NSTX Upgrade Project

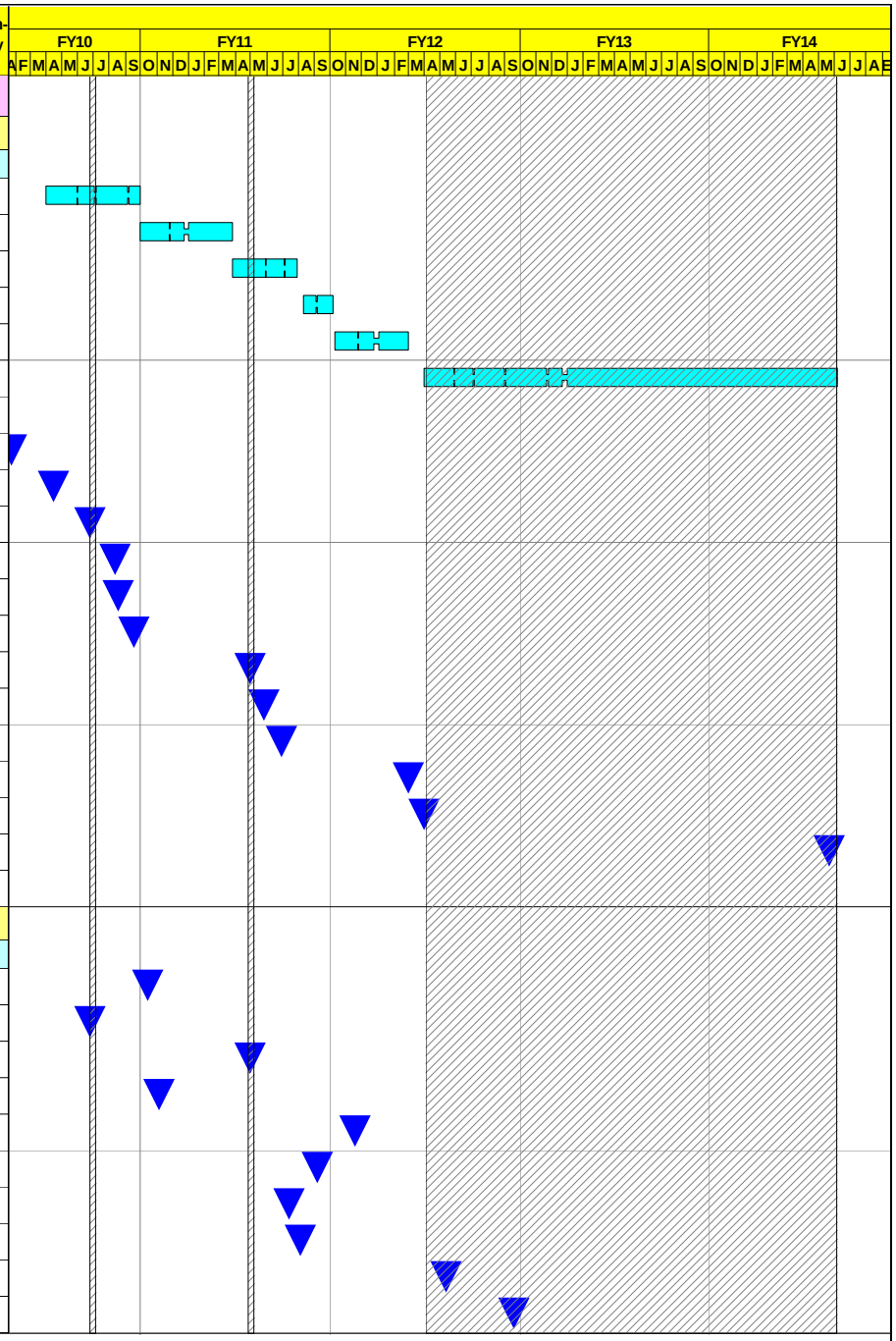
Critical Decisions

LEVEL I

Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
0001	**NSTX FY10 RUN- 14 RUNWEEKS**	128*	01APR10*	30SEP10	2,511	0.00	
0002	**NSTX FY 11 OPENING/MAINTENANCE**	118*	01OCT10*	25MAR11	2,393	0.00	
0003	**NSTX FY11 RUN - 14 RUNWEEKS**	88*	28MAR11*	29JUL11	2,305	0.00	
0004	**NSTX FY12 MAINTENACE NO VV VENT!**	41*	11AUG11*	07OCT11	2,256	0.00	
0005	**NSTX RUN 10 RUNWEEKS**	95*	10OCT11*	29FEB12	2,161	0.00	
0006	**NSTX UPGRADE MAJOR OUTAGE**	559	30MAR12	05JUN14*	1,581	0.00	
CDR	PROJECT CDR	0		28OCT09A		0.00	
CD1	Submit CD-1 Request	0		22JAN10A		0.00	
CD1A	CD1 Approval	0		15APR10A		0.00	
PDR	PROJECT PDR	0		23JUN10*	91	0.00	
LR	Lehman Review	0		10AUG10*	78	0.00	
CD2	Submit CD2 Request	0		17AUG10*	73	0.00	
CD2A	Receive CD-2 Approval	0		15SEP10*	73	0.00	
FDR	PROJECT FDR	0		29APR11*	62	0.00	
CD3	Submit CD3 Request	0		27MAY11	62	0.00	
CD3A	Receive CD-3 Approval	0		27JUN11	62	0.00	
SD-1	NSTX COMPLETE OPERATIONS	0		01MAR12*	1,581	0.00	
SD-2	BEGIN UPGRADE OUTAGE	0		29MAR12	1,581	0.00	
SD-3	RESUME OPERATIONS (Early Start)	0		20MAY14	10	0.00	
CD4	CD4	0		16JAN15	78	0.00	

Level 2 Milestones

1000	NB #2 Decon Program Complete	0		15OCT10	2,500	0.00	
1010	Project Preliminary Design Review (PDR)	0		23JUN10	2,580	0.00	
1020	Project Final Design Review (FDR)	0		29APR11	2,368	0.00	
1030	Award Inner Toroidal Field (TF) Conductor Machi	0		03NOV10	2,487	0.00	
1040	Award Ohmic Heating (OH) Conductor	0		17NOV11	2,227	0.00	
1050	Complete Machining Inner TF Conductors	0		06SEP11	2,279	0.00	
1060	Generate Center Stack (CS) Assembly Procedure	0		12JUL11	2,318	0.00	
1070	Friction Stir-Weld Coil Leads TF Conductors	0		05AUG11	2,300	0.00	
1080	Begin Fabricate Inner TF/OH Coil Assembly	0		11MAY12	2,109	0.00	
1090	Award Neutral Beam (NB) Vessel Cap	0		19SEP12	2,019	0.00	



Data Date 01OCT09
Run Date 15JUN10 15:32

Early Bar
Progress Bar
Critical Activity

RLS9

NSTX UPGRADES
RESOURCE LOADED SCHEDULE
CD-2 Schedule

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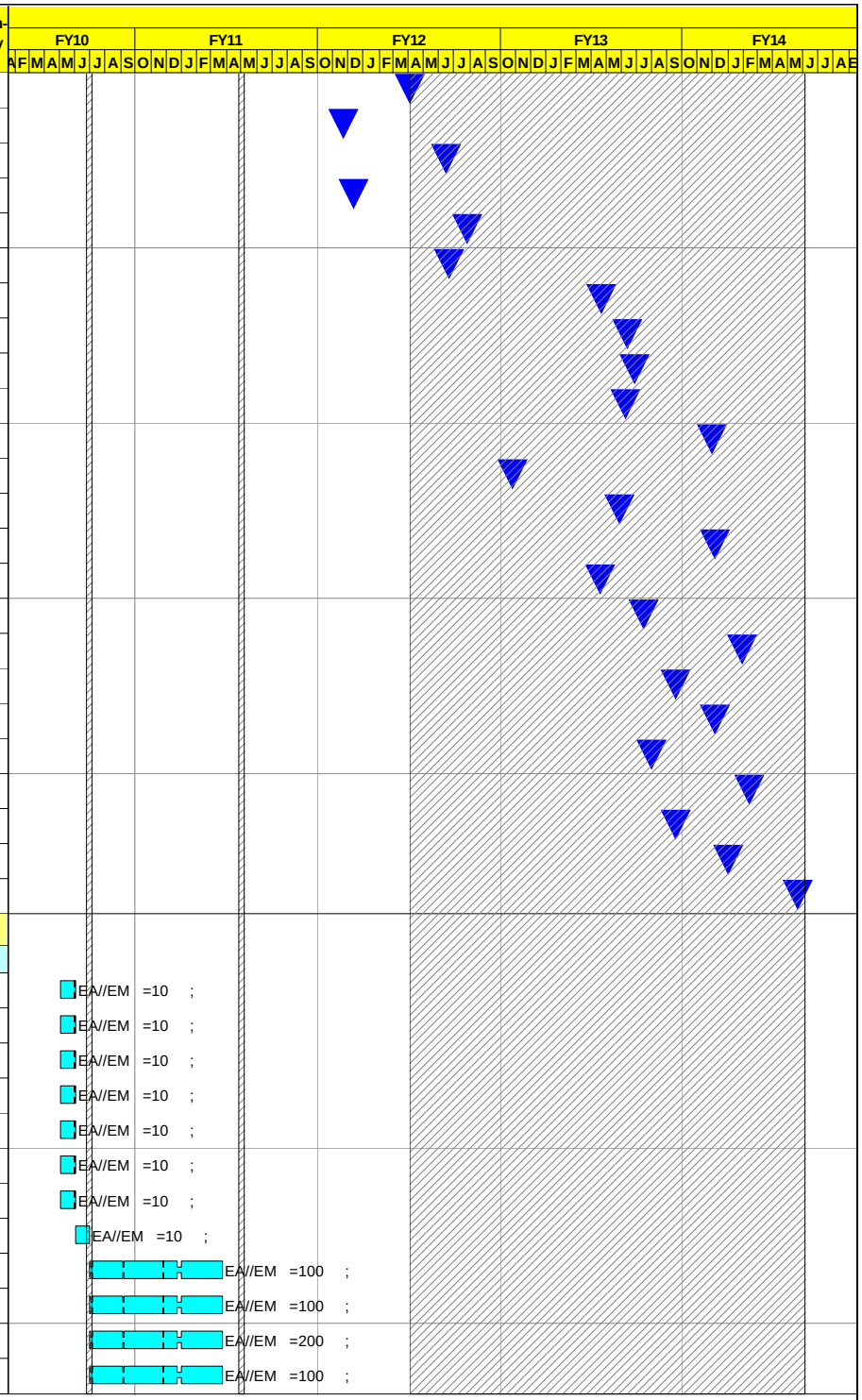
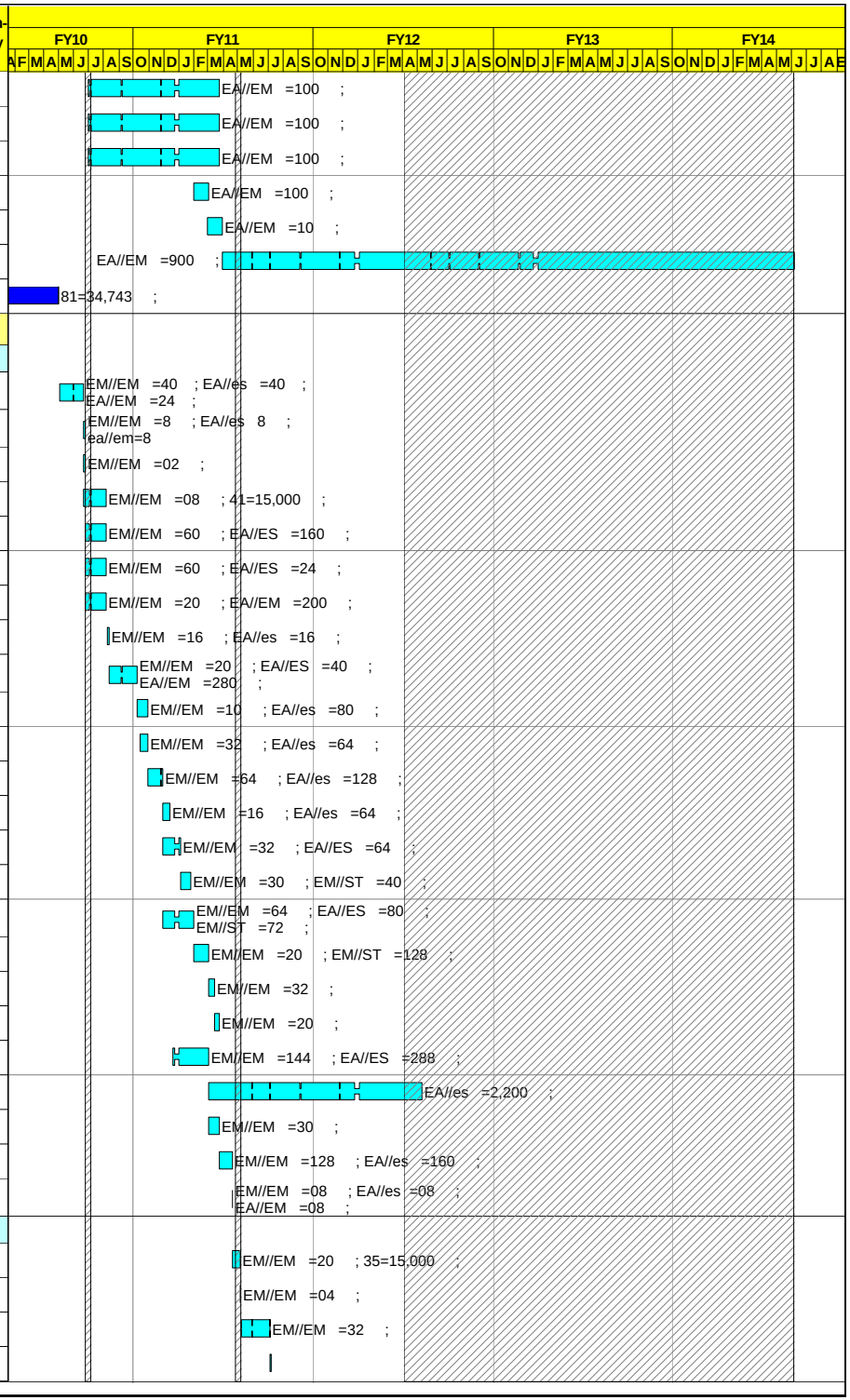
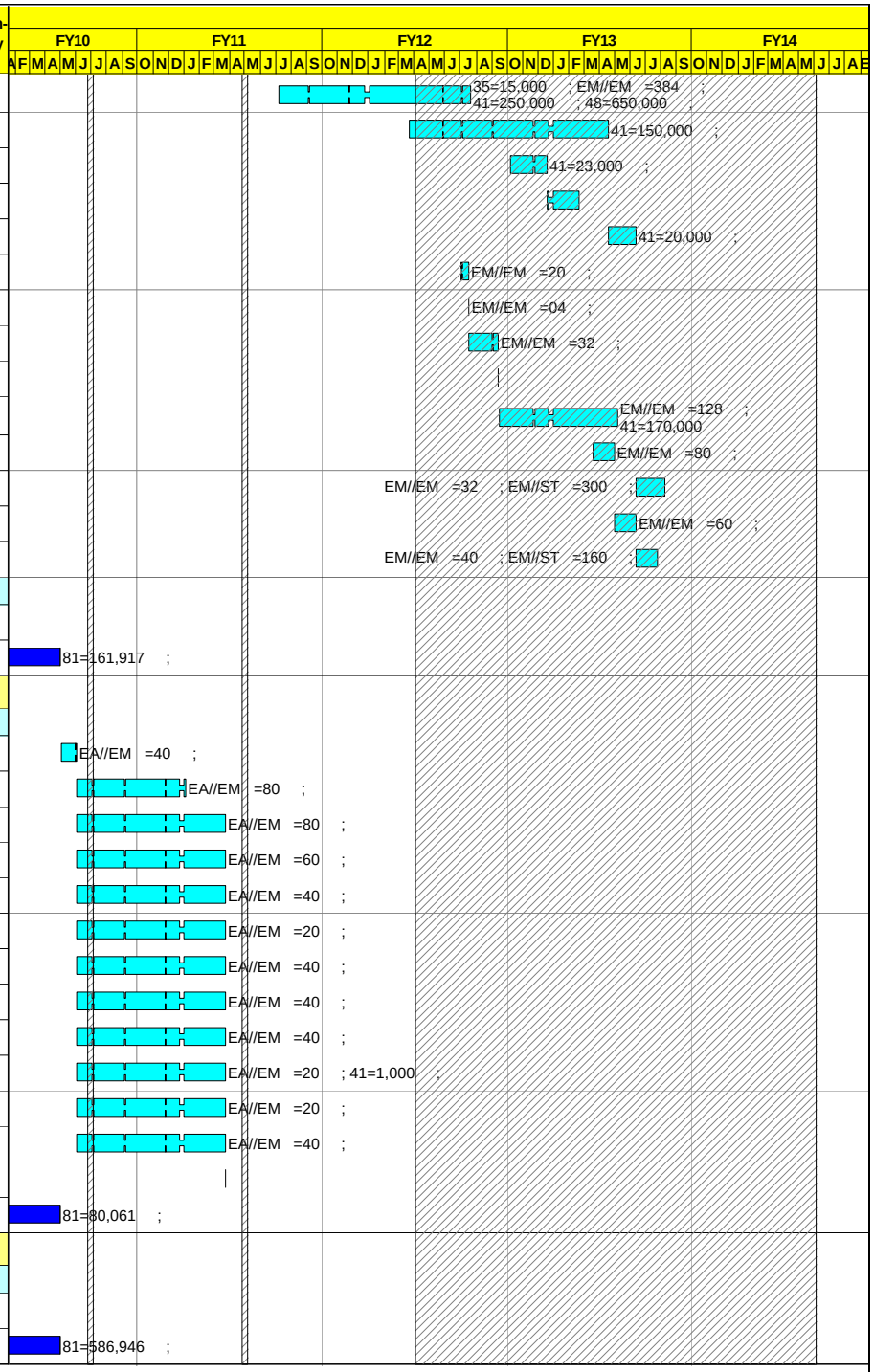
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1100	Begin Diagnostics Removals	0		02APR12	2,138	0.00	
1110	Award NB Rectangular Bellows Section	0		21NOV11	2,225	0.00	
1120	Complete Diagnostics Removals	0		14JUN12	2,086	0.00	
1130	Award Contract Inner Poloidal Field (PF) Coils	0		13DEC11	2,211	0.00	
1140	Lift Out Old Centerstack	0		25JUL12	2,058	0.00	
1150	Complete Assy And Pot Of 1st Inner TF Quadrant	0		20JUN12	2,082	0.00	
1160	Complete Fabricate Inner TF/OH Coil Assembly	0		23APR13	1,873	0.00	
1170	Begin Final Assembly Of Centerstack	0		13JUN13	20	0.00	
1180	Deliver NB Rectangular Bellows Section	0		28JUN13	1,825	0.00	
1190	Deliver NB Vessel Cap	0		10JUN13	1,839	0.00	
1200	Complete Final Assembly Of Centerstack	0		28NOV13	20	0.00	
1210	Install NB Cap	0		26OCT12	131	0.00	
1220	Begin Field Coil Power Conversion DC Sys Cable I	0		27MAY13	31	0.00	
1230	Lift In New Centerstack	0		05DEC13	20	0.00	
1240	Deliver Inner Inner PF Coils	0		18APR13	49	0.00	
1250	Beam Box Moved and Internals Installed	0		16JUL13	64	0.00	
1260	Install New Umbrella	0		28JAN14	20	0.00	
1270	Begin Re-Installation Of Diagnostics	0		17SEP13	44	0.00	
1280	Complete Refurbishment Of Sources	0		06DEC13	106	0.00	
1290	Reinstall New Pump Duct	0		30JUL13	150	0.00	
1300	Begin Machine Pump down	0		13FEB14	17	0.00	
1310	Complete FCPC DC Systems Cable Installation	0		16SEP13	31	0.00	
1320	Re-Installation Of Diagnostics Complete	0		31DEC13	49	0.00	
1330	Complete ISTP.	0		20MAY14	10	0.00	
Job: 1000 - CSU Analytical Support-TITUS							
1000-0002	Maintain Global model with updated design concep	21*	03MAY10*	01JUN10	89	1,771.10	10
1000-0003	Maintain updated 96 Scenarios	21	03MAY10	01JUN10	110	1,771.10	10
1000-0004	Generic Tile Qualification Program	21	03MAY10	01JUN10	110	1,771.10	10
1000-0005	Maintain Disruption Scenarios	21	03MAY10	01JUN10	110	1,771.10	10
1000-0006	Develop List of in-service Inspection Areas	21	03MAY10	01JUN10	110	1,771.10	10
1000-0007	Dynamic Response to Normal Loads PF4/5/TF/TF OOP	21	03MAY10	01JUN10	110	1,771.10	10
1000-0008	Fault, FMEA evaluation and analyses	21	03MAY10	01JUN10	110	1,771.10	10
1000-0009	PDR Documentation	21	02JUN10	30JUN10*	89	1,771.10	10
1000-0011	Maintain Global model with updated design concep	180	01JUL10	23MAR11	89	18,446.31	20
1000-0012	Maintain updated 96 Scenarios	180	01JUL10	23MAR11	89	18,446.31	20
1000-0013	Generic Tile Qualification Program	180	01JUL10	23MAR11	89	36,892.62	20
1000-0014	Maintain Disruption Scenarios	180	01JUL10	23MAR11	89	18,446.31	20



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1000-0015	Develop List of in-service Inspection Areas	180	01JUL10	23MAR11	89	18,446.31	20
1000-0016	Dynamic Response to Normal Loads PF4/5/TF/TF OOP	180	01JUL10	23MAR11	89	18,446.31	20
1000-0017	Fault, FMEA analyses	180	01JUL10	23MAR11	89	18,446.31	20
1000-0018	FDR Prep/documention	21*	01FEB11*	01MAR11	105	18,852.00	20
1000-0019	CONDUCT FDR	20	01MAR11	28MAR11*	86	1,885.20	20
1000-0022	Title 3 Analysis Support	812	29MAR11	06JUN14	1,580	179,843.39	40
FY101000	FY10 Actual Cost	143*	01OCT09A	30APR10A		34,743.00	
Job: 1001 - CS Plasma Facing Components-TRESEMER							
Design							
1001-0029	PDR Prep	36	03MAY10*	22JUN10	23	13,498.64	10
1001-0030	CONDUCT PDR	2	23JUN10	24JUN10	23	3,266.48	10
1001-0031	Receipt of Material data	1	23JUN10	23JUN10	24	298.30	10
1001-0032	Order Samples for testing (6 wks lead)	32	23JUN10	06AUG10	23	18,893.20	10
1001-0034	PDR chit resolution	30	25JUN10	06AUG10	23	22,077.00	20
1001-0035	Update WAF for Lehman Review (prep)	30	25JUN10*	06AUG10	2,549	10,918.20	20
1001-0036	Generic Tile Qualitfication Program	30	25JUN10*	06AUG10	23	38,405.00	20
1001-0037	Lehman Review	2	10AUG10*	11AUG10	20	3,699.20	10
1001-0039	Disruption Forces - Final Tile Analysis	40	12AUG10	07OCT10	20	56,303.98	20
1001-0040	Thermal system - Final Tile Analysis	15	08OCT10	28OCT10	20	11,703.60	20
1001-0041	Fastener Scheme - Final Tile Analysis	10	15OCT10	28OCT10	20	10,648.96	20
1001-0043	Part re-design - Fastener Design	20	29OCT10	29NOV10	20	21,297.92	20
1001-0044	Tile adjustments - Fastener Design	10	30NOV10	13DEC10	35	8,108.80	20
1001-0045	Fastener Mock-up - Fastener Design	20	30NOV10	04JAN11	25	10,648.96	20
1001-0046	Testing - Fastener Design	15	05JAN11	25JAN11	25	8,807.60	20
1001-0048	Mechanical - Material Testing	40	30NOV10*	01FEB11	20	24,402.08	20
1001-0049	Thermal - Material Testing	20	02FEB11	01MAR11	20	16,118.56	20
1001-0050	Review Data - Material Testing	10	02MAR11	15MAR11	20	5,080.32	20
1001-0053	Make Material Choices	5	16MAR11	22MAR11	20	3,175.20	20
1001-0054	Finalize Designs/Drawings	45	21DEC10	01MAR11	20	47,920.32	20
1001-0055	Drawings (Assem/Installation)	300	02MAR11	09MAY12	235	195,547.00	20
1001-0056	Prep Procurement Specs	15	02MAR11	22MAR11	20	4,762.80	20
1001-0057	FDR Prep	20	23MAR11	19APR11	20	34,242.88	10
1001-0058	CONDUCT FDR	1	20APR11*	20APR11	20	3,789.84	10
Procure, Fab & Assembly							
1001-0062	Prep Req & Proc Package - Tiles (CFC)	10	21APR11	04MAY11	20	22,075.20	20
1001-0063	Submit Req. to Procurement - Tiles (CFC)	2	05MAY11	06MAY11	20	635.04	20
1001-0064	Procurement Lead Time - Tiles (CFC)	40	09MAY11	05JUL11	20	5,080.32	20
1001-0065	Award - Tiles (CFC)	1	06JUL11	06JUL11	20	0.00	20

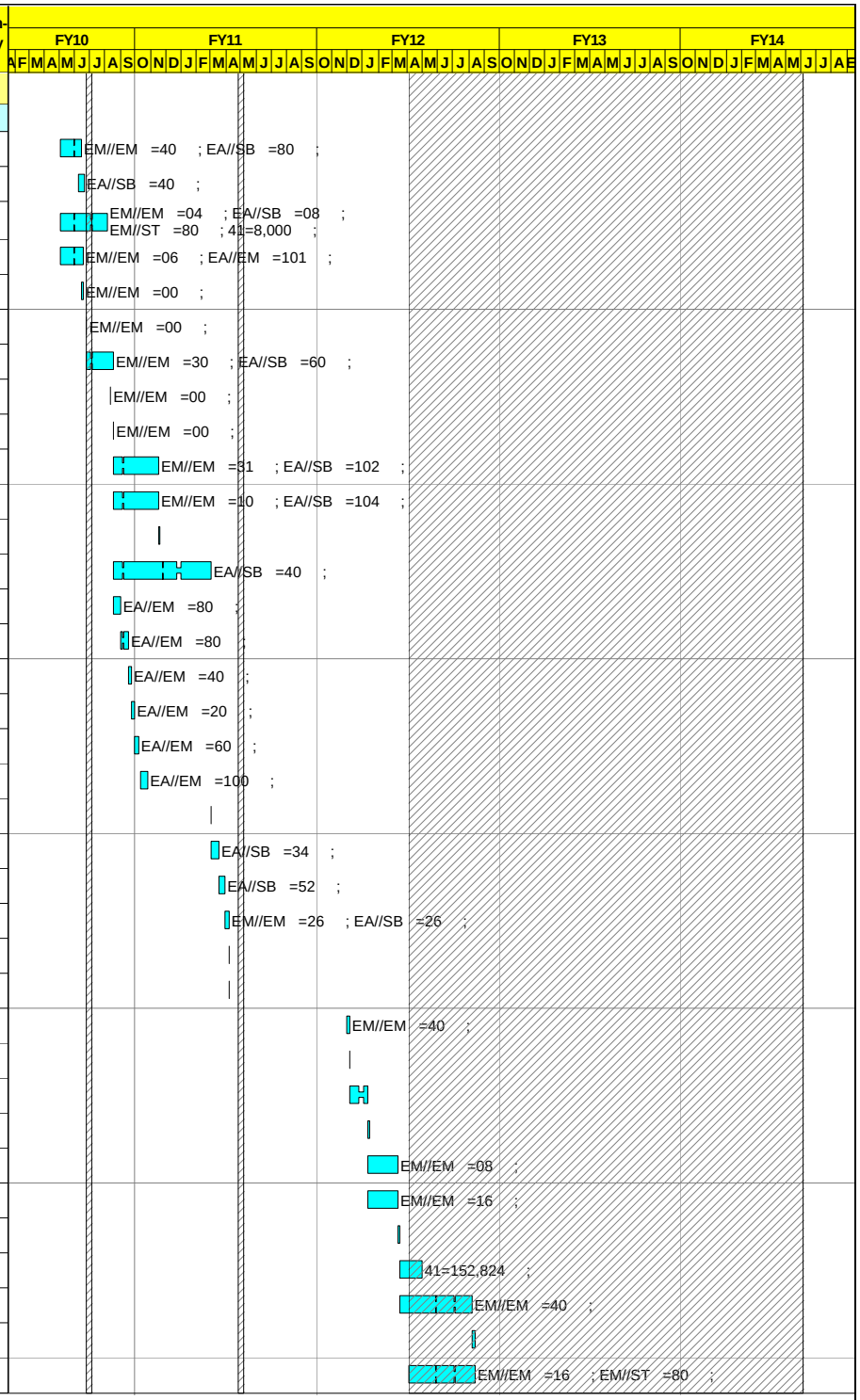


Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1001-0066	Fabricate and Deliver - CFC Material	260	07JUL11	19JUL12	20	1,084,325.38	30
1001-0066A	Fabricate/Machine 800 tiles	270	22MAR12	18APR13	20	197,266.67	30
1001-0068	Machine Tiles for Diagnostics	50	09OCT12	19DEC12	60	30,590.00	30
1001-0068A	Diagn Tile bakeout	40	20DEC12	21FEB13	60	0.00	
1001-0069	Tile Bakeout	40	19APR13	13JUN13	20	26,600.00	30
1001-0071	Prep Req & Proc Package - hardware, other materi	10	02JUL12*	16JUL12	46	3,312.20	10
1001-0072	Submit Req. to Procurement - hardware, other mat	2	17JUL12	18JUL12	46	662.44	10
1001-0073	Procurement Lead Time - hardware, other material	40	19JUL12	13SEP12	46	5,299.52	20
1001-0074	Award - hardware, other materials	1	14SEP12	14SEP12	46	0.00	20
1001-0075	Fabricate and Deliver - hardware, other material	160	17SEP12	08MAY13	46	247,575.73	30
1001-0078	Fab/Assembly Procedures	30	22MAR13	02MAY13	20	13,646.40	30
1001-0079	Tile Assembly with Hardware	40	14JUN13	08AUG13	20	38,050.56	30
1001-0082	Installation Procedure	30	03MAY13	13JUN13	20	10,234.80	30
1001-0083	Tile Re-fit, as needed, additional machining	30	14JUN13	25JUL13	20	24,205.60	30
FY091001	FY09 Actual Cost	22	01JAN09A	30SEP09A		64,576.00	
FY101001	FY10 Actual Cost	143*	01OCT09A	30APR10A		161,917.00	
Job: 1002 -Passive Plate Analysis &Upgrade-TITUS							
1002-0005	Check/Correct Vector Potential Solution	21	03MAY10*	01JUN10	89	7,084.40	30
1002-0014	Disposition PDR Chits	144*	02JUN10	03JAN11	145	14,542.79	20
1002-0015	Check/Correct Vector Potential Solution	200	02JUN10	22MAR11	89	14,693.66	20
1002-0016	Run Disruption files based on lower background F	200	02JUN10	22MAR11	89	11,020.25	20
1002-0017	Add Halo Loads	200	02JUN10	22MAR11	89	7,346.83	20
1002-0018	Complete Bolting and Bracket Evaluation	200	02JUN10	22MAR11	89	3,673.42	20
1002-0019	Monitor fiberoptic Disruption Instrumentation	200	02JUN10	22MAR11	89	7,346.83	20
1002-0020	Fatigue Assessment	200	02JUN10	22MAR11	89	7,346.83	20
1002-0021	Input to the DCPS	200	02JUN10	22MAR11	89	7,346.83	20
1002-0025	Procure 100 718 bolts	200	02JUN10	22MAR11	89	4,899.42	20
1002-0029	Bracket re-work, in-house	200	02JUN10	22MAR11	89	3,673.42	20
1002-0030	Drawing Update	200	02JUN10*	22MAR11	89	7,346.83	20
1002-0099	PP analysis complete for FDR	1	23MAR11*	23MAR11	89	0.00	20
FY101002	FY10 Actual Cost	144	01OCT09A	30APR10A		80,061.00	
Job: 1200 - Vacuum Vsl & Struct Support-SMITH							
FY091210	FY09 Actual Cost	22*	01JAN09A	30SEP09A		571,717.00	
FY101200	FY10 Actual Cost	143	01OCT09A	30APR10A		586,946.00	

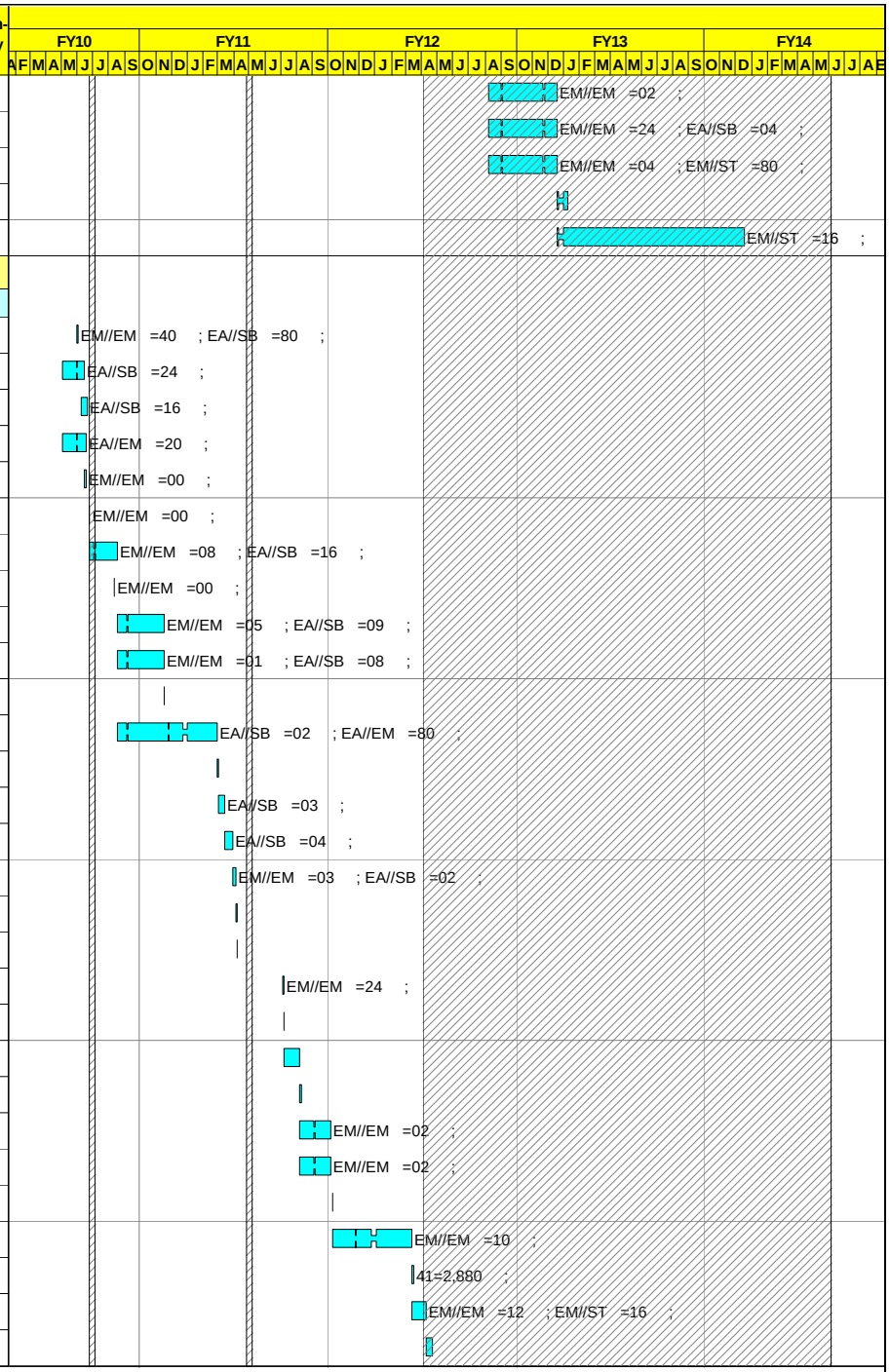


Job: 1201 - Outer TF Structures-SMITH

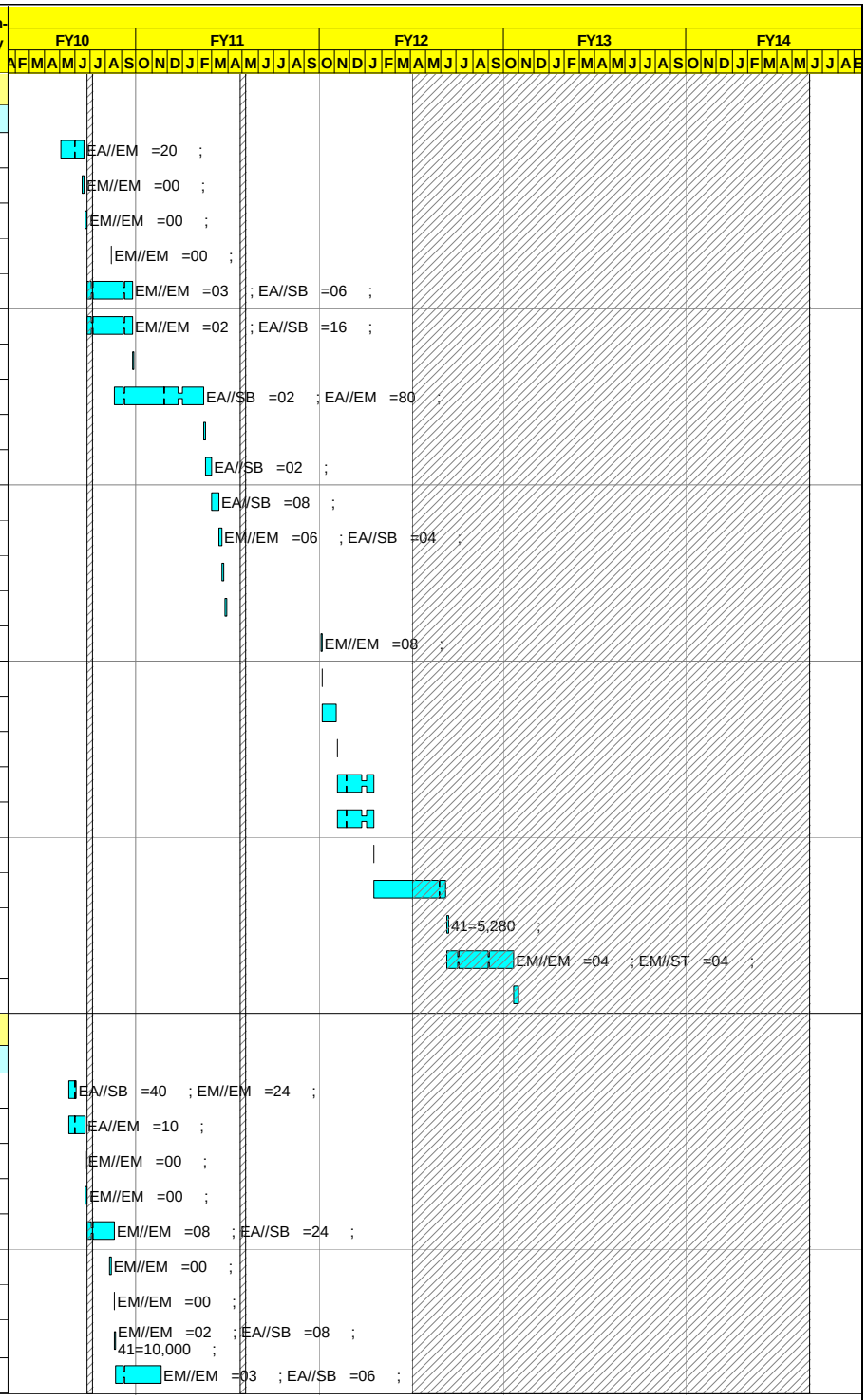
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1201-0009	Dsgn Eng/CAD Models: Iteration, Optimizatn, Updt	30	03MAY10*	14JUN10	77	15,470.00	37
1201-0010	Complete Preliminary CAD Models	10	09JUN10	22JUN10	77	4,752.00	50
1201-0011	Mockups:outer link, real estate issues(# of it 4	66	03MAY10*	04AUG10	82	18,586.20	50
1201-0013	ME Analysis/CAD Model Iterations-Strss/EM/Therml	32	03MAY10	16JUN10	82	18,783.01	20
1201-0014	Analysis of Preliminary Design Approved	1	16JUN10	16JUN10	82	0.00	0
1201-0016	PDR	1	24JUN10	24JUN10	77	0.00	20
1201-0018	Dsgn Eng & CAD Models: Iterations, Optim & Updat	38	24JUN10	17AUG10	77	11,602.50	37
1201-0021	DOE CD-2 (Lehman) Review	1	11AUG10*	11AUG10	2,546	0.00	0
1201-0024	PDR CAD model Compld-Outr supp ring/clamp/sprng	1	18AUG10	18AUG10	77	0.00	0
1201-0028	Det Dsgn Eng, CAD/Analysis Iterations(34mod/13dw	64	19AUG10	17NOV10	169	17,314.04	41
1201-0029	Update Design Drawings	64	19AUG10	17NOV10	77	14,320.41	47
1201-0030	Design Drawings Ready for Checking & Validation	1	18NOV10	18NOV10	169	0.00	0
1201-0031	Validate Analysis: Stress, EM, Thermal	130	19AUG10	01MAR11	77	4,987.38	20
1201-0031A	OTF Analysis: Insul Bond Shear/Copper Stress/CC	10	19AUG10	01SEP10	158	14,168.80	20
1201-0031B	OTF Analysis: Ring, Bracket, Spring Link	10	02SEP10	16SEP10	158	14,168.80	20
1201-0031C	OTF Analysis:Keep Clevis Bracket Load Stress Upd	5	17SEP10	23SEP10	158	7,084.40	20
1201-0031D	OTF Analysis: Fatique Assesment	3	24SEP10	28SEP10	158	3,542.20	20
1201-0031E	OTF Analysis: Write. Check, File Calculations	8	29SEP10	08OCT10	158	11,140.05	20
1201-0031F	OTF Analysis: DCOS Input	13	11OCT10	27OCT10	158	18,852.00	20
1201-0032	Validation of Design Complete	1	02MAR11	02MAR11	77	0.00	0
1201-0033	Update CAD Models per Validation	10	03MAR11	16MAR11	77	4,299.30	50
1201-0034	Revise Fabrication & Assembly Drawings per Valid	10	17MAR11	30MAR11	77	6,575.40	50
1201-0035	Review, Check & Sign Off Drawings	5	31MAR11	06APR11	77	7,415.46	30
1201-0036	Release Fabriction & Assembly Drawings	1	07APR11	07APR11	77	0.00	0
1201-0038	FDR	1	08APR11*	08APR11	77	0.00	12
1201-0042	Prep Req & Procurement Package	4	01DEC11*	06DEC11	128	6,624.40	20
1201-0043	Submit Req to Procurement	1	06DEC11	06DEC11	128	0.00	0
1201-0044	Procurement Processing	22	06DEC11	12JAN12	128	0.00	0
1201-0045	Submit for Vendor Quotes	1	13JAN12	13JAN12	128	0.00	0
1201-0046	Eval Quotes	43	13JAN12	13MAR12	128	1,324.88	10
1201-0047	Tech Eval of Vendors	43	13JAN12	13MAR12	128	2,649.76	10
1201-0048	Award / Order Approved	1	14MAR12	14MAR12	128	0.00	0
1201-0048A	Fabricate Components - Outer TF Structure	33*	15MAR12	30APR12	128	0.00	0
1201-0049	Vendor Oversight	102	15MAR12	07AUG12	128	6,624.40	10
1201-0050	Receipt of Hardware	4	08AUG12	13AUG12	128	0.00	11
1201-0051	QA Inspection	94	02APR12	13AUG12	218	11,088.16	43



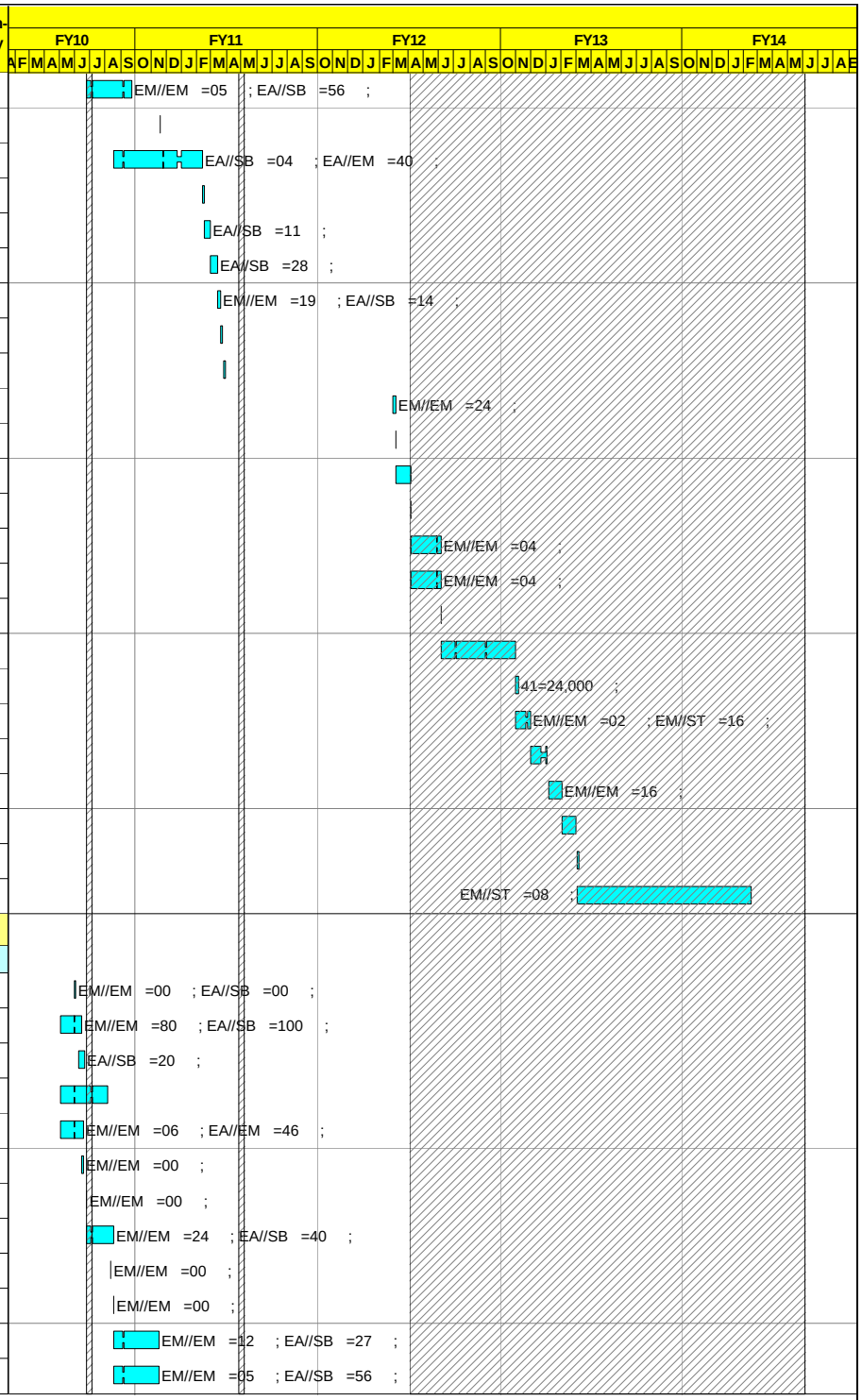
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1201-0052	Resolve Procurement Issues	94	08AUG12	20DEC12	128	337.25	10
1201-0053	Documentation: Assembly Procedures	94	08AUG12	20DEC12	128	4,584.22	16
1201-0054	Assembly of Components	94	08AUG12	20DEC12	136	9,266.18	48
1201-0055	Parts ready for installation	8	21DEC12	09JAN13	128	0.00	25
1201-0056	Handling / Warehouse / Storage	251	21DEC12	16DEC13	1,704	1,749.67	50
Job: 1202 - Outer PF2 Coil Structures-SMITH							
1202-0008	Input F/Analysis Group:Prelim Analysis of PF2	1	01JUN10*	01JUN10	78	15,470.00	20
1202-0009	Dsgn Eng/CAD Models: Iteration, Optimizatn, Updt	30	03MAY10*	14JUN10	2,587	2,851.20	50
1202-0010	Complete Preliminary CAD Models	10	09JUN10	22JUN10	78	1,900.80	50
1202-0013	ME Analysis/CAD Model Iterations-Strss/EM/Therml	32	03MAY10*	16JUN10	83	3,542.20	20
1202-0014	Analysis of Preliminary Design Approved	1	16JUN10	16JUN10	83	0.00	0
1202-0016	PDR	1	24JUN10*	24JUN10	78	0.00	20
1202-0018	Dsgn Eng & CAD Models: Iterations, Optim & Updat	38	24JUN10	17AUG10	78	3,094.00	37
1202-0021	DOE CD-2 (Lehman) Review	1	11AUG10*	11AUG10	239	0.00	0
1202-0028	Det Dsgn Eng, CAD/Analysis Iterations(3mod/1dwgs	64	18AUG10	16NOV10	170	1,875.23	37
1202-0029	Update Design Drawings	64	18AUG10	16NOV10	78	1,136.07	47
1202-0030	Design Drawings Ready for Checking & Validation	1	17NOV10	17NOV10	170	0.00	0
1202-0031	Validate Analysis: Stress, EM, Thermal	130	18AUG10	28FEB11	78	15,113.18	20
1202-0032	Validation of Design Complete	1	01MAR11	01MAR11	78	0.00	0
1202-0033	Update CAD Models per Validation	10	02MAR11	15MAR11	78	379.35	50
1202-0034	Revise Fabrication & Assembly Drawings per Valid	10	16MAR11	29MAR11	78	505.80	50
1202-0035	Review, Check & Sign Off Drawings	5	30MAR11	05APR11	78	729.18	26
1202-0036	Release Fabriction & Assembly Drawings	1	06APR11	06APR11	78	0.00	0
1202-0038	FDR	1	07APR11*	07APR11	78	0.00	12
1202-0042	Prep Req & Procurement Package	4	05JUL11*	08JUL11	157	3,810.24	10
1202-0043	Submit Req to Procurement	1	08JUL11	08JUL11	157	0.00	0
1202-0044	Procurement Processing	22	08JUL11	08AUG11	157	0.00	0
1202-0045	Submit for Vendor Quotes	1	09AUG11	09AUG11	157	0.00	0
1202-0046	Eval Quotes	43	09AUG11	07OCT11	157	319.11	10
1202-0047	Tech Eval of Vendors	43	09AUG11	07OCT11	157	319.11	10
1202-0048	Award / Order Approved	1	10OCT11	10OCT11	157	0.00	0
1202-0049	Vendor Oversight	102	11OCT11	12MAR12	157	1,656.10	10
1202-0050	Receipt of Hardware	4	13MAR12	16MAR12	157	3,744.00	5
1202-0051	QA Inspection	20	13MAR12	09APR12	157	3,675.00	33
1202-0055	Parts ready for installation	8	10APR12	19APR12	157	0.00	5



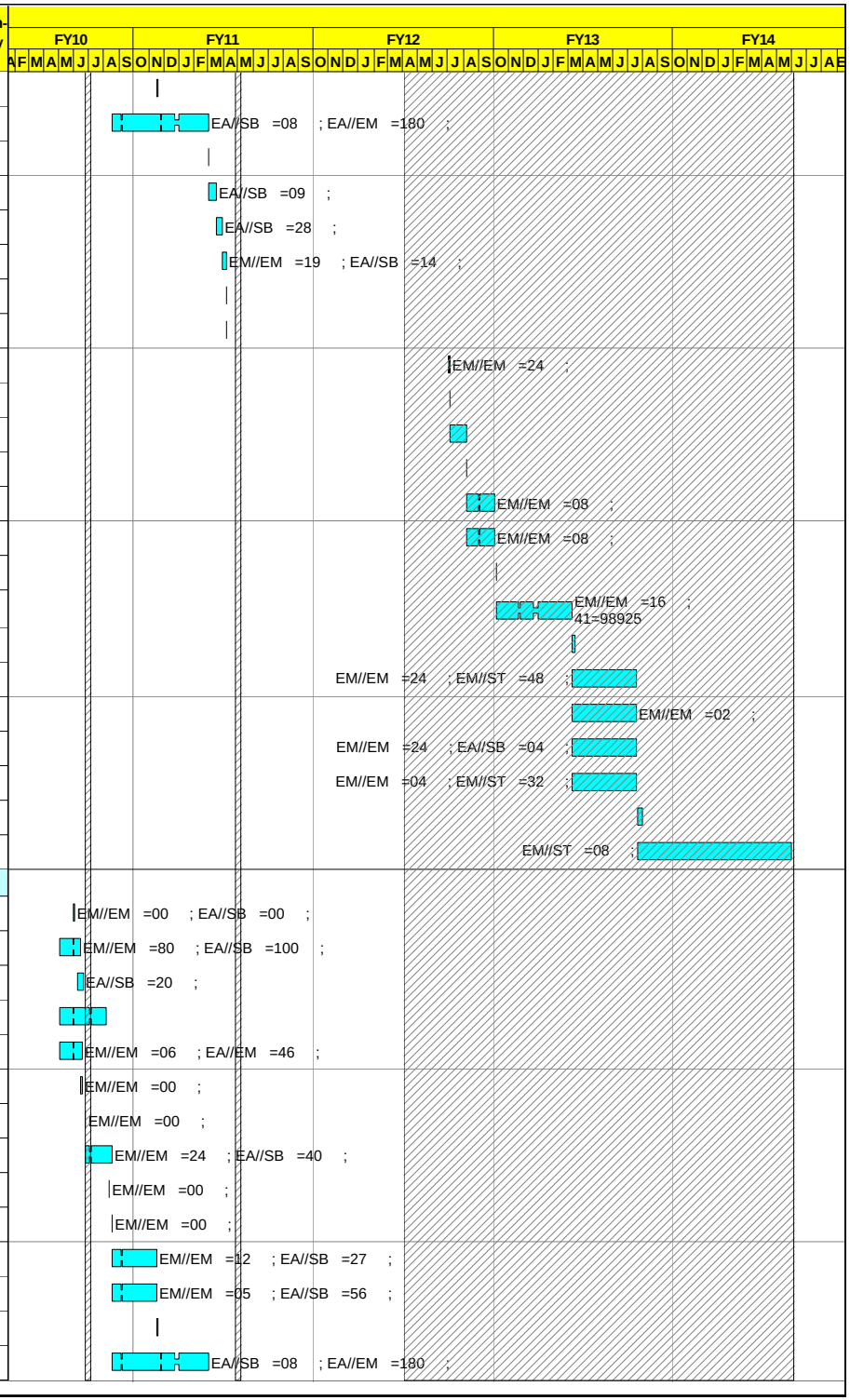
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
Job: 1203 - PF3 Support.-SMITH							
1203-0013	ME Analysis/CAD Model Iterations-Strss/EM/Thermal	32	03MAY10*	16JUN10	130	3,542.20	20
1203-0014	Analysis of Preliminary Design Approved	1	16JUN10	16JUN10	130	0.00	0
1203-0016	PDR	1	23JUN10*	23JUN10	126	0.00	20
1203-0021	DOE CD-2 (Lehman) Review	1	11AUG10*	11AUG10	2,546	0.00	0
1203-0028	Det Dsgn Eng, CAD/Analysis Iterations(2mod/2dwgs	64	24JUN10	23SEP10	2,515	1,160.25	37
1203-0029	Update Design Drawings	64	24JUN10	23SEP10	126	2,199.10	47
1203-0030	Design Drawings Ready for Checking & Validation	1	24SEP10	24SEP10	2,515	0.00	0
1203-0031	Validate Analysis: Stress, EM, Thermal	120	17AUG10*	11FEB11	89	15,087.01	20
1203-0032	Validation of Design Complete	1	14FEB11	14FEB11	89	0.00	0
1203-0033	Update CAD Models per Validation	10	15FEB11	28FEB11	89	252.90	50
1203-0034	Revise Fabrication & Assembly Drawings per Valid	10	01MAR11	14MAR11	89	1,011.60	50
1203-0035	Review, Check & Sign Off Drawings	5	15MAR11	21MAR11	89	1,458.36	26
1203-0036	Release Fabriction & Assembly Drawings	1	22MAR11	22MAR11	89	0.00	0
1203-0038	FDR	1	28MAR11*	28MAR11	86	0.00	0
1203-0042	Prep Req & Procurement Package:inconel Bolts	4	03OCT11*	06OCT11	293	1,324.88	10
1203-0043	Submit Req to Procurement	1	06OCT11	06OCT11	293	0.00	0
1203-0044	Procurement Processing	22	06OCT11	04NOV11	293	0.00	0
1203-0045	Submit for Vendor Quotes	1	07NOV11	07NOV11	293	0.00	0
1203-0046	Eval Quotes	43	07NOV11	16JAN12	293	0.00	0
1203-0047	Tech Eval of Vendors	43	07NOV11	16JAN12	293	0.00	0
1203-0048	Award / Order Approved	1	17JAN12	17JAN12	293	0.00	0
1203-0049	Vendor Oversight	102	18JAN12	08JUN12	293	0.00	0
1203-0050	Receipt of Hardware	4	11JUN12	14JUN12	293	6,864.00	5
1203-0051	QA Inspection	94	11JUN12	22OCT12	293	1,089.89	30
1203-0055	Parts ready for installation	8	23OCT12	01NOV12	293	0.00	5
Job: 1204 - PF4/5 Leads & Radial Supports-SMITH							
1204-0009	Dsgn Eng/CAD Models: Iteration, Optimizatn, Updt	10	18MAY10*	01JUN10	2,596	8,331.60	35
1204-0013	ME Analysis/CAD Model Iterations-Strss/EM/Thermal	24	19MAY10*	22JUN10	126	1,771.10	20
1204-0014	Analysis of Preliminary Design Approved	1	22JUN10	22JUN10	126	0.00	0
1204-0016	PDR	1	23JUN10*	23JUN10	126	0.00	20
1204-0018	Dsgn Eng & CAD Models: Iterations, Optim & Updat	38	24JUN10	17AUG10	168	4,044.40	40
1204-0021	DOE CD-2 (Lehman) Review	1	10AUG10*	10AUG10	2,547	0.00	0
1204-0023	PDR CAD model Compld-Outr supp ring/clamp/sprng	1	18AUG10	18AUG10	168	0.00	0
1204-0027	Rapid Prototype Mockup:Real Estate Issue/Sizing	1	19AUG10	19AUG10	168	13,048.70	42
1204-0028	Det Dsgn Eng, CAD/Analysis Iterations(11mod/7dwg	64	20AUG10*	18NOV10	168	1,201.12	39



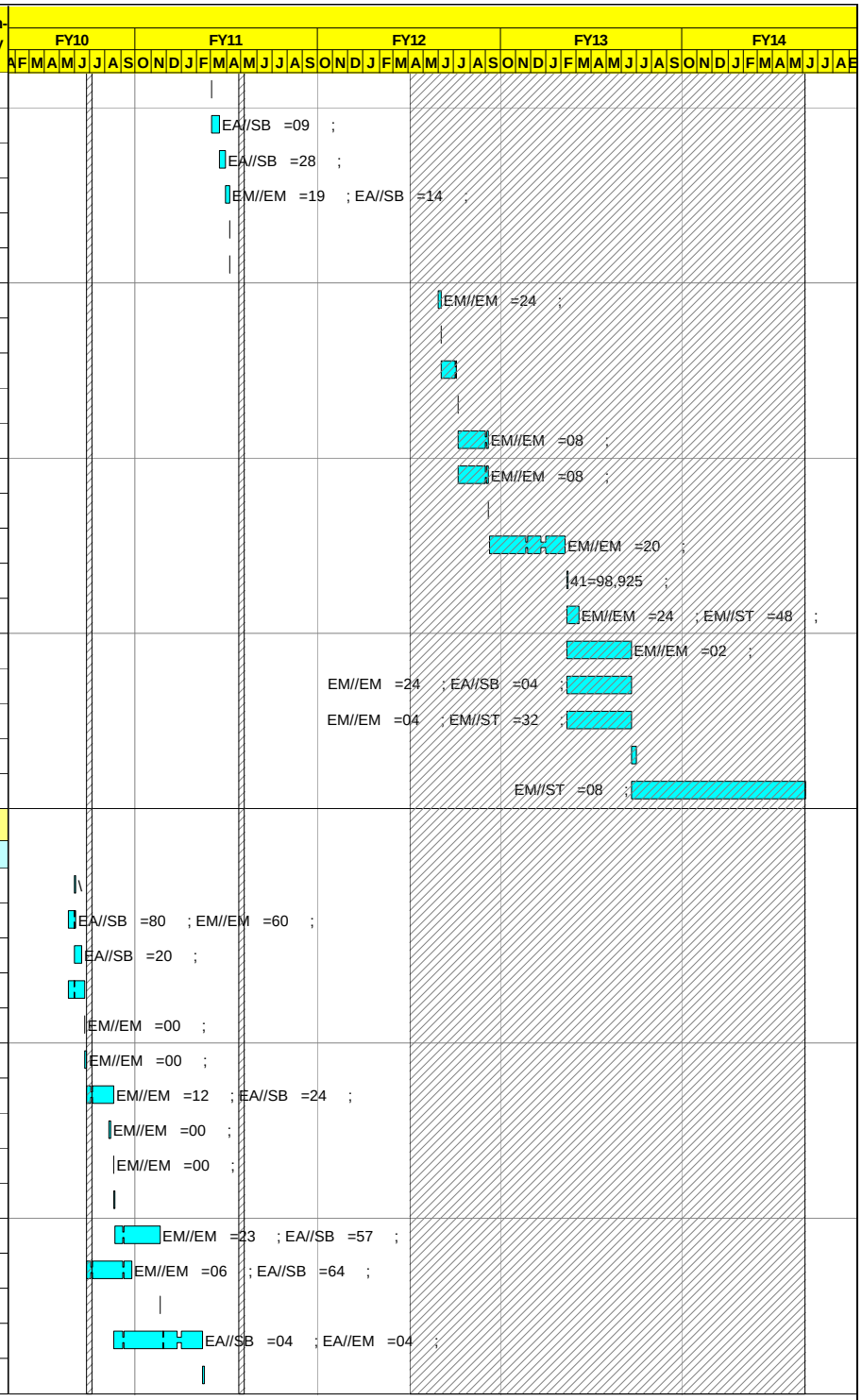
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1204-0029	Update Design Drawings	64	24JUN10	23SEP10	126	7,398.55	47
1204-0030	Design Drawings Ready for Checking & Validation	1	19NOV10	19NOV10	168	0.00	0
1204-0031	Validate Analysis: Stress, EM, Thermal	120	17AUG10*	11FEB11	89	7,916.73	20
1204-0032	Validation of Design Complete	1	14FEB11	14FEB11	89	0.00	0
1204-0033	Update CAD Models per Validation	10	15FEB11	28FEB11	89	1,390.95	50
1204-0034	Revise Fabrication & Assembly Drawings per Valid	10	01MAR11	14MAR11	89	3,540.60	50
1204-0035	Review, Check & Sign Off Drawings	5	15MAR11	21MAR11	89	4,786.74	27
1204-0036	Release Fabriction & Assembly Drawings	1	22MAR11	22MAR11	89	0.00	0
1204-0038	FDR	1	28MAR11*	28MAR11	86	0.00	12
1204-0042	Prep Req & Procurement Package	4	01MAR12*	06MAR12	166	3,974.64	50
1204-0043	Submit Req to Procurement	1	06MAR12	06MAR12	166	0.00	0
1204-0044	Procurement Processing	22	06MAR12	04APR12	166	0.00	0
1204-0045	Submit for Vendor Quotes	1	05APR12	05APR12	166	0.00	0
1204-0046	Eval Quotes	43	05APR12	05JUN12	166	662.44	20
1204-0047	Tech Eval of Vendors	43	05APR12	05JUN12	166	662.44	20
1204-0048	Award / Order Approved	1	06JUN12	06JUN12	166	0.00	0
1204-0049	Vendor Oversight	102	07JUN12	30OCT12	166	0.00	0
1204-0050	Receipt of Hardware	4	31OCT12	05NOV12	166	31,920.00	11
1204-0051	QA Inspection	20	31OCT12	29NOV12	166	2,079.40	46
1204-0052	Resolve Procurement Issues	20	30NOV12	04JAN13	166	0.00	0
1204-0053	Documentation: Assembly Procedures	20	07JAN13	01FEB13	166	2,729.28	50
1204-0054	Assembly of Components	20	04FEB13	01MAR13	166	0.00	0
1204-0055	Parts ready for installation	5	04MAR13	08MAR13	166	0.00	25
1204-0057	Handling / Warehouse / Storage	251	04MAR13	17FEB14	1,659	879.51	50
Job: 1205 - Umbrella-SMITH							
Lower Umbrella							
1205-0008	Input F/Analysis Group:Interface Detail to CS	1	01JUN10*	01JUN10	2,596	0.00	0
1205-0009	Dsgn Eng/CAD Models: Iteration, Optimizatn, Updt	30	03MAY10*	14JUN10	77	23,812.00	32
1205-0010	Complete Preliminary CAD Models	10	09JUN10	22JUN10	77	2,376.00	50
1205-0011	Mockups:CS Struct Real Estate Issues	66	03MAY10*	04AUG10	82	0.00	10
1205-0013	ME Analysis/CAD Model Iterations-Strss/EM/Thermal	32	03MAY10	16JUN10	82	9,041.96	20
1205-0014	Analysis of Preliminary Design Approved	1	16JUN10	16JUN10	82	0.00	0
1205-0016	PDR	1	24JUN10	24JUN10	77	0.00	20
1205-0018	Dsgn Eng & CAD Models: Iterations, Optim & Updat	38	24JUN10	17AUG10	77	8,331.60	35
1205-0021	DOE CD-2 (Lehman) Review	1	11AUG10*	11AUG10	2,546	0.00	0
1205-0024	PDR CAD model Compld-Outr supp ring/clamp/sprng	1	18AUG10	18AUG10	77	0.00	0
1205-0028	Det Dsgn Eng, CAD/Analysis Iterations(9mod/7dwgs	64	19AUG10	17NOV10	169	5,168.39	38
1205-0029	Update Design Drawings	64	19AUG10	17NOV10	77	7,651.67	47



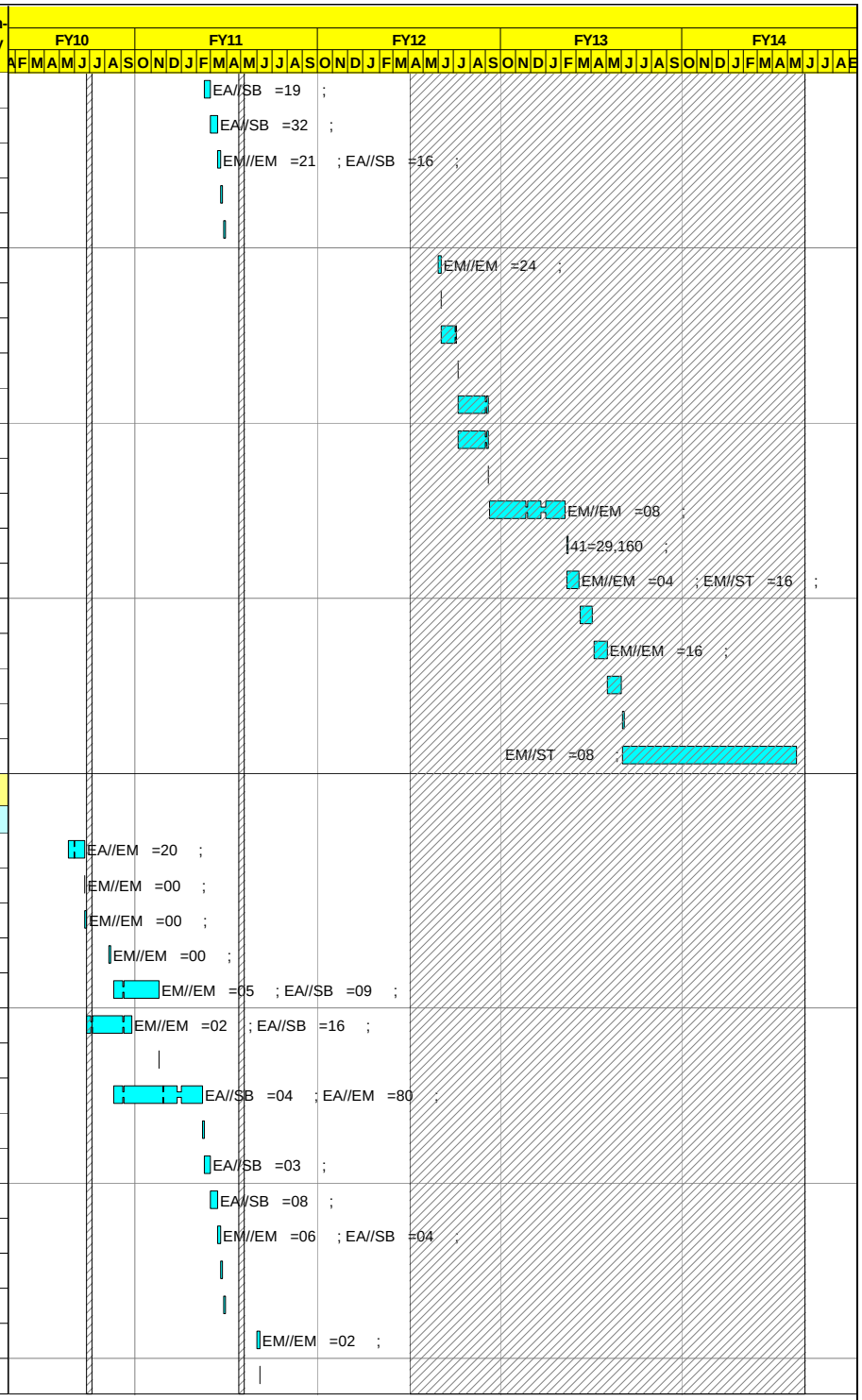
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1205-0030	Design Drawings Ready for Checking & Validation	1	18NOV10	18NOV10	169	0.00	0
1205-0031	Validate Analysis: Stress, EM, Thermal	130	19AUG10	01MAR11	77	34,457.13	20
1205-0032	Validation of Design Complete	1	02MAR11	02MAR11	77	0.00	0
1205-0033	Update CAD Models per Validation	10	03MAR11	16MAR11	77	1,138.05	50
1205-0034	Revise Fabrication & Assembly Drawings per Valid	10	17MAR11	30MAR11	77	3,540.60	50
1205-0035	Review, Check & Sign Off Drawings	5	31MAR11	06APR11	77	4,786.74	27
1205-0036	Release Fabriction & Assembly Drawings	1	07APR11	07APR11	77	0.00	0
1205-0038	FDR	1	08APR11*	08APR11	77	0.00	12
1205-0042	Prep Req & Procurement Package	4	02JUL12*	06JUL12	71	3,974.64	33
1205-0043	Submit Req to Procurement	1	06JUL12	06JUL12	71	0.00	0
1205-0044	Procurement Processing	22	06JUL12	06AUG12	71	0.00	0
1205-0045	Submit for Vendor Quotes	1	07AUG12	07AUG12	71	0.00	0
1205-0046	Eval Quotes	43	07AUG12	05OCT12	71	1,329.50	50
1205-0047	Tech Eval of Vendors	43	07AUG12	05OCT12	71	1,329.50	50
1205-0048	Award / Order Approved	1	08OCT12	08OCT12	71	0.00	0
1205-0049	Fab & Deliver incl Vendor Oversight	102	09OCT12	11MAR13	71	134,299.53	50
1205-0050	Receipt of Hardware	4	12MAR13	15MAR13	71	0.00	11
1205-0051	QA Inspection	94	12MAR13	19JUL13	71	9,308.64	37
1205-0052	Resolve Procurement Issues	94	12MAR13	19JUL13	71	341.16	5
1205-0053	Documentation: Assembly Procedures	94	12MAR13	19JUL13	71	4,637.40	16
1205-0054	Assembly of Components	94	12MAR13	19JUL13	79	4,158.80	46
1205-0055	Parts ready for installation	8	22JUL13	31JUL13	71	0.00	25
1205-0056	Handling / Warehouse / Storage	225	22JUL13	30MAY14	1,585	889.29	50
Upper Umbrella							
1205-0066	Input F/Analysis Group:Interface Detail to CS	1	01JUN10*	01JUN10	2,596	0.00	0
1205-0067	Dsgn Eng/CAD Models: Iteration, Optimizatn, Updt	30	03MAY10*	14JUN10	77	23,812.00	32
1205-0068	Complete Preliminary CAD Models	10	09JUN10	22JUN10	77	2,376.00	50
1205-0069	Mockups:CS Struct Real Estate Issues	66	03MAY10*	04AUG10	82	0.00	0
1205-0071	ME Analysis/CAD Model Iterations-Strss/EM/Therml	32	03MAY10	16JUN10	82	9,041.96	20
1205-0072	Analysis of Preliminary Design Approved	1	16JUN10	16JUN10	82	0.00	0
1205-0074	PDR	1	24JUN10	24JUN10	77	0.00	20
1205-0076	Dsgn Eng & CAD Models: Iterations, Optim & Updat	38	24JUN10	17AUG10	77	8,331.60	35
1205-0079	DOE CD-2 (Lehman) Review	1	11AUG10*	11AUG10	2,546	0.00	0
1205-0081	PDR CAD model Compld-Outr supp ring/clamp/sprng	1	18AUG10	18AUG10	77	0.00	0
1205-0086	Det Dsgn Eng, CAD/Analysis Iterations(9mod/7dwgs	64	19AUG10	17NOV10	169	5,168.39	38
1205-0087	Update Design Drawings	64	19AUG10	17NOV10	77	7,651.67	47
1205-0088	Design Drawings Ready for Checking & Validation	1	18NOV10	18NOV10	169	0.00	0
1205-0089	Validate Analysis: Stress, EM, Thermal	130	19AUG10	01MAR11	77	34,457.13	20



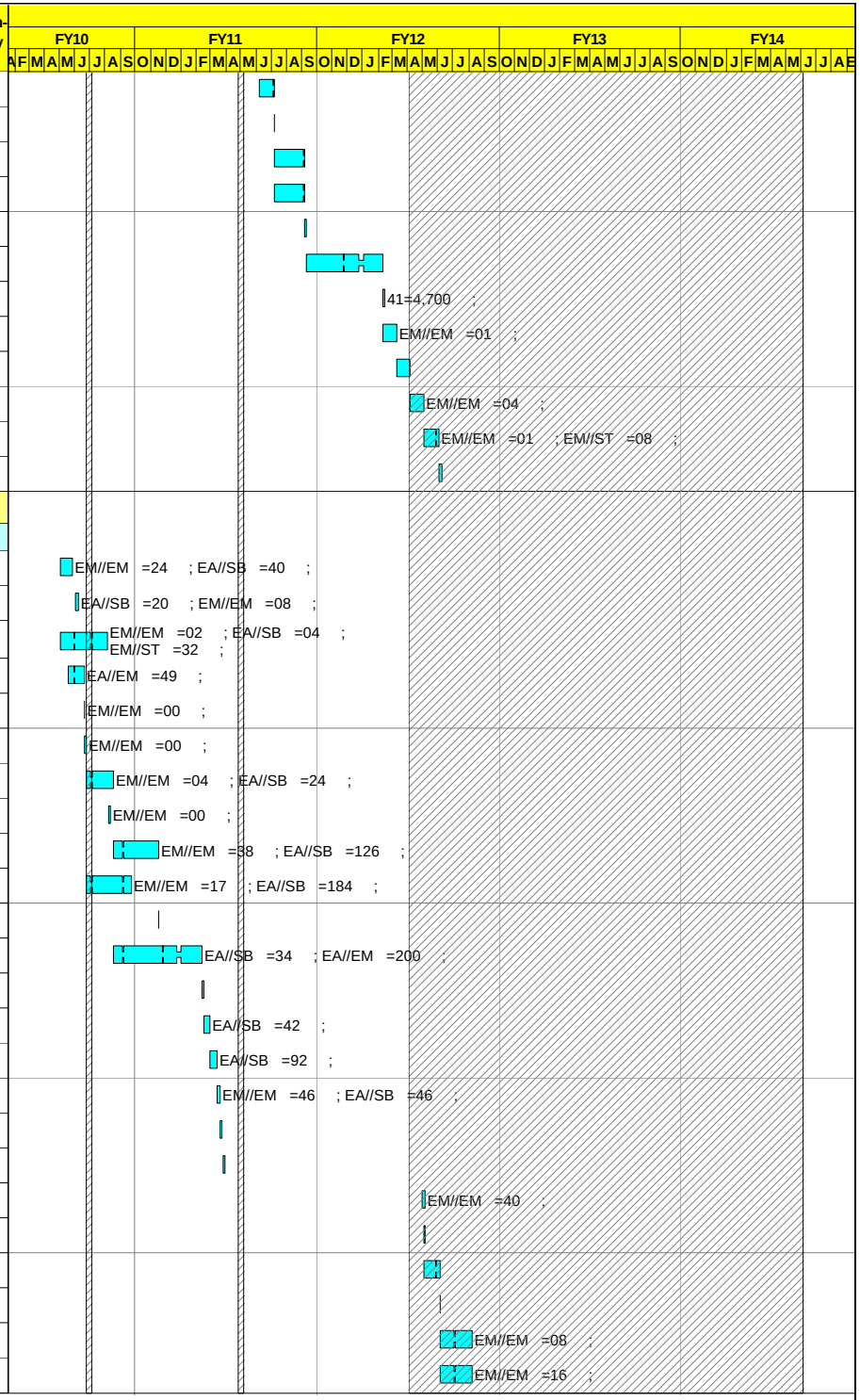
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1205-0090	Validation of Design Complete	1	02MAR11	02MAR11	77	0.00	0
1205-0091	Update CAD Models per Validation	10	03MAR11	16MAR11	77	1,138.05	50
1205-0092	Revise Fabrication & Assembly Drawings per Valid	10	17MAR11	30MAR11	77	3,540.60	50
1205-0093	Review, Check & Sign Off Drawings	5	31MAR11	06APR11	77	4,786.74	27
1205-0094	Release Fabriction & Assembly Drawings	1	07APR11	07APR11	77	0.00	0
1205-0096	FDR	1	08APR11*	08APR11	77	0.00	12
1205-0100	Prep Req & Procurement Package	4	01JUN12*	06JUN12	128	3,974.64	33
1205-0101	Submit Req to Procurement	1	06JUN12	06JUN12	128	0.00	0
1205-0102	Procurement Processing	22	06JUN12	06JUL12	128	0.00	0
1205-0103	Submit for Vendor Quotes	1	09JUL12	09JUL12	128	0.00	0
1205-0104	Eval Quotes	43	09JUL12	06SEP12	128	1,324.88	50
1205-0105	Tech Eval of Vendors	43	09JUL12	06SEP12	128	1,324.88	50
1205-0106	Award / Order Approved	1	07SEP12	07SEP12	128	0.00	0
1205-0107	Vendor Oversight	102	10SEP12	08FEB13	128	3,396.98	50
1205-0108	Receipt of Hardware	4	11FEB13	14FEB13	128	131,570.25	11
1205-0109	QA Inspection	20	11FEB13	08MAR13	202	9,308.64	37
1205-0110	Resolve Procurement Issues	94	11FEB13	20JUN13	128	341.16	5
1205-0111	Documentation: Assembly Procedures	94	11FEB13	20JUN13	128	4,637.40	16
1205-0112	Assembly of Components	94	11FEB13	20JUN13	136	4,158.80	46
1205-0113	Parts ready for installation	8	21JUN13	02JUL13	128	0.00	25
1205-0114	Handling / Warehouse / Storage	251	21JUN13	06JUN14	1,580	887.72	50
Job: 1206 - Pedestal -SMITH							
1206-0008	Input F/Analysis Group:Interface Detail to CS	1	01JUN10*	01JUN10	2,587	0.00	20
1206-0009	Dsgn Eng/CAD Models: Iteration, Optimizatn, Updt	10	18MAY10*	01JUN10	2,596	18,453.00	33
1206-0010	Complete Preliminary CAD Models	10	01JUN10	14JUN10	2,587	2,376.00	50
1206-0013	ME Analysis/CAD Model Iterations-Strss/EM/Thermal	24	19MAY10*	22JUN10	126	0.00	0
1206-0014	Analysis of Preliminary Design Approved	1	22JUN10	22JUN10	126	0.00	0
1206-0016	PDR	1	23JUN10*	23JUN10	126	0.00	20
1206-0018	Dsgn Eng & CAD Models: Iterations, Optim & Updat	38	24JUN10	17AUG10	168	4,641.00	37
1206-0021	DOE CD-2 (Lehman) Review	1	10AUG10*	10AUG10	2,547	0.00	0
1206-0023	PDR CAD model Compld-Outr supp ring/clamp/sprng	1	18AUG10	18AUG10	168	0.00	0
1206-0027	Rapid Prototype Mockup:Real Estate Issue/Sizing	1	19AUG10	19AUG10	168	0.00	
1206-0028	Det Dsgn Eng, CAD/Analysis Iterations(11mod/7dwg	64	20AUG10*	18NOV10	168	10,561.39	39
1206-0029	Update Design Drawings	64	24JUN10	23SEP10	126	8,498.10	47
1206-0030	Design Drawings Ready for Checking & Validation	1	19NOV10	19NOV10	168	0.00	0
1206-0031	Validate Analysis: Stress, EM, Thermal	120	17AUG10*	11FEB11	89	1,239.55	20
1206-0032	Validation of Design Complete	1	14FEB11	14FEB11	89	0.00	0



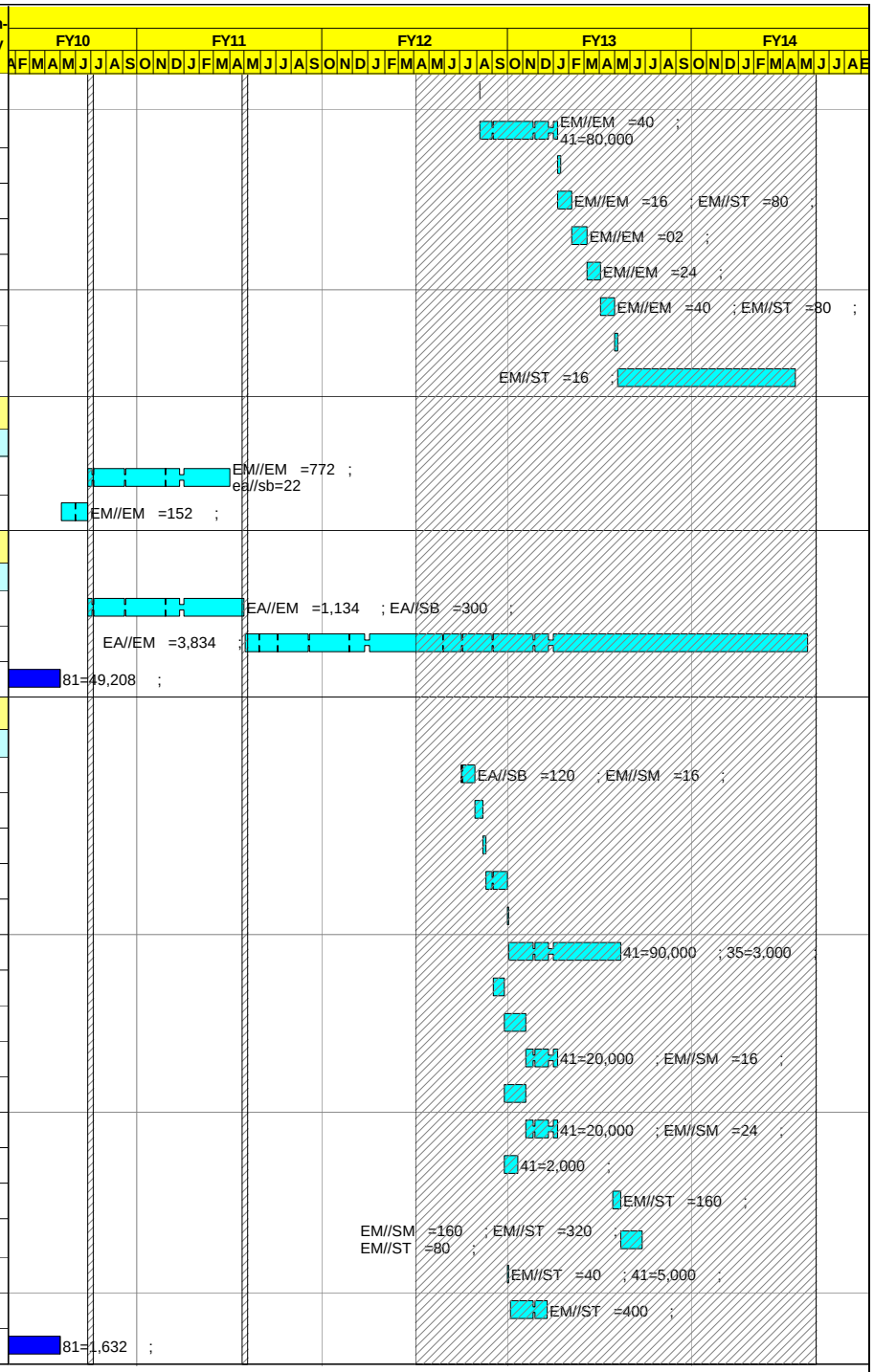
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1206-0033	Update CAD Models per Validation	10	15FEB11	28FEB11	89	2,402.55	50
1206-0034	Revise Fabrication & Assembly Drawings per Valid	10	01MAR11	14MAR11	89	4,046.40	50
1206-0035	Review, Check & Sign Off Drawings	5	15MAR11	21MAR11	89	5,357.16	27
1206-0036	Release Fabriction & Assembly Drawings	1	22MAR11	22MAR11	89	0.00	0
1206-0038	FDR	1	28MAR11*	28MAR11	86	0.00	12
1206-0042	Prep Req & Procurement Package	4	01JUN12*	06JUN12	135	3,974.64	33
1206-0043	Submit Req to Procurement	1	06JUN12	06JUN12	135	0.00	0
1206-0044	Procurement Processing	22	06JUN12	06JUL12	135	0.00	0
1206-0045	Submit for Vendor Quotes	1	09JUL12	09JUL12	135	0.00	0
1206-0046	Eval Quotes	43	09JUL12	06SEP12	135	0.00	0
1206-0047	Tech Eval of Vendors	43	09JUL12	06SEP12	135	0.00	0
1206-0048	Award / Order Approved	1	07SEP12	07SEP12	135	0.00	0
1206-0049	Vendor Oversight	102	10SEP12	08FEB13	135	1,358.79	50
1206-0050	Receipt of Hardware	4	11FEB13	14FEB13	135	38,782.80	11
1206-0051	QA Inspection	20	11FEB13	08MAR13	135	2,420.56	42
1206-0052	Resolve Procurement Issues	20	11MAR13	05APR13	135	0.00	0
1206-0053	Documentation: Assembly Procedures	20	08APR13	03MAY13	135	2,729.28	10
1206-0054	Assembly of Components	20	06MAY13	31MAY13	135	0.00	46
1206-0055	Parts ready for installation	5	03JUN13	07JUN13	135	0.00	25
1206-0057	Handling / Warehouse / Storage	251	03JUN13	19MAY14	1,594	886.26	50
Job: 1207 - Vessel Legs -SMITH							
1207-0013	ME Analysis/CAD Model Iterations-Strss/EM/Therml	24	19MAY10*	22JUN10	126	3,542.20	20
1207-0014	Analysis of Preliminary Design Approved	1	22JUN10	22JUN10	126	0.00	0
1207-0016	PDR	1	23JUN10*	23JUN10	126	0.00	20
1207-0021	DOE CD-2 (Lehman) Review	1	10AUG10*	10AUG10	2,547	0.00	0
1207-0028	Det Dsgn Eng, CAD (3 CAD/2dwg	64	17AUG10*	15NOV10	171	1,873.41	37
1207-0029	Update Design Drawings	64	24JUN10	23SEP10	126	2,199.10	47
1207-0030	Design Drawings Ready for Checking & Validation	1	16NOV10	16NOV10	171	0.00	0
1207-0031	Validate Analysis: Stress, EM, Thermal	120	17AUG10*	11FEB11	89	15,335.83	20
1207-0032	Validation of Design Complete	1	14FEB11	14FEB11	89	0.00	0
1207-0033	Update CAD Models per Validation	10	15FEB11	28FEB11	89	379.35	50
1207-0034	Revise Fabrication & Assembly Drawings per Valid	10	01MAR11	14MAR11	89	1,011.60	50
1207-0035	Review, Check & Sign Off Drawings	5	15MAR11	21MAR11	89	1,458.36	28
1207-0036	Release Fabriction & Assembly Drawings	1	22MAR11	22MAR11	89	0.00	0
1207-0038	FDR	1	28MAR11*	28MAR11	86	0.00	12
1207-0042	Prep Req & Procurement Package	4	02JUN11*	07JUN11	390	317.52	50
1207-0043	Submit Req to Procurement	1	07JUN11	07JUN11	390	0.00	0



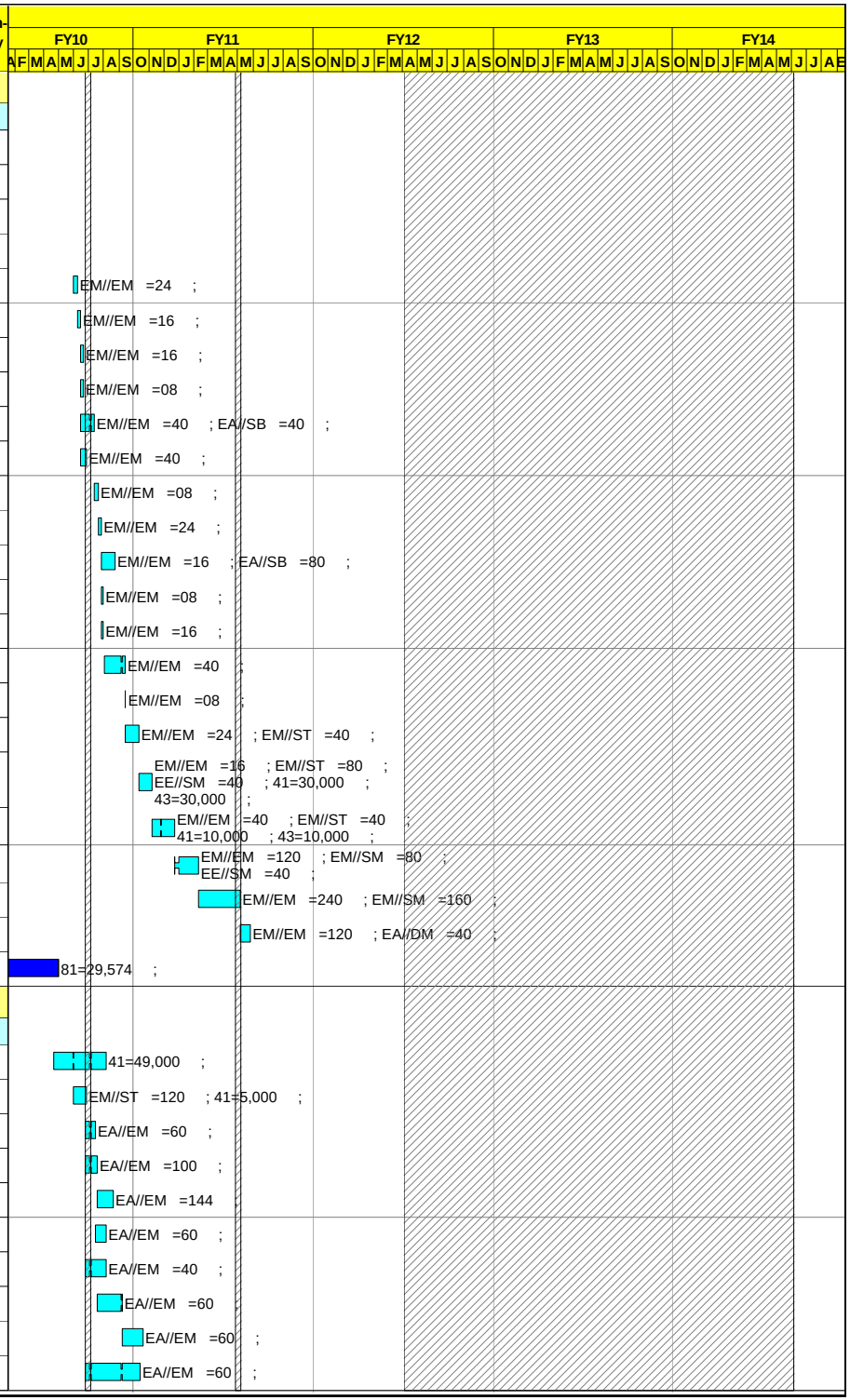
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1207-0044	Procurement Processing	22	07JUN11	07JUL11	390	0.00	0
1207-0045	Submit for Vendor Quotes	1	08JUL11	08JUL11	390	0.00	0
1207-0046	Eval Quotes	43	08JUL11	07SEP11	390	0.00	0
1207-0047	Tech Eval of Vendors	43	08JUL11	07SEP11	390	0.00	0
1207-0048	Award / Order Approved	1	08SEP11	08SEP11	390	0.00	0
1207-0049	Vendor Oversight	102	09SEP11	09FEB12	390	0.00	0
1207-0050	Receipt of Hardware	4	10FEB12	15FEB12	390	6,110.00	11
1207-0051	QA Inspection	20	10FEB12	08MAR12	390	165.61	10
1207-0052	Resolve Procurement Issues	20	09MAR12	05APR12	390	0.00	0
1207-0053	Documentation: Assembly Procedures	20	06APR12	03MAY12	390	662.44	10
1207-0054	Assembly of Components	20	04MAY12	01JUN12	390	1,009.45	0
1207-0055	Parts ready for installation	5	04JUN12	08JUN12	390	0.00	25
Job: 1208 - PF4&5 Verticle Support-SMITH							
1208-0009	Dsgn Eng/CAD Models: Iteration, Optimizatn, Updt	20	03MAY10*	28MAY10	2,591	8,331.60	35
1208-0010	Complete Preliminary CAD Models	5	02JUN10	08JUN10	2,591	3,569.20	39
1208-0011	Mockups:PF4/5 Vert Supp Struct Real Estate Issue	66	03MAY10*	04AUG10	2,551	3,813.18	48
1208-0013	ME Analysis/CAD Model Iterations-Strss/EM/Therml	24	19MAY10*	22JUN10	126	8,678.39	20
1208-0014	Analysis of Preliminary Design Approved	1	22JUN10	22JUN10	126	0.00	0
1208-0016	PDR	1	23JUN10*	23JUN10	126	0.00	0
1208-0018	Dsgn Eng & CAD Models: Iterations, Optim & Updat	38	24JUN10	17AUG10	2,542	3,447.80	44
1208-0021	DOE CD-2 (Lehman) Review	1	10AUG10*	10AUG10	2,547	0.00	0
1208-0028	Det Dsgn Eng, CAD (42 CAD/23 dwg)	64	17AUG10*	15NOV10	2,478	21,301.04	41
1208-0029	Update Design Drawings	64	24JUN10	23SEP10	126	24,394.75	47
1208-0030	Design Drawings Ready for Checking & Validation	1	16NOV10	16NOV10	2,478	0.00	0
1208-0031	Validate Analysis: Stress, EM, Thermal	120	17AUG10*	11FEB11	89	41,325.41	20
1208-0032	Validation of Design Complete	1	14FEB11	14FEB11	89	0.00	0
1208-0033	Update CAD Models per Validation	10	15FEB11	28FEB11	89	5,310.90	50
1208-0034	Revise Fabrication & Assembly Drawings per Valid	10	01MAR11	14MAR11	89	11,633.40	50
1208-0035	Review, Check & Sign Off Drawings	5	15MAR11	21MAR11	89	13,119.66	30
1208-0036	Release Fabriction & Assembly Drawings	1	22MAR11	22MAR11	89	0.00	0
1208-0038	FDR	1	28MAR11*	28MAR11	86	0.00	12
1208-0042	Prep Req & Procurement Package	4	01MAY12*	04MAY12	85	6,624.40	50
1208-0043	Submit Req to Procurement	1	04MAY12	04MAY12	85	0.00	0
1208-0044	Procurement Processing	22	04MAY12	05JUN12	85	0.00	0
1208-0045	Submit for Vendor Quotes	1	06JUN12	06JUN12	85	0.00	0
1208-0046	Eval Quotes	43	06JUN12	06AUG12	85	1,324.88	25
1208-0047	Tech Eval of Vendors	43	06JUN12	06AUG12	85	2,649.76	25



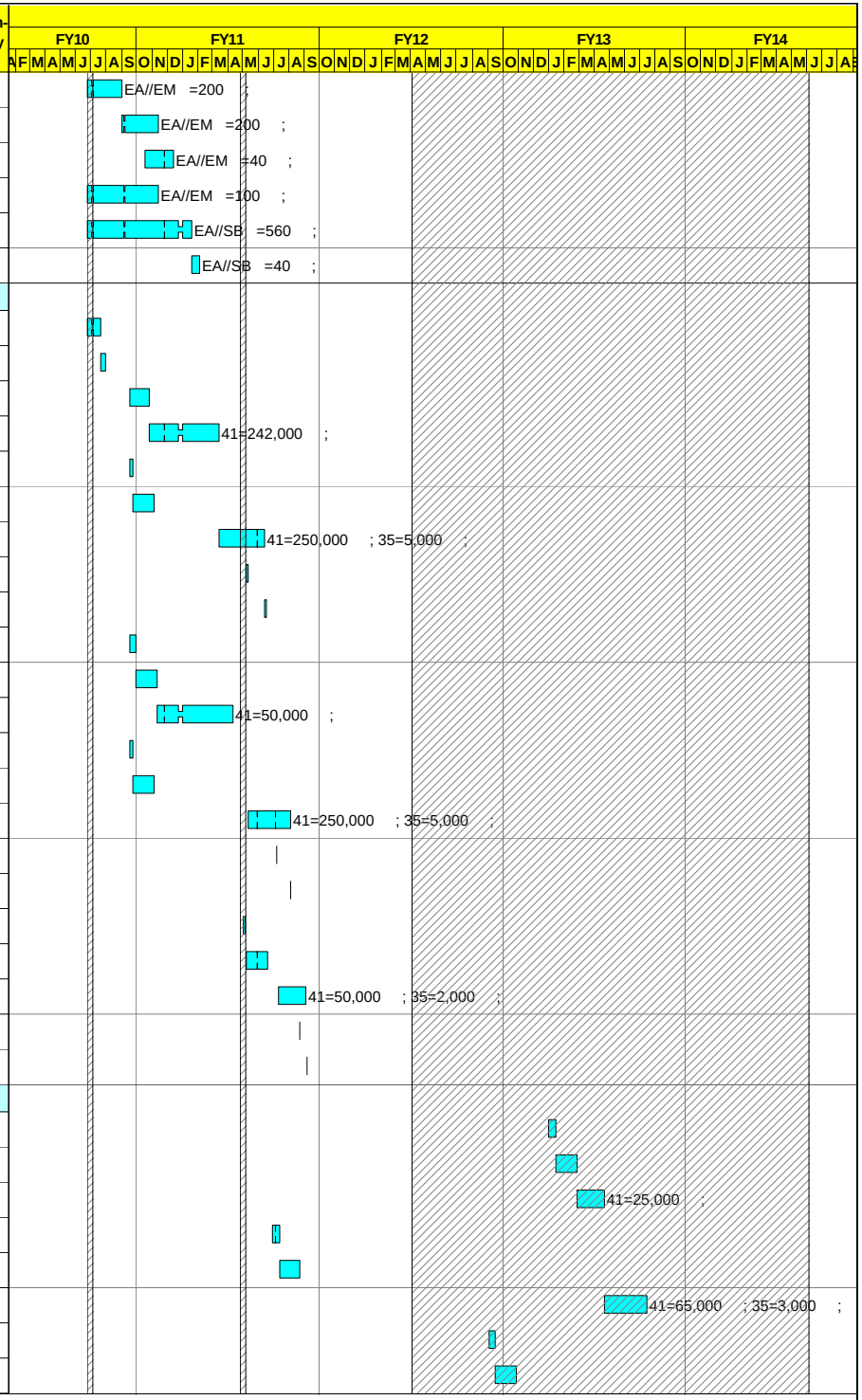
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1208-0048	Award / Order Approved	1	07AUG12	07AUG12	85	0.00	0
1208-0049	Fab & Deliver incl Vendor Oversight	102	08AUG12	09JAN13	85	112,280.50	25
1208-0050	Receipt of Hardware	4	10JAN13	15JAN13	85	0.00	11
1208-0051	QA Inspection	20	10JAN13	06FEB13	85	11,420.48	43
1208-0052	Resolve Procurement Issues	20	07FEB13	06MAR13	85	341.16	20
1208-0053	Documentation: Assembly Procedures	20	07MAR13	03APR13	85	4,093.92	33
1208-0054	Assembly of Components	20	04APR13	01MAY13	85	15,514.40	48
1208-0055	Parts ready for installation	5	02MAY13	08MAY13	85	0.00	25
1208-0057	Handling / Warehouse / Storage	251	09MAY13	24APR14	1,611	1,769.00	50
Job: 1220 - Misc Structural Design-SMITH							
1220-FDR	Final Design Oversight	190	25JUN10	31MAR11	83	122,629.20	44
1220-PDR	Prelim Design Oversight	38	03MAY10*	24JUN10	83	22,670.80	26
Job: 1300 - Center Stack-CHRZANOWSKI							
1300-0010	Engineering & Design Support-Final Design	212	24JUN10	29APR11	1,594	246,758.46	10
1300-0011	Engineering and Design Support-Title III	774	02MAY11	19MAY14	1,594	766,865.68	10
FY101300	FY10 Actual Cost	143	01OCT09A	30APR10A		49,208.00	
Job: 1301 - Outer TF Coils-CHRZANOWSKI							
1301-0010	Revise Outer TF Coil (OTF) Drawings	20	02JUL12*	30JUL12	88	18,474.16	10
1301-0020	Generate Spec & SOW for OTF Purchase	10	31JUL12	13AUG12	88	0.00	10
1301-0030	Prep Requisition & Submit to Procurement'	5	14AUG12	20AUG12	88	0.00	10
1301-0040	Bid & Award OTF Manufacturing	30	21AUG12	02OCT12	88	0.00	10
1301-0050	Provide Existing OTFTooling to Vendor	1	03OCT12	03OCT12	88	0.00	10
1301-0060	Manufacture (2) OTF Coils	150	04OCT12	13MAY13	88	123,660.00	30
1301-0100	Prep Requisitions & Submit to Procurement	15	04SEP12*	24SEP12	175	0.00	
1301-0110	Bid & Award Al Supp Castings & SS Supp Clamps	30	25SEP12	05NOV12	175	0.00	
1301-0120	Fab & Del Al Supp Castings & SS Supp Clamps	40	06NOV12	10JAN13	175	29,324.32	25
1301-0150	Bid & Award Epoxy/Glass for support blocks	30	25SEP12	05NOV12	1,916	0.00	
1301-0160	Fab & Del Epoxy/Glass	40	06NOV12	10JAN13	1,916	30,686.48	25
1301-0180	Purchase Copper Fittings	20	25SEP12	22OCT12	1,966	2,648.00	15
1301-0200	Setup work area to install OTF Support H/W	10	30APR13	13MAY13	1,829	17,382.40	25
1301-0210	Install OTF (2Coils) Support Hardware	30	14MAY13	24JUN13	1,829	70,699.20	25
1301-0300	Fab Drill Jig for add'l holes in all OTF Flags	5	01OCT12*	05OCT12	262	10,995.60	15
1301-0310	Drill (24) Add'l holes in all OTF Flags	50	08OCT12	18DEC12	262	43,456.00	25
FY101301	FY10 Actual Cost	143	01OCT09A	30APR10A		1,632.00	



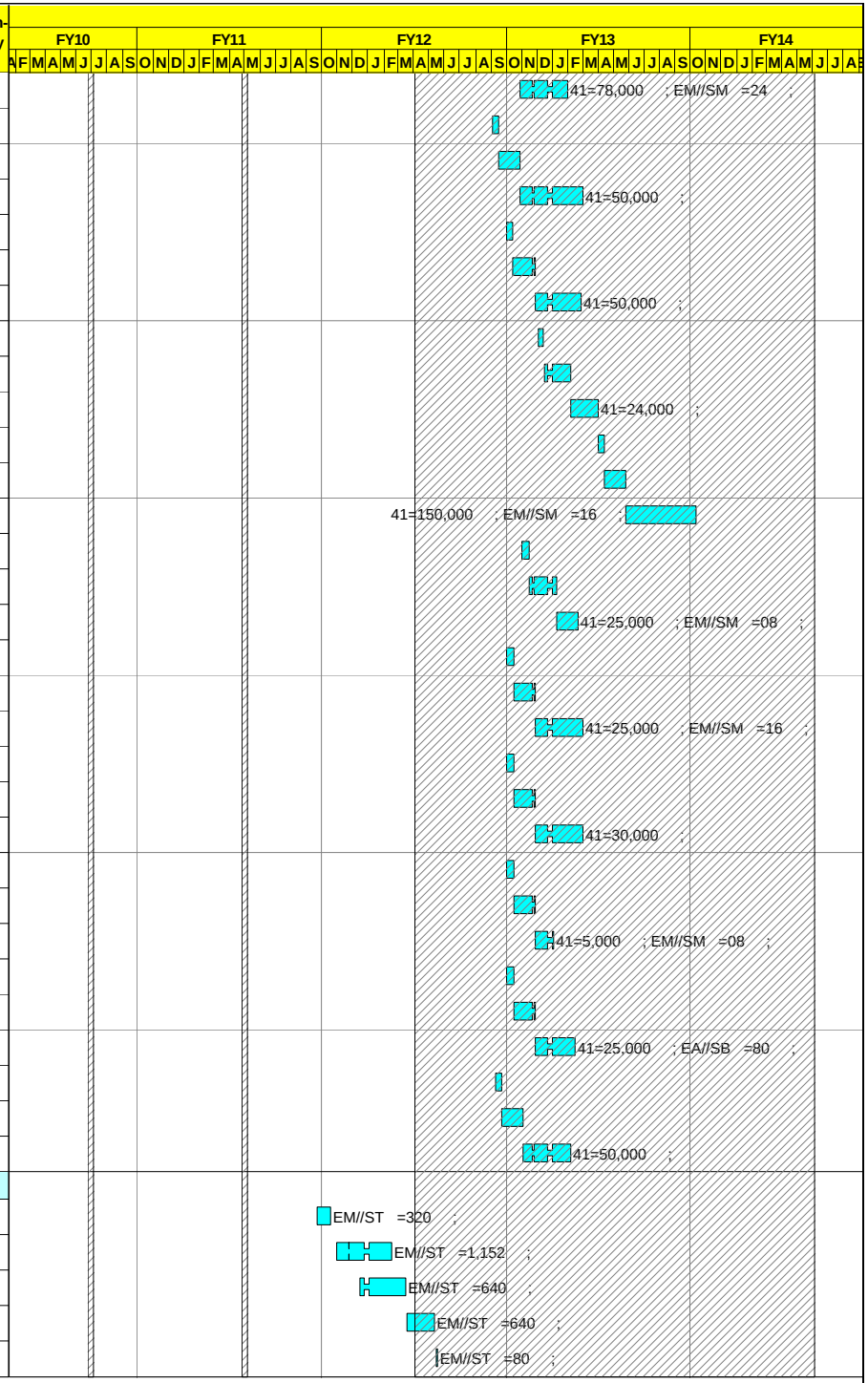
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
Job: 1303 - TF Joint Test Stand&Test-CHRZANOWSKI							
CS13030010	Physics Requirements	5	05OCT09*	09OCT09	2,490	0.00	
CS13030020	PREPARE WORK PLANNING FORM	5	12OCT09	16OCT09	2,490	0.00	
CS13030030	Prep System Description	5	19OCT09	23OCT09	2,490	0.00	
CS13030040	Prep System Requirements	5	26OCT09	30OCT09	2,490	0.00	
CS13030050	R&D	5	01JUN10*	07JUN10	2,349	3,579.60	20
CS13030060	CDR	5	08JUN10	14JUN10	2,349	2,386.40	20
CS13030070	Prepare NEPA Form	5	15JUN10*	21JUN10	2,582	2,386.40	20
CS13030080	Update Cost & Schedule Estimate	5	15JUN10	21JUN10	2,582	1,193.20	20
CS13030090	Design Drawings	20	15JUN10*	13JUL10	2,349	10,718.00	20
CS13030100	PDR Prep	10	15JUN10	28JUN10	2,364	5,966.00	20
CS13030110	CONDUCT PDR	5	14JUL10	20JUL10	2,349	1,193.20	20
CS13030120	Disposition PDR Chits	5	21JUL10	27JUL10	2,349	3,579.60	20
CS13030130	Design Drawings	20	28JUL10	24AUG10	2,361	11,890.40	20
CS13030140	Update Cost & Schedule Estimate	2	28JUL10	29JUL10	2,379	1,193.20	20
CS13030150	Prep Procurement Specs	3	28JUL10	30JUL10	2,349	2,386.40	20
CS13030160	FDR Prep	30	02AUG10	13SEP10	2,349	5,966.00	20
CS13030170	CONDUCT FDR	1	13SEP10	13SEP10	2,349	1,193.20	20
CS13030180	Fab/Assy Procedure	20	14SEP10	11OCT10	2,349	7,545.74	20
CS13030190	Shop Fabrication	20	12OCT10	08NOV10	2,349	93,542.56	20
CS13030200	Assembly	30	09NOV10*	22DEC10	2,349	35,895.20	20
CS13030210	Machine Installation	30	23DEC10	10FEB11	2,349	38,141.60	20
CS13030220	PTP Testing	60	11FEB11	05MAY11	2,349	63,457.60	20
CS13030230	TF Joint Test Final Report & Presentation	15	06MAY11	26MAY11	2,349	23,564.00	20
FY101303	FY10 Actual Cost	143	01OCT09A	30APR10A		29,574.00	
Job: 1304 - Inner TF Bundle (Ds/Fab)-CHRZANOWSKI							
Inner TF Bundl;e Design							
1304-0050	Perform Add'l Friction Stir Weld Trials-Phase II	75	22APR10*	06AUG10	2,549	57,820.00	10
1304-0060	Fabricate Flex Bus Assy's for Testing (2)	20	01JUN10*	28JUN10	2,577	17,298.80	30
1304-0110	Design-Analyze Tension Strap	15	24JUN10	15JUL10	244	10,626.60	20
1304-0120	Analyze TF Bus Bar	17	24JUN10	19JUL10	192	17,711.00	20
1304-0130	Complete Analysis if TF Flex Bus	24	20JUL10	20AUG10	203	25,503.84	20
1304-0140	Complete & Check Thermal Stresses	15	16JUL10	05AUG10	244	10,626.60	20
1304-0150	Maintain input to Willards Flex Model	30	24JUN10	05AUG10	214	7,084.40	20
1304-0160	Check Willards Calculations	35	20JUL10	07SEP10	192	10,626.60	20
1304-0170	Tooling/Fixturing Calculations	30	08SEP10	19OCT10	192	10,923.26	20
1304-0180	Calculation/Write/Check Files	80	24JUN10	15OCT10	194	10,720.73	20



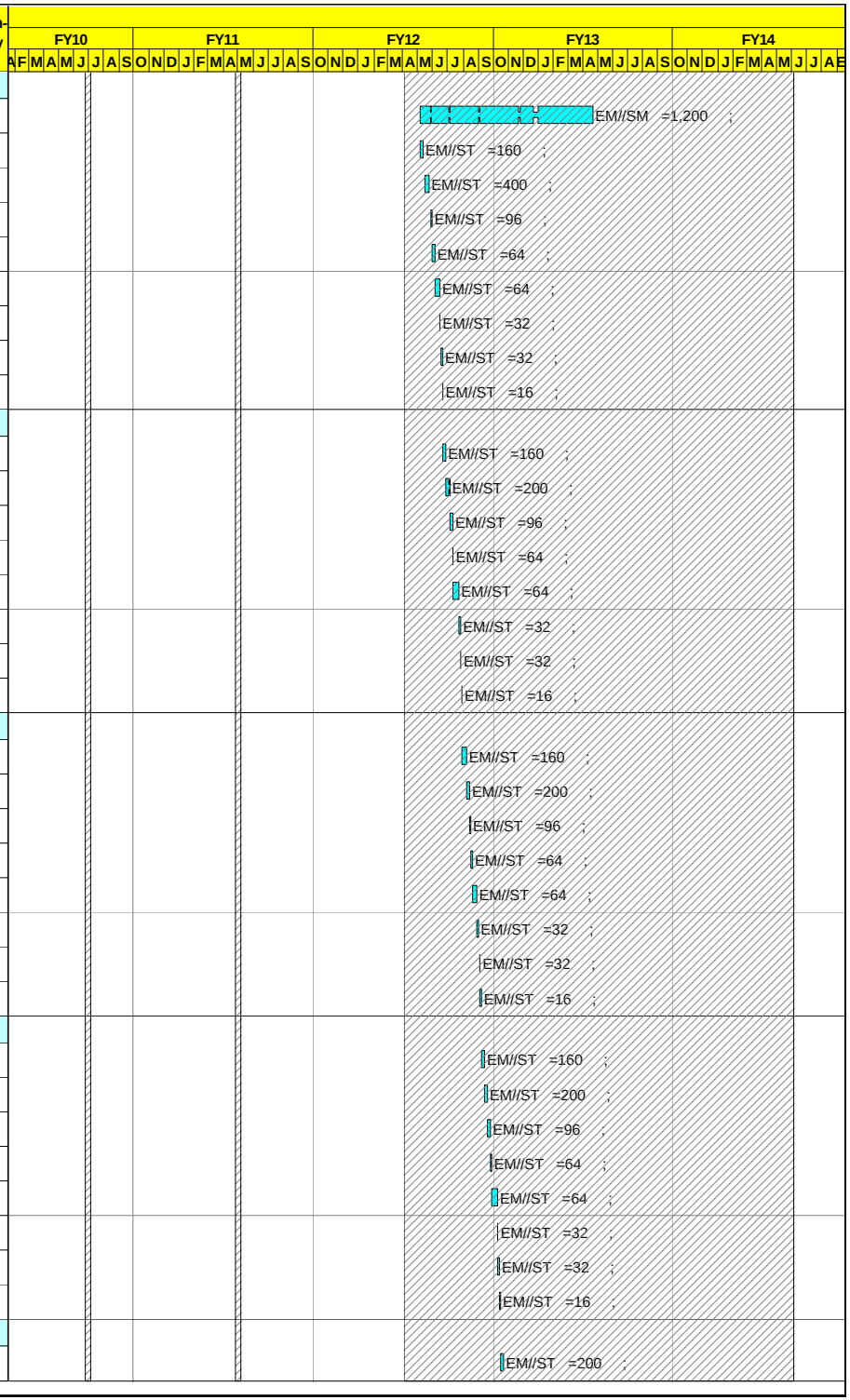
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1304-0190	Analyze Double Row of Teeth	50	24JUN10	02SEP10	154	35,422.00	20
1304-0210	Pedestal/Lower Skirt/TF Teeth Analysis	50	03SEP10	12NOV10	154	36,836.84	20
1304-0220	Finish Torque for Upper Teeth & Covers Post Proc	40	18OCT10	14DEC10	154	7,540.80	20
1304-0230	DCPS Input	100	24JUN10	12NOV10	2,480	18,064.71	
1304-0250	Complete Detail and Assembly CAD Drawings	140	24JUN10	19JAN11	124	68,700.60	25
1304-0260	Prepare for FDR	10	20JAN11	02FEB11	124	5,058.00	10
Manufacture Inner TF Conductor							
1304-0460	Generate SOW for TF Conductor	20	24JUN10	22JUL10	106	0.00	
1304-0480	Prep Req for TF Conductor & Submit to Proc	5	23JUL10	29JUL10	106	0.00	10
1304-0500	Bid/Award TF Conductor-Copper Extrusions	30	16SEP10	27OCT10	73	0.00	10
1304-0600	Manufacture TF Conductor-Copper Extrusions	90	28OCT10	14MAR11	73	304,920.00	35
1304-0730	Prep Req to Mach Conductors & Submit to Proc	5	16SEP10	22SEP10	118	0.00	10
1304-0740	Bid & Award Contract to Machine Conductors	30	23SEP10	03NOV10	118	0.00	10
1304-0750	Machine TF Conductors (Clng Grooves, Lead Areas)	65	15MAR11	14JUN11	73	321,300.00	35
1304-0750A	Deliver 1st 25 Machined Conductors	1	10MAY11	10MAY11	73	0.00	
1304-0750B	Deliver 2nd 20 Machined Conductors	1	15JUN11	15JUN11	83	0.00	
1304-0770	Prep Req for Cu-Cr-Zr TF Lead Extensions	10	16SEP10	29SEP10	94	0.00	
1304-0780	Bid & Award TF Lead Extensions	30	30SEP10	10NOV10	94	0.00	
1304-0790	Fab & Del TF Lead Extensions	100	11NOV10	11APR11	94	63,000.00	25
1304-0830	Prep Req for Friction Stir Welding	5	16SEP10	22SEP10	199	0.00	10
1304-0840	Bid & Award Friction Stir Welding	30	23SEP10	03NOV10	199	0.00	10
1304-0850	Friction Stir-Weld Coil Leads to Conductors	60	11MAY11	04AUG11	73	321,300.00	35
1304-0850A	Deliver 1st 20 FSW Conductors	1	08JUL11	08JUL11	73	0.00	
1304-0850B	Deliver 2nd 25 FSW conductors	1	05AUG11	05AUG11	73	0.00	
1304-0930	Prep Req for Final Conductor Machining	5	02MAY11	06MAY11	86	0.00	10
1304-0940	Bid & Award Final Conductor Machining	30	09MAY11	20JUN11	86	0.00	10
1304-0950	Machine TF Conductors (Fnl Lead Areas & Inserts)	40	11JUL11	02SEP11	73	65,520.00	35
1304-0950A	Receive 1st Delivery of Final Machined TF Cond	1	22AUG11	22AUG11	83	0.00	
1304-0950B	Receive Balance ofFinal Machined TF Cond	1	06SEP11	06SEP11	73	0.00	
Other Inner TF Bundle Hardware							
1304-1110	Prep Req for C151 (Cu-Zr) for Flex Bus	10	01JAN13*	14JAN13	128	0.00	
1304-1112	Bid/Award- C151 for Flex Bus	30	15JAN13	25FEB13	128	0.00	
1304-1114	Fab & Deliver C151 for Flex Bus	40	26FEB13	22APR13	128	33,250.00	25
1304-1120	Prep Req for Flex Bus Fabrication	10	28JUN11	12JUL11	542	0.00	
1304-1122	Bid/Award Flex Bus Fabrication	30	13JUL11	23AUG11	542	0.00	
1304-1124	Fab & Deliver Flex Bus	60	23APR13	15JUL13	128	90,410.00	35
1304-1130	Prep Req for Cu-Cr-Zr (C1815) for OTF Lead Ext	10	04SEP12*	17SEP12	115	0.00	
1304-1132	Bid/Award Cu-Cr-Zr for OTF Lead Ext	30	18SEP12	29OCT12	115	0.00	



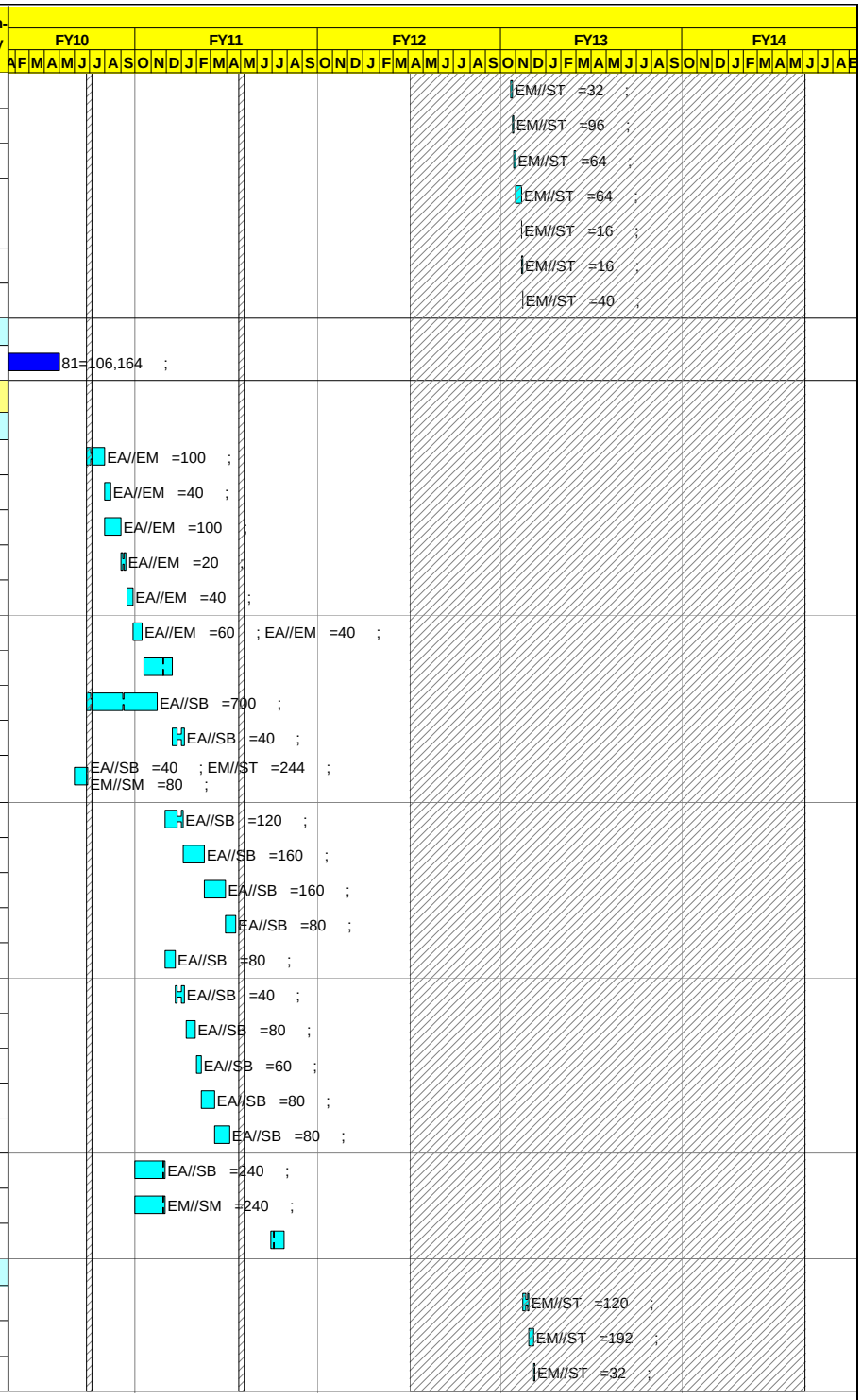
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1304-1134	Fab & Del Cu-Cr-Zr for OTF Lead Ext	60	30OCT12	31JAN13	115	107,826.48	25
1304-1140	Prep Req for OTF Lead Ext (OTF to Flex)	10	04SEP12*	17SEP12	95	0.00	
1304-1142	Bid/Award OTF Lead Ext (OTF to Flex)	30	18SEP12	29OCT12	95	0.00	
1304-1144	Fab & Del OTF Lead Ext (OTF to Flex)	80	30OCT12	28FEB13	95	66,500.00	30
1304-1150	Prep ReqPrep Req for Supports for OTF Jumpers	10	01OCT12*	12OCT12	96	0.00	
1304-1152	Bid/Award Supports for OTF Jumpers	30	15OCT12	27NOV12	96	0.00	
1304-1154	Fab/Deliver Supports for OTF Jumpers	60	28NOV12	27FEB13	96	66,500.00	30
1304-1160	Prep Req Lower TF Coil to Bus Jump & Supp	10	03DEC12*	14DEC12	73	0.00	
1304-1162	Bid/Award Lower TF Coil to Bus Jump & Supp	30	17DEC12	04FEB13	73	0.00	
1304-1164	Fab & Deliver Lower TF Coil to Bus Jump & Supp	40	05FEB13	01APR13	73	31,920.00	30
1304-1170	Prep Spec for Super Bolts	10	01APR13*	12APR13	64	0.00	
1304-1172	Bid/Award Super Bolts	30	15APR13	24MAY13	64	0.00	
1304-1174	Fab & Deliver Super Nuts	100	27MAY13	11OCT13	64	202,636.68	25
1304-1180	Prep Req Joint Hardware	10	02NOV12*	15NOV12	102	0.00	
1304-1182	Bid/Award Joint Hardware	30	16NOV12	08JAN13	102	0.00	
1304-1184	Fab & Deliver Joint Hardware	30	09JAN13	19FEB13	102	34,612.16	25
1304-1190	Prep Spec Copper for Lead Ext for Upper ITF	10	02OCT12*	15OCT12	95	0.00	
1304-1192	Bid/Award - Copper Lead Ext for Upper ITF	30	16OCT12	28NOV12	95	0.00	
1304-1194	Fab & Deliver Copper Lead Ext for Upper ITF	60	29NOV12	28FEB13	95	35,974.32	25
1304-1210	Prep Req for Up/Lwr OF to TF Supp Struct	10	02OCT12*	15OCT12	95	0.00	
1304-1212	Bid/Award Up/Lwr OH to TF Supp Struct	30	16OCT12	28NOV12	95	0.00	
1304-1214	Fab & Del Up/Lwr OH to TF Supp Struct	60	29NOV12	28FEB13	95	39,900.00	30
1304-1220	Pre Req for Cooling Fittings	10	02OCT12*	15OCT12	135	0.00	
1304-1222	Bid/Award Cooling Fittings	30	16OCT12	28NOV12	135	0.00	
1304-1224	Fab & Deliver Cooling Fittings	20	29NOV12	03JAN13	135	8,012.16	15
1304-1230	Prep Req for Tooling for Inst Flex Bus Segments	10	02OCT12*	15OCT12	105	0.00	
1304-1232	Bid/Award-Tooling for Inst Flex Bus segments	30	16OCT12	28NOV12	105	0.00	
1304-1234	Fab/Del Tooling for Inst Flex Bus Segments	50	29NOV12	14FEB13	105	44,119.60	25
1304-1240	Prep req for Up/Lwr Teeth Interf Struct	10	10SEP12*	21SEP12	111	0.00	
1304-1242	Bid/Award Up/Lwr Teeth Interf Struct	30	24SEP12	02NOV12	111	0.00	
1304-1244	Fab & Deliver Up/Lwr Teeth Interf Struct	60	05NOV12	06FEB13	111	66,500.00	35
Inner TF Conductor Receipt/Inspection/Prep							
1304-1310	Inspect Machined TF Conductors	20	22SEP11	19OCT11	62	33,265.28	40
1304-1330	Solder TF cooling tubes [40 conductors]	72	31OCT11	17FEB12	55	121,512.96	40
1304-1340	Cleanup TF conductors- post solder	60	16DEC11	16MAR12	55	67,507.20	40
1304-1350	Sandblast TF conductor length for primer	40	19MAR12	11MAY12	55	67,507.20	40
1304-1360	Apply primer [40 TF conductors]	5	14MAY12	18MAY12	55	8,438.40	40



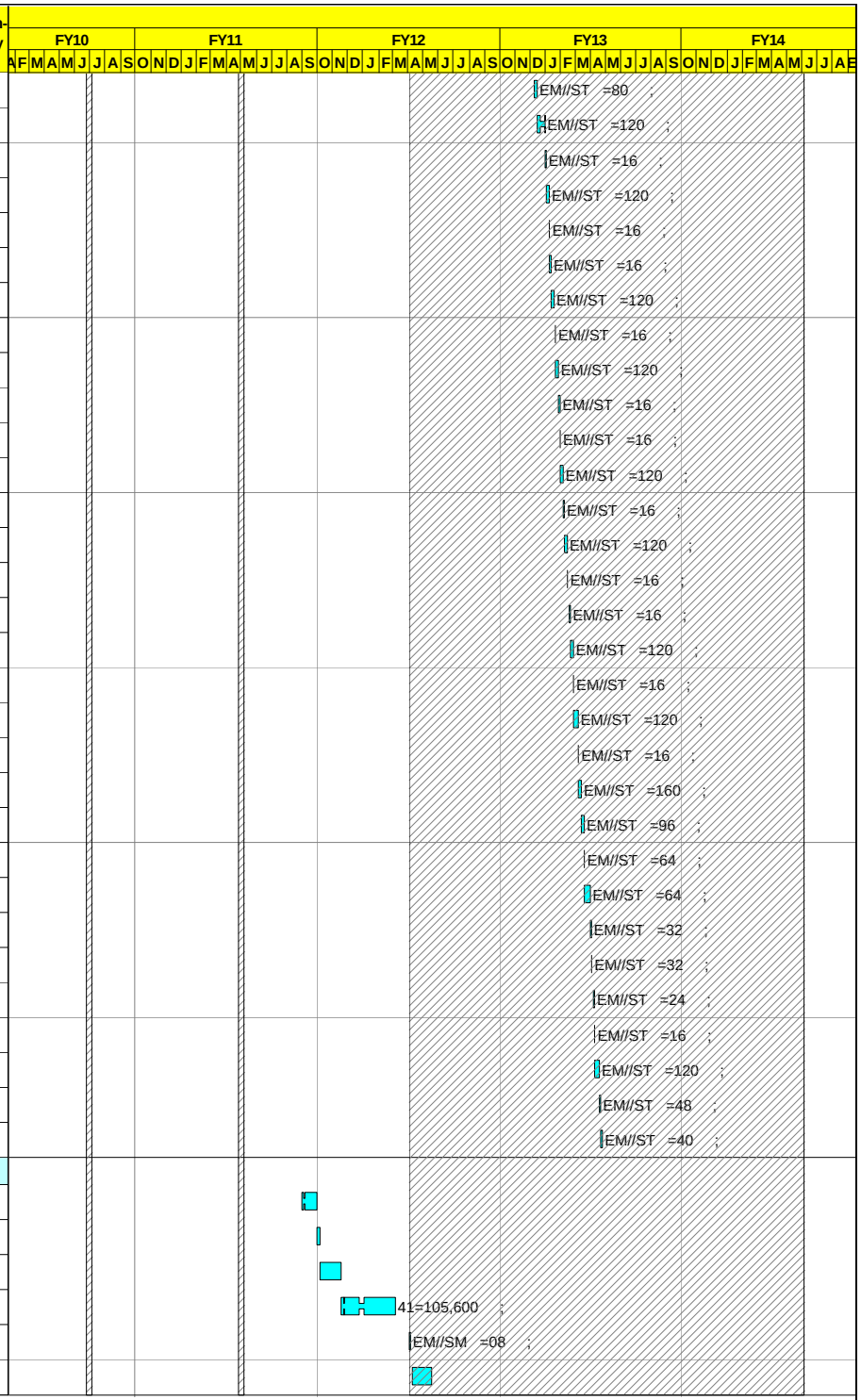
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
Inner TF Quadrant 1							
1304-1510	Supervise TF/OH Coil Manufacturing	240	07MAY12	22APR13	1,874	201,794.40	40
1304-1520	Apply turn insulation Quadrant #1	5	07MAY12	11MAY12	55	16,876.80	40
1304-1530	Assemble Quadrant #1	10	14MAY12	25MAY12	55	42,192.00	40
1304-1540	Prepare VPI operation	3	29MAY12	31MAY12	55	10,126.08	40
1304-1550	VPI- fill quadrant	2	01JUN12	04JUN12	55	6,750.72	40
1304-1560	Cure VPI'd coil	8	05JUN12	14JUN12	55	6,750.72	40
1304-1570	Remove Quadrant #1 from mold	1	15JUN12	15JUN12	55	3,375.36	40
1304-1580	Cleanup quadrant	2	18JUN12	19JUN12	55	3,375.36	40
1304-1590	Perform T/T electrical tests	1	20JUN12	20JUN12	55	1,687.68	40
Inner TF Quadrant 2							
1304-1620	Apply turn insulation Quadrant #2	5	21JUN12	27JUN12	55	16,876.80	40
1304-1630	Assemble Quadrant #2	5	28JUN12	05JUL12	55	21,096.00	40
1304-1640	Prepare VPI operation	3	06JUL12	10JUL12	55	10,126.08	40
1304-1650	VPI- fill quadrant	2	11JUL12	12JUL12	55	6,750.72	40
1304-1660	Cure VPI'd coil	8	13JUL12	24JUL12	55	6,750.72	40
1304-1670	Remove Quadrant #2 from mold	1	25JUL12	25JUL12	55	3,375.36	40
1304-1680	Cleanup quadrant	2	26JUL12	27JUL12	55	3,375.36	40
1304-1690	Perform T/T electrical tests	1	30JUL12	30JUL12	55	1,687.68	40
Inner TF Quadrant 3							
1304-1720	Apply turn insulation Quadrant #3	5	31JUL12	06AUG12	55	16,876.80	40
1304-1730	Assemble Quadrant #3	5	07AUG12	13AUG12	55	21,096.00	40
1304-1740	Prepare VPI operation	3	14AUG12	16AUG12	55	10,126.08	40
1304-1750	VPI- fill quadrant	2	17AUG12	20AUG12	55	6,750.72	40
1304-1760	Cure VPI'd coil	8	21AUG12	30AUG12	55	6,750.72	40
1304-1770	Remove Quadrant #3 from mold	1	31AUG12	31AUG12	55	3,375.36	40
1304-1780	Cleanup quadrant	2	04SEP12	05SEP12	55	3,375.36	40
1304-1790	Perform T/T electrical tests	1	06SEP12	06SEP12	55	1,687.68	40
Inner TF Quadrant 4							
1304-1820	Apply turn insulation Quadrant #4	5	07SEP12	13SEP12	55	16,876.80	40
1304-1830	Assemble Quadrant #4	5	14SEP12	20SEP12	55	21,096.00	40
1304-1840	Prepare VPI operation	3	21SEP12	25SEP12	55	10,126.08	40
1304-1850	VPI- fill quadrant	2	26SEP12	27SEP12	55	6,750.72	40
1304-1860	Cure VPI'd coil	8	28SEP12	09OCT12	55	6,927.68	40
1304-1870	Remove Quadrant #4 from mold	1	10OCT12	10OCT12	55	3,476.48	40
1304-1880	Cleanup quadrant	2	11OCT12	12OCT12	55	3,476.48	40
1304-1890	Perform T/T electrical tests	1	15OCT12	15OCT12	55	1,738.24	40
Inner TF Coil							
1304-4800	Assemble quadrants together	5	16OCT12	22OCT12	55	21,728.00	40



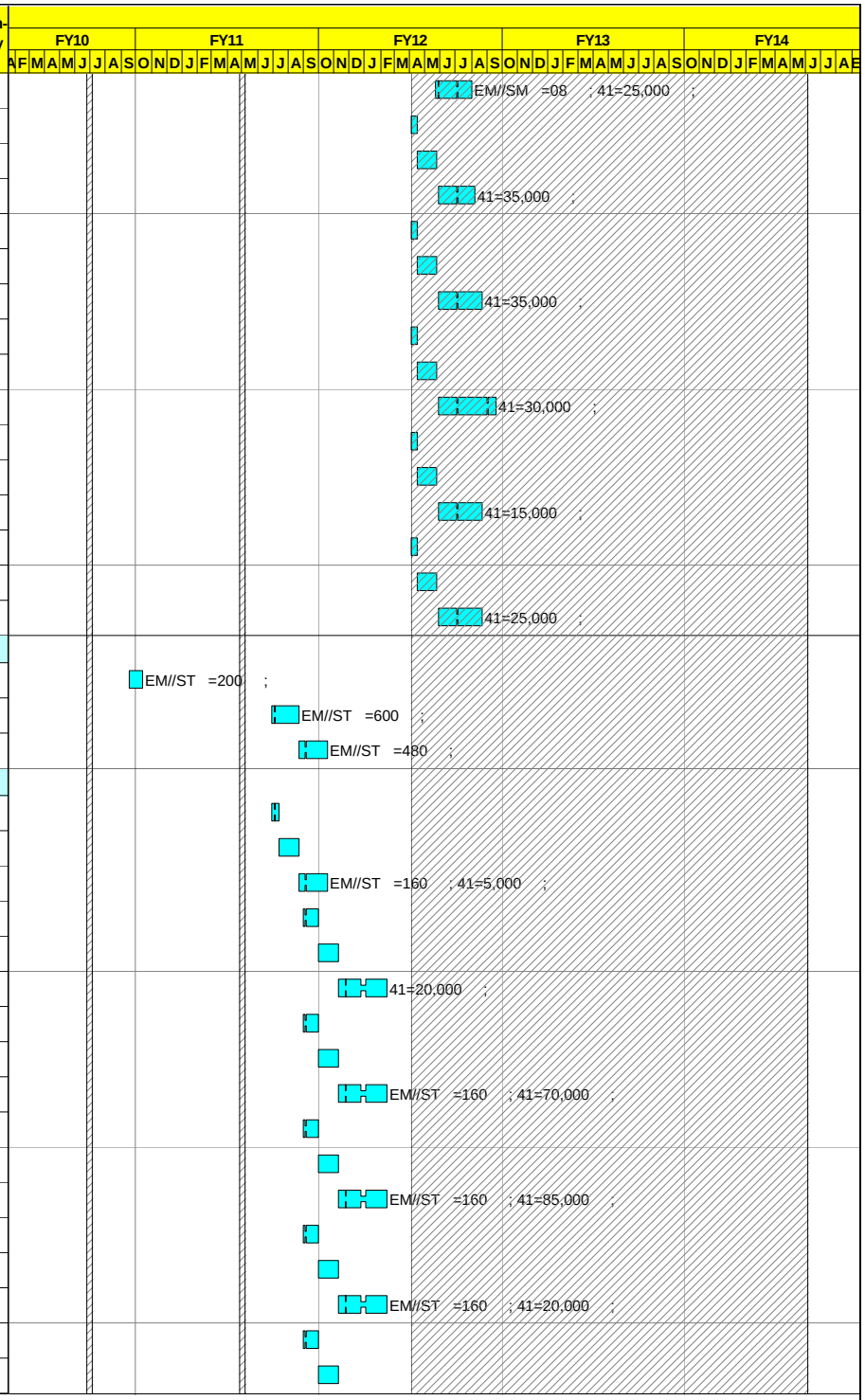
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1304-4900	Apply groundwrap insulation	2	23OCT12	24OCT12	55	3,476.48	40
1304-5000	Prepare VPI operation	3	25OCT12	29OCT12	55	10,429.44	40
1304-5100	VPI full TF coil	2	30OCT12	31OCT12	55	6,952.96	40
1304-5200	Cure VPI'd coil	8	01NOV12	12NOV12	55	6,952.96	40
1304-5300	Remove full TF from mold and cleanup	1	13NOV12	13NOV12	55	1,738.24	40
1304-5400	Perform Final electrical tests	1	14NOV12	14NOV12	55	1,738.24	40
1304-5500	Transfer TF to OH station	1	15NOV12	15NOV12	55	4,345.60	40
FY101304	FY10 Actual Cost	143	01OCT09A	30APR10A		106,164.00	
Job: 1305 - OHMIC Heating Coil (OH)-CHRZANOWSKI							
Design							
1305-0100	Finalize Calcs on OH Flow Optimization	25	24JUN10	29JUL10	144	17,711.00	10
1305-0110	Check Flow Rates on Cavitation Issues	10	30JUL10	12AUG10	229	7,084.40	10
1305-0120	Analyze Coax Lead Box	25	30JUL10	02SEP10	144	17,711.00	10
1305-0140	Fatigue Assessment	5	03SEP10	10SEP10	144	3,542.20	10
1305-0160	OH Bus Bar Analysis	10	13SEP10	24SEP10	144	7,084.40	10
1305-0180	Calculation Write/Check & File	15	27SEP10	15OCT10	144	18,547.73	10
1305-0200	Analysis of Mfg Tooling & CS Support Fixture	40	18OCT10	14DEC10	144	0.00	10
1305-0510	Complete Detail & Assembly CAD Drawings	100	24JUN10	12NOV10	164	84,820.05	20
1305-0900	Prepare for FDR	10	15DEC10	05JAN11	144	5,058.00	10
1305-0910	Complete R&D for Tooling	20	01JUN10*	28JUN10	271	39,839.16	20
1305-1410	Design TF Quadrant Mold	20	30NOV10	04JAN11	70	15,174.00	10
1305-1430	Design TF Full Mold	30	05JAN11	15FEB11	70	20,232.00	10
1305-1450	Design OH Mold	30	16FEB11	29MAR11	70	20,232.00	30
1305-1470	Design OH Winding Clamps	15	30MAR11	19APR11	70	10,116.00	15
1305-1490	Design Lifting Beam -conductors & coils	15	30NOV10	20DEC10	79	10,116.00	15
1305-1510	Design Ground Wrap Station	8	21DEC10	07JAN11	79	5,058.00	15
1305-1530	Design Tension Unit	15	10JAN11	28JAN11	79	10,116.00	25
1305-1550	Design Mold for OH-TF Castable Material	8	31JAN11	09FEB11	79	7,587.00	25
1305-1570	Design Braze Station	20	10FEB11	09MAR11	79	10,116.00	20
1305-1580	Design Sandblast Station	20	10MAR11	06APR11	79	10,116.00	20
1305-1610	Design OH/TF Facility Area Layout incl CleanRoom	40	01OCT10*	29NOV10	70	30,348.00	10
1305-1620	Electrical Layout to Support Winding Area	40	01OCT10*	29NOV10	205	38,032.80	20
1305-1630	Generate Manufacturing Procedures & Travelers	20	28JUN11	26JUL11	249	0.00	10
TF/OH Fabrication							
1305-5600	Prepare TF for OH winding	5	16NOV12	26NOV12	55	13,036.80	40
1305-5700	Install intermediate spacer between OH/TF bundle	8	27NOV12	06DEC12	55	20,858.88	40
1305-5800	Apply slip plane, and inner groundwall insulatio	2	07DEC12	10DEC12	55	3,476.48	40



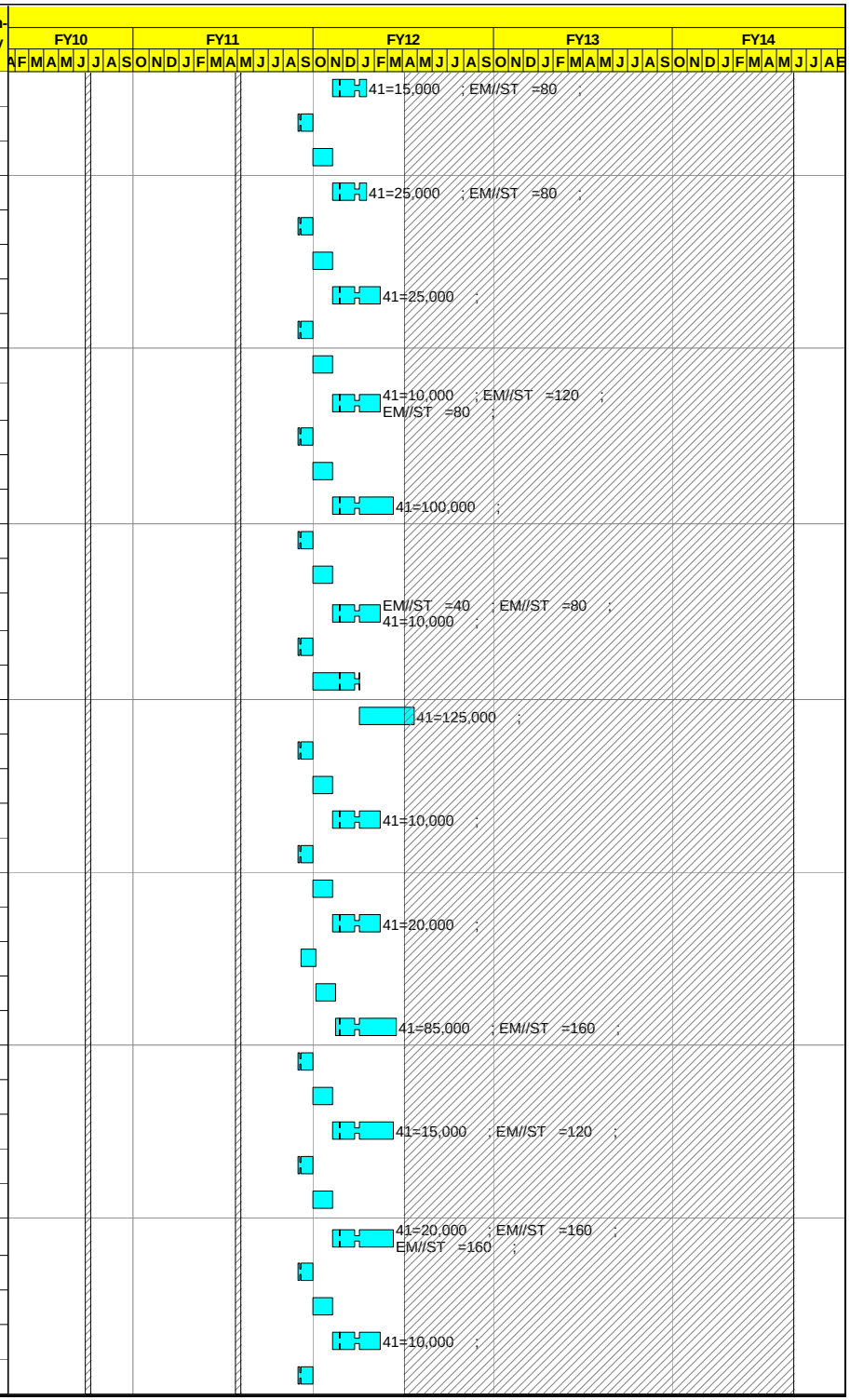
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1305-5900	Braze first lead and prepare for winding	5	11DEC12	17DEC12	55	8,691.20	40
1305-6000	Wind 1st half of layer #1	5	18DEC12	01JAN13	55	13,036.80	40
1305-6100	Make [2] in-line brazes	1	02JAN13	02JAN13	55	1,738.24	40
1305-6200	Wind second half of layer #1	5	03JAN13	09JAN13	55	13,036.80	40
1305-6300	Perform prelim electrical tests	1	10JAN13	10JAN13	55	1,738.24	40
1305-6400	Braze layer to layer joint	1	11JAN13	11JAN13	55	1,738.24	40
1305-6500	Wind 1st half of layer #2	5	14JAN13	18JAN13	55	13,036.80	40
1305-6600	Make [2] in-line brazes	1	21JAN13	21JAN13	55	1,738.24	40
1305-6700	Wind second half of layer #2	5	22JAN13	28JAN13	55	13,036.80	40
1305-6800	Perform prelim electrical tests	1	29JAN13	29JAN13	55	1,738.24	40
1305-6900	Braze layer to layer joint	1	30JAN13	30JAN13	55	1,738.24	40
1305-7000	Wind 1st half of layer #3	5	31JAN13	06FEB13	55	13,036.80	40
1305-7100	Make [2] in-line brazes	1	07FEB13	07FEB13	55	1,738.24	40
1305-7200	Wind second half of layer #3	5	08FEB13	14FEB13	55	13,036.80	40
1305-7300	Perform prelim electrical tests	1	15FEB13	15FEB13	55	1,738.24	40
1305-7400	Braze layer to layer joint	2	18FEB13	19FEB13	55	1,738.24	40
1305-7500	Wind 1st half of layer #4	5	20FEB13	26FEB13	55	13,036.80	40
1305-7600	Make [2] in-line brazes	1	27FEB13	27FEB13	55	1,738.24	40
1305-7700	Wind second half of layer #4	5	28FEB13	06MAR13	55	13,036.80	40
1305-7800	Apply groundwrap insulation	1	07MAR13	07MAR13	55	1,738.24	40
1305-7900	Mount OH mold around coil	5	08MAR13	14MAR13	55	17,382.40	40
1305-8000	Prepare VPI operation	3	15MAR13	19MAR13	55	10,429.44	40
1305-8100	VPI- mold	2	20MAR13	21MAR13	55	6,952.96	40
1305-8200	Cure VPI'd coil	8	22MAR13	02APR13	55	6,952.96	40
1305-8300	Remove mold from OH coil	1	03APR13	03APR13	55	3,476.48	40
1305-8400	Cleanup OH coil	2	04APR13	05APR13	55	3,476.48	40
1305-8500	Silverplate all electrical surfaces [OH/TF]	3	08APR13	10APR13	55	2,607.36	40
1305-8600	Perform Final OH electrical tests	1	11APR13	11APR13	55	1,738.24	40
1305-8700	Remove intermediate spacer between OH and TF bun	5	12APR13	18APR13	55	13,036.80	40
1305-8800	Perform hydrostat and flow tests- OH/TF coils	3	19APR13	23APR13	55	5,214.72	40
1305-8900	Transport to CS assembly station	1	24APR13	24APR13	55	4,345.60	40
OH Conductor & Other Hardware							
1305-0920	Generate SOW for OH Conductor	20	01SEP11*	29SEP11	234	0.00	10
1305-0930	Prep Requisition & Submit to Procurement	5	30SEP11	06OCT11	234	0.00	10
1305-0940	Bid & Award OH Conductor Fabrication	30	07OCT11	17NOV11	234	0.00	10
1305-0950	Manufacture OH Copper Conductor	70	18NOV11	06MAR12	234	137,280.00	25
1305-0960	Generate Requisition for Kapton/Glass Insulation	5	02APR12*	06APR12	131	1,322.48	10
1305-0980	Bid & Award Kapton/Glass Insulation	30	09APR12	18MAY12	131	0.00	



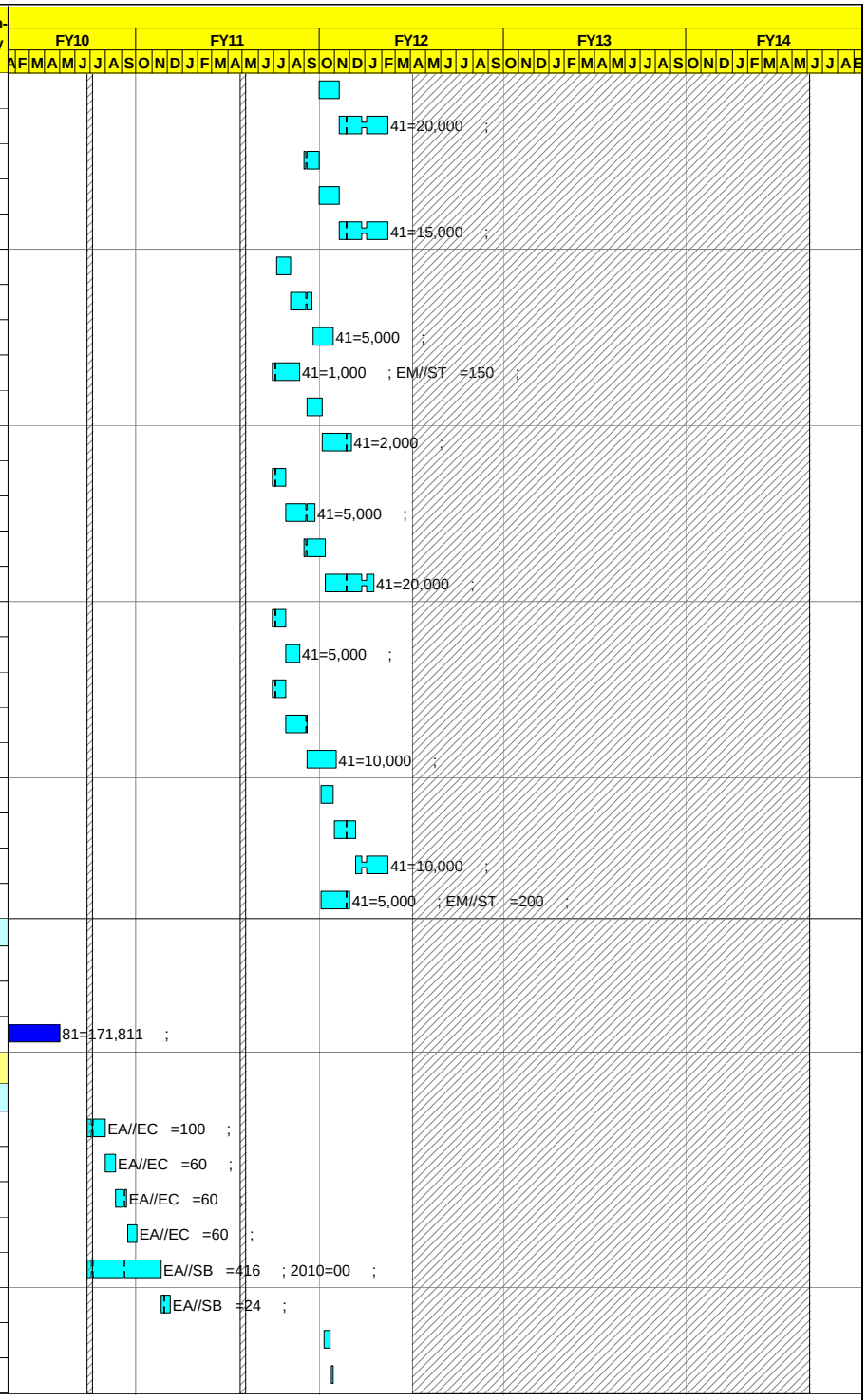
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1305-1000	Fab & Deliver Kapton/Glass Insulation	50	21MAY12	31JUL12	131	33,822.48	20
1305-1010	Prep Requisiton for Belleville Washer Assembly	10	02APR12*	13APR12	126	0.00	
1305-1030	Bid & Award Belleville Washer Assembly	30	16APR12	25MAY12	126	0.00	
1305-1050	Fab & Deliver Belleville Washer Assembly	50	29MAY12	07AUG12	126	45,500.00	20
1305-1060	Prepare Requisition for G-10 Fillers	10	02APR12*	13APR12	116	0.00	
1305-1080	Bid & Award G-10 Fillers	30	16APR12	25MAY12	116	0.00	
1305-1100	Fab & Deliver G-10 Filers	60	29MAY12	21AUG12	116	45,500.00	20
1305-1110	Prep Requisition for Lead Blocks & Cooling Fitti	10	02APR12*	13APR12	96	0.00	
1305-1130	Bid & Award Lead Blocks & Cooling Fittings	30	16APR12	25MAY12	96	0.00	
1305-1150	Fab & Deliver Lead Blocks & Cooling Fittings	80	29MAY12	19SEP12	96	39,000.00	20
1305-1160	Prep Requisition for Misc Parts	10	02APR12*	13APR12	116	0.00	
1305-1180	Bid & Award Misc Parts	30	16APR12	25MAY12	116	0.00	
1305-1200	Fab & Deliver Misc Parts	60	29MAY12	21AUG12	116	19,500.00	20
1305-1210	Prep Requisition for OH Lwr Lead & Suppt Struct	10	02APR12*	13APR12	116	0.00	
1305-1230	Bid & Award OH Lwr Lead & Supt Struct	30	16APR12	25MAY12	116	0.00	
1305-1250	Fab & deliver OH Lwr Lead & Suppt Struct	60	29MAY12	21AUG12	116	32,500.00	20
TFOC							
1305-4010	Remove NCSX Tooling & Spare Parts from NCSX TC	20	16SEP10	13OCT10	236	19,549.70	15
1305-4030	Setup Winding Area	40	28JUN11	23AUG11	62	60,672.00	20
1305-4050	Setup Winding Equipment	40	24AUG11	19OCT11	62	49,217.76	20
TF/OH Tooling/Equip/M&S							
1304-3350	Spec-TF conductor stands- tube soldering	10	28JUN11*	12JUL11	62	0.00	
1304-3352	Bid/Award TF Conductor Stands for Soldering	30	13JUL11	23AUG11	62	0.00	
1304-3354	Fab & Del TF Conductor Stands for Soldering	40	24AUG11	19OCT11	62	22,770.92	40
1304-3450	Spec-TF conductor stands- for insulating	20	01SEP11*	29SEP11	113	0.00	
1304-3452	Bid/Award TF Conductor Stand for Insulating	30	30SEP11	10NOV11	113	0.00	
1304-3454	Fab & Del TF Conductor Stands for Insulating	60	11NOV11	14FEB12	113	26,000.00	40
1304-3550	Spec TF Quadrant mold	20	01SEP11*	29SEP11	118	0.00	
1304-3552	Bid/Award-TF Quadrant Mold	30	30SEP11	10NOV11	118	0.00	
1304-3554	Fab & Deliver TF Quadrant Mold	60	11NOV11	14FEB12	118	107,876.80	40
1304-3600	Spec - TF Full coil mold	20	01SEP11*	29SEP11	226	0.00	
1304-3602	Bid/Award TF Full Coil Mold	30	30SEP11	10NOV11	226	0.00	
1304-3604	Fab & Deliver Full TF Coil Mold	60	11NOV11	14FEB12	226	127,376.80	40
1304-3700	Spec - VPI delivery system	20	01SEP11*	29SEP11	128	0.00	
1304-3702	Bid/Award VPI Delivery System	30	30SEP11	10NOV11	128	0.00	
1304-3704	Fab & Deliver VPI Delivery System	60	11NOV11	14FEB12	128	42,876.80	40
1304-3800	Spec - Lift beam- conductor	20	01SEP11*	29SEP11	161	0.00	
1304-3802	Bid/Award Lift Beam Conductor	30	30SEP11	10NOV11	161	0.00	



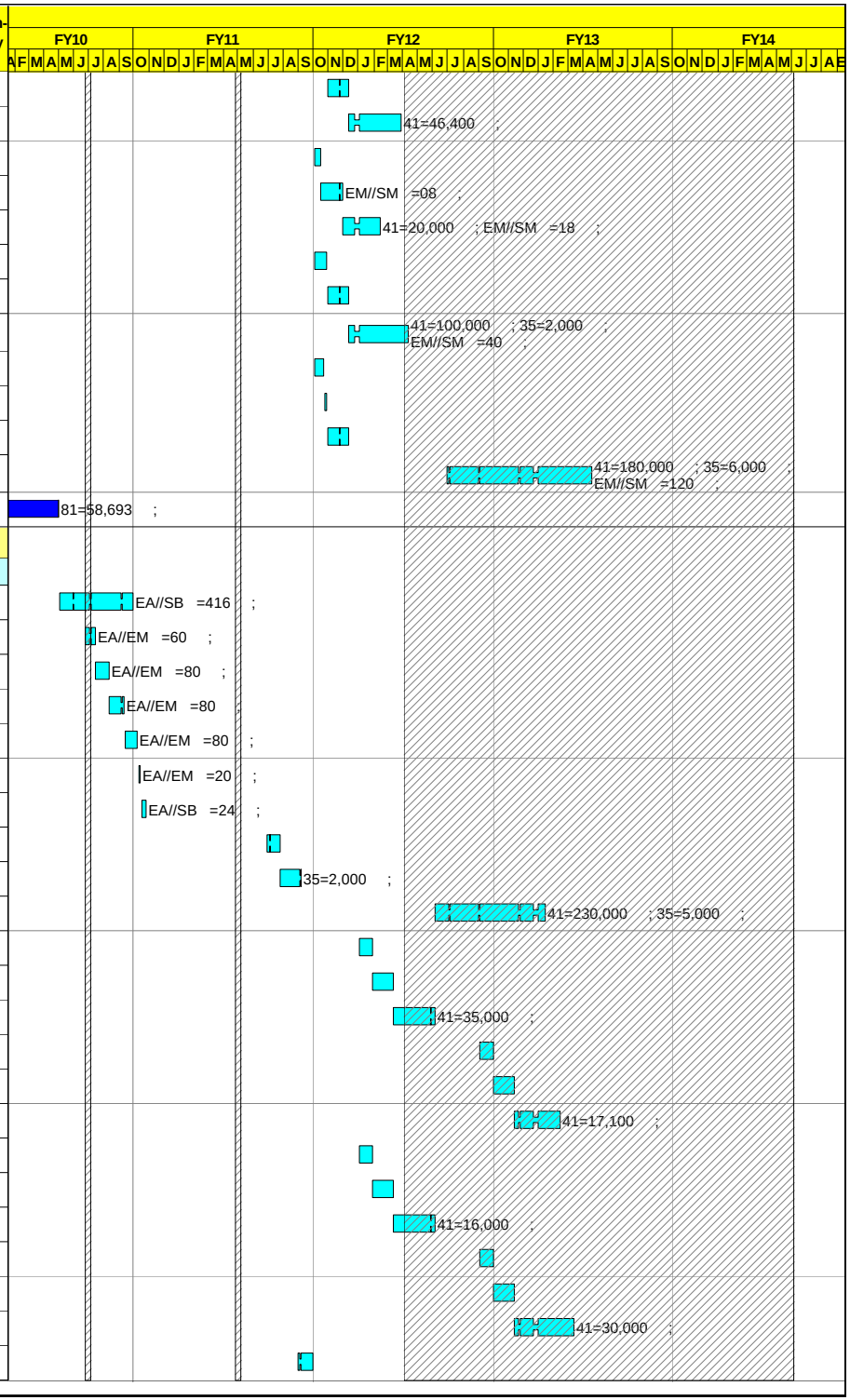
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %	
1304-3804	Fab & Deliver Lift Beam for Conductor	40	11NOV11	17JAN12	161	27,938.40	40	41=15,000 ; EM//ST =80 ;
1304-3900	Spec - Lift Beam for coil	20	01SEP11*	29SEP11	133	0.00		
1304-3902	Bid/Award - Lift Beam for Coil	30	30SEP11	10NOV11	133	0.00		
1304-3904	Fab & deliver Lift Beam for Coil	40	11NOV11	17JAN12	133	40,938.40	40	41=25,000 ; EM//ST =80 ;
1305-1900	Spec- Taping machines [2]	20	01SEP11*	29SEP11	249	0.00		
1305-1902	Bid/Award - Taping Machines	30	30SEP11	10NOV11	249	0.00		
1305-1904	Fab & Deliver Taping Machines	60	11NOV11	14FEB12	249	32,500.00	40	41=25,000 ;
1305-2000	Spec- Tension unit	20	01SEP11*	29SEP11	249	0.00		
1305-2002	Bid/Award Tension Unit	30	30SEP11	10NOV11	249	0.00		
1305-2004	Fab & Deliver Tension Unit	60	11NOV11	14FEB12	249	34,096.00	40	41=10,000 ; EM//ST =120 ; EM//ST =80 ;
1305-2100	Spec-Braze unit	20	01SEP11*	29SEP11	229	0.00		
1305-2102	Bid/Award Braze Station	30	30SEP11	10NOV11	229	0.00		
1305-2104	Fab & Deliver Braze Station	80	11NOV11	13MAR12	229	130,000.00	40	41=100,000 ;
1305-2200	Spec-Braze fixture and work coil	20	01SEP11*	29SEP11	249	0.00		
1305-2210	Bid/Award Braze Fixture for Work Coil	30	30SEP11	10NOV11	249	0.00		
1305-2220	Fab & Deliver Braze Fixture for Work Coil	60	11NOV11	14FEB12	249	25,657.60	40	EM//ST =40 ; EM//ST =80 ; 41=10,000 ;
1305-2300	Spec Winding machine for OH	20	01SEP11*	29SEP11	199	0.00		
1305-2310	Bid/Award Winding Machine for OH	60	30SEP11	03JAN12	199	0.00		
1305-2320	Fab & Deliver Winding Machine for OH	80	04JAN12	24APR12	199	162,500.00	40	41=125,000 ;
1305-2400	Spec - Mold for OH-TF spacer [Aquapour]	20	01SEP11*	29SEP11	249	0.00		
1305-2410	Bid/Award Mold for OH-TF Spacer	30	30SEP11	10NOV11	249	0.00		
1305-2420	Fab & Deliver Mold for OH-TF Spacer	60	11NOV11	14FEB12	249	13,000.00	40	41=10,000 ;
1305-2500	Spec - OH winding clamps- 4-sets	20	01SEP11*	29SEP11	249	0.00		
1305-2510	Bid/Award OH Winding Clamps - 4 sets	30	30SEP11	10NOV11	249	0.00		
1305-2520	Fab & Deliver OH Winding Clamps 4 sets	60	11NOV11	14FEB12	249	26,000.00	40	41=20,000 ;
1305-2600	Spec - OH Mold	20	08SEP11*	05OCT11	225	0.00		
1305-2610	Bid/Award OH Mold	30	06OCT11	16NOV11	225	0.00		
1305-2620	Fab & Deliver OH Mold	80	17NOV11	19MAR12	225	127,376.80	40	41=85,000 ; EM//ST =160 ;
1305-2650	Spec SandBlast Unit	20	01SEP11*	29SEP11	58	0.00		
1305-2652	Bid/Award Sanblast Unit	30	30SEP11	10NOV11	58	0.00		
1305-2654	Fab & Deliver Sandblast Unit	80	11NOV11	13MAR12	58	32,157.60	40	41=15,000 ; EM//ST =120 ;
1305-2700	Miscellaneous tools & fixtures	20	01SEP11*	29SEP11	229	0.00		
1305-2702	Bid/Award Misc Tools & Fixtures	30	30SEP11	10NOV11	229	0.00		
1305-2704	Fab & deliver Misc Tools & Fixtures	80	11NOV11	13MAR12	229	59,753.60	40	41=20,000 ; EM//ST =160 ; EM//ST =160 ;
1305-2800	Spec - "Aquapour"- castable material	20	01SEP11*	29SEP11	249	0.00		
1305-2802	Bid/Award Aquapour	30	30SEP11	10NOV11	249	0.00		
1305-2820	Fab & Deliver Aquapour	60	11NOV11	14FEB12	249	13,000.00	40	41=10,000 ;
1305-2900	Spec-Insulation [fiberg tape, teflon and gnd p	20	01SEP11*	29SEP11	113	0.00		



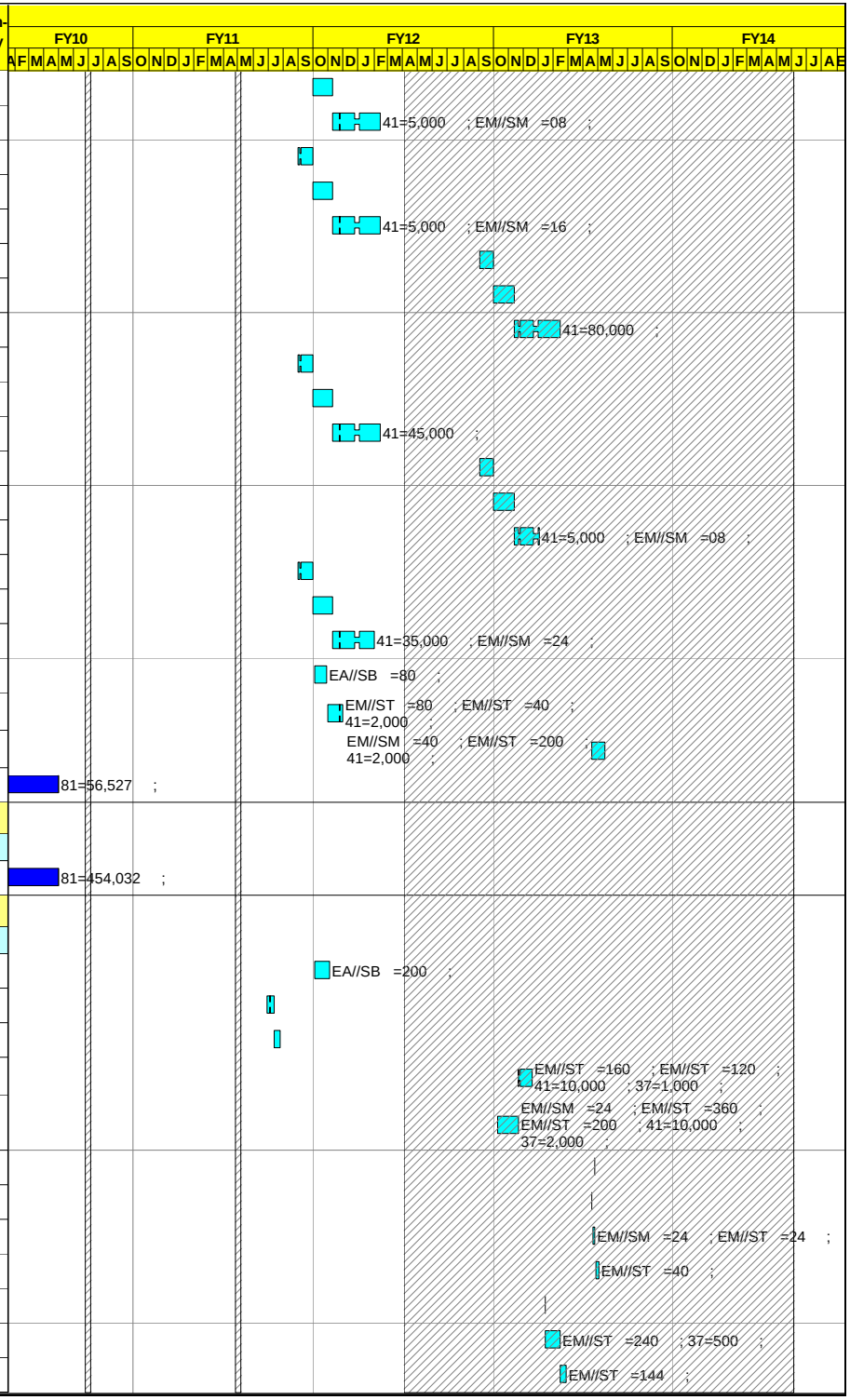
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1305-2902	Bid/Award - Insulation	30	30SEP11	10NOV11	113	0.00	
1305-2904	Fab & Deliver Insulation	60	11NOV11	14FEB12	113	26,000.00	40
1305-3000	Epoxy- CTD-101	20	01SEP11*	29SEP11	113	0.00	
1305-3002	Bid/Award Epoxy-CTD-101	30	30SEP11	10NOV11	113	0.00	
1305-3004	Fab & Deliver Epoxy-CTD-101	60	11NOV11	14FEB12	113	19,500.00	40
1305-3100	Spec-Copper pre-tinned tubing [TF conductor]	20	08JUL11*	04AUG11	55	0.00	
1305-3102	Bid/Award Copper pre-tinned tubing	30	05AUG11	16SEP11	55	0.00	
1305-3104	Fab & Deliver pre-tinned tubing	30	19SEP11	28OCT11	55	6,433.33	40
1305-3200	G-10 Filler modifications	40	28JUN11	23AUG11	229	16,428.00	40
1305-3300	Req/Order - Conductor primer	20	08SEP11*	05OCT11	164	0.00	
1305-3310	Fab & Deliver Conductor Primer	40	06OCT11	02DEC11	164	2,600.00	40
1305-3400	Req/Order-Safety and PPE equipment and supplies	20	28JUN11	26JUL11	62	0.00	
1305-3410	Fab & Deliver Safety & PPE	40	27JUL11	21SEP11	62	6,300.00	40
1305-3500	Req/Order Miscellaneous supplies	30	01SEP11*	13OCT11	133	0.00	
1305-3510	Fab & Deliver Misc Supplies	60	14OCT11	17JAN12	133	26,000.00	40
1305-3600	Req/OrderRTV and silicone caulk for mold sealing	20	28JUN11	26JUL11	229	0.00	
1305-3610	Fab & Deliver RTV & Silcone for Mold Sealing	20	27JUL11	23AUG11	229	6,300.00	40
1305-3700	Specify-valves & fittinngs (VPI Disposables)	20	28JUN11	26JUL11	179	0.00	
1305-3710	Bid/Awad-Valves & Fittings (VPI)	30	27JUL11	07SEP11	179	0.00	
1305-3720	Fab & Deliver Valves-Fittings (VPI)	40	08SEP11	02NOV11	179	12,830.00	40
1305-3800	spec-High &Low Temp Vac Tubing (VPI)	20	03OCT11*	28OCT11	112	0.00	
1305-3810	Bid/Award High & Low Temp Vac Tubing (VPI)	30	31OCT11	13DEC11	112	0.00	
1305-3820	Fab & deliver High & Low Temp Vac Tube (VPI)	40	14DEC11	15FEB12	112	13,000.00	40
1305-3900	Fabricate - VPI manifolds	40	03OCT11*	29NOV11	162	27,596.00	40
FY091310	FY09 Actual Cost	22*	01JAN09A	30SEP09A		1,051,480.00	
FY091315	FY09 Actual Cost	22*	01JAN09A	30SEP09A		4,085.00	
FY101305	FY10 Actual Cost	143	01OCT09A	30APR10A		171,811.00	
Job: 1306 - Inner PF Coils-CHRZANOWSKI							
1306-1010	Complete Inner PF Coil Analysis	25	24JUN10	29JUL10	204	16,855.00	20
1306-1020	PF Lead & Flag Analysis	15	30JUL10	19AUG10	204	10,113.00	20
1306-1030	Fatigue Assessment & DCPS	15	20AUG10	10SEP10	204	10,113.00	20
1306-1040	Calculation Write/Check/File	15	13SEP10	01OCT10	204	10,153.72	20
1306-1050	Compl CAD Detail and Assembly Dwgs for Inner PF	104	24JUN10	18NOV10	160	50,491.80	20
1306-1060	Prepare for FDR	10	19NOV10	06DEC10	160	3,034.80	10
1306-2010	Generate SOW for Inner PF Conductor	10	10OCT11*	21OCT11	114	0.00	10
1306-2020	Prep Spec for Inner PF Conductor	5	24OCT11	28OCT11	114	0.00	10



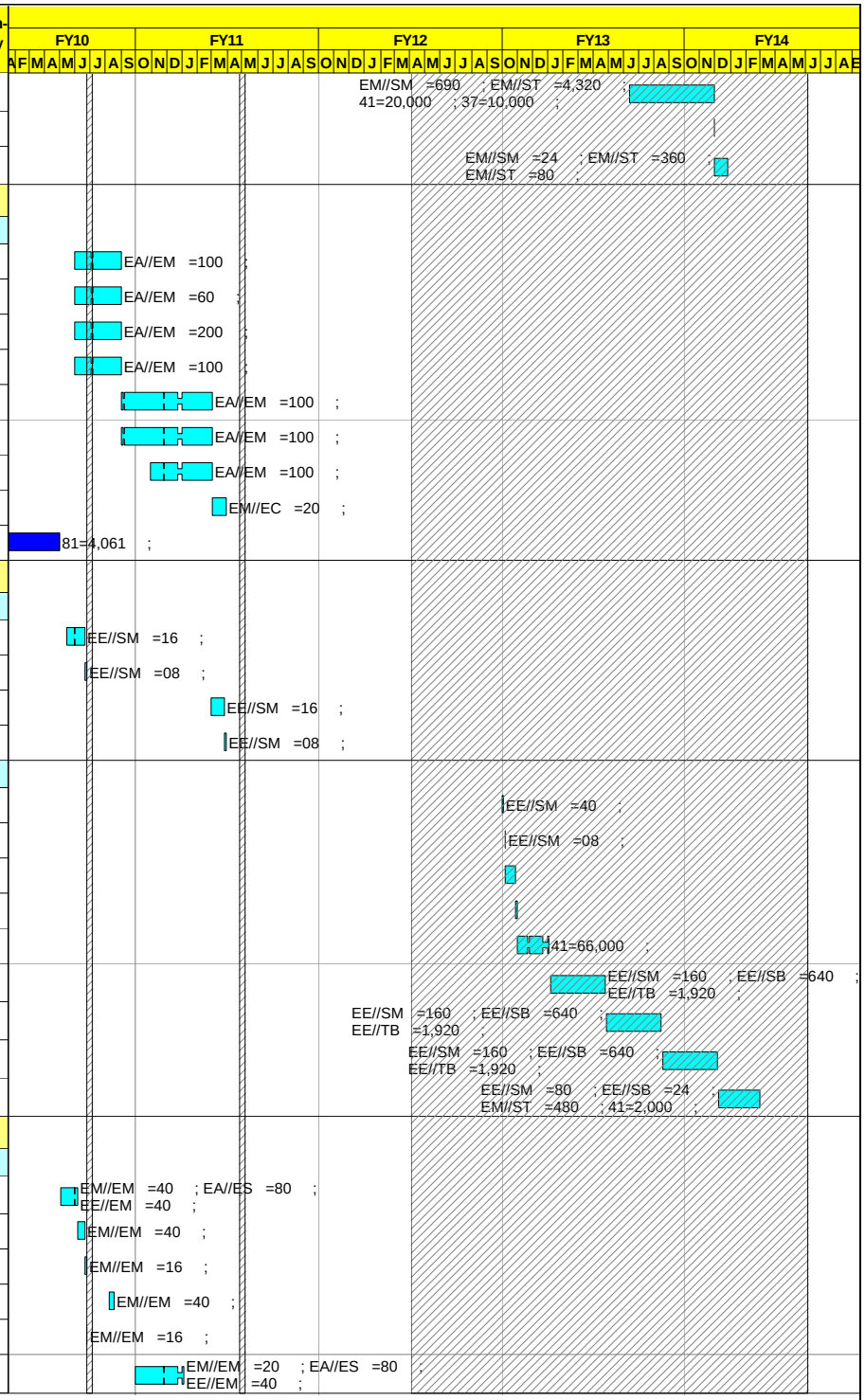
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1306-2030	Bid/Award - Inner PF Conductor	30	31OCT11	13DEC11	114	0.00	10
1306-2050	Fab & Deliver Inner PF Conductor	70	14DEC11	28MAR12	114	60,320.00	25
1306-3010	Prep Req for Kapton/Glass Insulation	10	03OCT11*	14OCT11	144	0.00	10
1306-3020	Bid/Award Kapton/Glass Insulation	30	17OCT11	29NOV11	144	1,322.48	10
1306-3030	Fab & Deliver Kapton/Glass Insulation	50	30NOV11	15FEB12	144	28,975.58	20
1306-4010	Prep SOW for SS Supp for PF1A/B Coils	20	03OCT11*	28OCT11	104	0.00	10
1306-4020	Bid/Award SS Supp for PF1A/B	30	31OCT11	13DEC11	104	0.00	10
1306-4030	Fab & Deliver SS Supp for PF1A/B	80	14DEC11	11APR12	104	139,192.40	25
1306-5010	Generate SOW & Spec for Inner PF Coil Fab	15	03OCT11*	21OCT11	184	0.00	10
1306-5020	Prep Req for Inner PF Fabrication	5	24OCT11	28OCT11	184	0.00	10
1306-5030	Bid/Award Inner PF Fabrication	30	31OCT11	13DEC11	184	0.00	10
1306-5050	Fab & Deliver Inner PF Coils	200	29JUN12*	18APR13	49	265,776.34	25
FY101306	FY10 Actual Cost	143	01OCT09A	30APR10A		58,693.00	
Job: 1307 - CS Casing Assembly -CHRZANOWSKI							
1307-1010	Complete CAD Detail & Assy Drawings	104	03MAY10*	28SEP10	201	49,420.80	20
1307-1020	Complete Bellow & Ceramic Break Analysis	15	24JUN10	15JUL10	188	10,626.60	20
1307-1030	Complete Halo Loading	20	16JUL10	12AUG10	188	14,168.80	20
1307-1040	Complete-Maintain Heat Balance Cooling Calcs	20	13AUG10	10SEP10	188	14,168.80	20
1307-1050	Integrate Thermal, Halo, Dsir Loads into Calcs	20	13SEP10	08OCT10	188	14,442.64	20
1307-1060	Fatigue Assessments	5	11OCT10	15OCT10	188	3,770.40	20
1307-1150	Prepare for FDR	6	18OCT10	25OCT10	188	3,034.80	20
1307-2010	Prep CS Casing SOW & Requisition	20	28JUN11	26JUL11	281	0.00	10
1307-2020	Bid/Award CS Casing Contract	30	27JUL11	07SEP11	281	2,520.00	10
1307-2030	Fabricate CS Casing	150	06JUN12	15JAN13	96	308,693.00	35
1307-2040	Spec/Requisition Inconel Bellows	20	03JAN12*	30JAN12	96	0.00	10
1307-2050	Bid/Award Inconel Bellows	30	31JAN12	12MAR12	96	0.00	10
1307-2060	Fab & Deliver Inconel Bellows	60	13MAR12	05JUN12	96	45,500.00	25
1307-2070	Spec/Requisition Rotatable Flanges	20	04SEP12*	01OCT12	226	0.00	10
1307-2080	Bid/Award Rotatable Flanges	30	02OCT12	12NOV12	226	0.00	10
1307-2090	Fab & Deliver Rotatable Flanges	60	13NOV12	14FEB13	226	22,743.00	25
1307-2100	Spec/Requisition CHI Copper Leads U&L	20	03JAN12*	30JAN12	277	0.00	10
1307-2110	Bid/Award CHI Copper Leads	30	31JAN12	12MAR12	277	0.00	10
1307-2120	Fab & Deliver CHI copper Leads U&L	60	13MAR12	05JUN12	277	20,800.00	20
1307-2130	Spec/Requisition CS Casing Support Structure	20	04SEP12*	01OCT12	196	0.00	10
1307-2140	Bid/Award CS Casing Support Structure	30	02OCT12	12NOV12	196	0.00	10
1307-2150	Fab & Deliver CS Casing Support Structure	80	13NOV12	14MAR13	196	39,900.00	25
1307-2160	Spec/Requisition Weld Material	20	01SEP11*	29SEP11	175	0.00	10



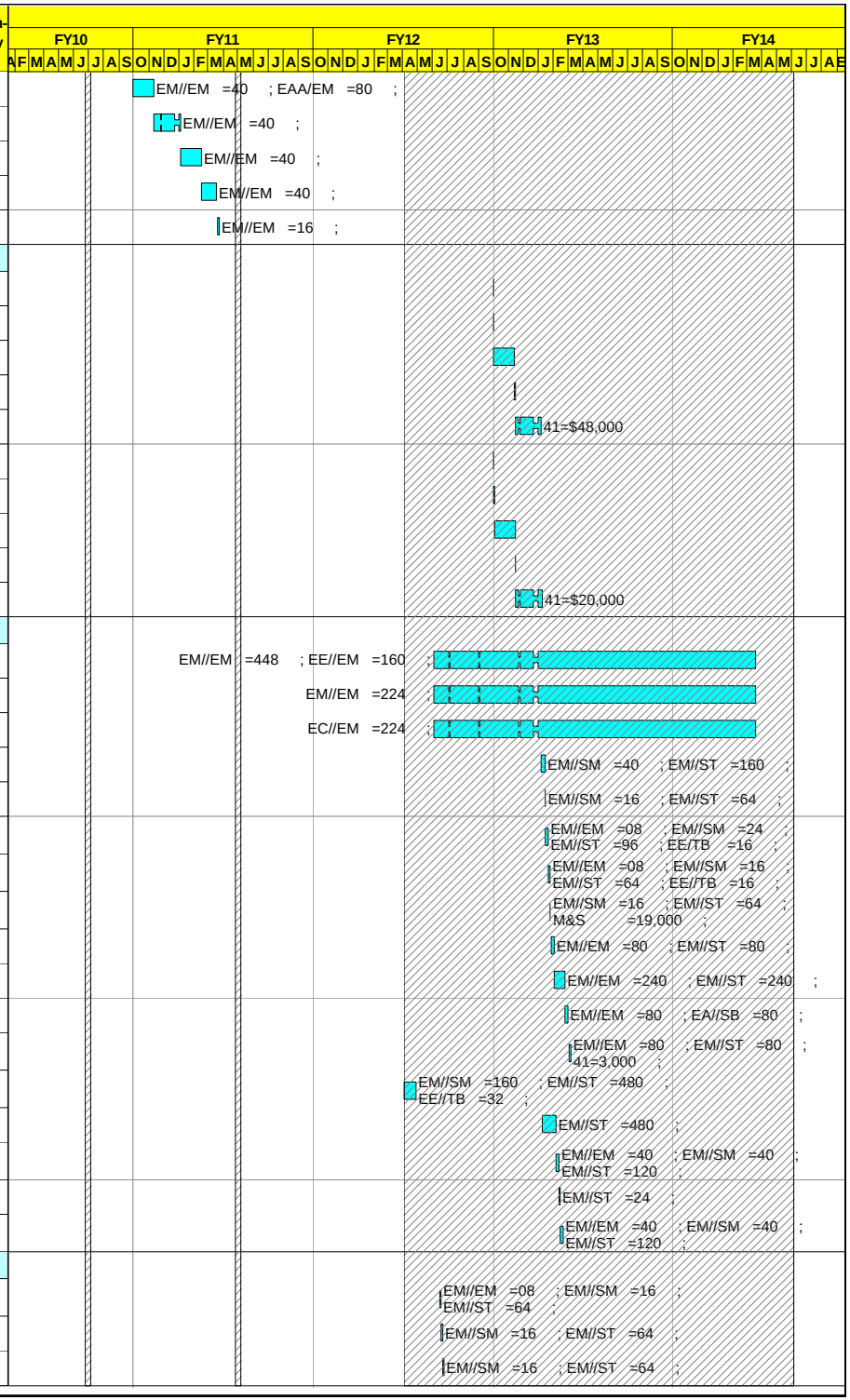
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1307-2170	Bid/Award Weld Material	30	30SEP11	10NOV11	175	0.00	10
1307-2180	Fab & Deliver Weld Material	60	11NOV11	14FEB12	175	7,822.48	15
1307-2190	Spec/Requisition Misc M&S	20	01SEP11*	29SEP11	175	0.00	10
1307-2200	Bid/Award Misc M&S	30	30SEP11	10NOV11	175	0.00	10
1307-2210	Fab & deliver Misc M&S	60	11NOV11	14FEB12	175	9,144.96	15
1307-2220	Spec/requisition Ceramic Insulators	20	04SEP12*	01OCT12	226	0.00	10
1307-2230	Bid/Award Creamic Insulators	30	02OCT12	12NOV12	226	0.00	10
1307-2240	Fab & Deliver Ceramic Insulators	60	13NOV12	14FEB13	226	106,400.00	35
1307-2250	Spec/Requisition CB SS Structure	20	01SEP11*	29SEP11	145	0.00	10
1307-2260	Bid/Award CB SS Structure	30	30SEP11	10NOV11	145	0.00	10
1307-2270	Fab & Deliver CB SS Structure	60	11NOV11	14FEB12	145	58,500.00	15
1307-2280	30Spec/Requisition Viton O Rings	20	04SEP12*	01OCT12	256	0.00	10
1307-2290	Bid/Award Viton O Rings	30	02OCT12	12NOV12	256	0.00	10
1307-2300	Fab & Deliver Viton O Rings	30	13NOV12	03JAN13	256	8,012.16	30
1307-2310	Spec/Requisition Organ Pipe Adapters & Feedthrus	20	01SEP11*	29SEP11	366	0.00	10
1307-2320	Bid/Award Organ Pipe Adapters & Feedthrus	30	30SEP11	10NOV11	366	0.00	10
1307-2330	Fab & Deliver Organ Pipe Adapters & Feedthrus	50	11NOV11	31JAN12	366	49,467.44	30
1307-2340	Design Stud Installation Fixture	20	03OCT11*	28OCT11	405	10,552.80	20
1307-2350	Fabricate Fixture for Stud Installation	20	31OCT11	29NOV11	405	15,257.60	20
1307-3010	Assemble & Test Ceramic Breaks incl PF1C Coil	20	19APR13	16MAY13	161	31,198.80	20
FY101307	FY10 Actual Cost	143	01OCT09A	30APR10A		56,527.00	
Job: 1310 - CSU Magnet Systems-CHRZANOWSKI							
FY101310	FY10 Actual Cost	143	01OCT09A	30APR10A		454,032.00	
Job: 1302 - Center Stack Assembly-CHRZANOWSKI							
1302-0050	CAD Support for Setup of CS Assembly Area	25	03OCT11*	04NOV11	339	26,382.00	20
1302-0060	Generate CS Assembly Procedure	10	28JUN11	12JUL11	451	0.00	10
1302-0070	Generate CS Installation Procedure	10	13JUL11	26JUL11	461	0.00	10
1302-0080	Modify CS Assembly Fixture	20	21NOV12*	20DEC12	108	44,719.20	25
1302-0090	Setup CS Assembly Area	30	10OCT12	20NOV12	108	80,224.88	25
1302-0150	Receive OH/TF Assembly	1	25APR13	25APR13	55	0.00	
1302-0160	Receive Inner PF Coils	1	19APR13*	19APR13	49	0.00	
1302-0170	Perf Accept Elect & Hydr test on PF Coils	5	22APR13	26APR13	49	6,693.84	10
1302-0180	Wrap PF1A Coil with Microtherm	5	29APR13	03MAY13	49	4,345.60	20
1302-0200	Receive CS Vacuum Casing	1	16JAN13	16JAN13	96	0.00	
1302-0210	Install Inconel Weld Studs on Casing Wall	20	17JAN13	13FEB13	96	26,573.60	25
1302-0220	Mount Upper & Lower PF1B Coils to CS Casing	10	14FEB13	27FEB13	96	15,644.16	25



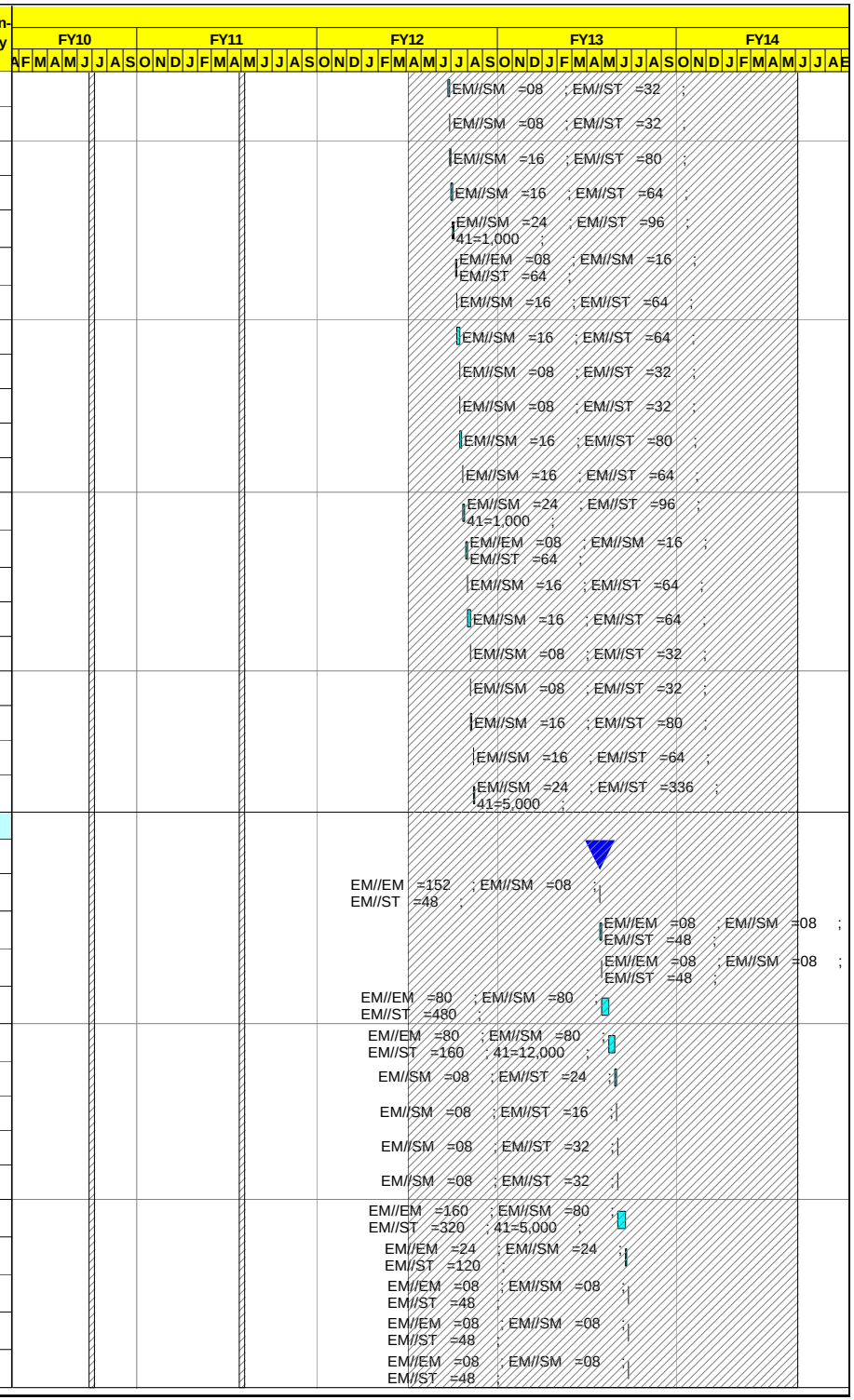
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
1302-1500	Assemble CS (OH Diag, Microtherm, Casing PFCs)	120	14JUN13	28NOV13	20	629,936.03	30
1302-1550	Deliver CS to NTC	1	29NOV13	29NOV13	20	0.00	
1302-1600	Tear Down Assembly Area	20	29NOV13	26DEC13	1,696	53,445.12	15
Job: 2300 - ECH Analysis-TITUS							
2300-0011	Run Other GRD disruptions for the HHFW antenna	66	01JUN10*	01SEP10	85	17,711.00	20
2300-0012	Updat HHFW Antenna	66	01JUN10*	01SEP10	85	10,626.60	20
2300-0013	Maintain/Update Diagnostic Database	66	01JUN10*	01SEP10	85	35,422.00	20
2300-0014	File Preliminary Database/Study	66	01JUN10	01SEP10	205	17,711.00	20
2300-0015	Check/Complete Disruption and Thermal Analyses	120*	02SEP10	01MAR11	85	18,661.83	20
2300-0016	Present/track recommentdations	120	02SEP10	01MAR11	85	18,661.83	20
2300-0018	FDR Prep	80	29OCT10	01MAR11	85	18,852.00	20
2300-0019	CONDUCT FDR	20	02MAR11	29MAR11*	85	3,428.80	20
FY102300	FY10 Actual Cost	143	01OCT09A	30APR10A		4,061.00	
Job: 2420 - 2nd NBI Sources-CROPPER							
Design							
24200020	PDR Prep PPL	26*	17MAY10*	22JUN10	635	2,409.76	5
24200050	CONDUCT PDR	1	23JUN10	23JUN10*	635	1,204.88	5
24200060	FDR Prep PPL	20	28FEB11	25MAR11	468	2,565.12	5
24200090	CONDUCT FDR	1	28MAR11	28MAR11*	468	1,282.56	5
Procure, Fab & Assembly							
24200100	Prep Requisition and procurement package	5	01OCT12*	05OCT12	67	6,890.00	15
24200110	SUBMIT REQ TO PROCUREMENT	1	08OCT12	08OCT12	67	1,378.00	15
24200120	Procurement lead time (1)	15	09OCT12	29OCT12	67	0.00	15
24200130	AWARD	1	30OCT12	30OCT12	67	0.00	15
24200150	Fabricate or delivery	40	31OCT12	04JAN13	67	87,780.00	15
24200160	Refurbish Source A	80	07JAN13	26APR13	67	300,577.60	15
24200170	Refurbish Source B	80	29APR13	16AUG13	67	300,577.60	15
24200180	Refurbish Source C	80	19AUG13	06DEC13	67	306,094.02	15
24200200	Build Probe tips (10 Long, 20 short)	60	09DEC13	28FEB14	67	74,087.12	30
Job: 2425 - BL Relocation-DENAULT							
Design							
2425-0017	Design Drawings	24*	03MAY10*	04JUN10	157	19,426.80	10
2425-0018	PDR Prep	11*	07JUN10	21JUN10	157	5,966.00	10
2425-0019	CONDUCT PDR	2	22JUN10	23JUN10	157	2,386.40	10
2425-0020	Layman Review	5	10AUG10*	16AUG10	2,543	5,966.00	10
2425-0023	Disposition PDR Chits	2	24JUN10*	25JUN10	157	2,386.40	10
2425-0024	Design Drawings	60	01OCT10*	04JAN11	90	17,477.60	10



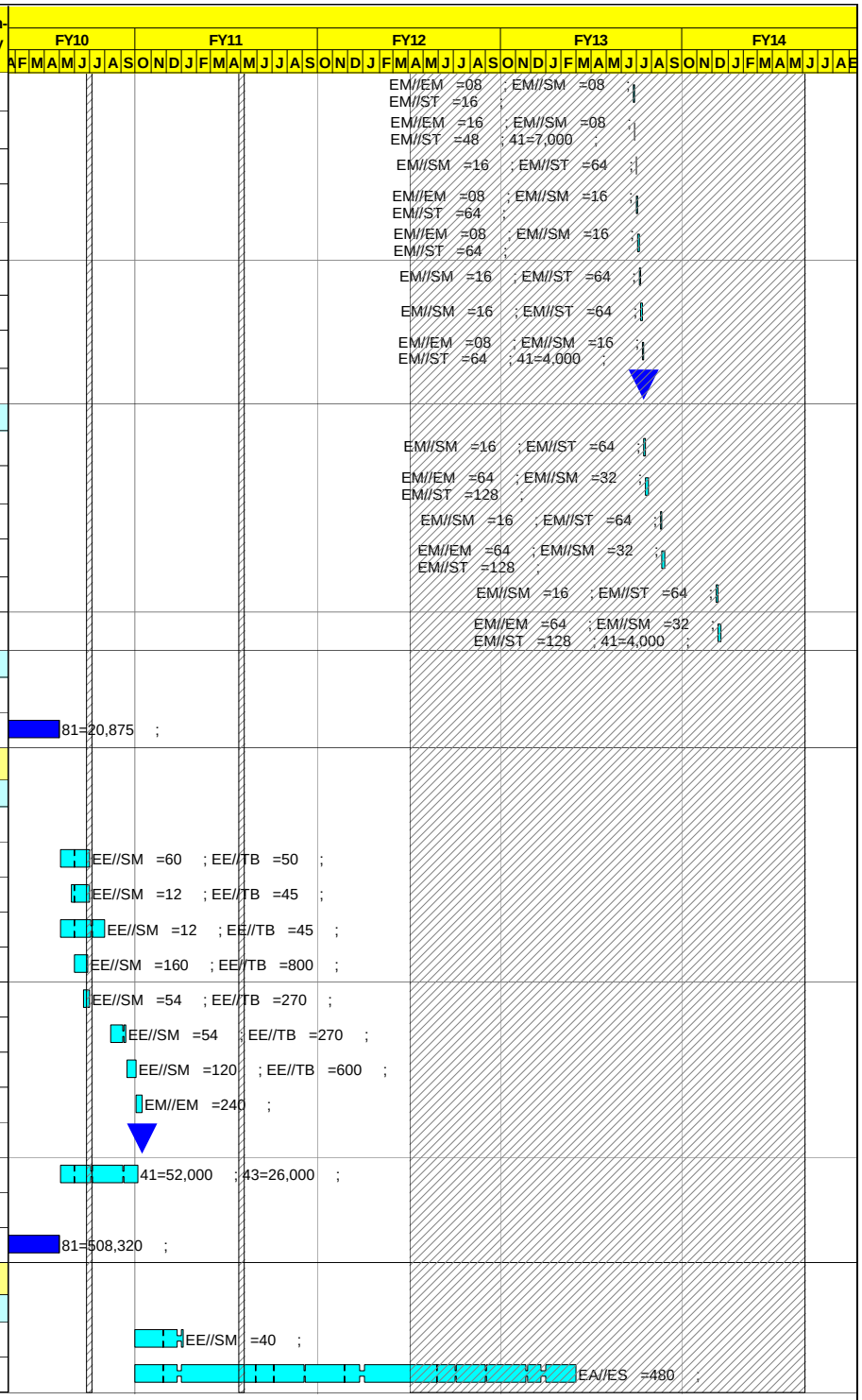
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2425-0025	Update Analyses	30	01OCT10	11NOV10	90	21,175.20	10
2425-0026	Update Cost & Schedule Estimate	30	12NOV10	04JAN11	90	6,350.40	10
2425-0027	Prep Procurement Specs	30	05JAN11	15FEB11	90	6,350.40	10
2425-0028	FDR Prep	23	16FEB11	18MAR11	90	6,350.40	10
2425-0029	CONDUCT FDR 2425	2	21MAR11	22MAR11	90	2,540.16	10
Procure, Fab & Assembly							
2425-0033	Prep Requisitn and procuremt pckg-Steel & Parts	1	01OCT12*	01OCT12	100	0.00	10
2425-0034	SUBMIT REQ TO PROCUREMENT - Steel and Parts	1	02OCT12	02OCT12	100	0.00	10
2425-0035	Procurement lead time (1) - Steel and Parts	30	03OCT12	13NOV12	100	0.00	10
2425-0036	AWARD - Steel and Parts	1	14NOV12	14NOV12	100	0.00	10
2425-0037	Fabricate or delivery - Steel and Parts	30	15NOV12	07JAN13	100	63,840.00	10
2425-0039	Prep Requisition and procurement pckg - Lifting	2	01OCT12*	02OCT12	111	0.00	10
2425-0040	SUBMIT REQ TO PROCUREMENT - Lifting Equipment	1	03OCT12	03OCT12	111	0.00	10
2425-0041	Procurement lead time (1) - Lifting Equipment	30	04OCT12	14NOV12	111	0.00	10
2425-0042	AWARD - Lifting Equipment	1	15NOV12	15NOV12	111	0.00	10
2425-0043	Fabricate or delivery - Lifting Equipment	30	16NOV12	08JAN13	111	26,600.00	10
Installation							
2425-0055	Engineering 1 Days Per Week title III	457	04JUN12*	18MAR14	1,638	108,258.76	10
2425-0056	Engineering Support .Days Per Weektitle III	457	04JUN12	18MAR14	1,638	38,311.39	25
2425-0057	Drafting Support .5 day/week title III	457	04JUN12	18MAR14	1,638	34,729.24	10
2425-0060	Road - Path	5	08JAN13	14JAN13	100	24,193.20	25
2425-0061	Duct Removal - Path	2	15JAN13	16JAN13	100	9,677.28	25
2425-0062	Lintel Removal - Path	3	17JAN13	21JAN13	100	15,880.56	25
2425-0063	Lintel Install - Path	2	22JAN13	23JAN13	100	12,570.24	25
2425-0064	Duct Install - Path	2	24JAN13	25JAN13	100	34,947.28	25
2425-0068	Setup - Metrology	5	28JAN13	01FEB13	100	22,337.60	10
2425-0069	Measure - Metrology	15	04FEB13	22FEB13	100	67,012.80	10
2425-0070	Model - Metrology	5	25FEB13	01MAR13	100	24,516.00	10
2425-0071	Lay out - Metrology	5	04MAR13	08MAR13	100	26,327.60	10
2425-0073	Labyrinth Removal	20	02APR12*	27APR12	313	80,047.68	20
2425-0076	Construction - Lift Fixtures	20	09JAN13	05FEB13	111	52,147.20	10
2425-0077	Load Test - Lift Fixtures	5	06FEB13	12FEB13	111	26,670.80	10
2425-0078	Move - Lift Fixtures	1	13FEB13	13FEB13	111	2,607.36	10
2425-0079	Trial Runs - Lift Fixtures	5	14FEB13	20FEB13	111	26,670.80	10
Relocate HVE							
2425-0123	Move - HVE 1 Movement	2	15JUN12	18JUN12	236	10,720.56	10
2425-0124	Disassemble - HVE 1 Movement	2	19JUN12	20JUN12	236	9,395.68	10
2425-0125	Move to Crain Access - HVE 1 Movement	2	21JUN12	22JUN12	236	9,395.68	10



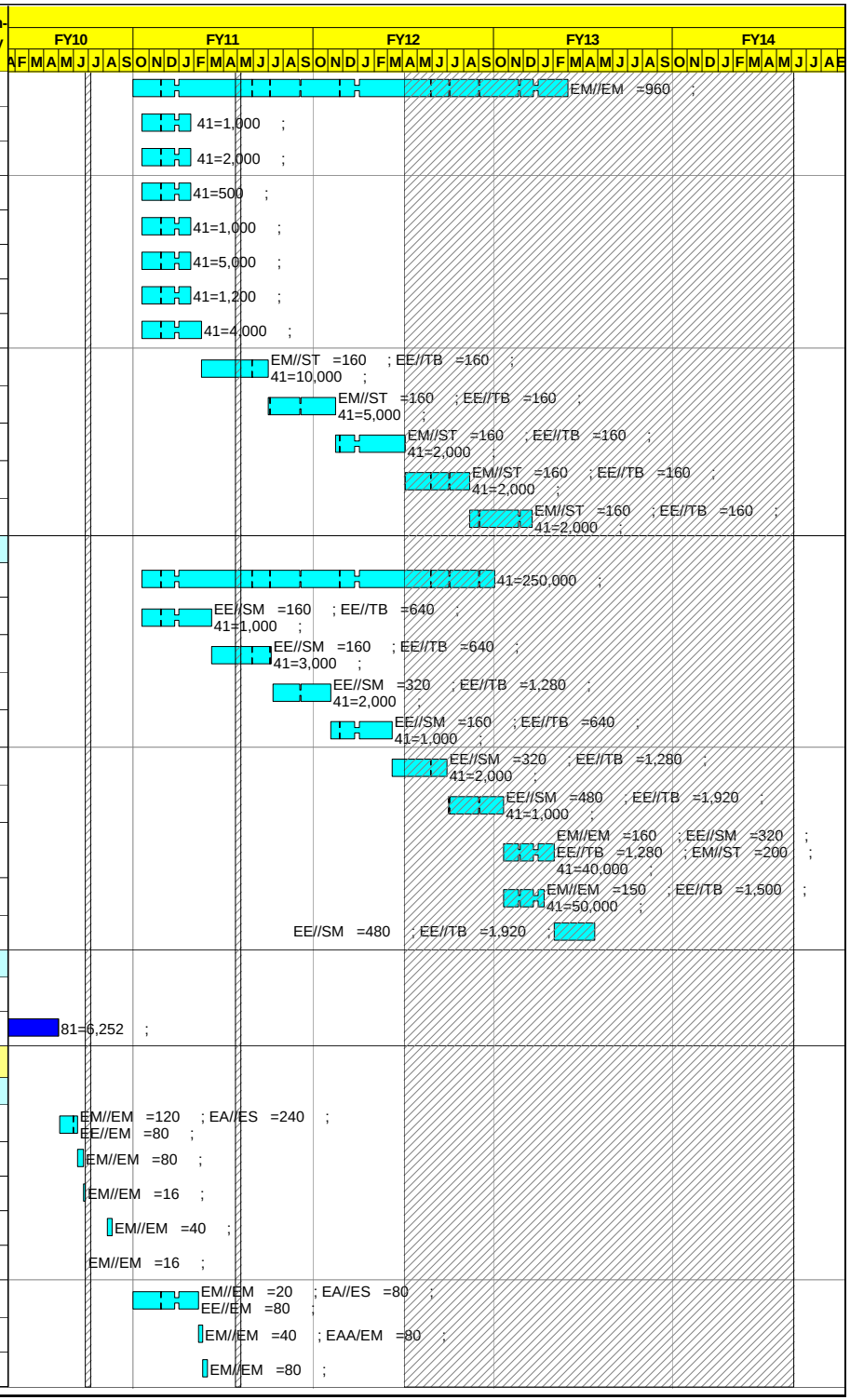
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2425-0126	Lift into TFTR - HVE 1 Movement	1	25JUN12	25JUN12	236	4,697.84	10
2425-0127	Move In - HVE 1 Movement	1	26JUN12	26JUN12	236	4,697.84	10
2425-0128	Over Wall - HVE 1 Movement	2	27JUN12	28JUN12	236	11,083.36	10
2425-0129	Reassemble - HVE 1 Movement	2	29JUN12	02JUL12	236	9,395.68	10
2425-0130	Placement - HVE 1 Movement	3	03JUL12	06JUL12	236	15,393.52	10
2425-0133	Move - HVE 2 Movement	2	09JUL12	10JUL12	236	10,720.56	10
2425-0134	Disassemble - HVE 2 Movement	2	11JUL12	12JUL12	236	9,395.68	10
2425-0135	Move to Crain Access - HVE 2 Movement	2	13JUL12	16JUL12	236	9,395.68	10
2425-0136	Lift into TFTR - HVE 2 Movement	1	17JUL12	17JUL12	236	4,697.84	10
2425-0137	Move In - HVE 2 Movement	1	18JUL12	18JUL12	236	4,697.84	10
2425-0138	Over Wall - HVE 2 Movement	2	19JUL12	20JUL12	236	11,083.36	10
2425-0139	Reassemble - HVE 2 Movement	2	23JUL12	24JUL12	236	9,395.68	10
2425-0140	Placement - HVE 2 Movement	3	25JUL12	27JUL12	236	15,393.52	10
2425-0143	Move - HVE 3 Movement	2	30JUL12	31JUL12	236	10,720.56	10
2425-0144	Disassemble - HVE 3 Movement	2	01AUG12	02AUG12	236	9,395.68	10
2425-0145	Move to Crain Access - HVE 3 Movement	2	03AUG12	06AUG12	236	9,395.68	10
2425-0146	Lift into TFTR - HVE 3 Movement	1	07AUG12	07AUG12	236	4,697.84	10
2425-0147	Move In - HVE 3 Movement	1	08AUG12	08AUG12	236	4,697.84	10
2425-0148	Over Wall - HVE 3 Movement	2	09AUG12	10AUG12	236	11,083.36	10
2425-0149	Reassemble - HVE 3 Movement	2	13AUG12	14AUG12	236	9,395.68	10
2425-0150	Placement - HVE 3 Movement	3	15AUG12	17AUG12	236	45,908.72	10
Relocate Beamline **TC LIMITED ACCESS**							
2425-0081	BEGIN BEAMLINE RELOCATION TO NTC	0	29APR13		64	0.00	20
2425-0082	Lift onto Rollers - Box Movements	1	29APR13	29APR13	64	32,505.04	20
2425-0083	Move IN - Box Movements	1	30APR13	30APR13	64	7,941.52	20
2425-0084	Over Wall - Box Movements	1	01MAY13	01MAY13	64	7,941.52	20
2425-0085	Placement - Box Movements	10	02MAY13	15MAY13	64	79,415.20	20
2425-0086	Metrology - Box Movements	10	16MAY13	29MAY13	64	60,610.40	20
2425-0089	Off - Source Platform	1	30MAY13*	30MAY13	64	3,969.52	10
2425-0090	Move - Source Platform	1	31MAY13	31MAY13	64	3,100.40	10
2425-0091	Lift - Source Platform	1	03JUN13	03JUN13	64	4,838.64	10
2425-0092	On - Source Platform	1	04JUN13	04JUN13	64	4,838.64	10
2425-0093	Metrology - Source Platform	10	05JUN13	18JUN13	64	82,329.20	10
2425-0097	Stabilize - Lid Movement	3	19JUN13	21JUN13	64	21,217.20	20
2425-0098	Lift onto Rollers - Lid Movement	1	24JUN13	24JUN13	64	7,941.52	20
2425-0099	Move IN - Lid Movement	1	25JUN13	25JUN13	64	7,941.52	20
2425-0100	Over Wall - Lid Movement	1	26JUN13	26JUN13	64	7,941.52	20



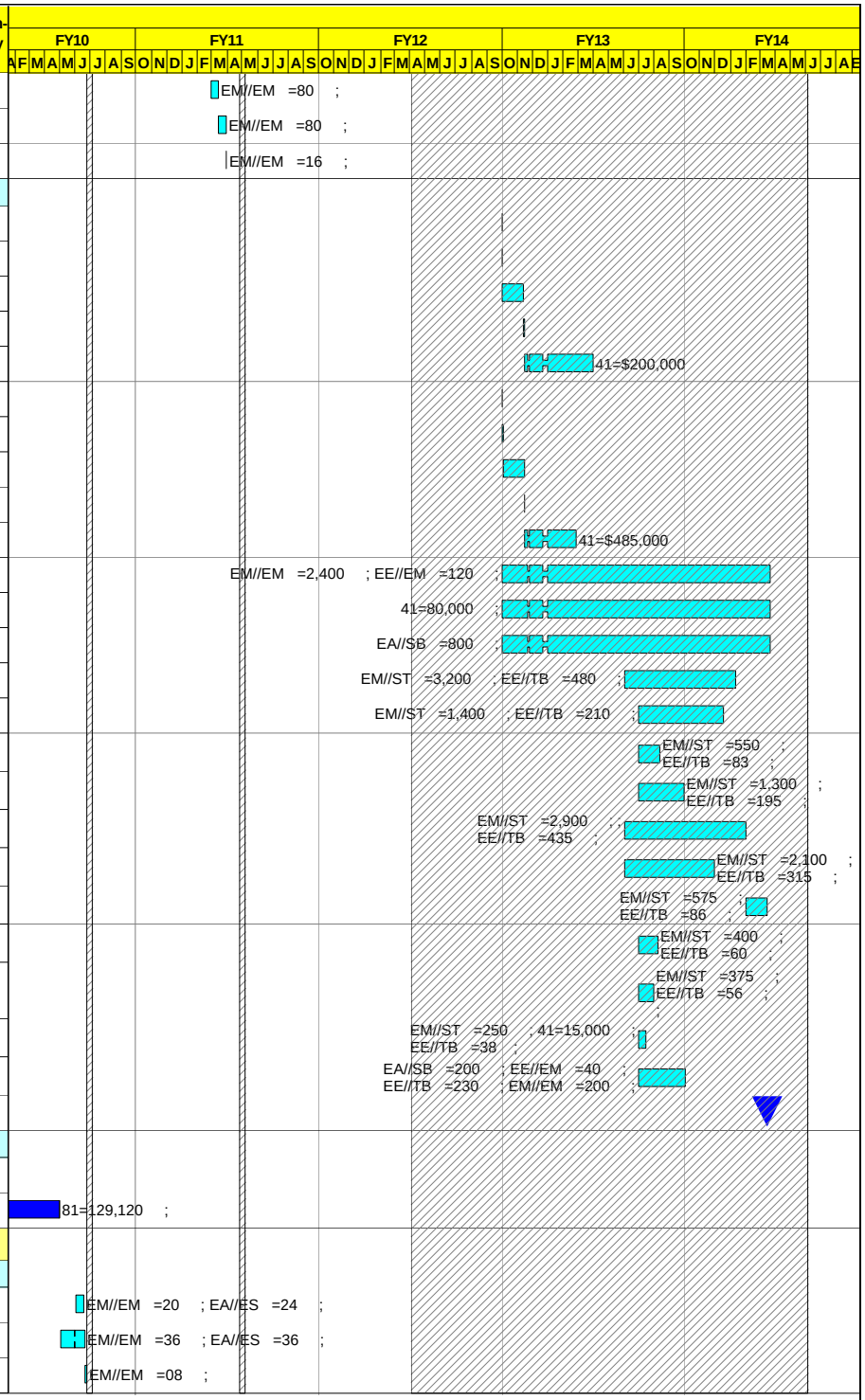
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2425-0101	Placement - Lid Movement	1	27JUN13	27JUN13	64	4,465.04	20
2425-0102	Metrology - Lid Movement	1	28JUN13	28JUN13	64	18,616.16	20
2425-0106	90in Flange - Component Movement	2	01JUL13	02JUL13	64	9,677.28	10
2425-0107	Magnet - Component Movement	2	03JUL13	04JUL13	64	11,041.92	10
2425-0108	Ion Dump - Component Movement	2	05JUL13	08JUL13	64	11,041.92	10
2425-0109	Exit Spool - Component Movement	2	09JUL13	10JUL13	64	9,677.28	10
2425-0110	TIV - Component Movement	2	11JUL13	12JUL13	64	9,677.28	10
2425-0111	Calorimeter - Component Movement	2	15JUL13	16JUL13	64	16,361.92	10
2425-0112	BEAMLINE AND COMPONENTS INSTALLED IN NTC	0		16JUL13	64	0.00	10
Relocate Sources							
2425-0115	Move 1 - Source Movement	2	17JUL13	18JUL13	197	9,677.28	15
2425-0116	Align 1 - Source Movement	4	19JUL13	24JUL13	197	30,271.68	15
2425-0117	Move 2 - Source Movement	2	19AUG13	20AUG13	180	9,677.28	15
2425-0118	Align 2 - Source Movement	4	21AUG13	26AUG13	180	30,271.68	15
2425-0119	Move 3 - Source Movement	2	09DEC13	10DEC13	106	9,967.68	15
2425-0120	Align 3 - Source Movement	4	11DEC13	16DEC13	106	36,620.16	15
FY092425	FY09 Actual Cost	22*	01JAN09A	30SEP09A		15,023.00	
FY102425	FY10 Actual Cost	143	01OCT09A	30APR10A		20,875.00	
Job: 2430 - 2nd NBI Decontamination-STEVENSON							
24300230	Decon Calorimeter	30	01OCT09*	11NOV09	216	0.00	
24300240	Decon Ion Dump	42*	03MAY10*	30JUN10	129	13,212.60	15
24300260	Decon Bending Magnet	25*	26MAY10*	30JUN10	129	5,565.72	15
24300280	Decon 90 inch flange & neutralizer	63*	03MAY10*	30JUL10	108	5,565.72	15
24300300	Decon Exit Spool Piece	20	01JUN10*	28JUN10	64	90,913.60	15
24300310	Decon BL Lid	9*	18JUN10*	30JUN10	64	30,683.34	15
24300370	Decon BL Box	20	13AUG10*	10SEP10	64	30,683.34	15
24300380	Decon BL exterior & accoutrements	15	13SEP10	01OCT10	64	68,478.08	15
24300390	Decon Program Evaluation/Operation Impact Report	10	04OCT10	15OCT10	64	38,102.40	15
24300399	DECON COMPLETE	0		15OCT10	64	0.00	15
24300400	Decon Procurement Support - Material & Supplies	108	03MAY10*	04OCT10	73	92,935.56	15
FY092430	FY09 Actual Cost	22*	01JAN09A	30SEP09A		1,238,513.00	
FY102430	FY10 Actual Cost	143	01OCT09A	30APR10A		508,320.00	
Job: 2440 - 2nd NBI Beamline-DENAULT							
Procure, Fab & Assembly							
2440-0001	Begin refurbishment job parts list	60	01OCT10*	04JAN11	75	6,412.80	10
2440-0002	Prepare drawings	600	01OCT10	28FEB13	1,911	43,035.38	10



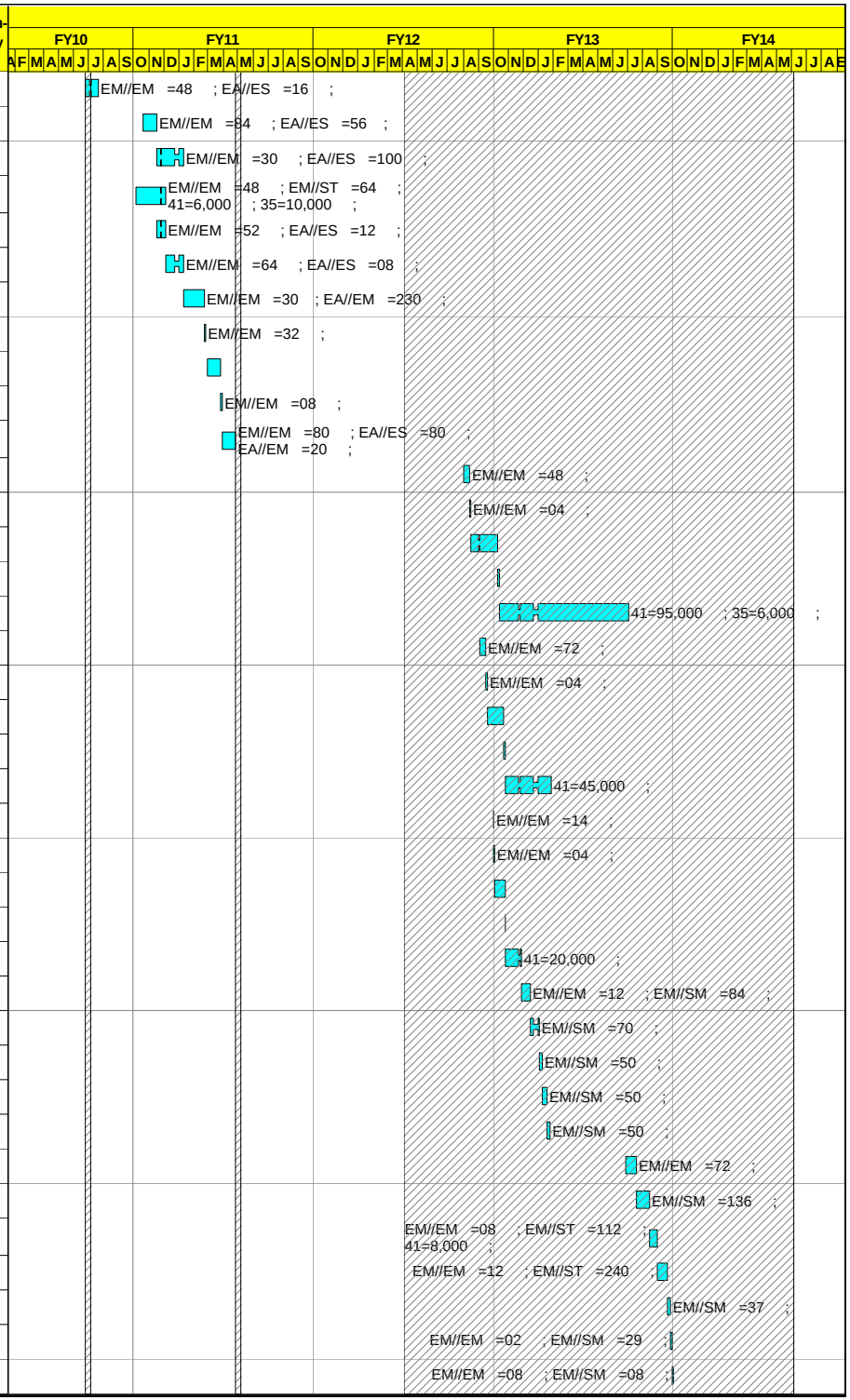
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2440-0002A	Engineering Supervision	600	01OCT10	28FEB13	1,911	157,048.75	10
2440-0003	Calorimeter parts	65	18OCT10	26JAN11	64	1,260.00	15
2440-0004	Ion Dump parts	65	18OCT10	26JAN11	64	2,520.00	15
2440-0005	Magnet parts	65	18OCT10	26JAN11	64	630.00	15
2440-0006	90 inch flange and neutralizer parts	65	18OCT10	26JAN11	64	1,260.00	15
2440-0007	Exit spool piece parts	65	18OCT10	26JAN11	64	6,300.00	15
2440-0008	BL Lid parts	65	18OCT10	26JAN11	64	1,512.00	15
2440-0009	BL Box parts	80	18OCT10	16FEB11	64	5,040.00	15
2440-0011	Calorimeter TC wiring	95	17FEB11	30JUN11	89	43,003.20	15
2440-0012	Ion Dump TC wiring	95	01JUL11	14NOV11	89	37,196.59	15
2440-0013	Magnet TC wiring	95	15NOV11	05APR12	89	34,315.20	15
2440-0014	90 inch flange and neutralizer TC wiring	90	06APR12	13AUG12	89	34,315.20	15
2440-0015	Exit spool piece TC wiring (refurb & relocate)	90	14AUG12	20DEC12	89	34,955.12	15
Refurbishment							
2440-0017A	Radiation Supplies (M&S)	493	18OCT10	05OCT12	141	320,228.19	15
2440-0018	Refurbish BL Box	95	18OCT10*	09MAR11	64	83,807.20	15
2440-0020	Refurbish BL Lid	85	10MAR11	08JUL11	64	86,327.20	15
2440-0022	Refurbish 90 inch flange and neutralizer	85	11JUL11	07NOV11	64	169,819.69	15
2440-0024	Refurbish Bending Magnet	80	08NOV11	08MAR12	64	87,412.00	15
2440-0026	Refurbish spool piece	80	09MAR12	29JUN12	64	174,824.00	15
2440-0028	Refurbish Ion Dump	80	02JUL12	23OCT12	64	295,256.12	15
2440-0030	Refurbish Calorimeter	65	24OCT12	01FEB13	64	279,606.40	15
2440-0031	Modify to New style	50	24OCT12	11JAN13	1,945	235,367.00	15
2440-0033	Reassembly & Test & relocate	60	04FEB13	26APR13	64	266,078.40	15
FY092440	FY09 Actual Cost	22*	01JAN09A	30SEP09A		28,566.00	
FY102440	FY10 Actual Cost	143	01OCT09A	30APR10A		6,252.00	
Job: 2450 - 2nd NBI Services-DENAULT							
Design							
2450-0017	Design Drawings	25*	03MAY10*	07JUN10	151	51,383.60	10
2450-0018	PDR Prep	10	08JUN10	21JUN10	151	11,932.00	10
2450-0019	CONDUCT PDR	2	22JUN10	23JUN10	151	2,386.40	10
2450-0020	Lehman Review	5	10AUG10*	16AUG10	2,543	5,966.00	10
2450-0022	Disposition PDR Chits	2	24JUN10	25JUN10	151	2,386.40	10
2450-0023	Design Drawings	87	01OCT10*	10FEB11	84	24,819.20	10
2450-0024	Update Analyses	5	11FEB11	17FEB11	84	21,175.20	10
2450-0025	Update Cost & Schedule Estimate	7	18FEB11	28FEB11	84	12,700.80	10



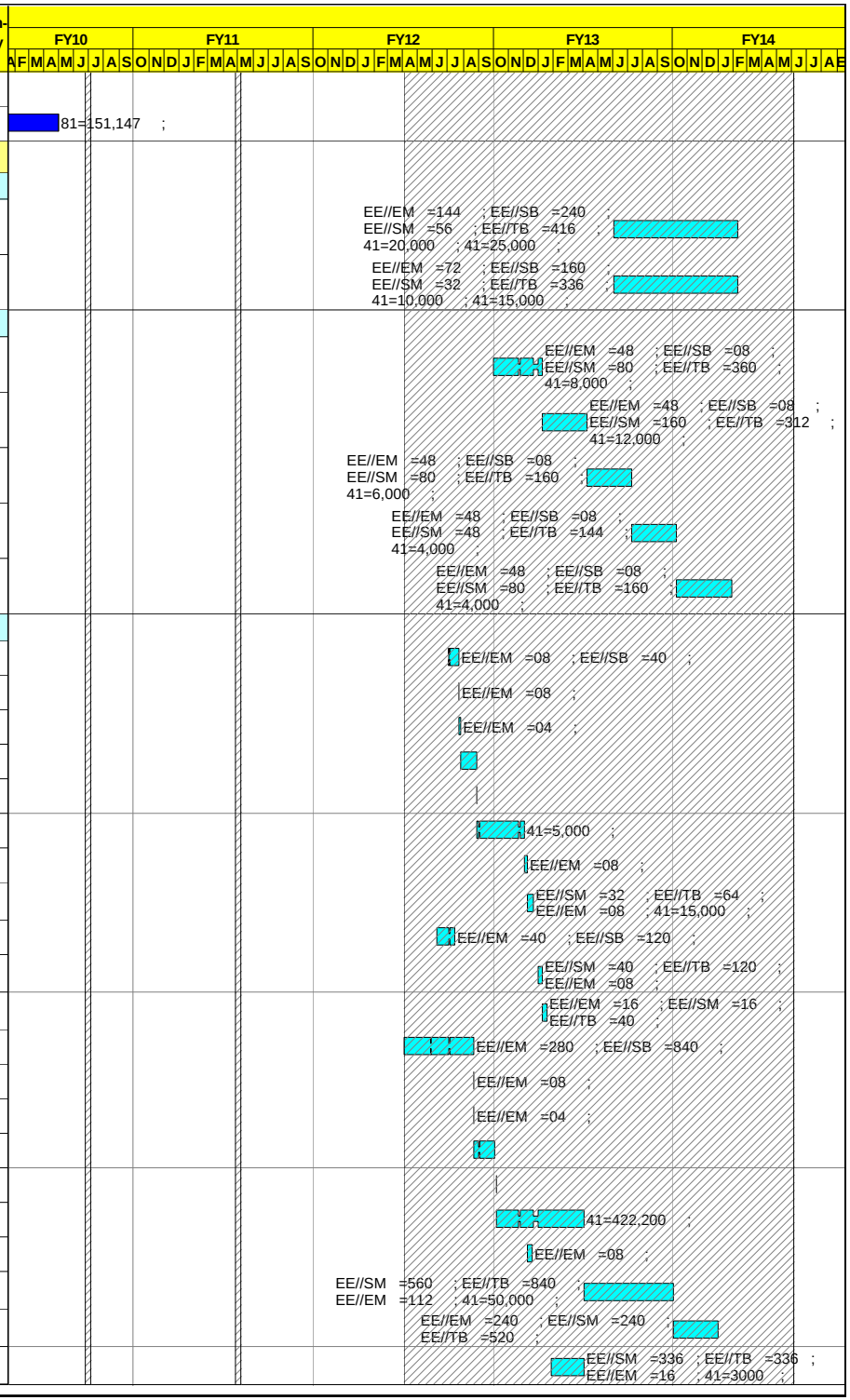
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2450-0026	Prep Procurement Specs	10	01MAR11	14MAR11	84	12,700.80	10
2450-0027	FDR Prep	10	15MAR11	28MAR11	84	12,700.80	10
2450-0028	CONDUCT FDR 2450	2	29MAR11	30MAR11	84	2,540.16	10
Procure, Fab & Assembly							
2450-0032	Prep Requisition & procurement pckg - Cyro parts	1	01OCT12*	01OCT12	110	0.00	10
2450-0033	SUBMIT REQ TO PROCUREMENT - Cyro parts	1	02OCT12	02OCT12	131	0.00	10
2450-0034	Procurement lead time (1) - Cyro parts	30	03OCT12	13NOV12	131	0.00	10
2450-0035	AWARD - Cyro parts	1	14NOV12	14NOV12	131	0.00	10
2450-0036	Fabricate or delivery - Cyro parts	90	15NOV12	01APR13	131	266,000.00	10
2450-0038	Prep Requisitn & procuremnt pckg - Pipe & misc.	2	01OCT12*	02OCT12	110	0.00	10
2450-0039	SUBMIT REQ TO PROCUREMENT - Pipe & misc.	1	03OCT12	03OCT12	110	0.00	10
2450-0040	Procurement lead time (1) - Pipe & misc.	30	04OCT12	14NOV12	110	0.00	10
2450-0041	AWARD - Pipe & misc.	1	15NOV12	15NOV12	110	0.00	10
2450-0042	Fabricate or delivery - Pipe & misc.	65	16NOV12	26FEB13	110	645,050.00	10
2450-0053A	Engineering for 2nd NBI Services	377	01OCT12*	21MAR14	1,635	437,331.34	10
2450-0053B	Engineering Support for 2nd NBI Services	377	01OCT12	21MAR14	1,635	107,189.39	25
2450-0053C	Drafting Support for 2nd NBI Services	377	01OCT12	21MAR14	1,635	109,766.94	10
2450-0057	Helium Transfer Lines	160	03JUN13*	10JAN14	87	398,957.32	25
2450-0059	Nitrogen Transfer Lines	120	02JUL13*	16DEC13	106	174,522.31	10
2450-0061	SF6 Transfer Lines	30	02JUL13*	12AUG13	196	67,680.16	10
2450-0063	HVE Water Lines	65	02JUL13*	30SEP13	161	159,858.40	10
2450-0065	Ion Dump Water Lines	175	03JUN13*	31JAN14	42	362,047.94	10
2450-0067	Ion Source Water Lines	130	03JUN13*	29NOV13	87	260,854.83	10
2450-0074	Vacuum Lines	30	03FEB14*	14MAR14	42	72,803.18	10
2450-0085	Stack 8 Vacuum Lines	30	01JUL13*	09AUG13	197	49,187.20	10
2450-0093	Gas System	23	01JUL13*	31JUL13	204	46,089.12	10
2450-0097	Legs	12	01JUL13*	16JUL13	215	50,739.76	10
2450-0102	Platform Mods	70	01JUL13*	04OCT13	157	441,482.77	10
2450-0103	NBI SERVICES COMPLETE	0		14MAR14	42	0.00	10
FY092450	FY09 Actual Cost	22*	01JAN09A	30SEP09A		76,722.00	
FY102450	FY10 Actual Cost	143	01OCT09A	30APR10A		129,120.00	
Job: 2460 - 2nd NBI Armor-PRINISKI							
2460-0016	Armor Service Connection (Bay H)	10	03JUN10*	16JUN10	95	4,952.20	10
2460-0018	PDR Prep - NBI Armor	36	03MAY10*	22JUN10	91	8,323.20	10
2460-0019	CONDUCT PDR - NBI Armor	1	23JUN10	23JUN10	91	1,193.20	10



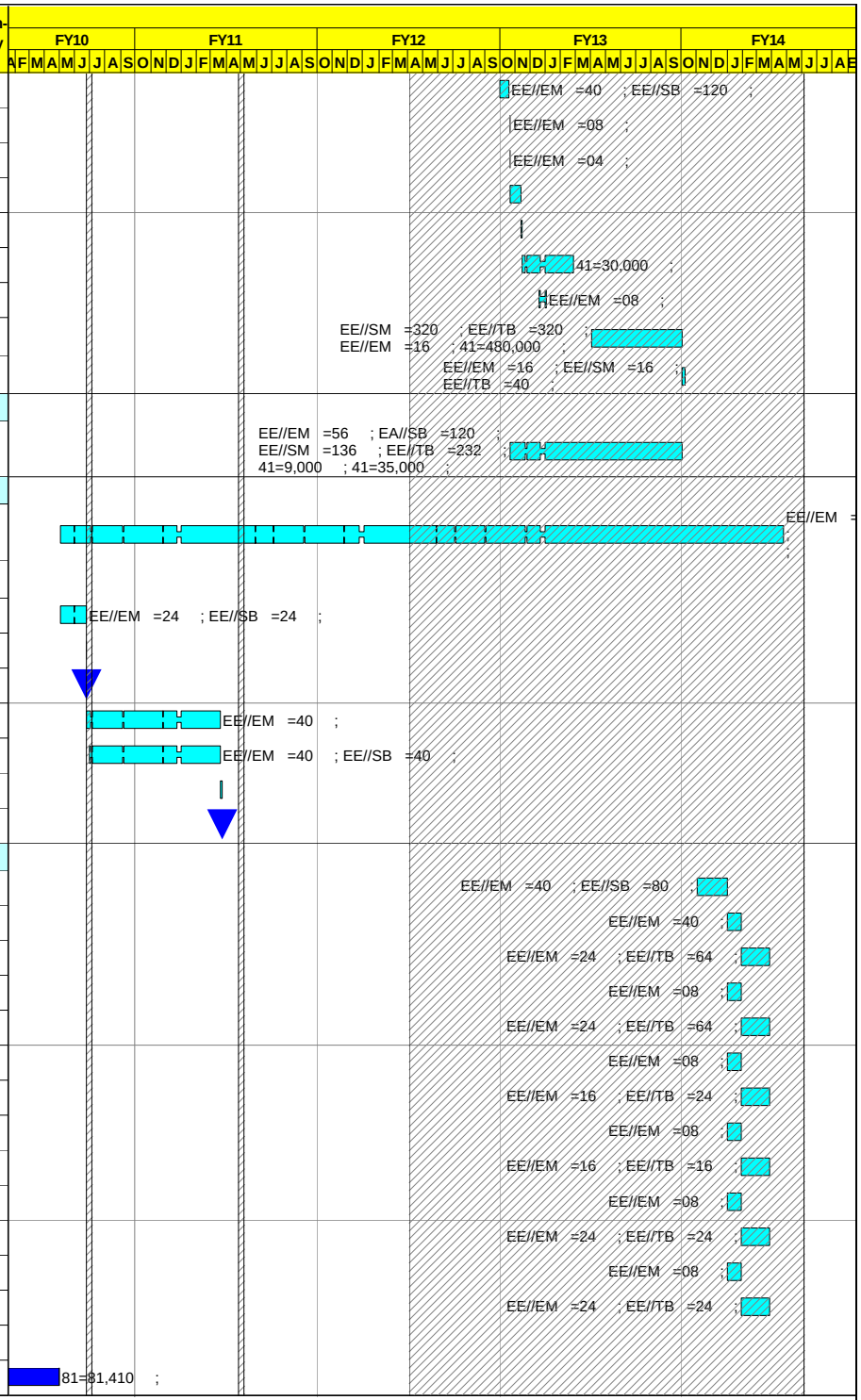
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2460-0020	Disposition PDR Chits - Final Design	20	24JUN10*	22JUL10	229	8,472.00	20
2460-0021	Revise Armor Backing &Armor service connecti	20	21OCT10	17NOV10	86	18,208.40	10
2460-0022	Design Drawings	30	18NOV10	10JAN11	86	13,463.80	10
2460-0023	Tile Material Evaluation	40	07OCT10*	03DEC10	86	34,252.16	30
2460-0024	Armor Instrumentation (thermocouples)	10	18NOV10	03DEC10	86	9,299.64	20
2460-0025	Develop Installation Techniques	20	06DEC10	10JAN11	86	10,856.72	10
2460-0026	Update Analysis	30	11JAN11	21FEB11	86	48,122.40	20
2460-0027	Update Cost & Sched Estimate - Final Dsgn	4	22FEB11	25FEB11	86	5,080.32	10
2460-0028	FDR Prep - NBI Armor	20	28FEB11	25MAR11	86	0.00	25
2460-0029	Conduct FDR - NBI Armor	1	28MAR11	28MAR11*	86	1,270.08	10
2460-0030	FDR Chit Resolution	20	29MAR11	25APR11*	411	23,432.00	10
2460-0031	Prep Requisition & Procuremnt Pckg - Armor Tiles	10	01AUG12*	14AUG12	93	7,949.28	20
2460-0032	Submit Request to Procurement - Armor Tiles	1	15AUG12	15AUG12	93	662.44	20
2460-0033	Procurement Lead Times - Armor Tiles	40	16AUG12	11OCT12	93	0.00	
2460-0034	Award - Armor Tiles	1	12OCT12	12OCT12	93	0.00	
2460-0035	Fabricate / Delivery - Armor Tiles	180	15OCT12	03JUL13	93	134,270.00	20
2460-0037	Prep Requisition & Procuremnt Pckg - Armor Tiles	10	04SEP12*	17SEP12	230	11,923.92	10
2460-0038	Submit Request t/Proc - Armor Support	1	18SEP12	18SEP12	230	662.44	20
2460-0039	Procurement Lead Time - Armor Support	25	19SEP12	23OCT12	230	0.00	
2460-0040	Award - Armor Support	1	24OCT12	24OCT12	230	0.00	
2460-0041	Fabricate / Delivery - Armor Support	60	25OCT12	28JAN13	230	59,850.00	20
2460-0043	Prep Requisition & Procuremnt Pckg-Backing Plate	2	01OCT12*	02OCT12	207	2,388.12	10
2460-0044	Submit Request t/Proc - New Backing Plates	1	03OCT12	03OCT12	207	682.32	20
2460-0045	Procurement Lead Time - New Backing Plates	15	04OCT12	24OCT12	207	0.00	
2460-0046	Award - New Backing Plates	1	25OCT12	25OCT12	207	0.00	
2460-0047	Delivery - New Backing Plates	20	26OCT12	26NOV12	207	26,600.00	20
2460-0049	Fabricate Backing Plates	15	27NOV12*	17DEC12	207	16,349.64	10
2460-0050	Assemble Armor Quad #1	7	18DEC12	03JAN13	207	11,918.90	25
2460-0051	Assemble Armor Quad #2	5	04JAN13	10JAN13	207	8,513.50	10
2460-0052	Assemble Armor Quad #3	5	11JAN13	17JAN13	207	8,513.50	10
2460-0053	Assemble Armor Quad #4	5	18JAN13	24JAN13	207	8,513.50	10
2460-0054	Assembly Procedure Finalized	15	28JUN13*	18JUL13	62	12,281.76	15
2460-0057	In Vessel Work Remove Armor	20	19JUL13*	15AUG13	62	23,156.72	20
2460-0058	Armor Support Installation	10	16AUG13	29AUG13	62	24,172.32	15
2460-0059	Armor Quadrant Installations	15	30AUG13*	19SEP13	62	28,120.56	20
2460-0060	Service Connections	4	20SEP13	25SEP13	62	6,299.99	25
2460-0061	Bay-H Port Cover Install	3	26SEP13*	30SEP13	62	5,278.99	15
2460-0062	PTP Testing - NBI Armor	2	01OCT13*	02OCT13	62	2,808.64	15



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
FY092460	FY09 Actual Cost	22*	01JAN09A	30SEP09A		35,786.00	
FY102460	FY10 Actual Cost	143	01OCT09A	30APR10A		151,147.00	
Job: 2470 - 2nd NBI Power-RAKI							
21-AC Aux.							
247000245	211-AC Auxiliaries PP's etc	181	03JUN13*	10FEB14	1,664	173,697.80	10
247000250	212 grounding	181	03JUN13*	10FEB14	1,664	109,021.20	10
22-Reactivation							
247000255	Switchyard- Reactivation	65	01OCT12*	09JAN13	1,672	69,393.04	10
247000256	Surge Room- Reactivation	65	10JAN13*	10APR13	1,672	83,908.08	10
247000257	Mod- reg- Reactivation	65	11APR13*	10JUL13	1,672	47,629.04	10
247000258	Arc/Filament/magnet- Reactivation	65	11JUL13*	09OCT13	1,672	38,046.93	10
247000259	LCC- Reactivation	80	10OCT13*	29JAN14	1,672	46,278.00	10
24-Cabling							
247000260	Design - Penetrations	15	02JUL12*	23JUL12	93	6,969.68	10
247000420	Prep Req & Procurement Pckg - Penetrations	1	24JUL12	24JUL12	93	1,531.68	10
247000430	Submit Req to Procurement - Penetrations	1	25JUL12	25JUL12	93	765.84	10
247000440	Procurement Lead Time - Penetrations	25	26JUL12	29AUG12	93	0.00	21
247000450	Award - Penetrations	1	30AUG12	30AUG12	93	0.00	21
247000460	Procurement/Fab/Assembly - Penetrations	65	31AUG12	04DEC12	93	6,603.85	10
247000690	Installation Procedure - Penetrations	5	05DEC12	11DEC12	93	1,577.60	10
247000700	Installation - Penetrations	8	12DEC12	21DEC12	93	33,152.88	10
247000270	Design Removal of Cable	25	08JUN12*	13JUL12	60	23,972.40	10
247000710	Removal - Cable	8	01JAN13	10JAN13	93	19,930.00	10
247000780	Commissioning - Removal of Cable	5	11JAN13	17JAN13	218	9,732.00	10
247000275	Design - Cables	100	02APR12*	21AUG12	33	167,806.80	20
247000470	Prep Req & Procurement Pckg - Cables	1	22AUG12	22AUG12	33	1,531.68	10
247000480	Submit Req to Procurement - Cables	1	23AUG12	23AUG12	33	765.84	10
247000490	Procurement Lead Time - Cables	30	24AUG12	05OCT12	33	0.00	21
247000500	Award - Cables	1	08OCT12	08OCT12	33	0.00	21
247000510	Procurement - NBI Cables	120	09OCT12	04APR13	33	561,526.00	20
247000720	Installation Procedure - Cable	5	12DEC12	18DEC12	104	1,577.60	10
247000730	Installation - Cable	130	05APR13	03OCT13	33	265,455.37	35
247000790	Commissioning - Cable	65	04OCT13	02JAN14	33	142,487.20	20
2470000729	decontmination of east wall	48	29JAN13	04APR13	33	97,115.92	35

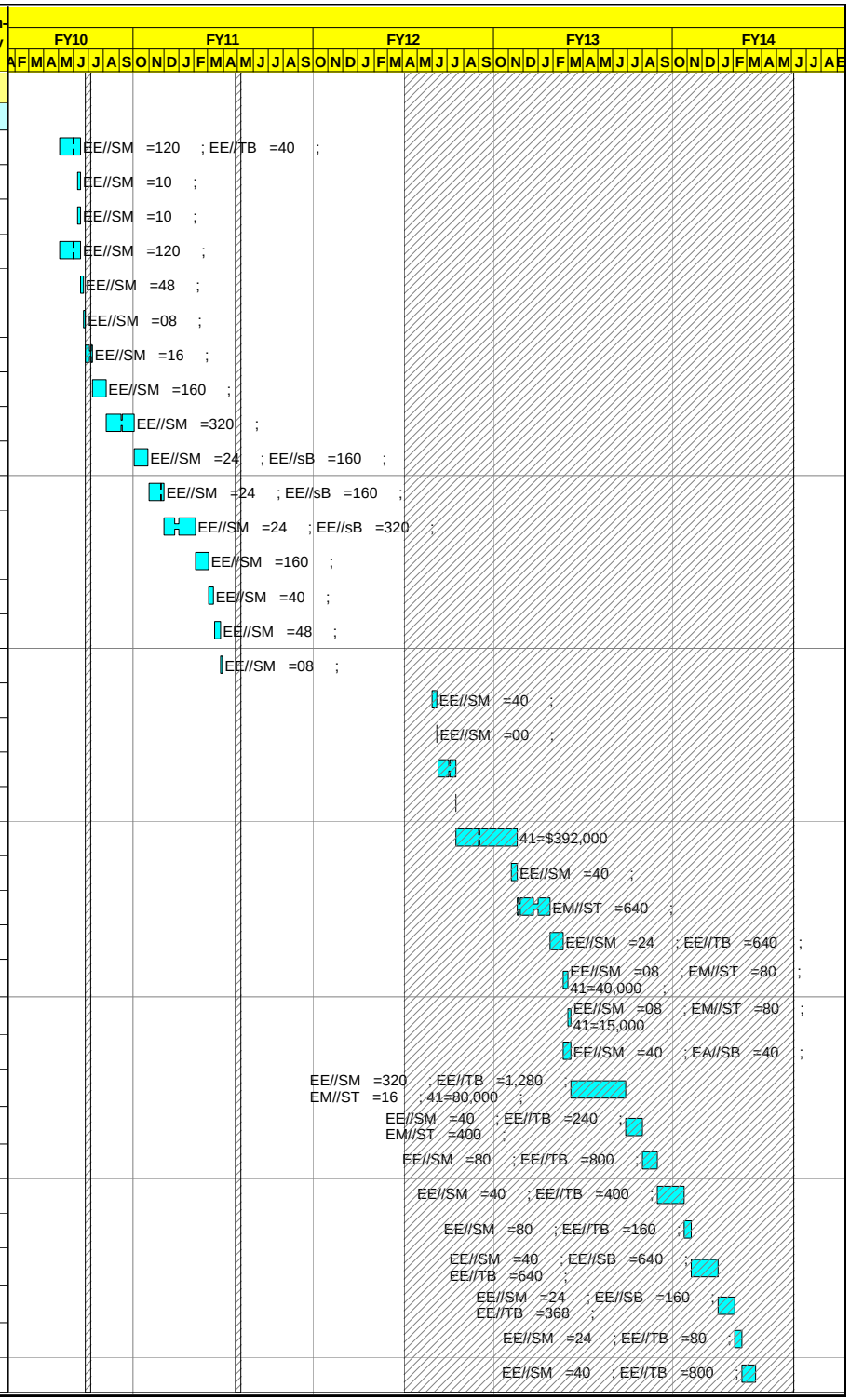


Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
247000280	Prep Procurement Spec - Raceway	15	01OCT12*	19OCT12	121	24,691.60	10
247000520	Prep Req & Procurement Pckg - Raceway	1	22OCT12	22OCT12	121	1,577.60	10
247000530	Submit Req to Procurement - Raceway	1	23OCT12	23OCT12	121	788.80	10
247000540	Procurement Lead Time - Raceway	15	24OCT12	13NOV12	121	0.00	10
247000550	Award - Raceway	1	14NOV12	14NOV12	121	0.00	10
247000560	Procurement/Fab/Assembly - Raceway	65	15NOV12	25FEB13	121	39,900.00	10
247000740	Installation Procedure - Raceway	5	19DEC12	02JAN13	159	1,577.60	10
247000750	Installation - 2nd NBI Raceway	130	05APR13	03OCT13	93	727,635.40	35
247000795	Commissioning - Raceway	5	04OCT13	10OCT13	93	10,023.84	10
25-Transmission Line							
247000285	Design & Install Transmission Line	240	22OCT12*	02OCT13	159	131,483.46	10
28-System Design & Integration							
247000090	Design dwgs, changes,as-builts	1,006	03MAY10*	24APR14	1,611	87,786.38	10
247000100	CDR Complete Power System	20	01OCT09	28OCT09*	213	0.00	10
247000180	PDR Preparation	37*	03MAY10*	23JUN10	90	7,076.40	10
247000190	Conduct PDR	1	24JUN10	24JUN10	90	0.00	10
247000200	PDR Complete	0		24JUN10*	90	0.00	10
247000235	Calculations - Final Dsgn	182	25JUN10	21MAR11	90	7,175.41	10
247000295	FDR Cabling	179	30JUN10	21MAR11	90	11,590.46	10
247000300	Conduct FDR	1	22MAR11	22MAR11	90	0.00	10
247000305	FDR Complete	0		22MAR11	90	0.00	10
System Testing							
247000890	New Procedures, PTP's, ISTP's	44	04NOV13*	02JAN14	33	19,663.20	10
247000900	DC Hipots Engineering	20	03JAN14	30JAN14	33	8,124.80	10
247000910	DC Hipots Commissioning	40	31JAN14	27MAR14	33	11,171.20	10
247000920	Elect Interlock Testing Eng	20	03JAN14	30JAN14	33	1,624.96	10
247000930	Elect Interlock Testg Commissioning	40	31JAN14	27MAR14	33	11,171.20	10
247000940	Kirk Key Testing Eng	20	03JAN14	30JAN14	33	1,624.96	10
247000941	Kirk Key Testg Commissioning	40	31JAN14	27MAR14	33	5,611.04	10
247000945	Instrumentation Testing Engr	20	03JAN14	30JAN14	33	1,624.96	10
247000946	Instrumentation Commissioning	40	31JAN14	27MAR14	33	4,824.00	10
247000950	Control Sys Engr	20	03JAN14	30JAN14	33	1,624.96	10
247000951	Control Sys Commissioning	40	31JAN14	27MAR14	33	7,236.00	10
247000960	Coil Protection Engr	20	03JAN14	30JAN14	33	1,624.96	10
247000971	Coil Protection Commissioning	40	31JAN14	27MAR14	33	7,236.00	10
FY092470	FY09 Actual Cost	22*	01JAN09A	30SEP09A		115,170.00	21
FY102470	FY10 Actual Cost	143	01OCT09A	30APR10A		81,410.00	

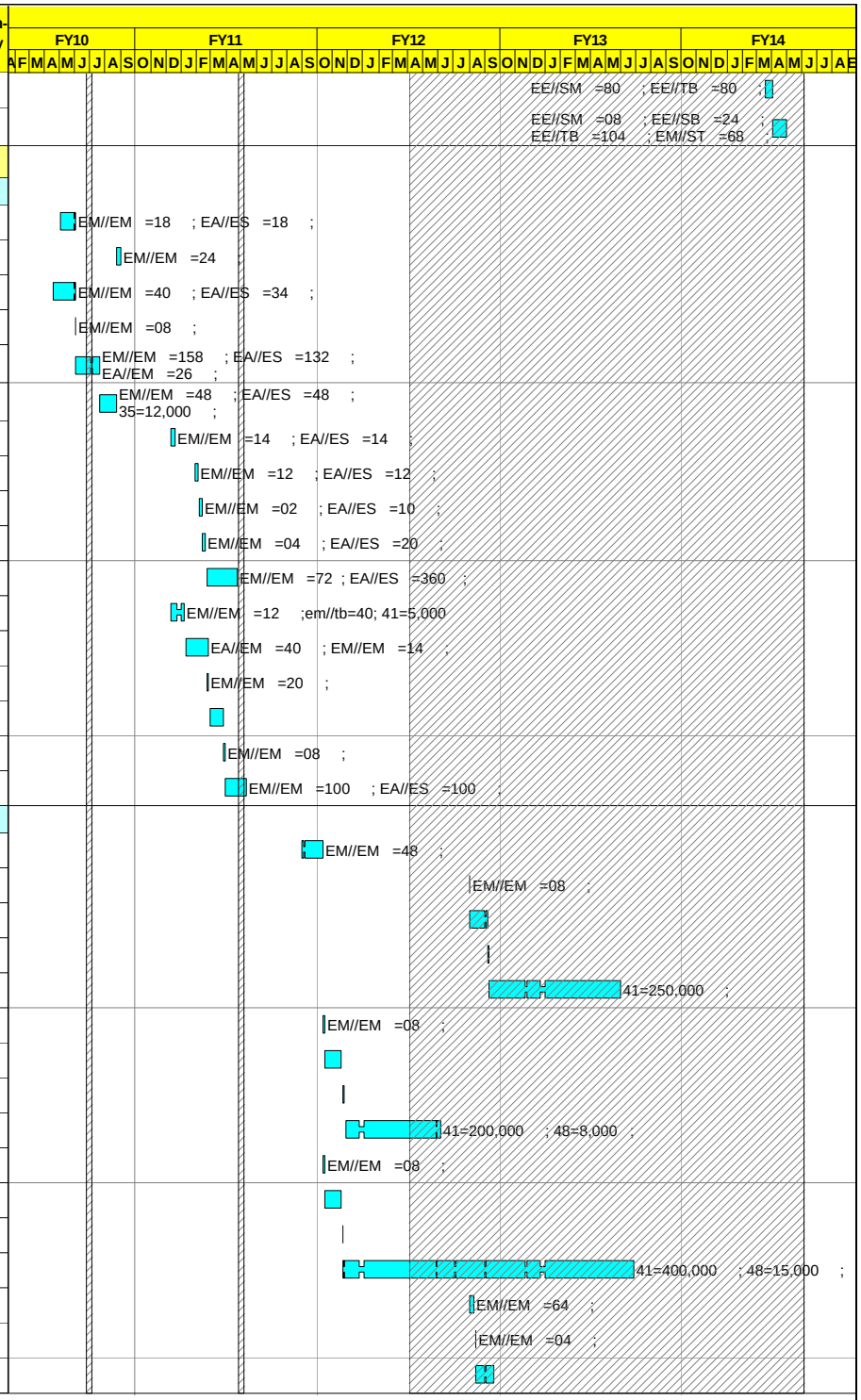


Job: 2475 - 2nd NBI Controls-CROPPER

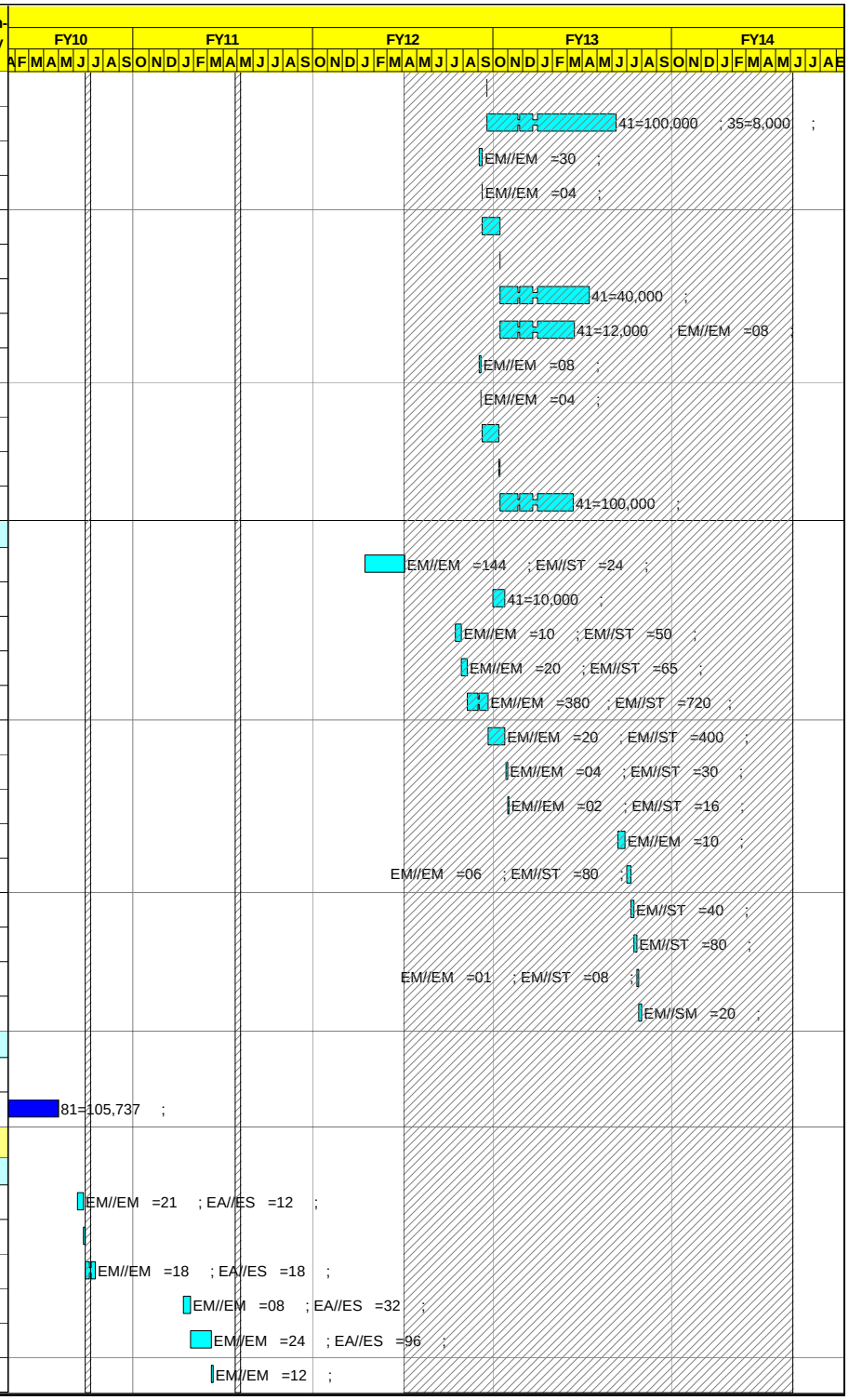
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2475-0002	Control System Lay Out-NBI-Controls & Instrument	30	03MAY10*	14JUN10	86	21,414.00	5
2475-0003	Update Cost & Sched Estimate-NBI-Control & Instm	5	08JUN10	14JUN10	86	1,506.10	5
2475-0004	FMEA Analysis-NBI-Controls & Instrumentation	5	08JUN10	14JUN10	86	1,506.10	5
2475-0005	Design Drawings-NBI-Controls & Instrumentation	30	03MAY10	14JUN10	86	18,073.20	5
2475-0006	PDR Prep PPL-NBI-Controls & Instrumentation	6	15JUN10	22JUN10	86	7,229.28	5
2475-0009	CONDUCT PDR-NBI-Controls & Instrumentation	1	23JUN10*	23JUN10	86	1,204.88	5
2475-0012	Disposition PDR Chits-NBI-Controls & Instrum	10	24JUN10	08JUL10	86	2,409.76	10
2475-0013	Design Drawings-NBI-Controls & Instrumentation	20	09JUL10	05AUG10	86	24,097.60	10
2475-0014	PLC & RSView Programing-NBI-Controls & Instrumen	40	06AUG10	01OCT10	86	48,272.88	10
2475-0015	Beamline TC Scanner Program-NBI-Controls & Instr	20	04OCT10	29OCT10	86	20,378.88	10
2475-0016	Protective Plate TC Scanner Program-NBI-Controls	20	01NOV10	30NOV10	86	20,378.88	10
2475-0017	LCC Remote LabView Programing-NBI-Controls/Instr	40	01DEC10	02FEB11	86	36,910.08	10
2475-0018	Protective Plate Interlocks-NBI-Controls & Instr	20	03FEB11	02MAR11	86	25,651.20	10
2475-0019	Update Cost & SchedEstimate-NBI-Controls & Instr	7	03MAR11	11MAR11	86	6,412.80	10
2475-0020	FDR Prep PPL-NBI-Controls & Instrumentation	10	14MAR11	25MAR11	86	7,695.36	10
2475-0023	CONDUCT FDR-NBI-Controls & Instrumentation	1	28MAR11*	28MAR11	86	1,282.56	10
2475-0027	Prep Requisition and procurement package	5	01JUN12*	07JUN12	10	6,689.60	10
2475-0028	SUBMIT REQ TO PROCUREMENT	1	08JUN12	08JUN12	10	0.00	10
2475-0029	Procurement lead time (1)	25	11JUN12	16JUL12	10	0.00	10
2475-0030	AWARD-NBI-Controls & Instrumentation	1	17JUL12	17JUL12	10	0.00	10
2475-0031	Fabricate or delivery--NBI-Controls & Instrument	88	18JUL12	19NOV12	10	514,410.91	10
2475-0034	Fab/Assy Procedure	10	06NOV12	19NOV12	10	6,890.00	15
2475-0036	Cable Tray - Fab/Assembly	40	20NOV12	24JAN13	10	69,529.60	15
2475-0038	Gradient Grid divider - Fab/Assembly	20	25JAN13	21FEB13	10	65,266.80	15
2475-0039	Penetrations - Fab/Assembly	5	22FEB13	28FEB13	10	63,269.20	15
2475-0040	Control Rack Cage - Fab/Assembly	5	01MAR13	07MAR13	10	30,019.20	15
2475-0042	Installation Procedures	10	22FEB13	07MAR13	10	12,324.80	15
2475-0043	Beam Line Cabling - Installation	80	08MAR13	27JUN13	10	285,523.84	20
2475-0044	Rack relocation - Installation	25	28JUN13	01AUG13	10	73,270.80	20
2475-0045	Aux Cabling - Installation	20	02AUG13	29AUG13	10	90,196.00	20
2475-0046	TC Scanners - beamline & Protective Plates-Instl	40	30AUG13	24OCT13	10	45,705.86	15
2475-0047	NBOS Station - Installation	10	25OCT13	07NOV13	10	29,934.40	15
2475-0048	LCC Remote - Installation	40	08NOV13	02JAN14	10	162,367.20	15
2475-0049	Power Supply Upgrade - Installation	23	03JAN14	04FEB14	10	63,538.72	15
2475-0050	Protective Plate TC's - Installation	10	05FEB14	18FEB14	10	12,128.48	15
2475-0051	Protective Plate Interlocks - Installation	20	19FEB14	18MAR14	10	85,800.80	15



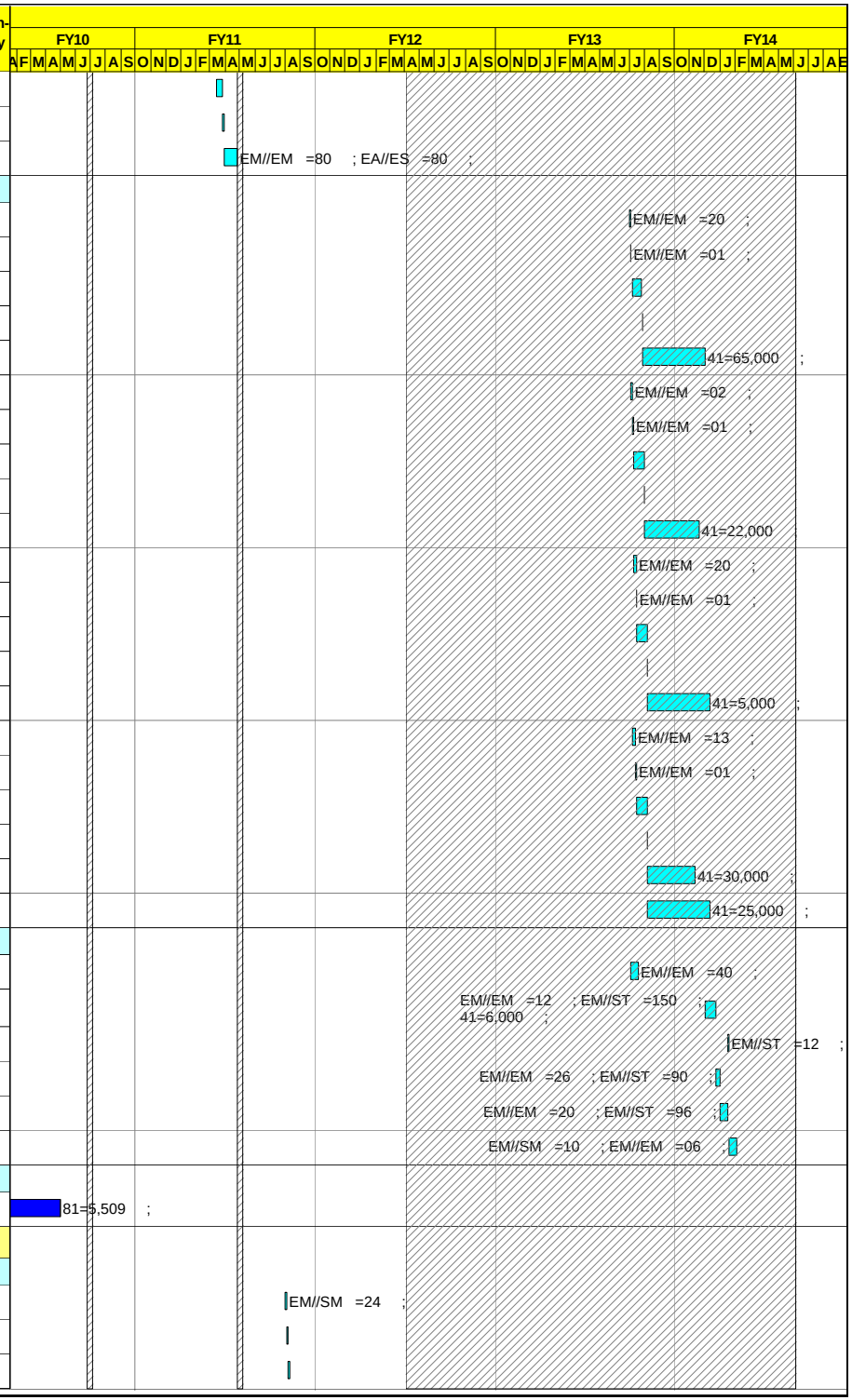
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2475-0052	PTP Testing	10	19MAR14	01APR14	10	22,064.00	15
2475-0056	Disconnect remote control	20	02APR14	29APR14	10	22,721.60	15
Job: 2480 - 2nd NBI/TVPS Duct & VV-PRINISKI							
Design							
2480-0024	New Coil Comonents F/J-K RWM Coil Re Dsgn	22	03MAY10*	02JUN10	167	4,161.60	10
2480-0025	Seismic Analysis	5	25AUG10*	31AUG10	205	3,579.60	10
2480-0027	PDR Prep - Duct & VV Mods	31	20APR10	02JUN10	167	8,755.70	10
2480-0028	CONDUCT PDR - Duct & VV Mods	1	03JUN10	03JUN10	167	1,193.20	10
2480-0029	Disposition PDR Chits - Final Design	33	04JUN10*	21JUL10	167	39,001.16	10
2480-0030	J-K Cap/Installation Procedure	24	22JUL10	24AUG10	167	25,857.60	25
2480-0031	K- Port Extension	7	10DEC10	20DEC10	86	3,440.78	15
2480-0032	NB- Ceramic-Break	6	28JAN11	04FEB11	86	2,949.24	15
2480-0033	Spool Piece/Round Bellows	5	07FEB11	11FEB11	86	1,187.62	15
2480-0034	Rectangular Bellows Assembly	5	14FEB11	18FEB11	86	2,375.24	15
2480-0035	Design Drawings - Final Design	45	21FEB11	22APR11	86	42,754.32	10
2480-0036	Installation Prototype	15	10DEC10	07JAN11	86	12,002.72	20
2480-0037	Update Analysis - Final Design	35	10JAN11	25FEB11	86	9,763.44	20
2480-0038	Update Cost & Sched Estimate - Final Dsgn	5	21FEB11	25FEB11	86	3,175.20	10
2480-0039	FDR Prep-Duct & VV Mods	20	28FEB11	25MAR11	86	0.00	10
2480-0040	CONDUCT FDR-Duct & VV Mods	1	28MAR11	28MAR11*	86	1,270.08	10
2480-0041	Disposition FDR Chits 15	33	29MAR11*	12MAY11	168	24,577.00	20
Procure, Fab & Assembly							
2480-0042	Prep Req & Procuremnt Pckg	30	01SEP11*	13OCT11	91	7,719.12	20
2480-0044	Submit Req to Procurement - 40" VAT Valves (2)	1	01AUG12*	01AUG12	111	1,324.88	20
2480-0045	Procurement Lead Times - 40" VAT Valves (2)	25	02AUG12	06SEP12	111	0.00	
2480-0046	Award - - 40" VAT Valves (2)	3	07SEP12	11SEP12	111	0.00	
2480-0047	Fabricate / Delivery - 40" VAT Valves (2)	180	12SEP12	31MAY13	111	331,958.33	15
2480-0049	Submit Req to Procurement - 40" Bellows Section	1	14OCT11*	14OCT11	151	1,324.88	20
2480-0050	Procurement Lead Time - 40" Bellows Section	25	17OCT11	18NOV11	151	0.00	
2480-0051	Award - 40" Bellows Section	3	21NOV11	23NOV11	151	0.00	
2480-0052	Fabricate / Delivery - 40" Bellows Section	130	28NOV11	05JUN12	151	268,400.00	20
2480-0054	Submit Req to Proc-Rectangular Bellows Section	1	14OCT11*	14OCT11	91	1,324.88	20
2480-0055	Procurement Lead Time-Rectangular Bellows Sectn	25	17OCT11	18NOV11	91	0.00	
2480-0056	Award-Rectangular Bellows Section	1	21NOV11	21NOV11	91	0.00	
2480-0057	Fabricate / Delivery-Rectangular Bellows Section	400	22NOV11	28JUN13	91	541,570.38	50
2480-0059	Prep Req & Procuremnt Pckg - Vessel Cap & Port E	8	01AUG12*	10AUG12	105	10,599.04	20
2480-0060	Submit Req to Procurement - Vessel Cap & Port Ex	1	13AUG12	13AUG12	105	662.44	20
2480-0061	Procurement Lead Times - Vessel Cap & Port Exten	25	14AUG12	18SEP12	105	0.00	



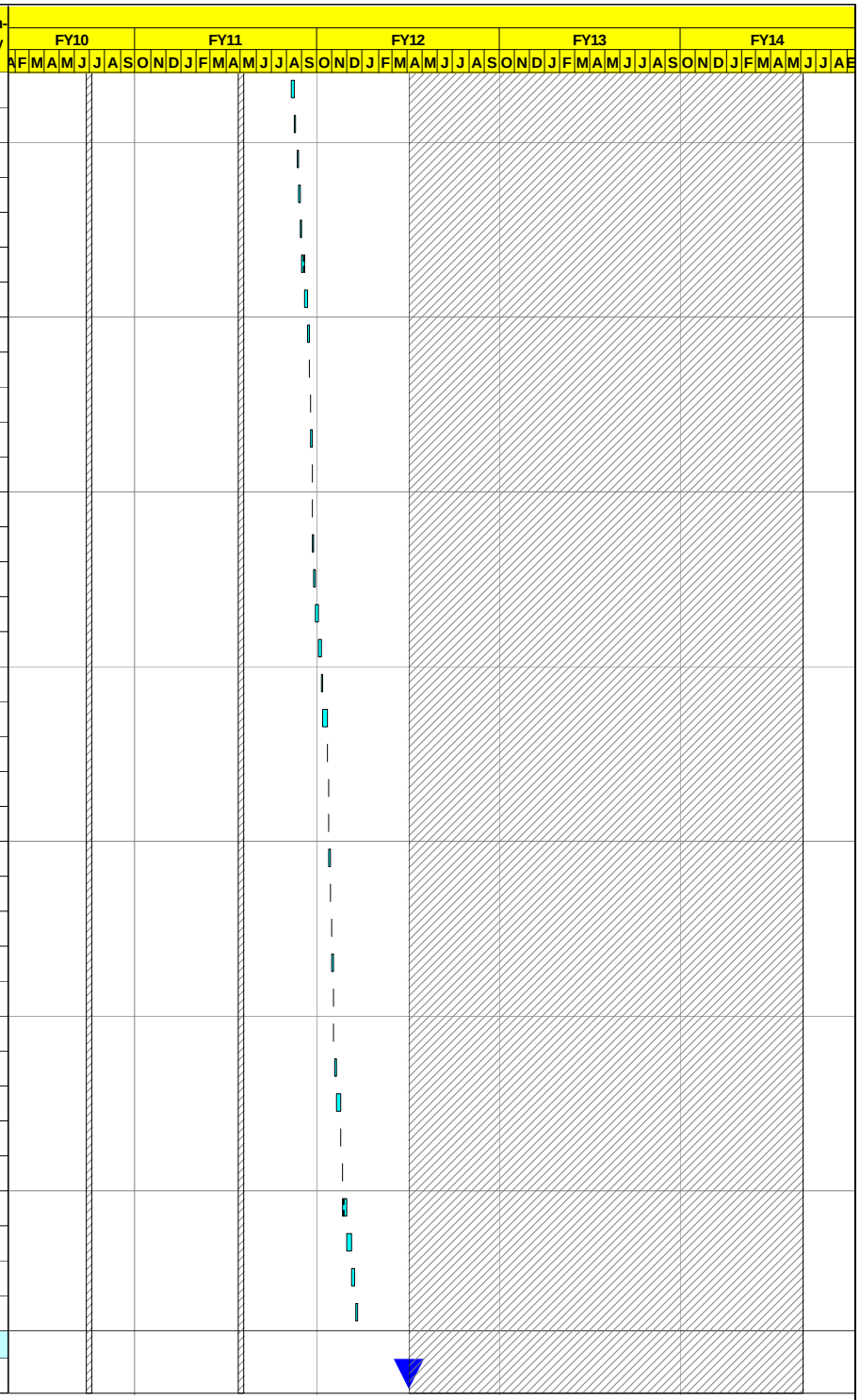
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2480-0062	Award - Vessel Cap & Port Extension	1	19SEP12	19SEP12	105	0.00	
2480-0063	Fabricate / Delivery - Vessel Cap & Port Extensn	180	20SEP12	10JUN13	105	143,434.00	15
2480-0064	Prep Req & Procuremnt Pckg - Spool Piece	5	04SEP12*	10SEP12	145	4,968.30	20
2480-0065	Submit Req to Procurement - Spool Piece	1	11SEP12	11SEP12	145	662.44	20
2480-0066	Procurement Lead Times - Spool Piece	25	12SEP12	16OCT12	145	0.00	
2480-0067	Award - Spool Piece	1	17OCT12	17OCT12	145	0.00	
2480-0068	Fabricate / Delivery - Spool Piece	120	18OCT12	15APR13	145	53,200.00	15
2480-0070	Fabricate / Delivery - RWM Coil Mtrl (cooper)	100	18OCT12*	18MAR13	165	17,324.64	15
2480-0072	Prep Req & Procuremnt Pckg-Other Material f/Duct	3	04SEP12*	06SEP12	143	1,324.88	10
2480-0073	Submit Req to Procurement -Other Material f/Duct	1	07SEP12	07SEP12	143	662.44	20
2480-0074	Procurement Lead Time - Other Material for Duct	25	10SEP12	12OCT12	143	0.00	
2480-0075	Award - Other Material for Duct	1	15OCT12	15OCT12	143	0.00	
2480-0076	Fabricate / Delivery-Other Mtrl f/Duct	100	16OCT12	14MAR13	143	133,000.00	15
Installation							
2480-0077	Installation Procedure - Duct & VV Mods	60	16JAN12*	06APR12	192	26,379.36	20
2480-0078	Installation Material - Duct & VV Mods	20	01OCT12*	26OCT12	131	13,300.00	30
2480-0081	Install Vessel Supports	8	19JUL12	30JUL12	121	6,930.10	15
2480-0082	Remove Bay-K Nozzle	8	31JUL12	09AUG12	121	10,168.40	15
2480-0083	Cut J-K opening	30	10AUG12	21SEP12	121	89,194.40	20
2480-0084	Fit Up/Install Cap	25	24SEP12	26OCT12	131	46,594.92	30
2480-0085	Install Duct Supports	3	29OCT12	31OCT12	131	3,941.52	15
2480-0086	Install K Extension	2	01NOV12	02NOV12	131	2,079.40	15
2480-0087	NB2 Duct Construction	12	13JUN13	28JUN13	79	1,705.80	20
2480-0088	Make up NB2 Transition Duct	7	01JUL13	09JUL13	79	9,714.68	15
2480-0089	Leak Check Duct	5	10JUL13	16JUL13	79	4,345.60	20
2480-0090	Install Transition Duct	5	17JUL13	23JUL13	79	8,691.20	20
2480-0091	Install, Connect Bake Out Lines	1	24JUL13	24JUL13	79	1,039.70	15
2480-0092	PTP Testing - Duct & VV Mods	4	25JUL13	30JUL13	79	3,405.40	15
FY092480	FY09 Actual Cost	22*	01JAN09A	30SEP09A		183,352.00	
FY102480	FY10 Actual Cost	143	01OCT09A	30APR10A		105,737.00	
Job: 2485 - Vacuum Pumping System-PRINISKI							
Design							
2485-0013	PDR Prep	10	09JUN10	22JUN10	734	4,116.75	10
2485-0014	CONDUCT PDR	2	23JUN10*	24JUN10	734	0.00	10
2485-0015	Disposition PDR Chits	15	25JUN10*	16JUL10	734	4,161.60	25
2485-0016	Vacuum Diagnostic Layout	10	12JAN11*	25JAN11	616	4,054.40	20
2485-0017	Design Drawings	30	26JAN11	08MAR11	616	12,163.20	10
2485-0018	Update Cost & Schedule Estimate	3	09MAR11	11MAR11	616	1,905.12	15



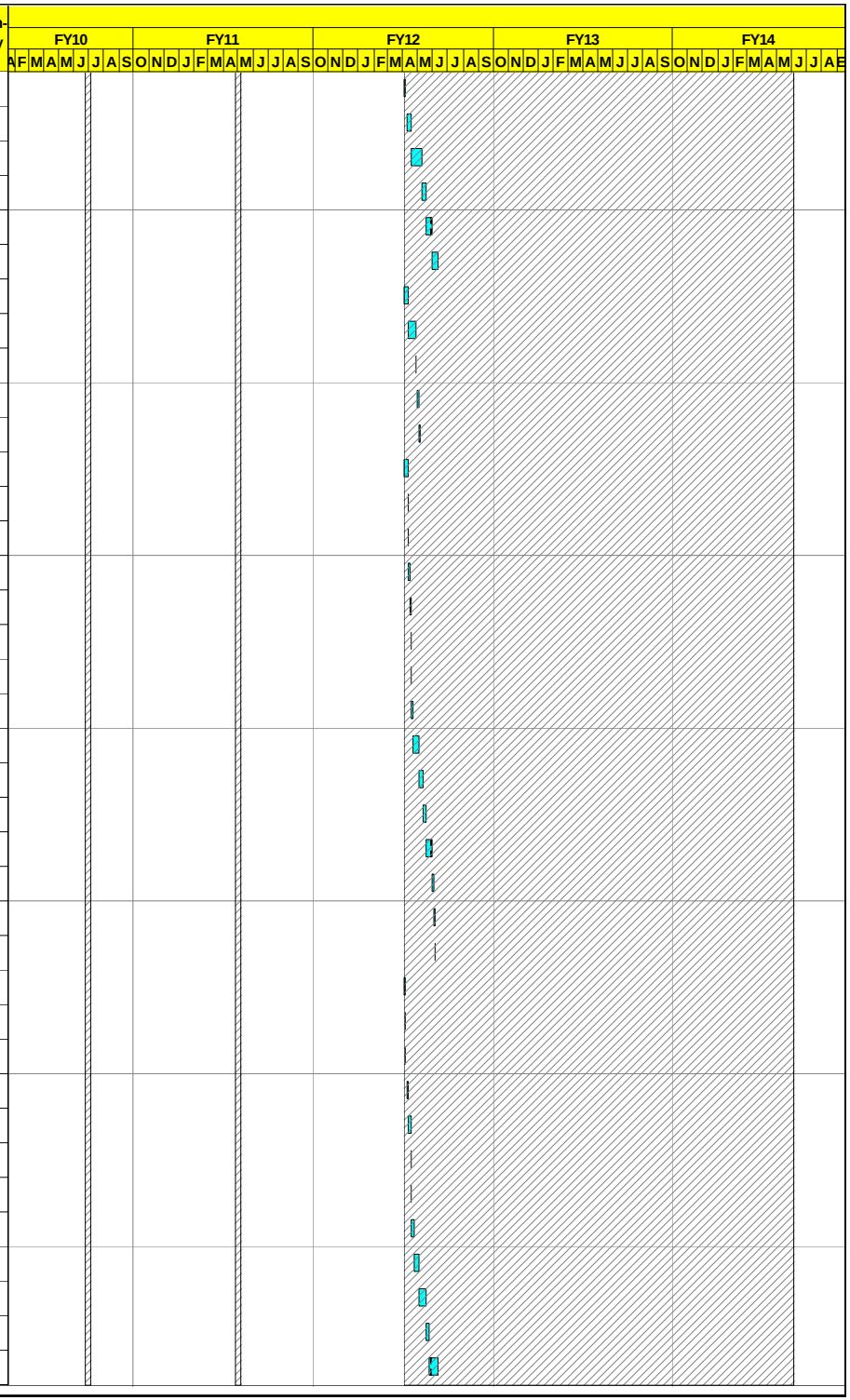
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
2485-0019	FDR Prep	10	14MAR11	25MAR11	616	0.00	10
2485-0020	CONDUCT FDR	2	28MAR11*	29MAR11	616	0.00	10
2485-0021	FDR Chit Resolution (All Areas)	20	30MAR11*	26APR11	616	19,661.60	10
Procure, Fab & Assembly							
2485-0022	Prep Req & proc pckg - 3200i/s TMPx2	4	01JUL13*	04JUL13	70	3,411.60	20
2485-0023	SUBMIT REQ TO PROC - 3200i/s TMPx2	1	05JUL13	05JUL13	70	170.58	10
2485-0024	Procurement lead time (1) - 3200i/s TMPx2	15	08JUL13	26JUL13	70	0.00	
2485-0025	AWARD - 3200i/s TMPx2	1	29JUL13	29JUL13	70	0.00	
2485-0026	Fabricate or delivery - 3200i/s TMPx2	90	30JUL13	02DEC13	70	87,425.00	10
2485-0028	Prep Req & proc pckg - New VAT Valves	2	05JUL13	08JUL13	78	341.16	20
2485-0029	SUBMIT REQ TO PROC- New VAT Valves	1	09JUL13	09JUL13	78	170.58	10
2485-0030	Procurement lead time (1)- New VAT Valves	15	10JUL13	30JUL13	78	0.00	
2485-0031	AWARD- New VAT Valves	1	31JUL13	31JUL13	78	0.00	
2485-0032	Fabricate or delivery - New VAT Valves	80	01AUG13	20NOV13	78	29,565.25	10
2485-0034	Prep Req & proc pckg - Vacuum Instrumentation	4	10JUL13	15JUL13	86	3,411.60	20
2485-0035	SUBMIT REQ TO PROC- Vacuum Instrumentation	1	16JUL13	16JUL13	86	170.58	10
2485-0036	Procurement lead time (1)- Vacuum Instrumentatn	15	17JUL13	06AUG13	86	0.00	
2485-0037	AWARD- Vacuum Instrumentation	1	07AUG13	07AUG13	86	0.00	
2485-0038	Fabricate or delivery - Vacuum Instrumentation	90	08AUG13	11DEC13	86	6,736.67	20
2485-0040	Prep Req & proc pckg - Misc Mtrl/Comp for Ducts	4	09JUL13	12JUL13	79	2,217.54	15
2485-0041	SUBMIT REQ TO PROC - Misc Mtrl/Comp for Ducts	1	15JUL13	15JUL13	79	170.58	20
2485-0042	Procurement lead time (1) - Mtrl/Comp for Duct	15	16JUL13	05AUG13	79	0.00	
2485-0043	AWARD - Misc Mtrl/Comp for Ducts	1	06AUG13	06AUG13	79	0.00	
2485-0044	Fabricate or delivery - Misc Mtrl/Comp for Ducts	70	07AUG13	12NOV13	84	40,298.57	20
2485-0044A	Fabricate or delivery - All Other Mtrl/Component	90	07AUG13*	10DEC13	79	33,675.00	20
Installation							
2485-0046	Installation Procedure	10	05JUL13*	18JUL13	167	6,823.20	10
2485-0047	Pre-Assemble Duct Legs 1 and 2	15	03DEC13*	23DEC13	70	27,053.40	15
2485-0048	Leak Checking	3	17JAN14	21JAN14	70	1,342.80	25
2485-0049	Install TVPS Supports/	8	24DEC13	02JAN14	70	14,639.20	20
2485-0050	Install Ducts/Pumps	10	03JAN14*	16JAN14	70	14,256.40	20
2485-0051	PTP Testing	10	22JAN14	04FEB14	70	2,808.00	10
FY102485	FY10 Actual Cost	143	01OCT09A	30APR10A		5,509.00	
Job: 2490 - NTC Equipt Relocations-PERRY							
Removal Procedures							
24910010	Prep procd rack 419 removal - UCLA Reflectometer	3	01AUG11*	03AUG11	212	3,803.28	15
24910160	Prep procedure rack 440 removal-SPRED & VIPS	3	04AUG11	08AUG11	212	3,803.28	15
24910210	Prep procedure rack 441-445 removal-VV ion gages	3	09AUG11	11AUG11	212	3,803.28	15



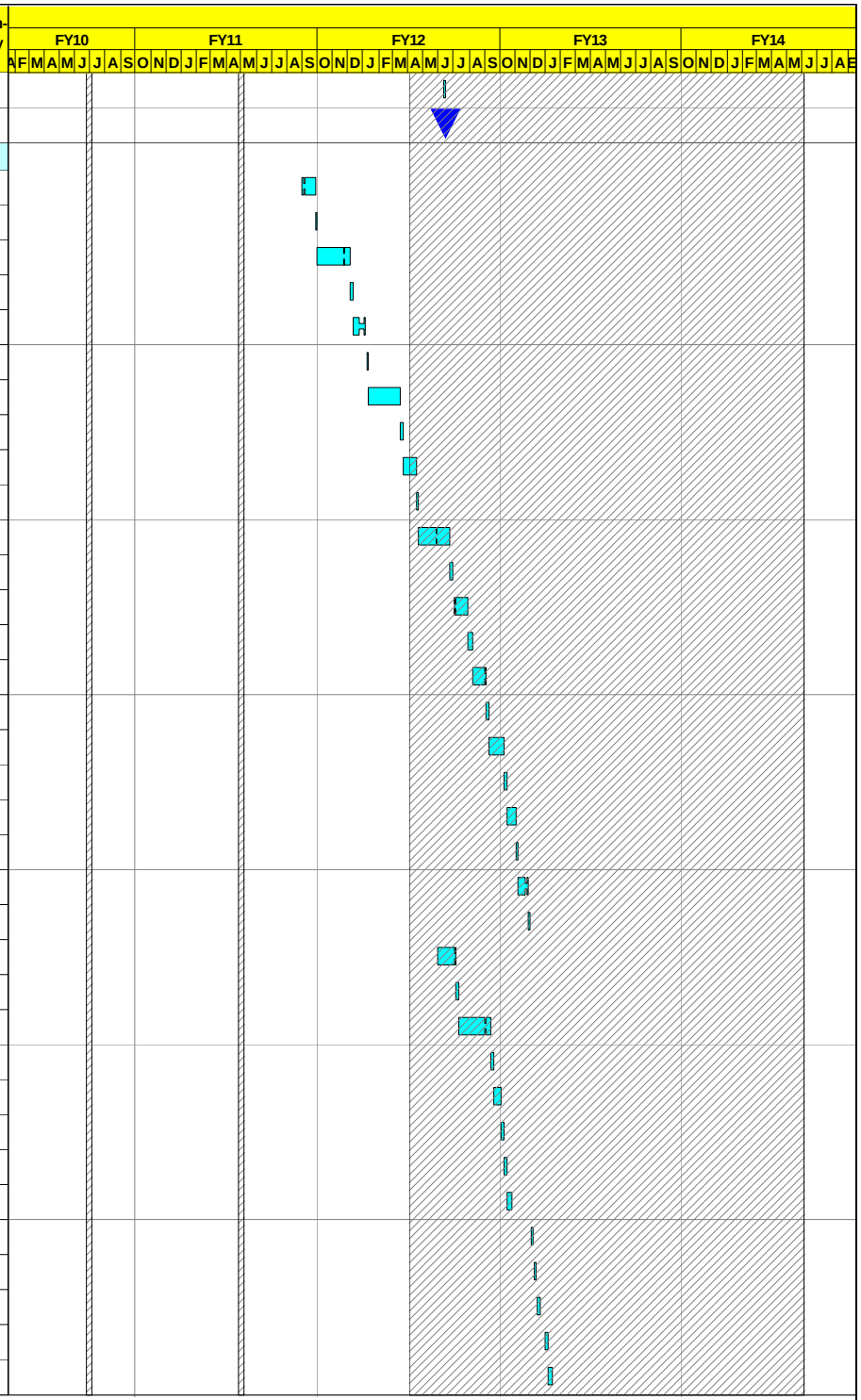
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
24910260	Prep procedure rack 447-448 removal-Fiber Optics	3	12AUG11	16AUG11	212	3,803.28	15
24910310	Prep procedure rack 449 removal - Glow Discharge	3	17AUG11	19AUG11	212	3,803.28	15
24910360	Prep proced rack 456 removal-Xray Crystal Spectr	3	22AUG11	24AUG11	212	3,803.28	15
24910380	Prp procd rack 488 remv-Dep monitr/fast xray/NPA	3	25AUG11	29AUG11	212	3,803.28	15
24910430	Prep procedure rack 489 removal - NPA	3	30AUG11	01SEP11	212	3,803.28	15
24910450	Prep procedure rack removal - PSI Camera	3	02SEP11	07SEP11	212	3,803.28	15
24910500	Prp procd rack removal -Ultra Fast X-ray Camera	3	08SEP11	12SEP11	212	3,803.28	15
24910550	Prep procd rack removal-Transmsn Grating Spectro	3	13SEP11	15SEP11	212	3,803.28	15
24910700	Prp procd equipt removal Bay J-Two gas injectors	1	16SEP11	16SEP11	212	1,270.08	15
24910750	Prep procd equipment removal Bay J - Reflectomer	1	19SEP11	19SEP11	212	1,270.08	15
24910800	Prep procdur equipment removal Bay J - Bolometer	1	20SEP11	20SEP11	212	1,270.08	15
24910850	Prep procdure equipment removal Bay J - RF Prove	1	21SEP11	21SEP11	212	1,270.08	15
24910900	Prep procedure equipment removal Bay J - S-Flip	1	22SEP11	22SEP11	212	1,270.08	15
24910950	Prep procedure equipment removal Bay J - SSNPA	1	23SEP11	23SEP11	212	1,270.08	15
24911000	Prp procd equipt removal Bay J-Re-entrant Window	1	26SEP11	26SEP11	212	1,270.08	15
24911050	Prp procd equipt removal Bay K-High K Scattering	5	27SEP11	03OCT11	212	6,405.20	15
24911070	Prep procdure equipment removal Bay K - FireTips	5	04OCT11	10OCT11	212	6,624.40	15
24911090	Prep procdu equipment removal Bay K - PSI Camera	3	11OCT11	13OCT11	212	3,974.64	15
24911110	Prp procedure equipment removal Bay K - NPA	5	14OCT11	20OCT11	212	6,624.40	15
24911130	Prp procd equipt remov Bay K-Ultra Fast Xray Cam	1	21OCT11	21OCT11	212	1,324.88	15
24911150	Prp procd equipt removal Bay K-IR Window f/Camra	1	24OCT11	24OCT11	212	1,324.88	15
24911200	Prp procd equip removal Bay K-Trans Grating Spec	1	25OCT11	25OCT11	212	1,324.88	15
24911250	Prep procd EQ remval Bay L pmp duct-VV Ion Gages	2	26OCT11	27OCT11	212	2,649.76	15
24911300	Prp procd EQ rem BayL pmp duct-X-ray Crystal Spe	1	28OCT11	28OCT11	212	1,324.88	15
24911320	Prep procedu equip removal Bay L pump duct-SPRED	1	31OCT11	31OCT11	212	1,324.88	15
24911390	Prep procedure equip removal Bay L pump duct-RGA	2	01NOV11	02NOV11	212	2,649.76	15
24911460	Prep procdu equip removal Bay L pump duct-LOWEUS	1	03NOV11	03NOV11	212	1,324.88	15
24911630	Prp procd EQ remov Bay L pmp duct-MPTS Beam Dump	1	04NOV11	04NOV11	212	1,324.88	15
24911642	Prp procd EQ remov Bay L pmp duct-Pump Duct	4	07NOV11	10NOV11	212	1,324.88	15
24911750	Prep procdur Power/Ground/Light @ Platform W NTC	5	11NOV11	17NOV11	212	6,598.88	15
24911820	Prp procd EQ Remov Misc. - Gas Delivery System	1	18NOV11	18NOV11	212	1,324.88	15
24911840	Prp procd EQ Remov Misc. - NW Sect 109' Platform	2	21NOV11	22NOV11	212	2,649.76	15
24911860	Prp procd EQ Remov Misc. - Convenience Outlets	5	23NOV11	01DEC11	212	6,624.40	15
24911880	Prp procd EQ Remov Misc. - Cat 3 & Cat 4 Bus	5	02DEC11	08DEC11	212	6,624.40	15
24911900	Prp procd EQ Remv Misc-Lights/E-stops/Fire Alarm	6	09DEC11	16DEC11	212	7,949.28	15
24911920	Prp procd EQ Rem Misc-Glow Disch Splice Box/Disc	2	19DEC11	20DEC11	212	2,649.76	15
Removals							
24910019	BEGIN DIAG REMOVALS	0		02APR12*	144	0.00	15



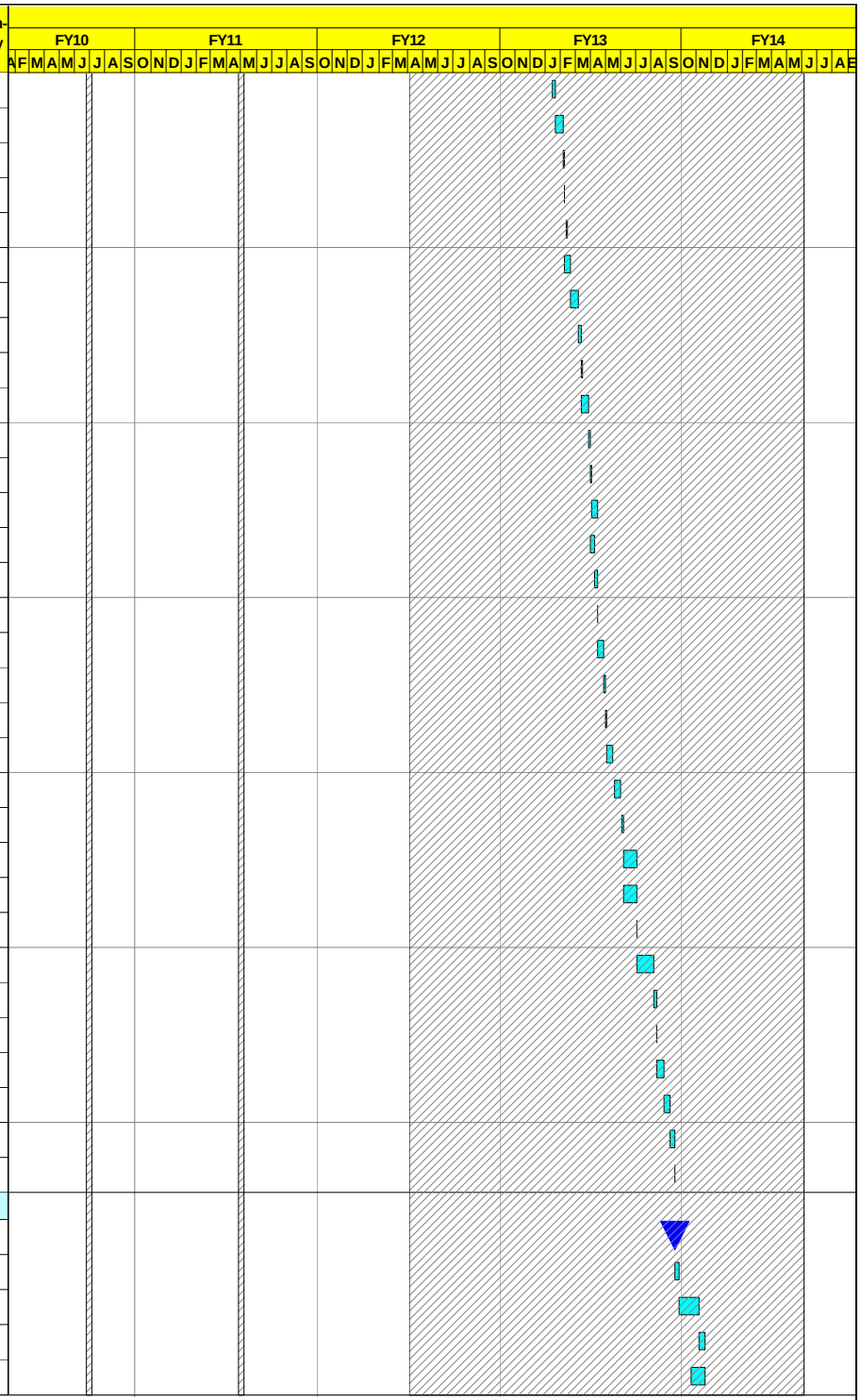
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
24910020	Remove rack 419 - UCLA Reflectometer	4	03APR12	06APR12	147	8,203.20	15
24910170	Remove rack 440 - SPRED and VIPS	8	09APR12	18APR12	147	14,166.80	15
24910220	Remove rack 441-445 - VV ion gages, RGA	15	19APR12	09MAY12	147	30,735.12	15
24910270	Remove rack 447-448 - Fiber Optics	5	10MAY12	16MAY12	147	11,213.36	15
24910320	Remove rack 449 - Glow Discharge	10	17MAY12	31MAY12	147	20,974.24	15
24910370	Remove rack 456 --Xray Crystal Spectr	7	01JUN12	11JUN12	147	14,588.72	15
24910390	Remove rack 488 - Depositn monitor/fast xray/NPA	7	03APR12	11APR12	172	14,588.72	15
24910440	Remove rack 489 - NPA	10	12APR12	25APR12	172	20,974.24	15
24910460	Remove rack - PSI Camera	2	26APR12	27APR12	172	4,827.84	15
24910510	Remove rack - Ultra Fast X-ray Camera	2	30APR12	01MAY12	172	4,827.84	15
24910560	Remove rack - Transmission Grating Spectrometer	3	02MAY12	04MAY12	172	6,515.52	15
24910690	Moving equipment In & Out of NTC	6	03APR12	10APR12	151	12,771.04	15
24910710	Remove Bay J - Two gas injectors	1	11APR12	11APR12	151	1,817.68	15
24910760	Remove Bay J - Reflectomer	1	12APR12	12APR12	151	1,817.68	15
24910810	Remove Bay J - Bolometer	1	13APR12	13APR12	151	1,817.68	15
24910860	Remove Bay J - RF Prove	1	16APR12	16APR12	151	1,817.68	15
24910910	Remove Bay J - S-Flip	1	17APR12	17APR12	151	1,817.68	15
24910960	Remove Bay J - SSNPA	1	18APR12	18APR12	151	973.84	15
24911010	Remove Bay J - Re-entrant Window	1	19APR12	19APR12	151	973.84	15
24911060	Remove Bay K - High K Scattering	10	20APR12	03MAY12	151	33,883.60	15
24911080	Remove Bay K - FireTips	5	04MAY12	10MAY12	151	17,006.80	15
24911100	Remove Bay K - PSI Camera	4	11MAY12	16MAY12	151	13,631.44	15
24911120	Remove Bay K - NPA	10	17MAY12	31MAY12	151	33,883.60	15
24911140	Remove Bay K - Ultra Fast X-ray Camera	1	01JUN12	01JUN12	151	973.84	15
24911160	Remove Bay K - IR Window for Camera	1	04JUN12	04JUN12	151	973.84	15
24911210	Remove Bay K - Transmission Grating Spectrometer	1	05JUN12	05JUN12	151	973.84	15
24911260	Remove Bay Bay L pump duct-VV Ion Gages/Filament	2	03APR12	04APR12	144	3,505.36	15
24911310	Remove Bay Bay L pump duct--X-ray Crystal Spectr	1	05APR12	05APR12	144	2,661.52	15
24911330	Remove Bay L pump duct-SPRED	1	06APR12	06APR12	144	1,817.68	15
24911400	Remove Bay L pump duct-RGA	3	09APR12	11APR12	144	5,193.04	15
24911470	Remove Bay L pump duct - LOWEUS	3	12APR12	16APR12	144	1,817.68	15
24911640	Remove Bay L pump duct-MPTS Beam Dump Window	1	17APR12	17APR12	144	973.84	15
24911646	Remove Bay L pump duct-Pump Duct	1	18APR12	18APR12	144	16,406.40	15
24911830	Remove Misc. EQ. - Gas Delivery System	4	19APR12	24APR12	144	17,446.40	15
24911850	Remove Misc. EQ - NW Sect 109' Platform	6	25APR12	02MAY12	144	32,019.60	15
24911870	Remove Misc. EQ - Convenience Outlets	10	03MAY12	16MAY12	144	22,144.24	15
24911890	Remove Misc. EQ - Cat 3 & Cat 4 Bus	5	17MAY12	23MAY12	144	13,683.36	15
24911910	Remove Misc. EQ-Lights/E-stops/Fire Alarm	13	24MAY12	12JUN12	144	31,129.76	15



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
24911930	Remove Misc. EQ-Glow Disch Splice Box/Disc	2	13JUN12	14JUN12	144	5,997.84	15
24919999	REMOVALS COMPLETE	0		14JUN12	144	0.00	15
Design, Procurement & Fabr of Re-installations							
24910030	Dsgn rack 419 re-installation - UCLA Reflectomer	17	01SEP11*	26SEP11	44	22,252.72	15
24910040	Prep procd rack 419 reinstalltn-UCLA Reflectomet	3	27SEP11	29SEP11	44	4,302.56	15
24910080	Dsgn rack 431-435 reinstallatn-VV T/C/magnetics	45	30SEP11	05DEC11	44	68,362.61	15
24910090	Prep procd rack 431-435 reinstln-VV T/C/magnetic	5	06DEC11	12DEC11	44	6,598.88	15
24910180	Design rack 440 re-installation - SPRED	13	13DEC11	06JAN12	44	18,963.60	15
24910190	Prep procd rack 440 reinstallatn-SPRED	3	09JAN12	11JAN12	44	4,488.32	15
24910230	Dsgn rack 441-445 re-installatn-VV ion gages/RGA	46	12JAN12	15MAR12	44	62,977.76	15
24910240	Prep procd rack 441-445 reinstln-VV ion gage/RGA	5	16MAR12	22MAR12	44	6,598.88	15
24910280	Design rack 447-448 re-installation-Fiber Optics	17	23MAR12	16APR12	44	23,184.72	15
24910290	Prep procd rack 447-448 re-instaltn-Fiber Optics	3	17APR12	19APR12	44	4,488.32	15
24910330	Design rack 449 re-installation - Glow Discharge	45	20APR12	22JUN12	44	65,822.48	15
24910340	Prep procedure rack 449 reinstall-Glow Discharge	5	25JUN12	29JUN12	44	6,598.88	15
24910400	Dsgn rack 488 reinstal-Dep monitr/fast xray	20	02JUL12	30JUL12	44	27,673.04	15
24910410	Prp procd rck 488 reinst-Dep montr/fast xray	5	31JUL12	06AUG12	44	6,598.88	15
24910470	Design rack re-installation - PSI Camera	20	07AUG12	04SEP12	44	27,673.04	15
24910480	Prep procedure rack re-installation - PSI Camera	5	05SEP12	11SEP12	44	6,598.88	15
24910520	Dsgn rack reinstallation-Ultra Fast X-ray Camera	20	12SEP12	09OCT12	44	27,957.46	15
24910530	Prp procd rack reinstall-Ultra Fast X-ray Camera	5	10OCT12	16OCT12	44	6,796.96	15
24910570	Dsgn rack reinstall- Transmissn Grating Spectrom	13	17OCT12	02NOV12	44	15,492.64	15
24910580	Prp procd rack reinstall-Transm Grating Spectrom	3	05NOV12	07NOV12	44	7,283.04	15
24910600	Design rack re-installation -IR Camera at Bay L	12	08NOV12	27NOV12	44	18,427.84	15
24910610	Prep procd rack re-installatn-IR Camera at Bay L	3	28NOV12	30NOV12	44	4,623.04	15
24910630	Design rack re-installation - IR Camera at Bay K	24	01JUN12*	05JUL12	69	39,694.16	15
24910640	Prep procedure rack reinstall-IR Camera at Bay K	3	06JUL12	10JUL12	69	4,488.32	15
24910660	Dsgn rack reinstall-Reconf AC & Diagnostic Trays	45	11JUL12	12SEP12	69	76,222.48	15
24910670	Prp procd rack reinstall-Reconf AC & Diagnt Tray	5	13SEP12	19SEP12	69	6,598.88	15
24910730	Prep procd Equipt reinstln Bay J-Two gas injectr	10	20SEP12	03OCT12	69	13,368.08	15
24910780	Prep procd Equipt reinstln Bay J-Reflectomer	5	04OCT12	10OCT12	69	6,823.20	15
24910830	Prep procd Equipt reinstln Bay J-Bolometer	5	11OCT12	17OCT12	69	6,823.20	15
24910880	Prep procd Equipt reinstln Bay J-RF Prove	5	18OCT12	24OCT12	69	6,823.20	15
24910930	Prep procd Equipt reinstln Bay J-S-Flip	5	03DEC12	07DEC12	44	6,823.20	15
24910980	Prep procd Equipt reinstln Bay J-SSNPA	5	10DEC12	14DEC12	44	6,823.20	15
24911030	Prep procd Equip reinst Bay J-Re-entrant Window	5	17DEC12	21DEC12	44	6,823.20	15
24911180	Prep procd Equip reinst NB2 Duct-IR Window f/Cam	5	01JAN13	07JAN13	44	6,823.20	15
24911230	Prep procd EQ reinst NB2 Duct-Trans Gratng Spect	5	08JAN13	14JAN13	44	6,823.20	15



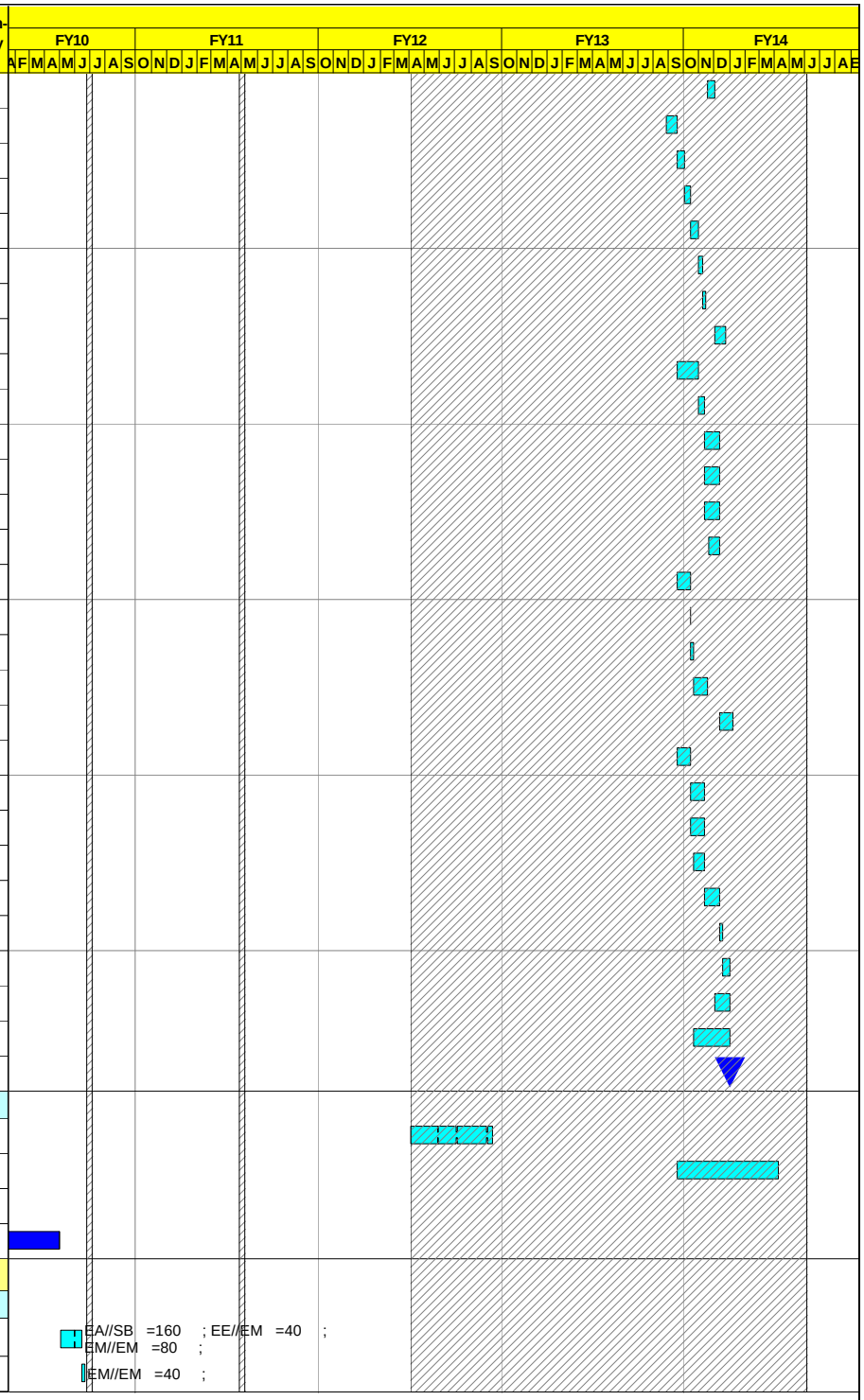
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
24911280	Prep procd EQ reinstal New pmp duct-VV Ion Gages	5	15JAN13	21JAN13	44	6,823.20	15
24911340	Design Equip re-installatn Bay L - SPRED	10	22JAN13	04FEB13	44	17,692.80	15
24911350	Prep procedure Equip re-installatn Bay L -SPRED	3	05FEB13	07FEB13	44	4,625.52	15
24911360	Procure Equipment re-installatn Bay L - SPRED	1	08FEB13	08FEB13	196	4,024.64	15
24911370	Fabrication Equipment re-installatn Bay L-SPRED	5	11FEB13	15FEB13	196	8,691.20	15
24911410	Prelim Design New Pump Duct - RGA	10	08FEB13	21FEB13	44	24,516.00	15
24911420	Final Design New Pump Duct - RGA	10	22FEB13	07MAR13	44	24,516.00	15
24911430	Prep procd Equip reinstalltn New Pump Duct - RGA	5	08MAR13	14MAR13	44	6,799.44	15
24911440	Procure Equipment reinstallatn New Pump Duct-RGA	1	15MAR13	15MAR13	176	12,004.64	15
24911480	Design Bay L - LOWEUS	10	15MAR13	28MAR13	44	17,692.80	15
24911490	Prep procedure Equip re-installatn Bay L- LOWEUS	3	29MAR13	02APR13	44	4,625.52	15
24911500	Procure Equipment re-installatn Bay L- LOWEUS	1	03APR13	03APR13	153	1,364.64	15
24911510	Fabrication Equipment re-installatn Bay L-LOWEUS	10	04APR13	17APR13	153	8,691.20	15
24911530	Design Bay L - IR Camera	6	03APR13	10APR13	44	14,694.72	15
24911540	Prep procdu Equip re-installatn Bay L- IR Camera	3	11APR13	15APR13	44	4,086.48	15
24911550	Procure Equip re-installatn Bay L- IR Camera	1	16APR13	16APR13	154	2,660.00	15
24911580	Design Bay L - Glow Discharge	10	16APR13	29APR13	44	17,692.80	15
24911590	Prep procdu EQ reinstallatn Bay L-Glow Discharge	3	30APR13	02MAY13	44	4,625.52	15
24911600	Procure EQ re-installatn Bay L-Glow Discharge	1	03MAY13	03MAY13	44	4,024.64	15
24911610	Fabrication EQ reinstallatn Bay L-Glow Discharge	10	06MAY13	17MAY13	44	8,691.20	15
24911700	Design 5 sections of Platform El 118' W Side NTC	10	20MAY13	31MAY13	44	17,994.24	15
24911710	Prep procd 5 sections of Platform El 118' W Side	3	03JUN13	05JUN13	44	4,093.92	15
24911720	Fab 5 sections of Platform El 118' W Side NTC	20	06JUN13	03JUL13	98	52,228.00	15
24911740	Fin Dsgn Power/Ground/Light @ Platform WSide NTC	20	06JUN13	03JUL13	44	31,145.68	15
24911760	Procurements Power/Ground/Light @ Platform W NTC	1	04JUL13	04JUL13	97	5,320.00	15
24911780	Design 42 Ckt Panel NTC/30 Ckt Panel Gallery	25	04JUL13	07AUG13	44	32,622.64	15
24911790	Prep procd 42 Ckt Panel NTC/30 Ckt Panel Gallery	3	08AUG13	12AUG13	44	4,623.04	15
24911800	Procuremnt 42 Ckt Panel NTC/30 Ckt Panel Gallery	1	13AUG13	13AUG13	69	79,800.00	15
24911940	Prel Dsgn New Pmp Duct-Tank Farm/TMB Sys/Gas Sol	10	13AUG13	26AUG13	44	24,516.00	15
24911950	Fin Dsgn New Pmp Duct-Tank Farm/TMB Sys/Gas Sol	10	27AUG13	09SEP13	44	24,516.00	15
24911960	Prep proc EQ Reinst New Pmp Duct-Tank Farm/TMB S	5	10SEP13	16SEP13	44	13,646.40	15
24911970	Proc EQ Reinst New Pmp Duct-Tank Farm/TMB Sys/Ga	1	17SEP13	17SEP13	44	18,620.00	15
Re-Installation							
24910049	BEGIN RE-INSTALLATION OF DIAGNOSTICS	0		17SEP13	44	0.00	15
24910050	re-install rack 419 - UCLA Reflectometer	6	18SEP13	25SEP13	46	10,695.44	15
24910100	re-install rack 431-435 - VV T/C & magnetics	30	26SEP13	06NOV13	46	66,104.14	15
24910200	re-install rack 440 - SPRED	8	07NOV13	18NOV13	46	15,468.00	15
24910250	re-install rack 441-445 - VV ion gages, RGA	20	22OCT13	18NOV13	46	41,644.00	15



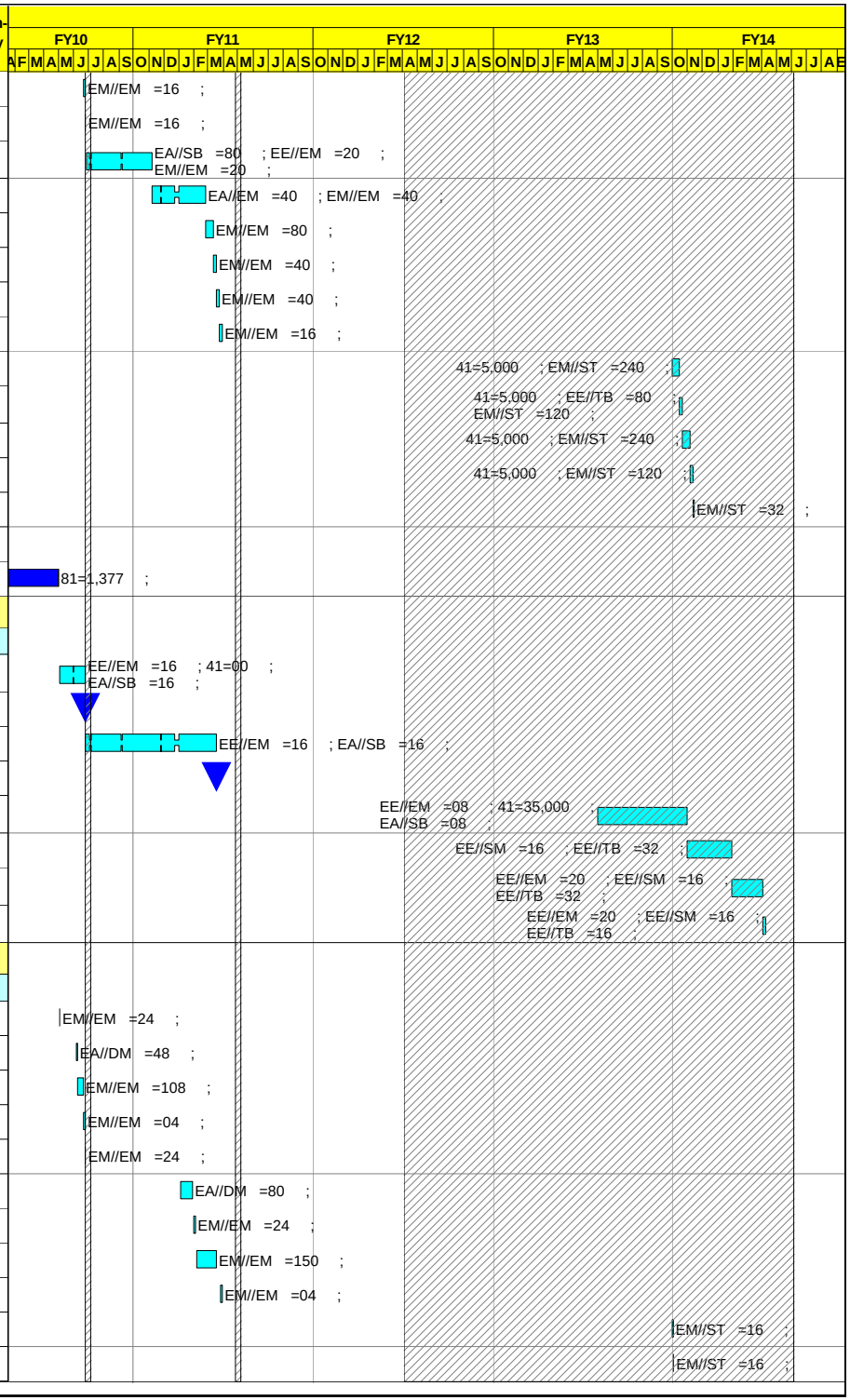
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
24910300	re-install rack 447-448 - Fiber Optics	10	19NOV13	02DEC13	46	14,108.00	15
24910350	re-install rack 449 - Glow Discharge	15	28AUG13	17SEP13	59	30,063.60	15
24910420	re-install rack 488-Dep monitor/fast xray	10	18SEP13	01OCT13	59	20,972.29	15
24910490	re-install rack - PSI Camera	10	02OCT13	15OCT13	59	20,624.00	15
24910540	re-install rack - Ultra Fast X-ray Camera	10	16OCT13	29OCT13	59	20,624.00	15
24910590	re-install rack-Transmission Grating Spectrometr	7	30OCT13	07NOV13	59	14,436.80	15
24910620	re-install rack - IR Camera at Bay L	4	08NOV13	13NOV13	59	8,521.60	15
24910650	re-install rack - IR Camera at Bay K	15	03DEC13	23DEC13	46	30,936.00	15
24910680	re-install rack-Reconfigure AC & Diagnostic tray	30	18SEP13	29OCT13	44	79,062.33	15
24910740	re-install Equipment Bay J - Two gas injectors	10	30OCT13	12NOV13	44	20,624.00	15
24910790	re-install Equipment Bay J - Reflectomer	20	13NOV13	10DEC13	44	48,263.20	15
24910840	re-install Equipment Bay J - Bolometer	20	13NOV13	10DEC13	44	48,263.20	15
24910890	re-install Equipment Bay J - RF Prove	20	13NOV13	10DEC13	44	48,263.20	15
24910940	re-install Equipment Bay J - S-Flip	15	20NOV13	10DEC13	44	48,263.20	15
24910990	re-install Equipment Bay J - SSNPA	20	18SEP13	15OCT13	60	47,647.78	15
24911040	re-install Equipment Bay J - Re-entrant Window	1	16OCT13	16OCT13	60	1,031.20	15
24911190	re-install Equipment NB2 Duct-IR Window f/Camera	3	17OCT13	21OCT13	60	3,093.60	15
24911240	reinstall Equip NB2 Duct-Transm Grating Spectro	20	22OCT13	18NOV13	60	48,263.20	15
24911290	reinstall EQ New pump duct-VV Ion Gages/Filament	20	11DEC13	07JAN14	44	48,263.20	15
24911380	re-install Bay L - SPRED	20	18SEP13	15OCT13	49	40,724.56	15
24911450	Re-install New Pump Duct - RGA	20	16OCT13	12NOV13	49	41,248.00	15
24911520	re-install Bay L - LOWEUS	20	16OCT13	12NOV13	49	41,248.00	15
24911570	re-install Bay L - IR Camera	15	23OCT13	12NOV13	49	16,148.00	15
24911620	re-install Bay L - Glow Discharge	20	13NOV13	10DEC13	49	41,248.00	15
24911730	instl 5 sections of Platform El 118' W Side NTC	5	11DEC13	17DEC13	49	21,420.00	15
24911770	Install Power/Ground/Light @ Platform W Side NTC	10	18DEC13	31DEC13	49	20,624.00	15
24911810	Install 42 Ckt Panel NTC/30 Ckt Panel Gallery	20	04DEC13	31DEC13	49	48,263.20	15
24911980	Reinstall New Pmp Duct-Tank Farm/TMB Sys/Gas So	50	23OCT13	31DEC13	49	107,759.52	15
24911999	DIAGNOSTICS RE-INSTALLED	0		31DEC13	49	0.00	21
24910001	Test Cell Oversight during diag removals	114	03APR12	12SEP12	2,024	150,762.72	15
24910002	Test Cell Oversight during diag re-installation	144	18SEP13	07APR14	1,624	256,288.76	15
FY092490	FY09 Actual Cost	22*	01JAN09A	30SEP09A		143,025.00	21
FY102490	FY10 Actual Cost	143	01OCT09A	30APR10A		118,184.00	21

Job: 3200 - Water Cooling System Mods-DENAULT

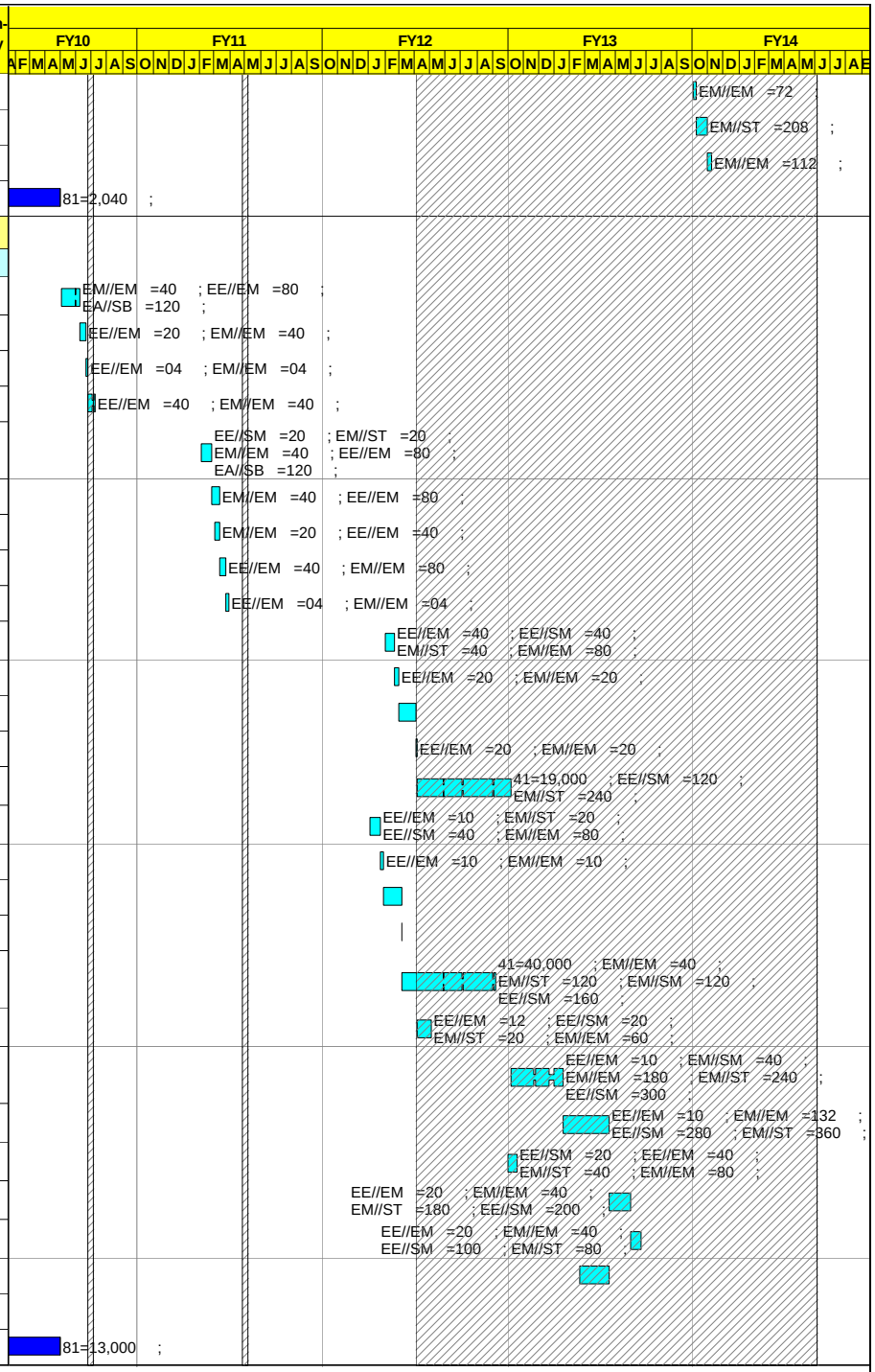
3200-0015	Prelim Dsn-Design Drawings	30	03MAY10*	14JUN10	86	37,836.80	10
3200-0016	Prelim Dsn-PDR Prep	5	15JUN10	21JUN10	86	5,966.00	10



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
3200-0017	Prelim Dsn-CONDUCT PDR	2	22JUN10	23JUN10	86	2,386.40	10
3200-0021	Final Design-Disposition PDR Chits	2	24JUN10	25JUN10	86	2,386.40	10
3200-0022	Final Design-Design Drawings	94	28JUN10	08NOV10	86	16,230.28	10
3200-0023	Final Design-Update Analyses	70	09NOV10	24FEB11	86	13,891.20	10
3200-0024	Final Design-Update Cost & Schedule Estimate	10	25FEB11	10MAR11	86	12,700.80	10
3200-0025	Final Design-Prep Procurement Specs	5	11MAR11	17MAR11	86	6,350.40	10
3200-0026	Final Design-FDR Prep	5	18MAR11	24MAR11	86	6,350.40	10
3200-0027	Final Design-CONDUCT FDR	2	25MAR11	28MAR11	86	2,540.16	10
3200-0055	Bus Work Cooling	10	01OCT13*	14OCT13	129	33,656.00	10
3200-0057	Flow Sensors	5	15OCT13	21OCT13	129	28,098.40	10
3200-0059	Modify Manifold	10	22OCT13	04NOV13	129	33,656.00	10
3200-0061	Fab & Connect Lines	5	05NOV13*	11NOV13	129	20,228.00	10
3200-0063	Leak Check	2	12NOV13	13NOV13	129	3,580.80	10
FY093000	FY09 Actual Cost	22*	01JAN09A	30SEP09A		5,447.00	
FY103200	FY10 Actual Cost	143	01OCT09A	30APR10A		1,377.00	
Job: 3300 - Bakeout System Mods for CSU-RAKI							
3300-105	Bakeout- Prelim Design	37*	03MAY10*	23JUN10	94	4,659.52	20
3300-110	Bakeout-PDR	0		23JUN10	94	0.00	20
3300-115	Bakeout-Final Design	180	24JUN10	16MAR11	94	4,844.72	20
3300-120	Bakeout-FDR	0		16MAR11	94	0.00	20
3300-125	Bakeout-Procure Hardware	130	01MAY13*	29OCT13	25	49,397.09	20
3300-130	Bakeout-Assembly	65	30OCT13	28JAN14	25	5,986.88	20
3300-135	Bakeout-Installation	45	29JAN14	01APR14	25	10,049.28	20
3300-140	Bakeout-Test	5	02APR14	08APR14	25	8,475.20	20
Job: 3400 - Gas Delivery System Mods-BLANCHARD							
3400-0016	Update Cost & Schedule Estimate - Gas Delivery S	2	03MAY10*	04MAY10	238	3,579.60	15
3400-0017	Design Drawings - Gas Delivery Sys Mod	3	07JUN10	09JUN10	216	5,087.52	15
3400-0018	PDR Prep - Gas Delivery Sys Mod	9	10JUN10	22JUN10	216	16,108.20	15
3400-0019	CONDUCT PDR - Gas Delivery Sys Mod	1	23JUN10*	23JUN10	216	596.60	15
3400-0022	Disposition PDR Chits - Gas Delivery Sys Mod	2	24JUN10	25JUN10	216	3,579.60	15
3400-0023	Design Drawings - Gas Delivery Sys Mod	20	03JAN11*	28JAN11	91	9,025.60	15
3400-0025	Update Cost & Schedule Estimate - Gas Delivery S	5	31JAN11	04FEB11	91	3,810.24	15
3400-0027	FDR Prep - Gas Delivery Sys Mod	30	07FEB11	18MAR11	91	23,814.00	15
3400-0028	CONDUCT FDR	1	28MAR11*	28MAR11	86	635.04	15
3400-0046	Shop Fabrication - Gas Delivery Sys Mod	1	01OCT13*	01OCT13	133	1,790.40	25
3400-0047	Assembly - Gas Delivery Sys Mod	1	02OCT13	02OCT13	133	1,790.40	25

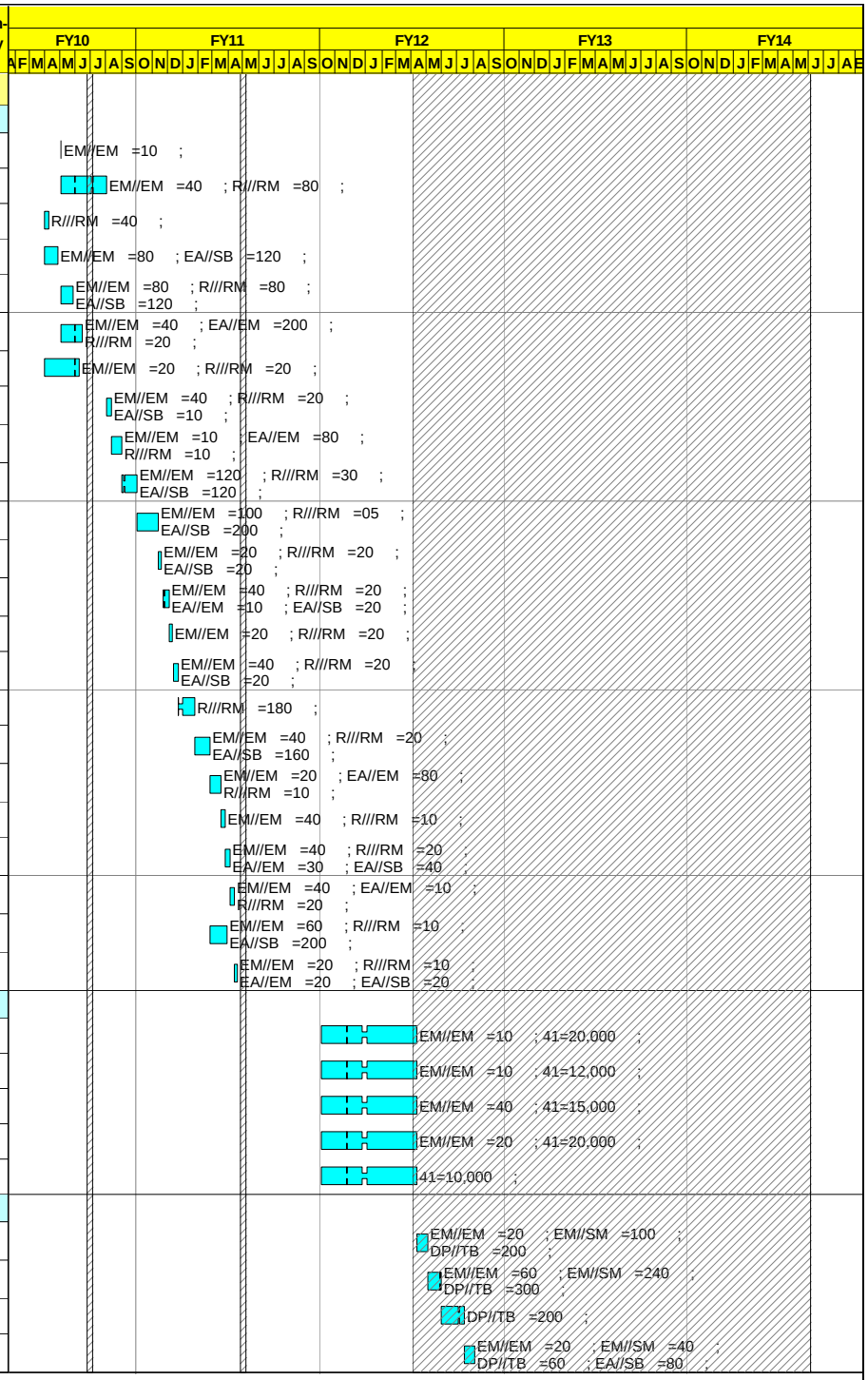


Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
3400-0050	Installation Procedure/Oversight - Gas Delivery	6	03OCT13	10OCT13	133	12,650.40	25
3400-0051	Machine Installation - Gas Delivery Sys Mod	13	11OCT13	29OCT13	133	23,275.20	25
3400-0052	PTP Testing/Programming - Gas Delivery Sys Mod	7	30OCT13	07NOV13	133	19,678.40	25
FY103400	FY10 Actual Cost	143	01OCT09A	30APR10A		2,040.00	25
Job: 4100 - Center Stack Diagnostics-KAITA							
4100-0017	Prelim Dsn-Design Drawings	25	03MAY10*	07JUN10	396	34,015.60	10
4100-0018	Prelim Dsn-PDR Prep	10	08JUN10	21JUN10	396	9,414.40	10
4100-0019	Prelim Dsn-CONDUCT PDR	2	22JUN10	23JUN10	396	1,286.28	10
4100-0022	Final Dsn-Disposition PDR Chits	10	24JUN10	08JUL10	396	12,862.80	10
4100-0023	Final Dsn-Design Drawings	15	04FEB11	24FEB11	255	41,436.40	10
4100-0025	Final Dsn-Update Cost & Schedule Estimate	10	25FEB11	10MAR11	255	21,033.60	10
4100-0026	Final Dsn-Prep Procurement Specs	5	04MAR11	10MAR11	255	10,516.80	10
4100-0027	Final Dsn-FDR Prep	10	11MAR11	24MAR11	255	20,042.40	10
4100-0028	Final Dsn-CONDUCT FDR	2	25MAR11	28MAR11*	255	1,369.20	10
4100-0032	Wire/Cables-Prep Requisition and procurement pac	15	01FEB12*	21FEB12	30	31,816.00	20
4100-0033	Wire/Cables-SUBMIT REQ TO PROCUREMENT	5	22FEB12	28FEB12	30	7,141.40	20
4100-0034	Wire/Cables-Procurement lead time (1)	25	29FEB12	03APR12	30	0.00	20
4100-0035	Wire/Cables-AWARD	1	04APR12	04APR12	30	7,141.40	20
4100-0036	Wire/Cables-Fabricate or delivery	130	05APR12	08OCT12	30	70,173.06	20
4100-0038	Coils w/mandrels -Prep Requisition & procurement	15	03JAN12*	23JAN12	51	23,962.60	20
4100-0039	Coils w/mandrels - SUBMIT REQ TO PROCUREMENT	5	24JAN12	30JAN12	51	3,570.70	20
4100-0040	Coils w/mandrels - Procurement lead time (1)	25	31JAN12	05MAR12	51	0.00	20
4100-0041	Coils w/mandrels - AWARD	1	06MAR12	06MAR12	51	0.00	20
4100-0042	Coils w/mandrels - Fabricate or delivery	130	07MAR12	07SEP12	51	117,877.60	20
4100-0045	Fab/Assy Procedure	20	05APR12	02MAY12	140	17,688.52	20
4100-0046	Shop Fabrication	65	09OCT12*	17JAN13	30	117,235.80	20
4100-0047	Assembly	65	18JAN13	18APR13	30	111,828.96	20
4100-0050	Installation Procedure (ex-vessel only)	15	01OCT12*	19OCT12	141	29,325.00	10
4100-0051	Machine Installation (ex-vessel only)	30	19APR13	30MAY13	30	64,772.40	10
4100-0052	PTP Testing	15	31MAY13	20JUN13	1,831	36,683.40	10
4100-0056	Mount Diagnostics in PFC Tiles	40	22FEB13	18APR13	60	0.00	
4100-FY09	FY09 Actual Cost	22*	01JAN09A	30SEP09A		11,000.00	
4100-FY10	FY10 Actual Cost	143	01OCT09A	30APR10A		13,000.00	

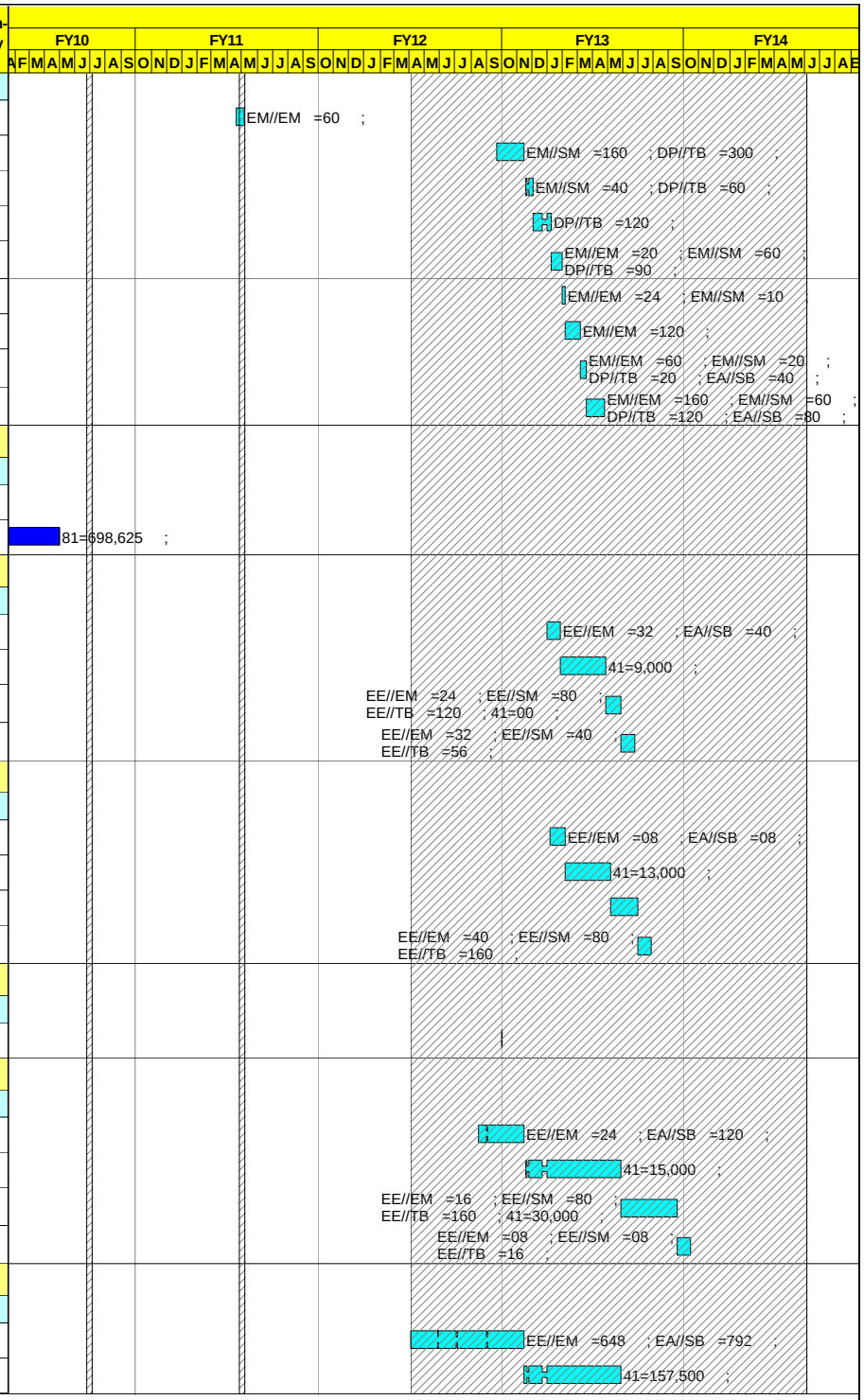


Job: 4500 - MPTS VV Modification

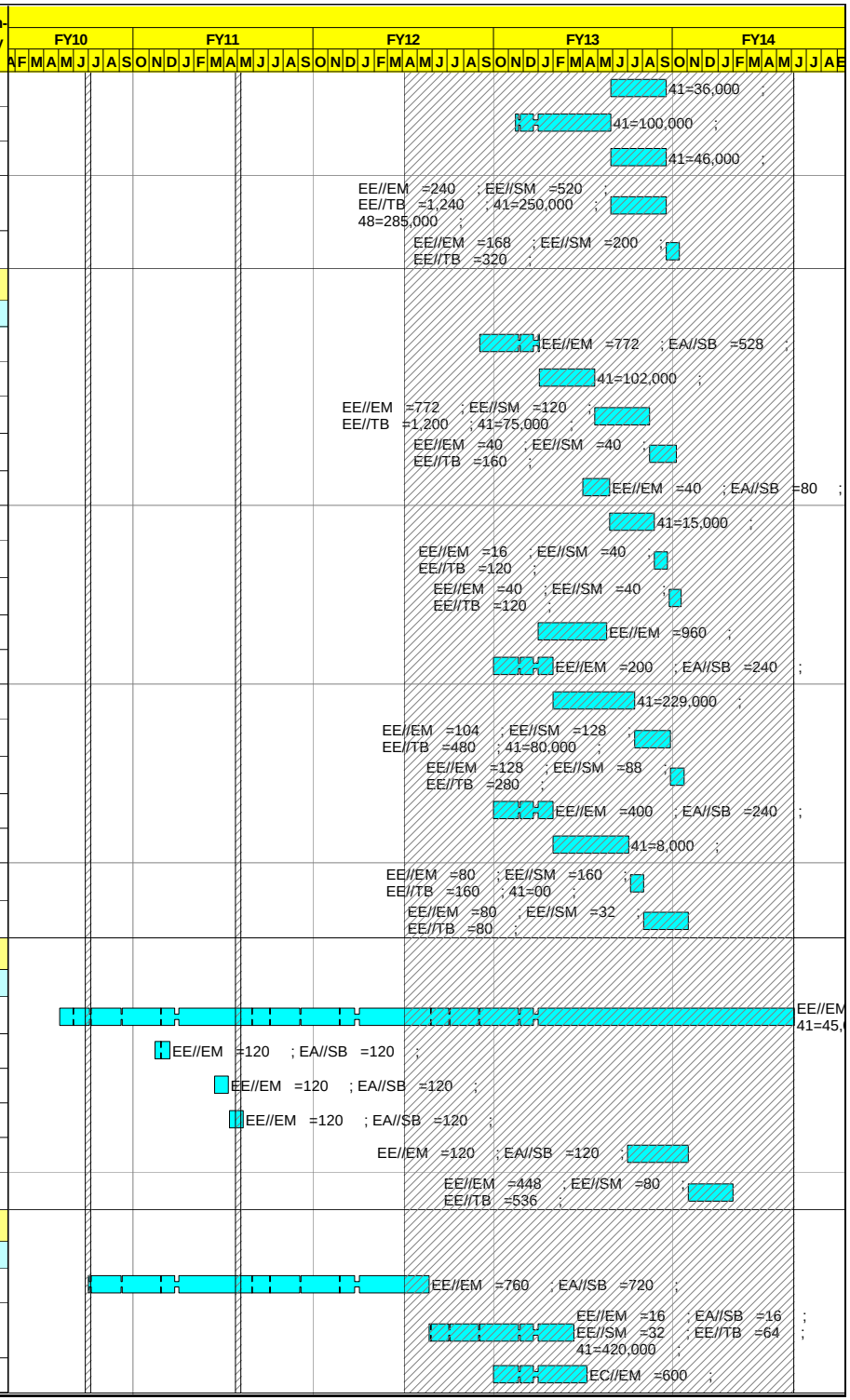
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
Design							
MPTS-0003	PREPARE WORK PLANNING FORM	2	03MAY10*	04MAY10	331	1,491.50	40
MPTS-0004	Prep System Description	65	03MAY10*	03AUG10	268	18,699.60	40
MPTS-0006	Preliminary Optics Design	7	01APR10*	09APR10	348	6,366.80	40
MPTS-0007	Mechanical Design	18	01APR10*	26APR10	337	26,188.00	40
MPTS-0008	Machine Tool Support Design	18	03MAY10*	26MAY10	315	38,921.60	40
MPTS-0009	Stress Analysis	30	03MAY10*	14JUN10	303	44,571.40	40
MPTS-0010	Technical Support	49	01APR10*	09JUN10	306	6,166.40	40
MPTS-0011	CDR	7	04AUG10	12AUG10	268	10,337.40	40
MPTS-0013	Analysis	15	13AUG10	02SEP10	268	17,252.00	40
MPTS-0014	Mechanical Design	20	03SEP10	01OCT10	268	37,048.05	40
MPTS-0015	Machine Tool Support Design	30	04OCT10	12NOV10	268	42,013.15	40
MPTS-0019	Disposition CDR Chits	5	15NOV10	19NOV10	268	9,092.80	40
MPTS-0020	CONDUCT PDR	8	22NOV10	03DEC10	268	14,153.20	40
MPTS-0021	Technical Support	5	06DEC10	10DEC10	268	6,563.80	40
MPTS-0023	Disposition PDR Chits	7	13DEC10	21DEC10	268	12,268.00	40
MPTS-0024	Complete Optics Evaluation	20	22DEC10	26JAN11	268	30,497.40	40
MPTS-0025	Design Drawings	20	27JAN11	23FEB11	268	29,971.00	40
MPTS-0026	Update Analyses	15	24FEB11	16MAR11	268	19,951.10	40
MPTS-0027	Update Cost & Schedule Estimate	7	17MAR11	25MAR11	268	8,044.70	40
MPTS-0028	Final Design Changes	7	28MAR11	05APR11	268	20,452.60	40
MPTS-0028A	CONDUCT FDR MPTS VV interface	7	06APR11	14APR11	268	11,624.20	40
MPTS-0029	Detail Drawings	25	24FEB11	30MAR11	272	36,509.90	40
MPTS-0030	FDR Chit Response	5	15APR11	21APR11	268	11,168.90	40
Procurement							
MPTS-0032	Bay L Wire Seal Flange & Nozzle w/Weld Prep	130	03OCT11*	11APR12	155	27,656.10	40
MPTS-0033	Bay L Port Cover	130	03OCT11*	11APR12	155	17,256.10	40
MPTS-0034	Port Milling Mach, Line Bore/Mod Bridgeport Hd	130	03OCT11*	11APR12	155	26,124.40	40
MPTS-0035	Misc Materials	130	03OCT11*	11APR12	155	29,312.20	40
MPTS-0036	Tooling	130	03OCT11*	11APR12	155	13,000.00	40
Fabrication							
MPTS-0038	Fabricate 3 Tooling Supports Assemblies	15	12APR12	02MAY12	155	39,651.20	40
MPTS-0039	POP Vessel Wall Plate and Nozzle Mockup	20	03MAY12	31MAY12	155	79,323.00	40
MPTS-0040	Leak Check Fixture	30	01JUN12	13JUL12	155	3,961.60	40
MPTS-0041	Low Power Laser Holder for Bay L , F and F/G	15	16JUL12	03AUG12	155	26,419.80	40



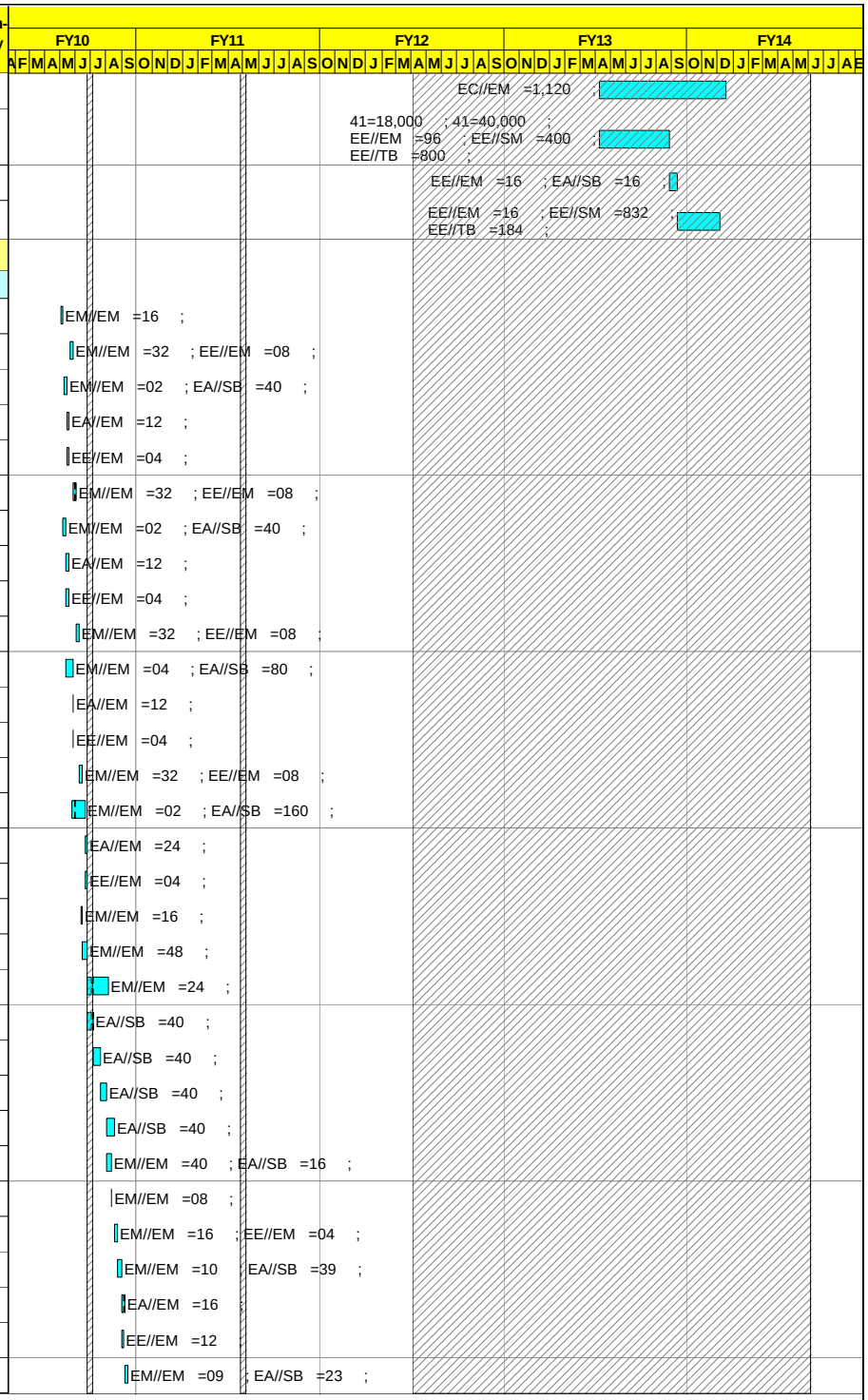
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
Installation							
MPTS-0044	Installation Procedure	10	22APR11	05MAY11	468	9,525.60	40
MPTS-0045	SetUp Tling Supp & Machine Penetr Bay L/F/G	40	24SEP12	16NOV12	121	57,635.63	40
MPTS-0046	Set Up New Ports Support	10	19NOV12	04DEC12	121	12,931.40	40
MPTS-0047	Weld New Ports	20	05DEC12	09JAN13	121	12,241.20	40
MPTS-0048	Set up and Machine Bay F Edge	15	10JAN13	30JAN13	121	22,808.70	40
MPTS-0049	Laser Alignmt of Ports & F Edge During Wlding	5	31JAN13	06FEB13	121	5,796.62	40
MPTS-0050	Metrology Support	20	07FEB13	06MAR13	274	20,469.60	40
MPTS-0051	Reposition magnetics & glow discharge filaments	10	07MAR13	20MAR13	274	21,115.20	40
MPTS-0052	Modify CHERS Razor dump	25	21MAR13	24APR13	274	60,619.80	40
Job: 5000 - CSU Power Systems-RAKI							
FY095000	FY09 Actual Cost	22*	01JAN09A	30SEP09A		385,771.00	
FY105000	FY10 Actual Cost	143	01OCT09A	30APR10A		698,625.00	
Job: 5001 - AC Power-RAKI							
AC Power							
510-005	51- AC Power -Dsn	20	01JAN13*	28JAN13	111	11,745.20	10
510-009	51- AC Power -Procurement	65	29JAN13*	29APR13	111	11,970.00	10
510-013	51- AC Power -Installation	20	30APR13	27MAY13	111	29,975.20	10
510-017	51- AC Power -Test&Commission	20	28MAY13	24JUN13	111	18,549.52	10
Job: 5002 - AC/DC Converters-RAKI							
AC/DC Converters							
520-005	52 - AC/DC Converters - Dsn	20	08JAN13*	04FEB13	86	2,664.56	10
520-009	52 - AC/DC Converters -Procurement	65	05FEB13*	06MAY13	86	17,290.00	10
520-013	52 - AC/DC Converters -Reactivate	40	07MAY13	01JUL13	86	0.00	10
520-017	52 - AC/DC Converters -Test&Commission	20	02JUL13	29JUL13	86	36,951.20	10
Job: 5003 - FCPC PF5 DC Systems-RAKI							
532-FCPC PF5 DC Systems*NOT IN PROJECT SCOPE**							
5003	x	0	01OCT12*	28SEP12	2,012	0.00	
Job: 5004 - TA-NTC DC Systems-RAKI							
532-TA-NTC DC Systems							
532-005	532- PCTS Changes - Dsn PCTS Changes	65	17AUG12*	16NOV12	29	20,754.30	25
532-009	532- PCTS Changes -Procurement	130	19NOV12*	29MAY13	29	19,950.00	25
532-013	532- PCTS Changes -Installation	80	30MAY13	18SEP13	29	72,118.40	25
532-017	532- PCTS Changes -Test&Commission	20	19SEP13	16OCT13	29	4,564.62	15
Job: 5005 - FCPC DC PF1 & TF Systems-RAKI							
FCPC DC PF1 & TFSystems							
531-005	531- FCPC DC Systems Dsn	160	02APR12*	14NOV12	31	229,952.82	15
531-013	531- FCPC DC Systems -Procure 1000MCM Cable & Tr	130	15NOV12	27MAY13	31	209,475.00	15



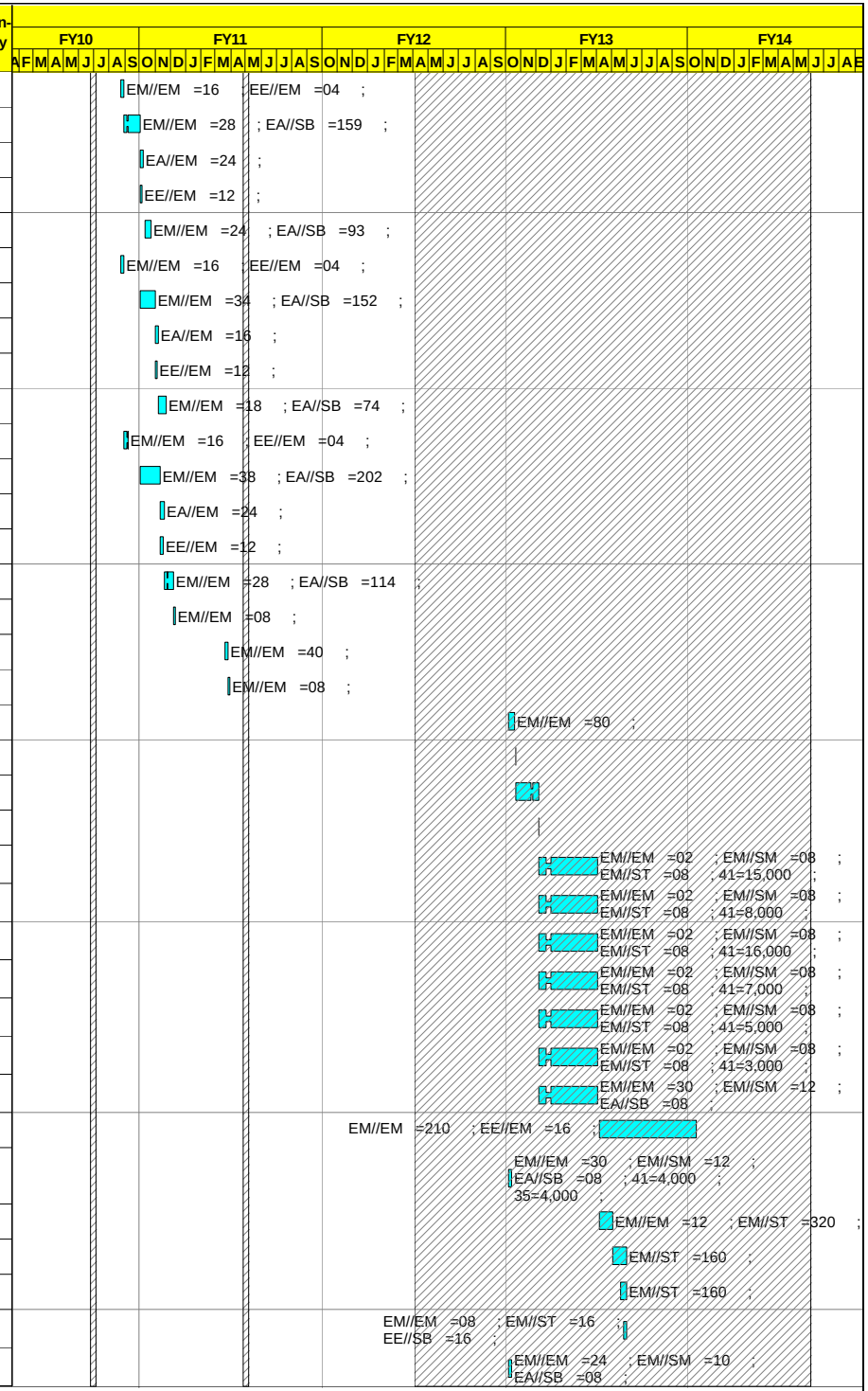
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
531-017	531- FCPC DC Systems Cabling Changes	80	28MAY13	16SEP13	31	47,880.00	30
531-021	531- FCPC DC Systems -Procure OH Reactors	130	15NOV12	27MAY13	31	133,000.00	15
531-025	531- FCPC DC Systems -OH React Instl	80	28MAY13	16SEP13	31	61,180.00	15
531-029	531- FCPC DC Systems - Instl cable & misc h/w	80	28MAY13	16SEP13	31	895,642.80	30
531-033	531- FCPC DC Systems -Test&Commission	20	17SEP13	14OCT13	31	99,617.88	15
Job: 5006 - Control & Protection-RAKI							
Control & Protection System							
541-005	541 - Electrical Interlocks -Dsn	80	04SEP12*	03JAN13	33	222,428.75	10
541-009	541 - Electrical Interlocks -Procurement PLC	80	04JAN13*	25APR13	33	135,660.00	20
541-013	541 - Electrical Interlocks -Installation	80	26APR13	15AUG13	33	387,282.40	15
541-017	541 - Electrical Interlocks -Test&Commission	40	16AUG13	10OCT13	33	30,241.44	15
542-005	542 - Kirk Key Interlocks -Dsn	40	01APR13*	24MAY13	27	18,757.60	15
542-009	542 - Kirk Key Interlocks -Procurement	65	27MAY13*	23AUG13	27	19,950.00	15
542-013	542 - Kirk Key Interlocks -Installation	20	26AUG13	20SEP13	27	21,507.60	15
542-017	542 - Kirk Key Interlocks -Test&Commission	20	23SEP13	18OCT13	27	26,791.16	15
543-005	543 - Real Time Control -Develop algorithms	100	01JAN13*	20MAY13	136	189,312.00	20
545-005	545 - Instrumentation -Dsn	80	01OCT12*	30JAN13	89	72,048.80	15
545-009	545 - Instrumentation -Procure Transducers	120	31JAN13*	17JUL13	89	304,570.00	15
545-013	545 - Instrumentation -Installation	50	18JUL13	25SEP13	89	194,806.40	15
545-017	545 - Instrumentation -Test&Commission	20	26SEP13	23OCT13	89	68,856.70	15
546-005	546 - Coil Protection Dsn	80	01OCT12*	30JAN13	17	111,488.80	25
546-009	546 - Coil Protection -Procurement	112	31JAN13*	05JUL13	17	10,640.00	25
546-013	546 - Coil Protection -Installation	20	08JUL13	02AUG13	17	58,619.20	25
546-017	546 - Coil Protection -Test&Commission	65	05AUG13	01NOV13	17	29,250.04	15
Job: 5007 - Systems Design & Integration-RAKI							
Systems Design & Integration							
551-001	551 - System Design -design support, analysis, c	1,037	03MAY10*	06JUN14	1,580	415,737.27	10
551-008	551 - FDR PF1a	20	15NOV10*	14DEC10	154	37,198.80	10
551-009	551 - FDR TF/OH	20	15MAR11*	11APR11	121	37,198.80	10
551-010	551 - FDR PF5	20	15APR11*	12MAY11	98	37,198.80	10
552-001	552 - System Testing -Prepare Procedures	90	01JUL13	01NOV13	17	40,288.08	10
552-003	552 - System Testing -Testing	65	04NOV13	31JAN14	17	157,923.04	10
Job: 5008 - Digital Coil Protection-RAKI							
Digital Coil Protection (DCP)							
MPS-101	DCP -Design	473	02JUL10*	23MAY12	133	232,041.03	25
MPS-103	DCP -Hardware (procure & Install)	200	24MAY12*	14MAR13	133	569,727.82	25
MPS-106	DCP -I&C Support	130	01OCT12*	10APR13	114	92,778.00	25



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
MPS-109	DCP -Software	180	11APR13	18DEC13	1,702	174,831.25	25
MPS-111	DCP -Cabling and Raceways	100	11APR13*	28AUG13	114	241,387.20	25
MPS-116	DCP -Procedures	10	29AUG13	11SEP13	114	5,329.12	25
MPS-121	DCP -PTP	60	12SEP13	04DEC13	114	167,898.76	25
Job: 5501 - Coil Bus Runs-SMITH							
5501-0007	FEMA	5	03MAY10*	07MAY10	101	2,386.40	10
5501-0009	Eng Dsgn: elect, thermal, EM & stress-OH BUS	4	21MAY10*	26MAY10	92	6,152.16	20
5501-0010	CAD:Coaxial bus dsgn/bus routing/supports-OH BUS	5	10MAY10*	14MAY10	110	5,050.30	20
5501-0011	Analysis Mech: thermal, EM & stress-OH BUS	2	17MAY10	18MAY10	110	2,125.32	20
5501-0012	Analysis Elec: electrical-OH BUS	2	17MAY10	18MAY10	110	689.68	20
5501-0014	Eng Dsgn: elect, thermal, EM & stress-PF BUS	4	27MAY10	02JUN10	92	6,152.16	20
5501-0015	CAD: bus routing, supports-PF BUS	5	07MAY10*	13MAY10	111	5,050.30	20
5501-0016	Analysis Mech: thermal, EM & stress-PF BUS	2	14MAY10	17MAY10	111	2,125.32	20
5501-0017	Analysis Elec: electrical-PF BUS	2	14MAY10	17MAY10	111	689.68	20
5501-0019	Eng Dsgn: elect, thermal, EM & stress-TF BUS	4	03JUN10	08JUN10	92	6,152.16	20
5501-0020	CAD: bus routing, supports-TF BUS	10	13MAY10*	26MAY10	102	10,100.60	20
5501-0021	Analysis Mech: thermal, EM & stress-TF BUS	2	27MAY10	28MAY10	102	2,125.32	20
5501-0022	Analysis Elec: electrical-TF BUS	2	27MAY10	28MAY10	102	689.68	20
5501-0024	Eng Dsgn: elect, thermal, EM & stress-CHI BUS	4	09JUN10	14JUN10	92	6,152.16	20
5501-0025	CAD:ring bus design/bus routing/supports-CHI BUS	18	26MAY10*	21JUN10	91	19,306.30	20
5501-0026	Analysis Mech: thermal, EM & stress-CHI BUS	2	22JUN10	23JUN10	91	4,250.64	20
5501-0027	Analysis Elec: electrical-CHI BUS	2	22JUN10	23JUN10	91	689.68	20
5501-0028	Update Cost & Schedule Estimate	3	11JUN10*	15JUN10	91	2,386.40	10
5501-0029	PDR Prep & PDR	6	16JUN10	23JUN10	91	7,159.20	10
5501-0030	Disposition of PDR CHITS	30	24JUN10	05AUG10	243	3,579.60	25
5501-0032	OH Coaxial Bus Prelim Dsgn Updat/Optim Cmplt	8	24JUN10	06JUL10	235	4,752.00	25
5501-0033	PF Bus Prelim Dsgn Updat/Optim Cmplt	10	07JUL10	20JUL10	235	4,752.00	25
5501-0034	TF Bus Prelim Dsgn Updat/Optim Cmplt	10	21JUL10	03AUG10	235	4,752.00	25
5501-0035	CHI Bus Prelim Dsgn Updat/Optim Cmplt	10	04AUG10	17AUG10	235	4,752.00	25
5501-0037	Prep DOE CD-2 (Lehman) Review	5	04AUG10*	10AUG10	239	7,866.80	10
5501-0038	DOE CD-2 (Lehman) Review	1	11AUG10*	11AUG10	239	1,193.20	5
5501-0046	Compt Busbar Sys Dsgn-OH BUS	5	17AUG10*	23AUG10	156	3,076.08	20
5501-0047	Updt CAD: Develop Drwgs f/Validation-OH BUS	6	24AUG10	31AUG10	217	6,124.70	20
5501-0049	Updt/Validt Analysis: EM/Stress/Thermal-OH BUS	5	01SEP10	08SEP10	217	2,833.76	25
5501-0050	Updt/Validt Electrical Analysis-OH BUS	3	01SEP10	03SEP10	222	2,069.04	25
5501-0051	Updt Models/Drwngs:Checkd/Ready f/Signoff-OH BUS	3	09SEP10	13SEP10	217	4,074.75	20



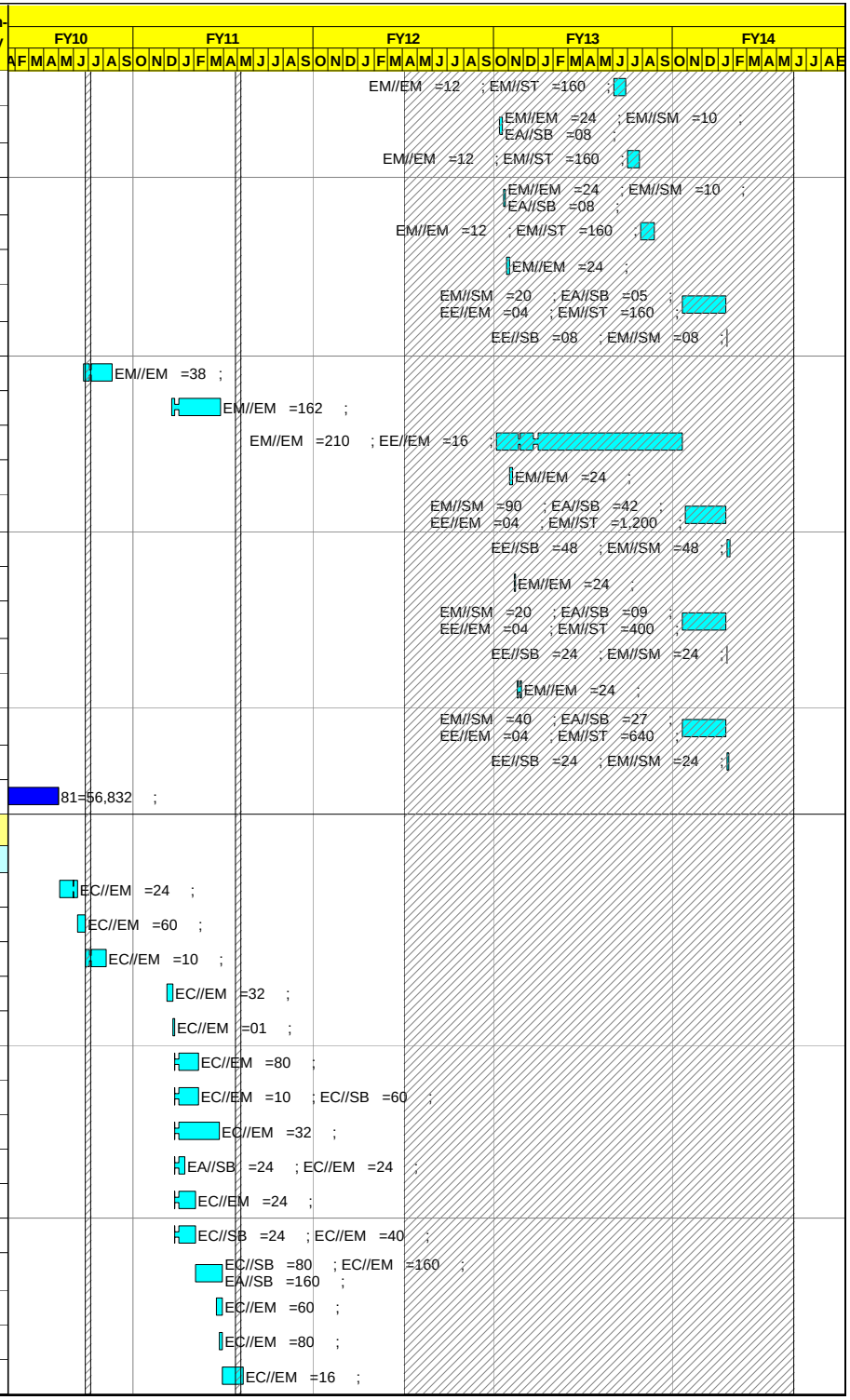
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
5501-0055	Compt Busbar Sys Dsgn-PF BUS	5	24AUG10	30AUG10	156	3,076.08	20
5501-0056	Updt CAD: Develop Drwgs f/Validation-PF BUS	23	31AUG10	01OCT10	156	23,129.98	20
5501-0058	Updt/Validt Analysis: EM/Stress/Thermal-PF BUS	5	04OCT10	08OCT10	188	4,524.48	25
5501-0059	Updt/Validt Electrical Analysis-PF BUS	3	04OCT10	06OCT10	200	2,202.48	25
5501-0060	Updt Models/Drwngs:Checkd/Ready f/Signoff-PF BUS	10	11OCT10	22OCT10	188	15,570.09	20
5501-0063	Compt Busbar Sys Dsgn-TF BUS	5	24AUG10	30AUG10	226	3,076.08	20
5501-0064	Updt CAD: Develop Drwgs f/Validation-TF BUS	21	04OCT10	01NOV10	167	24,618.24	20
5501-0066	Updt/Validt Analysis: EM/Stress/Thermal-TF BUS	5	02NOV10	08NOV10	167	3,016.32	25
5501-0067	Updt/Validt Electrical Analysis-TF BUS	3	02NOV10	04NOV10	179	2,202.48	25
5501-0068	Updt Models/Drwngs:Checkd/Ready f/Signoff-TF BUS	10	09NOV10	22NOV10	167	12,214.98	20
5501-0071	Compt Busbar Sys Dsgn-CHI BUS	5	31AUG10	07SEP10	221	3,076.08	20
5501-0072	Updt CAD: Develop Drwgs f/Validation-CHI BUS	29	04OCT10	11NOV10	156	31,575.78	20
5501-0074	Updt/Validt Analysis: EM/Stress/Thermal-CHI BUS	5	12NOV10	18NOV10	156	4,524.48	25
5501-0075	Updt/Validt Electrical Analysis-CHI BUS	3	12NOV10	16NOV10	171	2,202.48	25
5501-0076	Updt Models/Drwngs:Checkd/Ready f/Signoff-CHI BU	11	19NOV10	07DEC10	156	18,860.58	20
5501-0077	Update Cost & Schedule Estimate	2	08DEC10	09DEC10	156	1,270.08	10
5501-0078	FDR Prep	5	21MAR11*	25MAR11	86	6,350.40	10
5501-0079	FDR 5500	1	28MAR11	28MAR11*	86	1,270.08	5
5501-0082	Prep Req & Procurement Package	10	08OCT12*	19OCT12	76	13,646.40	20
5501-0083	Submit Req to Procurement	1	22OCT12	22OCT12	76	0.00	
5501-0084	Procurement Lead Time	30	23OCT12	05DEC12	76	0.00	
5501-0085	Award Coil Bus Run	1	06DEC12	06DEC12	76	0.00	
5501-0086	Copper Total	80	07DEC12	05APR13	76	22,522.44	20
5501-0087	Insulation & Protection Total	80	07DEC12	05APR13	76	13,212.44	20
5501-0088	SS Hardware, Fittings, Materials Total	80	07DEC12	05APR13	76	23,852.44	20
5501-0089	G10 FR4 Total	80	07DEC12	05APR13	76	11,882.44	25
5501-0090	Fab & Safety Comsumables Total	80	07DEC12	05APR13	76	9,222.44	20
5501-0091	Struc Support Material Total	80	07DEC12	05APR13	76	6,562.44	25
5501-0092	Misc Total	80	07DEC12	05APR13	76	8,247.60	25
5501-0097	Fab/Assembly	140	08APR13*	18OCT13	76	39,093.99	20
5501-0098	Documentn: Fab/Assy Procedure-OH BUS	5	08OCT12	12OCT12	233	18,847.60	25
5501-0099	Fabricatn: pre-installation components-OH BUS	20	08APR13	03MAY13	116	36,811.76	35
5501-0100	Assembly: pre-installatn components-OH BUD	20	06MAY13*	31MAY13	116	17,382.40	35
5501-0101	Insulation & Protective Layer-OH BUS	10	20MAY13	31MAY13	116	17,382.40	35
5501-0102	Electrical Testing-OH BUS	5	27MAY13	31MAY13	116	5,343.36	35
5501-0105	Documentn: Fab/Assy Procedure-PF BUS	5	08OCT12*	12OCT12	273	6,883.58	25



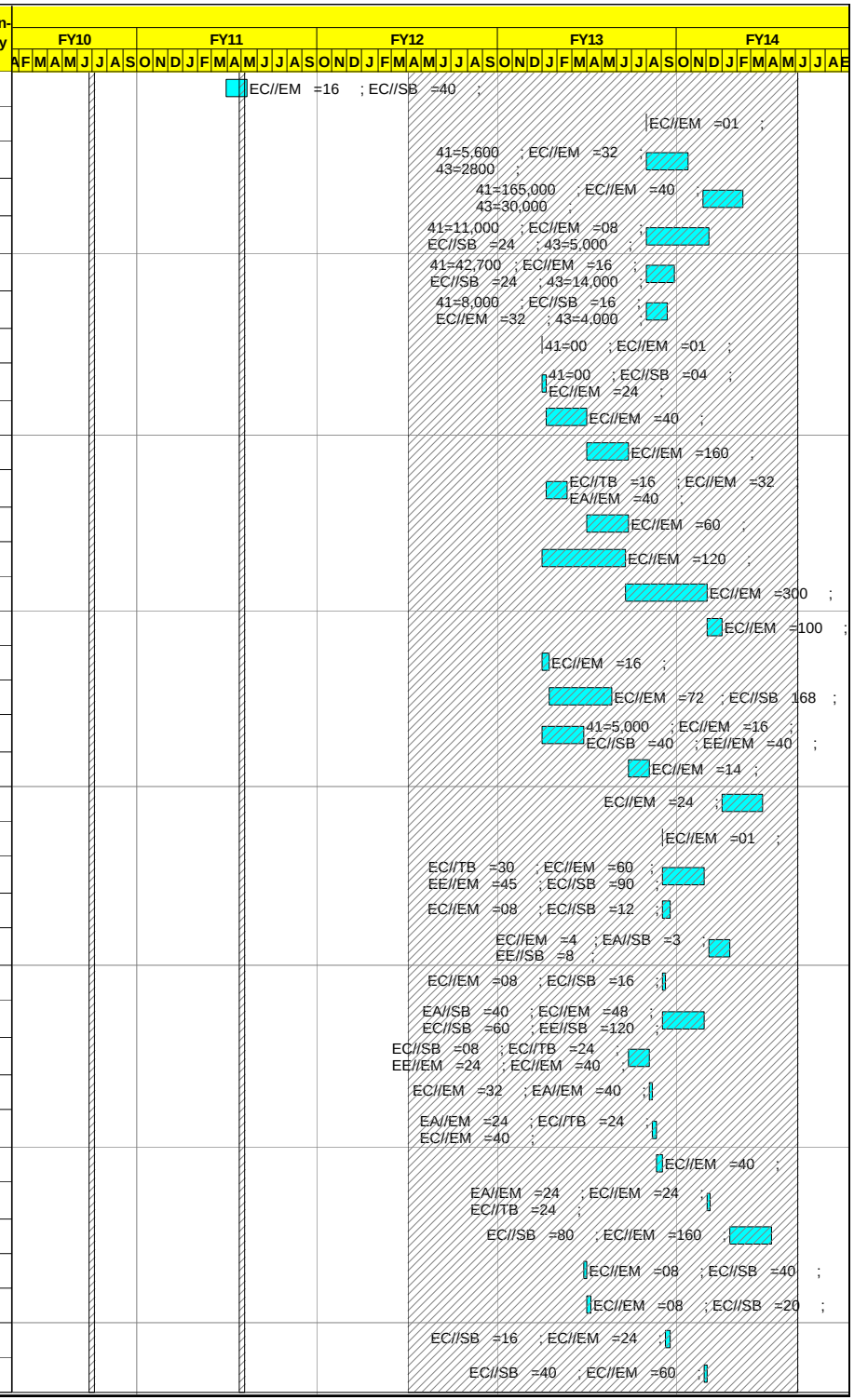
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
5501-0106	Fabricatn: pre-installation components-PF BUS	20	03JUN13	28JUN13	116	19,429.36	35
5501-0109	Documentn: Fab/Assy Procedure-TF BUS	5	15OCT12	19OCT12	288	6,883.58	25
5501-0110	Fabricatn: pre-installation components-TF BUS	20	01JUL13	26JUL13	116	19,429.36	35
5501-0113	Documentn: Fab/Assy Procedure-CHI BUS	5	22OCT12	26OCT12	303	6,883.58	25
5501-0114	Fabricatn: pre-installation components-OH BUS	20	29JUL13*	23AUG13	116	19,429.36	35
5501-0118	Documentation: Installation Procedure-OH BUS	5	29OCT12*	02NOV12	306	4,093.92	25
5501-0119	Field Fit Up, Fabrication, Installation-OH BUS	65	21OCT13	17JAN14	76	22,923.78	35
5501-0120	Testing-OH BUS	1	20JAN14	20JAN14	81	2,556.88	35
5501-0031	Eng Dsn & CAD Model Updates	38	23JUN10*	16AUG10	236	5,667.70	10
5501-0042	Final Design	65	17DEC10	25MAR11	86	25,719.12	10
5501-0080	Procurementsupport	263	08OCT12*	21OCT13	76	39,043.72	30
5501-0123	Documentation: Installation Procedure-PF BUS	5	05NOV12*	09NOV12	306	4,093.92	25
5501-0124	Field Fit Up, Fabrication, Installation-PF BUS	60	28OCT13	17JAN14	76	156,754.16	35
5501-0125	Testing-PF BUS	6	20JAN14	27JAN14	76	15,341.28	35
5501-0129	Documentation: Installation Procedure-TF BUS	5	12NOV12*	16NOV12	306	4,093.92	25
5501-0130	Field Fit Up, Fabrication, Installation-TF BUS	65	21OCT13	17JAN14	79	50,339.54	35
5501-0131	Testing-TF BUS	2	20JAN14	21JAN14	80	7,670.64	35
5501-0135	Documentation: Installation Procedure-CHI BUS	5	19NOV12*	27NOV12	306	4,093.92	25
5501-0136	Field Fit Up, Fabrication, Installation-CHI BUS	65	21OCT13	17JAN14	79	83,222.06	35
5501-0137	Testing-CHI BUS	3	20JAN14	22JAN14	79	7,670.64	35
FY105501	FY10 Actual Cost	143	01OCT09A	30APR10A		56,832.00	

Job: 6100 - Control Sys Data Acquisition -SICHTA

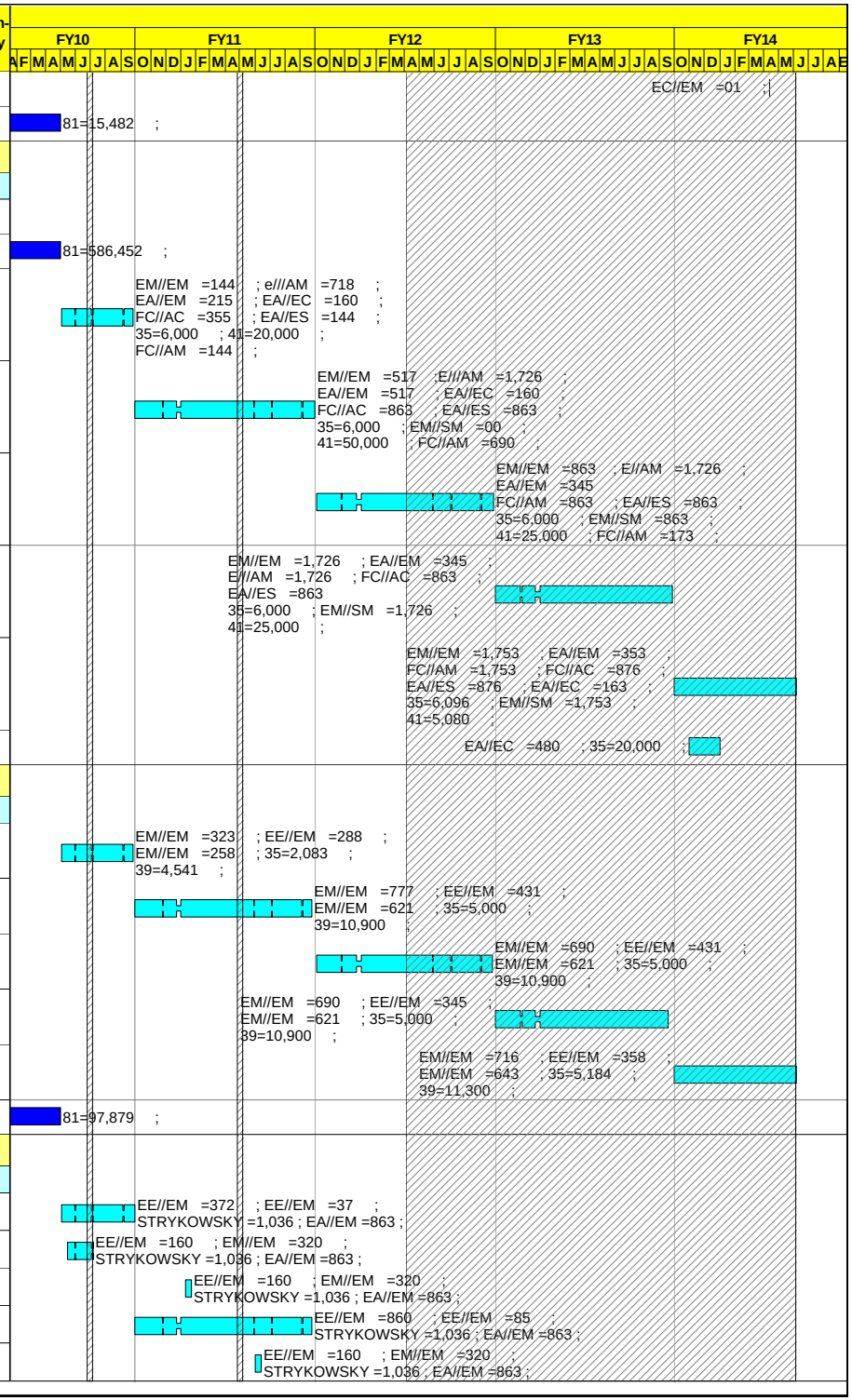
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
6100-0026	Update System documents - PDR	27*	03MAY10*	09JUN10	168	3,244.80	10
6100-0027	PDR Prep	10	10JUN10	23JUN10*	168	8,112.00	10
6100-0032	Disposition PDR Chits - FDR	30	24JUN10	05AUG10	168	1,352.00	10
6100-0033	Assess workscope changes	10	07DEC10*	20DEC10	84	4,605.44	10
6100-0034	Delay design for NSTX run support	1	21DEC10*	21DEC10	84	143.92	10
6100-0035B	PCS Software design analysis	30	22DEC10	09FEB11	114	11,513.60	10
6100-0036	CAMAC Memory PCB design	30	22DEC10	09FEB11	114	7,919.80	10
6100-0037	CAMAC Replacement selection	60	22DEC10	23MAR11	84	4,605.44	10
6100-0038	Cntr Stk diags data acq design	10	22DEC10	12JAN11	99	6,488.88	10
6100-0039	DAS upgrade for NSTX diagnostics	25	22DEC10	02FEB11	84	3,454.08	10
6100-0040	I&C effort due to NTC GIS rack move	25	22DEC10	02FEB11	84	8,349.04	10
6100-0041	ECN & new drawings	40	03FEB11	30MAR11	84	51,900.00	10
6100-0042	Update System documents	10	17MAR11	30MAR11	84	8,635.20	10
6100-0043	FDR Prep 6100	5	24MAR11*	30MAR11	84	11,513.60	10
6100-0044	Disposition FDR Chits	30	31MAR11	11MAY11	580	2,302.72	10



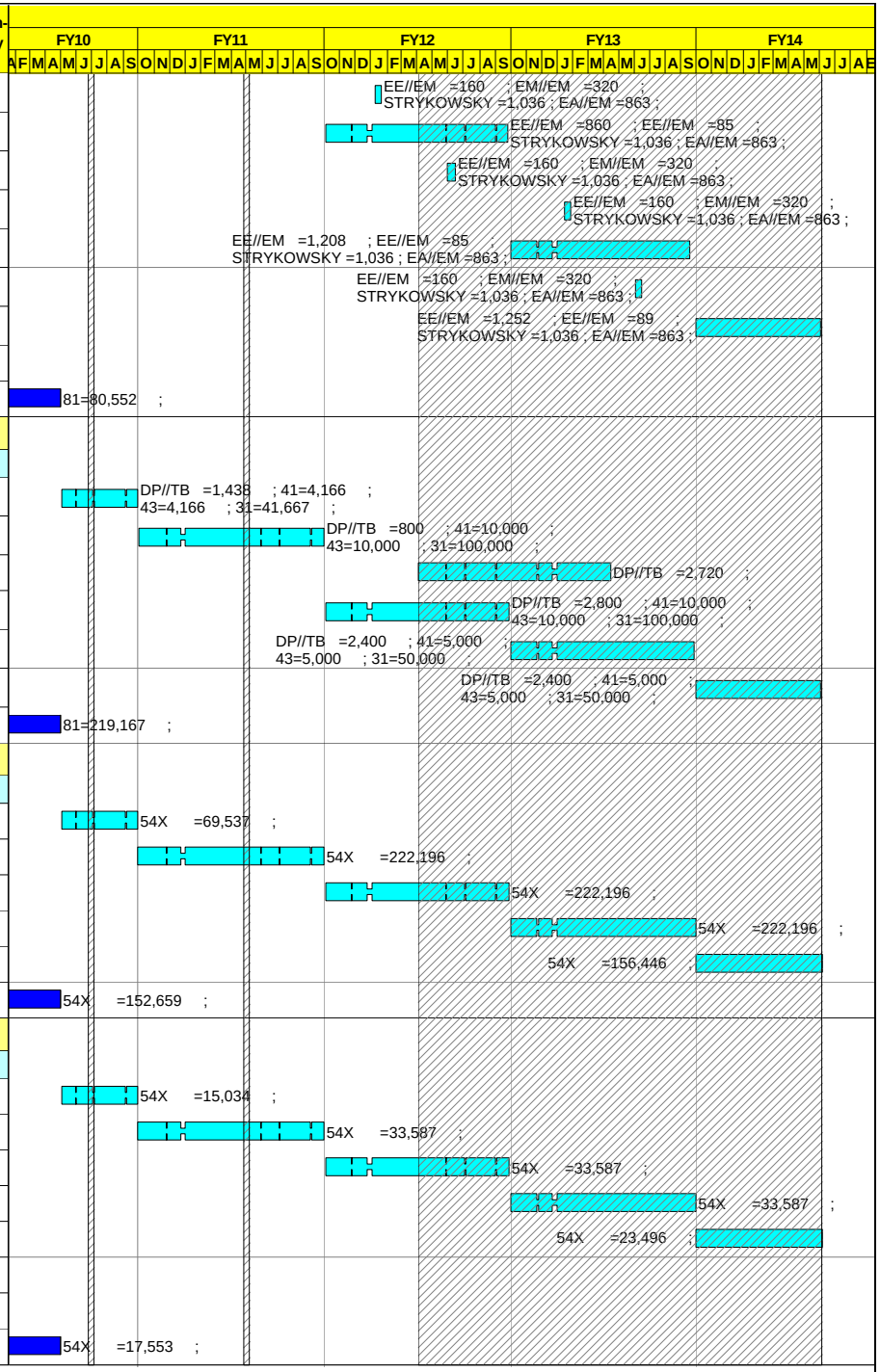
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
6100-0045	Network Design	30	31MAR11	11MAY11	580	6,623.12	10
6100-0048	Wait for I&C Procurement Start	1	01AUG13*	01AUG13	22	154.63	10
6100-0049C	CAMAC Replacement proto	60	02AUG13	24OCT13	82	16,304.70	10
6100-0049D	CAMAC Replacement equipment	60	25NOV13*	14FEB14	61	272,470.80	10
6100-0050	CAMAC Memory module	90	02AUG13	05DEC13	22	25,756.44	10
6100-0051	Networking equipment & fiber optics	40	02AUG13	26SEP13	162	80,965.40	10
6100-0052	GIS rack-move I&C fiber optics & equip.	30	02AUG13	12SEP13	172	22,855.04	10
6100-0055	Wait for I&C Fabrication Start (per	1	01JAN13*	01JAN13	34	154.63	10
6100-0056	I&C Peer Review	5	02JAN13	08JAN13	174	4,177.84	10
6100-0057C	PCS Infrastructure code & debug	60	09JAN13	02APR13	174	6,185.20	10
6100-0058	PSRTC code & debug	60	03APR13	25JUN13	229	24,740.80	10
6100-0059	Update PSRTC Simulation models	30	09JAN13	19FEB13	319	14,292.96	10
6100-0060	PCS code & debug	60	03APR13	25JUN13	174	9,277.80	10
6100-0061A	CAMAC replacement proto	120	02JAN13	18JUN13	34	18,555.60	10
6100-0061B	CAMAC replacement - local software	120	19JUN13	03DEC13	34	46,922.60	10
6100-0062	CAMAC replacement - MDSplus changes	20	04DEC13	31DEC13	34	15,927.00	10
6100-0063	Cntr Stk diags data acq changes	10	02JAN13	15JAN13	254	2,474.08	10
6100-0064	F CAMAC Replacement systems fab.	90	16JAN13	21MAY13	254	30,735.60	10
6100-0065	CAMAC Memory module fab.	60	02JAN13	26MAR13	284	21,679.28	10
6100-0066	PCS – Support Transrex Firing Gener	30	26JUN13	06AUG13	199	2,164.82	10
6100-0067	DAS programming for NSTX diags upgd	60	01JAN14	25MAR14	34	3,822.48	10
6100-0070	Wait for I&C Installation Start (per NSTX	1	02SEP13*	02SEP13	60	154.63	10
6100-0071	CAMAC Replacement systems install	60	03SEP13	25NOV13	60	31,563.90	10
6100-0072	CAMAC Memory install	10	03SEP13	16SEP13	170	2,637.20	10
6100-0073A	NTC/DARM fiber & network install	30	06DEC13	16JAN14	22	2,210.74	10
6100-0074	install I&C Thermocouple equipment	5	03SEP13	09SEP13	160	3,103.92	10
6100-0075	Install I&C due to NTC GIS rack relocation	60	03SEP13	25NOV13	110	37,368.85	10
6100-0081	CS Infrastructure tests	30	26JUN13	06AUG13	174	13,715.04	10
6100-0082	PSRTC Simulation PTP-034	5	07AUG13	13AUG13	174	13,050.56	10
6100-0083	PSRTC PTP-035	5	14AUG13	20AUG13	174	12,910.24	10
6100-0084B	PCS tesing	10	21AUG13	03SEP13	174	6,185.20	10
6100-0085	Support ISTP-001	5	03DEC13	09DEC13	110	10,749.36	10
6100-0086	CAMAC Replacement system tests	60	17JAN14	10APR14	22	35,046.40	10
6100-0087	CAMAC Memory bench tests	5	27MAR13	02APR13	284	5,904.24	10
6100-0088	CAMAC Memory field tests	5	03APR13	09APR13	284	3,570.64	10
6100-0089	Cntr Stk diags testing	5	10SEP13*	16SEP13	160	5,578.00	10
6100-0090	test relocated I&C GIS rack systems	5	26NOV13	02DEC13	110	14,337.80	10



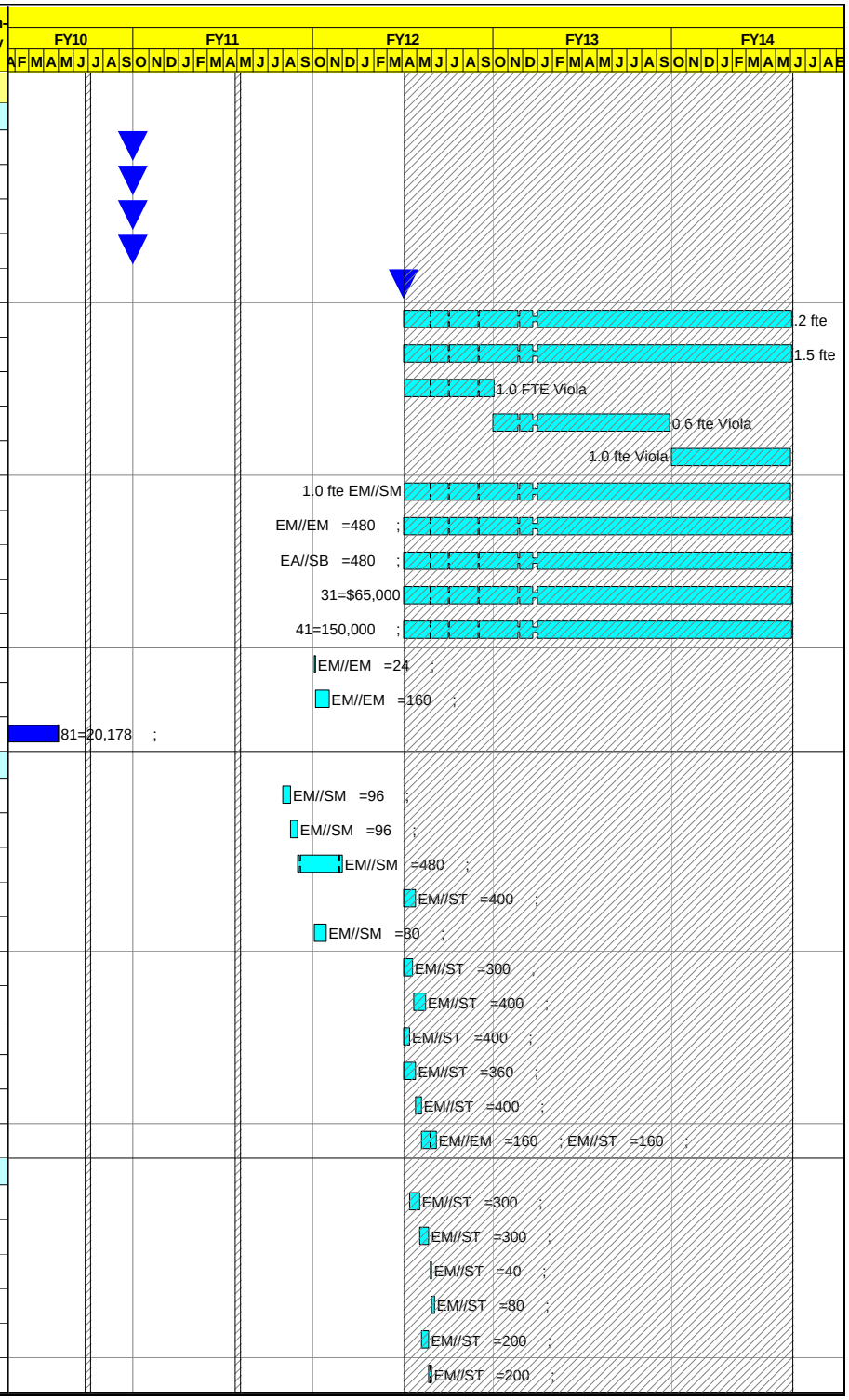
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
6100-0092	Project Ready for ISTP Target	1	11APR14*	11APR14	22	159.27	10
FY106100	FY10 Actual Cost	143	01OCT09A	30APR10A		15,482.00	26
Job: 7100 - Project Mgt & Integration-STRYKOWSKY							
FY097100	FY09 Actual Cost	22*	01JAN09A	30SEP09A		625,829.00	
FY107100	FY10 Actual Cost	143	01OCT09A	30APR10A		586,452.00	
CS7000020	FY2010 Project Management	102*	03MAY10*	24SEP10	1,767	322,448.13	15
CS7000031	FY2011 Project Management	249	01OCT10*	29SEP11	1,763	878,641.43	15
CS7000041	FY2012 Project Mangement	249	03OCT11*	28SEP12	1,762	998,151.94	15
CS7000053	FY2013 Project Management	250	01OCT12*	25SEP13	1,762	1,220,189.43	15
CS7000054	FY2014 Project Management	178	01OCT13*	05JUN14	1,581	896,589.19	15
CS7000052	ORA support	43	01NOV13*	31DEC13	1,693	121,944.00	15
Job: 7200 - Center Stack Management-DUDEK							
7200-01	FY2010 CSU Management	102*	03MAY10*	24SEP10	2,515	146,229.21	13
7200-02	FY2011 CSU Management	245	01OCT10*	23SEP11	2,266	325,882.22	13
7200-03	FY2012 CSU Management	245	03OCT11*	24SEP12	2,016	325,049.97	13
7200-04	FY2013 CSU Management	245	01OCT12*	18SEP13	1,767	317,775.38	13
7200-05	FY2014 CSU Management	178	01OCT13*	05JUN14	1,581	237,694.86	13
FY107200	FY10 Actual Cost	143	01OCT09A	30APR10A		97,879.00	
Job: 7300 - NB2 Management-STEVENSON							
7300-01	FY2010 NB2 Management	106*	03MAY10*	30SEP10	2,511	70,547.37	13
7300-02	FY2010 NB2 RLM's support of reviews	35	17MAY10*	06JUL10	2,572	75,315.20	13
7300-03	FY2010 NB2 RLM's support of reviews	10	10JAN11*	21JAN11	2,438	80,169.60	13
7300-11	FY2011 NB2 Management	245	01OCT10*	23SEP11	2,266	173,445.30	13
7300-12	FY2011 NB2 RLM's support of reviews	10	01JUN11*	14JUN11	2,337	80,169.60	13



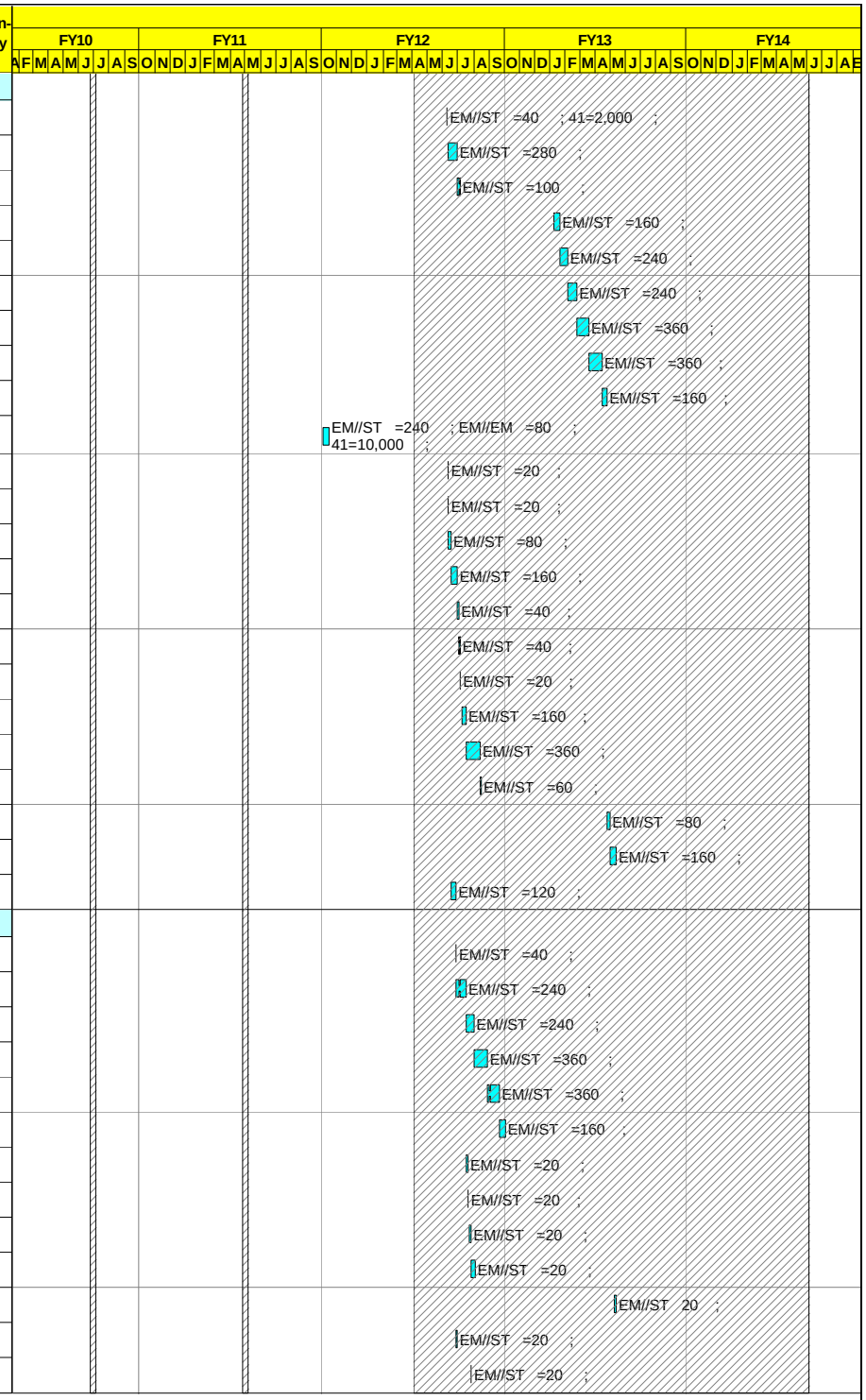
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
7300-13	FY2011 NB2 RLM's support of reviews	10	09JAN12*	20JAN12	2,189	83,628.80	13
7300-21	FY2012 NB2 Management	245	03OCT11*	24SEP12	2,016	180,929.70	13
7300-22	FY2012 NB2 RLM's support of reviews	10	01JUN12*	14JUN12	2,086	83,628.80	13
7300-23	FY2012 NB2 RLM's support of reviews	10	15JAN13*	28JAN13	1,934	86,137.60	13
7300-31	FY2013 NB2 Management	245	01OCT12*	18SEP13	1,767	254,979.60	13
7300-32	FY2013 NB2 RLM's support of reviews	10	03JUN13*	14JUN13	1,835	86,137.60	13
7300-35	FY2014 NB2 Management	176	01OCT13*	03JUN14	1,583	188,755.35	13
FY092410	FY09 Actual Cost	22*	01JAN09A	30SEP09A		63,263.00	
FY107300	FY10 Actual Cost	143	01OCT09A	30APR10A		80,552.00	
Job: 7400 - Health Physics Support-STEVENSON							
740000100	FY2010 NBI Decon HP Technical Support	106*	03MAY10*	30SEP10	2,511	261,110.24	13
740000110	FY2011 NBI Decon HP Technical Support	249	04OCT10*	30SEP11	2,261	322,332.00	13
740000115	FY2011 EQ Removal & Relocation HP Technical Supp	259	03APR12*	15APR13	1,879	370,339.76	13
740000120	FY2012 NBI Decon HP Technical Support	249	03OCT11*	28SEP12	2,012	601,652.00	13
740000125	FY2013 NBI Decon HP Technical Support	252	01OCT12*	27SEP13	1,760	447,864.00	13
740000130	FY2014 NBI Decon HP Technical Support	176	01OCT13*	03JUN14	1,583	319,568.83	13
FY107400	FY10 Actual Cost	143	01OCT09A	30APR10A		219,167.00	
JOB: 7700 - NSTX-U HP Allocations-STRYKOWSKY							
CS9500070	NSTX Upgrade HP Allocations FY10	106*	03MAY10*	30SEP10	2,511	120,299.01	13
CS9500080	NSTX Upgrade HP Allocations FY11	250	01OCT10*	30SEP11	2,261	404,396.72	13
CS9500090	NSTX Upgrade HP Allocations FY12	249	03OCT11*	28SEP12	2,012	417,728.48	13
CS9500100	NSTX Upgrade HP Allocations FY13	253	01OCT12*	30SEP13	1,759	428,838.28	13
CS9500110	NSTX Upgrade HP Allocations FY14	179	01OCT13*	06JUN14	1,580	311,327.54	13
FY107700	FY10 Actual Cost	143	01OCT09A	30APR10A		264,100.07	
Job: 7710 - Upgrade Allocations-STRYKOWSKY							
7710-10	NSTX Upgrade Direct Allocations FY10	106*	03MAY10*	30SEP10	2,511	26,008.82	13
7710-11	NSTX Upgrade Direct Allocations FY11	250	01OCT10*	30SEP11	2,261	61,128.34	13
7710-12	NSTX Upgrade Direct Allocations FY12	249	03OCT11*	28SEP12	2,012	63,143.56	13
7710-13	NSTX Upgrade Direct Allocations FY13	253	01OCT12*	30SEP13	1,759	64,822.91	13
7710-14	NSTX Upgrade Direct Allocations FY14	178	01OCT13*	05JUN14	1,581	46,757.04	13
FY09NNUL	FY09 Actual Cost	22*	01JAN09A	30SEP09A		158,969.00	
FY09NNUL8	FY09 Actual Cost	22*	01JAN09A	30SEP09A		367,345.00	
FY107710	FY10 Actual Cost	143	01OCT09A	30APR10A		30,366.69	



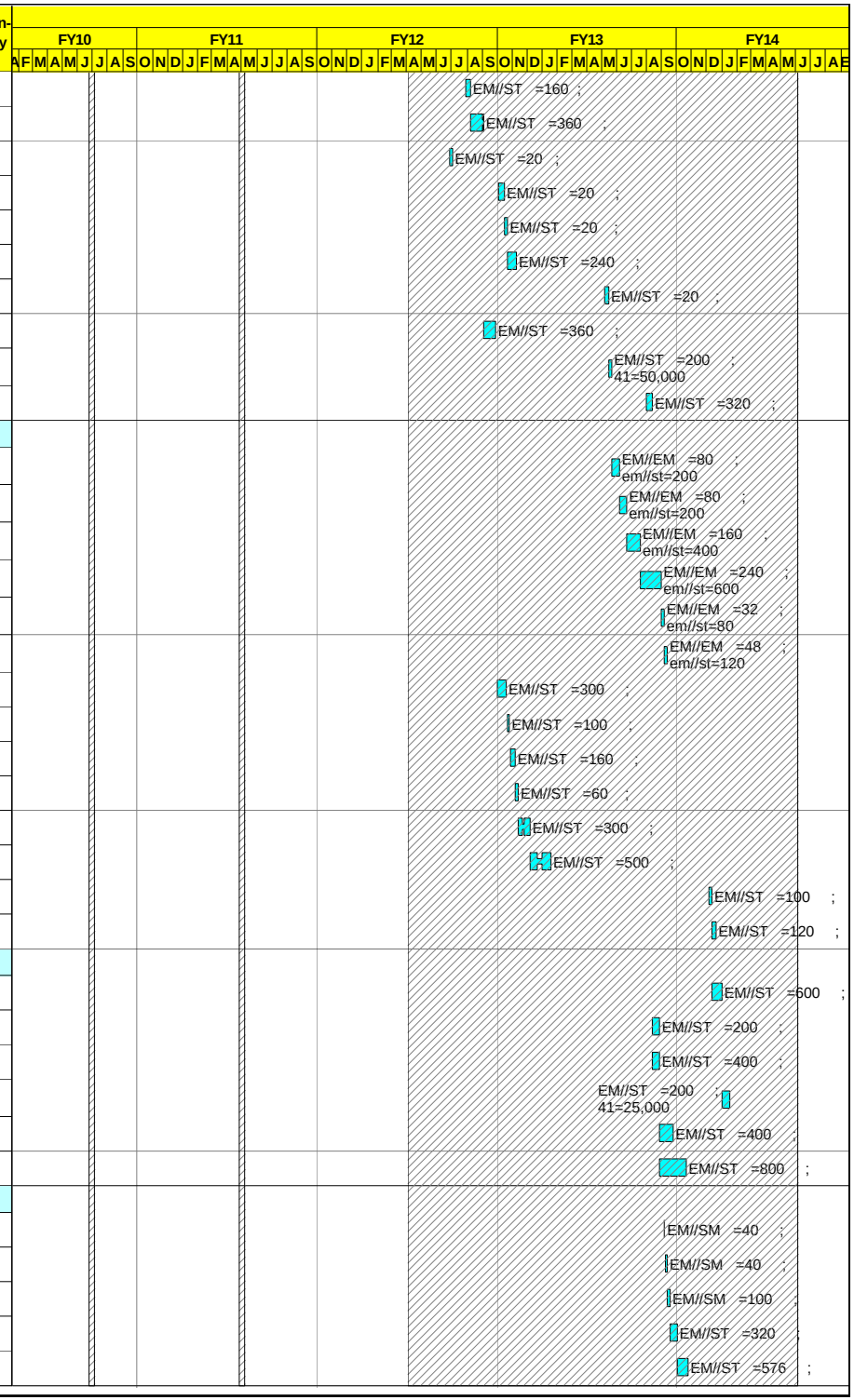
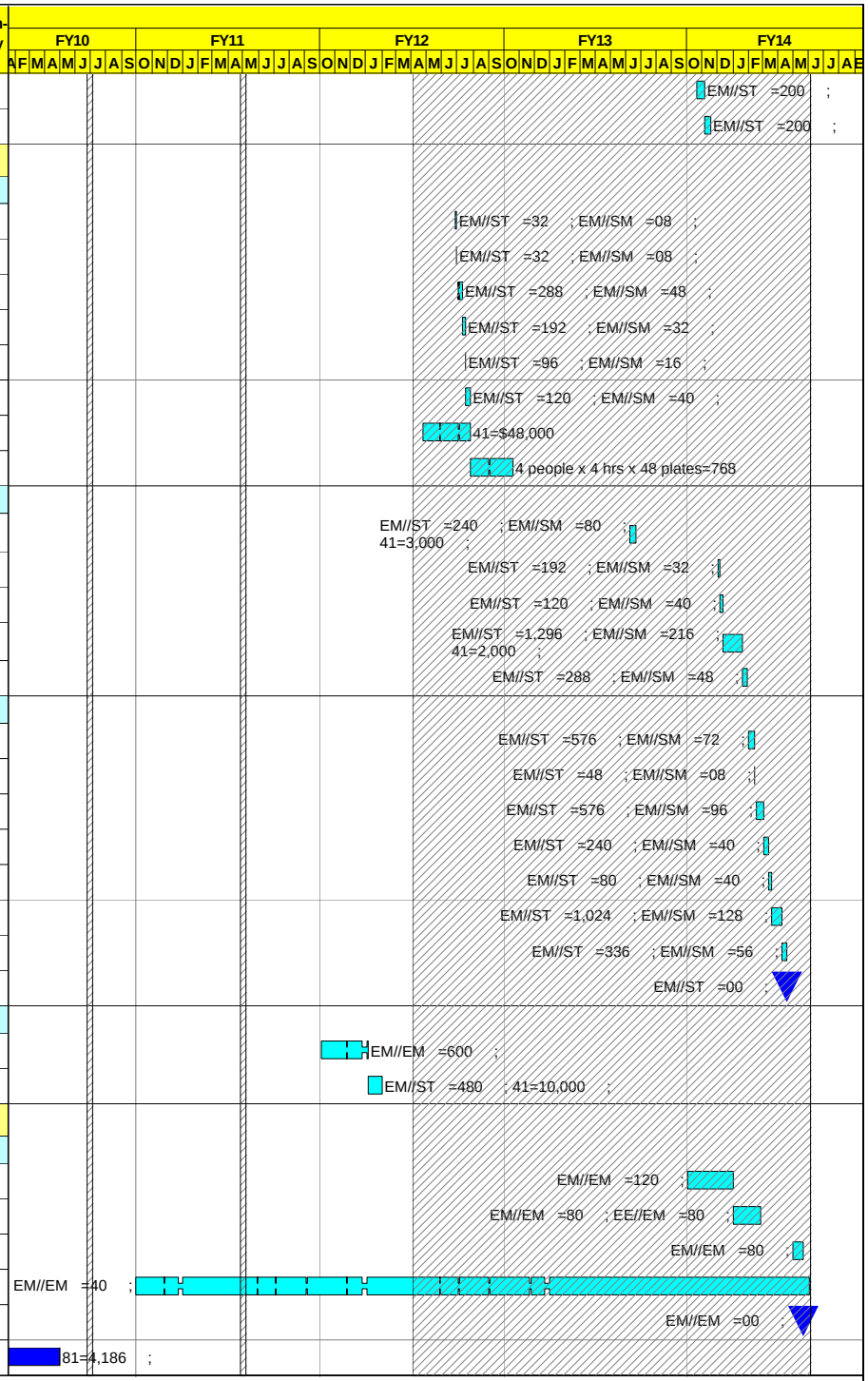
Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
Job; 8200 - CS & Coil Sprt Struc Install- VIOLA							
Management/Oversight/supervision							
8200-0002	Designs complete	0	01OCT10*		2,511	0.00	
8200-0003	Sequence complete	0	01OCT10*		2,511	0.00	
8200-0004	Parts arrived	0	01OCT10*		2,511	0.00	
8200-0005	Start procedural development	0	01OCT10*		2,511	0.00	
8200-0006	Mobilize crews	0	02APR12*		121	0.00	
8200-0010	Shop Fabrication oversight 20% FTE for duration	556	02APR12*	03JUN14	1,583	126,499.51	10
8200-0011	Shop Fabrication support 1.5 FTE for duration	556	02APR12*	03JUN14	1,583	602,733.99	20
8200-0012A	Assembly oversight 1 FTE Engr	127	05APR12*	03OCT12	2,009	139,544.13	10
8200-0012B	Assembly oversight 0.6 FTE Engr	250	01OCT12*	25SEP13	1,762	169,727.10	10
8200-0012C	Assembly oversight 1 FTE Engr	174	01OCT13*	30MAY14	1,585	202,691.03	10
8200-0013	Assembly oversight 1 FTE SM	551	05APR12*	30MAY14	1,585	623,835.73	10
8200-0014	Title 3 Support Engineer	556	02APR12*	03JUN14	1,583	82,111.43	10
8200-0015	Title 3 Support Drafting	556	02APR12*	03JUN14	1,583	65,401.83	10
8200-0016	OT for efficiency (2 crews 1 weekend a month)	556	02APR12*	03JUN14	1,583	134,243.71	20
8200-0017	MISC M&S $250 per day* 2 crews	556	02APR12*	03JUN14	1,583	199,896.58	10
8200-0020	PREPARE WORK PLANNING FORM	3	03OCT11*	05OCT11	220	3,974.64	50
8200-0021	Fab/AssyInstallation Procedure	20	06OCT11*	02NOV11	220	26,497.60	50
FY108200	FY10 Actual Cost	143	01OCT09A	30APR10A		20,178.00	
Bay by Bay Diagnostic Catalogue							
8200-0026	Perform bay by bay catalogue and label Elect	12	01AUG11*	16AUG11	203	15,213.12	40
8200-0027	Perform bay by bay catalogue and label Mech	12	17AUG11*	01SEP11	203	15,213.12	40
8200-0028	Write removal procedures	60	02SEP11	29NOV11	203	78,254.40	40
8200-0029	Remove RF pipes	20	02APR12*	27APR12	149	42,192.00	40
8200-0030	Write Electrical Removal & Installation Procedur	20	03OCT11*	28OCT11	236	13,224.80	40
8200-0031	Safe, remove and store Elect	15	02APR12*	20APR12	134	31,644.00	40
8200-0032	Upper Tray remove and store Elect	20	23APR12	18MAY12	134	42,192.00	40
8200-0033	Remove and store Mech	10	02APR12*	13APR12	123	42,192.00	40
8200-0034	Remove and store Upper and lower port eqpt	18	02APR12*	25APR12	121	37,972.80	40
8200-0035	Remove section of platform	10	26APR12*	09MAY12	121	42,192.00	40
8200-0036	Fiducialize Coil and Vacuum vessel	20	10MAY12	07JUN12	121	43,374.40	40
Equipment Removals							
8200-0039	Remove insulation	15	16APR12	04MAY12	123	31,644.00	30
8200-0040	Gas Injection System	15	07MAY12	25MAY12	123	31,644.00	30
8200-0041	Disconnect trim coil and lock mode coil	2	29MAY12	30MAY12	123	4,219.20	30
8200-0042	Remove trim coil and lock mode coil	4	31MAY12	05JUN12	123	8,438.40	30
8200-0043	Clear platform and area to remove bad TF	10	10MAY12	23MAY12	126	21,096.00	30
8200-0044	Remove bad TF	5	24MAY12	31MAY12	126	21,096.00	30



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
Upper Half							
8200-0047	Umbrella Lid Remove existing	1	08JUN12	08JUN12	121	6,819.20	35
8200-0048	VV Umbrella legs Weld reinforcement plates	14	11JUN12	28JUN12	376	29,534.40	35
8200-0049	Umbrella legs add reinforcement plate	5	29JUN12	06JUL12	376	10,548.00	35
8200-0050	TF Remove turnbuckles	8	10JAN13	21JAN13	128	17,382.40	35
8200-0051	TF Install new clamps	12	22JAN13	06FEB13	128	26,073.60	35
8200-0052	TF Install new hoop brace	12	07FEB13	22FEB13	128	26,073.60	35
8200-0053	TF Align and match drill new hoop brace	18	25FEB13	20MAR13	128	39,110.40	35
8200-0054	TF Install Vessel ties	18	21MAR13	15APR13	128	39,110.40	35
8200-0055	TF Install and torque all bolts	8	16APR13	25APR13	128	17,382.40	35
8200-0056	Design & build lifting method for PF5	10	03OCT11*	14OCT11	282	51,564.00	35
8200-0057	PF2 lift and support	1	11JUN12	11JUN12	121	2,109.60	35
8200-0058	PF2 Replace existing hardware (bolted)	1	12JUN12	12JUN12	121	2,109.60	35
8200-0059	PF2 Install New plates (bolted)	4	13JUN12	18JUN12	121	8,438.40	35
8200-0060	PF2 weld reinforcement	8	19JUN12	28JUN12	253	16,876.80	35
8200-0061	PF2 Reinstall & Realign	2	29JUN12	02JUL12	253	4,219.20	35
8200-0062	PF3 lift and support	2	03JUL12	05JUL12	253	4,219.20	35
8200-0063	PF3 remove bolted support	1	06JUL12	06JUL12	253	2,109.60	35
8200-0064	PF3 Install new bolted support	8	09JUL12	18JUL12	253	16,876.80	35
8200-0065	PF3 weld reinforcement	18	19JUL12	13AUG12	347	37,972.80	35
8200-0066	PF3 Reinstall & Realign	3	14AUG12	16AUG12	347	6,328.80	35
8200-0067	PF5U/L Disconnect existing midplane columns	4	26APR13	01MAY13	128	8,691.20	35
8200-0068	PF4, 5 lift and install 1/4" plate	8	02MAY13	13MAY13	128	17,382.40	35
8200-0069	PF4, 5 Install newbolts and torque	6	19JUN12	26JUN12	121	12,657.60	35
Lower Half							
8200-0073	Umbrella Lid Remove existing	1	27JUN12	27JUN12	121	4,219.20	35
8200-0074	TF Install new clamps	12	28JUN12	16JUL12	206	25,315.20	35
8200-0075	TF Install new hoop brace	12	17JUL12	01AUG12	206	25,315.20	35
8200-0076	TF Align and match drill new hoop brace	18	02AUG12	27AUG12	206	37,972.80	35
8200-0077	TF Install Vessel ties	18	28AUG12	21SEP12	206	37,972.80	35
8200-0078	TF Install and torque all bolts	8	24SEP12	03OCT12	206	17,066.40	35
8200-0079	PF2 lower and support	1	19JUL12	19JUL12	253	2,109.60	35
8200-0080	PF2 Replace existing hardware (bolted)	1	20JUL12	20JUL12	253	2,109.60	35
8200-0081	PF2 Install New plates (bolted)	4	23JUL12	26JUL12	253	8,438.40	35
8200-0082	PF2 weld reinforcement	6	27JUL12	03AUG12	318	12,657.60	35
8200-0083	PF2 Reinstall	2	10MAY13	13MAY13	128	4,345.60	35
8200-0084	PF3 lower and support	2	27JUN12	28JUN12	272	4,219.20	35
8200-0085	PF3 remove bolted support	1	27JUL12	27JUL12	253	2,109.60	35



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
8200-0086	PF3 Install new bolted support	8	30JUL12	08AUG12	253	16,876.80	35
8200-0087	PF3 weld reinforcement	18	09AUG12	04SEP12	258	37,972.80	35
8200-0088	PF3 Reinstall	3	28JUN12	02JUL12	343	6,328.80	35
8200-0089	PF4, 5 lower and install 1/4" plate	8	04OCT12	15OCT12	206	17,382.40	35
8200-0090	PF4, 5 Install newbolts and torque	6	16OCT12	23OCT12	206	13,036.80	35
8200-0091	PF4 Install new clamps	12	24OCT12	08NOV12	206	26,073.60	35
8200-0092	PF4, 5 Install newintersticial columns	6	09MAY13	16MAY13	85	13,036.80	35
8200-0094	Umbrella legs add reinforcement plate	18	05SEP12	28SEP12	258	37,972.80	35
8200-0095	TF Install New Coil	5	17MAY13	23MAY13	85	88,228.00	35
8200-0097	Reinstall platform sections	8	01AUG13	12AUG13	71	34,764.80	35
Alignment Verification Coil & VV							
8200-0100	Map internal targets to external	10	24MAY13	06JUN13	85	35,374.40	30
8200-0101	Verify Vessel Alignemnt targets	10	07JUN13	20JUN13	85	35,374.40	30
8200-0102	Verify Coil Alignment Targets	20	21JUN13	18JUL13	85	70,748.80	30
8200-0103	Adjust vessel Internals	30	19JUL13	29AUG13	85	106,123.20	30
8200-0104	Adjust TF Coils	4	30AUG13	04SEP13	85	14,149.76	30
8200-0105	Adjust PF Coils	6	05SEP13	12SEP13	118	21,224.64	30
8200-0107	Fit and Install PF 1a, 1b, 1c U&L buswork	15	01OCT12	19OCT12	258	32,592.00	30
8200-0108	Fit and Install OH U&L buswork	5	22OCT12	26OCT12	258	10,864.00	30
8200-0109	Install CHI & Ring bus	8	29OCT12	07NOV12	258	17,382.40	30
8200-0110	Install TF coil cooling system (72)	3	08NOV12	12NOV12	258	6,518.40	30
8200-0111	Install Inboard Divertor heating/cooling system	15	13NOV12	05DEC12	258	32,592.00	30
8200-0112	New TF air cooled bus and support system	25	06DEC12	17JAN13	258	54,320.00	30
8200-0113	Install center stack edge tiles	5	06DEC13	12DEC13	28	11,190.00	30
8200-0114	Install New Umbrella Lids	6	13DEC13	20DEC13	47	13,428.00	30
Reinstall Equipment							
8200-0118	Gas Injection System	15	13DEC13	02JAN14	28	67,140.00	30
8200-0120	Reinstall insulation	10	13AUG13	26AUG13	111	21,728.00	30
8200-0121	Platform areas reinstall	10	13AUG13	26AUG13	71	43,456.00	30
8200-0122	Heating Manifold Reconfigure	10	03JAN14	16JAN14	28	56,380.00	30
8200-0124	Reinstall RF pipes	20	27AUG13	23SEP13	111	43,456.00	30
8200-0125	Reinstall electrical Tray	40	27AUG13	21OCT13	71	87,890.00	30
Bay by Bay Diagnostic							
8200-0130	Perform bay by bay review Elect	2	05SEP13	06SEP13	85	6,810.80	40
8200-0131	Perform bay by bay review Mech	2	09SEP13	10SEP13	85	6,810.80	40
8200-0132	Write reinstallation procedures	5	11SEP13	17SEP13	85	17,027.00	40
8200-0133	Reinstall Mech	10	18SEP13	01OCT13	85	34,869.12	40
8200-0134	Reinstall Upper and lower port Eqpt	18	02OCT13	25OCT13	87	64,454.40	40



Activity ID	Activity Description	Work Days	Early Start	Early Finish	Total Float	Budgeted Cost	Contin-gency %
8200-0135	Reinstall Elect	10	22OCT13	04NOV13	71	22,380.00	40
8200-0136	Testing	10	05NOV13	18NOV13	71	22,380.00	40
Job: 8250 - Remove/Install Centerstack-PERRY							
Remove Old Centerstack							
8250-101	Disconnect Hoses	1	28JUN12	28JUN12	121	4,697.84	15
8250-105	Remove umbrella lid (top and bottom)	1	29JUN12	29JUN12	121	4,697.84	15
8250-109	Remove flex bus (top and bottom)	6	02JUL12	10JUL12	121	38,313.12	15
8250-113	Support lower support structure	4	11JUL12	16JUL12	121	25,542.08	15
8250-117	lift old centerstack	2	17JUL12	18JUL12	121	12,771.04	15
8250-121	Remove old centerstack pedestal	5	19JUL12	25JUL12	293	19,270.00	15
8250-122	Purchase passive plate bolts	65	24APR12	25JUL12	293	62,400.00	15
8250-122A	Replace mountiung bolts for passive plates	60	26JUL12	18OCT12	293	81,574.91	15
Install New Centerstack							
8250-125	Install new centerstack pedestal	10	10JUN13	21JUN13	135	43,685.20	15
8250-129	Lift in new centerstack (2 times)	4	02DEC13	05DEC13	20	27,096.96	15
8250-133	Check vacuum seals	5	06DEC13	12DEC13	20	20,443.20	15
8250-137	Install new flex bus (3 times w/2 re-machinings)	27	13DEC13	20JAN14	20	185,624.48	15
8250-141	Install new umbrella (3 times w/2 re-machinings)	6	21JAN14	28JAN14	20	40,645.44	15
Close Vessel and Pumpdown							
8250-145	Clean, Photo, Close VV	9	03FEB14	13FEB14	17	77,081.76	15
8250-149	Pumpdown	1	14FEB14	14FEB14	17	6,774.24	15
8250-153	Leak check	12	17FEB14	04MAR14	17	81,290.88	15
8250-157	Setup for Bakeout	5	05MAR14	11MAR14	17	33,871.20	15
8250-161	Rayleigh/Raman Scattering	5	12MAR14	18MAR14	17	15,967.20	15
8250-165	Bakeout	16	19MAR14	09APR14	17	137,034.24	15
8250-169	Recover from bakeout & scrub	7	10APR14	18APR14	17	47,419.68	15
8250-173	Ready for ISTP	0		18APR14	17	0.00	15
8250-123	Dsgn Lift Fixture for new centerstack pedestal	60	03OCT11*	04JAN12	476	99,366.00	15
8250-124	Fab Lift Fixture for new centerstack pedestal	20	05JAN12	01FEB12	476	63,630.40	15
Job: 7900 - Integrated System Test-GENTILE							
Integrated System Testing (WBS 1.7 / Job 7900)							
7900-115	Prepare NBI2 & CS ISTP Test Procedures	65	02OCT13*	31DEC13	55	21,084.00	21
7900-120	Conduct ACC Review of Upgrades	40	01JAN14	25FEB14	55	30,305.60	21
7900-140	Perform ISTP	15	30APR14	20MAY14	10	14,056.00	21
7900-150	Participate in cost and schedule reviews	928	01OCT10*	03JUN14	1,583	6,681.33	21
7900-999	NSTX RESUME OPERATIONS	0		20MAY14	10	0.00	21
FY107900	FY10 Actual Cost	143	01OCT09A	30APR10A		4,186.00	21