

*Appendix
XIV*

Campus Utility Shut Down

Campus utility shut-down matrix

Building name and level (e.g. Braun, basement)	Utility being isolated	Pipe symbol	utility description	Point of disconnect (e.g. near the utility tunnel inside the mechanical room)	Type of isolation valve (e.g. ball, gate, butterfly, globe, plug, etc.)	Name of person authorizing the Shut-down	Isolation Valve holding? (yes/no)
		CHWS & CHWR	Chilled water supply and return				
		HHWS & HHWR	Heating hot water supply and return				
		STM	Steam				
		CS	Clean steam				
		SC	Steam condensate				
		DI / DE	De-ionized or demineralized water				
		RO	Reverse osmosis water				
		HPA	High pressure compressed air				
		AIR	Low pressure compressed air				
		DCW	Domestic cold water				
		DHW	Domestic hot water				
		DHWR	Domestic hot water return				
		ICW	Industrial cold water				
		IHW	Industrial hot water				
		IHWR	Industrial hot water return				
		NG	Natural gas				
		VAC	Vacuum				
		N2	Nitrogen				
		CO2	Carbon dioxide				
		FS	Fire sprinkler				

1) Only Caltech staff are authorized to perform utility shut-downs. 2) Contractor shall request utility shut-downs from the CIT project manager 3-5 days prior to required shut-down.

Date revised:08-01-2014