

Southern City Hospital Surgical Department Remodel OSHDP Functional Program

Facility Name: Southern City Hospital
Project Name: Surgical Department Remodel

Facility Number: #12345

Building Number: BLD6789

Summary

Project Summary: Remodeling of the existing Surgical Department to relocate equipment storage and add an Operating Room

Project Size: 1,200 SF of 12,800 DGSF **# Stories:** 2nd Floor of an Existing 5-Story Bldg **# Beds:** N/A

Construction Type: Type I-B w/ Sprinkler System **Occupancy:** Group I.2 – OR; and Incidental Group S – Equipment Storage Room

(c) 1. Purpose of the Project: The purpose of the project is to increase the capacity of the existing Surgical Department by adding a 4th staffed Operating Room (OR), in order to accommodate recent growth in the volume of scheduled procedures per week.

(c) 2. Project Components and Scope: The proposed remodeling is to utilize previously shelled space in the existing Surgical Department to facilitate the addition of a 4th OR. The OR is intended to be located in the area of an existing equipment storage room. The displaced equipment storage room will be relocated to the shelled space. The men's toilet room will be remodeled to add a water closet.

(c) 3. Indirect Support Functions. The project is to add an OR which will include a staff of 6 additional Full Time Equivalent (FTE) personnel that will result in a peak complement in the Surgery Department of roughly 32 staff members, estimated at 50% male and 50% female, where the current peak is 26 medical staff members. They will be supported by the existing showering, dressing, lockers, and toilets currently located within the Surgical Service area. There are currently two toilets in the women's locker/dressing area, and one toilet and one urinal in the men's locker/dressing area. The new complement of 16 male staff will require an additional toilet in the men's facilities to be fully compliant with the California Plumbing Code (CPC) table 4-3, and footnote 6.

(c) 4. Operational Requirements. The operating rooms are supported by the Post-Anesthesia Care Unit (PACU) located adjacent to the Surgical Department with direct access from the semi-restricted corridor system. There are currently headwalls for 8 recovery bays within the PACU, however only 6 beds are used at this time to support the 3 existing ORs. The 7th and 8th recovery bays will support the new OR. Nursing staff within the PACU will be increased by 1 FTE. The existing laundry and Central Sterile Supply can accommodate the new OR without any modification.

(c) 5. Environment of Care Requirements

(c) 5.A. Delivery of Care Model. The project is intended to provide for an increase in volume of existing standard surgical procedures. There is no intent to provide any new procedure types.

(c) 5.B. Patients, Visitors, Physicians and Staff Accommodation and Flow. User flow is already established within the Surgical Department. The location of the new OR is planned within the existing semi-restricted environment and on the existing controlled-access corridor system. The shelved space intended to become the surgical department equipment storage is also within the semi-restricted environment and on this same corridor system. The corridor system currently has direct access to the existing PACU, to the patient elevator lobby with access to the nursing units, and to the service elevator lobby with access to the laundry and Central Sterile Supply.

(c) 5.C. Building Infrastructure and Systems Design Criteria.

Structural System: The existing structural system is a special steel moment frame system. Analysis indicates that the primary and secondary framing members will accept the vertical and lateral loads associated with the surgical lights/booms. Intermediate framing will be added to provide for attachment and distribution of loads back to the structural frame.

Mechanical Systems: The existing roof-mounted, constant-volume, air-handling unit (AHU) provides 100% outside air for the entire Surgery Department and was installed under the 2007 code. Tempering, damping, and humidification occur locally at each room. Laminar air flow will be provided in the new operating room. Supply air to the Surgical Department is distributed to the various rooms through pressure-independent constant air volume boxes (CAVs). Relief air is currently evacuated in an independent system. The AHU has sufficient capacity to accommodate the new OR. The air handler and relief fans are on the mechanical branch of the Essential Electrical System (EES). Fire/smoke dampers will be provided in the ducting above the new equipment storage room.

Electrical Systems: The hospital currently has a compliant segregated EES system. Power to the operating room will include (2) circuits on normal power and (12) circuits on the Critical Branch of the EES. The Critical Branch circuits will be fed by a new sub-panel off the existing floor critical branch panel which has adequate capacity to accommodate the new loads. Critical Care Area grounding/bonding is required at the operating room.

Lighting levels are to be based on IESNA standards and provide:

- 750 Foot Candles at OR surgery task lighting

- 100 Foot Candles at OR general lighting

- 30 Foot Candles at the equipment storage room

Fire Protection System: The existing fire sprinkler system will be modified to provide compliance with NFPA 13 and CBC Chapter 9 in the new OR and in the relocated equipment storage room.

(c) 5.D. Physical Environment. The existing hospital building and building systems can accommodate this interior remodeling. The hospital is committed to continued reduction of nosocomial disease acquisition, and has established comprehensive Infection Control standards. These standards will be applied to operational protocols and to critical care area HVAC systems and interior finishes.

(c) 6.A. Architectural Space & Equipment Requirements.

Architectural			Arch Finish			HVAC							Plumbing						Medical Gas						Electrical					
Room	Gross Floor Area	Ceiling Height	Standard	Semi-restricted	Restricted	Balance	Air Changes/Hour	100% OA	Return Air System	Relief Air System	Exhaust System	Relative Humidity	Handwashing Fixture	Scrub Sink Outside Room	Toilet	Floor Drain	Other Plumb Fixtures	N ₂ O	O ₂	Medical Air	Vacuum	WAGD	Normal	Equip System	Life Safety Br	Critical Branch	Grounding/Bonding	Nurse Call		
Surgical Department																														
Operating Room	560	10'			X	P	16	X		X		45%-55%		X		No		1	2	2	2	1	X			X	X	E		
Equipment Storage	440	10'		X		NR	2	X		X													X			X				
(E) Men's Toilet & Shower Room	(110)	10'		X		N	10	X			X				X								X		X					

(c) 6.B.(1). Department Gross Square Footage (DGSF). Existing Surgical Department: 12,800 DGSF – No Change

(c) 6.B.(2). Building Gross Square Footage (BGSF). N/A

(c) 7. Technology Requirements. All admitting, accessing, recording, and filing of patient medical records are currently supported by an Electronic Medical Record System (EMR). The Surgical Department currently has secure EMR stations for access to patient records. An EMR station will be provided in the new OR. The staff emergency nurse call system will be coordinated with the master station at the semi-restricted area control station.

(c) 8. Short- and Long-Term Planning Considerations. In taking the remaining shelled space, this project completes the build-out of the Surgical Department.