

September 17, 2024

ITEM TITLE

Agreement: Award Progressive Design-Build Agreement with Erickson Hall Construction Company for the Temporary Fire Station 12 Project (CIP No. GGV0275), Amend the Fiscal Year 2024-25 CIP, Establish a New CIP Project, and Appropriate Funds

Report Number: 24-0246

Location: Lot at the northeast corner of Bay Boulevard and J Street (APN 5713301500), or 610 Bay Boulevard in the City of Chula Vista

Department: Engineering & Fire

G.C. § 84308: Yes

Environmental Notice: The Project was adequately covered in the previously certified Final Environmental Impact Report (UPD#83356-EIR-658; SCH No. 2005081077) for the Chula Vista Bayfront Master Plan.

Recommended Action

Adopt a resolution A) awarding a Progressive Design-Build Construction Agreement between the City and Erickson-Hall Construction Company for design and construction of Temporary Fire Station 12; B) amending the fiscal year 2024-25 Capital Improvement Program (CIP) budget by establishing a new CIP Project, GGV0275 "Temporary Fire Station 12"; and C) appropriating funds for that purpose (4/5 Vote Required).

SUMMARY

The Chula Vista Fire Department ("CVFD", or the "Department") provides fire, rescue, and emergency medical services to the City of Chula Vista. The Department's jurisdiction encompasses the entire municipal limits of the City. In 2023, the Department responded to more than 29,000 calls for service from 10 Fire Stations.

The Bayfront Development Agreement requires certain infrastructure to be provided by the City of Chula Vista, including fire services. Several planning documents establish the need for the Bayfront Fire Station (FS12) and associated response units in order to provide the appropriate life safety services. The Fire Facility, Maintenance, and Equipment Master Plan (FFMP), the Fire Facility, Maintenance, and Equipment Master Plan (FFMP), the Fire Facility, Maintenance, and Equipment Master Plan Amendment, the Determination of Proportional Share for Bayfront Fire Station Study, and

current response plans provide the basis for the station and its response units. The appropriate location for this Fire Station is near the intersection of Bay Blvd and J Street according to the FFMP.

Staff further recommends the Temporary Fire Station 12 project be expedited by awarding the contract on a sole source basis to Erickson-Hall Construction Company, which is currently doing similar work for the City.

ENVIRONMENTAL REVIEW

The Director of Development Services has reviewed the proposed project for compliance with the California Environmental Quality Act (CEQA) and has determined that the project was adequately covered in the previously certified Final Environmental Impact Report (UPD#83356-EIR-658; SCH No. 2005081077) for the Chula Vista Bayfront Master Plan. Thus, no additional environmental review is required.

BOARD/COMMISSION/COMMITTEE RECOMMENDATION

Not applicable.

DISCUSSION

The Chula Vista Bayfront development currently under construction will significantly increase calls for service to the Fire Department in the area. With the requirement of fire services detailed in the development agreement, the current FFMP also establishes the need for an additional fire station, FS12, at or near Bay Blvd and J Street. This need is also directly supported by the FFMP Amendment and the Determination of Proportional Share for the Bayfront Fire Station Study. Within the FFMP, the addition of the Bayfront Fire Station is referenced in several areas; however, the focus revolves around the increased growth in call volume and development impacts within the City.

FS12 is necessary to provide fire, rescue, and emergency medical services because existing fire stations and response companies do not have response capacity for this new population growth and the associated risks involved with the development type. The Bayfront is adjacent to several existing and occupied neighborhoods, making up west Chula Vista. Without the increase to fire service capability, additional calls for service, or "CFS," caused by population growth will have a negative impact on Fire Department response threshold standards. In addition to the population growth which directly coincides with CFS increases, the high-rise type of development requires additional personnel and equipment to properly mitigate life safety risks. The currently existing fire stations and response companies do not have additional service capacity. The effects will progressively worsen as development approaches build out, and normal service demand continues to increase. In evaluating the need and location for an additional fire station, several indicators are reviewed to reach that determination. These indicators are the fire station network, performance metrics, service demand, and station scope.

Fire Station Network

A fire station network is built based on distribution and concentration of resources. Distribution is spreading fire stations with the appropriate equipment and staffing throughout the service area to minimize travel times to CFS regardless of the volume. Concentration is adjusting the spread of fire stations with the appropriate equipment and staffing throughout the service area based on call volume and/or high-risk potential incidents requiring additional equipment and staffing to safely mitigate the incident.

Today, services are provided via ten fire stations located within the City. The Department staffs a fleet of fire apparatus which includes 10 fire engines, two aerial trucks, one Urban Search and Rescue (US&R) company, three SQUAD response units, and two battalion command vehicles. The Department operates with engine companies in nine of the ten fire station locations and a standalone US&R at Fire Station 3.

Reliability, availability, and operational efficiency are the outcomes of distribution and concentration of fire stations, equipment, and staffing demonstrated in the form of performance metrics. These performance metrics are outcome based, meaning they have a direct correlation to the amount of fire spread and/or loss, and the severity of irreversible damage to people suffering from a medical emergency.

Performance Metrics

Responses to emergency incidents are measured by three performance metrics which include the first fire apparatus to arrive at a fire within seven (7) minutes 90% of the time which addresses resource distribution. The second metric focuses on concentration by measuring the first 14 firefighters to arrive at a fire within ten (10) minutes 90% of the time. And the final metric is distribution-based measuring the first fire apparatus to arrive at a medical aid within seven (7) minutes 90% of the time.

While Department performance metrics are formulated on a Citywide basis, a closer look at individual response areas in the western portions of the City reveals a stressed fire station network with high-demand service levels when compared to the central and eastern portions of the city and the region. Fire Stations one and five (FS1 & FS5) currently provide service to the Bayfront area, but their capacity to assume additional service demands does not exist without sacrificing the current service levels of their respective areas. These two stations are the top two busiest in the City by a large margin, and Engine 51 has been ranked in the top 10 busiest engines in the country for the past five years. They both require significant support from adjacent CVFD fire stations and neighboring agencies to maintain service levels.

Figure 1 reflects the reliability of FS1's units responding to their respective emergency calls in their service areas. It also shows the number of emergency calls covered by other Fire Station units when FS1's units are committed to different calls and unavailable to respond.

Figure 1 Chula Vista Fire Station Reliability Jan 1, 2023 – Dec 31, 2023			
1st Arriving Unit's Station	Responses	% of Responses	
1	6,438	72.84%	
2	243	2.75%	
3	405	4.58%	
4	1	0.01%	
5	355	4.02%	
6	45	0.51%	
7	98	1.11%	
8	34	0.38%	
9	69	0.78%	
10	315	3.56%	
NCFD	835	9.45%	
Total Station 1 Calls:	8,838	100.00%	

More specifically, Engine 51 at FS1 averages 20 calls for service per day or 24-hour period. This equates to one response every 72 minutes and with an average time on task of 22 minutes for each one, the likelihood of concurrent calls is very high. While Engine 51 is assigned to these calls for service, they are unavailable to respond to simultaneous calls in their existing response area. This is the cause for adjacent fire stations covering 2,400 calls on behalf of Engine 51.

Bayfront Service Demand

The Bayfront service area is expansive, with its northern boundary near Gunpowder Point and the Nature Center, and its southern boundary ending near the Salt Flats and Palomar Street. This portion of the City generates an existing call loading of approximately 245 calls for service which is absorbed by Fire Stations One and Five.

Based on the Determination of Proportional Share for the Bayfront Fire Station Study, the entire Bayfront development will generate 1,132 new calls for service. However, of these new calls for service, 320 are expected to be generated by the Resort Hotel and Convention Center which is expected to open in May of 2025. Without the addition of FS12, these additional calls for service will decrease the performance of FS1 and FS5 for the communities they serve.

Impacts to fire, rescue, and medical service delivery are more than just the additional call volume. Call volume and workload due to the hazards and risks associated with the Bayfront development are uniquely different from the existing service demands in the City of Chula Vista. Density, elevated occupancy, and the water (bay) create a higher complexity to provide Fire, EMS, and Rescue services.

Fire responses to mid and high-rise buildings require additional firefighters to perform hazard-specific operations in addition to traditional firefighting operations. Traditional operations include performing:

- Evacuations
- Search and rescue
- Firefighting hose line deployment
- Establishing hydrant water supplies (multiple required)
- Supporting standpipe and fire sprinkler systems
- Ventilation

The additional and hazard-specific operations include:

- Operating fire control rooms
- Operating fire pumps
- Elevator control (capture/recall)
- Maintaining building compartmentation
- HVAC control
- Stairwell and exit passageway ventilation and pressurization
- Operation of building communication systems

Even with modern fire protection systems and engineering controls, the above-listed firefighting operations are still required to be deployed as an industry best practice for public and firefighter safety for calls for service related to fires. The Chula Vista Fire Department initially deploys a minimum of 34 firefighters (1st Alarm) to a reported fire (working fire or false alarm) to investigate and/or mitigate an incident at a

mid/high-rise building. To assemble 34 firefighters requires no less than 5 fire stations to be depleted to fulfill this response. This is nearly 60% of the firefighters on duty each day in the City (including the future Bayfront FS Engine and Truck Companies). If there is a working fire, a 2nd alarm would be required, and possibly a 3rd or greater. Each alarm increases the personnel count by 34 additional firefighters.

Emergency medical calls for service require the same response throughout the City regardless of the location. However, these calls for service in mid/high-rise buildings require a longer time on task when compared to residential and commercial locations. The longer time on task is attributed to long-distance access (large lobbies), elevator wait times, and distant rooms from elevators. Due to these delays, assigned resources are available less for concurrent calls. This will require a response from FS1, FS3, and FS5 to cover these concurrent calls when the Bayfront Fire Station companies are already on an incident/response.

High-rise buildings pose unique barriers for 911-initiated first responders; building access issues, elevator delays and extended distance from the emergency vehicle to the patient can all contribute to longer times for 911-initiated first responders to reach the patient and start time-sensitive, potentially life-saving procedures. The increased time required for 911-initiated first responders to reach the patient after they arrive on the scene and the return trip in bringing the patient back to the ground floor is a time delay not experienced when responding to incidents in residential areas.

Rescue responses will increase from the increased population in this newly developed Bayfront region. These call types will range from incidents related to mid/high-rise building operation/maintenance to water rescues in the bay. These rescues require technically trained firefighters and specialized equipment that respond from Chula Vista Fire Department fire station 3 (100 Moss Street). The Bayfront Fire Station companies will respond as the initial responders; however, the technical rescue tasks will be assigned to the firefighters assigned to FS3 personnel upon their arrival.

Station Scope

In order to account for daily service demands and mitigate the risk to the public from fire, rescue, and emergency medical services, the Bayfront fire station will house the following frontline and staffed companies/units on 24-hour shifts:

- Engine
- Truck
- Battalion Chief
- Two Ambulances

This is to account for the large influx of population, traffic, and other associated activities resulting from the operation of the Resort Hotel and Convention Center. Additionally, large events which cause significant population surges will require additional capacity at this fire station to safely meet the increase in service demands. This space within the station will serve in other capacities to perform on-the-job training requirements of the Fire Department that will be significantly increased due to the additional staffing needs for the Bayfront Fire station.

For daily staffing, this fire station will need to accommodate an Engine (4 personnel per shift), one Truck (4 personnel per shift), two Ambulances (4 personnel per shift), and one Battalion Chief (1 person per shift). These resources are considered frontline response companies/units and are treated as minimum staffing

levels. In total, daily staffing will be 13 personnel on duty 24 hours per day, 7 days a week, and 365 days per year.

Surge staffing capacity needs to be able to accommodate at least one additional Engine or the capacity to staff a Squad (2 personnel) and an Ambulance (2 personnel). Depending on the event, identified hazards and/or the Fire Department's ability to staff certain resources will dictate which surge resources are staffed. Common factors requiring surge staffing would include large-scale community events that will increase the population by 10,000 or more as well as high-risk activities such as boat/plane races (examples only). Surge staffing combined with required daily staffing increases the fire station's capabilities to accommodate a minimum of 17 personnel.

The surge capacity space needs that were described above will be used for ongoing mandated on-the-job training needs when not used by surge staffing. Our mandated training requirements for entry-level personnel require every employee to work as an observed intern (Field Training Program) for approximately 30 shifts. With the Bayfront fire station slated to house 39 personnel to cover all shifts annually, the response units located there will play a significant role in providing the capacity for the field training program. It is anticipated that the Engine, Truck, and both Ambulances will be needed to accommodate a Field Training Intern on a regular basis. Each of these interns will require the requisite station space to complete their training.

In addition to daily frontline apparatus, capacity should be provided for reserve or back up apparatus. This is done to minimize service delivery interruptions when frontline apparatus must go out of service for various repairs and maintenance. Reserve apparatus include:

- 1 reserve engine
- 1 reserve truck
- 1 reserve ambulance
- capacity for large population events in the Bayfront area for additional response units such as squads, ambulances, and emergency management vehicles.

Emergency response apparatus is complex and requires frequent and regular maintenance and/or repair. This work is done at our City's Public Works Shop; however, warranty work and complicated repairs are sent out to local vendors in San Diego or the manufacturer located in San Bernardino County. Regardless of these options, the average out-of-service time is high and therefore requires a robust reserve fleet and a location to store them. The Chula Vista Fire Department's current fire stations do not have the additional capacity for the additional reserve apparatus triggered by the Bayfront fire station and apparatus needs.

Additional capabilities at the Bayfront fire station necessary to serve this new development are:

- Fueling Station Gas/Diesel
- Electric vehicle (response) and equipment charging
- Breathing Air Compressor
- EMS equipment storage

Program For Temporary Fire Station 12

To meet timing and budget objectives, a temporary Fire Station is proposed. The program for Temporary Fire Station 12 will include modular buildings with living quarters and offices for engine and EMT crews;

gym, laundry, and turnout gear storage; modular apparatus building(s); and all sitework, utilities, access roads, and components required for a fully functional fire station. The temporary facility will be sited to mitigate any impacts to future permanent fire station construction.

	\$ 515,000
City Soft Costs. Consultants. Fees and Misc. Costs:	
Design and Design Builder Preconstruction Services:	\$ 715,000
Construction Contingency:	\$ 350,000
Construction:	\$ 7,750,000

Estimated Costs for Design and Construction of Temp Fire Station 12

Sole-Source Design Build Delivery

Progressive Design-Build delivery will best meet the expedited needs for the Temporary Fire Station 12 project. Chula Vista Municipal Code Section 2.57.030(E) permits sole source design-build contracts where certain market conditions exist and the proposed design-builder possesses unique performance capabilities. A sole-source procurement will save critical months of staff time required to craft and issue a Request for Proposal, advertise the project and select a design-build team.

Erickson Hall possesses a unique performance capability with respect to this project by virtue of the existing progressive design-build contract between the City and Erickson Hall for Temporary Fire Station 11 Project CIP# GGV0273 awarded by City Council on April 23, 2024 and executed July 25, 2024. The components, design parameters, contract, and project team will essentially be the same for Temporary Fire Station 12 as Temporary Fire Station 11. Because of the similarities in the Temporary Fire Station 11 and 12 projects, and the coincidental timing, Erickson Hall is uniquely positioned to help the City meet the Temporary Fire Station 12 target completion date.

A progressive design-build contract is a delivery method where the initial contract does not contain a construction price, and the design-build team works collaboratively with the City to develop a final design and scope within project budget. Once the design is sufficiently developed, Erickson-Hall will solicit bids from suppliers and trade contractors. Erickson Hall will evaluate and select the bids with input for the City and propose a guaranteed maximum construction price (GMP). This delivery method ensures opportunity for trade subcontractors to participate in the project, and that cost competition is maintained for the construction portion of the work despite the sole source approach.

City staff has provided Erickson-Hall with an initial draft contract, which the parties are continuing to finalize language. The final contract will be in a form approved by the City Attorney.

DECISION-MAKER CONFLICT

Staff has reviewed the property holdings of the City Council members and has found no property holdings within 1000 feet of the boundaries of the property which is the subject of this action. Consequently, this item does not present a disqualifying real property-related financial conflict of interest under California Code of Regulations Title 2, section 18702.2(a)(7) or (8), for purposes of the Political Reform Act (Cal. Gov't Code §87100, et seq.).

Staff is not independently aware and has not been informed by any City Council member, of any other fact that may constitute a basis for a decision maker conflict of interest in this matter.

CURRENT-YEAR FISCAL IMPACT

Approval of the resolution amends the fiscal year 2024-25 Capital Improvement Projects Program budget by appropriating \$6,866,880 from the available fund balance of the Fire Suppression Component of the Public Facilities Development Impact Fees (PFDIF) Fund and \$2,463,120 from the available fund balance of the Capital Improvement Projects fund for total project costs for Project GGV0275 (Temporary Fire Station 12) of \$9,330,000.

ONGOING FISCAL IMPACT

Fire Station 12 is a critical component of the Chula Vista Bayfront Master Plan and will incur ongoing operations and maintenance costs essential for its continued service to the community. These costs, covering staffing, equipment upkeep, utilities, and facility maintenance, align with the vision of the City's Long-Term Financial Plan and will be included in the annual budget development process.

As the station becomes operational, funding will be allocated to ensure the Bayfront area remains safe and well-supported as it develops and grows. The new station is expected to be staffed with one engine company in fiscal year 2025-26, with an increase to two engine companies in fiscal year 2026-27. The estimated operating cost is \$2.2 million for fiscal year 2025-26, and \$4.4 million for 2026-27.

ATTACHMENTS

- 1. Sole Source Justification Memo
- 2. Levine Act Disclosure

Staff Contact: Harry Muns, - Fire Chief, Fire Department Jonathan Salsman – Principal Civil Engineer, Engineering & Capital Projects