

Time Impact Analysis Form

TitleSFM Structural Steel Review Delays

Key Dates and Assumptions

Submitted

2/9/2019

Substantial Completion

3/10/2020

Time Impact Analysis

Effected Construction Activities											Milestone	Delay to the Progress											Delay to the Milestone						
Description							Status				Relevant Milestone	Before Change		Fragnet (days)						Relation			After Change			Before	After Change		
Number	Earliest	Most Critical	Activity ID	Section	Level	Description	Shop Drawings	Fabrication	Delivery	Construction		Start	Finish	IFC	Shop Drawings	Fabrication	Delivery	Construction	Total	Type	Lag (wks)	Start	Finish	Work affected	Milestone Date	Milestone Date	Impact on Milestone	Days of Impact	
1	X	X	STR-1120	All	All	Building A - Erect South to North	X				Substantial	7/15/2019	8/2/2019		90				90	FS	0	9/23/2019	10/11/2019		3/10/2020	5/19/2020	X	70	
2																													
3																													
4																													
5																													

Narrative of Time Impact Analysis

After working through the design teams review the Shop Drawings were ready to be submitted to the Fire Marshal’s Office for final review. Unfortunately, the project team was informed at time of submission that the review process is experiencing major delays due to the large influx of projects currently in review and staff shortage due to California Wildfire support.

To expedite reviews the Project team decided to split the packages into Building A, Building B, and the mezzanines. Building B and the Mezzanines were reviewed in time to support the schedule, but the shop drawings were delayed on Building A by 90 calendar days. At the time of the delay the steel erection of building A was on the critical path of the project. Although the team was able to keep Building B progressing the delays on building A could not be fully mitigated.

After the delay was inputted into the schedule the team recognized a 12 week impact on the project. Two weeks of total float was consumed on the delay and two weeks were mitigated through re-sequencing the work to enable the OH activities to begin sooner while the roof was completed. This brought the overall impact on the schedule to eight weeks.

Findings & Recommendations

Although the project team was able to mitigate two weeks by working roofing structure and OH Top track and MEP the overall project was impacted 8 weeks. Therefore, Hensel Phelps formally requests an 8 week time extension due to impacts beyond the control of Hensel Phelps.

Prepared byJonathon Peltz

Mitigation Measures

Milestone		Mitigation to the Milestones							
Number	Relevant Milestone	Potential Mitigation Measures			Before	After Mitigation			
		Description			Value (days)	Milestone Date	Milestone Date	Impact on Milestone	Days of Impact
1	Substantial	Remove Roofing Predecessor to OH and Top Track			1	5/19/2020	5/6/2020	-14	14
2									
3									
4									
5									

Approved by

Activity ID	Activity Name	OD	Start	Finish	TF	2019												2020					
						Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Solano County - CVTC Reno Competition 2019 - TIA Part B		330	11-Feb-19	08-Jun-20	0																		
Contract Milestones		330	11-Feb-19	08-Jun-20	0																		
MS-1000	Notice to Proceed	0	11-Feb-19*	11-Feb-19	-40	Notice to Proceed																	
MS-1010	Weather Allowance	40	11-Feb-19	09-Apr-19	228	Weather Allowance																	
MS-1020	Substantial Completion	0	06-May-20	06-May-20*	-40	Substantial Completion																	
MS-1030	Final Completion	0	08-Jun-20	08-Jun-20	0																		
Interim Milestones		268	11-Feb-19	09-Mar-20	0																		
IM-1060	Phase 1	268	11-Feb-19	09-Mar-20	0	Phase 1																	
IM-1000	Start Structure	0	15-Jul-19*		0	Start Structure																	
IM-1030	Energize Main Gear	0	22-Aug-19*		0	Energize Main Gear																	
IM-1020	Building Dry In	0		10-Oct-19*	0	Building Dry In																	
IM-1010	End Structure	0		21-Oct-19*	0	End Structure																	
IM-1040	Start Mechanical Systems	0	13-Dec-19*		0	Start Mechanical Systems																	
IM-1050	Start Fire Alarm Testing	0	30-Jan-20*		0	Start Fire Alarm Testing																	
Preconstruction Schedule		155	11-Feb-19	20-Sep-19	3																		
Buyout		40	11-Feb-19	09-Apr-19	3																		
BO-1000	Metal Structure	10	11-Feb-19	25-Feb-19	-40	Metal Structure																	
BO-1090	Electrical System	10	13-Feb-19	27-Feb-19	0	Electrical System																	
BO-1010	Fire Alarm	10	15-Feb-19	01-Mar-19	9	Fire Alarm																	
BO-1060	Security Electronic Systems	10	19-Feb-19	04-Mar-19	13	Security Electronic Systems																	
BO-1020	Mezzanine Metal Stairs	10	28-Feb-19	13-Mar-19	1	Mezzanine Metal Stairs																	
BO-1030	Fire Suppression	10	05-Mar-19	18-Mar-19	13	Fire Suppression																	
BO-1080	Detention Hardware	10	08-Mar-19	21-Mar-19	5	Detention Hardware																	
BO-1070	Detention Doors and Frames	10	14-Mar-19	27-Mar-19	1	Detention Doors and Frames																	
BO-1040	HVAC Units	10	19-Mar-19	02-Apr-19	2	HVAC Units																	
BO-1050	Security Glazing	10	26-Mar-19	09-Apr-19	3	Security Glazing																	
Submittals		115	11-Feb-19	25-Jul-19	-12																		
Light Fixtures		55	28-Feb-19	16-May-19	0																		
SM-1130	Light Fixtures- Product Data- Submit	35	28-Feb-19	18-Apr-19	0	Light Fixtures- Product Data- Submit																	
SM-1020	Light Fixtures- R/A	15	19-Apr-19	09-May-19	0	Light Fixtures- R/A																	
SM-1140	Light Fixtures- Review by AHJ	5	10-May-19	16-May-19	0	Light Fixtures- Review by AHJ																	
Mezzanine Metal Stairs		40	14-Mar-19	09-May-19	1																		
SM-1040	Mezzanine Metal Stairs- Shop Drawings- Submit	25	14-Mar-19	18-Apr-19	1	Mezzanine Metal Stairs- Shop Drawings- Submit																	
SM-1170	Mezzanine Metal Stairs- R/A	10	19-Apr-19	02-May-19	1	Mezzanine Metal Stairs- R/A																	
SM-1180	Mezzanine Metal Stairs- Review by AHJ	5	03-May-19	09-May-19	1	Mezzanine Metal Stairs- Review by AHJ																	
Metal Structure		115	11-Feb-19	25-Jul-19	-40																		
A1070	Foundation- Shop Drawings- Submit	20	11-Feb-19	11-Mar-19	-22	Foundation- Shop Drawings- Submit																	
SM-1000	Structure- Shop Drawings- Submit	30	22-Feb-19	05-Apr-19	-40	Structure- Shop Drawings- Submit																	
A1060	Anchor Bolts- Shop Drawings- Submit	25	26-Feb-19	02-Apr-19	-37	Anchor Bolts- Shop Drawings- Submit																	
A1100	Foundation- Shop Drawings- R/A	10	12-Mar-19	25-Mar-19	-22	Foundation- Shop Drawings- R/A																	
A1110	Anchor Bolt- Shop Drawings- R/A	10	03-Apr-19	16-Apr-19	-37	Anchor Bolt- Shop Drawings- R/A																	
A1080	Structure- Shop Drawings- R/A	10	08-Apr-19	19-Apr-19	-40	Structure- Shop Drawings- R/A																	
A1090	Structure- Review by AHJ	5	22-Apr-19	26-Apr-19	-40	Structure- Review by AHJ																	
A1120	Structure- Shop Drawing SFMDelay on Bldg A	90	27-Apr-19	25-Jul-19	-57	Structure- Shop Drawing SFMDelay on Bldg A																	
Doors, Frames and Hardware		60	28-Mar-19	21-Jun-19	1																		
SM-1010	Detention Doors and Frames- Product Data- Submit	40	28-Mar-19	23-May-19	1	Detention Doors and Frames- Product Data- Submit																	
SM-1110	Detention Hardware- Product Data- Submit	45	28-Mar-19	31-May-19	1	Detention Hardware- Product Data- Submit																	
SM-1090	Detention Doors and Frames- R/A	15	24-May-19	14-Jun-19	1	Detention Doors and Frames- R/A																	
SM-1120	Detention Hardware- R/A	10	03-Jun-19	14-Jun-19	1	Detention Hardware- R/A																	
SM-1100	Doors, Frames and Hardware- Review by AHJ	5	17-Jun-19	21-Jun-19	1	Doors, Frames and Hardware- Review by AHJ																	
Fire Supression		40	19-Mar-19	14-May-19	13																		
FS-1200	Fire Supression- Shop Drawings- Submit	25	19-Mar-19	23-Apr-19	13	Fire Supression- Shop Drawings- Submit																	
FS-1190	Fire Supression- R/A	10	24-Apr-19	07-May-19	13	Fire Supression- R/A																	
FS-1210	Fire Supression- Review by AHJ	5	08-May-19	14-May-19	13	Fire Supression- Review by AHJ																	
HVAC Units		50	03-Apr-19	12-Jun-19	2																		
SM-1060	HVAC Units- Product Data- Submit	35	03-Apr-19	21-May-19	2	HVAC Units- Product Data- Submit																	
SM-1210	HVAC Units- Shop Drawing- Submit	35	03-Apr-19	21-May-19	2	HVAC Units- Shop Drawing- Submit																	
SM-1200	HVAC Units- R/A	10	22-May-19	05-Jun-19	2	HVAC Units- R/A																	
SM-1190	HVAC Units- Review by AHJ	5	06-Jun-19	12-Jun-19	2	HVAC Units- Review by AHJ																	

Remaining Level of Effort

Actual Work

Critical Remaining Work

Actual Level of Effort

Remaining Work

Milestone

CTVC Reno-2 Solano County - CVTC Reno Competition 2019 - TIA Part B

Data Date: 11-Feb-19



HENSEL PHELPS
Plan. Build. Manage.


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Activity ID	Activity Name	OD	Start	Finish	TF	2019												2020				
						Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
STR-1380	Entrance Canopy- Punch List Sign Off	5	27-Dec-19	06-Jan-20	43																	
Building B		145	25-Jun-19	24-Jan-20	30																	
Site Utilities		30	07-May-19	18-Jun-19	159																	
Interior Finishes		239	21-May-19	05-May-20	-40																	
Building A		115	15-Nov-19	05-May-20	-40																	
IF-1010	Building A- Exterior Doors and Hardware	10	15-Nov-19	02-Dec-19	-26																	
IF-1020	Building A- Glazing	15	15-Nov-19	09-Dec-19	-34																	
IF-1100	Building A- Detention Doors and Hardware	10	15-Nov-19	02-Dec-19	-6																	
IF-1000	Building A- Wall Insulation	5	21-Nov-19	27-Nov-19	-29																	
IF-1030	Building A- Drywall	20	09-Dec-19	08-Jan-20	-34																	
IF-1040	Building A- Tape and Finish	20	12-Dec-19	13-Jan-20	-34																	
IF-1110	Building A- Acoustical Ceiling Grid	15	13-Dec-19	07-Jan-20	-24																	
IF-1050	Building A- Hardlid Ceilings / Tape and Finish	15	30-Dec-19	22-Jan-20	-40																	
IF-1190	Building A- Electrical Systems	25	08-Jan-20	12-Feb-20	-24																	
IF-1070	Building A- Ceramic Tile	15	14-Jan-20	04-Feb-20	-22																	
IF-1060	Building A- Paint	15	23-Jan-20	12-Feb-20	-40																	
IF-1090	Building A- Plumbing Fixtures	5	11-Feb-20	17-Feb-20	-22																	
IF-1180	Building A- Light Fixtures	10	13-Feb-20	27-Feb-20	-34																	
IF-1210	Building A- VCT	10	13-Feb-20	27-Feb-20	-40																	
IF-1080	Building A- Toilet Accessories	10	20-Feb-20	04-Mar-20	-12																	
IF-1220	Building A- Interior Doors and Hardware	10	28-Feb-20	12-Mar-20	-38																	
IF-1200	Building A- Casework	10	03-Mar-20	16-Mar-20	-40																	
IF-1130	Building A- Building Specialties	10	04-Mar-20	17-Mar-20	-21																	
IF-1120	Building A- Signage	10	06-Mar-20	19-Mar-20	-23																	
IF-1150	Building A- Wall Trim	15	13-Mar-20	03-Apr-20	-33																	
IF-1230	Building A- Wall and Door Protection	5	13-Mar-20	19-Mar-20	-23																	
IF-1140	Building A- Epoxy Flooring	20	17-Mar-20	14-Apr-20	-40																	
IF-1170	Building A- Detention Fxtures	5	17-Mar-20	23-Mar-20	-25																	
IF-1160	Building A- Ceiling Trim	5	20-Mar-20	26-Mar-20	-28																	
IF-1240	Building A- HP Work to Complete List	5	15-Apr-20	21-Apr-20	-40																	
IF-1250	Building A- Owner/Architect Punch List	5	22-Apr-20	28-Apr-20	-40																	
IF-1260	Building A- Punch List Sign Off	5	29-Apr-20	05-May-20	-40																	
Building B		155	28-Aug-19	14-Apr-20	-25																	
Sitework / Landscaping		92	21-May-19	30-Sep-19	107																	
Comissioning		203	03-Jul-19	27-Apr-20	-34																	
Closeout		22	06-May-20	05-Jun-20	0																	