CHAPTER IV

Environmental Setting, Impacts and Mitigation Measures

This chapter constitutes the heart of the EIR analysis. It describes the project's environmental setting, evaluates the project's potential environmental impacts, and, where feasible, sets forth mitigation measures to avoid or substantially reduce any significant adverse effects that would result from development of the Marina Center project.

Environmental Effects Addressed in the EIR

This chapter of the EIR contains the following sections:

A. Aesthetics

See pages beginning with IV.A-1. This section identifies and evaluates key visual resources in the vicinity of the project site and on the project site itself and describes the aesthetic effects of the proposed project on these resources. This section looks at permanent changes in physical features near a state scenic highway; and, the presence of short-term, long-term, or continuous light.

B. Agricultural Resources

See pages beginning with IV.B-1. This section analyzes whether the Marina Center project would result in the adverse conversion of agricultural lands to non-agricultural uses.

C. Air Quality

See pages beginning with IV.C-1. This section analyzes the impacts the Marina Center project would have on ambient air quality and the exposure of people, especially sensitive individuals (receptors), to hazardous pollutant concentrations. This section also discusses climate change and greenhouse gas emissions.

D. Biological Resources

See pages beginning with IV.D-1. This section describes existing biological resources at the project site and the regional vicinity and addresses the impacts the Marina Center project would have on vegetation, wildlife, aquatic resources and associated habitats.

E. Cultural Resources

See pages beginning with IV.E-1. This section identifies and evaluates the potential for the project to adversely affect paleontological, archaeological, and historical resources. The resources of concern include, but are not limited to fossils, prehistoric and historic artifacts, burials, sites of religious or cultural significance to Native American groups, and historic structures.

F. Geology, Soils, and Seismicity

See pages beginning with IV.F-1. This section evaluates whether the Marina Center project would create a physical change in surface or subsurface soil or rock characteristics, or would expose people or structures to major geotechnical hazards. This section identifies and evaluates geologic, soils, and seismic conditions in the project site vicinity and the potential for the proposed project to result in significant impacts related to the geology of the project site.

G. Hazards and Hazardous Materials

See pages beginning with IV.G-1. This section evaluates the potential impacts the Marina Center project would have to expose persons to hazards and hazardous materials, including the transportation, storage, use and disposal of hazardous materials.

H. Hydrology and Water Quality

See pages beginning with IV.H-1. This section describes and evaluates the impacts the Marina Center project would have on surface and groundwater resources. This section also describes and evaluates the impacts generated by runoff that could affect flooding or drainage both on-site and downstream, or by flooding from storm events or dam failure.

I. Land Use and Planning

See pages beginning with IV.I-1. This section identifies and evaluates potential conflicts between the Marina Center project and existing land uses and those that are proposed as part of the project, and potential conflicts with local land use plans and policies.

J. Mineral Resources

See pages beginning with IV.J-1. This to identifies and evaluates the potential for the Marina Center project to adversely affect the availability of known mineral resources.

K. Noise

See pages beginning with IV.K-1. This section identifies existing sources of noise, including ground-borne vibration, and describes and evaluates the future noise conditions, including ground-borne vibration, that would result from the Marina Center project. Noise and ground borne vibration resulting from the Marina Center project would include temporary noise and

ground borne vibration from construction related activities and permanent noise and ground borne vibration anticipated based on expected changes in land use, traffic, and surrounding activities.

L. Population and Housing

See pages beginning with IV.L-1. This section assesses the direct and indirect physical and socioeconomic impacts of the Marina Center project on population growth and on general population levels, and the housing stock of the region.

M. Public Services

See pages beginning with IV.M-1. This section assesses the impacts of the Marina Center project on existing levels of service for fire protection, law enforcement, schools, and other public services, and to determine the improvements that would be required to accommodate the Marina Center project and the resulting environmental impacts of providing increased service capacity.

N. Recreation

See pages beginning with IV.N-1. This section to analyzes the specific effects of the Marina Center project on existing recreation facilities on or near the project site and determines if the Marina Center project would result in substantial increased demand for recreation facilities.

O. Transportation

See pages beginning with IV.O-1. This section describes existing and future traffic circulation and parking patterns, and evaluates the impact of the proposed Marina Center project on these conditions. This evaluation considers project impacts on public transportation and alternative modes of transportation, such as bicycles, shuttles, and walkways. Key transportation issues evaluated include traffic patterns, trip generation, peak congestion periods, areas and cause of congestion, traffic and pedestrian safety, transit availability, parking availability, and bicycle and pedestrian flows.

P. Urban Decay

See pages beginning with IV.P-1. This section evaluates whether the Marina Center project would create long-term store or office closures or vacancies in the greater Eureka area leading to urban decay.

Q. Utilities and Service Systems

See pages beginning with IV.Q-1. This section identifies and evaluates the incremental demand upon and the available capacity of utilities and service systems, including water, wastewater, and solid waste disposal to serve the Marina Center project.

Organization of Sections

Each of the 17 sections identified above contains the following subsections:

Environmental Setting

The environmental setting is the physical environmental conditions in the project vicinity and at the project site at the time that the Notice of Preparation was filed. This establishes a baseline against which to compare the effects of the proposed project. The analysis provides information on the existing resources and, when appropriate, discusses the methodology that was used to determine these existing conditions.

Environmental Analysis

"Effects" and "impacts" as used in this EIR are synonymous. Effects must be related to a physical change and include direct or primary effects which are caused by the project and occur at the same time and place, or indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

The **Environmental Analysis** section is divided into the following subsections:

Significance Criteria

The CEQA Guidelines Section 15382 defines a significant effect on the environment as "*a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.*" Determinations of significance vary with the physical conditions affected and the setting in which the change occurs. The significance criteria used in this EIR are the thresholds for determining significance of potential impacts and are based on Appendix G of the CEQA Guidelines.

Regulatory Framework

The Regulatory Framework section provides a list of the relevant standards and regulations that govern the specific environmental effect and by which the identified impacts are measured.

Project Impacts

The Project Impacts section utilizes the significance criteria to identify and analyze the impacts that would result from development of the Marina Center project. The analysis of environmental impacts uses the baseline for comparison and considers both the construction and operational

phases associated with implementation of the Marina Center project. As required by Section 15126.2(a) of the CEQA Guidelines, direct, indirect, short-term, long-term, on-site, and/or off-site impacts are addressed, as appropriate, for the environmental issue area being analyzed.

Mitigation. The Project Impact analysis recommends feasible mitigation measures, feasible meaning capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. All mitigation measures are proposed by the City of Eureka, as Lead Agency for CEQA. The proposed mitigation measures would reasonably be expected to reduce adverse impacts if required as conditions for approving the project and are fully enforceable through permits, agreements or other legally binding instruments. As defined in Section 15370 of the CEQA Guidelines, mitigation includes any of the following:

- **Avoidance.** Avoiding the impact altogether by not taking a certain action or parts of an action
- **Minimization.** Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- **Restoration**. Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment
- **Elimination**. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- **Compensation**. Compensating for the impact by replacing or providing substitute resources or environments

Finding of Significance. The Finding of Significance is a statement of the level of significance for a potential project impact. If mitigation measures are recommended, the Finding of Significance will include a determination as to whether the impact, following implementation of the mitigation measures, would remain significant, or would be reduced to a less than significant level.

The EIR uses the following terms to describe the level of significance of impacts identified during the course of the environmental analysis:

- **Significant and Unavoidable Impact.** An impact that exceeds the defined threshold(s) of significance and cannot be eliminated or reduced to a less-than significant level through the implementation of feasible mitigation measures.
- **Significant Impact.** An impact that exceeds the defined threshold(s) of significance. For purposes of this document, pre-mitigation impacts that exceed the defined threshold(s) of significance are referred to as significant; however, when the impacts cannot be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures, these impacts are referred to as **Significant and Unavoidable**.

- **Less-than-significant Impact.** An impact that does not exceed the defined threshold(s) of significance. This term is used for impacts for which mitigation measure(s) identified can reduce a pre-mitigation impact to a less-than-significant level.

- **No Impact.** The project would result in no impact.

Cumulative Impacts

Cumulative impacts refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

References

The documents and data sources used in preparing the subsection are listed.