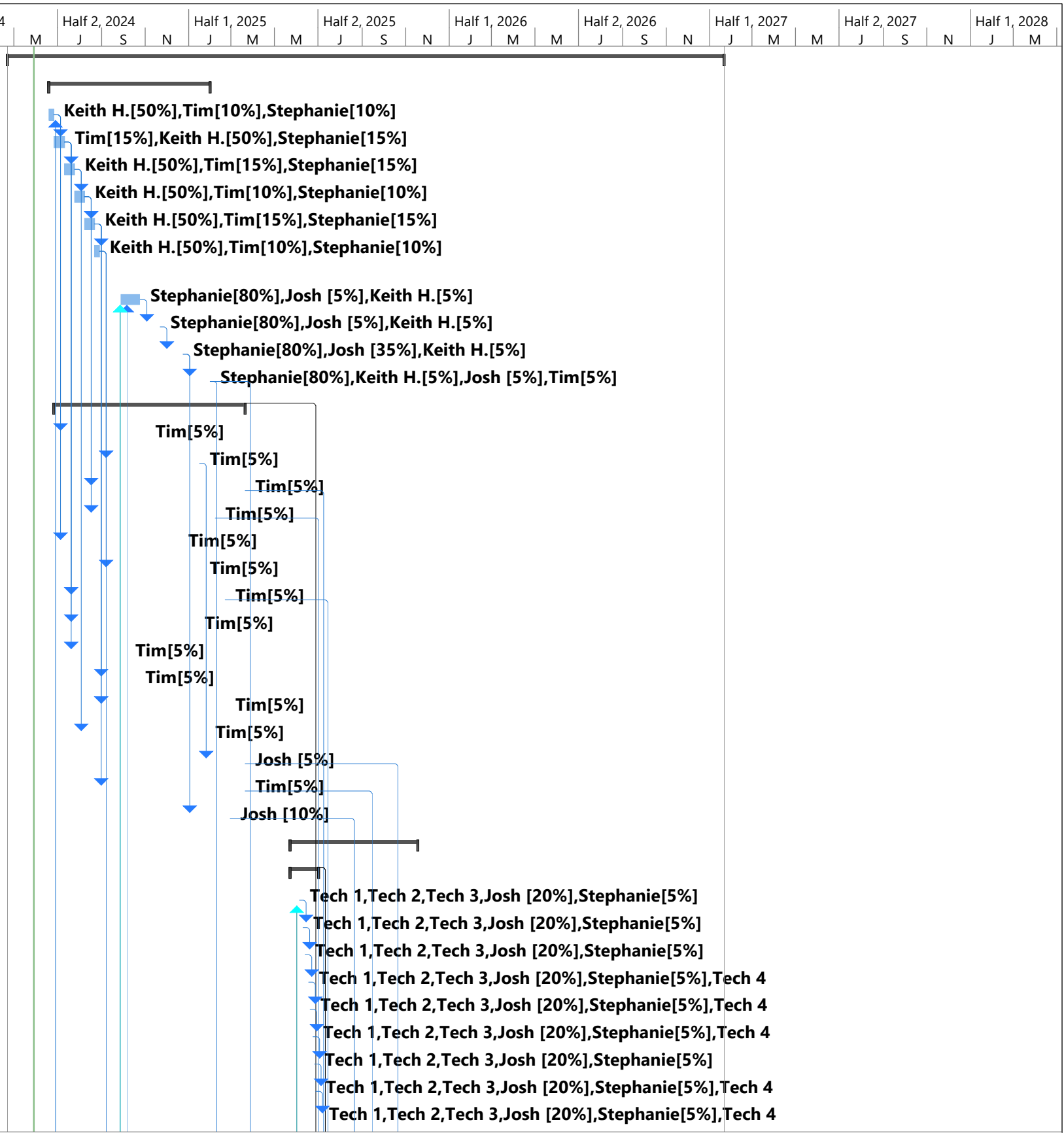
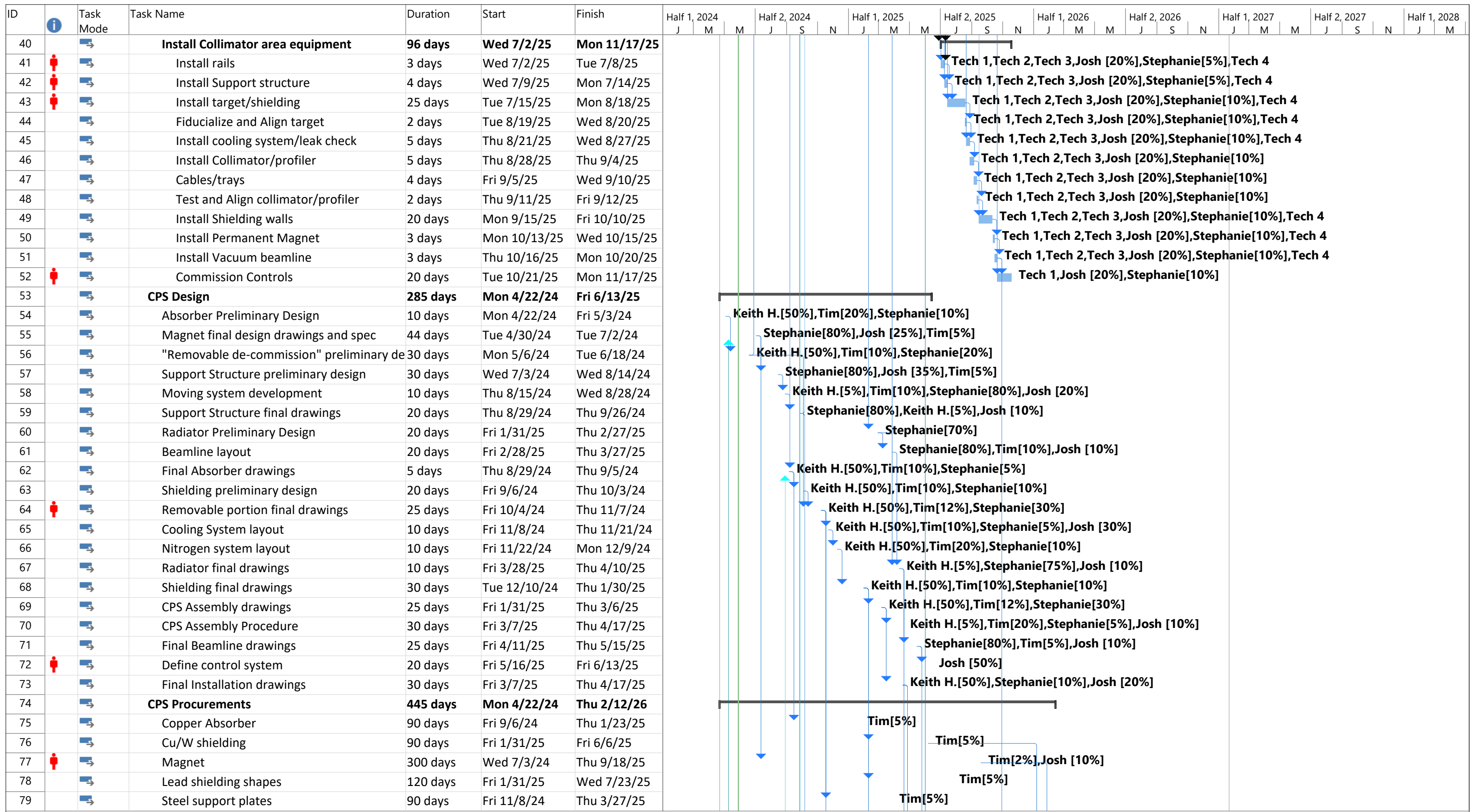


ID	Task Mode	Task Name	Duration	Start	Finish	Half 1, 2024			Half 2, 2024			Half 1, 2025			Half 2, 2025			Half 1, 2026			Half 2, 2026			Half 1, 2027			Half 2, 2027			Half 1, 2028	
						J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M
1	→	K-Long Design, Fabrication and Installation	676 days	Mon 4/22/24	Wed 1/20/27																										
2	→	KPT Design	150 days	Wed 6/19/24	Thu 1/30/25																										
3	→	Beryllium Target/Absorber updated drawing	5 days	Wed 6/19/24	Tue 6/25/24																										
4	→	Target Shielding final drawings	10 days	Wed 6/26/24	Wed 7/10/24																										
5	→	Beamline final drawings	10 days	Thu 7/11/24	Wed 7/24/24																										
6	→	Frame/rails system final drawings	10 days	Thu 7/25/24	Wed 8/7/24																										
7	→	Shield Wall Final drawings	10 days	Thu 8/8/24	Wed 8/21/24																										
8	→	Beryllium and Tungsten cooling plates final drawings	5 days	Thu 8/22/24	Wed 8/28/24																										
9	→	Profilor Final Design	20 days	Fri 9/27/24	Thu 10/24/24																										
10	→	Active collimator final design	20 days	Fri 10/25/24	Thu 11/21/24																										
11	→	Cooling system final drawings/control specs	20 days	Fri 11/22/24	Mon 12/23/24																										
12	→	Final Installation Drawings	20 days	Thu 1/2/25	Thu 1/30/25																										
13	→	KPT Procurements	180 days	Wed 6/26/24	Thu 3/20/25																										
14	→	Beryllium Target	90 days	Wed 6/26/24	Thu 10/31/24																										
15	→	Beryllium target cooling/containment shroud	90 days	Thu 8/29/24	Wed 1/15/25																										
16	→	Support Structure	150 days	Thu 8/8/24	Thu 3/20/25																										
17	→	Rail system/rollers	120 days	Thu 8/8/24	Thu 2/6/25																										
18	→	Tungsten Absorber	120 days	Wed 6/26/24	Mon 12/16/24																										
19	→	Absorber cooling plates	90 days	Thu 8/29/24	Wed 1/15/25																										
20	→	Target lead shielding	150 days	Thu 7/11/24	Thu 2/20/25																										
21	→	Target Borated Poly Shielding	120 days	Thu 7/11/24	Wed 1/8/25																										
22	→	Aluminum filler tubes	60 days	Thu 7/11/24	Thu 10/3/24																										
23	→	Concrete shield walls	40 days	Thu 8/22/24	Thu 10/17/24																										
24	→	Lead Shield walls	120 days	Thu 8/22/24	Thu 2/20/25																										
25	→	Vacuum Beamline components and support	120 days	Thu 7/25/24	Thu 1/23/25																										
26	→	PLC components	45 days	Thu 1/16/25	Thu 3/20/25																										
27	→	Lead Shield Wall Supports	140 days	Thu 8/22/24	Thu 3/20/25																										
28	→	Cooling system components	40 days	Thu 1/2/25	Thu 2/27/25																										
29	→	KPT Installation	122 days	Fri 5/23/25	Mon 11/17/25																										
30	→	Remove equipment from Collimator	26 days	Fri 5/23/25	Tue 7/1/25																										
31	→	Perform Shut down of existing equipment	8 days	Fri 5/23/25	Wed 6/4/25																										
32	→	Bleed up Vacuum and remove pumps	3 days	Thu 6/5/25	Mon 6/9/25																										
33	→	Remove Collimator/Profilor	3 days	Tue 6/10/25	Thu 6/12/25																										
34	→	Remove permanent magnet and move to	2 days	Fri 6/13/25	Tue 6/17/25																										
35	→	Remove 2ndary Collimator	2 days	Wed 6/18/25	Thu 6/19/25																										
36	→	Remove sweep magnet	2 days	Fri 6/20/25	Mon 6/23/25																										
37	→	Remove Polarimeter	2 days	Tue 6/24/25	Wed 6/25/25																										
38	→	Remove beamline and stands	2 days	Thu 6/26/25	Fri 6/27/25																										
39	→	Remove/reposition Cable trays/wiring	2 days	Mon 6/30/25	Tue 7/1/25																										



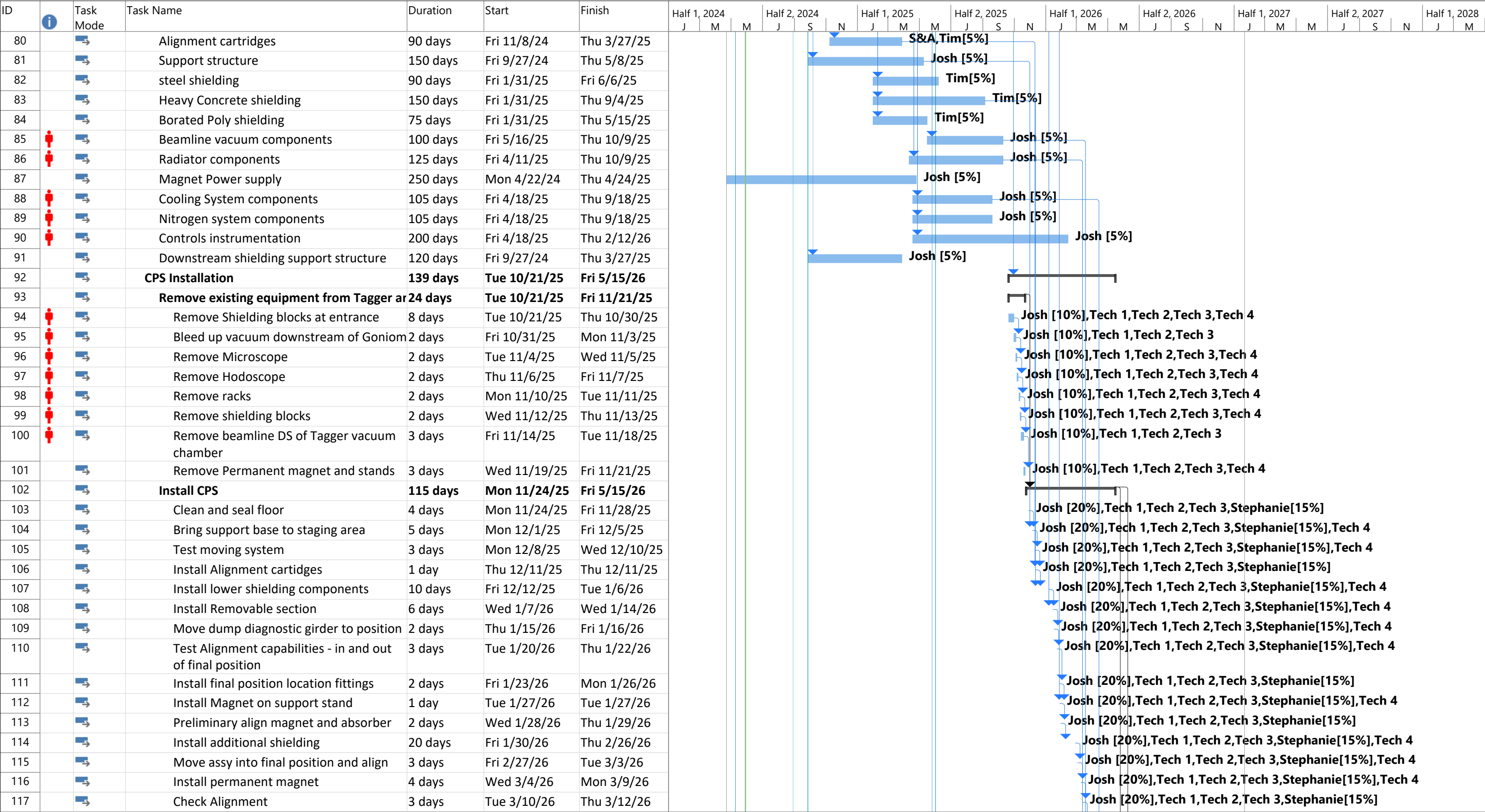
Project: K-Long Design, Fab an
Date: Wed 5/29/24

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	



Project: K-Long Design, Fab an Date: Wed 5/29/24

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Project: K-Long Design, Fab an Date: Wed 5/29/24	Task	Project Summary		Manual Task	Start-only	Deadline
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	Milestone	Inactive Milestone	◇	Manual Summary Rollup	External Tasks	Manual Progress
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ID	Task Mode	Task Name	Duration	Start	Finish	Half 1, 2024			Half 2, 2024			Half 1, 2025			Half 2, 2025			Half 1, 2026			Half 2, 2026			Half 1, 2027			Half 2, 2027			Half 1, 2028	
						J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M
118		Install Radiator and test controls	4 days	Fri 3/13/26	Wed 3/18/26																										
119		Install Beamline and windows	4 days	Thu 3/19/26	Tue 3/24/26																										
120		Install remaining shielding	5 days	Wed 3/25/26	Tue 3/31/26																										
121		Verify Alignment	2 days	Wed 4/1/26	Thu 4/2/26																										
122		Install vacuum pumps and pump down	3 days	Fri 4/3/26	Tue 4/7/26																										
123		Hookup electrical and water to magnet and test	4 days	Wed 4/8/26	Mon 4/13/26																										
124		Hookup cooling water to absorber and verify instrumentation	4 days	Tue 4/14/26	Fri 4/17/26																										
125		Hookup and verify nitrogen purge	2 days	Mon 4/20/26	Tue 4/21/26																										
126		Install/Test all controls	20 days	Mon 4/20/26	Fri 5/15/26																										
127		Install Ramp Shielding blocks	7 days	Wed 4/22/26	Thu 4/30/26																										
128		KFM Design	410 days	Tue 10/1/24	Tue 6/2/26																										
129		Preliminary Design MRI Magnet installaion	45 days	Fri 5/16/25	Wed 7/23/25																										
130		Preliminary Beamline design	25 days	Thu 7/24/25	Wed 8/27/25																										
131		Assemble FPC frame in ESB	7 days	Tue 10/1/24	Wed 10/9/24																										
132		Assemble FRI frame in ESB	7 days	Thu 10/10/24	Fri 10/18/24																										
133		Preliminary FWC support design	5 days	Thu 8/28/25	Thu 9/4/25																										
134		Preliminary FVH support design	5 days	Fri 9/5/25	Thu 9/11/25																										
135		Preliminary FPC support design	10 days	Fri 9/12/25	Thu 9/25/25																										
136		Preliminary FRI support design	10 days	Fri 9/26/25	Thu 10/9/25																										
137		Preliminary design Start Counter mods	15 days	Fri 10/10/25	Thu 10/30/25																										
138		Target mods	20 days	Fri 10/31/25	Fri 11/28/25																										
139		Installation Layout	15 days	Mon 12/1/25	Fri 12/19/25																										
140		Final drawings FWC	8 days	Mon 12/22/25	Mon 1/12/26																										
141		Final drawings FPC	12 days	Tue 1/13/26	Thu 1/29/26																										
142		Final drawings FVH	5 days	Fri 1/30/26	Thu 2/5/26																										
143		Final drawings FRI	15 days	Fri 2/6/26	Thu 2/26/26																										
144		Final Start Counter Drawings	7 days	Fri 2/27/26	Mon 3/9/26																										
145		Final Beamine drawings	15 days	Tue 3/10/26	Mon 3/30/26																										
146		Final Installation Drawings	45 days	Tue 3/31/26	Tue 6/2/26																										
147		KFM Fabrication/Procurements	257 days	Thu 7/24/25	Wed 8/5/26																										
148		Beamline vacuum components	90 days	Tue 3/31/26	Wed 8/5/26																										
149		Support structure components	90 days	Tue 1/13/26	Tue 5/19/26																										
150		Start Counter components	90 days	Fri 10/31/25	Thu 3/19/26																										
151		MRI Magnet installation infrastructure	120 days	Thu 7/24/25	Thu 1/22/26																										
152		KFM Installation	165 days	Mon 5/18/26	Wed 1/20/27																										
153		Remove Equipment on US Platform	15 days	Mon 5/18/26	Mon 6/8/26																										
154		Remove HG PS Detector	2 days	Mon 5/18/26	Tue 5/19/26																										
155		Remove LG PS Detector	2 days	Wed 5/20/26	Thu 5/21/26																										

Project: K-Long Design, Fab an
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Task	Project Summary			Manual Task		Start-only		Deadline	
Split	Inactive Task		Duration-only		Finish-only		Progress	
Milestone	Inactive Milestone	◆	◆	Manual Summary Rollup		External Tasks	◆	Manual Progress	
Summary	Inactive Summary	—		Manual Summary		External Milestone	◆		

ID	Task Mode	Task Name	Duration	Start	Finish	Half 1, 2024			Half 2, 2024			Half 1, 2025			Half 2, 2025			Half 1, 2026			Half 2, 2026			Half 1, 2027			Half 2, 2027			Half 1, 2028			
						J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M		
						Gantt Chart Area with Milestones: 4/29, 5/15, 5/22, 9/30																											
156		Remove Cable Trays	3 days	Fri 5/22/26	Wed 5/27/26	Tech 1,Tech 2,Tech 3,Tech 4[25%],Josh [5%]																											
157		Remove PS Shielding Wall	4 days	Thu 5/28/26	Tue 6/2/26	Tech 1,Tech 2,Tech 3,Tech 4[25%],Josh [5%]																											
158		Remove PS Magnet Vacuum Chamber	2 days	Wed 6/3/26	Thu 6/4/26	Tech 1,Tech 2,Tech 3,Tech 4[25%],Josh [5%]																											
159		Remove Start Counter	2 days	Fri 6/5/26	Mon 6/8/26	Tech 1,Tech 2,Tech 3,Tech 4[25%],Josh [5%]																											
160		Install KFM	150 days	Tue 6/9/26	Wed 1/20/27	Tech 1,Tech 2,Tech 3,Tech 4,Josh [30%],Stephanie [10%]																											
161		Install MRI magnet infrastructure	75 days	Tue 6/9/26	Wed 9/23/26	Tech 1,Tech 2,Tech 3,Tech 4,Josh [35%],Stephanie [10%]																											
162		Install MRI magnet	30 days	Thu 9/24/26	Wed 11/4/26	Tech 1,Tech 2,Tech 3,Tech 4,Josh [35%],Stephanie [10%]																											
163		Install FWC Structure	3 days	Thu 11/5/26	Mon 11/9/26	Tech 1,Tech 2,Tech 3,Josh [10%],Stephanie [10%]																											
164		Install FPC Structure	3 days	Tue 11/10/26	Thu 11/12/26	Tech 1,Tech 2,Tech 3,Josh [10%],Stephanie [10%]																											
165		Install FVH Structure	3 days	Fri 11/13/26	Tue 11/17/26	Tech 1,Tech 2,Tech 3,Josh [10%],Stephanie [10%]																											
166		Install FRI Structure	3 days	Wed 11/18/26	Fri 11/20/26	Tech 1,Tech 2,Tech 3,Josh [10%],Stephanie [10%]																											
167		Install Beamline	3 days	Mon 11/23/26	Wed 11/25/26	Tech 1,Tech 2,Tech 3,Josh [10%],Stephanie [10%]																											
168		Cable detectors	15 days	Mon 11/30/26	Fri 12/18/26	Tech 1																											
169		Test all systems	15 days	Mon 12/21/26	Wed 1/20/27	Tech 1,Tech 2,Tech 3,Josh [30%]																											
170																																	
171																																	
172		Receive detector from Julich	1 day	Mon 9/30/24	Mon 9/30/24	9/30																											
173		Get on KPT updated drawings	1 day	Wed 5/15/24	Wed 5/15/24	5/15																											
174		Beam 2025 stops	1 day	Thu 5/22/25	Thu 5/22/25	5/22																											
175		Start of schedule	1 day	Mon 4/29/24	Mon 4/29/24	4/29																											
176		Decisions on collimator and profiler	1 day	Thu 8/29/24	Thu 8/29/24																												
177		Finish CPS absorber test	1 day	Tue 8/13/24	Tue 8/13/24																												

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Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone			