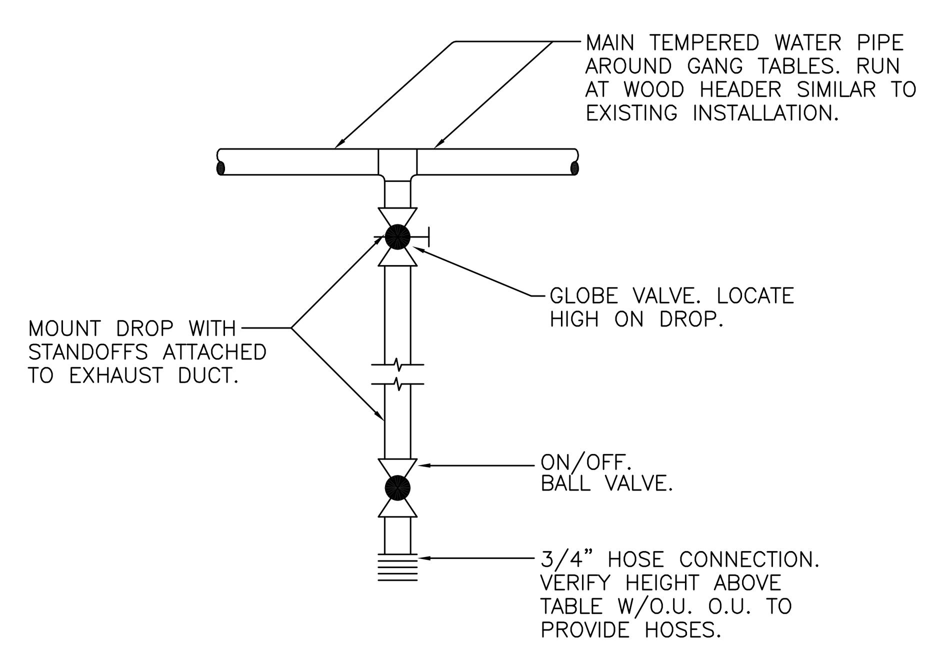


2ND FLOOR PLUMBING PLAN

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

MECHANICAL SYMBOLS AND ABBREVIATIONS		
GATE VALVE	-CHWS- CHILLED WATER SUPPLY	TURNING VANES
GLOBE VALVE	-CHWR- CHILLED WATER RETURN	EXTRACTION DAMPER
BALANCE VALVE	-CWS- CONDENSER WATER SUPPLY	SPLITTER DAMPER
BALL VALVE	-CWR- CONDENSER WATER RETURN	VOLUME DAMPER
AUTO CONTROL VALVE (3-WAY)	-HWS- HOT WATER SUPPLY	MOTOR OPERATED DAMPER
AUTO CONTROL VALVE (2-WAY)	-HWR- HOT WATER RETURN	PRESSURE GAUGE
LOCKSHIELD GATE VALVE	-HPS- HIGH PRESSURE STEAM	THERMOMETER
GAS COCK	-MPS- MEDIUM PRESSURE STEAM	THERMOSTAT
SOLENOID VALVE	-LPS- LOW PRESSURE STEAM	OA OUTSIDE AIR
DRAIN VALVE W/HOSE CONN.	-DCW- DOMESTIC COLD WATER	SA SUPPLY AIR
CHECK VALVE	-DHW- DOMESTIC HOT WATER	RA RETURN AIR
STRAINER W/VALVED BLOWDOWN	-DHWR- DOMESTIC HOT WATER RETURN	BDD BACKDRAFT DAMPER
BUTTERFLY VALVE	-ST- STORM SEWER PIPING	D– DIFFUSER
RELIEF VALVE	-SAN- SANITARY SEWER PIPING	R– REGISTER
UNION	-V- VENT PIPING	
F.D. FLOOR DRAIN/FIRE DAMPER	-G- NATURAL GAS PIPING	
	-A- COMPRESSED AIR PIPING	
	H.B. HOSE BIBB	
	H.D. HUB DRAIN	
	CONNECT TO EXISTING	



WATER DROP AT GANG TABLES

NTS

BEFORE INSTALLING DROPS AT GANG TABLES, COORDINATE WITH PHOTO LAB SUPERVISOR EXACT HEIGHT & LOCATION OF HOSE CONNECTION AND VALVES. TOTAL LENGTH OF PIPE OFF MAIN HEADER AROUND TABLE IS 2' TO 3' (APPROX.).

CODED NOTES

1. FROM EXISTING 2" DCW, 1-1/2" DHW & 3/4" DHWR AT CEILING OF 1ST FLOOR. RUN NEW 2-1/2" DCW, 2-1/2" DHW & 3/4" DHWR UP IN CHASE. INSTALL ISOLATION BALL VALVES AFTER TAP OF EXISTING LINES AT 1ST FLOOR. OPEN & SEAL UP CHASE AS REQ'D PAINT TO MATCH – INSULATE LINES.
2. PIPE 68'F TEMPERED WATER TO EXISTING GANG PHOTO TABLES. PIPE IN THE SAME MANNER AND ARRANGEMENT AS EXISTING. INSTALL NEW CHICAGO "5T" GLOBE BALANCE VALVE, AND ON/OFF BALL VALVE AT EACH DROP. BALANCE FLOWS TO 1.5 GPM PER OUTLET. USE 1/2" COPPER PIPING DROPS. SEE DETAIL THIS SHEET. MAIN 68'F HOT WATER LINES TO RUN HIGH IN SPACE AND DROP DOWN TO ENDS OF TABLES AND SPLIT TO BOTH SIDES. RUN TW TO BALANCE VALVES AT END OF TABLES IN BASE BID.
3. PROVIDE 1/2" DCW & 1/2 DHW DROP TO NEW MIXING VALVE AT EXISTING SINK UNDER BASE BID. INSTALL SHUTOFF/BALANCE VALVES IN DROPS. SEE SINGLE SINK MIXING VALVE DETAIL ON SHEET P-4. STATION TO HAVE GLOBE BALANCE VALVES IN DROPS, MIXING VALVE, THERMOMETER, VACUUM BREAKER AND TWO HOSE OUTLETS EACH WITH BALL VALVE. BALANCE STATIONS TO 1.5 GPM TOTAL FLOW. FIELD PIPE IN A NEAT MANNER WITH LOCATIONS OF HOSE CONNECTIONS AS DIRECTED BY LAB SUPERVISOR.
4. GENERAL LOCATION OF MASTER MIXING VALVE FOR GANG TABLES. COORDINATE EXACT LOCATION OF MIXING VALVE WITH UNIVERSITY. MIXING VALVE: LEONARD TM-186-30TA-PRV-EXP WITH EXPOSED CABINET, WHITE BAKED ENAMEL. 3/4" DCW/DHW INLETS, 1" OUTLET. TRANSITION IMMEDIATELY AFTER MIXING VALVE TO 1-1/2" TEMPERED WATER LINE. SET TEMPERED WATER AT 68'F. SEE DETAIL FOR TYING IN RECIRCULATING LINE AND PIPING OF RECIRCULATING PUMP ON SHEET P-6. FIELD LOCATE MIXING VALVE. RELOCATE ANY EXISTING PIPING OR ELECTRICAL AS NECESSARY.
5. UNDER ALTERNATE 1, INSTALL NEW 100 AMP PANEL. SEE SHEETS P-5 & P-6.
6. UNDER ALTERNATE 2, PROVIDE & INSTALL TWR PIPING, PUMP, ETC. AND PIPE BACK TO MIXING VALVE & BUILDING DHWR LINE. RUN TWR FROM GLOBE VALVES AT ENDS OF GANG TABLES. SEE DETAIL ON SHEET P-6.
7. UNDER ALTERNATE 5 INSTALL TWO NEW SINKS ON THIS WALL WITH COUNTER IN BETWEEN. RAISE HOODS AS NECESSARY INSTALL TWO NEW MIXING VALVES AS SHOWN IN THE DETAIL. SINK PIPING – ROOM 209 (BASE BID). 125' HOT WATER TO BE PIPED TO BOTH SINKS AS SHOWN IN THE DETAIL. SEE NEW DOUBLE SINK INSTALLATION – ROOM 209. DETAIL ON SHEET P-6. PIPE BOTH SINKS WITH GLASS WASTE PIPING AND TIE INTO EXISTING DRAIN THROUGH FLOOR. VENT BOTH SINKS WITH GLASS ACID PIPING AND PIPE UP THROUGH THIRD & FOURTH FLOORS TO A NEW 3" VENT THROUGH ROOF. IF FEASIBLE TIE VENT INTO EXISTING VENT THROUGH ROOF. FIELD ROUTE VENT.
8. UNDER ALTERNATE 6 INSTALL NEW 3" FLOOR DRAINS AND TIE INTO EXISTING SANITARY WASTE PIPING IN FLOOR BELOW. FIELD ROUTE SANITARY PIPING IN CEILING OF FIRST FLOOR BELOW. PIPE 1/2" TRAP PRIMER LINE TO EACH FLOOR DRAIN. INSTALL TRAP PRIMERS IN A COLD WATER LINE AT SINKS IN ROOMS 209, 210, 215 OR 218 AS REQUIRED. FLOOR DRAIN PIPING TO BE CAST IRON NO HUB.

2ND FLOOR PLUMBING PLAN

DRAWN BY	DATE	JOB NO.	DETAIL NOS.
			SHEET NO. P-3