

LCLS Room Data Sheet # 1.9-1003	Linac	Revision 1
---------------------------------	-------	------------

Philip G Cutino  Feb. 27, 2006
 Owner / Editor Signature Date

Jim Welch  3/9/06
 Conventional Facilities System Physicist Signature Date

David Saenz  for 3/9/06
 Conventional Facilities System Manager Signature Date

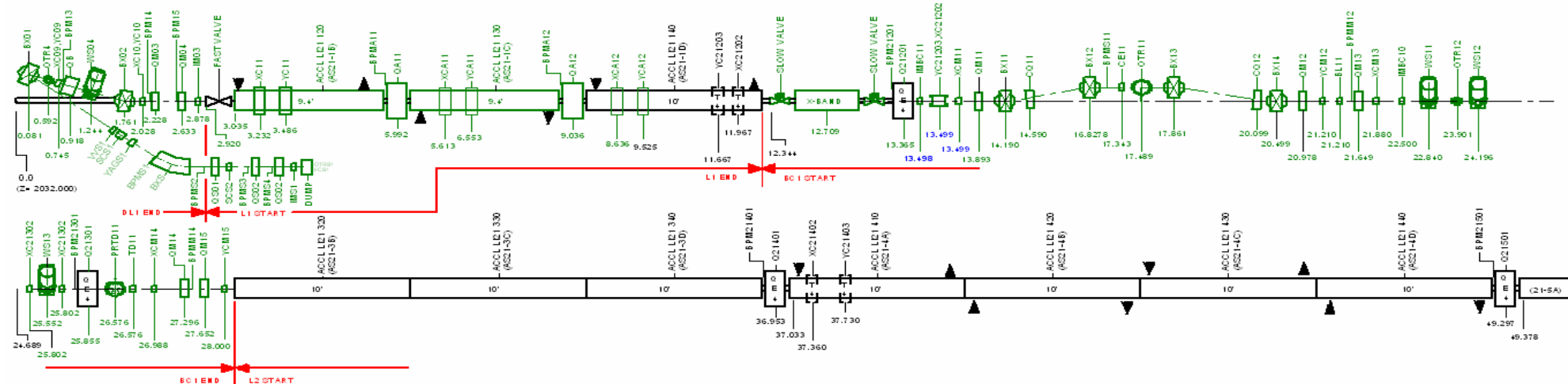
Eric Bong 
 Injector/ Linac Manager Signature Date

Dave Schultz  3/9/06
 E-Beam System Manager Signature Date

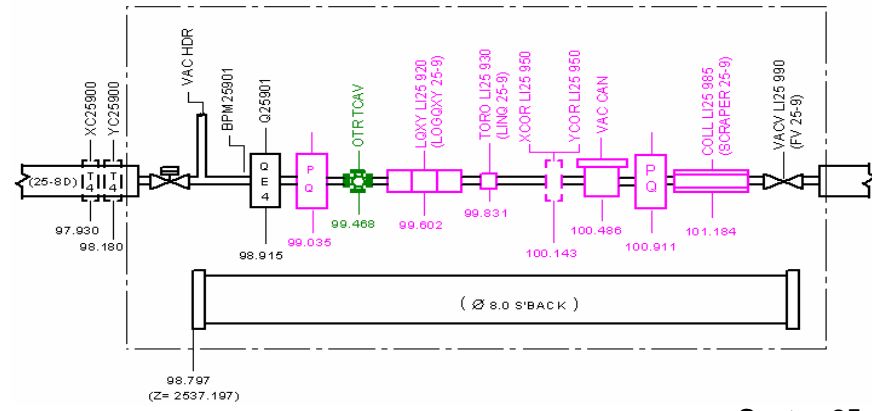
Darren Marsh  3/9/06
 Quality Assurance Manager Signature Date

REVISION INFORMATION

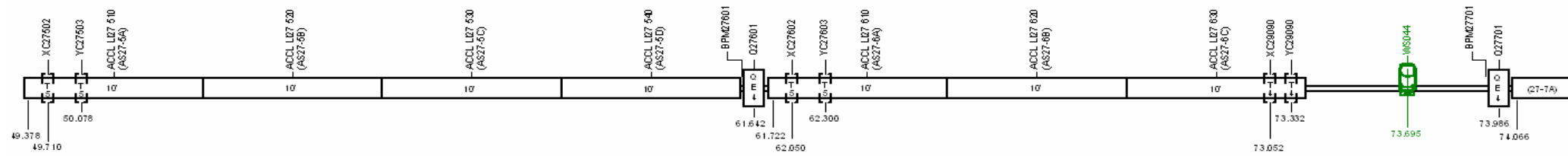
FACILITY COMPONENT	LINAC - ROOM DATA SHEET	
	Name of Building	Linac Klystron Gallery (Building 002) and Linac Housing (Building 001)
	Organization or Department	SLAC, Stanford University
	Hours of operation	Housing is locked 24/7/365 (periodic maintenance only) The Gallery is available for maintenance during operations
	Users/Occupancy	No occupancy in housing during normal operation of the facility
	Application Notes	The Linac is an existing facility being upgraded for LCLS. This Room Data Sheet applies only to the additions and upgrades associated with LCLS. The upgrades are limited to the final 1/3 of the 3 kilometer Linac, sectors 20 through 30
PLANNING CONSIDERATIONS & CRITICAL FACTORS	Installation of upgrades must be coordinated with ongoing operations	
APPLICABLE STANDARDS	29 CFR Part 1910 Occupational Safety and Health Standards Dept of Labor, 29 CFR Part 1926 Safety and Health Regulations for Construction Dept of Labor, Uniform Building Code (UBC) 1997 including appendixes, National Electric Code (NEC) 2002, Uniform Mechanical Code (UMC) 1997 including appendixes, Uniform Plumbing Code (UPC) 1997 including appendixes, Uniform Fire Code (UFC) 1997 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 and Health Act (OSHA), Environmental Protection Agency 40 CFR Parts 264 and 265, SLAC Environmental Safety & Health Manual, General Industrial Activities Storm Water Permit (SLAC Permit), NFPA 101 life Safety Code, Title 24 Standards-Energy Code, DOE standard 10 CFR Part 435, ASHRAE/IES Standards 90.1, NFPA Standard 13 and SLAC Fire Marshal requirements, LCLS Cabling Standard and SLAC LOTO	
VIEWS & SCHEMATICS	Schematics are for reference only. New equipment is indicated in green. See the following Schematic Diagrams for details: Sector 21: SD-380-030-021 Sector 24: SD-380-030-024 Sector 25: SD-380-030-025 Sector 27: SD-380-030-027 Sector 28: SD-380-030-028 Sector 29: SD-380-030-029	



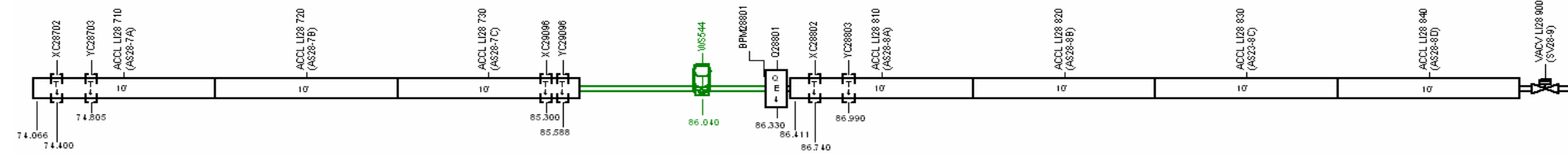
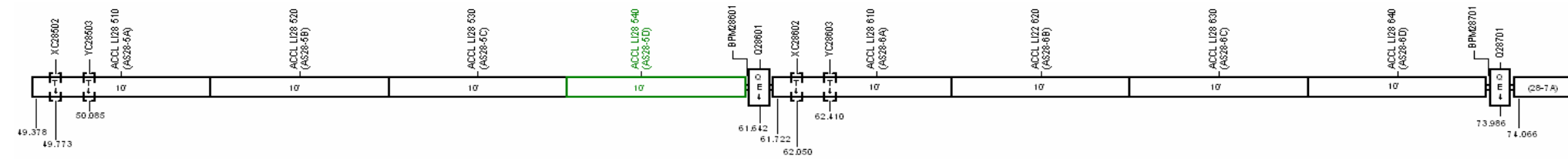
Sector 21



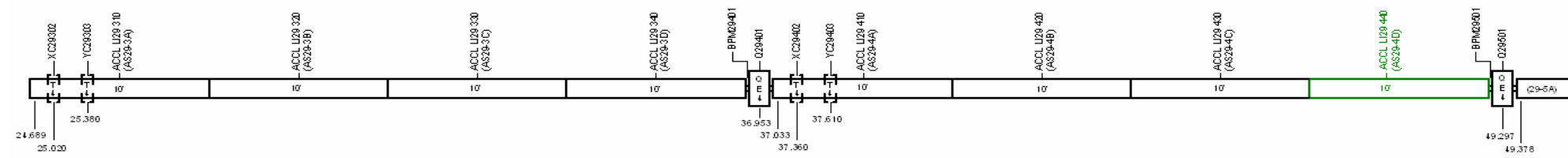
Sector 25 continued



Sector 27



Sector 28



Sector 29

MECHANICAL REQUIREMENTS		Process Water (LCW)		Sector	Change in Waveguide Water (GPM)	Change in Klystron Water (GPM)	Change in Accelerator Water (GPM)	Air (CFM)	New Inj. Water Sys. (GPM)
		20	0.00			13.66	(90.00)	0.00	42.80
		21	(19.50)				(38.80)	0.80	
		22	0.00			10.60	0.00	0.00	
		23	0.00				0.00	0.00	
		24	52.00				(133.00)	0.60	
		25	13.00			0.00	13.00	0.00	
		26	0.00				0.00	0.00	
		27	0.00				(13.00)	0.00	
		28	0.00			0.00	0.00	0.00	
		29	0.00				0.00	0.00	
		30	0.00				0.00	0.00	
ELECTRICAL REQUIREMENTS		AC Power		Sector	Change in 480 Volt Power (kW)	Change in 208/120 Volt Power (kW)			
		20	1500.00			300.00			
		21	0.00			16.00			
		22	0.00			16.00			
		23	0.00			16.00			
		24	107.00			124.00			
		25	30.00			46.00			
		26	0.00			16.00			
		27	0.00			16.00			
		28	0.00			16.00			
		29	0.00			16.00			
		30	0.00			16.00			

—