

Middle Avenue Pedestrian and Bicycle Undercrossing Project

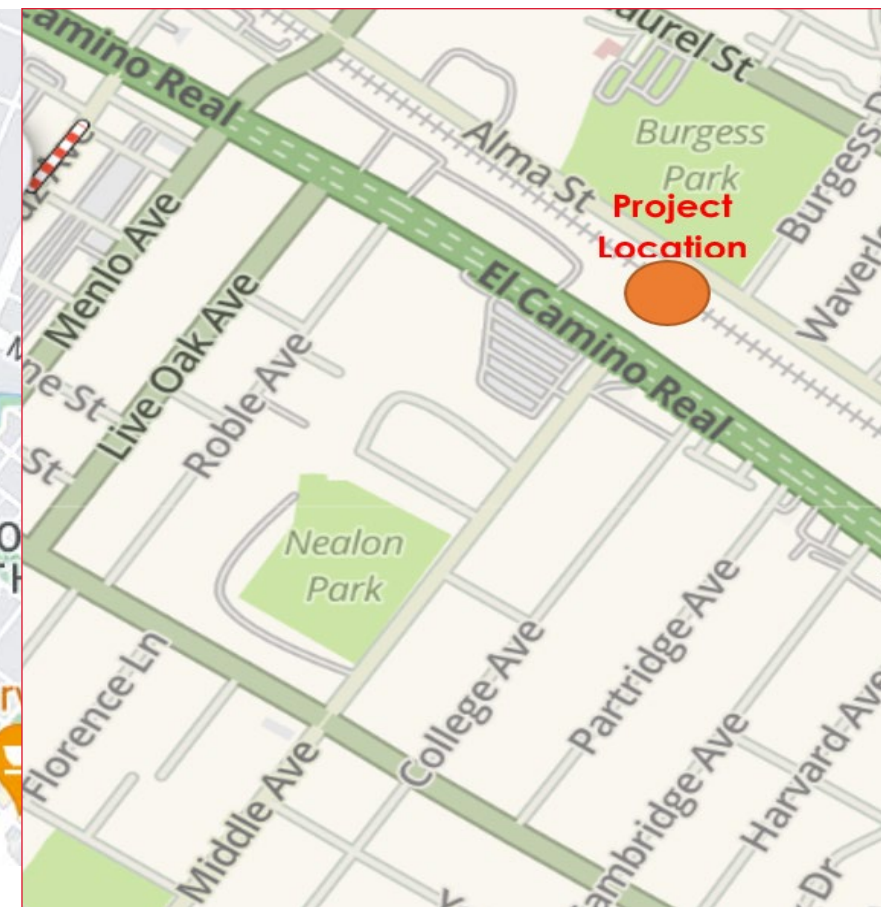
Project Delivery Strategy

JPB Board

November 2, 2023



Project Location

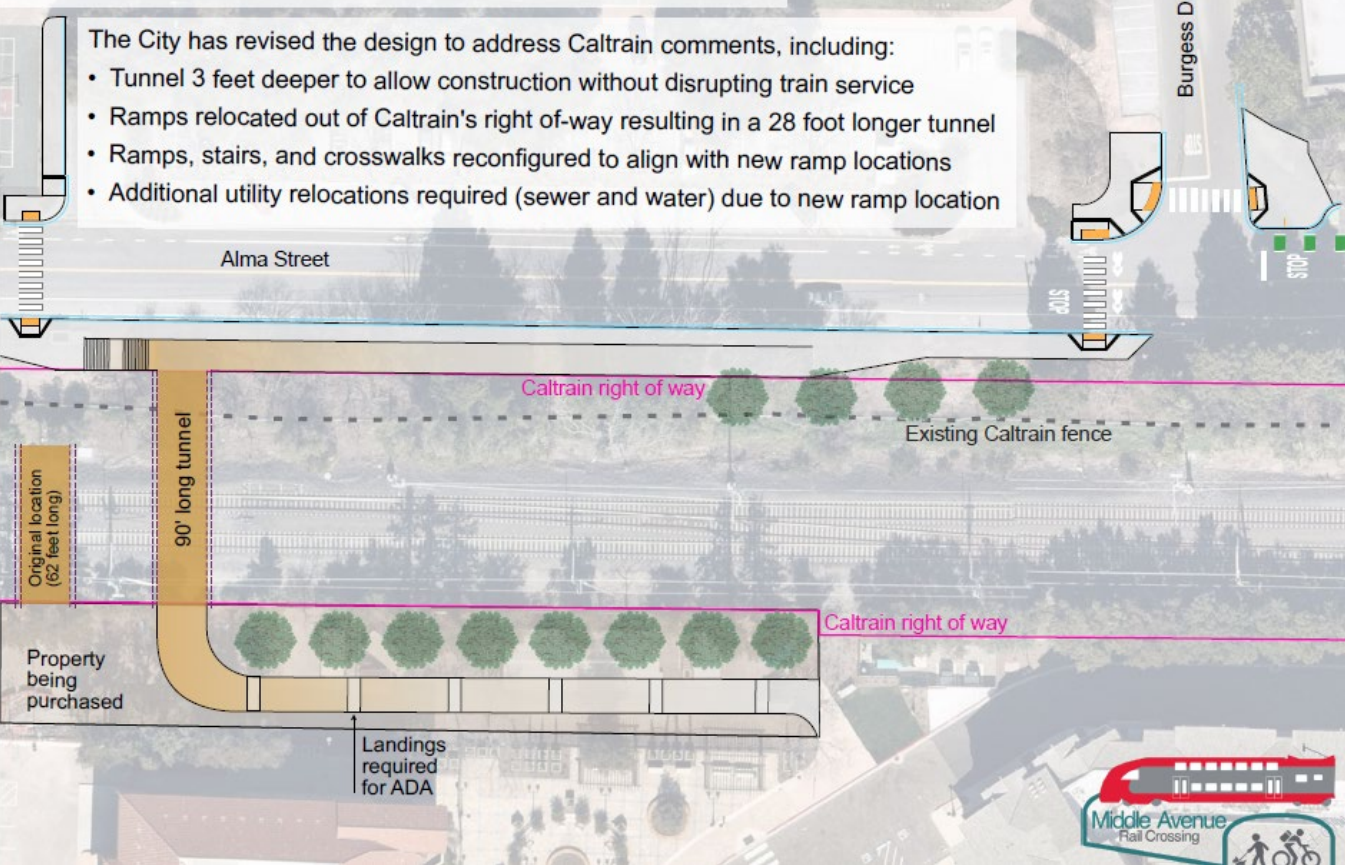


Project Goals

- Improve safety for pedestrian and bicyclists
- Provide a more direct and safer connection to schools, communities and commercial centers on either side of the Caltrain tracks

Project Elements

Middle Avenue Caltrain crossing revised design



Proposed Project Schedule

Dates	Activity
November 2023	Board approval of CM/GC Method of Delivery
June 2024 - November 2025	Final Design
September 2025	CM/GC Price Proposal
December 2025 – September 2027	Construction
December 2027	Closeout

Legislative Basis for CMGC

CA Public Utility Code section 103393 et. seq.

Allows District (and through the JPA, Caltrain) to use CMGC delivery after

- Evaluation of both traditional design-bid-build process and alternative CMGC project delivery method in a public meeting



Legislative Basis for CMGC

CA Public Utility Code section 103393 et. seq.

Allows Caltrain to use CMGC delivery after

- JPB must make a written finding that the use of CMGC will accomplish one or more of the following objectives:
 - ***Reduce project costs***
 - ***Expedite the project's completion***
 - ***Or provide features not achievable through the design-bid-build method***



Legislative Basis for CMGC

CA Public Utility Code section 103393 et. seq.

Written Findings must be

- Made prior to the Caltrain entering into a CMGC contract
- Included as part of any application for state funds for the transit project



Project Delivery Methods Evaluated

Design-Bid-Build (**Traditional**)

- **Standard** US project delivery method – provides the baseline delivery method
- Contractual obligations are **well understood** by design and construction industry
- Typically, the **longest** project delivery duration

Construction Manager/General Contractor (**CMGC**)

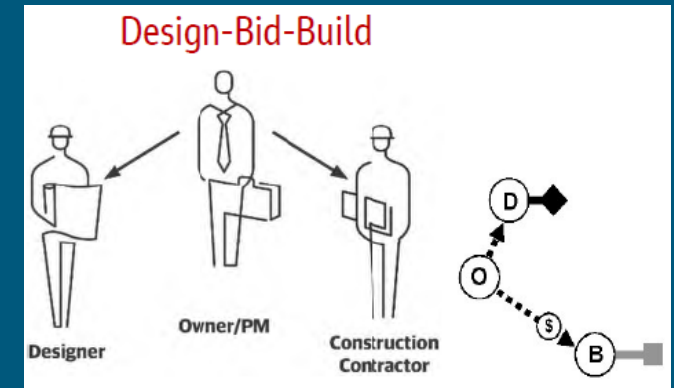
- **Caltrain** controls Final Design
- Maximizes cost and schedule savings opportunities – **commercial pricing**
- **Teamwork** develops during design reducing conflict risk during construction

Progressive Design Build (**PDB**)

- **Designer** is under the control of the Design-Builder
- Single point of contact
- **Potential** cost and schedule savings

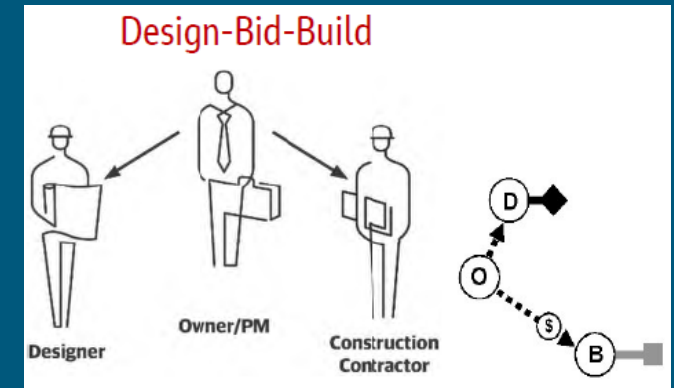


Design-Bid-Build Advantages



- Competitive bidding = **lowest initial price**
- Designer and contractor “**checks and balances**”
- Rights and obligations **well understood**
- Exemption from competitive bidding not required
 - No public hearing and record of findings

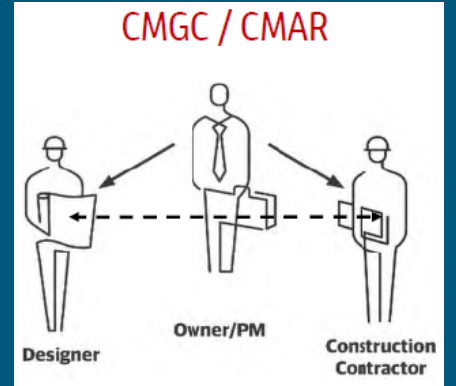
Design-Bid-Build Disadvantages



- Optimistic pricing = increased likelihood of **claims**
- **Eliminates communication** between Caltrain-Contractor on constructability, work plans, means and methods, and phasing during final design
- **Risk of inadequate budget** for jurisdictional stakeholder expectations, QC, schedule control, etc.
- **Higher** Caltrain construction administration
- Potential to develop **adversarial positions**

CMGC

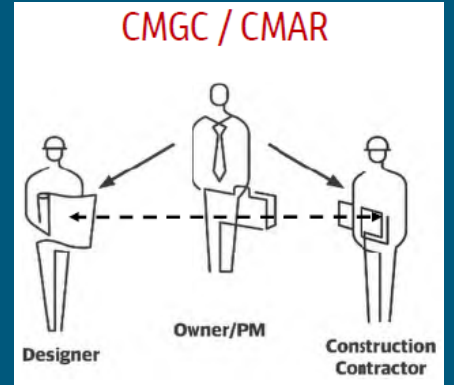
Advantages



- Use of **weighted criteria for selection** to match project demands
- Caltrain controls **final design**
- Maximizes potential cost saving opportunities – **commercial pricing**
- Caltrain influences **conduct of construction**
 - Analyze options to meet stakeholder and jurisdiction expectations
 - Commercial pricing of options
 - Contractor buy-in

CMGC

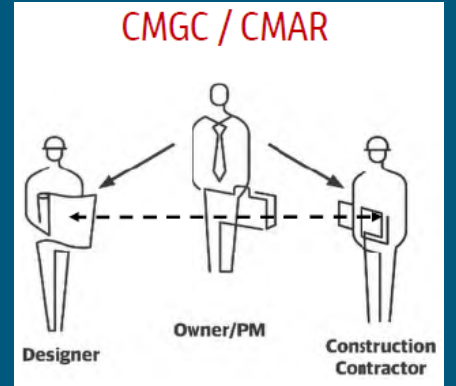
Advantages



- **Competitive pricing**
 - ✓ **Open-book** evaluation of all costs
 - ✓ Appropriate **risk apportionment**
 - ✓ Sub-contracts are **low-bid**
 - ✓ Targeted **best value** to support diversity contracting
- **Claim risk reduced** due to early contractor involvement
- **Schedule flexibility** allows issue resolution
- **Teamwork** develops during pre-construction design phase, reducing conflict risk during construction

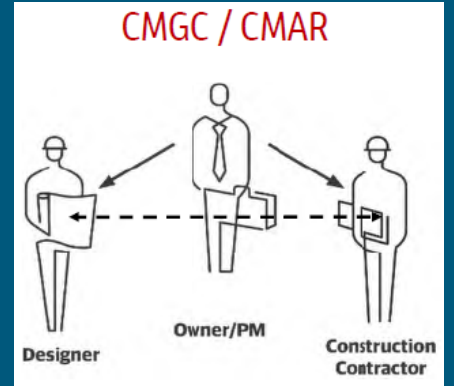
CMGC

Disadvantages



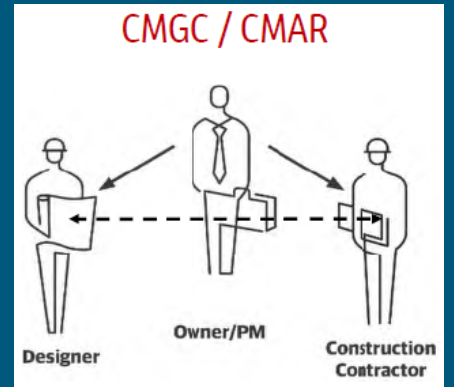
- **CMGC exemption requires public hearing**
- **Reduces competitive leverage on General Conditions**
- **Claims may occur at subcontractor level**

Progressive Design-Build Advantages



- Single Point of Contact
- Time and Cost Savings in Procurement
- Enhanced Creativity and Innovation
- Qualifications dominated procurement practices
- Negotiation of ultimate project price

Progressive Design-Build Disadvantages



- **Unfamiliar** project delivery method
- Difficulty in **off-ramping** because the design is performed by the Design Builder
- Need **staff resources** to prepare the initial performance specifications

Project Delivery Workshop

Objective

- Evaluate DBB, CMGC, and PDB
- Determine most appropriate delivery method

Participants

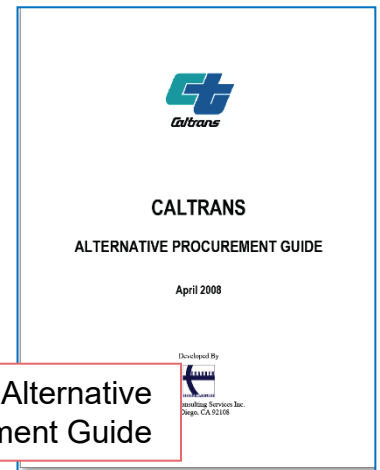
- Caltrain, City of Menlo Park, and SMCTA staff

Evaluation Tools

- TCRP Report 131 Analytical Project Delivery Assessment
- Caltrans Modified Quantitative Project Delivery Method Selection



TCRP Report 131
Guidebook for
Evaluation of Project
Delivery Methods



Caltrans Alternative
Procurement Guide

Project Delivery Workshop - Results

Based on this project's **unique features and complexities**

Construction Manager/General Contractor delivery method **most appropriate choice**

Ranking or Scoring Method	Design-Bid-Build	Construction Manager General Contractor	Progressive Design-Build
TCRC Report 131 Analytical Method	51	60	35
Modified Caltrans Qualitative Method	77	99	88

CMGC Findings

Reduce Project Costs

Optimize Costs

- Provides total contract price (TCP)
- Provides less competitive leverage on general condition pricing

Secure competitive construction bids

- Owner has an off-ramp to competitively bid the construction phase if TCP agreement not reached with contractor

CMGC Findings

Expedite Project's Completion

Optimize overall schedule

- Achieves reduced delivery time by overlapping traditional DBB procurement tasks

Targeted construction schedule reductions

- Allows for early enabling construction work such as utility relocations and other site preparation work
- Allows for early procurement of long-lead items

CMGC Findings

Provide features not achievable under design bid build method

- Provide **early contractor input** to design to incorporate preferred construction means and methods and phasing
- Allows for **collaboration** between the owner, designer, and contractor to deliver project requirements
- **Early bid packages:**
 - Utility relocation
 - Procurement and/or fabrication of long-lead items
 - Advance bid package for discreet critical path items – like bridge foundations

Staff Recommendations

1. **Make findings** that the use of CMGC will accomplish one or more of the required objectives pursuant to Public Utility Code Section 103395
2. **Authorize use** of CMGC project delivery method
3. **Authorize** the Executive Director, or designee, to file any other required documentation and to take **any other actions necessary** to give effect to this action

Questions



FOR MORE INFORMATION

WWW.CALTRAIN.COM

