

SANITARY SEWER CALCULATION

FIXTURE	QUANTITY	FIXTURE UNITS		SUB-TOTAL
		DFU		
WATER CLOSET	17	6		102
LAVATORY	17	1		17
SINK	3	3		9
MOP SINK	2	2		4
WATER COOLER	2	.5		1
SHOWERS	18	2		36
CLINIC SINK	1	5		5
TOTAL				174

174 FIXTURE UNITS

NOTE:
FIXTURE UNIT VALUES TAKEN FROM PLUMBING DESIGN MANUAL, DEPARTMENT OF VETERAN AFFAIRS.
EXISTING 4" WASTE STACKS WILL BE ADEQUATE TO SERVE NEW LAYOUT. TOTALS LISTED ABOVE ARE FOR "F" WING.

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	SAN	VENT	HW	CW	REMARKS
P103	WALL HUNG	4"	2"	-	1"	WALL HUNG WATER CLOSET WITH MANUAL FLUSH VALVE
P106	FLOOR MOUNTED WATER CLOSET	4"	2"	-	3/4"	PRESSURE ASSISTED TANK TYPE, ADA COMPLIANT
P114	FLOOR MOUNTED WATER CLOSET (BARIATRIC ROOM, BACK OUTLET)	4"	2"	-	1"	304 STAINLESS STEEL WITH WHITE EPOXY COATING ON INTERIOR AND EXTERIOR OF TOILET. CONCEALED SENSOR FLUSH VALVE, ADA COMPLIANT. PROVIDE AUTO-FLUSH FEATURE ON VALVE
P116	FLOOR MOUNTED WATER CLOSET BACK OUTLET BACK SPUD.	4"	2"	-	1"	304 STAINLESS STEEL WITH WHITE EPOXY COATING ON INTERIOR AND EXTERIOR OF TOILET. CONCEALED SENSOR FLUSH VALVE, ADA COMPLIANT. PROVIDE AUTO-FLUSH FEATURE ON VALVE
P414	LAVATORY	2"	2"	1/2"	1/2"	WALL HUNG 21" X 18" VITREOUS CHINA LAVATORY. PROVIDE GOOSENECK FAUCET W/ MIXING VALVE. THREADED SUPPLIES AND P-TRAP AND SUPPLY COVER. FAUCET SHALL BE WRIST-BLADE TYPE. SEE NOTE 4
P421	LAVATORY (PATIENT ROOMS)	2"	2"	1/2"	1/2"	WALL HUNG 20" X 18" LAVATORY WITH SENSOR FAUCET WITH MIXING VALVE SUPPLIES AND P-TRAP AND WANDALPROOF POLYMER COVER. SEE NOTE 4
P502	MOP SINK	3"	2"	1/2"	1/2"	FLOOR MOUNTED CORNER TYPE
P505	CLINICAL SERVICE SINK	2"	2"	1/2"	1/2"	WALL MOUNTED WITH FLUSH VALVE AND BEDPAN WASHER, AND FAUCET. SEE NOTE 4
P524	SINK	2"	2"	1/2"	1/2"	DOUBLE COMPARTMENT STAINLESS STEEL 33" X 22" X 5" ADA COMPLIANT. SEE NOTE 4
P528	SINK	2"	2"	1/2"	1/2"	SINGLE COMPARTMENT STAINLESS STEEL 21" X 22" X 5" DEEP UNDERMOUNT TYPE. ADA COMPLIANT. SEE NOTE 4
P609	WATER COOLER	2"	2"	-	1/2"	RECESSED STAINLESS STEEL WITH INTEGRAL STRAINER ASSEMBLY AND LIGATURE PROOF BUBBLER.
P702	SHOWER	3"FD-C	-	1/2"	1/2"	PROVIDE PRESSURE BALANCE SHOWER VALVE AND SHOWER HEAD VALVE AND HEAD SHALL BE ANTI-LIGATURE TYPE.
P704	SHOWER	3"FD-C	-	1/2"	1/2"	PROVIDE PRESSURE BALANCE SHOWER VALVE AND SHOWER HEAD VALVE.
P801	FREEZEPROOF WALL HYDRANT	-	-	-	3/4"	PROVIDE NICKEL BRONZE BOX AND VACUUM BREAKER.
P808	WASHER BOX	2"	-	1/2"	1/2"	EPOXY COATED FINISH
P812	ICE MAKER BOX	-	-	-	1/2"	EPOXY COATED FINISH

NOTE:
1. REFER TO ARCHITECTURE PLANS FOR MOUNTING HEIGHT OF FIXTURES AND EQUIPMENT.
2. COORDINATE FLUSH VALVE INSTALLATION WITH GRAB BAR, IF APPLICABLE.
3. CONTRACTOR SHALL SUBMIT TO ARCHITECT/COR REPRESENTATIVE CUT SHEETS FOR ALL PLUMBING FIXTURES PRIOR TO PURCHASE AND/OR INSTALLATIONS SUBJECT TO APPROVAL AND REVIEW CAN BE COORDINATED AND AGREED ON CONCERNING FIXTURE TYPE TO BE FURNISHED/INSTALLED.
4. PROVIDE THERMOSTATIC MIXING VALVE SET AT 110° F.

DOMESTIC WATER CALCULATION

FIXTURE	QUANTITY	FIXTURE UNITS			SUB-TOTAL (ROUNDED)		SUB-TOTAL
		CW	HW	TOT	CW	HW	
WATER CLOSET	17	10	-	10	170	-	170
LAVATORY	17	1.5	1.5	2	25.5	25.5	34
SINK	3	1.5	1.5	2	4.5	4.5	6
MOP SINK	2	3	3	4	6	6	8
SHOWERS	18	1	1	1.4	18	18	25.2
CLINIC SINK	1	10	3		10	3	10
ELEC. WATER COOLER	1	0.25	-	0.25	1	-	.25
TOTAL				235	57		253.45
PEAK DEMANDS				97 GPM	32 GPM		102 GPM

254 FIXTURE UNITS = 102 GPM MAXIMUM DEMAND
EXISTING 3" CW SUPPLY SERVING WING "F" IS ADEQUATE FOR NEW RENOVATION. TOTALS ABOVE ARE FOR "F" WING.

NOTE:
FIXTURE UNIT VALUES TAKEN FROM PLUMBING DESIGN MANUAL, DEPARTMENT OF VETERAN AFFAIRS.

PUMP SCHEDULE

MARK	TYPE	CAPACITY (GPM) EACH PUMP	HEAD (FEET)	HP	VOLT	PHASE	RPM	BASIN	REMARKS
RCP-1	IN-LINE	10	2	1/4	120	1	1750	N/A	COLD WATER CONTINUOUS CIRCULATION

NOTES:
1. REFER TO ELECTRICAL DRAWING FOR ELECTRICAL CONNECTION INFORMATION. BASIS OF DESIGN B&G SERIES 60

PIPE LEGEND

NEW PIPE	EXISTING PIPE TO REMAIN	EX PIPE TO BE REMOVED	PIPE DESCRIPTION
(E)CW	(E)CW	(E)CW	DOMESTIC COLD WATER
(E)HW	(E)HW	(E)HW	DOMESTIC HOT WATER
(E)HWR	(E)HWR	(E)HWR	DOMESTIC HOT WATER RETURN
(E)SAN	(E)SAN	(E)SAN	SANITARY WASTE
(E)V	(E)V	(E)V	VENT
(E)RL	(E)RL	(E)RL	RAIN LEADER
(E)V	(E)V	(E)V	VACUUM PIPING
(E)A	(E)A	(E)A	MEDICAL AIR PIPING
(E)O	(E)O	(E)O	OXYGEN PIPING

SYMBOL LEGEND

SYMBOL	DESCRIPTION	ABBREVIATIONS
→	PIPE TURNING DOWN	ABV, AP, ABOVE
←	PIPE TURNING UP	BLW, BELOW
— —	PIPE CAP	CO, CLEANOUT
+	TEE TURNING DOWN	CONT, CONTINUATION
+	TEE TURNING UP	CW, COLD WATER
+	TEE TURNING UP	DFU, SANITARY DRAINAGE FIXTURE UNITS
⊗	OFF VALVE	DN, DOWN
⊙	CHECK VALVE	(E), EX, EXISTING
⊕	BALANCING VALVE (JUG TYPE)	FCO, FLOOR CONTROL DEVICE
⊖	FLOOR DRAIN	FD, FLOOR CLEANOUT
⊗	FLOOR CLEANOUT	FLR, FLOOR
⊙	END-OF-LINE CLEANOUT	HB, HOSE BIBB
⊖	WALL CLEANOUT	HW, HOT WATER
⊕	SHOCK ARRESTER (SUFFIX INDICATES PDI SIZE)	HWR, HOT WATER RETURN
⊖	TRAP PRIMER	LAV, LAVATORY
⊕	DIRECTION OF FLOW	MGAP, MEDICAL GAS ALARM PANEL
⊖	POINT OF DEMOLITION	MH, MOUNTING HEIGHT
⊕	CONNECT TO EXISTING	PL, PLUMBING LEADER
⊖	MEDICAL GAS ALARM PANEL	SA, SHOCK ARRESTOR
⊕	ZONE VALVE BOX	SAN, S, SANITARY
		SS, SERVICE SINK
		TYP, TYPICAL
		V, VENT
		VB, VACUUM BREAKER
		VTR, VENT THRU ROOF
		WCO, WALL CLEANOUT
		ZVB, ZONE VALVE BOX
		NO, NORMALLY OPEN
		NC, NORMALLY CLOSED

MEDICAL GAS ALARM PANEL SCHEDULE

SYMBOL	OXYGEN		NITROUS OXIDE		AIR		VACUUM		NITROGEN		EVAC.		MASTER PANEL	LINE PRESS. ALARM W/GAUGES	MANUFACTURER MODEL NO.
	LIQUID LEVEL IN USE (OR LOW)	RESERVE IN USE (OR LOW)	HIGH/LOW LINE PRESS.	LIQUID LEVEL IN USE (OR LOW)	RESERVE IN USE (OR LOW)	HIGH/LOW LINE PRESS.	HIGH/LOW LINE PRESS.	LOW LINE PRESS.	HIGH/LOW LINE PRESS.	RESERVE IN USE (OR LOW)	LOW LINE PRESS.				
MGAP															BEACON MEDAES 6-M2R-QAVB

BASIS OF DESIGN FOR MEDICAL GAS ALARM PANEL IS BEACON MEDAES.

GENERAL PLUMBING NOTES

- PLUMBING PIPING SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES IN ORDER TO PROVIDE A CODE COMPLIANT INSTALLATION.
- WATER PIPING SHALL BE SLOPED FOR DRAINAGE WITH DRAIN VALVES INSTALLED AT LOW POINTS.
- ACCESS PANELS SHALL BE PROVIDED AT CONCEALED VALVES, WATER HAMMER ARRESTORS AND OTHER DEVICES ABOVE HARD CEILINGS AND WALLS.
- IF EQUIPMENT IS SUBMITTED AND ACCEPTED WITH UTILITY CONNECTIONS OTHER THAN AS SHOWN ON THE DRAWINGS AND SCHEDULES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE PROPER UTILITY CONNECTIONS TO THIS EQUIPMENT AT NO ADDITIONAL COST.
- CLEANOUTS SHALL HAVE TOPS DESIGNED FOR SPECIFIC FLOOR FINISHES SUCH AS CARPET TILE, ETC., UNLESS NOTED OTHERWISE, AND SHALL BE INSTALLED SO THAT TOP OF CLEANOUT IS FLUSH WITH FINISH FLOOR OR FINISH GRADE.
- THE CONTRACTOR SHALL DO ALL CUTTING OF WALLS, FLOORS, AND CEILING AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE HELD TO A MINIMUM.
- DRAWINGS SHALL NOT BE SCALED. REFERENCE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF DOORS, WINDOWS, WALLS, ETC.
- ALL VERTICAL SUPPLY, SANITARY WASTE, AND SANITARY VENT PIPING SHALL BE LOCATED IN WALLS, CHASES OR PARTITIONS, UNLESS NOTED OTHERWISE.
- SUPPLY PIPING SHALL BE LOCATED ABOVE CEILING UNLESS NOTED OTHERWISE.
- SANITARY VENTS WILL BE COLLECTED ABOVE CEILING AND EXTENDED UP IN CEILING SPACE AND CONNECT TO EXISTING VENT STACKS.
- PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING, ADJUSTMENT OR MAINTENANCE.
- CONTRACTOR SHALL COORDINATE ALL PHASES OF WORK AND INTERRUPTIONS IN SERVICES WITH THE COR.
- PROVIDE NEW CONDUIT TO APOLLO BALL SHUT-OFF VALVES FOR EACH NEW TAP OF EXISTING WATER LINE AND AS INDICATED ON DRAWINGS.

THESE PLUMBING DRAWINGS ARE DIAGRAMMATIC. IT IS THE INTENTION OF THESE DRAWINGS TO COVER ALL WORK AND MATERIALS FOR A COMPLETE INSTALLATION. MAKE PROPER HOT AND COLD WATER, WASTE, VENT, ETC., PIPING CONNECTIONS TO ALL FIXTURES AND EQUIPMENT. ALTHOUGH ALL FITTINGS AND CONNECTIONS ARE NOT SHOWN, THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR PROVIDING PIPE ESCUTCHEONS, DIELECTRIC UNIONS, DRIP PANS, PIPE LABELS, VALVE TAGS, ANCHORS, SUPPORT SEALS, SLEEVE SEALS, ISOLATION VALVES, CLEANOUTS ETC., IN QUANTITIES ADEQUATE TO SATISFY THE INTENT OF THE ENGINEER'S DOCUMENTS. ANY EQUIPMENT, PLUMBING FIXTURES, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THIS 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 COR) SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.

- PROVIDE INSULATION ON ALL NEW WATER AND STORM SEWER PIPING.
- SMALL ITEMS NOT SHOWN OR SPECIFIED BUT OBVIOUSLY REQUIRED BY GOOD GENERAL PRACTICE TO COMPLETE THE WORK SHALL BE FURNISHED AND INSTALLED THE SAME AS IF BOTH SHOWN AND SPECIFIED.
- BY SUBMITTING A PROPOSAL FOR THIS WORK, THE CONTRACTORS WILL BE HELD TO HAVE EXAMINED THE SITE AND SATISFIED THEMSELVES AS TO EXISTING CONDITIONS UNDER WHICH THEY WILL BE OBLIGED TO OPERATE OR THAT WILL IN ANY MANNER AFFECT THEIR WORK UNDER THIS CONTRACT. NO ALLOWANCES SHALL BE MADE SUBSEQUENTLY IN THIS CONTRACT ON BEHALF OF THE CONTRACTOR FOR ANY ERRORS OR NEGLIGENCE OF HIS PART.
- PIPING SHALL NOT BE ROUTED ABOVE I.T. CLOSETS ELECTRICAL ROOMS, ELECTRICAL EQUIPMENT, OR UNDERNEATH ELECTRICAL ROOMS.
- PIPE HANGERS: HANGERS, BRACES AND RESTRAINTS SHALL ADEQUATELY SUPPORT THE SYSTEM HORIZONTALLY AND VERTICALLY AND SHALL ALLOW FOR MOVEMENT WITHOUT TRANSMITTING STRESS OR VIBRATION TO THE STRUCTURE. HANGERS SHALL BE EQUAL TO CRINELL PRODUCTS. HANGERS ON INSULATED PIPING SHALL BE PROVIDED WITH AND SHALL BE SIZED TO ACCOMMODATE HANGERS SHIELDS. HORIZONTAL SOIL, WASTE AND VENT PIPING HUNG FROM BUILDING CONSTRUCTION SHALL BE SUPPORTED AT NOT OVER 5 FEET NEXT TO FITTINGS. PROVIDE ADDITIONAL SUPPORT AT JOINTS, CHANGES IN DIRECTION AND ELSEWHERE AS REQUIRED TO MAINTAIN PROPER ALIGNMENT.
- SHOP DRAWINGS: THE CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS, CUTS AND BROCHURES TO THE COR IN ACCORDANCE TO THE PROJECT SPECIFICATIONS.
- CLEANING: THE CONTRACTOR SHALL CLEAN ALL FIXTURES, ADJUST ALL VALVES, AND LEAVE THE SYSTEM IN GOOD WORKING ORDER, REMOVE ALL DEBRIS AND RUBBISH CAUSED BY HIS WORK, AND REPAIR ANY DAMAGE CAUSED BY HIS WORKMANSHIP.
- THE PLUMBING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH OTHER TRADES AND COR THAT ITEMS FURNISHED UNDER HIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SERVICE REQUIREMENTS, AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE INTENT AND MEANING OF THE DRAWINGS AND SPECIFICATIONS.
- THE PLUMBING CONTRACTOR SHALL SEAL ALL OF HIS PENETRATIONS OF FIRE RATED WALLS USING U.L. LISTED PENETRATION MATERIALS AS DETAILED ON DRAWINGS. REFER TO ARCHITECTURAL PLANS SHEETS G1106 AND G1107.
- ALL FLOOR DRAINS, ACCESS PANELS, FLOOR DRAINS SHALL HAVE TAMPER RESISTANT SCREWS.

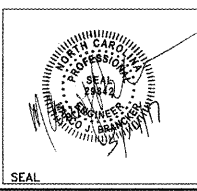
MEDICAL GAS EQUIPMENT

SYMBOL	MANUFACTURER MODEL NO.	LOCATION
MEDICAL GAS ZONE VALVE BOX	BEACON MEDAES	MOUNTING HEIGHT AT 5'-6" TO TOP OF BOX. PROVIDE VALVES WITH GAUGES. MUST HAVE SECURITY ACCESS COVER.
ZVB TRIPLE VALVE BOX - 3/4" x 3/4"	CATALOG NO. 6-150302-00	
MEDICAL GAS OR VACUUM WALL OUTLETS/INLETS	BEACON MEDAES QUICK CONNECT TYPE	CONTRACTOR SHALL CONFIRM WITH THE HOSPITAL ON THE MOUNTING HEIGHT OF THE OUTLET/INLET
VACUUM SLIDE ASSEMBLY	BEACON MEDAES STOCK NO. 6-120978-00	MOUNT AT SAME LEVEL AS GAS OUTLETS.

BASIS OF DESIGN FOR ZONE VALVE IS BEACON MEDAES; MUST HAVE SECURITY ACCESS COVER.
ALL MEDICAL GAS OUTLETS/INLETS SHALL HAVE PSYCH-SAFE FEATURE.

REVISION	DESCRIPTION

Department of Veterans Affairs
Charlie Norwood
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1 Freedom Way
Augusta, Ga. 30904



Recommended Approvals:

1. MEDICAL CENTER DIRECTOR	6. OPERATIONS SERVICE LINE MANAGER
2. ASSISTANT DIRECTOR	7. INFECTION CONTROL MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COR

Drawing Title
PLUMBING LEGEND, NOTES AND SCHEDULES

100%
CONSTRUCTION DOCUMENTS

FULLY SPRINKLERED

Project Title
RENOVATE MENTAL HEALTH UNITS

Drawn: LDR
 Building Number: []
 AutoCAD File Name: []
 Checked: []
 Reviewed: []
 Const. Contract No.: []

Date
 February 10, 2017

Project Number
 509-12-104

DRAWING No.
PL001

