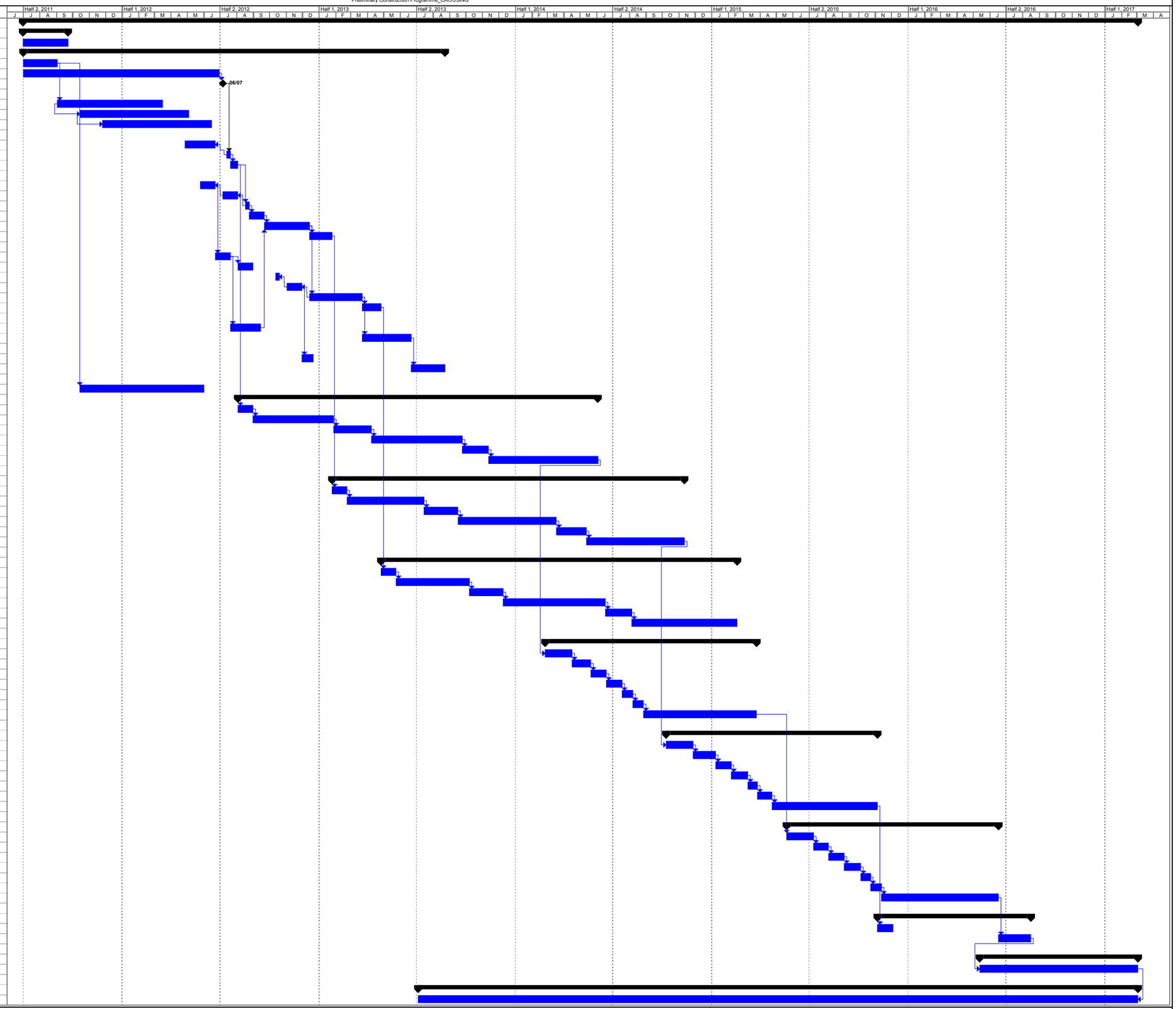
VARIANTS 8 & 9 – DIAMOND TOWER WITH LADDER BEAM DECK

Forth Replacement Crossing
Preliminary Construction Programme_CROSSING

ID	Task Name	Duration	Start	Finish	Predecessors
1	**D2M Variant 8 & 9 - Diamond Tower - Ladder Beam - Composite**	**1394.75 days**	**Fri 01/07/11**	**Fri 03/03/17**	
2	**Mobilisation and Site Clearance**	**60 days**	**Fri 01/07/11**	**Thu 22/09/11**	
3	Mobilisation and Site Clearance	60 days	Fri 01/07/11	Thu 22/09/11	
4	**Foundations**	**530 days**	**Fri 01/07/11**	**Fri 23/08/13**	
5	Dry Dock Mobilisation	45 days	Fri 01/07/11	Fri 02/09/11	
6	Dry dock for CT, NT and ST	245 days	Fri 01/07/11	Fri 29/06/12	
7	Dry dock open	0 days	Fri 06/07/12	Fri 06/07/12	6FS+5 days
8					
9	Cast NT	130 days	Fri 02/09/11	Fri 16/03/12	5
10	Cast ST	130 days	Fri 14/10/11	Fri 04/05/12	9SS+30 days
11	Cast CT	130 days	Fri 25/11/11	Fri 15/06/12	10SS+30 days
12					
13	Excavation works CT	40 days	Fri 27/04/12	Fri 22/06/12	14SF-15 days
14	Float CT caission	5 days	Fri 13/07/12	Fri 20/07/12	7FS+5 days
15	Position and Grout CT caisson	10 days	Fri 20/07/12	Fri 03/08/12	14
16					
17	Early piling ST, pile plant	20 days	Fri 25/05/12	Fri 22/06/12	18SF-10 days
18	Early piling ST concrete plant	20 days	Fri 06/07/12	Fri 03/08/12	19SF-10 days
19	Float ST caisson	5 days	Fri 17/08/12	Fri 24/08/12	15FS+10 days
20	Locate and Grout ST caisson	20 days	Fri 24/08/12	Fri 21/09/12	19
21	Final 12 piles ST, pile plant	60 days	Fri 21/09/12	Fri 14/12/12	20,31
22	Final 12 piles ST, concrete plant	20 days	Fri 14/12/12	Fri 25/01/13	21
23					
24	Early piling NT, pile plant	20 days	Fri 22/06/12	Fri 20/07/12	17
25	Early piling NT, concrete plant	20 days	Fri 03/08/12	Fri 31/08/12	24FS+10 days
26	Float NT caisson	5 days	Fri 12/10/12	Fri 19/10/12	27SF-10 days
27	Locate and Grout NT caisson	20 days	Fri 02/11/12	Fri 30/11/12	28SF-10 days
28	Final 12 piles NT, pile plant	60 days	Fri 14/12/12	Fri 22/03/13	21
29	Final 12 piles NT, concrete plant	20 days	Fri 22/03/13	Fri 26/04/13	28
30					
31	Piling to approach spans 1	40 days	Fri 20/07/12	Fri 14/09/12	24
32	Piling to approach spans 2	60 days	Fri 22/03/13	Fri 21/06/13	28
33					
34	Float out and grout N1	15 days	Fri 30/11/12	Fri 21/12/12	27
35	Float out and grout S1-4	45 days	Fri 21/06/13	Fri 23/08/13	32
36					
37	Construction of S5-6 - offline	150 days	Fri 14/10/11	Fri 01/06/12	5FS+30 days
38	**Central Tower**	**447 days**	**Fri 03/08/12**	**Tue 03/06/14**	
39	Prepare temporary access and assemble formwok	20 days	Fri 03/08/12	Fri 31/08/12	15
40	Construct tower legs from base diamond to deck	96 days	Fri 31/08/12	Mon 28/01/13	39
41	Install deck tie and form points of diamond	45 days	Mon 28/01/13	Mon 08/04/13	40
42	Construct tower legs to top of diamond	121 days	Mon 08/04/13	Tue 24/09/13	41
43	Modify climbing forms for single shaft of tower	35 days	Tue 24/09/13	Tue 12/11/13	42
44	Concrete tower head including stay boxes	130 days	Tue 12/11/13	Tue 03/06/14	43
45					
46	**South Flanking Tower**	**447 days**	**Fri 25/01/13**	**Tue 11/11/14**	
47	Prepare temporary access and assemble formwok	20 days	Fri 25/01/13	Fri 22/02/13	22
48	Construct tower legs from base diamond to deck	96 days	Fri 22/02/13	Mon 15/07/13	47
49	Install deck tie and form points of diamond	45 days	Mon 15/07/13	Mon 16/09/13	48
50	Construct tower legs to top of diamond	121 days	Mon 16/09/13	Tue 18/03/14	49
51	Modify climbing forms for single shaft of tower	35 days	Tue 18/03/14	Tue 13/05/14	50
52	Concrete tower head including stay boxes	130 days	Tue 13/05/14	Tue 11/11/14	51
53					
54	**North Flanking Tower**	**447 days**	**Fri 26/04/13**	**Tue 17/02/15**	
55	Prepare temporary access and assemble formwok	20 days	Fri 26/04/13	Fri 24/05/13	29
56	Construct tower legs from base diamond to deck	96 days	Fri 24/05/13	Mon 07/10/13	55
57	Install deck tie and form points of diamond	45 days	Mon 07/10/13	Mon 09/12/13	56
58	Construct tower legs to top of diamond	121 days	Mon 09/12/13	Tue 17/06/14	57
59	Modify climbing forms for single shaft of tower	35 days	Tue 17/06/14	Tue 05/08/14	58
60	Concrete tower head including stay boxes	130 days	Tue 05/08/14	Tue 17/02/15	59
61					
62	**Main Span - Central Tower Fan**	**266 days**	**Tue 25/02/14**	**Wed 25/03/15**	
63	Erect deck segment CT	36 days	Tue 25/02/14	Wed 16/04/14	44FS-65 days
64	Monlithic Connection between deck and tower	20 days	Wed 16/04/14	Wed 21/05/14	63
65	Erect north cantilever deck lifting gantry	21 days	Wed 21/05/14	Thu 19/06/14	64
66	Erect deck segment CN1	21 days	Thu 19/06/14	Fri 18/07/14	65
67	Erect south cantilever deck lifting gantry	14 days	Fri 18/07/14	Thu 07/08/14	66
68	Erect deck segment CS1	14 days	Thu 07/08/14	Wed 27/08/14	67
69	Erect Deck Segments - CN2 to CN17 and CS2 to CS17	140 days	Wed 27/08/14	Wed 25/03/15	68
70					
71	**Main Span - South Tower Fan**	**266 days**	**Wed 08/10/14**	**Thu 05/11/15**	
72	Erect deck segment ST	36 days	Wed 08/10/14	Thu 27/11/14	52FS-24 days
73	Floating Connection between deck and tower	20 days	Thu 27/11/14	Thu 08/01/15	72
74	Erect north cantilever deck lifting gantry	21 days	Thu 08/01/15	Fri 06/02/15	73
75	Erect deck segment FS1	21 days	Fri 06/02/15	Mon 09/03/15	74
76	Erect south cantilever deck lifting gantry	14 days	Mon 09/03/15	Fri 27/03/15	75
77	Erect deck segment SS1	14 days	Fri 27/03/15	Thu 23/04/15	76
78	Erect Deck Segments - FS2 to FS17 and SS2 to SS17	140 days	Thu 23/04/15	Thu 05/11/15	77
79					
80	**Main Span - North Tower Fan**	**266 days**	**Wed 20/05/15**	**Fri 17/06/16**	
81	Erect deck segment NT	36 days	Wed 20/05/15	Thu 09/07/15	69FS+35 days
82	Floating Connection between deck and tower	20 days	Thu 09/07/15	Thu 06/08/15	81
83	Erect north cantilever deck lifting gantry	21 days	Thu 06/08/15	Fri 04/09/15	82
84	Erect deck segment SN1	21 days	Fri 04/09/15	Mon 05/10/15	83
85	Erect south cantilever deck lifting gantry	14 days	Mon 05/10/15	Fri 23/10/15	84
86	Erect deck segment FN1	14 days	Fri 23/10/15	Thu 12/11/15	85
87	Erect Deck Segments - FN2 to FN17 and SN2 to SN17	140 days	Thu 12/11/15	Fri 17/06/16	86
88					
89	**Main Span Closure**	**187 days**	**Thu 05/11/15**	**Tue 16/08/16**	
90	Central to South Fan	21 days	Thu 05/11/15	Fri 04/12/15	78
91	Central to North Fan	42 days	Fri 17/06/16	Tue 16/08/16	87
92					
93	**Finishes**	**200 days**	**Fri 13/05/16**	**Fri 03/03/17**	
94	Finishes	200 days	Fri 13/05/16	Fri 03/03/17	91FS-67 days
95					
96	**Piers and Approach Viaducts**	**900 days**	**Thu 04/07/13**	**Fri 03/03/17**	
97	Piers and Approach Viaducts	900 days	Thu 04/07/13	Fri 03/03/17	94FF



Project: MSProj11
Date: Wed 08/10/08

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline