

BLDG. 23, 4 AND C WATER FILTERS

PROJECT NUMBER: 554-16-05S

SHEET INDEX	
DRAWING NUMBER	SHEET NAME
GI001	COVER SHEET AND INDEX SHEET
BUILDING 4	
PL-4-110	1ST FLOOR PLUMBING PLAN BUILDING 4 AND FILTER CONNECTION DETAIL
BUILDING 23	
PL-23-110	1ST FLOOR PLUMBING PLAN BUILDING 23
BUILDING C	
PL-C-110	1ST FLOOR PLUMBING PLAN BUILDING C
ELECTRICAL	
EP110	ELECTRICAL PLANS BUILDINGS C, 4, AND 23
SITE PLAN	
GRAPHICS SYMBOLS	
 ROOM TAG ROOM NUMBER	 NORTH ARROW GRAPHIC
 DWG TITLE LINE #2 SCALE: ### DRAWING TITLE	 KEY NOTES

GENERAL NOTES
<p>1. THE INFORMATION SHOWN ON THESE DRAWINGS IS BASED ON VISUAL OBSERVATION OF THE AREAS AND IT WAS NECESSARY TO MAKE CERTAIN ASSUMPTIONS REGARDING EXISTING CONDITIONS. THE EXTENT OF NECESSARY WORK IS IDENTIFIED ON THESE PLANS TO THE BEST ABILITY OF THE DESIGN CONTRACTOR. IF ADDITIONAL WORK IS IDENTIFIED DURING CONSTRUCTION, COORDINATE WITH THE VA COR BEFORE COMMENCING WITH WORK OUTSIDE THE ORIGINAL SCOPE.</p> <p>2. CONTRACTOR SHALL SUPPLY ALL TOOLS, LABOR, MATERIAL, EQUIPMENT, AND SUPERVISION REQUIRED TO COMPLETE A MULTI SCOPE PROJECT INVOLVING INTERIOR FINISHES, REPAIRS AND/OR UPGRADES AT LOCATIONS IDENTIFIED ON CONTRACT DRAWINGS AND IN THE SPECIFICATIONS.</p> <p>3. CONTRACTOR SHALL PROVIDE CONSTRUCTION SERVICES FOR WORK TO INCLUDE BUT NOT LIMITED TO: GENERAL CONSTRUCTION, DEMOLITION, AND PAINTING AT THE DENVER VA MEDICAL CENTER.</p> <p>4. CONTRACTOR SHALL FOLLOW ALL VA POLICY, DRAWINGS, INFECTION CONTROL REQUIREMENTS, AND SPECIFICATIONS TO COMPLETE THE WORK PER CONTRACT DOCUMENTS.</p> <p>5. CONTRACTOR MUST HAVE EXPERIENCE WORKING IN AN OCCUPIED MEDICAL CENTER ENVIRONMENT.</p> <p>6. ALL KEYNOTES ARE CONSISTENTLY NUMBERED THROUGHOUT THE DRAWING SET. NOTE THAT NOT ALL KEYNOTES ARE USED ON EACH SHEET.</p> <p>7. CONTRACTOR SHALL PATCH, AND REPAIR WALL AND CEILING SURFACES TO A "LIKE NEW" FINISH. IF ANY ADJACENT FINISH SURFACES ARE DAMAGED, PROVIDE A SEAMLESS TRANSITION AND FINISH LEVEL. COORDINATE WITH COR.</p> <p>8. CONTRACTOR SHALL CLEAN ALL AREAS OF WORK UPON COMPLETION, INCLUDING BUT NOT LIMITED TO: ALL EXISTING EQUIPMENT, FIXTURES, LIGHTS, WINDOWS, BLINDS, AND REGISTERS. CONTRACTOR SHALL REPLACE ANY CEILING TILES DAMAGED IN THE COURSE OF WORK.</p> <p>9. CONTRACTOR IS ENCOURAGED TO VISIT ALL AREAS OF WORK, INCLUDING WALKING THE SITE, MEASURING EXISTING FEATURES AND OBSERVING EXISTING CONDITIONS BEFORE SUBMITTING A BID, ORDERING MATERIALS, AND/OR STARTING ANY CONSTRUCTION WORK.</p> <p>10. UNLESS NOTED OTHERWISE, ALL MATERIALS TO BE REMOVED SHALL BE THE PROPERTY OF THE CONTRACTOR. DISPOSE OF ALL WASTE MATERIAL IN APPROVED MANNER AND LOCATION, COORDINATE MATERIALS FOR SALVAGE AND RECYCLING WITH COR. THE CONTRACTOR SHALL USE ONLY DESIGNATED PATHWAYS AS ESTABLISHED BY THE VA TO REMOVE ITEMS AND MATERIALS FROM THE PROJECT BUILDING AND SITE.</p> <p>11. THE CONTRACTOR SHALL PROVIDE TRAINING IN PROPER MAINTENANCE OF THE SYSTEM INCLUDING FILTER REPLACEMENT. THE TIME REQUIRED FOR TRAINING SHALL BE INCLUDED IN THE PROPOSED SCHEDULE ALONG WITH AN OUTLINE FOR THE TRAINING.</p> <p>12. CONTRACTOR SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND STANDARDS.</p> <p>13. ALL ASPECTS OF THIS CONSTRUCTION SHALL COMPLY WITH THE VA GUIDELINES AND STANDARDS FOR DESIGN AND CONSTRUCTION PROJECTS AT THE DENVER VA.</p> <p>14. COORDINATE WITH COR AND COMPLY WITH VA REGULATIONS FOR UTILITY SHUT DOWN, NOISE AND VIBRATION.</p> <p>15. CONTRACTOR SHALL PROVIDE TWO (2) ADDITIONAL FILTERS, PER FILTRATION UNIT, FOR HOSPITAL M&R STOCK WHICH SHALL BECOME PROPERTY OF THE VA AFTER PROJECT COMPLETION.</p>
INFECTION CONTROL RISK ASSESSMENT
<p>1. THE VA'S INFECTION CONTROL POLICY AND INTERNAL REVIEW SHALL BE VERIFIED AND IMPLEMENTED THROUGHOUT CONSTRUCTION.</p> <p>2. COORDINATE DUST CONTROL PREVENTION MEASURES WITH COR.</p>
INTERIM LIFE SAFETY MEASURES NOTES (ILSM)
<p>1. ALL BUILDING SYSTEMS SERVING OCCUPIED AREAS OF THE HOSPITAL SHALL REMAIN FULLY OPERATIONAL AT ALL TIMES. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING BUILDING SYSTEMS INCLUDING ALL SYSTEMS PASSING THROUGH AND ADJACENT TO AREAS REQUIRED; INCLUDING, BUT NOT LIMITED TO, WIRING, CONDUITS, PIPING, DUCTWORK, AND OTHER UTILITIES TO SERVE OCCUPIED AREAS.</p>

ABBREVIATIONS	
A-AMP	AMPERE
ABV	ABBREVIATION
A/E	ARCHITECT/ENGINEER
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AWG	AMERICAN WIRE GAGE
BLDG	BUILDING
C	CONDUIT
CKT	CIRCUIT
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CV	CONTROL VALVE
DCW	DOMESTIC COLD WATER
DET	DETAIL
DN	DOWN
DWG	DRAWING
DWR	DRINKING WATER RETURN
DWS	DRINKING WATER SUPPLY
ELEC	ELECTRICAL OR ELECTRIC
EPA	ENVIRONMENTAL PROTECTION AGENCY
EX	EXISTING
FCW	FILTERED COLD WATER
FD	FLOOR DRAIN
FM	FLOW METER
GAL	GALLON
GFI	GROUND FAULT INTERRUPTER
GND OR GRD	GROUND
GOVT	GOVERNMENT
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIB
HZ	HERTZ
IPC	INTERNATIONAL PLUMBING CODE
KW	KILOWATT
KWH	KILOWATT HOURS
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
M&R	MAINTENANCE AND REPAIR
MSB	MOP SERVICE BASIN
MTD	MOUNTED
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NPW	NON POTABLE WATER
NSF	NATIONAL SANITATION FOUNDATION
NTS	NOT TO SCALE
PNL	PANEL
PH	PHASE
PPM	PARTS PER MILLION
PVC	POLYVINYL CHLORIDE
PW	POTABLE WATER
RECP	RECEPTACLE
REF	REFERENCE
SPEC	SPECIFICATIONS
ST	STREET
SYS	SYSTEM
TEMP	TEMPERATURE
TYP	TYPICAL
UPC	UNIFORM PLUMBING CODE
V	VOLT
VA	VETERANS AFFAIRS
W	WASTE
W/	WITH
WC	WATER CLOSET
WL	WATER LINE
WPF	WATER PROOF

FIRE PROTECTION NOTES	
<p>1. MAINTAIN FIRE AND/OR SMOKE BARRIERS AROUND ALL PENETRATIONS OCCURRING THROUGH FLOORS, WALLS, AND CEILINGS AT FIRE AND/OR SMOKE-RATED ASSEMBLIES. COORDINATE WITH COR.</p>	
PHASING	
<p>1. CONTRACTOR SHALL COMPLETE WORK BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM WHENEVER POSSIBLE. ALTERNATE HOURS DESIRED BY THE CONTRACTOR WILL HAVE TO BE APPROVED BY COR. CONTRACTOR AND COR WILL AGREE ON WORK SCHEDULE PRIOR TO COMMENCEMENT OF WORK.</p> <p>2. CONTRACTOR SHALL DEVELOP WORK SCHEDULE WITH PHASING STRATEGIES TO MINIMIZE CONSTRUCTION IMPACTS ON HOSPITAL ROUTINE, INGRESS/EGRESS OF PEDESTRIANS, AND VEHICULAR TRAFFIC FLOWS, TRANSPORTATION AND STORAGE OF CONSTRUCTION MATERIALS, AND THE SEQUENCING OF NEW CONSTRUCTION EVENTS TO MINIMIZE CONFLICT.</p>	
GENERAL PLUMBING SYMBOLS	
	DIRECTION OF FLOW
	CAPPED OUTLET
	RISE OR DROP IN PIPE
	PIPE UP
	PIPE DOWN
	FLOAT & THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES
	HOSE BIB
	DRINKING FOUNTAIN / EQUIPMENT
	SHUT-OFF VALVE
	REMOVE EXISTING
	FILTER
	MATCH EXISTING
GENERAL ELECTRICAL SYMBOLS	
	PANELBOARD
	DUPLEX RECEPTACLE - 2P, 3W GROUNDING TYPE RECEPTACLE, 125V, NUMERAL ADJACENT IDENTIFIES CURRENT RATING IN AMPS (NO DESIGNATION INDICATES 15A MIN.) GFI INDICATES DEVICE WITH INTEGRAL GROUND FAULT PROTECTION, WP INDICATES WEATHERPROOF
	2P, 3W GROUNDING TYPE RECEPTACLE - 125V, CONVENTIONAL DUPLEX, NEMA 5-20R. RECEPTACLE COVERPLATE SHALL BE PROVIDED WITH LABEL STATING "COMPUTER".
VA PROJECT TEAM	
<p>OWNER VETERANS AFFAIRS VA ECHS MEDICAL CENTER 1055 CLERMONT STREET DENVER, CO 80220-3808</p> <p>FMS MICHELE KAYEN PH: 303.399.8020 EXT. 2664 FAX: 303.393.2894</p>	<p>OWNERS CONTRACTING OFFICER VISN 19 CONTRACTING OFFICER ROCKY MOUNTAIN CONSOLIDATED CO. 4100 E. MISSISSIPPI AVE, SUITE 900 GLENDALE, CO 80220-4848</p>

100% DESIGN SUBMITTAL

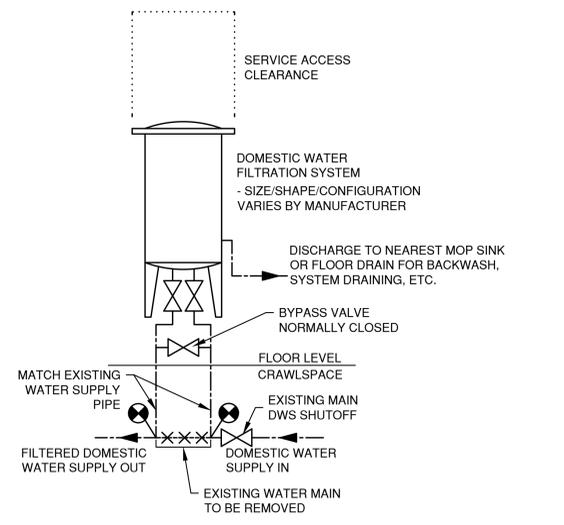
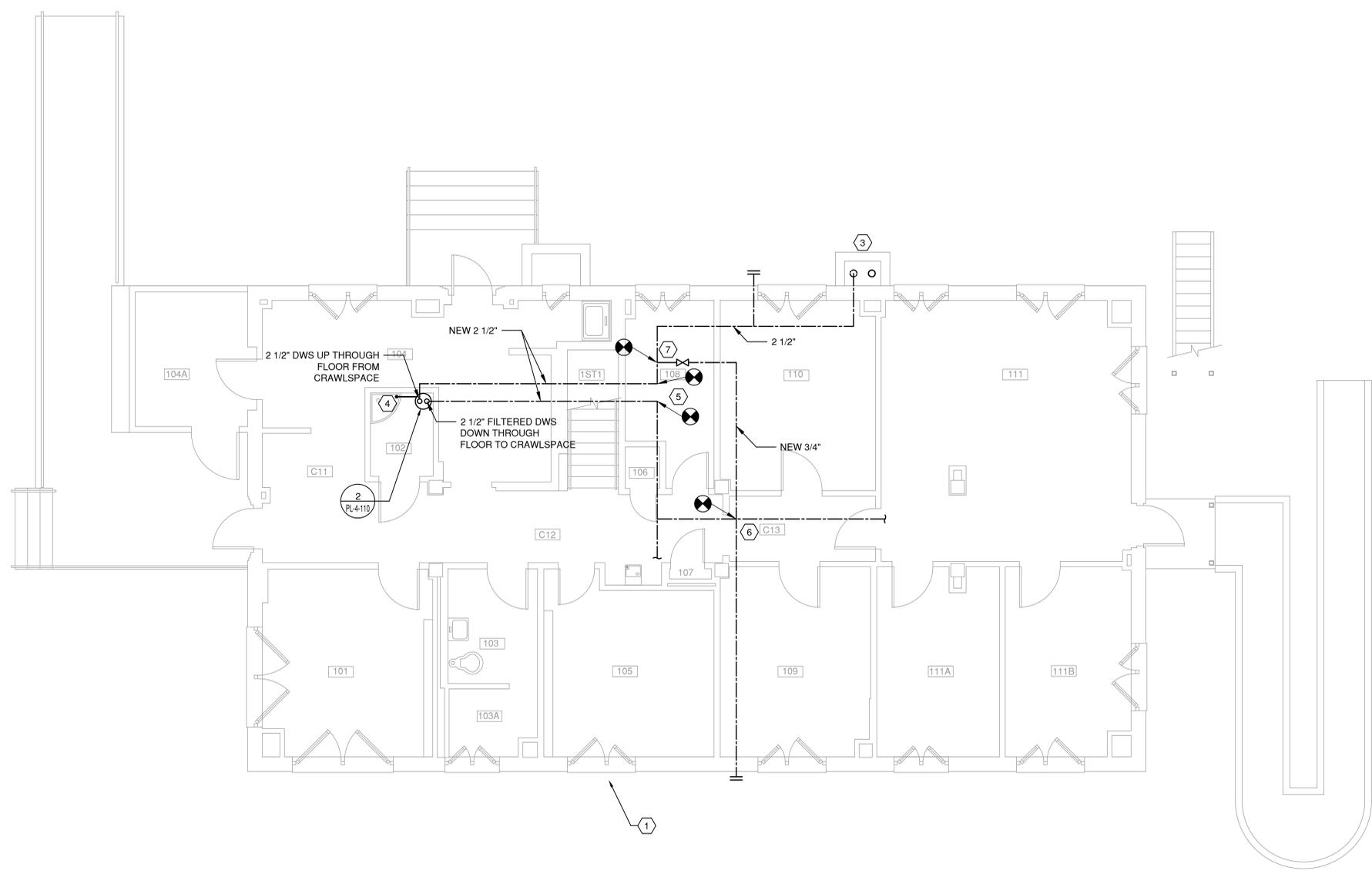
	CONSULTANT:	CONSULTANT:	ARCHITECT/ENGINEERS:	Drawing Title COVER SHEET AND INDEX SHEET	Project Title BLDG. 23, 4 AND C WATER FILTERS	Project Number 554-16-05S	Office of Construction and Facilities Management
				Approved: Project Director MICHELE KAYEN - COR PHONE: 303-399-8020x2664	Location DENVER, COLORADO	Building Number 23, 4 & C	
Revisions:	Date			Date MAY 2016	Checked JTK	Drawn MMM	

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY DRAWINGS AND/OR EXISTING CONDITIONS AND LAYOUT PRIOR TO COMMENCEMENT OF WORK.
2. INSTALL NEW WATER FILTER THAT MEETS OR EXCEEDS EPA'S NATIONAL SECONDARY DRINKING WATER REGULATIONS, NSF/ANSI 42, AND NSF/ANSI 53 AT THE POINT OF WATER CONSUMPTION/USE.
3. ANY WORK IS TO AVOID CREATING DEAD LEGS IN WATER SUPPLY LINES. CAP REMOVED BRANCHES AT THE MAIN SUPPLY, LEAVING NO EXTENDED LEG OF PIPE WITH NO CIRCULATION.

KEY NOTES

1. EXTERIOR CRAWLSPACE ACCESS. CRAWLSPACE LISTED AS CONFINED SPACE.
3. APPROXIMATE LOCATION OF WATER MAIN IN FROM UNDERGROUND IN CRAWLSPACE.
4. DRAIN LINE TO MOP SINK FOR BACKWASH DRAIN. OPERATE BACKWASH ON TIMER TO RUN DURING UNOCCUPIED HOURS.
5. TIE INTO MAIN WATER LINE AFTER BUILDING SHUTOFF. RECONNECT FILTERED WATER SUPPLY BEFORE FIRST EXISTING FIXTURE BRANCH. INSTALL BYPASS VALVE ON GROUND FLOOR NEAR FILTER.
6. CURRENT POINT OF CONNECTION FOR EXISTING HOSE BIBB. CAP EXISTING BRANCH AT MAIN AND RECONNECT HOSE BIBB LEG TO MAIN PRIOR TO NEW SPLIT FOR WATER FILTER.
7. NEW POINT OF CONNECTION FOR HOSE BIB BRANCH LINE.

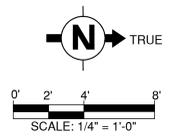


1 1ST FLOOR PLUMBING PLAN BUILDING 4
PL-4-110 SCALE: 1/4" = 1'-0"

2 WATER FILTER CONNECTION DETAIL
PL-4-110 SCALE: NTS

WATER FILTERS									
MARK	BUILDING	LOCATION	AREA SERVED	SYSTEM SERVED	TYPE	GALLONS PER FILTER CHANGE (APPROXIMATE)	# OF VESSELS	ELECTRICAL (PH/Hz/A)	REMARKS
WF-1	4	ROOM 102	BUILDING 4	DOMESTIC WATER SUPPLY	DUAL ACTION MIXED MEDIA	50000	1	1/60/5	1, 2, 3
WF-2	23	ROOM 107	BUILDING 23	DOMESTIC WATER SUPPLY	DUAL ACTION MIXED MEDIA	75000	2	1/60/5	1, 2, 3
WF-3	C	ROOM 100	BUILDING C	DOMESTIC WATER SUPPLY	DUAL ACTION MIXED MEDIA	50000	1	1/60/5	1, 2, 3

1. AUTOMATIC BACKFLUSH REQUIRED
 2. PROGRAMMABLE ONBOARD CONTROLS AND TIMER REQUIRED
 3. FILTER SYSTEM SHOULD ACHIEVE A MAINTENANCE INTERVAL OF APPROXIMATELY 2 YEARS BETWEEN FILTER MEDIA CHANGES, GALLONS BASED ON ESTIMATED GPD OVER 500 WORKING DAYS.



100% DESIGN SUBMITTAL

	CONSULTANT:	CONSULTANT:	ARCHITECT/ENGINEERS:	Drawing Title 1ST FLOOR PLUMBING PLAN BUILDING 4 AND FILTER CONNECTION DETAIL	Project Title BLDG. 23, 4 AND C WATER FILTERS	Project Number 554-16-05S
				Approved: Project Director MICHELE KAYEN - COR PHONE: 303-399-8020x2664	Location DENVER, COLORADO	Building Number 4
Revisions:	Date			Date MAY 2016	Checked JTK	Drawn MMM
						Drawing Number PL-4-110
						Dwg. of

