Wildfire Evacuation Study

Eddie Jones Warehouse Project

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CBC	California Building Code
CCR	California Code of Regulations
CERT	Community Emergency Response Team
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
City	City of Oceanside
City EOP	City of Oceanside Emergency Operations Plan
County	County of San Diego
County OA EOP	County Operational Area Emergency Operations Plan
DAS	Department of Animal Services
EAS	Emergency Alert System
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
FHSV	Fire Hazard Severity Zone
HOA	Homeowner's Association
IC	Incident Command
IFTSA	International Fire Service Training Association
JIC	Joint Information Center
LRA	Local Responsibility Area
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
NIMS	National Incident Management System
NWFCG	National Wildland Fire Coordinating Groups
OA	Operational Area
OES	Office of Emergency Services
Project	Eddie Jones Warehouse, Manufacturing & Manufacturing Facility Project
SDCFA	San Diego County Fire Authority
SDCSD	San Diego County Sheriff's Department
SEMS	State Emergency Management System
SRA	State Responsibility Area
TEP	temporary evacuation point
TRA	Temporary Refuge Area
VoIP	Voice over Internet Protocol
VHFHSZ	Very High Fire Hazard Severity Zone
WES	Wildfire Evacuation Study
WUI	Wildland-Urban Interface

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Executive Summary

The City of Oceanside in northern San Diego County is home to approximately 167,000 residents[1] across approximately 42-square miles. The proposed project site is 31.79 acres and consists of a previously developed site with remnants of the recently demolished industrial manufacturing building. The Project site is located in the Airport Neighborhood Area of the City of Oceanside. The Project site is bound by the San Luis Rey River to the north, the Oceanside Municipal Airport to the south, Benet Road to the west and vacant light industrial land to the east.

The Project site is adjacent to the San Luis Rey River and is nearby the Camp Pendleton Military Base. The Camp Pendleton Military Base has a large open space, as close as 1,000 feet away from the Project site. The project site is within a Very High Fire Hazard Severity Zone (VHFHSZ). Although the project site is within a VHFHSZ, and vegetation in the San Luis Rey River corridor to the north could present a wildfire risk, land uses to the south and east are largely urban and do not present a wildfire risk.

The Project proposes redevelopment of the Project site with a new 566,905-square-foot warehouse and manufacturing facility. The proposed warehouse and facility would consist of 369,415 square feet of warehouse area; 158,320 square feet of manufacturing space; and 39,170 square feet of office area, designed as a single building that could support multitenant occupancies. Development of the Project would include associated landscaping, stormwater features, 590 parking spaces for employee/visitor parking, 60 truck trailer parking stalls, and a vehicle circulation area. Loading bays are proposed on the north and south sides of the building, with a total of 114 truck terminals.

This Wildfire Evacuation Study (WES) has been prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. Given the location of the Project site, if there is a fire related emergency, the most likely cause of evacuation from the Project site is wildland fire; however, the fundamental components of this WES will serve to support overall emergency preparedness and evacuation in a manner consistent with applicable plans and policies described in this WES. Here in, information is provided addressing evacuation organization, planning and preparedness, evacuation routes, roadways capacities, contingencies, potential shelter-in-place, and other related topics.

Due to the Project site's location in an urban infill area, numerous evacuation routes are available to Project occupants including: Benet Road, Alex Road, North Foussat Road, El Camino Real, Highway 76, Mission Avenue, and I-5. Further from the Project site, routes such as Oceanside Boulevard, Mesa Drive, Canyon Drive, Rancho Del Oro Road, College Boulevard, etc., as well as local streets and roadways, may be used to accommodate evacuating traffic.

As part of the WES, evacuation time modeling was prepared to evaluate potential Project impacts to evacuation conditions. Six scenarios analyzed the time needed to evacuate the existing and future land uses surrounding the

[1] SANDAG Data Surfer Population Estimate 2022. https://app.powerbigov.us/view?r=eyJrIjoiOThiOTAyMTItY2JiYy00MjVmLTlkZGQtNDUzN2E4ZTI2NTMyIiwidCI6IjJiYmI1Njg5LWQ5ZDUtNDA2Yi04ZDAyLWNmMTAwMmI0NzNlNyJ9

Project site as well as Project populations. Using conservative assumptions, these scenarios considered (1) existing land uses, (2) existing land uses with proposed Project, (3) proposed Project only, (4) existing land uses with cumulative conditions, and (5) existing land uses with cumulative projects with the proposed Project, (6) existing land uses with cumulative projects with the closure of Benet Road (7) existing land uses with cumulative projects and Project with the closure of Benet Road, (8) existing land uses with cumulative projects with the closure of Foussat Road (9) existing land uses with cumulative projects and Project with the closure of Foussat Road.

The key finding of this study is that the Project would not substantially impair an adopted emergency evacuation plan or emergency response plan, and impacts would be less than significant without mitigation. Further, the available roadway capacity is sufficient to safely accommodate the number of evacuating vehicles within the relevant areas with and without the Project development. Project impacts would be less than significant as this study demonstrates that evacuation times would be reasonable and in line with typical evacuation times and would allow for safe evacuations to be conducted under all evaluated scenarios. Therefore, this evacuation study acknowledges that the project does not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

The Project would also not eliminate any existing evacuation routes. In an evacuation or emergency scenario, adequate emergency access would be maintained. Considering these facts and others discussed herein, the Project would not expose people to a significant risk of loss or death involving wildland fires related to evacuation, would not interfere with evacuation response planning, and would not result in inadequate emergency access.

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1 Introduction

This Wildfire Evacuation Study (WES) was prepared based on guidance from and is consistent with the City's Emergency Operations Plan (City EOP) (City of Oceanside 2016) and the County of San Diego Operational Area (OA) Emergency Operations Plan (County OA EOP) including Annex Q- Evacuation (County of San Diego 2022).

Evacuation is a process by which people are moved from a place where there is immediate or anticipated danger, to a place of safety, and offered appropriate temporary shelter facilities. When the threat to safety is gone, evacuees are able to return to their normal activities, or to make suitable alternative arrangements. The overarching goal of evacuation planning in the San Diego County OA is to maximize the preservation of life while reducing the number of people that must evacuate and the distance they must travel to seek safe refuge (County of San Diego 2022).

This Wildfire Evacuation Study will outline strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the case of a wildfire emergency effecting the Eddie Jones Warehouse Project. In the onset of a wildfire or other emergency, occupants and visitors will be faced with decisions that need to be made quickly and determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams.

1.1 Project Description

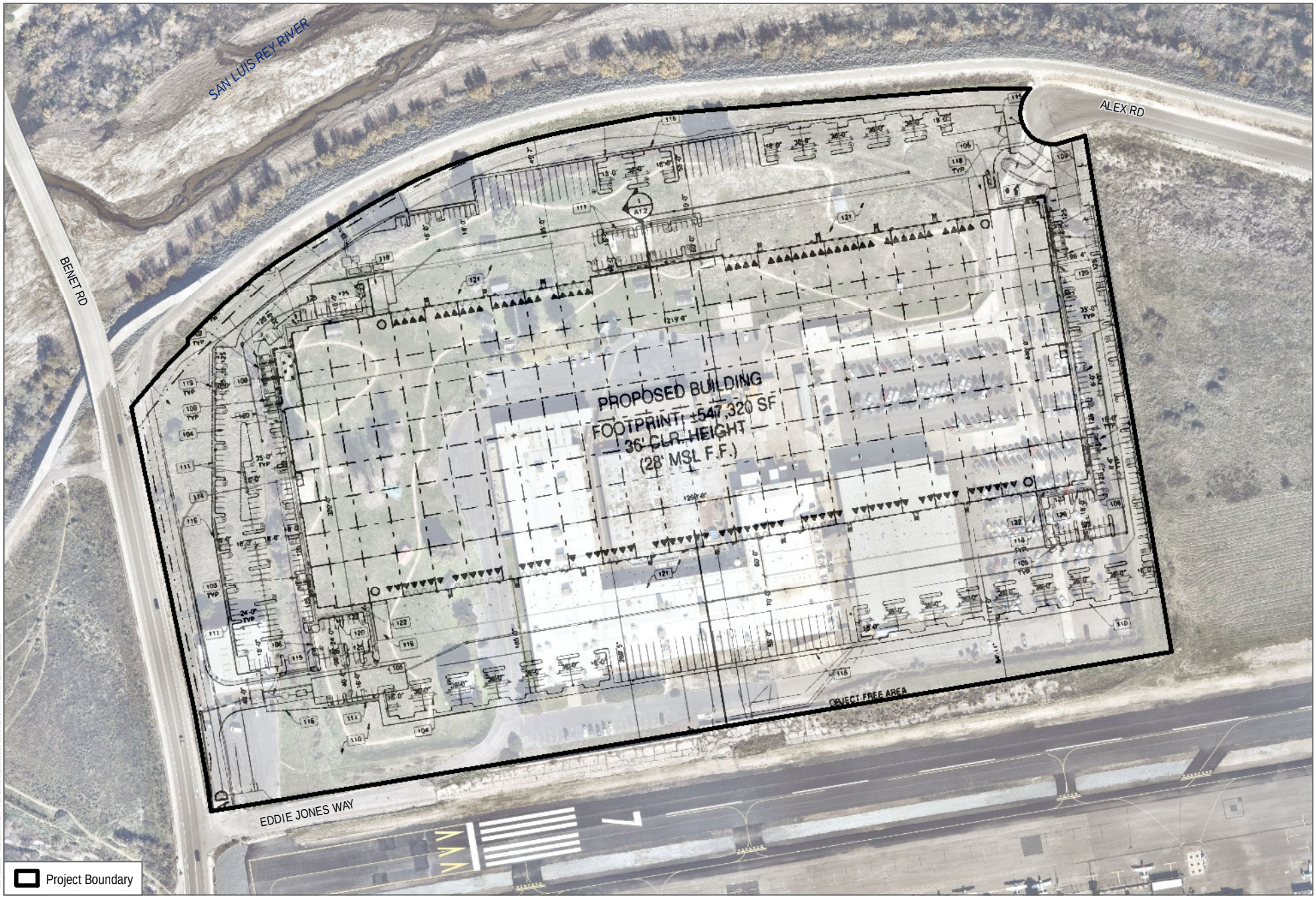
In the northern part of the City, the Eddie Jones Warehouse Project (Project) proposes the of redevelopment of the 31.79 acre Project site with a new 566,905-square-foot warehouse and manufacturing facility (Figure 1, Project Vicinity).[2] The proposed warehouse and manufacturing facility would consist of 369,415 square feet of warehouse area; 158,320 square feet of manufacturing space; and 39,170 square feet of office area, designed as a single building that could support multitenant occupancies. Separate office areas (with ground level and mezzanine-level space) are planned at all four corners of the facility, with associated warehouse/industrial space, adjacent parking, and access areas to facilitate multiple users. Development of the proposed project would include associated landscaping, stormwater features, 590 parking spaces for employee/visitor parking, 60 truck trailer parking stalls, and a vehicle circulation area. Loading bays are proposed on the north and south sides of the building, with a total of 114 truck terminals (Figure 2, Project Site Plan). Access to the project site would be maintained and improved as necessary, with existing access points from Alex Road at the northeast corner and Benet Road at the southwest corner. The Alex Road access would be limited to passenger vehicles, and heavy truck traffic would be limited to the Benet Road access point.

The Project has been designed to maintain a 100-foot buffer (50-foot biological buffer, plus a 50-foot planning buffer) from the edge of the San Luis Rey River riparian habitat as designated in the draft City of Oceanside Subarea Plan (SAP). This buffer is located along the northern edge of the property. Although the San Luis Rey River Trail and embankment runs through the buffer area forming a hard boundary between the Project site and the river habitat areas, the Project's proposed structures and parking/circulation areas have been designed and located to specifically avoid the biological

[2] The evacuations scenarios considered herein account for the most intense development of the Project site; however, the conclusions herein would be applicable and true for the 4-building alternative and the reduced truck bay alternative. In both alternative scenarios, the proposed development would not increase estimated Project population or reduce the number of ingress or egress, and all proposed ignition resistant construction features and fuel modification would remain under both alternatives; therefore, the potential impacts and conclusions discussed herein would be similar for all proposed alternatives.

and planning buffers. The portion of the 100-foot-wide buffer area located on the Project site would be replanted with native coastal species such as, California Sycamore, Coast Live Oak, and Bay Laurel. Shade and accent tree species planned along perimeter and interior site areas include Desert Willow, Chilean Mesquite, California Laurel, and Willow Acacia. Additionally, the Project would incorporate required building setbacks and airspace height limits established by the Oceanside Municipal Airport Land Use Compatibility Plan.

The Project site's urban infill location and 500 space paved parking lot surrounding the building, further reduce the risk of potential fire encroachment of the building. Further, this location is approximately 0.5 miles away from the City of Oceanside Fire Department #7 and has ready access to the State Route 76 (SR – 76), and other primary evacuation routes. The Project's urban infill location also provides access to sufficient water supply in the event of a fire.



SOURCE: SANGIS 2020, 2022

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0 100 200 Feet

FIGURE1

Project Vicinity

Wildfire Evacuation Study for the Eddie Jones Warehouse, Manufacturing & Distribution Facility

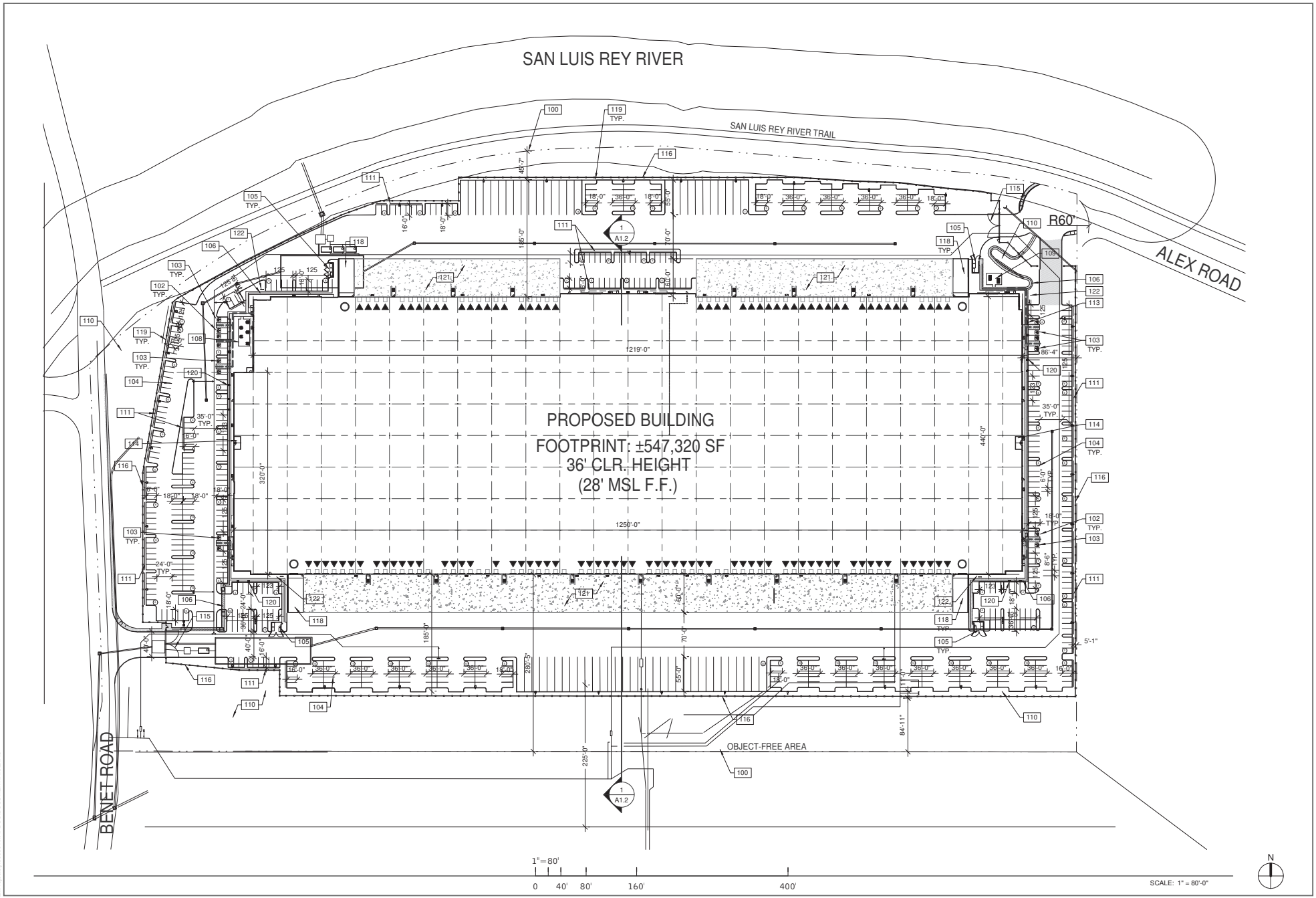

FIGURE 2

Site Plan

Wildfire Evacuation Study for the Eddie Jones Warehouse, Manufacturing & Distribution Facility

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1.2 Applicable Regulations, Standards, and Planning Tools

1.2.1 Federal

1.2.1.1 Disaster Mitigation Act

The Disaster Mitigation Act of 2000 requires that a state mitigation plan, as a condition of disaster assistance, add incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Disaster Mitigation Act also established a new requirement for local mitigation plans.

1.2.1.2 National Incident Management System

The National Incident Management System (NIMS) guides all levels of government, nongovernmental organizations, and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from incidents. NIMS provides community members with a shared vocabulary, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. The National Preparedness System is a Presidential Policy Directive establishing a common goal to create a secure and resilient nation associated with prevention, protection, mitigation, response, and recovery to address the greatest risks to the nation. One core area is fire management and suppression.

NIMS defines operational systems that guide how personnel work together during incidents.

1.2.1.3 Pet Evacuation and Transportation Standards Act

The Pets Evacuation and Transportation Standards Act of 2006 amends the Stafford Act, and requires evacuation plans to take into account the needs of individuals with household pets and service animals, prior to, during, and following a major disaster or emergency.

1.2.2 State

1.2.2.1 Fire Hazard Severity Zones

To assist each fire agency in addressing its responsibility area, California Department of Forestry and Fire Protection (CAL FIRE) uses a severity classification system to identify areas or zones of severity for fire hazards within the state. CAL FIRE is required to map these fire hazard severity zones (FHSZs) for State Responsibility Areas (SRAs) and identify Very High Fire Hazard Severity Zones (VHFHSZ) for Local Responsibility Areas (LRAs). The Project Site is designated as a VHFHSZ located within a LRA.

1.2.2.2 California Wildland-Urban Interface Code

On September 20, 2005, the California Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the California Building Code (CBC) (California Code of Regulations [CCR] Title 24, Part 2). Section 701A of the CBC includes regulations addressing materials and construction methods for exterior wildfire exposure and applies to new buildings located in State Responsibility Areas or Very High Fire Hazard Severity Zones in Local Response Areas.

1.2.2.3 California Fire Code

The 2022 California Fire Code (CCR Title 24, Part 9) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas. The City has adopted the 2022 California Fire Code with amendments as Title 11, Article II, Section 11.15 of the City's Municipal Code.

1.2.2.4 California Emergency Services Act

The California Emergency Services Act (California Government Code Section 8550, et seq., provides for the creation of an Office of Emergency Services, assign and coordinate functions and duties to be performed during an emergency, facilitate mutual aid, and assign resources (including manpower and facilities) throughout the state for dealing with any emergency that may occur.

1.2.2.5 California Office of Emergency Services

The California Office of Emergency Services (OES) is responsible for the coordination of overall state agency response to disasters. Assuring the state's readiness to respond to, recover from all hazards and assisting local governments in their emergency preparedness, response, recovery, and mitigation.

1.2.2.5.1 Standardized Emergency Management System

The Standardized Emergency Management System (SEMS) is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. SEMS incorporates:

- Incident Command System (ICS) - A field-level emergency response system based on management by objectives.
- Multi/ Inter-agency coordination - Affected agencies working together to coordinate allocations of resources and emergency response activities.

- Mutual Aid - A system for obtaining additional emergency resources from non-affected jurisdictions.
  - Operational Area Concept - County and its sub-divisions to coordinate damage information, resource requests and emergency response.

1.2.2.6 Attorney General's Guidance

The California Office of the Attorney General issued (October 2022) guidance (Guidance) outlining the Attorney General's recommendations for "best practices" for analyzing and mitigating wildfire impacts of development projects under the California Environmental Quality Act (CEQA). The Guidance is intended to help local governments' evaluation and approval considerations for development projects in fire-prone areas, and to help project design in a way that minimizes wildfire ignition and incorporates emergency access and evacuation measures. Importantly, the Guidance does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations.

The Guidance states that evacuation modeling and planning should be considered for certain projects located in HFHSZ/ VHFHSZ as projects in these areas have the potential to present an increased risk of ignition and/or evacuation impacts. The Guidance encourages evacuation modeling and planning prior to project approval to provide greater flexibility regarding design modifications if the evaluation demonstrates such changes are required.
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The Project is in an area designated as a VHFHSZ within a LRA and is adjacent to open space areas. However, the project also proposes a non-residential use located on a previously developed site with a project design that minimizes fire risks on a property that has two separate access roads and is proximate to the SR-76. This Wildfire Evacuation Study, which includes modeling and the analysis of several evacuation scenarios that address existing conditions, cumulative projects and/or the project, incorporates elements and performs analysis contemplated by the Guidance.

The Guidance provides that evacuation modeling and analysis should include the following:

- Evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access.
  - Existing and future roadway capacities are analyzed in Section 4 of this Wildfire Evacuation Study.
- Assessment of the timing for evacuation.
  - Analysis of evacuation timing is detailed in Section 4.1.1.
- Identification of alternative plans for evacuation.
  - Alternative plans for evacuation (e.g., shelter-in-place as discussed in Section 3.3.3) would be feasible due to the high ignition resistance level of Project structures.
- Evaluation of the Project's impacts on existing evacuation plans.
  - Existing evacuation plans do not exist for the area so this element does not apply.
- Consideration of the adequacy of emergency access, including the Project's proximity to existing fire services and the capacity of existing services.
  - As disclosed in Section 4, Evacuation Road Network, emergency access is provided in a manner consistent with the fire code requirements.

- The topics of proximity to existing services and capacity of those services are discussed in Section 3.5, Emergency Response and Service. Traffic modeling to quantify travel times under various likely scenarios.
  - This Wildfire Evacuation Study conducted simulations using Vissim, a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions, such as drivers' behaviors during an evacuation. In Vissim simulations, roadway capacity is accounted for and each vehicle in the traffic system is individually tracked through the model and comprehensive measures of effectiveness, such as average vehicle speed and queueing, are collected on every vehicle during each 0.1 second of the simulation.

1.2.3 Local

1.2.3.1 San Diego County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the County's Multi-Jurisdictional Hazard Mitigation Plan (County of San Diego 2023) is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and human-made hazards. An important San Diego County Multi-Jurisdictional Hazard Mitigation Plan component is the Community Emergency Response Team (CERT), which educates community members about disaster preparedness and trains them in basic response skills, including fire safety.

1.2.3.2 San Diego County Operational Area Emergency Operations Plan

The 2022 San Diego County Operational Area Emergency Operations Plan (County OA EOP) describes a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization, and describes the overall responsibilities for protecting life and property and providing for the overall well-being of the population. The plan also identifies the sources of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

1.2.3.3 Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan – Evacuation Annex

The Evacuation Annex is intended to be used as a template for the development of jurisdictional evacuation plans and will support or supplement the evacuation plans prepared and maintained by each local jurisdiction. The annex outlines strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the San Diego County Operational Area.

1.2.3.4 County of San Diego Resilience Review Report: Wildland Fires

Prepared by the Chief Administrative Officer's Resilience Review Working Group, the Resilience Review Report: Wildland Fires provides recommendations for achieving community goals related to actively reducing risk of wildfire

and improving efforts to respond and recover from wildfire events. The Working Group recommends 16 principal objectives divided among three focus areas: pre-fire, response, and recovery.

1. Pre-Wildfire: Focus on fire preparedness at the neighborhood-level. Specific community recommendations include:
    - Implementing a cohesive County pre-fire strategy
    - Enhancing pre-fire vegetation management
    - Improving pre-fire emergency planning
    - Strengthening fire safety measures in new construction
        - Reducing loss from wildfires in existing structures

2. Response: Improve fire suppression capabilities and on the ground safety measures including:
    - Increase County Fire's firefighting capabilities
    - Enhancement of accessible transportation services to include the evacuation of at-risk populations and large animals
    - Improved operational communications among response personnel
    - More rapid and efficient restoration of essential services and systems
        - Improved delivery of coordinated, timely, reliable, and actionable information to the whole community during a wildfire

3. Recovery: Enhance fire recovery effort including:
    - The ongoing development of a County Debris Removal Framework
    - Developing administrative tools and processes that improve the speed and efficiency in providing emergency interim housing options to victims of a wildfire
    - Improvements in health and social services capabilities
        - Increased County capacity to coordinate large-scale recovery operations

1.2.3.5 City's Emergency Operations Plan

The City's Emergency Operations Plan (2016) aims to facilitate effective operations during emergency incidents and disasters and is in accordance with the State of California's SEMS and the Federal NIMS. The EOP sets up protocol for the control and coordination of on-scene emergency operations including the designation of an Incident Commander (IC), establish Incident Command Posts, conduct response operations according to departmental protocols and SEMS/NIMS principles, request assistance from other City departments for support as needed, and inform senior City officials as appropriate.

1.2.3.6 City of Oceanside Fire Code

The City has adopted the California Fire Code as Chapter 11, Article II of the City's Municipal Code including the following Appendices: Chapter 4, A (with modifications), B, BB, C, CC, D, E, F, G, H, I, K, N, and O, as published by the International Code Council, except those portions that are deleted, modified, or amended. Provisions of the California Fire Code are described under State Regulations, above.

1.2.3.7 City of Oceanside Building Regulations

The City's Building Construction Regulations (City of Oceanside Code of Ordinances, Chapter 6) are intended to regulate the construction of applicable facilities and encompasses (and formally adopts) associated elements of the CBC. Specifically, this includes regulating the "construction, alteration, replacement, repair, maintenance, moving, removal, demolition, occupancy, and use of any privately owned building or structure or any appurtenances connected or attached to such buildings or structures." (City of Oceanside 2022)

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2 Background

This Eddie Jones Warehouse Project Wildfire Evacuation Study is informed by and consistent with the guidance provided in the City's EOP and the County OA EOP including Annex Q- Evacuation (County of San Diego 2022). The City of Oceanside EOP and San Diego County EOP can be downloaded at the following links:

City of Oceanside EOP:
https://fire.ci.oceanside.ca.us/home/showpublisheddocument/9334/637997041776700000

San Diego County OA EOP:
https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/plans/op-area-plan/2023-eop/EOP2023_Complete%20Plan.pdf

To establish a framework for implementing well-coordinated evacuations, the City and County, like most California emergency operations agencies, has adopted evacuation procedures in accordance with the State of California's SEMS and the Federal NIMS. Large-scale evacuations are complex, multi-jurisdictional efforts that require coordination between many agencies and organizations. Emergency services and other public safety organizations play key roles in ensuring that an evacuation is effective, efficient, and safe.

Evacuation is a process by which people are moved from a place where there is immediate or anticipated danger, to a safer place, and offered temporary shelter facilities. When the threat passes, evacuees are able to return to their normal activities, or to make suitable alternative arrangements.

Evacuation during a wildfire is not necessarily directed by the fire agency, except in specific areas where fire personnel may enact evacuations on-scene. The City of Oceanside Police Department would be the primary law enforcement agency responsible for coordinating evacuation operations within the City's jurisdiction and may share responsibilities with others under the IC system for larger events. These agencies work closely within the Unified ICS, which includes coordination between the City's Emergency Operations Center (EOC) and the County's EOC.

Every evacuation scenario will include some level of unique challenges, constraints, and fluid conditions that require interpretation, fast decision making, and alternatives. For example, one roadway incident that results in blockage of evacuating vehicles may require short-term or long-term changes to the evacuation process. Additionally, risk is considered high when evacuees are evacuating late, and fire encroachment is imminent. This hypothetical scenario highlights the importance of continuing to train responding agencies, model various scenarios, educate the public, provide contingency plans, and take a very conservative approach to evacuation decision timelines.

Equally as important, evacuation procedures are updated with lessons learned from actual evacuation events such as the 2003, 2007, 2014, and 2017 San Diego County fires. Major fire events that have occurred in San Diego County in the past 20 years (including the 2003 Cedar Fire and 2007 Witch Fire) have resulted in substantial change in the individual and united approaches between City, County and State agencies, as well as substantial investment in fire-fighting resources. For example, San Diego County Fire Agencies and related partners have developed a robust ability to rationally predict wildfire movement. This is accomplished through pre-fire planning and fire behavior modeling, working with UCSD's WIFIRE lab advanced wildfire behavior projection technology, and SDG&E's nationally renowned weather system network. In addition, more than 500 million dollars has been invested to enhance the County's fire prevention, detection, response, suppression, and recovery capabilities since

the 2003 Cedar Fire. These efforts have proven effective in managing and responding to wildfire events, such as was accomplished during the successfully managed 2017 Lilac Fire.

At the time of this WES's preparation, there is no encompassing emergency evacuation plan available for the San Diego region. This Wildfire Evacuation Study is consistent with the County evacuation planning standards and can be integrated into a regional evacuation plan and other pre-plans when and if the area officials and stakeholders (CAL FIRE, SDFRD, OES, SDCSD, SDCFA, and others) complete one.

As demonstrated during large and localized evacuations occurring throughout San Diego County over the last 15 years, an important component to successful evacuation is early assessment of the situation and early notification via managed evacuation declarations. The City and County utilize early warning and informational programs to help meet these important factors. Among the methods available to citizens for emergency information are radio, television, social media/internet, neighborhood patrol car, aerial public address notifications, and Reverse 911, Genasys Protect, Ready Oceanside, or Alert San Diego. The Oceanside Police Department launched Ready Oceanside in March 2023, which is a free service that allows individuals to sign up for notifications sent from state and local authorities. The new features offered by Ready Oceanside include text, email, and voice alerts that provide maps and images, and is available in multiple languages. Ready Oceanside also provides notifications about potentially hazardous situations involving police activity, weather, road closures, and other emergencies. The County, in partnership with Blackboard Connect Inc., instituted Alert San Diego, which is a regional notification system that sends telephone notifications to occupants and businesses within San Diego County impacted by, or in danger of being impacted by, an emergency or disaster. Alert San Diego is used by emergency response personnel to notify at risk occupants and businesses with information on the event and/or actions (such as evacuation, shelter-in-place, gas leak, missing person, etc.) they are advised to implement. The system utilizes the region's 911 database, provided by the local telephone company(ies), and thus is able to contact landline telephones whether listed or unlisted. It is TTY/TDD capable.

Because the Alert San Diego system uses the 911 database, only landline numbers are in the system. If you have a Voice over Internet Protocol (VoIP) or cellular telephone and would like to be notified over that device, or if you would like an email notification, you must register those telephone numbers and/or email address for use by the system to receive voice, text, and email messages.

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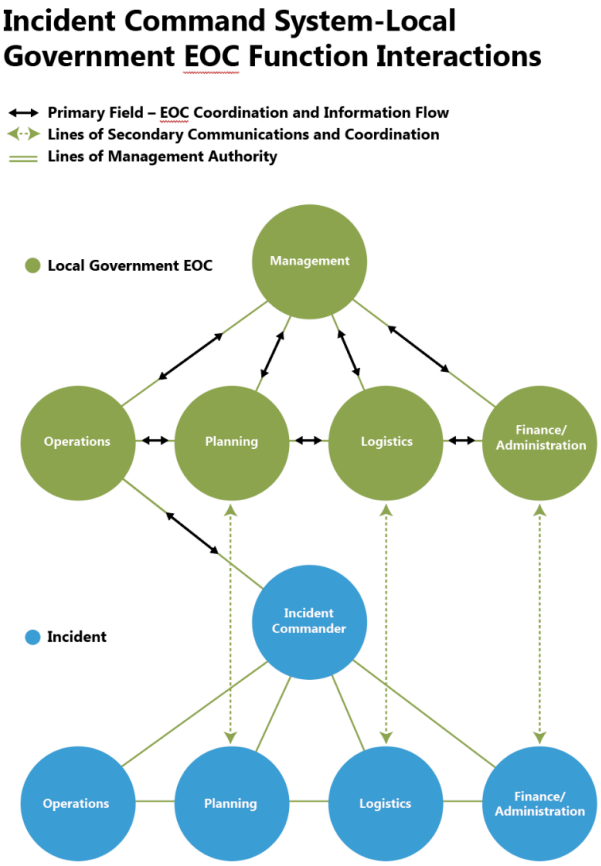
3 City and County Evacuation Planning

This Wildfire Evacuation Study incorporates concepts and protocols practiced throughout the City of Oceanside and San Diego County. The City's EOP follows basic protocols set forth in the County OA EOP and the California Master Mutual Aid Agreement, which dictate who is responsible for an evacuation effort and how regional resources will be requested and coordinated. The following overview contains information from the County OA EOP Evacuation Annex and is consistent with the City's EOP.

First responders are responsible for determining initial protective actions before EOCs and emergency management personnel have an opportunity to convene and gain situational awareness. For a local emergency that does not require coordination with other jurisdictions, the Oceanside Police Department in coordination with the City Manager would activate the City's EOC. If the emergency requires coordination with multiple jurisdictions, initial protective actions are shared/communicated to local EOCs and necessary support agencies as soon as possible to ensure an effective, coordinated evacuation. Figure 3 summarizes the functional interactions of local government EOCs under ICS.

Figure 3 Incident Command System Local Government EOC Functional Interactions



During a multi-jurisdictional evacuation effort, the SDCSD will declare and coordinate and be assisted by other law enforcement and support agencies. Law enforcement agencies, highway/road/street departments, and public and private transportation providers will conduct evacuation operations. Procurement, regulation, and allocation of resources will be accomplished by those designated. Evacuation operations will be conducted by the following agencies:

- Oceanside Police Department
- San Diego County Sheriff's Department
- San Diego Humane Society
- San Diego County Department of Animal Services
- City and County Department of Planning and Development Services
- City and County Department of Public Works
- County Department of Environmental Services
- American Red Cross
- Other City, County, and state agencies, as needed

3.1 Evacuation Objectives

As discussed in the Emergency Operations Plan, the overall objectives of emergency evacuation operations and notifications for the City of Oceanside are to:

- Expedite the movement of persons from hazardous areas
- Institute access control measures to prevent unauthorized persons from entering vacated, or partially vacated areas
- Coordinate evacuation to appropriate transportation points, which may include temporary evacuation points (TEP), temporary safe refuge areas (TSRA), and/or shelters
- Coordinate adequate means of transportation for individuals with disabilities and others with access and functional needs, which includes, but is not limited to, older adults, children, and individuals who are transportation disadvantaged
- Coordinate the procurement, allocation, and use of necessary transportation and law enforcement resources by means of mutual aid or other agreements
- Coordinate with affected law and enforcement agencies to control evacuation traffic and road closures
- Account for the needs of individuals with household pets and service animals prior to, during, and following a major disaster or emergency
- Provide initial notification, ongoing, and repopulation communications to the public through the Joint Information Center (JIC)
    - Coordinate the safe repopulation of the evacuated persons

The lead agency for evacuating the Eddie Jones Warehouse Project area is the Oceanside Police Department. The SDCSD is the lead agency for conducting evacuations of the unincorporated areas of San Diego County and jurisdictions, which contract SDCSD to provide law enforcement services. If necessary, Unified Command will assess and evaluate the need for evacuations with cooperating agencies, and SDCSD or local law enforcement orders and conducts evacuations according to established procedures, which are outlined in the County EOP Evacuation annex. Additionally, as part of the Unified Command, the SDCSD or local law enforcement will identify available and appropriate evacuation routes and coordinate evacuation traffic management with the California Department of Transportation (Caltrans), the California Highway Patrol (CHP), other supporting agencies, and jurisdictions.

3.2 Evacuation Coordination Process

The decision to evacuate an area is not made lightly and there is a significant impact to public safety and the economy. The following process describes how emergency evacuation decisions within the OA will be coordinated, allowing emergency managers and other supporting response organizations to make collaborative decisions.

a. If the emergency only impacts the City, the decision to evacuate will be made at the local jurisdiction level. Regional coordination is required for any evacuation impacting multiple jurisdictions.

b. Based on the information gathered, local jurisdictions will generally make the determination on whether to evacuate communities as the need arises, on a case-by-case basis.

c. The decision to evacuate will depend entirely upon the nature, scope, and severity of the emergency; the number of people affected; and what actions are necessary to protect the public.

d. Local jurisdictions may activate their EOC and conduct evacuations according to procedures outlined in their EOP.

e. All evacuations from, through, or into a local jurisdiction will be coordinated with that jurisdiction's public safety partners.

f. The OA EOC may make recommendations on whether a jurisdiction should evacuate and may help coordinate the evacuation effort, if requested by the jurisdiction.

g. The Evacuation Annex is automatically activated when an incident occurs requiring an evacuation effort that impacts two or more jurisdictions within the OA or when there is an evacuation in the unincorporated area necessitating response from the County.

h. If the emergency impacts multiple jurisdictions within the OA:

    i. All impacted jurisdictions may activate their EOCs

    ii. The OA EOC may be activated, including the OA EOC JIC

    iii. The OA EOC with begin obtaining situational awareness, understanding the severity of the incident

    iv. Unified Command, which may consist of fire, law enforcement, public health, and other relevant support agencies, will communicate with the OA EOC as to what protective actions have been

implemented. The OA EOC will coordinate with jurisdictional emergency management personnel and other public safety personnel.

v. The Director of Emergency Services or designee or the Policy Group if it is established will coordinate with City Managers and other leaders within the OA to identify strategic decisions that will:

- Gain regional situational awareness
- Determine response status
- Review statis if initial protective actions
- Consider additional protective actions
- Evaluate public information needs
- Determine next steps
- Establish a schedule for internal and external updates

vi. Evaluate health and welfare of affected occupants The OA EOC JIC will coordinate emergency public information to the public in accordance with procedures established in Annex L Emergency Public Information of the OA EOP

vii. The OA EOC may support the evacuation response according to the OA EOP and:

- Coordinate transportation for those who need assistance through the activation of emergency transportation services agreements.
- Coordinate support for individuals with disabilities and others with access and functional needs during the evacuation process, which may include, but is not limited to, the provision of assistance with wayfinding, supervision, and language interpretation.
- Coordinate and communicate with non-governmental organizations including but not limited to the private sector, community-based organizations, and faith-based organizations to utilize services and resources available to support the response.
- Coordinate the provision of accessible care and shelter services.

3.3 Evacuation Response Operations

An evacuation of any area requires significant coordination among numerous public, private, and community/non-governmental organizations. Wildfire evacuations will typically allow time for responders to conduct evacuation notification in advance of an immediate threat to life safety; giving occupants time to gather belongings and make arrangements for evacuation. Other threats, including wildfires igniting nearby, may occur with little or no notice and certain evacuation response operations will not be feasible (for example, establishing contra flow requires between 24 to 72 hours to be implemented). Every attempt will be made to assist people with safe evacuation, and

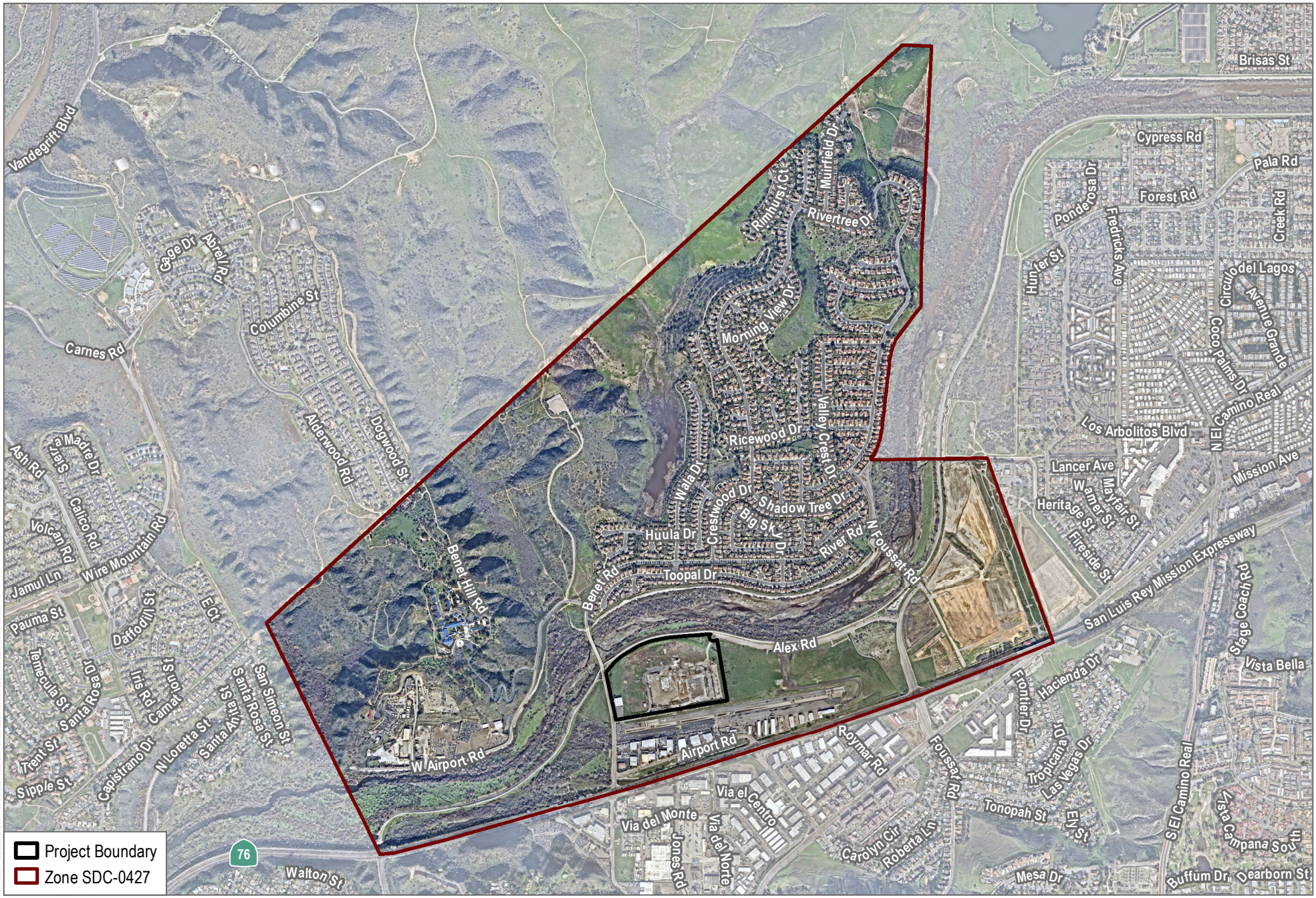
risk to first responders is an additional important consideration. People are encouraged to evacuate early and to help their neighbors, friends, and family to evacuate if doing so will not cause danger to themselves or others.

The Project's proposed development is not located immediately adjacent to wildlands area. Development to the south of the Project site includes the Oceanside Municipal Airport and SR-76 and commercial and industrial development to the south, development to the east includes the approved and graded Ocean Kamp development, land uses to the north include the San Luis Rey River and residential development, and land uses to the west include the San Luis Rey River and industrial uses. Project improvements include ignition resistant construction and 100-feet of fuel modification, as required for development in VHFHSZs. As described further in Section 1.1, Project Description, the buffer area between the San Luis Rey River will be 100-feet wide and revegetated with native plant species that are more resistant to wildfires.

Given that context, the authors consulted with both Oceanside Fire Department (OFD) and Oceanside Police Department (OPD)[3], about the procedures that would be applied in the event of an emergency requiring evacuations. OFD and OPD confirmed that in the event of an evacuation, IC would order evacuations of zones designated by Genasys Protect[4], with the zones at highest risk obtaining a priority evacuation order status. The Project is located in zone SDC-0427, as seen in Figure 4. In addition to the Project, this evacuation zone includes the Wanis View Estates Community to the north of the Project site as well as other areas shown on Figure 4.

When feasible, evacuations occur well in advance of an approaching wildfire. In a scenario where lives were in immediate danger and evacuation remained the safest option, OPD would issue an evacuation order for an entire evacuation zone, then prioritize movement of the highest risk population out of the area through door-to-door notifications, intersection control, road closures, and in-the-field management activities. Wildfires are dynamic events and OPD or IC will prioritize the protection of life. As described above, the Project provides OPD or IC options for the protection of life, which are critical for the dynamic needs of emergency operations.

[3] Zoom Conference with OFD, Division Chief Blake Dorse, and OPD, Lieutenant Bill Weese on March 4, 2024.
[4] https://protect.genasys.com/search?z=14&latlon=32.715738%2C-117.161084



SOURCE: Genays Protect; SANGIS 2023, 2024

DUDEK

0 1,000 2,000 Feet

FIGURE 4

Evacuation Zone Boundary

Wildfire Evacuation Study for the Eddie Jones Way Industrial Project

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3.3.1 Evacuation Points and Shelters

When the Oceanside Police Department or SDCSD implements an evacuation order, they will coordinate with the IC and the EOC to decide on a location to use as a Temporary Evacuation Point (TEP). American Red Cross representatives located in the City's EOC, County OA EOC and/or Incident Command Post, along with the City's EOC Care and Shelter Branch and/or OA EOC Care & Shelter Branch will coordinate the locations to be used as emergency shelters if necessary. The County OA EOC staff may assist, as requested, in the coordination of an evacuation in an incorporated city. When the City is managing an evacuation, response alerts will come from the Ready Oceanside system, social media, radio, television, IPAWS, etc. to direct evacuees to the established TEP or shelter. Whereas, the SDCSD Dispatch Center in conjunction with the County OA EOC and JIC will utilize the Alert San Diego system. Local jurisdictions all have access to the same alert and warning tools as the County OA EOC and would follow their internal protocols for sharing information with the public. Temporary evacuation points will serve as temporary safe zones for evacuees, but they generally do not provide any services, such as food, water, restrooms, etc. Emergency shelters are opened when at least one overnight stay is necessary. Basic services are provided at emergency shelters, which includes meals, accessible shower facilities, dormitory management, health, and behavioral health services. Some temporary evacuation points may be suitable to be converted into an emergency shelter location, if necessary and available. Possible shelters and assembly areas in the Project vicinity that can provide at least short-term refuge and that would be designated by emergency managers during an evacuation include:

- Laurel Elementary School
- Mission Elementary School
- Jefferson Junior Middle School
- Pablo Tac School of the Arts

Other refuge sites are available within urbanized areas surrounding the Project site. If there are occupants unable to evacuate or in need of transportation assistance to get to a TEP or shelter, the OPD and/or SDCSD may establish transportation points to collect and transport people without transportation resources to evacuation points. These transportation points would be large, well-known sites such as shopping centers, libraries, and schools. Transportation should be accessible to all populations, including people with disabilities and other access and functional needs.

3.3.2 Shelter-in-Place (County EOC Discussion)

As stated in the County OA EOC, sheltering-in-place is the practice of going or remaining indoors during or following an emergency event. This procedure is recommended if there is little time for the public to react to an incident and it is safer for the public to stay indoors for a short time rather than travel outdoors. Sheltering-in-place also has many advantages because it can be implemented immediately, allowing people to remain in their familiar surroundings, and providing individuals with everyday necessities such as telephone, radio, television, food, and clothing. However, the amount of time people can stay sheltered-in-place is dependent upon availability of food, water, medical care, utilities, and access to accurate and reliable information.

The decision on whether to evacuate or shelter-in-place is carefully considered with the timing and nature of the incident (County of San Diego 2022). Sheltering-in-place is the preferred method of protection for people that are not directly impacted or in the direct path of a hazard. This will reduce congestion and transportation demand on

the major transportation routes for those that have been directed to evacuate by police or fire personnel. The communities adjacent to the proposed Eddie Jones Warehouse Project includes homes built in the 1960s and early 2000s and are in varying states of ignition resistance. Unlike with the Project that incorporates ignition-resistant construction and provides defensibility throughout, responding fire and law enforcement personnel may not be able to direct existing occupants of neighboring developments to temporarily refuge in their homes; however, it would be possible for occupants of the Eddie Jones Warehouse Project. More recently constructed structures, such as those that will be within the Project, must conform to the ignition-resistant building codes codified in Chapter 7A of the California Building Code that were purposefully adopted to be ignition-resistant, defensible, and require minimal firefighting resources for protection. These measures will enable OFD or the IC to utilize this contingency option for the Project when it is considered appropriate in their professional judgment. This approach is consistent with San Diego County's (2022) evacuation approach that states, the concept of shelter-in-place is an available option in those instances where physical evacuation is impractical.

The Project would provide the OPD or the IC an alternative option of recommending occupants temporarily seeking refuge onsite in the Project's new, more fire-resistant buildings or within the wide, converted landscapes and hardscapes that would not readily facilitate wildfire spread such as parking lots and paved walkways surrounding the building. This would provide OPD or the IC with a safer alternative to risking a late evacuation. By contrast, the examples of Southern California evacuations that have included loss of life have been the result of occupants who did not evacuate when directed, and then attempted a late evacuation with travel through long distances of exposed travel ways as wildfire were overtaking the area. These examples occurred in fire environments that were more aggressive and included less maintenance than would occur at the Project area.

As part of the City's planning process, the Development Services Department requires all projects to go through Engineering Division's plan submittal process, which requires grading and site plans, among others. This information is also provided to the Oceanside Fire Department and used in pre-planning efforts, which will better inform in the field decisions made pursuant to adopted Emergency Operations Plans. In a real evacuation scenario, OPD or IC may use alternative actions/options to further expedite evacuation. Such actions may include providing additional lead time in issuing evacuation orders, providing alternative signal control at downstream intersections, utilizing additional routes or directing traffic to roadways with additional capacity, implementing contra-flow lanes, issuing "shelter-in-place" orders when determined to be safer than evacuation, or considering the possibility of a delayed evacuation where parts of the population could be directed to remain on site until the fire burns out in the sparse fuels around the evacuation route. These options require "in the field" determinations of when evacuations are needed and how they are phased to maximize efficiency. The P.A.C.E. Evacuation Plan that follows describes evacuation alternatives specific to the Project.

3.4 P.A.C.E. Evacuation Planning

P.A.C.E. evacuation planning is based on a military concept focused on mitigating risk by developing a strong primary evacuation plan along with three back up plans. If the Primary plan is compromised, the Alternate plan would be triggered. If the Alternate is considered not functional or not safe, the Contingency Plan is implemented. If that plan is not sufficient, then the evacuation reverts to the Emergency plan. P.A.C.E. Planning is an effective tool used to accomplish evacuations with flexibility and redundant contingencies.

The Project's Fire Safety Coordinator will be responsible for maintaining, reviewing, and updating this P.A.C.E. Evacuation Plan at least every 2 years. The plan provides the following:

1. Based on and includes a documented, facility-based and community-based risk assessment, utilizing hazard analysis approach.
2. Include strategies for addressing emergency events identified by the risk assessment.
3. Address participant population, including, but not limited to, the type of services the P.A.C.E. organization has the ability to provide in an emergency; and continuity of operations, including delegations of authority.
4. Include a process for cooperation and collaboration with emergency preparedness officials' efforts to maintain an integrated response during a disaster or emergency situation.

Primary: This is the overall preferred plan of action to use based on the most likely and most damaging scenario resulting from hazard analysis.

Alternate: The Alternate plan should, when feasible, be as viable as the Primary plan. Alternate plans are needed because unforeseen circumstances arise during emergency evacuations.

> Developing the Alternate plan includes analyzing the most likely problems that could cause the Primary plan to fail and then come up with a plan that fits with the situation that won't be affected by those problems. Whenever possible, come up with a few to several vulnerabilities in the Primary plan and find an alternate that's just as good but covers all those bases.

Contingency: The contingency evacuation plan is the action that will be implemented if you cannot implement either the Primary or the Alternate action due to compromised safety. The contingency isn't always (or isn't usually) as preferred as the others but is a viable option that doesn't rely on the same actions as the Primary and Alternate.

Emergency: This is the action that is implemented if all three of the previous actions fail. In some respects, it is a last resort that is the least preferred option, but is a viable and safe option, nonetheless. The goal is to utilize an Emergency plan that's independent from reliance on the types of actions in the first three options, is a flexible plan, has the highest probability of succeeding, and offers a reliable option with little potential for compromise.

An emergency plan may not be the most convenient or preferred plan and may include components that are uncomfortable to visitors, but it should be as foolproof as possible.

Table 1. P.A.C.E Evacuation Plan for the Eddie Jones Warehouse Project

Primary: Project will evacuate via the primary evacuation route(s) after receiving evacuation notice utilizing the primary evacuation route(s) as directed by law enforcement/emergency managers. Project specific primary evacuation routes may include Alex Road, Benet Road south to SR- 76, I-5, Foussat Road (via Alex Road) and El Camino Real.
Alternate: Project will follow evacuation instructions that may include an alternate plan to utilize secondary routes or to relocate to nearby urban areas based on congested traffic conditions. Notifications that this alternate plan is being implemented will be provided via the notification systems or on-site emergency personnel, media and social media.
Contingency: Due to primary and alternate options being compromised or undesirable, the contingency plan of evacuating smaller, highest vulnerability populations will be implemented. For the Project, this includes moving potentially exposed or vulnerable populations in the southern portion of the Project site (nearest to the municipal airport) or to nearby areas that may serve as Safe Refuge Areas during a wildland

fire. Remaining populations will be instructed to remain in place in the Project structures. Depending on the nature of the emergency, the contingency option may not be available or safe.
Emergency: When the wildfire or other emergency dictates that off-site evacuation is not advised by the primary or alternate evacuation routes, and conditions are such that open air exposure would be unhealthy or unsafe, occupants of the Eddie Jones Warehouse Project will be directed to shelter in place. Sheltering in place is possible due to the construction materials and irrigated landscape that creates a fire hardened development, as well as the fuel modification zones (FMZs). Sheltering in place may also be the preferred option for other emergencies, e.g., active shooter, earthquake. Persons sheltering in place are advised to remain aware of the situation and move out of the building to a designated safe zone if directed to do so or otherwise necessitated.

3.5 Emergency Response and Service

The following sections analyze the Project in terms of current Oceanside Fire Department (OFD) Service capabilities and resources to provide Fire Protection and Emergency Services. The analysis that follows examines the ability of the existing OFD fire stations to adequately serve the Project site. Response times were evaluated using Project build-out conditions and the shortest feasible access route to the proposed structure(s).

3.5.1 Emergency Response

The Project site is located within the City of Oceanside, within OFD's jurisdictional area. Fire protection services within the County are typically provided by various City and/or volunteer fire departments. In addition, the County has cooperative Fire Protection Agreements with CAL FIRE for fire and emergency services for portions of the County. CAL FIRE responds typically to wildland fires, although firefighters are trained in structural firefighting techniques and will respond to structure fires as well as medical emergencies. The County and State operate as "One Team, One Mission".

The OFD protects businesses operating within the City as well as approximately 180,000 residents and visitors(approximately 175,000 residents and 5,000 visitors) over an area of 42 square miles. The OFD has a total of 115 full-time fire personnel, 34 full and part-time emergency medical technicians, 7 full-time lifeguard personnel, 76 part-time lifeguard personnel, and 8 support staff (OFD 2022). All truck and engine companies are staffed with a minimum of 1 company officer, 1 engineer, and 1 firefighter/paramedic. The Fire Operations Division also manages emergency medical service response, transport, and management. The following apparatus are in service full time (OFD 2022):

- Fire engines (8)
- Ambulances (6)
- Tiller truck (1)
- Type 3 brush engines (3)
- Type 6 brush engine (2)
- Water tender (1)
- Command vehicle (Battalion Chief) (1)
- Command and interoperability trailer (1)

- Incident support trailer (1)
- Mass casualty response vehicle (1)
- Confined space trailer (1)

The OFD has eight stations located throughout the City. Of these stations, the closest to the Project site is Station 7 (3350 Mission Avenue), located approximately 0.7 miles southeast of the project site. Station 3 (3101 Oceanside Boulevard) is the second-closest station to the project site, located approximately 1.7 miles southeast of the project site (OFD 2022). As established by the Community Facilities Element of the City's General Plan, the City has the following standards for OFD facilities: (1) strive to maintain a 5-minute response time from fire stations to all developed areas within the City; (2) maintain staffing levels adequate to achieve a locally desirable Insurance Service Office rating; and (3) strive to maintain a maximum response time for paramedic units of 8 minutes in urban areas and 15 minutes in rural areas (City of Oceanside 2002).

Table 2 presents a summary of the location, equipment, staffing levels, maximum travel distance, and estimated travel time for OFD Fire Station #7. Travel distances are derived from Google road data while travel times are calculated using response speeds of 35 mph, consistent with nationally recognized National Fire Protection Association (NFPA) 1710 and Insurance Services Office (ISO) Public Protection Classification Program's Response Time Standard formula (Time=0.65 + 1.7(Distance). The ISO response travel time formula discounts speed for intersections, vehicle deceleration and acceleration, and does not include turnout time.

The City of Oceanside General Plan (Oceanside General Plan 2002) Community Facilities Element, Policy 3.1, provides an emergency response goal travel time standard of five minutes from a fire station to any developed area within the City. The City General Plan is currently being updated and under review. The Evacuation and Emergency Response section of the City's General Plan Update (GPU) Safe and Resilient Environment Element, provides goal travel time standards for emergency services. The OFD aims to provide emergency service within 5 minutes of notification 90% of the time (Oceanside General Plan Update 2020). Travel time does not represent total response time, which is calculated by adding the travel time to the call processing time and to the turnout/reflex time. Generally, the call processing and turnout/reflex time would add between two to three minutes to the travel time.

Table 2. Closest Responding Fire Station Summary

Station No.	Location	Maximum Travel Distance*	Travel Time**
Oceanside Fire Department Station 7	3350 Mission Avenue, Oceanside, CA 92058	0.8 mi.	2 minutes 0 seconds

Notes:
* Distance measured to farthest portion of Project site
** Assumes travel at 35 mph travel speed and does not include donning turnout gear and fire dispatch time. Actual travel speeds are likely to be closer to 45 mph speed limits.

Based on the Project site location in relation to OFD Station 7, travel time to the site for the first responding engine is not expected to exceed 2 minutes and 0 seconds to the farthest portion of the Project site along Benet Road. As it currently is configured, the Project would meet the City's General Plan Update travel time requirement for full time coverage within 5 minutes travel time.

3.5.2 Estimated Calls and Demand for Service from the Project

Per the City of Oceanside Fire Department, the total number of calls in 2022 –2023 (the most recent data available) were as follows:

- Total responses – 24,173
- Fire responses – 382
- Emergency medical service responses – 17,005
- Investigation/good intent – 3,517
- Service calls – 2,493
- Hazardous condition – 108
- False alarms – 749
- Other – 307

The Project is expected to employ approximately 499 permanent workers. A population of 499 would generate approximately 71 calls per year if they were associated with a residential development (i.e., full-time population). As a conservative approach, this analysis ignores the overnight depopulation and focuses on the absence of workers on weekends. Subtracting the 104 weekend days from 365 total days, there are people on site 261 days per year. This represents 72% of the year. Discounting the 71 calls per year generated from a full-time population by 28% results in a projected 51 calls per year, most of which are expected to be medical-related calls, consistent with typical emergency call statistics. Further discounting this number based on the 8 hours per day (overnight) that workers would not be on site results in a total anticipated annual call volume of 34. However, the proposed building would be equipped with a fire alarm system, which could affect false alarm calls, adding to the anticipated annual call volume as a result of the Project.

The closest OFD fire station, Station 7, currently responds to roughly seven calls per day (2,600 calls per year) in its primary service area. This is a moderately busy fire station, and adding calls could cumulatively create an impact and result in longer response times or stacked calls requiring assistance from more distant fire stations. As the total number of occupants at the site increases, so does vehicle traffic. The anticipated employee vehicles and commercial delivery trucks at the site would add to the overall amount of traffic flow, resulting in a potential increase in traffic collisions and a consequent additional demand on emergency services. However, it is anticipated that the project's contributions to fire service and availability fees through property taxes and/or other avenues would provide the funding needed to augment service capabilities such that an impact is not experienced. Despite the current busy call load, an addition of approximately 34 calls per year, or 1 call per 11 days, is not expected to significantly impact service level requirements. The increase of approximately 499 workers at the project site is not expected to result in a substantial increase in service calls to the OFD in comparison to the previous development on the project site, considering none of the workers would reside on site.

As described above, the OFD has eight firehouses located throughout the City. Of these stations, the closest to the project site is Station 7 (3250 Mission Avenue), located approximately 0.7 miles southeast of the project site. Station 3 (3101 Oceanside Boulevard), the second-closest station to the project site, is located approximately 1.75 miles southeast of the project site (OFD 2022). In addition to the City's eight fire stations, the City has an automatic aid agreement with the neighboring cities of Carlsbad and Vista. Per the agreement, when an emergency call comes into dispatch, the nearest emergency responder is notified regardless of the jurisdictional boundaries.

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4 Evacuation Road Network

4.1 CEQA Significance Standards

The CEQA Guidelines establish the significance criteria that apply to an evaluation of a project's potentially significant impacts relative to wildfire related risks. Relevant to this Study and the Project, those criteria include whether a proposed Project would:

- Substantially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

As described in the Project's Draft Environmental Impact Report (DEIR), the other CEQA criteria related to potential wildfire related significant impacts do not apply to this analysis for a variety of reasons including, without limitations, the nature of the Project, its location and the improvements proposed for the Project.

Neither CEQA nor the City of Oceanside establishes a time-based threshold for evaluating the potential significance of project impacts with respect to the CEQA criteria quoted above. Public safety, not time, is the guiding consideration for evaluating impacts related to emergency evacuation. For purposes of promoting informed decision making, Sections 4.2 and 4.3 below including the results of evacuation time modeling performed under various scenarios with and without the Project as well as an analysis of those results. The following discloses differences in evacuation times for the Project and areas in the vicinity of the Project under certain of the scenarios. However, based the CEQA significance criteria, the modeling and analysis support the determination made in the DEIR that evacuation traffic generated by the Project does not qualify as a significant adverse impact as the Project would not (i) impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; (ii) expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires; or (iii) substantially impair an adopted emergency response plan or emergency evacuation plan.

4.2 Wildfire Evacuation

Wildfire poses an evolving threat to lives and property in an increasing number of communities across the United States (FEMA, 2012). While wildfires are a natural part of California's landscape, the fire season in California is starting earlier and ending later each year. In 2020 and 2021, California experienced the deadliest and most destructive wildfires in its history. The size and intensity of these wildfires, fueled by drought, an unprecedented buildup of dry vegetation and extreme winds, caused the loss of more than 100 lives, destroyed thousands of homes and exposed millions of urban and rural Californians to unhealthy air. Climate change is considered a key driver of this trend. Warmer spring and summer temperatures, reduced snowpack, and earlier spring snowmelt create longer and more intense dry seasons that increase moisture stress on vegetation and make forests more susceptible to severe wildfire. The length of fire season is estimated to have increased by 75 days across the Sierras and seems to correspond with an increase in the extent of forest fires across the state (CAL FIRE, 2020).

These large and increasingly destructive wildfires have forced many Californians living in the Wildland Urban Interface (WUI) to evacuate when an encroaching wildfire threatens their community. The following provides a summary of the Project's wildfire risk.

The historical fire record shows that most vegetation fires occur during normal, onshore weather conditions, and that such fires account for only a proportionally small amount of the land area burned. Wildfires that occur on normal, non-extreme weather days behave in a much less aggressive manner and pose fewer dangers to life and property because they include less aggressive fire behavior and are easier to control. Terrain and fuel are typically the wildfire drivers. During these non-extreme weather days, vegetation is much more difficult to ignite and does not spread fire as rapidly. While there can be on-shore wind conditions that lead to more aggressive fire behavior, generally in these normal weather situations, firefighters have a very high success rate of controlling fires and keeping them under 10 acres.

Conversely, a small number of wildfires that occur during extreme fire weather (Red Flag or Santa Ana conditions) account for most of the land area burned. The data highlights that the most dangerous fire conditions are those related to a fire that moves rapidly due to high winds and low humidity, whereas under normal conditions fires are likely to be controlled with no evacuation or possibly limited extent, focused evacuations.

Project Wildfire Risk

Fire history is an important component of understanding the potential fire risk for the Project. Fire history data provides valuable information regarding fire spread, fire frequency, ignition sources, and vegetation/fuel mosaics across a given landscape. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and therefore may provide a tactical defense position, what type of fire burned in the vicinity of the Project site, and how a fire may spread.

Fire history data is available through the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program (FRAP) database. According to available data from the CAL FIRE in the FRAP database, 4 fires greater than 10 acres have burned within 5 miles of the Project Site since the beginning of the historical fire data record with the oldest fire occurring in 1938 (Unnamed Fire) and the largest fire that burned 15,184.69 acres occurring in 2014 (Pulgas Fire). Of the 4 fires, none have burned on the Project Site. Recorded wildfires within 5 miles range from approximately 167.9 acres to approximately 15,184.7 acres and the average fire size is approximately 1,538 acres, or 621.3 acres if not including the Puglas Fire. Fire history, which includes all fires greater than 10 acres within 5 miles of the Project Site, is illustrated and listed in Appendix D.

Since the Unnamed Fire in 1979, there have only been 2 fires greater than 10 acres within 5 miles of the Project. As development urbanizes previously undeveloped areas, it makes the spread of wildfire less likely due to the presence of infrastructure that is non-combustible or less likely to ignite than natural fuels. Additionally, as an area develops, additional emergency response resources are provided, which allows for a quick response, reducing the spread of fire and the need for evacuations. It is important to note that despite the large expanse of open space on the Camp Pendelton Military Base to the north of the Project, the only recorded wildfire that burned on Camp Pendelton within 5 miles of the Project site was the Pulgas Fire in 2014.

Although near the San Luis Rey riverbed and other natural areas, the Project is in an urban setting. Based on the above and other information, in coordination with and as recommended by OFD, a fire spread model was completed using the Genasys software. As shown is Figure 5, the fire spread model (OFD 2024) considers a fire originating in

the San Luis Rey River east of the Wanis View Estates Community, under Santa Ana conditions with temperatures of 90 degrees and 30 mile per hour winds. The model indicates that a fire originating from this location, without any fire suppression efforts, would take approximately 2 hours to reach the Wanis View Estates Community and approximately 4 hours to reach the Project site. As detailed in the evacuation modeling scenarios results in Section 4.3.3.below, under all scenarios with the cumulative projects and the Project, the most time it would take to evacuate any area is 1 hour and 32 minutes. Thus, under all scenarios, the modeling demonstrates that an emergency evacuation of the SDC-0427 evacuation zone is projected to be completed well in advance of when the modeling projects the fast moving fire would first reach an occupied area within that evacuation zone.

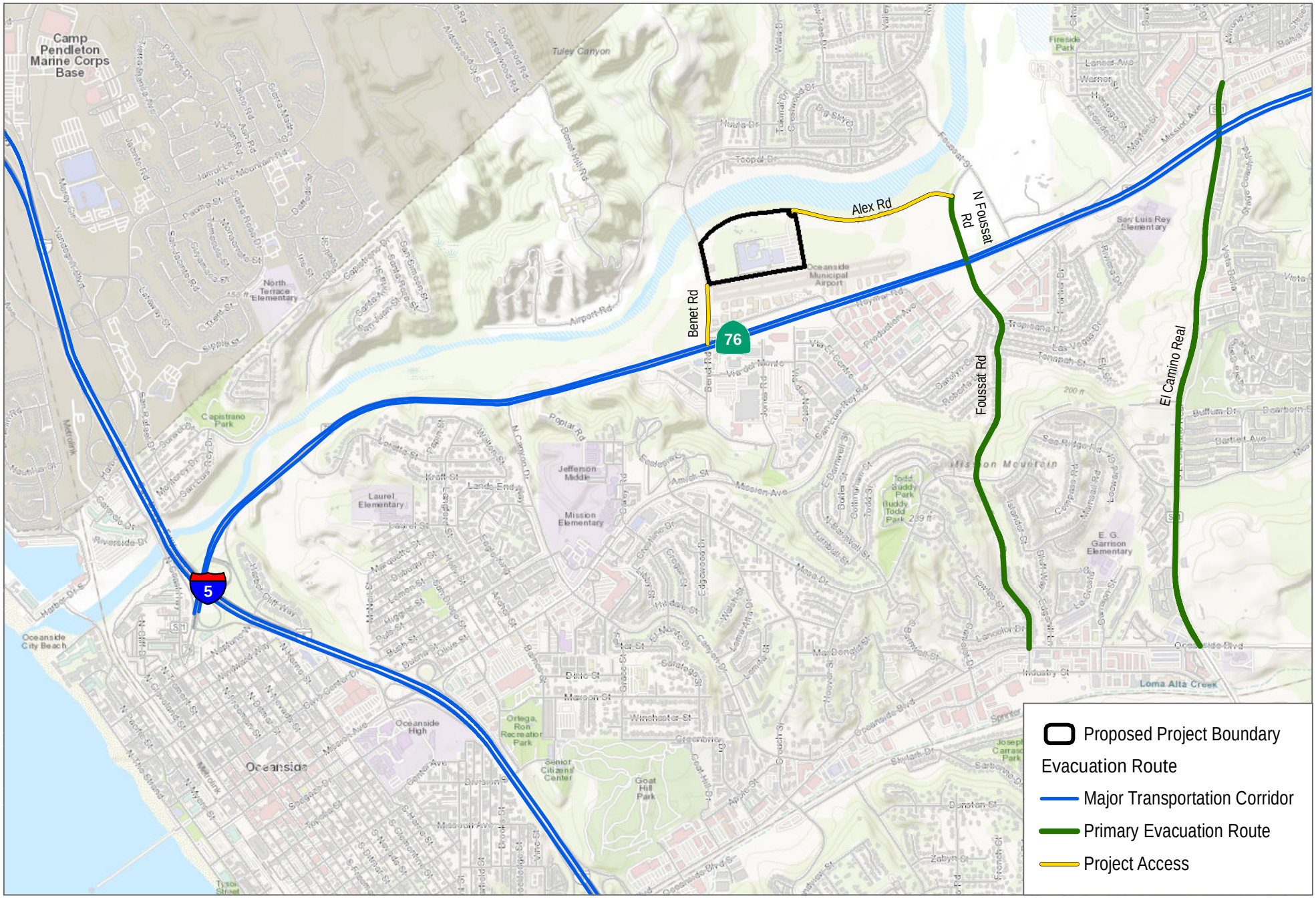
Figure 5 OFD Fire Spread Model

Evacuation Routes

The Project roads and adjacent road circulation system will be able to effectively handle average daily trips generated by the Project. As evidenced by historical mass evacuations in San Diego County and throughout Southern California, even with roadways that are designed to the applicable requirements, it may not be possible, or even the best response, to move large numbers of persons at the same time as part of a mass-evacuation. Instead, informed, phased or targeted evacuations enable more streamlined evacuations where those at highest risk are moved first.

Therefore, the jurisdictions in San Diego County have developed distinct evacuation zones, and performed pre-planning, and tiered or targeted and staggered evacuation strategies to evacuation effectiveness.

In a wildland fire event, the SDC-0427 evacuation zone, has multiple evacuation routes available including: Alex Road, Benet Road, Foussat Road (via Alex Road) and El Camino Real. If an evacuation order is issued, evacuees are likely to be directed westward towards major transportation corridors (i.e., I-5 and/or southward to utilize the SR-76), away from at-risk areas. Available evacuation routes are identified on Figure 6.



SOURCE: BASEMAP-ESRI 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 6

Evacuation Routes

Wildfire Evacuation Study for the Eddie Jones Way Industrial Project

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Targeted Evacuations

Targeted evacuation, which typically targets the scope of the evacuation to only the area in immediate danger and placing a larger area on standby for evacuation, has replaced mass evacuation as the standard protocol for conducting evacuations. This practice allows for better evacuation operations, reduces gridlock, and reserves sufficient travel way for emergency vehicles.

Target evacuations are possible due to technological advancements and improved evacuation strategies that were learned from prior wildfire evacuation events. This improved approach is reflected in EOPs and the experience of the people tasked with coordinating emergency events and is many times more capable of managing evacuations. With the technology in use today (e.g., Ready Oceanside, AlertSanDiego (a.k.a., Genasys Protect)), evacuations are more strategic and surgical than in the past, evacuating smaller areas at highest risk and phasing evacuation traffic so that it flows more evenly and minimizes the surges that may slow an evacuation. Mass evacuation scenarios where large populations are all directed to leave simultaneously, resulting in traffic delays, are thereby avoided, and those populations most at risk safely evacuate.

Often in an evacuation, emergency managers will conduct phased evacuations by issuing an evacuation warning or order for an entire predetermined evacuation zone. The Project is in evacuation zone SDC – 0427. A complete map of all evacuation zones in the County can be accessed at:

https://protect.genasys.com/search?z=14.570532360577667&latlon=32.77219491397284%2C-117.07362871836989.

The City of Oceanside and County of San Diego utilize the Genasys Evacuation system to provide precise evacuation information[5]. Targeting the area in immediate danger allows for better evacuation operations, reduces gridlock, and reserves sufficient travel way for emergency vehicles. Under this approach, first responders or law enforcement personnel will direct traffic at all major intersections during the evacuation process. As the City of Oceanside has adopted the San Diego OA EOP, the Evacuation and Repopulation Policy #8-B[6] provides the following procedures when an evacuation is needed:

Fire Department Responsibilities

- Establish command of the Incident
- Conduct a situation assessment and evaluate the need for evacuations
- Establish an Incident Command Post (ICP) with sufficient room for representatives from other assisting agencies and announce its location
- Request Agency Representative from Law Enforcement to respond to the ICP.

Law Enforcement Responsibilities

- Assign supervisor of the rank of Sergeant or above to the Incident Command Post and request a Deputy to locate with Operations Section Chief
- Maintain ingress and egress routes for emergency vehicles
- Establish perimeter control, keeping unauthorized vehicles and pedestrians out of the involved area. Conduct evaluations, if required, at the direction of the Incident Commander
- Establish anti-looting security patrols, when safe to do so, for evacuated areas within the perimeter
- Maintain a Unit log

[5]https://www.sandiegouniontribune.com/news/public-safety/story/2024-05-30/new-evacuation-notification-system
[6] https://sdoparea.org/wp-content/uploads/documents/8B%20Evacuation%20and%20Repopulation.pdf

Joint Fire and Law Enforcement Responsibilities

- Evaluate and determine whether Law Enforcement role will be as an Agency Representative or Unified Incident Commander, depending on the scope of the Incident
- Assign a Law Enforcement supervisor to work closely with the Operations Section Chief or Incident Commander, whomever is determining the areas to be evacuated
- Assess and validate the need for an Evacuation Warning, Evacuation Order, and/or Shelter in Place — Determine the location, potential size, and direction of Incident travel or spread
- Unified Commanders determine potential for Incident spread and request the appropriate resources to complete the evacuation and mitigate the Incident concurrently

The approach above is demonstrated in a recent evacuation order where the roadway is closed to non-essential traffic prior to an evacuation order being issued. During the Border Fire 32 in August 2022[7]. For example, on August 31st, the San Diego County Sheriff's Department shut down SR-94 at 2:57 p.m. before issuing an evacuation order at 3:28 p.m.[8]. Such road closures are typically implemented to ensure that evacuating traffic has priority and to maintain clear pathways for law enforcement, first responders, and firefighting equipment.

When the IC deemed certain areas at risk due to fire conditions, an evacuation order was issued. Based on the County OA EOP Evacuation and Repopulation procedures, an evacuation order requires the movement of community members out of a defined area due to an immediate threat to life and property from an emergency incident. An evacuation order should be used when there is a potential for or an actual threat to civilian life, within 1 to 2 hours of such determination or when the IC deems it necessary to protect civilians. The purpose of an evacuation warning, in comparison, is to alert community members in a defined area of a potential threat to life and property from an emergency incident. An evacuation warning may be issued when the potential or actual threat to civilian life is more than 2 hours away.

As demonstrated in the Border Fire #32, the Thomas Fire, and other recent fires, evacuation orders were issued only to those persons facing a potential threat. In some cases, such as the Thomas Fire, law enforcement emphasized that the evacuation order was specific to certain areas to prevent a mass evacuation that could congest the roadway network and hinder their ability to prioritize those at the greatest risk.

The Department of Homeland Security (2019) provides supporting data for why jurisdictions have moved to the targeted evacuation approach that leverages the power of situational awareness to support decision making. According to their Planning Considerations: Evacuation and Shelter in Place document, they indicate that delineated zones provide benefits to the agencies and community members. Evacuation and shelter-in-place zones promote phased, zone-based evacuation targeted to the most vulnerable areas, which allows jurisdictions to prioritize evacuation orders to the most vulnerable zones first and limit the need to evacuate large areas not under the threat. Zones help:

- Jurisdictions to understand transportation network throughput and capacity, critical transportation and resource needs, estimated evacuation clearance times, and shelter demand.
- Planners to develop planning factors and assumptions to inform goals and objectives.
- Community members to understand protective actions to take during an emergency.
- Shelters to limit traffic congestion and select locations suitable for the evacuated population.

Additionally, targeted evacuation order/warning aims to ensure proper traffic flow and reduce stress at evacuation sites, some people may still choose to evacuate even if they are not facing an immediate threat. These individuals

[7] https://x.com/SDSheriff/status/1565096377494818817
[8] https://x.com/SDSheriff/status/1565104232688074752

are known as shadow evacuees, and they increase the demand on the roadway network. The number of shadow evacuees varies from incident to incident, depending on their proximity to the actual fire. The evacuation modeling analysis, in all the Scenarios described below, conservatively assumes the evacuation of all populations within the SDC – 0427 evacuation zone, including shadow evacuees.

While the amount of time needed to evacuate the Project would vary by the type of incident, the number of evacuation routes utilized, the amount of mobilization time taken by occupants, actual areas at risk, and other factors, the targeted approach would minimize the size of the area being evacuated.

4.3 Evacuation Modeling

An evacuation model analysis was performed by Chen Ryan Associates (CRA) and Dudek for the Project to determine how long it would take for occupants of the Project and the other land uses in the SDC – 0427 evacuation zone to evacuate to nearby urban areas and/or freeways in case of a fire emergency. The City's EOP is a combination of the County OA EOP combined with information specific to the City of Oceanside. The City's EOP is complete with the 18 annexes contained in the County OA EOP, including Annex Q – Evacuation. This analysis was performed in accordance with the requirements of the City's EOP and County OA EOP – Annex Q (Evacuation), September 2022 for the calculation of evacuation times.

The following analysis assumes an evacuation order has all of the SDC - 0427 evacuation zone evacuating at one time. As previously stated, there are multiple evacuation routes out of this evacuation zone; therefore, to determine impacts to existing land uses, the model considers evacuation traffic from five areas within SDC - 0427, Area A through Area D and the Project site. As depicted in Figure 7, the following detail the existing land uses in each Area:

- Area A: Wanis View Estates Community
- Area B: Prince of Peace Abby, Industrial Uses
- Area C: Municipal Airport
- Area D: Ocean Kamp (Cumulative Only)

4.3.1 Evacuation Modeling Methodology, Assumptions, and Scenarios

The following provides a summary of the methodology, assumptions and scenarios considered in the evacuation time analysis presented herein.

Worst-Case Evacuation Scenario- Saturday Afternoon Evacuation; Full Project Operation

The Project is located in an urban area with an airport to the south, residential and open spaces to the north, Camp Pendelton to the northwest, and Ocean Kamp development to the east. Accordingly, to evaluate a "worst-case" scenario, the model assumes that the evacuation would transpire (i) on a Saturday afternoon, a time when residents from the nearby communities are home and all residential vehicles would be required to evacuate, (ii) fully occupancy of the Prince of Peace Abbey, (iii) when the project is in operation; and (iv) when the Ocean Kamp site

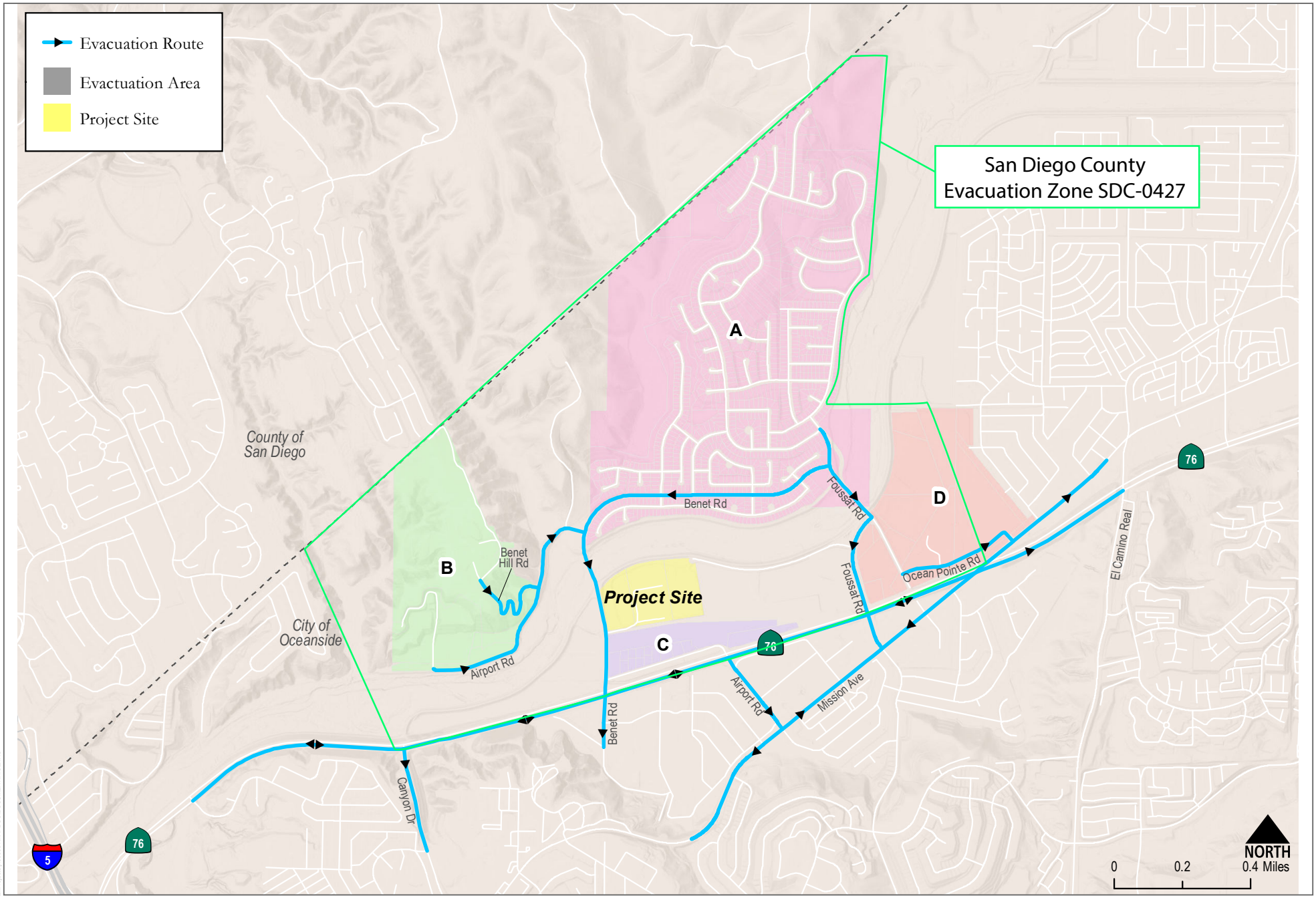
as well as nearby land uses would be operational (open). In an actual evacuation scenario, the total number of vehicles needing to evacuate may actually be less. The OPD or IC would prioritize evacuation of land uses located closest to the area with immediate risk, depending on the location of the fire. However, by assuming a "worst case scenario," the modeling accounts for any other vehicles that may be on the road and/or voluntarily evacuating from other areas. For example, shadow evacuees may leave regardless of a threat to their location. The model accounts for this by assuming that all populations are on-site and would be evacuating.

Primary Evacuation Routes and Capacity

The evacuation model assumes that traffic evacuating from both the Project and nearby communities/land uses would use the closest evacuation routes to leave the area. Evacuation routes were selected based upon review of the Project site, available evacuation routes, and the quickest way to leave areas located adjacent to the available vegetative fuels. Evacuations during large wildfire events would focus on removing threatened populations from the area to a more urbanized area (i.e., "Safe Zone"), as discussed below. These routes are indicated in Figure 7, Fire Evacuation Area and Routes. The evacuation modeling does not account for mobilization time, that is, the time from when an evacuation order is given until occupants leave their homes or other location. Mobilization time varies from short notice events where evacuation populations are evacuated in a short time frame with virtually no mobilization time to longer notice events where there is time for populations to gather needed belongings before leaving.

The study assumed that evacuees would use a mix of Benet Road, Airport Road, Foussat Road, Eddie Jones Way, SR-76, Ocean Pointe Road, Mission Avenue, and other local roads to head towards the more developed parts of the City of Oceanside. The Project site is adjacent to SR-76 and in relatively close proximity to the I-5 freeway, within 2 miles, such that Project occupants would utilize the major transportation arteries to evacuate. Given the roadway network and existence of open space and Camp Pendleton to the north, the modeling illustrates Project occupants would not evacuate to the north.

Contraflow lanes are a temporary arrangement where traffic on a road is transferred from its usual side to share the other half of the carriageway with traffic moving in the opposite direction, which would increase vehicle capacity in one direction. No contraflow lanes were assumed, and access for first responders and law enforcement would be fully maintained. Two-way travel was assumed, with evacuating vehicles traveling outbound to the Safe Zone and first responders and law enforcement provided the opportunity to travel inbound to the fire. Should evacuation managers determine that contraflow is preferred or necessary in a wildfire evacuation scenario, evacuation capacity would increase while evacuation times would decrease.



SOURCE: CR 2024

FIGURE 7

Fire Evacuation Area and Routes

Wildfire Evacuation Plan for the Eddie Jones Way Industrial Project, Fire Protection Plan

DUDEK

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Control of Downstream Intersections

As part of evacuations operations, as demonstrated, by way of one example, in Boarder Fire #32, first responders or law enforcement will direct traffic at all major downstream intersections out of the area during the evacuation process. As possible, intersection traffic signals may be managed at appropriately equipped signals to assist in the movement of traffic from areas of higher potential exposure to areas of lower exposure.

Safe Zone

Based on wildfires in the vicinity of the project area, fires have halted along areas adjacent to wildland fuels and have not historically progressed into the more densely urbanized, irrigated, and hardscaped areas. Within the San Luis Rey River, fires tend to be confined to the river bottom and do not spread aggressively and are contained quickly. Wildfires on nearby Camp Pendelton are controlled on base and although evacuations may occur from these fires, they do not spread uncontrollably into urbanized areas. Thus, it is assumed that evacuees are considered to reach a safe area once they are within the more developed areas such as the area east of El Camino Real.

Evacuation Scenarios

A total of nine evacuation scenarios were analyzed per the guidance provided by OFD and OPD :

- **Scenario 1 – Existing Land Uses:** This scenario estimates the evacuation time for the existing land uses within the study area (Area A through D).
- **Scenario 2 – Existing Land Uses with Proposed Project:** This scenario is similar to Scenario 1 (Area A through D), with the addition of the proposed Project traffic.
- **Scenario 3 – Proposed Project Only:** This scenario estimates the evacuation time for the Project's site only.
- **Scenario 4 – Existing Land Uses with Cumulative Projects:** This scenario is similar to Scenario 1, with an ambient growth of 5% to represent potential cumulative growth in the area and the Ocean Kamp Project.
- **Scenario 5 – Existing Land Uses with Cumulative Projects and the Proposed Project:** This scenario is similar to Scenario 4, with the addition of the proposed Project traffic.
- **Scenario 6 - Existing Land Uses with Cumulative Projects - Benet Rd Closed:** This scenario is similar to Scenario 4, with the assumption that the bridge is closed making Benet Road unavailable as an evacuation route to the neighborhoods to the north of the Project site.
- **Scenario 7 -Existing Land Uses with Cumulative Projects with the Proposed Project- Benet Rd Closed:** This scenario is the same as Scenario 6 with the addition of the Project.
- **Scenario 8 -Existing Land Uses with Cumulative Projects - Foussat Road Closed:** This scenario is similar to Scenario 4, with the assumption that the bridge is closed making Foussat Road unavailable as an evacuation route to the neighborhoods to the north of the Project site.
- **Scenario 9 -Existing Land Uses with Cumulative Projects with the Proposed Project- Foussat Road Closed:** This scenario is similar to Scenario 8, with the addition of the Project.

Evacuating Vehicles

The number of evacuating vehicles was calculated using the following methodology, and is detailed in Table 3, Evacuating Vehicles:

- Nearby Residential land uses: The number of vehicles expected to evacuate from neighboring residential zones was calculated by multiplying the number of households with the average vehicle ownership for each household in the area. Data for land use was sourced from the Parcel Quest parcel map, and statistics on vehicle ownership were provided by the US Census Bureau.

- Prince of Peace Abbey: Maximum occupancy of the parking lots

- Industrial Land Uses: Highest parking demand observed using historical aerial images. Heavy vehicles, such as tractor-trailers, were directly incorporated into the Vissim model. The simulation generated these heavy vehicles and tracked them throughout the evacuation process, considering factors specific to heavy vehicles, such as turning radius and acceleration/deceleration speeds.

- Ocean Kamp: Proposed land uses from the Ocean Kamp Local Transportation Study multiply by the average parking demand rate obtained from the Institute of Transportation Engineer Parking Generation Manual.

- Proposed Project: Maximum occupancy of the employees/visitors (590 vehicles/parking spaces), truck trailer parking stalls (60 fully loaded tractor trailers/60 stalls). There would be a maximum of 60 trailer parking spaces onsite (excluding loading bays), which are available for tractors with trailers to park. The model conservatively assumed there will be 60 heavy-duty trucks (each consisting of a tractor and a 48-53 ft trailer) exiting the Project site during an evacuation. The 60 trucks are equal to the total number of trailer parking spaces within the Project site. See Table A of Appendix C.

- Including all 60 tractor trailers is conservative, based on a review of other industrial manufacturing complexes in North County over a 12-month period. During this time, none of the sites reached full occupancy with tractor trailers and head units, including the loading bays. Additionally, each trailer requires a tractor (head unit) for the trailer to be evacuated off-site. Trailers without tractors would be left behind during an emergency evacuation. As mentioned earlier, during an emergency, law enforcement will implement traffic control measures, including preventing inbound vehicles from entering the evacuation area. Therefore, a tractor would not be able to drive to the Project site solely to remove additional trailers. Further details and examples can be found in the evacuation memorandum.

Table 3. Evacuating Vehicles

Scenario	Evacuation Vehicles					
	Nearby Land Uses				Project	Total
	A	B	C	D		
Scenario 1 – Existing Land Uses	1,340	260	150	0	0	1,750
Scenario 2 – Existing Land Uses with Proposed Project	1,340	260	150	0	650	2,400
Scenario 3 –Proposed Project Only	0	0	0	0	650	650

Scenario 4 – Existing Land Uses with Cumulative Projects	1,410	280	160	2,397	0	4,247
Scenario 5 – Existing Land Uses with Cumulative Projects with the proposed Project	1,410	280	160	2,397	650	4,897
Scenario 6 – Existing Land Uses with Cumulative Projects - Benet Rd Closed	1,410	280	160	2,397	0	4,247
Scenario 7 -Existing Land Uses with Cumulative Projects with the Proposed Project- Benet Rd Closed	1,410	280	160	2,397	650	4,897
Scenario 8 -Existing Land Uses with Cumulative Projects - Foussat Road Closed	1,410	280	160	2,397	0	4,247
Scenario 9 -Existing Land Uses with Cumulative Projects with the Proposed Project - Foussat Road Closed	1,410	280	160	2,397	650	4,897

Sources: CR Associates 2024, US Census Bureau 2023, Google Maps 2023

Under emergency evacuation conditions and consistent with the City's EOP, County OA EOP and practices employed during prior emergency evacuation events in the County, traffic signals would revert to special timing plans and/or traffic personnel will be deployed at key intersections to help regulate traffic flow for primary evacuation approaches.

4.3.2 Potential for Project Evacuation Impact

Based on the analysis methodology described in the previous section, Table 4 summarizes the evacuation time for each analysis scenario. The evacuation time does not depict the evacuation time for each individual person within an evacuation area, but rather the total amount of time needed to evacuate all populations modeled from an area. Populations located in closer proximity to the OPD or IC designated safe zone will safely evacuate sooner than the total calculated evacuation time identified in Table 4. Detailed evacuation travel time analysis information is provided in Attachment B of Appendix C.

As shown in Table 4, the following is a summary of the evacuation time for each scenario:

- Scenario 1: It would take between 21 minutes and 57 minutes to evacuate the existing land uses.
- Scenario 2: It would take between 21 minutes and 1 hour and 7 minutes to evacuate the existing land uses and the proposed Project. Under this scenario, the Project would cause the following increases:
    - Area A – 10 minutes
    - Area B – 8 minutes
    - Area C and Area D: No change
    - It would take 43 minutes to evacuate the Project's site.
- Scenario 3: It would take 28 minutes to evacuate the Project site by itself.
- Scenario 4: It would take between 22 minutes and 1 hour and 4 minutes to evacuate the nearby land use under the "with cumulative projects" conditions.
- Scenario 5: It would take between 23 minutes and 1 hour and 9 minutes to evacuate the nearby land uses and the proposed Project under the "with cumulative projects with Project" conditions. Under this scenario, the Project would cause the following increases:
    - Area A – 10 minutes
    - Area B – 8 minutes
    - Area C – 1 minute

    - Area D – 2 minutes
    - It would take 43 minutes to evacuate the Project.
- Scenario 6: It would take between 21 minutes and 1 hour and 27 minutes to evacuate the nearby land uses under the "with cumulative projects" conditions with Benet Road closed.
- Scenario 7: It would take between 23 minutes and 1 hour and 27 minutes to evacuate the nearby land uses and the proposed Project under the "with cumulative projects with Project" conditions. Under this scenario, the Project would cause the following increases:
    - Area A and Area B: No change
    - Area C: 2 minute
    - Area D: 4 minutes
    - It would take 42 minutes to evacuate the Project.
- Scenario 8: It would take between 22 minutes and 1 hour and 32 minutes to evacuate the nearby land uses under the "with cumulative projects" conditions.
- Scenario 9: It would take between 22 minutes and 1 hour and 32 minutes to evacuate the nearby land uses and the proposed Project under the "with cumulative projects with Project" conditions. Under this scenario, the Project would not cause any increases in evacuation time. It would take 42 minutes to evacuate the Project.

Table 4. Evacuation Time Summary

Scenario	Total Evacuation Vehicles	Evacuation Time				
		A	B	C	D	Project
Scenario 1 – Existing Land Uses	1,750	0:57	0:45	0:21	0:00	0:00
Scenario 2 – Existing Land Uses with Project	2,400	1:07	0:53	0:21	0:00	0:43
Change (Scenario 2 – Scenario 1)		**0:10**	**0:08**	**0:00**	**0:00**	**0:43**
Scenario 3 –Proposed Project Only	650	0:00	0:00	0:00	0:00	0:28
Scenario 4 – Existing Land Uses with Cumulative Projects	4,247	0:59	0:47	0:22	1:04	0:00
Scenario 5 – Existing Land Uses with Cumulative Projects with the Project	4,897	1:09	0:55	0:23	1:06	0:43
Change (Scenario 5 – Scenario 4)		**0:10**	**0:08**	**0:01**	**0:02**	**0:43**
Scenario 6 - Existing Land Uses with Cumulative Projects - Benet Rd Closed	4,247	1:27	1:15	0:21	0:58	0:00
Scenario 7 - Existing Land Uses with Cumulative Projects with the Proposed Project- Benet Rd Closed	4,897	1:27	1:15	0:23	1:02	0:42
Change (Scenario 7- Scenario 6)		**0:00**	**0:00**	**0:02**	**0:04**	**0:42**
Scenario 8 - Existing Land Uses with Cumulative Projects - Foussat Road Closed	4,247	1:32	0:46	0:22	1:02	0:00
Scenario 9 - Existing Land Uses with Cumulative Projects with the Proposed Project- Foussat Road Closed	4,897	1:32	0:46	0:22	1:02	0:42
Change (Scenario 9- Scenario 8)		**0:00**	**0:00**	**0:00**	**0:00**	**0:42**

Source: CR Associates 2024

[1] Evacuation times shown here are representative of the time necessary for evacuation after the 45-minute delay from the prioritization of Area A and Area B.

4.3.3 Impact Findings

Safely undertaking large-scale evacuations is a complicated process that involves many factors that cannot necessarily be determined in advance. A large-scale evacuation may take several hours or more and require moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, occupants' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control.

The City's EOP, County OA EOP, and San Diego County MJHMP include various flexible strategies to evacuate land use areas A-D and the Project strategically in order to remove the occupants closest to the hazard first. This process allows officials to respond to the near infinite number of variables in an emergency, prevents overwhelming roadway capacities, and allows land uses areas to evacuate quicker. Technological advancements and improved evacuation strategies learned from prior wildfire evacuation events have resulted in a system, reflected in the EOPs and the experience of the people tasked with coordinating events, that is many times more capable of managing evacuations.

Scenarios 2, 5, 7 and 9 demonstrate the differences in evacuation timing with the Project compared to scenarios without the Project. Scenario 2 identifies the evacuation timing with the Project under existing land use conditions without the addition of cumulative projects, while Scenario 5 demonstrates evacuation timing with the Project under existing land use with cumulative projects conditions, which includes the Ocean Kamp project. Scenarios 7 and 9 demonstrate evacuation timing with the Project and cumulative projects and the closure of Benet Road and Fousset Road, respectively.

As demonstrated in Scenario 2, 5, 7 and 9, the increase in evacuation time does not constitute a substantial impairment to the adopted emergency evacuation plan or emergency response plan, resulting in a less than significant impact without mitigation. Additionally, due to ignition resistant construction, fuel modification zones, and the preservation of evacuation routes, the project does not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

As presented above, in the scenarios that demonstrate with Project conditions and using the conservative assumptions described above, evacuation times under varying conditions increase up to a maximum 10 minutes in a scenario where an evacuation would otherwise take a maximum of 59 minutes. OFD does not consider such a change to be a significant impact under CEQA.[9] This determination considers the Project area's fire environment, fire spread modeling conducted by OFD which is described in Section 4.2 hereof and results shows fire spread not reaching structures in the SDC – 0427 evacuation zone for up to 2 hours. Conservatively, this determination does not take into consideration fire suppression efforts or the requirements for development of the Project related to fire protection (e.g., ignition resistant construction, defensible space), which provide contingency options, such as shelter-in-place nor does it assume OPD implements traffic control measures to prioritize evacuees at highest risk within the SDC – 0427 evacuation zone. Additionally, the Project would not eliminate any existing evacuation routes. Considering these facts and others discussed herein, and the expertise of this study's authors, OFD and OPD, the Project would not expose people to a significant risk of loss or death involving wildland fires related to evacuation, would not interfere with evacuation response planning, and would not result in inadequate emergency access. Overall, Project impacts would be less than significant without mitigation. Safe evacuation of the Project and

[9] Zoom Conference with OFD, Division Chief Blake Dorse and Fire Marshal Randy Hill, on November 7, 2024.

surrounding community is possible in all modeled scenarios and the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

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5 Wildfire/Evacuation Awareness

Although not required by regulation or code, nor relied upon for purposes of reaching the significance conclusions set forth in this WES, the Eddie Jones Warehouse Project can be proactive in its outreach to its occupants regarding fire safety, wildfire and evacuation awareness, and general evacuation procedures. Educating populations in FHSZ and WUI areas on wildfire safety and evacuation can make for an even more efficient and effective evacuation, such as understanding how to receive emergency notifications and the different types of notifications keeps occupants informed, what to include in your emergency kit for your home or vehicle keeps occupants ready to evacuate when notified, encouraging evacuees to carpool helps reduce the number of vehicles on evacuation roadways. Similarly, the Eddie Jones Warehouse Project can also coordinate with local fire agencies to engage occupants in fire safety and evacuation awareness through a variety of methods as described further below.

The focus of the "Ready, Set, Go!" program is on public awareness and preparedness, especially for those living and working in the wildland-urban interface (WUI) areas. The program is designed to incorporate the local fire protection agency as part of the training and education process in order to ensure that evacuation preparedness information is disseminated to those subject to the potential impact from a wildfire. There are three components to the program:

- "READY" – Preparing for the Fire Threat: Take personal responsibility and prepare long before the threat of a wildfire so you are ready when a wildfire occurs. Confirm you are registered for Reverse 911, Alert San Diego, and Community alert system. Make sure all occupants have an individual Action Plan. Appendix E, Quick Reference Guide includes emergency preparedness information specific to the Project.
- "SET" – Situational Awareness When a Fire Starts: If a wildfire occurs and there is potential for it to threaten the Eddie Jones Warehouse Project and surrounding communities, pack your vehicle with your emergency items. Stay aware of the latest news from local media and your local fire department for updated information on the fire. If you are uncomfortable, leave the area.
- "GO!" – Leave Early! Following your Action Plan provides you with knowledge of the situation and how you will approach evacuation. Leaving early, well before a wildfire is threatening the area, provides you with the least delay and results in a situation where, if a majority of neighbors also leave early, firefighters are now able to better maneuver, protect and defend structures, evacuate other occupants who couldn't leave early, and focus on citizen safety.

"READY SET GO!" is predicated on the fact that being unprepared and attempting to flee an impending fire late (such as when the fire is physically close to your community) is dangerous and exacerbates an already confusing situation. This Eddie Jones Warehouse Project Wildfire Evacuation Study provides key information that can be integrated into the individual Action Plans, including the best available routes to use in the event of an emergency evacuation.

Situational awareness requires a reliable information source. There are several notification systems that can provide and disseminate information to occupants of the Project. These systems include Genasys Protect, Reverse 911, Ready Oceanside and Alert San Diego, SD Emergency App and the San Diego Emergency Alert System. More information on how to register for these programs can be found in the Quick Reference Guide- Register to Receive Emergency Alerts.

The following provides examples of best practices for how the Project could proactively implement a wildfire and evacuation awareness program.

Owner(s)s and/or Property Management Companies can identify a Fire Safety Coordinator that is responsible for:

1. Overseeing implementation of this WES and overall fire coordination with OPD and OFD.

2. Implementing a proactive facility wildfire education program utilizing a multi-pronged approach to fire safety following the "**Ready, Set, Go!"** approach to wildfire evacuation, to include, but not limited to:

    i. Annual wildfire and evacuation safety awareness meeting in coordination with local fire agencies.
    ii. Annual reminder notices will be provided to each employee encouraging them to review this WES and be familiar with evacuation protocols.
    iii. The Project website will host a webpage dedicated to wildfire and evacuation education and awareness, which should include a copy of this Wildfire Evacuation Study and the resources provided herein.

3. Coordinating an annual fire evacuation drill/ fire exercise to ensure proper safety measures have been implemented, facility awareness and preparation of a facility-wide **Ready, Set, Go!"** plan.

4. Organizing an employee training and awareness through various practices:

    i. New hire fire awareness and evacuation training
    ii. Ongoing staff training
    iii. Facility sweeps by trained staff

    Strategically placed fire safety and evacuation/sheltering protocol information, as determined by the Fire Safety Coordinator.

While the practices above for would support an informed populace and would further improve safety and reduce and/or avoid problems during an evacuation, the evacuation modeling herein is not predicated on implementation of those practices. Therefore, as previously demonstrated, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires or substantially impair implementation of or physically interfere with an adopted emergency evacuation plan or emergency response plan.

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6 Project Evacuation Procedures

The following provides a discussion of the types of evacuations that Project occupants could experience (e.g., pre-planned, late-notice, etc.), and Project specific evacuation contingencies, and Project specific procedures for social aspects of evacuation.

Note: This Wildfire Evacuation Study will require adjustment and continued coordination by the Owner(s) and/or Property Manager and fire/law enforcement agencies during each of the construction phases. With each phase, the evacuation routes may be subject to changes with the addition of both primary and secondary evacuation routes.

6.1 Relocation/Evacuation

It is estimated that the maximum amount of time needed to move the Eddie Jones Warehouse Project population to urbanized and/or designated evacuation areas may require up to approximately 43 minutes under varying constraints that may occur during an evacuation. This does not include additional allowances for the time needed to detect and report a fire, for fire response and on-site intelligence, for phone, patrols, and aerial based notifications, and for notifying special needs citizens.

Wolshon and Marchive (2007) simulated traffic flow conditions in a computer derived WUI under a range of evacuation notice lead times and housing densities. To safely evacuate more people, they recommended that emergency managers (1) provide more lead time to evacuees and (2) control traffic levels during evacuations so that fewer vehicles are trying to exit at the same time.

Wildfire emergency response procedures will vary depending on the type of wildfire and the available time in which decision makers (IC, OPD, OFD, CAL FIRE, SDCSD, and/or County Office of Emergency Management) can assess the situation and determine the best course of action. Based on the Eddie Jones Warehouse Project and surrounding communities, its road network, and the related fire environment, the first and primary type of evacuation envisioned is an orderly, pre-planned evacuation process where people are evacuated to more urban areas further from an encroaching wildfire (likely to urban areas north, south and west) well before fire threatens. This type of evacuation must include a conservative approach to evacuating (i.e., when ignitions occur and weather is such that fires may spread rapidly, evacuations should be triggered on a conservative threshold that includes time allowances for unforeseen, but possible, events that would slow the evacuation process).

The second type of evacuation is considered by many to offer the highest level of life protection to the public, but it can result in evacuees being placed in harm's way if the time available for evacuation is insufficient (Cova et al. 2011). An example of this type of evacuation, which is highly undesirable from a public safety perspective, is an evacuation that occurs when fire ignites close to vulnerable communities. This type of situation is inherently dangerous because there is generally a higher threat to persons who are in a vehicle on a road when fire is burning in the immediate area than in a well-defended, ignition-resistant home. Conditions may become so poor that the vehicle drives off the road or crashes into another vehicle, and flames and heat overcome the occupants. A vehicle offers little shelter from a wildfire if the vehicle is situated near burning vegetation or catches fire itself. This type of evacuation must be considered a very undesirable situation by law and fire officials in all but the rarest situations where late evacuation may be safer than seeking temporary refuge in a structure (such as when there are no nearby structures, the structure[s] is/are already on fire, or when there is no other form of refuge). Temporary refuge would

be possible within the Project's structures, but structures within surrounding communities, as previously discussed, are less desirable due to their higher vulnerability to ignition.

The third potential type of evacuation is a hybrid of the first two. In cases where evacuation is in process and changing conditions result in a situation that is considered unsafe to continue evacuation, it may be advisable to direct evacuees to pre-planned temporary refuge locations, including their own home if it is ignition-resistant and defensible. As with the second type of evacuation discussed above, this situation is considered highly undesirable, but the evacuation pre-planning must consider these potential scenarios and prepare decision makers at the IC level and at the field level for enacting a contingency to evacuation when conditions dictate.

Indications from past fires and related evacuations, in San Diego County and throughout Southern California, which have experienced increasingly more frequent and larger fires, are that evacuations are largely successful, even with a generally unprepared populace. It then stands to reason that an informed and prepared populace would minimize the potential evacuation issues and related risk to levels considered acceptable from a community perspective.

Evacuation orders or notifications are often triggered based on established and pre-determined model buffers, which are based on topography, fuel, moisture content of the fuels and wind direction. Evacuations are initiated when a wildfire reaches or crosses one of these pre-determined buffers. Evacuations can also be very fluid. The IC, law enforcement, and OES would jointly enact evacuations based on fire behavior.

6.2 Civilian and Firefighter Evacuation Contingency

As of this document's preparation, no community in California has been directed to shelter-in-place during a wildland fire. Even the communities in Rancho Santa Fe, California, which are designed and touted as shelter-in-place communities, were evacuated during the 2007 Witch Creek Fire. This is not to say that people have not successfully sheltered-in-place during wildfire, where there are numerous examples of people sheltering in their homes, in hardened structures, in community buildings, in swimming pools, and in cleared or ignition-resistant landscape open air areas. The preference will always be early evacuation following the "Ready, Set, Go!" model, but there exists the potential for unforeseen civilian evacuation issues, and having a contingency plan will provide direction in these situations that may result in saved lives.

Potential problems during wildfire evacuation from the Eddie Jones Warehouse Project area include:

- Inadequate time to safely evacuate
- Fire evacuations during rush hour traffic or when large events are occurring
- Blocked traffic due to accidents or fallen tree(s) or power pole(s)
- The need to move individuals who are unable to evacuate

As part of the Project's approval process, detailed plans are required to be submitted to the City's Engineering Division, and will be provided to OPD and OFD to support pre-planning. These pre-planning efforts focus on evacuation contingency planning for civilian populations when it is considered safer to temporary seek a safer refuge than evacuation.

As discussed throughout, the Project's structures would allow for the possibility of temporary sheltering while structures in surrounding communities would not typically be considered ignition-resistant and therefore, not appropriate for temporary refuge.

6.2.1 Safety Zones

The International Fire Service Training Association (IFTSA; Fundamentals of Wildland Fire Fighting, 3rd Edition) defines "safety zones" as areas mostly devoid of fuel, which are large enough to assure that flames and/or dangerous levels of radiant heat will not reach the personnel occupying them. Areas of bare ground, burned over areas, paved areas, and bodies of water can all be used as safety zones. The size of the area needed for a safety zone is determined by fuel types, its location on slopes and its relation to topographic features (chutes and saddles) as well as observed fire behavior. Safety zones should never be located in topographic saddles, chutes or gullies. High winds, steep slopes or heavy fuel loads may increase the area needed for a safety zone.

The National Wildland Fire Coordinating Groups (NWFCG), Glossary of Wildland Fire Terminology provides the following definitions for safety zones:

> *Safety Zone*. An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuel breaks; they are greatly enlarged areas, which can be used with relative safety by firefighters and their equipment in the event of blowup in the vicinity.

According to NWFCG, safety zone(s):

- Must be survivable without a fire shelter
- Can include moving back into a clean burn
- May take advantage of natural features (rock areas, water, meadows)
- Can include constructed sites (clear-cuts, roads, helistops)
- Are scouted for size and hazards
- Consider the topographic location (larger if upslope)
- Should be larger if downwind
- Should not include heavy fuels
- May need to be adjusted based on site-specific fire behavior

The definition for a safety zone includes provisions for separation distance between the firefighter and the flames of at least four times the maximum continuous flame height. Distance separation is the radius from the center of the safety zone to the nearest fuels. Due to the dynamic nature of wildfire events it is important to have multiple contingencies, the urbanized areas nearby the Project site (e.g., Oceanside Municipal Airport, SR-76, commercial/industrial uses south of SR-76) offer the best possibility for a safety zone for firefighter use. The Eddie Jones Warehouse Project will also include the ability for firefighters to seek safety zones within the ignition-resistant landscapes, but identification of other potential safety zones will require additional focused study by OFD and other fire and law enforcement agencies.

6.2.2 Temporary Firefighter Refuge Areas

Firescope California (Firefighting Resources of Southern California Organized for Potential Emergencies) was formed by legislative action to form a partnership between all facets of local, rural, and metropolitan fire departments, CAL FIRE and federal fire agencies. Firescope defines a contingency plan when it is not possible to retreat to a safety zone. This contingency includes establishment of firefighter temporary refuge areas (TRAs), which are defined as:

> A preplanned area where firefighters can immediately take refuge for temporary shelter and short-term relief without using a fire shelter in the event that emergency egress to an established safety zone is compromised.

Examples of a TRA may include the lee side of a structure, inside of a structure, large lawn or parking areas, or cab of a fire engine, amongst others. Differences between a TRA and a Safety Zone is that TRAs are closer to the immediate firefighting area, are considered a contingency to being able to get to a safety zone, do not include a requirement for a large area set back four times the flame lengths of adjacent fuels, and cannot be feasibly pre-planned until firefighters arrive on-scene and size up the situation.

Firescope appropriately notes that although safety zones and viable escape routes shall always be identified in the WUI environment, they may not be immediately available should the fire behavior increase unexpectedly. Often a TRA is more accessible in the WUI environment. A TRA will provide temporary shelter and short-term relief from an approaching fire without the use of a fire shelter and allow the responders to develop an alternate plan to safely survive the increase in fire behavior.

The major difference between a TRA and a safety zone is that a TRA requires another planned tactical action (i.e., TRAs cannot be considered the final action, but must include self-defense and a move out of the area when the fire threat subsides). A TRA should be available and identified on site at a defended structure. TRAs are NOT a substitute for a safety zone. TRA pre-planning is difficult, at best because they are very site- and fire behavior-specific. For the Eddie Jones Warehouse Project site, TRAs would likely include navigating into the densely developed areas where firefighters would be separated from the unmaintained wildland fuels by wide areas including site-wide maintained landscapes, ignition-resistant residences, and wide roads that offer numerous opportunities for TRA.

The majority of Project site would be developed and paved surfaces, such as the parking areas, are considered TRAs. This is an important concept because it offers last-resort, temporary refuge of firefighters, and in a worst-case condition, occupants. This approach would be consistent with Firescope California (2013), which indicates that firefighters must determine if a safe evacuation is appropriate and if not, to identify safe refuge for those who cannot be evacuated, including civilians.

Each of the Project's structures that can be considered for TRA include the following features:

- Ignition-resistant construction materials
- Wide roadways with fire hydrants
- Annual landscape inspections by 3rd party inspectors
- Maintained landscapes and roadside fuel modification
- Ember-resistant vents

- Interior fire sprinklers

Because there is the possibility that evacuation of the Project and surrounding communities may be less safe than temporarily refuging on site, such as during a fast-moving, wind-driven fire that ignites nearby, including temporary refuge within onsite structures that have been properly designed, constructed, and maintain with fire safety features (e.g., ignition resistant construction, fuel modification) is considered a contingency plan for the Eddie Jones Warehouse Project. This concept is considered a component of the "Ready, Set, Go!" model as it provides a broader level of "readiness" should the ability to execute an early evacuation be negated by fire, road congestion, or other unforeseen issues.

Note: This approach would be considered a last-resort contingency during wildfire with the primary focus being on early evacuation. The decision for evacuation or temporarily refuging onsite will be made by responding law enforcement and/or fire personnel.

6.3 Social Aspects of Wildfire Evacuation

Orderly movement of people is the result of planning, training, education, and awareness, all of which are promoted in San Diego. Evacuation has been the standard term used for emergency movement of people and implies imminent or threatening danger. The term in this Wildfire Evacuation Study, and under the "Ready, Set, Go!" concept, indicates that there is a perceived threat to persons and movement out of the area is necessary, but will occur according to a pre-planned and practiced protocol, reducing the potential for panic.

Citizen reactions may vary during an evacuation event, although several studies indicate that orderly movement during wildfire and other emergencies is not typically unmanageable. Evacuation can be made even less problematic through diligent public education and emergency personnel training and familiarity. Social science research literature indicates that reactions to warnings follow certain behavior patterns that are defined by people's perceptions (Aguirre 1994; Drabek 1991; Fitzpatrick and Mileti 1994; Gordon 2006; Collins 2004) and are not unpredictable. In summary, warnings received from credible sources by people who are aware (or have been made aware) of the potential risk, have the effect of an orderly decision process that typically results in successful evacuation. This success is heightened when evacuations are not foreign to occupants (Quarantelli and Dynes 1977; Lindell and Perry 2004) as will occur within the Project area. Further, in all but the rarest circumstances, evacuees will be receiving information from credible sources during an evacuation. It is anticipated that law enforcement and/or fire personnel would be on site to help direct traffic and would be viewed as knowledgeable and credible.

6.3.1 Evacuation of Special Populations

Vogt (1990, 1991) defines special populations as those groups of people who, because of their special situations or needs, require different planning strategies from those of the general population. Special needs populations in Eddie Jones include people with disabilities, the hearing or visually impaired, senior citizens, foreign speaking, visitors passing through the area, temporary visitors such as day workers or customers.

People with disabilities and temporary visitors may not have knowledge of the area's fire hazard, they may not know how to react in a fire emergency, and they may not understand what they are being told to do. Conversely,

this segment of the population would typically be easier to evacuate quickly as they have no possessions or pets they would need to prepare. They can get in their cars and be directed out of the area.

Project Approach:

The Fire Safety Coordinator will include information to occupants regarding how to notify the Oceanside Police Department and/or County EMD of special needs, so that accommodations for their notification, transportation, or other special requirements can be provided during an emergency evacuation. Occupants will be advised of their options during an emergency by law enforcement or fire officials.

6.3.2 Animal Evacuations

Animal evacuations present a host of challenges that may affect the overall successful movement of people and their possessions out of harm's way. For example, livestock owners do not always have the means to load and trailer their livestock out of the area. Further, most wildfire evacuation relief shelters or commercial lodging facilities do not allow people to bring in pets or other animals. Sorensen and Vogt (2006) indicate that an issue receiving increasing attention is what evacuees do with pets or other animals such as livestock when they leave their homes and whether having pets or animals impacts their decision to evacuate.

Project Approach: The Eddie Jones Warehouse Project would not accommodate livestock or pets onsite and, therefore, a separate evacuation protocol with respect to animals is not warranted. Any service animals onsite would be evacuated with their owner, and unlike pets, are permitted in TEP and emergency shelters.

6.3.3 Re-entry Procedures

An important component of evacuations is the citizen re-entry process. Guidance and procedures to ensure a coordinated, safe, and orderly repopulation into impacted communities following an incident is provided in the County of San Diego Evacuation and Repopulation Plans.

Repopulation will be initiated by the Incident Commander/Unified Command of the Incident Management Team, with the support of the Director of Emergency Services, the City's EOC and/or OA EOC Director, and the Operations Section Chief at the City's EOC and/or OA EOC. In most cases the City's EOC and/or OA EOC will remain activated until full repopulation is complete. The City's Recovery Coordination Officer from the Management Section would be responsible for coordinating recovery efforts. In the event that the OA EOC has been deactivated, the Incident Commander or the Liaison Officer of the Incident Management Team will initiate repopulation procedures. The Incident Commander will designate staff to the Evacuation/Repopulation Branch and the Operations Section Chief of the OA EOC will coordinate with and support the Evacuation/Repopulation Branch Coordinator. The Evacuation/Repopulation Coordinator is responsible for coordinating the repopulation procedures with all involved agencies and ensuring effective communication.

The public will be notified of repopulation through various notification measures previously mentioned in this WES, which may include Ready Oceanside, Alert San Diego, and/or the SDEmergency App for smart phones, emergency broadcast radio, television, press releases, informational phone lines such as 211, community briefings, and informational updates at shelters.

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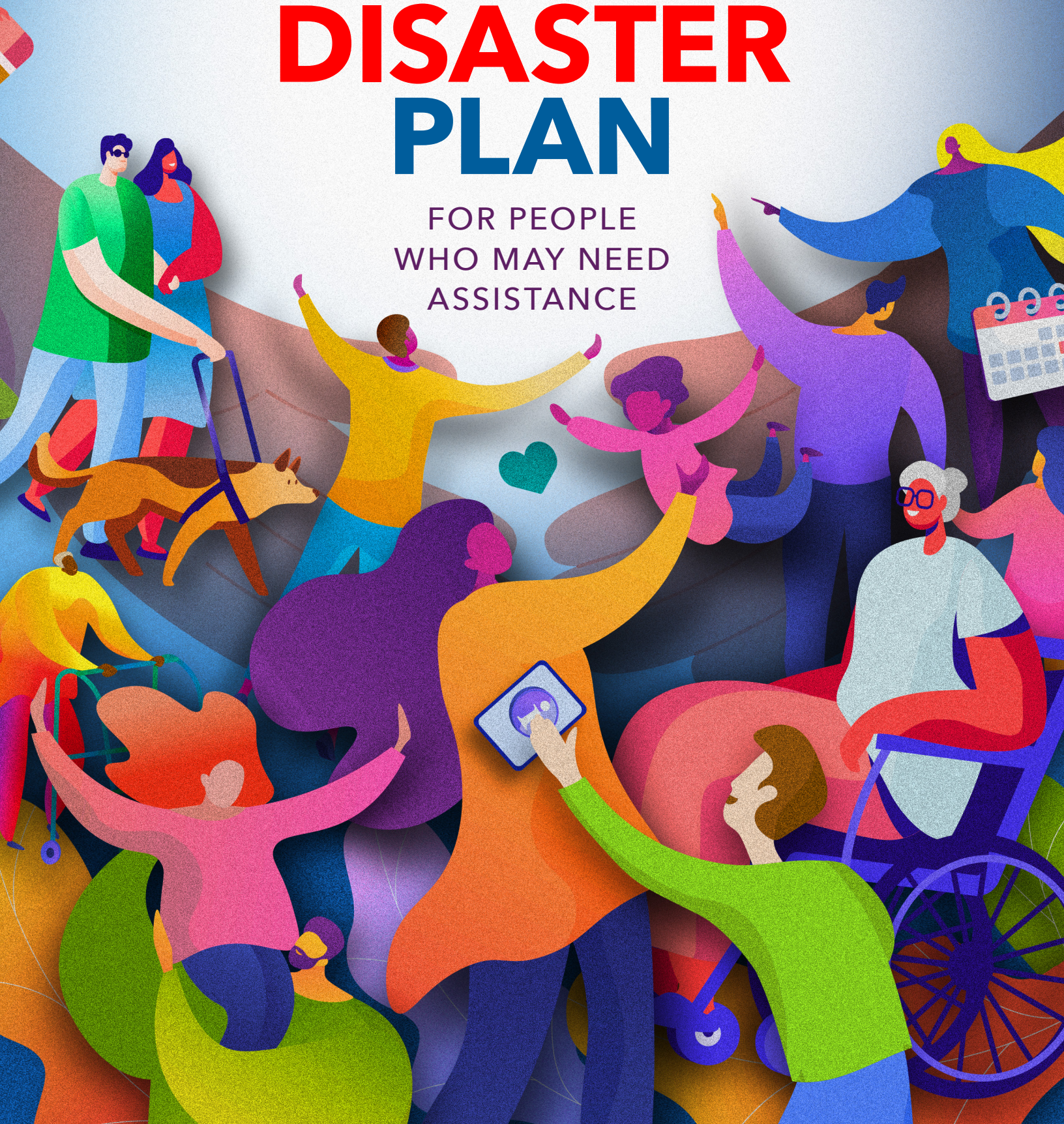
Appendix A1–A5

City of Oceanside Emergency Preparedness Resources,
San Diego County Emergency Preparedness Resources,
Firewise Wildfire Preparation,
and "Ready, Set, Go!" Wildland Fire Action Guide

COUNTY OF SAN DIEGO OFFICE OF EMERGENCY SERVICES

PERSONAL DISASTER PLAN

FOR PEOPLE WHO MAY NEED ASSISTANCE



Introduction

This guide supports older adults, people with disabilities, caregivers, and others who may benefit from help when planning for disasters.

Emergencies can range from falls in the home to fires and earthquakes. Each person has unique abilities and needs during a disaster, and everyone can take steps to prepare.

This guide will help you evaluate your needs and make a personalized emergency plan so that you and your loved ones can be better prepared.

Steps to Prepare for any Emergency

GET CONNECTED

Preparedness is all about people.

Build your support network.

MAKE A PLAN

Know where to go, what to do, and who can help.

Share your plan with your support network.

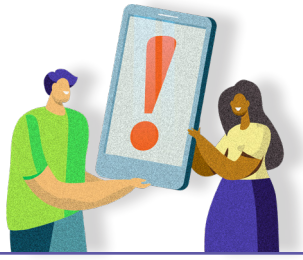
GATHER SUPPLIES

Create a Go Kit with supplies you can easily take with you.

Assemble a Home Kit with supplies for sheltering in place.

STAY INFORMED

Get alerts and know your local resources.




Get Connected
The first step in disaster preparedness is building a support network of people who can help

Preparedness is all about People

Our social connections help us respond better to challenges during emergencies.

Social connections also provide physical and mental health benefits to improve your ability to react to disasters.

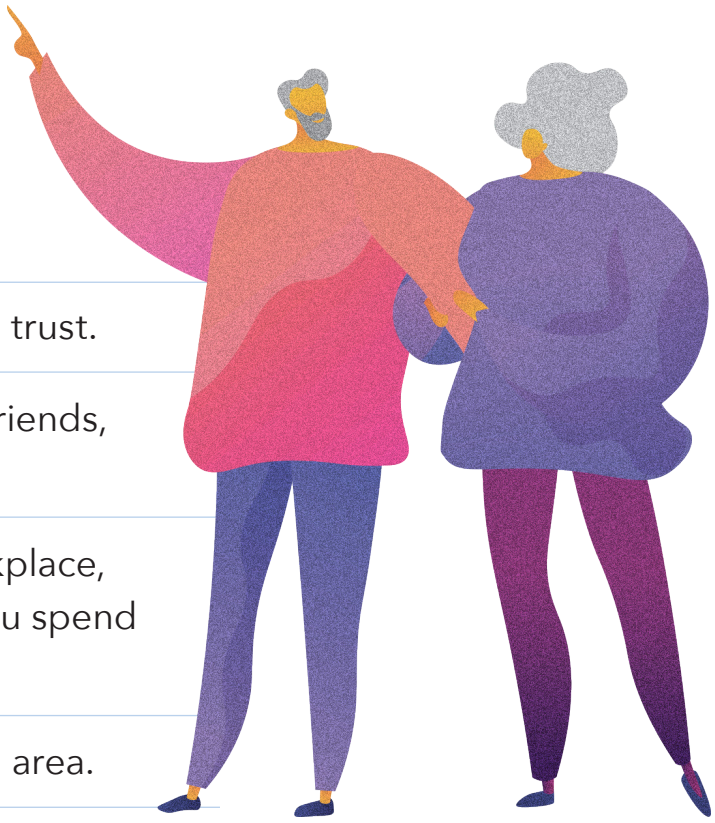
Think about the groups that you already belong to or could join:

- Volunteer groups
- Faith-based groups
- Co-workers
- School-based groups
- Neighborhood groups
- Exercise groups
- Support groups

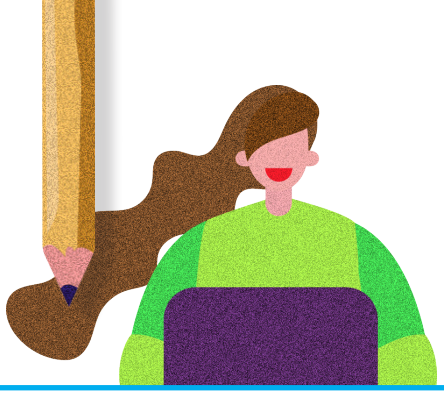
During an emergency or disaster, you and members of your community can come together to help each other.

Build your Support Network

Your support network can include anyone who can provide help during an emergency.



- Include a minimum of three people you trust.
- Consider family members, neighbors, friends, coworkers, and personal attendants.
- Organize networks for your home, workplace, volunteer sites, and any other places you spend a lot of time.
- Include one contact that lives out of the area.
- Network members should know your capabilities and limitations.
- Disasters can be stressful and overwhelming. Include people that are supportive when you are under stress.



CONTACTS

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

OUT-OF-AREA CONTACTS

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Name/Relationship

Home Phone | Cell Phone

Other Phone | Email

Planning with your Support Network

Communicating with Your Network Members

- Share your disaster plan with your support network.
- Ask your network to notify you when an emergency arises.
- Agree on how you will contact each other during an emergency.
- When possible, text instead of calling during an emergency.
- Consider giving a trusted member of your network keys to your home and car.
- Choose an emergency meeting place where you can reunite.
- Show members of your network how to operate your medical equipment and assistive devices.
- If you have a service animal, make sure it knows and trusts the people in your network.

To learn more about the **NET** program or to connect with a **NET** member in your area.

readysd@sdcounty.ca.gov

858-565-3490

CERT COMMUNITY EMERGENCY RESPONSE TEAM

- Join a **Community Emergency Response Team (CERT)**: ReadySanDiego.org/get_involved

Neighborhood Evacuation Team

Connect with your Neighborhood Evacuation Team

The **Neighborhood Evacuation Team (NET)** pairs trained **Community Emergency Response Team** members with individuals who may have difficulty evacuating during an emergency.

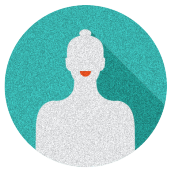
Neighborhood Evacuation Team members can help you:

- Prepare and review your evacuation plan
- Identify emergency contacts
- Register for **AlertSanDiego** and learn about other emergency communication tools
- Connect you with other resources to help you better prepare for disasters

Call 2-1-1 to connect to resources

Free, 24 hour, confidential phone service in 200+ languages and a searchable online database. Trusted local, nonprofit organization providing access to 6000+ community, health, and disaster services such as:

- Food Assistance
- Housing & Utilities
- Disaster Relief & Prevention
- Financial & Legal Assistance
- Transportation
- Health, Nutrition & Primary Care
- Military & Veteran Services
- Enrollment Services



TALK

LIVE CHAT

SEARCH

ENROLL

If you have limitations hearing or speaking, a specially-trained **California Relay Service Communications Assistant** can relay telephone conversations for all of your calls. Dial **7-1-1** and ask to be connected with **2-1-1** at **(858) 300-1211**.

Facebook
211sandiego

Twitter
@211sd

Instagram
211sd

Food Assistance

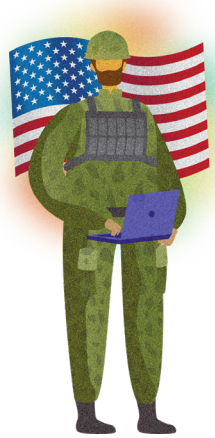
Housing & Utilities

Disaster Relief
& Prevention

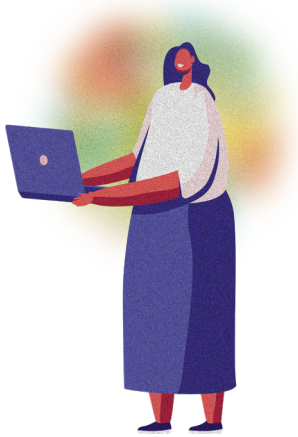
Financial &
Legal Assistance

Transportation

Health, Nutrition
& Primary Care

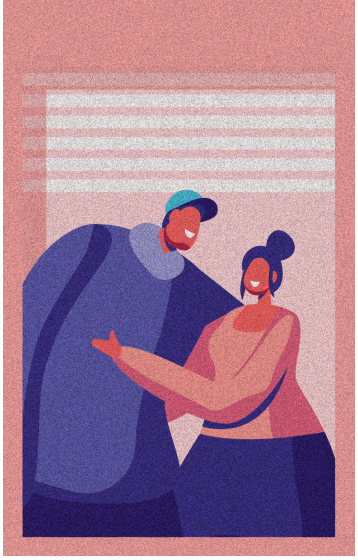


Military & Veteran
Services



Enrollment Services


Make
a Plan
NEWS
PASSPORT



Your Home

Emergency planning starts in your home

- Install smoke and carbon monoxide detectors on every level of your home and test regularly. If you are deaf or have hearing loss, install a system with flashing lights or vibrations. Call **2-1-1** if you need help installing smoke alarms.
- Know the location of utilities valves and learn how to disconnect them during an emergency.

Write down the locations of utilities

Gas Valve: *

Water Valve:

Circuit Breaker:

Garage Door Manual Override:

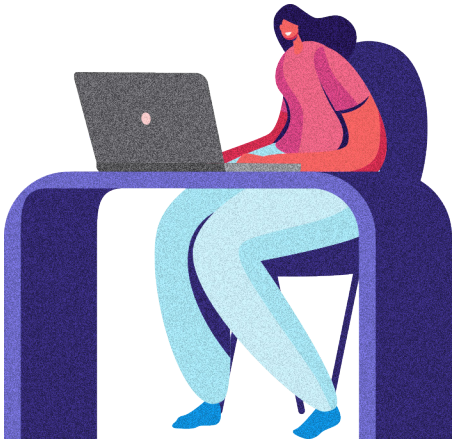
Insurance Coverage

- Talk with your insurance agent to be sure that you have adequate insurance coverage. Typical homeowner's or renter's insurance may not provide full coverage for all hazards such as flooding, wildfires, or earthquakes.
- Inventory your possessions so you may claim reimbursement in case of loss or damage.

* *If you smell gas, hear a hissing sound, or suspect a leak, turn off the main gas valve, open windows, and leave the area immediately. Do not light candles or strike matches. Only shut off the gas if you suspect a leak, because only the gas company can restore service.*

Evacuation Plan

- **Know your evacuation routes.** Find the location of all exits, including doors and windows in each room.
- **Evacuate early.** If you have medical or mobility concerns, or pets or service animals, prepare to leave when an Evacuation Warning is issued instead of waiting for a mandatory Evacuation Order.
- **Plan for unique needs.** Consider the ability of you and your loved ones to evacuate, use stairs, and access transportation. Arrange help from your support network or call **2-1-1** for assistance before an emergency.
- **Meeting places.** Know where you will meet your friends and family after an emergency. Pick two places to meet, one right outside your home and meeting place outside of your neighborhood.



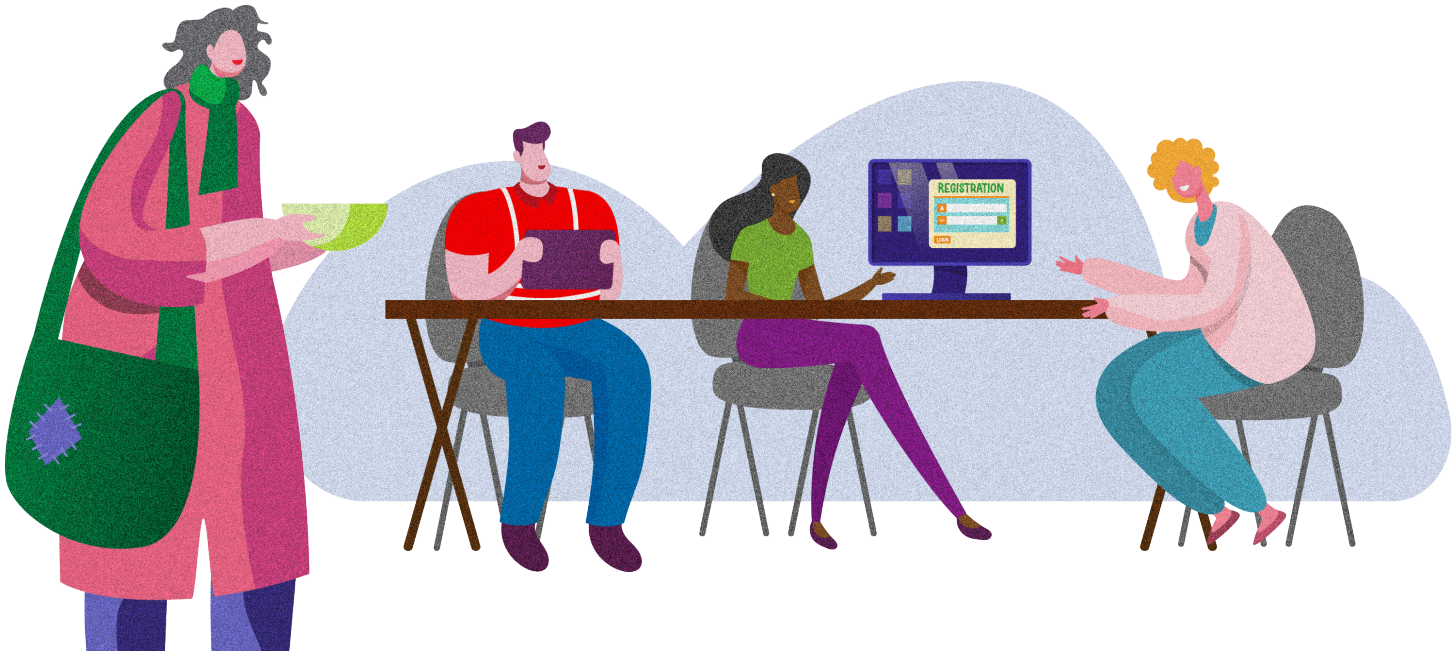
Meeting place close to home:

Meeting place outside of your neighborhood:

Emergency Shelters

If an emergency requires you to evacuate, consider going to a hotel, a friend or relative's home, or a shelter. Emergency shelters may be set up in schools, community buildings, and places of worship.

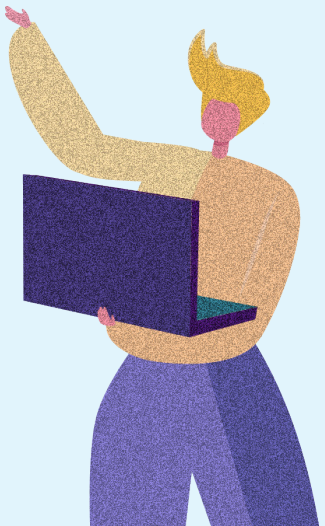
- Shelters provide food, water, and basic supplies.
- Bring items you need, including medical equipment.
- Shelters will be accessible and can meet needs of people with different abilities. Service animals are allowed.
- Shelters follow public health safety recommendations, such as social distancing during the COVID-19 pandemic.
- Call **2-1-1** or visit **AlertSD.org** to find a shelter near you.



Planning for Your Medical Equipment

- Attach instruction cards on how to use and move each item in case of evacuation.
- Identify critical supplies (such as catheters, colostomy supplies, etc.) that must be taken.
- If you rely on electric medical equipment, ask your medical supply company about a back-up power source, and ask your utility company about programs you may be eligible for.
- If you depend on dialysis or other life-sustaining treatment, know the location of more than one treatment facility.

- To request a free **Vial of LIFE** kit, please call: **1-800-339-4661**
- Fill out the medical information form included on the following pages or for a version with large print and different languages visit **readysandiego.org/make-a-plan/**
- Make copies and store in your wallet or purse. Share a copy with members of your support network.



Vial of LIFE

The **Vial of LIFE** program has saved countless lives by providing emergency responders with life-saving medical information. Store the **Vial of LIFE** envelope on your refrigerator.

Each Vial of LIFE kit includes:

- **A medical information form.** List your medical conditions, medications, emergency contacts, insurance, and hospital preference.
- **A vinyl envelope and magnet.** Place the completed medical form in the envelope and store it on the outside of your refrigerator. Add a copy of your power of attorney for health care and health care directive.
- **A Vial of LIFE sticker.** Place on the door jamb of your front door or a front window. This informs emergency responders that you completed a **Vial of LIFE**.

VIAL OF LIFE

LIVE WELL SAN DIEGO
LIVEWELLSD.ORG

Information & Assistance
1-800-339-4661
Updated On
____/____/____

Name _____

☐ Blind ☐ Deaf ☐ Alzheimer's Disease or Related Dementia

Address _____ City _____ Zip _____

Phone # _____ Male ☐ Female ☐ Date of Birth _____

Social Security Number (last four digits) _____

Medicare Number (last four digits) _____

Other Insurance _____ Policy Number _____

Do you have an Advance Health Care Directive? Yes ☐ No ☐

If yes, location _____ Agent _____ Phone # _____

Do you have a "Do Not Resuscitate Order" Yes ☐ No ☐

Registered with Sheriff's "Take Me Home"? Yes ☐ No ☐

Emergency Contacts

Name _____ Relationship _____ Phone # and E-mail _____

Name _____ Relationship _____ Phone # and E-mail _____

Caregiver _____ Phone # and E-mail _____

Clergy _____ Phone # and E-mail _____

Pet's Information Name & Type _____

Veterinarian _____ Phone # _____

Medical Information

Primary Doctor _____ Phone # _____

Secondary Doctor _____ Phone # _____

Hospital _____ Phone # _____

Height _____ Weight _____ Blood Type _____

Normal Bood Pressure _____

Allergies to drugs or foods _____

Please list any medical conditions that apply (for example: cardiac, diabetes, hypertension, stroke) _____

Surgeries (type and date)

Do you?

Wear dentures?	Yes ☐	No ☐	Wear glasses?	Yes ☐	No ☐
Wear contacts?	Yes ☐	No ☐	Use Oxygen?	Yes ☐	No ☐
Wear hearing aids?	Yes ☐	No ☐	Wheelchair?	Yes ☐	No ☐

Other Important Emergency Information

Immunizations

Where do you keep your medications?

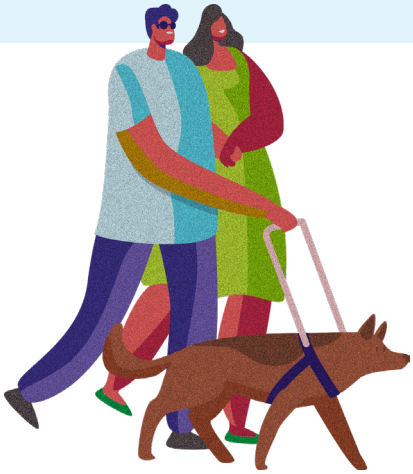
Medications
(Prescription, Over-the-counter Drugs, Vitamins, Herbal Supplelments)

Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose
Name	Dose-Frequency	Purpose

Please record all information in a manner easy to read by emergency medical personnel.

Planning for Different Circumstances

Disasters are challenging for everyone. We benefit from understanding our own needs and the unique needs of our friends, neighbors, and family members. Disaster preparedness is an individual and a community effort. Review the tips below to help prepare for a variety of circumstances.



People with Pets or Service Animals

- Get your pet an ID tag. Ask for a free or discounted microchip.
- Pack food, water, medicine, and proof of immunization.
- Dial **2-1-1** for local animal service resources.

Older Adults

- Clear your home of clutter to prevent falls.
- If you receive home care, ask about their plans for emergencies.
- If you live in a retirement community, learn about their emergency plan.
- Consider getting a medical alert system so you can call for help.

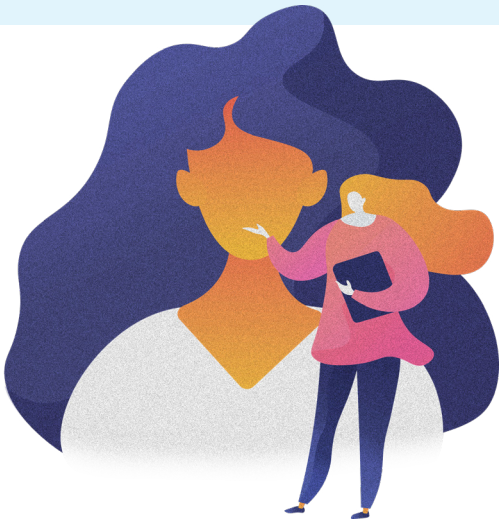
Rural Communities

- Share alerts through phone trees and ham radio networks.
- Meet with neighbors to discuss collaboration.
- Plan for evacuating large animals.

People with Developmental Disabilities

- Practice your disaster plan with your support network to help you feel safe.
- Ask emergency responders to repeat directions if you don't understand.
- Practice how you might quickly describe your disability to a rescuer.

People with Speech/Communication Disabilities



- Carry an instruction card on how to communicate with you.
- Carry communication devices, phrase cards, or picture boards, like on page 43 and 44.
- Know how to replace your assistive device if damaged.

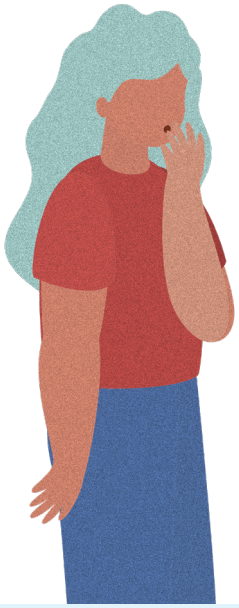
People with Mobility or Other Physical Disabilities

- Identify paratransit or accessible transportation options.
- Plan for damaged ramps, rails, or elevators.
- Bring an extra wheelchair battery, tire repair kit, and seat cushion.

People who are Blind or who have Low Vision

- Mark emergency supplies with Braille or large print.
- Keep a Braille or deaf-blind communication device in your emergency supply kit.
- Keep Braille/text communication cards for two-way communication.

People with Dementia



- Move to a quieter place to avoid agitation. Limit stimulation.
- Redirect the person's attention if he or she becomes upset.
- Find outlets such as taking a walk or engaging in simple tasks.
- Avoid elaborate explanations. Use concrete terms.

Pregnant women and families with infants

- Find out where to get prenatal or well-baby checkups if your doctor's office closes.
- Include baby care supplies in your **Go Kit**.
- Tell shelter staff if you have a baby or have issues with your pregnancy.

Transportation Challenged

- Arrange for rides with neighbors if you must evacuate.
- Call **2-1-1** to identify transportation service providers in your area.
- Ask if public transit or ride share services may be free after a disaster.

People who speak Limited English

- Find trusted community sources to talk to about safety options.
- Call **2-1-1** for information in over 200 languages.
- Ask a bilingual person to share safety steps with you.
- Know which of your media sources provide emergency alerts.

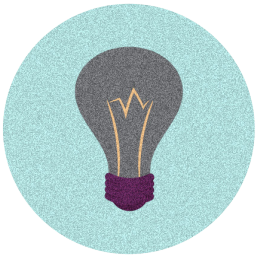
New Californians

- Learn emergency system basics, like dialing **2-1-1** for non-emergencies and **9-1-1** for emergencies.
- Ask your community how disasters here are different.
- Find trusted sources in emergencies beyond the government.

Planning for Different Emergencies

In this section you will find tips on what to do in different disaster situations.

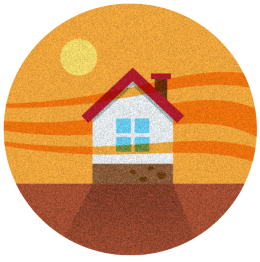
Fires



Power Outages

Tsunamis

Floods

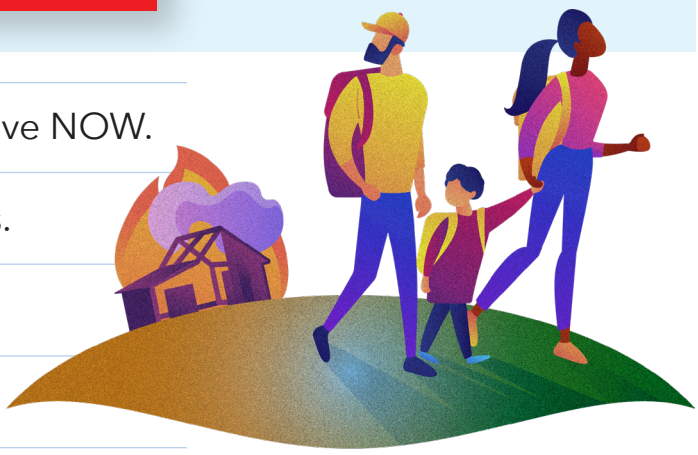


Heat Waves

Earthquakes

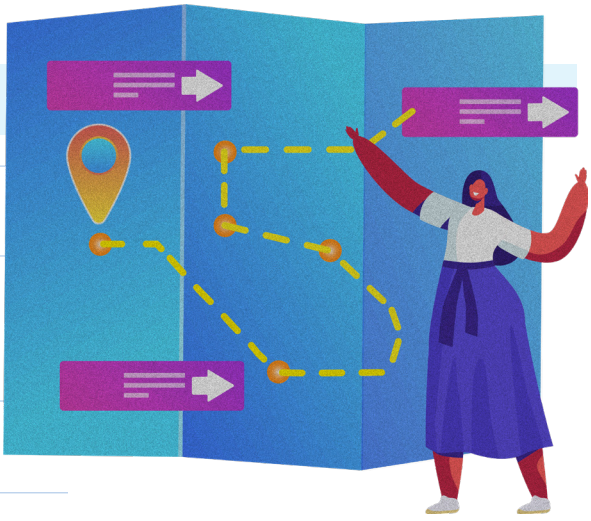
Fires

Before:



- Evacuation warning means prepare to leave NOW.
- Plan for no electricity. Do not use candles.
- Get a bandana or mask to protect lungs.
- Plan escape routes from each room.
- Clean gutters. Remove brush near home. Call **2-1-1** to see if local Fire Safe Councils can assist.

During:



- Evacuation order means you must leave NOW.
- Don't "wait and see." Leave immediately when ordered to evacuate.
- When a door feels hot, do not open it.
- If trapped, close doors and windows to keep smoke out.
- If your clothes are on fire, Stop, Drop and Roll.
- Leave smoky areas quickly. Stay low to the ground as smoke rises.

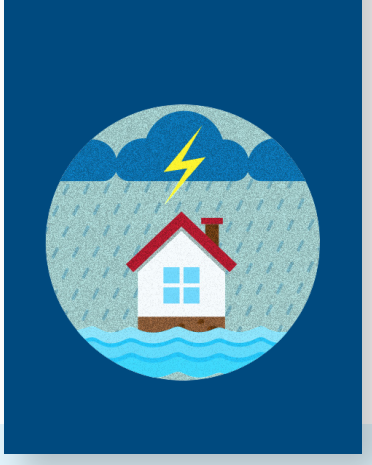
Earthquakes

Before:

- Secure furniture to walls.
- Identify safe spots in each room, like sturdy tables and desks.
- Identify dangerous spots near windows, mirrors, and hanging objects.
- Learn how to shut off gas, water, and electricity.

During:

- Don't rush outside. Get under a desk or table.
- If outside, move away from buildings, trees, streetlights, or powerlines.
- If driving, pull over and stop away from buildings and trees.
- Using a wheelchair: Go into a doorway, lock wheels, cover head and neck.
- Be ready for aftershocks.
- Watch for tsunamis on the coast.



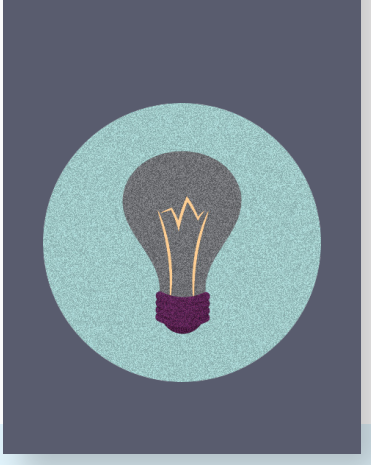
Flooding

Before:

- Keep storm pipes and drains clear.
- Move valuables to higher floors.
- Monitor TV and radio for flood watches or warnings.
- Learn best escape routes to higher ground.
- Use sandbags to divert water.

During:

- Don't "wait and see." Leave immediately when ordered to evacuate.
- Never walk, swim, or drive through moving water. Remember, Turn Around, Don't Drown.
- Watch for mudslides.
- Avoid downed powerlines.
- If instructed, turn off water and electricity and unplug appliances.



Power Outages

Before:

- Prepare flashlights – no candles.
- Keep an emergency backup phone charger.
- Buy food that won't spoil and doesn't need cooking.
- Keep car gas tank at least half full.

During:

- Unplug appliances/electronics to prevent damage.
- Leave one light plugged in.
- Keep your refrigerator and freezer door closed.
- Do not use your gas stove for heat.
- Use generators, camp stoves, and grills outdoors.

Be prepared for public safety power shutoff

San Diego Gas & Electric® (SDG&E®) sometimes turns power off in fire-prone areas during adverse weather conditions as a safety precaution. This is known as a **Public Safety Power Shutoff (PSPS).** While these events are more likely to occur in high fire-risk areas, all San Diegans could be affected and should be prepared. **SDG&E** aims to send early notifications via phone calls, text alerts, emails and other means before turning off power.

Stay informed during PSPS

Update Your Contact Information and/or Sign Up for Outage Notifications

Visit **sdge.com/notifications** or call **1-800-411-7343** to update your contact information and/or sign up to receive voice, text and/or email notifications, even if you don't have an **SDG&E** account.

Community Resource Centers

SDG&E may open **Community Resource Centers** near affected communities during a PSPS event. Visitors can receive preparedness materials, ice, water, snacks,

Follow SDG&E on social media and the NewsCenter for updates during a PSPS

Facebook: facebook.com/SanDiegoGasandElectric

Twitter: twitter.com/SDGE

Instagram: instagram.com/sdge

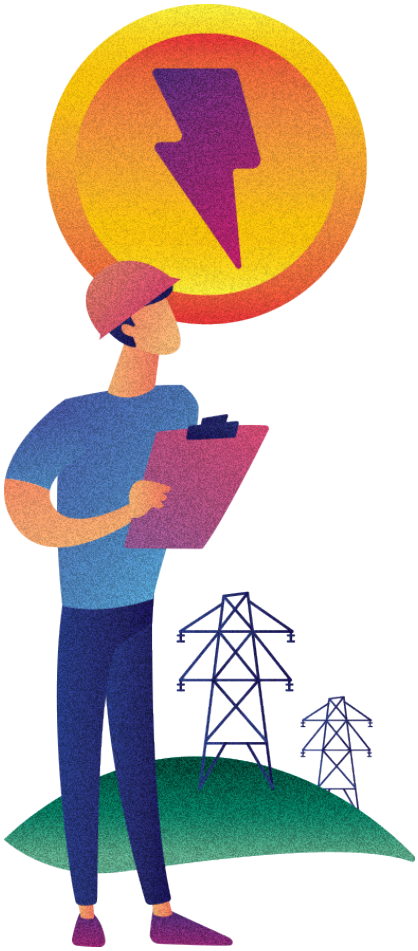
Nextdoor: San Diego Gas & Electric

NewsCenter: sdgenews.com

charging for mobile devices, small solar powered batteries, radios and up-to-date information about the shutoff event. Public health protocols may also be in place including social distancing measures, routine deep cleaning and drive through service. Learn more at **sdge.com/resource-centers**.

Event Duration/Backup Generation

A PSPS event will require power to remain out for as long as a threat to public safety and to the electric system continues. Before power can be restored, crews must inspect power lines and equipment and make any needed repairs.



You are encouraged to explore safe, alternative power sources to operate your critical equipment during PSPS events. For additional information on choosing a generator or an alternative back-up system, please consult a licensed electrician and **SDG&E**. Learn more at **sdge.com/generator**.

Medical Baseline Allowance program

If you or someone in your household has a qualifying medical condition or needs certain in-home medical equipment, you may be eligible for more electricity or natural gas at a lower rate. The person with the qualifying medical condition must live at the address on the application, and the medical equipment must be for home-use only. This program can also help by providing extra notifications in advance of a PSPS event. Learn more at **sdge.com/medicalbaseline**.

CARE and FERA programs

CARE and **FERA** are two **SDG&E** programs that can provide you with a monthly discount on your bill.

- **California Alternate Rates for Energy (CARE)**
  30% or more monthly bill discount.
- **Family Electric Rate Assistance (FERA)**
  18% monthly bill discount. **FERA** is only open to households with three or more people.

Learn more about qualifications, income guidelines, and apply to these programs at **sdge.com/CARE**.

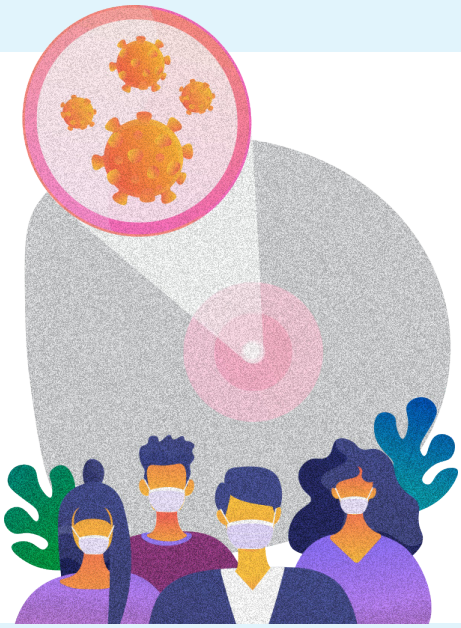
Energy Savings Assistance program

Energy-efficient home improvements can make your home more comfortable, save you money now, and for years to come. You may be eligible to receive low- or no-cost products and installation. Learn more and apply at **sdge.com/ESA**.

Access & Functional Needs (AFN) Resources

SDG&E and **2-1-1** San Diego partner to support individuals with Access and Functional Needs. Information and services are provided to increase preparedness and self-resilience during PSPS events and emergencies. Services may include assisted transportation, backup power, preparedness items, food security, temporary shelter and welfare checks. Learn more at **211SanDiego.org** or dial **2-1-1**.

Tips for other Emergencies



Pandemics and Public Health Emergencies

- Store a two-week supply of water and food.
- Keep prescription drugs on hand.
- Wash hands frequently.
- Cover coughs or sneezes.
- Stay home if you are sick.

Extreme Heat

- Seek air conditioning or a fan.
- Go to libraries, shopping malls, or call **2-1-1** to find a designated cool zone or visit **coolzones.org**.
- Take a cool bath.
- Drink cool, non-alcoholic, non-caffeinated beverages.
- If you feel ill, call a doctor or **9-1-1** immediately.

Extreme Cold

- Stay indoors.
- Wear warm, comfortable, dry clothing.
- Watch for frostbite, hypothermia, or overexertion.
- Do not use a charcoal or gas grill for heat inside your home.

Tsunami

- Move to higher ground, inland and/or to a higher floor.
- Listen to your radio or TV for emergency instructions.
- Leave immediately if ordered to do so.
- Do not go sightseeing – stay away from the coast.
- Do not return to the hazard zone until local safety officials give the "all clear."

Terrorism

- Report suspicious activities to authorities.
- Do not accept packages from strangers.
- Follow instructions from emergency officials.
- Be ready for instructions to shelter in place or evacuate.
- Remain calm, patient, and contact someone in your personal support network.

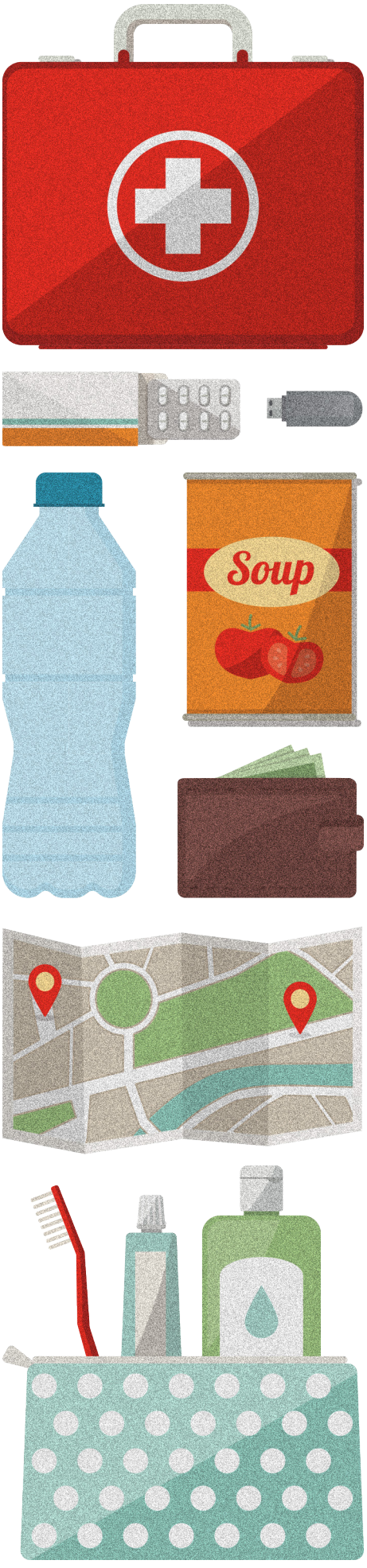
For more information on responding to specific emergencies, visit the County's preparedness website: ReadySanDiego.org

Evacuation Warning: The alerting of people in an affected area of potential threat to life and property. An Evacuation Warning considers the probability that an area will be affected in the near future and prepares people for a potential Evacuation Order. Vulnerable populations such as people with disabilities, with access or functional needs, and/or large animals should leave now.

Evacuation Order: Requires immediate movement out of an affected area due to an imminent threat to life.

Shelter in Place: Go inside. Shut and lock doors and windows. Prepare to self-sustain until further notice and/or contacted by emergency officials.


Gather Supplies
MEDICATION LIST
ID CARD
PASSPORT



Go Kit

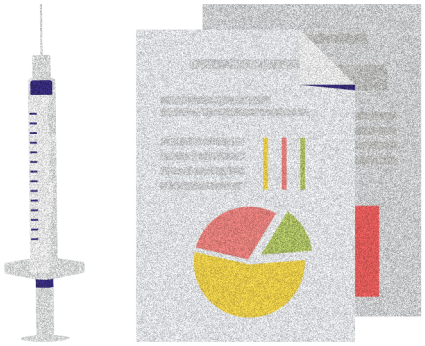
Most disasters are unexpected and happen fast. You might not have time to shop or pack. Pack a "Go Kit" for when you must leave in a hurry.

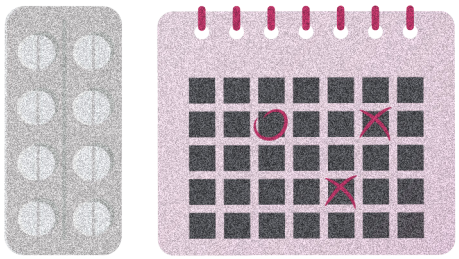
Check off items you have and add those you will need:

- ☐ Bottled water and nonperishable food, such as granola bars
- ☐ Copies and/or a USB flash drive of your important documents in a waterproof container (identification, insurance, photos of family and pets for identification)
- ☐ List of the medications you take, why you take them, and their dosages
- ☐ If any medication needs to be refrigerated, keep an extra ice pack in the freezer
- ☐ Contact information for your household and members of your support network
- ☐ Flashlight, hand-crank or battery-operated AM/FM radio, and extra batteries
- ☐ Cash, in small bills
- ☐ Notepad and pen
- ☐ Antibacterial wipes and hand sanitizer

- [ ] Face mask or bandana
- [ ] Back-up medical equipment (e.g., glasses, batteries) and chargers
- [ ] Aerosol tire repair kits and/or tire inflator to repair flat wheelchair or scooter tires
- [ ] Supplies for your service animal or pet (food, extra water, bowl, leash, cleaning items, vaccination records, and medications)
- [ ] Portable cell phone chargers
- [ ] This guide

Other items you will need:





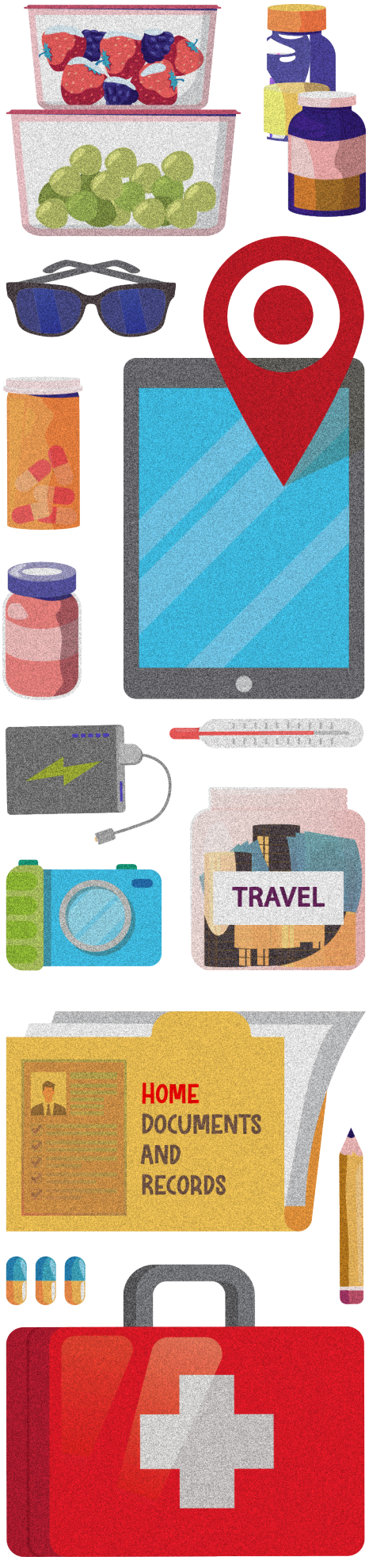
Home Kit

In some emergencies, you may be safer staying at home. You may not have water to drink or be able to flush the toilet. You may not have electricity to keep your food cold, turn on the light, or charge your phone. Prepare a "Home Kit" to survive for at least three days without water or electricity.

Check off items you have and add those you will need:

- ☐ One gallon of drinking water, per person, per day
- ☐ Food that won't spoil, like ready-to-eat canned foods, and a manual can opener
- ☐ First-aid kit
- ☐ Medications, including a list of the medications you take, why you take them, and their dosages
- ☐ Flashlight or battery-powered lantern, battery-operated AM/FM radio, and extra batteries, or wind-up radios that do not require batteries
- ☐ Whistle or bell
- ☐ Back-up medical equipment, if possible (e.g., oxygen, medication, scooter battery, hearing aids, mobility aids, glasses, facemasks, gloves)
- ☐ Style and serial numbers of medical devices (such as pacemakers) and usage instructions

Other personal items:



TIP: Your hot water heater is a source of water. Turn off the power and let the water cool. To get water, place a container underneath and open the drain valve on the bottom of the tank.

Communication Tools

During an emergency, your normal way of communicating may be impacted by changes in environment, noise, service disruptions, or confusion.

If you are blind or have low vision, practice explaining to others how to guide you.

If you are Deaf or hard of hearing, find alternate ways to communicate your needs, such as through gestures, note cards, or text messages. Keep communication cards in your emergency supply kits.

I need a translator

Necesito un traductor

Tôi cần một người phiên dịch

انا بحاجة الى الترجمة

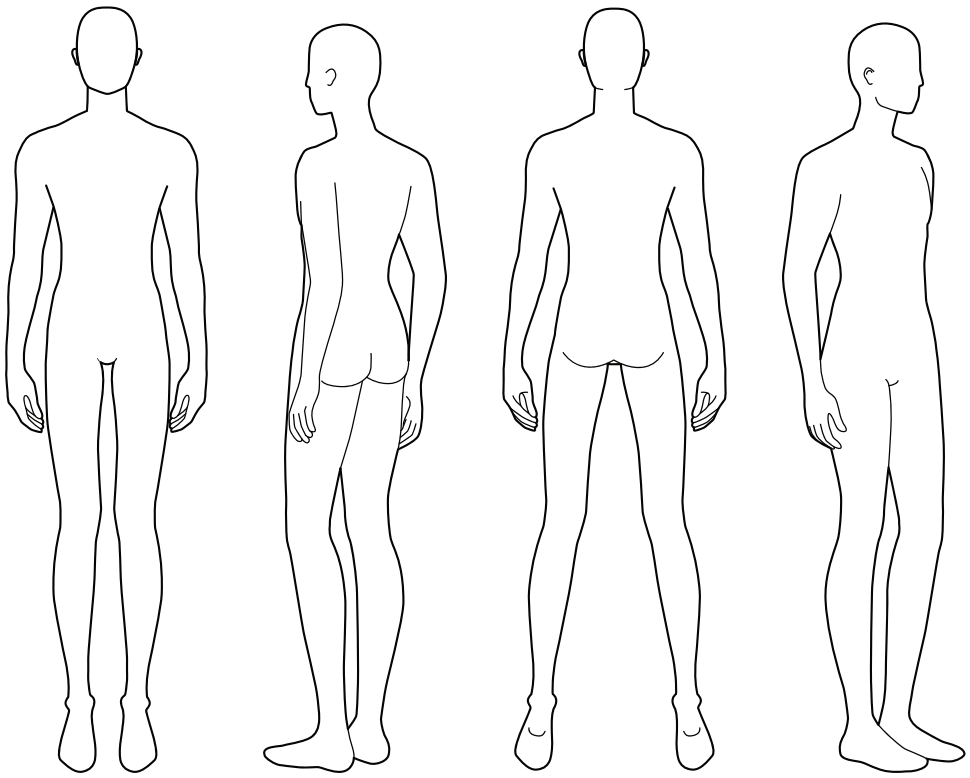
Kailangan ko ng tagasalin

我需要翻

A	B	C	D	E	F	G	H	I	J
K	L	M	N	Ñ	O	P	Q	R	S
T	U	Ü	V	W	X	Y	Z		
1	2	3	4	5	6	7	8	9	0
.	'	,	?	!	+	-	SPACE		

PAIN CHART | LEVEL OF PAIN

0 1 2 3 4 5 6 7 8 9 10



Dull

Sharp

Radiating

I want pain medicine

Shot

One pill

Two pills

Itches

Stings

Hurts/aches

Burns

Can't move/numb

How am I doing?

What day/time?

What is happening?

When is tube coming out?

IV

Remove restraints

Excercise

Massage

leave me alone

Don't leave

Come back later

Prayer

Bathroom

Cool cloth

Pillow/blanket

Glasses/Socks

Wash face

Shampoo/Bath

Comb/Brush

Teeth brushed

I AM


Short of breath


In pain


Choking


Feeling sick


Hungry/Thirsty


Cold/Hot


Tired


Dizzy

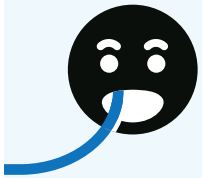

Angry

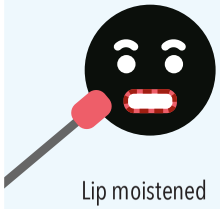

Afraid


Frustrated


Sad

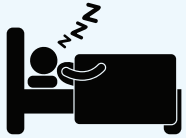
I WANT


To be suctioned


Lip moistened


Water/Ice


To be comforted


To sleep


TV/Video/DVD


Call light/Remote


It quiet


Lights Off/On

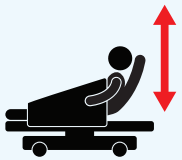

To go home


To sit up


To lie down


To turn left


To turn right

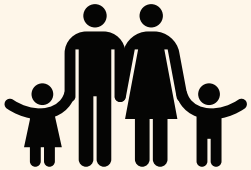

Head of bed up/down


Get out of bed

I WANT TO SEE


Doctor


Nurse


Family


Chaplain


Pen/Paper

Thank you

I Love you ❤

For infection control purposes, please do not reuse this board between patients.


SD County Emergency
ReadySanDiego
Plan, Prepare
Emergency
Disaster Info, Maps, Shelters
Recovery
Resources, Assi
Disaster Info | Refreshed:
PT
Excessive Heat Warning Is
8/14/20,12:00 p.m. throug
Fri Aug 14, 2020 12:00 PM
Excessive Heat Warning ued Today,
7/30/20,11:00 a.m. through 8/02/20, 9:00 p.m.
Thu Jul 30, 2020 11 M PDT ASL/Audio
Excessive He ssued Today,
7/11/20 13/20, 8 p.m.
Stay
Informed
SanDiegoCounty.gov
2
1

Stay Informed

ReadySanDiego.org
Prepare. Plan. Stay Informed.

AlertSanDiego
Get signed up. Get notified.

ACCESSIBLE AlertSanDiego
Get signed up. Get notified.

San Diego County

Twitter.com/ReadySanDiego

Facebook.com/ReadySanDiego

- County's preparedness website: **ReadySanDiego.org**
- Register your cell phone number, VoIP phone number and email at **ReadySanDiego.org/AlertSanDiego.** This is the County's emergency mass notification system used by first responders to send evacuation instructions and other disaster information through calls, text, and email.
- Download the free **SD Emergency App**, available in English and Spanish for iOS and Android mobile devices. Visit **ReadySanDiego.org/SDEmergencyApp**.
- During an emergency, visit **AlertSD.org** or the **SD Emergency App** for incident updates, shelter locations, evacuation areas, hazard perimeters, official social media feeds, and more.
- The main **Emergency Alert System** radio stations for San Diego County are ***KOGO AM 600*** and ***KLSD AM 1360***.
- For recovery information, visit **RecoverSD.org**.
- For non-emergency questions and updated disaster information, call **2-1-1**.
- If you are experiencing a life-threatening emergency, call **9-1-1**.

Getting Support

Disasters can be stressful and overwhelming. You may feel irritable, sad, or angry. You may experience headaches or not be able to sleep.

Talk to someone about your feelings, even though it might be difficult.

Look to your support network or seek help from a professional.

San Diego Access and Crisis Line

If you need support, experienced counselors are available 7 days a week/24 hours a day to provide you with a referral to meet your needs and help determine eligibility for mental health or substance use services.

- Call **(888) 724-7240** or visit our web site: **www.sandiegocounty.gov/hhsa/programs/bhs**

National Alliance on Mental Health (NAMI) San Diego

You can connect with a trained crisis counselor to receive free crisis support 24 hours a day.

- Text **NAMI** to **741-741** or call **(888) 523-5933**

National Suicide Prevention Lifeline and Veterans Crisis Line

We can all help prevent suicide. The Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for you or your loved ones, and best practices for professionals.

- Call **(800) 273-8255** or call **9-8-8**

County of San Diego
www.sandiegocounty.gov
(800) 694-3900

Office of Emergency Services
www.sandiegocounty.gov/oes
(858) 565-3490

Listos California
www.listoscalifornia.org
(916) 845-8510

Thank you to the **County of San Diego Health and Human Services Agency**, Aging & Independence Services for their contributions to this guide. For aging resources, visit www.aging.sandiegocounty.gov

This document was prepared under a grant from Listos California, a program anchored at the Governor's Office of Emergency Services. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of Listos California or the Governor's Office of Emergency Services.

San Diego County Office of Emergency Services

Family Disaster Plan and Personal Survival Guide

Family Disaster Plan and Personal Survival Guide

I. PREPARATION

Family Meetings

At least once a year, have a meeting with your family to discuss and update your disaster plan. Determine what additional training, equipment, and supplies are needed to meet your family's needs. Don't forget to practice! Occasional drills can improve reaction time and help to avoid panic in an actual emergency.

A. Know how and where to shut off utilities.

Location of Main Water Valve: _____

Location of Gas Valve*: _____

Location of Wrench: _____

Location of Garage Door Manual Override: _____

Location of Other Utilities: _____

* Do not shut off gas unless you suspect a leak exists.

B. On a separate sheet of paper, draw a floor plan of your home showing the location of exit doors and windows, utility shutoffs, first aid kit, and emergency supplies. Ensure EVERYONE in your household is familiar with it. Show it to babysitters and house guests when you're going away.

C. Reunion locations: Establish two places where you and your family can meet following an emergency. One immediately outside of your home, e.g. a neighbor's mailbox, or community park **AND** another site outside of your immediate community in case you are unable to return home.

Home Location: _____

Away-from-Home Location: _____

D. Out-of-State Contact: Name and telephone number of a person outside of the state for family members to call and report their location and condition. Everyone should memorize this number!

Name: _____

Location: _____ Phone: (_____) _____

E. What is your children's school disaster policy?

_____

_____

_____

Are medical consent forms for your children complete and current? _____

Where are they located? _____

F. Assemble a Home Emergency Supply Kit. Store it in a convenient and accessible location. See Section VII for details on what to put inside your Home Emergency Supply Kit.

Location of Home Emergency Supply Kit: _____

Family Disaster Plan and Personal Survival Guide

II. TRAINING

A. Learn how to protect yourself from falling objects, smoke, fire, toxic fumes, etc.

B. Learn First Aid/CPR

Person(s) Trained:

Name: _____ Date Training Expires: _____

Name: _____ Date Training Expires: _____

III. BEFORE A DISASTER

There are many different kinds of disasters, such as earthquakes, fires, floods, airplane crashes, chemical spills, and explosions, which seldom give warning and can be equally devastating to their victims. Although this guide is primarily about earthquake preparation, the steps you take will help your family prepare for any type of disaster that could strike in your community. For additional information on local disaster preparedness for your home, school, and business visit **www.ReadySanDiego.org**.

A. Register your cell phone, Voice over Internet Protocol (VoIP) phone, and email address with AlertSanDiego*. **Listed and unlisted landlines are already registered. Registering makes it more likely that you will receive an emergency notification. Registration is quick and simple.** **Also available in accessible formats such as American Sign Language.*

B. Download the **SD Emergency App** for Android and iOS devices.

C. Inspect your home. Identify potential hazards and evacuation routes.

D. Secure water heater and tall or heavy furniture to wall studs.

E. Move heavy items to lower shelves in bookcases.

F. Install clips, latches and other locking devices on cabinet doors.

G. Provide strong support and flexible connections on gas appliances.

H. Remove or isolate and secure flammable materials.

I. Review and practice this plan.

IV. DURING AN EARTHQUAKE

A. If you are indoors STAY THERE. Move away from windows, bookcases, and high/overhanging shelves. Get under a sturdy table or desk and hold onto it. Be prepared to move with it and HOLD that position until the shaking stops and it is safe to relocate. If there is no desk or table to get under, brace yourself in an interior corner. Watch for falling, flying and sliding objects, and be especially careful around windows, as they can shatter during an earthquake.

> **NOTE:** *If you are in a mobile home which is resting on A-Frame supports, get on top of the bed or sofa and cover your head and face. If a mobile home slips off the supports they may penetrate the flooring and cause injuries.*

B. If you are outdoors, move to an open area away from buildings, trees, power poles, brick or block walls and other objects that could fall.

C. If you are in an automobile, stop and stay in it until the shaking ends. Avoid stopping near trees and power lines or on or under overpasses or bridges.

D. If you are in a multi-level building, get under a desk and hold on, or crouch next to an interior wall until the shaking stops. **DO NOT USE THE ELEVATOR TO EVACUATE.** Use the stairs.

E. If you are in a store, get under a table or any sturdy object. Avoid stopping under anything that could fall. **DO NOT RUN FOR THE EXIT.** After the shaking has stopped, choose your exit carefully.

Family Disaster Plan and Personal Survival Guide

V. IF YOU EVACUATE

A. Take with you:

- Medicines and first aid kit
- Flashlight, radio and batteries
- Important documents and cash
- Blankets and extra clothes
- Personal sanitary items
- Any additional items you feel are necessary (e.g. photos, heirlooms, jewelry, etc.)

B. Make arrangements for pets. Don't forget food, medications, vaccination records, and other important items.

VI. AFTER A DISASTER

A. Put on heavy shoes immediately to avoid injury from stepping on glass.

B. Locate a light source, such as a flashlight, if necessary.

C. Check for injuries and administer first aid.

D. Check for fires and fire hazards.

- Sniff for gas leaks, starting at the hot water heater. If you smell gas, hear a hissing sound or suspect a leak, turn off the main gas valve, open the windows and carefully leave the house. **DO NOT TURN LIGHTS ON OR OFF. DO NOT STRIKE MATCHES.**

  NOTE: *Do not shut off the gas unless you suspect a leak exists. Only the gas company can restore service.*

- If necessary, turn off the electrical system at the main circuit breaker or fuse box.

E. Check on your neighbors.

F. Visit **www.SDCountyEmergency.com** or the **SD Emergency App** for updates, shelter locations, interactive mapping information (e.g. evacuation areas and hazard perimeters), official social media feeds, and other critical information.

G. Listen for advisories using a battery powered radio. The primary Emergency Alert System station for San Diego County is KOGO AM 600. The secondary station is KLSD AM 1360.

H. Do not use the phone except in emergencies. Only call 9-1-1 for life threatening emergencies. Have a plug-in analog phone in case the power is out, but phone lines are still working.

I. For general and updated disaster information or volunteer opportunities, call 2-1-1.

J. Do not touch downed power lines or objects touching downed wires. Do not stand in water near downed lines.

K. Remove fallen debris that may cause personal injury.

L. Assess house, roof, and chimney for damages.

M. Be prepared for aftershocks.

N. Open closets and cupboards carefully because items may have fallen or become rearranged.

O. Cooperate with public safety officials.

P. Be prepared to evacuate when/if necessary.

Q. DO NOT GO SIGHTSEEING!

PREPAREDNESS STARTS WITH Y U!

Family Disaster Plan and Personal Survival Guide

VII. HOME EMERGENCY SUPPLIES

This list contains items usually available in your home. It is recommended that they be organized and located together for easy access during an emergency. Your emergency supplies should be sufficient to sustain you, your family and pets for a ***minimum of 72 hours***. A two (2) week supply of prescription and necessary over-the-counter medications is recommended**.**

Basic Supplies

- ❒ Water* – minimum of 1 gallon per person per day
- ❒ Non-Perishable Foods*
- ❒ First Aid Kit and Manual
- ❒ Can opener – non-electric
- ❒ Watch or clock – non-electric
- ❒ Plug-in analog telephone
- ❒ Cash
- ❒ Important documents
- ❒ Blankets or sleeping bags for each member of the family
- ❒ Radio – portable, with spare batteries
- ❒ Prescription and over-the-counter medications*
- ❒ Additional equipment – glasses, dentures, hearing aids
- ❒ Flashlight – spare batteries and light bulb
- ❒ Fire extinguisher – multipurpose labeled "ABC"
- ❒ Whistle
- ❒ Dust mask
- ❒ Activity items for adults (e.g. deck of cards) and kids (e.g. coloring books with crayons)

*Rotate food, water, and medications as necessary. Remember to consider household members with unique needs: infants, elderly, disabled, allergies. Avoid salty foods, as they will make you thirsty.

Water Tips

The best option is to store drinking water prior to a disaster, in appropriate containers. If purified water is not available, water should be boiled for 1 full minute, keeping in mind that some water will evaporate. Let the water completely cool before use.

Sanitation Supplies

- ❒ Large plastic trash bags for waste, sanitation, and protection
- ❒ Pre-moistened towelettes
- ❒ Hand soap and liquid detergent
- ❒ Shampoo
- ❒ Toothpaste & toothbrush
- ❒ Feminine supplies
- ❒ Infant supplies
- ❒ Toilet paper and paper towels
- ❒ Deodorant

Cooking Supplies

- ❒ Plastic bags – various sizes, sealable
- ❒ Paper plates, plastic utensils, paper towels
- ❒ Pots (cooking) – at least two
- ❒ Barbecue or gas grill; charcoal and lighter or propane (**for outdoor use only**); Sterno® stove

Family Disaster Plan and Personal Survival Guide

VII. HOME EMERGENCY SUPPLIES (CONTINUED)

Safety Supplies

- ❒ Knife, razor blade, and multipurpose tool
- ❒ Clothes – complete change for each family member (Preferably long pants and long sleeves for protection)
- ❒ Heavy gloves for each adult
- ❒ Heavy shoes for each family member

Pet Supplies

- ❒ Carrier
- ❒ Food
- ❒ Medications
- ❒ Important documents such as vaccination records and license information
- ❒ Collar with ID tag and harness or leash
- ❒ Water
- ❒ Sanitation items – Litter and litter box if appropriate

Car Survival Kit

- ❒ Non-perishable food
- ❒ Flares
- ❒ Bottled water
- ❒ First Aid Kit and Manual
- ❒ Fire extinguisher
- ❒ Blanket
- ❒ Sealable plastic bags
- ❒ Flashlight with batteries
- ❒ Tools and rubber hose
- ❒ Critical medications
- ❒ Pre-moistened towelettes and tissues
- ❒ Extra clothing

VIII. IMPORTANT TELEPHONE NUMBERS

USE "9-1-1" FOR LIFE THREATENING EMERGENCIES ONLY

NON-EMERGENCY FIRE DEPARTMENT: _____

NON-EMERGENCY LAW ENFORCEMENT AGENCY: _____

PRIMARY DOCTOR: _____

GAS COMPANY: _____

ELECTRIC COMPANY: _____

WATER COMPANY: _____

OUT-OF-STATE CONTACT: _____

POISON CONTROL: 1-800-222-1222

OTHER: _____

IX. PRACTICE YOUR PLAN AS A FAMILY

A. Practice helps people feel less disoriented and better organized in case of a disaster – even in the middle of the night.

B. Make sure your family knows where to locate fire extinguishers, gas and water valves, and the main circuit breaker.

C. Update your Family Disaster Plan every year.

- Verify the telephone numbers and personal information of everyone listed in the plan.
- Print updated copies for all the members of your family.

D. In case of emergency, you should know the school's disaster plan.

- Determine what is required to release your child to your representatives if you cannot get there yourself.
- Ensure that the school knows your current contact information and those people authorized to pick up your child.

E. Check the contents of your emergency kits.

- Change the batteries in your flashlights and portable radio; replace spare batteries.
- Replenish your emergency kits. Replace bottled water; ensure that all food is still safe to eat and that medications have not expired.

Every family member should carry a copy of this important information:

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:______________________________

Telephone: __________________________

Neighborhood Meeting Place:

____

Out-of-Area Meeting Place:

____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:______________________________

Telephone: __________________________

Neighborhood Meeting Place:

____

Out-of-Area Meeting Place:

____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:______________________________

Telephone: __________________________

Neighborhood Meeting Place:

____

Out-of-Area Meeting Place:

____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION

Out-of-State Contact

Name:______________________________

Telephone: __________________________

Neighborhood Meeting Place:

____

Out-of-Area Meeting Place:

____

Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

Family Disaster Plan and Personal Survival Guide

NOTICE:

The information presented in this brochure is believed to be accurate and of practical value in preparing for a disaster, however, no guarantee can be given that the guidance presented will provide protection.

The County of San Diego, the San Diego County Office of Emergency Services, the Unified San Diego County Emergency Services Organization, the Unified Disaster Council and each organization's officers, employees, and agents, assume no legal liability for the accuracy, completeness, or usefulness of any information, product, or process disclosed herein, or for any injuries or damages arising from any disaster or occurrence giving rise to the use or application of the information, products or processes described or disclosed herein.

ReadySanDiego.org
Prepare. Plan. Stay Informed.

County of San Diego Office of Emergency Services
Phone: (858) 565-3490
Website: www.ReadySanDiego.org

Background cover-photos provided by Robert A. Eplett/Cal-EMA

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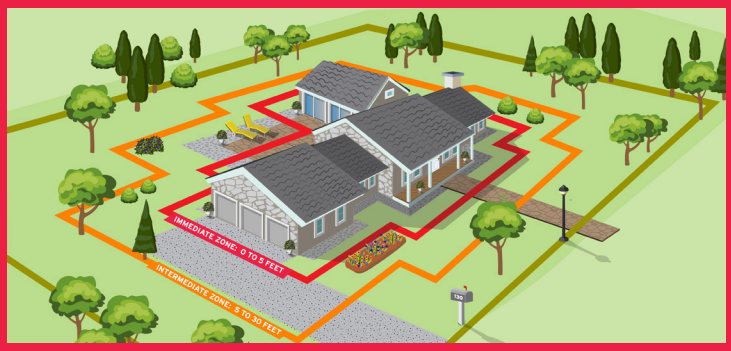
PREPAREDNESS STARTS WITH YOU!

HOW TO PREPARE YOUR HOME FOR WILDFIRES



WILDFIRE RISK REDUCTION STEPS THAT CAN MAKE YOUR HOME SAFER DURING A WILDFIRE

VEGETATION MANAGEMENT

1. HOME IGNITION ZONES

To increase your home's chance of surviving a wildfire, choose fire-resistant building materials and limit the amount of flammable vegetation in the three home ignition zones. The zones include the **Immediate Zone:** (0 to 5 feet around the house), the I**ntermediate Zone** (5 to 30 feet), and the **Extended Zon**e (30 to 100 feet).

2. LANDSCAPING AND MAINTENANCE

To reduce ember ignitions and fire spread, trim branches that overhang the home, porch, and deck and prune branches of large trees up to 6 to 10 feet (depending on their height) from the ground. Remove plants containing resins, oils, and waxes. Use crushed stone or gravel instead of flammable mulches in the **Immediate Zone** (0 to 5 feet around the house). Keep your landscape in good condition.

FIRE RESISTIVE CONSTRUCTION

3. ROOFING AND VENTS

Class A fire-rated roofing products, such as composite shingles, metal, concrete, and clay tiles, offer the best protection. Inspect shingles or roof tiles and replace or repair those that are loose or missing to prevent ember penetration. Box in eaves, but provide ventilation to prevent condensation and mildew. Roof and attic vents should be screened to prevent ember entry.

4. DECKS AND PORCHES

Never store flammable materials underneath decks or porches. Remove dead vegetation and debris from under decks and porches and between deck board joints.

5. SIDING AND WINDOWS

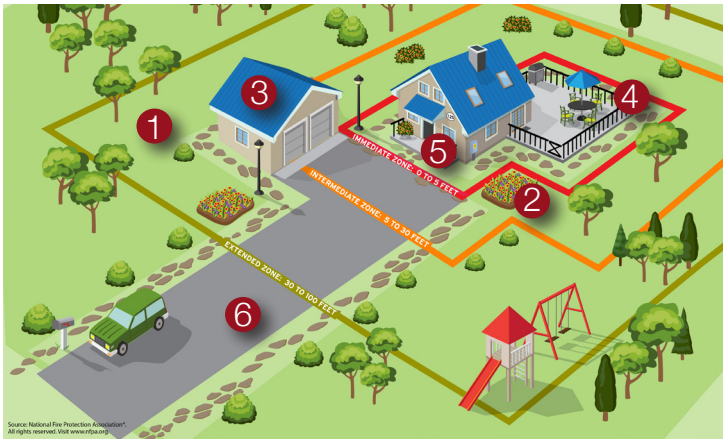
Embers can collect in small nooks and crannies and ignite combustible materials; radiant heat from flames can crack windows. Use fire-resistant siding such as brick, fiber-cement, plaster, or stucco, and use dual-pane tempered glass windows.

BE PREPARED

6. EMERGENCY RESPONDER ACCESS

Ensure your home and neighborhood have legible and clearly marked street names and numbers. Driveways should be at least 12 feet wide with a vertical clearance of 15 feet for emergency vehicle access.

- Develop, discuss, and practice an emergency action plan with everyone in your home. Include details for handling pets, large animals, and livestock.
- Know two ways out of your neighborhood and have a predesignated meeting place.
- Always evacuate if you feel it's unsafe to stay—don't wait to receive an emergency notification if you feel threatened from the fire.
- Conduct an annual insurance policy checkup to adjust for local building costs, codes, and new renovations.
- Create or update a home inventory to help settle claims faster.



TALK TO YOUR LOCAL FORESTRY AGENCY OR FIRE DEPARTMENT TO LEARN MORE ABOUT THE SPECIFIC WILDFIRE RISK WHERE YOU LIVE.

NFPA | FIREWISE USA®
RESIDENTS REDUCING WILDFIRE RISKS

VISIT FIREWISE.ORG FOR MORE DETAILS

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Order a Reducing Wildfire Risks in the Home Ignition Zone checklist/poster at Firewise.org

WILDFIRE IS COMING.
ARE YOU READY?

WILDFIRE ACTION PLAN

BE PREPARED

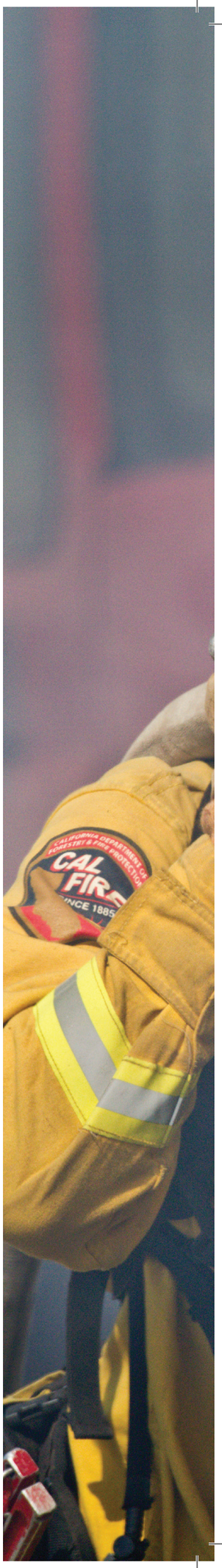
Wildfires are a fact of life in California. It's not a question of if they will occur, but when. Catastrophic wildfires are increasing in our state, encroaching further into populated areas. It is extremely important that Californians be prepared when wildfire strikes.

By preparing your home and property for wildfire, and knowing what to do if evacuation is necessary, you can dramatically increase your safety and the survivability of your home. It is your responsibility to prepare yourself, your family, and your home for when wildfire strikes.

This guide illustrates the importance of creating and maintaining Defensible Space and hardening your home by retrofitting it with ignition-resistant or noncombustible materials to protect against the threat of flying embers, direct flame contact, and radiant heat exposure. It also provides information about the preparations and precautions to make in order to evacuate early and safely.

If you need more information about preparing for wildfire or any other disaster, contact your nearest fire station or visit us at ReadyforWildfire.org.

These counties receive funding from the state to provide fire protection and prevention services to State Responsibility Area lands within their boundaries.



CONTENTS

GET READY

GET SET

GO!


GET
REAT

There are three ways your home can be exposed to wildfire: through flying embers, direct flame contact, and radiant heat exposure.

Embers are the main cause of homes igniting during a wildfire. Wind can blow embers up to a mile ahead of a wildfire. These flying embers can directly ignite materials on, or attached to, a home. They can also ignite vegetation or combustible materials near the home, resulting in a subsequent fire that spreads to the home through direct flame contact or radiant heat.

Direct flame contact to the home can be the result of nearby vegetation or combustible materials catching on fire due to embers, or from the wildfire burning unchecked directly to the building.

Radiant heat exposure occurs when there are materials, vegetation, or other combustibles, that are burning close to the home—for a long enough period of time—and generate enough heat to directly ignite a combustible component of the home.

Getting ready for wildfire begins with two very important efforts: **Home Hardening** and **Defensible Space.** Hardening your home is retrofitting it with fire-resistant materials. Defensible Space is creating and maintaining a buffer between buildings and vegetation to slow wildfire. While not a guarantee that your home will survive a wildfire, these efforts give it the best chance.

HARDENING YOUR HOME

Now is the time to retrofit your home—before a wildfire strikes. California Building Code Chapter 7A requires specific construction materials and methods for the building of new homes in wildfire-prone areas. These same materials and methods are also the minimum standards recommended when retrofitting a home. Retrofitting prepares your home for the exposure it will experience during a wildfire. Here's what you can do to harden your home:

ROOF

Your roof is the most vulnerable part of your home. Homes with wood shake or shingle roofs are at high risk of being destroyed in a wildfire.

- Replace wood shake or shingle roofs with a Class A fire-rated roof, using materials such as composition, metal, or tile.
- Inspect your roof and maintain it by removing debris and plugging gaps.

VENTS

Vents on homes create openings for flying embers.

- Avoid storing combustible items near attic or crawl space vents.
- Inspect vents to ensure they are in good condition with no tears or large openings.
- Cover all vent openings with 1/16 inch to 1/8 inch corrosion-resistant metal mesh screen.
- Consider replacing screened vents with ember and flame-resistant vents.

EAVES AND SOFFITS

Eaves and soffits are a point of entry for flying embers from fires up to a mile away or flames from nearby vegetation or other material burning.

- Plug or caulk gaps greater than 1/8 inch in size with durable caulk.
- Enclose eaves with ignition-resistant or noncombustible materials if possible.

WINDOWS

Heat from a wildfire can cause windows to break before the home ignites, allowing embers to enter and start fires inside. Single-paned and large windows are particularly at risk.

- Install dual or multi-paned windows with at least one pane being tempered glass.
- Consider limiting the size and number of windows that face large areas of vegetation.
- Install metal mesh screens on openable windows to increase ember resistance and reduce radiant heat exposure.

DECKS

Surfaces within 10 feet of the building should be built with ignition-resistant, noncombustible, or other approved materials.

- Remove all combustible items from underneath deck.
- Limit combustible items on top of deck. Bring these items inside the home or move them away from the home when wildfire threatens.

EXTERIOR WALLS

Wood products such as boards, panels, or shingles are common siding materials. However, they are combustible and not good choices for wildfire prone areas.

- Use noncombustible materials such as stucco, metal, or fiber cement, or use ignition-resistant siding.
- Be sure to extend materials from the foundation to the roof.
- Plug or caulk gaps and joints with openings greater than 1/8 inch.

RAIN GUTTERS

Screen or enclose rain gutters with noncombustible corrosion-resistant materials to prevent accumulation of plant debris.

PATIO COVERS

Consider using noncombustible material within eight feet of buildings.

CHIMNEYS

Cover chimney or stovepipe outlet with a noncombustible corrosion-resistant metal mesh screen with openings between 3/8 inch and 1/2 inch in size. Close the fireplace flue during fire season when the fireplace is not in use.

FENCES

Construct fences using noncombustible materials within eight feet of your home.

GARAGES

Install weather stripping to eliminate gaps around garage doors. Add a battery back-up to automatic garage door openers so the garage can easily be opened if the power is out.

DRIVEWAYS

Ensure that access to your home complies with local fire codes.

WATER SUPPLY

Have multiple garden hoses long enough to reach all areas of your house.

ADDITIONAL HOME FIRE SAFETY RESOURCES

HOME HARDENING INFORMATION GUIDE

ReadyforWildfire.org

CALIFORNIA BUILDING CODE CHAPTER 7A

codes.iccsafe.org

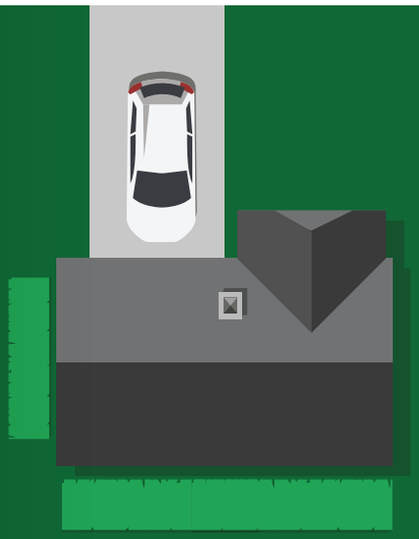
WILDFIRE HOME RETROFIT GUIDE

ReadyforWildfire.org

BUILDING MATERIALS LISTING

osfm.fire.ca.gov

DEFENSIBLE SPACE



Creating and maintaining Defensible Space is essential to reducing the impact of wildfire on your home and property. Defensible Space is the buffer created between a building on your property and the plants, brush, trees, or other combustible items in the near vicinity. This buffer helps to keep wildfire away from your home by reducing the fire's intensity and slowing or halting the spread of wildfire. The less there is to burn near your home, the less exposure your home will have to wildfire. Creating this space also provides protection for the firefighters defending your home.

CREATING AND MAINTAINING YOUR DEFENSIBLE SPACE

Within the 100-foot perimeter of a home, there is a need for more intense reduction of wildfire fuels. Start at the home and work your way out 100 feet or to your property line, whichever is closer.

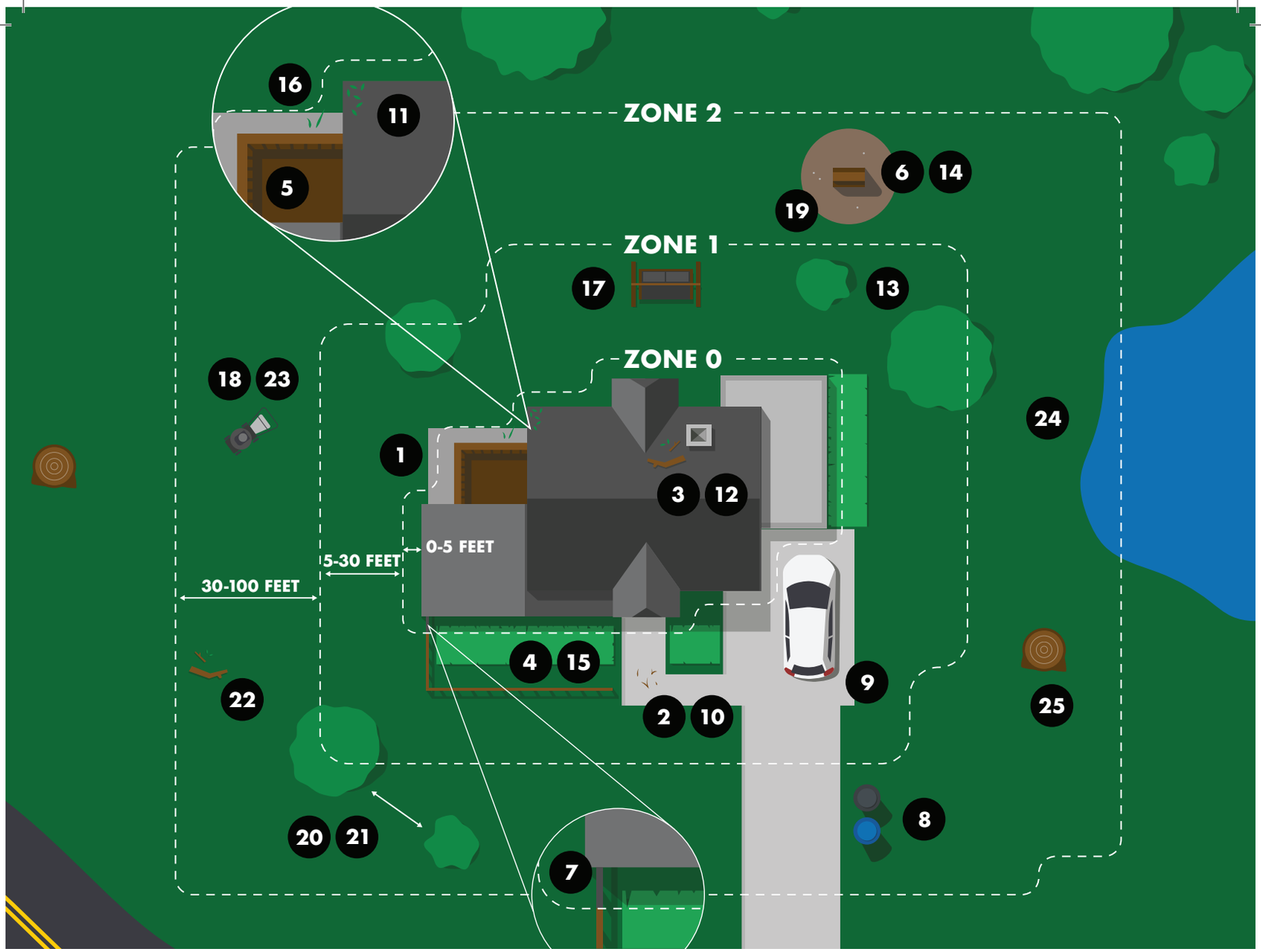
KNOW THE LAW - BE FIRE SMART

One hundred feet of Defensible Space is required under the Public Resources Code (PRC) 4291. Zones 1 and 2 currently make up the 100 feet of Defensible Space required by law. Assembly Bill 3074, passed into law in 2020, requires an ignition-resistant Zone 0 for Defensible Space.

Many local government agencies have ordinances for Defensible Space. These local ordinances will often be more stringent than the state of California's minimum requirement in PRC 4291. Check with your local fire department or fire protection district for any additional Defensible Space requirements. **fire.ca.gov/dspace**

Zone 0 extends from zero to five feet from buildings, structures, decks, etc.

1. Use hardscape like gravel, pavers, concrete, and other noncombustible mulch materials. No combustible bark or mulch.
2. Remove all dead and dying weeds, grass, branches, and vegetative debris. Check your roofs, gutters, decks, porches, stairways, etc.
3. Remove all branches within 10 feet of any chimney or stovepipe outlet.
4. Limit plants in this area to low growing, nonwoody, properly watered, and maintained plants.
5. Limit combustible items (outdoor furniture, planters, etc.) on top of decks.
6. Relocate firewood and lumber to Zone 2.
7. Replace within Zone 0 combustible fencing, gates, and arbors attached to the home with noncombustible alternatives.



8. Relocate garbage and recycling containers outside this zone.
9. Relocate boats, RVs, vehicles, and other combustible items outside this zone.

Zone 1 extends five to 30 feet from buildings, decks, and other structures.

10. Remove all dead plants, grass, and weeds (vegetation).
11. Remove dead or dry leaves and pine needles from your yard, roof, and rain gutters.
12. Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney or stovepipe outlet.
13. Trim trees regularly to keep branches a minimum of 10 feet from other trees.
14. Relocate exposed wood piles outside of Zone 1.
15. Remove or prune flammable plants and shrubs near windows.
16. Remove vegetation and items that could catch fire from around and under decks.
17. Create a separation between trees, shrubs, and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.

Zone 2 extends from 30 feet to 100 feet from buildings, structures, decks, etc.

18. Cut or mow annual grasses to a maximum height of four inches.
19. All exposed wood piles must have a minimum of 10 feet clearance around them, down to bare mineral soil, in all directions.
20. Create horizontal space between shrubs and trees. (See diagram on page 11)
21. Create vertical space between grass, shrubs, and trees. (See diagram on page 11)
22. Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of three inches.

All zones

23. Mow before 10 a.m., but never when it's windy or excessively dry.
24. Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion—especially on steep slopes.
25. Logs or stumps embedded in the soil must be removed in Zone 0. In Zones1and 2 they need to be removed or isolated from other vegetation.

It takes the combination of both Defensible Space and Home Hardening to give your home and property the best chance of surviving a wildfire. Below are examples of low-risk and high-risk scenarios:

HIGH RISK

UNENCLOSED EAVES

UNSCREENED VENTS

DEFENSIBLE SPACE NONCOMPLIANT

LOW RISK

ENCLOSED EAVES

SCREENED VENTS

DEFENSIBLE SPACE COMPLIANT

FIRE SMART LANDSCAPING

While some plants are characterized as "fire-safe" or "fire-resistant," all plants will burn under the right conditions, regardless of how they are classified. The environment the plant grows in, how it is maintained, and its placement and spacing near other vegetation and combustibles will generally have more influence on the flammability of the plant than how it is characterized. Taking these items into consideration is crucial to reduce the spread of wildfire to your home. Scan the QR code below for more information.

FIRE SMART LANDSCAPING
ReadyforWildfire.org/fire-smart-landscaping

MINIMUM VERTICAL SPACING BETWEEN TREES AND SHRUBS

Eliminate opportunities for a vertical "fire ladder":

- Remove branches beneath large trees for a six-foot minimum clearance.
- Create proper vertical spacing between shrubs and the lowest branches of trees. See adjacent diagrams.

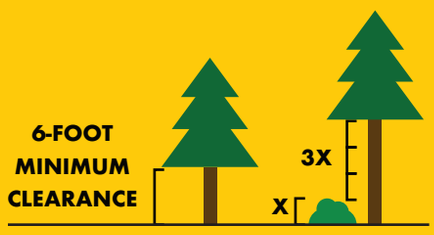
MINIMUM HORIZONTAL SPACING BETWEEN TREES AND SHRUBS

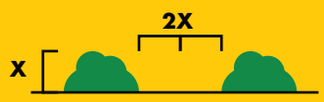
Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. See adjacent diagrams.

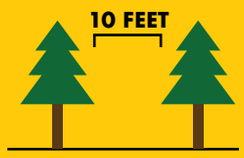
DEAD TREE REMOVAL

If you have dead or dying trees on your property, the entire tree needs to be removed to reduce wildfire risk. Scan the QR code below to learn about permit requirements.

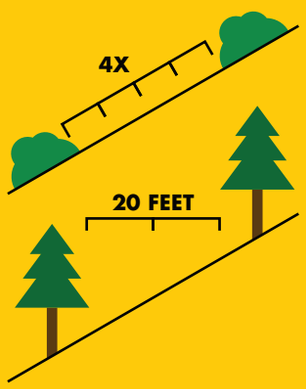
PERMIT REQUIREMENTS
ReadyforWildfire.org/dead-tree-removal



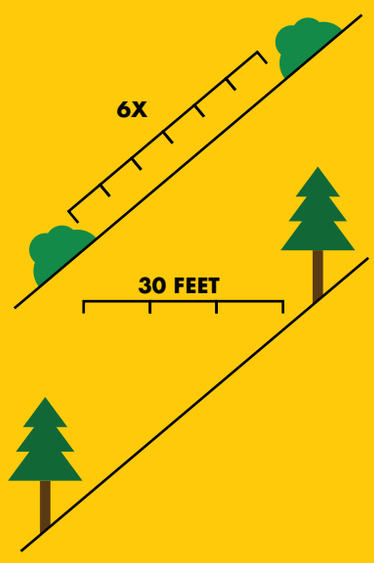




Flat to mild slope (<20%)



Mild to moderate slope (20%–40%)



Moderate to steep slope (>40%)


GET
SET

It is important that you are prepared **before** wildfire strikes. In an emergency it is easy to become confused or panicked.

Getting Set requires three main preparation actions:

- Creating a Wildfire Action Plan
- Creating an Emergency Supply Kit
- Creating a Family Communication Plan

Preparing these items in advance will help keep you focused and able to act quickly when evacuation is anticipated or needed.

Use this guide to complete these actions to prepare in advance of wildfire.

READY FOR WILDFIRE INCIDENT APP

Scan the QR code below to access accurate updates about active wildfires near you with our web-based Ready for Wildfire Incident App.

ACTION PLAN CHECKLIST

CREATE A WILDFIRE ACTION PLAN

Your Wildfire Action Plan must be prepared and familiar to all members of your household well in advance of a wildfire. Use the checklist below to help create your plan. Each family's plan will be different, depending on a variety of issues, needs, and situations.

Create an evacuation plan that includes:

- ○ A designated emergency meeting location outside the fire or hazard area. This is critical to determine who has safely evacuated from the affected area.
- ○ Identification of several different escape routes from your home and community. Practice these routes often so everyone in your family is familiar with them in case of emergency. Go to page 18 to write down your evacuation routes.
- ○ An evacuation plan for pets and large animals such as horses and other livestock.
- ○ A Family Communication Plan that designates an out-of-area friend or relative as a point of contact to act as a single source of communication among family members in case of separation. It is easier to call or message one person and let them contact others than to try and call everyone when phone, cell, and internet systems can be overloaded or limited during a disaster and under a stressful situation. See page 18 for a Family Communication Plan form.

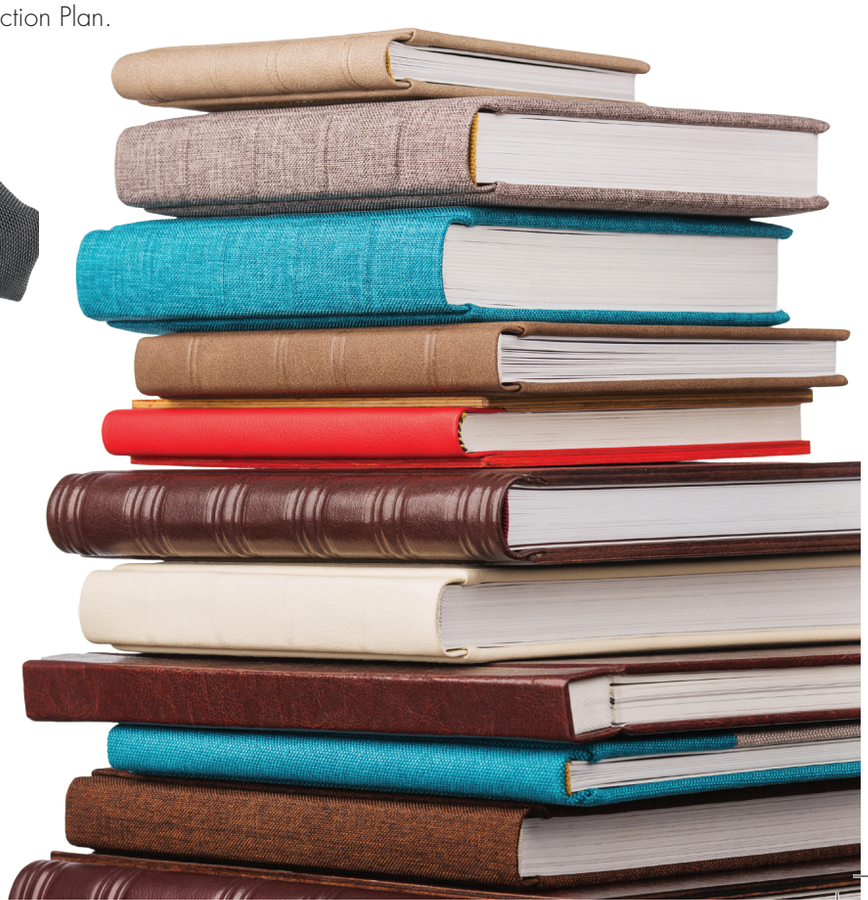
Be prepared:

- ○ Have fire extinguishers on hand and make sure everyone in the family knows how to use them. Many fire extinguishers have expiration dates, so make sure to check yours.
- ○ Ensure you and your family know where the home's gas, electric, and water main shut-off controls are located and how to safely shut them down in an emergency.
- ○ Assemble an Emergency Supply Kit for each person, as recommended by the American Red Cross. See Emergency Supply Kit on page 16 for details.
- ○ Maintain a list of emergency contact numbers in your cell phone, posted near your home phone, and in your Emergency Supply Kit.
- ○ Keep an extra Emergency Supply Kit in your car in case you cannot get to your home because of fire or other emergency.
- ○ Have a portable radio or scanner, or follow the Ready for Wildfire App so you can stay updated on wildfires. Follow local law enforcement notifications for any evacuation information. Visit incidents.ReadyforWildfire.org or scan QR code on page 13 to view the incident app.
- ○ Tell your neighbors about Ready, Set, Go! and your Wildfire Action Plan.

THE SIX Ps

Remember the "Six Ps" and keep them ready in case immediate evacuation is required:

- ○ People and pets
- ○ Papers, phone numbers, and important documents
- ○ Prescriptions, vitamins, and eyeglasses
- ○ Pictures and irreplaceable memorabilia
- ○ Personal computer, hard drive, and disks
- ○ "Plastic" (credit cards, ATM cards) and cash



EMERGENCY SUPPLY KIT

Put together your Emergency Supply Kit—also called a "go bag"—before a wildfire or other disaster occurs and keep it easily accessible so you can take it with you when you evacuate. Backpacks work great for storing these items (except food and water) and are quick to grab. Storing food and water in a tub or chest on wheels will make it easier to transport. Keep it light enough to be able to lift it into your car.

Emergency Supply Kit Contents:

- ○ Face masks or coverings
- ○ Three-day supply of non-perishable food and three gallons of water per person
- ○ Map marked with at least two evacuation routes
- ○ Prescriptions or special medications
- ○ Change of clothing, including a cotton long-sleeved shirt and pants
- ○ Extra eyeglasses or contact lenses
- ○ An extra set of car keys, phone charger, credit cards, cash, or traveler's checks
- ○ First aid kit
- ○ Flashlight
- ○ Battery-powered radio and extra batteries
- ○ Sanitation supplies
- ○ Copies of important documents (birth certificates, passports, insurance, etc.)
- ○ Food, water, and medications for pets
- ○ Can opener

Items to take if time allows:

- ○ Easily carried valuables
- ○ Family photos and other irreplaceable items
- ○ Personal computer information on hard drives and disks
- ○ Extra cell phone chargers, laptops, etc.

Always keep a sturdy pair of shoes and a flashlight near your bed handy in case of a sudden evacuation at night.

OUR FAMILY'S ADDITIONAL SUPPLY KIT MUST HAVES ARE:

BE PREPARED FOR POWER OUTAGES

Power outages may occur before and during the threat of a wildfire. It's important to be prepared and know what actions to take when leaving your home during a power outage.

- Learn how to manually open your automatic garage doors or gates—this is extremely important!
- Be familiar with your home's utility shutoffs (electricity, water, and gas).
- Keep a flashlight and shoes near your bed in case you need to evacuate during the night.
- Keep your Emergency Supply Kit easily accessible so you can find it in the dark if you have to evacuate.
- Always keep at least a half tank of gas in your vehicles.
- If you have a power generator, be sure you know the safety guidelines of your model, including where to connect it, which electrical cords to use, and the electrical load rating. An improperly installed generator can electrocute you or an electric utility worker and can also be a fire hazard.
- Keep your cell phone charged.
- Keep a supply of bottled water.

DURING A POWER OUTAGE

If the power goes out, follow these steps:

- Keep your refrigerator and freezer doors closed.
- Shut off the gas and other combustibles such as propane tanks.
- If wildfire is within your area, keep informed with a battery-powered radio or your cell phone.
- Stay at least 10 feet away from both overhead power lines and electrical facilities, and never approach or touch overhead power lines or any person or object in contact with the lines.

SAVE THIS
FAMILY COMMUNICATION PLAN

Fill out this form and place it in a location where it can easily be found by everyone in your household. Copy the form and keep it in your Emergency Supply Kit. This will allow all family members to have access to this key information in case you get separated.

WHEN WE HAVE TO EVACUATE, WE WILL MEET AT:

_____

OUR OUT-OF-AREA EMERGENCY CONTACT PERSON IS:

Name: _____

Home Phone #: _____

Relationship: _____

E-mail: _____

Cell Phone #: _____

OTHER IMPORTANT NUMBERS ARE:

Emergency 911: _____

Local Police: _____

Local Fire Department: _____

Other: _____

Other: _____

Other: _____

OUR TWO EVACUATION ROUTES ARE (DESCRIBE BELOW):

_____ _____

_____ _____

_____ _____

_____ _____

INSURANCE PREPAREDNESS

A home is generally your largest asset. Protect it.

Insurance is the critical back-up plan enabling you to rebuild your home after a wildfire. Follow these tips as part of your Ready, Set, Go! Wildfire Action Plan:

Conduct an annual insurance checkup

- Call your agent or insurance company annually to discuss your policy limits and coverage. Make sure your policy reflects the correct square footage and features in your home. Consider purchasing building code upgrade coverage.

Know what your policy covers

- Know if you have a replacement-cost policy that pays to replace all of your items at current market price, or if you have an actual cash value policy that takes depreciation into account and pays less for aged items.

Update your policy to cover home improvements

- If you make home improvements, be sure to call your agent or company to update your coverage. Make sure your insurer knows about the changes, so that new countertops, floors, rooms, etc., are covered if you must rebuild.

Maintain insurance

- If your home is paid off, be sure to maintain homeowner insurance. Without insurance, costs to repair or replace a home or structure is the responsibility of a homeowner.

Get renters insurance

- Renters can lose everything in a fire and be left to start over. Many insurers bundle renters insurance coverage with an auto insurance policy at affordable prices.

Make a home inventory

- Document the contents of your home before a wildfire occurs. Use your cell phone to video your belongings or a camera to take photos. Store the inventory list and photos at a location away from the property and/or in a cloud internet server. Include the cost of items and note important or expensive items. If possible, keep receipts for major purchases.
- Don't forget to include items inside the home, inside the garage, and outside of the home.


GO

Give your household the best chance of surviving a wildfire by being ready to go and evacuating early.

Being ready to go means following pre-evacuation steps, knowing when to evacuate, preparing possible evacuation routes, and knowing what to do if you become trapped.

Be safe and don't wait until it's too late! Use these checklists to help prepare you and your family to be ready to evacuate if wildfire strikes.

It is also important to learn what to expect after a wildfire and what you should do before returning home. The danger is not over after the flames are put out.

KNOW THE LAW—BE READY TO EVACUATE

California law authorizes officers to restrict access to any area where a menace to public health or safety exists due to a calamity such as flood, storm, fire, earthquake, explosion, accident, or other disaster. Refusal to comply is a misdemeanor. (Penal Code 409.5)

PRE-EVACUATION STEPS

When evacuation is anticipated, follow these checklists (if time allows):

Outside

- ○ Gather flammable items from the exterior of the house and bring them inside (patio furniture, children's toys, door mats, trash cans, etc.) or place them in your pool.
- ○ Turn off propane tanks.
- ○ Move propane BBQ appliances away from structures.
- ○ Connect garden hoses to outside water valves or spigots for use by firefighters. Fill water buckets and place them around the house.
- ○ Turn off sprinklers and running water; leaving them on can affect critical water pressure.
- ○ Leave exterior lights on so your home is visible to firefighters in the smoke or darkness of night.
- ○ Put your Emergency Supply Kit in your vehicle.
- ○ Back your car into the driveway with vehicle loaded and all doors and windows closed. Carry your car keys with you.
- ○ Have a ladder available and place it at the corner of the house for firefighters to quickly access your roof.
- ○ Seal attic and ground vents with pre-cut fire-resistant boards or commercial seals.
- ○ Monitor your property and the fire situation. Don't wait for an evacuation order if you feel threatened and need to leave.
- ○ Check on neighbors and make sure they are preparing to leave.

Inside the House

- ○ Shut all windows and doors, leaving them unlocked.
- ○ Remove flammable window shades and curtains. Close metal shutters.
- ○ Move flammable furniture to the center of the room, away from windows and doors.
- ○ Shut off gas at the meter or tank. Turn off pilot lights.
- ○ Leave your lights on so firefighters can see your house under smoky conditions.
- ○ Shut off the air conditioning or heater.

Animals

- ○ Locate your pets and keep them nearby.
- ○ Prepare livestock for transport and consider moving them to a safe location early.

EVACUATION STEPS

- ○ Review your Evacuation Checklist.
- ○ Ensure your Emergency Supply Kit is in your vehicle.
- ○ Cover up to protect against heat and flying embers. Wear long pants, a long-sleeved shirt, heavy shoes/boots, cap/hat, a dry bandana for face cover, goggles, or glasses. Clothing made of 100% cotton is preferable.
- ○ Locate your pets and take them with you.

WHEN TO EVACUATE

Leave when evacuation is recommended by fire officials to avoid being caught in fire, smoke, or road congestion. You don't need to wait to be ordered by authorities to evacuate. In an intense wildfire, emergency personnel may not have time to knock on every door. If you feel you are in danger, the best course of action is to evacuate. If you are advised to leave, don't hesitate!

Officials will determine the areas to be evacuated and escape routes to use depending upon the fire's location, behavior, winds, terrain, etc.

Law enforcement agencies are typically responsible for enforcing an evacuation order. Follow their directions promptly.

You will be advised of potential evacuations as early as possible. You must take the initiative to stay informed and aware. Listen to your radio/TV for announcements from law enforcement and emergency personnel.

You may be directed to temporary assembly areas to await transfer to a safe location.

The terms "Warning" and "Order" are used to describe evacuation orders. However, local jurisdictions may use other terminology such as "Precautionary" and "Immediate Threat." These terms are used to alert you to the significance of the danger. All evacuation instructions provided by officials should be followed immediately for your safety.

ANIMAL EVACUATION

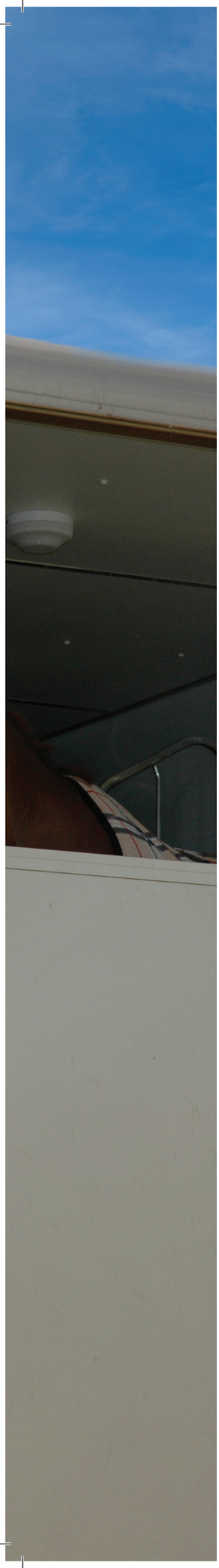
You've taken steps to help keep your family and home fire safe. Don't forget your pets and livestock. With some advanced planning, you can increase their chances of surviving a wildfire.

1. Clear Defensible Space around your barns, pastures, and property just as you do your home.
2. Contact your local fairgrounds, stockyards, equestrian centers, friends, etc. about their policies and ability to temporarily take livestock in an emergency.
3. Have vaccination/medical records, registration papers, and photographs of your animals (proof of ownership).
4. If you must leave your animals, leave them in a pre-selected, cleared area. If appropriate, leave enough hay for 48 to 72 hours.
   - Leave water for your animals. Do not rely on automatic watering systems, as a power outage could occur or the water system become compromised.
5. Arrange in advance for a neighbor to check on or transport your pets in case you are not home when disaster strikes.
   - Make sure your neighbors have your contact numbers (cell phone, work, home, etc.).
6. Make sure that each animal has its own pet carrier, as appropriate.
   - Birds, rodents, and reptiles should be transported in cages covered with a light sheet or cloth to minimize their fear.
7. Make sure your pets are always wearing properly fitted collars with personal identification, rabies and license tags.
8. Plan where you will take your pets and select an alternate prearranged location as well.
   - In the event of evacuation, pets may not be allowed inside human emergency shelters.
9. Prepare your livestock disaster preparedness kit.
10. Prepare your pet disaster preparedness kit.

Scan the QR code below to find what items to include in your livestock and pet disaster preparedness kit.

LIVESTOCK AND PET DISASTER PREPAREDNESS KIT INSTRUCTIONS

ReadyforWildfire.org/animal-evacuation



WHAT TO DO IF TRAPPED

WHILE IN YOUR VEHICLE:

- Stay calm.
- Park your vehicle in an area clear of vegetation.
- Close all vehicle windows and vents. If possible, cover inside of windows with a wool or cotton blanket to minimize radiant heat.
- Cover yourself with a wool or cotton blanket or jacket.
- Lie on vehicle floor.
- Use your cell phone to contact officials— **Call 911**

WHILE ON FOOT:

- Stay calm.
- Go to an area clear of vegetation, a ditch, or depression on level ground, if possible.
- Lie face down and cover up your body.
- If near a body of water—pool, creek, pond, lake, etc.—seek safety in the water or use it to keep distance away from the fire. Be careful not to be swept away by moving water or get too deep.
- Use your cell phone to contact officials— **Call 911**

WHILE IN YOUR HOME:

- Stay calm and keep your family together.
- **Call 911** and inform authorities of your location.
- Fill sinks and tubs with cold water.
- Keep doors and windows closed but unlocked.
- Stay inside your house.
- Stay away from outside walls and windows.
- Turn on lights so emergency officials know you are inside.

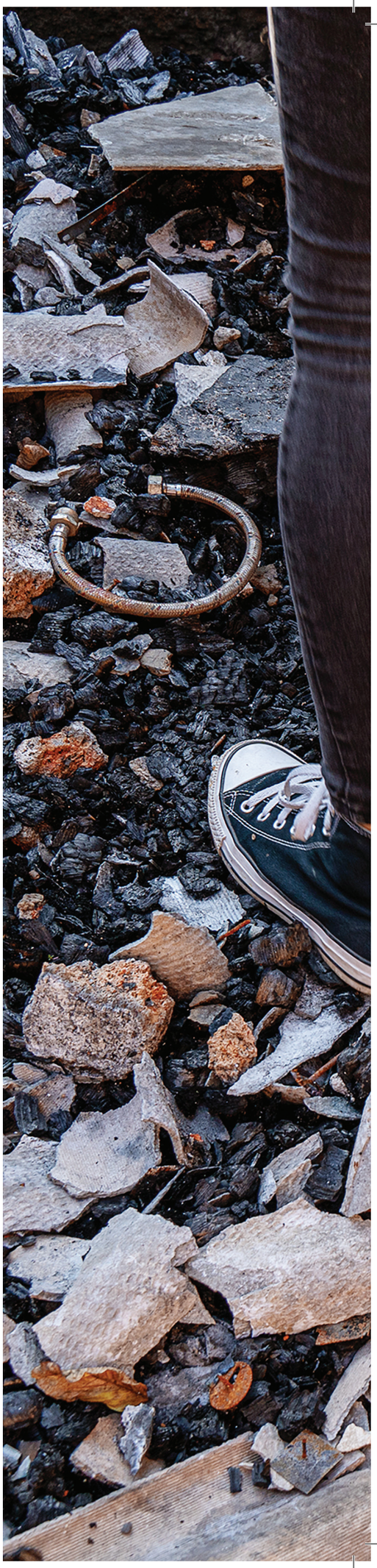
RETURNING HOME AFTER A WILDFIRE

ALWAYS check with officials before attempting to return to your home after a wildfire. Once home, check for the following:

- ○ **Call 911** if any danger is perceived.
- ○ Before inspecting your home, first check for the smell of gas. Turn off power until you've completed your inspection. Use a battery-powered flashlight to inspect a damaged home.
- ○ Check grounds for hot spots, smoldering stumps, and vegetation.
- ○ Check the roof and exterior areas for sparks or embers.
- ○ Check the attic and throughout your house for any hidden burning sparks or embers.
- ○ Check for fire damage to your home, turn off all appliances, and make sure the meter is not damaged before turning on the main circuit breaker.
- ○ Check the well or pump house to ensure it is in working order.
- ○ Do not drink or use water from the faucet until emergency officials say it is okay.
- ○ Discard any food that has been exposed to heat, smoke, or soot.
- ○ Consult local experts on the best way to restore and plant your land with fire smart landscaping.

Be aware of the following dangers that exist after a wildfire:

- Flash floods are a very real and potentially deadly hazard when rain occurs in heavily burned areas after a wildfire. Stay away from burned forests, storm channels, and natural drainages.
- Use extreme caution around trees, power poles, and other tall objects or structures that may have lost stability during the fire.




ReadyforWildfire.org
CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
CAL FIRE
SINCE 1885

Appendix B1–B4

Family Disaster Plan and Personal Survival Guide

Additional Items to Consider Adding to an Emergency Supply Kit:

- ❑ **Prescription medications and glasses**
- ❑ **Infant formula and diapers**
- ❑ **Pet food and extra water for your pet**
- ❑ **Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container**
- ❑ **Cash or traveler's checks and change**
- ❑ **Emergency reference material such as a first aid book or information from www.ready.gov**
- ❑ **Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.**
- ❑ **Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.**
- ❑ **Household chlorine bleach and medicine dropper** – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- ❑ **Fire Extinguisher**
- ❑ **Matches in a waterproof container**
- ❑ **Feminine supplies and personal hygiene items**
- ❑ **Mess kits, paper cups, plates and plastic utensils, paper towels**
- ❑ **Paper and pencil**
- ❑ **Books, games, puzzles or other activities for children**

Ready

Prepare. Plan. Stay Informed.®

Emergency Supply List

FEMA

www.ready.gov

Recommended Items to Include in a Basic Emergency Supply Kit:

- **Water, one gallon of water per person per day for at least three days, for drinking and sanitation**
- **Food, at least a three-day supply of non-perishable food**
- **Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both**
- **Flashlight and extra batteries**
- **First aid kit**
- **Whistle to signal for help**
- **Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place**
- **Moist towelettes, garbage bags and plastic ties for personal sanitation**
- **Wrench or pliers to turn off utilities**
- **Can opener for food (if kit contains canned food)**
- **Local maps**

Through its *Ready* Campaign, the Federal Emergency Management Agency educates and empowers Americans to take some simple steps to prepare for and respond to potential emergencies, including natural disasters and terrorist attacks. *Ready* asks individuals to do three key things: get an emergency supply kit, make a family emergency plan, and be informed about the different types of emergencies that could occur and their appropriate responses.

All Americans should have some basic supplies on hand in order to survive for at least three days if an emergency occurs. Following is a listing of some basic items that every emergency supply kit should include. However, it is important that individuals review this list and consider where they live and the unique needs of their family in order to create an emergency supply kit that will meet these needs. Individuals should also consider having at least two emergency supply kits, one full kit at home and smaller portable kits in their workplace, vehicle or other places they spend time.

Ready

FEMA

Federal Emergency Management Agency
Washington, DC 20472

BE SMART. TAKE PART. CREATE YOUR FAMILY EMERGENCY COMMUNICATION PLAN

Join with others to prepare for emergencies and participate in America's PrepareAthon! | ready.gov/prepare

Creating your *Family Emergency Communication Plan* starts with one simple question: "What if?"

"What if something happens and I'm not with my family?" "Will I be able to reach them?" "How will I know they are safe?" "How can I let them know I'm OK?" During a disaster, you will need to send and receive information from your family.

Communication networks, such as mobile phones and computers, could be unreliable during disasters, and electricity could be disrupted. Planning in advance will help ensure that all the members of your household—including children and people with disabilities and others with access and functional needs, as well as outside caregivers—know how to reach each other and where to meet up in an emergency. Planning starts with three easy steps:

1. COLLECT.

Create a paper copy of the contact information for your family and other important people/offices, such as medical facilities, doctors, schools, or service providers.

2. SHARE.

Make sure everyone carries a copy in his or her backpack, purse, or wallet. If you complete your *Family Emergency Communication Plan* online at ready.gov/make-a-plan, you can print it onto a wallet-sized card. You should also post a copy in a central location in your home, such as your refrigerator or family bulletin board.

3. PRACTICE.

Have regular household meetings to review and practice your plan.

TEXT IS BEST!

If you are using a mobile phone, a text message may get through when a phone call will not. This is because a text message requires far less bandwidth than a phone call. Text messages may also save and then send automatically as soon as capacity becomes available.

The following sections will guide you through the process to create and practice your *Family Emergency Communication Plan*.

HOUSEHOLD INFORMATION

Write down phone numbers and email addresses for everyone in your household. Having this important information written down will help you reconnect with others in case you don't have your mobile device or computer with you or if the battery runs down. If you have a household member(s) who is Deaf or hard of hearing, or who has a speech disability and uses traditional or video relay service (VRS), include information on how to connect through relay services on a landline phone, mobile device, or computer.

SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS

Because a disaster can strike during school or work hours, you need to know their emergency response plans and how to stay informed. Discuss these plans with children, and let them know who could pick them up in an emergency. Make sure your household members with phones are signed up for alerts and warnings from their school, workplace, and/or local government. To find out more about how to sign up, see *Be Smart. Know Your Alerts and Warnings* at http://1.usa.gov/1BDloze. For children without mobile phones, make sure they know to follow instructions from a responsible adult, such as a teacher or principal.

OUT-OF-TOWN CONTACT

It is also important to identify someone outside of your community or State who can act as a central point of contact to help your household reconnect. In a disaster, it may be easier to make a long-distance phone call than to call across town because local phone lines can be jammed.

EMERGENCY MEETING PLACES

Decide on safe, familiar places where your family can go for protection or to reunite. Make sure these locations are accessible for household members with disabilities or access and functional needs. If you have pets or service animals, think about animal-friendly locations. Identify the following places:

- ☐ *Indoor*: If you live in an area where tornadoes, hurricanes, or other high-wind storms can happen, make sure everyone knows where to go for protection. This could be a small, interior, windowless room, such as a closet or bathroom, on the lowest level of a sturdy building, or a tornado safe room or storm shelter.
- ☐ *In your neighborhood*: This is a place in your neighborhood where your household members will meet if there is a fire or other emergency and you need to leave your home. The meeting place could be a big tree, a mailbox at the end of the driveway, or a neighbor's house.
- ☐ *Outside of your neighborhood*: This is a place where your family will meet if a disaster happens when you're not at home and you can't get back to your home. This could be a library, community center, house of worship, or family friend's home.

- [ ] *Outside of your town or city*: Having an out-of-town meeting place can help you reunite if a disaster happens and:
    - You cannot get home or to your out-of-neighborhood meeting place; or
    - Your family is not together and your community is instructed to evacuate the area.

    This meeting place could be the home of a relative or family friend. Make sure everyone knows the address of the meeting place and discuss ways you would get there.

OTHER IMPORTANT NUMBERS AND INFORMATION

You should also write down phone numbers for emergency services, utilities, service providers, medical providers, veterinarians, insurance companies, and other services.

SHARE

MAKE SURE EVERYONE HAS THE INFORMATION

- [ ] Make copies of your *Family Emergency Communication Plan* for each member of the household to carry in his or her wallet, backpack, or purse. Post a copy in a central place at home. Regularly check to make sure your household members are carrying their plan with them.
- [ ] Enter household and emergency contact information into all household members' mobile phones or devices.
- [ ] Store at least one emergency contact under the name "In Case of Emergency" or "ICE" for all mobile phones and devices. This will help someone identify your emergency contact if needed. Inform your emergency contact of any medical issues or other requirements you may have.
- [ ] Create a group list on all mobile phones and devices of the people you would need to communicate with if there was an emergency or disaster.
- [ ] Make sure all household members and your out-of-town contact know how to text if they have a mobile phone or device, or know alternative ways to communicate if they are unable to text.
- [ ] Read *Be Smart. Know Your Alerts and Warnings* at http://1.usa.gov/1BDloze and sign up to receive emergency information.

NOW IT'S TIME TO PRACTICE!

Once you have completed your *Family Emergency Communication Plan*, made copies for all the members of your household, and discussed it, it's time to practice!

Here are some ideas for practicing your plan:

- [ ] Practice texting and calling. Have each person practice sending a text message or calling your out-of-town contact and sending a group text to your mobile phone group list.
- [ ] Discuss what information you should send by text. You will want to let others know you are safe and where you are. Short messages like "I'm OK. At library" are good.

- [ ] Talk about who will be the lead person to send out information about the designated meeting place for the household.
- [ ] Practice gathering all household members at your indoor and neighborhood emergency meeting places. Talk about how each person would get to the identified out-of-neighborhood and out-of-town meeting places. Discuss all modes of transportation, such as public transportation, rail, and para-transit for all family members, including people with disabilities and others with access and functional needs.
- [ ] Regularly have conversations with household members and friends about the plan, such as whom and how to text or call, and where to go.
- [ ] To show why it's important to keep phone numbers written down, challenge your household members to recite important phone numbers from memory—now ask them to think about doing this in the event of an emergency.
- [ ] Make sure everyone, including children, knows how and when to call 911 for help. You should only call 911 when there is a life-threatening emergency.
- [ ] Review, update, and practice your *Family Emergency Communication Plan* at least once a year, or whenever any of your information changes.

To help start the conversation or remind your family why you are taking steps to prepare and practice, you may want to watch the 4-minute video, *It Started Like Any Other Day*, about families who have experienced disaster, at www.youtube.com/watch?v=w_omgt3MEBs. Click on the closed captioning (CC) icon on the lower right to turn on the captioning.

After you practice, talk about how it went. What worked well? What can be improved? What information, if any, needs to be updated? If you make updates, remember to print new copies of the plan for everyone.

OTHER IMPORTANT TIPS FOR COMMUNICATING IN DISASTERS[1]

- [ ] Text is best when using a mobile phone, but if you make a phone call, keep it brief and convey only vital information to emergency personnel and/or family or household members. This will minimize network congestion, free up space on the network for emergency communications, and conserve battery power. Wait 10 seconds before redialing a number. If you redial too quickly, the data from the handset to the cell sites do not have enough time to clear before you've re-sent the same data. This contributes to a clogged network.
- [ ] Conserve your mobile phone battery by reducing the brightness of your screen, placing your phone in airplane mode, and closing apps you do not need. Limit watching videos and playing video games to help reduce network congestion.
- [ ] Keep charged batteries, a car phone charger, and a solar charger available for backup power for your mobile phone, teletypewriters (TTYs), amplified phones, and caption phones. If you charge your phone in your car, be sure the car is in a well-ventilated area (e.g., not in a closed garage) to avoid life-threatening carbon monoxide poisoning.

[1] Federal Communications Commission, Public Safety and Homeland Security Bureau. (n.d.) *Tips for communicating in an emergency.* Retrieved from http://transition.fcc.gov/pshs/emergency-information/tips.html

- [ ] If driving, do not text, read texts, or make a call without a hands-free device.
- [ ] Maintain a household landline and analog phone (with battery backup if it has a cordless receiver) that can be used when mobile phone service is unavailable. Those who are Deaf or hard of hearing, or who have speech disabilities and use devices and services that depend on digital technology (e.g., VRS, Internet Protocol [IP] Relay, or captioning) should have an analog phone (e.g., TTY, amplified phone, or caption phone) with battery backup in case Internet or mobile service is down.
- [ ] If you evacuate and have a call-forwarding feature on your home phone, forward your home phone number to your mobile phone number.
- [ ] Use the Internet to communicate by email, Twitter, Facebook, and other social media networks. These communication channels allow you to share information quickly with a widespread audience or to find out if loved ones are OK. The Internet can also be used for telephone calls through Voice over Internet Protocol. For those who are Deaf or hard of hearing, or who have speech disabilities, you can make calls through your IP Relay provider.
- [ ] If you do not have a mobile phone, keep a prepaid phone card to use if needed during or after a disaster.
- [ ] Use a pay phone if available. It may have less congestion because these phones don't rely on electricity or mobile networks. In some public places, you may be able to find a TTY that can be used by those who are Deaf or hard of hearing, or who have speech disabilities.

America's PrepareAthon! is a grassroots campaign for action to get more people prepared for emergencies. Make your actions count at ready.gov/prepare.

The reader recognizes that the Federal Government provides links and informational data on various disaster preparedness resources and events and does not endorse any non-Federal events, entities, organizations, services, or products.

10 WAYS TO PARTICIPATE IN AMERICA'S PrepareAthon!℠

Access Alerts and Warnings

Test Communication Plans

Assemble or Update Supplies

Drill or Practice Emergency Response

Participate in a Class, Training, or Discussion

Plan with Neighbors

Conduct an Exercise

Make Property Safer

Document and Insure Property

Safeguard Documents

FAMILY EMERGENCY COMMUNICATION PLAN

HOUSEHOLD INFORMATION

Home #: .....
Address:.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

Name: ..... Mobile #: .....
Other # or social media: .....
Email: .....
Important medical or other information: .....
.....

SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS

Name: .....
Address:.....
Emergency/Hotline #: .....
Website: .....
Emergency Plan/Pick-Up: .....

SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS

Name: .....
Address:.....
Emergency/Hotline #: .....
Website: .....
Emergency Plan/Pick-Up: .....

Name: .....
Address:.....
Emergency/Hotline #: .....
Website: .....
Emergency Plan/Pick-Up: .....

Name: .....
Address:.....
Emergency/Hotline #: .....
Website: .....
Emergency Plan/Pick-Up: .....

IN CASE OF EMERGENCY (ICE) CONTACT

Name: ..... Mobile #: .....
Home #: .....Email: .....
Address: .....

OUT-OF-TOWN CONTACT

Name: ..... Mobile #: .....
Home #: .....Email: .....
Address: .....

EMERGENCY MEETING PLACES

Indoor: .....
Instructions: .....
Neighborhood: .....
Instructions: .....

Out-of-Neighborhood: .....
Address:.....
Instructions: .....

Out-of-Town: .....
Address:.....
Instructions: .....

IMPORTANT NUMBERS OR INFORMATION

Police: ..... Dial 911 or #: .....
Fire: ..... Dial 911 or #: .....
Poison Control: .....#: .....
Doctor: .....#: .....
Doctor: .....#: .....
Pediatrician: .....#: .....
Dentist: .....#: .....
Hospital/Clinic: .....#: .....
Pharmacy: .....#: .....
Medical Insurance: .....#: .....
Policy #: .....
Medical Insurance: .....#: .....
Policy #: .....
Homeowner/Rental Insurance: .....
#: .....
Policy #: .....
Flood Insurance: .....#: .....
Policy #: .....
Veterinarian: .....#: .....
Kennel: .....#: .....
Electric Company: .....#: .....
Gas Company: .....#: .....
Water Company: .....#: .....
Alternate/Accessible Transportation: .....
#: .....
Other: .....#: .....
Other: .....#: .....
Other: .....#: .....

AMERICA'S PrepareAthon!
BE SMART. TAKE PART. PREPARE.

Ready

Write your family's name above

Family Emergency Communication Plan

IN CASE OF EMERGENCY (ICE) CONTACT

Name: ..... Mobile #: .....
Home #: ..... Email: .....
Address: .....

OUT-OF-TOWN CONTACT

Name: ..... Mobile #: .....
Home #: ..... Email: .....
Address: .....

FOLD HERE

HOUSEHOLD INFORMATION

Home #: .....
Address: .....

Name: ..... Mobile #: .....
Other # or social media: ..... Email: .....
Important medical or other information: .....

Name: ..... Mobile #: .....
Other # or social media: ..... Email: .....
Important medical or other information .....

FOLD HERE

Name: ..... Mobile #: .....
Other # or social media: ..... Email: .....
Important medical or other information: .....

Name: ..... Mobile #: .....
Other # or social media: ..... Email: .....
Important medical or other information: .....

FOLD HERE

SCHOOL, CHILDCARE , CAREGIVER, AND WORKPLACE EMERGENCY PLANS

Name: .....
Address: .....
Emergency/Hotline #: ..... Website: .....
Emergency Plan/Pick-Up: .....

Name: .....
Address: .....
Emergency/Hotline #: ..... Website: .....
Emergency Plan/Pick-Up: .....

FOLD HERE

Name: .....
Address: .....
Emergency/Hotline #: ..... Website: .....
Emergency Plan/Pick-Up: .....

Name: .....
Address: .....
Emergency/Hotline #: ..... Website: .....
Emergency Plan/Pick-Up: .....

EMERGENCY MEETING PLACES

Indoor: .....
Instructions: .....
.....

Neighborhood: .....
Instructions: .....
.....

Out-of-Neighborhood: .....
Address: .....
Instructions: .....
.....

Out-of-Town: .....
Address: .....
Instructions: .....
.....

IMPORTANT NUMBERS OR INFORMATION

Police: ..... Dial 911 or #: .....
Fire: ..... Dial 911 or #: .....
Poison Control: ..... #: .....
Doctor: ..... #: .....
Doctor: ..... #: .....
Pediatrician: ..... #: .....
Dentist: ..... #: .....
Medical Insurance: ..... #: .....
Policy #: .....
Medical Insurance: ..... #: .....
Policy #: .....
Hospital/Clinic: ..... #: .....

Pharmacy: ..... #: .....
Homeowner/Rental Insurance: ..... #: .....
Policy #: .....
Flood Insurance: ..... #: .....
Policy #: .....
Veterinarian: ..... #: .....
Kennel: ..... #: .....
Electric Company: ..... #: .....
Gas Company: ..... #: .....
Water Company: ..... #: .....
Alternate/Accessible Transportation: ..... #: .....
Other: .....
Other: .....

American Red Cross

Family Disaster Plan

Family Last Name(s) or Household Address: **Date:**

Family Member/Household Contact Info (If needed, additional space is provided in #10 below):

Name	Home Phone	Cell Phone	Email:

Pet(s) Info:

Name:	Type:	Color:	Registration #:

Plan of Action

1. The disasters most likely to affect our household are:

2. What are the escape routes from our home?

3. If separated during an emergency, what is our meeting place near our home?

4. If we cannot return home or are asked to evacuate, what is our meeting place outside of our neighborhood?

_____

What is our route to get there and an alternate route, if the first route is impassible?

_____

_____

5. In the event our household is separated or unable to communicate with each other, our emergency contact outside of our immediate area is:

Name	Home Phone	Cell Phone	Email:

After a disaster, let your friends and family know you are okay by registering at "Safe and Well" at https://safeandwell.communityos.org/cms// or by calling 1-800-733-2767. You can also give them a call, send a quick text or update your status on social networking sites.

6. If at school/daycare, our child(ren) will be evacuated to:

Child's Name:	Evacuation Site (address and contact info):

7. Our plan for people in our household with a disability or special need is:

Person's Name:	Plan:

8. During certain emergencies local authorities may direct us to "shelter in place" in our home. An accessible, safe room where we can go, seal windows, vents and doors and listen to emergency broadcasts for instructions, is:

_____

9. Family Member Responsibilities in the Event of a Disaster

Task	Description	Family Member Responsible
Disaster Kit*	Stock the disaster kit and take it if evacuation is necessary. Include items you might want to take to an evacuation shelter. Remember to include medications and eye glasses.	
Be informed	Maintain access to NOAA or local radio, TV, email or text alerts for important and current information about disasters.	
Family Medical Information	Make sure the household medical information is taken with us if evacuation is necessary.	
Financial Information	Obtain copies of bank statements and cash in the event ATMs and credit cards do not work due to power outages. Bring copies of utility bills as proof of residence in applying for assistance.	
Pet Information	Evacuate our pet(s), keep a phone list of pet-friendly motels and animal shelters, and assemble and take the pet disaster kit.	
Sharing and Maintaining the Plan	Share the completed plan with those who need to know. Meet with household members every 6 months or as needs change to update household plan.	

**What supplies and records should go in your disaster kit? Visit www.redcross.org*

10. Other information, if not able to be included above.

Congratulations on completing your family disaster plan! Please tell others: "We've made a family disaster plan and you can, too, with help from the American Red Cross."

Get the facts about what you should do if an emergency or disaster occurs at www.redcross.org

Appendix C
Evacuation Modeling

TO:	RAF Pacifica Group
FROM:	Phuong Nguyen, PE; CR Associates (CRA)
DATE:	November 14, 2024
RE:	Eddie Jones Warehouse Fire Evacuation Analysis – Technical Memorandum

The purpose of this technical memorandum is to assess the time required for emergency evacuation under several scenarios, assuming a wind-driven fire that results in an evacuation affecting the Eddie Jones Warehouse ("Project") and surrounding communities.[1] The following discussion of evacuation traffic simulations is not intended to be an Evacuation Plan, nor include elements typically found in an Evacuation Plan. The sole purpose of the traffic simulations is to focus on the vehicle travel times in simulated evacuation events.

Background and Purpose

This memorandum provides a summary of the traffic simulations conducted for evacuation of the Project and surrounding community due to a wildfire. The simulations have been conducted for a variety of evacuation scenarios described below. Modeling potential evacuation traffic impacts requires that numerous assumptions be made to address many variables that will impact a real-life evacuation scenario, including the number of existing vehicles in the community, the number of Project vehicles that will need to evacuate, the roadway capacities and whether enhancements are provided (e.g., extra lanes, lane widening, signaling intersections), the total number of intersections and how they will be operating, the final destination, the targeted evacuation area, the total mobilization time, vegetation communities, weather and wind, fire spread rates, humidity, topography, risk to homes, locations of ignitions and new fire starts, and lead time needed, etc. There are many hundreds or thousands of potential model scenarios, and every fire scenario poses variations that regularly change and are reassessed "real-time" during a wildfire. Agencies involved in implementing an evacuation order would not rely on a project-specific evacuation plan, but on situational awareness and agency created wildfire pre-plans, which act as operational tools to provide high-level fire assessments and assets at risk, preferred evacuation approaches, and safety information to inform evacuation decision-making.

The following analysis is intended to present representative evacuation scenarios using available information, conservative assumptions, and an industry-based modeling technology. In an actual emergency, unified command will take into account numerous factors including fire location and spread rates, wind speeds and direction, humidity, topography, fuel loading, emergency access routes, evacuation routes, shelter-in-place options, time needed to evacuate, and other variables, and will issue specific evacuation or shelter-in-place directives consistent with the process and protocols outlined in the City of Oceanside Emergency Operations Plan (City EOP) and the County of San Diego Operational Area (OA) Emergency Operations Plans (County OA EOP). During a wildfire, nearby residents and the Project's residents should comply with those directives from authorities and first responders conducting the evacuation or emergency response. The evacuation traffic model used herein is appropriate for planning and comparison purposes but will likely not be relied on by first responders and should not be relied on by Incident Commander in time of an emergency; however, it provides useful information that will be provided to agencies and emergency managers and may inform strategic response plans in terms of evacuation timeframes and contingency options.

[1] This memorandum was prepared in coordination with the Dudek's fire protection planning team

The roadway network and vehicle input assumptions also have been selected to simulate a "worst-case" evacuation scenario that would occur during a weekend (Saturday) when the Project's employees maybe at work, nearby residents are home, full occupancy of the Prince of Peace Abbey parking lot, and the Ocean Kamp site would be in full operation. While evaluation of the "worst-case" scenario is not required by law, out of an abundance of caution, the Project has opted to consider this scenario. The assumption that a mass evacuation would occur when the Project is in operation and all residents in the surrounding community are at home when the evacuation order is provided represents an extreme, worst-case condition. In an actual wildfire event, it is most likely that law enforcement would manage traffic to allow vehicles at greatest risk to be moved out of the area. It is also likely that fewer residents would be present nearby if the evacuation happened during a time that the Project may not be at full occupancy such as a weekday afternoon.

The wildfire evacuation scenarios selected for this analysis were based on a comprehensive approach that included review of fire history, review of Oceanside River Fire (2014)[2] and the Basilone Complex Fire[3], fire behavior science, area topography, fuel types and the evolved approach to evacuations which have become increasingly more surgical instead of large, area-wide. Accordingly, given the highest probability wildfire scenarios that would result in evacuation, it is anticipated that specific neighborhoods and communities would be evacuated in a phased approach, as possible. This may be combined with targeted evacuations within existing communities located to the north of the Project's site and/or the Prince of Peace Abbey and nearby land uses. This type of evacuation is consistent with management of recent wildfires throughout southern California and San Diego County, where the phased evacuation practice has been implemented with great success and continues to be refined through real-time application.

Project Description

The Eddie Jones Warehouse Project is site is 31.79 acres and consists of a vacant site with remnants of the previous industrial manufacturing building (APN 145-021-29-00, 145-021-030-00, and 145-021-032-00). The site is located in the Airport Neighborhood Area of the City of Oceanside, California. The proposed Project includes development of a new 566,905 square- foot warehouse and distribution facility on the 31.79-acre project site. The proposed warehouse and distribution facility would consist of 369,415 square feet of warehouse area, 158,320 square feet of manufacturing space and 39,170 square feet of office area designated as a single building that could support multi-tenant occupancies. Separate office areas (with ground level and mezzanine level space) are planned at all four corners of the facility with associated warehouse/ industrial space, adjacent parking, and access areas to facilitate multiple users. Development of the proposed project would include associated landscaping, stormwater features, 590 parking spaces for employee/visitor parking, 60 truck trailer parking stalls, and vehicle circulation area. Loading bays are proposed on the north and south sides of the building with a total of 114 truck terminals. Access to the project site would be maintained and improved as necessary with existing access points from Alex Road at the northeast corner, and Benet Road at the southwest corner. The Alex Road access would be limited to passenger vehicles while heavy truck traffic would be limited to the Benet Road access point. **Figure 1** displays the proposed Project location.

[2] https://www.readysandiego.org/content/dam/oesready/en/aar/may-2014-san-diego-county-wildfires/May-2014-San-Diego-County-Wildfires.pdf
[3] https://www.marines.mil/News/Press-Releases/Press-Release-Display/Article/496775/press-release-14-035-update-23-camp-pendleton-fire-update-acreage-and-containme/

Oceanside Eddie Jones Warehouse Evacuation

Figure 1
Project Location

C+R

Assumptions

This evacuation analysis was performed for the Project to determine how long it would take for residents of the Project and the residents of the surrounding communities to evacuate to nearby urban areas/freeway access in case of a fire emergency. Current evacuation practice typically targets the scope of the evacuation only to the area in immediate danger and placing a larger area on standby for evacuation. This practice allows for better evacuation operations, reduces gridlock, and reserves sufficient travel way for emergency vehicles. It is assumed that first responders or law enforcement will direct traffic at all major downstream intersections during the evacuation process.

During the evacuation process, wildfire spread, and encroachment may be slowed by fire-fighting efforts that would likely include significant fixed wing and helicopter fire-fighting assets. Hand crews would also be deployed toward containment. None of the evacuation scenarios assumed contraflow (reverse) lanes, as these lanes are reserved for first responders, law enforcement, and fire fighters in case of unforeseen circumstances.

Given the project's location, surrounded by residential land uses, this analysis takes into account a hypothetical evacuation scenario on a Saturday afternoon. At this time, it is anticipated that the majority of residents within both the project and neighboring properties will be home. The estimation of vehicles evacuating from the Project's site was derived by multiplying the number of households by the average vehicle ownership per household in the vicinity. Similarly, for the surrounding residential areas, the number of evacuating vehicles was determined using land use information from Parcel Quest parcel map data in conjunction with the average vehicle ownership data provided by the US Census Bureau.

For a reasonable analysis, these scenarios assumed that two percent (2%)[4] of the evacuating vehicles are heavy vehicles (trucks with trailers) for all nearby land uses. Two percent is the nationally acceptable ratio of heavy vehicles to all vehicles. The analysis assumed that the 590 parking spaces for employee/visitor parking, 60 truck trailer parking stalls would be fully occupied when an evacuation order occurred.

Saturday Afternoon Evacuation

CRA presumes that the evacuation would transpire on a Saturday afternoon, a time when the Project would likely still be in operation, residents from the nearby communities are home, meaning all residential vehicles would be required to evacuate, fully occupancy of the Prince of Peace Abbey, and that the Ocean Kamp site as well as nearby land uses would be operational (open). In an actual evacuation scenario, the total number of vehicles needing to evacuate may actually be less. The Operation Area commander would prioritize evacuation of land uses located closest to the area with immediate risk, depending on the location of the fire.

Primary Evacuation Routes

CRA assumed that t both the Project and surrounding communities would utilize the nearest evacuation routes for departure. The chosen evacuation paths were based on an examination of the Project's location, accessible evacuation routes, and the fastest means to exit areas. The study assumed that evacuees would use a mix of Benet Road, Airport Road, Foussat Road, Eddie Jones Way, SR-76, Ocean Pointe Road, Mission Avenue, and other local roads to head towards the more developed parts of the City of Oceanside.

[4] https://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_599.pdf (p.5).

No contraflow lanes were assumed to provide access for first responders and law enforcement.[5] Two-way travel was assumed, with evacuating vehicles traveling outbound to the designated Safe Zone. It is assumed that first responders or law enforcement will direct traffic at all major intersections during the evacuation process. Should evacuation managers determine that contraflow is preferred or necessary, evacuation capacity would increase while evacuation times would decrease.

An evacuation model analysis was performed to determine how long it would take for occupants of the Project and the other land uses to evacuate to nearby urban areas and/or freeways in case of a fire emergency. Often in an evacuation, emergency managers will conduct phased evacuations by issuing an evacuation warning or order for an entire predetermined evacuation zone. The Project is in evacuation zone SDC – 0427[6].

The following analysis assumes an evacuation order has all of the SDC - 0427 evacuation zone evacuating at one time. As previously stated, there are multiple evacuation routes out of this evacuation zone; therefore, to determine impacts to existing land uses, the model considers evacuation traffic from five areas within SDC - 0427, Area A through Area D and the Project site. As depicted in **Figure 2**, the following detail the existing land uses in each Area:

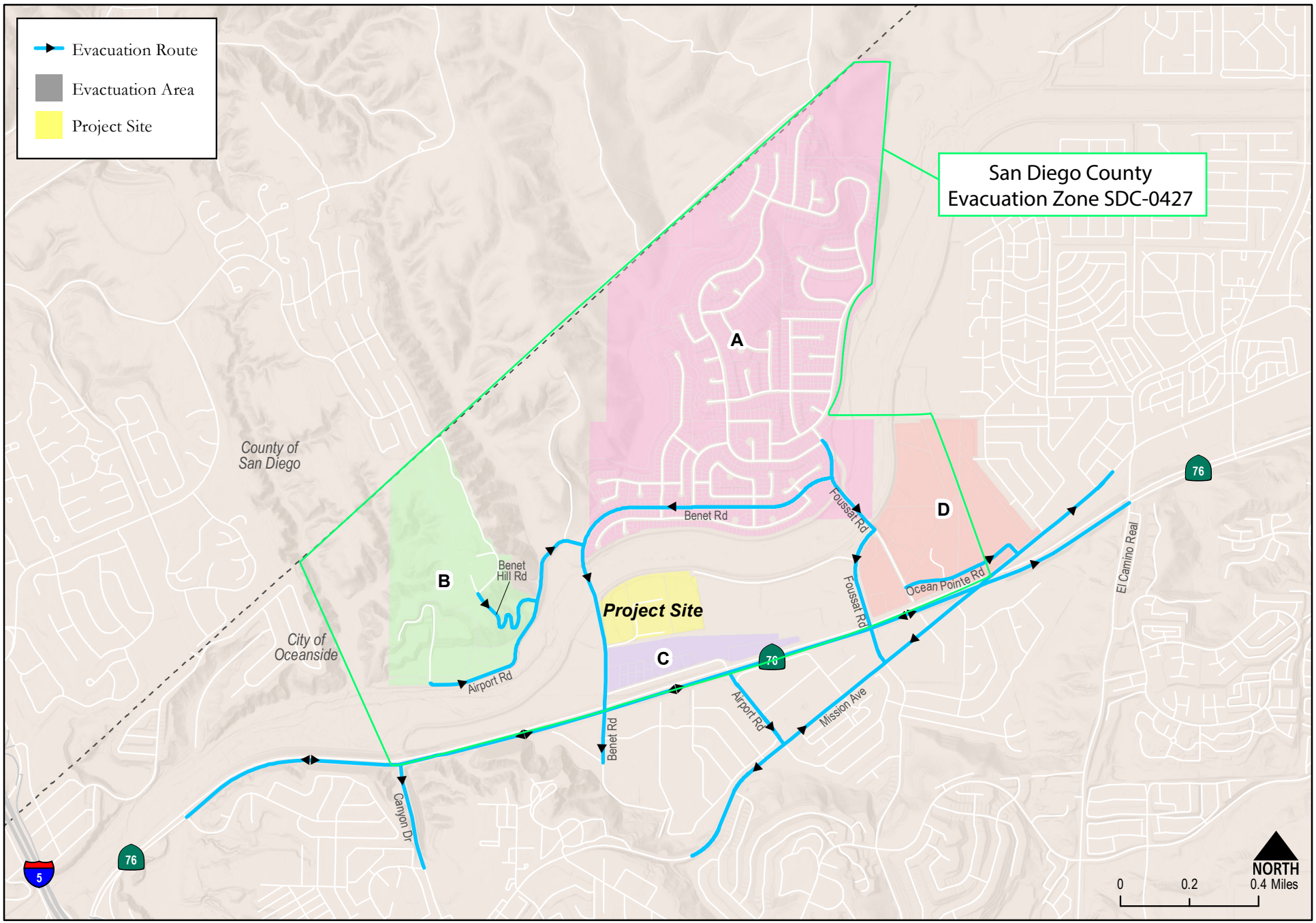
- Area A: Wanis View Estates Community
- Area B: Prince of Peace Abby, Industrial Uses
- Area C: Municipal Airport
- Area D: Ocean Kamp (Cumulative Only)

Safe Zone

Based on the FPP, fires have halted along areas adjacent to wildland fuels and have not historically progressed into the more densely urbanized, irrigated, and hardscaped areas. Specifically, none of the historical fires encroached beyond the periphery areas within the wildland urban interface area of the City of Oceanside. Thus, it is assumed that evacuees are considered to reach a safe area once they are within the more developed areas such as the area east of El Camino Real.

[5] Contraflow or lane reversal involves directing traffic to use lanes coming from the source of a hazard to move people away from the hazard. Such a strategy can be used to eliminate bottlenecks in communities with road geometries that prevent efficient evacuations or to facilitate traffic flow out of a major urban area. Among the considerations in planning emergency contraflow are whether sufficient traffic control officers are available, potential negative impact on responding fire apparatus, access management, merging, exiting, safety concerns, and labor requirements. Contraflow configurations must be carefully planned based on on-site factors and should not be implemented in an *ad-hoc* fashion. Dudek July 2014. "Wildland Fire Evacuation Procedures Analysis" for City of Santa Barbara, California, page 65.

[6] https://protect.genasys.com/search?z=14.570532360577667&latlon=32.77219491397284%2C-117.07362871836989.



Oceanside Eddie Jones Warehouse Evacuation

Figure 2
Evacuation Area and Evacuation Routes

C+R

Evacuation Scenarios

A total of 8 evacuation scenarios were analyzed:

- **Scenario 1** – *Existing Land Uses*: This scenario estimates the evacuation time for the existing land uses within the study area (Area A through D), including the planned Ocean Kamp site.
- **Scenario 2** – *Existing Land Uses with the proposed Project*: This scenario is similar to Scenario 1 (Area A through D), with the addition of the proposed Project traffic.
- **Scenario 3** – Project Only: This scenario estimates the evacuation time for the Project's site only.
- **Scenario 4** – *Existing Land Uses with Cumulative Projects*: This scenario is similar to Scenario 1, with an ambient growth of 5% to represent potential cumulative growth in the area, and the Ocean Kamp Project.
- **Scenario 5** – *Existing Land Uses with Cumulative Projects with the proposed Project*: This scenario is similar to Scenario 4, with the addition of the proposed Project traffic.
- **Scenario 6** - *Existing Land Uses with Cumulative Projects – Benet Road Closed*: This scenario is similar to Scenario 4 in terms of land use and evacuation routes; however, it also assumes a wildfire near the San Luis Rey River, which leads to the closure of Benet Road between West Airport Road and the San Luis Rey Bike Path.
- **Scenario 7** – *Existing Land Uses with Cumulative Projects with the proposed Project – Benet Road Closed*: This scenario is similar to Scenario 6, with the addition of the proposed Project traffic. Since the neighborhood north of the San Luis Rey River would have only one evacuation route (Foussat Road), it is assumed that law enforcement would direct traffic from the Project to evacuate via Benet Road (between the Eddy Jones Way and SR-76), reserving Foussat Road for those evacuees who rely on it for evacuation.
- **Scenario 8** - *Existing Land Uses with Cumulative Projects – Foussat Road Closed*: This scenario is similar to Scenario 4 in terms of land use and evacuation routes; however, it also assumes a wildfire near the San Luis Rey River, which leads to the closure of Foussat Road, between River Road and the San Luis Rey Bike Path.
- **Scenario 9** – *Existing Land Uses with Cumulative Projects with the proposed Project – Foussat Road Closed*: This scenario is similar to Scenario 8, with the addition of the proposed Project traffic. Since the neighborhood north of the San Luis Rey River would have only one evacuation route (Benet Road), it is assumed that law enforcement would direct traffic from the Project to evacuate via Foussat Road (between San Luis Rey Bike Path and SR-76), reserving Benet Road for those evacuees who rely on it for evacuation.

Evacuating Vehicles

The number of evacuating vehicles was calculated using the following assumptions:

- Nearby Residential land uses: Residential units x average vehicle ownership (2.41 vehicles per household and round up)
- Prince of Peace Abbey: Maximum occupancy of the parking lots
- Industrial Land Uses: Highest parking demand observed using historical aerial images.
- Ocean Kamp: Proposed land uses x Institute of Transportation Engineer Average Parking Demand
- Proposed Project: Maximum occupancy of the employees/visitors and truck trailer parking stalls.

Average vehicle ownership, residential units, and evacuating vehicles calculations are provided in Attachment A. **Table 1** displays the number of vehicles evacuating under each scenario.

Table 1 – Evacuating Vehicles

Scenario	Number of Evacuating Vehicles					
	Nearby Land Uses (Area)				Project	Total
	A	B	C	D		
Scenario 1 – Existing Land Uses	1,340	260	150	0	0	1,750
Scenario 2 – Existing Land Uses with Proposed Project	1,340	260	150	0	650	2,400
Scenario 3 – Project Only	0	0	0	0	650	650
Scenario 4 – Existing Land Uses with Cumulative Projects	1,410	280	160	2,397	0	4,247
Scenario 5 – Existing Land Uses with Cumulative Projects with the proposed Project	1,410	280	160	2,397	650	4,897
Scenario 6 - Existing Land Uses with Cumulative Projects – Benet Road Closed	1,410	280	160	2,397	0	4,247
Scenario 7 – Existing Land Uses with Cumulative Projects with the proposed Project – Benet Road Closed	1,410	280	160	2,397	650	4,897
Scenario 8 - Existing Land Uses with Cumulative Projects – Foussat Road Closed	1,410	280	160	2,397	0	4,247
Scenario 9 – Existing Land Uses with Cumulative Projects with the proposed Project – Foussat Road Closed	1,410	280	160	2,397	650	4,897

Source: CR Associates (2023), US Census Bureau (2023), Google Maps (2023).

Mass Evacuation

A mass evacuation scenario was modeled in which all area residents would evacuate at the same time. This assumption presents a worst-case scenario as all traffic would be directed to the evacuation roadways at once. Mass evacuation events can overwhelm a roadway's capacity, which, when reaching a threshold traffic density, begins to decrease traffic flow. In an actual "real-life" wildfire event, a phased evacuation would be implemented where orders are given to evacuate based on vulnerability, location, and/or other factors, which reduces or prevents traffic surges on major roadways and improves traffic flow. The phased evacuation strategy also prioritizes the evacuation of residents in proximity to the immediate danger, giving emergency managers the ability to monitor the fire situation and decide in real time based on changing conditions whether to order additional evacuations as needed, or not[7].

Extreme Wildfire Event

The evacuation analysis set forth below assumes a Santa Ana-wind driven fire from the north and/or east of the study area and travels in a westerly and southerly direction. This fire condition is the one

[7] Phased evacuation is a standard procedure used to prioritize areas at risk and prevent bottlenecks along the evacuation path. In the Poinsettia Fire, the Incident Commander regulated the evacuation by sending calls/texts to those at a higher risk. This strategy was implemented to great success during the Poinsettia Fire. https://thecoastnews.com/five-years-later-carlsbad-officials-recall-poinsettia-fire/

most likely to require a large-scale evacuation, and the one that creates the most risk to property and humans.

In California, wildfire-related large-scale evacuations are almost exclusively associated with wildfires that occur on extreme fire weather days, also known as "Red Flag Warning" days. These days occur when relative humidity drops to low levels and strong winds from the north/northeast are sustained. With climate change, periods in which such wildfires occur may increase. During Red Flag Warning days, vegetation is more likely to ignite and fire spread is more difficult to control. In the greater Los Angeles region, these extreme weather days typically occur during limited periods in the late summer, fall and, occasionally, in the spring, but may occur at other times on a less frequent basis. Currently, it is not common to experience more than 10 to 15 Red Flag Warning days in a typical year. Wildfires that occur during these periods of extreme weather are driven by winds –referred to as "Santa Ana" winds – that come from the north or east and blow toward the south or west. Fires driven by these winds move very quickly, making them difficult to control. In response to such fires, emergency managers typically activate pre-planned evacuation triggers that require down-wind communities to sequentially be notified to evacuate and move to nearby urbanized areas prior to the fire's encroachment.

Wildfires that occur on non-extreme weather days typically behave in a much less aggressive manner and pose fewer dangers to life and property because they include less aggressive fire behavior and are easier to control. Terrain and fuel are typically the wildfire drivers during these conditions. During these non-extreme weather days, vegetation is much more difficult to ignite and does not spread fire as rapidly. In these situations, firefighters have a very high success rate of controlling fires and keeping them under 10 acres. CALFIRE estimates that 90% of all vegetation fires occur during normal, onshore weather conditions and that such fires account for only 10% of the land area burned. Conversely, the 10% of wildfires that occur during extreme fire weather account for 90% of the land area burned. This data highlights that the most dangerous fire conditions are those related to a fire that moves rapidly due to high winds and low humidity, whereas under normal conditions fires are likely to be controlled with no evacuation or possibly limited extent, focused evacuations.

While it is possible that a fire driven by onshore wind (i.e., from the west) could require evacuation of the Project, such an event would be unusual. Moreover, due to the reduced fire behavior during normal weather periods, the evacuation would not be expected to be a large-scale evacuation of large areas.

Analysis Methodology

To analyze the evacuation events, CRA conducted simulations using *Vissim*, a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions. In *Vissim* simulations, roadway capacity is accounted for and each vehicle in the traffic system is individually tracked through the model and comprehensive measures of effectiveness, such as average vehicle speed and queueing, are collected on every vehicle during each 0.1-second of the simulation. This software enables drivers' behaviors during an evacuation to be replicated. A total of 20 simulations were conducted to yield a reasonable sample size to determine the performance of the study area roadways and impacts during evacuation scenarios. To be conservative, CRA assumed a worst-case scenario in which all vehicles belonging to households in the study area would be used in the evacuation, instead of the necessary number of vehicles needed to evacuate the impacted population. Detailed evacuation analysis information is provided in **Attachment B**.

Evacuation Analysis & Results

Based on the analysis methodology described above, **Table 2** reflects evacuation times for each scenario.

Table 2 – Evacuation Time Summary – All Scenarios

Scenario	Total Evacuation Vehicles	Evacuation Time (hours: minutes)				Project
		A	B	C	D	
Scenario 1 – Existing Land Uses	1,750	0:57	0:45	0:21	0:00	0:00
Scenario 2 – Existing Land Uses with Proposed Project	2,400	1:07	0:53	0:21	0:00	0:43
Δ Evacuation Time (Scenario 2 – Scenario 1)		**0:10**	**0:08**	**0:00**	**0:00**	**0:43**
Scenario 3 - Project Only	650	0:00	0:00	0:00	0:00	0:28
Scenario 4 – Existing Land Uses with Cumulative Projects	4,247	0:59	0:47	0:22	1:04	0:00
Scenario 5 – Existing Land Uses with Cumulative Projects with the proposed Project	4,897	1:09	0:55	0:23	1:06	0:43
Δ Evacuation Time (Scenario 5 – Scenario 4)		**0:10**	**0:08**	**0:01**	**0:02**	**0:43**
Scenario 6 - Existing Land Uses with Cumulative Projects – Benet Road Closed	4,247	1:27	1:15	0:21	0:58	0:00
Scenario 7 – Existing Land Uses with Cumulative Projects with the proposed Project – Benet Road Closed	4,897	1:27	1:15	0:23	1:02	0:42
Δ Evacuation Time (Scenario 7 – Scenario 6)		**0:00**	**0:00**	**0:02**	**0:04**	**0:42**
Scenario 8 - Existing Land Uses with Cumulative Projects – Foussat Road Closed	4,247	1:32	0:46	0:22	1:02	0:00
Scenario 9 – Existing Land Uses with Cumulative Projects with the proposed Project – Foussat Road Closed	4,897	1:32	0:46	0:22	1:02	0:42
Δ Evacuation Time (Scenario 9 – Scenario 8)		**0:00**	**0:00**	**0:00**	**0:00**	**0:42**

Source: CR Associates (2023).

A summary of the evacuation time for each scenario is provided below:

- Scenario 1: It would take between 21 minutes and 57 minutes to evacuate the existing land uses.
- Scenario 2: It would take between 21 minutes and 1 hour and 7 minutes to evacuate the existing land uses and the proposed Project. Under this scenario, the Project would cause the following increases:
    - Area A – 9 minutes
    - Area B – 8 minutes
    - Area C and Area D: No Change
    - It would take 43 minutes to evacuate the Project's site.
- Scenario 3: It would take 28 minutes to evacuate the Project site by itself.
- Scenario 4: It would take between 22 minutes and 1 hour and 4 minutes to evacuate the nearby land use under the "with cumulative projects" conditions.
- Scenario 5: It would take between 23 minutes and 1 hour and 9 minutes to evacuate the nearby land uses and the proposed Project under the "with cumulative projects with Project" conditions. Under this scenario, the Project would cause the following increases:
    - Area A – 10 minutes
    - Area B – 8 minutes
    - Area C – 1 minute
    - Area D – 2 minutes
    - It would take 43 minutes to evacuate the Project's site.
- Scenario 6: It would take between 21 minutes and 1 hour and 27 minutes to evacuate the nearby land use under the "with cumulative projects" and with "closure of Benett Road, between West Airport Road and the San Luis Rey Bike Path" conditions.

- Scenario 7: It would take between 23 minutes and 1 hour and 27 minutes to evacuate the nearby land use and the proposed Project under the "with cumulative projects with Project" and with ""closure of Benett Road, between West Airport Road and the San Luis Rey Bike Path" conditions. Under this scenario the Project would cause the following increase:
    - Area A and Area B: No Change
    - Area C – 2 minutes
    - Area D – 4 minutes
    - It would take 42 minutes to evacuate the Project's site.
- Scenario 8: It would take between 22 minutes and 1 hour and 32 minutes to evacuate the nearby land use under the "with cumulative projects" and with "closure of Foussat Road, between Benet Road and the San Luis Rey Bike Path" conditions.
- Scenario 9: It would take between 22 minutes and 1 hour and 32 minutes to evacuate the nearby land use and the proposed Project under the "with cumulative projects with Project" and with ""closure of Foussat Road, between Benet Road and the San Luis Rey Bike Path" conditions. Under this scenario, the project would not result in increased evacuation times for any nearby land uses.

Currently there is no set standard for acceptable evacuation time due to the myriad of factors influencing evacuations, such as time of day, specific locations, areas at risk, wind conditions, and more. The "Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act"[8] guidance from the California Office of the Attorney General suggests that jurisdictions set benchmarks of significance based on past successful evacuations or on those from communities in similar situations. For instance, the Poinsettia Fire saw a successful evacuation with no fatalities[9], although specific data on the total evacuation duration wasn't included in the official report.

A recent study titled "Review of California Wildfire Evacuation from 2017 to 2019" provides more insights on the topic. This research involved interviews with 553 individuals (297 evacuees affected by various fires) including the Creek Fire, Rye Fire, Skirball Fire, and Thomas Fire. The study aimed to understand the decision-making processes of these individuals during the fires, such as whether to evacuate or stay, when to leave, the paths taken, chosen shelters, destinations, and modes of transportation. According to this research, the time it took for evacuations ranged from under 30 minutes to over 10 hours. From this dataset[10], the average evacuation time for the Creek Fire was found to be 3 hours and 40 minutes, involving 115,000 people[11]. For the Thomas Fire, the average time was 4 hours and 25 minutes, impacting 104,607 individuals. It's important to note that since the Thomas Fire resulted in 2 fatalities, the evacuation time for the Existing and Existing with Project scenarios were compared against the data from the Creek Fire.

With the Project, the evacuation times are less than the average evacuation time for the Creek Fire, and the analyzed timeframe is based on a very conservative scenario, with actual evacuation times expected to occur over a shorter time frame. Other modeling assumptions and limitations are discussed below.

Analysis and Conclusion

Neither CEQA, nor the City of Oceanside has adopted numerical time standards for determining whether an evacuation timeframe is appropriate. Public safety, not time, is generally the guiding

[8] https://oag.ca.gov/system/files/attachments/press-docs/2022.10.10%20-%20Wildfire%20Guidance.pdf
[9] https://www.northcoastcurrent.com/oside-latest-news/2015/05/carlsbad-marks-one-year-since-poinsettia-fire/
[10] 2018 Carr Wildfire Evacuation Survey Data | Zenodo
[11] https://abc7.com/sylmar-brush-fire-creek-kagel-canyon/2740550/

consideration for evaluating impacts related to emergency evacuation. The County considers a Project's impact on evacuation significant if the Project will significantly impair or physically interfere with implementation of an adopted emergency response or evacuation plan; or if the Project will expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

The County of San Diego/City of Oceanside has historically had an extremely high success rate for safely evacuating large numbers of people and doing so in a managed and strategic way using available technological innovations. Safely undertaking large-scale evacuations may take several hours or more and require moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, residents' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control.

Notwithstanding evacuation challenges and variables, the success rate in the County of San Diego/City of Oceanside in safely managing both mass and targeted evacuations is extremely high for safe evacuations. Technological advancements and improved evacuation strategies learned from prior wildfire evacuation events have resulted in a system that is many times more capable of managing evacuations. With the technology in use today in the County, evacuations are more strategic and surgical than in the past, evacuating smaller areas at highest risk and phasing evacuation traffic so that it flows more evenly and minimizes the surges that may slow an evacuation.

Based on the evacuation simulations above, evacuation traffic generated by the Project would not significantly increase the average evacuation travel time or result in unsafe evacuation timeframes.

The Project would also provide the responding emergency managers (County of San Diego Sheriff and Fire Department, California Highway Patrol, and other cooperating agencies and Departments) the alternative option of recommending that all or a portion of the site's population temporarily seek refuge at nearby urbanized area. This on-site sheltering option is a contingency plan, but an important option in the scenario when evacuation is considered infeasible or the less safe option. This would provide emergency managers with a safer alternative to risking a late evacuation.

This information will be provided to law enforcement and fire agencies for use in pre-planning scenarios to better inform in the field decisions made pursuant to adopted Emergency Response Plans. Emergency personnel who issue an evacuation order may take into account these time estimates in determining when and where to issue evacuation orders. In a real evacuation scenario, emergency managers may use alternative actions/options to further expedite evacuation. Such actions may include providing additional lead time in issuing evacuation orders, prioritizing area at higher risks, providing alternative signal control at downstream intersections, utilizing additional off-site routes or directing traffic to roadways with additional capacity, implementing contra-flow lanes, issuing "shelter-in-place" orders when determined to be safer than evacuation, or considering the possibility of a delayed evacuation where parts of the population could be directed to remain on-site until the fire burns through the fuels around the evacuation route. These options require "in the field" determinations of when evacuations are needed and how they are phased to maximize efficiency. Overall, safe evacuation of the Project and surrounding community is possible in all modeled scenarios.

Limitations

In coordination with fire professionals at Dudek, CRA has presented a conservative analysis simulating evacuation during an extreme wildfire event. However, as discussed above, wildfires are variable events. The underlying planning principle for fire preparedness, given the dynamic nature of a fire, is

to demonstrate the availability of multiple route alternatives and response strategies to permit emergency professionals to manage their response according to the specific circumstances. The Project area provides ample route and response alternatives that were not considered in this model. Emergency responders will coordinate the safest possible evacuation based on the dynamic circumstances of the actual event, including the appropriate phasing of the evacuation, and utilization of the most appropriate ingress and egress routes for area residents and emergency responders.

The breadth of route alternatives and response strategies available to emergency professionals to manage a potential fire in the County cannot and should not be evaluated using this evacuation analysis alone. A comprehensive view of Project fire safety is gained by understanding this memorandum, the Project's Evacuation Plan (Dudek 2023), along with the standard protocols and "in-the-field" decision making of emergency responders as detailed in the County[12] and nearby cities Emergency Response Plans documents.

This travel time analysis presents a reasonable vehicle travel time estimate based on professional judgment made by CRA, Dudek, and fire operations experts with experience participating in evacuations in Southern California. Changing any number of these assumptions can lengthen or shorten the average vehicle travel time.

For instance, a situation could arise in which professionals *may* choose to utilize additional roadways for evacuation not utilized in the analyses and *may also* choose to guide vehicle trips to more or different route permutations relative to what has been modeled in this analysis. A phased evacuation is also likely to be implemented, which improves the orderly flow of traffic in an evacuation scenario.

The net result of changing the variables selected could yield an average evacuation travel time shorter or longer than the results detailed in the analysis. Many factors can shorten or lengthen the vehicle time from the results shown herein. For example:

1. Changing the evacuation area affected by the evacuation order would affect the results. For Instance, emergency managers could order an early evacuation of land uses located in higher risks area, such as the Southern Oaks community. Thus, by the time an evacuation order is established for the proposed Project, there would be less vehicles on the road.

2. Increasing or decreasing the number of path permutations and percentage of the population utilizing each route that leads out of the immediate area could shorten or lengthen vehicle travel time relative to the results shown herein.

3. Emergency professionals electing to reserve certain travel lanes for emergency vehicle ingress for periods of time could affect the travel time relative to the results shown herein.

4. Assuming evacuees utilize fewer or more vehicles to evacuate from their homes relative to the vehicle utilization rate selected in the analysis would shorten or lengthen vehicle travel time relative to the results shown herein.

5. Changing the mix of vehicle trips allocated to each evacuation route could shorten or lengthen vehicle travel time relative to the results shown herein.

6. Assuming different road condition adjustment factors could shorten or lengthen the vehicle travel time relative to the results shown herein.

[12] https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/plans/op-area-plan/2022/EOP2022_Annex%20Q.pdf

7. Assuming fewer people are at home when the evacuation notice is given would reduce the number of vehicle trips and shorten vehicle travel time relative to the results shown herein. For instance, an evacuation during daytime hours could result in fewer outbound trips than assumed in this analysis.

8. Assuming some portion of vehicle trips are made in advance of the evacuation notice would reduce the number of vehicle trips relative to the results shown herein.

9. Assuming emergency professionals elect to implement contraflow on certain roadways to open up additional lanes for emergency evacuation egress could reduce the travel time results shown herein.

This evacuation time analysis is necessarily limited in scope given the numerous variables inherent in a wildfire and evacuation event. However, as discussed above, it is not anticipated that the Project will significantly impact evacuation of the proposed or existing surrounding communities based on evacuation times and other qualitative considerations.

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Average Vehicle Ownership

		Census Tract 186.01, San Diego County, California		
Label	**VEH Available**	**Estimate**	**Margin of Error**	**Total Veh**
Total:		1469	±123	3547
No vehicle available	0	14	±24	0
1 vehicle available	1	208	±96	208
2 vehicles available	2	611	±117	1222
3 vehicles available	3	427	±118	1281
4 or more vehicles available	4	209	±78	836
Average Veh / HH	**2.41456773**			

Count of Land Use for Each Area – Area A

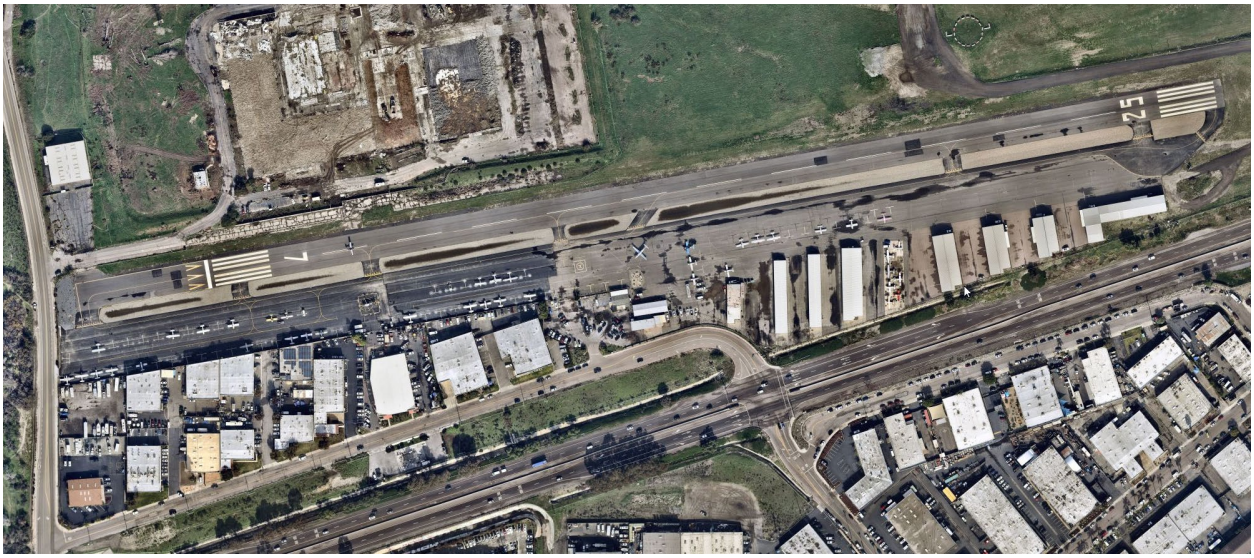
Row Labels	Count of Use Type
COMMERCIAL	13
INDUSTRIAL	1
NO VALUE	15
OFFICE	1
RECREATIONAL	16
RESID. CONDOMINIUM	1
RESID. SINGLE FAMILY	1084
RESTAURANT	20
VACANT	6
(blank)	
Grand Total	**1157**

Count of Parking Spaces Usage in Area B

Area B - Monastary	Parking Spaces
1	5
2	23
3	132
Total	160
Area B - Junk yard	100

Count of Parking Spaces and Usage in Area C

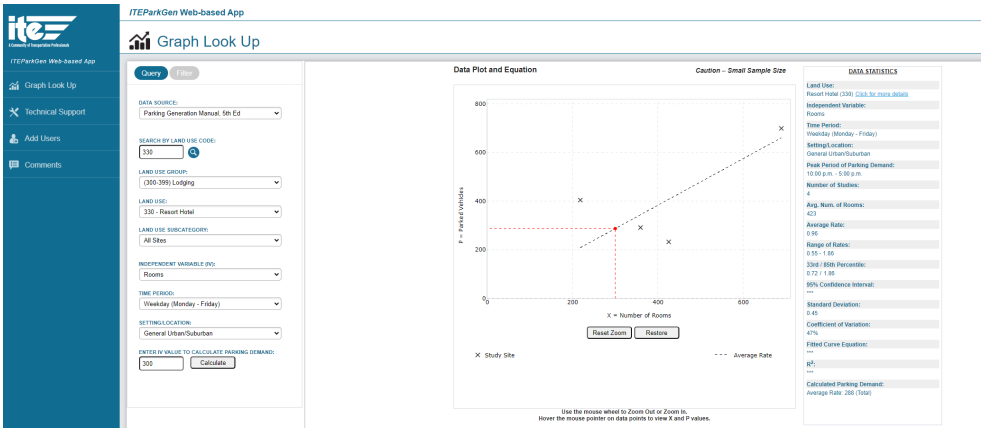
Total Counts: 125 | Conservative Analysis Assumption 150



Area D – Ocean Kamp[13]

Land Use	Amount	TYPE	ITE Rate or Average Rate	Total	Note
Hotel Resort	300	Room	0.96	288	
Residential	700	Multi-Family Residential	2.41	1687	
Commercial	126	KSF Commercial	1.92	242	
	1	Surf Lagoon	180	180	360 Trips = 180 vehicles
			Total	2397	

Resort hotel parking generator



[13] Source: LOCAL TRANSPORTATION STUDY OCEAN KAMP PROJECT Oceanside, California July 14, 2021 LLG Ref. 3-19-3145

Existing						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	1	200	8	3665.41	3465.41	0:57
B	2	200	9	2953.625	2753.625	0:45
C	3	200	10	1491.67	1291.67	0:21
D	4	0	11	0	0	0:00

Existing with Project						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	1	200	8	4250.155	4050.155	1:07
B	2	200	9	3437.175	3237.175	0:53
C	3	200	10	1500.72	1300.72	0:21
D	4	0	11	0	0	0:00
Project	5	200	12	2813.265	2613.265	0:43

Project						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
Project	7	200	13	1885.715	1685.715	0:28

Cumulative						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	1	200	8	3784.35	3584.35	0:59
B	2	200	9	3033.805	2833.805	0:47
C	3	200	10	1563.165	1363.165	0:22
D	4	200	11	4040.81	3840.81	1:04
Project	6	0	13	0	0	0:00

Cumulative with Project						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	1	200	8	4362.63	4162.63	1:09
B	2	200	9	3519.265	3319.265	0:55
C	3	200	10	1611.53	1411.53	0:23
D	4	200	11	4210.2	4010.2	1:06
Project	7	200	14	2837.98	2637.98	0:43

Scenario 6 - Existing Land Uses with Cumulative Projects – Benet Road Closed						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	1	200	6	5453.36	5253.36	1:27
B	2	200	7	4702.855	4502.855	1:15
C	3	200	8	1493.7	1293.7	0:21
D	4	200	9	3730.55	3530.55	0:58

Scenario 7 – Existing Land Uses with Cumulative Projects with the proposed Project – Benet Road Closed						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	200	6	5459.87	5259.87	1:27	200
B	200	7	4703.5	4503.5	1:15	200
C	200	8	1606.72	1406.72	0:23	200
D	200	9	3929.77	3729.77	1:02	200
Project	200	10	2760.655	2560.655	0:42	200

Scenario 8 - Existing Land Uses with Cumulative Projects – Foussat Road Closed						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	1	200	6	5765.23	5565.23	1:32
B	2	200	7	3003.525	2803.525	0:46
C	3	200	8	1555.335	1355.335	0:22
D	4	200	9	3957.845	3757.845	1:02

Scenario 9 – Existing Land Uses with Cumulative Projects with the proposed Project – Foussat Road Closed						
Start Zone	Start Gate	Start Time	End Gate	End Time	Elapse Seconds	Elapse Time
A	1	200	6	5765.23	5565.23	1:32
B	2	200	7	3003.525	2803.525	0:46
C	3	200	8	1555.335	1355.335	0:22
D	4	200	9	3957.845	3757.845	1:02
Project	5	200	10	2738.52	2538.52	0:42

Reference & Analysis Tool Selection

The methodology for fire evacuation analysis is rapidly advancing as new data and best practices become available. Before conducting the evacuation analysis, a thorough historical review of fire evacuation behavior and practices was undertaken to ensure the analysis accurately reflects local conditions. Consequently, the list of references in the technical memorandum only includes documents that pertain directly to local operating conditions and behaviors. The intention behind this selective referencing is to guide decision-makers towards specific, location-relevant guidelines rather than providing a comprehensive list of all reviewed best practices.

CRA has compiled an extensive list of research and findings on best practices for both wildfire and standard evacuation analyses. These foundational best practices informed our evacuation analysis, and a selection of the most relevant and recent research is included at the end this section. According to the research, wildfire evacuation analysis is not a one-size-fits-all approach; certain tools and practices are better suited for jurisdiction-wide analysis, including transportation modeling, roadway capacity-based analysis, GIS analysis, and custom tools. Notably, "A Review of Traffic Models for Wildland-Urban Interface Wildfire Evacuation" (Bergstedt, 2017) identified 12 tools for evacuation analysis, a number that continues to grow as more data and computing power become available.

Vissim, although not the sole tool available for fire evacuation analysis, was chosen for its capability to simulate driver behaviors, particularly undesirable behaviors such as competing for the right-of-way during evacuations. This capability is endorsed by the Bergstedt research paper and is utilized by various agencies, including the Utah Department of Transportation and the Florida Department of Transportation for hurricane evacuation analysis. Vissim's popularity and widespread use in evacuation analysis are evidenced by its citation in over 700 research papers, reflecting its effectiveness in mirroring human behavior. Despite the availability of other tools, Vissim was deemed the most suitable for this Project's evacuation analysis.

Additionally, the "Traffic Modeling for Wildland–Urban Interface Fire Evacuation" research paper, which evaluated a broad range of potential fire evacuation modeling platforms including microsimulation, supports the methodology used in this Project. The paper underscores that microsimulation should be sensitive to local conditions and reflect actual demand. This aligns with our approach: vehicle ownership was derived from census data to mirror local demand accurately, and speed and traffic counts were meticulously gathered from all study area roadways to calibrate the model. The research findings affirm the conclusions of the CRA team regarding the adoption of best practices in evacuation modeling.

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Additional Assumptions – Methodical Approach

Current evacuation practice typically targets the scope of the evacuation only to the area in immediate danger. Specifically, the County of San Diego (including jurisdictions within San Diego County) utilizes the Genasys Evacuation system to provide precise evacuation information[14]. Targeting the area in immediate danger allows for better evacuation operations, reduces gridlock, and reserves sufficient travel way for emergency vehicles. Under this approach, first responders or law enforcement personnel will direct traffic at all major intersections during the evacuation process.

The San Diego County Operational Area Evacuation and Repopulation Policy #8-B[15] provides the following procedures when an evacuation is needed:

Fire Department Responsibilities

- Establish command of the Incident
- Conduct a situation assessment and evaluate the need for evacuations
- Establish an Incident Command Post (ICP) with sufficient room for representatives from other assisting agencies and announce its location
- Request Agency Representative from Law Enforcement to respond to the ICP.

Law Enforcement Responsibilities

- Assign supervisor of the rank of Sergeant or above to the Incident Command Post and request a Deputy to locate with Operations Section Chief
- Maintain ingress and egress routes for emergency vehicles
- Establish perimeter control, keeping unauthorized vehicles and pedestrians out of the involved area. Conduct evaluations, if required, at the direction of the Incident Commander
- Establish anti-looting security patrols, when safe to do so, for evacuated areas within the perimeter
- Maintain a Unit log

Joint Fire and Law Enforcement Responsibilities

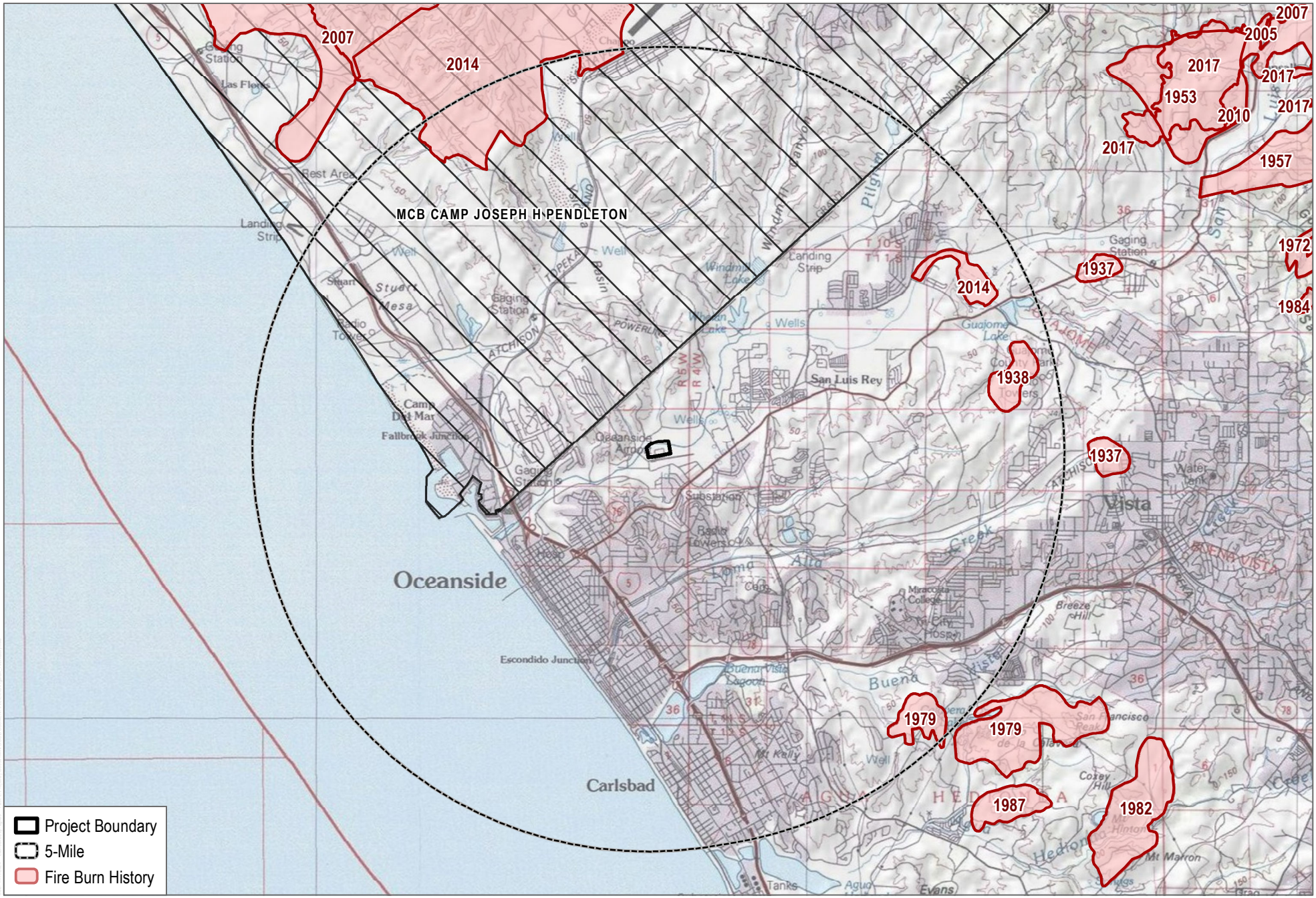
- Evaluate and determine whether Law Enforcement role will be as an Agency Representative or Unified Incident Commander, depending on the scope of the Incident
- Assign a Law Enforcement supervisor to work closely with the Operations Section Chief or Incident Commander, whomever is determining the areas to be evacuated
- Assess and validate the need for an Evacuation Warning, Evacuation Order, and/or Shelter in Place — Determine the location, potential size, and direction of Incident travel or spread
- Unified Commanders determine potential for Incident spread and request the appropriate resources to complete the evacuation and mitigate the Incident concurrently

While this study assumed a worst-case simultaneous evacuation of all existing uses/occupants within the modeled area (i.e., SDC 0427). To remain conservative, this analysis considers a mass evacuation event; however, in an actual evacuation scenario, if necessary (i.e., the encroaching fire poses an immediate threat to evacuation traffic), OPD or IC would use traffic control measures (e.g., controlling intersections, barricades, etc.) to prioritize evacuation of land uses located closest to the area with immediate risk, depending on the location of the fire, which may result in reduced evacuation timeframes compared to this modeling.

[14]https://www.sandiegouniontribune.com/news/public-safety/story/2024-05-30/new-evacuation-notification-system

[15] https://sdoparea.org/wp-content/uploads/documents/8B%20Evacuation%20and%20Repopulation.pdf

Appendix D
Fire History



SOURCE: CalFIRE; SANGIS 2024; USGS Topographic Base Map

DUDEK

0 1 2 Miles

Fire History

Wildfire Evacuation Study for the Eddie Jones Way Industrial Project

Appendix E – Quick Reference Guide

Quick Reference - Wildfire Preparedness

The Quick Reference Guide provides helpful tips and educational resources, so occupants (e.g., employees and visitors) are prepared in the event of a wildland fire evacuation.

Evacuation routes for Project occupants are detailed in Section 4 and illustrated in Figure 1. Figure 2 displays the Project's vicinity location, and Figure 3 is the Project's site plan. Occupants should know available routes, stay informed, and follow directions provided by law enforcement or fire agencies, news media, and other credible sources, and should not rely on navigation apps that may inadvertently lead persons toward the approaching wildfire.

Nearest Medical Facilities

Hospitals:

Tri-City Medical Center
4002 Vista Way
Oceanside, CA 92056

Head south on Benet Road
Turn right on Highway 76
Take the on-ramp for Interstate 5 South
Take exit 51b for Highway 78 East
Turn right onto Highway 78 East
Take exit 3 for College Boulevard
Turn left onto College Boulevard
Turn right onto Vista Way
Turn left onto Tri City Hospital
Stay left on the fork
Hospital on right

Scripps Memorial Hospital Encinitas
354 Santa Fe Drive
Encinitas, CA 92024

Head south on Benet Road
Turn right on Highway 76
Take the on-ramp for Interstate 5 South
Take exit 41a for Santa Fe Drive
Turn right onto Santa Fe Drive Comfort Way
Turn right into hospital parking lot, before the roundabout
Hospital on right

Urgent Care Facilities:

8-2-8 Urgent Care
4171 Oceanside Blvd #109
Oceanside, California 92056

Carbon Health
2484 Vista Way #2484A
Oceanside, CA 92054

Scripps Medical Center
2205 Vista Way
Oceanside, CA 92054

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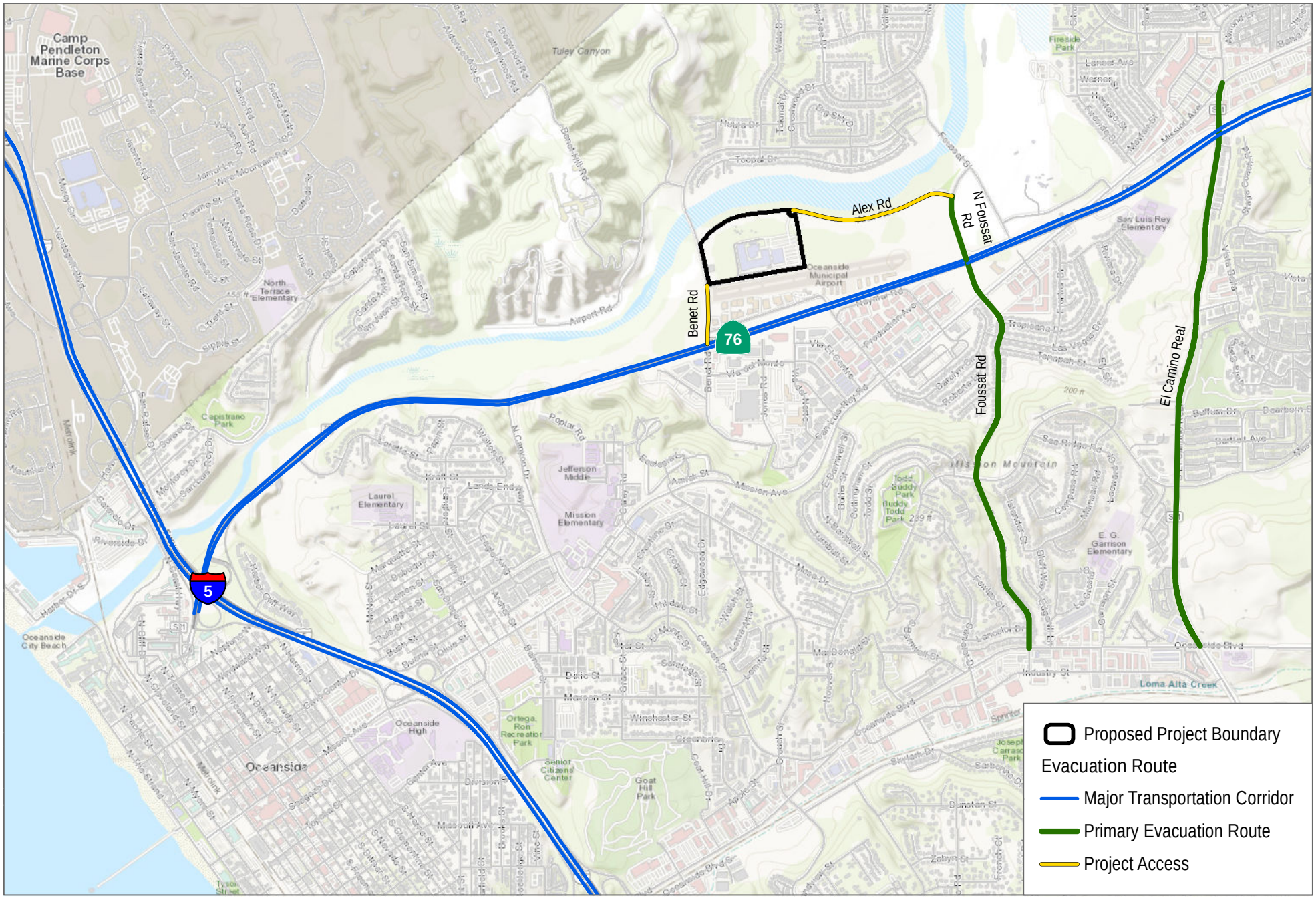

SOURCE: BASEMAP-ESRI 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Evacuation Routes

Wildfire Evacuation Study for the Eddie Jones Way Industrial Project

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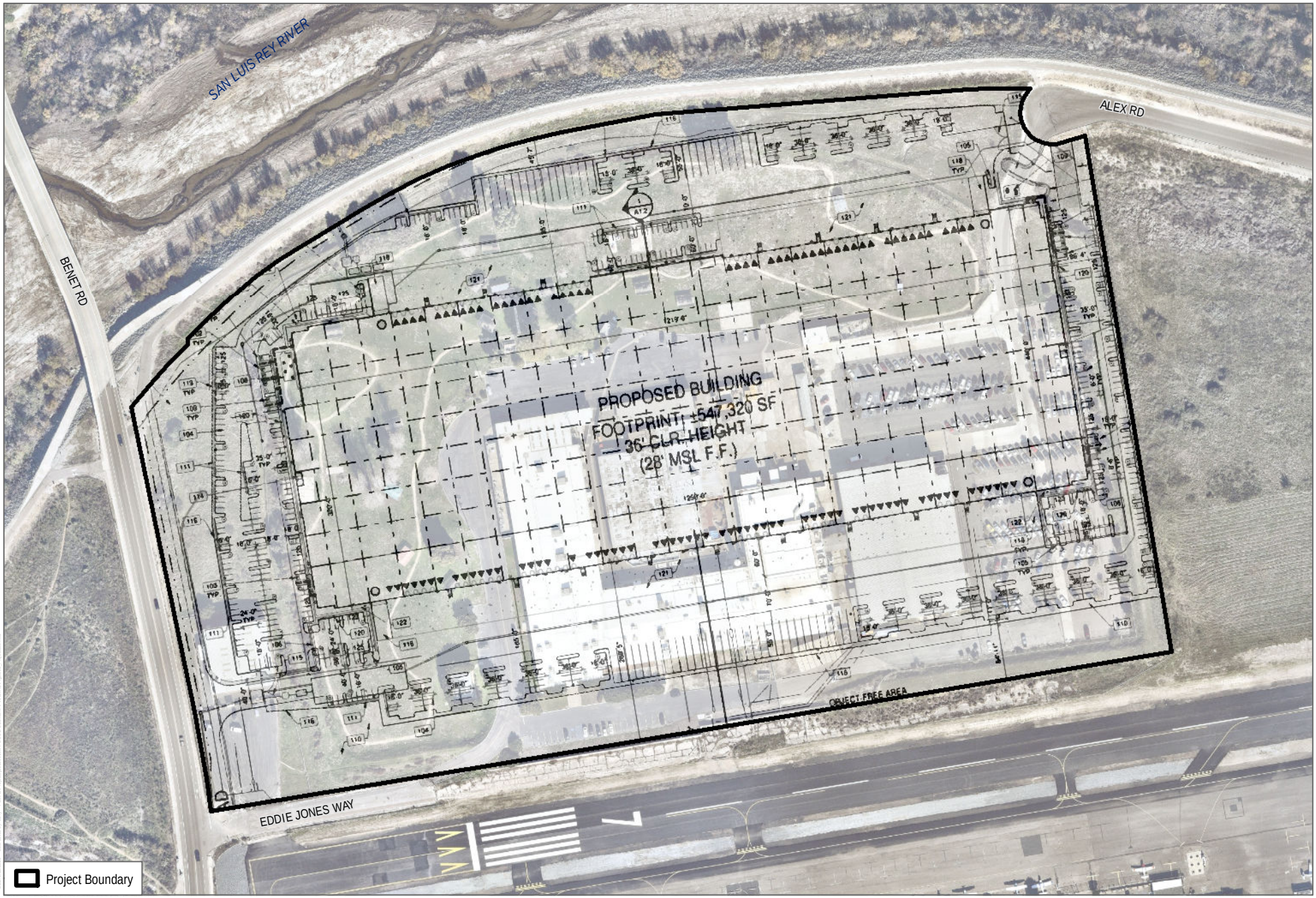

SOURCE: SANGIS 2020, 2022

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0 100 200 Feet

FIGURE 2

Project Vicinity

Wildfire Evacuation Study for the Eddie Jones Warehouse, Manufacturing & Distribution Facility

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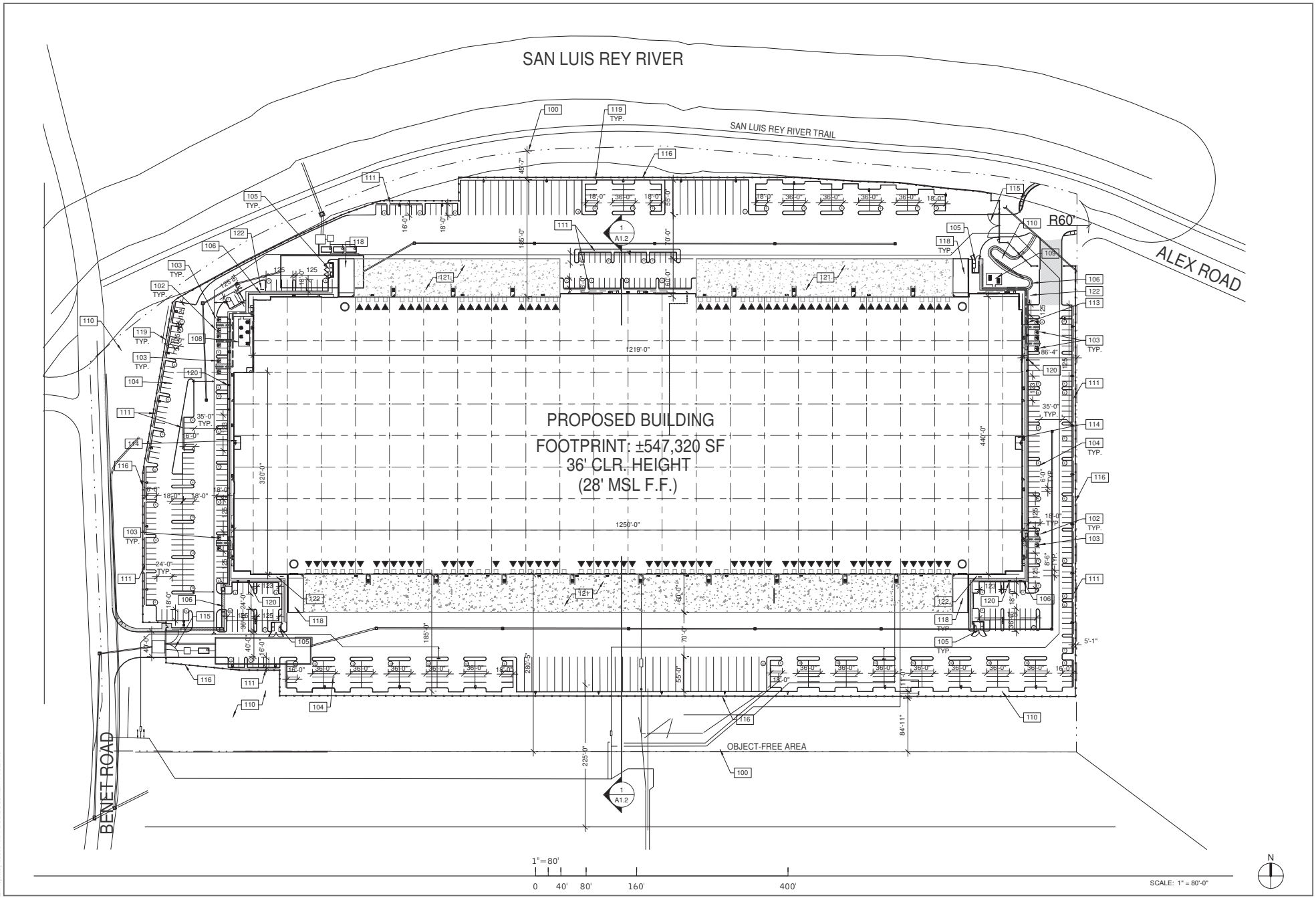

FIGURE 3

Site Plan

Wildfire Evacuation Study for the Eddie Jones Warehouse, Manufacturing & Distribution Facility

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Register to Receive Emergency Alerts

The City of Oceanside (City) utilizes Ready Oceanside for its Community Emergency Notification System. The Oceanside Police Department launched Ready Oceanside in March 2023, which is a free service that allows individuals to sign up for notifications sent from state and local authorities. The new features offered by Ready Oceanside include text, email, and voice alerts that provide maps and images, and is available in multiple languages. Ready Oceanside also provides notifications about potentially hazardous situations involving police activity, weather, road closures, and other emergencies. Similarly, Alert San Diego is a countywide standard system that is managed as a regional asset by the County of San Diego Office of Emergency Services. In the event of a wildfire within the city limits, the Incident Command (IC) or other City departments will contact the San Diego County Sheriff's Department (SDCSD) to coordinate response efforts and evacuation, if necessary. The SDCSD has the ability to activate the Alert San Diego system and release an emergency notification (San Diego 2022) to affected populations. Further, the Genasys Protect platform is another resource for occupants to use to stay informed in the event of an emergency. The Genasys Protect app classifies areas of the jurisdiction into zones and will order an entire zone evacuation, expediting the evacuation process. Occupants of the Eddie Jones Project are strongly advised to know their Genasys Protect zone and register their land lines, mobile phone numbers and email addresses with:

- Ready Oceanside: https://www.smart911.com/smart911/ref/reg.action?pa=oceansideca
- Alert San Diego: https://www.readysandiego.org/content/oesready/en-us/alertsandiego.html
- Genasys Protect: https://protect.genasys.com/search

The occupants of the Eddie Jones Warehouse Project are part of the greater San Diego media market, and the local media outlets will also be a good source of information, via television and radio, on overall emergency situations and how occupants should respond. In addition, the San Diego Emergency Alert System (EAS) is county-wide and broadcasts emergency information via three radio stations: KOGO AM 600, KLSD AM 1360, and public radio station KPBS FM 89.5.

Television outlets include:

- Channel 18 – KOCT, the Oceanside cable channel
- Channel 19 – The County News Center (CNC) TV

Social media provides another outlet for news:

City of Oceanside

- Facebook: https://www.facebook.com/CityofOceanside/
- Twitter: https://twitter.com/CityofOceanside

Oceanside Police Department

- Facebook: https://www.facebook.com/OceansidePD/
- Twitter: https://twitter.com/OceansidePD

Oceanside Fire Department

- Facebook: https://www.facebook.com/OceansideFireDepartment/
- Twitter: https://twitter.com/Oceanside_Fire

San Diego County

- Facebook: https://www.facebook.com/sandiegocounty/

San Diego County Sheriff

- Twitter: https://twitter.com/sdsheriff

In addition to phone, television, radio, and social media reporting, the County of San Diego has SD Emergency, an application for your mobile device that provides preparedness information and emergency incident notifications. SD Emergency is available on the Apple Store and Google Play, additional information is available at https://www.readysandiego.org/SDEmergencyApp/.

Get Involved in Community Readiness

Occupants of the Eddie Jones Warehouse Project are encouraged to participate in local Community Emergency Response Team (CERT) training (https://www.oceansidecert.org/). The Owner/Property Manager will organize annual evacuation education for all employees, visitors and any occupants anticipated on the Project site as well as maintaining a fire safe page on the Project's website, including this Wildfire Evacuation Study (WES) and links to important preparedness information. This information will be made available to all anticipated occupants of the Project.

This Wildfire Evacuation Study is prepared specifically for the Eddie Jones Warehouse Project and focuses on wildland fire evacuations, although many of the concepts and protocols will be applicable to other emergency situations. Ultimately, this WES should be used by employees for awareness of evacuation approaches during wildfires and other similar emergencies. It is important for the employees to understand the importance of being prepared, so if/when the time comes where evacuation is necessary, they will be able to calmly implement their personal evacuation plan. Some actions the community occupants can do in advance include:

- Follow the "Ready, Set, Go!" model developed for wildfire evacuations. Occupants should create an individual evacuation plan.
- All employees should know the available evacuation routes, stay informed and follow directions provided by credible sources.
- No employee should rely on navigation apps that may inadvertently lead them toward an approaching fire.
- All employees should be encouraged to prepare a car emergency kit, including cell phone charger, flashlight, jumper cables, water, and food.

Sample emergency preparedness resources available to the Eddie Jones Warehouse Project occupants are provided in Appendices A1 through A4 (City of Oceanside Emergency Preparedness Resources, San Diego County Emergency Preparedness Resources, Firewise Wildfire Preparation, and "Ready, Set, Go!" Wildland Fire Action Plan)

and Appendices B1 through B4 (Family Disaster Plan and Personal Survival Guide), and occupants will have training that makes them with the concepts detailed at the following websites:

1. "Ready, Set, Go!" Personal Action plan:

   https://www.readysandiego.org/content/dam/oesready/en/Resources/wildfire_preparedness_guide.pdf
2. Red Cross Emergency Planning:

   http://www.redcross.org/get-help/how-to-prepare-for-emergencies/make-a-plan
3. Hazardous Materials Emergency Preparedness:

   https://www.ready.gov/hazardous-materials-incidents
4. Building a disaster kit:

   http://www.redcross.org/get-help/prepare-for-emergencies/be-red-cross-ready/get-a-kit
5. Making a Plan Checklist:

   https://www.ready.gov/make-a-plan
6. Family Communication Plan:

   https://www.ready.gov/collection/family-communication-plan

Evacuation Study Purpose and Limitations

Wildfire and other emergencies are often dynamic events and the need for evacuations are typically determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams, including Office of Emergency Services and the IC established for larger emergency events. As such, and consistent with all emergency evacuation plans, this Wildfire Evacuation Study is to be considered a tool that supports existing pre-plans and provides for occupants who are familiar with the evacuation protocol. Consistent with applicable laws and governmental emergency evacuation protocols, this plan is subservient to emergency event-specific directives provided by agencies managing the event.

Appendix F – Limitations

Limitations

Wildfire Evacuation Study ("WES")

This section details basic evacuation information that will familiarize Project occupants with alternate bodily and property options that may be available to them during an emergency; mindful, however, that real-time law enforcement and fire personnel/agencies' decision-making and direction during an emergency requiring evacuation is of utmost importance and must be adhered to.

This WES analyzes the existing community's evacuation times currently, and assuming the construction of the Project as it relates to wildfires; however, the components of the plan may also be useful in similar situations, as noted above. The estimated evacuation times are based on several assumptions detailed further below in this WES. However, actual evacuation times may be faster or slower than the estimates, depending on the type of emergency, the extent of the evacuation, its gravity, the time of day, and other factors. A collective, community–wide evacuation of existing populations and the proposed population from the Project would include congested roads in its existing condition that are improved, but still congested with the Project. Congested roads are normal in any urban setting when a large evacuation is declared unless it is managed appropriately (*e.g.*, evacuation areas are staggered to reduce the potential traffic surges that can significantly impact evacuations), there would still be the potential for congestion and delays.

This WES promotes the "Ready, Set, Go!" model, adopted by County of San Diego, CAL FIRE, and many fire agencies statewide. The goal is to raise agency and citizen awareness of potential evacuation issues and get a majority of the public "Ready" by taking a proactive stance on preparedness, training drills, and resident education, and evacuation planning efforts.

The Project populace will be "Set" by closely monitoring the situation whenever fire weather occurs and/or when wildfire occurs and elevating pre-planned protocol activities and situational awareness.

Lastly, fire or law enforcement officials will mandate that populations "Go" by executing pre-planned evacuation procedures. The preferred alternative, initially, may well be early evacuation. However, there may be instances when evacuation is not possible, is not considered safe, or is not an option based on changing conditions, or other factors.

The Project also is designed specifically to maintain an enhanced resistance to wildfire ignition and perform as a fire adapted Project, offering fire and law officials with additional options for safety to the populace compared to those options available to less thought-through projects.

As noted, this WES does not and cannot provide any guarantees. Fire is a dynamic and unpredictable occurrence, and it is important for those in a high fire severity zone to educate themselves on practices that will improve safety and that will be able to be implemented at the individual level rapidly and effectively, albeit in combination with protocols and "in-the-field" decision making of emergency responders.

Summary – Vehicle Travel Time Scenarios

This WES presents a reasonable vehicle travel time estimate based on professional judgments made by CRA, taking into consideration input from Dudek and other resources. Changing any number of these assumptions can lengthen or shorten the average vehicle travel time. For instance, a situation could arise in which professionals *may* choose to utilize additional roadways for evacuation not utilized in the Dudek/CRA analysis and *may also* choose to send more vehicle trips to certain evacuation routes and *may also* choose to guide vehicle trips to more or different route permutations relative to what has been modeled in this the Dudek/CRA analysis. The net result of changing the

variables selected could yield an average evacuation travel time shorter or longer than the results detailed in the Dudek/CRA analysis.

Many factors can shorten or lengthen the vehicle time from the results shown herein. For example:

1. Changing the possible evacuation routes selected would affect the results. For instance, utilizing roads for ingress and/or egress that are not utilized in this analysis could shorten vehicle travel times relative to the results shown herein.
2. Increasing or decreasing the number of path permutations and percentage of the population utilizing each route that leads out of the immediate area could shorten or lengthen vehicle travel time relative to the results shown herein.
3. Emergency professionals electing to reserve certain road lanes for emergency vehicle ingress for portions of time could affect the travel time relative to the results shown herein.
4. Assuming evacuees utilize fewer or more vehicles to evacuate from the Project or surrounding communities relative to the Vehicle Utilization Rate selected in the analysis would shorten or lengthen vehicle travel time relative to the results shown herein.
5. Changing the mix of vehicle trips allocated to each evacuation route could shorten or lengthen vehicle travel time relative to the results shown herein.
6. Assuming a different road capacity adjustment factor could shorten or lengthen the vehicle travel time relative to the results shown herein.
7. Assuming fewer people are at home when the evacuation notice is given would reduce the number of vehicle trips and shorten vehicle travel time relative to the results shown herein. For instance, an evacuation during daytime hours would typically result in fewer outbound trips than assumed in this analysis.
8. Assuming some portion of vehicle trips are made in advance of the evacuation notice would reduce the number of vehicle trips relative to the results shown herein.
9. Assuming some homeowners and their families are not in the Study Area when evacuation notice is given (most likely in a daytime evacuation event), could reduce the number for vehicle trips relative to the results shown herein.

The evacuation time analysis is necessarily limited in scope given the numerous variables inherent in a wildfire and evacuation event. However, as discussed above, it is not anticipated that the Project will significantly impact evacuation of the proposed or existing surrounding communities based on evacuation times and other qualitative considerations.

Limitation On Reliance Or Dependence Upon Report

Any person or entity furnished with this report and/or who reviews it agrees that the advance written consent of Dudek be sought and furnished to such person or entity prior to the review, reliance or authorization as to any matters that are the subject of the reports by any person or entity (whether through act or omission as set forth in the report), other than Dudek's direct client. In such case, obtaining Dudek's consent shall not be subject to any fee or charge (other than reasonable copy costs, where applicable).

Dudek expressly disavows, does not assume any responsibility for, nor will be liable for any claims, losses, or damages associated with any matters that are the subject of this or other reports it prepares or contributes to respecting this project, however characterized (including without limitation as sounding in tort, breach of contract, misrepresentation by act or omission, failure to adhere to applicable standards of professionalism, statutory liability, etc.), whether in law or equity, whether known or unknown, and whether actual or contingent, excepting only Dudek's direct client, as to which the limitation of liability provisions in the contract between Dudek and its client shall govern.

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