



PENINSULA CORRIDOR ELECTRIFICATION PROJECT (PCEP)

Q3 Quarterly Update #14
January 1 – March 31, 2018

JPB Board Meeting
May 3, 2018
Agenda Item # 7b



CalMod ELECTRIFICATION

Progression of Design

- Overhead Catenary System (OCS):
 - Complete design for Segment 2 Work Area 3 and Segment 4 Work Area 2
 - Continued design for other Segments 2 and 4 Work Areas
- Signal System:
 - Complete design of System Ductbanks for Segment 2 and 4
 - Continued submission and review of 65% signal design for Segments 2 and 4
 - Continued technical coordination with Union Pacific Railroad for systemwide signal system design
 - Met with FRA headquarters regarding proposed solution for Consistent Warning Time

Progression of Design

- Traction Power System:
 - Completed design of Traction Power Facilities plans in Segment 2
 - Completed design of Traction Power Substation 2 in Segment 4
 - Continued coordination with PG&E on design of interconnection
- Communication System:
 - Continued work on systemwide communication design

Issued for Construction Designs Completed During Quarter

Design Discipline	OCS	Signal	Traction Power
Segment 2	5	1	1
Segment 4	3	1	1
Systemwide	4	1	4

CONSTRUCTION



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CalMod ELECTRIFICATION

Construction Progress

Segment	Work Area	Foundations		Poles	
		Required ¹	Completed	Required	Completed
2	5	256	172	210	29
	4	366	84	294	0
Total	11	622	256	501	29

Note:

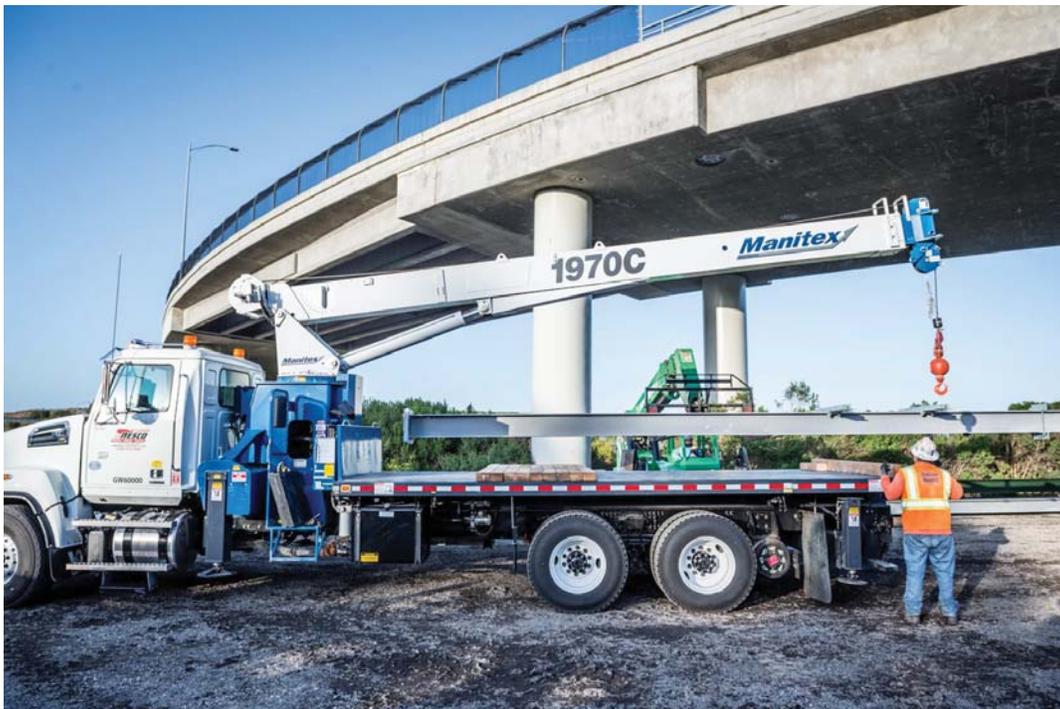
¹Foundations Required do not match Poles Required as guy foundations are needed in some locations for extra support.



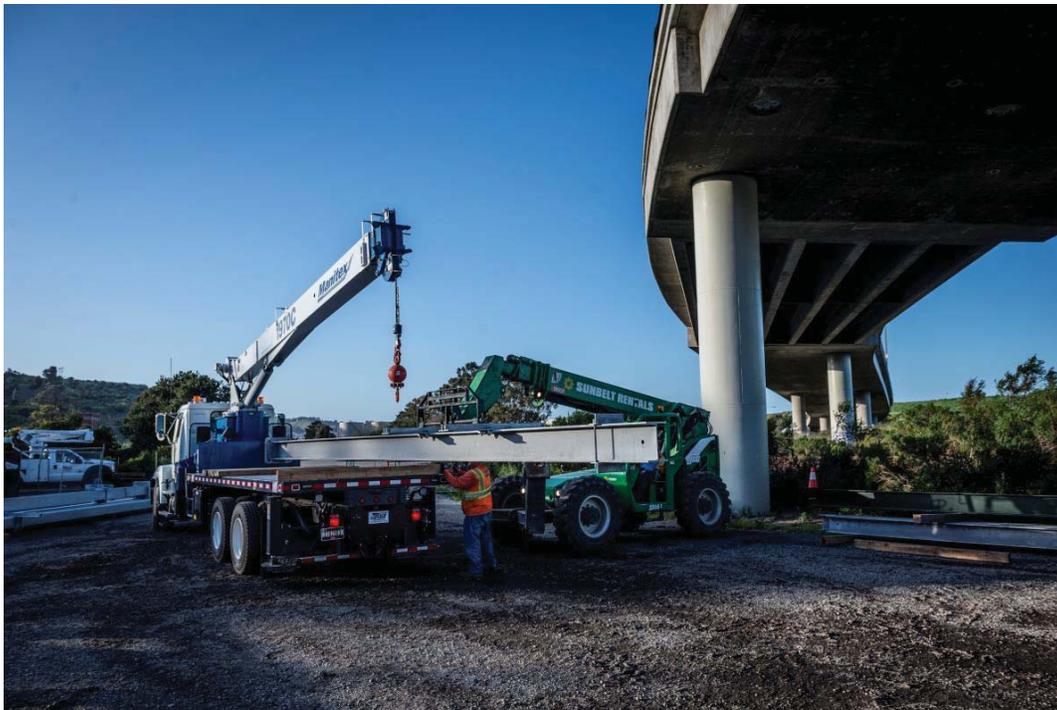
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Unloading Cages in the Burlingame Storage Yard



OCS pole on flatbed truck



OCS pole on flatbed truck

ELECTRIFICATION



OCS pole lifted off flatbed truck



Crew placing OCS pole on foundation



Installed OCS Pole



Time-Lapse Video



Other Electrification Contracts

- **Supervisory Control and Data Acquisition (SCADA) Contract**
 - Received and reviewed baseline schedule
 - Continued work on SCADA points list and database
- **Tunnel Modifications**
 - Advertised construction contract February 20
 - Received and answered potential bidders' questions and answers
 - Bid opening May 11
- **Centralized Equipment Maintenance and Operations Facility (CEMOF)**
 - Progressed designed to Issue for Bid – civil portion only

Other Electrification Contracts (continued)

- **Pacific Gas and Electric (PG&E)**
 - Continued progress on power quality studies with PG&E
 - Continued coordination for substation improvements
 - Temporary power construction @ FMC in San Jose started in April
 - Continued PG&E utility overhead relocation in Segment 2 Work Area 4

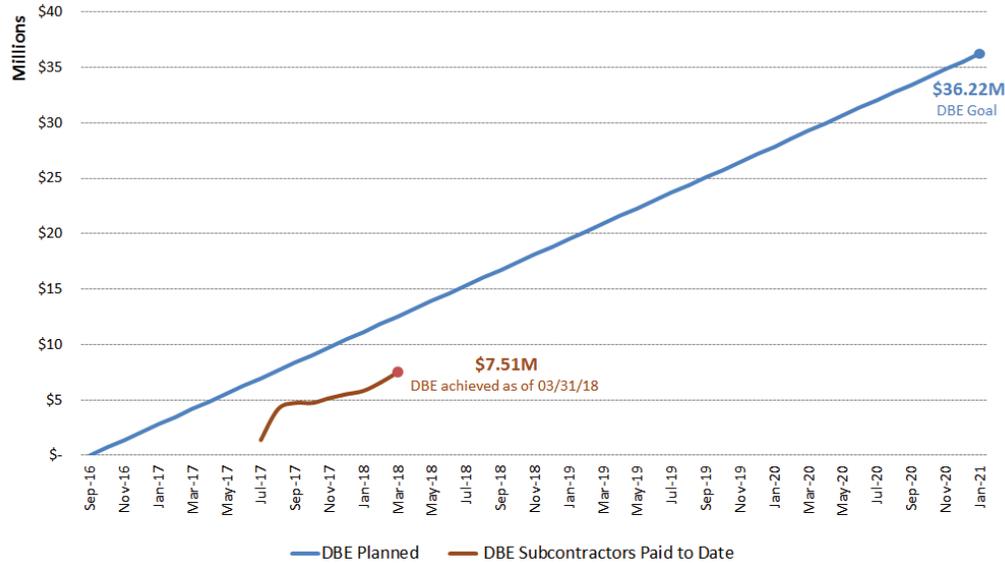


FMC Substation - San Jose

DISADVANTAGED BUSINESS ENTERPRISES (DBE)

Goal of 5.2% (\$36,223,749) of the DB contract

- As of March 31, 2018
 - \$7,508,058 has been paid to DBE subcontractors



Goal of 5.2% (\$36,223,749) of the DB contract

- Contractor will receive incentives when they exceed the 5.2% goal
- A \$300,000 incentive will be paid out for each 1% over the 5.2% goal, up to \$900,000

ELECTRIC MULTIPLE UNITS (EMU)



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EMU

Stadler

- Final Designs Reviews for major systems conducted and being finalized for Caltrain approval
- Carshell fabrication and splicing underway
- Subsystem (e.g. HVAC, Propulsion, Brakes, Doors, Wheelchair Lifts, Passenger Seats, Communication) component manufacturing underway
- Technical and commercial discussions with substitute PTC supplier (Wabtech) commencing
- Manufacturing and Final Assembly Facility construction underway in Salt Lake City, which is expected to be available for first car shell delivery in August 2018



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Stadler's Utah Manufacturing Facility



Prototype Cab HVAC Unit





Upper Carbody and Lower Carbody Subassemblies Coming Together

EMU FTA Buy America Status Update

- 60% of components and subcomponents to be U.S. origin, plus final assembly in U.S.
- Caltrain conducted FTA required Pre-Award Audit May 2016
- Pre-Award Audit concluded Stadler's plan is reasonable to achieve Buy America requirements
- Caltrain conducted Buy America review with Stadler in Salt Lake City March 19-21, 2018
- The current Buy America review concluded Stadler's activities exceed Buy America requirements with a reasonable margin

SCHEDULE



CalMod SCHEDULE

MILESTONES



*Please keep in mind that testing and construction will overlap as each Segment will be tested individually, prior to final system testing.

Note: Schedule Subject to Change



RISK MANAGEMENT



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RISK MANAGEMENT

- Review Cost and Schedule Impacts of Risk Register
- 282 risks; 92 active; 190 retired
- Top Risk: BBII may be unable to develop grade crossing modifications that meet regulatory requirements prior to scheduled testing and commissioning of the consistent warning system

BUDGET & EXPENDITURES



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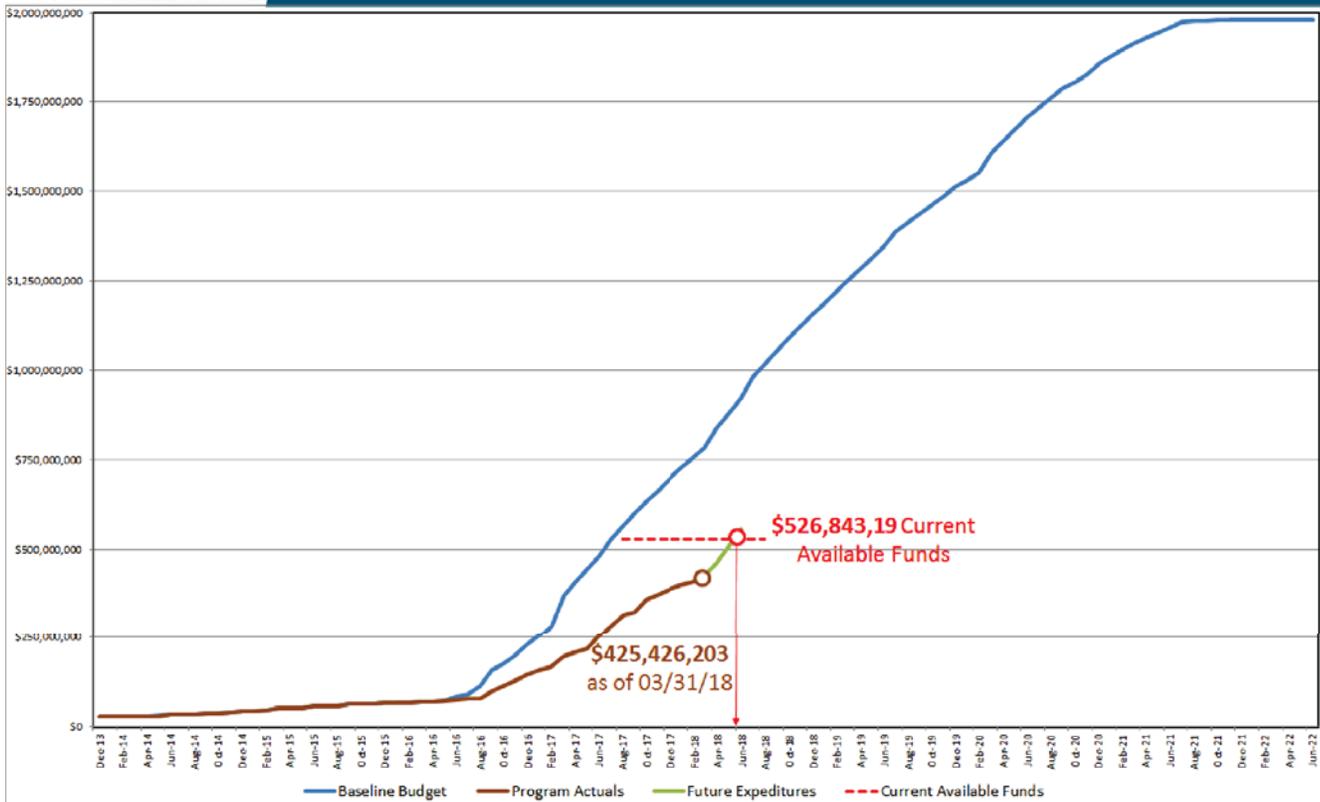
CalMod BUDGET & EXPENDITURES (in millions)

	Budget	Current Budget	FY18 Q3 Costs	Costs to Date	Estimate at Completion
Electrification	\$696.61	\$695.96	\$19.55	\$203.41	\$695.96
SCADA	\$0.00	\$3.45	\$1.38	\$1.38	\$3.45
EMU	\$550.90	\$552.45	\$0.42	\$61.14	\$552.45
PG&E	\$57.22	\$88.49	\$3.55	\$18.09	\$88.49
Separate Contract & Support Costs	\$359.99	\$359.99	\$12.02	\$141.41	\$359.99
Contingency	\$315.53	\$279.93	\$0.00	\$0.00	\$271.88
Anticipated Changes	\$0.00	\$0.00	\$0.00	\$0.00	\$8.05
PCEP Total	\$1,980.25	\$1,980.25	\$36.93	\$425.43	\$1,980.25

Note: Budget / Expenditures as of **March 31, 2018**



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Contracts	Amount	Contingency
Beginning Contingency		\$315,533,611
Drawdown		
Executed Change Orders	\$895,098	
SCADA Contract	\$3,446,917	
PG&E Supplemental #4	\$31,263,082	
Total	\$35,605,097	
Remaining Contingency		\$279,928,514

Note: As of **March 31, 2018**

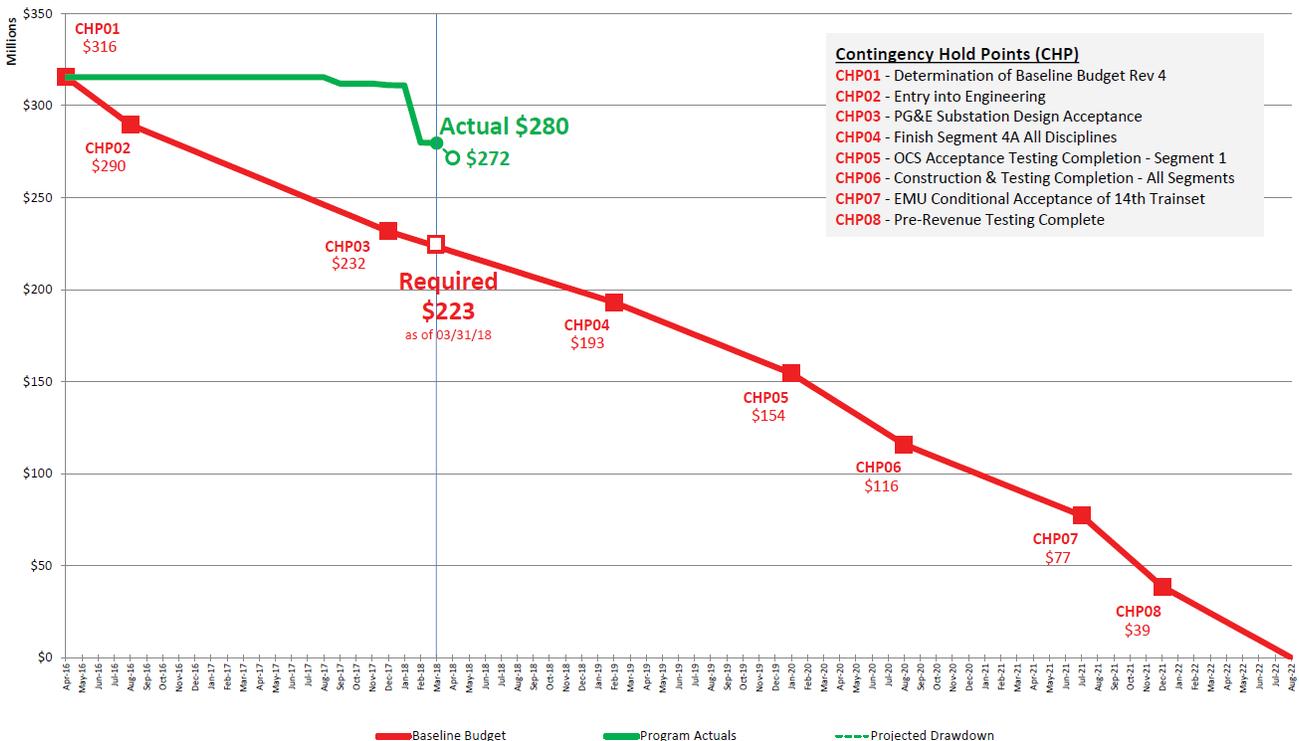
CalMod ANTICIPATED CONTINGENCY DRAWDOWN

Contracts	Amount	Contingency
Remaining Contingency		\$279,928,514
Pending Contingency Drawdown		
Change Orders In Process	\$8,045,864	
Total	\$8,045,864	
Anticipated Remaining Contingency		\$271,882,651

Note: As of March 31, 2018



CalMod CONTINGENCY DRAWDOWN CURVE



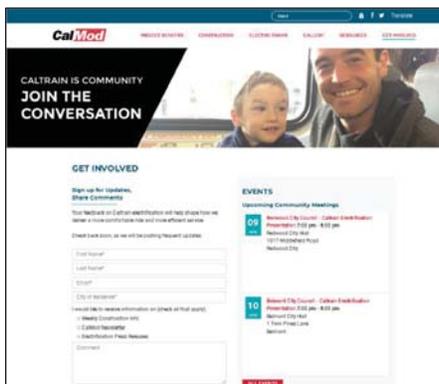
COMMUNITY OUTREACH



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CalMod OUTREACH

- 7 Community Meetings re: Construction
 - (Atherton, SSF, Menlo Park, San Jose, San Jose (North), San Bruno, Millbrae)
- 25,745 Direct Mailers
- Website Updates: CalMod.org



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“Did You Know” Public Education Campaign



13,619 VIDEO VIEWS

677 QUIZ PARTICIPANTS

10,743+ FACEBOOK REACH

32.7% eNEWS CLICK THROUGH RATE

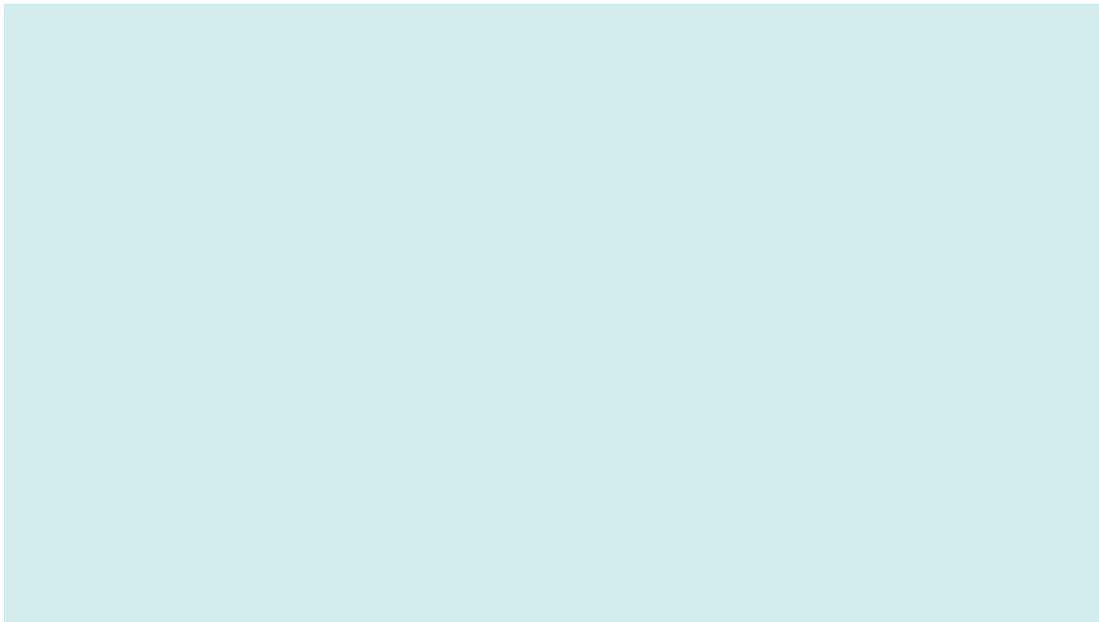
95,841 TWITTER IMPRESSIONS

2,548 WEBSITE USERS

- Share Caltrain history, highlight CalMod, spotlight electrification benefits
- Assets: Short cartoon, Facebook quiz, Social Media graphics

View video at CalMod.org/DYK

Did You Know? - Caltrain and the CalMod Program



Caltrain **CalMod**



QUESTIONS