)	0	Task Mode	Task Name						Duration	Start
1		-5	SBS Installation Schedule						236 days	Mon 9/21
2		-5	Milestones						235 days	Mon 9/21
3	~	-5	Post Beam Checklist - Ir	nstallation Begins					0 days	Mon 9/21
4	~	-5)	Turn Off LCW Supply to	Hall (need to be coo	rdinated with other	r halls)			0 days	Thu 10/1
5	~	-5	Turn Main LCW System	Back On (coordinate	with C. Jones)				0 days	Thu 10/15
6	~	-5	LCW Upgrade Complete	2					0 days	Thu 11/5
7	~	-5	PREX/CREX Removal Co	mplete - Power Upg	rade Work Can Begi	in (inside th	e Hall)		0 days	Mon 12/7
8	~	-5	RHRS Decommissioning	Complete - Replace	ment of Main AHU	Begins			0 days	Fri 2/26
9	~	-5	Begin Transporting SBS	Magnet Parts to Hall					0 days	Thu 3/4
10	~	-5	Prepare Initial Set of Eq	uipment Racks for Tr	ansporting to Hall ((not involve	d in test	ing)	0 days	Thu 3/25
11	~	-5	HCAL Detector Ready to	Transport to Hall					0 days	Mon 4/19
12	~	-5	Big Bite Detector Ready	for Transporting to	Hall				0 days	Mon 5/17
13		-5	Begin Connecting Electi	ronics in Upstream B	unker (non-collabor	ration/detec	ctors)		0 days	Mon 6/21
14		-5	Begin Cool Down of LHI	RS					0 days	Mon 6/21
15		-5	GEN-RP Detector Ready	to Transport to Hall					0 days	Fri 6/25
16		-5	Begin Connecting GeN-	RP Electronic (collabo	oration)				0 days	Tue 7/6
17		-5	Begin Connecting HCAL	Electronics (collabor	ration)				0 days	Tue 7/6
8		-5	Begin connecting BB Ele	ectronics (Collaborati	on)				0 days	Tue 7/6
19		-5	AHU Installation Compl	ete					0 days	Fri 7/16
20	===	-5	Complete Pre-Beam Ch	ecklist - Installation (Complete				0 days	Fri 9/3
21		-5	Preliminaries						19 days	Mon 9/21
22	~	-5	Post Beam Checklist - Ir	nstallation Begins					0 days	Mon 9/21
23		-5	RADCON Survey / Hold	Around Pivot					19 days	Mon 9/21
			Task		Inactive Summary			External Tasks		
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	0	Task Mode	Task Name					Duration	Start
24		-5	FML Work List (maintaine	d by FML)				236 days	Mon 9/21
25		-5	LCW Pressure Sensor					5 days	Mon 9/21
26	~	-5	Various Water Leak Rep	airs				40 days	Fri 10/9
27	~	- 5	Hall A 2MVA Power Upg	grade				20 days	Tue 12/8
28	~	-5	Electrical Retrofits Due	to Detector Rotatio	on			9 days	Tue 1/19
29	~	- 5	Relocate ODH Monitor	/ Alarm System				9 days	Mon 2/1
30	~	<u>-</u> 5	HVAC Retrofits Due to D	Detector Rotation				2 days	Fri 2/12
31	~	-5	Lighting Replacement					9 days	Tue 2/16
2		- 5	Hall A AHU Replacemen	nt (integrated using	g a schedule provide	ed by Celia or	n 5/20/21)	143 days	Mon 2/15
3		-5	Final Design M&H					29 days	Tue 3/9
4		- 5	Site Visit - Subs Pre-b	id				1 day	Thu 4/8
5		-5	AHU/Condensor PO					1 day	Wed 3/3
6		-5	Exh Fan PO					1 day	Thu 3/18
7		- 5	Submittal - AHU AAN					1 day	Wed 3/24
3		-5	Submittals - Exh Fan					2 days	Thu 4/1
)		- 5	Final Proposal					14 days	Tue 4/6
)		-5	Training					75 days	Mon 2/15
I		-5	Final PO					1 day	Fri 5/21
2		- 5	Issue Sub/Vendor Pos	S				3 days	Mon 5/10
3		-5	Subcontractor Trainir	ng				15 days	Thu 5/13
1		-5	Submittals - Other/Al	НА				10 days	Wed 4/21
5		-5	Mobilization / Field V	erification				5 days	Mon 5/24
6		-5	Structural Work					10 days	Fri 4/30
			Task		Inactive Summary		External Tasks		
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D	0	Task Mode	Task Name				 	Duration	Start
47		-5	Submittals - Struct	DWgs				10 days	Fri 4/30
48		-5	Submitals- Struct App	r				2 days	Fri 5/14
49		-5	Field Verify Dimensio	n				1 day	Tue 5/18
50		-5	Submit Demo Plan					5 days	Thu 5/13
51		-5	Submital Demo Plan	Approved				2 days	Thu 5/20
52		-5	Demo Platform					9 days	Mon 5/24
53		-5	Fabricate Platform					14 days	Mon 5/24
54		-5	Platform special Insp	ections				14 days	Mon 5/24
55		-5)	Paint New Platform					5 days	Mon 6/14
56		-5	Install AHU platform					10 days	Mon 6/21
57		-5	Civil					10 days	Fri 6/4
58		-5	Util Loc					1 day	Fri 6/4
59		-5	Excavation Permit?)				1 day	Mon 6/7
60		-5	Excavate New Pad					2 days	Mon 6/7
61		-5	Concrete New Pad					5 days	Wed 6/9
62		-5	Pneumatic Demo E	xisting CU Pad				1 day	Thu 6/10
63		-5	Demo Existing CU I	Pad				5 days	Fri 6/11
64		-5	Mechanical Install					66 days	Mon 4/26
65		-5	Submittal - Refrig F	Pipe				10 days	Mon 4/26
66		<u>_</u>	Submittal - Pipe Ap	ppr				2 days	Mon 5/10
67		- 5	Submittal - Duct					10 days	Fri 4/30
68		- 5	Submittal - Duct A	ppr				2 days	Fri 5/14
69		-5	Evacuate Refrig/Oi					3 days	Fri 6/4
			Task		Inactive Summary		External Tasks		
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D	0	Task Mode	Task Name					Duration	Start
70	<u> </u>	-3	AHU Arrival at PCR					1 day	Thu 4/29
71		-5	AHU Coil at PCR					1 day	Fri 5/14
72		-5	AHU Coil install					10 days	Mon 5/17
73		-5	Demo Exhaust Fan					2 days	Tue 6/1
74		-5	GPR Inspections					3 days	Wed 5/26
75		-5	Mechanical Rough	In				9 days	Tue 6/1
76		-5	Insulation Rough I	n				5 days	Mon 6/14
77		-5	Install 101-AHU-01					2 days	Tue 7/6
78		-5	Receive Filter					1 day	Fri 6/11
79		-5	Install Filter Sectio	n				2 days	Thu 7/8
80		-5	Install duct heater					2 days	Thu 7/8
81		-5	Duct Work Install					2 days	Thu 7/8
82		-5	Demo existing CU					1 day	Wed 6/9
83		-5	Install 101-CU-1					2 days	Wed 6/16
84		-5	Mechanical Tie In	AHU				5 days	Thu 7/8
85		-5	Insulation Comple	te				10 days	Thu 7/15
86		-5	Install new exhaus	t fan				10 days	Thu 7/15
87		-5	Electrical					40 days	Fri 4/30
88		-5	Submitals - Electric	cal				10 days	Fri 4/30
89		-5	Submittal - Elect A	ppr				6 days	Fri 5/14
90		-5	Demo existing elec	ctrical				5 days	Wed 6/9
91		-5	Electrical Rough In					14 days	Mon 5/24
92		-5	Electrical Install					10 days	Mon 6/14
			Task		Inactive Summary		External Tasks		
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)	0	Task Mode	Task Name					Duration	Start
93		-5	Controls					36 days	Thu 5/13
94		-5	Submittals - Cont	trols				10 days	Thu 5/13
95		-5	Submittal - Contr	ol App				2 days	Thu 5/27
96		-5	Controls Rough I	n				9 days	Tue 6/1
97		<u>-</u> 5	Controls Install					10 days	Mon 6/14
98		-5	Final Controls					5 days	Mon 6/28
99		-5	Start up - Acceptan	ce				44 days	Tue 7/6
100		<u>-5</u>	Start up - Checko	ut				1 day	Tue 7/6
101		-5	AHU running in n	nanual				2 days	Mon 7/12
102		-5	TABS					3 days	Wed 7/7
103		-5	Commisioning					10 days	Mon 7/12
104		-5	Training					1 day	Mon 7/26
105		-5	Substantial comp	oletion				1 day	Tue 7/27
106		-5	Close out					28 days	Wed 7/28
107	LCW Heat Exchanger [scheduling postponed]						4 days	Mon 9/21	
108		-5	Replace Obsolete XL1	00 Honeywell Contro	ller [scheduling post	poned]		4 days	Mon 9/21
109		-5	Fire Safety System: Sn	noke Removal Fans R	eplacement [schedu	ıling postpon	ed]	4 days	Mon 9/21
110		<u>-5</u>	Beam Dump Cooling S	tudy [scheduling pos	tponed]			4 days	Mon 9/21
111		-5	Beam Dump Cooling C	Capacity Increase [sch	eduling postponed]			4 days	Mon 9/21
112		-5	Nitrogen Vaporizer fo	r Dehumidification Sy	stem [scheduling po	ostponed]		4 days	Mon 9/21
113		<u>-5</u>	Fire Safety System: En	d Station Fire Detect	ion and Suppression	[scheduling	postponed]	4 days	Mon 9/21
114		-5	LCW Pressure Regulat	ion (Hall B) [schedulii	ng postponed]			4 days	Mon 9/21
115	~	-5	LCW Upgrade (has sepa	rate detailed drawin	gs & procedure)			34 days	Mon 9/21
			Task		Inactive Summary		External Tasks		
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)	0	Task Mode	Task Name	Duration	Start
116	~	-5	Shut Off LCW Entering the Hall and Drain System	4 days	Mon 9/21
117	~	-5	Remove downstream (4") section of pipe that connects to arms	5 days	Fri 9/25
118	~	-5	Drain System and relieve pressure Upstream of Main (8") Valves	1 day	Fri 10/2
119	~	-5	Contact FML To Remove Pressure/Flow Sensors	1 day	Mon 10/5
120	~	-5	Remove 8" Valves	1 day	Tue 10/6
121	~	-5	Cut Off 90 Degree Elbows on 8" Lines	2 days	Wed 10/7
122	~	-5	Install New Flanges on 8" Pipes	2 days	Fri 10/9
123	~	-5	Install New 8" Valves	1 day	Tue 10/13
124	~	-5	Install 8" to 4" Manifolds	2 days	Wed 10/14
25	~	-5	Reconnect 4" LCW Lines Going to Pivot	2 days	Fri 10/16
126	~	-5	Position New LCW Structure and Manifold	1 day	Tue 10/20
127	~	-5	Weld in 4" Line Going Down to New Manifold	2 days	Wed 10/21
128	~	-5	Connect New Manifold to LCW System	1 day	Fri 10/23
129	~	-5	Disconnect & Cap Water Lines Over the Pivot Going to RHRS	3 days	Mon 10/26
130	~	-5	Pressurize LCW System and Check For Leaks	1 day	Thu 10/29
131	~	-5	Complete Pressure Test of New Section of LCW for Engineering Checkout	3 days	Fri 10/30
132	~	-5	Document and Signoff on In-Service LCW System.	2 days	Wed 11/4
133		-5	Target Group Work (Target Group has details)	29 days	Mon 9/21
134	~	-5	Warm Up Target (PREX/CREX) [anticipated]	2 days	Mon 9/21
135	~	-5	Bleed Up and Open Target Chamber (PREX/CREX) [anticipated]	2 days	Fri 10/16
136	~	-5	Complete as Found Surveys on Target and HRS (PREX/CREX) [anticipated]	3 days	Tue 10/20
137	~	-5	Remove Target (PREX/CREX) [anticipated]	5 days	Fri 10/23
138	III	-5	Install New Turbos and Cables on Chamber - Hall A Tech Staff [scheduling postponed]	1 day	Mon 9/21
			Task Inactive Summary External Tasks		
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Project: SBS Installation Date: Mon 6/7

Task

Inactive Summary

Manual Task

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Manual Summary Rollup

Project Summary

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Inactive Task

Start-only

Inactive Milestone

Manual Progress

Manual Progress

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)	0	Task Mode	Task Name					Duration	Start
139		-5	Install Target (SBS) [sche	eduling postponed]				1 day	Mon 9/21
140		-5	Complete Startup Surve	ys [scheduling postp	oned]			1 day	Mon 9/21
141		-5	Close and Pump Down (Chamber (SBS) [sche	duling postponed]			1 day	Mon 9/21
142		-5	Cool Down Target (SBS)	[scheduling postpor	ned]			1 day	Mon 9/21
143	~	-5	Decommission RHRS & Po	sitioning LHRS				103 days	Mon 9/21
144	~	-5	Bleed Up Vacuum Syste	ems				1 day	Mon 9/21
145	~	-5	Bleed Up Entrance Be	eam Line (downstrea	m of raster)			1 day	Mon 9/21
146	~	-5	Bleed Up Exit Beam L	ine				1 day	Mon 9/21
147	~	-5	Bleed Up Both Spectr	ometers				1 day	Mon 9/21
148	~	-5	Remove PREX/CREX Eq	uipment				35 days	Fri 10/16
149	~	-5	Remove Pivot Fence					1 day	Fri 10/16
150	~	-5	Remove Ion Chamber	Near Pivot (request	t through SSG)			1 day	Mon 10/19
151	~	-5	Disconnect Chamber	From Entrance Bear	n Line			1 day	Tue 10/20
152	~	-5	Remove Turbo Pump	Remove Turbo Pump and Valve From Chamber					
153	~	-5	Remove Poly-Blocks B	Remove Poly-Blocks Between Chamber and Collimator					
154	~	-5	Remove Bellows and	Valve Between Colli	mator and Chambe	r		2 days	Tue 10/27
155	~	-5	Disconnect Exit Beam	Line and Spectrome	eters' Feed-Thrus			1 day	Thu 10/29
156	~	-5	Disconnect Septum V	Viring				3 days	Fri 11/6
157	~	-5	Move Septum Magne	t Upstream to Clear	Spectrometer Nose	e (~4"-6")		2 days	Wed 11/11
158	~	-5	Remove Left and Ride	e Side Work Platforn	าร			1 day	Fri 11/13
159	~	-5	Roll PREX/CREX Equip	ment Out to Beam	Left			1 day	Mon 11/16
160	~	-5	Remove Sky Shine Sh	ielding and Support	Structure			2 days	Tue 11/17
161	~	-5	Remove Target Cham	ber and Base Plate				1 day	Thu 11/19
			Task		Inactive Summary		External Tasks		
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)	0	Task Mode	Task Name	Duration	Start
162	✓	-5	Remove Top Half of Septum Magnet	2 days	Fri 11/20
163	~	-5	Remove Collimator, Concrete Shielding, and Vacuum Feed-Thrus From Bore of Septum	n 1 day	Tue 11/24
164	~	-5	Reinstall Top Half of Septum Magnet	2 days	Wed 11/25
165	~	-5	Remove Septum Magnet From Pivot	1 day	Tue 12/1
166	~	-5	Remove Septum Magnet Base Plate	1 day	Wed 12/2
167	~	-5	Remove Septum Magnet Carriage	1 day	Thu 12/3
168	~	-5	Remove Bridge From Pivot	2 days	Fri 12/4
169	~	-5	Install Work Platform Around Distribution Can (removed from schedule)	8 days	Tue 12/8
170	~	-5	Remove Right Q1 Magnet	5 days	Fri 12/18
171	~	-5	Cryogenic Work (has a separate detailed procedure)	44 days	Mon 9/21
172	~	-5	Power Supply Testing and Prep Work	9 days	Mon 9/21
173	~	-5	Warm Up Cryogenic System	15 days	Fri 10/2
174	~	-5	Disconnect RHRS From Cryogenic System	20 days	Fri 10/23
175	~	-5	Disconnect and Label Lines Going to RHRS (above pivot)	10 days	Tue 12/8
176	~	-5	Remove Detectors From RHRS	6 days	Tue 12/22
177	~	-5	Remove SAMs (LUMIs) From Exit Beam Line and Cap Opening	1 day	Tue 1/12
178	~	-5	Remove Bridge That Connects the Two Spectrometers	1 day	Wed 1/13
179	~	-5	Clear Floor Space and Move RHRS to ~45 Degrees	20 days	Tue 12/8
180	~	-5	Remove Big Box Power Supply From RHRS	13 days	Tue 1/12
181	~	-5	Request Electrician to Disconnect Main Power to Big Box PS	4 days	Tue 1/12
182	~	-5	Disconnect Water and Magnet's Leads	2 days	Tue 1/19
183	~	-5	Move (Walter's) Platform Table into Position on Inside of RHRS	0.5 days	Thu 1/21
184	~	-	Remove Shielding and Handrails From RHRS Platform	0.5 days	Thu 1/21
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Page 8

Manual Summary

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Project Summary

Inactive Milestone

Inactive Task

)	0	Task Mode	Task Name	Duration	Start
185	✓	-5	Remove Big Box Power Supply From RHRS Platform	1 day	Fri 1/22
186	~	-5	Reinstall RHRS Platform Handrails	0.5 days	Mon 1/25
187	~	-5	Place Big Box PS into its Original Position (behind green wall)	0.5 days	Mon 1/25
188	~	-5	Remove Platform Table From the Hall (ask Walter where to put)	1 day	Tue 1/26
189	~	-5	Request Electrician to reconnect Main Power to Big Box PS - Postponed	1 day	Wed 1/27
190	~	-5	Connect Magnet Leads (Big Bite) and Water to Big Box PS - Postponed	2 days	Thu 1/28
191	~	-5	Move RHRS Pass Roll Up Door	29 days	Tue 1/19
192	~	-5	Continue Clearing Floor Space Behind Green Wall Area	13 days	Tue 1/19
193	~	-5	Electrical Retrofits Due to Detector Rotation	9 days	Tue 1/19
194	~	-5	Relocate ODH Monitor / Alarm System	9 days	Mon 2/1
195	~	-5	Move Small AHU (see FML work list)	10 days	Fri 2/12
196	~	-5	Remove Interfering Electronic Equipment Racks Behind Green Wall	4 days	Mon 2/1
197	~	-5	Remove Post Underneath Pivot That Interferes With RHRS Movement	10 days	Fri 2/5
198	~	-5	Move and Park RHRS Pass Roll Up Door	1 day	Fri 2/26
199		-5	L-HRS & Exit Beamline Work	69 days	Fri 3/19
200		-5	Prep / LHRS Work	69 days	Fri 3/19
201	~	-5	Clear Floor Space Needed to Move LHRS	5 days	Fri 3/19
202	~	-5	Rotate L-HRS Out to ~105 for Removing Exit Beamline	1 day	Fri 3/26
203	~	-5	Install Upstream Electronics Bunker and Racks	9 days	Mon 3/29
204		-5	Install SBS Power Supply in Upstream Bunker	5 days	Mon 6/7
205		-5	Install Power Outlets in Upstream Bunker	10 days	Mon 6/7
206		-5	Begin Connecting Electronics in Upstream Bunker (non-collaboration/detectors)	0 days	Fri 6/18
207		-5	Install New Turbos and Cables on Target Chamber	3 days	Tue 6/22

Milestone Duration-only Project: SBS Installation Summary Manual Summary Rollup Critical Date: Mon 6/7 Project Summary Manual Summary Critical Split Е Inactive Task Start-only Progress 3 Inactive Milestone Finish-only **Manual Progress**

)	0	Task Mode	Task Name	Duration	Start
208	✓	-5	Remove Shielding Blocks Underneath Exit Beamline	2 days	Mon 3/29
209		-5	Exit Beamline Work	50 days	Fri 3/19
210	~	-5	Disconnect Turbo And Instrumentation For Exit Beamline	1 day	Fri 3/19
11	~	-5	Remove Beamline Between Chamber and Corragated (see drawings)	2 days	Mon 3/22
12	~	-5	Layout Mounting Holes for Exit Beamline Tower (S&A)	2 days	Wed 3/31
13	~	-5	Install Exit Beamline Tower (see procedure for alignment requirements)	10 days	Fri 4/2
14	~	-5	Remove Old Support Infrastructure for Exit Beamline	10 days	Fri 4/2
15	~	-5	Install New flange for Connecting Shielded Beamline (see drawings)	2 days	Fri 4/16
16		-5	Install Turbo in New Position Along Exit Beamline (see drawings)	5 days	Fri 4/16
17	~	-5	Install Lower Section of Target Chamber	1 day	Fri 4/23
218		- 5	Install Isolation Valve Between Chamber and Exit Beamline	1 day	Mon 4/26
219		-5	Assemble Correctors and Shielded Beamline Subassembly	3 days	Tue 4/27
220		- 5	Install Correctors and Shielded Beamline Subassembly on Tower	1 day	Fri 4/30
221		-5	Check Alignment of Correctors and Shielded Beamline	3 days	Mon 5/3
222		-5	Make Final Connections of Shielded Beamline: Chamber and Exit .	1 day	Thu 5/6
223		-5	Install Temp Sensors on Correctors	4 days	Fri 5/7
224		-5	Install Upper Section of Target Chamber	1 day	Thu 5/13
225		-5	Pump Down and Leak Check Exit Beamline (ensure isolation valve is closed)	5 days	Fri 5/14
226		-5	Complete (2A) Survey and Alignment of Correctors and Shielded Beamline	5 days	Fri 5/21
227		-5	Big Bite Equipment	23 days	Fri 5/21
228	~	-5	Move Big Bite Tracks From Right to Left Side of Pivot (S&A new position)	5 days	Fri 5/21
229	~	-5	Install Big Bite Stand On Pivot (see procedure)	1 day	Fri 5/28
230	✓	-	Survey Pivot Stand Height and Position During Motion	1 day	Tue 6/1
			Task Inactive Summary External Tasks		
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Project: SBS Installation Date: Mon 6/7 Task

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0	9	Task Mode	Task Name					Duration	Start
31 🗸		-5	Install Big Bite Craddle	on Pivot Stand and C	heck Motion			1 day	Wed 6/2
32 🗸	/	-5	Install Big Bite Magnat	on Pivot Stand				2 days	Thu 6/3
33 🗸		-5	Survey and Align Big Bi	te Magnet (2A)				1 day	Mon 6/7
34		-5	Connect Power Leads	To Big Bite Magnet				1 day	Tue 6/8
35		<u>-5</u>	Connect Temp Sensors	and Electronics				3 days	Wed 6/9
36		-5	Connect LCW					1 day	Mon 6/14
37		-5	Install Guards					3 days	Tue 6/15
38		<u>-5</u>	Conduct Low Power Te	esting				1 day	Fri 6/18
39		<u>-</u> 5	Install Sieve Plate					1 day	Mon 6/21
10		<u>-</u> 5	Survey Sieve Plate					2 days	Tue 6/22
11		-5	Big Bite Detector Packag	ie –				50 days	Fri 5/21
12 🗸		<u>-</u> 5	Disconnect Big Bite Eq	uipment Racks In TED	(remaining)			2 days	Fri 5/21
13 🗸		<u>-5</u>	Transport Big Bite Equi	ipment Racks To Hall				3 days	Tue 5/25
14 🗸		-5	Transport Big Bite Dete	ectors To Hall				2 days	Fri 5/21
1 5 🗸	5 🗸 🔫 Transport Big Bite			ers and Supporting E	ers and Supporting Equipment To Hall				
16 🗸		-5	Install Extension on Big	g Bite Carriage				1 day	Thu 6/24
17 🗸		-5	Install Detector on Car	riage				1 day	Fri 6/25
18 🗸		<u>-5</u>	Install Big Bite Electron	nics Shielding Hut				2 days	Mon 6/28
19		-5	Install Big Bite Equipm	ent Racks				3 days	Wed 6/30
50		-5	Connect Big Bite Detec	ctor and Testing				20 days	Tue 7/6
51		<u>-5</u>	SBS Equipment					132 days	Mon 3/1
52 🗸		-5	Disassemble Counterv	veight Assembly In To	est Lab			5 days	Mon 3/1
53 🗸		-5	Disconnect Hydrauli	c Positioning System				1 day	Mon 3/1
			Task		Inactive Summary		External Tasks		
			Split		Manual Task		External Milestone	\Diamond	
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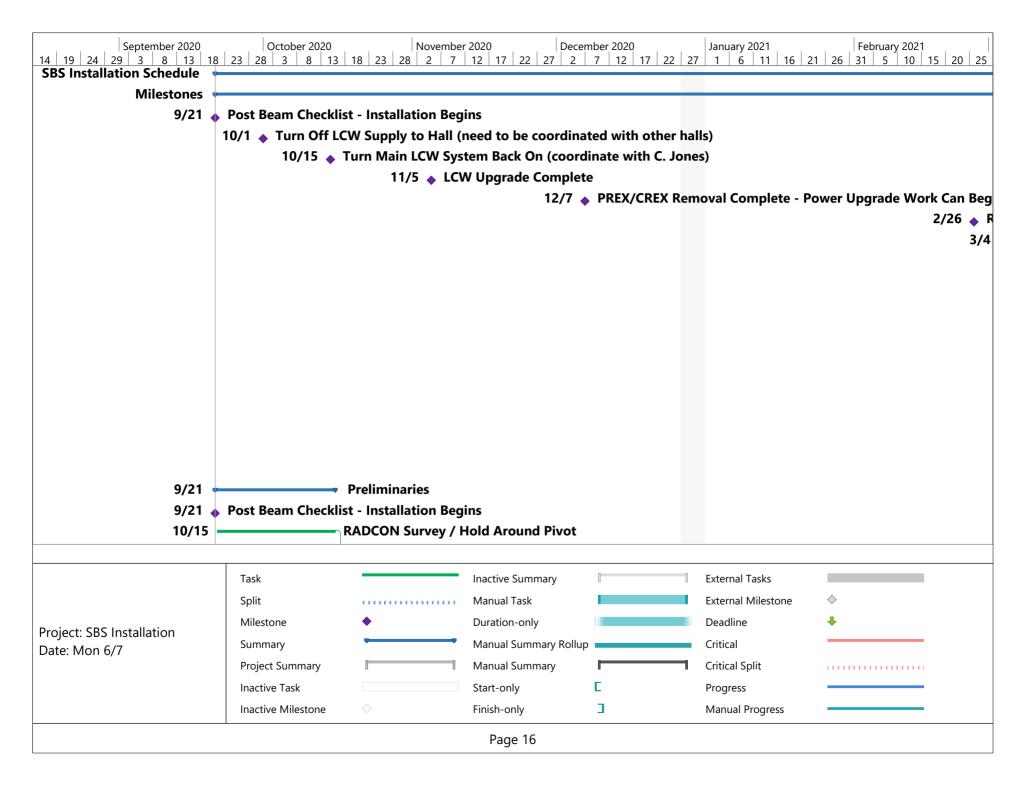
0	Task Mode	Task Name						Duration	Start
✓	-5	Disassemble Counterv	weight Steel and We	eldment				1 day	Tue 3/2
~	-5	Lay Counterweight Sto	eel Down Flat					1 day	Wed 3/3
~	-5	Disassemble Floor Pla	tes					1 day	Thu 3/4
~	-5	Prep Equipment and N	Material For Transpo	orting To Hall				1 day	Fri 3/5
~	-5	Transport 48D48 Magne	et Steel and Counter	rweight To Hall A				9 days	Mon 3/8
~	-5	Clear Floor Space In T	est Lab Needed To L	oad Steel				1 day	Mon 3/8
~	-5	Clear Floor Space For	Delivering Steel In T	he Hall				1 day	Tue 3/9
~	-5	Transport Magnet Ste	el and Counterweig	ht Assembly To Hall				3 days	Wed 3/10
~	-5	Transport Hydraulic P	ositioning System To	o Hall				2 days	Mon 3/15
~	-5	Transport SBS Lockers	and Remaining Equ	ipment To Hall				2 days	Wed 3/17
	-5	Install 48D48 Magnet ar	nd Counterweight A	ssembly				94 days	Fri 3/19
~	-5	Survey and Install SBS	Floor Plates					5 days	Fri 3/19
~	-5	Install Counterweight	Assembly on Floor I	Plates				2 days	Fri 3/26
~	-5	Install Hillman Rollers						1 day	Tue 3/30
~	-5	Install Lifting Jacks and	d Springs					1 day	Wed 3/31
	-	Connect Hydraulic Ho	ses and Pumps					1 day	Mon 6/7
	-	Connect Hydraulic Ele	ctronics					2 days	Tue 6/8
	-	Check and Adjust Hyd	raulic Pumps and Co	ontrols				2 days	Thu 6/10
	-	Install Positioning Act	uators					1 day	Mon 6/14
	-	Connect Power and To	est Acuators					2 days	Tue 6/15
	-5	Adjust Actuators and	Limit Switches					2 days	Thu 6/17
	-	Assemble 48D48 Mag	net On Weldment (s	see procedure)				3 days	Mon 6/21
	-5	Test SBS and Counter	weight Motion and	Controls				2 days	Thu 6/24
		Task		Inactive Summary			External Tasks		
		Split		Manual Task			External Milestone	\Diamond	
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		Inactive Milestone	\diamond	Finish-only]		Manual Progress		
	t: SBS	Mode Mode	Disassemble Counterverse Lay Counterweight Steel Lay Counterweight Steel Disassemble Floor Plate Prep Equipment and Manager Clear Floor Space In Teel Clear Floor Space For Transport Magnet Steel Transport Magnet Steel Transport SBS Lockers Install 48D48 Magnet are Survey and Install SBS Install Counterweight Install Hillman Rollers Install Lifting Jacks and Connect Hydraulic Floel Check and Adjust Hyd Install Positioning Act Connect Power and Teel Check and Adjust Hyd Install Positioning Act Connect Power and Teel Adjust Actuators and Assemble 48D48 Mag Test SBS and Countere Task Split Milestone Summary Project Summary Inactive Task	Disassemble Counterweight Steel and Wee Lay Counterweight Steel Down Flat Disassemble Floor Plates Prep Equipment and Material For Transport Transport 48D48 Magnet Steel and Counter Clear Floor Space In Test Lab Needed To Le Clear Floor Space For Delivering Steel In T Transport Magnet Steel and Counterweig Transport Hydraulic Positioning 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Summary Project Summary Manual Summary Project Summary Manual Summary Project Summary Project Summary Inactive Task Start-only Progress	Mode

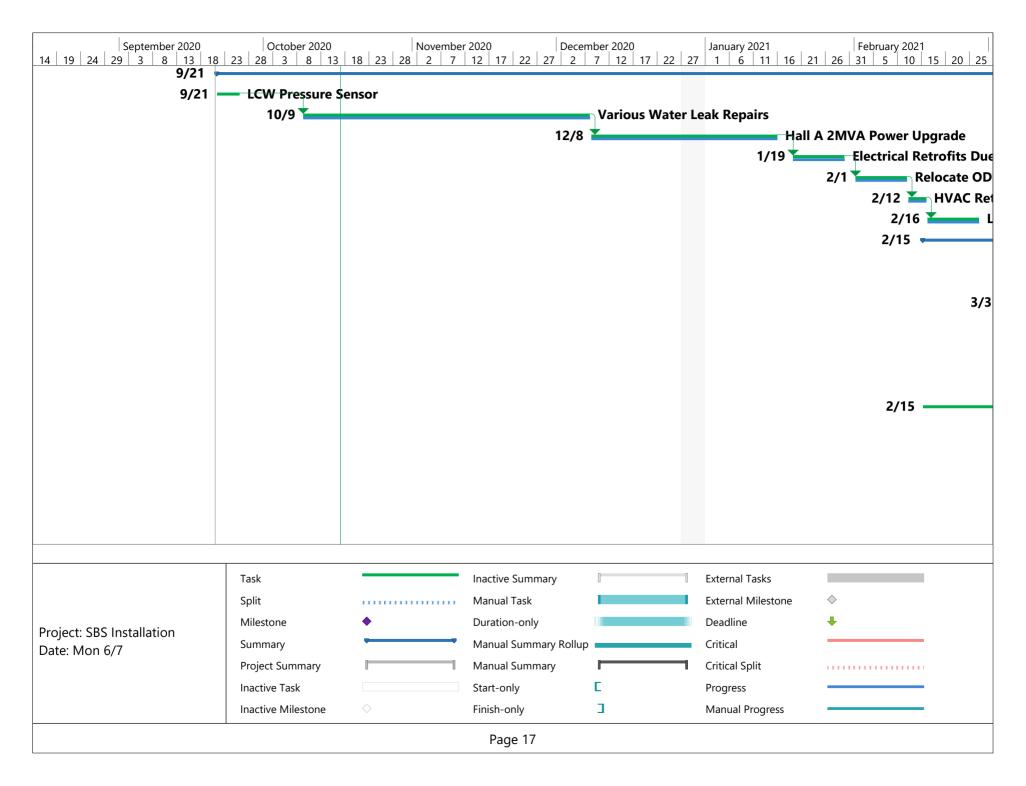
)	0	Task Mode	Task Name						Start
277		-5	Install Field Clamps and Sieve Plates						Mon 6/28
278		-5	Move SBS Into Starting Position						Tue 6/29
279		-5	Survey and Align SBS	(2A)				2 days	Wed 6/30
280		-5	Connect LCW to SBS					3 days	Fri 7/2
281		-	Connect Power Leads	s To Magnet				2 days	Thu 7/8
282		-	Connect Temp Senso	rs and Electronics				3 days	Mon 7/12
283		-5	Install Guards					7 days	Thu 7/15
284		-	Conduct Low Power	Testing				1 day	Mon 7/26
285		-5	Interface FSD Interlo	cks				1 day	Tue 7/27
286		-5	Final Survey and Alig	Final Survey and Alignment of SBS (2B)					Wed 7/28
287		-5	Transport and Install G	eN-RP Detector				47 days	Tue 6/29
288		-5	Transport Detector P	arts to Hall				2 days	Tue 6/29
289		-5	Assemble Detector P	Assemble Detector Parts Inside Hall					Thu 7/1
90		-5	Install Detector on SE	Install Detector on SBS Magnet					Thu 7/15
291		-5	Connect GeN-RP Elec	Connect GeN-RP Electronics and Testing					Thu 7/29
92		-5	Transport and Install HCAL						Fri 4/23
93	~	-	Layout HCAL Floor Plates						Fri 4/23
294	~	-5	Disassemble HCAL El	Disassemble HCAL Electronics In Test Lab					Mon 4/26
95	~	-	Disassemble HCAL Su	Disassemble HCAL Sub-Assemblies In Test Lab					Tue 4/27
96	~	-	Transport Electronic Rack To Hall					2 days	Wed 4/28
97	~	-	Transport Sub-Assem	Transport Sub-Assemblies To Hall					Fri 4/30
98	~	-	Install HCAL Frame/Support Structure					1 day	Tue 5/4
99	✓	-5	Install HCAL Modules on Support Structure					1 day	Wed 5/5
			Task		Inactive Summary		External Tasks		
Project: SBS Installation Date: Mon 6/7			Split				External Milestone	\Diamond	
			Milestone	•	Duration-only		Deadline	+	
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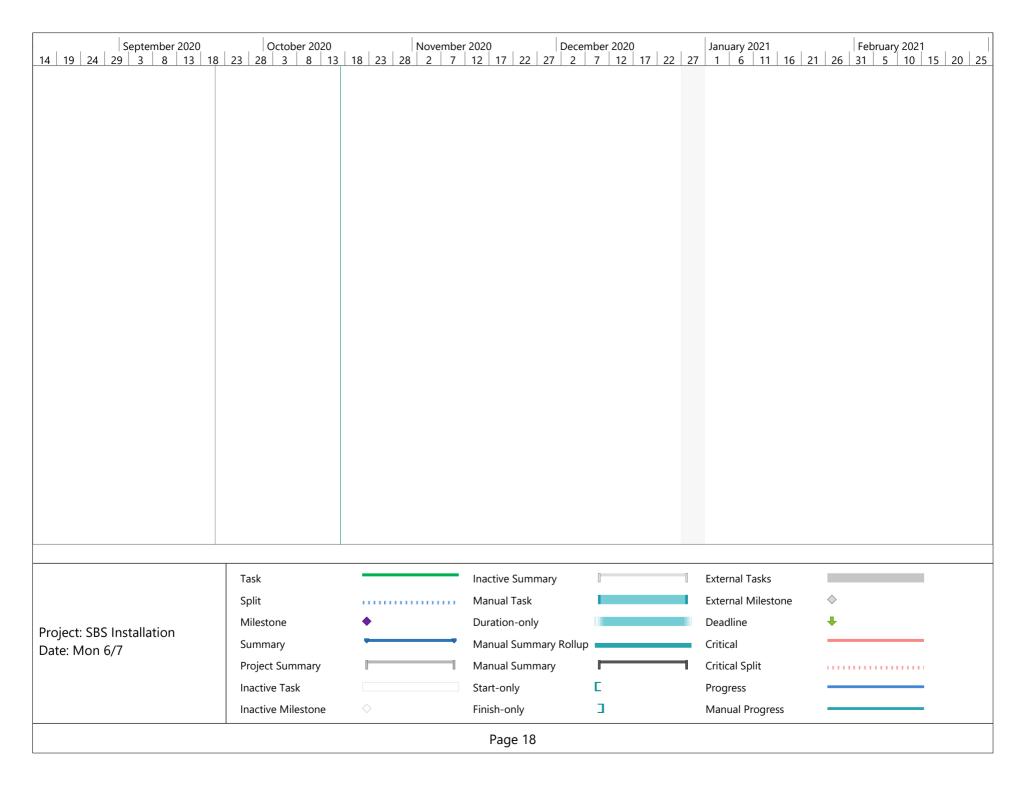
)	0	Task Mode	Task Name						Duration	Start
300		-5	Install Lead Wall							Thu 5/6
301		-5	Install Work Access Platform							Fri 5/7
302		-5	Install HCAL Equipm	ent Racks Shielding H	ut (local)				1 day	Mon 5/10
303		-5	Install HCAL Equipm	ent Racks (local)					2 days	Tue 5/11
304		-5	Connect HCAL Elect	70 days	Thu 5/13					
305		-5	Final Preparations						73 days	Mon 5/24
306		-5	Clean up Cryogenic Sys	Clean up Cryogenic System for LHRS						
307		-5	Cooldown LHRS						36 days	Mon 6/21
308		-5	Check for Proper Func	tion on All Temp. Sen	sor (BB, SBS, and Co	orrectors)			10 days	Tue 6/15
309		-5	Make Sure Proper Ion	Make Sure Proper Ion Chamber are Installed						Tue 6/29
310		-5	Check FSD Interfaces						5 days	Fri 7/2
311		-5	Final Pumpdown and L	Final Pumpdown and Leak Check Entrance Beamline						Mon 7/12
312		-5	Final Pumpdown and L	Final Pumpdown and Leak Check Exit Beamline						Mon 7/12
313		-5	Final Pumpdown and Leak Check L-HRS							Mon 7/19
314		-5	Final Pumpdown and Leak Check of Target Chamber (Target Group)							Mon 7/26
315		-5	Final Survey and Align All SBS Equipment (2B)							Mon 8/2
316		-5	Dial In The Cryo System							Mon 8/2
317		-3	Test All Magnets and Power Supplies To Full Current						15 days	Mon 8/16
318		-5	Remove Excessive Equipment From Hall						15 days	Mon 8/16
319		-5)	Complete Pre-Beam Checklist - Installation Complete						0 days	Fri 9/3
320		-5								
321		-5								
322		*	ADDITIONAL TASK NOT YET SCHEDULED:						1 day	Mon 9/21
			Task		Inactive Summary			External Tasks		
			Split		Manual Task			External Milestone	\Diamond	
			Milestone	•	Duration-only			Deadline	•	
Project: SBS Installation Date: Mon 6/7			On Summary	▼	Manual Summary Roll	up		Critical		
			Project Summary		Manual Summary		1	Critical Split		
			Inactive Task		Start-only	Е		Progress		
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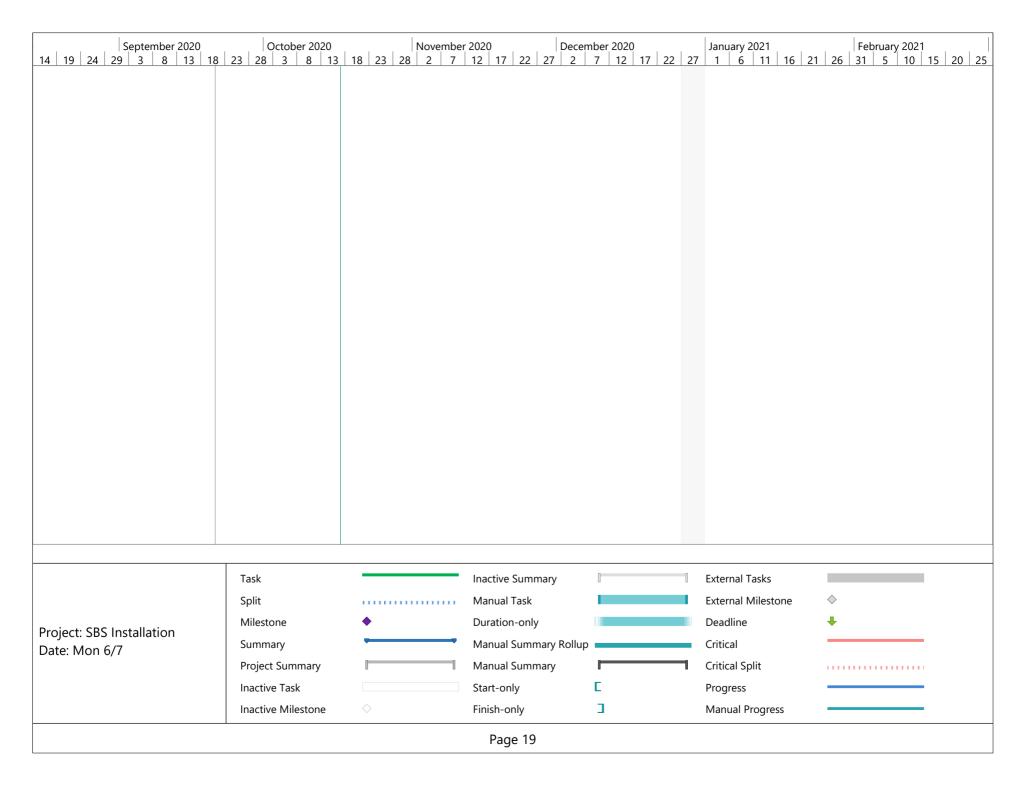
ID		Task	Task Name	Duration	Start	20
	O	Mode				و
323		-5	Renovate Hall A Counting House (coordinate with Ole)	1 day	Mon 9/21	
324		-5	Replace LQ2 Power Supply with RQ2 Power Supply (coordinate with Jack)	1 day	Mon 9/21	
325		-5	Replace the LD1 Multiplexer with the one from RD1 (coordinate with Jack)	1 day	Mon 9/21	1
326		-5	Installation of Fiber Optic Cables From Hall to CH [FML per Alex request]	1 day	Mon 9/21	iΙ

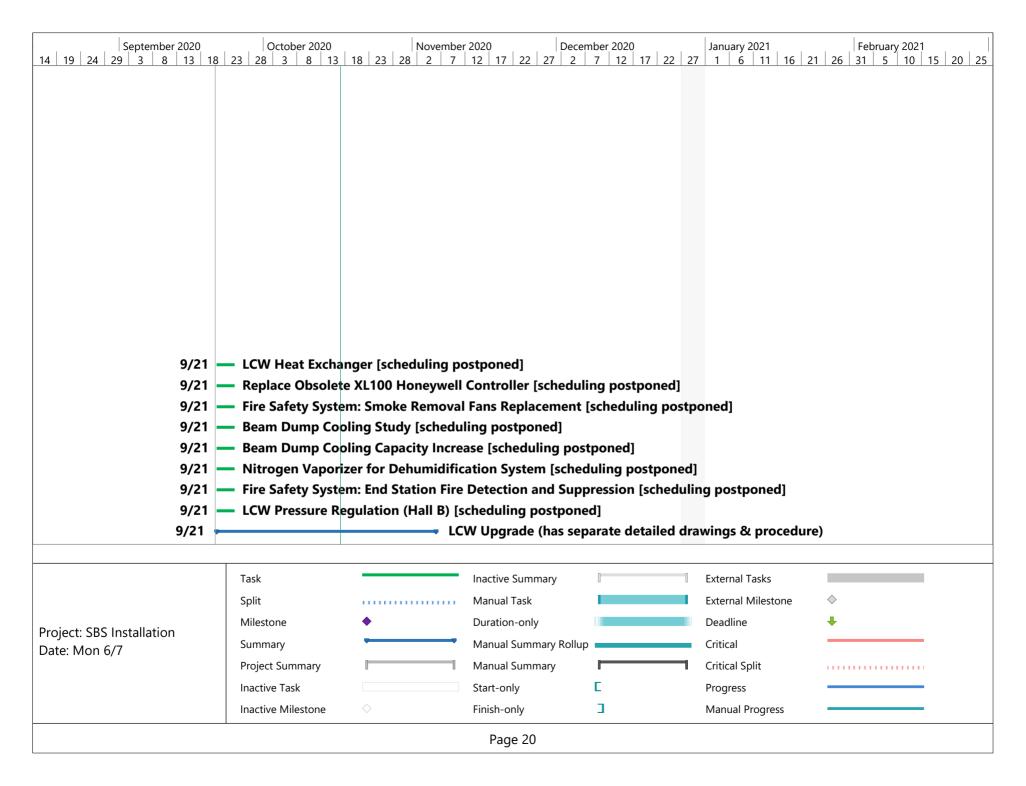
Task Inactive Summary External Tasks Split Manual Task External Milestone \Diamond Duration-only Deadline Milestone Project: SBS Installation Manual Summary Rollup Critical Summary Date: Mon 6/7 Project Summary Manual Summary Critical Split Е Inactive Task Start-only Progress] Inactive Milestone Finish-only **Manual Progress**

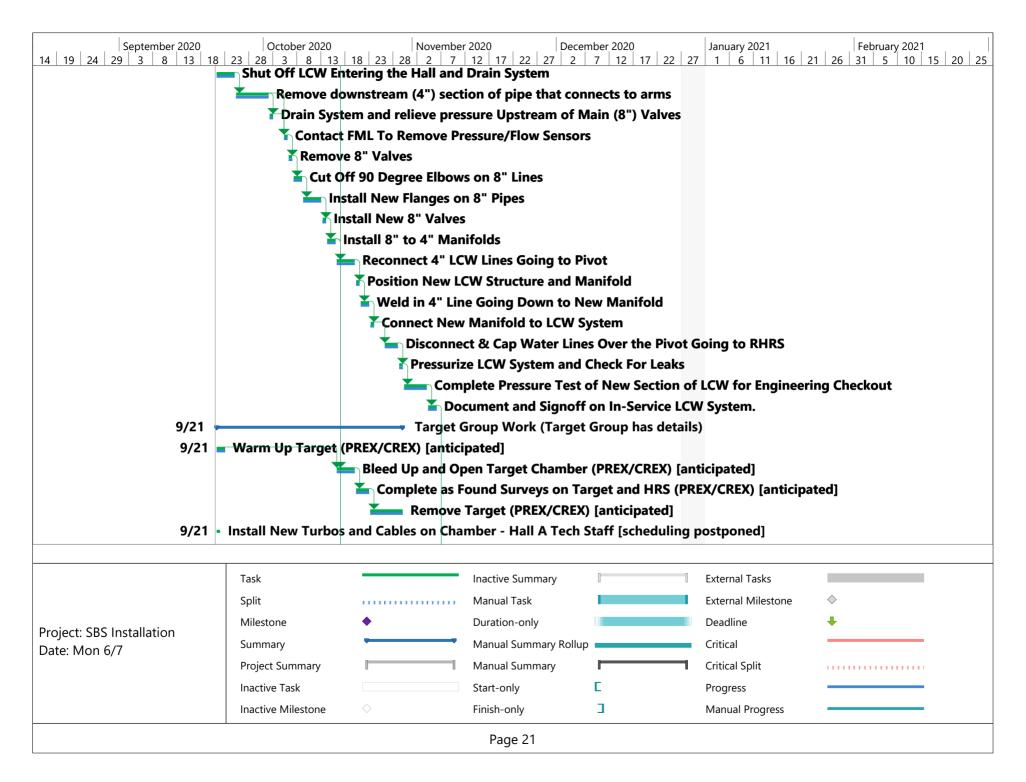


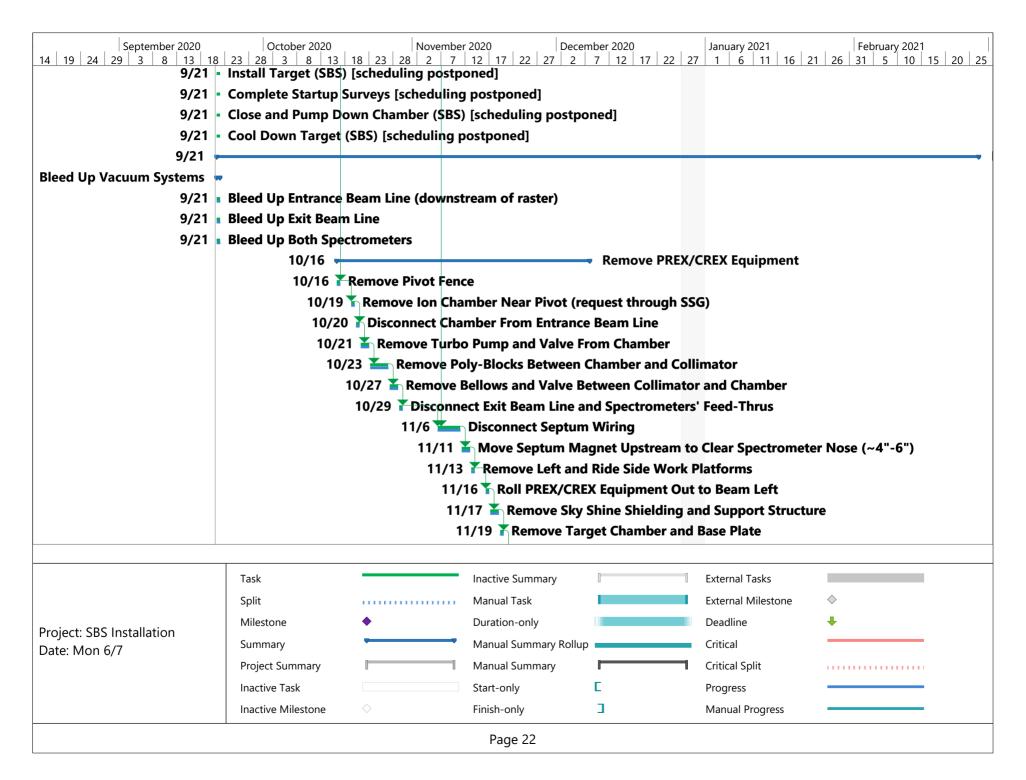


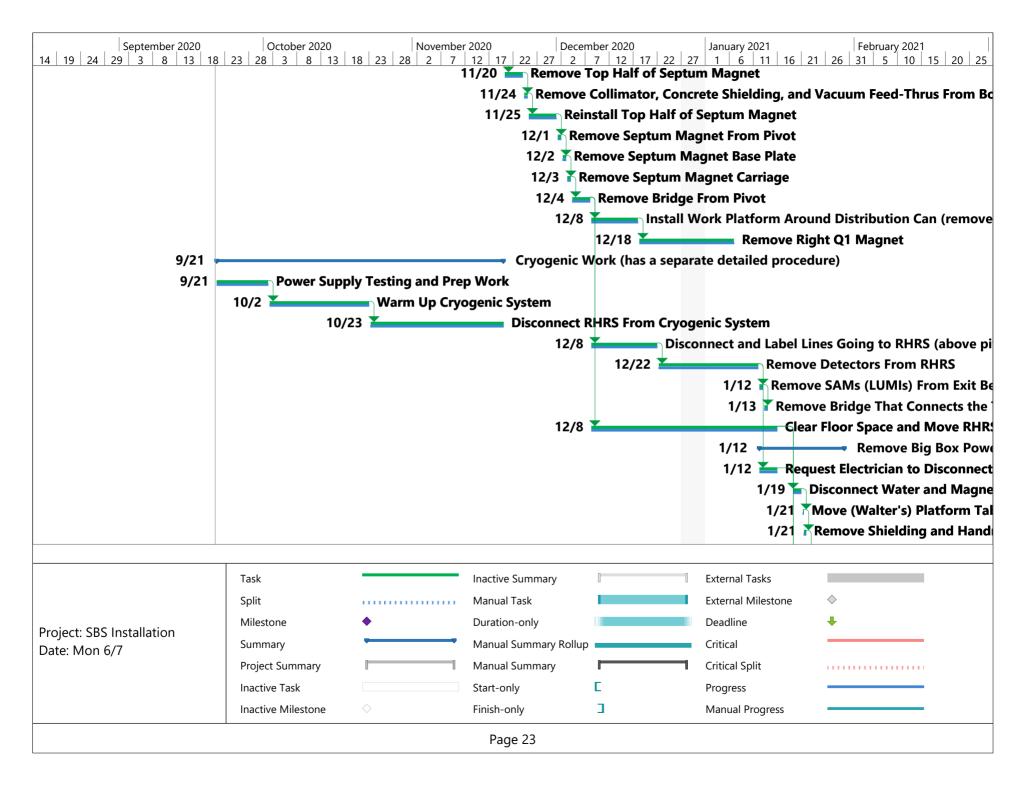


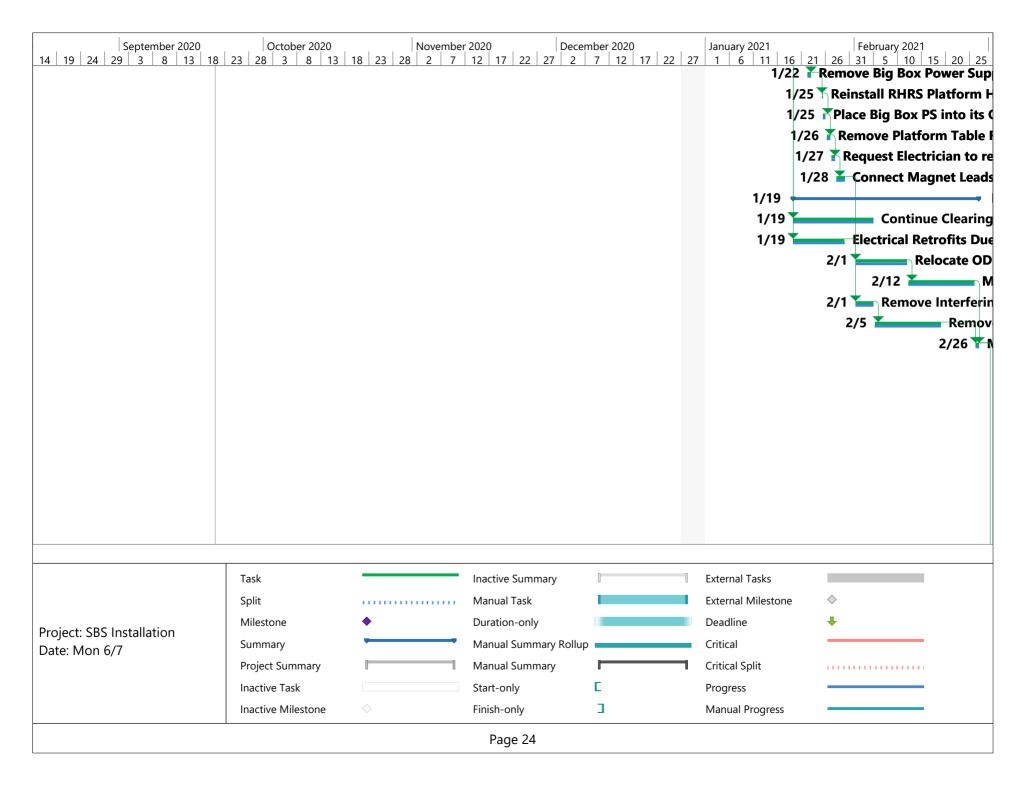


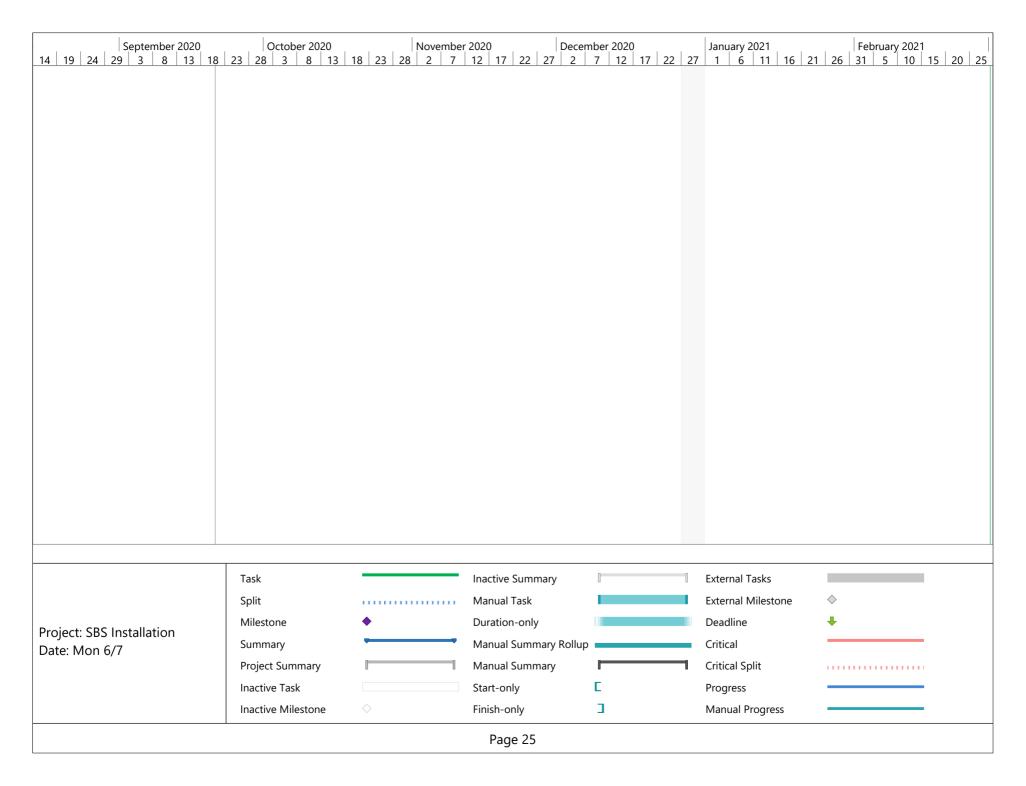


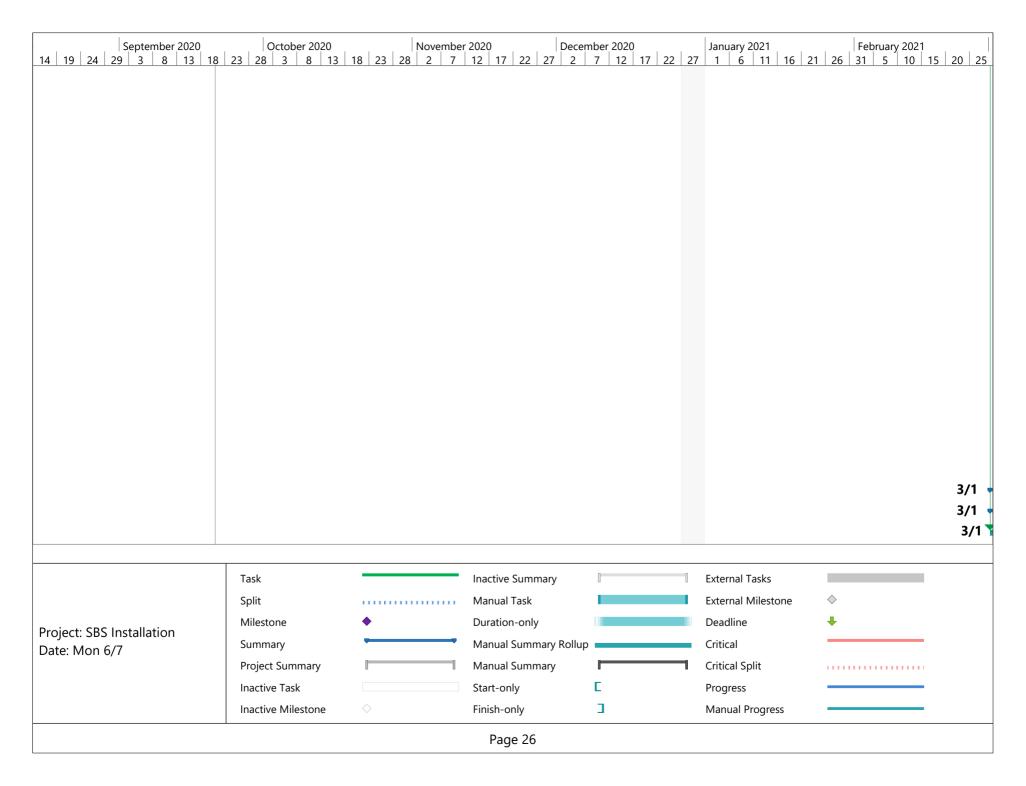


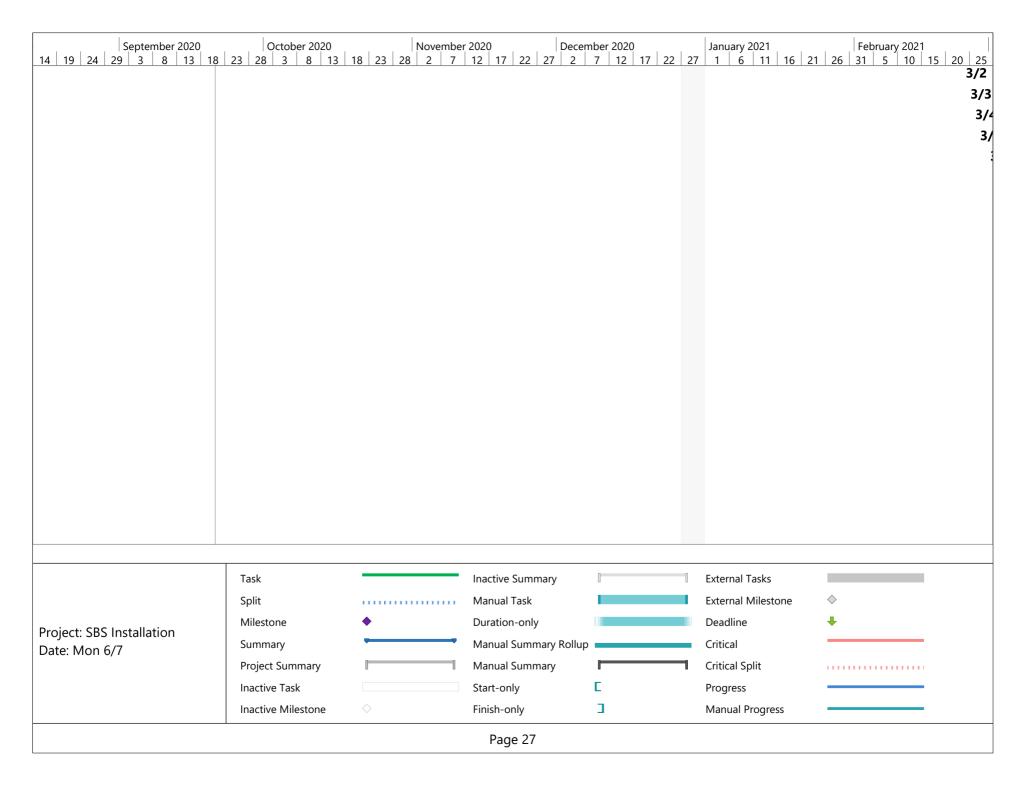


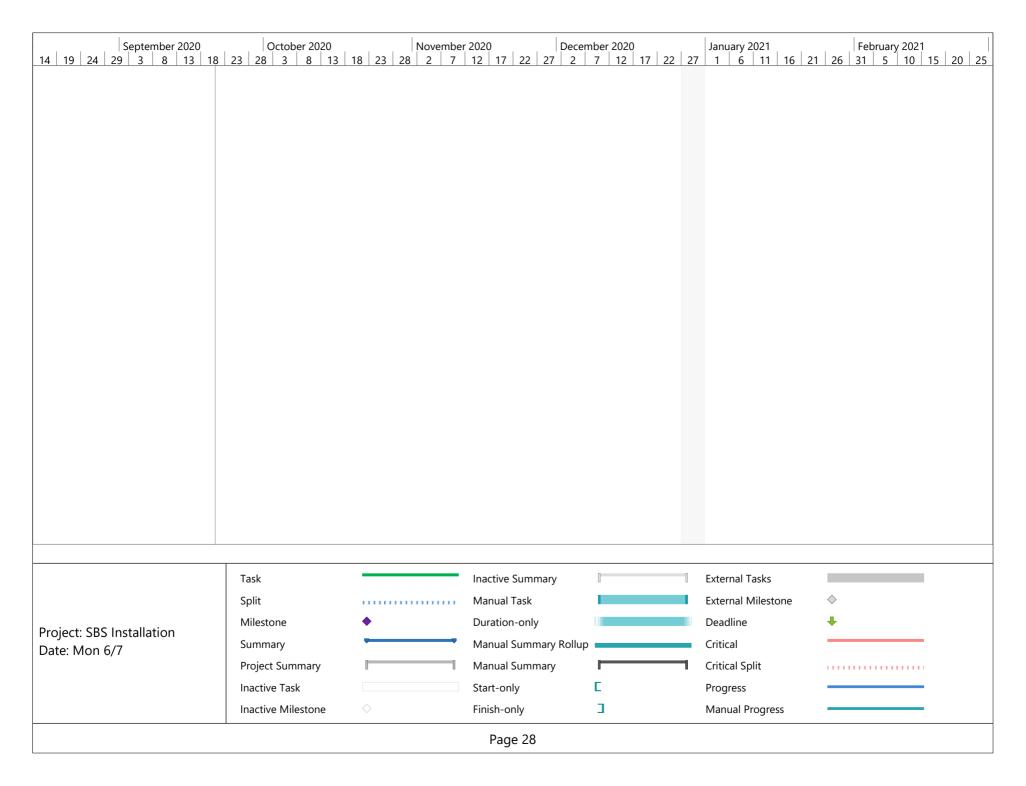


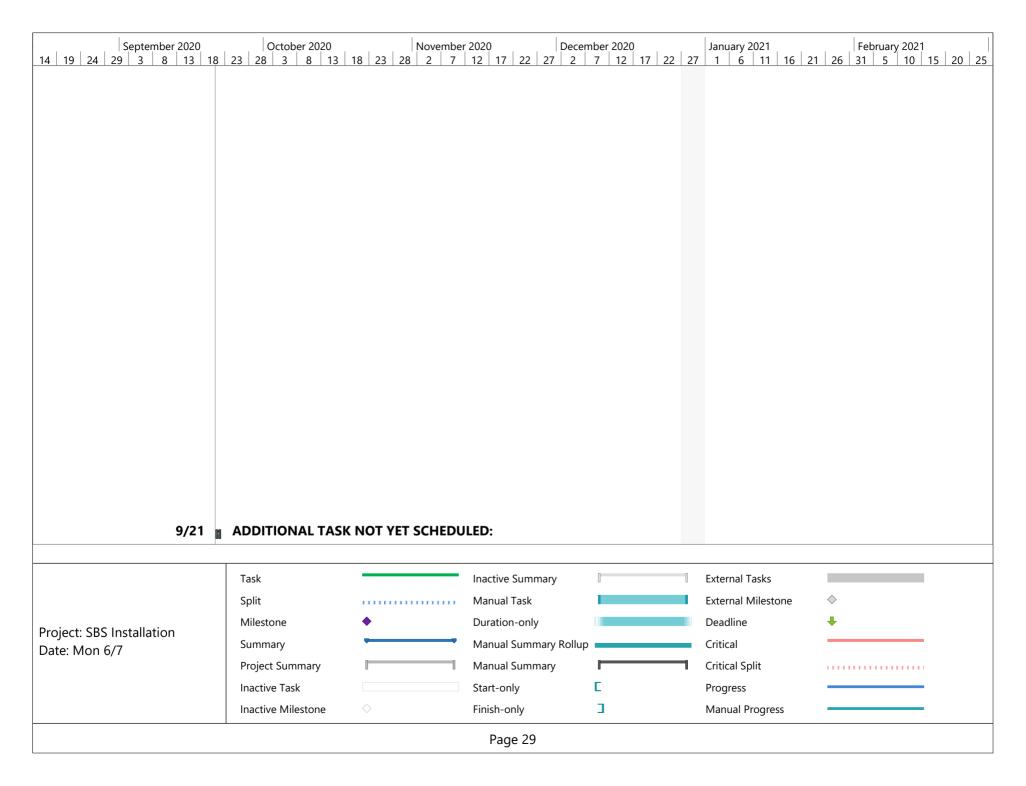


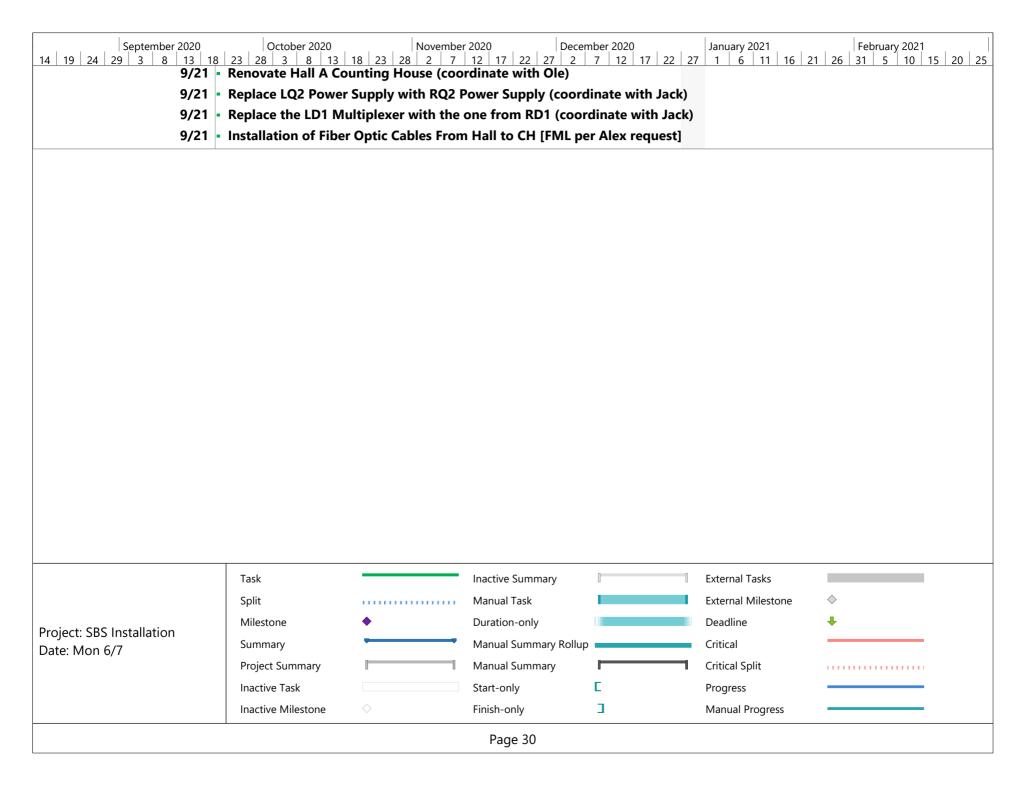


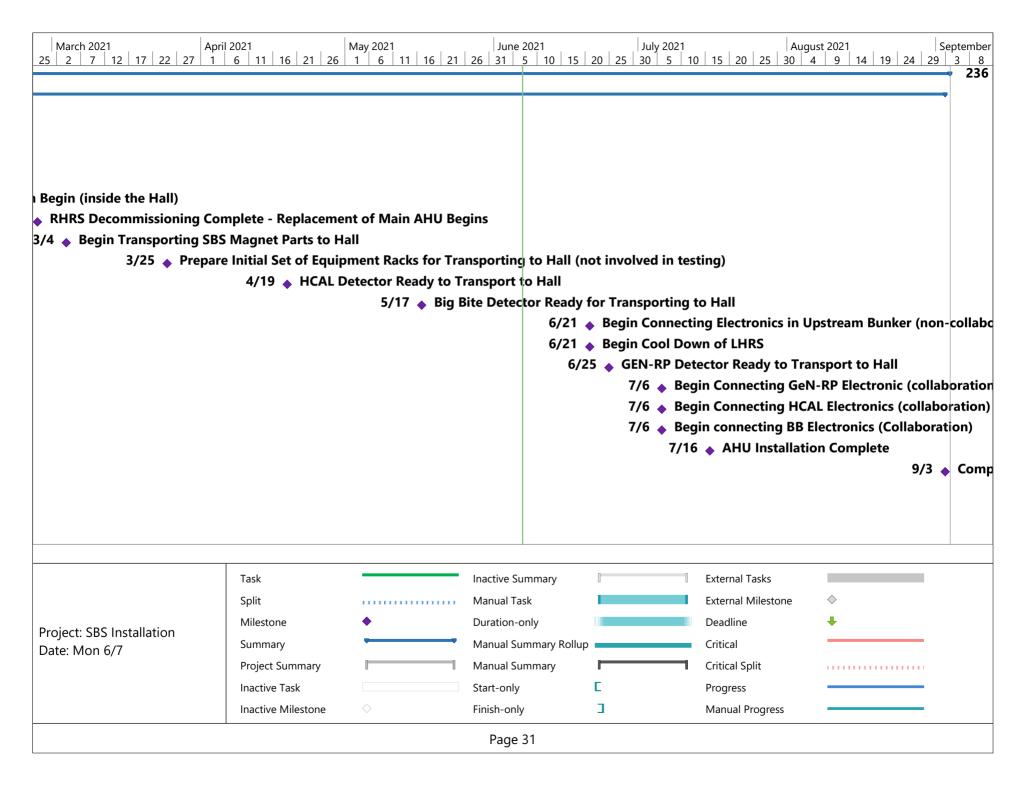


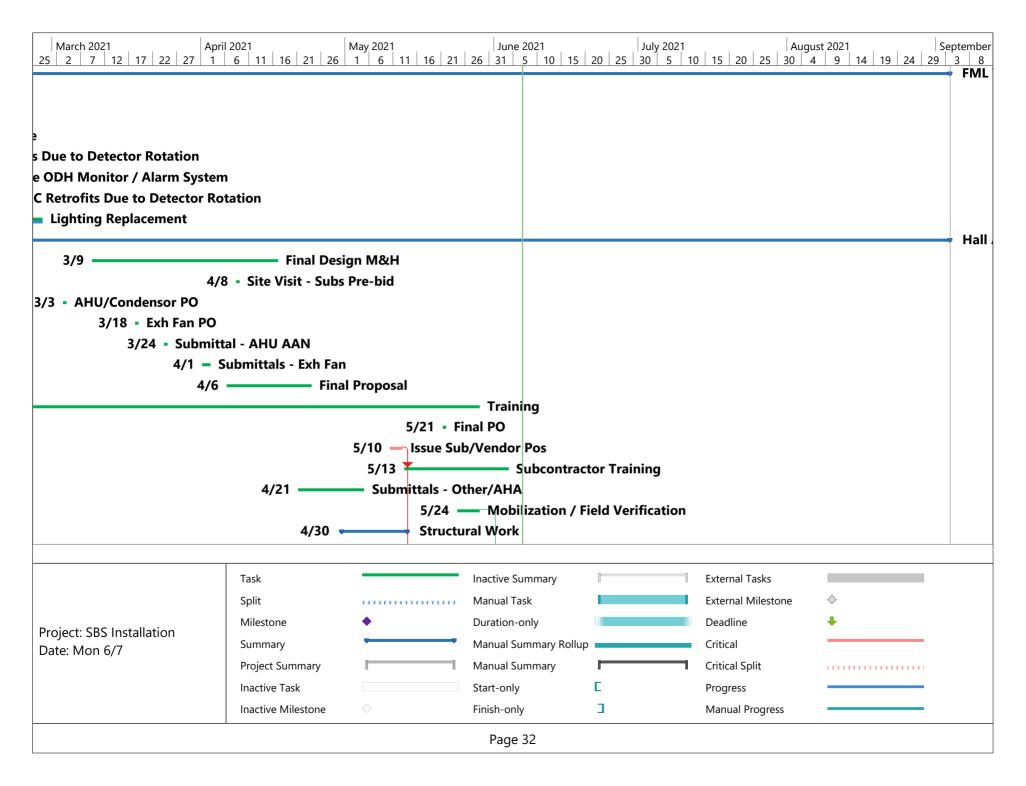


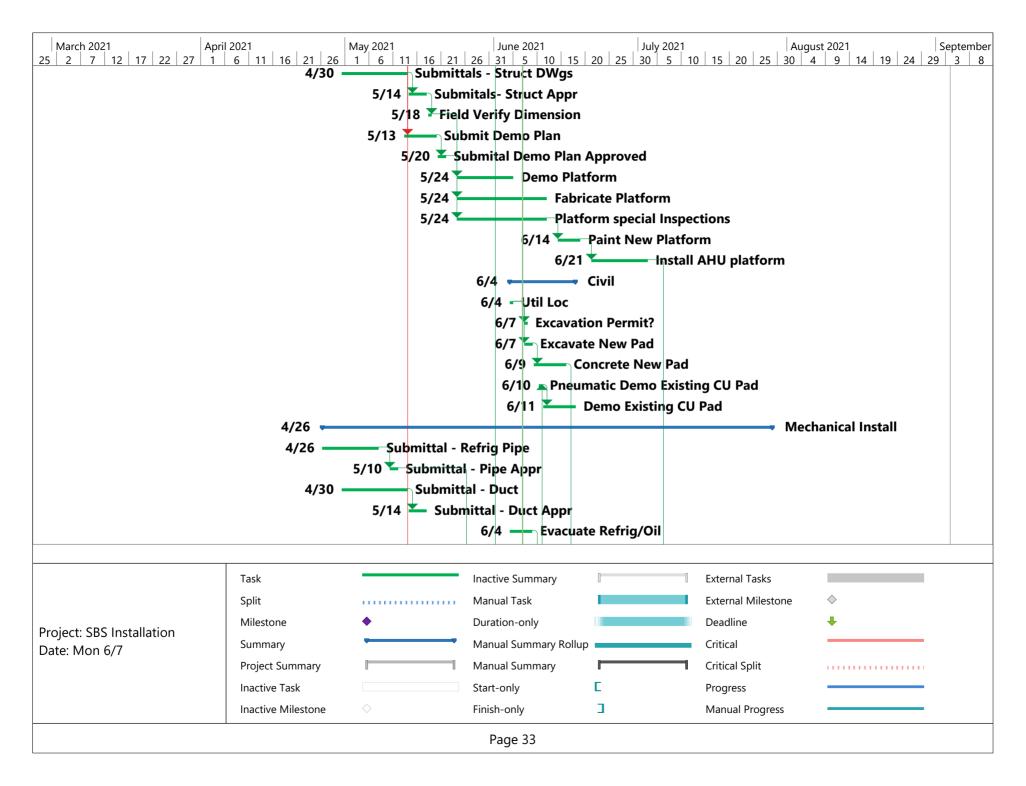


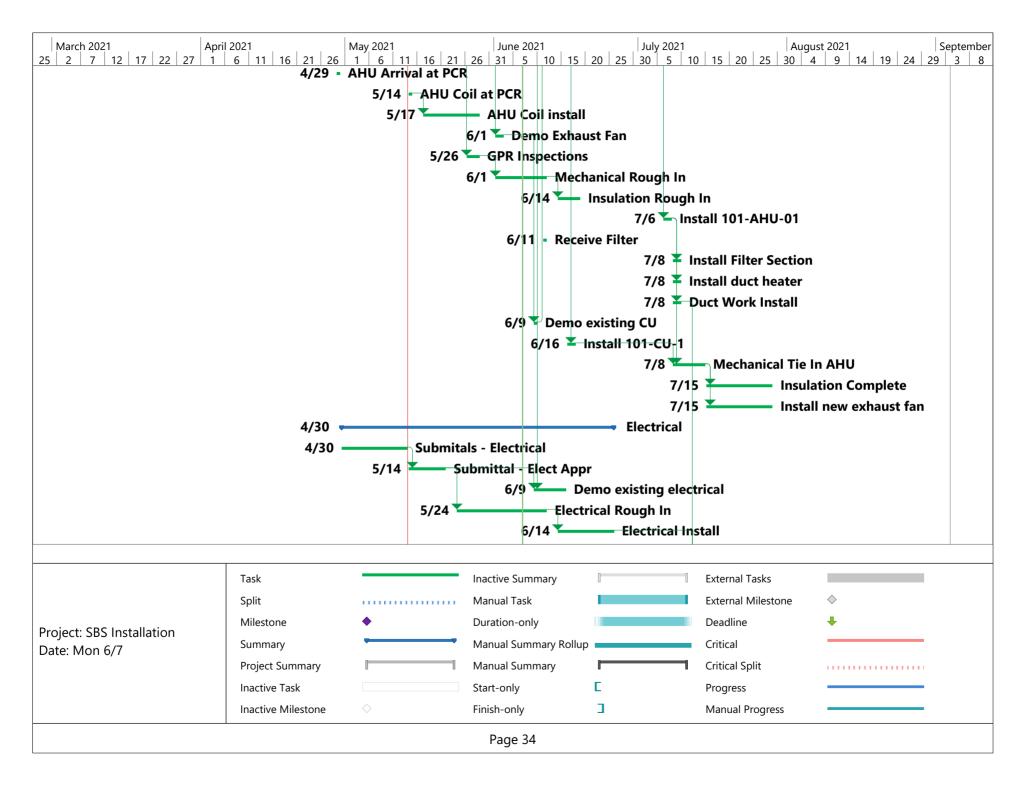


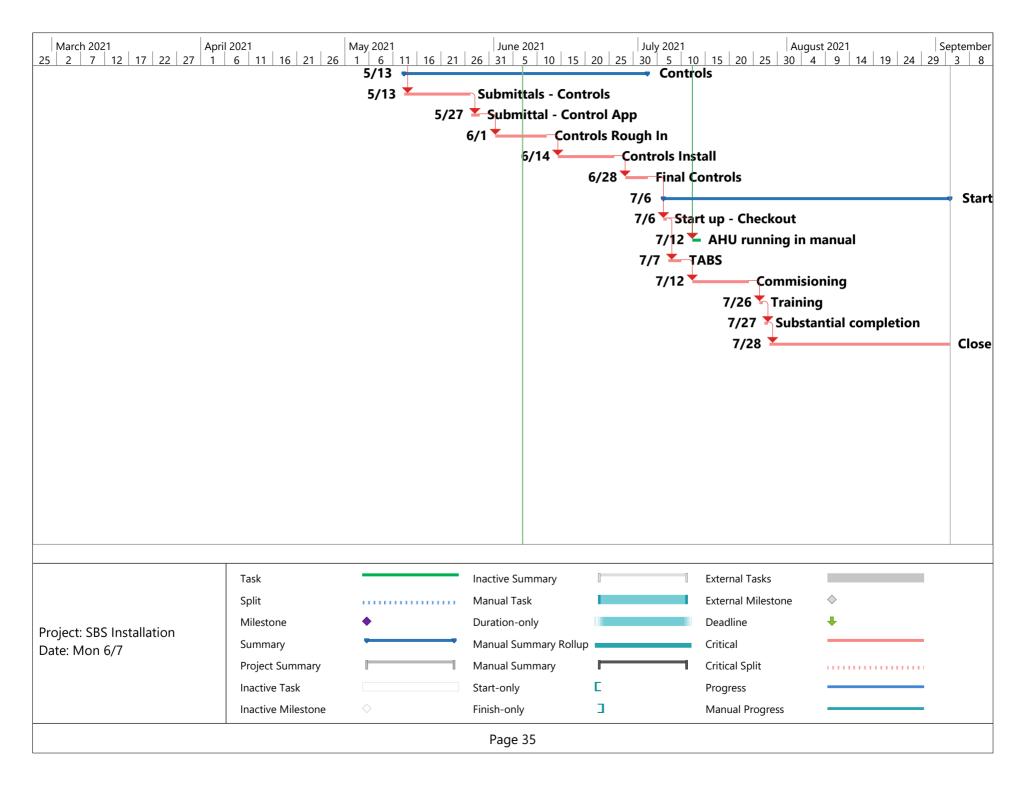


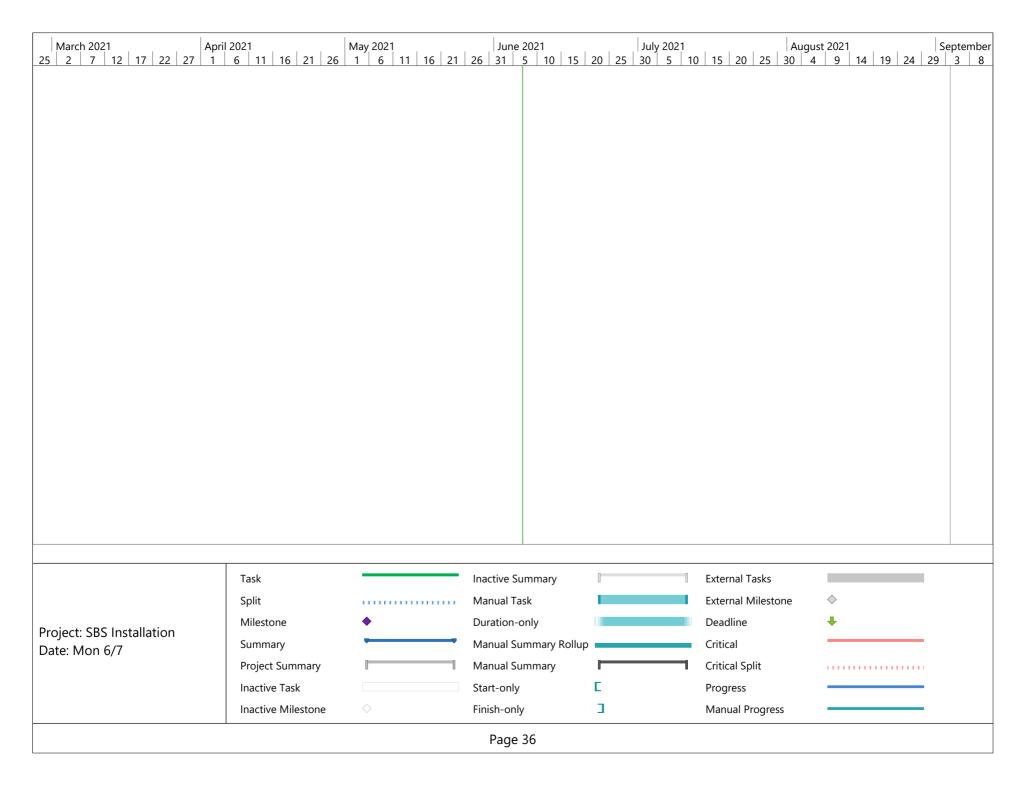


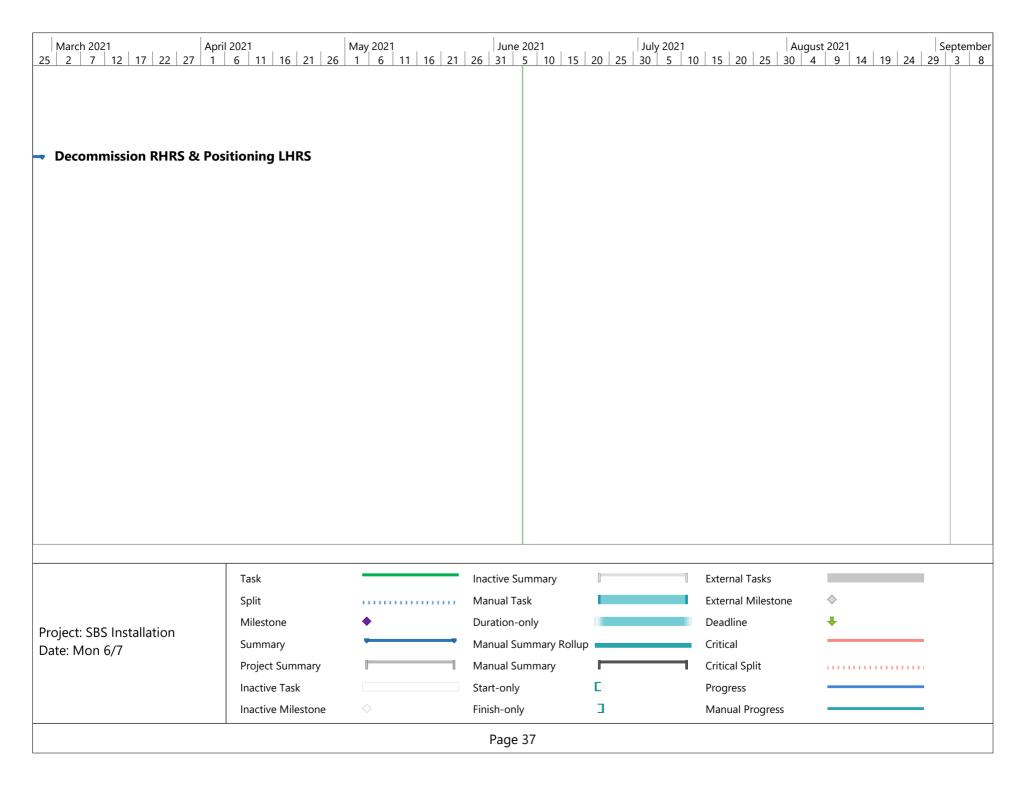


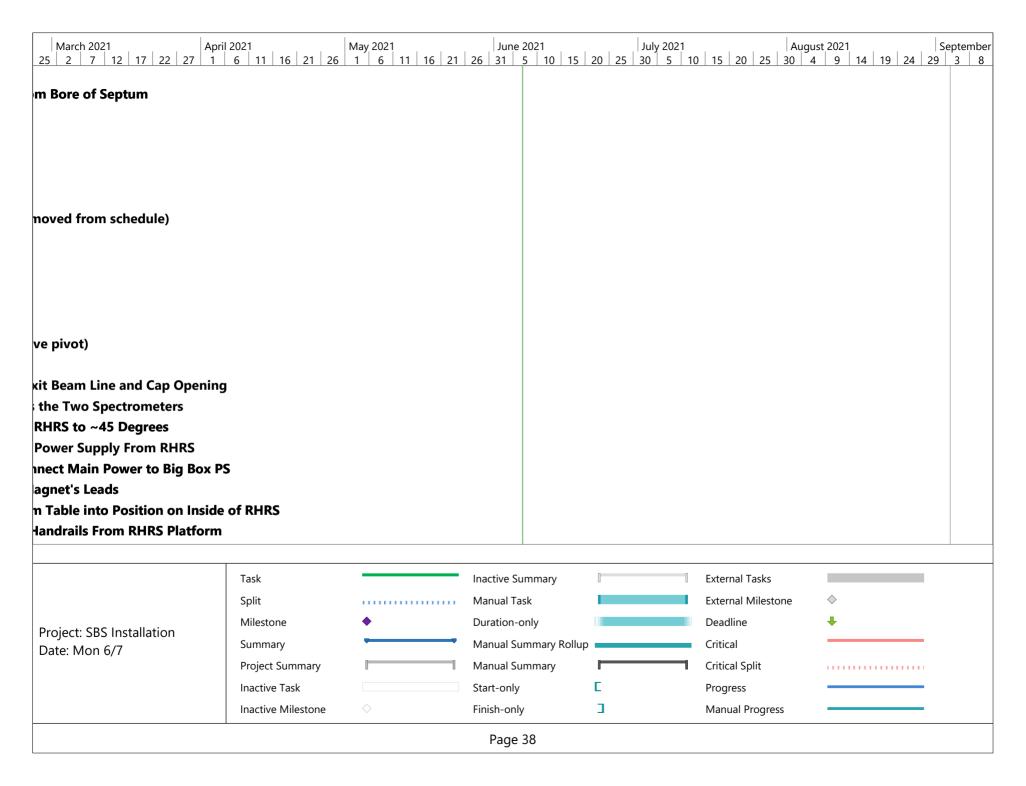


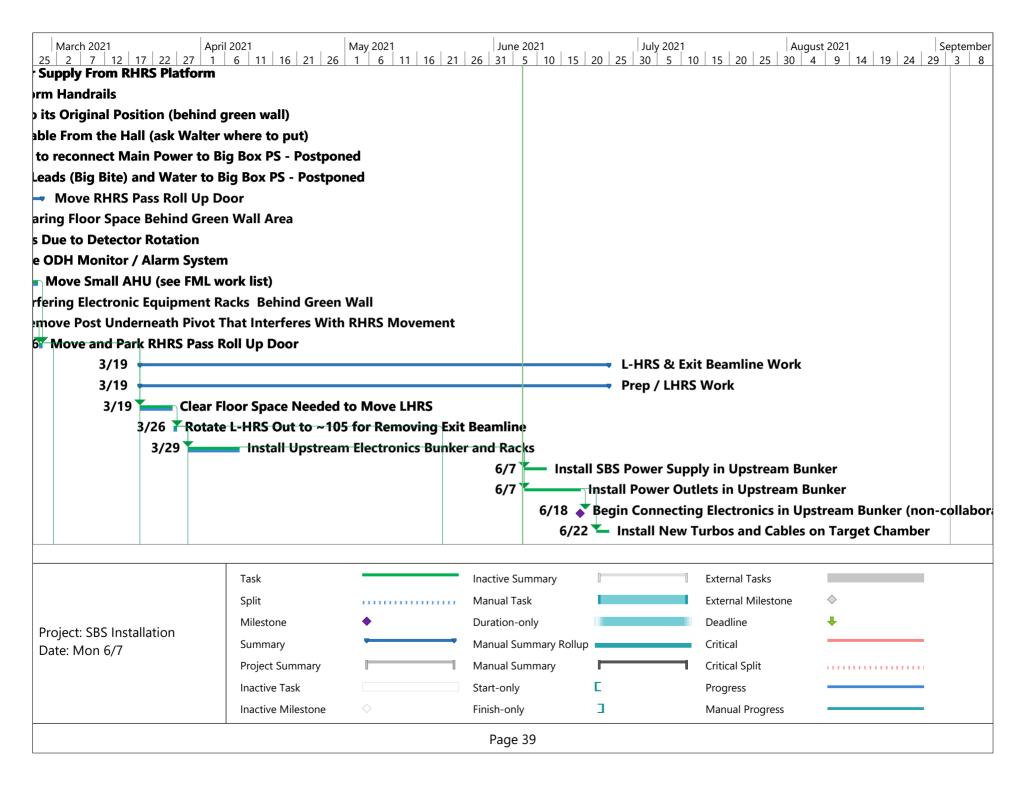


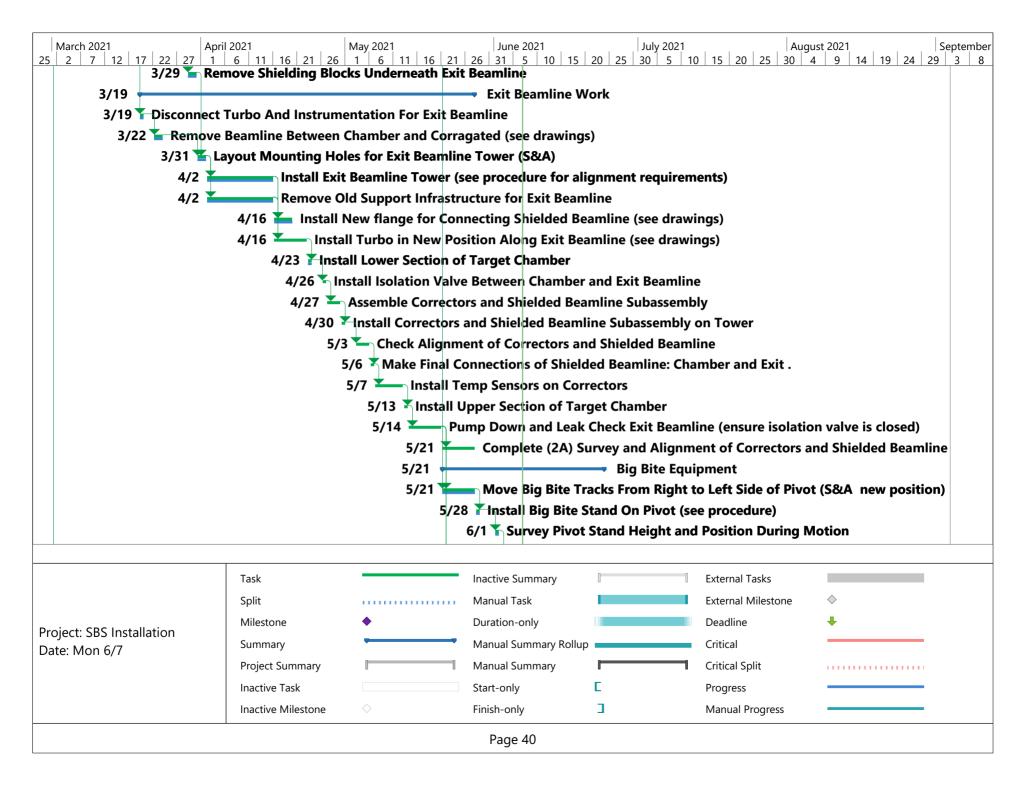


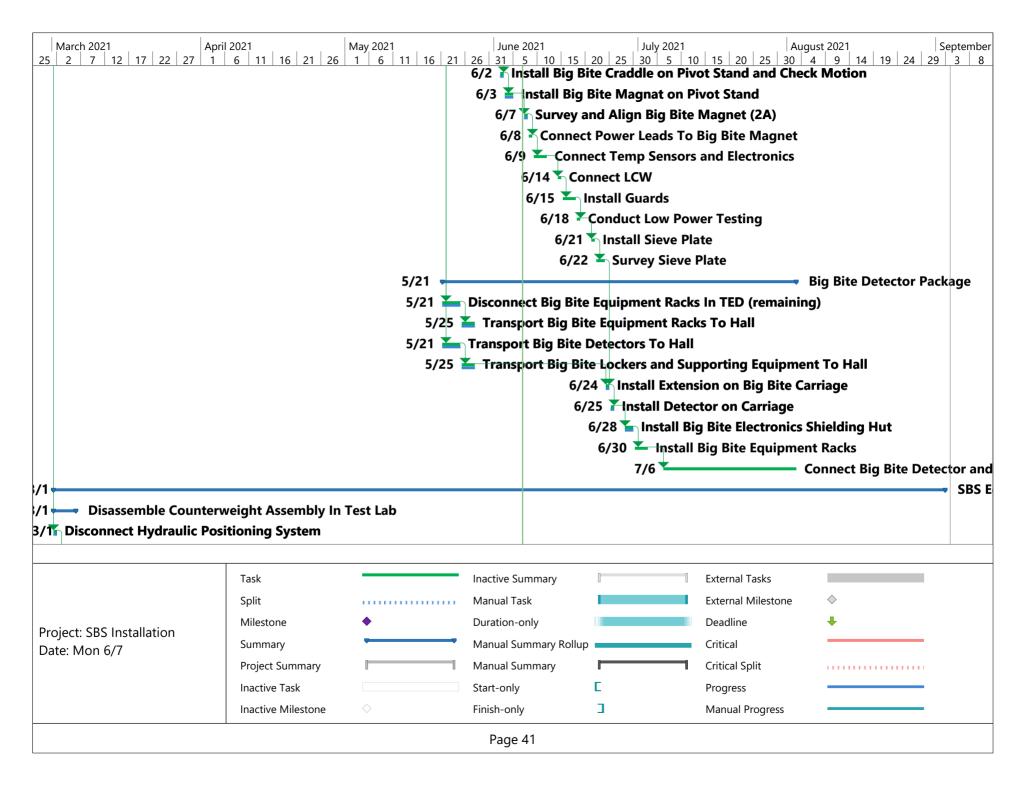


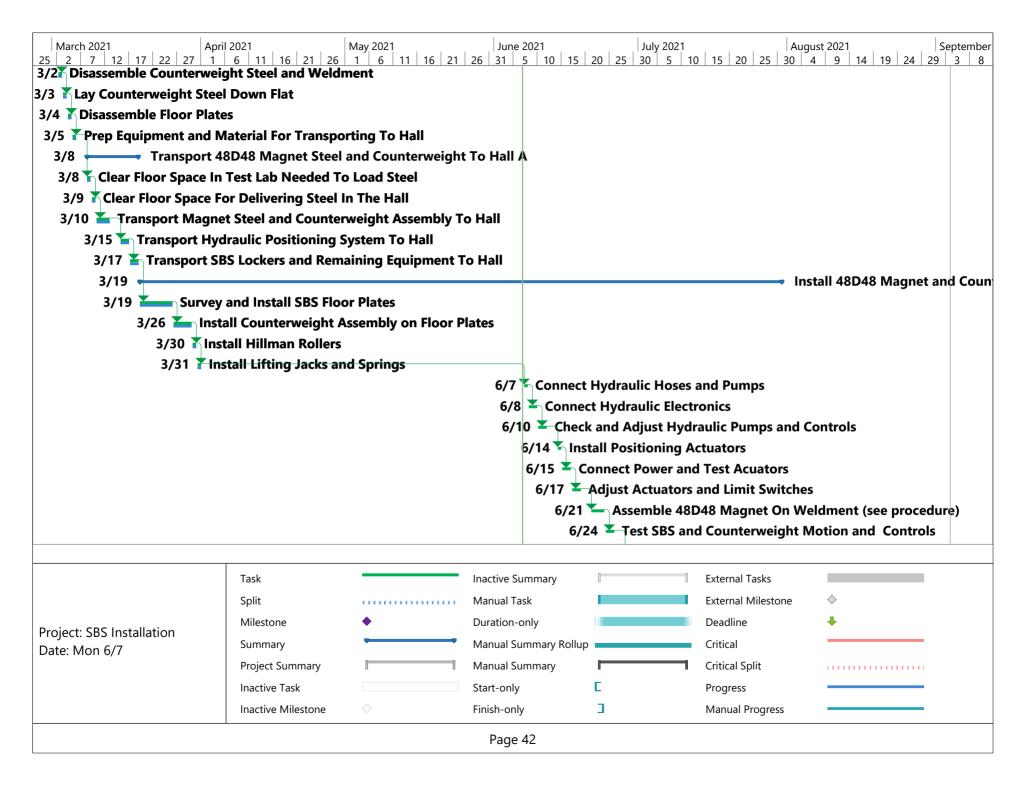


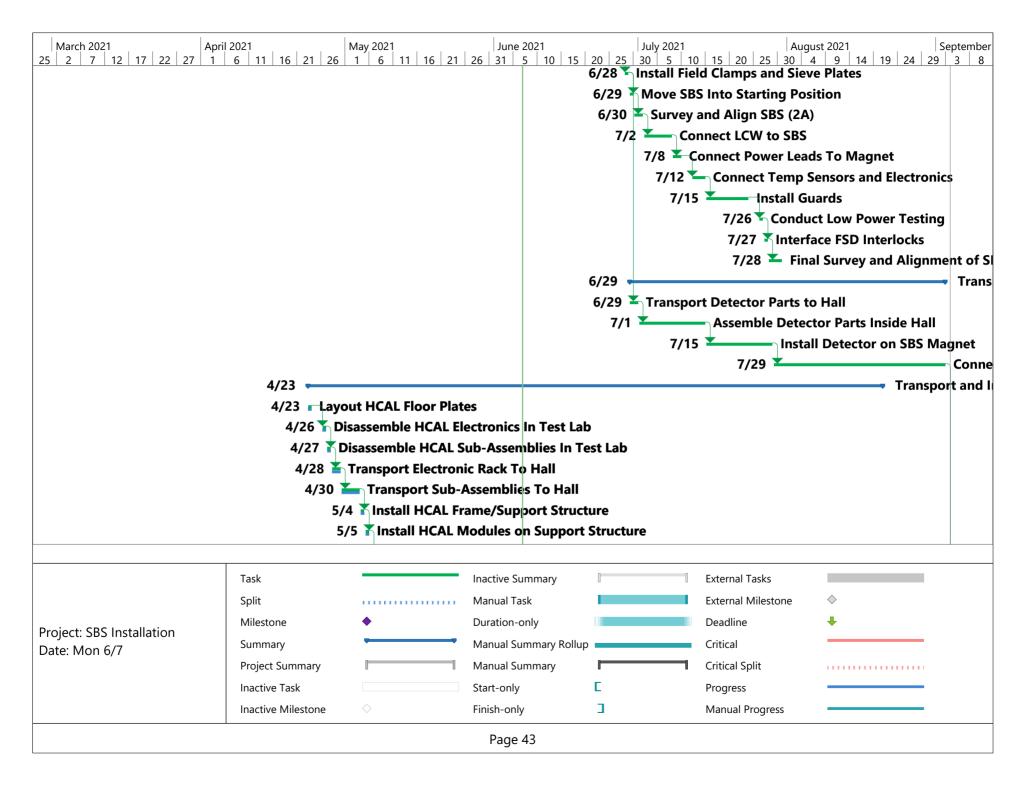


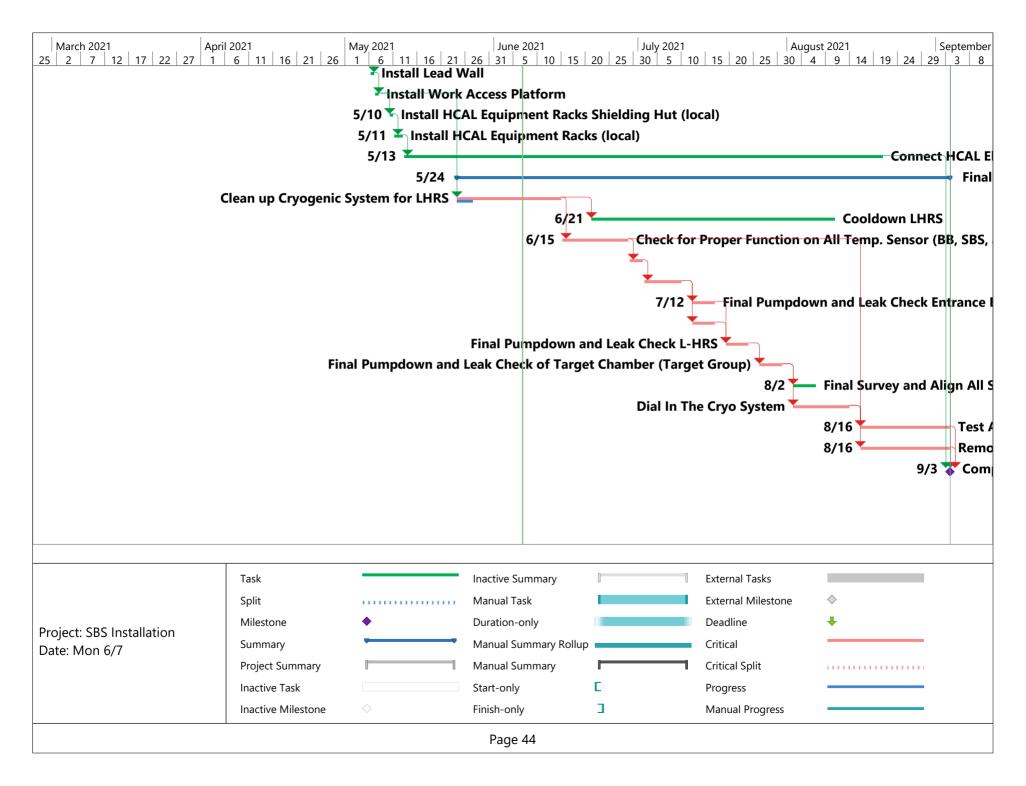


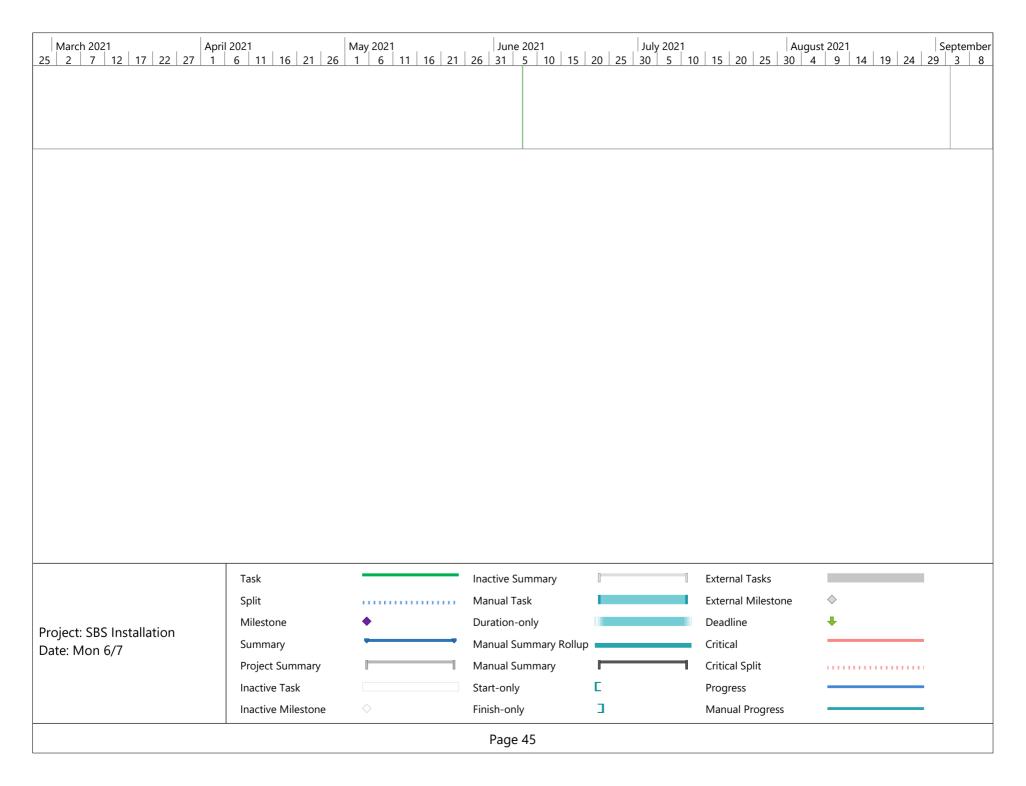


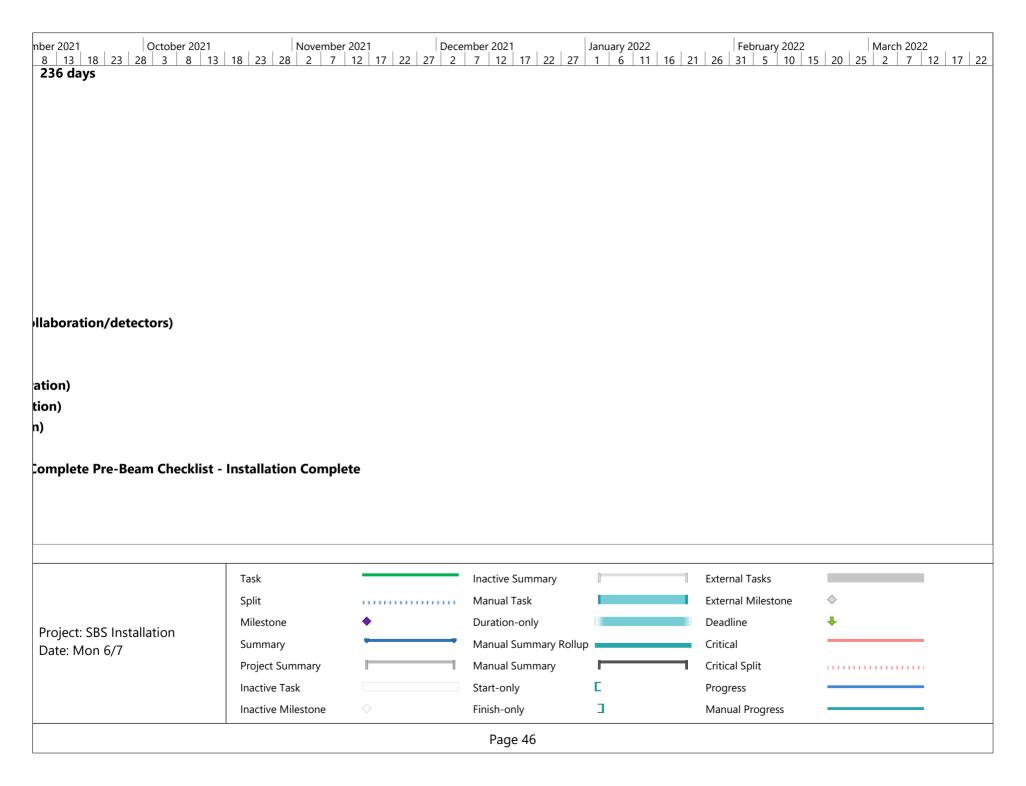


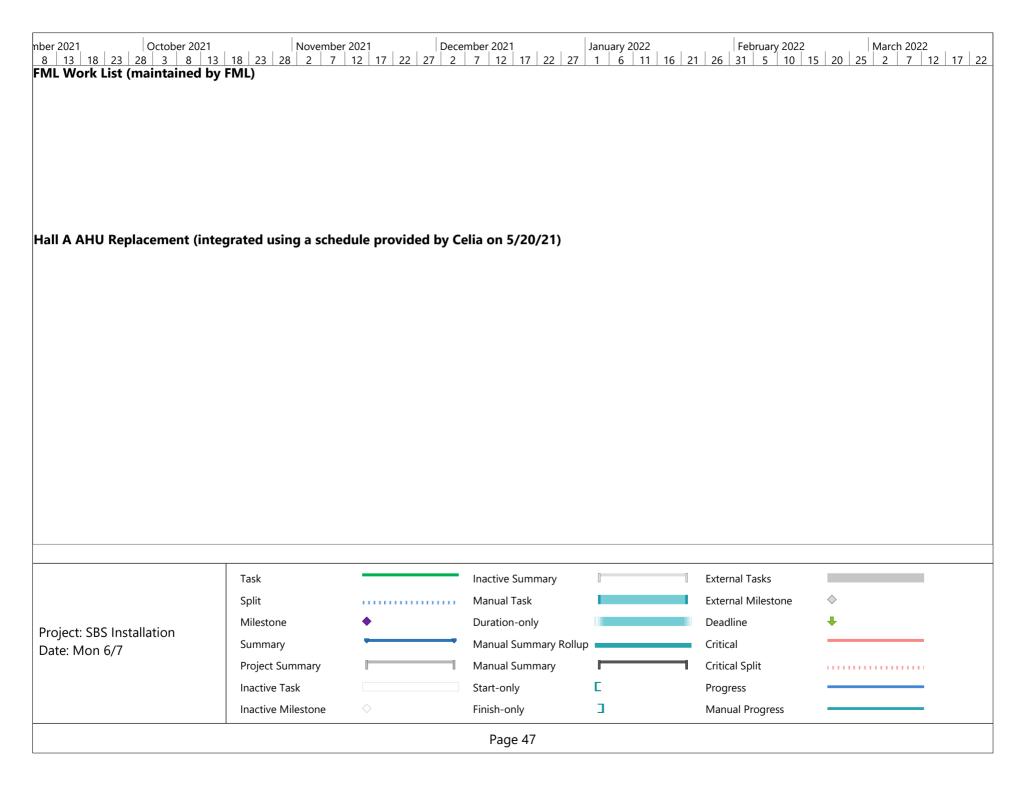


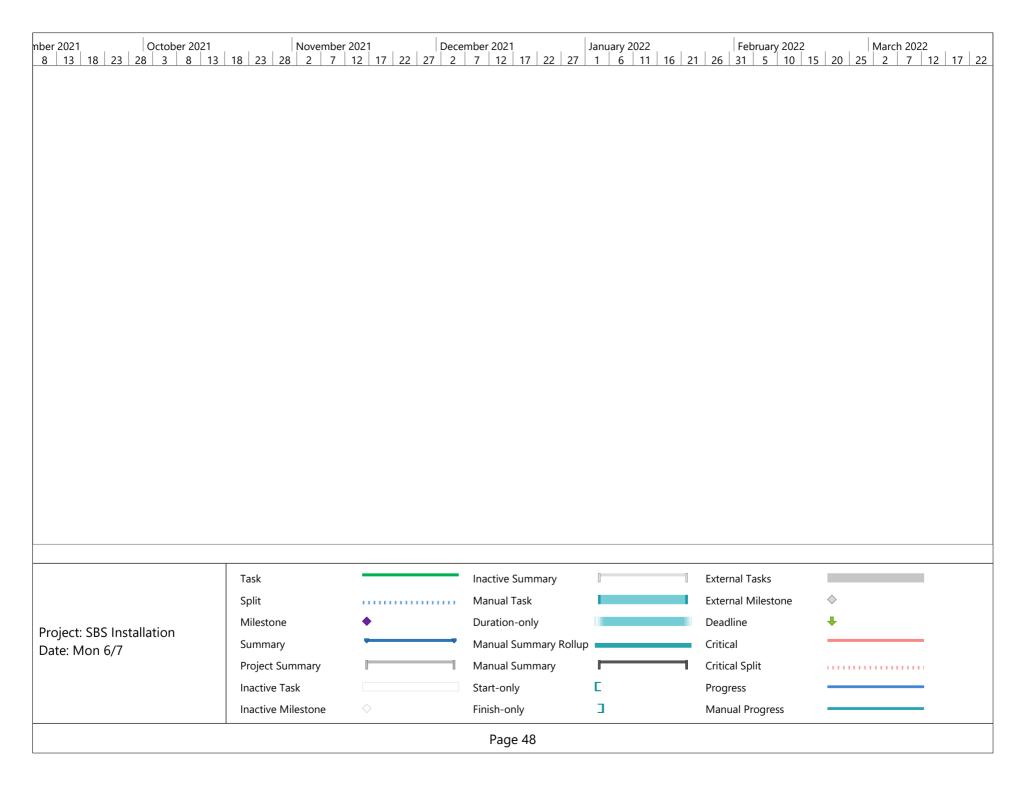


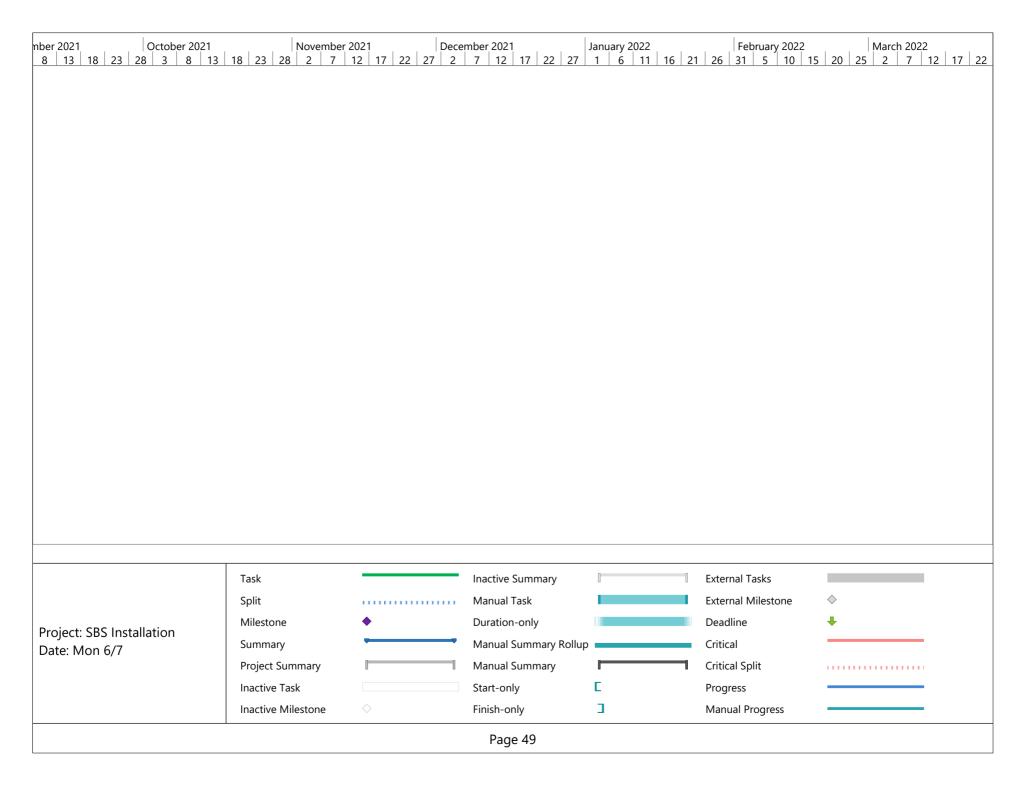


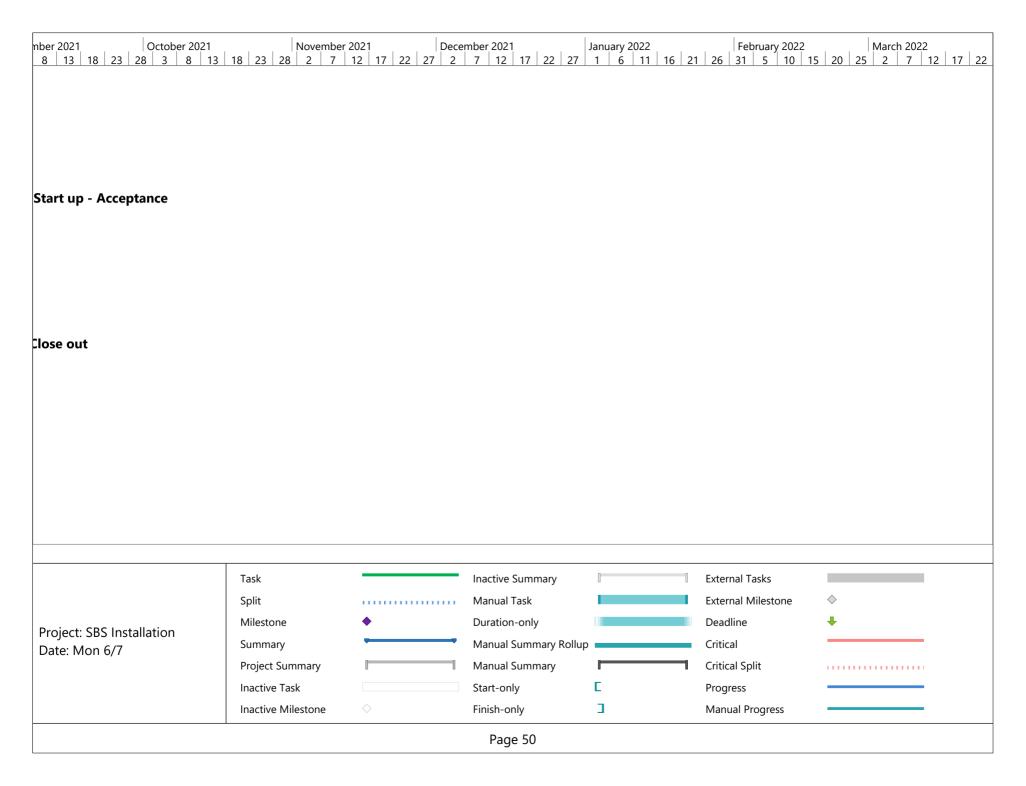


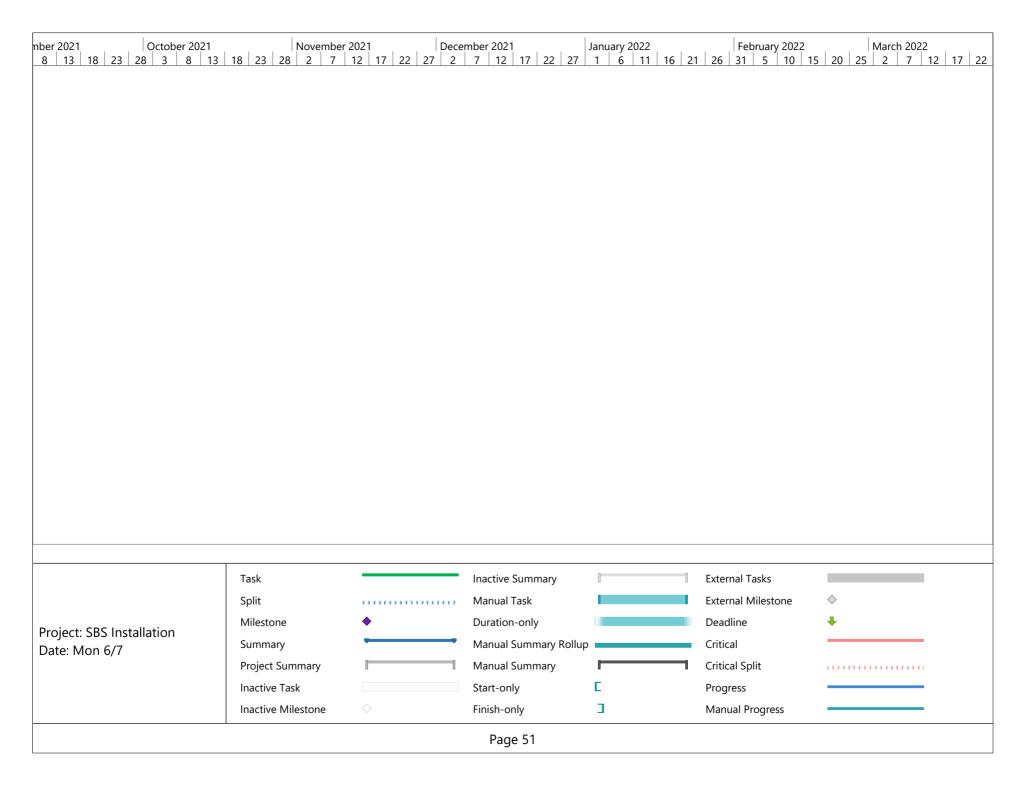


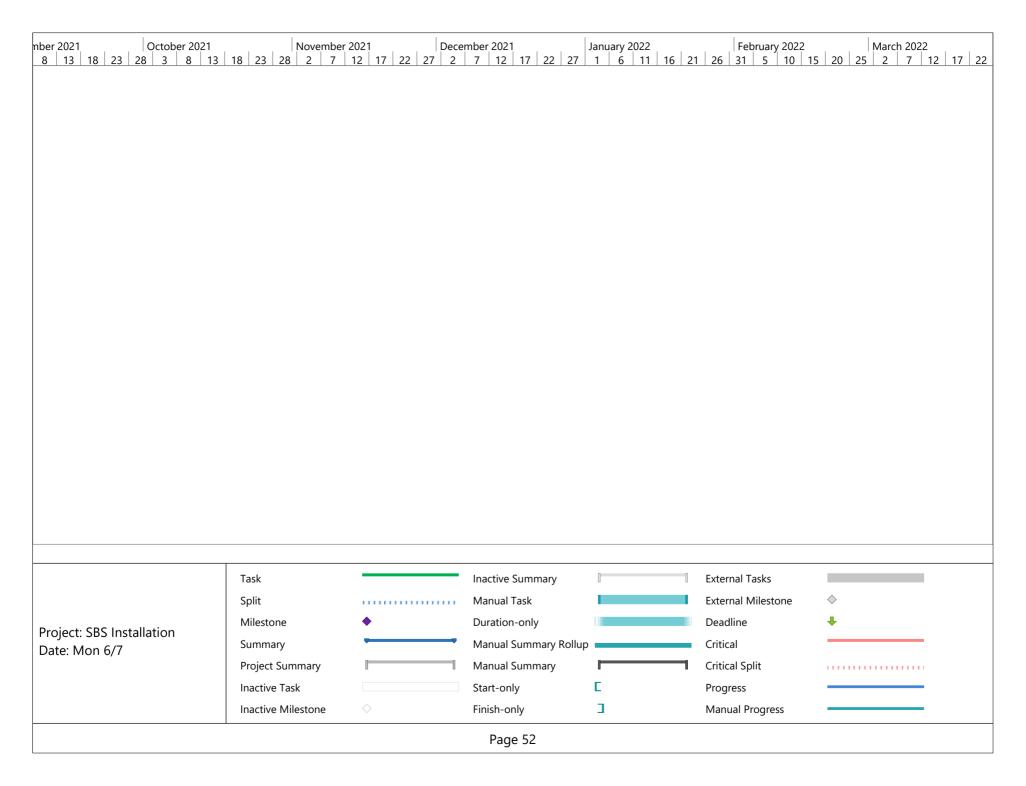


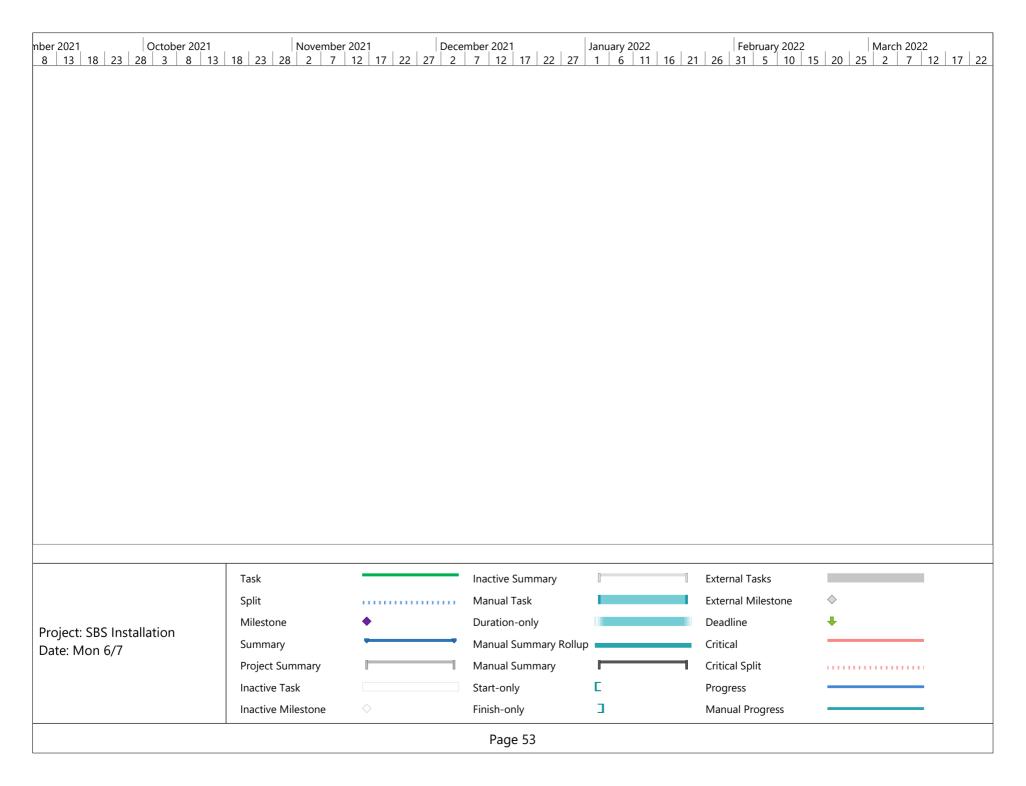


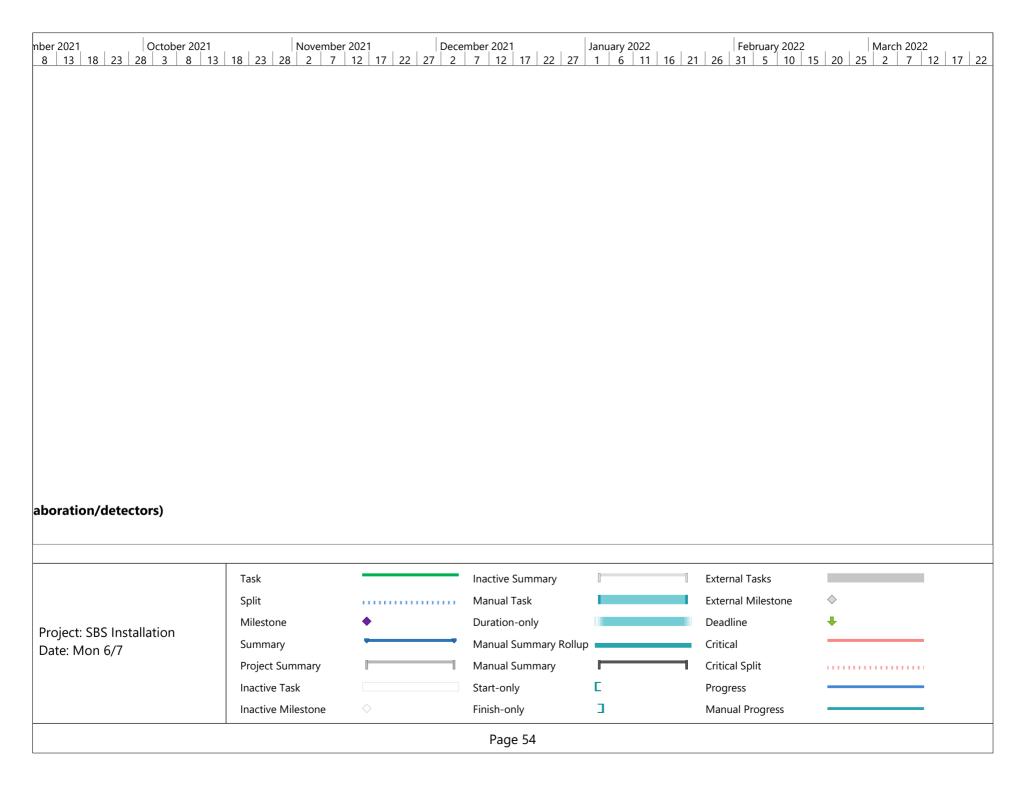


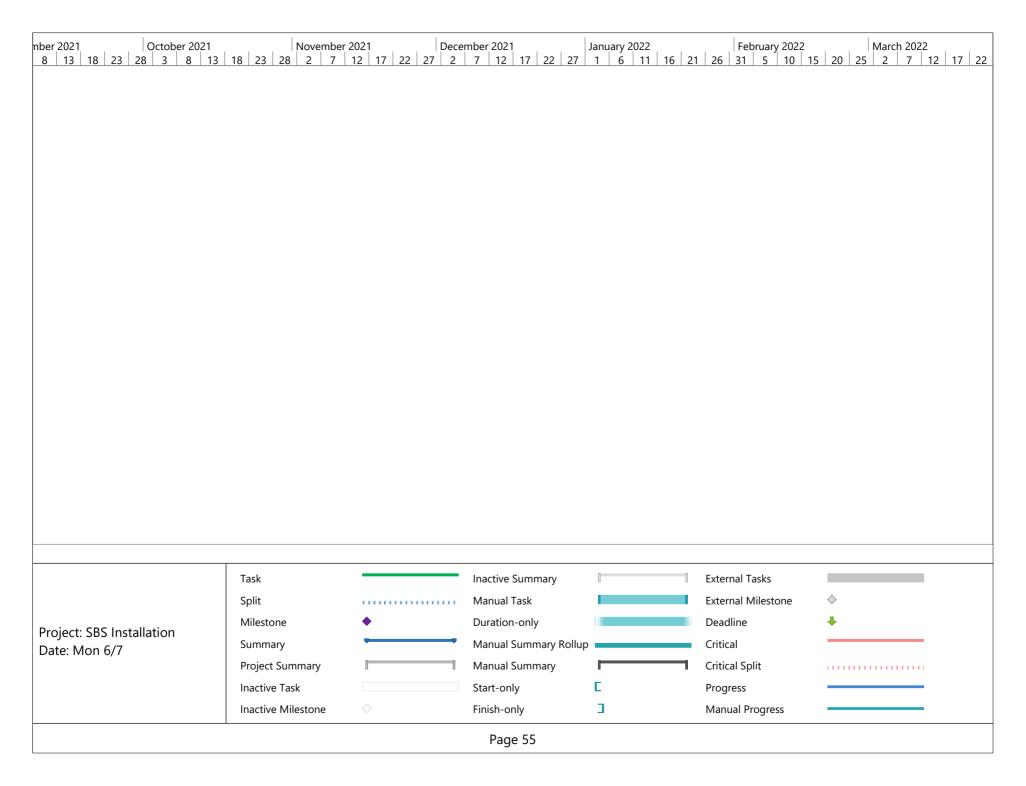


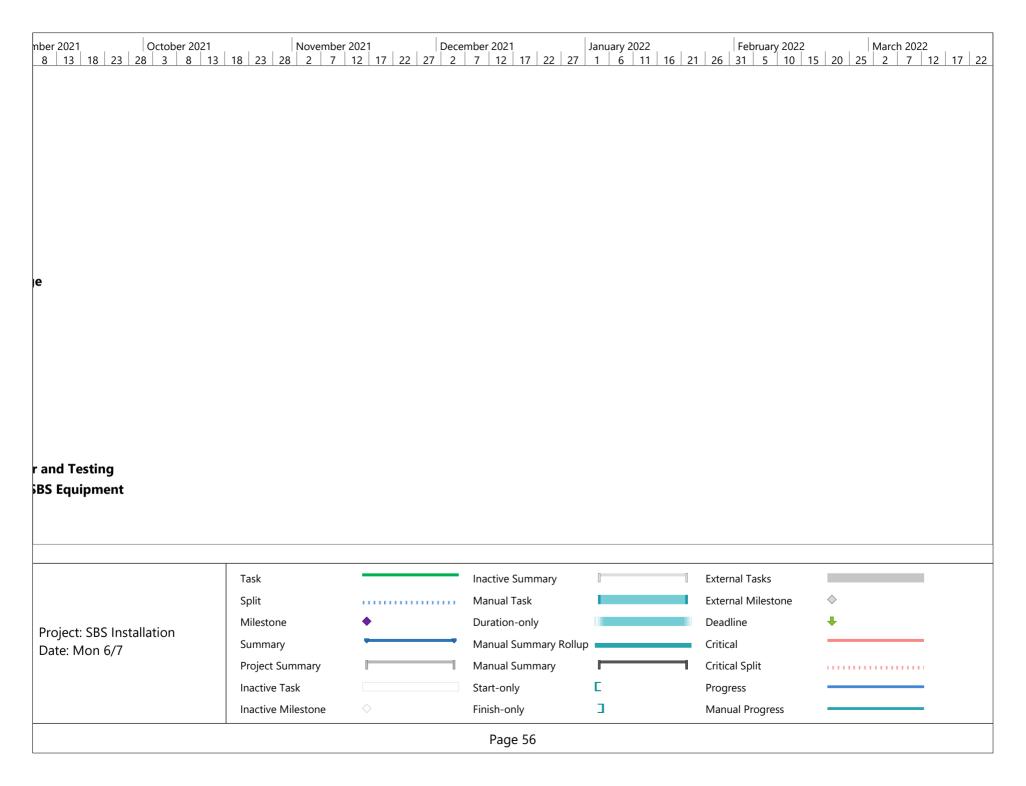


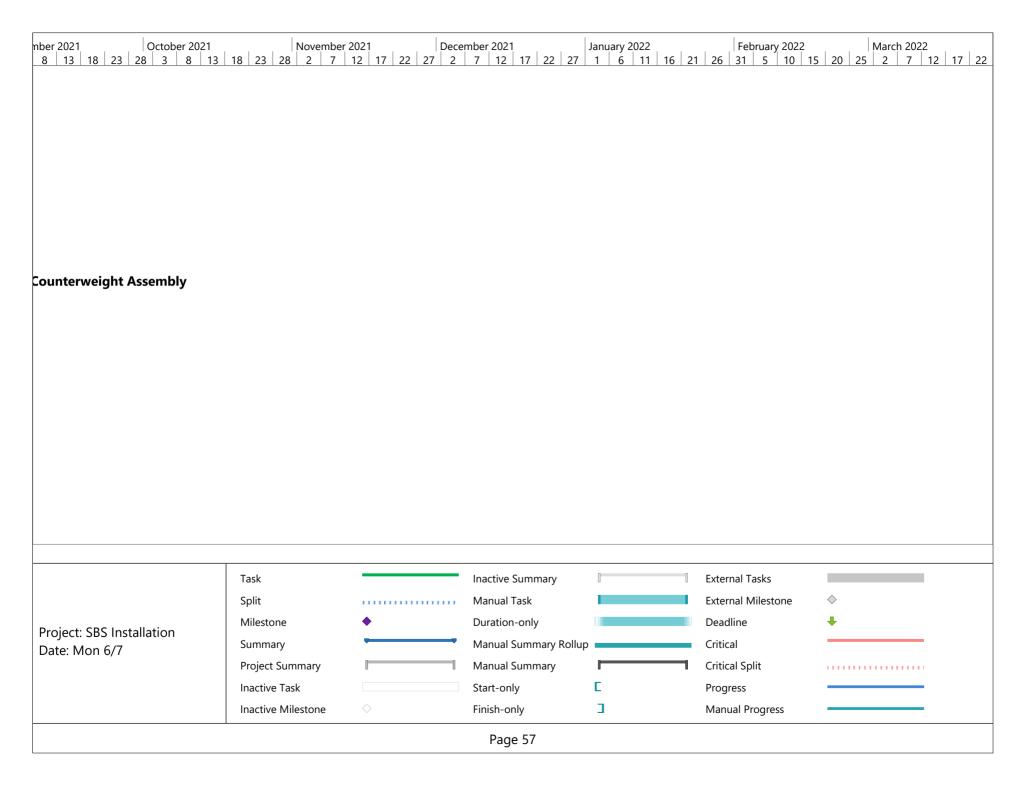


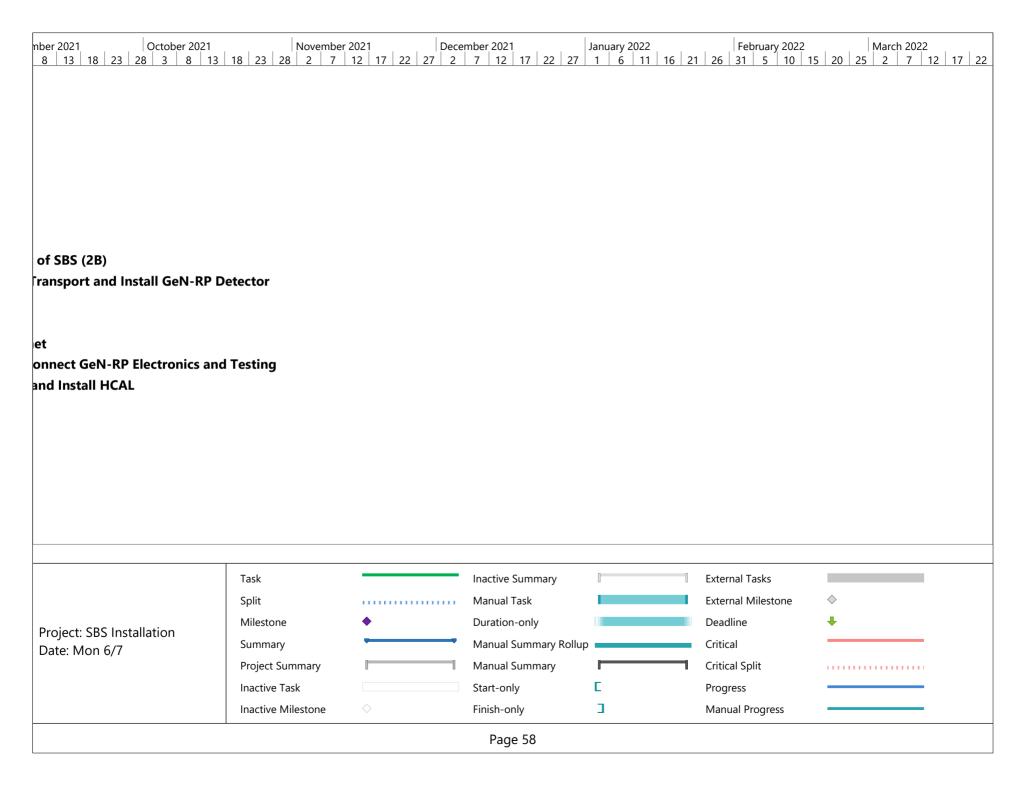












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inal Preparations						
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ice Beamline						
All SBS Equipment (2B)						
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est All Magnets and Power	Supplies To Full Curre	nt				
Remove Excessive Equipment From Hall						
Complete Pre-Beam Checkli	st - Installation Comp	lete				
Project: SBS Installation Date: Mon 6/7	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	\Diamond
	Milestone	•	Duration-only		Deadline	•
	Summary	•	Manual Summary Rollup		Critical	
	Project Summary		Manual Summary		Critical Split	
	Inactive Task		Start-only	Г	Progress	
	Inactive Milestone	\Diamond	Finish-only	3	Manual Progress	
			Page 59			

