

June 2023 Report (data through April 2023)



# **Executive Summary**

#### Construction Packages (CP) Design-Build Expenditures (Page 4)

- April 2023 Expenditures totaled \$84.5M:
  - Construction Package 1 (Page 13) Expenditures totaled \$54.0M.
  - Construction Package 2-3 (Page 22) Expenditures totaled \$23.2M.
  - Construction Package 4 (Page 33) Expenditures totaled \$7.3M.
- Total CP Cumulative Actual Expenditures (Pages 12, 21, and 30) \$4,654.9M.
- Total Cumulative Current Contract Amount (Pages 12, 21, and 30) \$6,894.6M.

#### **Change Orders**

- Executed Change Orders this period 14 for a total of \$12.6M:
  - Construction Package 1 (Page 14) One for a total of \$0.1M.
  - Construction Package 2-3 (Page 23) One for a total of \$4.4M
  - Construction Package 4 (Page 34) 12 for a total of \$8.1M.

#### Risk Contingency (Page 5)

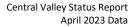
- Approved Contingency \$6,001.6M budgeted contract contingency. Contingency balance is \$2,085.2M as of data date.
  - Construction Package 1 (Page 15) \$2,791.6M budgeted contract contingency. Contingency balance is \$878.3M as of data date.
  - Construction Package 2-3 (Page 24) \$2,691.5M budgeted contract contingency. Contingency balance is \$1,076.1M as of data date.
  - Construction Package 4 (Page 35) \$518.5M budgeted contract contingency. Contingency balance is \$130.8M as of data date.

## CP Construction Labor (Page 6)

- April 2023, Average Daily Site Workers (by Week) 1,246 workers. An increase of 277 workers from the previous period (969):
  - Construction Package 1 (Page 16) 285 workers. An increase of 53 workers from the previous month (232).
  - Construction Package 2-3 (Page 25) 699 workers. An increase of 140 workers from the previous month (559).
  - Construction Package 4 (Page 36) 262 workers. An increase of 84 workers from the previous month (178).
- Contractors continued with construction while following safety protocols and guidelines from the Centers for Disease Control and Prevention (CDC) and Occupational Safety and Health Administration (OSHA).

## CP Construction Progress (Page 7)

- Structures 70 underway/construction complete compared to 93 structures (75%) total. No change from the previous period.
  - Construction Package 1 26 structures underway/construction complete.
  - Construction Package 2-3 33 structures underway/construction complete.
  - Construction Package 4 11 structures underway/construction complete.
- Guideway 90 miles underway/construction complete compared to 119 miles (76%) total. No change from the previous period.
  - Construction Package 1 20 miles underway/construction complete.
  - Construction Package 2-3 48 miles underway/construction complete.
  - Construction Package 4 22 miles underway/construction complete.



#### CALIFORNIA High-Speed Rail Authority

## Utility Relocations Status (Page 8)

- Relocated: 1,034 (56%); In Progress: 374 (21%); Approved to Start: 22 (1%); Not Started: 406 (22%); Total: 1,836. A total of 16 relocated in April 2023. A sequence of activities must be completed to begin utility relocation work. These activities include environmental clearance, executed third-party agreement(s), design approval, construction work plans, pre-construction walkthroughs, acquisition of real property, and/or land right conveyances:
  - Construction Package 1 Relocated: 473 (48%); In Progress: 301 (30%); Approved to Start: 0 (0%); Not Started: 218 (22%); Total: 992.
  - Construction Package 2-3 Relocated: 453 (65%); In Progress: 60 (8%); Approved to Start: 0 (0%); Not Started: 188 (27%); Total: 701.
  - Construction Package 4 Relocated: 108 (76%); In Progress: 13 (9%); Approved to Start: 22 (15%); Not Started: 0 (0%); Total: 143.

## CP Real Property/Right-of-Way (ROW) (Pages 10 - 11)

- Total Parcels Delivered to Date 2,222 parcels compared to an estimated 2,293 parcels needed.
- Parcels Delivered to Design-Builder (DB) Zero parcels in April 2023.
- Construction Packages 1-4 One parcel added for CP 2-3 and eight parcels removed for CP 4. The Authority continues to receive requests for additional parcels primarily related to third-party requirements. The Authority reviews these as received and if merit is found, those parcels will be added and acquired per contractual terms.
- Railroad Parcels Delivered to Design-Builder Zero parcels in April 2023.
- Total Railroad Parcels Delivered to Date 144 parcels delivered compared to an estimated 171 total railroad parcels needed.

## Project Development (Environmental Clearance) Schedule – Notice of Determination (NOD)/Record of Decision (ROD) (Pages 41 - 42)

- San Francisco to San Jose Work through NOD/ROD has been completed. Staff finalizing the Administrative Record.
- San Jose to Merced Work through NOD/ROD has been completed. Staff finalizing the Administrative Record.
- Bakersfield to Palmdale Work through NOD/ROD has been completed. Continued meeting with key stakeholders, including the Center for Biological Diversity.
- Palmdale to Burbank Regional Consultant has prepared and delivered for Authority review a draft version of the Administrative Final EIR/EIS to be submitted to the Cooperating Agencies.
- Burbank to Los Angeles Work through NOD/ROD has been completed. Project closeout activities are ongoing.
- Los Angeles to Anaheim Admin Draft scheduled for spring 2024. NOD/ROD anticipated in late 2025.

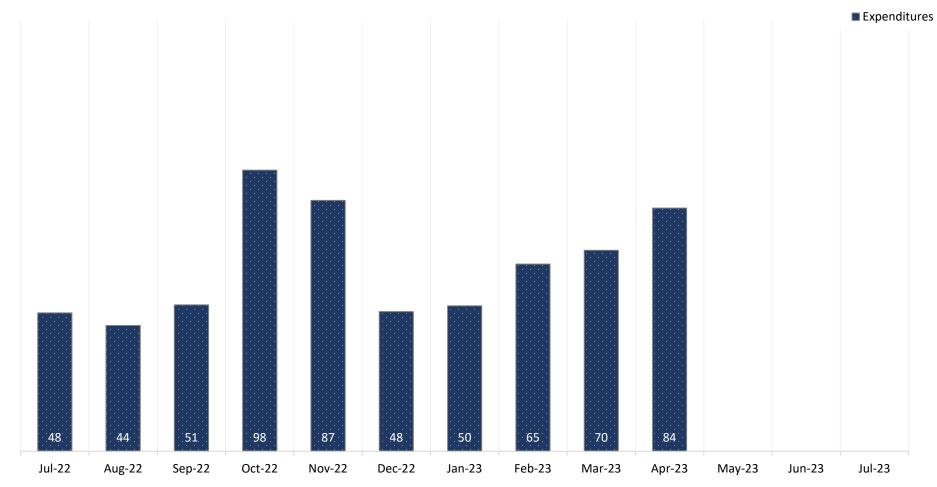
## Project Development (Post-Record of Decision) Schedule (Page 42)

- Merced Extension (Merced to Madera) Stantec Inc., under Agreement HSR 22-02, continues to make progress on the early actions of this Project, including submittal of various draft documents such as the Project Management Plan-Draft.
- Fresno to Bakersfield Locally Generated Alternative (LGA) HNTB Corporation (HNTB), under agreement HSR 22-01, continues to make progress on the early actions of this Project, including submittal of various draft documents such as the Project Management Plan and the BNSF Shoofly Alignment - Draft.



# **CP 1-4 – Design-Build Expenditures**

CP 1-4 – Monthly Expenditures (\$ Millions)



#### Notes:

1. April 2023 Expenditures totaled \$84.5M:

a. Construction Package 1 – Expenditures totaled \$54.0M.

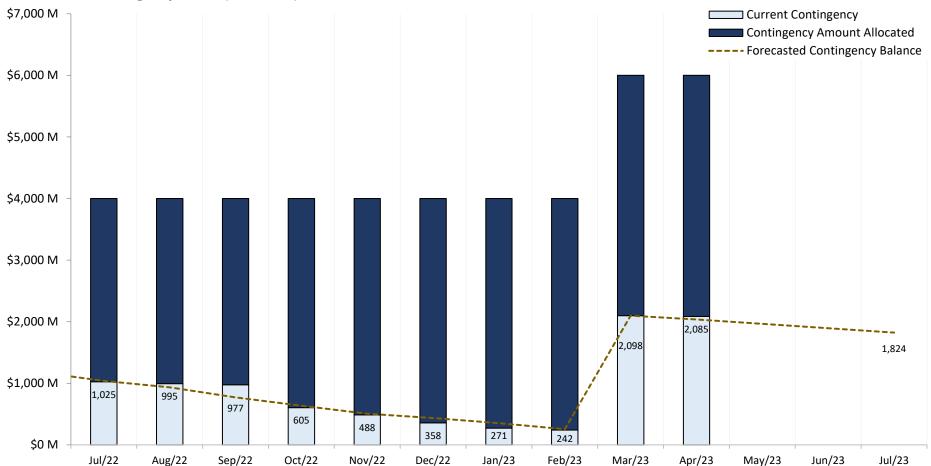
b. Construction Package 2-3 – Expenditures totaled \$23.2M.

c. Construction Package 4 – Expenditures totaled \$7.3M.



# **CP 1-4 – Risk Contingency**

## CP 1-4 – Risk Contingency Status (\$ Millions)



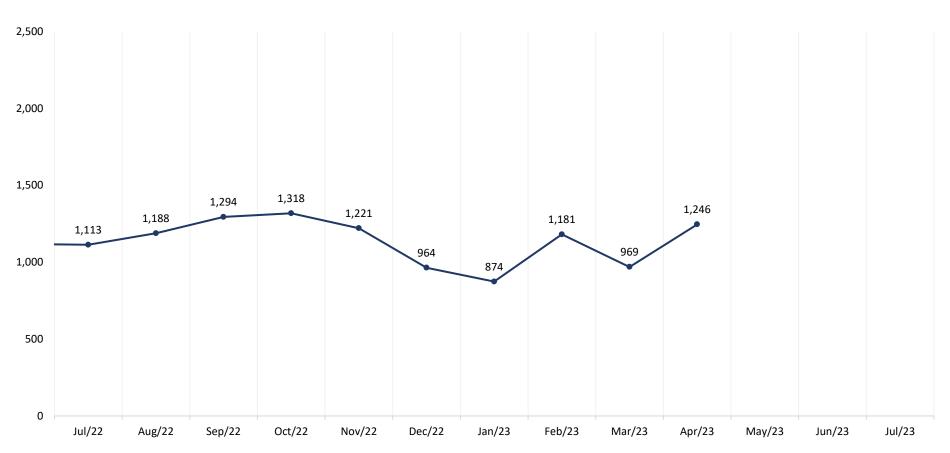
- 1. March 2023 reflects the March 16, 2023 Board Expenditure Authorization which increased the total Program Contingency to \$6,001.6M.
- 2. Contingency balance updated to reflect the Board's adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
- 3. Contingency Amount Allocated reflects all executed change orders and Business Oversight Committee (BOC) approved items for all CPs.
- 4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations, and dispute resolution, timing and value of Forecasted Contingency Balance is uncertain.



## **CP 1-4 – Construction Labor**







#### Notes:

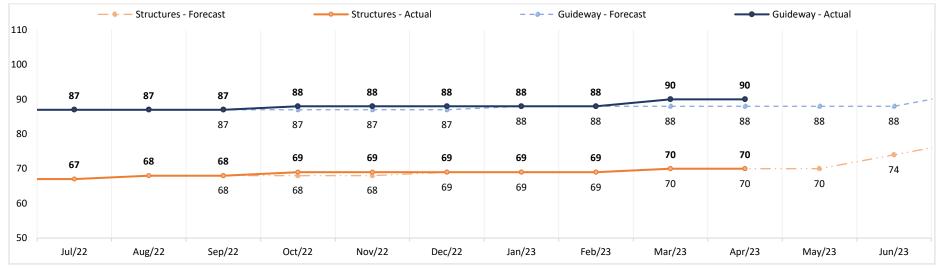
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).

- 2. April 2023, Average Daily Site Workers (by week) 1,246 workers. An increase of 277 workers from the previous period (969).
  - a. Construction Package 1 (Page 16) 285 workers. An increase of 53 workers from the previous month (232).
  - b. Construction Package 2-3 (Page 24) 699 workers. An increase of 140 workers from the previous month (559).
  - c. Construction Package 4 (Page 34) 262 workers. An increase of 84 workers from the previous month (178).



# **CP 1-4 – Construction Progress**

## CP 1-4 – Construction Progress to Completion – Forecast vs. Actual



#### Monthly Construction Status - In Progress vs. Completed

Construction	CP 1		СР	CP 2-3 CP 4		P 4	Overall		Total
	In Progress	Completed	In Progress	Completed	In Progress	Completed	In Progress	Completed	
Guideway	18	2	15	33	7	15	40	50	90
Structures	9	17	19	14	0	11	28	42	70

#### Notes:

5.

- 1. Construction Complete definition:
  - a. Structure Completion all concrete work is complete.
  - b. Guideway Completion earthworks complete with rough grading.
- 2. Total Structures: 93
- 3. Structures 70 underway/construction complete compared to 93 structures total. (75%). No change from the previous period.
  - a. CP 1 26 structures underway/construction complete.
  - b. CP 2-3 33 structures underway/construction complete.
  - c. CP 4 11 structures underway/construction complete.
- 4. Total Guideway: approximately 119 miles
  - Guideway 90 miles underway/construction complete compared to 119 miles total. (76%). No change from the previous period.
  - a. CP 1 20 miles underway/construction complete.
  - b. CP 2-3 48 miles underway/construction complete.
  - c. CP 4 22 miles underway/construction complete. The actual miles for CP 4 are 21.5 miles but rounded to 22 miles for consistency in reporting.

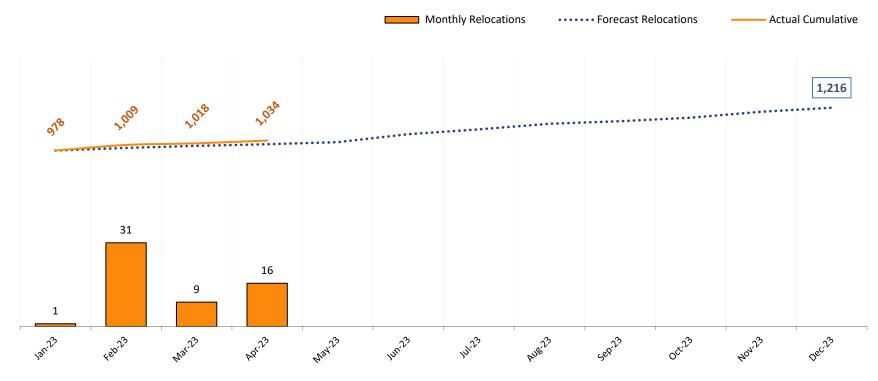


# **CP 1-4 – Utility Relocations**

## **CP 1-4 – Utility Relocation Summary**

Construction Package	Total Relocations April 30, 2023	Total Utilities Relocated to Date April 30, 2023	Remaining Utility Relocations April 30, 2023
CP 1	992	473	519
CP 2-3	701	453	248
CP 4	143	108	35
Total	1,836	1,034	802

## CP 1-4 – Utility Relocation Status Summary-Monthly



#### Notes:

1. Updated utility goal numbers for 2023.



# **CP 1-4 – Utility Relocation Summary**

Data as of April 30, 2023

CP 1-4 – Summary by Utility Type

Utility	Status	CP-1	CP-2-3	CP-4	CP 1-4 Total	Percentage
	NOT STARTED	93	114	1	208	32%
<b>F</b> L	IN PROGRESS	23	52	6	81	12%
Electric	RELOCATED	99	218	55	372	56%
	TOTAL Electric Utilities	215	384	62	661	100%
	NOT STARTED	25	12	0	37	30%
	IN PROGRESS	22	0	0	22	17%
Gas	RELOCATED	44	15	7	66	53%
	TOTAL Gas Utilities	91	27	7	125	100%
	NOT STARTED	46	31	0	77	11%
	IN PROGRESS	153	3	4	160	24%
Telecom	RELOCATED	216	199	29	444	65%
	TOTAL Telecom Utilities	415	233	33	681	100%
	NOT STARTED	54	31	21	106	29%
	IN PROGRESS	103	5	3	111	30%
Wet	RELOCATED	114	21	17	152	41%
	TOTAL Wet Utilities	271	57	41	369	100%

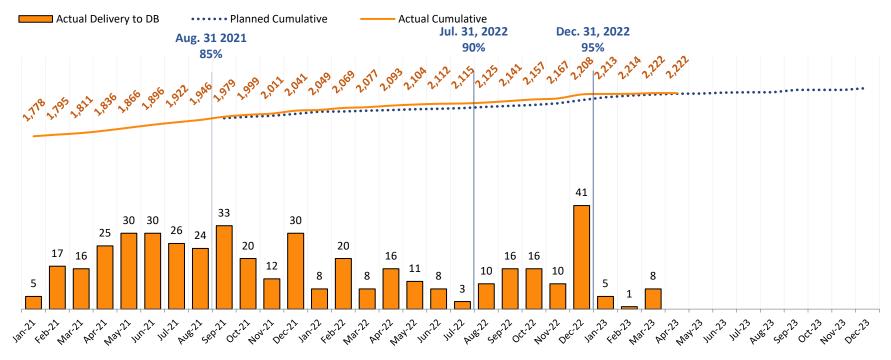


# CP 1-4 – Real Property/Right-of-Way (ROW)

#### CP 1-4 - Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels April 30, 2023	Total Parcels Delivered to Date April 30, 2023	Remaining Parcels to be Delivered April 30, 2023
CP 1	1,083	1,062	21
CP 2-3	987	939	48
CP 4	223	221	2
Total	2,293	2,222	71

## CP 1-4 – Parcel Delivery to Design-Builder (DB) Summary



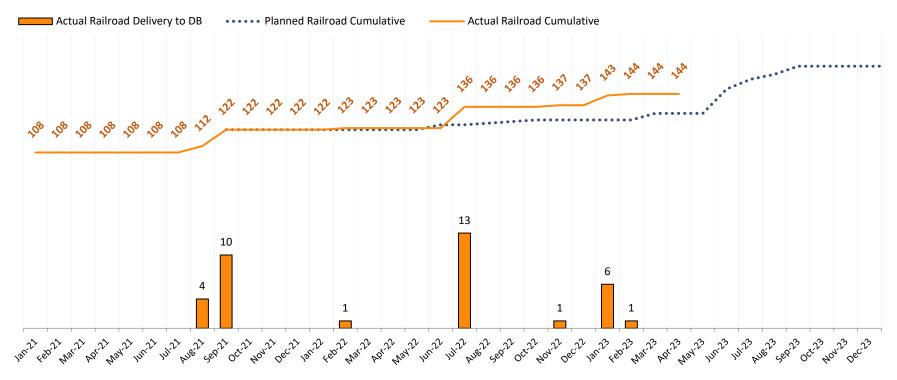
- 1. This reflects the actual parcels delivered to the Design-Builder by month compared to the planned delivery schedule which identifies 90% and 95% milestone completion for CP 1-4.
- 2. Delivery to Design Builder 90% milestone completion was achieved for CP 1-4 in March 2022.
- 3. Real Property delivered 41 parcels in December 2022 which brings the total percentage of parcels delivered to 96%, surpassing their goal of 95% by the end of December 2022.
- 4. For CP 4, Total Parcels Needed for Substantial Completion were reduced by eight parcels in April 2023.
- 5. Total Parcels Needed was reduced by seven parcels in April 2023.

# CP 1-4 – Real Property/Right-of-Way (ROW) Railroad

## CP 1-4 - Right-of-Way (ROW) Railroad Summary

Construction Package	Total Needed Railroad Parcels April 30, 2023	Total Railroad Parcels Delivered to Date April 30, 2023	Remaining Railroad Parcels to be Delivered April 30, 2023
CP 1	84	64	20
CP 2-3	58	51	7
CP 4	29	29	0
Total	171	144	27

## CP 1-4 – Railroad Parcel Delivery to Design-Builder (DB) Summary



#### Notes:

1. This reflects the actual Railroad parcels delivered to the Design-Builder by month and forecasts based on Revised Baseline Schedules (RBS) Revision 4.



# CONSTRUCTION PACKAGE 1 (CP 1) OVERVIEW

## CP 1 – Design-Build Contract Summary<sup>(1)</sup>

#### Milestones

Milestone	Date
Request for Quote (RFQ) Date:	11/15/2011
Statement of Qualification (SOQ) Date:	12/19/2011
Request for Proposal (RFP) Date:	03/22/2012
Proposal:	01/18/2013
Bid Open Date:	04/13/2013
Award Date:	08/16/2013
Notice to Proceed (NTP) 1 Date:	10/15/2013
Notice to Proceed (NTP) 2 Date:	11/22/2013
Notice to Proceed (NTP) 3 Date:	07/11/2014
Original Completion Date:	03/31/2018
Current Forecast Contract Completion Date <sup>(2)</sup> :	03/05/2026 <sup>(5)</sup>
Current Forecast Construction Completion Date <sup>(2)</sup> :	12/31/2025

Contract Value	
Description	Amount
Fixed Bid Price:	\$969,988,000.00
Provisional Sums:	\$53,000,000.00
Original Contract Price:	\$1,022,988,000.00
Executed Change Orders:	\$2,229,053,548.47
Current Contract Amount <sup>(4)</sup> :	\$3,252,041,548.47
Approved Invoices to Date:	\$2,033,059,454.17
Remaining Contract Balance:	\$1,218,982,094.30

#### **Contract Time Status**

Description	Duration
Original Contract Days:	1,628
Extension of Time Awarded <sup>(3)</sup> :	2,832
Current Forecast Contract Days <sup>(3)</sup> :	4,460
Calendar Days Worked (thru 04/30/2023):	3,484

#### Expended to Date

Description	Percentage
Time <sup>(3)</sup> :	78.1%
Dollars <sup>(4)</sup> :	62.5%

#### **Growth Percentage**

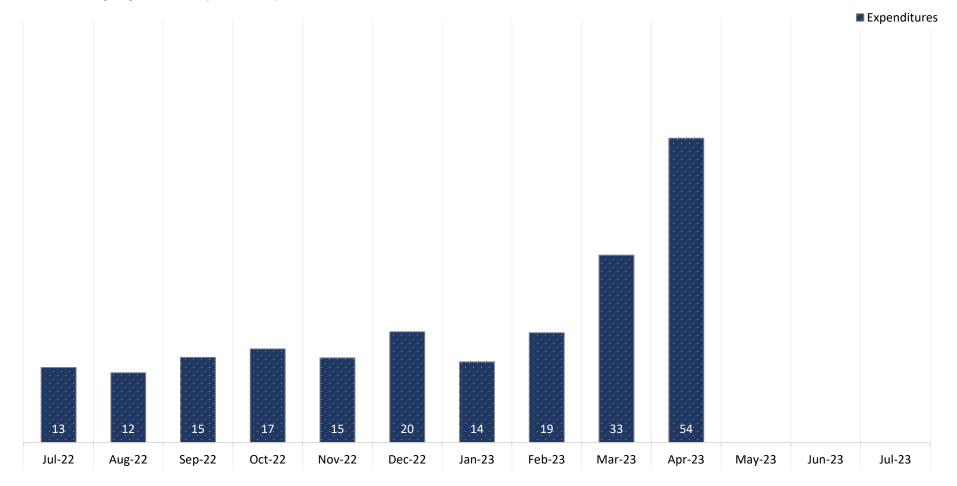
Description	Percentage
Time <sup>(3)</sup> :	174.0%
Dollars <sup>(4)</sup> :	217.9%

- 1. Data in this section is sourced from data provided by the PCM Monthly Status Report.
- 2. Updated per the accepted Revised Baseline Schedule (RBS) Revision 4.
- 3. Contract Time Status (Extension of Time Awarded and Current Contract Days), Expended to Date (Time), and Growth Percentage (Time) calculation is based on the Current Forecast Construction Completion Date.



# **CP 1 – Design-Build Expenditures**

**CP 1 – Monthly Expenditures (\$ Millions)** 



#### Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.

2. Expenditures totaled \$54.0M.



# CP 1 – Change Orders (CO)

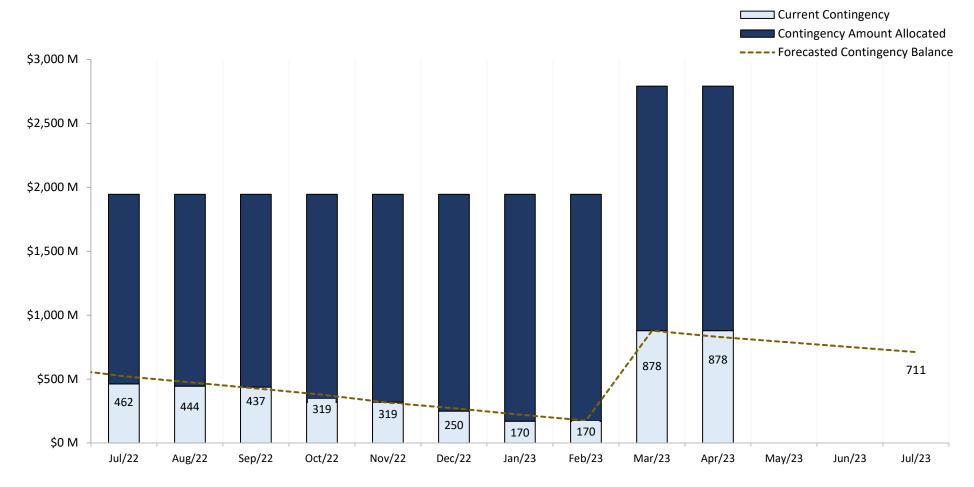
## **CP 1 – Change Order Status**

CO Number	Title	Change Status	Amount	Executed Date
489	Manhole on McKinley and GSB - Construction	Executed	\$125,376.00	04-24-23
	TOTAL		\$125,376.00	



# **CP 1 – Risk Contingency**

## CP 1 – Risk Contingency Status (\$ Millions)

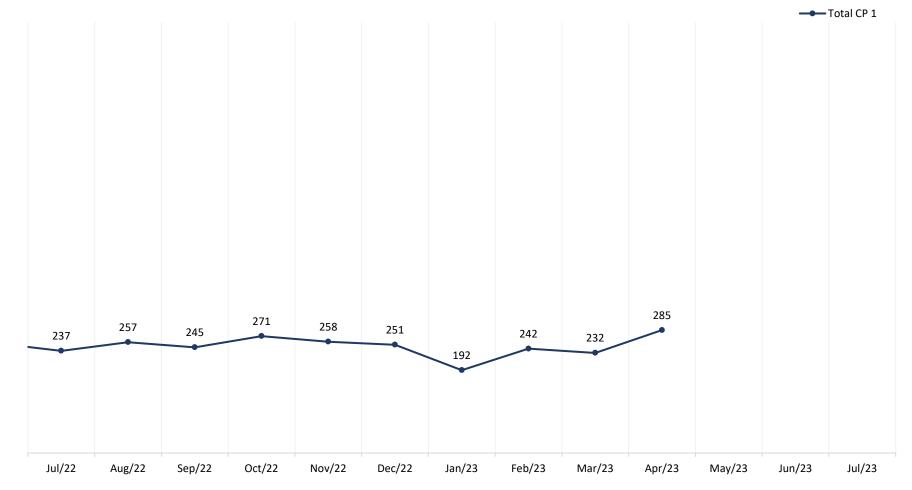


- 1. March 2023 reflects the March 16, 2023 Board Expenditure Authorization which increased the total CP 1 Contingency to \$2,791.6M.
- 2. Contingency balance updated to reflect the Board's adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
- 3. Contingency Amount Allocated reflects executed change orders and Business Oversight Committee (BOC) approved items.
- 4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations and dispute resolution, timing and value of Forecasted Contingency Balance can vary.



# **CP 1 – Monthly Construction Labor**

## CP 1 – Monthly Construction Workforce Total – Actual (FTE)



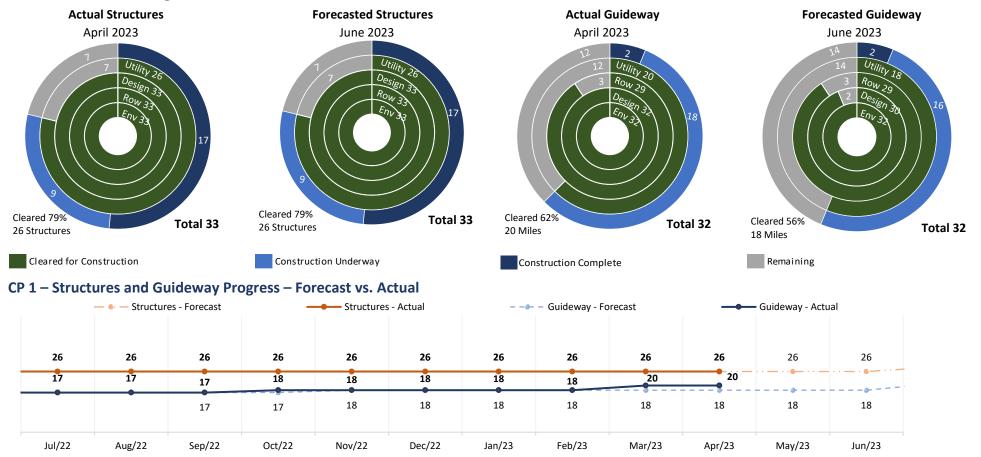
#### Notes:

1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).

2. An increase of 53 workers from the previous month (232).

# **CP 1 – Construction Progress**

#### **CP 1 – Construction Progress**



- 1. The circle charts above incorporate Revised Baseline Schedules (RBS4) accepted schedule.
- 2. Construction Complete definition:
  - a. Structure Completion all concrete work is complete.
  - b. Guideway Completion earthworks complete with rough grading.
- 3. Total Structures: 33:
  - a. 26 structures underway/construction complete.
- 4. Total Guideway: 32 miles.
  - a. 20 miles underway/construction complete.
- 5. There are 32 miles of guideway approved by the Authority, but 2.5 miles (Caltrans section) has not been approved by Union Pacific Railroad (UPRR). Update: UPRR has approved the Caltrans 2.5 miles at 60% Design with 90% Design progressing. The Caltrans 2.5 mile IPB Work Plan has been approved and work commenced February 2023.
- 6. Late finish dates are being used to estimate forecast numbers.



# **CP 1 – Utility Relocation Summary**

Data as of April 30, 2023

## CP 1 - High Level Summary

Status	Utility Relocations	Percentage
Total Utilities Not Started	218	22%
Total Utilities in Progress	301	30%
Total Utilities Relocated	473	48%
Total Utilities	992	100%

## **CP 1 – Summary by Utility Type**

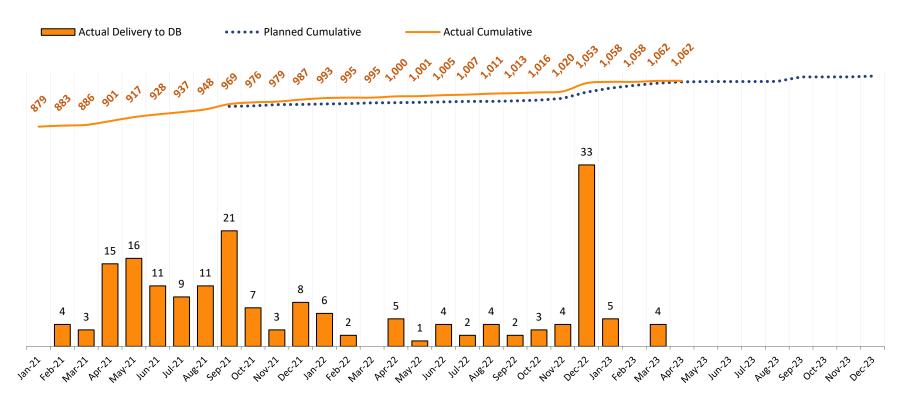
Utility	Status	Utility Relocations	Percentage
	NOT STARTED	93	43%
Electric	IN PROGRESS	23	11%
Electric	RELOCATED	99	46%
	<b>TOTAL Electric Utilities</b>	215	100%
	NOT STARTED	25	28%
Cas	IN PROGRESS	22	24%
Gas	RELOCATED	44	48%
	TOTAL Gas Utilities	91	100%
	NOT STARTED	46	11%
Telecom	IN PROGRESS	153	37%
Telecom	RELOCATED	216	52%
	<b>TOTAL Telecom Utilities</b>	415	100%
	NOT STARTED	54	20%
Wet	IN PROGRESS	103	38%
vvet	RELOCATED	114	42%
	TOTAL Wet Utilities	271	100%

# CP 1- Real Property/Right-of-Way (ROW)

## CP 1 – Right-of-Way (ROW) Summary

Construction Package		Total Needed Parcels	Total Parcels Delivered to Date	Remaining Parcels to be Delivered
		April 30, 2023	April 30, 2023	April 30, 2023
	CP 1	1,083	1,062	21

## CP 1 – Parcel Delivery to Design-Builder (DB) Summary



#### Notes:

1. This reflects the actual parcels delivered to the Design-Builder by month and forecasts based on Revised Baseline Schedules (RBS) Revision 4.

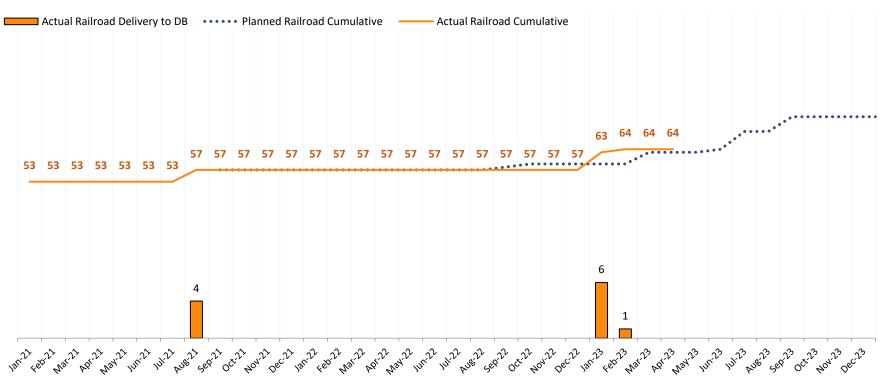


# CP 1 – Real Property/Right-of-Way (ROW) Railroad

#### CP 1 – Right-of-Way (ROW) Railroad Summary

Construction Package	Total Needed Railroad Parcels	Total Railroad Parcels Delivered to Date	Remaining Railroad Parcels to be Delivered
	April 30, 2023	April 30, 2023	April 30, 2023
CP 1	84	64	20

## CP 1 – Railroad Parcel Delivery to Design-Builder (DB) Summary



Note:

1. This reflects the actual Railroad parcels delivered to the Design-Builder by month and forecasts based on Revised Baseline Schedules (RBS) Revision 4.



# **CONSTRUCTION PACKAGE 2-3 (CP 2-3) OVERVIEW**

## CP 2-3 – Design-Build Contract Summary<sup>(1)</sup>

#### Milestones

Milestone	Date
Request for Quote (RFQ) Date:	10/09/2013
Statement of Qualification (SOQ) Date:	12/13/2013
Request for Proposal (RFP) Date:	04/03/2014
Proposal:	10/30/2014
Bid Open Date:	12/11/2014
Award Date:	06/10/2015
Late Notice to Proceed (LNTP) Date:	06/12/2015
Notice to Proceed (NTP) Date:	07/25/2015
Original Completion Date:	08/19/2019
Current Forecast Contract Completion Date <sup>(2)</sup> :	05/21/2026
Current Forecast Construction Completion Date <sup>(2)</sup> :	03/21/2026

Contract Value
----------------

Description	Amount	
Fixed Bid Price:	\$1,205,335,890.00	
Provisional Sums:	\$160,000,000.00	
Original Contract Price:	\$1,365,335,890.00	
Executed Change Orders:	\$1,542,865,668.59	
Current Contract Amount <sup>(4)</sup> :	\$2,908,201,558.59	
Approved Invoices to Date:	\$1,965,811,009.47	
Remaining Contract Balance:	\$942,390,549.12	

#### Contract Time Status

Description	Duration
Original Contract Days:	1,486
Extension of Time Awarded <sup>(3)</sup> :	2,406
Current Forecast Contract Days <sup>(3)</sup> :	3,892
Calendar Days Worked (thru 04/30/2023):	2,836

#### Expended to Date Percentage

Description	Percentage
Time <sup>(3)</sup> :	72.9%
Dollars <sup>(4)</sup> :	67.6%

Growth	Percentage

Description	Percentage	
Time <sup>(3)</sup> :	161.9%	
Dollars <sup>(4)</sup> :	113.0%	

#### Notes:

1. Data in this section is sourced from data provided by the PCM – Monthly Status Report.

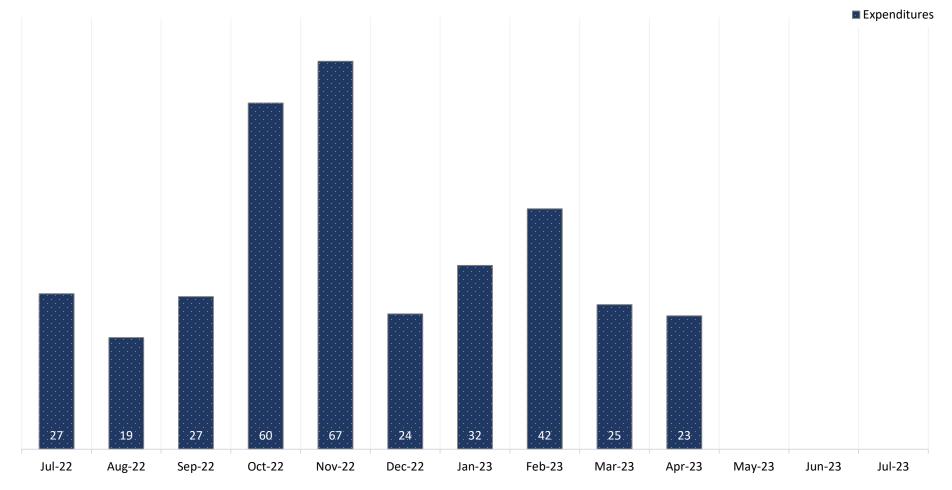
2. Updated per the conditionally accepted Revised Baseline Schedule (RBS) Revision 4.

3. Contract Time Status (Extension of Time Awarded and Current Contract Days), Expended to Date (Time), and Growth Percentage (Time) calculation is based on the Current Forecast Construction Completion Date.



# **CP 2-3 – Design-Build Expenditures**

## CP 2-3 – Monthly Expenditures (\$ Millions)



#### Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.

2. Expenditures totaled \$23.2M.



# CP 2-3 – Change Orders (CO)

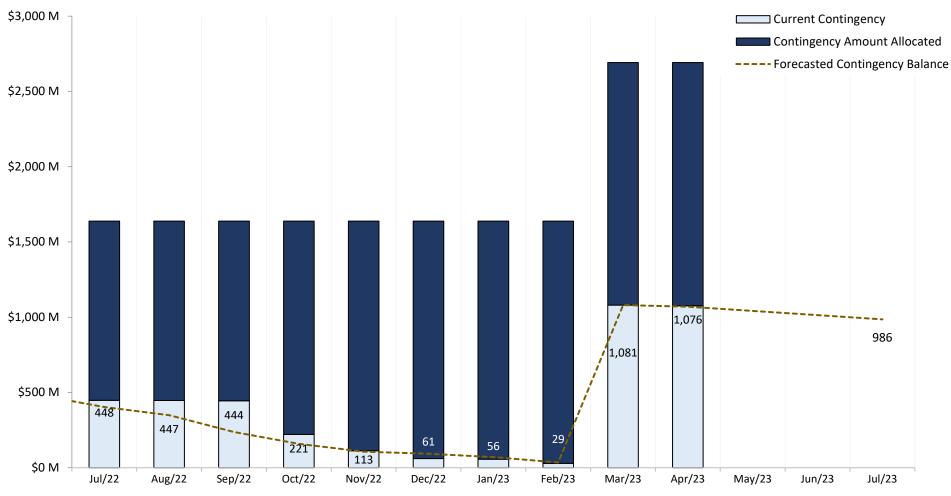
## CP 2-3 – Change Order Status

CO Number Title		Change Status	Amount	Executed Date
342	Cole Slough Temporary Trestle – Time and Material Change Order	Executed	\$4,438,305.00	04-24-23
	TOTAL		\$4,438,305.00	



# CP 2-3 – Risk Contingency

## CP 2-3 – Risk Contingency Status (\$ Millions)

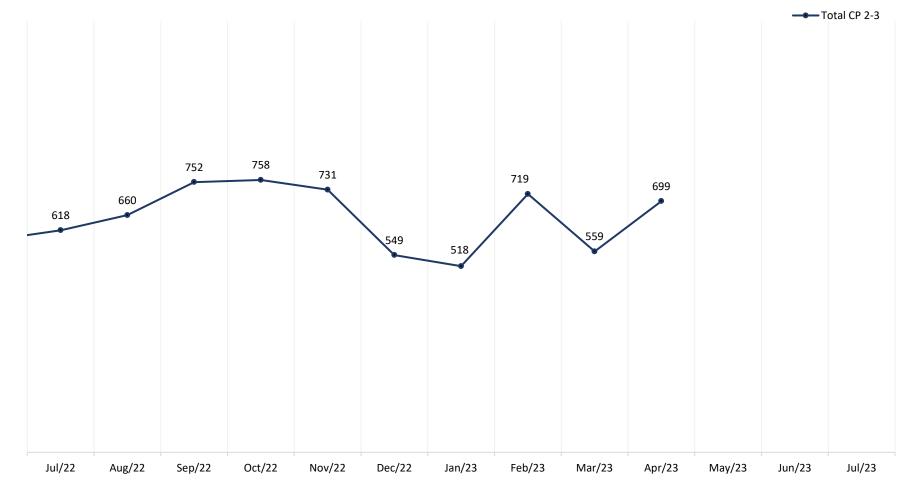


- 1. March 2023 reflects the March 16, 2023 Board Expenditure Authorization which increased the total CP 2-3 Contingency to \$2,691.5M.
- 2. Contingency balance updated to reflect the Board's adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
- 3. Contingency Amount Allocated reflects executed change orders and Business Oversight Committee (BOC) approved items.
- 4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations and dispute resolution, timing and value of Forecasted Contingency Balance is uncertain.



# **CP 2-3 – Monthly Construction Labor**

## CP 2-3 – Monthly Construction Workforce Total – Actual (FTE)



Notes:

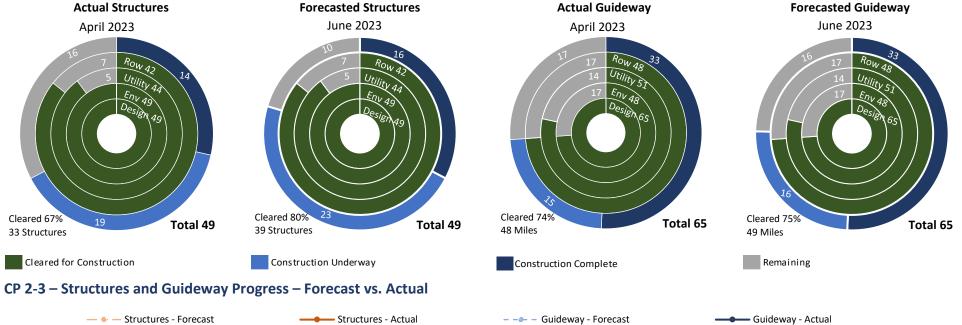
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).

2. An increase of 140 workers from the previous month (559).

3. Flood waters continue to impact labor numbers.

# **CP 2-3 – Construction Progress**

#### **CP 2-3 – Construction Progress**



	— • — Structur	es - Forecast	_	Structures	- Actual	8-	– Guideway - Fo	orecast		- Guideway - Actu	al
48	48	48	48	48	48	48	48	48	48	48	48
30	31	31	32	32	32	32	32	33	33		
		31	32	32	32	32	32	32	32	32	36
Jul/22	Aug/22	Sep/22	Oct/22	Nov/22	Dec/22	Jan/23	Feb/23	Mar/23	Apr/23	May/23	Jun/23

- 1. The circle charts above incorporate Revised Baseline Schedules (RBS) Revision 4 data as of September 2022, pending final approval.
- 2. The line chart above incorporates provisional forecast numbers as of September 2022, pending final approval of RBS Revision 4.
- 3. Construction Complete definition:
  - a. Structure Completion all concrete work is complete.
  - b. Guideway Completion earthworks complete with rough grading.
- 4. Total Structures: 49:
  - a. 33 structures underway/construction complete.
- 5. Total Guideway: 65 miles:
  - a. 48 miles underway/construction complete.
- 6. Late finish dates are being used to estimate forecast numbers.



# **CP 2-3 Utility Relocation Summary**

Data as of April 30, 2023

## CP 2-3 - High Level Summary

Status	Utility Relocations	Percentage
Total Utilities Not Started	188	27%
Total Utilities in Progress	60	8%
Total Utilities Relocated	453	65%
Total Utilities	701	100%

## CP 2-3 – Summary by Utility Type

Utility	Status	Utility Relocations	Percentage
	NOT STARTED	114	30%
Electric	IN PROGRESS	52	13%
Electric	RELOCATED	218	57%
	TOTAL Electric Utilities	384	100%
	NOT STARTED	12	44%
Gas	IN PROGRESS	0	0%
Gas	RELOCATED	15	56%
	TOTAL Gas Utilities	27	100%
	NOT STARTED	31	13%
Telecom	IN PROGRESS	3	1%
relecom	RELOCATED	199	86%
	TOTAL Telecom Utilities	233	100%
	NOT STARTED	31	54%
Wet	IN PROGRESS	5	9%
vvet	RELOCATED	21	37%
	TOTAL Wet Utilities	57	100%

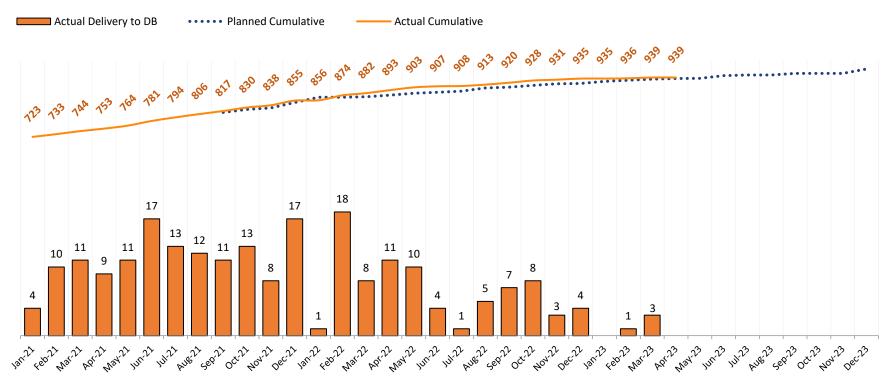


# CP 2-3 – Real Property/Right-of-Way (ROW)

#### CP 2-3 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels	Total Parcels Delivered to Date	Remaining Parcels to be Delivered	
	April 30, 2023	April 30, 2023	April 30, 2023	
CP 2-3	987	939	48	

#### CP 2-3 – Parcel Delivery to Design-Builder (DB) Summary



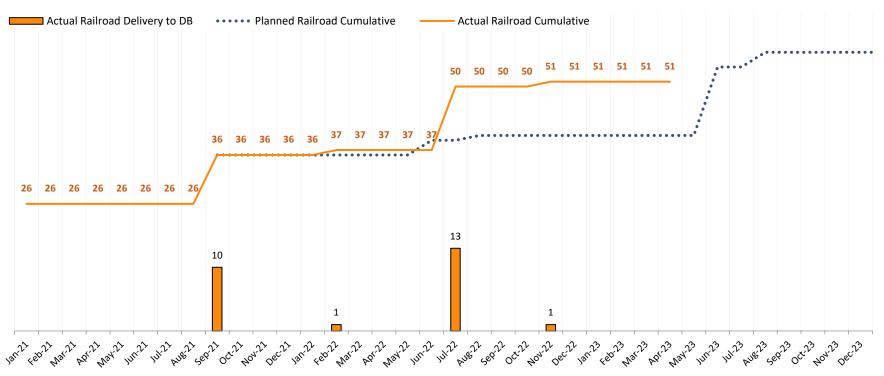
- 1. This reflects the actual parcels delivered to the Design-Builder by month and forecasts based on Revised Baseline Schedules (RBS) Revision 4.
- 2. Total Parcels Needed increased by one parcel in April 2023.

# CP 2-3 – Real Property/Right-of-Way (ROW) Railroad

## CP 2-3 – Right-of-Way (ROW) Railroad Summary

Construction Package	Total Needed Railroad Parcels	Total Railroad Parcels Delivered to Date	Remaining Railroad Parcels to be Delivered		
	April 30, 2023	April 30, 2023	April 30, 2023		
CP 2-3	58	51	7		

## CP 2-3 – Railroad Parcel Delivery to Design-Builder (DB) Summary



#### Notes:

1. This reflects the actual Railroad parcels delivered to the Design-Builder by month and forecasts based on Revised Baseline Schedules (RBS) Revision 4.



# **CONSTRUCTION PACKAGE 4 (CP 4) OVERVIEW**

## CP 4 – Design-Build Contract Summary<sup>(1)</sup>

#### Milestones

Milestone	Date
Request for Quote (RFQ) Date:	11/20/2014
Statement of Qualification (SOQ) Date:	01/30/2015
Request for Proposal (RFP) Date:	05/27/2015
Proposal:	11/25/2015
Bid Open Date:	01/05/2016
Award Date:	02/29/2016
Late Notice to Proceed (LNTP) Date:	03/01/2016
Notice to Proceed (NTP) Date:	04/15/2016
Original Completion Date:	06/03/2019
Current Forecast Contract Completion Date <sup>(2)</sup> :	Dec 2023
Current Forecast Construction Completion Date <sup>(3)</sup> :	Aug 2023

#### Contract Value

Description	Amount
Fixed Bid Price:	\$337,247,000.00
Provisional Sums:	\$107,000,000.00
Original Contract Price:	\$444,247,000.00
Executed Change Orders:	\$290,084,119.94
Current Contract Amount:	\$734,331,119.94
Approved Invoices to Date:	\$655,990,963.68
Remaining Contract Balance:	\$78,340,156.26

#### **Current Time Status**

Description	Duration
Original Contract Days:	1,144
Extension of Time Awarded:	1,548
Current Forecast Contract Days:	2,692
Calendar Days Worked (thru 04/30/2023):	2,571

#### **Expended to Date**

Description	Percentage
Time:	95.5%
Dollars:	89.3%

#### **Growth Percentage**

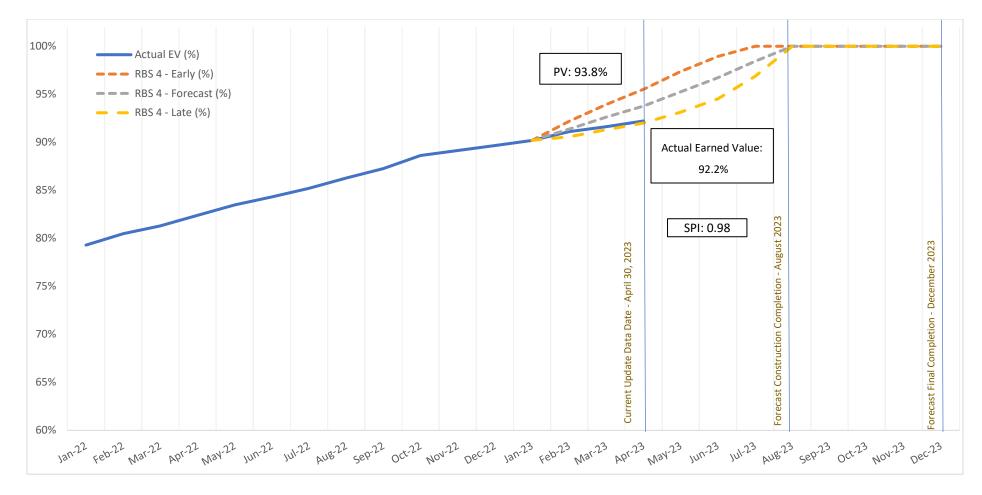
Description	Percentage
Time:	135.3%
Dollars:	65.3%

- 1. Data in this section is sourced from data provided by the PCM Monthly Status Report.
- 2. Updated to align with Current Forecast Contract Completion Date based on Expenditure Authorization.
- 3. Expenditure Authorization Current Forecast Construction Completion Date of August 2023.
- 4. Contract Time Status (Extension of Time Awarded and Current Forecast Contract Days), Expended to Date (Time), and Growth Percentage (Time) calculation is based on the Current Construction Completion Date.



# CP 4 – Earned Value

## CP 4 – Earned Value Summary (%)

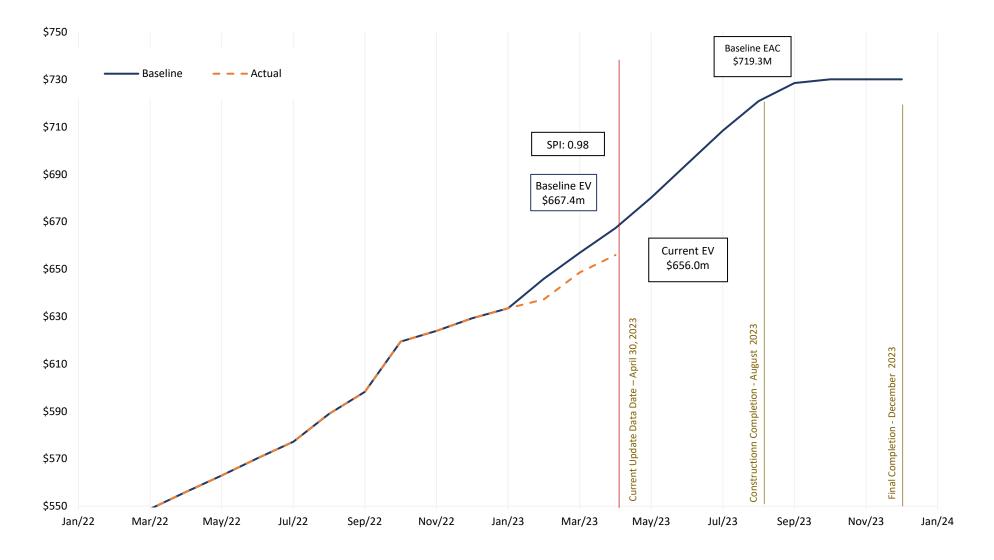


- 1. Forecast periods are based on a revised forecast as of May 1, 2023. The baseline schedule finalization is under negotiation with the contractor.
- 2. Earned Value represents physical progress of site activities, which is based on project team verification of site progress measurements.
- 3. The early dates graph is optimistic and assumes activities will take place on the schedule early dates.
- 4. Average graph assumes non-critical path activities are taking place mid-way of early and late dates.
- 5. The late dates graph assumes activities will take place on the schedule late dates. If actuals fall below late graph, it indicates schedule slippage. To provide contingency, the Schedule Performance Index (SPI) is measured against the average graph.
- 6. Time contingency is not included in these forecasts. This is Authority owned contingency.
- 7. The schedule update received shows Substantial Completion in Summer 2023.



# CP 4 – Cost Trend

## CP 4 – Cost Trend Summary (Millions)



#### Notes:

1. The graph provides a comparison of the project actual cost performance against the current Estimate at Completion (EAC).

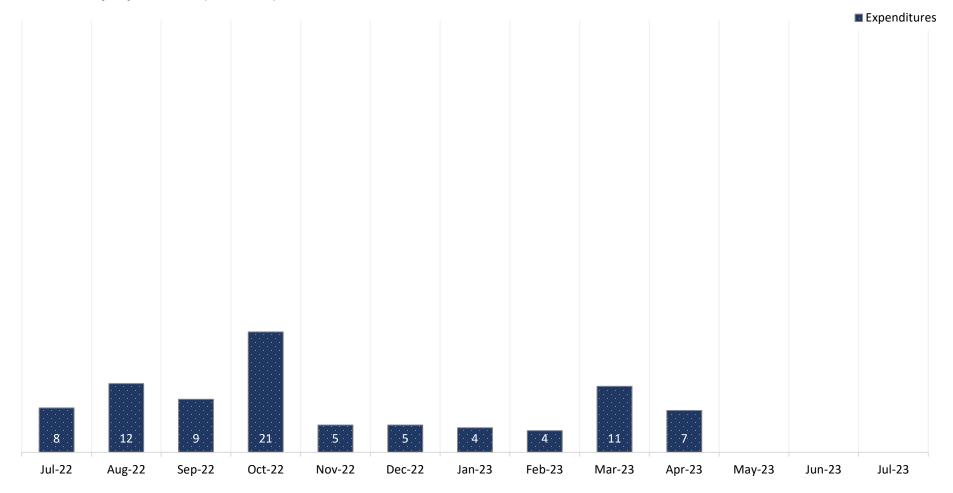
2. The current EAC forecast is based on the contract value and the estimated cost of expected change orders.

3. The schedule update received shows Substantial Completion in Summer 2023.



# **CP 4 – Design-Build Expenditures**

**CP 4 – Monthly Expenditures (\$ Millions)** 



#### Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.

2. Expenditures totaled \$7.3M.

3. California Rail Builders (CRB) is unable to proceed with embankment work currently held back by completion of necessary utility relocations.



# CP 4 – Change Orders (CO)

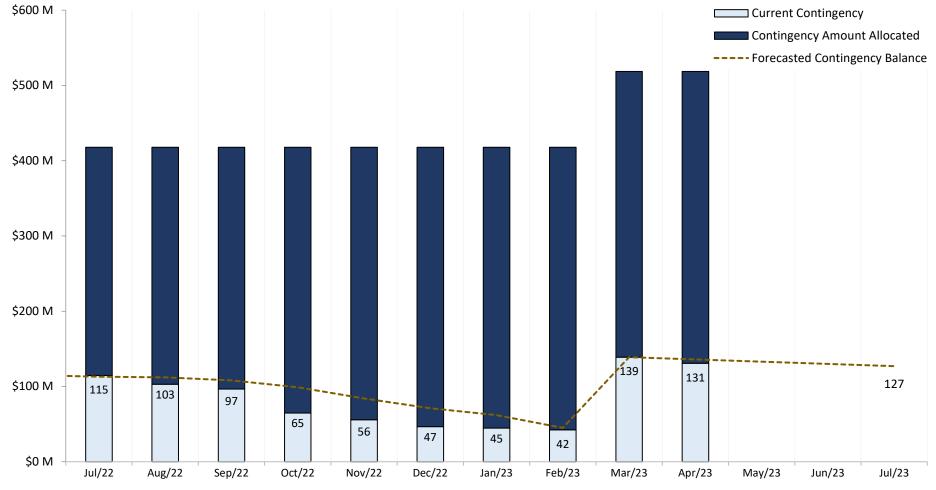
## **CP 4 – Change Order Status**

CO Number	Title	Change Status	Amount	Executed Date
32.3	Interim Adjustment to Completion Deadlines and Contract Price	Executed	\$4,396,432.95	04-25-23
118r2	Ceiling Increase for Continued Wasco Ave Detour	Executed	\$253,679.37	04-27-23
169	Semitropic Facilities' Design Costs	Executed	\$500,000.00	04-5-23
171.1	North Kern Water Storage District Additional Costs not Covered under the Contract	Executed	\$21,518.77	04-26-23
177	Lapidary Farms Access Road	Executed	\$308,160.16	04-27-23
178	Environmental Monitoring Addtl Costs September 2022-November 2022	Executed	\$933,789.22	04-6-23
179	Steel Casing RAM Analysis Documents (DL-00122)	Executed	\$21,904.56	04-27-23
180	Maintenance Manuals Update and Rework	Executed	\$23,540.00	04-27-23
181	Additional Costs Incurred at Peterson Bridge Resulting from Authority's Directive to Stop Work	Executed	\$171,920.99	04-5-23
182	Semitropic Water Storage District Costs Reimbursement	Executed	\$83,171.51	04-5-23
184	Environmental Monitoring Additional Costs from September 2022-November 2022	Executed	\$544,793.05	04-6-23
185	Canal 9-22 Access Road from Old McCombs Road	Executed	\$819,757.00	04-27-23
	TOTAL		\$8,078,667.58	



# **CP 4 – Risk Contingency**



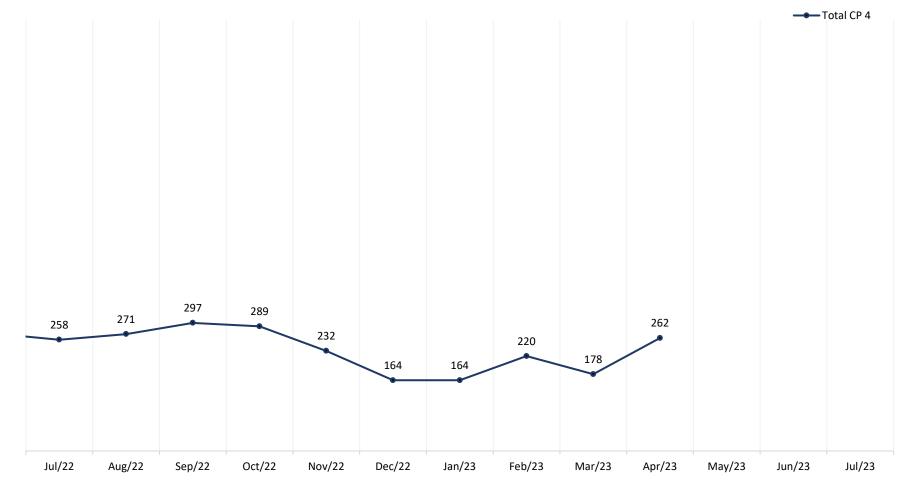


- 1. March 2023 reflects the March 16, 2023 Board Expenditure Authorization which increased the total CP 4 Contingency to \$518.5M.
- 2. Contingency balance updated to reflect the Board's adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
- 3. Contingency Amount Allocated reflects executed change orders and Business Oversight Committee (BOC) approved items.
- 4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations and dispute resolution, timing and value of Forecasted Contingency Balance is uncertain.



# **CP 4 – Monthly Construction Labor**

## CP 4 – Monthly Construction Workforce Total – Actual (FTE)



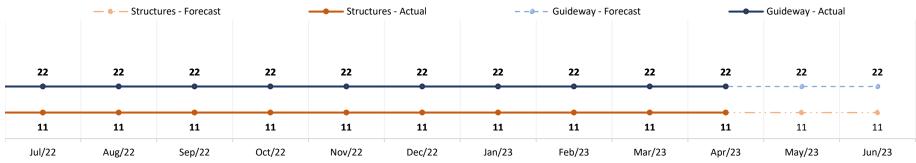
- 1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
- 2. An increase of 84 in the number of workers from the previous month (178).

# **CP 4 – Construction Progress**

#### **CP 4 – Construction Progress**



#### CP 4 – Structures and Guideway Progress – Forecast vs. Actual



- 1. The circle charts above incorporate Revised Baseline Schedules (RBS3) approved schedule.
- 2. Construction Complete definition:
  - a. Structure Completion all concrete work is complete.
  - b. Guideway Completion earthworks complete with rough grading.
- 3. Total Structures: 11:
  - a. 11 structures underway/construction complete.
- 4. Total Guideway: 22 miles. The actual miles for CP 4 are 21.5 miles but rounded to 22 miles for consistency in reporting:
  - a. 22 miles underway/construction complete.

# **CP 4 – Utility Relocation Summary**

Data as of April 30, 2023

## CP 4 – High Level Summary

Status	Utility Relocations	Percentage
Total Utilities Not Started	22	15%
Total Utilities in Progress	13	9%
Total Utilities Relocated	108	76%
Total Utilities	143	100%

## CP 4 – Summary by Utility Type

Utility	Status	Utility Relocations	Percentage				
	NOT STARTED	1	1%				
Flootvie	IN PROGRESS	6	10%				
Electric	RELOCATED	55	89%				
	<b>TOTAL Electric Utilities</b>	62	100%				
	NOT STARTED	0	0%				
Gas	IN PROGRESS	0	0%				
Gas	RELOCATED	7	100%				
	TOTAL Gas Utilities	7	100%				
	NOT STARTED	0	0%				
Telecom	IN PROGRESS	4	12%				
Telecom	RELOCATED	29	88%				
	TOTAL Telecom Utilities	33	100%				
	NOT STARTED	21	51%				
Wet	IN PROGRESS	3	7%				
vvet	RELOCATED	17	42%				
	TOTAL Wet Utilities	41	100%				

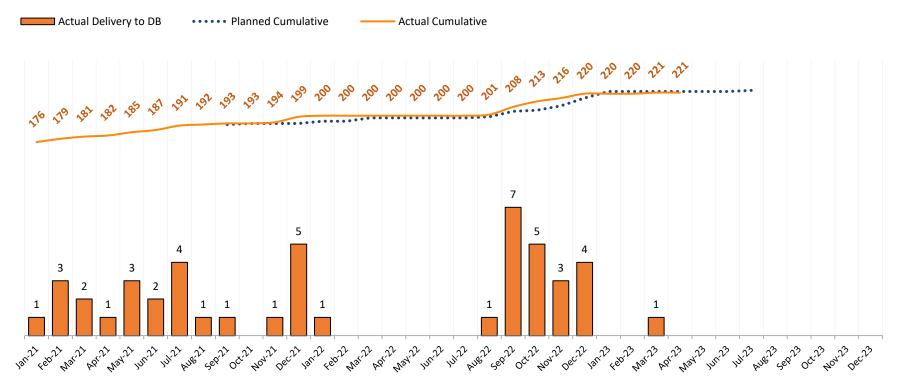


# CP 4 – Real Property/Right-of-Way (ROW)

## CP 4 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels	Total Parcels Delivered to Date	Remaining Parcels to be Delivered
	April 30, 2023	April 30, 2023	April 30, 2023
CP 4	223	221	2

#### CP 4 – Parcel Delivery to Design-Builder (DB) Summary



- 1. This reflects the actual parcels delivered to the Design-Builder by month compared to the Revised Baseline Schedule (RBS) Revision 3.
- 2. Two remaining parcels are anticipated to be delivered in early June.
- 3. Total Parcels Needed for Substantial Completion were reduced by eight parcels in April 2023.

# CP 4 – Real Property/Right-of-Way (ROW) Railroad

## CP 4 – Right-of-Way (ROW) Railroad Summary

Construction Package	Total Needed Railroad Parcels April 30, 2023	Total Railroad Parcels Delivered to Date April 30, 2023	Remaining Railroad Parcels to be Delivered April 30, 2023
CP 4	29	29	0

## CP 4 – Railroad Parcel Delivery to Design-Builder (DB) Summary

		Actua	al Rai	Iroad	l Deli	ivery	to DE	3	•••	••••	Planr	ned R	ailro	ad Cı	umula	ative			<u> </u>	Actua	l Rail	road	Cum	ulativ	/e										
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29								
-								29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	<u>~</u> `	à	<u>م</u> ک	ŝ	<u>م</u> ک	<u>~</u>	<u>^</u>	<u>~</u>	~	<u>م</u> ک	ŝ	ഹ	<u>^</u>	ഹ	<u>^</u>	<u>م</u>	പ്	ഹ	<u>م</u>	<u></u>	<u>^</u>	v	ഹ	ഹ	ഹ	ഹ	ഹ	ഹ	ഹ	ഹ	ഹ	ഹ		ഹ	ഹ
an'l'te	2, Ng	N. P.	N. NS	× 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	N 1	JI'L PI	sé se	× 0	× ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	De De	, v 13		0 L. NS	J. L. P.S	Nº Nº	× . "	N. 1. 1	J'L' AU	المحافظ فللم	er oc	Y'' NC	De De	, v v		01 N2	N. P. P.	Nº No	× ~ ~	N 1	J' AU	it' set	er oc	X.J.S. NON	s' De	; <sup>l</sup>

# **Project Development Schedule (Environmental Clearance) – Record of Decision (ROD)**

## **Project Development Schedule (to ROD)**

Program Priority	Segment	Progress	-	Purpose and atement	Complete A Ana			currence of Preferred Alt. EIR/EIS	Publish Dr	aft EIR/EIS	Publish Fin Obtair		Date EIR/ Comp	EIS To Be deted
Number	Section	Due Dates	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current
Document Complete	Merced to Fresno	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Fresno to Bakersfield	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Compl0ete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	CV Electrical Interconne ctions	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Locally Generated Alternative (F-B)	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Central Valley Wye (M-F)	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Bakersfield to Palmdale	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Burbank to Los Angeles	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	San Jose to Merced	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	San Francisco to San Jose	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
1	Los Angeles to Anaheim	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	May-23 Aug-23 <sup>1</sup>	Oct-24 Oct-24 <sup>1</sup>	Jun-24 Sep-24 <sup>1</sup>	Nov-24 Nov-25 <sup>1</sup>	Sep-24 <sup>1</sup>	Dec-25 <sup>1</sup>
2	Palmdale to Burbank	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-23 Nov-23	Sep-23 Nov-23	Dec-23	Dec-23
3	Heavy Maintenan ce Facility (HMF)	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Note:

1. For the Los Angeles to Anaheim project section, the schedule has been revised and the baseline re-established to account for supplemental alternative analysis.



# **Project Development – Key Actions**

## **Project Development (Environmental Clearance) – Key Actions Summary**

Project Section	Key Actions
San Francisco To San Jose	Environmental Clearance activities complete. Authority is currently in settlement discussions for ongoing litigation activities.
San Jose To Merced	Environmental Clearance activities complete. The Authority is participating in post-Record of Decision (ROD) coordination with external stakeholders such as the Transportation Authority of Monterey County, Grasslands Water District, City of San Jose, and others.
Central Valley Wye	Conducted monthly progress meeting with County of Madera on Fairmead mitigation projects. Environmental Clearance activities complete. Transition to Merced Extension (Merced to Madera).
Locally Generated Alternative	Environmental Clearance activities complete. Transition to Bakersfield Extension (LGA).
Bakersfield To Palmdale	Work through Notice of Determination/Record of Decision (NOD/ROD) has been completed. The Authority has continued to meet with key stakeholders (e.g., Center for Biological Diversity, City of Palmdale) as necessary.
Palmdale To Burbank	Regional Consultant has prepared and delivered for Authority review a draft version of the Administrative Final EIR/EIS to be submitted to the Cooperating Agencies.
Burbank To Los Angeles	Work through NOD/ROD has been completed. Project closeout activities are ongoing. Authority is currently in settlement discussions for ongoing litigation activities.
Los Angeles To Anaheim	The LA-A team is finalizing a Supplemental Alternative Analysis which evaluates potential project alternatives and recommends alternatives or options to advance for further study in the DEIR/DEIS.

## **Project Development (Post-ROD) – Key Actions Summary**

Project Section	Key Actions
Merced Extension (Merced to Madera)	Stantec Inc. under agreement HSR 22-02, continues to make progress on the early actions of this Project, including submittal of various Draft documents such as the Project Management Plan - Draft.
Fresno to Bakersfield Locally Generated Alternative (LGA)	The HNTB Corporation (HNTB), under agreement HSR 22-01, continues to make progress on the early actions of this Project, including submittal of various Draft documents such as the Project Management Plan and the Burlington Northern Santa Fe Corporation (BNSF) Shoofly Alignment - Draft.