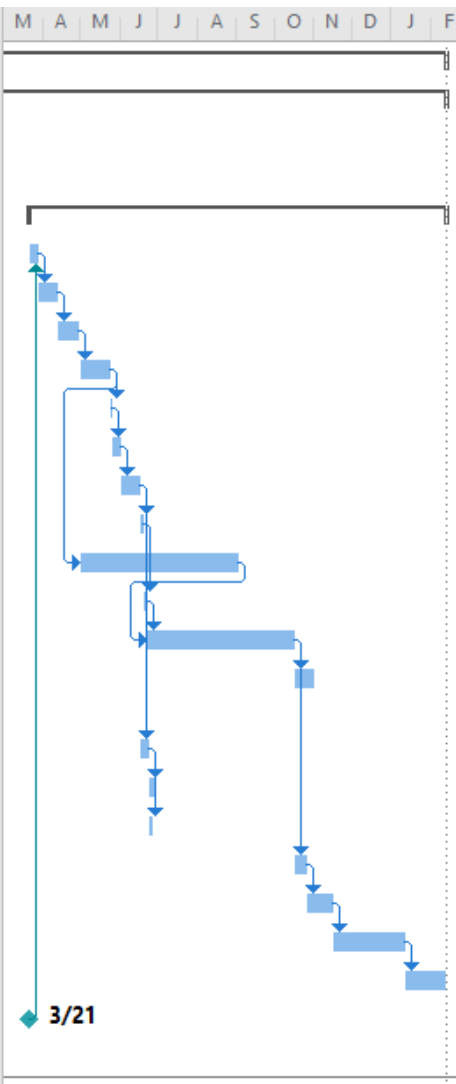
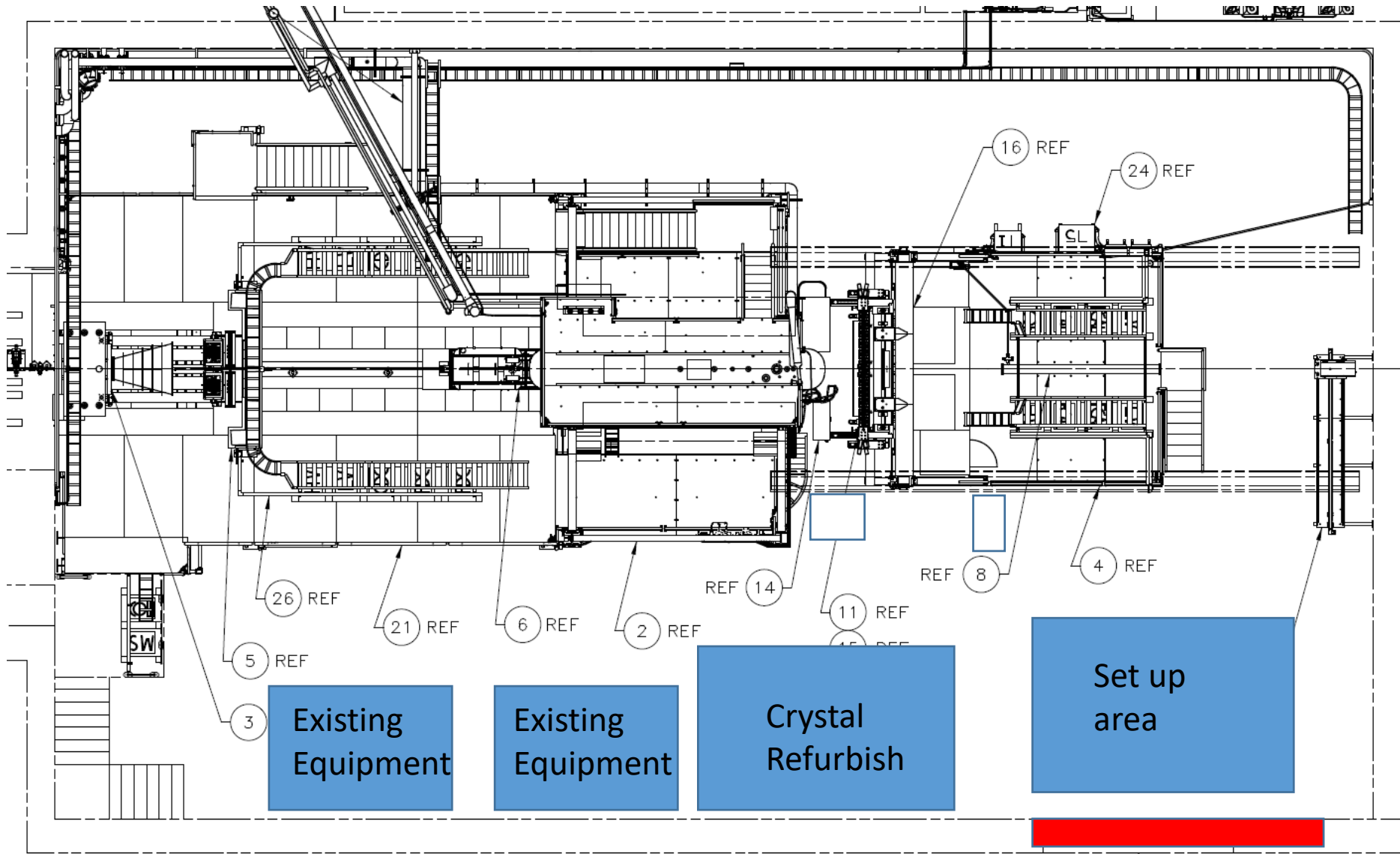


Basic Install Schedule

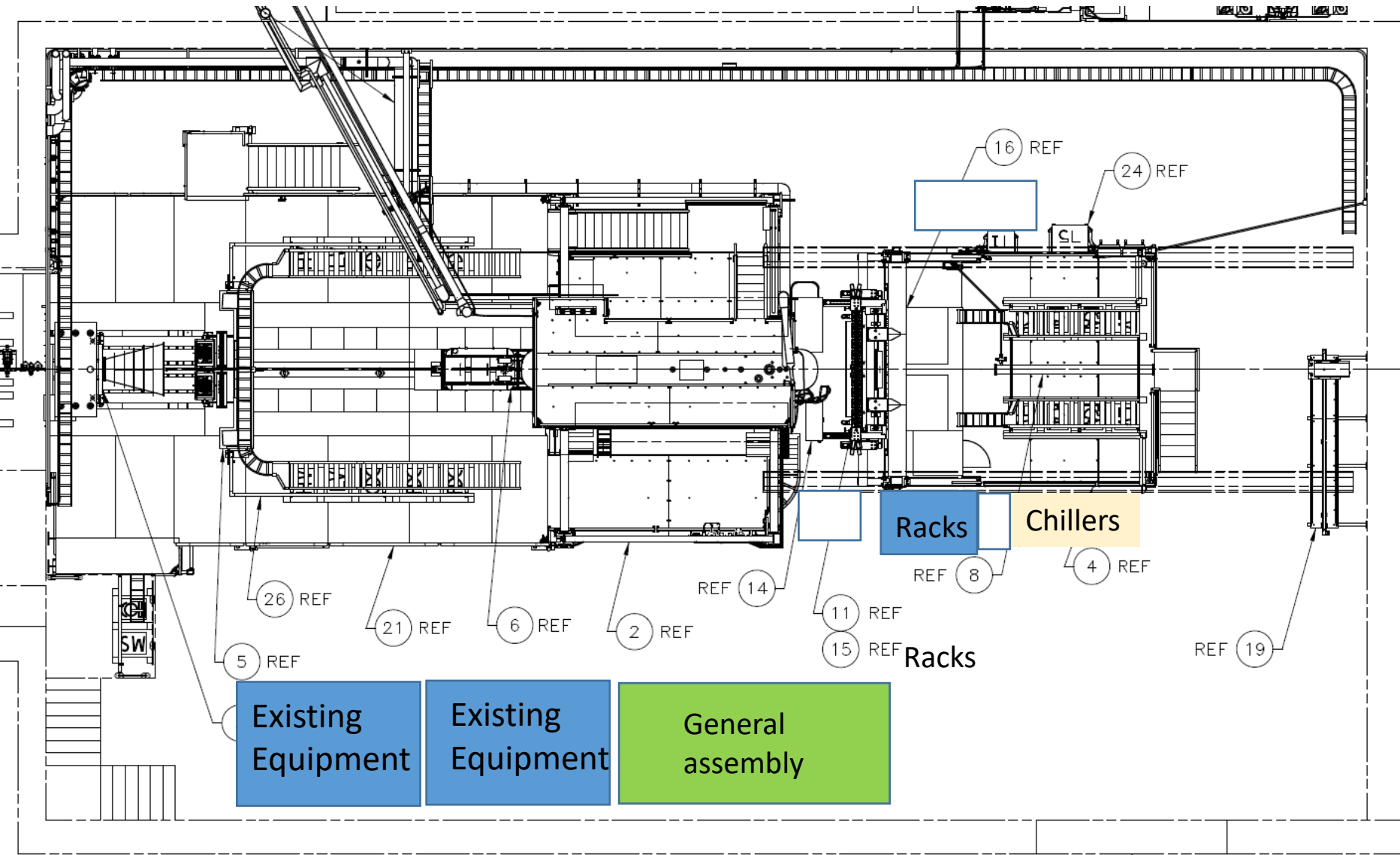
Mode	Task Name	Duration	Start	Finish	Predecessors
	▾ Hall D Installation	870 days	Mon 9/21/20	Tue 2/13/24	
	▾ FCAL 2 Install	870 days	Mon 9/21/20	Tue 2/13/24	
	▸ Complete Design	403 days	Mon 9/21/20	Fri 4/29/22	
	▸ Component Procurements	201 days	Mon 5/2/22	Mon 2/6/23	
	▾ Installation	235 days	Wed 3/22/23	Tue 2/13/24	
	Remove TOF & CCAL	5 days	Wed 3/22/23	Tue 3/28/23	35
	Remove Cables	11 days	Wed 3/29/23	Wed 4/12/23	16
	Remove Dark room/cable trays	12 days	Thu 4/13/23	Fri 4/28/23	17
	Disassemble FCAL Modules	17 days	Mon 5/1/23	Tue 5/23/23	18
	Remove liftable frame and disassemble	2 days	Wed 5/24/23	Thu 5/25/23	19
	Modify liftable frame	5 days	Fri 5/26/23	Thu 6/1/23	20
	Assemble new FCAL frame	10 days	Fri 6/2/23	Thu 6/15/23	21
	Install and align liftable frame	2 days	Fri 6/16/23	Mon 6/19/23	22
	Refurbish old FCAL modules	90 days	Mon 5/1/23	Fri 9/1/23	19FS-17 days
	install Cooling blocks	2 days	Tue 6/20/23	Wed 6/21/23	23
	Install FCAL 2 modules	83 days	Thu 6/22/23	Mon 10/16/23	24FS-60 days,25
	Install monitoring panes, rohacel and tungsten absorber, insulation	10 days	Tue 10/17/23	Mon 10/30/23	26
	Install new electrical power	5 days	Fri 6/16/23	Thu 6/22/23	22
	Install Racks	4 days	Fri 6/23/23	Wed 6/28/23	28
	Install crates	2 days	Fri 6/23/23	Mon 6/26/23	28
	Install water cooling system	7 days	Tue 10/17/23	Wed 10/25/23	26
	Install Dark room/cable trays	15 days	Thu 10/26/23	Wed 11/15/23	31
	Install cables	40 days	Thu 11/16/23	Wed 1/10/24	32
	Test all systems	24 days	Thu 1/11/24	Tue 2/13/24	33
	Hall Opens 2023	1 day	Tue 3/21/23	Tue 3/21/23	



Installation Space Usage



Final Space Usage



Labor Requirements

- Detector removal
 - Cables – electronics/tech group
 - Darkroom – tech group
 - Lead Glass Blocks – students/tech group?
 - Frame – tech group
- Lead Glass module refurbish – students?
- Frame assembly/install – tech group
- Module stacking – students/tech group
- Darkroom Install – tech group
- Cabling – electronics/tech group
- Testing – electronics/Scientists

Equipment needed

- Detector removal
 - Cables – ladders/manlift
 - Darkroom – ladders/manlift
 - Lead Glass Blocks – ladders/manlift/gloves/tables/crates/shelving
 - Frame – ladders/manlift/crane
- Lead Glass module refurbish – cleanroom/gloves/tables/crates/shelving
- Frame assembly/install – ladders/manlift
- Module stacking – ladders/manlift/gloves/tables
- Darkroom Install – ladders/manlift
- Cabling – ladders/manlift
- Testing – ladders/manlift/scopes