

Link Union Station: Construction Management/General Contractor Project Delivery Method



Phase A - Funded

SEGMENT 1 – THROAT AREA

1. Rail signal, communications and track work
2. Utility relocation

SEGMENT 2 – COMMERCIAL & CENTER ST

1. Property acquisition
2. Utility relocation
3. Street and ATP improvements

SEGMENT 3 – VIADUCT & RUN-THROUGH

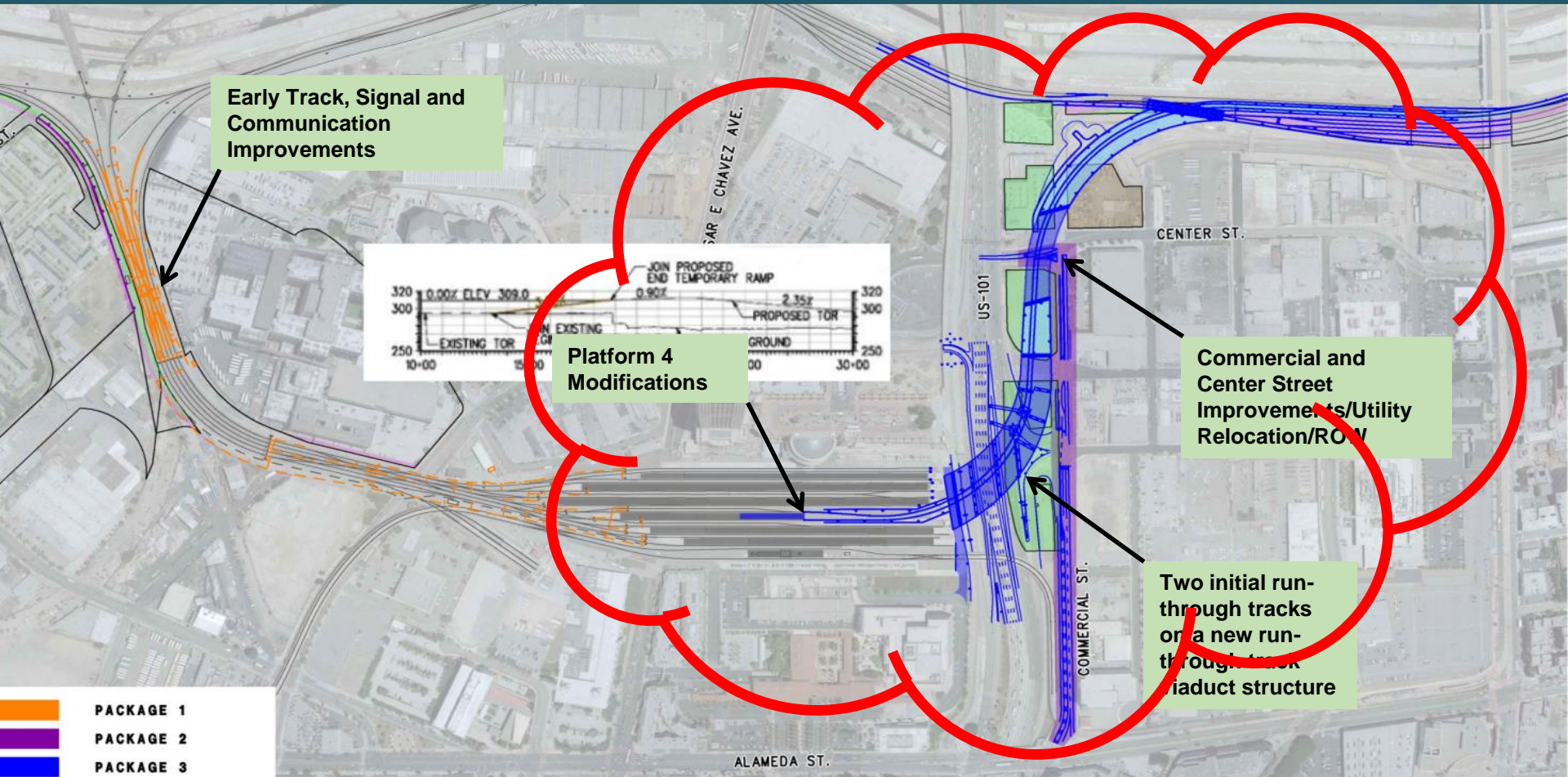
1. Viaduct structure over US-101 (full width) and south of US-101 to 1st Street.
2. Two run-through tracks from Union Station Platform 4 to mainline tracks
3. Signal and communication

Phase B - Not Funded

SEGMENT 4 – RAIL YARD/CONCOURSE AREA

1. Raising of the rail yard, including new platforms and tracks, new stairs, escalators and elevators, and new bridges over Cesar Chavez Avenue and Vignes Street.
2. Proposed modified expanded passageway, including including East and West Plazas
3. Add remaining run-through tracks and new lead track in the throat

Initial Phase A (Funded)

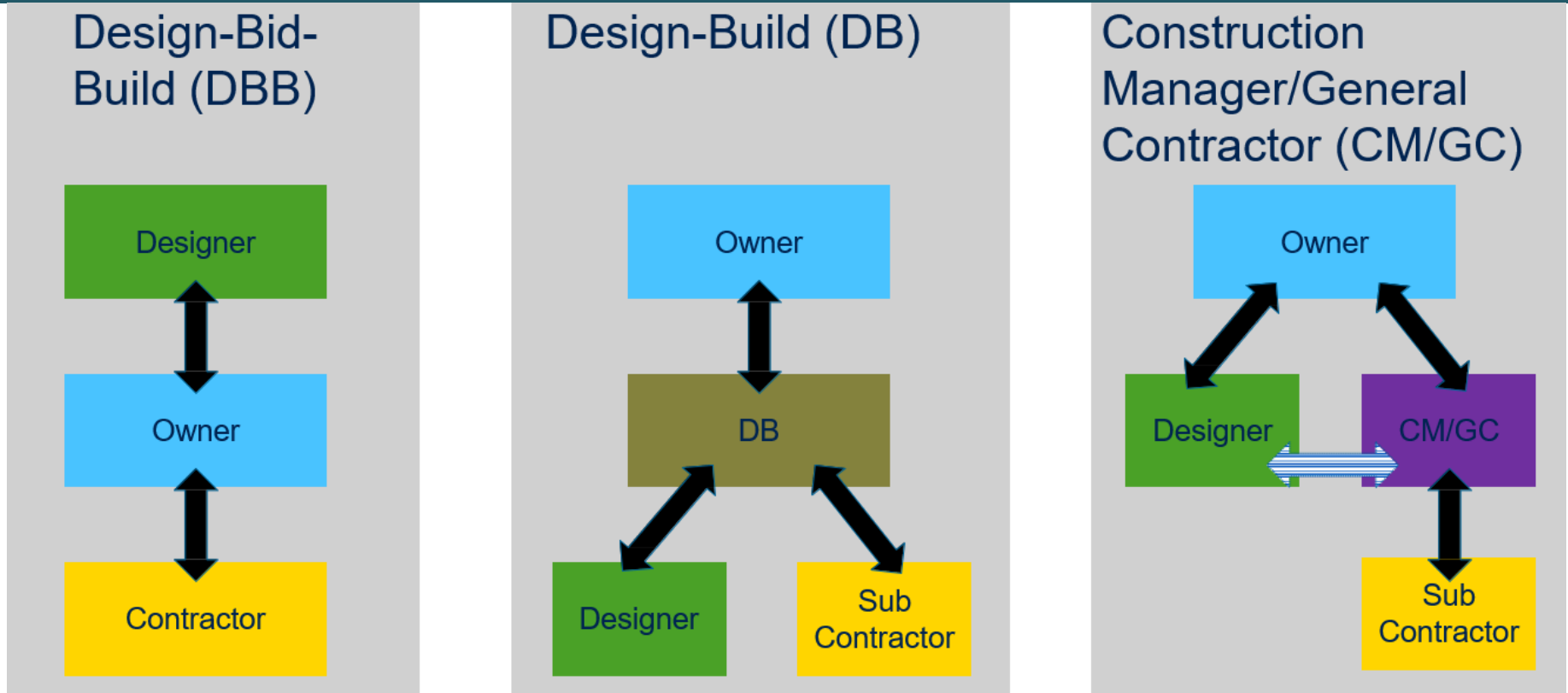


Key Project Components

1. New rail communication, signals and early tracks to be performed by Metrolink
2. Utility relocation and street improvements
3. Platform #4 and Viaduct structure over the US 101 freeway

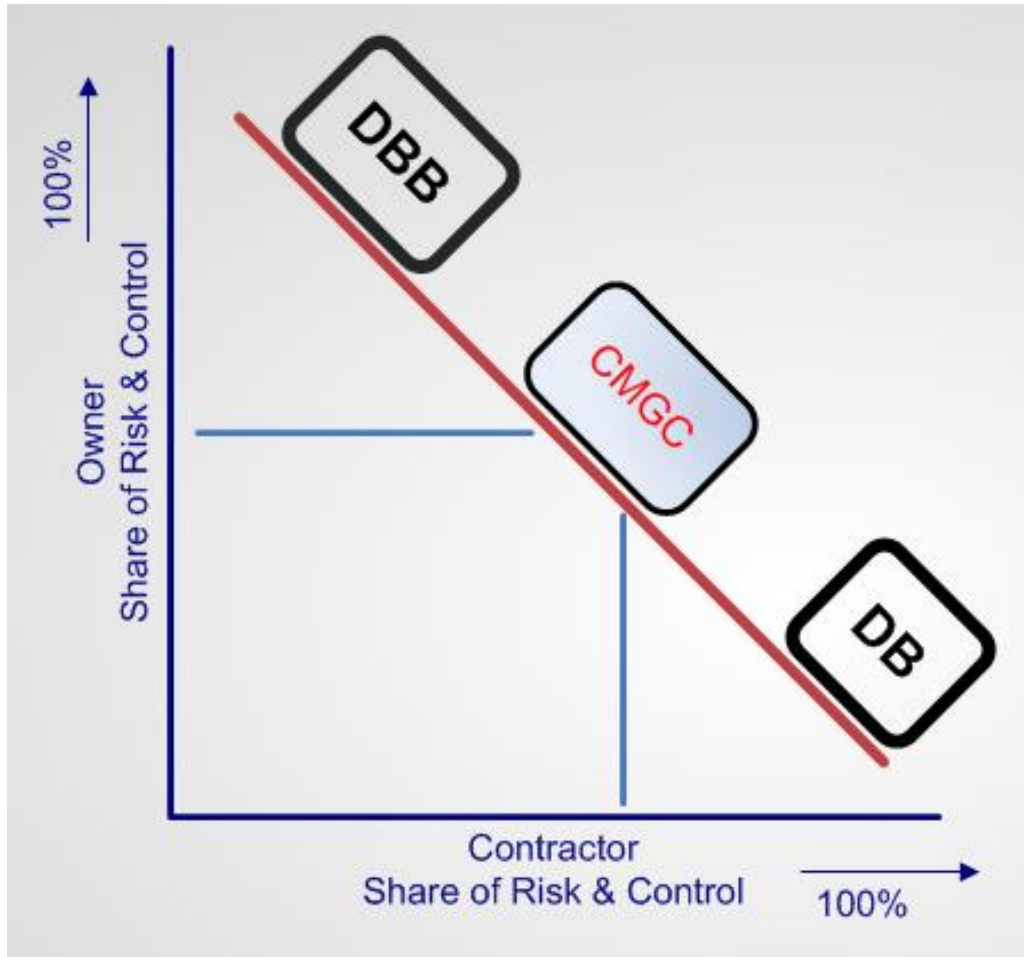
← CMGC Scope

Delivery Methods Comparison



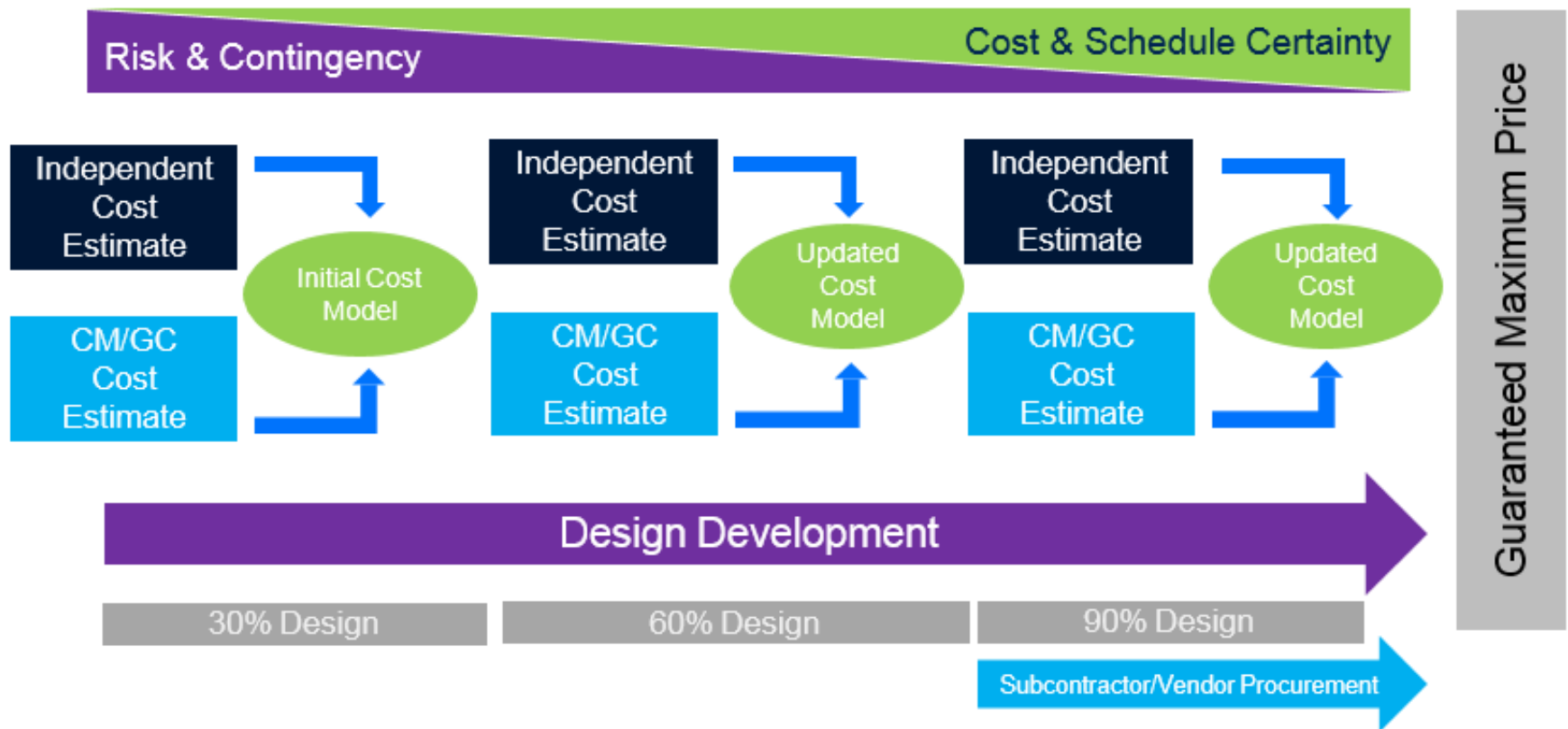
The **Construction Manager/General Contractor (CM/GC)** project delivery method is defined as when an owner engages a general contractor to provide pre-construction services during the design phase and commit to construct the project at a defined scope and price.

CMGC Balances Risks



1. CMGC furnishes more owner control than DB
2. **CMGC allows an equitable sharing of project risk with the contractor because contractor is involved in the design enabling value engineering and constructability review.**

CM/GC Manages Risks



1. **CM/GC: Enables value engineering and constructability review** throughout the design development process.
2. **CM/GC: Reduce risk and contingency** while reaffirming cost and schedule certainty at each progression of the design thereby minimizing change orders

Link US Funding Plan (Phase A)

Funding Source	Phase A	
State Proposition 1A/High Speed Rail Bonds	\$423.335	California High-Speed Rail Authority 2018 Business Plan includes \$423 million for Link US.
TIRCP/STIP	\$398.391	As part of the 2018 Transit and Intercity Rail Capital Program under Metrolink's SCORE program, Link US was awarded \$398.4 million.
Measure R	\$51.672	
Measure M	\$13.274	
HSR	\$18.726	
SCRRA JPA Contribution (Non-Metro)	\$40.0	
Amtrak/State	\$5.0	
Total	\$950.398*	

Note: Metro and HSR have contributed \$70.398 Million for environmental & preliminary engineering (Metro \$51.672 M and HSR \$18.726 M).

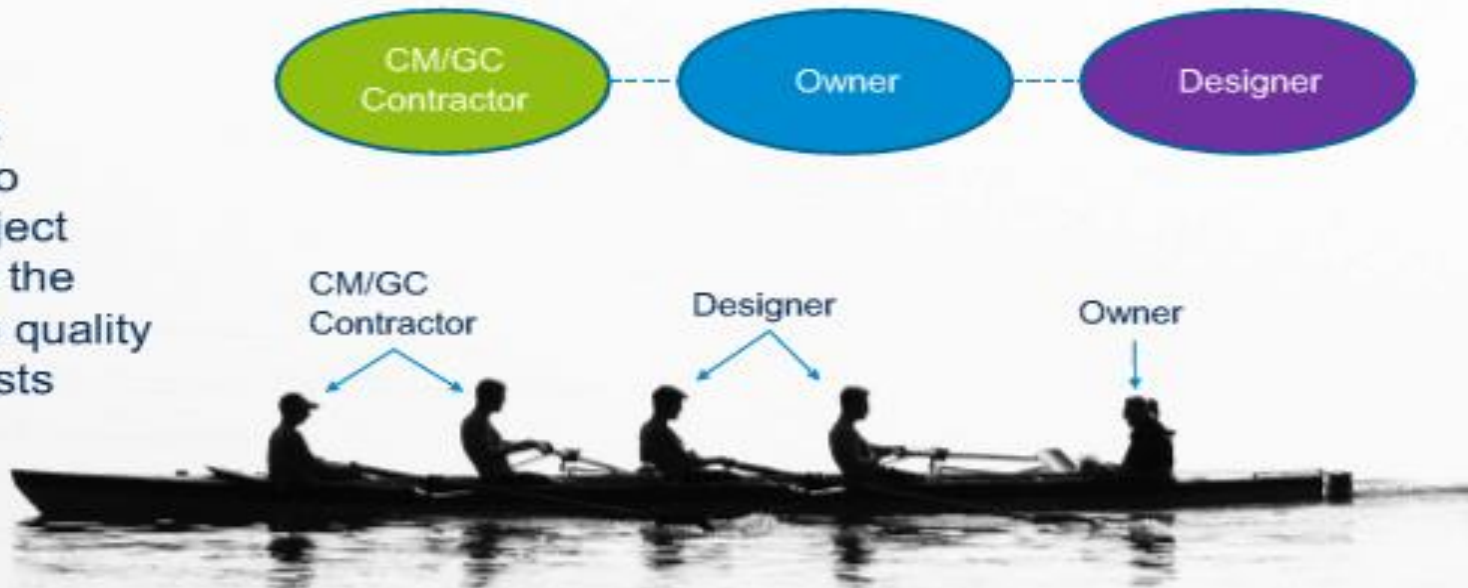
CMGC is the recommended Project Delivery Method

Because having a General Contractor on board early during the design process **addresses the key project constraints**:

1. **Maintain operations** at Los Angeles Union Station, largest multi-modal transit terminal in Southern California every week day serving over 100,000 passengers, 188 Metrolink and Amtrak trains, over 1,000 buses, as well as Red Line, Purple Line and Gold Line services. Site constraints include US 101 Freeway including on/off ramps, Metro Purple Line/Red Line tunnel and Division 20 expansion project in the same area as the Link US run-through tracks
2. **Fixed Budget** – Due to the financial constraint of a \$950 million funding for the entire project, there is very limited ability to absorb cost overruns.
 - a) **Maximize cost and schedule savings with early engagement of the GC** during the design phase to provide constructability review, value engineering analysis, updated construction costs, risk analysis and updated construction schedule at every design submittal.
 - b) **Minimize change orders** during construction.
 - c) **Minimize third party delays** with flexible phasing plan based on GC construction schedule.
3. **Large stakeholders** – Metrolink, CAHSR, CalSTA, Caltrans, Amtrak/LOSSAN, State Historic Preservation Officer (SHPO), LA Conservancy, Metropolitan Water District (MWD), First 5 LA, Arts District, Little Tokyo residents and businesses, William Mead Homes, City of Los Angeles with specific design criterion.
4. **Optimize Quality** – with a high level of sustainable design and construction as the A/E, CMGC and Owner are collaboratively working together throughout the design development phase.

We are recommending CMGC for LINK US

Designer and Contractor work collaboratively to develop the project scope, optimize the design, improve quality and manage costs



Based on 35% PE Design Bridging Documents Considering:

1. **Single contract** with phased approach (via Task Order) which provide off-ramps with independent task orders
2. **NTE fee with lump sum contract** (at 90% design level)
3. **Establish an overall SBE and DVBE goal** based on 35% preliminary engineering design
4. **3-Party Cooperation Agreement** (CMGC, A/E and Owner)

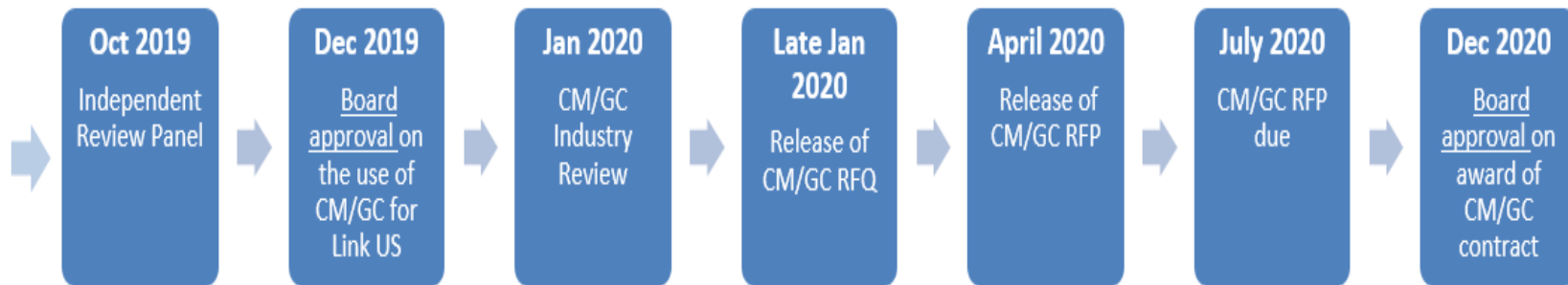
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DRAFT PRE-CONSTRUCTION PHASE			CONSTRUCTION PHASE
Task Order 1 6 MONTHS (Jan to Jun 2021)	Task Order 2 10 MONTHS (Jul 21' to Apr 22')	Task Order 3 8 MONTHS (May 22' to Dec 22')	Task Order 4, 5, etc. 48 MONTHS (Jan 23' to Dec 26')
35% Phase B Design Milestone	65% Design Milestone	90% Design Milestone	A/E to prepare as constructed documents
SEPARATE TASK ORDER ISSUED OR OFF-RAMP AND TERMINATION	SEPARATE TASK ORDER ISSUED AND/OR OPPORTUNITY FOR EARLY CONSTRUCTION WORK OR OFF-RAMP AND TERMINATION	NEGOTIATION TO DETERMINE LUMP SUM CONSTRUCTION TASK ORDER OR OFF-RAMP AND TERMINATION	
If Terminated, Metro may proceed with second highest CM/GC proposer, if feasible	If Terminated, Metro may proceed with second highest CM/GC proposer, if feasible	If Terminated, Metro may proceed with second highest CM/GC proposer, if feasible	

CMGC Timeline Overview

Sep 2019
AB 1475,
CM/GC for
transportation
projects

Existing Law
PUC 130242
(Russell Act)



1. **Subject to Change...pending V/CM approval**
2. **A separate CM/GC Project Support Consulting Services RFP will be needed and anticipated to be released in June 2020**

Independent Panel Review on Oct 11th

Link Union Station Independent Review Panel consisted of 12 Panel Participants: **DART** (Tim McKay), **SANDAG** (John Haggerty), **High Speed Rail** (Christine Inouye), **Metrolink** (Justin Fornelli), **City of LA** (Julie Allen), **Metro Program Management** (5) and **Metro V/CM** (2) to address two key questions were asked:

- 1. Is CMGC the right delivery method for the project and why?**
 - a) **CMGC is the best project delivery method** for constraint budget, constraint site, large stakeholders and live tracks (commuter, intercity, light rail and heavy rail)
 - b) **DB is not a good fit** because risks will be high due to live tracks and large stakeholders resulting in higher costs. **DBB is not a good fit** because the project is too complicated for a low bid delivery which will result in significant change orders.
- 2. What are the advice and lessons learned from your experience and expertise?**
 - a) Design and construct to budget cost.
 - b) For live tracks and station, incentivize with performance score card paid quarterly.
 - c) Co-location of key project team members in one office
 - d) Maintain key project team members
 - e) Defined off-ramp strategy and be ready and willing to implement.
 - f) Importance of independent cost estimate to validate both the CMGC and A/E cost estimates.