

ID	Task Name	Duration	2021			
			Jul	Aug	Sep	
1	<b>Civil and Building Works for Unit 11 and Associated Works</b>	<b>1197 days</b>	▼ 30 Sep '21			
2	<b>Contract Key Dates</b>	<b>1197 days</b>				
3	Contract Commencement Date	0 days				
4	<b>Completion Dates</b>	<b>1044 days</b>	▼ 30 Sep '21			
5	Section A1 - Ground treatment installation works at Zone 1A	0 days				
6	Section A2 - Ground treatment installation works at Zone 1B	0 days				
7	Section A3 - Ground treatment installation works at Zone 2	0 days				
8	Section A4 - Ground treatment installation works at Zone 3	0 days				
9	Section A5 (i) - Ground treatment installation works at Zone 4 - Band drain installation	0 days				
10	Section A5 (ii) - Ground treatment installation works at Zone 4 - Surcharge filling	0 days				
11	Section A6 (i) - A&A Works for No. 4 C.W. Outfall at Area E18	0 days				
12	Section A6 (ii) - External works at Area E15	0 days				
13	Section B1 (i) - Area south of L11 MSB and HRSG from GL11-F eastwards leading to Chimney Road at Area E1 & E2	0 days				
14	Section B1 (ii) - Supporting structures for overhead cranes of L11 MSB including the associated roof structure except the roof deferred works	0 days				
15	Section B1 (iii) - FSRU Civil works at Area E13	0 days				
16	Section B2 - Retractable Cover D at Area E22	0 days				
17	Section B3 - External works at Area B1, D2 and D4	0 days				
18	Section C1 - Area south of L11 MSB from GL11-F westwards leading to Station Road at Area E3(A) & E3(B)	0 days				
19	Section C2 - (i) Southern part of L11 HRSG area and its surrounding at Area E7 except the deferred works for Lube Oil Storage Tank	0 days				
20	Section C2 - (ii) L11 Turbo Block foundation including the L11 MSB ground floor together with the equipment foundations between GL 11-F to 11-H and 11-1 to 11-6 for the installation of power generator, air inlet duct and lube oil reservoir	0 days				
21	Section C2 - (iii) G/F of L11 MSB including the Condenser Pit, Circulating Water Pipe Pit and equipment foundations between GL 11-B to 11-C and 11-1 to 11-6 for the installation of condenser	0 days				
22	Section D - (i) Roads and external grounds surrounding L11 MSB and L11 HRSG in addition to the southern & eastern areas mentioned above in Area E5 and E6	0 days				
23	Section D - (ii) Remaining northern part of L11 HRSG area and its surrounding in Area E6	0 days				
24	Section D - (iii) Whole of L11 MSB including the pipe and cable rack along south façade of L11 MSB with all underground utilities at Area E4 including C.W. Inlet and Outlet Culvert except the deferred works	0 days				
25	Section D - (iv) Link Bridge between L10 and L11 MSB and at the south of L11 MSB including their associated alternations & additions (A&A) Works at L10 MSB	0 days				
26	Section D - (v) Gas Duct Foundation, Pipe and Cable Rack and associated trench in Area E20	0 days				
27	Section E1 - (i) Link Bridge and Pipe and Cable Rack connecting L11 MSB to the western area of L11 MSB at Area E3	0 days				
28	Section E1 - (ii) Gas Receiving Station and L11 Gas Receiving Station Equipment Room (GRS) Area Extension at Area E16	0 days				
29	Section E1 - (iii) External Works at Area E15 ( C )	0 days				
30	Section E2 - Pipe and Cable Rack and trench at west of Chimney Road and Pipe and Cable Rack at south of Middle Road at Area E8 and E19	0 days				
31	Section E3 - Gas Pipe Support Foundation and Pipe Trench and associated external works at Area E14, E15 (A) and E15 (B)	0 days				
32	Section E4 - 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (A)	0 days				
33	Section F - 275kV Station Building Extension and associated works at Area E17	0 days				
34	Section G - A&A Works at No. 4 C.W. Intake at Area E12	0 days				
35	Section H - L11 Steel flue liner at No. 4 Chimney	0 days				

Contract No. 17/8002 Lamma Power Station Extension Civil and Building Works for Unit L11

17-8002 Master Prog Rev 3

Refer to CEM dated 26March2019

ID	Task Name	Duration	2021		
			Jul	Aug	Sep
36	Section I - (i) 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (B)	0 days			
37	Section I - (ii) Interconnector 2 Trench Modification Works at Area E10	0 days			
38	Section J - (i) Demolition of Retractable Cover A&B & (ii) Foundation of LMX Light Oil Storage Tank Nos. 3 & 4 and A&A for Existing Bund Wall at	0 days	4		
39	Section K1 - External works at Area 15 ( E ) and 15( F )	0 days			
40	Section K2 - Removal of Southern Bund and External Works at Area D5, D6 and D7	0 days			
41	Section K3 - All remaining works shall be completed for reporting completion to BD and ready for OP inspection	0 days			
42	<b>General &amp; Preliminary</b>	<b>318 days</b>			
43	Set up Temporary Site Office and Utilities	90 days			
44	Permit Applications & Statuary Submissions	120 days			
45	Existing Utilities scanning & Excavation Permit	45 days			
46	Tower Crane erection 2@MSB, 1@ 275	50 days			
47	<b>Submission and Approval</b>	<b>554 days</b>			
48	Method Statement / Temp Work Submission & Approval from HEC for General Works	240 days			
49	BD Approval & Consent (If required)	120 days			
50	BIM Model, CSD & CBWD Submission & Approval from HEC	200 days			
51	Structure Steelwork Connection Design Submission & BD Approval	60 days			
52	Structure Steelwork Shop Drawing & Approval	60 days			
53	Metal Cladding, louvre & windows submission & BD Approval	60 days			
54	Metal Cladding, louvre & windows shop drawing submission	60 days			
55	Order, Off Site Fabrication and Delivery (S. Steel & Cladding & louvres)	180 days			
56	Retractable Cover D BD Submission & Approval	90 days			
57	No. 4 C.W. Outfall A&A BD 1st Submission	90 days			
58	Submission & Approval of Steel Flue Assessment Report and Design Drawings	60 days			
59	Submission and Approval of Steel Flue Design from BD	60 days			
60	Material Fabrication & Delivery for L11 Flue	100 days			
61	Folding Shutters Shop Drawing Submission & Approval	120 days			
62	Fabrication & Delivery of Folding Shutters	150 days			
63	Sewage Pump System Design submission & approval	90 days			
64	Fabrication & Delivery of Sewage Pump	180 days			
65	Other material submission & approval & delivery	300 days			
66	<b>Coordination with the Employer's Specialist Contractors</b>	<b>478 days</b>			
67	Installation of Puddle Pipes at C.W. outlet Culvert	7 days			
68	Installation of Puddle Pipes at C.W. Inlet Culvert	7 days			
69	Template setting at L11 Turbo Block Foundation	60 days			
70	Template setting of holding down bolts at HRSG column base	46 days			
71	I-beam / channel base installation on top of transformer foundations at Transformer Area	30 days			
72	Overhead crane erection at turbine hall using access through a temporary opening at L11 MSB roof between GL11-G to 11-H and 11-2 to 11-6	36 days			
73	Condenser assembly and erection using access through a temporary façade opening at L11 MSB below 1/F along GL 11-6 from GL11-B to 11-C including a clear space below 1/F between GL 11-B to 11-C	127 days			
74	Installation of power train equipment including air inlet duct using access through a temporary façade opening at L11 MSB below 1/F along GL 11-6 from GL11-F to 11-H including a clear space below 1/F of the above area	142 days			
75	Installation of embedded materials such as holding down bolts for equipment foundations - Commencement	30 days			
76	<b>Section A1 &amp; A2 - Ground treatment at Zone 1A &amp; 1B</b>	<b>92 days</b>			
77	Plant establishment for earthworks	7 days			
78	Backfilling and compaction from existing ground +4.5mPD to +5.5mPD	45 days			
79	Delivery of band drain	5 days			
80	Plant establishment for band drain (1st rig)	10 days			
81	Plant establishment for band drain (2nd rig)	7 days			
82	Plant establishment for band drain (3rd rig)	7 days			

◆ Section K3 - All remain

17-8002 Master Prog Rev 3

Task



Split



Milestone ◆

Summary



ID	Task Name	Duration	2021		
			Jul	Aug	Sep
83	Vert. Band drain installation (1023 nos. x 44m)	45 days			
84	Deposition of surcharge up to +8.3mPD	45 days			
85	<b>Section A3 - Ground treatment installation works at Zone 2</b>	<b>158 days</b>			
86	Backfilling and compaction from existing ground +4.5mPD to +5.5mPD	30 days			
87	Delivery of band drain	6 days			
88	Vert. Band drain installation (1787 nos. x 44m)	50 days			
89	Deposition of surcharge up to +8.3mPD	60 days			
90	Additional Concrete Blocks + Extra Surcharge	60 days			
91	<b>Section A4 - Ground treatment installation works at Zone 3</b>	<b>131 days</b>			
92	Backfilling and compaction from existing ground +4.5mPD to +5.5mPD	12 days			
93	Vert. Band drain installation	60 days			
94	Deposition of surcharge up to +8.3mPD	45 days			
95	Possession of Part 1 Defer portion at Zone 3	0 days			
96	Vert. Band drain installation	10 days			
97	Possession of Part 2 Defer portion at Zone 3	0 days			
98	Vert. Band drain installation	7 days			
99	Surcharge at deferred portion	14 days			
100	<b>Section A5 (i) - Ground treatment installation works at Zone 4</b>	<b>83 days</b>			
101	Site Preparation for Vertical Band Drain	3 days			
102	Band drain installation	21 days			
103	Possession of Defer portion at Zone 4	0 days			
104	Vert. Band drain installation	28 days			
105	<b>Section A5 (ii) - Surcharge works at Zone 4</b>	<b>30 days</b>			
106	Deposition of surcharge up to +8.3mPD	30 days			
107	<b>Section A6 (i) - A&amp;A Works for No. 4 C.W. Outfall at Area E18</b>	<b>493 days</b>			
108	BD Amendment, resubmission & approval for Jacking Pit	170 days			
109	Consent for Jacking Pit ELS	28 days			
110	Mobilization	0 days			
111	Jacking Pit Sheetpile Installation (incl. Stop work notice + CNY)	60 days			
112	Protective screen and preventive measure for U9 gas pipeline (VO)	28 days			
113	Provision of temp support for U10 gas pipeline (VO) upon RMA allow access	28 days			
114	ELS of jacking pit	30 days			
115	Pipe Jacking set up & ground strengthening	18 days			
116	Pipe Jacking	90 days			
117	Receiving Pit BD Approval	170 days			
118	Consent for Pipe & Sheet pile	28 days			
119	Receiving Pit Pipe & Sheet pile installation	30 days			
120	Consent for Receiving Pit ELS	28 days			
121	ELS of Receiving pit	40 days			
122	Allow modify existing outfall manhole for pipe jacking receiving	18 days			
123	Culvert Pipe Intallation & water test	55 days			
124	Inspection Manhole at Jacking Pit + backfill (Area E3(A))	18 days			
125	Manhole extension at Outfall no. 4 + backfill + Reinstate of Outfall Rd	45 days			
126	Sheetpile for L12 Outlet culvert (Connection to Jacking Pit)	45 days			
127	Consent + ELS for remaining jacking pit	75 days			
128	Outlet Culvert pipe installation + Thrust Box (remaining portion at A1 Area)	45 days			
129	Sheet pile for future extension along GRS	60 days			
130	<b>Section A6 (ii) - External works at Area E15(D)</b>	<b>37 days</b>			
131	Area possession & Clearance	6 days			
132	Road & Surface Works	31 days			
133	<b>Section B1 (i) - Area south of L11 MSB and HRSG from GL11-F eastwards leading to Chimney Road at Area E1 &amp; E2</b>	<b>375 days</b>			
134	Area Possession & Clearance	0 days			
135	Excavation for CW Inlet Culvert (South of L11 HRSG)	21 days			
136	Installation CW Inlet Culvert pipe	30 days			
137	Construction of Thrust Box & Manholes,etc	14 days			
138	Backfill	21 days			
139	Install underground utilities	45 days			
140	Backfill and Temporary paving for Condensor Move in (E1)	14 days			
141	Backfill and Temporary paving for Condensor Move in (others)	30 days			
142	<b>Section B1 (ii) - Supporting structures for overhead cranes of L11 MSB including the associated roof structure except the roof deferred works</b>	<b>482 days</b>			
143	Area possession & Clearance	0 days			
144	Erection of turbine hall roof except defer work	0 days			

ID	Task Name	Duration	2021		
			Jul	Aug	Sep
145	Installation of crane griders	21 days			
146	Turbine hall wall claddings	60 days			
147	<b>Section B1 (iii) - FSRU Civil works at Area E13 (GRS)</b>	<b>151 days</b>			
148	Submission and approval for consent to work	0 days			
149	Civil & Building Works	130 days			
150	Ground reinstatement	21 days			
151	<b>Section B2 - Retractable Cover D at Area E22</b>	<b>435 days</b>			
152	Area Possession, Demolition and clearance work	60 days			
153	Revise Structural Form and BD resubmission & approval	150 days			
154	Foundation construction	60 days			
155	Backfill & Ground reinstatement	30 days			
156	Superstructure fabrication & delivery	90 days			
157	Superstructure erection	90 days			
158	E&M Installation and T&C	45 days			
159	<b>Section B3 - External works at Area B1, D2 and D4</b>	<b>416 days</b>			
160	Receive Area from HKE, Area Possession & Clearance	0 days			
161	Removal of existing paving for band drain under Section A5(i)	30 days			
162	Complete Vert. Band drain under Section A5(i)	0 days			
163	Ground preparation for B1, D2 & D4 for handover to Plant contractor	90 days			
164	<b>Section C1 - Area south of L11 MSB from GL11-F westwards leading to Station Road at Area E3(A) &amp; E3(B)</b>	<b>466 days</b>			
165	Area Possession & Clearance	0 days			
166	Excavation for Type C (Area E3A)	21 days			
167	Installation CW Outlet Culvert Pipe connect to Type C1	21 days			
168	Installation CW Inlet Culvert pipe (South of L11 Condensor)	21 days			
169	Construction of Thrust Box	10 days			
170	Construction of Access Manhole	21 days			
171	Backfill	14 days			
172	Construction of Underaround drainage and utilities	60 days			
173	Construct Temp Paving for Condenser move in	45 days			
174	<b>Section C2 - (i) Southern part of L11 HRSG area and its surrounding at Area E7 (No Defer Foundations)</b>	<b>295 days</b>			
175	Area Possession & Clearance	0 days			
176	Excavation & Pile Caps & Tie Beams (HRSG South Area E7)	45 days			
177	Construction RC foundations	45 days			
178	Construction RC plinths	30 days			
179	Construction underground utilities	45 days			
180	Backfill & Construction on-grade slabs	35 days			
181	Backfill and Temporary paving	21 days			
182	<b>Section C2 - (ii) L11 Turbo Block foundation including the L11 MSB ground floor together with the equipment foundations between GL 11-F to 11-H and 11-1 to 11-6 for the installation of power generator, air inlet duct and lube oil reservoir</b>	<b>496 days</b>			
183	Area Possession & Clearance	0 days			
184	Excavation & Pile Caps & Tie Beams (MSBL11 - Turbo Block North)	70 days			
185	Excavation & Pile Caps & Tie Beams (MSBL11 - Turbo Block South)	30 days			
186	Backfill and construction turbine block foundations	21 days			
187	Construction of internal drainage	60 days			
188	Construction RC walls incl. G/F rooms	90 days			
189	Construction turbine block columns and upper portion for plant embed installation	21 days			
190	Concrete Turbine upper part foundation & clear falsework	52 days			
191	<b>Section C2 - (iii) G/F of L11 MSB including the Condenser Pit, Circulating Water Pipe Pit and equipment foundations between GL 11-B to 11-C and 11-1 to 11-6 for the installation of condenser</b>	<b>466 days</b>			
192	Area Possession & Clearance	0 days			
193	Excavation to foundation level at ELS Type A	18 days			
194	Construction of CW Outlet Box + lowest tie beam & caps	40 days			
195	Construction of pile caps & tie beams & hot well sump pit up to +2.5mPD	30 days			
196	Backfill & Construction of CW Inlet Box + tie beams	18 days			
197	Backfill and Construction ground beams & trenches	18 days			



ID	Task Name	Duration	2021		
			Jul	Aug	Sep
198	Construction of indoor underground drainage	12 days			
199	Backfill & construction on-grade slabs	10 days			
200	Construction Column casting and RC walls	30 days			
201	Metal Cladding & Louvres for GLB-C/1-6	60 days			
202	Mis. Works for plant erection	24 days			
203	<b>Section D - (i) Roads and external grounds surrounding L11 MSB and L11 HRSG in addition to the southern &amp; eastern areas mentioned above in Area E5 and E6</b>	<b>414 days</b>			
204	Area Possession & Clearance	14 days			
205	Excavation for Type C1 and open sheet pile	75 days			
206	Install CW Outlet pipe & connect to previous	21 days			
207	Backfill	10 days			
208	Undeground utilities and trenches	60 days			
209	Construction of plant drainage, trenches & RC plinths	45 days			
210	Remaining Undeground utilities & backfill (West of Tx Bay)	75 days			
211	<b>Section D - (ii) Remaining northern part of L11 HRSG area and its surrounding in Area E6</b>	<b>375 days</b>			
212	Area Possession & Clearance	0 days			
213	Excavation & Pits & Pile Caps & Tie Beams (HRSG north Area E6)	45 days			
214	Construction RC foundations	45 days			
215	Construction RC plinths & HRSG Lift Pit & internal drainage	60 days			
216	Backfill Construction on-grade slabs	28 days			
217	Construction underground utilities	45 days			
218	Backfill, Remaining utilities and temporary paving	85 days			
219	Touch up and site clearance	13 days			
220	<b>Section D - (iii) Whole of L11 MSB including the pipe and cable rack along south facade of L11 MSB with all underground utilities at Area E4 including C.W. Inlet and Outlet Culvert except the deferred works</b>	<b>526 days</b>			
221	Area Possession & Clearance	0 days			
222	Construction of pile caps & tie beams at Transformer Area	60 days			
223	Excavation & Construction Blow Down Sum pit (Type B)	45 days			
224	Construction of pile caps & tie beams at SunShadeCover Area	45 days			
225	Preparation for S.Steelwork Erection	14 days			
226	Structural Delivery & Erection (Turbine Hall North fr G.L. 1-3/H->B)	30 days			
227	Structural Delivery & Erection (Equipment Floors)	45 days			
228	Structural Delivery & Erection (Turbine Hall South)	45 days			
229	Fire Coating Application at Joint	120 days			
230	External Scaffolding Erection	150 days			
231	Construction 1/F RC Slab	14 days			
232	Construction M/F RC Slab	7 days			
233	Construction 2/F RC Slab	14 days			
234	Construction 3/F RC Slab	14 days			
235	Construction 4/F RC Slab	14 days			
236	Construction 5/F RC Slab (Roof of turbine hall, except defer portion)	30 days			
237	Construction Roof RC Slab	14 days			
238	Construction Upper Roof RC Slab	12 days			
239	Construction Defer Roof RC Slab (G.L. G-H)	30 days			
240	Construction of Staircase ST-01 & lift shaft & machine room	120 days			
241	Construction of Staircase ST-02 except defer work	76 days			
242	Construction of RC plinth, kerbs & parapet Walls	30 days			
243	Erection of Skylight & Roof Features	45 days			
244	Waterproofing & Flooring at Roof	60 days			
245	ABFW Works from 1/F to 5/F equipment rooms	150 days			
246	Metal Cladding, Windows and Louvres incl. roof feature	100 days			
247	Removal of external scaffolding	60 days			
248	Building Services E&M Access & Installation	150 days			
249	Remaining and Mis. works for Plant erection Full Access	18 days			
250	<b>Section D - (iv) Link Bridge between L10 and L11 MSB and at the south of L11 MSB including their associated alternations &amp; additions (A&amp;A) Works at L10 MSB</b>	<b>526 days</b>			
251	Area Possession & Clearance	0 days			

ID	Task Name	Duration	2021		
			Jul	Aug	Sep
252	A&A works at South of L10 MSB	60 days			
253	Erection of link bridge structural steel	21 days			
254	Casting of bridge deck	7 days			
255	Metal roofing installation	14 days			
256	ABWF work	21 days			
257	Form new opening at MSB for final connection	14 days			
258	E&M Work for completion	21 days			
259	<b>Section D - (v) Gas Duct Foundation, Pipe and Cable Rack and associated trench in Area E20</b>	<b>345 days</b>			
260	Area Possession & Clearance + CNY	0 days			
261	Sheet pile installation & submit as-built	75 days			
262	Consent for excavation	28 days			
263	Excavation & plate load test	45 days			
264	Construction of foundation	45 days			
265	Backfill & Underground utitiies	30 days			
266	Remaining Pipe & cable rack and associated trenches in Area E20	115 days			
267	<b>Section E1 - (i) Link BrIdge and Pipe and Cable Rack connecting L11 MSB to the western area of L11 MSB at Area E3</b>	<b>263 days</b>			
268	Area Possession	0 days			
269	Excavation & construction of new foundation	40 days			
270	Backfill	10 days			
271	Erection of Structural steel	30 days			
272	Backfill & Ground works	55 days			
273	<b>Section E1 - (ii) Gas Receiving Station and L11 Gas Receiving Station Equipment Room (GRS) Area Extension at Area E16</b>	<b>173 days</b>			
274	Area Possession	0 days			
275	Removal of Surcharge and excavation	14 days			
276	Modification of Site Drainage	45 days			
277	Construction of new RC for GRS Equipment Room	75 days			
278	ABWF for GRS Equipment room	45 days			
279	E&M Installation	45 days			
280	Construction of new Gas pipe plinths & racks	45 days			
281	Backfill and construction site drainage	21 days			
282	External Paving and install new fencing	60 days			
283	<b>Section E1 - (iii) External Works at Area E15 ( C )</b>	<b>273 days</b>			
284	Removal of Surcharge and excavation	45 days			
285	Underground drianage, Utilities and RC plinths	123 days			
286	Backfill and install surface utilities	45 days			
287	Roadwork	60 days			
288	<b>Section E2 - Pipe and Cable Rack and trench at west of Chimney Road and Pipe and Cable Rack at south of Middle Road at Area E8 and E19</b>	<b>495 days</b>			
289	BD consent + Site Possession @ Area E8	0 days			
290	Excavation & Plate load test	60 days			
291	Foundation and Trench constructions	90 days			
292	Backfill & underground utitiles + temp paving	60 days			
293	Excavation & plate load test @ E19	60 days			
294	Construction of foundations & trenches	45 days			
295	Backfill & underground utitiles	60 days			
296	Pipe & cable rack Erection	60 days			
297	Ground reinstatement	60 days			
298	<b>Section E3 - Gas Pipe Support Foundation and Pipe Trench and associated external works at Area E14, E15 (A) and E15 (B)</b>	<b>173 days</b>			
299	Removal of surcharge / site clearance	21 days			
300	Excavation & construction of pipe trench	30 days			
301	Construction of gas pipe support foundation	30 days			
302	Construction of underground drainage and utilities	60 days			
303	Backfill & road work	32 days			
304	<b>Section E4 - 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (A)</b>	<b>185 days</b>			
305	Site possession	0 days			
306	Obtain Permit to work & Road close permit	10 days			

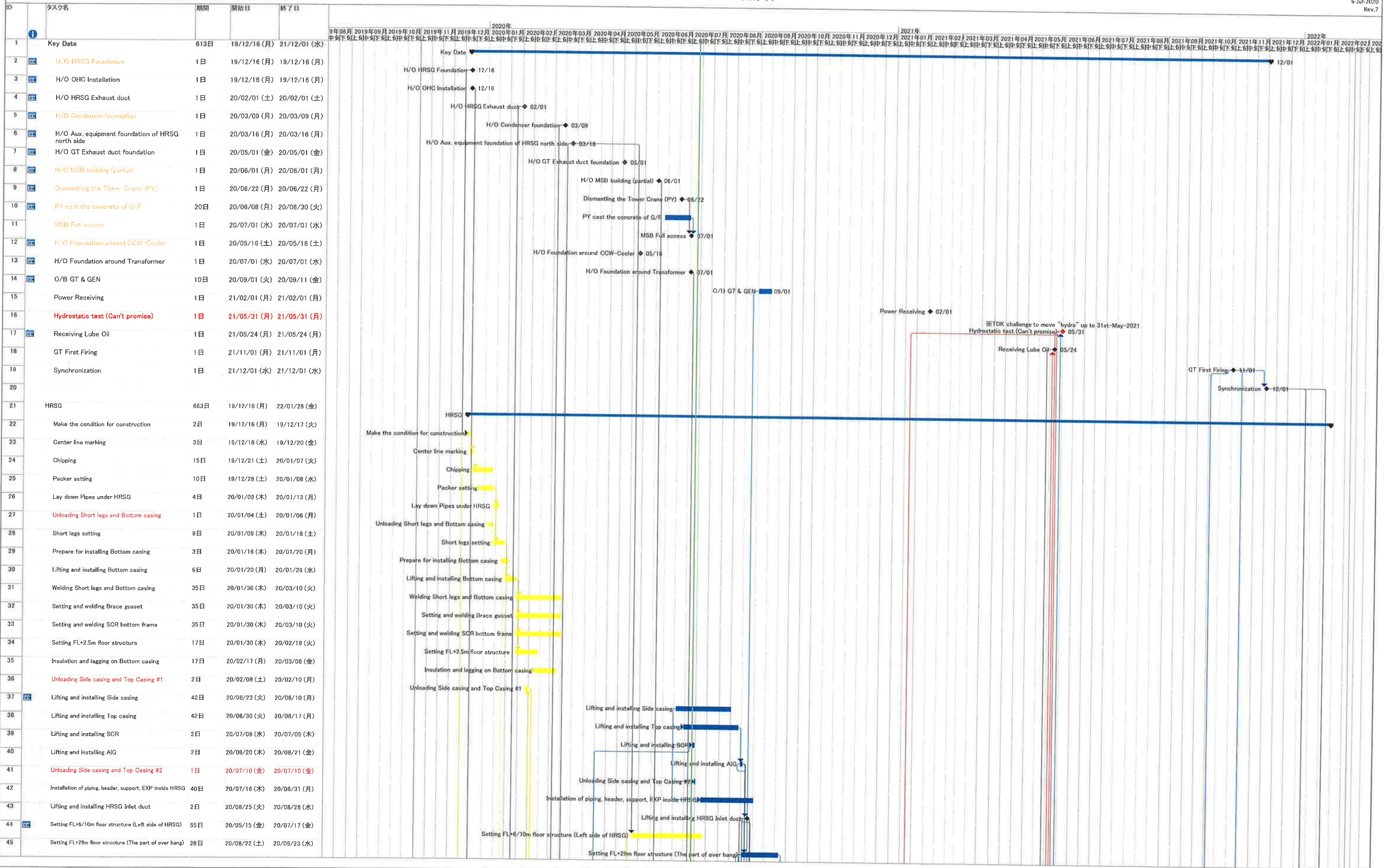
ID	Task Name	Duration	2021		
			Jul	Aug	Sep
307	Excavation & construction new cable trench to 275kV	45 days			
308	Excavation & construction new cable trench to L11MSB	130 days			
309	<b>Section F - 275kV Station Building Extension and associated works at Area E17</b>	<b>709 days</b>			
310	Installation of ELS for 275kV Switching Station near Staircase ST-3 and ST-6	14 days			
311	Construction of Staircase ST-3	110 days			
312	BD Amendment Approval on A&A	0 days			
313	BD Amendment Approval on A&A ST3 & Drainage	0 days			
314	OP inspection of Staircase ST-3	14 days			
315	Consent of New Foundation Works (Stage 1)	0 days			
316	Consent & BA10 for Demolition of Existing Staircase	0 days			
317	Demolition of Existing Staircase and Submit BA14A	14 days			
318	BD inspection for BA14A & Issue OP	28 days			
319	Consent & BA10 for New Foundation Work (Stage 2)	28 days			
320	Hoarding Modification	7 days			
321	Pile Cap & Tie Beam Construction (Stage 1)	98 days			
322	Erection of Tower Crane	40 days			
323	Pile Cap and Tie Beam (Stage 2)	21 days			
324	RC Construction up to 1/F (Stage 1)	30 days			
325	RC Construction up to 1/F (Stage 2)	75 days			
326	Construction of Staircase ST6	90 days			
327	Shop Drawing Submission & Approval of Structural Steel	45 days			
328	Structural Steel fabrication & Delivery	60 days			
329	Erection of Structural Steel GL 17~18	30 days			
330	Erection of Structural Steel GL 8~17	60 days			
331	Metal Cladding Delivery	60 days			
332	Metal Door, Window & Louvre Delivery	45 days			
333	Erection of Working Platform and Scaffold	150 days			
334	Install Decking	60 days			
335	RC Walls from 1/F @ GIS Hall	40 days			
336	Construction of 2/F RC slab	14 days			
337	Construction of R/F RC slab	21 days			
338	Construction of UR/F RC slab	14 days			
339	Construction of GIS Hall Floor	60 days			
340	Installation of Overhead Crane (By JEC)	60 days			
341	Construction of staircase ST4, ST5, Lift Shaft & Equip Floors	150 days			
342	Lift Installation	90 days			
343	Concrete of RC walls, plinths, kerb & parapet walls & New trench for LV Power	30 days			
344	ABWF Works @ G/F	50 days			
345	ABWF Works @ 1/F	50 days			
346	ABWF Works @ 2/F	75 days			
347	ABWF Works @ R/F	30 days			
348	ABWF Works @ UR/F	21 days			
349	Waterproofing Works at R/F & UR/F	45 days			
350	Building Services E&M Access & Installation & T&C	150 days			
351	Metal Cladding, Windows and Louvres incl. Roof Feature	90 days			
352	Shutter Erection	30 days			
353	Removal of External Scaffolding + Tower Crane	35 days			
354	External Underground Drainage and Utilities	30 days			
355	Road & Paving Reinstatement	30 days			
356	Ready for FSD & OP Inspection	0 days			
357	<b>Section G - A&amp;A Works at No. 4 C.W. Intake at Area E12</b>	<b>143 days</b>			
358	Permit to work	0 days			
359	Erection of temp. platform	14 days			
360	Demolition work	30 days			
361	Modify existing slab openings	75 days			
362	Curing + Removal of platform	24 days			
363	<b>Section H - L11 Steel flue liner at No. 4 Chimney</b>	<b>186 days</b>			
364	Complete erection of L10 Steel flue	0 days			
365	Modification of erection equipment	21 days			
366	Erection temp. platform and demolition work	30 days			
367	Structural steel delivery & Erection	85 days			
368	Removal of temp. work	5 days			
369	Reinstatate G/F louvre wall and access door	45 days			
370	<b>Section I - (i) 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (B)</b>	<b>232 days</b>			
371	Obtain Permit to work & Road close permit	0 days			
372	Excavation & construction new cable trench	160 days			
373	Re-excavate cable trench for cable laying	72 days			
374	<b>Section I - (ii) Interconnector 2 Trench Modification Works at Area E10</b>	<b>275 days</b>			
375	Obtain Permit to work & Road close permit	0 days			
376	Re-excavate & new cable trench for cable laying	275 days			

ID	Task Name	Duration	2021			
			Jul	Aug	Sep	
377	<b>Section J - (i) Demolition of Retractable Cover A&amp;B &amp; (ii) Construction of new LOT 3 &amp; 4</b>	<b>426 days</b>				
378	Obtain permit to work & Road close permit	0 days				
379	Erection of Hoarding	21 days				
380	Removal of existing cover & structural steel	30 days				
381	Demolish of existing bund wall and staircases	45 days				
382	Demolish of existing slab & foundation	60 days				
383	Consent for new work	30 days				
384	Construction of new bund wall and foundation	100 days				
385	Construction of new oil separator	80 days				
386	Construct underground drainage and surface channel	40 days				
387	Construction on-grade slab	60 days				
388	Removal of hoarding and ground reinstatement	40 days				
389	<b>Section K1 - External works at Area 15 ( E ) and 15( F )</b>	<b>365 days</b>				
390	Removal of surcharge	30 days				
391	Construct new drainage and utilities work	200 days				
392	Road & Paving	135 days				
393	<b>Section K2 - Removal of Southern Bund and External Works at Area D5, D6 and D7</b>	<b>365 days</b>				
394	Demolition work	30 days				
395	Construct new drainage and utilities work	200 days				
396	Road & Paving	135 days				
397	<b>Section K3 - All remaining works shall be completed for reporting completion to BD and ready for OP inspection (PS1.4.4)</b>	<b>623 days</b>				30 Sep '21
398	Completion of remaining roof after over headcrane move in	30 days				
399	Construction of G/F Lube Oil Tank Room (BY TDK)	61 days				
400	Construction of wall and staircase at G/F after Condensor Move in	90 days				
401	Construction of Durasteel Steel wall panel after IBP installation	30 days				
402	Construction of Transformer fence wall, cladding & associated FS services	122 days				
403	Final restatement of road & paving around MSB & HRSG	122 days				
404	Installation of trench covers and gratings after plant installation	151 days				
405	Backfill and reinstatement after 275kV cable laying	122 days				Backfill and reinstatem



Construction Schedule of Unit-11

6-Jul-2020  
Rev.7

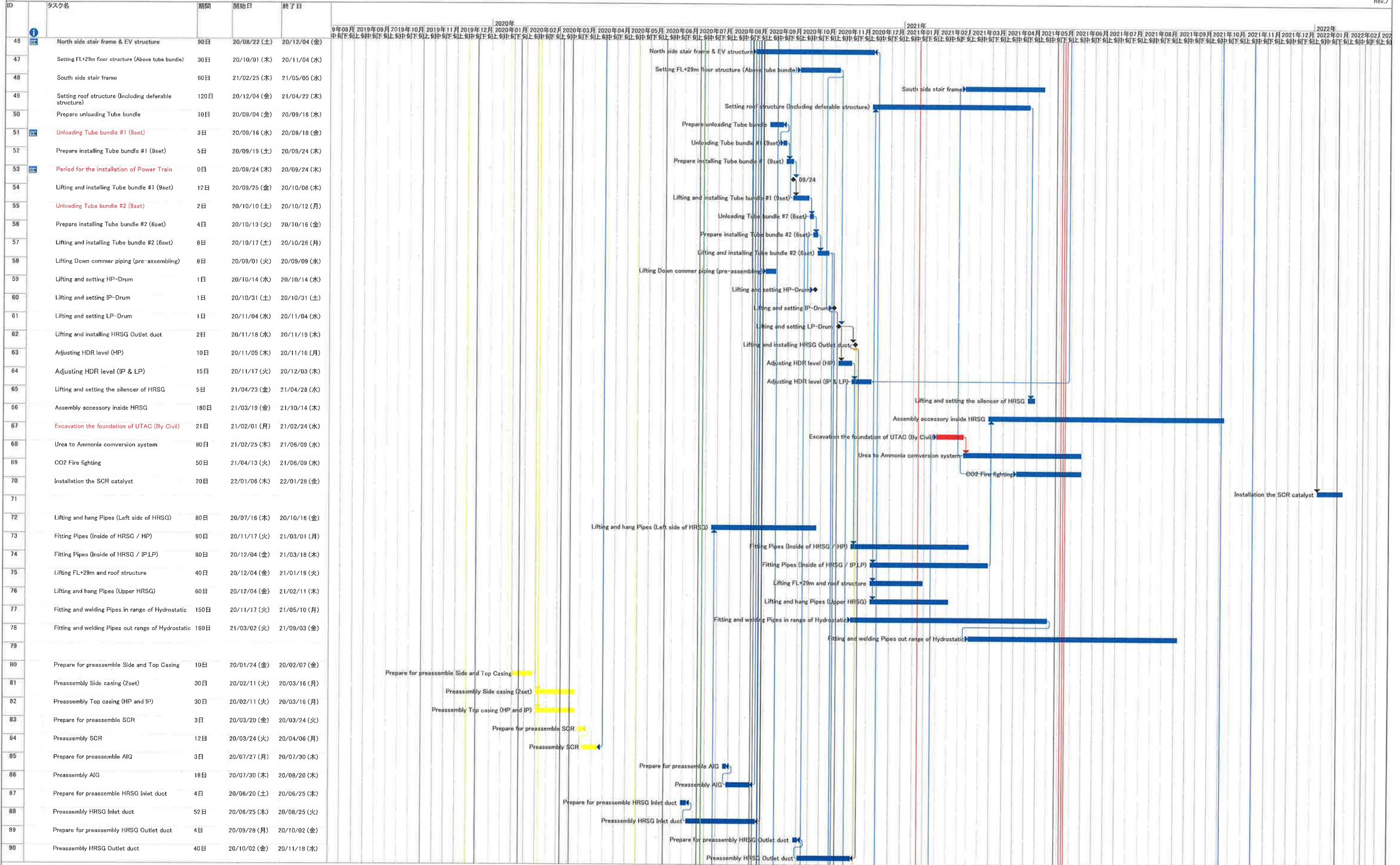


1. Change the starting date of installation below
  - ・ Installation HRSFG was re-started from 23rd-Jun
  - ・ Installation Exhaust duct was re-started from 15th-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP

Construction Schedule of Unit-11

6-Jul-2020  
Rev.7



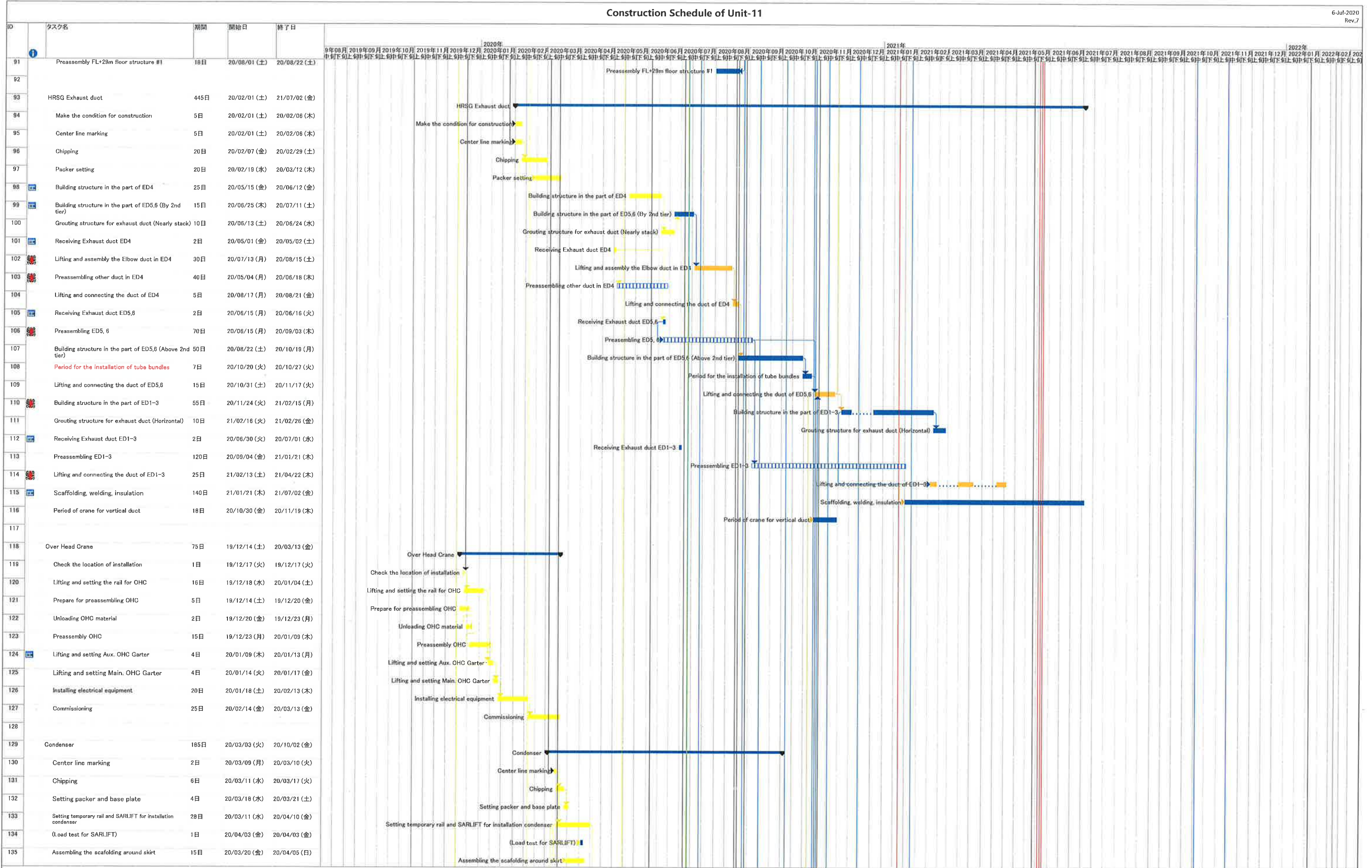
1. Change the starting date of installation below
  - ・ Installation HRSG was re-started from 23rd-Jun
  - ・ Installation Exhaust duct was re-started from 15st-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP



Construction Schedule of Unit-11

6-Jul-2020  
Rev.7

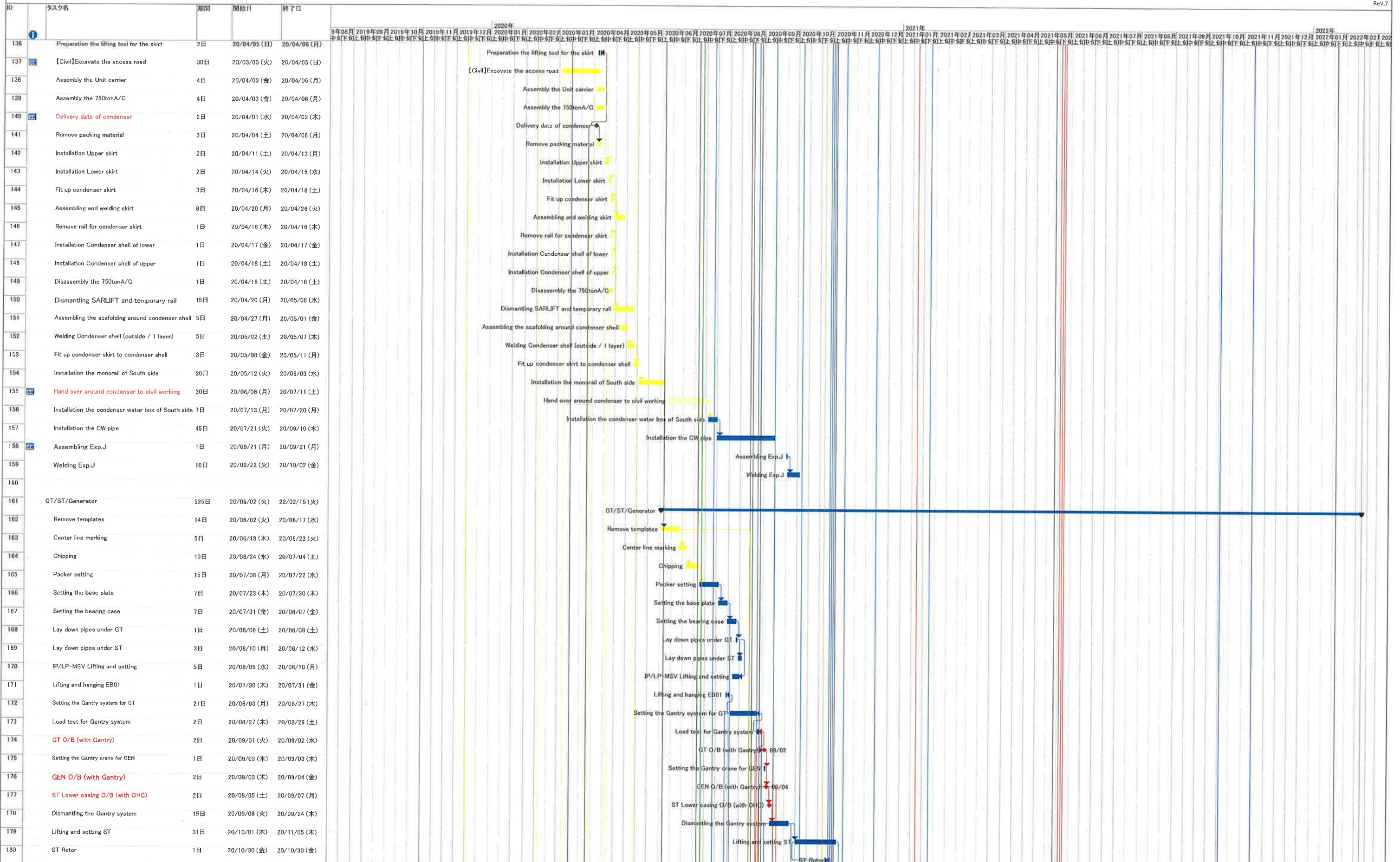


1. Change the starting date of installation below
  - ・ Installation HRSG was re-started from 23rd-Jun
  - ・ Installation Exhaust duct was re-started from 15st-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP

Construction Schedule of Unit-11

6-Jul-2020  
Rev.7



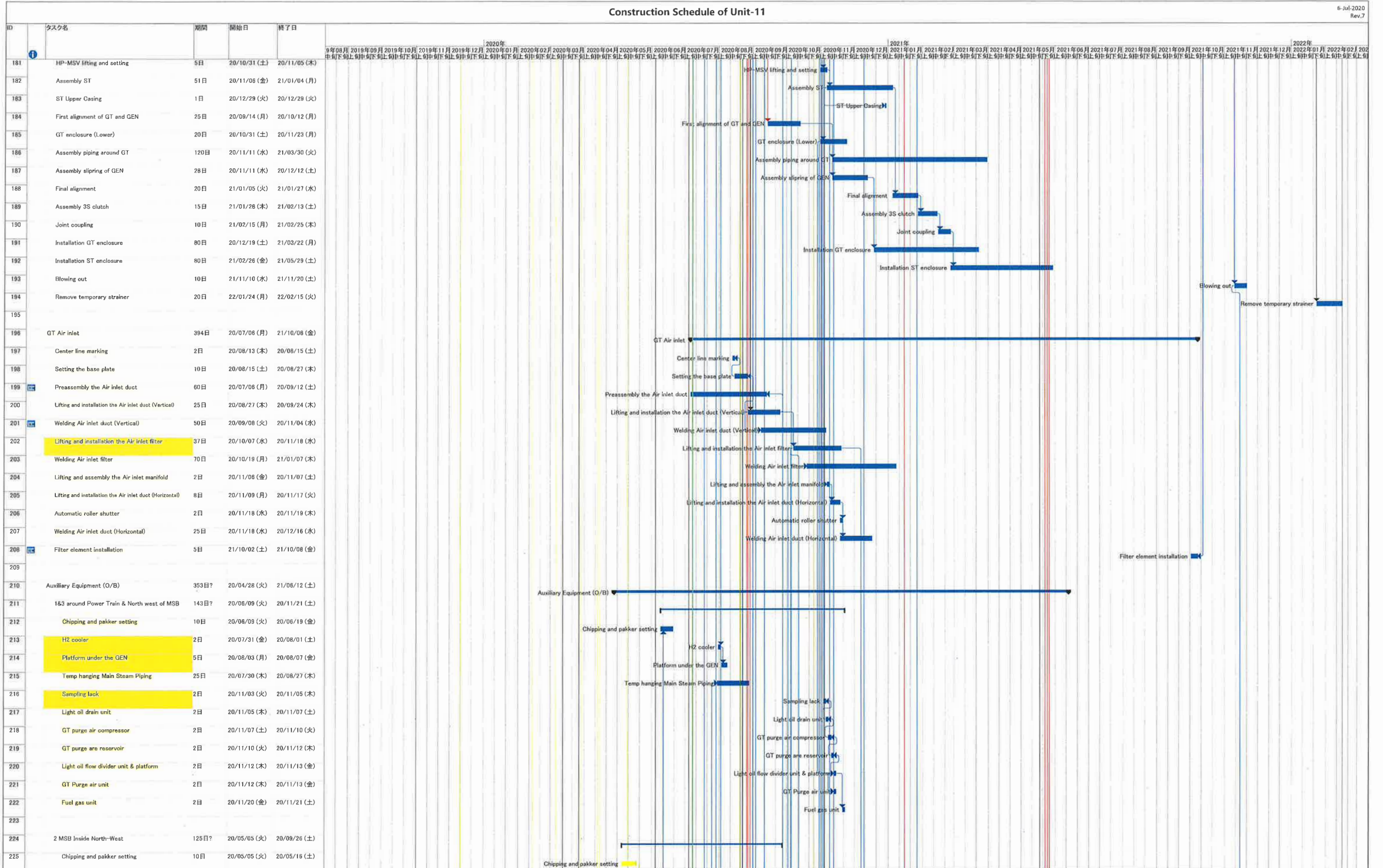
1. Change the starting date of installation below
  - ・ Installation HRSG was re-started from 23rd-Jun
  - ・ Installation Exhaust duct was re-started from 15st-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP



Construction Schedule of Unit-11

6-Jul-2020  
Rev.7

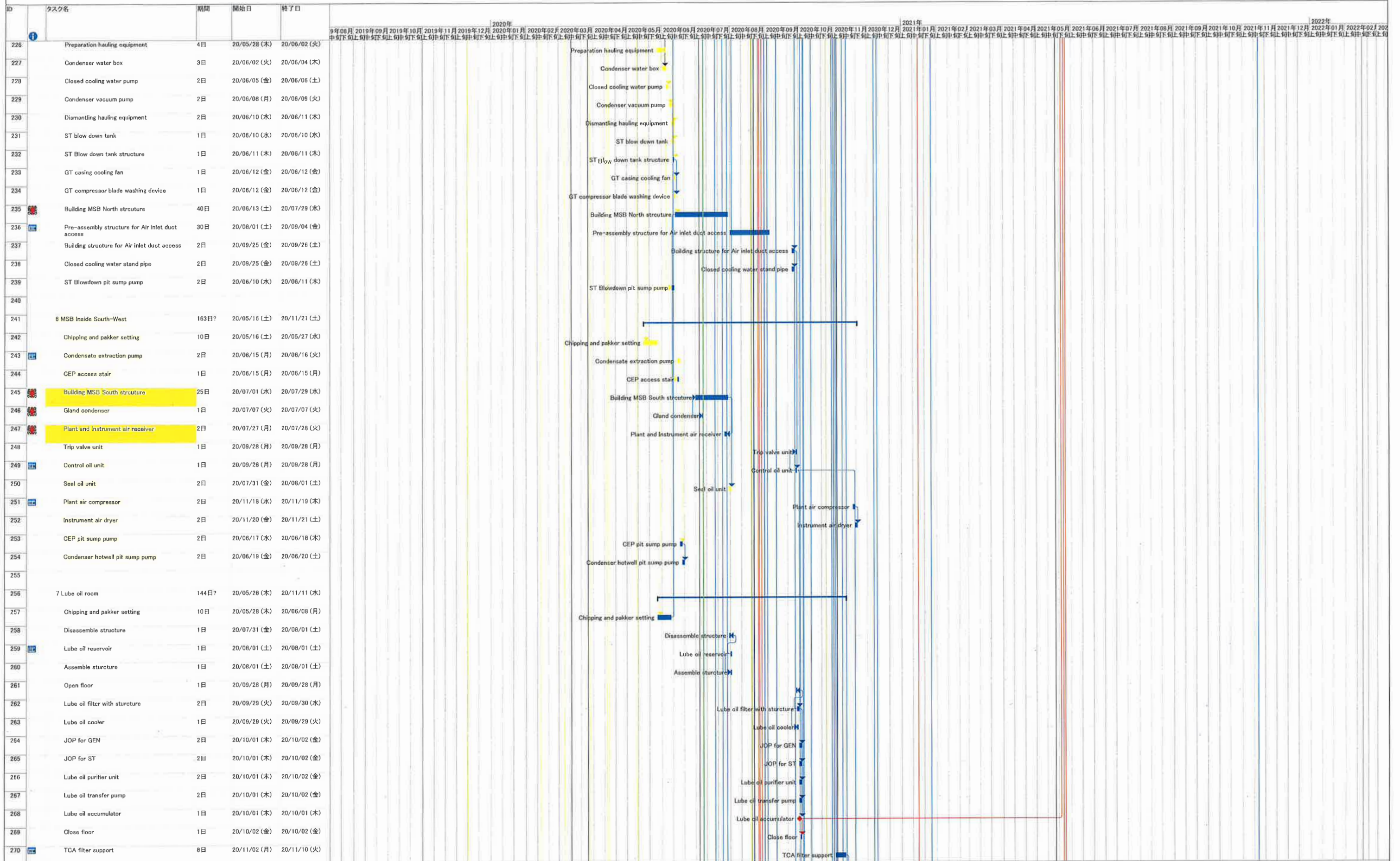


1. Change the starting date of installation below
  - Installation HRSRG was re-started from 23rd-Jun
  - Installation Exhaust duct was re-started from 15th-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP



Construction Schedule of Unit-11

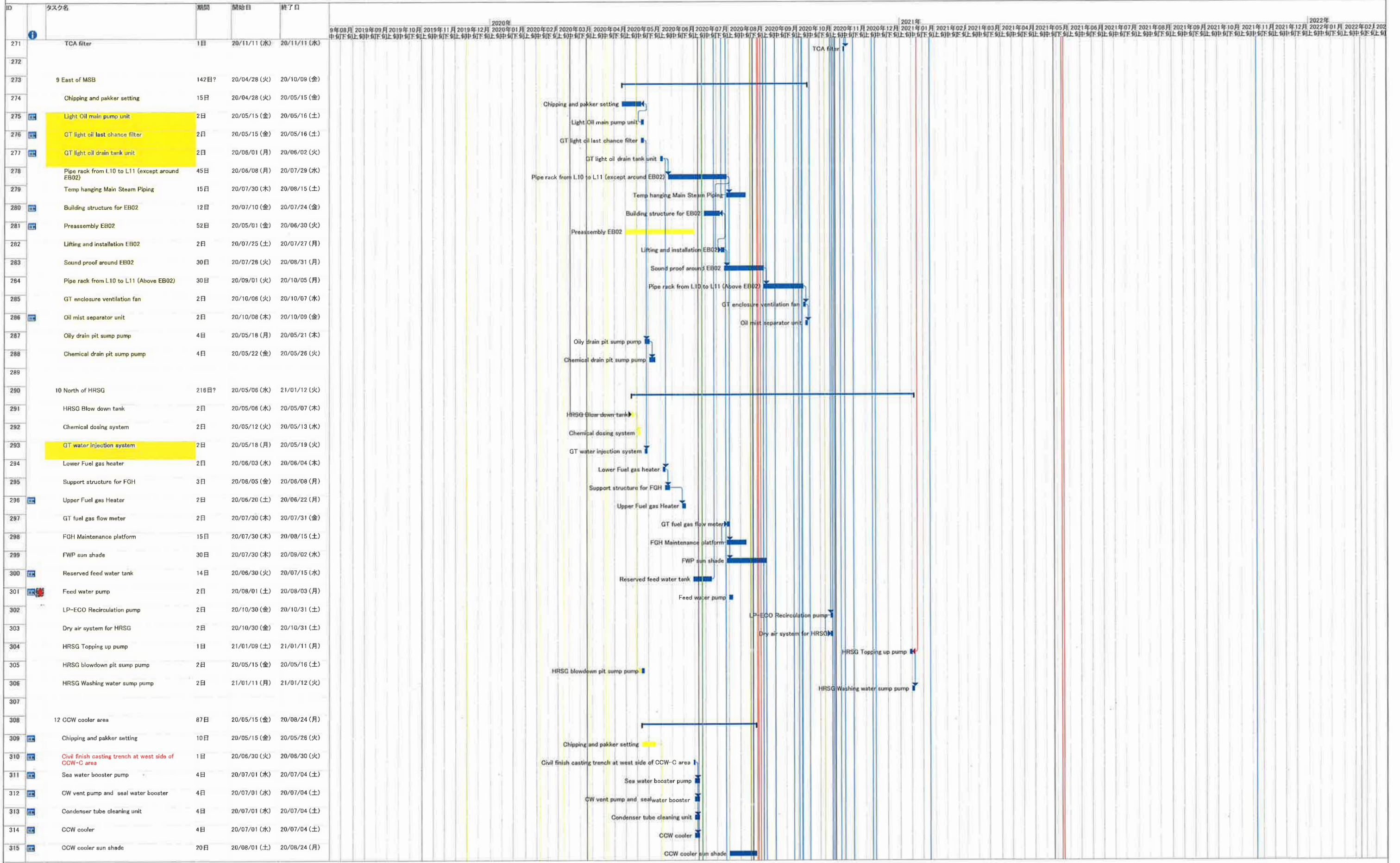


1. Change the starting date of installation below
  - ・ Installation HRSG was re-started from 23rd-Jun
  - ・ Installation Exhaust duct was re-started from 15st-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP



Construction Schedule of Unit-11



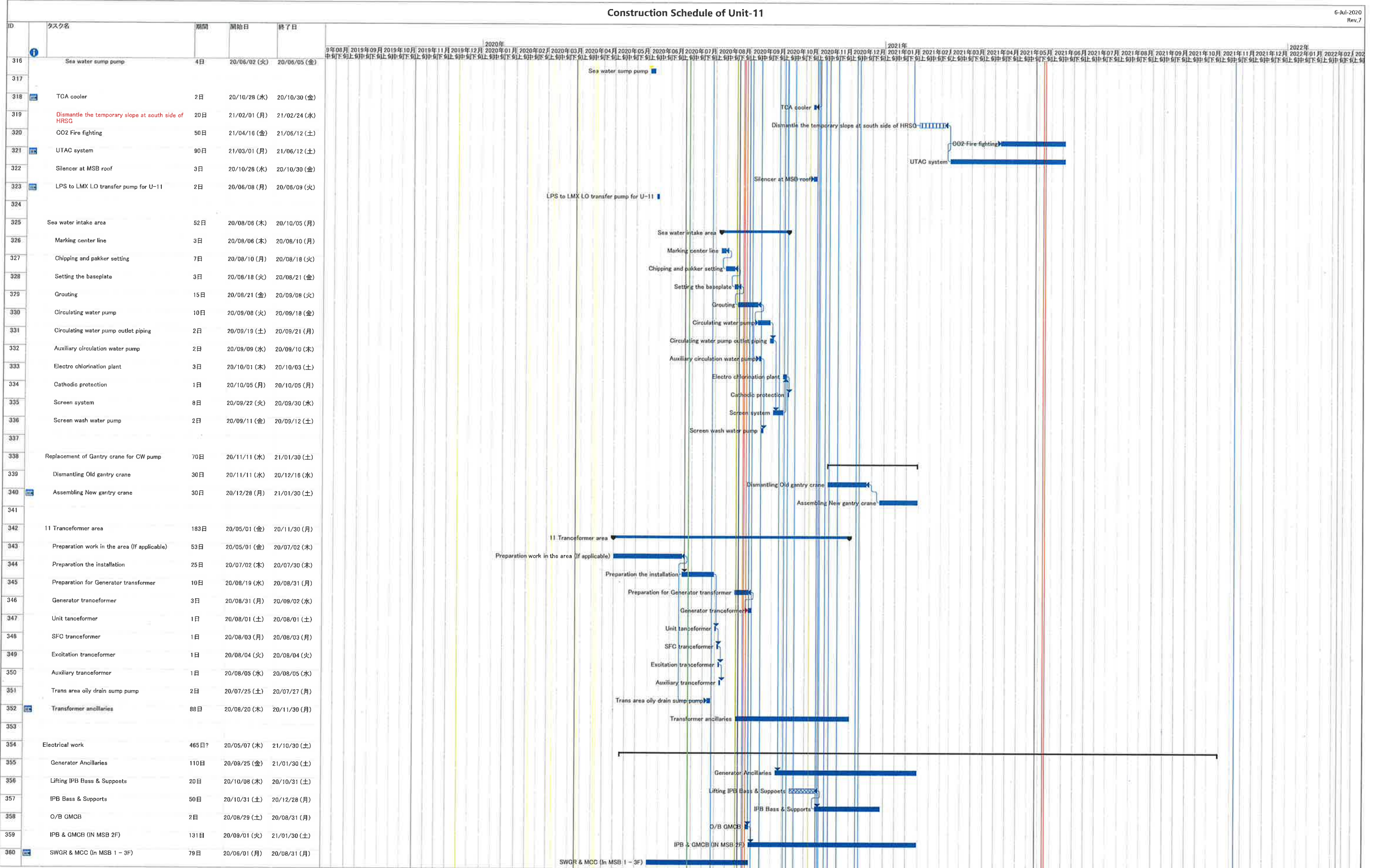
- 1. Change the starting date of installation below
  - Installation HRSG was re-started from 23rd-Jun
  - Installation Exhaust duct was re-started from 15th-May
- 2. To consider that structure of Takasago portion is delayed

- 4. To consider the delay of H/O date from PDC
- 5. Add the schedule of the electric work and the replacement the gantry crane for CWP



Construction Schedule of Unit-11

6-Jul-2020  
Rev.7

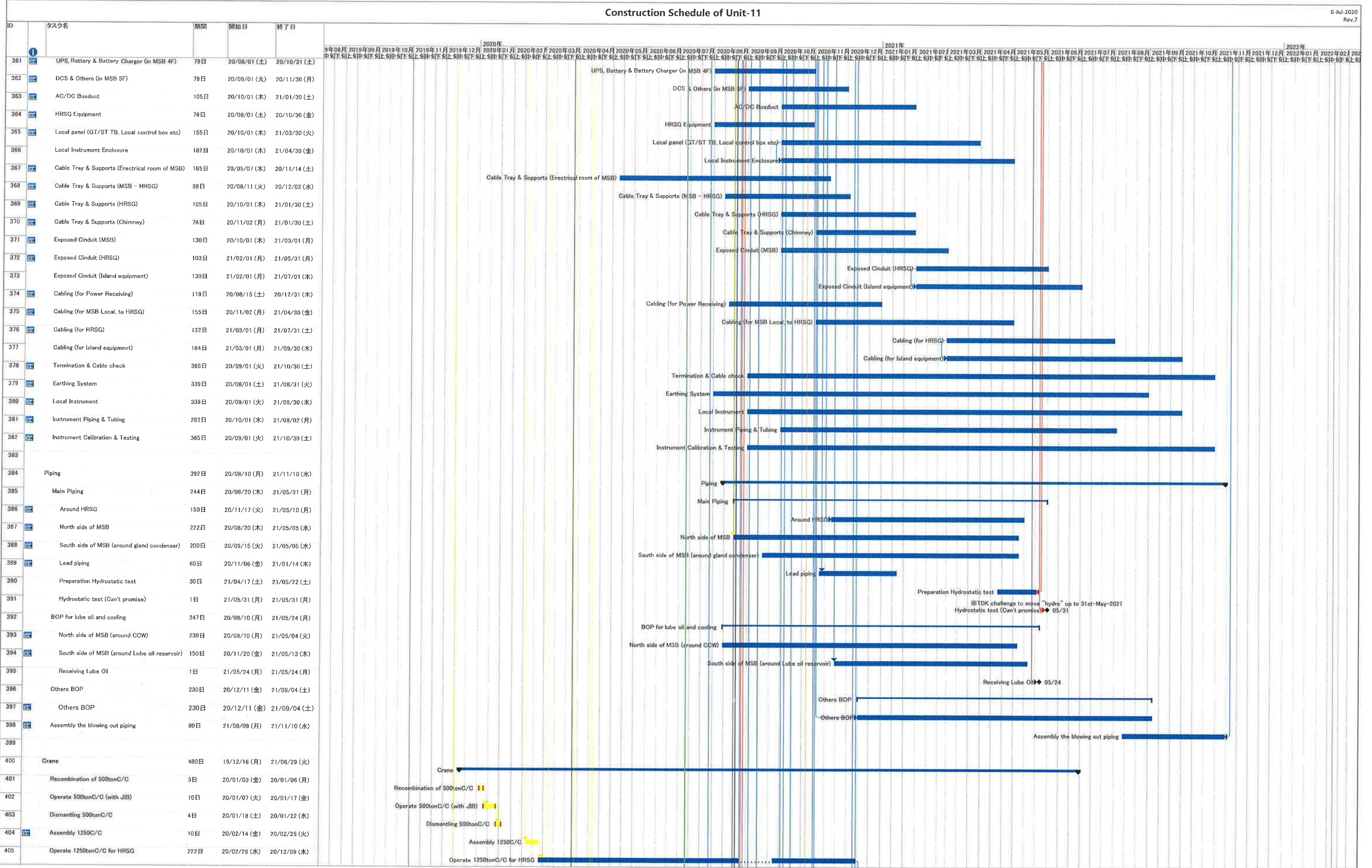


1. Change the starting date of installation below  
 ・ Installation HRSG was re-started from 23rd-Jun  
 ・ Installation Exhaust duct was re-started from 15st-May  
 2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC  
 5. Add the schedule of the electric work and the replacement the gantry crane for CWP

Construction Schedule of Unit-11

6-Jul-2020  
Rev.7



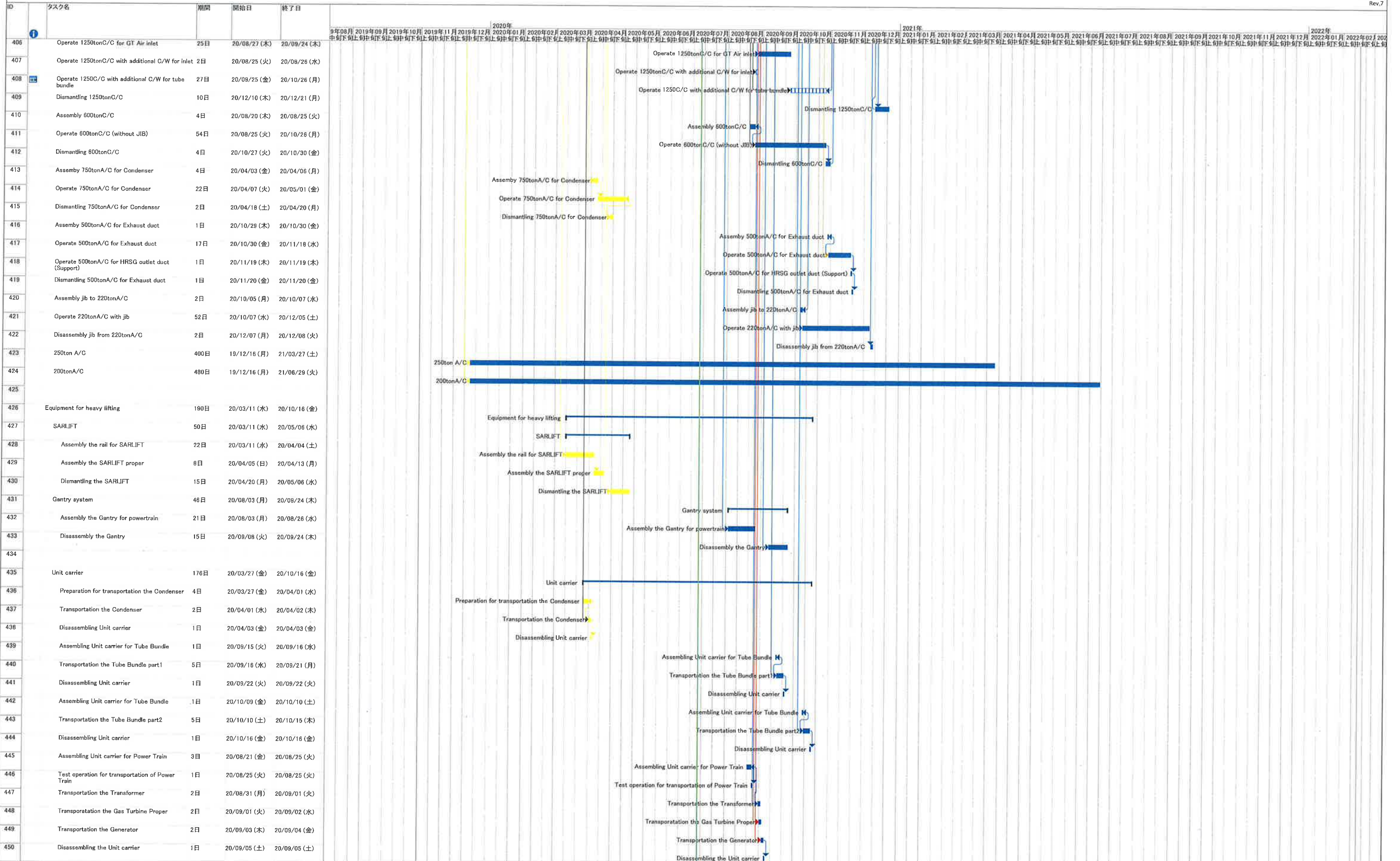
1. Change the starting date of installation below
  - Installation HRSG was re-started from 23rd-Jun
  - Installation Exhaust duct was re-started from 15th-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP



Construction Schedule of Unit-11

6-Jul-2020  
Rev.7



1. Change the starting date of installation below
  - ・ Installation HRSG was re-started from 23rd-Jun
  - ・ Installation Exhaust duct was re-started from 15st-May
2. To consider that structure of Takasago portion is delayed

4. To consider the delay of H/O date from PDC
5. Add the schedule of the electric work and the replacement the gantry crane for CWP





**Contract No. 19/83002 Lamma Power Station Extension Civil and Building Works for Unit L12**

**MASTER PROGRAMME**

ID	Task Name	Duration	2021	Jul	Aug	Sep	Oct
1	<b>KEY DATES &amp; MILESTONES</b>	<b>1123 days</b>					
2	Contract Period	1123 days					
3	Deferred Work Completion Key Dates	784 days					
4	Substantial Completion of the Whole Contract Works (1123 Days)	0 days					
5	<b>SITE POSSESSION DATES</b>	<b>513 days</b>					
6	Site Possession Date as phased site possession plan and PS1.4.2	0 days					
7	Site Possession Date as phased site possession plan and PS1.4.2	0 days					
8	Site Possession Date as phased site possession plan and PS1.4.2	0 days					
9	Site Possession Date as phased site possession plan and PS1.4.2	0 days					
10	Site Possession Date as phased site possession plan and PS1.4.2	0 days					
11	Site Possession Date as phased site possession plan and PS1.4.2	0 days					
12	<b>COMPLETION DATES as per PS1.4.2 Time for Completion</b>	<b>609 days</b>					
13	Section A1 (i) - Area south of L12 MSB and L12 HRSG from GL12-F eastwards leading to Chimney Road at Area F1 & F2	0 days					
14	Section A1 (ii) - Supporting structures for overhead cranes of L12 MSB including the associated roof structure except the roof deferred works	0 days					
15	Section A2 (i) External Works including CW Inlet Culvert at Area F8A	0 days					
16	Section A2 (ii) External Works including CW Inlet Culvert at Area F8B	0 days					
17	Section A2 (iii) External Works including CW Inlet Culvert at Area F8C	0 days					
18	Section B1 - Area south of L12 MSB from GL12-F westwards leading to Station Road at Area F3	0 days					
19	Section B2 (i)- Southern Part of L12 HRSG areas and its surrounding refer to Area F6B as shown in drawing no 553/03/2040 including the foundations for Gas Exhaust Duct	0 days					
20	Section B2 (ii) - Remaining northern part of L12 HRSG area and its surrounding at Area F6A and F6C	0 days					
21	Section B2 - (iii) L12 Turbo Block foundation including the L12 MSB ground floor together with the equipment foundations between GL 12-F to 12-H and 12-1 to 12-6 for the installation of power generator, air inlet duct and lube oil reservoir	0 days					
22	Section B2 - (iv) G/F of L12 MSB including the Condenser Pit, Circulating Water Pipe Pit and equipment foundations between GL 12-B to 12-C and 12-1 to 12-6 for the installation of condenser	0 days					
23	Section C - (i) Roads and external grounds surrounding L12 MSB and L12 HRSG in addition to the southern & eastern areas mentioned above in Area F5	0 days					
24	Section C - (ii) Whole of L12 MSB including the pipe and cable rack along south façade of L12 MSB with all underground utilities at Area F4 including C.W. Inlet and Outlet Culvert except the deferred works	0 days					
25	Section C - (iii) Link Bridge between L11 and L12 MSB including their associated A&A at L11 MSB	0 days					
26	Section D - (i) Microwave Antenna Room and Chimney Windshiled for the installation of microwave equipment and antenna	0 days					
27	Section D (ii) - No. 5 Chimney with L12 Steel Flue liner	0 days					
28	Section E (i) Tx Room of Administration and Control Building	0 days					
29	Section E (ii) - G/F,1/F, 2/F & Hoisting Well of Admin. & Control Building	0 days					
30	Section E (iii) - Whole of Admin. And Control Building	0 days					
31	Section F (i) - Gas Receiving Station and L12 Gas Receiving Station Equipment Room (GRS) Area Extension at Area F14	0 days					
32	Section F (ii) - Pipe and Cable rack and external work at Area F9A and F9B	0 days					
33	Section F (iii) - No. 5 CW Equipment Room, pipe and cable rack, external works at Area F10	0 days					
34	Section G (i) - External Work surrounding Area F11	0 days					
35	Section G (ii) - External Works at Area F12 & F13	0 days					
36	Section G (iii) - FS Modification works along South Seafront Road at Area F15	0 days					
37	Section G (iv) - 275kV cable trenches and External Works at Area F16	0 days					
38	Section G (v) - Shunt Reactor Compound and External Works at Area F17	0 days					
39	Section G (vi) - 275kV cable trenches and External Works at Area F18	0 days					
40	Section G (vii) - Flood Wall at No. 4 CW Intake Area along HUA at Area F20A	0 days					
41	Section G (viii) - Flood wall at No. 5 CW Intake Area along HUA at Area F20B	0 days					
42	Section G (ix) - Bund wall modification works at South Seafront Road at Area F21	0 days					
43	Section G (x) - DAX Cable Diversion Works (from Part I to Part IV)	0 days					
44	Section H - All remaining works shall be completed for reporting completion to BD and ready for OP inspection	0 days					
45	<b>GENERAL &amp; PRELIMINARY</b>	<b>228 days</b>					
46	First Mobilization	18 days					
47	Set up Temporary Site Office and Welfare Facilities	90 days					
48	Permit Applications & Statuary Submissions	120 days					
49	Existing Utilities scanning & Excavation Permit	45 days					
50	Tower Crane erections	60 days					
51	<b>TECHNICAL SUBMISSION AND APPROVAL</b>	<b>314 days</b>					
52	BD Approval & Consent (If required)	0 days					
53	Submission and Approval of Master Programme	14 days					
54	Work Execution Overall Plan submission & approval	14 days					
55	Material Submissions and approval	300 days					
56	Method Statement submission and approval	300 days					
57	BIM Model, CSD & CBWD Submission & approval	120 days					
58	Structure Steelwork Connection Design Submission & BD approval	45 days					
59	Structure Steelwork Shop Drawing & Approval	30 days					
60	Metal Cladding, louvre & windows submission & BD approval	45 days					
61	Metal Cladding, louvre & windows shop drawing submission	45 days					
62	Order, Off Site Fabrication and Delivery (S. Steel & Cladding & louvres)	120 days					
63	ELS Submission and BD approval	90 days					
64	No. 5 Chimney windshield temporary work submission, approval & fabrication	60 days					
65	Steel Flue Assessment Report and Design Drawings submission & approval	60 days					
66	Folding Shutters Shop Drawing Submission & Approval	30 days					
67	Fabrication & Delivery of Folding Shutters	180 days					
68	Sewage Pump System Design submission & approval	45 days					
69	Fabrication & Delivery of Sewage Pump	180 days					
70	Other material submission & approval & delivery	180 days					
71	Other material submission & approval & delivery	180 days					
72	<b>CONSTRUCTION</b>	<b>1123 days</b>					
73	<b>Coordination with the Employer's Specialist Contractors</b>	<b>421 days</b>					
74	Installation of Puddle Pipes at C.W. outlet Culvert	7 days					
75	Installation of Puddle Pipes at C.W. Inlet Culvert	7 days					
76	Template setting at L12 Turbo Block Foundation	45 days					
77	Template setting of holding down bolts at HRSG column base	45 days					
78	I-beam / channel base installation on top of transformer foundations at Transformer Area	45 days					
79	Overhead crane erection at turbine hall using access through a temporary opening at L12 MSB roof between GL12-G to 12-H and 12-2 to 12-6	38 days					
80	Condenser assembly and erection using access through a temporary façade opening at L12 MSB below 1/F along GL 12-6 from GL12-B to 12-C including a clear space below 1/F between GL 12-B to 12-C	122 days					
81	Installation of power train equipment including air inlet duct using access through a temporary façade opening at L12 MSB below 1/F along GL 12-6 from GL12-F to 12-H including a clear space below 1/F of the above area	121 days					
82	Installation of embedded materials such as holding down bolts for equipment foundations - Commencement	0 days					
83	<b>Section A1 (i) - Area south of L12 MSB and L12 HRSG from GL12-F eastwards leading to Chimney Road at Area F1 &amp; F2</b>	<b>301 days</b>					
84	Area Possession & Clearance	30 days					
85	Subletting / Fabrication / Delivery (both for Area F1 and Area F2)	60 days					
86	Excavation for CW Inlet Culvert (Type D Construction Area)	14 days					
87	Installation CW Inlet Culvert pipe + testing	30 days					
88	Construction of Thrust Box & Manholes,etc	14 days					
89	Backfill	14 days					
90	Construction UG Utilities 2m deep below further surface	30 days					
91	Temporary Paving and handover for plant erection	13 days					
92	<b>Section A1 (ii) - Supporting structures for overhead cranes of L12 MSB including the associated roof structure except the roof deferred works</b>	<b>301 days</b>					
93	Area Possession & Clearance	45 days					
94	Subletting / Fabrication / Delivery	210 days					
95	Complete structural steel erection	0 days					
96	Install Crane Girders	18 days					
97	Construction of roof slab (except defer work)	21 days					
98	Touch up and handover for install overhead cranes	3 days					
99	<b>Section A2 (i) External Works including CW Inlet Culvert at Area F8A</b>	<b>301 days</b>					
100	BD consent for Sheetpile installation	30 days					

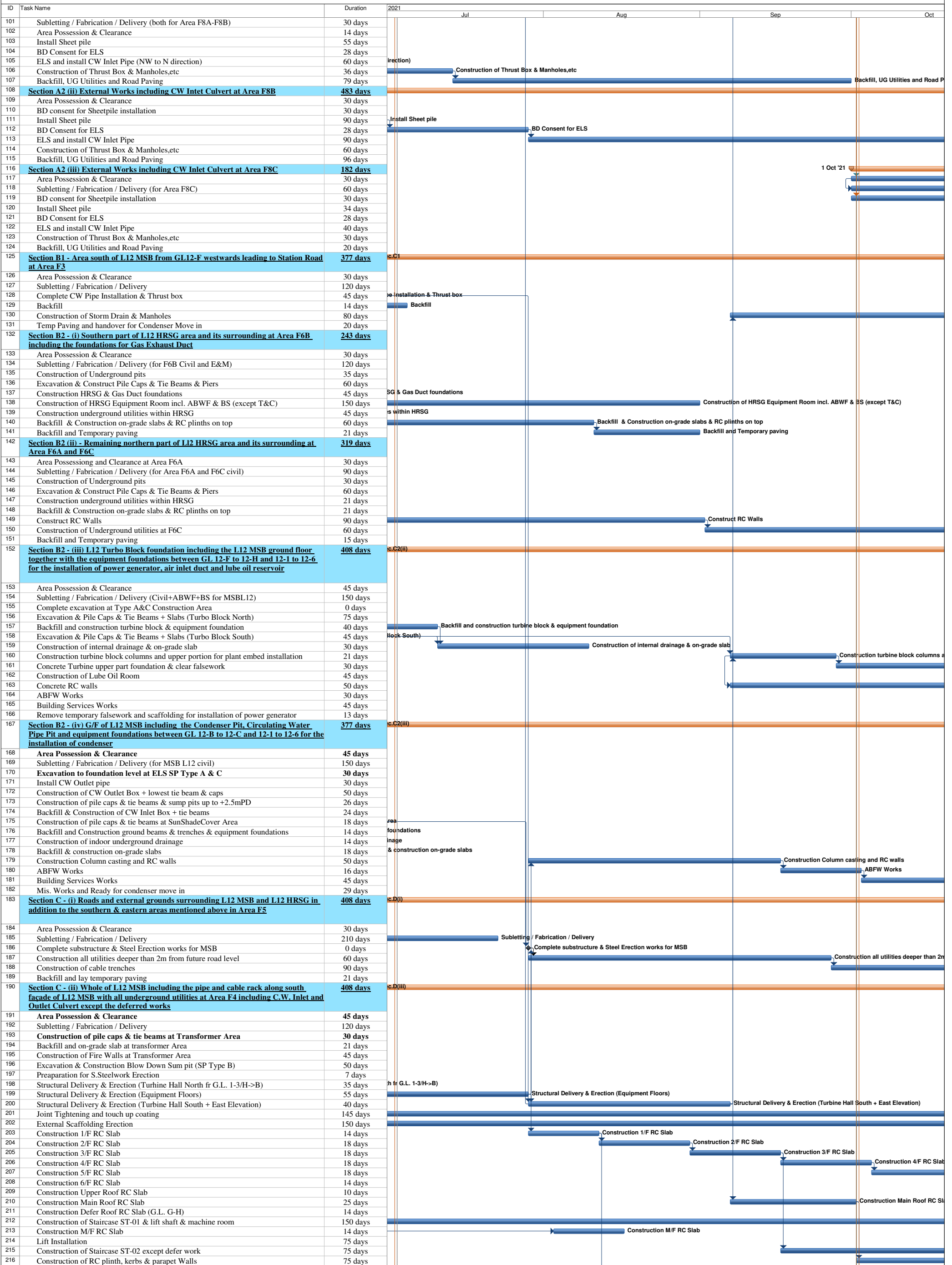
REVISED MASTER PROGRAMME  
4 JAN 2021 Rev. 1-A



Task  Split  Milestone  Summary 


Contract No. 19/83002 Lamma Power Station Extension Civil and Building Works for Unit L12

MASTER PROGRAMME



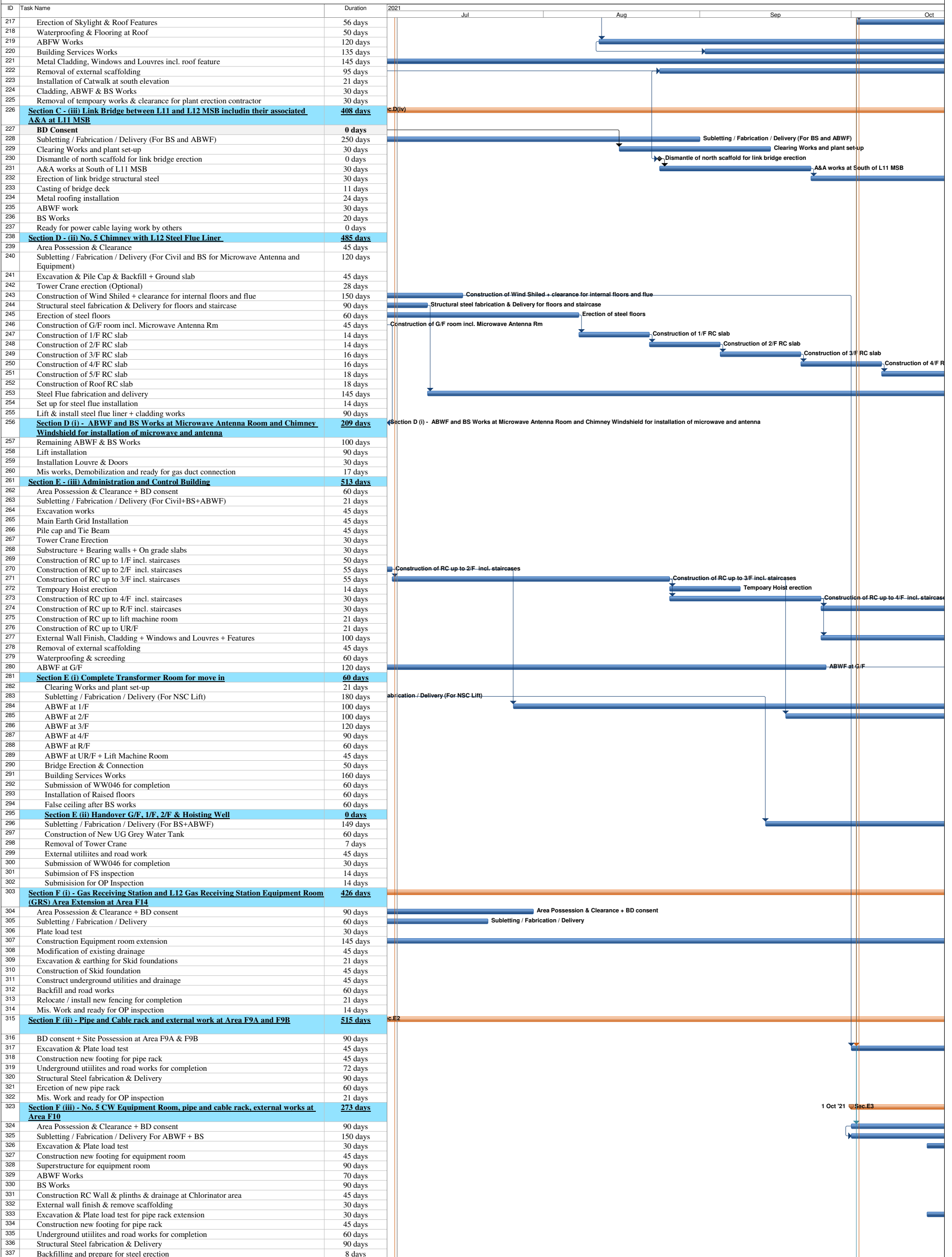
REVISED MASTER PROGRAMME  
4 JAN 2021 Rev. 1-A



Task  Split  Milestone  Summary 

Contract No. 19/83002 Lamma Power Station Extension Civil and Building Works for Unit L12

MASTER PROGRAMME










Contract No. 19/83002 Lamma Power Station Extension Civil and Building Works for Unit L12

MASTER PROGRAMME

ID	Task Name	Duration	2021	Jul	Aug	Sep	Oct
338	Erection of new pipe rack	70 days					
339	Mis. Work and ready for OP inspection	15 days					
340	<b>Section G (i) - External Work surrounding Area F11</b>	<b>153 days</b>					
341	Area Possession & Clearance after handover from No. 5 Intake Contractor	30 days					
342	Subletting / Fabrication / Delivery	30 days					
343	Submission WWO046 for commencement	30 days					
344	Construct Underground utilities and drainage	30 days					
345	Install new FS Hydrant	20 days					
346	Submission WWO046 for completion	30 days					
347	Construction Road extension	58 days					
348	Construction road paving and install fencing	30 days					
349	Ready for OP inspection	15 days					
350	<b>Section G (ii) - External Works at Area F12 &amp; F13</b>	<b>666 days</b>					
351	Area Possession & Clearance after handover from other	45 days					
352	Subletting / Fabrication / Delivery	180 days					
353	Excavation	21 days					
354	Submission WWO046 for commencement	30 days					
355	Construct Underground utilities and drainage	90 days					
356	Install new FS Hydrant	30 days					
357	Submission WWO046 for completion	30 days					
358	Construction Road extension	127 days					
359	Complete with Mis. Works for completion	15 days					
360	<b>Section G (iii) - FS Modification works along South Seafront Road at Area F15</b>	<b>183 days</b>					
361	Area Possession & Clearance after handover from other	45 days					
362	Subletting / Fabrication / Delivery	21 days					
363	Temporary Traffic Arrangement approval	14 days					
364	Utilities scanning and expose existing FS	14 days					
365	Determine new FS alignment	21 days					
366	Submission to FSD	14 days					
367	Modification of FS	60 days					
368	Backfill and reinstatement + report to FSD	60 days					
369	<b>Section G (iv) - 275kV cable trenches and External Works at Area F16</b>	<b>518 days</b>					
370	Area Possession & Clearance	60 days					
371	Subletting / Fabrication / Delivery	210 days					
372	Temporary Traffic Arrangement approval	60 days					
373	Removal of aboveground services	60 days					
374	Utilities scanning and expose existing UU	30 days					
375	Arrange of diversion existing UG utilities	90 days					
376	Construct new cable trenches	173 days					
377	Realignment / install new UG utilities	60 days					
378	backfill and reinstatement & ready for cable laying by others	45 days					
379	<b>Section G (v) - Shunt Reactor Compound and External Works at Area F17</b>	<b>666 days</b>					
380	Temporary Traffic Arrangement approval	45 days					
381	Subletting / Fabrication / Delivery	100 days					
382	BD approval & consent for sheetpile installation	90 days					
383	Area Possession & Clearance	14 days					
384	Removal of aboveground services	21 days					
385	Utilities scanning and expose existing UU	15 days					
386	Arrange of diversion existing UG utilities	45 days					
387	Install pipe piles	61 days					
388	BA14 for pipepile and BD consent for ELS	28 days					
389	Excavation & install earthing	35 days					
390	Construct Pile Caps and Tie Beams	45 days					
391	Backfill & Erect scaffold	21 days					
392	Construction of SRC Walls	75 days					
393	Wall finish and remove scaffolding	24 days					
394	Construct new cable trenches	60 days					
395	Realignment / install new UG utilities	117 days					
396	backfill and reinstatement & ready for cable laying by others	30 days					
397	<b>Section G (vi) - 275kV cable trenches and External Works at Area F18</b>	<b>397 days</b>					
398	Temporary Traffic Arrangement approval	45 days					
399	Subletting / Fabrication / Delivery	60 days					
400	Area Possession & Clearance	15 days					
401	Removal of aboveground services	30 days					
402	Utilities scanning and expose existing UU	45 days					
403	Arrange of diversion existing UG utilities	60 days					
404	Construct new cable trenches	172 days					
405	Realignment / install new UG utilities	45 days					
406	backfill and reinstatement & ready for cable laying by others	30 days					
407	<b>Section G (vii) - Flood wall at No. 5 CW Intake Area along HUA at Area F20A</b>	<b>301 days</b>					
408	Area Possession & Clearance	30 days					
409	Subletting / Fabrication / Delivery	60 days					
410	Temporary Traffic Arrangement approval	14 days					
411	ELS BD approval & consent	90 days					
412	Demolition of existing carriageway	30 days					
413	Removal of aboveground services	21 days					
414	Utilities scanning and expose existing UU	21 days					
415	Arrange of diversion existing UG utilities	30 days					
416	Install Sheet piles	45 days					
417	BA14 for sheetpile and BD consent for ELS	28 days					
418	Excavation and construction of new Flood wall	65 days					
419	Realignment / install new UG utilities	30 days					
420	backfill and construct new carriageway	18 days					
421	Mis. Work for completion	6 days					
422	<b>Section G (viii) - Flood wall at No. 5 CW Intake Area along HUA at Area F20B</b>	<b>365 days</b>					
423	Area Possession & Clearance	45 days					
424	Subletting / Fabrication / Delivery	90 days					
425	Temporary Traffic Arrangement approval	14 days					
426	ELS BD approval & consent	90 days					
427	Demolition of existing carriageway	60 days					
428	Removal of aboveground services	21 days					
429	Utilities scanning and expose existing UU	21 days					
430	Arrange of diversion existing UG utilities	30 days					
431	Install Sheetpiles	55 days					
432	BA14 for sheetpile and BD consent for ELS	28 days					
433	Excavation and construction of new Flood wall	90 days					
434	Realignment / install new UG utilities	30 days					
435	backfill and construct new carriageway	21 days					
436	Mis. Work for completion	9 days					
437	<b>Section G (ix) - Bund wall modification works at South Seafront Road at Area F21</b>	<b>209 days</b>					
438	Area Possession & Clearance	45 days					
439	Subletting / Fabrication / Delivery	90 days					
440	Temporary Traffic Arrangement approval	14 days					
441	ELS BD approval & consent	0 days					
442	Demolition of existing carriageway	14 days					
443	Removal of aboveground services	14 days					
444	Utilities scanning and expose existing UU	21 days					
445	Arrange of diversion existing UG utilities	30 days					
446	Excavation and expose existing bund wall & demolish	18 days					
447	Construction new bund wall for road junction	45 days					
448	Realignment / install new UG utilities	30 days					
449	backfill and construct new carriageway	18 days					
450	Mis. Work for completion	5 days					
451	<b>Section G (x) - DAX Cable Diversion Works (from Part I to Part IV)</b>	<b>758 days</b>					
452	Temporary Traffic Arrangement approval	14 days					
453	Subletting / Fabrication / Delivery	90 days					
454	Area Possession & Clearance	45 days					
455	Identification of existing cable trench	7 days					
456	Part 1 Re-excavation works incl. construction of joint bay	246 days					
457	Part 2 Re-excavation works incl. joint bay	120 days					
458	Part 3 Re-excavation works incl. joint bay	242 days					
459	Part 4 Re-excavation works incl. joint bay & new oil tank pits	92 days					
460	Backfill & Reinstatement Part 1	61 days					

REVISED MASTER PROGRAMME  
4 JAN 2021 Rev. 1-A



Task  Split  Milestone  Summary 

**Contract No. 19/83002 Lamma Power Station Extension Civil and Building Works for Unit L12**

**MASTER PROGRAMME**

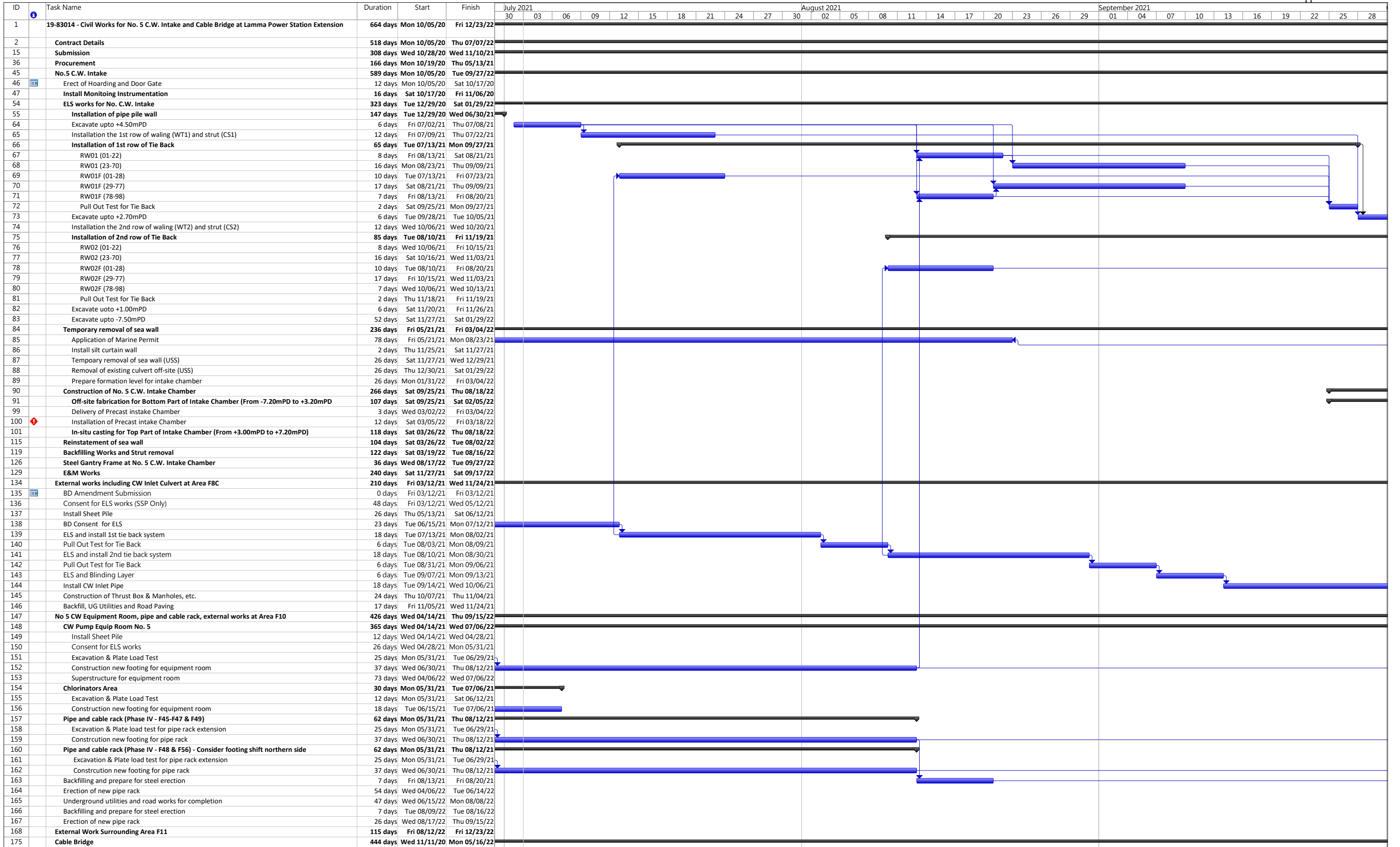
ID	Task Name	Duration	2021	Jul	Aug	Sep	Oct
461	Backfill & Reinstatement Part 2	61 days					
462	Backfill & Reinstatement Part 3	61 days					
463	<b>Section H - All remaining works shall be completed for reporting completion to BD and ready for OP inspection (PS1.4.4)</b>	<b>478 days</b>					
464	<b>Deferred works (MSB &amp; HRSB) Listed in PS 1.4.4</b>	<b>281 days</b>					
465	Construction of L12 MSB roof between GL12-G to 12-H and 12-2 to 12-6 after the overhead crane installation by the Employer's Specialist Contractors	38 days					
466	Construction of walls of L12 MSB below 1/F along GL 12-6 from GL12-B to 12-C and the associated staircases including the enclosure walls between G/F and 1/F. The Contractor shall allow access for the Employer's Specialist Contractors to use the hoisting we	92 days					
467	Provision in associated with hoisting well	21 days					
468	Construction of internal partition wall at 1/F of L12 MSB along GL 12-C from GL 12-2 to 12-3 AND North Façade at 1/F of L12 MSB along GL 12-1 from GL 12-B to 12-C	30 days					
469	Construction of metal fence and the associated Fire Services (F.S.) installations and installation of removable shelter at Transformer Area	92 days					
470	<b>Deferred works (DAX1 and DAX2 ) Listed in PS 1.4.4</b>	<b>334 days</b>					
471	Backfilling of whole DAX1 compartment inside existing joint bay "STJ12" and the new oil tank pit A located aside existing joint bay "STJ12".	59 days					
472	Re-excavation of whole DAX2 compartment inside existing joint bay "STJ12".	61 days					
473	Backfilling of whole DAX2 compartment inside existing joint bay "STJ12" and the new oil tank pit B located aside existing joint bay "STJ12".	61 days					
474	<b>Deferred works (External Work) Listed in PS 1.4.4</b>	<b>121 days</b>					
475	Final reinstatement of access roads and pavement surrounding and within L12 MSB and L12 HRSB area	62 days					
476	Installation of trench cover and road reinstatement of gas pipe and cable trenches within Area F5, F14, F16, F17 and F18.	90 days					
477	Backfilling and road-reinstatement of 275kV cable trenches	90 days					
478	All Remaining work ready for OP inspection	0 days					
479	<b>STATUTORY SUBMISSION, INSPECTION &amp; APPROVAL</b>	<b>865 days?</b>					
480	<b>WSD Statutory Submission, Inspection and Approval WWO Part I to III Submission / Approval</b>	<b>256 days</b>					
481	WSD : Submit to WSD Form WWO 046 Part I to II - FOR ACB Building (for Ext Works at later stage)	0 days					
482	WSD: Vetting Form WWO 046 Part I and II Submission	90 days					
483	WSD: Issued of Form WWO 046 Part III by WSD - FOR ACB Building	0 days					
484	WSD: Prepare for 1st Amendment for Plumbing Plan	60 days					
485	WSD: Submit to WSD 1st Amendment for Plumbing Plan	0 days					
486	WSD: Vetting of Plumbing Plan by WSD	60 days					
487	WSD: 1st Approval for Plumbing Plan by WSD	0 days					
488	WSD: Prepare and Submit for Final Amendment for Plumbing Plan	45 days					
489	WSD: Vetting and Final Approval for Plumbing Plan by WSD	0 days					
490	<b>WSD Statutory Submission, Inspection and Approval WWO Part IV to V Fire Services Water Submission / Approval</b>	<b>34 days?</b>					
491	WSD: Form WWO 046 Part IV Submission (FS)	0 days					
492	WSD: WSD Received Form WWO046 Part IV and arrange for inspection (FS)	7 days					
493	WSD: WSD Inspection (FS)	7 days					
494	WSD: WWO 046 Part V Endorsement by WSD (FS)	12 days					
495	WSD: WSD Processing Water Supply Connection Certificate (FS)	7 days					
496	WSD: Issue by WSD Water Supply Connection Certificate (FS)	0 days?					
497	<b>WSD Statutory Submission, Inspection and Approval WWO Part IV to V Potable /Flush Water Submission / Approval</b>	<b>60 days</b>					
498	WSD: Form WWO 046 Part IV Submission (Fresh/Flush)	0 days					
499	WSD: WSD Acknowledge Form WWO 046	6 days					
500	WSD: WSD Inspection with Testing to lead (Fresh/Fluhs)	12 days					
501	WSD: Cleansing/Disinfecting Water Tanks / Piping System (Fresh/Flush)	6 days					
502	WSD: Collection of Sample for Testing at Accredited Lab (Fresh/Flush)	12 days					
503	WSD: Accredited Lab Testing Report of Sample to WSD	12 days					
504	WSD: Vetting of Test Report by WSD	6 days					
505	WSD: Issue of WWO 046 Part V (Fresh/Flush)	0 days					
506	WSD: WSD Processing WW01005 Water Certification (Fresh/Flush)	6 days					
507	WSD: Issue by WSD WWO 1005 Water Certification (Fresh/Flush)	0 days					
508	<b>EMSD LIFT Statutory Submission, Inspection and Approval</b>	<b>45 days</b>					
509	EMSD: Submission of Lift Form LE5 to EMSD	12 days					
510	EMSD: EMSD Makes arrangement for Lift Installation	5 days					
511	EMSD: EMSD Inspection to Lift Installation	14 days					
512	EMSD: Processing Lift Certificate (Form LE6)	14 days					
513	EMSD: Lift Issuance of Form 6 (Lift Certificate)	0 days					
514	<b>HKE Transformer Final Inspection</b>	<b>120 days</b>					
515	TX Room: Invite HKE For Transformer Room Inspection	7 days					
516	TX Room: Give Access to Transformer Room for HKE Contractor	0 days					
517	TX Room: Move-IN HKE Transformer Equipments	5 days					
518	TX Room: Install HKE Transformer, MEP Works & Testing	90 days					
519	TX Room: HKE Power Energization / Inspection	6 days					
520	TX Room: Metering Installation	12 days					
521	TX Room: HKE Power-ON Date	0 days					
522	<b>DSD Drainage Completion Memo</b>	<b>65 days</b>					
523	DSD: CCTV Survey Report on Completed Drainage	30 days					
524	DSD: Submitted CCTV Report & Form HPB1 of Completed Drainage to DSD For Technical Audit	7 days					
525	DSD: Completed Drainage System including TMC Inspection/Technical Audit by DSD	14 days					
526	DSD: Preparation of Drainage Connection Completion Memo by DSD	14 days					
527	DSD: Issue of Drainage Connection Completion Memo by DSD	0 days					
528	<b>EPD Submission, Inspection and Approval</b>	<b>60 days</b>					
529	EPD: License Application to EPD under APCO (Cap 311) for Generator Sets	0 days					
530	EPD: Vetting of Application by EPD under APCO (Cap 311) for Generator Sets	60 days					
531	EPD: Approval from EPD under APCO (Cap 311) for Generator Sets Installation	0 days					
532	<b>FSD VAC Statutory Submission, Inspection and Approval</b>	<b>150 days</b>					
533	Preparation of FSD VAC Drawings and Submission to HEC	60 days					
534	HEC: Review and Approval	30 days					
535	Preparation of VAC Drawings and Submission to FSD	30 days					
536	FSD: Review and Approval	30 days					
537	<b>FSD Statutory Submission, Inspection and Approval</b>	<b>91 days</b>					
538	Testing and Commissioning (Individual System - FSI Related)	45 days					
539	FSD: All Sections FS Ingration Test by NSC_BS	15 days					
540	FSD: Completion of FS Integration Test by NSC_BS for FS314/501	0 days					
541	FSD: Submit Form 213/314 & Form 501 Request for Inspection	0 days					
542	FSD: FSD Makes Arrangement for Inspection	7 days					
543	FSD: FSD Inspection	12 days					
544	FSD: Completion of FS Inspection	0 days					
545	FSD: FSD Processing FS Certificate Form 172	12 days					
546	FSD: Issue of Fire Services FS Certificate Form 172	0 days					
547	<b>PRACTICAL COMPLETION</b>	<b>216 days</b>					
548	<b>BD Inspection</b>	<b>97 days</b>					
549	BD: Application Form BA13 for OP Application	21 days					
550	BD: BD Inspection Date	15 days					
551	BD: Reinspection date with defects and rectification works	60 days					
552	<b>BD: Obtain Occupation Permit (OP) from BD</b>	<b>1 day</b>					
553	<b>As-Built Drawings &amp; Handover Documentation</b>	<b>120 days</b>					
554	Prepare and Submit As-Built Drawings & Handover Documentation	45 days					
555	Review and Approval	45 days					
556	As-Built Drawings & Handover Documentation - Revision by MC	30 days					
557	Revised As-Built Drawings & Handover Documentation - Final Submission	0 days					
558	<b>Completion of the Whole Contract Works</b>	<b>119 days</b>					
559	1st Client Inspection for Review and Comments	30 days					
560	Defects and Rectification works	60 days					
561	2nd Client Inspection	14 days					
562	Minor Defects Rectification Works and Final Inspection	15 days					
563	<b>PRACTICAL COMPLETION</b>	<b>0 days</b>					

REVISED MASTER PROGRAMME  
4 JAN 2021 Rev. 1-A



Task  Split  Milestone  Summary 





Project: 19-83014 - No. 5 Intake and Cable Br  
 Date: 23 Jan 2021  
 Rev. 2(a) - Combined L12 Area (Draft)

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

ID	Task Name	Duration	Start	Finish	July 2021							August 2021							September 2021																
					30	03	06	09	12	15	18	21	24	27	30	02	05	08	11	14	17	20	23	26	29	01	04	07	10	13	16	19	22	25	28
1	<b>19-83014 - Civil Works for No. 5 C.W. Intake and Cable Bridge at Lamma Power Station Extension</b>	<b>518 days</b>	<b>Mon 10/05/20</b>	<b>Thu 07/07/22</b>																															
2	<b>Contract Details</b>	<b>518 days</b>	<b>Mon 10/05/20</b>	<b>Thu 07/07/22</b>																															
15	<b>Submission</b>	<b>308 days</b>	<b>Wed 10/28/20</b>	<b>Wed 11/10/21</b>																															
36	<b>Procurement</b>	<b>166 days</b>	<b>Mon 10/19/20</b>	<b>Thu 05/13/21</b>																															
45	<b>Cable Bridge</b>	<b>442 days</b>	<b>Wed 11/11/20</b>	<b>Fri 05/13/22</b>																															
46	Erect of Hoarding and Door Gate	12 days	Wed 11/11/20	Tue 11/24/20																															
47	Install Monitoring Instrumentation	2 days	Wed 11/25/20	Thu 11/26/20																															
54	<b>Pile Cap Construction</b>	<b>196 days</b>	<b>Wed 12/30/20</b>	<b>Sat 08/28/21</b>																															
55	<b>LPS Pile Cap (PC5)</b>	<b>80 days</b>	<b>Thu 01/21/21</b>	<b>Mon 05/03/21</b>																															
56	Excavation to F.E.L. by open cut (From +4.50mPD to +1.95mPD)	42 days	Thu 01/21/21	Sat 03/13/21																															
57	Socket H-pile head treatment (14 nos)	6 days	Mon 03/15/21	Sat 03/20/21																															
58	Construction of Pile Cap PC5	26 days	Mon 03/22/21	Sat 04/24/21																															
59	Backfilling to pile cap level	6 days	Mon 04/26/21	Mon 05/03/21																															
60	<b>LMX Pile Cap (PC6)</b>	<b>196 days</b>	<b>Wed 12/30/20</b>	<b>Sat 08/28/21</b>																															
61	Expose existing 275kV cable trench by hand dig method	12 days	Wed 12/30/20	Wed 01/13/21																															
62	Install pipe pile (P1-P47)	24 days	Thu 01/28/21	Sat 02/27/21																															
63	Submission of BA14, as-built plan and record	14 days	Mon 03/01/21	Tue 03/16/21																															
64	BD Excavation Consent	0 days	Tue 04/20/21	Tue 04/20/21																															
65	Excavate to 500mm below strut level	6 days	Wed 04/21/21	Tue 04/27/21																															
66	Install waling system (W1)	6 days	Wed 04/28/21	Wed 05/05/21																															
67	Excavate to F.E.L.	12 days	Thu 05/06/21	Thu 05/20/21																															
68	Trimming to COL for Dia 2180mm Bored Pile (8nos)	26 days	Fri 05/21/21	Mon 06/21/21																															
69	Construction of Pile Cap PC6	52 days	Tue 06/22/21	Sat 08/21/21																															
70	Backfilling to pile cap level	6 days	Mon 08/23/21	Sat 08/28/21																															
71	Existing Seawall modification works (USS)	26 days	Mon 08/23/21	Tue 09/21/21																															
72	<b>Construction of Cable Bridge</b>	<b>326 days</b>	<b>Wed 04/07/21</b>	<b>Fri 05/13/22</b>																															
73	<b>Off-site precast beam construction (PCB1-PCB12)</b>	<b>142 days</b>	<b>Wed 04/07/21</b>	<b>Fri 09/24/21</b>																															
74	<b>Type 2 (PCB6 - PCB12)</b>	<b>88 days</b>	<b>Wed 04/07/21</b>	<b>Thu 07/22/21</b>																															
75	PCB12	20 days	Wed 04/07/21	Thu 04/29/21																															
76	PCB11	20 days	Fri 04/23/21	Mon 05/17/21																															
77	PCB10	20 days	Tue 05/11/21	Thu 06/03/21																															
78	PCB9	16 days	Fri 05/28/21	Wed 06/16/21																															
79	PCB8	16 days	Wed 06/09/21	Mon 06/28/21																															
80	PCB7	16 days	Tue 06/22/21	Sat 07/10/21																															
81	PCB6	16 days	Mon 07/05/21	Thu 07/22/21																															
82	<b>Type 1 (PCB1 - PCB5)</b>	<b>60 days</b>	<b>Fri 07/16/21</b>	<b>Fri 09/24/21</b>																															
83	PCB5	16 days	Fri 07/16/21	Tue 08/03/21																															
84	PCB4	16 days	Wed 07/28/21	Sat 08/14/21																															
85	PCB3	16 days	Mon 08/09/21	Thu 08/26/21																															
86	PCB2	16 days	Fri 08/20/21	Tue 09/07/21																															
87	PCB1	20 days	Wed 09/01/21	Fri 09/24/21																															
88	Application of Marine Permit	78 days	Tue 06/22/21	Thu 09/23/21																															
89	Erect precast beam (PCB1-PCB12)	16 days	Thu 09/23/21	Tue 10/12/21																															
90	Construction of Diaphragm Beams (DB7-DB11)	36 days	Wed 10/13/21	Wed 11/24/21																															
91	Stage 2 PT Stressing	6 days	Thu 12/02/21	Wed 12/08/21																															
92	Construction of 200mm thk R.C. Middle Slab	36 days	Thu 12/09/21	Sat 01/22/22																															
93	Installation of Precast Panel (for planter and kerb)	52 days	Mon 01/24/22	Mon 03/28/22																															
94	Casting of 250mm thk R.C. Top Slab	18 days	Tue 03/08/22	Mon 03/28/22																															
95	Road paving work	24 days	Mon 04/11/22	Fri 05/13/22																															
96	Installation of steel parapet	24 days	Mon 04/11/22	Fri 05/13/22																															
97	<b>Construction of Abutment at LPS</b>	<b>114 days</b>	<b>Thu 12/09/21</b>	<b>Tue 05/03/22</b>																															
98	Construction of Shear Key NSK2	12 days	Thu 12/09/21	Wed 12/22/21																															
99	Construction of End Beam EB1	40 days	Thu 12/23/21	Mon 02/14/22																															
100	Construction of Shear Key NSK1	18 days	Tue 02/15/22	Mon 03/07/22																															
101	Construction of Abutment Wall AW2	18 days	Tue 03/08/22	Mon 03/28/22																															
102	Construction of Retaining Wall (Type 1, RWA & RWB)	26 days	Tue 03/29/22	Tue 05/03/22																															
103	Construction of Retaining Wall (Type 2, RWA & RWB)	26 days	Tue 03/29/22	Tue 05/03/22																															
104	<b>Construction of Abutment at LMX</b>	<b>110 days</b>	<b>Thu 12/09/21</b>	<b>Wed 04/27/22</b>																															
105	Construction of Shear Key SSK1	12 days	Thu 12/09/21	Wed 12/22/21																															
106	Construction of End Beam EB2	26 days	Thu 12/23/21	Tue 01/25/22																															
107	Construction of maintenance chamfer	18 days	Wed 01/26/22	Fri 02/18/22																															
108	Construction of Abutment Wall AW1	18 days	Sat 02/19/22	Fri 03/11/22																															
109	Construction of late cast portion of pile cap PC6	18 days	Sat 03/12/22	Fri 04/01/22																															
110	Cast mass concrete retaining wall and planter end wall	18 days	Sat 04/02/22	Wed 04/27/22																															
111	<b>Stormwater Drainage</b>	<b>32 days</b>	<b>Tue 03/29/22</b>	<b>Wed 05/11/22</b>																															
112	Gully Pit (GP1-GP8 & GP11-GP18)	32 days	Tue 03/29/22	Wed 05/11/22																															
113	<b>E&amp;M works</b>	<b>32 days</b>	<b>Tue 03/29/22</b>	<b>Wed 05/11/22</b>																															
114	Street Lighting (Total 6 nos.)	26 days	Tue 03/29/22	Tue 05/03/22																															
115	Irrigation Water Point (WP210-WP212)	26 days	Tue 03/29/22	Tue 05/03/22																															
116	Fire Hydrant Box	26 days	Tue 03/29/22	Tue 05/03/22																															
117	Cable Trench	32 days	Tue 03/29/22	Wed 05/11/22																															

Project: 19-83014 - No. 5 Intake and Cable Br  
 Date: 23 Jan 2021  
 Rev. 2(a) - Combined L12 Area (Draft)

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