
IV. ENVIRONMENTAL IMPACT ANALYSIS

H. HAZARDS AND HAZARDOUS MATERIALS

INTRODUCTION

This section of the DEIR evaluates potential hazards and hazardous materials that may result from implementation of the Stonegate Vesting Tentative Subdivision Map and General Plan Amendment / Rezone (“proposed project”). Hazardous materials that could be introduced as a result of project implementation, as well as possible health hazards associated with the proposed project, are assessed in this section.

ENVIRONMENTAL SETTING

The following section summarizes identified hazards and potentially hazardous materials existing or considered likely to occur on the project site, and which could therefore impact the proposed project. This includes a consideration of risk from exposure to hazards or hazardous materials during earthwork and grading, construction, and during the course of normal operations at the proposed Stonegate Subdivision.

As discussed in Section III (Project Description) of this DEIR, the project site is located along the east and west side of Bruce Road, between E. 20th Street and the Skyway at Assessor Parcel Numbers (“APNs”) 002-190-041, 018-510-007, 008, and 009. The project site is generally level open space, gently sloping up to the northeast and was historically used for grazing land, although that use has been much less active in during the past 25 years. Surrounding land uses include a mix of single-family and multi-family residential uses, commercial uses, grazing land, and public open space. A detailed discussion of the site topography is provided in Section IV.F (Geology and Soils).

Hazardous Materials

According to 22 California Code of Regulations (“CCR”) § 66261.20, the term “hazardous substance” refers to both hazardous materials and hazardous wastes, both of which are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity. A hazardous material is defined by 22 CCR § 66261.10 as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (22 CCR § 66261.10).

Hazardous Sites (Cortese List)

The provisions of Government Code 65962.5 require the Department of Toxic Substance Control (“DTSC”), the State Water Resources Control Board, the California Department of Health Services, and the California Integrated Waste Management Board to submit information pertaining to sites associated with solid waste disposal, hazardous waste disposal, and/or hazardous materials releases to the Secretary of Cal/EPA. Based on a review of regulatory databases,¹ including listed hazardous materials release sites compiled pursuant to Government Code 65962.5, the project site is not listed as a hazardous materials site. The nearest active cleanup site is located at Bruce and Humboldt Roads, Highway 32, approximately 0.88 miles north of the project site. This site was previously a burn dump and landfill that is now an active cleanup site under the State’s jurisdiction.

Emergency Response/Evacuation

The City of Chico and Butte County have both adopted Emergency Response Plans², which include prearranged emergency response procedures and mutual aid agreements for emergency assistance with the City. Emergency routes for evacuation of Chico are Highway 99 and State Route 32.

Wildfire Hazards

The California Department of Forestry and Fire Protection (“CAL FIRE”) has mapped areas in Butte County with significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Very High Fire Hazard Severity Zones, are classified by the CAL FIRE Director in accordance with Government Code Sections 51175-51189 to assist responsible local agencies identify measures to reduce the potential for losses of life, property, and resources from wildland fire. According to CAL FIRE, the project site is not located within a Fire Hazard Severity Zone, but the site is located adjacent to a Moderately High Fire Hazard Severity Zone (“MHFHSZ”).³

¹ State Water Resources Control Board, 2011. *GeoTracker Environmental Database*. <http://www.envirostor.dtsc.ca.gov/public/>. Accessed May 2016..

² City of Chico Resolution No. 72-14 adopting the Butte County Local Hazard Mitigation Plan <https://www.buttecounty.net/oem/MitigationPlans.aspx>

³ CAL FIRE. 2007. Available at: http://www.fire.ca.gov/fire_prevention/fhsz_maps_butte. Accessed May 2016.

REGULATORY SETTING

A variety of laws and regulations at the federal, state, and local levels affect the management and control of hazardous substances. These regulations are intended to protect both the environment and public health from improper use, handling, storage, transport, and disposal of hazardous materials. The following section describes the regulatory framework for hazardous materials, worker health and safety requirements and potentially hazardous materials associated with the proposed construction.

Federal and State Regulations

California Environmental Protection Agency

In California, the U.S. Environmental Protection Agency (“EPA”) has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (“Cal EPA”). In California, regional agencies are responsible for programs regulating emissions to the air, as well as discharges to soil, surface water, and groundwater.

Hazardous Materials

At the project site, the Butte County Air Quality Management District (“BCAQMD”) has oversight over air emissions and the Central Valley Regional Water Quality Control Board (“Central Valley Water Board”) regulates discharges and releases to surface and groundwater. Oversight for investigation and remediation of sites affected by hazardous materials releases can be performed by state agencies, such as the DTSC or the Regional Water Board. The Resource Conservation and Recovery Act (“RCRA”) is the United States’ primary law governing the handling and disposal of solid hazardous waste. RCRA, which was passed into law in 1976, set out to accomplish the following main goals: ensure that wastes are managed in an environmentally sound manner, protect human health and the environment from the potential hazards of waste disposal, reduce the amount of waste generated, and conserve energy and natural resources.

Hazardous Materials Transportation

Transportation of hazardous materials on highways is regulated through the Federal Department of Transportation (“DOT”) and the California Department of Transportation (“Caltrans”). Transportation by rail is regulated through the DOT Office of Railroad Safety, Hazardous Materials Division. Hazardous materials transportation safety programs include a system of placards, labels, and shipping papers required to identify the hazards of shipping each class of hazardous materials. Federal and state laws include regulations outlined in the Hazardous Materials Transportation Act administered by DOT. Caltrans is mandated to implement the regulations established by DOT, which are published as the Federal Code of Regulations, title 49, commonly referred to as 49 CFR. Regulations of hazardous materials and wastes include the manufacture of packaging and transport containers; packing and repacking;

labeling, marking or placarding; handling; spill reporting; routing of transports; training of transport personnel; and registration of highly hazardous material transport.

Hazardous Materials Storage, Handling, and Disposal

Routine hazardous materials management in California is administered under the Certified Uniform Program Agency (“CUPA”) program. The CUPA program was established under California Senate Bill 1082 to reduce the cost and improve the efficiency of hazardous materials regulations. In Butte County, the CUPA is the Butte County Public Health Department (“BCPHD”). The CUPA program encompasses several hazardous materials programs: Hazardous Materials Management Plans (“HMMP”) program, California Accidental Release Prevention (“CalARP”) program, underground storage tank (“UST”) programs, aboveground storage tank (“AST”) programs, and hazardous waste generation and disposal. The six hazardous materials programs administered under the CUPA program are described briefly below.

Hazardous Materials Management Plan

Businesses that store hazardous materials in excess of specified quantities must report their chemical inventories by preparing a HMMP, also known as a Business Plan. This information informs the community on chemical use, storage, handling, and disposal practices. It is also intended to provide essential information to firefighters, health officials, planners, elected officials, employees, and their representatives so that they can plan for and respond to potential exposures to hazardous materials.

California Accidental Release Prevention Program

Under CalARP, businesses that use large quantities of acutely hazardous materials must prepare a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential.

Underground Storage Tank Programs

Due to fire hazards, flammable liquids, such as gasoline, have historically been stored in USTs, which, over time, tend to leak, resulting in potential risks for the general public and the environment. Current regulations require that USTs be installed, monitored, operated, and maintained in a manner that protects public health and the environment. Tanks must be constructed with primary and secondary levels of containment and be designed to protect public health and the environment for the lifetime of the installation.

Aboveground Storage Tank Programs

Inspections and permits are required for facilities storing hazardous materials in ASTs. In addition, any facility operating ASTs with an aggregate tank capacity of 1,320 gallons or more must: (1) complete a Spill Prevention Control and Countermeasure (“SPCC”) plan to provide a detailed engineering analysis of the potential for release from ASTs present at a facility and the measures, such as secondary containment and emergency response that can be implemented

to reduce the release potential; and (2) file a storage statement, as required by the State Water Resources Control Board (“SWRCB”).

Hazardous Waste Generation and Disposal

Once a hazardous material has been used or processed, what remains may be considered a hazardous waste. Many items routinely used by residents and businesses, such as paints and thinners, cleaning products, and motor oil, are considered hazardous waste once they are ready for disposal. Businesses that generate more than 100 kilograms of hazardous waste per month, or more than one kilogram of acutely hazardous waste, must be registered with U.S. EPA’s RCRA program and are subject to extensive regulations regarding storage and disposal. When CUPAs perform inspections for HMMP, they also verify that businesses are properly registered under RCRA and are properly handling and disposing hazardous wastes.

Worker Health and Safety Regulations

Worker health and safety in California is regulated by the California Department of Industrial Relations, Division of Occupational Safety and Health (“California OSHA”). California OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices. Several programs related to worker health and safety are described below.

Injury and Illness Prevention Plan

The California General Industry Safety Order⁴ requires that all employers in California shall prepare and implement an Injury and Illness Prevention Plan, which should contain a code of safe practice for each job category, methods for informing workers of hazards, and procedures for correcting identified hazards.

Emergency Action Plan

The California General Industry Safety Order⁵ requires that all employers in California prepare and implement an Emergency Action Plan. The Emergency Action Plan designates employee responsibilities, evacuation procedures and routes, alarm systems, and training procedures.

Fire Prevention Plan

The California General Industry Safety Order⁶ requires that all employers in California prepare and implement a Fire Prevention Plan. The Fire Prevention Plan specifies areas of potential hazard, persons responsible for maintenance of fire prevention equipment or systems, fire prevention housekeeping procedures, and fire hazard training procedures.

⁴ California Code of Regulations, Title 8, Subchapter 7. General Industry Safety Orders, Section 3203.

⁵ California Code of Regulations, Title 8, Subchapter 7. General Industry Safety Orders, Section 3220.

⁶ California Code of Regulations, Title 8, Subchapter 7. General Industry Safety Orders, Section 3221.

Fire Protection Regulations

The 2010 California Building Code (“CBC”) applies to all occupancies throughout the State of California; however, cities and/or counties may establish more restrictive building standards reasonably necessary because of local climatic, geological, or topographic conditions. Furthermore, local fire jurisdictions may identify additional fire hazard areas, especially in communities adjacent to wildlands. Development of new buildings located within an area designated by the enforcing agency to be at significant risk from wildfires, for which an application for a building permit and/or plan approval for construction is submitted, shall meet the intent of CBC Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure.

Regulations require that building products and construction methods comply with applicable codes and ordinances of the local authority having jurisdiction with compliance submitted to the building official having jurisdiction for final approval.

Local Regulations

City of Chico

City of Chico 2030 General Plan

Policy S-1.1 (Emergency Preparedness) – Promote public safety from hazards that may cause death, injury, or property damage through emergency preparedness and awareness.

Policy S-2.1 (Potential Flood Hazards) – When considering areas for development, analyze and consider potential impacts of flooding.

Policy S-3.1 (Potential Structural Damage) – Prevent damage to new structures caused by seismic, geologic, or soil conditions.

Policy S-4.1 (Fire Safety Staffing) – Maintain adequate fire suppression and prevention staffing levels.

Policy S-4.3 (Fire Safety Standards and Programs) – Support the development and implementation of standards and programs to reduce fire hazards and review development and building applications for opportunities to ensure compliance with relevant codes.

Policy S-4.4 (Vegetation Management) – Support vegetation management and weed abatement programs that reduce fire hazards.

Policy S-5.5 (Crime Detering Design) – Support the deterrence of crime through site planning and community design.

Policy S-8.1 (Hazardous Materials Safety Coordination) – Support efforts to reduce the potential for accidental release of toxic and hazardous substances.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Based on the Appendix G, Environmental Checklist Form, of the State *CEQA Guidelines*, the project would have a significant impact on the environment related to hazards and hazardous materials if it would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Hazards and Hazardous Materials Criteria Not Discussed Further in the Draft EIR

The following issues were addressed in the Initial Study (see Appendix A) and Section IV.A of this Draft EIR and were determined to result in no impact or a less-than-significant impact and not warrant further analysis:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

Project Impacts and Mitigation Measures

Impact HAZ-1: Emergency Response and Evacuation

The General Plan identifies Highway 99 and SR32 as emergency routes for evacuation within the City. The project site is approximately 1.15 miles east of Highway 99 and 1.15 miles south of SR32. Access to Highway 99 is would be provided through the proposed roadways that lead to either E.20th Street or Skyway. Access to SR32 would be provided through the proposed roadways that lead to Bruce Road. While the construction workers and vendors would use these routes to access the project site, this would not create a level of traffic that would impede emergency access to or from the site during construction activities. During construction, appropriate coordination with the Chico Fire Department and Police Department would be required to ensure emergency vehicle access is maintained through construction areas. As described in Section IV.O (Transportation and Traffic), the proposed circulation for the project would adhere to the emergency access requirements of the City of Chico for the number of access lanes on each road and approved turn-arounds with appropriate turning radii, thus reducing operational impacts of the project.

While Section IV.L (Population and Housing) of this DEIR utilizes BCAG regional growth projections to analyze impacts of the proposed project on population, the Emergency Management Plan Adopted by the City of Chico utilizes the General Plan's population growth projections to prepare adequate emergency management strategies and evacuation routes. Full buildout of the proposed project is fully covered under the buildout scenario of the General Plan, which utilizes a higher growth rate than the BCAG projections. Finally, the proposed project does not propose any off-site modifications to roadways in a manner that would impair or interfere with emergency response or evacuation (permanent road closures, lane narrowing, one-way street conversions, etc.). Impacts would be less than significant.

Impact HAZ-2: Wildland Fire Exposure

As discussed above, the proposed project is not within a Fire Hazard Severity Zone, but the site is located adjacent to a Moderately High Fire Hazard Severity Zone (“MHFHSZ”). The City of Chico General Plan includes several policies related to fire safety, including Policy S-4.3 (Fire Safety Standards and Programs), which states, “support the development and implementation of standards and programs to reduce fire hazards and review development and building applications for opportunities to ensure compliance with relevant codes.” As all the development and building applications to be developed as a result of this subdivision would undergo review for compliance with City and State fire codes, this policy reduces the risk for new development on the vacant parcels to be at risk from fire threats. As discussed in Impact HAZ-1 above, the proposed project would also comply with emergency access requirements and would provide access to emergency evacuation routes, which would further minimize wildlife impacts on the proposed project.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Hazards and hazardous materials impacts associated with the proposed project would be ***less than significant***.

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