CIRCULATOR PUMP SCHEDULE MANUFACTURER MARK | CAPACITY | TOTAL HEAD POWER HEAD NUMBER VOLTAGE 4 GPM 7 ftH2O 11 ftH2O 0.125 hp 0010-SF3 115 V CP-2 4 GPM 7 ftH2O 11 ftH2O 0.125 hp 115 V TACO 0010-SF3

1. PUMPS SHALL OPERATE ONE AT A TIME. IF 1 PUMP FAILS, THE OTHER WILL AUTOMATICALLY TURN ON. PUMPS SHALL ALTERNATE BASED ON A SCHEDULE TO BE DETERMINED BY THE VA. PUMPS SHALL RUN CONTINUOUSLY.

PLUMBING ACCESSORIES

FLOOR DRAIN - REFER TO SPECIFICATION FOR MORE INFORMATION.

FLOOR DRAIN - REFER TO SPECIFICATION FOR MORE INFORMATION.

LINEAR SHOWER DRAIN, STAINLESS STEEL, 4 15/32" WIDE, REFER TO SPECIFICATIONS FOR MORE INFORMATION.

FLOOR CLEANOUT - REFER TO SPECIFICATIONS FOR MORE INFORMATION

WALL CLEANOUT - REFER TO SPECIFICATIONS FOR MORE INFORMATION

GRADE CLEANOUT - REFER TO SPECIFICATIONS FOR MORE INFORMATION

ROOF DRAIN - 15" DIAMETER MAIN ROOF DRAIN LOW SILHOUETTE DOME (NO-HUB).

OVERFLOW (SECONDARY) ROOF DRAIN - 15" DIAMETER MAIN ROOF DRAIN LOW SILHOUETTE DOME (NO-HUB).

#### WATER MONITORING EQUIPMENT

THE SPECFIED WATER MONITORING EQUIPMENT SHALL BE REQUIRED AT THE FOLLOWING LOCATIONS:

TIE WATER MONITORING SYSTEM TO BAS

MAINS/RISERS CW/HW - MOST REMOTE LOCATION TEMPERATURE

CW/HW - MOST REMOTE FIXTURE TEMPERATURE

TEMPERATURE AT END OF RETURN SYSTEM AND PRIOR TO MIXING.

RECIRCULATION PUMP FLOW

CW - PROVIDE A PANEL MOUNTED SYSTEM (SAMPLER SKID) FOR AUTOMATIC MONITORING OF FREE OR TOTAL CHLORINE RESIDUALS, PH. PRESSURE, DISSOLVED SOLIDS (CONDUCTIVITY), AND TEMPERATURE. THE SYSTEM MUST CONTINUOUSLY MONITOR THESE SENSORS AND MAKE THE DATA AVAILABLE SECURELY USING AND INTERNET CONNECTED DEVICE. THE TOTAL SYSTEM MUST BE PREWIRED AND PRE PLUMBED ON A SINGLE PANEL TO ENSURE HIGH QUALITY AND A SIMPLE INSTALLATION. PROVIDE PHIGENICS WME-1175 PWA ADVANCED MONITORING SYSTEM 2.0 OR APPROVED EQUAL.

HW - PROVIDE A PANEL MOUNTED SYSTEM (SAMPLER SKID) FOR AUTOMATIC MONITORING OF FREE OR TOTAL CHLORINE RESIDUALS, PH. PRESSURE, DISSOLVED SOLIDS (CONDUCTIVITY), AND TEMPERATURE. THE SYSTEM MUST CONTINUOUSLY MONITOR THESE SENSORS AND MAKE THE DATA AVAILABLE SECURELY USING AND INTERNET CONNECTED DEVICE. THE TOTAL SYSTEM MUST BE PREWIRED AND PRE PLUMBED ON A SINGLE PANEL TO ENSURE HIGH QUALITY AND A SIMPLE INSTALLATION. PROVIDE PHIGENICS WME-1175 PWA ADVANCED MONITORING SYSTEM 2.0 OR APPROVED EQUAL. PROVIDE WITH SAMPLE COOLER.

## DEDUCTIVE ALTERNATE NOTES

(DEDUCTIVE ALTERNATES ARE CASCADING AND MUST BE EXCERCISED IN THE ORDER PRESENTED) FOR A DETAILED DESCRIPTION OF EACH DEDUCTIVE ALTERNATE REFR TO COVER SHEET ON GI000 DEDUCTIVE ALTERNATE #2: ELIMINATE TUNNEL (EAST LEG).

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DEDUCTIVE ALTERNATE #6 : REDUCE PLATFORM AT CHILLER.

PLUMBING LEGEND									
#		DRAWING KEYNOTE							
P-XXX		EQUIPMENT MARK							
lacktriangle		POINT OF NEW CONNECTION							
<b>\( \rightarrow</b>		POINT OF CONNECTION TO CIVIL							
———— (E)SAN		EXISTING SANITARY PIPING							
	(E)CW	EXISTING COLD WATER							
	CW	COLD WATER PIPING							
	HW	HOT WATER PIPING							
	HWR	HOT WATER RETURN PIPING							
	SAN	SANITARY PIPING							
	V	SANITARY VENT PIPING							
⊙ OR > <	VTR	VENT THRU ROOF							
♡ OR ※	GCO	GRADE CLEAN OUT (1-WAY OR 2-WAY)							
♡ OR ※	FCO	FLOOR CLEAN OUT (1-WAY OR 2-WAY)							
wco	WCO	WALL CLEAN OUT							
G+		PIPE DOWN							
C+		PIPE UP							
E		PIPE CAP							
	FD	FLOOR DRAIN							
ιбι		BALL VALVE							
ı[i		BUTTERFLY VALVE							
$\nearrow$		CHECK VALVE							
$\bowtie$		GATE VALVE							
ı₹ı		PLUG VALVE							
$\rightarrow$		STRAINER							
1 1		UNION							
<u>8</u> 4	PRV	PRESSURE RELIEF VALVE							
		BACKFLOW PREVENTER							

PLUMBING FIXTURE SCHEDULE

#### FIXTURE UNITS WATER WATER FIXTURE FIXTURE COLD HOT FIXTURE DESCRIPTION WATER WATER DRAINAGE MARK | FIXTURE | TRAP DRAIN SUPPLY SUPPLY COUNT WATER CLOSET, BARRIER FREE - BACK OUTLET, WALL MOUNTED, ELONGATED RIM, 1-1/2" TOP SPUD, MANUAL FLUSH VALVE, 1.28 GPF, VITREOUS CHINA, VACUUM BREAKER; OPEN FRONT SEAT LESS COVER, STAINLESS N/A 4" 4" 10 STEEL CHECK HINGE. RIM: 17". FIXTURE SHALL BE EPA WATER SENSE LABELED WATER CONSERVING PRODUCT. REFER TO SPECIFICATIONS FOR ADDITIONAL 19. INSTALL INSULATION PER SPECIFICATION ON ALL ROOF LEADERS ABOVE CEILING. WATER CLOSET, BARRIER FREE - BACK OUTLET, WALL MOUNTED, ELONGATED RIM, 1-1/2" TOP SPUD. MANUAL FLUSH VALVE. 1.28 GPF. VITREOUS CHINA. VACUUM BREAKER; OPEN FRONT SEAT LESS COVER, STAINLESS 10 P-114 STEEL CHECK HINGE. RIM: 17". FIXTURE SHALL BE EPA WATER SENSE LABELED WATER CONSERVING PRODUCT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION LAVATORY - INTEGRAL TO COUNTERTOP, LAVATORY PROVIDED BY MILL WORK CONTRACTOR, FAUCET HOLES AS REQUIRED. REFER TO ARCHITECTURAL DETAIL D7 ON SHEET A-401 FOR COUNTERTOP INFORMATION. PLUBMING CONTRACTOR TO PROVIDE RIGID GOOSENECK SPOUT WITH WRIST BLADE HANDLES FAUCET WITH ASSE 1070 COMPLIANT THERMOSTATIC ANTI-SCALD VALVE (SEE 1/2" 1/2" 1 1/4" 2" P-417 0.5 0.5 DETAIL 1 ON SHEET P-502), 1/2 GPM, LEAD FREE, DECK MOUNTED. PROVIDE COVER PLATES, GRID DRAIN ASSEMBLY, P-TRAP, STOPS, SUPPLIES, ETC., FOR A COMPLETE INSTALLATION. FIXTURE SHALL BE EPA WATER SENSE LABELED WATER CONSERVING PRODUCT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. LAVATORY - BARRIER FREE, WALL HUNG. PROVIDE CONCEALED ARM SUPPORT CARRIER. PROVIDE SELF-POWERED, SENSOR OPERATED, 0.5 GPM, ADA COMPLIANT, SINGLE HOLE, DECK MOUNTED FAUCET: TOTO TEL105-D10E OR EQUAL. PROVIDE WITH ASSE 1070 THERMOSTATIC ANTI-SCALD VALVE. TOP OF RIM 34" FROM FINISHED FLOOR. PROVIDE COVER PLATES, PERFORATED | 1/2" | 1/2" | 1 1/4" | 2" P-418 0.5 0.5 STRAINER, P-TRAP, STOPS, SUPPLIES, ETC. FOR A COMPLETE INSTALLATION. PROVIDE ADA COMPLIANT PROTECTIVE PIPING COVERS FOR EXPOSED SUPPLIES. TRAP, AND DRAIN PIPING. FIXTURE SHALL BE EPA WATER SENSE LABELED WATER CONSERVING PRODUCT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. SERVICE SINK . REFER TO SPECIFICATIONS FOR P-501 1/2" 1/2" 3" 2.25 2.25 ADDITIONAL INFORMATION. CLINICAL SINK - FLOOR MOUNTED, PROVIDE WITH SERVICE SINK FAUCET AND FLUSH VALVE, REFER TO P-505FV BELOW FOR ADDITIONAL INFORMATION 4" 4" P-505 1/2" 1/2" REGARDING THE FLUSHVALVE. PROVIDE WITH ASSE 1070 THERMOSTATIC ANTI-SCALD VALVE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. CLINICAL SINK FLUSH VALVE - REFER TO SPECIFICATION P-505FV 1" N/A 4" 4" 10 0 FOR ADDITIONAL INFORMATION. SINK - SALON HAIR WASHING. HIGH PORCELAIN WALL MOUNTED SHAMPOO BOWL FOR HAIR WASHING. PROVIDE P-516 WITH SPRAY NOZZLE WITH HOSE, STRAINER, AND ASSE 1/2" 1/2" 1 1/4" 2" 0.5 0.5 1070 ANTI-SCALD VALVE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. TWO COMPARTMENT SINK - 29X22" STAINLESS STEEL TWO COMPARTMENT SINK, SELF RIMMING, 7-3/4" DEEP, 3 FAUCET HOLES. BASKET STRAINER NO. LK35 GRID DRAIN. WRIST BLADE FAUCET - ELKAY MODEL LK810HA08T4, 4" 1/2" 1/2" 1 1/2" 2" P-524 WRISTBLADE HANDLES WITH 8" RIGID GOOSENECK SPOUT, 34. ALL EQUIPMENT, FIXTURES AND MATERIALS SHALL BE NEW AND UNUSED, AND INSTALLED IN STRICT AERATOR, DRAIN BASKET AND STRAINER. PROVIDE WITH ASSE 1070 ANTI-SCALD VALVE. PROVIDE STOPS, SUPPLIES, TRAP, ETC., TO COMPLETE INSTALLATION. SINK - SINGLE COMPARTMENT, STAINLESS STEEL 1/2" 1/2" 1 1/4" 2" 0.5 0.5 PROVIDE WITH ASSE 1070 ANTI-SCALD VALVE. SHOWER - ADA COMPLIANT, SHOWER SYSTEM WITH SHOWER HEAD AND SINGLE LEVER HANDLE. PRESSURE-BALANCED THERMOSTATIC ANTI-SCALD VALVE, WITH INTEGRAL SERVICE STOPS, 1.5 GPM. PROVIDE SHOWER FLOOR DRAIN KOHLER K-9132 OR EQUAL, CHROME PLATED BRASS, WITH 4 3/8" ROUND 1/2" 1/2" 2" 2" 3 STRAINER, AND 2" OUTLET. PROVIDE STOPS, SUPPLIES, TRAP. ETC. FOR A COMPLETE INSTALLATION. FIXTURE SHALL BE EPA WATER SENSE LABELED WATER CONSERVING PRODUCT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. EMERGENCY EYE AND FACE WASH, WALL MOUNTED. PROVIDE WITH ASSE 1071 THERMOSTATIC ANTI-SCALD 1/2" 1 1/2" WALL HYDRANT, NON-FREEZE - ZURN NO. Z-1330-0 ENCASED FLUSH WALL HYDRANT. NICKEL BRONZE BOX AND HINGE COVER WITH OPERATING CYLINDER LOCK AND N/A N/A N/A "WATER" CAST ON COVER. 3/4" CW. LAWN FAUCET. NON-FREEZE – BRASS FAUCET WITH DETACHABLE WHEEL OR T-HANDLE. REFER TO N/A N/A N/A SPECIFICATION FOR MORE INFORMATION. WATER SUPPLY BOX UNIT (ICE MAKER) WITH BALL TYPE 1/2" N/A N/A N/A 0.25 0

SHUT OFF VALVE.

### PLUMBING NOTES

- REVIEW PLANS OF ALL TRADES PRIOR TO BIDDING AND BEGINNING WORK. INSTALLATIONS ARE TO INCLUDE ALL PLUMBING FOR COMPLETE SYSTEMS SHOWN ON THE PLANS AND AS REQUIRED.
- COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE WITH HVAC DUCTS, STRUCTURE, ELECTRICAL, LIGHTING, AND OTHER PIPING IN THE CEILING SPACE AND PROVIDE COORDINATION DRAWINGS PRIOR TO CONSTRUCTION. VENT PIPING AND WATER PIPING SHALL BE HELD EITHER ABOVE OR BELOW HVAC DUCTWORK, AS
- COORDINATED WITH THE HVAC CONTRACTOR. ALL CHANGES SHALL BE REVIEWED BY THE ARCHITECT.
- . COORDINATE WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING-IN PLUMBING FIXTURES AND EQUIPMENT
- THE PLUMBING SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING FIXTURES, UNLESS NOTED OTHERWISE.
- VERIFY MOUNTING HEIGHT AND WATER CONNECTION SIZES OF ALL PLUMBING FIXTURES PRIOR TO ROUGH-IN. FURNISH CUT-OUT TEMPLATES, FOR PLUMBING FIXTURES TO BE INSTALLED IN MILLWORK, TO THE GENERAL
- MAKE PROPER HOT AND COLD WATER, WASTE AND VENT PIPING CONNECTIONS TO ALL FIXTURES AND EQUIPMENT EVEN THOUGH ALL FITTINGS AND CONNECTIONS ARE NOT SHOWN ON DRAWINGS.
- 8. VERIFY LOCATION OF WATER SERVICE AND THE LOCATION/INVERTS OF SANITARY PIPING PRIOR TO INSTALLATION.
- 9. CUT AND PATCH CONCRETE AS REQUIRED.
- 10. IT IS NOT THE INTENT OF THESE DRAWINGS TO COVER ALL WORK AND MATERIAL. ANY EQUIPMENT, PLUMBING FIXTURE, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THESE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE ARCHITECT) SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.
- . THE EQUIPMENT ROUGH-IN ITEMS AND THEIR DIMENSIONED LOCATIONS FOR ALL CONNECTIONS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. IN SOME INSTANCES THE OWNER OR SUPPLIER MAY MAKE SUBSTITUTIONS OR EQUIPMENT ITEMS MAY VARY FROM WHAT IS SHOWN. THEREFORE, THESE ITEMS AND DIMENSIONS SHALL BE VERIFIED WITH THE EQUIPMENT SUPPLIER, OWNER AND/OR EQUIPMENT ROUGH-IN DRAWING. FAILURE OF THE APPROPRIATE CONTRACTOR TO VERIFY ROUGH-INS OR THEIR LOCATIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION AND/OR ADDITIONAL ROUGH-INS DIRECTLY UPON THAT CONTRACTOR.
- 2. CONTRACTOR SHALL SUPPLY TO THE ARCHITECT/ENGINEER THE REQUIRED COPIES OF SHOP DRAWINGS FOR APPROVAL SO THE QUALITY OF INTENDED MATERIALS OR EQUIPMENT CAN BE REVIEWED BEFORE INSTALLATION. THERE WILL BE NO INSTALLATION UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED AND REVIEWED BY THE ARCHITECT/ENGINEER.
- 13. DO NOT SCALE THIS DRAWING. REFER TO ARCHITECTURAL FLOOR PLAN FOR BUILDING DIMENSIONS.
- 14. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL ELBOWS, OFFSETS. UNIONS, VALVES, FITTINGS, ETC. REQUIRED TO COMPLETE THE INSTALLATION OF THE WORK. THE SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORESEEN HAD PROPER EXAMINATION BEEN MADE.
- 5. VERIFY SERVICE POINTS AND METERING LOCATIONS FOR PROJECTS WITH LOCAL UTILITIES AND/OR LANDLORD (DOMESTIC WATER, SANITARY SEWER, GAS, ETC.).
- 16. THE CONTRACTOR SHALL COOPERATE FULLY AMONG ALL TRADES.
- 17. ALL ROOF PENETRATIONS FOR ROOF DRAINS AND PLUMBING, GAS, AND REFRIGERANT PIPING SHALL BE MADE IN ACCORDANCE WITH ROOF SYSTEM MANUFACTURER'S GUIDELINES. COORDINATE WITH ARCHITECTURAL DETAILS AND/OR MANUFACTURER FOR ROOF SYSTEM USED.
- 18. ALL PLUMBING VENTS IN EXTERIOR WALLS SHALL BE OFFSET A MINIMUM OF 3'-0" BEFORE ROOF PENETRATION.
- 0. THE POTABLE WATER SUPPLY SHALL BE PROTECTED AGAINST BACKFLOW AND SIPHONAGE. BOTH NATURAL AND INDUCED. ALL EQUIPMENT CONNECTED TO THE POTABLE WATER SYSTEM BEING CAPABLE OF POLLUTING OR CONTAMINATING THE POTABLE WATER DISTRIBUTION SYSTEM OR ANY PART THEREOF BY MEANS OF A REVERSAL OF FLOW, PRESSURE DROP, PRESSURE LOSS, INDUCED VACUUM, OR BY INJECTION BECAUSE OF ANY PRIMARY OR AUXILIARY PUMPING SYSTEM CONNECTED. MUST BE ISOLATED AND CONTAINED BY MEANS OF APPROVED BACKFLOW DEVICES, CHECK VALVES, AIR GAPS, OR VACUUM BREAKERS. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL THESE DEVICES PER LOCAL CODE REQUIREMENTS.
- 21. THE WATER PIPING SYSTEM SHALL BE FLUSHED AND STERILIZED IN ACCORDANCE WITH LOCAL REGULATIONS.
- 22. HOT AND COLD WATER SUPPLY BRANCHES FOR ALL SYSTEMS HAVING QUICK CLOSING VALVES OF ANY TYPE SHALL HAVE WATER HAMMER ARRESTORS INSTALLED AT THE HIGH POINT ON THE END OF EACH BRANCH AND AS
- 23. ALL PIPES HANGING FROM SINGLE VERTICAL RODS / HANGERS SHALL NOT MOVE OR SWAY DURING OPERATION. SUITABLE LATERAL SUPPORTS OR BRACING SHALL BE USED TO PREVENT SWAY OR MOVEMENT.
- 24. PROVIDE SHUTOFF BALL VALVES AND DIELECTRIC UNIONS FOR ALL EQUIPMENT HOT AND COLD WATER LINES. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. COORDINATE WITH EQUIPMENT SUPPLIER FOR EXACT REQUIREMENTS.
- 25. VERIFY MOUNTING HEIGHTS OF ALL BARRIER FREE FIXTURES WITH ARCHITECTURAL PLANS.
- 26. PROVIDE COPPER INDIRECT WASTE PIPING REQUIRED FROM EQUIPMENT TO FLOOR DRAINS, OPEN RECEPTACLES, OR FLOOR SINKS. PIPING SHALL COMPLY WITH STATE AND LOCAL CODES. COORDINATE WITH ALL EQUIPMENT SUPPLIERS AND SIZES AS REQUIRED BY PIECE OF EQUIPMENT SERVED. HOLD PIPING TIGHT TO WALL WHERE APPLICABLE. PROPERLY SECURE AS REQUIRED. COORDINATE WITH CASEWORK SUPPLIER FOR MAXIMUM CLEARANCE UNDER CABINETS.
- 27. PROVIDE CHROME PLATED ESCUTCHEONS AT ALL WALL PENETRATIONS.
- 28. INSTALL SANITARY, STORM, AND CONDENSATE PIPING WITH A MINIMUM SLOPE OF 1/8" PER FOOT UNLESS OTHERWISE REQUIRED. CONTRACTOR IS RESPONSIBLE FOR PROPER DRAINAGE OF ALL SYSTEMS.
- 29. ALL FLOOR DRAINS ARE TO BE PROVIDED WITH MINIMUM 3" DRAIN LINES, DEEP SEAL TRAPS, AND AUTOMATIC TRAP PRIMERS. TRAP PRIMERS SHALL BE LOCATED IN A SERVICEABLE LOCATION AND INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. HOLD TOP OF FLOOR DRAINS FLUSH WITH FINISHED FLOOR: SEE ARCHITECTURAL SHEETS FOR FLOOR SLOPES AND PROPER FINISHED FLOOR ELEVATION.
- 30. ALL VENT PIPE TO BE COMPATIBLE WITH STRUCTURE, MECHANICAL EQUIPMENT, DUCTWORK, ELECTRICAL EQUIPMENT, AND LIGHTING. ALL VTR'S SHALL BE EXTENDED TO A MINIMUM OF 2" ABOVE PARAPET HEIGHT AND MAINTAINED 10'-0" MINIMUM FROM ALL OUTSIDE AIR INTAKES.
- 11. MATERIALS, EQUIPMENT, ASSEMBLIES AND SYSTEMS SHALL MEET ALL PERTINENT REQUIREMENTS OF NATIONALLY RECOGNIZED TESTING ORGANIZATIONS SUCH AS UL. ASTM. ASSE. AWWE. AGA AND NFPA AS WELL AS THE MOST CURRENT ADOPTED VERSION OF THE STATE AND LOCAL CODES.
- . ALL INSTALLED SYSTEMS, DEVICES AND RELATED ITEMS SHALL BE TESTED IN PLACE. REPLACE ANY AND ALL CONTRACTOR SUPPLIED DEFECTIVE DEVICES, ITEMS, OR SYSTEMS AT CONTRACTOR'S EXPENSE, BEFORE COMPLETION OF PROJECT.
- 3. WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OR NATURE OF WORK REQUIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
- CONFORMANCE TO MANUFACTURER'S RECOMMENDATIONS (UNLESS OTHERWISE NOTED). PROVIDE COMPLETE WITH ALL TRIM, STOPS, HANGERS, CARRIERS, SUPPORTS, ETC., INCLUDING PROVISIONS FOR BARRIER FREE USE, IF REQUIRED. WHERE FIXTURES ARE ACCESSIBLE THEY MUST COMPLY WITH ALL FEDERAL ADA REGULATIONS. 35. CONTRACTOR SHALL GUARANTEE ALL WORK FOR WHICH MATERIALS ARE FURNISHED. FABRICATED. FIELD
- ERECTED, ALL FACTORY ASSEMBLED EQUIPMENT FOR WHICH NO SPECIFIC MANUFACTURER'S GUARANTEE IS FURNISHED. AND ALL WORK IN CONNECTION WITH INSTALLATION OF MANUFACTURER'S GUARANTEED EQUIPMENT THE CONTRACTOR'S GUARANTEE SHALL LAST ONE YEAR FROM THE FINAL OWNER ACCEPTANCE OF THE WORK AND SHALL APPLY TO ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF ANY KIND.
- 36. ALL FAUCET CONTROLS SHALL BE OPERABLE WITH ONE HAND AND NOT REQUIRE TIGHTGRASPING.
- 37. ALL BARRIER FREE WATER CLOSET CONTROLS SHALL BE LOCATED ON UNIT TOWARDS WIDE SIDE OF STALL. VERIFY IF RIGHT OR LEFT SIDE LOCATION.
- 38. PENETRATIONS FOR PIPES, CONDUITS OR OTHER PURPOSES THROUGH ASSEMBLIES )FLOORS, ROOF, WALLS. PARTITIONS, ETC.) WITH A REQUIRED FIRE RESISTANCE RATING SHALL BE SEALED TO THE PENETRATING MEMBER IN AN APPROVED MANNER WHICH MAINTAINS THE REQUIRED FIRE RESISTANCE RATING OF THE ASSEMBLY.

# GENERAL NOTES

- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATIVE OF WORK TO BE PROVIDED (FURNISHED AND INSTALLED) UNDER THIS CONTRACT. DRAWINGS SHOULD NOT BE SCALED.
- THE CONTRACTOR IS RESPONSIBLE TO EXAMINE THE EXISTING CONDITIONS UNDER WHICH THEY SHALL OPERATE AND VERIFY THE EXTENT OF WORK REQUIRED TO COMPLETE THE WORK UNDER THIS CONTRACT.
- PRIOR TO ORDERING AND FABRICATING ANY EQUIPMENT, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE PHYSICAL CONDITIONS AT THE PROJECT SITE AND VERIFY SPACE AND SUFFICIENT CLEARANCES ARE
- AVAILABLE FOR INSTALLING EQUIPMENT, DUCTWORK, PIPING, AND APPURTENANCES, AND TO DETERMINE ANY NECESSARY MODIFICATIONS. PERFORM ALL WORK IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, REGULATIONS,
- AND STANDARDS ADOPTED BY THE AUTHORITY HAVING JURISDICTION. IF CONFLICTS EXIST BETWEEN THESE ENGINEERING DOCUMENTS AND CODES, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN. 5. ALL CONSTRUCTION WORK SHALL ALSO MEET THE FOLLOWING CODE REQUIREMENTS:
- VA PLUMBING DESIGN MANUAL VA SMALL HOUSE DESIGN GUIDE
- INTERNATIONAL BUILDING CODE (IBC) 2018 INTERNATIONAL EXISTING BUILDING CODE 2018
- IBC MECHANICAL 2018
- IBC PLUMBING 2018
- IBC ENERGY CONSERVATION 2018
- NFPA 1-2018, THE UNIFORM FIRE CODE
- NFPA 101-2018, THE LIFE SAFETY CODE NFPA 51B-2019, STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING AND OTHER HOT WORK NFPA 13-2019, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
- NFPA 70-2017, NATIONAL ELECTRICAL CODE • NFPA 90A-2018, STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTING SYSTEMS.
- NFPA 99-2018, STANDARD FOR HEALTH CARE FACILITIES
- NFPA 241-2019, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS.
- CONTRACTOR SHALL COORDINATE AND SEQUENCE DEMOLITION, CLEANING, AND CONSTRUCTION WORK.
- CONTRACTOR SHALL NOTE ANY SPECIAL REQUIREMENTS FOR INSTALLATION OF WORK UNDER THIS CONTRACT. DISMANTLE AND REASSEMBLE EQUIPMENT AS NECESSARY FOR ENTRY INTO THE BUILDING AND THE LOCATION OF
- THE CONTRACTOR SHALL MAINTAIN A COMPLETE PROJECT SCHEDULE AND SHALL UPDATE THIS SCHEDULE WEEKLY. ANY CHANGES SHALL BE NOTED AND AN UPDATED SCHEDULE SHALL BE PROVIDED TO THE OWNER.
- 9. ALL PERMITS, FEES, TAXES, ETC SHALL BE PAID BY CONTRACTOR AS PART OF THE TOTAL PROJECT COST.
- PENETRATIONS THROUGH RATED ASSEMBLIES WITH FIRESTOP MATERIAL IN ACCORDANCE WITH U.L. REQUIREMENTS TO MAINTAIN THE ASSEMBLY RATING.

0. MAINTAIN THE INTEGRITY OF ALL FIRE AND SMOKE RATED WALLS, PARTITIONS, CEILINGS, AND FLOORS. SEAL ALL

- 1. CONTRACTOR SHALL FURNISH U.L. APPROVED DRAWINGS FOR EACH TYPE OF FIRE AND SMOKE RATED ASSEMBLY PENETRATION BY DUCTS, PIPES, OR CONDUITS, AND SHALL DISPLAY THESE DRAWINGS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- 12. CONTRACTOR SHALL REFER TO ALL DETAILS FOR PROPER GUIDANCE.
- 13. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND EQUIPMENT SUBMITTALS FOR ALL PRODUCTS USED ON
- 14. THE ENGINEER'S APPROVAL OF SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE REQUIREMENTS OF CONTRACT DOCUMENTS UNLESS THE CONTRACTOR HAS RECEIVED WRITTEN APPROVAL FROM THE ENGINEER TO THE SPECIFIC DEVIATION. THE ENGINEER'S APPROVAL OF SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN HIS OR HER SUBMITTAL DATA.
- 15. THE CONTRACTOR IS REQUIRED TO SUBMIT THREE COMPLETE O&M MANUALS IN THREE RING BINDERS AT SUBSTANTIAL COMPLETION. MANUALS SHALL INCLUDE INSTALLATION AND MAINTENANCE DATA ON ALL NEW EQUIPMENT AND MATERIALS, CERTIFIED TECHNICAL PRODUCT DATA, EQUIPMENT SHOP DRAWINGS, SPARE PARTS DATA, ETC. PROVIDE AN INDEX AND ASSOCIATED DIVIDERS.
- 16. CLOSE OUT DOCUMENTS: THE CONTRACTOR IS TO MAINTAIN ONE SET OF CONSTRUCTION DRAWINGS ON SITE AND KEEP CURRENT WITH MARK UP AS-BUILT CONDITIONS DURING CONSTRUCTION OF THE PROJECT. THIS SET IS TO INCLUDE ALL CONTRACT CHANGES, MODIFICATIONS AND CLARIFICATIONS, THIS SET ALONG WITH ALL SHOP

DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT/ENGINEER AFTER CONSTRUCTION COMPLETION.

17. IT IS THE RESPONSIBILITY OF ALL BIDDERS TO THOROUGHLY REVIEW AND UNDERSTAND ALL CONSTRUCTION DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO ALL DRAWINGS, SPECIFICATION SECTIONS, ETC. THE DRAWINGS ARE SCHEMATIC IN NATURE. THEREFORE BEFORE STARTING ANY WORK, THE CONTRACTOR SHALL REVIEW ALL OTHER CONSTRUCTION DOCUMENTS, VERIFY FIELD CONDITIONS AND SHALL MAKE ANY REQUIRED MINOR ADJUSTMENTS WITHOUT EXTRA COST TO THE OWNER. ANY MAJOR DISCREPANCIES FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. THE BASE BID SHALL REFLECT THE TOTAL COST OF NEW EQUIPMENT INSTALLATION. THIS INCLUDES LABOR, EQUIPMENT AND MATERIALS. NO CHANGE ORDERS SHALL

# **ABBREVIATIONS**

BE ISSUED WITHOUT WRITTEN CONSENT AND APPROVAL FROM ENGINEER AND ARCHITECT.

- **EXISTING** ABOVE FINISHED FLOOR **BELOW FINISHED FLOOR**
- CIRCULATOR PUMP CONNECT TO EXISTING DCW DOMESTIC COLD WATER DEMO DEMOLISH OR DEMOLITION

PIPE CLEAN OUT

- DRAINAGE FIXTURE UNITS ETR EXISTING TO REMAIN EWC ELECTRIC WATER COOLER
- EXISTING FLOOR CLEAN OUT FCO FLOOR DRAIN FLOOR SINK
- GRADE CLEAN OUT GPM GALLONS PER MINUTE HUB DRAIN DOMESTIC HOT WATER

DOMESTIC HOT WATER RETURN

ICE MAKER OUTLET BOX INTERNATIONAL BUILDING CODE LAVATORY

HEAT EXCHANGER

MOP SINK NORMALLY CLOSED NORMALLY OPEN

DHWR

- OVERFLOW ROOF DRAIN OSD OVERFLOW (SECONDARY) STORM WATER DRAIN PRIMARY STORM WATER DRAIN **ROOF DRAIN**
- SANITARY SHOWER SH
- SUMP PUMP TANKLESS WATER HEATER VTR **VENT THROUGH ROOF**
- WASTE WATER CLOSET WALL CLEAN OUT
- WALL HYDRANT WSFU WATER SUPPLY FIXTURE UNITS

# DRAWING INDEX - PLUMBING

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		CONSULTANT				ARCHITECT/ENGINEER OF RECORD STAMP  AE:  STAMP  STA		Office of Construction  Office of Construction  Drawing Title PLUMBING LEGENDS & NOTES		ISSUED FOR CONSTRUCTION	Project Title NEW COMMUNITY LIVING		Project Number 620-334  Building Number	
		NORRIS DESIGN Planning   Landscape Architecture   Branding	HINMAN	C.S.Davidson,Inc.	MES GROUP	TRIPLE C - The A/E Group 201 E. Jefferson Street, Suite 200 Syracuse, NY 13202	TRIPLE C - THE A&E GROUP	TICEN WOON THE REAL WOON THE WOON THE WOON THE REAL WOON THE REAL WOON THE REAL WOON THE WOON	and Facilities	Approved:		CENTER		CLC  Drawing Number
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