



Finance & Audit Committee

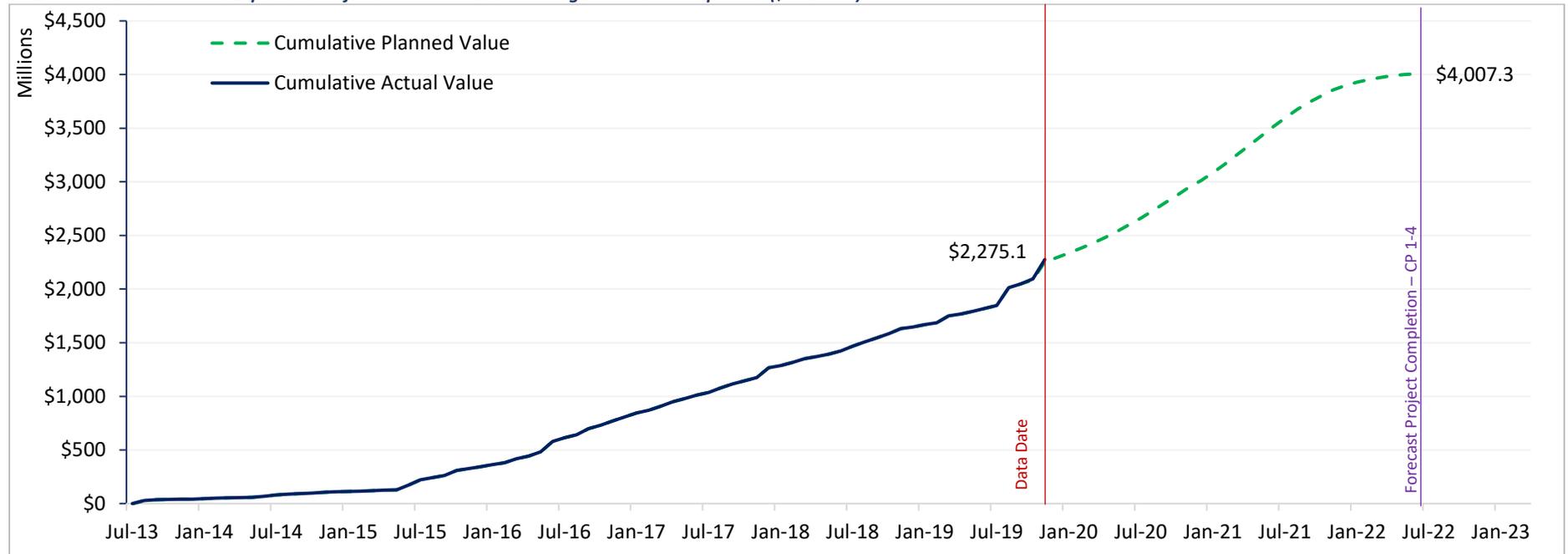
CENTRAL VALLEY STATUS REPORT

January 2020 Report (data through November 2019)

Infrastructure Delivery Overview – 119-mile Central Valley Segment Construction Packages 1-4 (CP 1-4)

CP 1-4 Earned Value

CP 1-4 - Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



Note:
1. Figure 1 shows historical expenditures from the award of the first construction package through November 30, 2019. The planned values from November 2019 to December 2022 are based on the Proposed Schedules developed for all the construction packages as of November 2019. It is anticipated that the total current contractual value \$4B will be expended by end of July 2022.

CP 1-4 Projected Milestones

Milestone	Date
01. CP 1 Main Design Complete	Dec-19
02. CP 1 ROW Acquisition Complete	Nov-20
03. CP 1 Environmental Clearance Complete	Feb-20
04. CP 1 Utility Relocation Complete	Mar-21

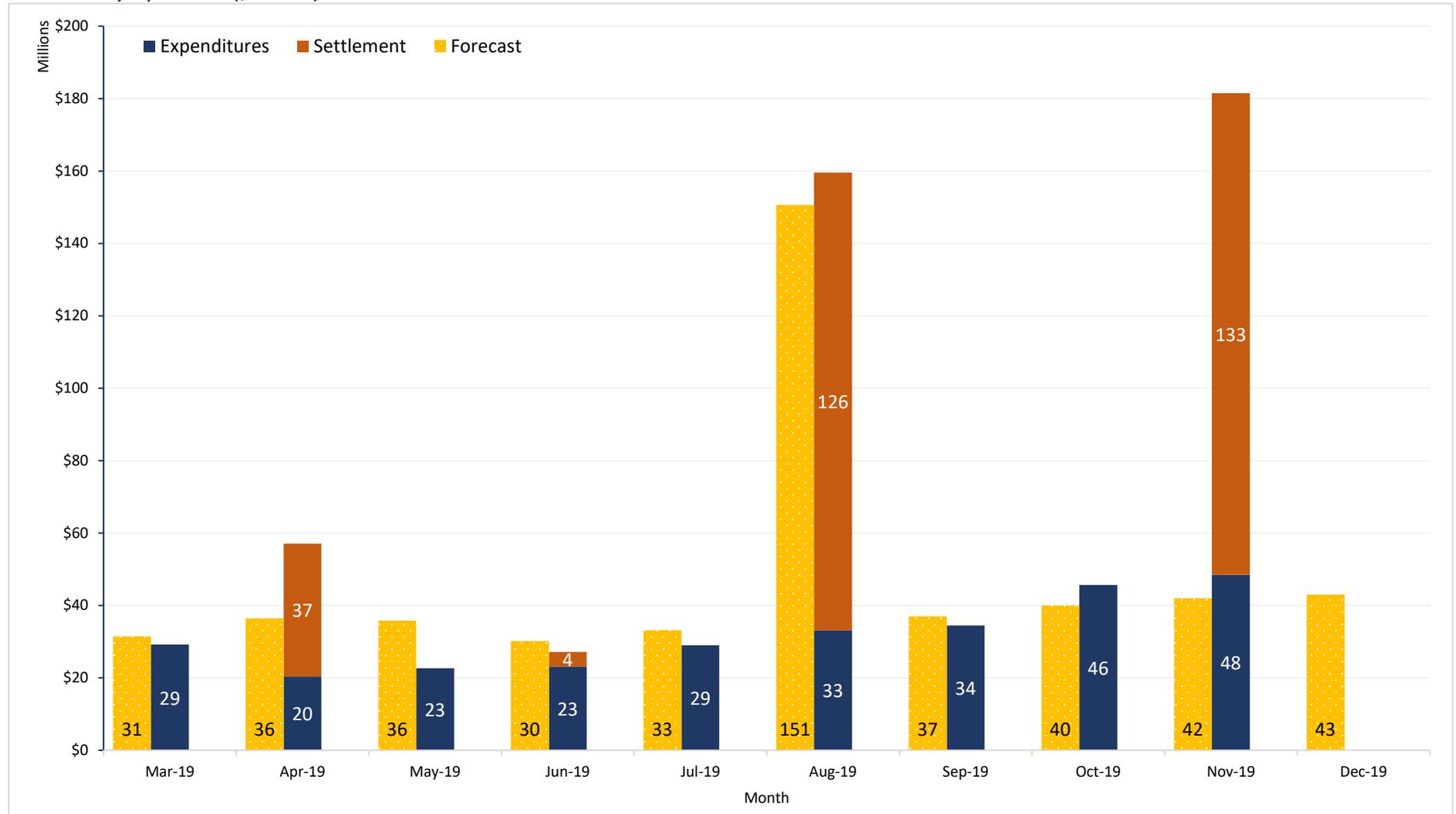
Milestone	Date
05. CP 2-3 Main Design Complete	May-20
06. CP 2-3 ROW Acquisition Complete	Jan-21
07. CP 2-3 Environmental Clearance Complete	Jan-20
08. CP 2-3 Utility Relocation Complete	Feb-21

Milestone	Date
09. CP 4 Main Design Complete	Feb-20
10. CP 4 ROW Acquisition Complete	Dec-20
11. CP 4 Environmental Clearance Complete	Mar-20
12. CP 4 Utility Relocation Complete	Mar-21

Note:
1. The above at completion value (\$4B) is based on the current contract values of the construction packages and does not include SR-99. This value does not include change orders that are yet to be executed.

CP 1-4 - Design-Build Planned vs. Actual Expenditures – Near Term

CP 1-4 Monthly Expenditures (\$ Millions)

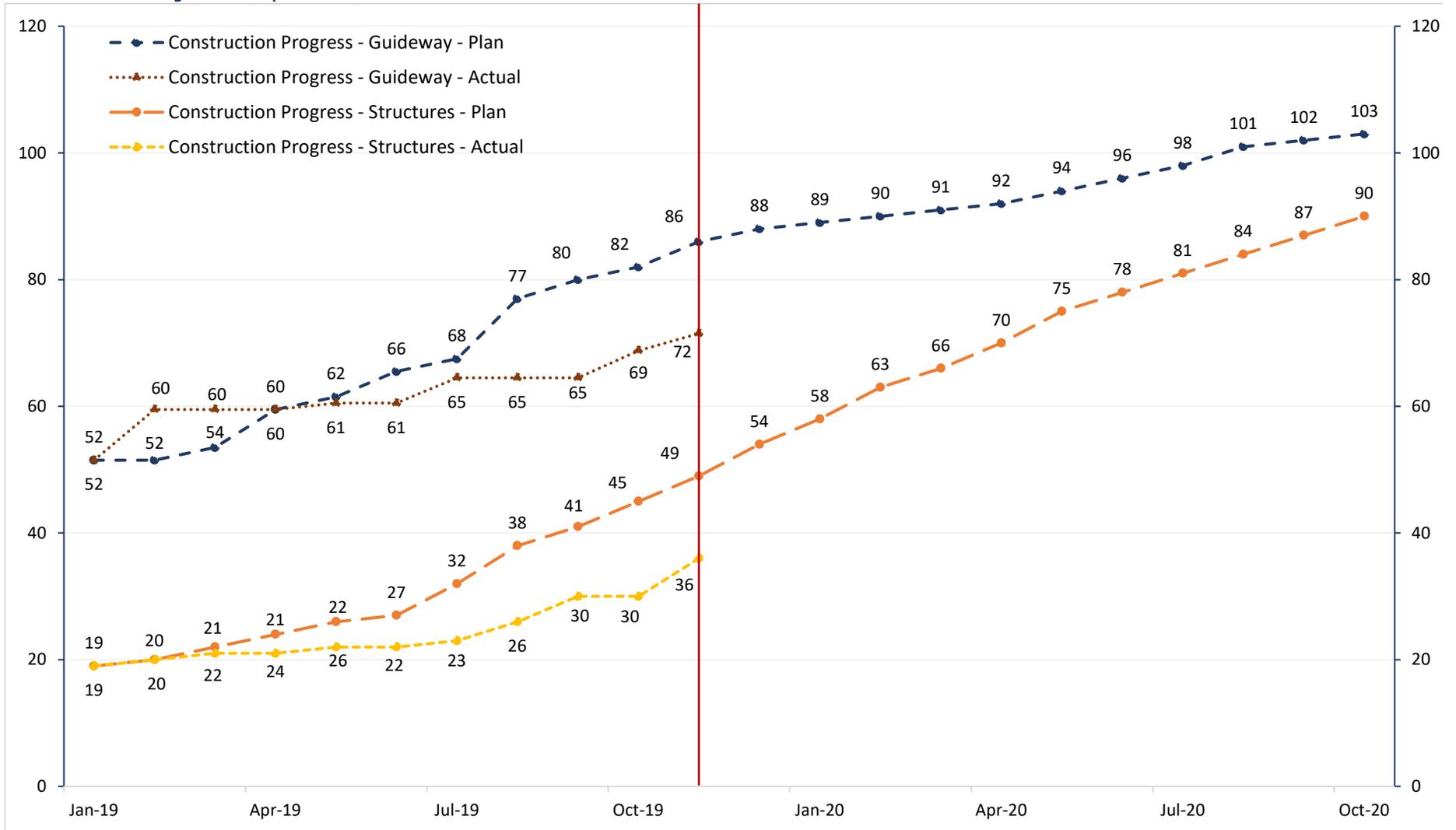


Notes:

1. Expenditures contained in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. Forecasted expenditures are based on the Proposed Schedules developed for CP 1-4 as of November 2019.
3. Sudden increases in the cumulative values are due to Time Impact Analysis Settlements.

CP 1-4 – Structures and Guideway Progress – Planned vs. Actuals

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



Notes:

1. Total Structures: 93 each.
2. Total Guideway: 117 miles does not include mileage for SR-99.
3. This forecast is based on the get to work plans developed in January 2019.

CP 1-4 - Construction Progress

CP 1-4 Construction Progress Summary

Construction Package	Category	Planned vs. Actuals	Status Update
CP 1	Structures	Planned Progress: 23 structures Actual Progress: 17 structures Progress: 6 structures behind	<p>Golden State Boulevard (Late February 2020)</p> <ul style="list-style-type: none"> Abutment 1: Pending execution of outgrants¹ (forecast late December 2019). Abutment 5: Pending relocation/cutover of unidentified AT&T utility locations (forecast February 2020). Bents² 2, 3, & 4: Finalizing specific Maintenance of Traffic (MOT) plan for construction of just these bents. <p>Jensen Trench (July 2020)</p> <ul style="list-style-type: none"> Phase I & II: Pending Department of Toxic Substances Control (DTSC), UPRR, Gas and Sewer System utility re-locations. Gas and Sewer relocations will free up 3,000 feet of trench for construction. PCM is looking into mitigations that could bring this forward to May. <p>Central Avenue (August 2020)</p> <ul style="list-style-type: none"> Dependent upon the completion of American Avenue which is currently forecasted for July 2020. PG&E redesign in progress to avoid additional ROW; PG&E outgrants in progress and early civil package to be scheduled. <p>Avenue 15^{1/2} (3rd Quarter 2020)</p> <ul style="list-style-type: none"> Dependent upon the completion of Avenue 15 which is currently forecasted for July 2020. PG&E redesign in progress to avoid additional ROW; PG&E outgrants in progress and early civil package to be scheduled. <p>McKinley Avenue (3rd Quarter 2020)</p> <ul style="list-style-type: none"> PG&E relocation pending redesign to avoid additional ROW and Fresno Metropolitan Flood Control District (FMFCD) out grant in progress. <p>Avenue 9 (4th Quarter 2020)</p> <ul style="list-style-type: none"> Embankment and gas transmission redesign initiated to avoid additional ROW. PCM driving to have design and outgrants completed by March 2020 which allows for a 2020 transmission cutover. <p>Herndon Avenue (2 Structures - UPRR and High-Speed Track (HST) Structures)</p> <ul style="list-style-type: none"> Dependent upon additional ROW acquisition; UPRR approval for Kinder Morgan and Shoofly Design. ROW to deliver additional ROW by 3/1/2020 to allow storm drain relocation to commence the start of April construction window. <p>Shaw Avenue (January 2020)</p> <ul style="list-style-type: none"> Dependent upon billboard removal, utility relocations, and outgrants. Utility has informed the Authority that the Remote Terminal Units (RTU) have to be placed on private property. Utility is requesting authorization to proceed with acquiring required easements to accommodate RTU relocations. ROW actions are expected to wrap up in January 2020. <p>Church Avenue (On Going)</p> <ul style="list-style-type: none"> Work cannot start due to the UPRR's electrical transmission line which requires ROW and storm drain redesign. PCM and UPRR are meeting weekly to resolve and clarify issues. The PCM and contractor are creating schedules that are being shared with UPRR to give visibility to upcoming submittals. <p>North Extension (February 2020)</p> <ul style="list-style-type: none"> Road 26 and Avenue 17 – Dependent upon the completion of Road 27; PG&E and AT&T redesigns; and the execution of the North Extension Change Order (CO). Currently the CO is being negotiated and is expected to wrap up in February 2020. This CO will cover the additional scope of work such as earthworks, structures, roads, and the County of Madera inputs.

Notes:

1. Outgrant refers to grant of interest or right to one to use government real property by a lease, easement, license, or permit. It is an agreement whereby a private party may, depending on the type of real estate instrument issued, enjoy an interest in or use real property.
2. Bents are the basic post and beam structure that forms a cross section for the frame that has been set in place, the bents are then lifted and simply dropped into place one by one by the crane.

CP 1-4 Construction Progress Summary (cont'd)

Construction Package	Category	Planned vs. Actuals	Status Update
CP 1	Guideway	Planned Progress: 15 miles Actual Progress: 8.5 miles Progress: 6.5 miles behind	<ul style="list-style-type: none"> Some Guideway in Madera County is being partially delayed due to Mechanically Stabilized Earth (MSE) Wall approval surrounding the future Overhead Catenary System (OCS). TPZP will be performing two sets of 3 test piles to confirm their methodology works. There are some sporadic utilities/lateral culverts that are preventing small sections of the Guideway from being constructed in Madera County.
CP 2-3	Structures	Planned Progress: 16 structures Actual Progress: 14 structures Progress: 2 structures behind	<ul style="list-style-type: none"> Adams Avenue on hold due to Fresno County encroachment permit. Delaying factors are unavailability of ROW and delayed starts of utilities works resulting from the land conveyance issues. PCM team and the Authority are actively working on finalizing the agreement between BNSF and SoCal Gas on the site-specific land right agreements and land conveyance issues. The negotiations are expected to wrap up in January 2020.
CP 2-3	Guideway	Planned Progress: 50 miles Actual Progress: 45 miles Progress: 5 miles behind	<ul style="list-style-type: none"> Dealing with unsuitable soils. Engineering is currently evaluating the three-dimensional (3D) model defining the rally waves' effect on the soil and will revise the design as necessary for the impacted areas. Currently acquiring more information from Dragados Flat Iron Joint Venture (DFJV) on the 3D test results which are scheduled to be available in January 2020. Once the issues are resolved, 8 miles of embankment will be available for construction.
CP 4	Structures	Planned Progress: 10 structures Actual Progress: 5 structures Progress: 5 structures behind	<ul style="list-style-type: none"> Re-design of one structure (Merced Avenue Overpass) was not completed as per plan due to ongoing negotiations with third parties and utilities regarding the relocation of their services. Actions are being taken to ensure land rights JUA are documented expeditiously to prevent any schedule delays and increasing the pressure on obtaining ROW agreements for each utility conflict location. Environmental clearance (preparation of the Pre-Construction Survey) is ongoing and preparation and process of required documentation has not been administered according to the plan. The project team is addressing this with the DB contractor. The PCM is coordinating with the Authority for assistance to ensure that the CP is not impacted and making sure that the contract is in strict compliance including notice deadlines through screening all claims and task order follow-ups. Ongoing negotiations with landowners are taking longer than anticipated, impacting the acquisition of ROW and the start of construction on anticipated structures. HSR is mobilizing additional resources, carrying out negotiations with the property owners, and optimizing the processes to expedite the ROW acquisition.
CP 4	Guideway	Planned Progress: 21.1 miles Actual Progress: 18.0 miles Progress: 3.1 miles behind	<ul style="list-style-type: none"> The remaining guideway is impacted by the ongoing negotiations with landowners taking longer than anticipated. The environmental clearance (preparation of the Pre-Construction Survey) has delayed the start of construction on the remaining alignment. The project team is working closely with CRB to resolve this issue. The PCM is coordinating with the Authority for assistance to ensure that the CP is not impacted and to make sure that the contract is in strict compliance including notice deadlines through screening all claims and task order follow-ups.

CP 1-4 – ROW Parcels to be Acquired and Remaining

CP 1-4 ROW Parcels to be Acquired and Remaining

Construction Package	Total Needed Parcels as of October 31, 2019	Total Acquired to Date as of October 31, 2019	Remaining Parcels to be Acquired as of October 31, 2019	Optimized Parcels November 2019	Parcels Acquired in November 2019	Total Parcels Remaining as of November 30, 2019
CP 1	928	827	101	0	0	101
CP 2-3	850	565	285	0	8	277
CP 4	223	166	57	0	6	51
Total	2,001	1,558	443	0	14	429

Notes:

1. Optimized parcels are reductions in parcels achieved through utility redesign.
2. In September 2019, eight parcels were optimized, reducing the total needed parcels to 2,001.
3. Reporting of railroad parcels is now included in the land conveyance reporting in this report for each Construction Package, rather than in the totals above. The property rights needed on railroad Right-of-Way is obtained through agreement rather than going through the Right-of-Way acquisition process.

The Real Property Branch is implementing the following risk mitigation strategies:

- Improvements to the land conveyance process to reduce process time from 140 days to approximately 40 days in length.
- Improvements to the pre-Acquisition process to reduce time from 105 to approximately 65 days.
- Pursuing administrative settlements to decrease the time to acquisition and immediately deliver needed parcels.
- Consolidating new acquisitions with existing acquisitions on the same parcels to decrease the time for the new acquisitions.
- Adding staff in Land Conveyance to triple our production rate and meet need dates for critical (utility) conveyances.
- Pursuing a Resolution of Necessity to start the condemnation process 31 days after first offer to have a known end point for parcel acquisition and to plan construction activities to meet schedule.

119-Mile Central Valley Segment - Third Party Agreements

CP 1-4 Look Ahead - Estimated completion timeline for key Third Party Agreements

Entity	Project Section	Result of Resolution	Estimated Completion
Calif. Dept. of Toxic Substances Control	CP 1	Provides for environmental review and mitigation between the design-builder and Calif. Dept. of Toxic Substances Control.	Jan-20
County of Fresno	CP 1	Updates road locations to be closed to reflect design changes since original Cooperative Agreement and provide further clarity regarding remediation of County property post-construction.	Jan-20
County of Fresno	CP 1	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Jan-20
Fresno Metropolitan Flood Control District	CP 1	CCUA template allows for prompt execution of the CCUA land conveyances. FMFCD and HSR ROW Engineering are finalizing format of mapping and legal descriptions for use with the template. FMFCD will not approve template until the format is finalized.	Jan-20
Fresno Metropolitan Flood Control District	CP 1	JUA template allows for prompt execution of the JUA land conveyances. FMFCD and HSR ROW Engineering are finalizing format of mapping and legal descriptions for use with the template. FMFCD will not approve template until the format is finalized.	Jan-20
Madera Valley Water Company	CP 1	Obtain cooperation in our project and capture the essential terms of how we will work together to relocate Madera Valley Water Company's facilities. MVWC's latest revisions required substantial overhaul of agreements. Completion pending MVWC approval of revisions – marked for January due to upcoming holidays.	Jan-20
Corcoran Irrigation District	CP 2-3	Provides for CID's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Feb-20
County of Fresno	CP 2-3	Updates the road locations to be closed to reflect design changes since original Cooperative Agreement and provides further clarity regarding remediation of County property post-construction.	Jan-20
County of Fresno	CP 2-3	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Jan-20
County of Kings	CP 2-3	Covers the transfer of Right-of-Way between the Authority and the County. Allows the Authority's immediate right of possession and use of existing Right-of-Way to construct the HSR project.	Mar-20
County of Tulare	CP 2-3	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Dec-19
Kings County Water District	CP 2-3	JUA template allows for prompt execution of the JUA land conveyances.	Mar-20
Kings County Water District	CP 2-3	CCUA template allows for prompt execution of the CCUA land conveyances.	Mar-20
Lakeside Ditch Company	CP 2-3	Provides for the necessary coordination for the development of JUA/CCUA.	Nov/Dec-19
Lower Tule River Irrigation District	CP 2-3	Provides for Lower Tule's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Jan-20
Lower Tule River Irrigation District	CP 2-3	Defines the ownership and maintenance of facilities between the Authority and Lower Tule in perpetuity. Agreement was finalized in concept in October and approved by Board in November, pending a change that required an HSR policy exception. Issue was resolved mid-December; awaiting signed copy for final execution.	Jan-20

CP 1-4 Look Ahead - Estimated completion timeline for key Third Party Agreements (cont'd)

Entity	Project Section	Result of Resolution	Estimated Completion
People's Ditch Company	CP 2-3	Provides for People's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA. Still going through CPB review to be sent to People's for execution.	Jan-20
Settler's Ditch Company	CP 2-3	Provides for Settler's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA. Still going through CPB review to be sent to Settler's for execution.	Jan-20
Southern California Edison	CP 2-3	JUA template allows for prompt execution of the JUA land conveyances. Template language is finalized; awaiting SCE management approval in light of recent SCE management changes.	Jan-20
Southern California Edison	CP 2-3	CCUA template allows for prompt execution of the CCUA land conveyances. Template language is finalized; awaiting SCE management approval in light of recent SCE management changes.	Jan-20
Southern California Edison	CP 2-3	Utility agreement addendum for Duct and Substructure Work for Construction. Template language is finalized; awaiting SCE management approval in light of recent SCE management changes.	Jan-20
City of Wasco	CP 4	Covers the transfer of Right-of-Way between the Authority and the City. It allows the Authority's immediate right of possession and use of existing Right-of-Way to construct the HSR project.	Feb-20
City of Wasco	CP 4	Defines the ownership and maintenance of grade separations between the Authority and City in perpetuity.	Feb-20
City of Wasco	CP 4	Design and construction of a pedestrian underpass at the Wasco Amtrak station.	Feb-20
City of Wasco	CP 4	Design and construction of a grade separation at Poso Ave. in Wasco.	Feb-20
County of Tulare	CP 4	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity. SIGNED by County of Tulare Board; currently routing internally at HSR for final execution.	Dec-19
Semitropic Water Storage District	CP 4	This agreement is for design and construction of facilities.	Nov/Dec-19
Semitropic Water Storage District	CP 4	JUA template allows for prompt execution of the JUA land conveyances.	Nov/Dec-19
Semitropic Water Storage District	CP 4	CCUA template allows for prompt execution of the CCUA land conveyances.	Nov/Dec-19
Southern California Edison	CP 4	Utility agreement addendum for Duct and Substructure Work for Construction. Template language is finalized; awaiting SCE management approval in light of recent SCE management changes.	Jan-20
Southern California Gas Company (Sempra)	CP 4	Southern California Gas Company's replacement rights needed in the BNSF Right-of-Way.	Oct/Nov-19
Pacific Gas & Electric Company	CP 4	Allows for the continuation of CP 4 PG&E design and construction work for 4.5 additional years until June 30, 2024.	Dec-19

119-Mile Central Valley Segment – Environmental Clearance

Incidental Take Permits (ITP) Summary

ITP Name	Amendment Status	Construction Project	ITP Amendment Construction Implications	Date of Approval / Issue
Merced-Fresno 2081 ITP, Permit Number 2081-2013-025-04, Issued on 12-Mar-14				
Utility Design Refinements	Contractor Revising	CP 1	Documents the changes in utility design at various locations in CP 1.	Feb-20
Hairy Orcutt Grass	In Review with CDFW	CP 1	Administrative to identify the mitigation site for HOG. no impact on construction.	Feb-20
North Extension Separation of Rail	In draft with contractor	CP 1	Accommodates increase in construction footprint to realign the HST away from existing freight rail lines in the North Extension of CP 1.	Mar-20
Utility & BNSF Access Road Cleanup	TPZP/PCM	CP1	Incomplete amendment currently under review. To be resubmitted to CDFW after review is complete.	Mar-20
Fresno-Bakersfield, 2081 ITP, Permit Number 2081-2015-024-04, Issued on 15-Jun-15				
Deer Creek/Cross Creek	CDFW Deemed Complete	CP 2-3	Accommodates design changes in the Deer and Cross Creek areas.	Feb-20
CP 2-3 IPB	Amendment Executed	CP 2-3	Construction of IPB at various locations in CP 2-3.	Dec-19
Table 5	In Review with CDFW	CP 2-3	Administrative map book amendment to finalize the locations of dedicated wildlife crossings.	Feb-20
Fresno-Bakersfield, 2081 ITP, Permit Number 2081-2015-024-04, Issued on 15-Jun-15				
Wasco At-Grade	Amendment Executed	CP 4	Accommodates changes construction profile in the city of Wasco from a viaduct to retained filled structure. Also, increases construction footprint to complete construction of cast-in-place concrete walls.	Nov-19
McCombs and Merced/Scaroni Caltrans	Amendment Executed	CP 4	Increases construction footprint for design variations at McCombs and Merced/Scaroni interchanges with SR 43, utility relocations, Caltrans roadway improvements, access roads, and other covered activities.	Dec-20
BNSF/PG&E	In Draft with Contractor	CP 4	Covers additional ROW adjacent to the mainline required for relocation of 3 rd party utilities and access to utilities and BNSF operations areas. Also, to include various other small footprint adjustments along alignment.	Mar-20

Note:

1. The above table represents a snapshot in time of the ITP amendments needed to complete CP 1-4. Some additional design changes may occur to complete utility relocations. As design progresses and achieves final approval, the risk of additional amendments shrinks.

CONSTRUCTION PACKAGE 1 (CP 1) OVERVIEW

CP 1 – Design-Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	11/15/2011
SOQ Date:	12/19/2011
RFP Date:	3/22/2012
Proposal:	1/18/2013
Bid Open Date:	4/13/2013
Award Date:	8/16/2013
NTP 1 Date:	10/15/2013
NTP 2 Date:	11/22/2013
NTP 3 Date:	7/11/2014
Original Completion Date:	3/31/2018
Current Completion Date:	11/2/2021

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:	\$800,428,555.66
Current Contract Amount:	\$1,823,416,555.66
¹ Approved Invoices to Date:	\$1,134,451,529.29
Remaining Contract Balance:	\$688,965,026.37

Contract Time Status

Description	Duration
Original Contract Days:	1,628
Extension of Time Awarded:	1,312
Current Contract Days:	2,940
Work Days Spent (thru 11/30/2019):	2,237

Expended to Date

Description	Percentage
Time:	76.1%
Dollars:	62.2%

Growth %

Description	Percentage
Time:	80.6%
Dollars:	78.2%

Notes:

1. Includes estimated earned value for the reporting period

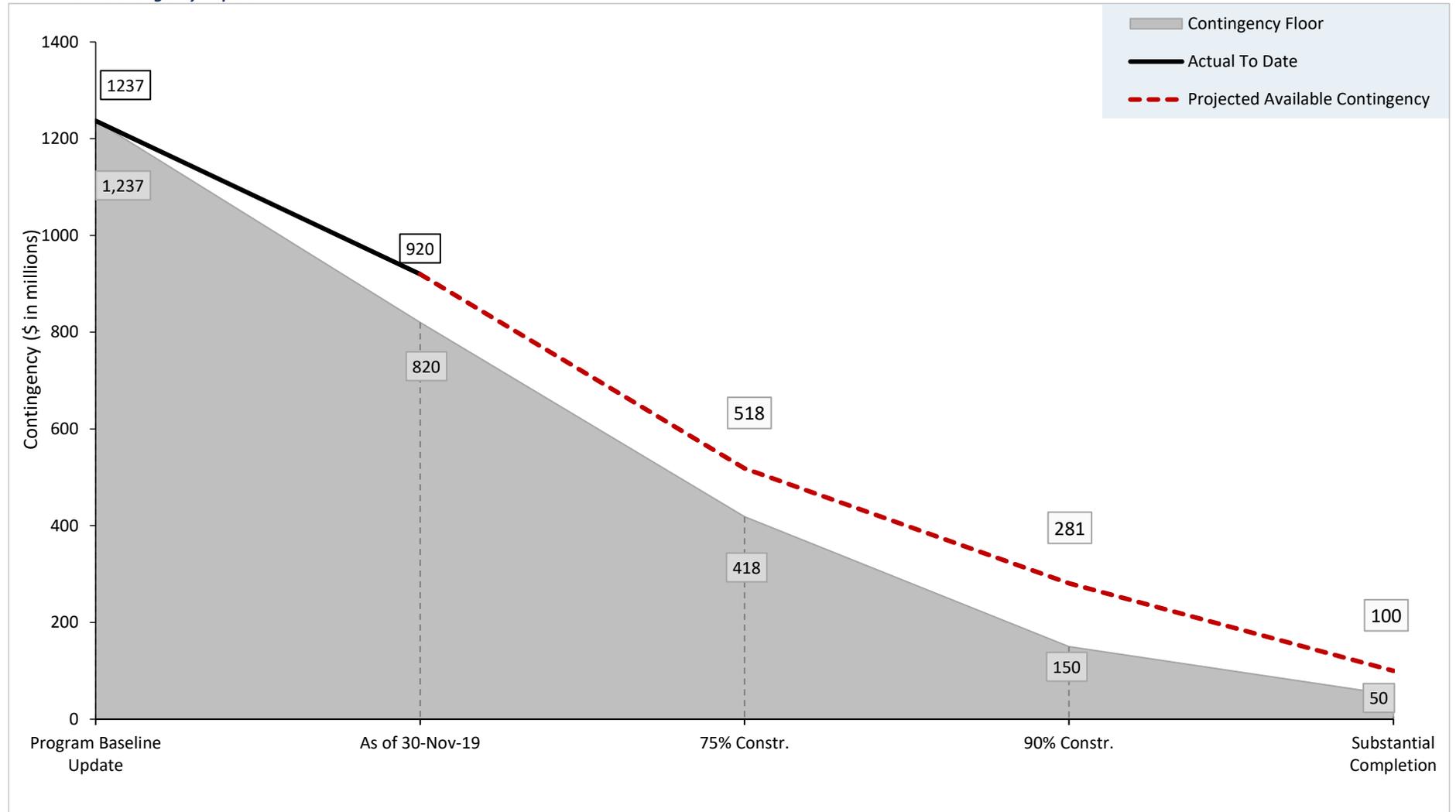
CP 1 – Executed Change Order Status

CP 1 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00005.1	Local/ Long Distance Phone Charges	Executed	\$50,410.40	27-Nov-19
00274	Left Turn Channelization at GSB	Executed	\$886,440.91	22-Nov-19
00177.1	Transfer of Funds Contingency to CCW	Executed	\$500,000.00	22-Nov-19
00277	Westside Wye Shoofly Dirt Contamination Testing	Executed	\$14,970.81	22-Nov-19
00273	McKinley Ave Storm Drain UPS Tie-In	Executed	\$13,717.08	15-Nov-19
00275	Mono Street - SJVRR Track 118 Materials	Executed	\$110,320.59	15-Nov-19
00087.3	Top Down Const SR 180 Supplemental 3	Executed	\$1,794,094.00	08-Nov-19
Total:			\$3,369,953.79	

CP 1 – Risk - Contingency Report

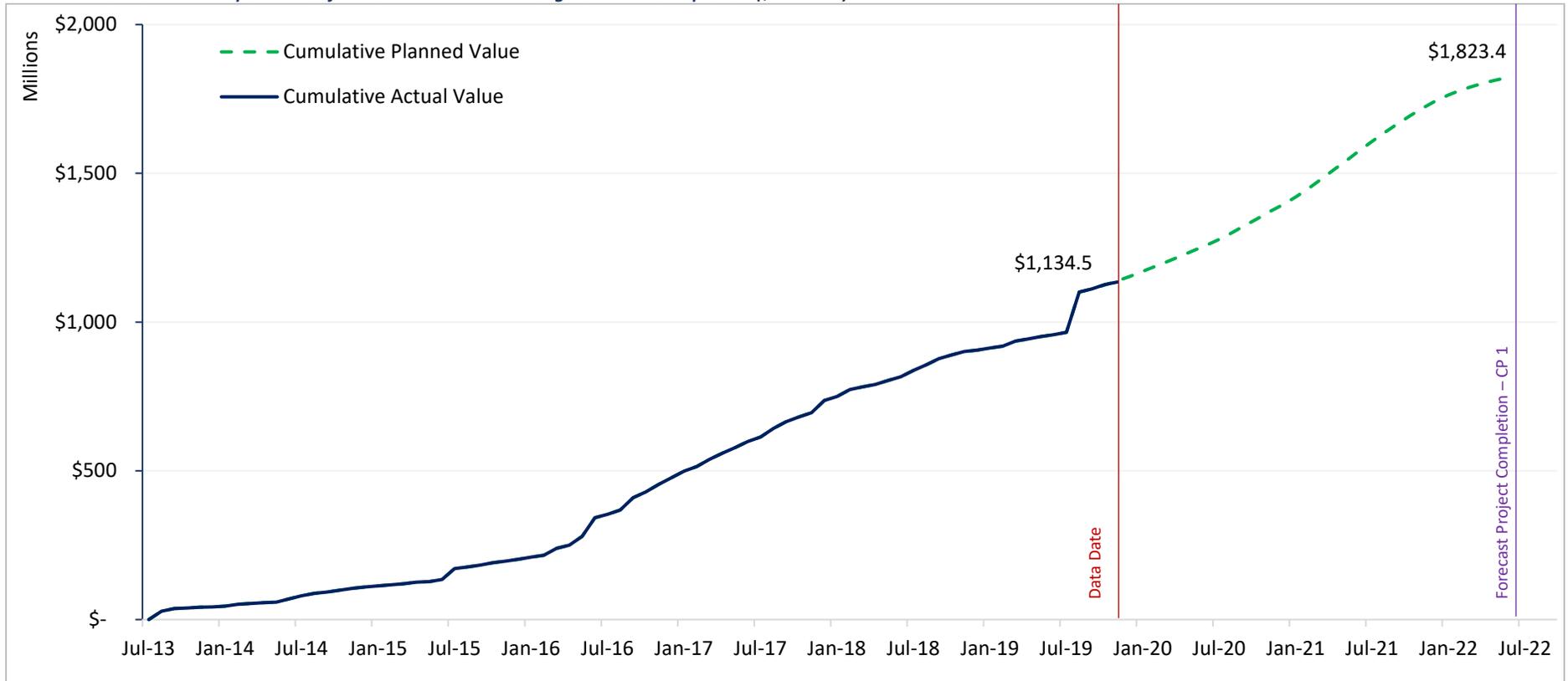
CP 1 – Risk - Contingency Report



- Notes:**
1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 1 Project.
 2. Contract through November 30, 2019.

CP 1 – Earned Value

CP 1 – Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



CP 1 – Projected Milestones

Milestone	Date
Main Design Complete	Dec-19
ROW Acquisition Complete	Nov-20

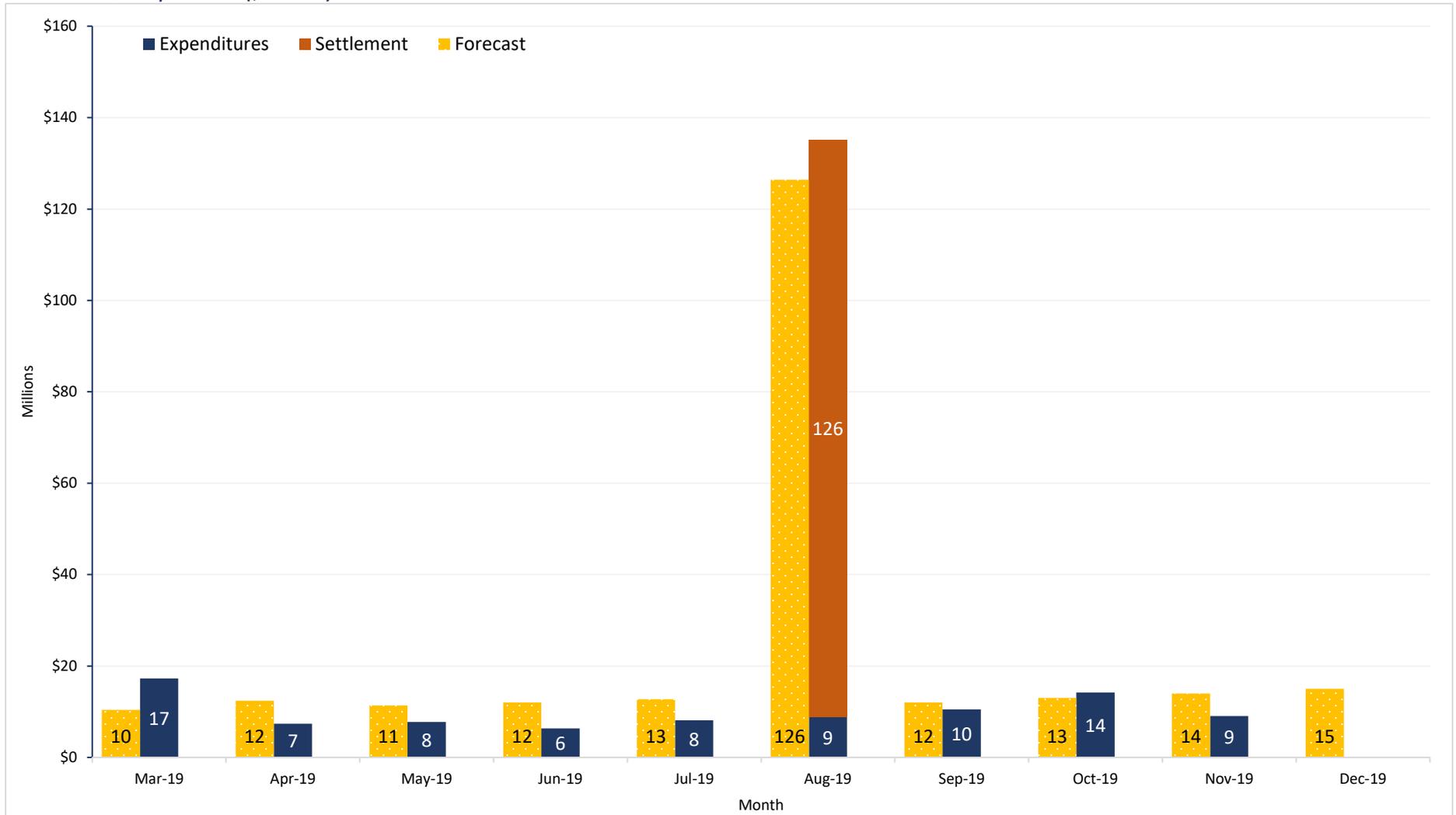
Milestone	Date
Environmental Clearance Complete	Feb-20
Utility Relocation Complete	Mar-21

Notes:

1. The Planned Value and Contract Substantial Completion Date is based on the CP 1 Proposed Schedule as of November 2019. This is expected to be refined as future change orders are issued and a revised RBS is finalized.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
3. The Current Contract Value at completion does not include unexecuted change orders including IPB, Herndon, SR99 section remaining works, and North Extension Revision.

CP 1 – Design-Build Planned vs. Actual Expenditures – Near Term

CP 1 – Fiscal Year Expenditures (\$ Millions)



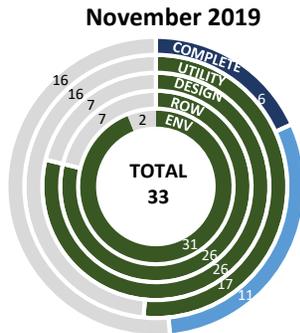
Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.

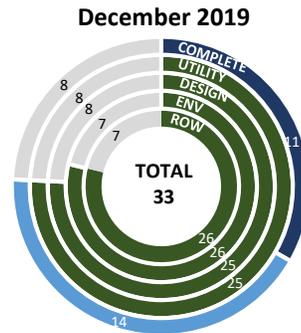
CP 1 – Construction Progress

CP 1 – Construction Progress

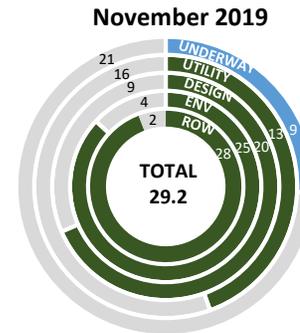
Actual Structures



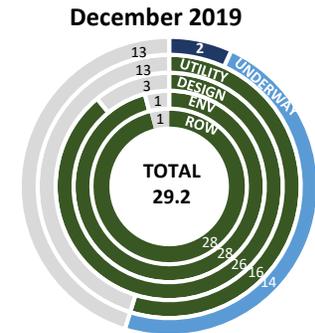
Forecasted Structures



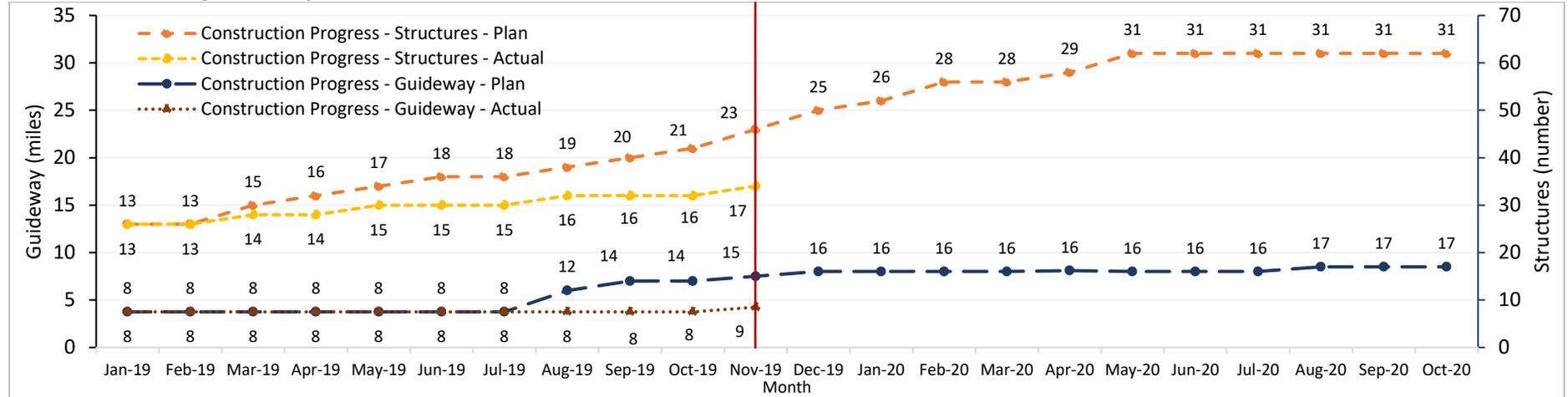
Actual Guideways



Forecasted Guideways



CP 1 – Construction Progress to Completion – Forecast vs. Actual

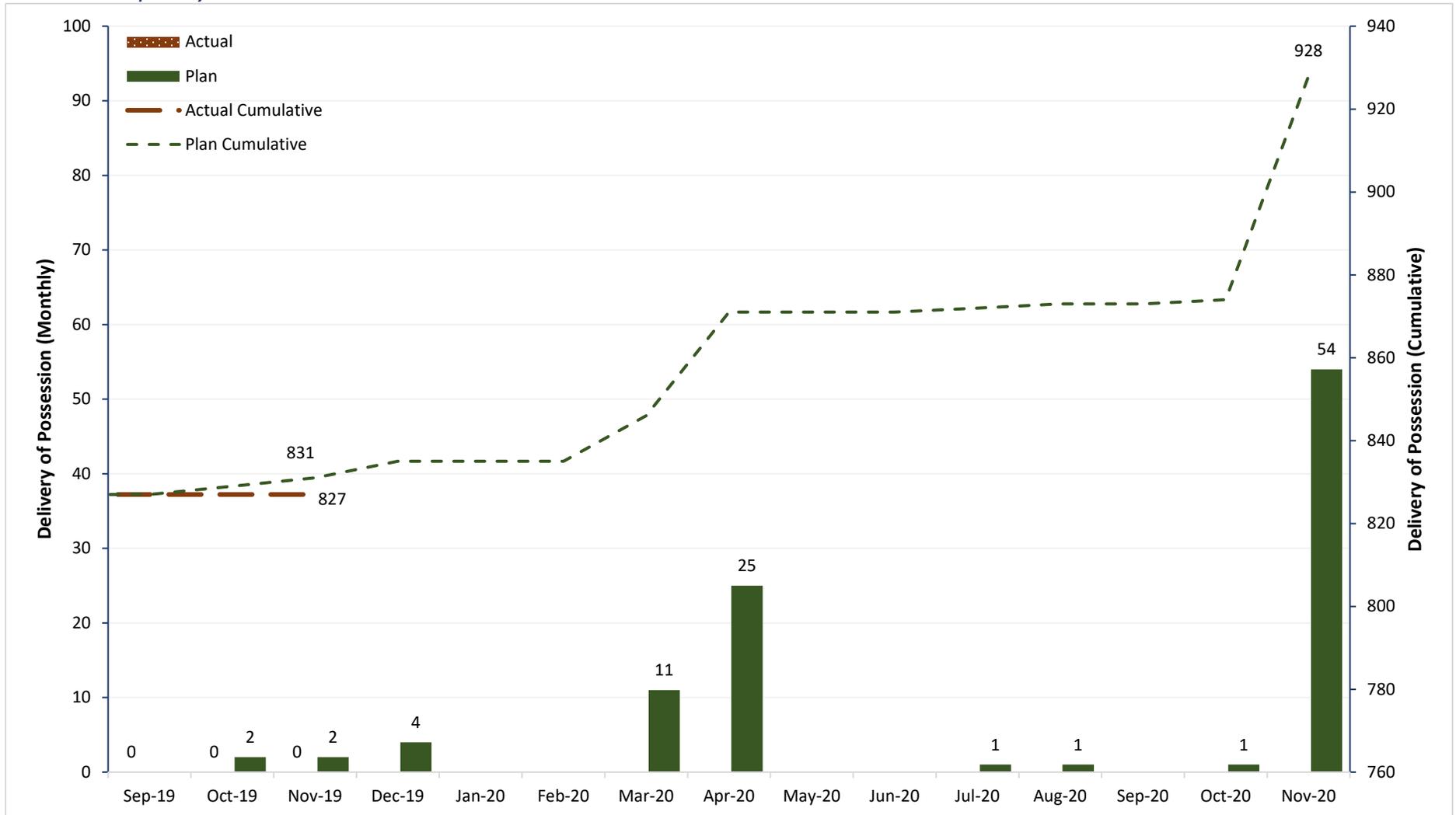


Notes:

1. Total Structures: 33 structures.
2. Total Guideway: 29 miles. (this does not include SR-99 section)
3. This forecast is based on the get to work plans developed in Jan 2019.

CP 1 – ROW Parcels Acquired by Month – Plan vs. Actuals

CP 1 – Parcels Acquired by Month

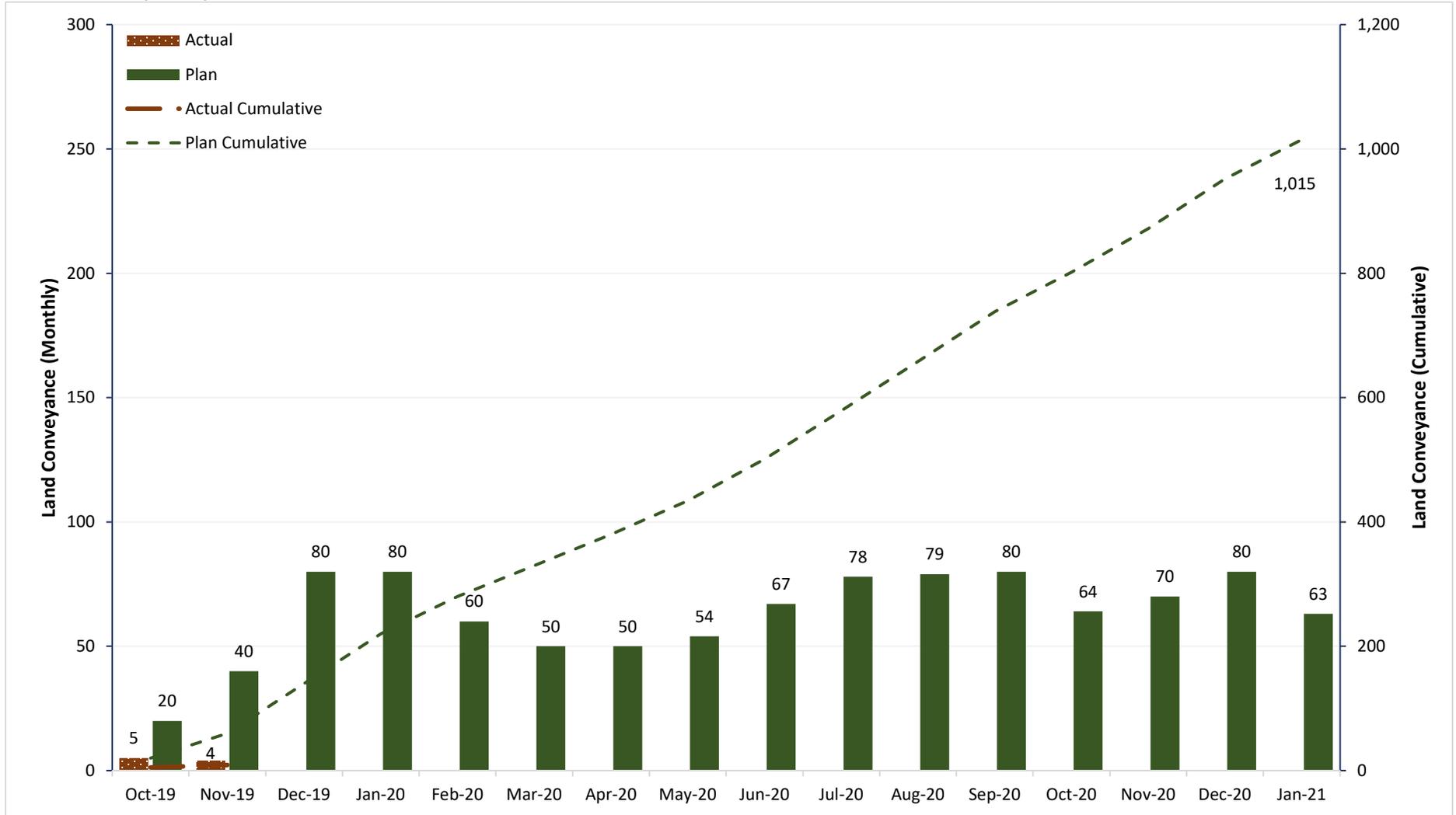


Note:

1. ROW process review undertaken in September resulting in no Actuals for that month.

CP 1 – ROW Land Conveyance by Month – Plan vs. Actual

CP 1 – Land Conveyance by Month



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

CP 2-3 – Design Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	10/9/2013
SOQ Date:	12/13/2013
RFP Date:	4/3/2014
Proposal:	10/30/2014
Bid Open Date:	12/11/2014
Award Date:	6/10/2015
NTP 1 Date:	6/12/2015
NTP 2 Date:	7/25/2015
Original Completion Date:	8/19/2019
Current Completion Date:	4/18/2022

Contract Value

Description	Amount
Fixed Bid Price:	\$1,205,335,890.00
Provisional Sums:	\$160,000,000.00
Original Contract Price:	<u>\$1,365,335,890.00</u>
Executed Change Orders:	\$309,515,640.42
Current Contract Amount:	<u>\$1,674,851,530.42</u>
¹ Approved Invoices to Date:	\$900,699,753.43
Remaining Contract Balance:	<u>\$774,151,776.99</u>

Contract Time Status

Description	Duration
Original Contract Days:	1,486
Extension of Time Awarded:	973
Current Contract Days:	2,459
Work Days Spent (thru 11/30/2019)	1,589

Expended to Date

Description	Percentage
Time:	64.6%
Dollars:	53.8%

Growth %

Description	Percentage
Time:	65.5%
Dollars:	22.7%

Notes:

1. Includes estimated November 2019 invoice of \$28,000,000
2. The budget status table has been removed this period as it contains same information as the contract value.

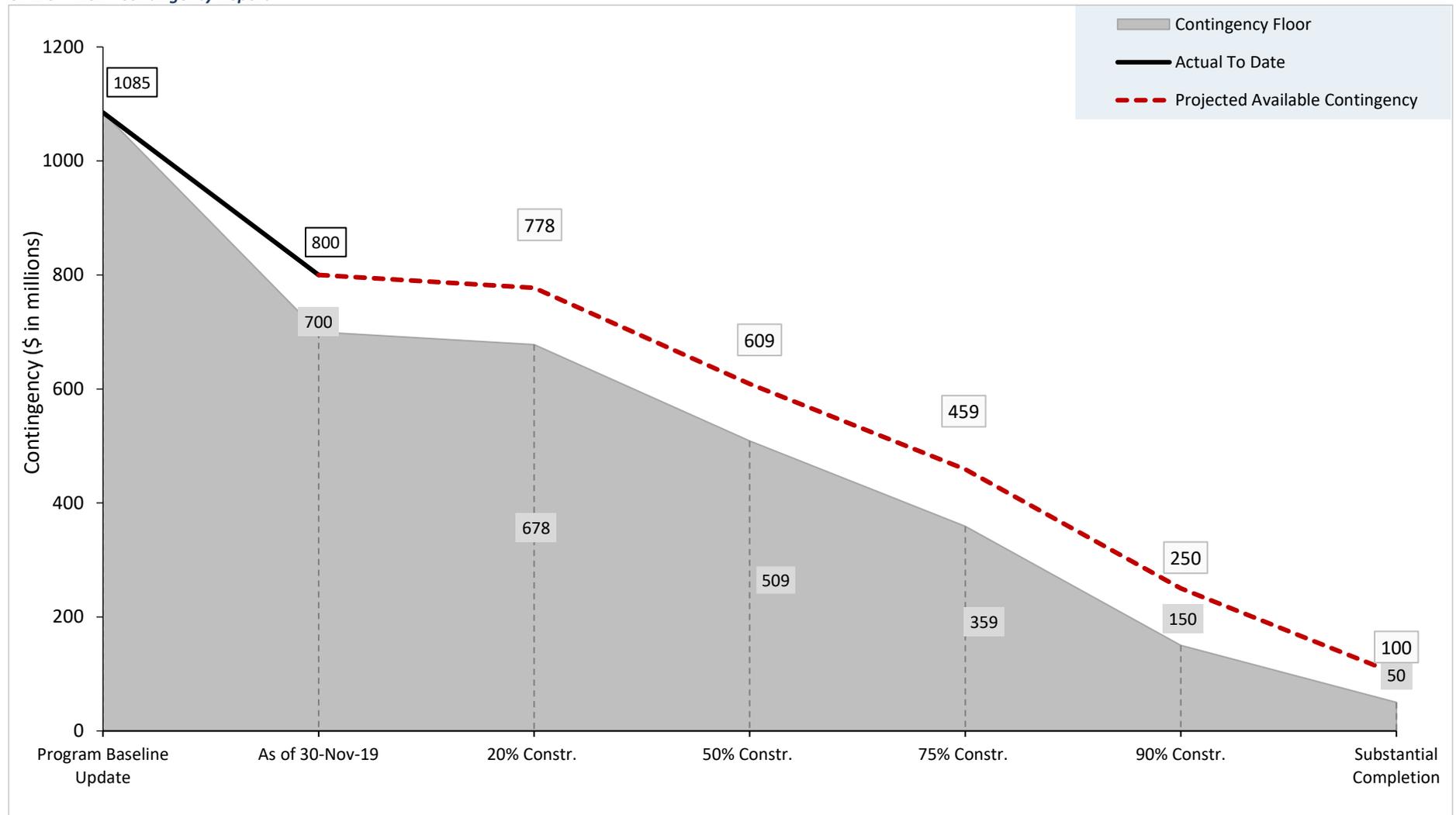
CP 2-3 – Executed Change Order Status

CP 2-3 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00118	Hanford Viaduct Precast Conc Piles	Executed	\$2,898,518	23-Nov-19
00045.1	Settlement Agreement Resolving Delays	Executed	\$133,930,912	23-Nov-19
00114	Ancillary Facility Sites	Executed	\$137,214	12-Oct-19
Total			\$136,966,644	

CP 2-3 – Risk - Contingency Report

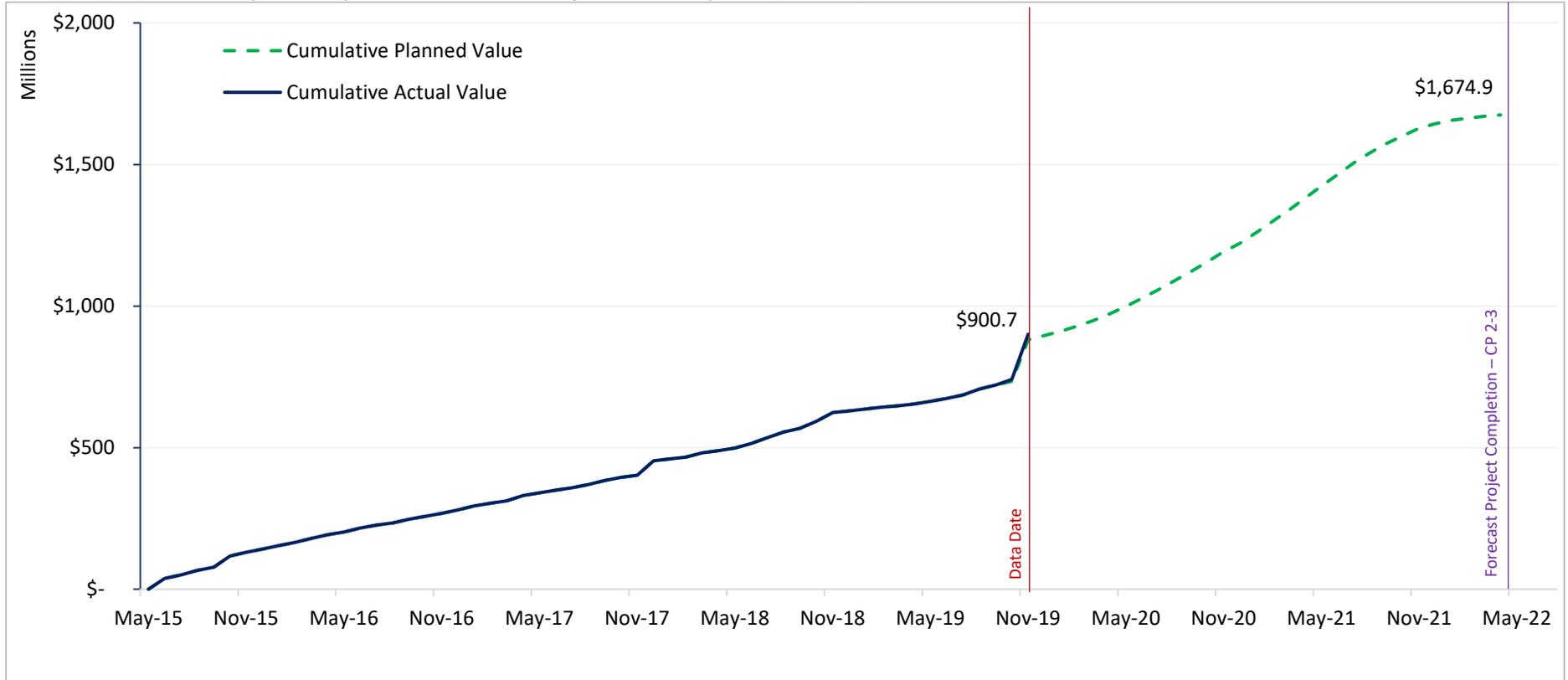
CP 2-3 – Risk - Contingency Report



- Notes:**
1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 2-3 Project.
 2. Contract through November 30, 2019.

CP 2-3 – Earned Value

CP 2-3 – Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



CP 2-3 – Projected Milestones

Milestone	Date
Main Design Complete	May-20
ROW Acquisition Complete	Jan-21

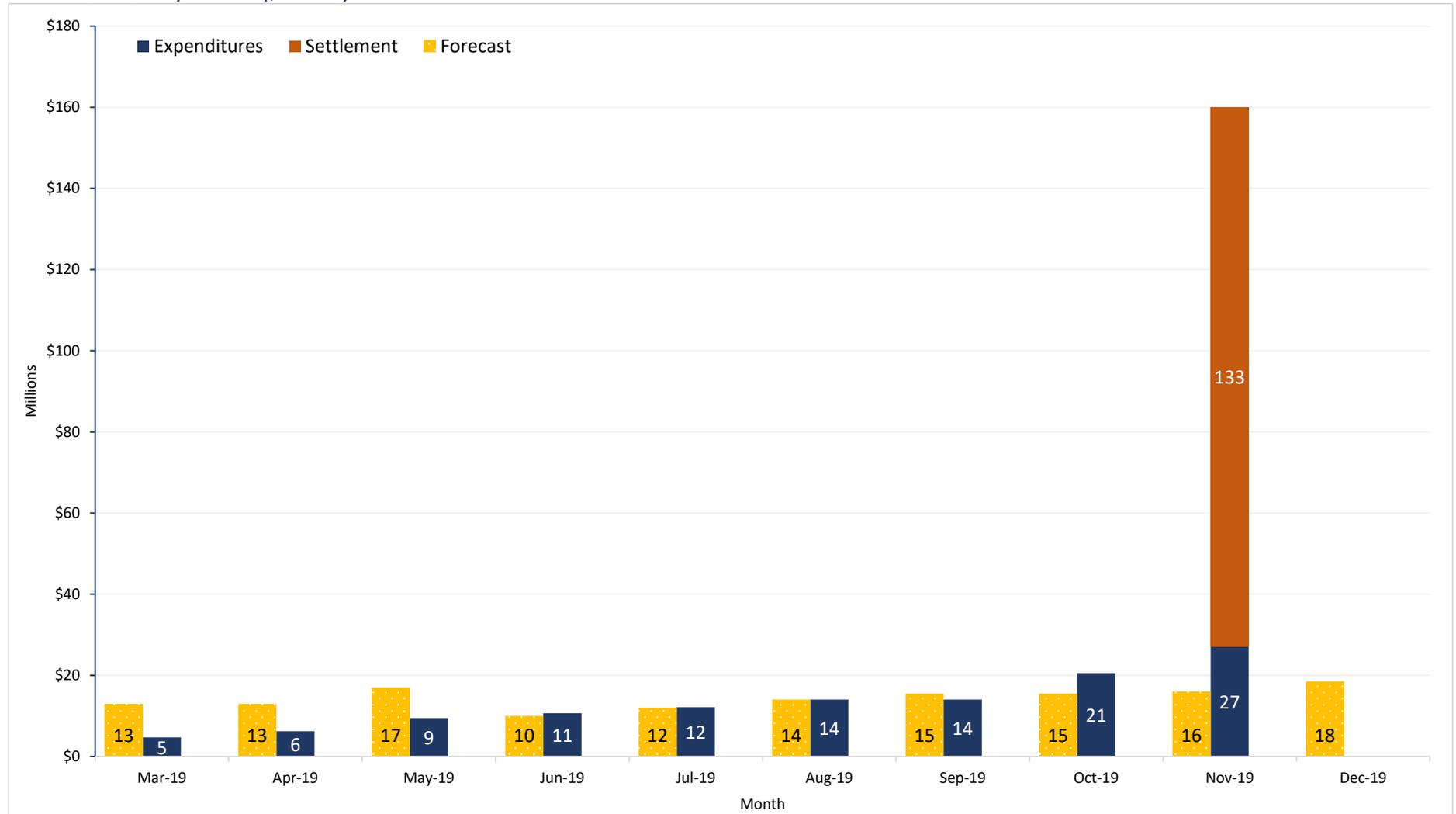
Milestone	Date
Environmental Clearance Complete	Jan-20
Utility Relocation Complete	Mar-21

Notes:

1. The Planned Value and Contract Substantial Completion Date is based on the CP 2-3 Proposed Schedule as of November 2019. This is expected to be refined as future change orders are issued and a revised RBS is finalized.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
3. The Current Contract Value does not include unexecuted change orders including Project 517, the latest TIA settlement, IPB change orders.

CP 2-3 – Design-Build Planned vs. Actual Expenditures – Near Term

CP 2-3 – Fiscal Year Expenditures (\$ Millions)



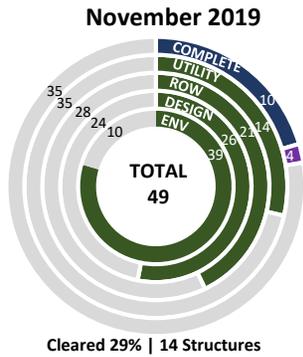
Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.

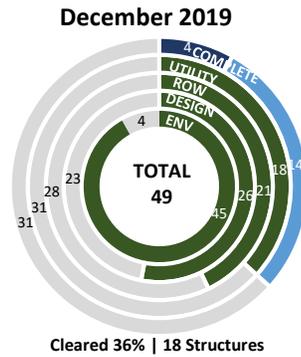
CP 2-3 – Construction Progress

CP 2-3 – Construction Progress

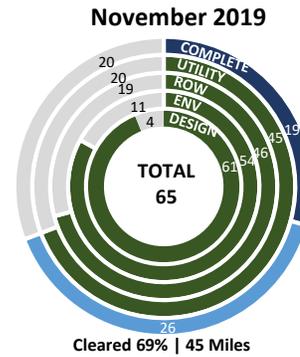
Actual Structures



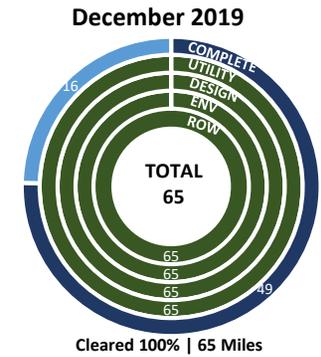
Forecasted Structures



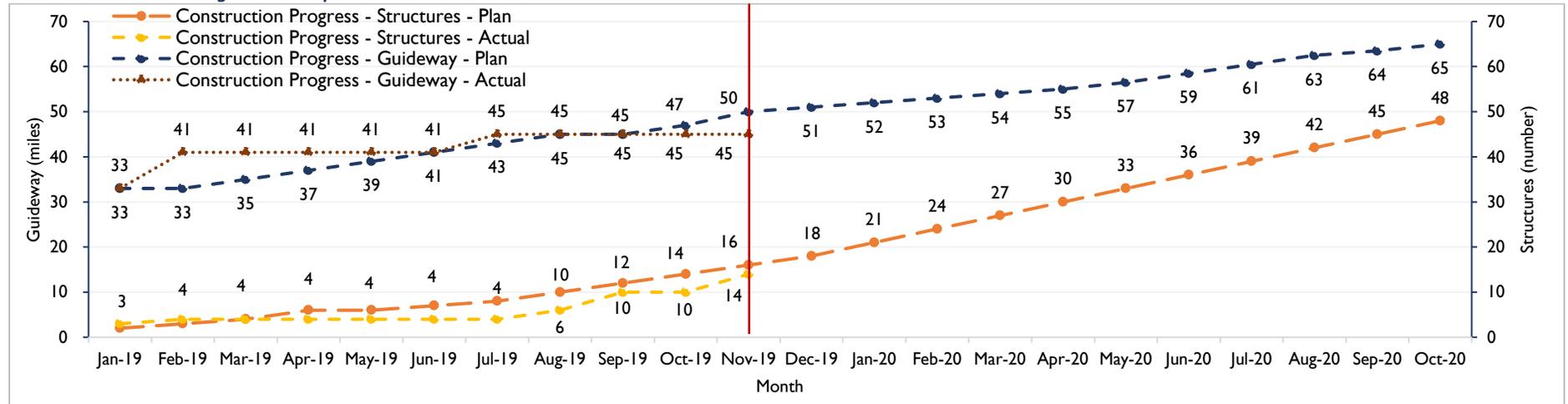
Actual Guideways



Forecasted Guideways



CP 2-3 – Construction Progress to Completion – Forecast vs. Actual

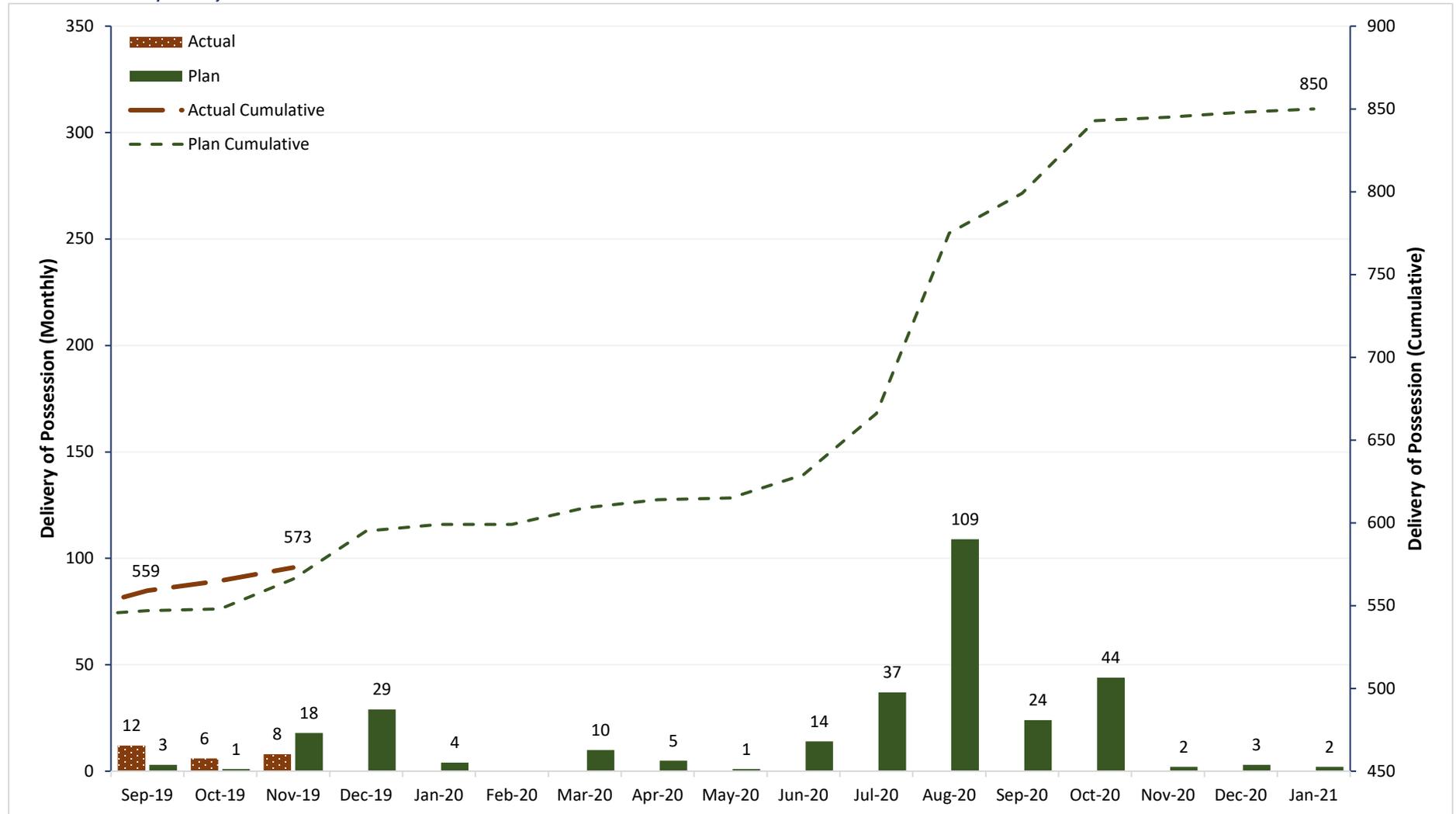


Notes:

1. Total Structures: 49 each. This count has been reduced from 50 due to combining the structures resulting from Project 517.
2. Total Guideway: 65 miles.
3. This forecast is based on the get to work plans developed in Jan 2019.

CP 2-3 – ROW Parcels Acquired by Month – Plan vs. Actuals

CP 2-3 – Parcels Acquired by Month

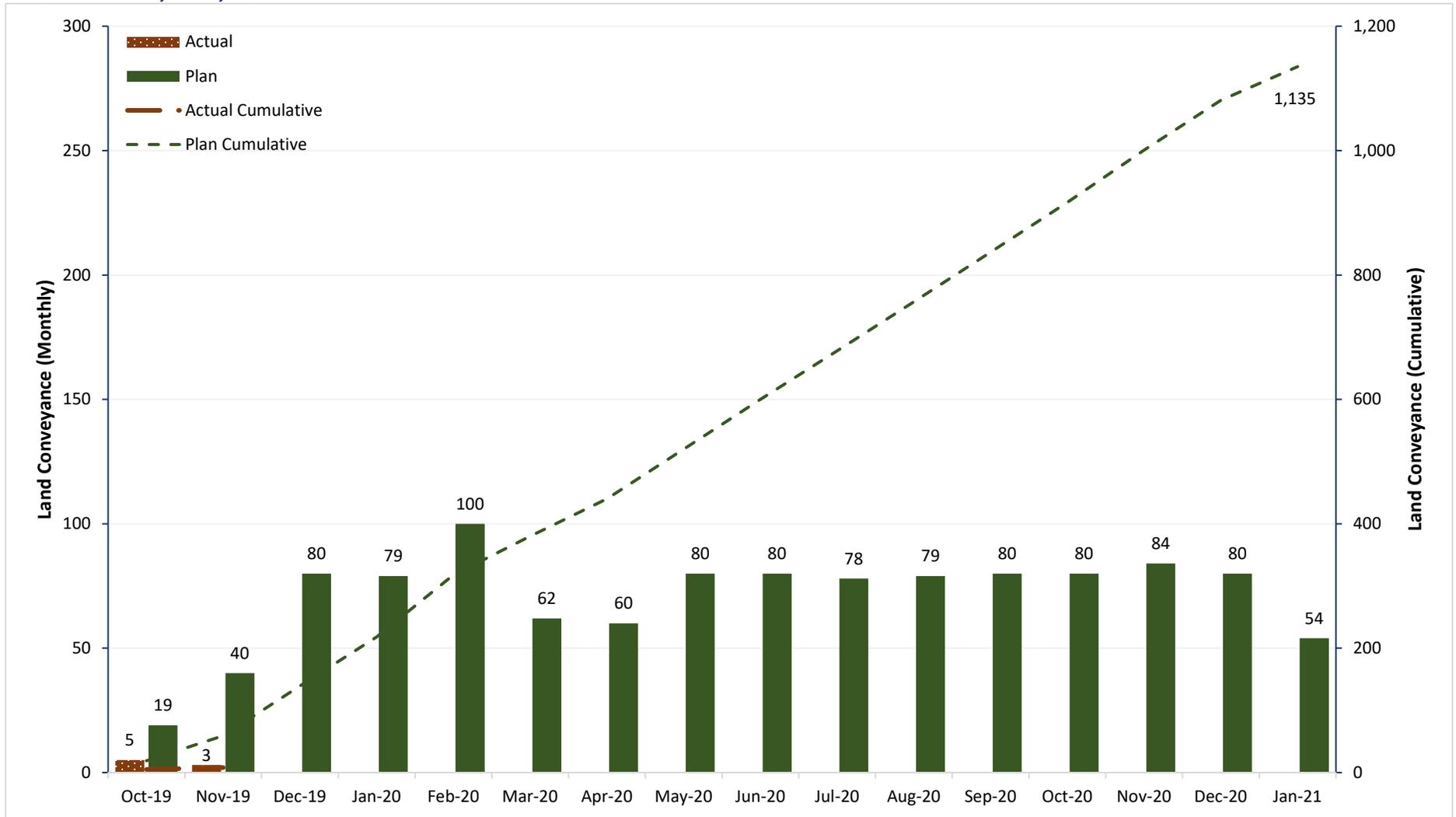


Note:

1. The above table reflects 284 parcels planned to be acquired after November 2019. Seven parcels were acquired ahead of plan, reducing the total remaining parcels to acquire to 277.

CP 2-3 – ROW Land Conveyance by Month – Plan vs. Actual

CP 2-3 – Land Conveyance by Month



CONSTRUCTION PACKAGE 4 (CP 4) OVERVIEW

CP 4 – Design Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	11/20/2014
SOQ Date:	1/30/2015
RFP Date:	5/27/2015
Proposal:	11/25/2015
Bid Open Date:	1/5/2016
Award Date:	2/29/2016
LNTP Date:	3/1/2016
NTP Date:	4/15/2016
Original Completion Date:	6/3/2019
Current Completion Date:	6/30/2021

Contract Value

Description	Amount
Fixed Bid Price:	\$337,247,000.00
Provisional Sums:	\$107,000,000.00
Original Contract Price:	<u>\$444,247,000.00</u>
Executed Change Orders:	\$64,834,232.16
Current Contract Amount:	<u>\$509,081,232.16</u>
² Approved Invoices to Date:	\$239,993,871.00
Remaining Contract Balance:	<u>\$269,087,361.16</u>

Contract Time Status

Description	¹ Duration
Original Contract Days:	1,144
Extension of Time Awarded:	757
Current Contract Days:	1,901
Work Days Spent (thru 11/30/2019)	1,323

Expended to Date

Description	Percentage
Time:	69.6%
Dollars:	47.1%

Growth %

Description	Percentage
% Time Growth:	66.2%
% Dollars Growth:	14.6%

Notes:

1. Calendar Days.
2. Included actuals through October and Estimate for November 2019.
3. The budget status table has been removed this period as it contains same information as the contract value.

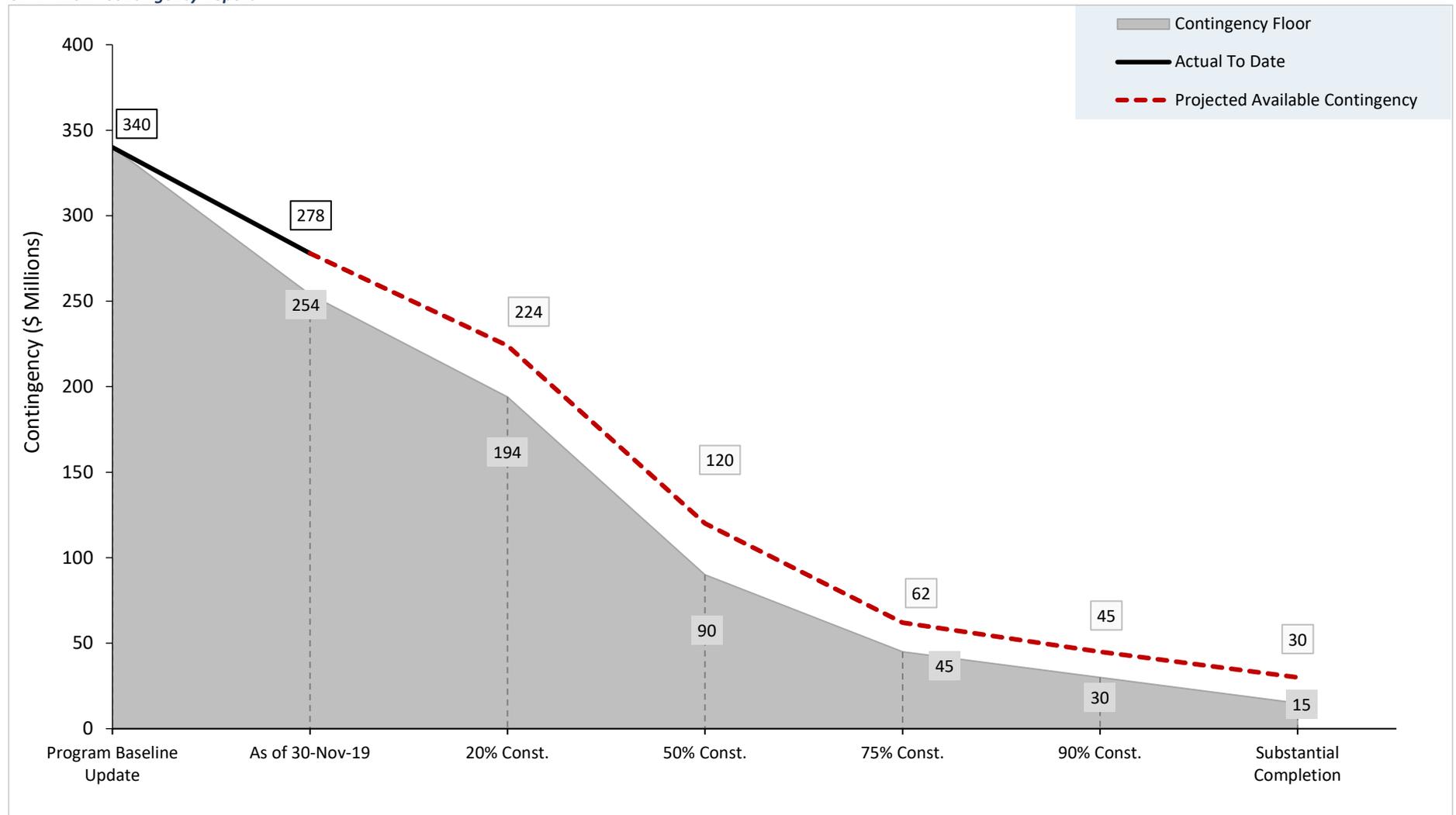
CP 4 – Executed Change Order Status

CP 4 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00047	Sempra Relocation SR-46 Conflict 10003 Design		\$459,722.86	22-Nov-19
00046	Mitigation Cost Reimburse Zones 1-5		\$2,800,000.00	5-Nov-19
Total:			\$3,259,722.86	

CP 4 – Risk - Contingency Report

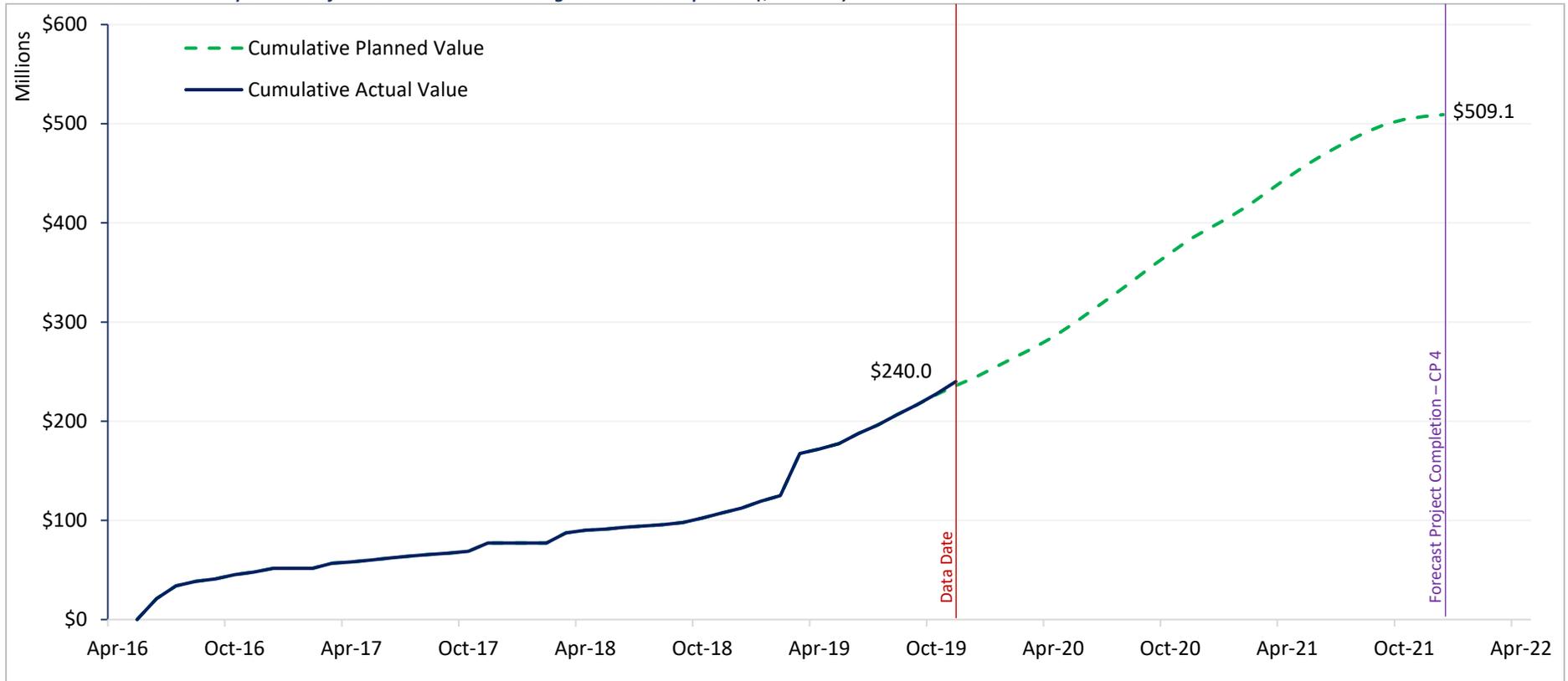
CP 4 – Risk - Contingency Report



- Notes:**
1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 4 Project.
 2. Contract through November 30, 2019.

CP 4 – Earned Value

CP 4 – Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



CP 4 – Projected Milestones

Milestone	Date
Main Design Complete	Feb-20
ROW Acquisition Complete	Dec-20

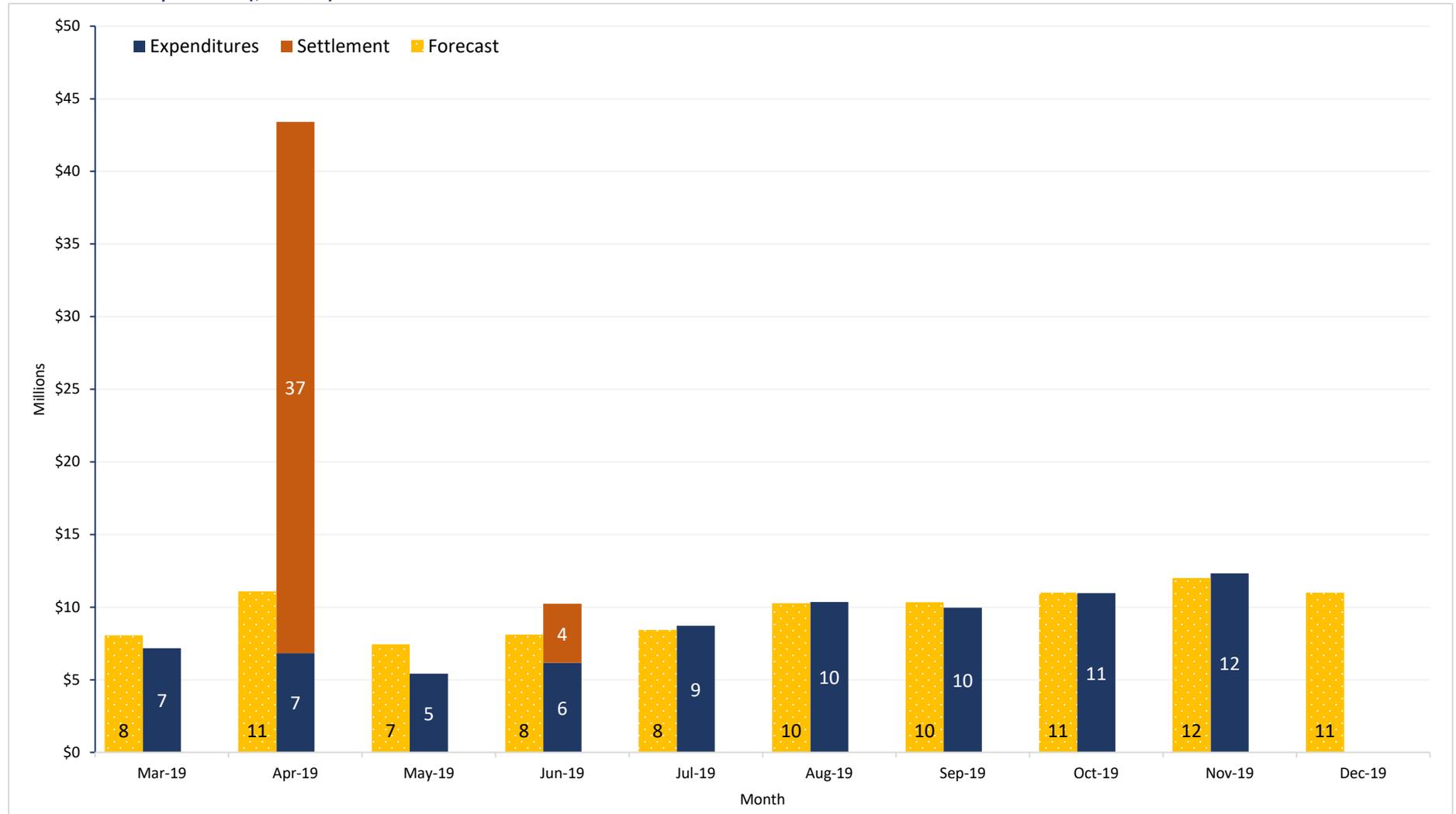
Milestone	Date
Environmental Clearance Complete	Mar-20
Utility Relocation Complete	Mar-21

Notes:

1. The Planned Value and Contract Substantial Completion Date is based on the CP 4 Proposed Schedule as of November 2019. This is expected to be refined as future change orders are issued and a revised RBS is finalized.
2. The above contract value does not include unexecuted change orders including SR46 BNSF structure and IPB.

CP 4 – Design-Build Planned vs. Actual Expenditures – Near Term

CP 4 – Fiscal Year Expenditures (\$ Millions)



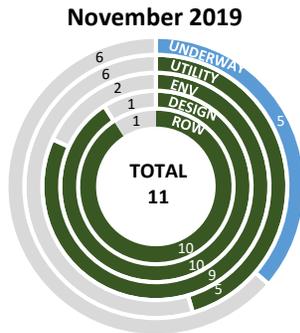
Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.

CP 4 – Construction Progress

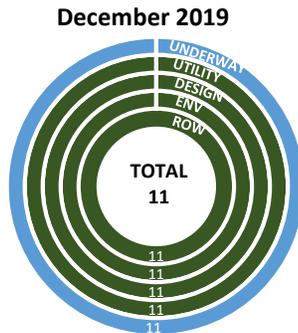
CP 4 – Construction Progress

Actual Structures



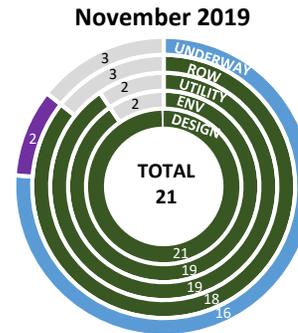
Cleared 45% | 5 Structures

Forecasted Structures



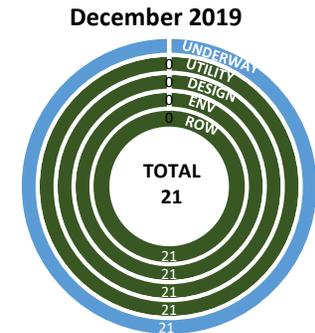
Cleared 100% | 11 Structures

Actual Guideways



Cleared 85% | 18 Miles

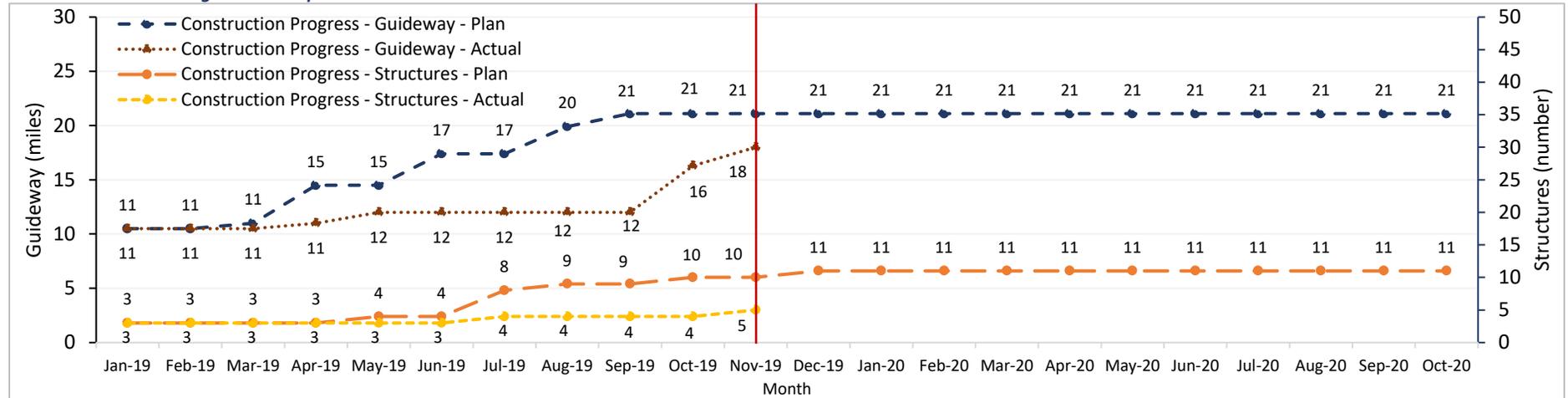
Forecasted Guideways



Cleared 100% | 21 Miles



CP 4 – Construction Progress to Completion – Forecast vs. Actual

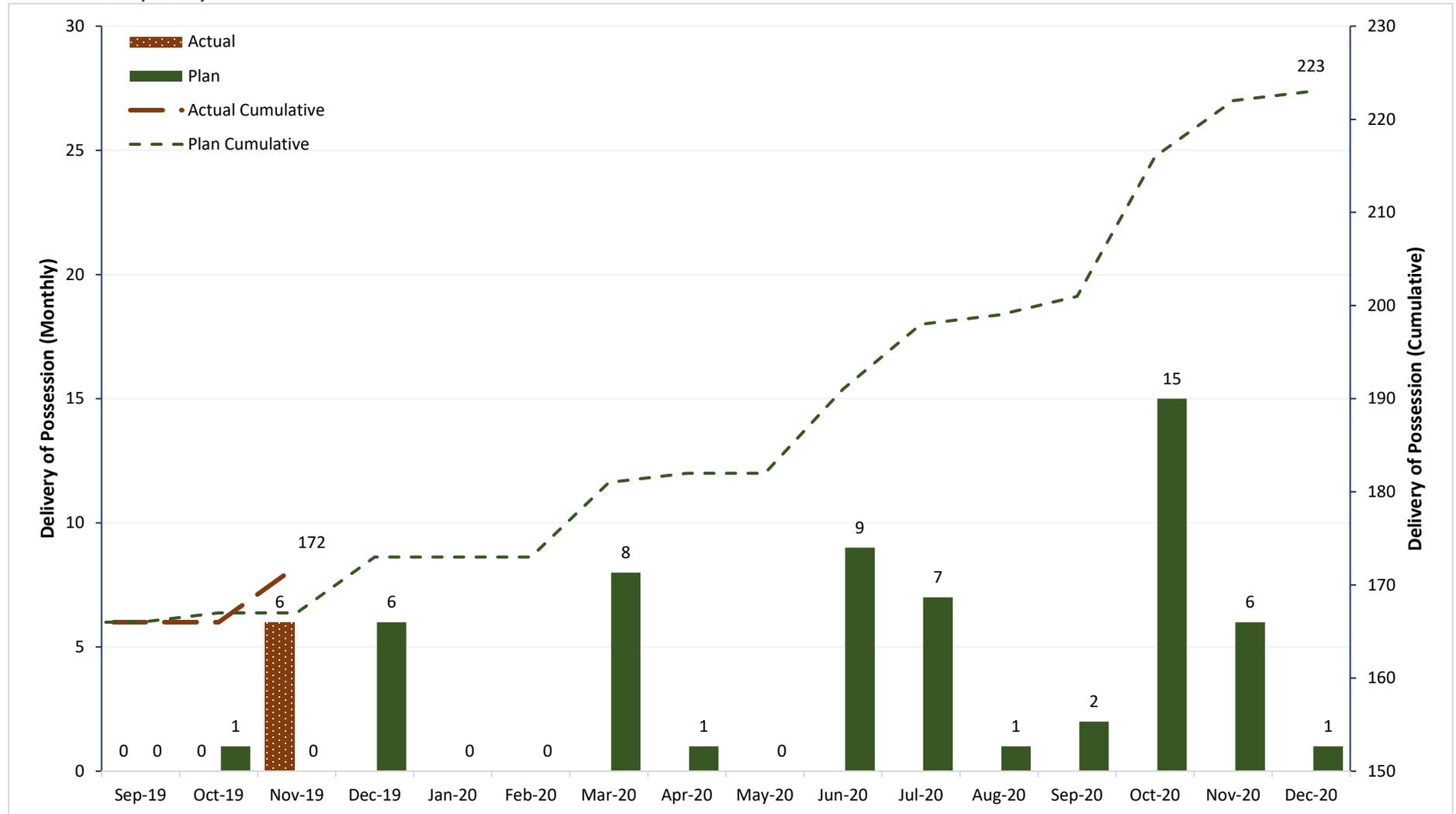


Notes:

1. Total Structures: 11 each.
2. Total Guideway: 21 miles.
3. Two miles of guideway have been cleared but not started.
4. This forecast is based on the get to work plans developed in Jan 2019.

CP 4 – ROW Parcels Acquired by Month – Plan vs. Actuals

CP 4 – Parcels Acquired by Month

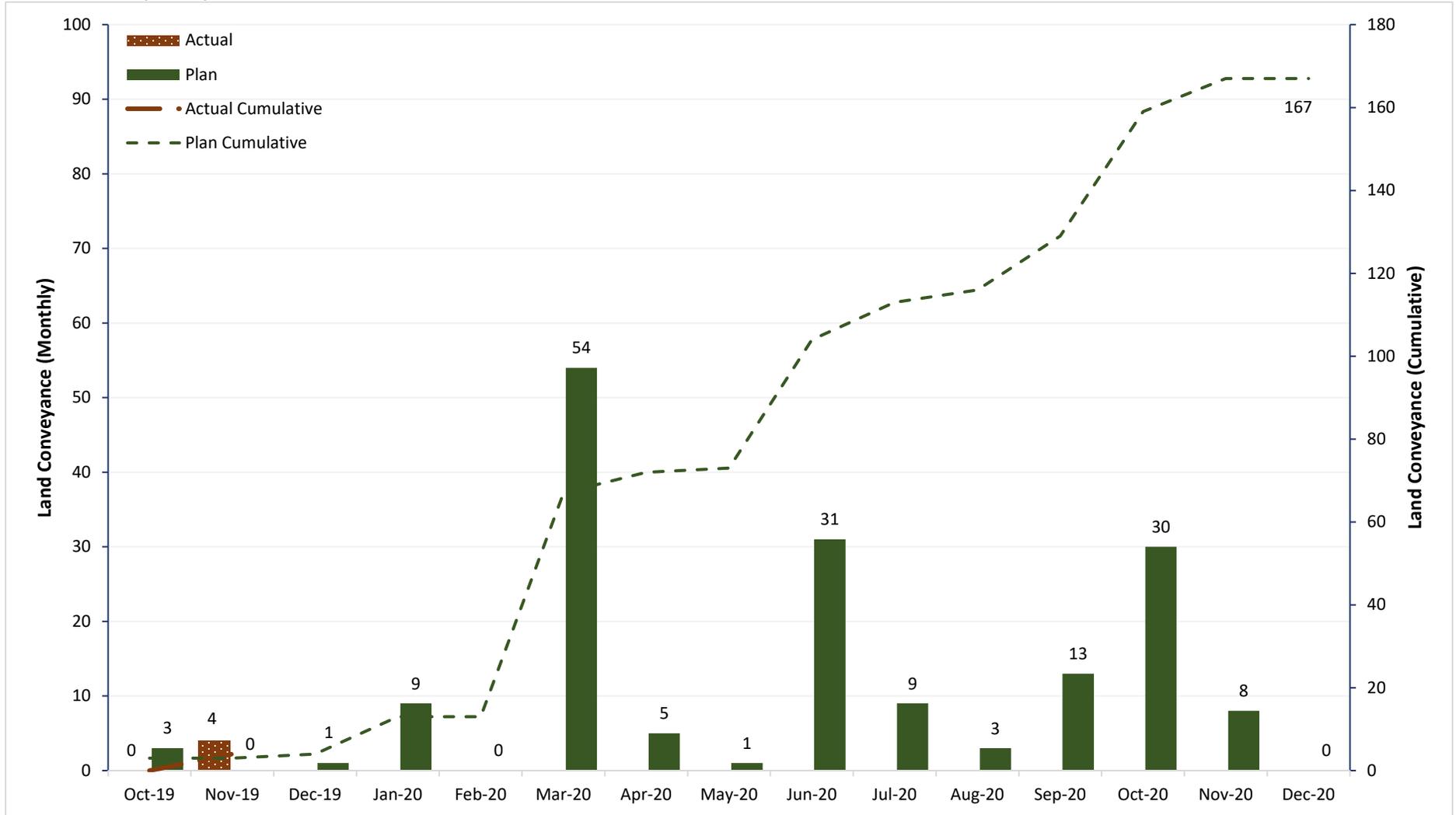


Notes:

1. ROW process review undertaken in September resulting in no Actuals for that month.
2. The above table reflects 56 parcels planned to be acquired after November 2019. Five parcels were acquired ahead of plan, reducing the total remaining parcels to acquire to 51.

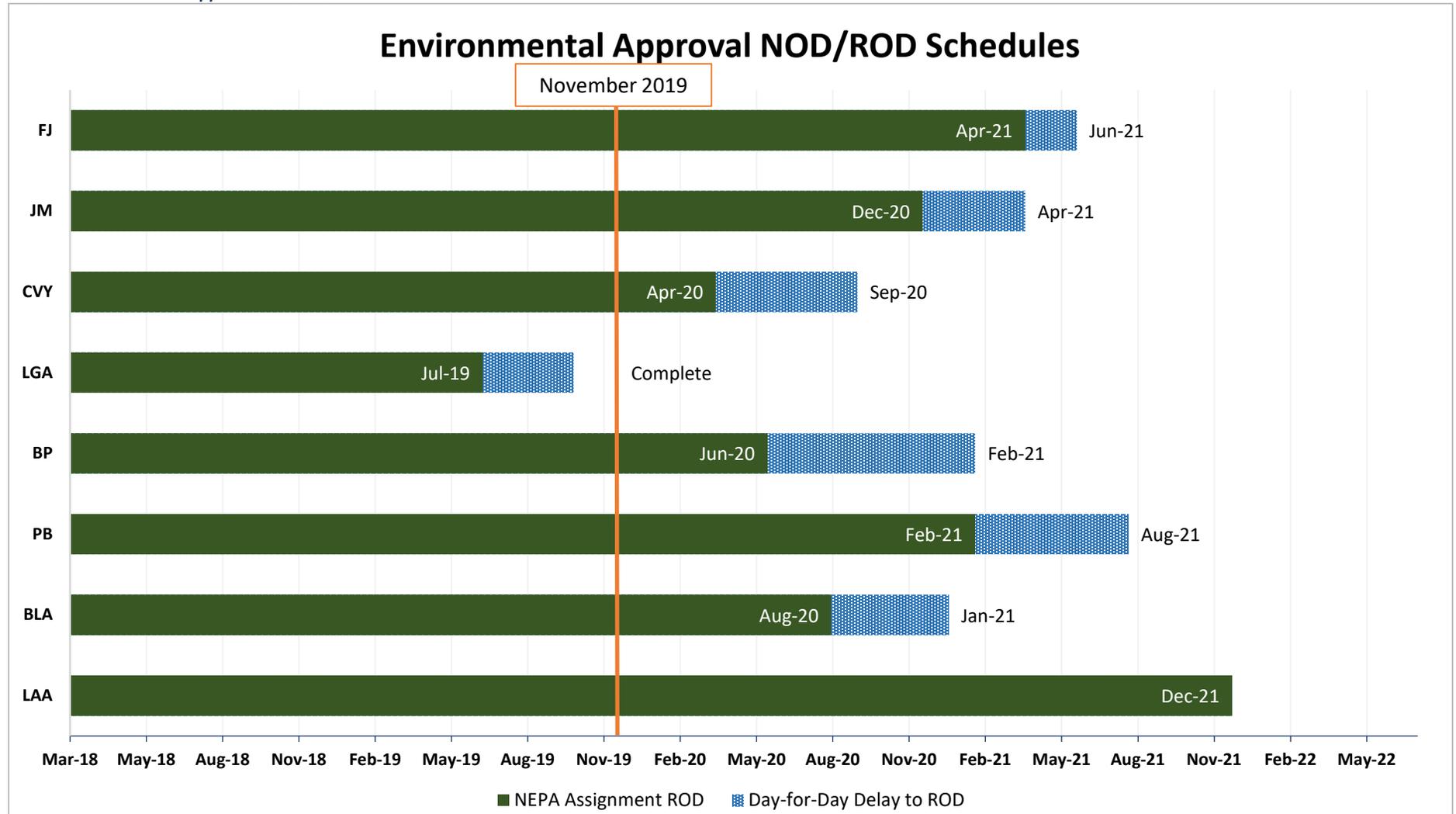
CP 4 – ROW Land Conveyance by Month – Plan vs. Actual

CP 4 – Land Conveyance by Month



PROJECT DEVELOPMENT SCHEDULE – RECORDS OF DECISION (ROD)

Phase 1 Environmental Approval Schedule



Project Development Schedule (to ROD)

Program Priority	Segment	Progress	Complete Purpose & Need Statement		Complete Alternatives Analysis		Board Concurrence of Preliminary Preferred Alt. Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIS & Obtain ROD		Date EIR/EIS To Be Completed	
			Number	Section	Due Dates	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current	Last Month
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 Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	CV Electrical Interconnections	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	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%	Mar-20 Apr-20 43%	Mar-20 Apr-20 45%	Apr-21 Apr-21 0%	Apr-21 Jun-21 ¹ 0%	Jun-21	Jun-21
2	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%	Dec-19 Mar-20 47%	Dec-19 Mar-20 50%	Dec-20 Dec-20 0%	Dec-20 Apr-21 ² 0%	Apr-21	Apr-21
3	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%	Apr-20 Sep-20 8%	Apr-20 Sep-20 ³ 20%	Sep-20	Sep-20
4	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%
5	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%	Nov-20 Nov-20 68%	Nov-20 Nov-20 68%	Dec-21 Dec-21 0%	Dec-21 Dec-21 0%	Dec-21	Dec-21
6	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%	Feb-20 Feb-20 80%	Feb-20 Feb-20 80%	Aug-20 Jan-21 0%	Aug-20 Jan-21 ⁴ 0%	Jan-21	Jan-21
7	Palmdale to Burbank	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Dec-19 Jan-20 64%	Dec-19 Mar-20 66%	Feb-21 Feb-21 0%	Feb-21 Aug-21 ⁵ 0%	Aug-21	Aug-21
8	Bakersfield to Palmdale	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-19 Mar-20 85%	Jul-19 Feb-20 87%	Jun-20 Jun-20 0%	Jun-20 Feb-21 ⁶ 0%	Feb-21	Feb-21
9	HMF	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Apr-16 TBD 0%	Apr-16 TBD 0%	Sep-16 TBD 0%	Sep-16 TBD 0%	Feb-21 TBD 0%	Feb-21 TBD 0%	TBD	TBD

¹ Actual 2-month delay (incorporating 2018 CEQA guidelines and responding to agency comments).
² Actual 4-month delay (incorporating 2018 CEQA guidelines and responding legal and program comments).
³ Actual 4-month delay (day for day slip occurred because of lack of NEPA Assignment).
⁴ Actual 5-month delay (Construction assumptions update and external agency coordination: Burbank Airport).
⁵ Actual 6-month delay (external agency coordination: Una Lake). Developing mitigation plans to minimize or eliminate associated schedule impacts.
⁶ Actual 8-month delay (external agency coordination: CCNM). Developing mitigation plans to minimize or eliminate associated schedule impacts.

Project Development – Key Actions

During November, the Authority conducted EIR/EIS document reviews for several project sections. This included Finishing Team reviews for distributing to the cooperating agencies the San Jose to Merced and San Francisco to San Jose Project Section Administrative Draft EIR/EIS documents. The NEPA Assignment Team also conducted its review responsibilities for the Bakersfield to Palmdale Administrative Draft EIR/EIS and completed a review for the Burbank to Los Angeles Administrative Draft EIR/EIS. For permitting, work continued to obtain environmental approvals (e.g., a Biological Opinion from the U.S. Fish and Wildlife Service) and Valley-to-Valley permits needed for project construction.

Project Development – Key Actions Summary

Project Section	Key Actions
San Francisco to San Jose	<ul style="list-style-type: none"> Initiated Finishing Team review of the Administrative Draft EIR/EIS November 4. Prepared Vistacion Creek Feasibility analyses to support environmental permitting with the Bay Conservation and Development Commission as part of ongoing coordination efforts. Checkpoint C Submittal #4 was submitted to legal counsel and CEQA/NEPA review.
San Jose to Merced	<ul style="list-style-type: none"> Distributed the administrative draft EIR/EIS to the cooperating/responsible agencies on November 27 for 30-day review. Updated Checkpoint C report and associated technical studies for consistent with U.S. Army Corps of Engineers (USACE) preliminary jurisdictional determination. Met with California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) staff to discuss wildlife corridor analysis and approach for mitigation impacts for Soap Lake and Grasslands Ecological Area Important Bird Areas.
Central Valley Wye	<ul style="list-style-type: none"> Prepared and sent for legal review draft responses for over 600 comments received by the Authority following public circulation of the Draft EIR/EIS. Sent the Checkpoint C closure letter to the U.S. Environmental Protection Agency (USEPA) and USACE on November 26.
Locally Generated Alternative	<ul style="list-style-type: none"> The Combined Supplemental Record of Decision and Final Supplemental Environmental Impact Statement was released to the public and noticed in the Federal Register on November 8, 2019. Readied for Authority review and approval Section 404 and Section 401 Clean Water Act permits and Section 1602 permit for project construction.
Bakersfield to Palmdale	<ul style="list-style-type: none"> Finalized project footprint for the Refined CCNM Design Option and began the environmental analysis. Incorporated the Refined CCNM Design Option into the Draft EIR/EIS. Preparing for public meetings in January prior to circulation of the Draft EIR/EIS to the public.
Palmdale to Burbank	<ul style="list-style-type: none"> Coordination continued with USACE and USEPA on Checkpoint B (for approvals and permits) with regard to impacts to Una Lake. Completed Record Set Preliminary Engineering for Project Definition (PEPD) documents and made available to FRA for review and comment. Submitted compiled administrative draft EIR/EIS for Finishing Team review. Cooperating agency review of the EIR/EIS is planned for January 2020.
Burbank to Los Angeles	<ul style="list-style-type: none"> Continued to conduct consultation with municipalities and agencies within the project section by providing preliminary engineering plans for their review. From this review, refinements were made to the construction phasing plans. Finishing Team review of the administrative draft EIR/EIS was completed and the document was distributed to the cooperating agencies on November 2, 2019.
Los Angeles to Anaheim	<ul style="list-style-type: none"> Coordination continued with BNSF on project elements and analysis methods for inclusion in the draft EIR/EIS. Continued coordination with Metro, Metrolink and other stakeholder agencies on shared corridor strategies.