

LCLS Room Data Sheet #	1.9-1061	BTH WEST - Service Building # 105	Revision 0
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Javier A. Sevilla  
Owner / Editor

 6/2/07  
Signature Date

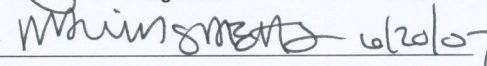
Jim Welch  
CF System Physicist

 6/7/07  
Signature Date

Jim Turner  
IMT Integration

 6-7-07  
Signature Date

David Saenz  
Conventional Facilities System  
Manager

 6/20/07  
Signature Date


Jess Albino  
Associate Director  
Conventional Facilities

 6/20/07  
Signature Date

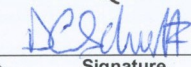
Jose Chan  
Linac WBS Manager

 6/20/07  
Signature Date

Hamid Shoaei  
Controls System Manager

 6-7-07  
Signature Date

David Schultz  
E-Beams System Manager

 6/7/07  
Signature Date

Darren Marsh  
Quality Assurance Manager

 6/21/07  
Signature Date

REVISION INFORMATION

ROOM DATA SHEETS

System & WBS Manager: Dave Schultz/ Jose Chan

FACILITY COMPONENT		BTH WEST SERVICE BLDG# 105 - ROOM DATA SHEET	
		<b>Name of Building</b>	BTH Service Building # 105- Building is existing
		<b>Organization or Department</b>	SLAC, Stanford University
		<b>Net area</b>	20.4 sq. meters 180 sf
		<b>Critical dimensions</b>	H: 3.66 m 12' W: 3.66 m 12' L: 5.57 m 15'
		<b>Hours of operation</b>	24/7/365 locked, occupied only for equipment service and maintenance
		<b>Users/Occupancy</b>	Only during service and maintenance periods
		<b>Building orientation</b>	East/West
FUNCTIONAL OBJECTIVE		To house rack mounted diagnostic equipment to run/monitor the BTH West.	
PLANNING CONSIDERATIONS & CRITICAL FACTORS		1) Building is existing and is located on top of BTH West area. 2) Re-use existing penetrations.	
FINISHES		Roof	Existing Corrugated steel, insulated, painted surface (SLAC Home Spun brown exterior)
		Ceiling	Existing Corrugated steel, insulated
		Floor	Existing to remain
		Base	None
		Doors	Existing 3 ft by 7ft metal door.
		Fenestrations	NA
		Acoustical	NA
APPLICABLE STANDARDS		29 CFR Part 1910 Occupational Safety Health Standard Dept of Labor and Part 1926 Safety and Health Regulations for Construction Dept of Labor. Uniform Building Code (UBC) 1997 including appendixes, National Electrical Code (NEC) 2002. 2003 Uniform Mechanical Code (UMC) including appendixes, 2003 Uniform Plumbing Code (UPC) including appendixes, Uniform Fire Code (UFC) including appendixes, California Code of Regulations title 8 Industrial Safety, Title 19 Public Safety, NFPA 70 National Fire Codes, National Electrical Safety Code ANSI C2, Occupational Safety Health Act (OSHA), General Services Administration 41 CFR part 101-19, Environmental Protection Agency 40 CFR Parts 264 and 265 SLAC Environmental safety and Health Manual, General Industrial Activities Storm Water Permit (SLAC Permit), NFPA 101 Life Safety Code, Title 24 Energy Code Standards, DOE Standard 10 CFR Part 435, ASHRAE/IES Standard 90.1, Fire Marshal requirements, LCLS Cabling Standard and SLAC LOTO and LCLS Fire Hazard Analysis, Title II	

Figure No. 1



EXTERIOR VIEW OF EXISTING BUILDING



EXTERIOR VIEW OF EXISTING BUILDING-LOOKING NORTH

Continued			
<b>MECHANICAL REQUIREMENTS</b>	<b>HVAC</b>	<input type="checkbox"/> Heating system <input checked="" type="checkbox"/> Air conditioning (existing) Temp: 75 F <input type="checkbox"/> Direct supply <input type="checkbox"/> Indirect supply <input type="checkbox"/> Smoke control system <input checked="" type="checkbox"/> Existing Temperature sensors a) Service building has a room air conditionin unit. Maximum heat rejected load per each single rack is: 2 KW	<input type="checkbox"/> Mechanical humidification <input type="checkbox"/> Direct exhaust system <input type="checkbox"/> Positive pressure system <input type="checkbox"/> Negative pressure system <input type="checkbox"/> Standard registers <input type="checkbox"/> Requirement for gases b) Existing HVAC system to provide conditioned air to the building.
	<b>Communications</b>	<input checked="" type="checkbox"/> Telephone- Existing <input checked="" type="checkbox"/> Dataport- Use existing <input type="checkbox"/> Payphone <input checked="" type="checkbox"/> Fire alarm station- Existing <input type="checkbox"/> Intercom Comments: a) Verify existing smoke detectors are operational. b) Existing cable trays are adequate to remain. c) Provide 1 #4/0 ground wire to all existing and new cable trays. d) Single Racks are existing. Verify grounding wiring for I&C racks. e) Provide cover for existing cable trays located outside the building.	<input type="checkbox"/> PA speakers <input type="checkbox"/> PA station <input type="checkbox"/> CCTV camera <input type="checkbox"/> CCTV monitor
	<b>Plumbing/Fire Protection</b>	<input type="checkbox"/> Hot water system <input type="checkbox"/> Cold water system <input type="checkbox"/> Tempered water <input type="checkbox"/> Waste drain <input type="checkbox"/> Floor drain <input type="checkbox"/> Trench drain Comments: a) Verify existing smoke detectors are operational.	<input type="checkbox"/> Electric watercooler <input type="checkbox"/> Drinking fountain Bottled <input checked="" type="checkbox"/> Smoke detection system -Existing <input type="checkbox"/> Wet sprinkler heads <input type="checkbox"/> Eye wash
<b>ELECTRICAL REQUIREMENTS</b>	<b>Instrumentation and Controls</b>	<input checked="" type="checkbox"/> 208 V outlets, 3 phase <input checked="" type="checkbox"/> 110V outlets -20 amps distributed along walls <input type="checkbox"/> Emergency power Comments: a) Building will house six (6) single racks for I& C. Power 208/120 volts, 3 phase. 100 amps. One panel for "clean" power. Panel board is existing and shall have a main breaker with a minimum capacity of 125 amps. The panel shall be independent of any power panel needed for HVAC equipment and service outlets. b) All conduits and light fixtures are surface mounted. Verify they are working properly.	<input type="checkbox"/> Uninterrupted power supply <input type="checkbox"/> Special electric Type:
	<b>Lighting</b>	<input checked="" type="checkbox"/> Light fixtures- existing <input type="checkbox"/> Fixture type I: Downright <input type="checkbox"/> Fixture type II: Bollard (exterior) <input checked="" type="checkbox"/> Emergency lighting Comments:	<input type="checkbox"/> Remote lighting control <input checked="" type="checkbox"/> Light switches-existing <input checked="" type="checkbox"/> Lighting level FC: 30
<b>RADIATION/SEISMIC/VIBRATIONS ISSUES</b>	Comments: 1. Existing penetrations located outside the building.		
<b>SPECIAL REQUIREMENTS FOR EQUIPMENT</b>	Comments: 1) Existing cable trays are adequate for I& C racks		
<b>ENVIRONMENTAL NEEDS</b>			