

Section 6

Design Guide Plates and Data Sheets Cystoscopy Rooms

Guide Plates

Cystoscopy Room

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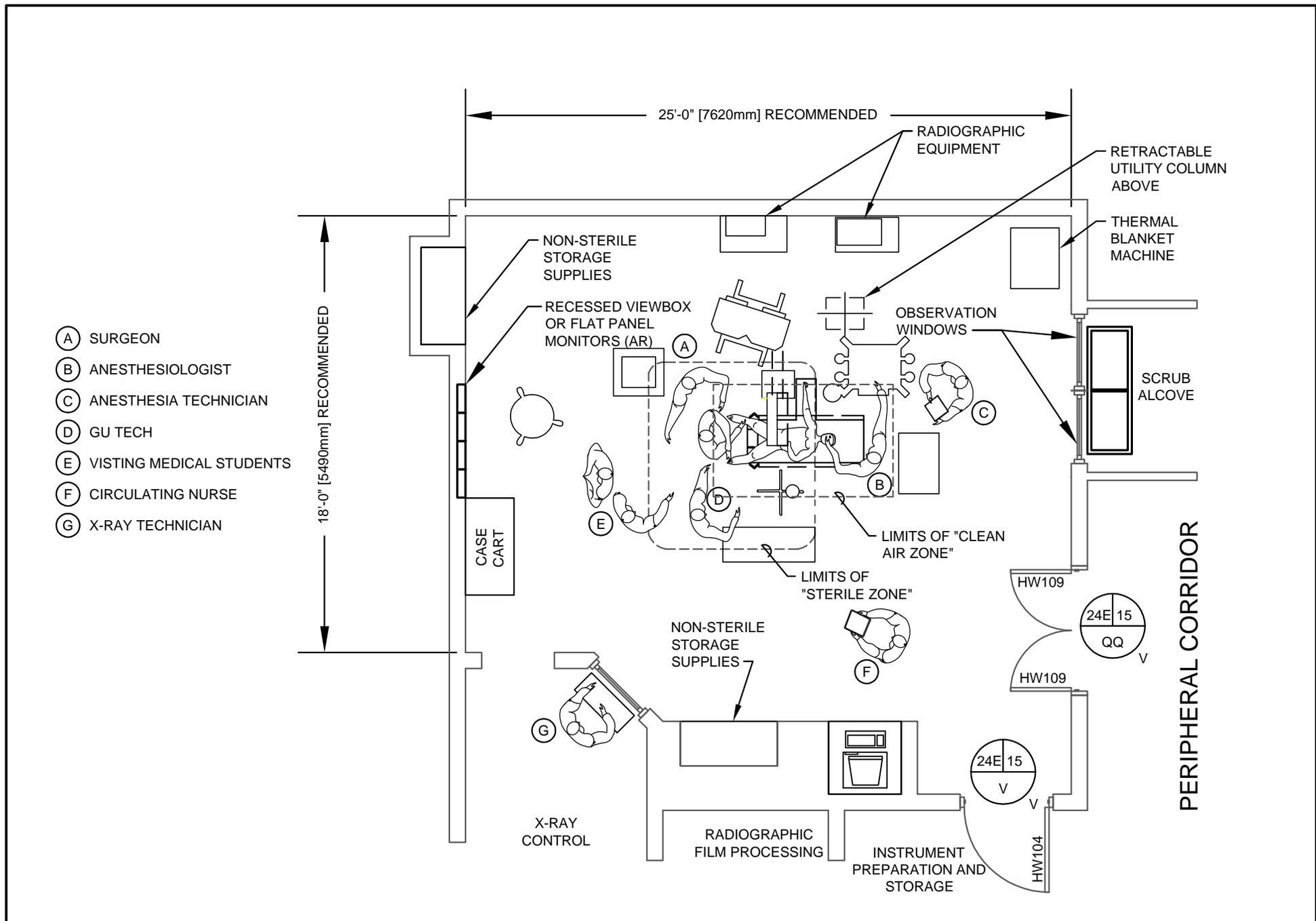


*Instrument Preparation and
Storage Room*.....6-2

Equipment, Utility Plan and
Reflected Ceiling Plan.....6-2a

Design Standards.....6-2b

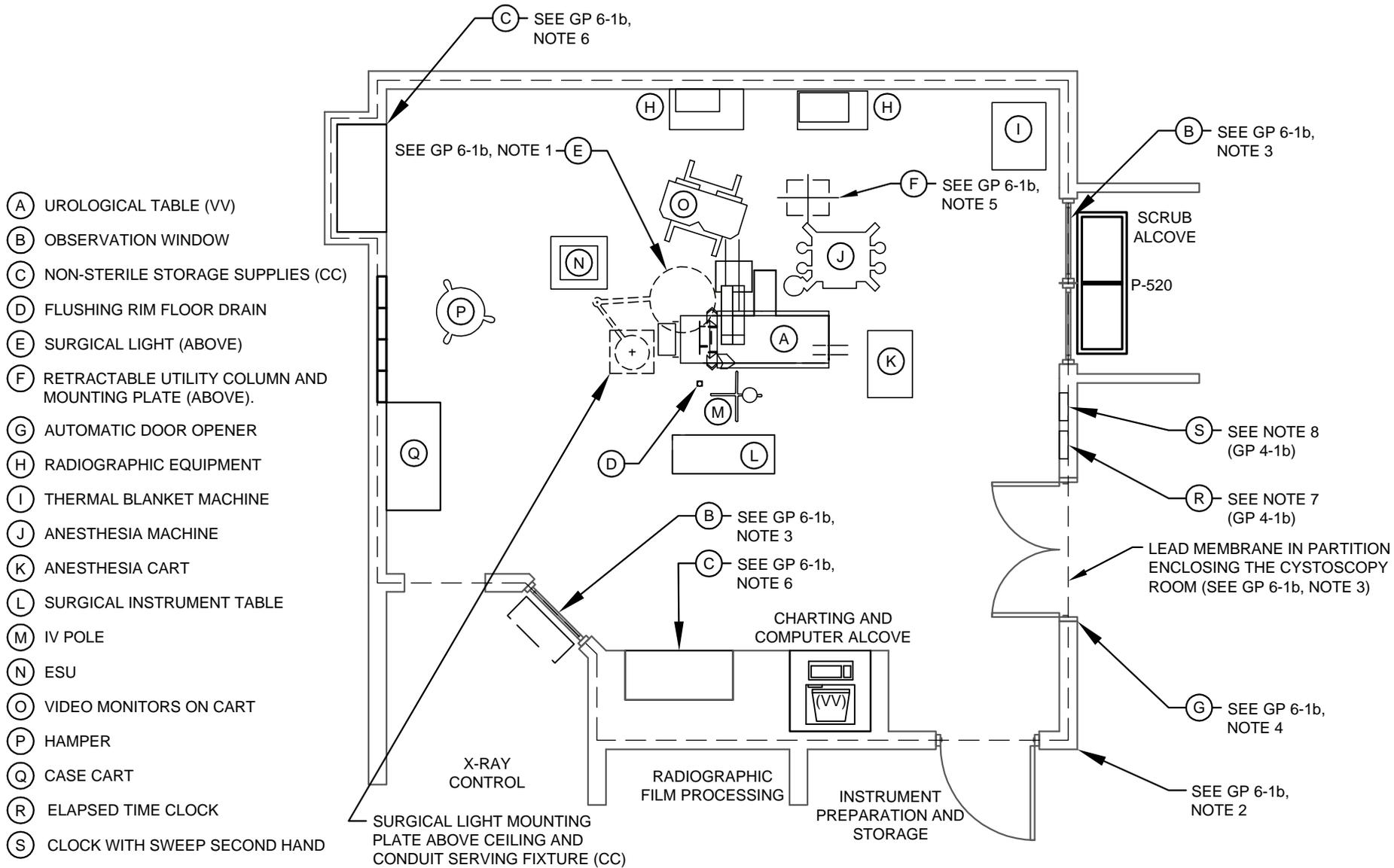
Equipment Guide List.....6-2c



Notes:

1. The surgical light fixtures are to be (CC) unless the VAMC chooses to select a specific surgical light fixture during the development of construction documents. If the VAMC chooses the fixtures, they may be either (CC), (CF), or (VC). All coordination involving structural support, utility connections, and other details regarding these lights are the responsibility of the A/E.
2. Nominal thickness of walls during design development should be shown as 8 inches (203 mm) thick by the A/E. This requirement is based upon the need to accommodate a variety of panel boards, return air ducts, and miscellaneous elements of construction that require a thicker partition than in other areas of a hospital building. Partitions other than the cystoscopy room enclosure should be shown nominally as 6 inches (152 mm) during design development by the A/E unless some special requirement dictates otherwise.
3. Provide x-ray shielding ([see CAD Detail 13091-1.DWG](#)) consisting of a lead membrane in the partitions; lead lined doors; and leaded glass observation windows. The exact location of that membrane and details related to it are the A/E's responsibility.
4. An automatic door opener is to be provided in the corridor at the doors between the cystoscopy room and the peripheral corridor. A wall-mounted type of automatic door opener with a push-plate is preferred.
5. The ceiling mounted utility column may be one of two types: articulating, or retractable (telescoping) (as indicated on this guide plate series). (See guide plates series General Operating Room for a graphic representation of an articulating utility column used in a General Operating Room.) The VAMC must decide which type of utility column to use during the design development phase of the project. If a choice is made at this point, the utility columns may be (VV), (CF) or (CC). If the VAMC declines to make a timely decision, then the utility columns will be (CC). Coordination involving structural support, utility connections, and other details is the responsibility of the designer.
6. Modular Equipment - The VAMC has the option of choosing modular equipment in lieu of built-in casework. However, this decision must be made during the design development phase of the procurement. If wall-mounted modular casework is selected by the VAMC, the A/E must design the partitions to support the casework. It should be noted that the standard studs found in the master specifications are insufficient to carry this added weight; therefore, the equipment manufacturer's recommendations for supporting partitions should be followed where appropriate.
7. Elapsed Time Clock: Flush Mounted Clock above, with wall mounted accessible controls below. For more information regarding clocks in the operating room see [MCS, Division 16](#), Electrical. (CC)
8. Clock With Sweep Second Hand: Flush mounted clock above, with wall mounted accessible controls below. For more information regarding clocks in the operating room see [MCS, Division 16](#), Electrical. (CC)
9. See Chapter 286 of the Equipment Guide List for additional equipment not shown.

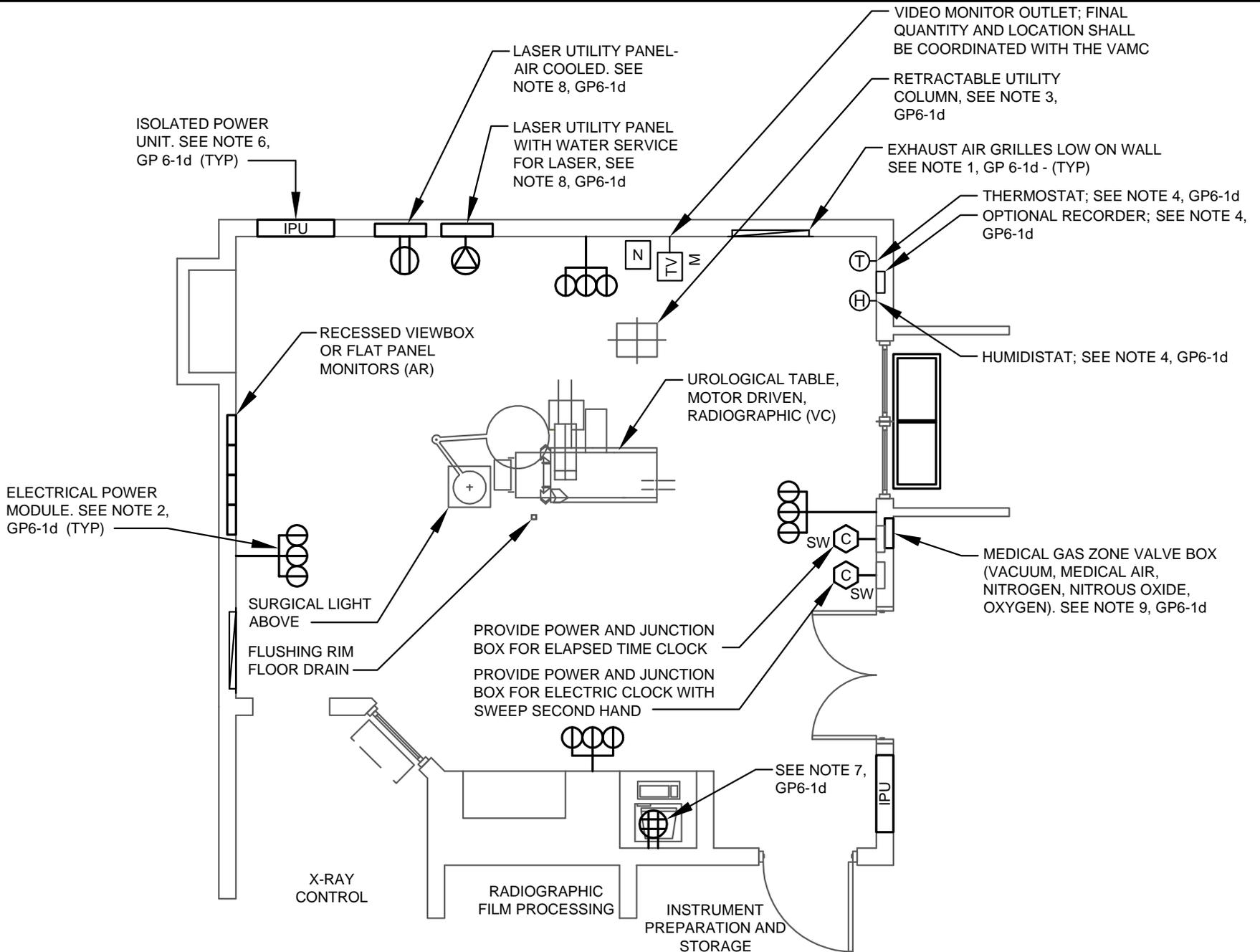




General Notes:

1. Exhaust Air Grilles - Provide a minimum of two exhaust air grilles in this operating room. If only two grilles are provided, locate them opposite from each other. Where there are more than two exhaust grilles, locate them at the corner of the operating room. The bottom of each exhaust air grille is to be seven inches above the finished floor. See HVAC Design Manual for Hospital Projects, [PG-18-10](#), for additional information.
2. Electrical Power Module - Provide single/ separate power module near the center of each wall of the operating room. Each power module is to have 3 power receptacles. These power receptacles are to be located 18 inches above the finished floor. Provide 4 power receptacles in one utility column. See Electrical Design Manual for Hospital Projects, [PG-18-10](#), for additional information.
3. Retractable Utility Column: Provide connections on utility column as delineated in Chapter 286, Equipment Guide List, [PG-7610](#). Provide data/ communication connections at each column.
4. HVAC Controllers - Provide one of the two following systems for controlling room temperature and humidity in the design of the mechanical system. The first system is indicated on the utility plan below. It involves locating a thermostat, a humidistat, and a recorder in the operating room. The second system involves temperature and humidity sensors located in the operating room with a recorder located remotely. See HVAC Design Manual for Hospital Projects, [PG-18-10](#) and [MCS, Division 15 Mechanical](#), for additional information.
5. Nitrogen Control Panel - For information regarding this panel see NFPA 99, and Master Specifications, Section 15491.
6. Isolated Power Unit - Each of the isolated power units is to serve two adjacent walls. For this reason the units are to be located near the corners of the room and diagonally opposite from each other. See Electrical Design Manual for Hospital Projects, [PG-18-10](#), for more information regarding isolated power.
7. Computer terminal - Utility requirements for the in-room computer terminal are to be determined by the VAMC based upon the computer system to be used. This information is to be given to the A/E for incorporation into the construction documents. The printer for the in-room computer terminals is to be located remotely.
8. Laser Panel - It is understood that air-cooled lasers are soon to replace water cooled lasers. For this reason, the future impact of air cooled lasers on the design of the HVAC system must be considered by the designer. In spite of this anticipated change, it is the policy of the VHA program official that water service is to be provided in any operating rooms where existing water cooled lasers are to be continued in use.
9. Zone Valve Box - A separate zone valve box is to be provided for each operating room (anesthetizing location) in accordance with NFPA 99. This cabinet is to be located in the semi-restricted corridor near the door to the operating room it serves. See [MCS, Division 15 Mechanical](#) for a description.

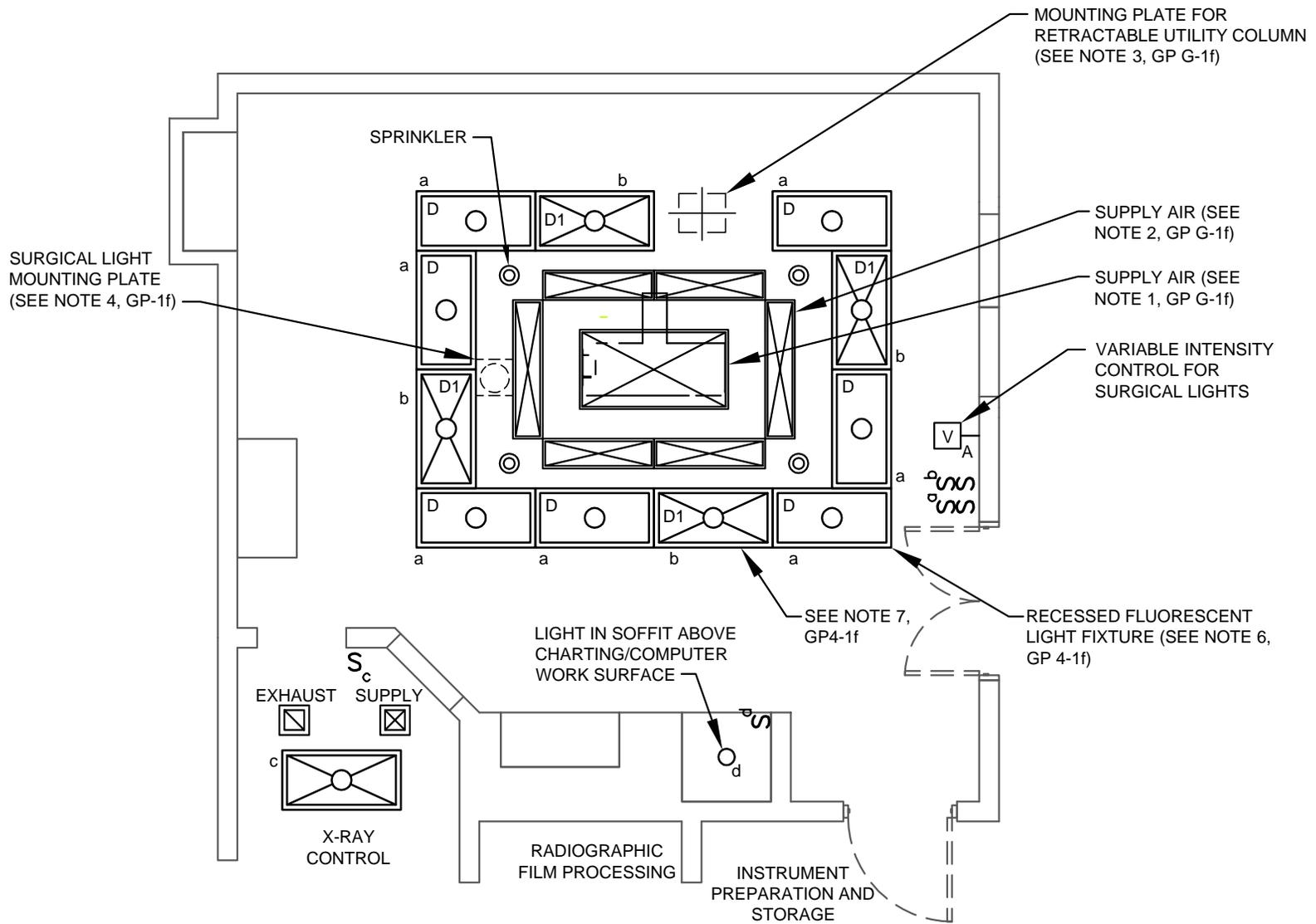




General Notes:

1. Supply Air Outlet - Perforated stainless steel panel centered over operating table with no obstructions. A/E is to design it. (Do not scale.) This outlet is to provide 30 percent of supply air for the operating room. Air distribution is to be in a downward vertical direction. See HVAC Design Manual for Hospital Projects, [PG-18-10](#).
2. Supply Air Outlets - Stainless steel multiple slot panel diffusers to be located above the perimeter of the "clean air zone". (See Functional Plan.) A/E is to design them. (Do not scale.) These outlets are to provide 70 percent of supply air for the operating room. This air is to be discharged in a vertical air stream inclined at an outward angle of fifteen degrees from the center of the room. See HVAC Design Manual for Hospital Projects, [PG-18-10](#).
3. Mounting Plate for Utility Column - (Do not scale.) Size of mounting plate varies with manufacturer. Exact type, size, type, and location are to be determined by the A/E in coordination with the VAMC and Central Office program officials.
4. Surgical Light Fixture - Note that the location of the mounting plate is not to be placed directly over the operating table. That zone must be kept unobstructed for the supply air outlet and the plenum serving it above the ceiling. See Electrical Design Manual for Hospital Projects, [PG-18-10](#).
5. Surgical Microscope - If VAMC chooses a ceiling-mounted microscope in lieu of a floor-mounted microscope, it must be supported by a fixed mounting plate. A ceiling track-mounted system is not to be used for the microscope due to concerns regarding asepsis. The exact size of the mounting plate depends upon the microscope selection. (Do not scale the guideplate.) Coordinate details and utilities requirements with the VAMC.
6. Fluorescent Light Fixtures - General illumination. Only 2 x 4 recessed fixtures are to be used in the operating room because this size of fixture (with 6 lamps - Type D) is required in order to deliver enough ambient illumination while also producing color corrected light in the operating room. The design is not to include 1 x 4 fluorescent fixtures.
7. General Illumination on Emergency Power - 50 percent of the fluorescent light fixtures above the operating table are to be provided emergency power with battery backup (Type D1). The fluorescent fixtures above the head of the patient (where the nurse anesthetist administers anesthesia and monitors the patient's vital signs) are to be provided emergency power.
8. Video Monitors (A proposal to be considered by the VAMC and the A/E) - Is to provide a fiber-optic connection (enclosed in conduit) from the video monitors in the operating room to the microscope in the frozen section area of the clinical laboratory. This would permit the surgical team in the operating room to see what the pathologist is talking about over the intercom while examining the biopsy specimen. This installation would reduce the need for anatomical pathologist to leave a contaminated area. Also, the surgical team would not have to wait for the pathologist to clean up, gown, and come to the operating suite to examine the tissue specimen.
9. Sprinkler System - Coordinate the location of the sprinklers with other ceiling systems in accordance with [MCS, Division 15](#) Mechanical and Plumbing Design Manual, Medical Centers for Hospital Projects.
10. Provide no ceiling tracks for intravenous solutions in the design. This restriction is based upon concerns for asepsis in the operating room.





ARCHITECTURAL

Floor Area	450 NSF (41.85 NSM)	Wall Finish	GYP. BOARD (SC)
Ceiling	GYP. BOARD	Wainscot	ACROVYN ON CBB
Ceiling Height	10'-0"* (3.0 METERS)	Base	6" (152 mm) INTEGRAL
Floor Load	100 PSF		COVE BASE
Note:		Floor finish	WSF
Refer to PG-18-1 and PG-18-6		Lead Lining	AS REQUIRED

*ADD 8" ACCESSIBLE SPACE ABV CLG FOR MICROSCOPE
OR 10'-2" (3.05 METERS)

ELECTRICAL

Lighting		Power	
General	200 FC, 6.0 W/SF*	General	(1) MODULE EA WALL
Special	SURGICAL LIGHT**		(1) MODULE EA COLUMN
Emergency	(4) FIXTURES***		
Notes:		Special	****
		Emergency	*****

*COLOR IMPROVED FLUOR LAMPS MATCHING COLOR TEMPERATURE OF
SURGICAL LIGHT

** (1) TYPE A, 1000 W

*** BATTERY BACKUP IN (4) FLUOR FIXTURES

**** (2) 5 KVA 10-CIRCUIT IPU

***** EACH IPU & X-RAY UNIT, (1) FILM PROCESSOR PER SUITE

TELECOMMUNICATIONS

Patient Monitor	YES	Data	WALL TERMINAL @
Nurse Call	-		EACH UTILITY COLUMN
Code One	-	Telephone	WALL MTD HAND FREE @
CCTV	EMPTY CONDUIT		EACH UTILITY COLUMN
		Intercom	COMB. W/TELEPHONE
		Public Addr.	EMPTY CONDUIT
		ADP	EMPTY CONDUIT
		Radio	EMPTY CONDUIT

HEATING, VENTILATING AND AIR CONDITIONING

AC Load Lights	8.5 W/SF
AC Load Equipment	16.0 W/SF
Number of People	12
Noise Criteria	NC-40
Room Pressure	POSITIVE
Dry Bulb Temp Cooling Range	62° - 80°F (17° - 27°C)
Dry Bulb Temp Heating Range	62° - 80°F (17° - 27°C)
Minimum Air Changes per Hour	15 OCC/8 UNOCC
Minimum% Outside Air	100
100% Exhaust Air	YES
Special Exhaust	-
Steam	-
Relative Humidity	45-55 %
Relative Humidity	45-55 %

PLUMBING AND MEDICAL GASES

Cold Water	YES	Medical Air	YES
Hot Water	FLUSHING	Medical Vacuum	YES
	RIM FLR.	Oxygen	YES
	DRAIN	-	-
Sanitary Drain	YES	Nitrous Oxide	YES
Acid Waste	-	Nitrogen	YES
Silver Recovery	-	Anesthesia Evac	YES

SPECIAL EQUIPMENT

None

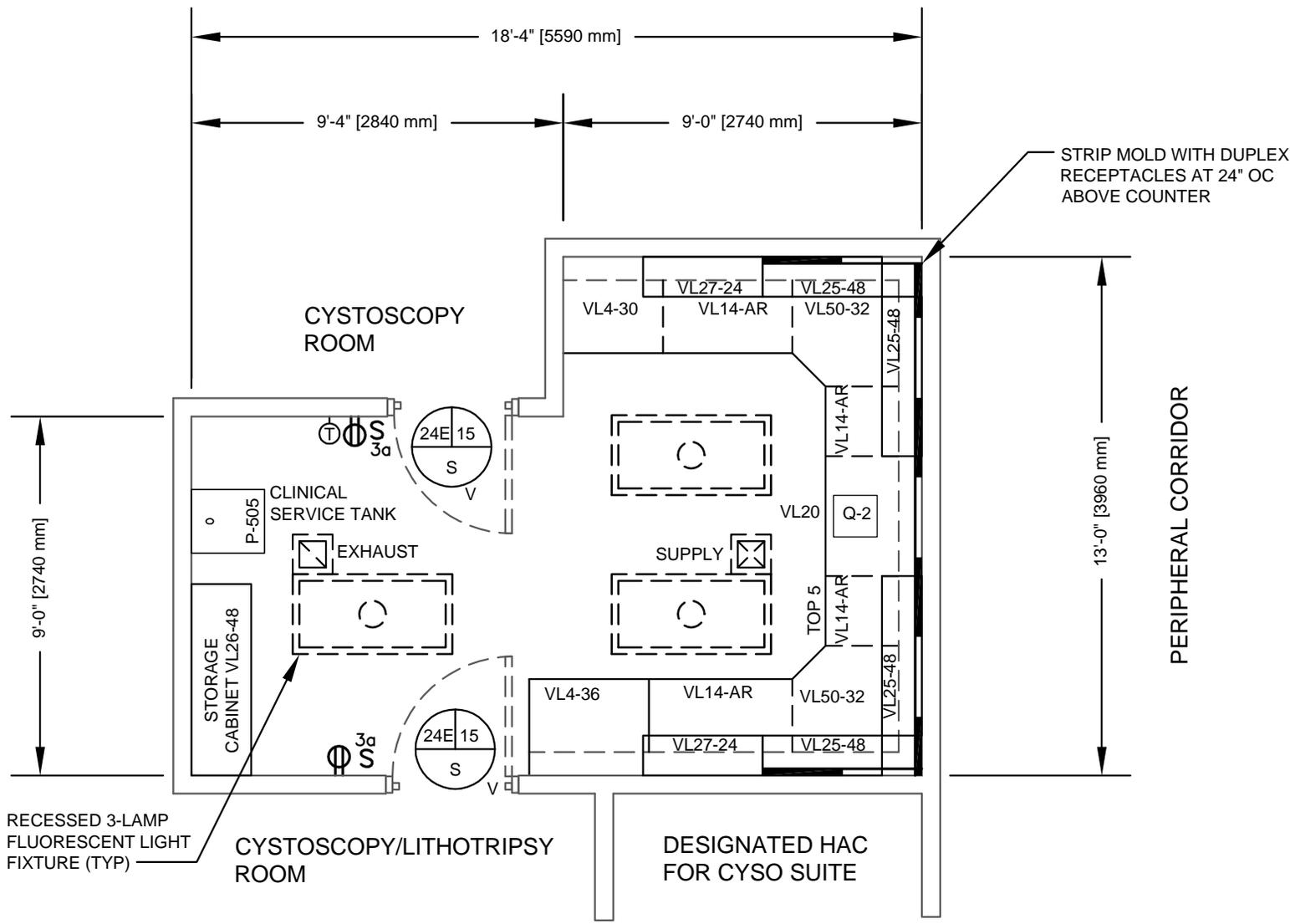


SYMBOL	QTY	AI	DESCRIPTION	MCS
	1	VV	TABLE, UROLOGICAL, RADIOGRAPHIC, MOTOR DRIVEN, WITH X-RAY TUBE SUPPORT	
	1	CC	FLOOR DRAIN, AUTOMATIC FLUSHING TYPE (PG-18-4 CAD DETAIL 15400-1.DWG)	15400
	4	CC	RECEPTACLE MODULES; ONE MODULE ON EACH WALL, EACH MODULE SHALL CONSIST OF THREE SINGLE, 120V, 20A HOSPITAL GRADE TYPE RECEPTACLES	16140
	1	VV	RADIOGRAPHIC TUBE AND HIGH VOLTAGE CABLES, 500 MA, SINGLE PHASE	
	AR	CC	SERVICES, ELECTRICAL, SPECIAL AS REQUIRED FOR THE ABOVE EQUIPMENT	
	4	CC	ILLUMINATOR, FILM, X-RAY, RECESSED, 120 VOLT, 20 AMP, 14" X 17" (355 mm X 430 mm) (INSTALLATION NOT TO BE COMBINED WITH IPU'S OR OTHER ELECTRICAL DEVICES)	16510
	1	CF	LIGHT, MAJOR, SURGICAL WITH VARIABLE INTENSITY CONTROL, SINGLE POINT SUSPENSION, CEILING MOUNTED	16515
	AR	CC	ILLUMINATION, GENERAL, RECESSED, WITH THREE LEVEL CONTROL	16510
	1	CC	NURSE CALL, EMERGENCY STATION, ACTIVATED BY PUSH BUTTON ON WALL, WITH CORRIDOR SIGNAL LIGHT	16761
	1	CC	COLUMN, TELESCOPING UTILITY, CEILING MOUNTED, LOCATED AT HEAD OF TABLE 48" (1220 mm) TO 72" (1830 mm) FROM THE CENTERLINE AND 24" (610 mm) TO 48" (1220 mm) TO THE LEFT OF THE CENTERLINE OF THE TABLE COLUMN CONTAINS THE FOLLOWING:	15491
	AR		2 INLETS, MEDICAL VACUUM	15491
	AR		1 OUTLET, NITROUS OXIDE	15491
	AR		2 OUTLETS, OXYGEN (PG-18-1)	15491
	AR		1 OUTLET, MEDICAL AIR	15491
	AR		1 OUTLET, NITROGEN	15491
			1 INLET, DEDICATED ANESTHESIA GAS EVACUATION	15491
			1 INLET, MASS ATOMIC SPECTROMETER (BLANK OUTLET)	
			DATA CONNECTION TELECOMMUNICATIONS CONNECTION	
			4 SINGLE, 120V, 20 AMP HOSPITAL GRADE TYPE RECEPTACLES	16140



SYMBOL	QTY	AI	DESCRIPTION	MCS
	2	CC	ISOLATED POWER UNIT PROVIDES ISOLATED ELECTRICAL POWER, INCLUDES LINE ISOLATION MONITOR, ISOLATION TRANSFORMER AND CIRCUIT BREAKERS	
	1	CC	CLOCK, ELECTRIC TIME ELAPSED, RECESSED	16665
	1	CC	CLOCK, ELECTRIC WITH SWEEP SECOND HAND, RECESSED	16665
	AR	CC	OUTLET, ELECTRICAL, 120 VOLT, 20 AMP, RECESSED FOR CLOCK	
	AR	VV	MONITOR, VIDEO	
T-14 AR		CC	CABINET, STORAGE, STAINLESS STEEL, WITH SLOPING TOP, 2 HINGED PANEL DOORS, LOCK AND 5 ADJUSTABLE SHELVES, 48"W X 22"D X 84"H (1220 mm X 560 mm X 2135 mm)	12301
	1	VV	CRT, COMPUTER SYSTEM, WITH KEYBOARD	
	1	CC	RECEPTACLE, ELECTRICAL, QUADRUPLEX, FOR COMPUTER EQUIPMENT ITEMS	16140
	AR	VV	KICKBUCKETS	
	AR	VV	STOOL, SURGICAL	
	1	VV	TABLE, SURGICAL INSTRUMENT	
	AR	VV	CART, CASE	
	AR	CC	INTERCOM, STATION	16760
	AR	CC	OUTLET, INTERCOM (EMPTY CONDUIT SYSTEM)	16111
	AR	VV	UNIT, ELECTROCAUTERY	
	AR	VV	UNIT, HYPER/HYPOTHERMIA	
	AR	VV	HAMPER, SOILED LINEN, WITH HINGED SELF CLOSING TOP, 20" (510 mm) DIA.	
	AR	VV	CART, EMERGENCY, "CRASH CART" APPROX. 36"W X 21"D (915 mm X 535 mm)	
	AR	VV	MACHINE, ANESTHESIA, PORTABLE	
	AR	VV	CART, ANESTHESIA EQUIPMENT	
	AR	VV	STAND, IV, MOBILE	
	AR	VV	MACHINE, SUCTION	





ARCHITECTURAL

Floor Area	200 NSF (18.6 NSM)	Wall Finish	GYP. BOARD(SC)
Ceiling	GYP. BOARD(SC)	Wainscot	-
Ceiling Height	9'-0" (2.75 METERS)	Base	6" (152 mm) INTEGRAL COVE BASE
Floor Load	100 PSF	Floor finish	WSF
Note:		Lead Lining	-

Refer to [PG-18-1](#) and [PG-18-6](#)

ELECTRICAL

Lighting		Power	
General	30 FC, 1.5 W/SF	General	1980 W
Special	-	Special	*
Emergency	-	Emergency	-

*(1) STRIP MOLD WITH DUPLEX RECEPTACLES 24" OC ABOVE COUNTER

TELECOMMUNICATIONS

Patient Monitor	-	Telephone	YES
Nurse Call	-	Intercom	-
Code One	-	Public Address	-
CCTV	-	ADP	-
		Radio	-

HEATING, VENTILATING AND AIR CONDITIONING

AC Load Lights	1.5 W/SF
AC Load Equipment	2.5 W/SF
Number of People	2
Noise Criteria	NC-40
Room Pressure	POSITIVE
Dry Bulb Temp Cooling Range	78°F (25°C)
Dry Bulb Temp Heating Range	72°F (22°C)
Minimum Air Changes per Hour	8(SA)
Minimum % Outside Air	100
100% Exhaust Air	YES
Special Exhaust	-
Steam	-
Relative Humidity	50 %
Relative Humidity	30 %

PLUMBING AND MEDICAL GASES

Cold Water	YES	Medical Air	-
Hot Water	YES	Medical Vacuum	-
Sanitary Drain	YES	Oxygen	-
Acid Waste	-	Nitrous Oxide	-
Silver Recovery	-	Nitrogen	-
		Anesthesia Evac	-

SPECIAL EQUIPMENT

None



SYMBOL	QTY	AI	DESCRIPTION	MCS
VS-122	1	CC	STERILIZER, SINGLE DOOR, RECESSED THROUGH ONE WALL, (CHAMBER SIZE: 16" X 16" X 26"/3.8 Cu. Ft.), (405 mm X 405 mm X 660 mm / 0.11 m ³) PROVIDE STEAM, WATER COMPRESSED AIR, DRAIN, ELECTRIC AND EXHAUST AS REQUIRED	11710
TOP 5	AR	CF	COUNTER TOP, CORROSION RESISTING (STAINLESS) STEEL, RAISED RIM, WITH INTEGRAL SINK AND SPLASHBACKS	12303
VL20/20A	AR	CF	CABINET, UNDERCOUNTER, SINK UNIT, 2 HINGED PANEL DOORS, AVAILABLE WIDTHS 30" (760mm), 36" (915mm), 42" (1065 mm), 48" (1220 mm); DEPTH 22" (560 mm); HEIGHTS 31" (790mm), 25" (635 mm), FOR FLOOR MOUNTED ADD 5" (130 mm) TOE BASE	12301
VL4/4A	AR	CF	CABINET, UNDERCOUNTER, WITH 2 DRAWERS, 2 HINGED DOORS AND 1 ADJUSTABLE SHELF, AVAILABLE WIDTHS 30" (760 mm), 36" (915 mm), 48" (1220 mm); DEPTH 22" (560 mm); HEIGHTS 31" (790 mm), 25" (635 mm), FOR FLOOR MOUNTED ADD 5" (130 mm) TOE BASE	12301
VL26	AR	CF	CABINET, WALL, WITH SLOPING TOP, 2 GLAZED SLIDING DOORS AND 2 ADJUSTABLE SHELVES, AVAILABLE 36" X 18" (915 mm X 460 mm) WIDTHS 30" (760 mm), 36" (915 mm), 42" (1065 mm), 48" (1220 mm); DEPTH 16" (405 mm), HEIGHT 48" (1220 mm)	12301
T-7D	AR	CC	SHELVING, WALL HUNG, STANDARD AND BRACKET TYPE, 4 ADJUSTABLE SHELVES, 36" X 18" X 48" (915 mm X 460 mm X 1220 mm)	12301
	1	VV	DISPENSER, PAPER TOWEL, SURFACE MOUNTED	
	1	VV	DISPENSER, SOAP, LIQUID, WALL MOUNTED	
	1	VV	CLOCK, BATTERY OPERATED	
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP	16140
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX 120 VOLT, 15AMP STRIP MOLD WITH OUTLETS, WIRED ALTERNATELY ON SEPARATE CIRCUITS 24" (610 mm) ON CENTERS ABOVE COUNTER	16140
P-505	1	CC	SINK SERVICE, CLINIC, FLUSHING RIM WALL HUNG (PG-18-1, CAD DETAIL 15450.DWG)	15450

