



Memorandum

Date:	April 23, 2025
To:	Aaron McAlister, Deputy Fire Chief (Contra Costa County Fire Protection District) Tracie Dutter, Assistant Fire Chief (Contra Costa County Fire Protection District)
From:	Heidi Mekkelson, Senior Managing Director (ICF) Jessica Viramontes, Principal, Environmental Planning (ICF)
Subject:	Fire Station 94 Air Quality, Noise, and Traffic Impacts

Dear Deputy Chief McAlister and Assistant Chief Dutter,

We are pleased to provide this memorandum in response to a request from the Contra Costa County Fire Protection District (Fire District) to review the Fire Station 94 Project (project) and qualitatively evaluate the project's potential to result in significant air quality, noise, and traffic impacts. This memorandum summarizes ICF's qualifications, project understanding, scope of review, and evaluation of the project.

Qualifications

ICF is a full-service environmental resources firm that is widely recognized as an industry leader in California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) compliance. We have extensive experience preparing environmental documentation pursuant to CEQA and NEPA, dating back to the founding of the former Jones & Stokes, which was acquired by ICF in 2008. Our environmental practice provides services in environmental planning and review, permitting, land use planning, regulatory implementation and compliance, natural resource management, and construction compliance monitoring and mitigation. Our professional staff includes environmental compliance experts, land use and natural resource planners, wildlife and fisheries biologists, plant and wetland biologists, watershed planners, restoration experts, archaeologists, architectural historians, community affairs experts, attorneys, engineers, and information technologists. We have a local office in San Francisco and have held an on-call contract with Contra Costa County to provide environmental planning services since 2018. From 2015 to 2017, ICF assisted with the Environmental Impact Report (EIR) for the Downtown Martinez Jail Demolition. In 2015, ICF assisted with the EIR for the West County Detention Facility Expansion. Since 2007, ICF has supported the County with the preparation of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) and Environmental Impact Statement (EIS)/EIR, as well as providing subsequent annual reporting and regulatory support. We have also provided CEQA support for several County fire station projects including Fire Station 1, Fire Station 9, Fire Station 81, Fire Station 86, and Fire Station 90.

Heidi Mekkelson is a Senior Managing Director with ICF's Environment and Planning Division. She has 22 years of experience in the preparation and management of environmental analysis documentation pursuant to CEQA and NEPA. She has successfully managed environmental documentation for a diverse range of projects including urban infill developments, renewable energy facilities, programmatic plans, climate action plans, and habitat conservation plans. She regularly presents at CEQA-focused workshops and conferences sponsored by the Association of Environmental Professionals (AEP), and is an instructor for UC Davis continuing and professional education courses related to CEQA. Heidi has a BS in Environmental Studies from the University of Southern California and an MSL in Water and Environmental Law from the University of the Pacific, McGeorge School of Law.

Jessica Viramontes is a Principal with ICF's Environment and Planning Division. She has 19 years of experience in environmental planning pursuant to CEQA and NEPA. She has successfully managed infill development projects, programmatic projects, institutional projects, and transportation projects of varying sizes. Jessica has a BS in Environmental Management and Protection and a BA in English from California Polytechnic University San Luis Obispo; Jessica also has an MS in Environmental Management from the University of San Francisco.

Project Understanding

The project would construct a new 8,137 square foot, two-story fire station, including two apparatus bays, living areas, and associated site improvements, on a 13,427 square foot parcel (project site) located at 739 First Street in the City of Brentwood (APN 013-091-019). The apparatus bays would house a Type I engine and Type III engine, but no ladder trucks. The project also includes nine on-site parking spaces, an emergency generator, landscaping, storm water treatment areas, a solid waste enclosure, lighting, and utilities. The project would employ a fire crew of approximately 3 to 4 employees. Fire Station 94 would replace a previous fire station (Fire Station 54) that was located on the site and was demolished in 2023.

Scope of Review

ICF reviewed the project description and regulatory plans and policies that govern development on the project site. We conducted a desktop review of the project site and its environs. ICF did not conduct fieldwork or technical modeling as part of this assessment. Based on our understanding of the project, background research, and experience with similar projects (including Fire Station 1, Fire Station 9, Fire Station 81, Fire Station 86, and Fire Station 90), we qualitatively evaluated the project's potential to result in significant air quality, noise, and traffic impacts under CEQA.

Evaluation

Air Quality

The project's grading and construction activities would generate air pollutant emissions. The Bay Area Air Quality Management District (BAAQMD) has local air quality jurisdiction over projects in Contra Costa County. BAAQMD has adopted advisory emission thresholds to assist CEQA lead

agencies in determining the level of significance of a project's emissions, which are outlined in its *California Environmental Quality Act Air Quality Guidelines* (CEQA Guidelines). BAAQMD's CEQA Guidelines include screening criteria for construction emissions. If a project meets the screening criteria, then project construction would result in less-than-significant criteria air pollutant impacts, which include carbon monoxide (CO), nitrogen oxide (NO_x), particulate matter no more than 2.5 microns in diameter (PM_{2.5}), particulate matter no more than 10 microns in diameter (PM₁₀), and reactive organic gases (ROG). The project would be below BAAQMD's screening-level size for a government office building (i.e., 277,000 gross square feet). Therefore, a quantitative air quality assessment of construction emissions is not required, and the project can be presumed to have a less than significant impact with respect to construction-generated criteria air pollutants.

The project would also generate criteria air pollutant emissions during operation, including emissions from vehicle travel (both worker and fire truck trips), energy consumption, and the operation of one on-site emergency generator. Emissions would be expected to be similar to those generated by the fire station that previously occupied the site, given their similar sizes and operating characteristics. Furthermore, as discussed below under *Transportation*, the project would be expected to reduce regional vehicle miles travelled (VMT) and associated emissions. Given the small size of the project and modeling ICF has conducted for similar types of projects, the project would not be expected to exceed BAAQMD's operational criteria air pollutant thresholds.

The project would also generate toxic air contaminants (TACs) during construction and operation, including local criteria pollutants (e.g., fugitive dust), diesel particulate matter (DPM), and PM_{2.5} exhaust. Such emissions can result in adverse health impacts (cancer and non-cancer) on nearby sensitive receptors. The nearest sensitive receptors to the project site are residential uses located approximately 250 feet to the north on First Street. The amount of dust generated by a project is highly variable and dependent on the size of the disturbed area at any given time, the amount of activity, soil conditions, and meteorological conditions. BAAQMD's CEQA Guidelines considers dust impacts to be less than significant if BAAQMD's construction best management practices (BMPs) are employed to reduce such emissions. The project would comply with BAAQMD's BMPs. The project is not expected to represent a significant source of construction or operational DPM or PM_{2.5} exhaust because of the short construction duration and the limited number of project-related vehicle trips. In addition, use of the proposed emergency generator would not represent a significant source of operational DPM because generator testing would be minimal and would not exceed BAAQMD's 50-hour-per-year testing limit. Therefore, the project would not be expected to expose receptors to significant health risks.

Conclusion: ICF's assessment is that there is a low likelihood for the project to result in significant impacts to air quality. Project-specific modeling would be needed to confirm the precise level of impact.

Noise

The project's grading and construction activities would generate noise that could impact nearby sensitive receptors. As discussed above under *Air Quality*, the nearest sensitive receptors to the project site are residential uses located approximately 250 feet to the north on First Street. Construction activities would be temporary and related noise impacts would be short-term. The

project would follow best practices for construction noise control, including the use of mufflers on internal combustion engines and limiting vehicle idling time. Furthermore, Section 9.32.070 of the City of Brentwood Municipal Code indicates that construction performed by an agency of government is exempt from noise provisions of the city code.

Noise would be generated during operation by fire station vehicles and emergency sirens, employee vehicles, an emergency generator, and an emergency alert system. Sirens on emergency response vehicles are required to be operated in accordance with California Vehicle Code Section 21055, which states that sirens should be sounded “as may be reasonably necessary.” When they occur, siren events and noise from fire trucks would be brief, and would be similar in terms of frequency and duration to the fire station that previously occupied the site. The emergency alert system would be indoors, designed to be audible to the on-site staff, and used only for emergency calls for service. With approximately 3 to 4 employees, employee vehicle trips would not generate noticeable increases in noise. As discussed above under *Air Quality*, emergency generator use would be infrequent. The generator would be installed in a masonry enclosure, which would further reduce noise levels.

Conclusion: ICF’s assessment is that there is a low likelihood for the project to result in significant noise impacts. Project-specific modeling would be needed to confirm the precise level of impact.

Transportation

Senate Bill (SB) 743 was signed into law in 2013 and is codified in Section 21099 of the California Public Resources Code with the intent to better align CEQA transportation impact analysis practices and mitigation outcomes with the State’s goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. SB 743 created several key statewide changes to CEQA, including changes related to the assessment of transportation and parking impacts under CEQA. As required by SB 743, the Office of Planning and Research (OPR) amended CEQA Guidelines Section 15064.3 to provide an alternative to automobile delay, as described by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, for evaluating traffic impacts of proposed projects. The new metric, VMT, measures the total number of miles traveled by vehicles daily on the roadway network and thereby the impacts on the environment from those miles traveled (e.g., through GHG emissions). In other words, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts on drivers to measuring the impact of driving on the environment, particularly as it relates to GHG emissions.

The Contra Costa Transportation Authority (CCTA) adopted VMT methodology and significance thresholds in July 2020, which are summarized in the Contra Costa County Transportation Authority Growth Management Program Implementation Guide (February 2021) (GMP Guide). CCTA guidance defines several criteria that lead agencies can apply to screen projects out of conducting project-level VMT analysis. One of these criteria is for local-serving uses, which can generally be presumed to have a less than significant VMT impact, absent substantial evidence to the contrary. The GMP Guide defines local-serving uses as: “land uses that are expected to draw users from a local area, typically no more than a 2- to 3-mile radius. The definition of local-serving uses may vary by jurisdiction. These uses may generally include local-serving public facilities such as a branch library, a police or fire station, neighborhood-based schools, and local-serving retail business such as

grocery stores, coffee shops or dry cleaners.” The proposed fire station is consistent with the GMP Guide’s definition of local-serving uses. Therefore, under CCTA methodology, the project can be presumed to have a less than significant VMT impact.

It is also noted that currently the Fire District responds to calls in downtown Brentwood from Fire Station 92 on John Muir Parkway, located on the west side of Brentwood, as well as fire stations in Oakley and Discovery Bay. Reopening a fire station at this project site in downtown Brentwood would reduce the VMT associated with responding to calls in this area compared to existing conditions.

The project would be consistent with programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The following policies in the City of Brentwood General Plan would apply to the project:

- Policy CIR 1-1: Ensure that the City’s circulation network is maintained and improved over time to support buildout of the General Plan in a manner that is consistent with the General Plan Roadways Map.
- Policy CIR 2-2: Routinely incorporate sidewalks and enhanced pedestrian crossing facilities as part of new street construction, and incorporate bicycle facilities on new collector and arterial streets (including bicycle lanes where appropriate, bicycle route and destination signs, and bicycle detection at signals).
- Policy CIR 2-4: Require development projects to construct on-site sidewalks, paths, and trails in a manner that is consistent with the City’s parks, trails, and recreation goals and policies in this General Plan and the Contra Costa County Countywide Bicycle and Pedestrian Plan, and as dictated by the location of transit stops and common pedestrian destinations.
- Policy CIR 2-6: Prioritize bicycle and pedestrian safety for students traveling to and from school.
- Policy CSF 4-4: Design and maintain roadways in such a way so as to maintain acceptable emergency vehicle response times.

Transit service would be provided by the Eastern Contra Costa Transit Authority (Tri Delta Transit), with the nearest bus station to the project site located approximately 0.1 mile away at Brentwood Boulevard and Oak Street (Route 391). Bay Area Rapid Transit (BART) provides fixed rail transit to eastern Contra Costa County, with the Antioch Station located approximately 4 miles from the project site. The project would not conflict with existing service or future changes to either service. Additionally, with approximately 3 to 4 employees, the project is not expected to generate high ridership relative to capacity on these routes and lead to over-capacity conditions.

The project would not obstruct the City’s ability to make planned improvements to roadway, bicycle, and pedestrian facilities, and would comply with applicable emergency access requirements. Fire engines would only enter the site from Diablo Way, along the rear property line, and exit onto First Street. Pedestrian access would be from First Street. The project is conditioned to meet all applicable Building, Engineering, and Public Works codes and regulations. Fire access and aerial

apparatus access shall comply with the requirements of the Fire District and Brentwood Municipal Code Chapter 15.06 "Fire Code."

Conclusion: ICF's assessment is that there is a low likelihood for the project to result in significant transportation impacts. Project-specific modeling would be needed to confirm the precise level of impact.

Conclusion

Based on the above, ICF's assessment is that there is a low likelihood for the project to result in significant air quality, noise, or transportation impacts. In addition, reopening a fire station at the project site is expected to have a beneficial impact with respect to regional VMT and mobile-source air emissions compared to existing conditions.