Santa Cruz Downtown Plan Expansion
Draft Subsequent EIR

January 2025
SCH #: 2022090276

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Prepared for

City of Santa Cruz

Planning and Community Development Department

Prepared by

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1 Introduction

1.1 Purpose of the EIR

This EIR has been prepared for the City of Santa Cruz (City), which is the lead agency for the project. The project is more specifically described below in section 1.3 and in Chapter 3 - Project Description but can be broadly described as amendments to the previously adopted Downtown Plan to expand the Plan area to incorporate a 29-acre area south of Laurel Street. For consistency purposes, the project also includes amendments to the City's General Plan 2030, the Local Coastal Program (LCP), the Municipal Code (Zoning Ordinance and Zoning Map), the Beach and South of Laurel Comprehensive Area Plan(B/SOL Plan), and the San Lorenzo Urban River Plan. This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA), which is found in the California Public Resources Code, Division 13, and with the State CEQA Guidelines, which are found in Title 14 of the California Code of Regulations, commencing with section 15000.

As stated in the CEQA Guidelines section 15002, the basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Pursuant to State CEQA Guidelines section 15121, an EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency. While the information in the EIR does not control the ultimate decision about the project, the agency must consider the information in the EIR and respond to each significant effect identified in the EIR by making findings pursuant to Public Resources Code section 21081.

This EIR is being prepared as a "Program EIR" pursuant to section 15168 of the State CEQA Guidelines. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related geographically, by similar environmental effects, as logical parts in the chain of contemplated actions, or in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program. A program EIR can provide a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action and can ensure

consideration of cumulative impacts. A program EIR can be used as part of the environmental review for later individual projects to be carried out pursuant to the project previously analyzed in the program EIR, where impacts have been adequately addressed in the program EIR. For later individual projects proposed in the areas covered by the plans and amendments covered in this EIR, the City will determine whether the individual project or subsequent activity is within the scope of this Program EIR, meaning it is an activity within the same project as analyzed in the program EIR or within the same geographic area encompassed by the program EIR. Depending on the City's determination, including whether new effects could occur, or new mitigation measures would be required, the analysis for later projects could range from no new CEQA document to a new EIR. The City potentially could apply one or more CEQA "streamlining" tools when it considers later projects, such as the focused analytical routes under Public Resources Code sections 21155.2 and 21083.3 and CEQA Guidelines sections 15152, 15182, 15183, and 15183.3. If appropriate and applicable to a proposed project, the City may also consider one or more statutory or categorical exemptions. The State CEQA Guidelines encourage agencies to "tier" the environmental analyses which they prepare for separate but related projects, including general plans, zoning changes, and development projects.

Pursuant to CEQA (Public Resources Code section 21002), public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures which would substantially lessen the significant environmental effects of such projects. Pursuant to section 15021 of the State CEQA Guidelines, CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. In deciding whether changes in a project are feasible, an agency may consider specific economic, environmental, legal, social, and technological factors. According to the State CEQA Guidelines, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. This section further indicates that CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors, and an agency shall prepare a "statement of overriding considerations" as to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment. The environmental review process is further explained below in section 1.4.

1.2 Use of a Subsequent EIR

The project (or project) is being analyzed in a Subsequent EIR (SEIR). State CEQA Guidelines Section 15162 states:

(a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

> (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant

environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

(c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.

(d) A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.

Based upon a preliminary review of the project pursuant to Section 15162 of the State CEQA Guidelines, the City of Santa Cruz has determined that a Subsequent EIR should be prepared to analyze potential impacts on the environment as a result of the of the project. The determination to prepare a Subsequent EIR for this project was made because the project is an amendment to the existing City of Santa Cruz Downtown Plan to expand the Plan area to incorporates a 29-acre area south of Laurel Street, and it was concluded that the potential for different or greater impacts than previously discussed in the Downtown Plan warranted a Subsequent EIR, which will provide the public with the highest level of environmental analysis and opportunities for participation in the environmental review process for the project.

This Subsequent EIR updates the certified Downtown Plan Amendments (DPA) EIR to reflect current conditions that differ from those described in the DPA EIR and analyze the project under existing environmental conditions. The EIR analyses also draw from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012.

The DPA EIR and General Plan 2030 EIR are on file at the City's Planning and Community Development Department at 809 Center Street, Room 101, Santa Cruz, California from 7:30 to 11:30 AM, Monday through Thursday. The documents are also available at the Santa Cruz Public Libraries Downtown Branch at 224 Church Street, Santa Cruz, California. Electronic access to review the documents are on the City of Santa Cruz Planning Department's website at:

- Downtown Plan Amendments EIR at: https://www.cityofsantacruz.com/Home/Components/BusinessDirectory/BusinessDirectory/101/2849
- General Plan 2030 and EIR at: https://www.cityofsantacruz.com/government/city-departments/planning-and-community-development/long-range-policy-planning/general-plan

The Santa Cruz City Council approved amendments to the Downtown Plan (formerly Downtown Recovery Plan [DRP]) in November 2017. The DRP was originally adopted in 1991 to guide reconstruction of the downtown after the 1989 Loma Prieta earthquake that destroyed significant portions of the downtown area. The intent of the DRP was to establish policies, development standards and guidelines to direct the recovery process toward the rebuilding after the earthquake. The DRP was adopted as a specific plan (pursuant to California Government Code requirements) to implement policies in the downtown area. Chapter 4 of the Downtown Plan, Development Standards and Design Guidelines, is incorporated by reference in Part 24 of the Zoning Code in the CBD zone.

A series of amendments to the DRP were proposed in 2017, including a change in the plan's name to "Downtown Plan." A program EIR was prepared pursuant to section 15168 of the State

CEQA Guidelines, which evaluated effects of the 2017 Plan amendments. The amendments included additional height allowances under specified circumstances and other revised development standards that could lead to potential increased development in the downtown area. The DPA EIR evaluated impacts of this level of potential future development and addressed aesthetics, air quality and greenhouse gas (GHG) emissions, biological resources, cultural and tribal cultural resources, hydrology and water quality, public services, transportation and traffic, water and wastewater utilities, land use, and cumulative impacts.

1.3 Project Overview

The project consists of a series of amendments to the City's Downtown Plan by extending the boundary of the existing Downtown Plan to incorporate the South of Laurel Area (the project area, see Figure 1-1 South of Laurel Area District) into the Downtown Plan boundary, to incorporate development standards and design guidelines for the project area and add other policies and standards to the Downtown Plan (last amended October 24, 2023) that will facilitate future redevelopment of the project area. The project also includes amendments to the City's General Plan 2030, the Local Coastal Program (LCP), the B/SOL Plan, the San Lorenzo Urban River Plan (SLURP), and the Municipal Code to provide updates consistent with the currently proposed amendments to the Downtown Plan.

Implementation of the project would facilitate additional development as a result of various circulation, land use, and infrastructure revisions. For purposes of environmental review, the project area is conservatively anticipated to accommodate:

- Future Development: Up to 1,800 housing units and 60,000 square feet (sf) of gross commercial area. Redevelopment would replace approximately 66 dwelling units and 76,770 gross sf. of commercial uses.
- New Arena: Construction of a new approximately 180,000 sf permanent sports and entertainment arena for the Santa Cruz Warriors basketball team. The arena would contain a main event court with spectator seating for approximately 3,200 seats for basketball, and approximately 4,000 seats for concerts, performances, etc. Additional facilities would include a practice facility consisting of an additional court and training spaces, and supporting concession, retail and administrative uses. This would replace the existing 35,000 sf. temporary arena with 2,475 fixed seats for basketball and 3,100 fixed and temporary seating for other entertainment events.
- Building Height: No new development shall exceed the base heights of 85 feet, 70 feet, or 50 feet except as the result of compliance with any density bonus program or provision of state or local law (as discussed below). Building heights adjacent to Beach Hill hillside shall be limited to no more than 70 feet to provide a transition in height adjacent to the Beach Hill neighborhood. Additional height is permitted through application of a State Density Bonus, the City's proposed Downtown Density Bonus, or other local density bonus provision.

- Community Spaces: Existing and planned public streets and the Santa Cruz Riverwalk are envisioned to be designed to accommodate public gatherings and events such as pre- and post-arena events, holidays events and festivals, and informal gatherings.
- Mobility: Pedestrian, bicycle, and vehicular circulation improvements envisioned as part of the creation of the community spaces:
    - Create a circulation network that integrates the built environment and civic spaces, both within and adjacent to the SOLA neighborhood.
    - Create a new Spruce Street Plaza along Spruce Street by permanently closing Spruce Street to vehicular traffic east of Front Street to the Santa Cruz Riverwalk. Emergency, maintenance, and delivery vehicle access shall be maintained through the use of removable barriers or bollards.
    - To create better opportunities for the public to engage with the San Lorenzo River, realign the connection to Laurel Street Extension to the base of Beach Hill, just north of the Cliff Street stairs. This improvement can only be initiated after existing residents and support facilities have been relocated, consistent with City policies and State law.
    - Consider removing the surface parking and public roadway north of the realigned Laurel Street Extension, and thereby creating a more developable Bock B.
    - Construct a new roundabout and associated pedestrian and bicycle improvements at the southern convergence of Pacific Avenue and Front Street.
    - As redevelopment proceeds, the City will further evaluate and discuss with the community the possibility of closing Spruce between Pacific and Front Street to auto traffic during special events.

1.4 Environmental Review and Approval Process

1.4.1 Notice of Preparation and Scoping

Under CEQA, the lead agency for a project is the public agency with primary responsibility for carrying out or approving the project, and for implementing the requirements of CEQA. CEQA Guidelines section 15083 authorizes and encourages an early consultation or scoping process to help identify the range of actions, alternatives, mitigation measures, and significant effects to be analyzed and considered in an EIR, and to help resolve the concerns of affected regulatory agencies, organizations, and the public. Scoping is designed to explore issues for environmental evaluation, ensuring that important considerations are not overlooked and uncovering concerns that might otherwise go unrecognized.

A Notice of Preparation (NOP) for this EIR was circulated for a 30-day comment period on September 16, 2022. The NOP was circulated to the State Clearinghouse and to local, regional, and federal agencies in accordance with State CEQA Guidelines. The NOP also was sent to organizations and interested citizens that have requested notification in the past for the

project. Additionally, the NOP was circulated to owners of property contiguous to the project area in accordance with the City's CEQA Guidelines. The NOP is included in Appendix A. A public scoping meeting also was held on September 28, 2022.

Written comments were received from four public agencies (California Coastal Commission, Caltrans, CA Department of Fish and Wildlife, and CA Department of Toxic Substances Control)); 40 comments were also received from general public. These letters are included in Appendix A. Comments received during the scoping period regarding environmental issues generally include the following concerns, which are further discussed in the EIR chapters that discuss the relevant topic:

- Aesthetics and impacts to the visual character of the surrounding area;
- Shadows and light and glare associated with new development;
- Air quality impacts associated with construction and operation;
- Biological impacts to San Lorenzo River habitat, including potential impacts to birds;
- Flood hazards and effects of climate change and sea level rise;
- Drainage and water quality impacts;
- Noise impacts from traffic and events;
- Population and housing impacts associated with new development;
- Traffic and parking impacts; and
- Alternatives analysis.

1.5 Scope of the SEIR

The Notice of Preparation was prepared for the project and is included in Appendix A. Based on responses to the Notice of Preparation, this SEIR evaluates potentially significant impacts for the topics listed below. The EIR also evaluates topics required by CEQA and CEQA Guidelines, including growth inducement, project alternatives, and cumulative impacts. The environmental analysis for this EIR includes:

- Aesthetics
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural and Tribal Cultural Resources
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Public Services
- Transportation

- Utilities, Service Systems, and Energy Conservation

The focus of the environmental review process is upon significant environmental effects. As defined in section 15382 of the CEQA Guidelines, a "significant effect on the environment" is:

> ... 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 a physical change is significant.

In evaluating the significance of the environmental effect of a project, the State CEQA Guidelines require the lead agency to consider direct physical changes in the environment and reasonably foreseeable indirect physical changes in the environment which may be caused by the project (CEQA Guidelines section 15064[d]). A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project. An indirect physical change in the environment is a physical change in the environment, which is not immediately related to the project, but which is caused indirectly by the project. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project.

CEQA Guidelines section 15064(e) further indicates that economic and social changes resulting from a project shall not be treated as significant effects on the environment, although they may be used to determine that a physical change shall be regarded as a significant effect on the environment. In addition, where a reasonably foreseeable physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project.

1.5.1 Public Review Draft SEIR

The Draft SEIR will be published and circulated for review and comment by the public and other interested parties, agencies, and organizations for a public review period from January 8, 2025, through February 21, 2025. Written comments on the Draft SEIR may be submitted to the City of Santa Cruz at the address below or may be submitted by email to Sarah Neuse at sneuse@santacruzca.gov, by 5:00 pm on February 21, 2025.

Sarah Neuse, Senior Planner
City of Santa Cruz Planning and Community Development Department
809 Center Street, Room 107
Santa Cruz, CA 95060

The Draft SEIR will be available for public review during the comment period at the following locations:

- City of Santa Cruz Planning and Community Development Department, located at 809 Center Street, Room 101.
- Reference Desk of the Downtown Public Library, located at 224 Church Street.
- Online at: http://www.cityofsantacruz.com/ceqa

The City of Santa Cruz encourages public agencies, organizations, community groups, and all other interested persons to provide written comments on the Draft SEIR prior to the end of the 45-day public review period. Section 15204(a) provides guidance on the focus of review of EIRs, indicating that in reviewing draft EIRs, persons and public agencies "should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated," and that comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects.

1.5.2 Final SEIR / Project Approval

Following the close of the public and agency comment period on this Draft SEIR, responses will be prepared for all comments received during the public review period that raise CEQA-related environmental issues regarding the project. The responses will be published in the Final EIR. The Final EIR will include written responses to any significant environmental issues raised in comments received during the public review period in accordance with State CEQA Guidelines section 15088. The Final EIR also will include Draft SEIR text changes and additions that are determined to be necessary after consideration of public comments.

The Final EIR document, which includes the Draft SEIR document, will be presented to the City Planning Commission for consideration of the proposed actions and recommendation to the City Council. The City Council will make the final decision on the proposed General Plan, LCP, B/SOL Plan, and Downtown Plan amendments, rezoning and Municipal Code Amendments. The City Council must ultimately certify that it has reviewed and considered the information in the EIR, that the EIR has been completed in conformity with the requirements of CEQA, and that the document reflects the City's independent judgment.

Pursuant to sections 21002, 21002.1 and 21081 of CEQA and sections 15091 and 15093 of the State CEQA Guidelines, no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant effects unless both of the following occur:

(a) The public agency makes one or more of the following findings with respect to each significant effect:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects on the environment.

2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

(b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

Although these determinations (especially regarding feasibility) are made by the public agency's final decision-making body based on the entirety of the agency's administrative record as it exists after completion of a final EIR, the draft EIR must provide information regarding the significant effects of the project and must identify the potentially feasible mitigation measures and alternatives to be considered by that decision-making body.

1.5.3 Adoption of Mitigation Monitoring & Reporting Program

CEQA requires that a program to monitor and report on mitigation measures be adopted by a lead agency as part of the project approval process. CEQA requires that such a program be adopted at the time the agency approves a project or determines to carry out a project for which an EIR has been prepared to ensure that mitigation measures identified in the EIR are implemented. The Mitigation Monitoring and Reporting Program will be included in the Final EIR, although it is not required to be included in the EIR.

1.6 Organization of the EIR

The content and format of this Draft SEIR are designed to meet the requirements of CEQA and the CEQA Guidelines (sections 15122 through 15132). This Draft SEIR is organized into the following chapters:

Chapter 1, Introduction, explains the CEQA process; describes the scope and purpose of this Draft SEIR; provides information on the review and approval process; and outlines the organization of this Draft SEIR.

Chapter 2, Summary, presents an overview of the project; provides a summary of the impacts of the project and mitigation measures; provides a summary of the alternatives being considered; includes a discussion of known areas of controversy; and lists the topics not carried forward for further analysis.

Chapter 3, Project Description, provides information about the location, setting, and background for the project; identifies project-specific objectives; provides a detailed description of the project elements and components; and lists the likely approvals for the project.

Chapter 4, Introduction to the Environmental Analysis, explains the approach to the environmental analysis for this Draft SEIR.

Chapters 5 through 15, provides environmental setting, impacts, and mitigation measures for the topics identified for inclusion in the Draft SEIR. Each topical section in this EIR presents information in three parts. The "Environmental Setting" section updates the DPA EIR regarding regulatory setting and environmental setting based on current conditions. Updated local, State and federal regulations also are identified and discussed, when relevant. As previously indicated, the section also draws from the City of Santa Cruz *General Plan 2030* EIR. The DPA EIR and General Plan 2030 EIR are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines. Relevant discussions are summarized in the Environmental Setting section.

The "Impacts and Mitigation Measures" section identifies thresholds of significance used to evaluate whether an impact is considered significant based on standards identified in the California Environmental Quality Act (CEQA), State CEQA Guidelines, and City of Santa Cruz CEQA Guidelines. Agency policies or regulations and/or professional judgment also are used to further define what actions may cause significant effects. Any project feature or element that may cause impacts, as well as project features that may serve to eliminate or reduce impacts, will be identified and addressed for both direct and reasonably foreseeable indirect impacts.

This subsection evaluates the potential environmental impacts associated with the project as described in Chapter 3 Project Description compared to the impacts identified in the Groundwater Final EIR per CEQA Guidelines Section 15162. All potential project impacts will be addressed , highlighting any relevant project additions or new or changing impact determinations.

Mitigation measures that would reduce significant impacts are identified. The significance of the impact after mitigation also is identified. For impacts found to be less- than-significant, mitigation measures are not required, but where relevant, the Draft SEIR recommends project modifications or appropriate conditions of approval.

Chapter 16, Other CEQA Considerations, evaluates the topics required to be included in an EIR, including significant unavoidable impacts, irreversible impacts growth inducement, cumulative impacts.

Chapter 17, Alternatives, provides a description of the alternatives to the project.

Chapter 18, EIR Preparers, identifies all agencies contacted during the preparation of the EIR, all references that were cited or utilized in preparation of the EIR and individuals who were involved in preparing this Draft SEIR and the individuals who provided information.

Appendices contain additional information used in preparing this Draft SEIR.

2 Summary

2.1 Introduction

This chapter provides a brief description of the project , known areas of controversy or concern, project alternatives, all potentially significant impacts identified during the course of this environmental analysis, and issues to be resolved. This summary is intended as an overview and should be used in conjunction with a thorough reading of the EIR. The text of this report, including figures, tables and appendices, serves as the basis for this summary.

2.2 Project Overview

The project consists of a series of amendments to the City's Downton Plan by extending the boundary of the existing Downtown Plan to incorporate the South of Laura Area (the project area, see Figure 1-1 South of Laurel Area District) into the Downtown Plan boundary, to incorporate development standards and design guidelines for the project area and add other policies and standards to the City's Downtown Plan (amended October 24, 2023) that will facilitate future redevelopment of the project area. The project also includes amendments to the City's General Plan 2030, the Local Coastal Program (LCP), the Beach and South of Laurel Comprehensive Area Plan (B/SOL Plan), the San Lorenzo Urban River Plan (SLURP), and the Municipal Code to provide updates consistent with the proposed currently amendments to the Downtown Plan.

Implementation of the project would facilitate additional development as a result of various circulation, land use and infrastructure revisions. For purposes of environmental review, the project area is conservatively anticipated to accommodate:

- Future Development: Up to 1,800 housing units and 60,000 square feet (sf) of gross commercial area. Redevelopment would replace approximately 66 dwelling units and 76,770 gross sf. of commercial uses.
- New Arena: Construction of a new approximately 180,000 sf sports and entertainment arena for the Santa Cruz Warriors basketball team. The arena would contain a main event court with spectator seating for approximately 3,200 seats for basketball, and approximately 4,000 seats for concerts, performances, etc. Additional facilities would include a practice facility consisting of an additional court and training spaces, and supporting concession, retail and administrative uses. This would replace the existing 35,000 sf. temporary arena with 2,475 fixed seats for basketball and 3,100 fixed and temporary seating for other entertainment events.
- Building Height: No new development shall exceed the base heights of 85 feet, 70 feet, or 50 feet except as the result of compliance with any density bonus program or provision of state or local law (as discussed below). Building heights adjacent to Beach Hill hillside shall be limited to no more than 70 feet to provide a transition in height adjacent to the Beach Hill neighborhood. Additional height is permitted through

application of a State Density Bonus, the City's proposed Downtown Density Bonus, or other local density bonus provision.

- Community Spaces: Existing and planned public streets and the Santa Cruz Riverwalk are envisioned to be designed to accommodate public gatherings and events such as pre- and post-arena events, holidays events and festivals, and informal gatherings.
- Mobility: Pedestrian, bicycle, and vehicular circulation improvements envisioned as part of the creation of the community spaces:
    - Create a circulation network that integrates the built environment and civic spaces, both within and adjacent to the SOLA neighborhood.
    - Create a new Spruce Street Plaza along Spruce Street by permanently closing Spruce Street to vehicular traffic east of Front Street to the Santa Cruz Riverwalk. Emergency, maintenance, and delivery vehicle access shall be maintained through the use of removable barriers or bollards.
    - To create better opportunities for the public to engage with the San Lorenzo River, realign the connection to Laurel Street Extension to the base of Beach Hill, just north of the Cliff Street stairs. This improvement can only be initiated after existing residents and support facilities have been relocated, consistent with City policies and State law.
    - Consider removing the surface parking and public roadway north of the realigned Laurel Street Extension, and thereby creating a more developable Bock B.
    - Construct a new roundabout and associated pedestrian and bicycle improvements at the southern convergence of Pacific Avenue and Front Street.
    - As redevelopment proceeds, the City will further evaluate and discuss with the community the possibility of closing Spruce between Pacific and Front Street to auto traffic during special events.

2.3 Summary of Impacts and Mitigation Measures

All impacts identified in the environmental analyses are summarized in this section. This summary groups impacts of similar ranking together, beginning with significant unavoidable impacts, followed by significant impacts that can be mitigated to a less-than-significant level, followed by less-than significant impacts and topics where no impacts were identified.

2.3.1 Significant Unavoidable Impacts

The following impacts were found to be potentially significant, and while mitigation measures have been identified in some cases, the impact cannot be reduced to a less-than-significant level. Chapter 16 Project Alternatives examines alternatives to eliminate or reduce the level of significance of these impacts.

CUL-1 (*DPA EIR Impact 4.4-2*): Historical Resources. Future development accommodated by the proposed plan amendments could result in impacts to historical resources (CUL-a) due to alteration or modification of historical buildings.

Mitigation Measures

MM CUL-1.1: Historic Resources Assessment and Project-Level Mitigation

Require preparation of an historic resources evaluation for any development proposal containing a structure or structures 50 years old or older and that are not identified as historic resources in the County HRI. If the structure(s) may potentially meet the criteria for listing as an historic resource, and proposed development would have the potential to impact the historic significance of the structure(s), the development applicant shall provide an historic assessment of the structure(s) prepared by a qualified historic consultant. If it is determined by the City Planning and Community Development Department based upon the historic assessment that a development would impact a structure that is eligible as an historic resource under CEQA definitions, the City shall consider measures that would enable the project to avoid direct or indirect impacts to the building or structure, including designs consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. If the building or structure can be preserved, but remodeling, renovation or other alterations are required, this work shall be conducted in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

MM CUL-1.2: Resource Documentation

If a significant historic building or structure is proposed for major alteration or renovation, or to be moved and/or demolished, the City shall ensure that a qualified architectural historian thoroughly documents the building and associated landscape and setting. Documentation shall include still and video photography and a written documentary record/history of the building to the standards of the Historic American Building Survey or Historic American Engineering Record, including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available. The record shall be prepared in consultation with the State Historic Preservation Officer and filed with the Office of Historic Preservation. The record shall be accompanied by a report containing site-specific history and appropriate contextual information. This information shall be gathered through site specific and comparative archival research, and oral history collection as appropriate.

2.3.2 Significant Impacts

The following impacts were found to be potentially significant but could be reduced to a less-than-significant level with implementation of identified mitigation measures should the City's decision-makers impose the measures on the project at the time of final action on the project.

AQ/GHG-3: Exposure of Sensitive Receptors. Future development and growth accommodated by the project would potentially expose sensitive receptors to substantial pollutant concentrations during short-term construction but not during long-term operations (AIR-c).

Mitigation Measures

MM AQ/GHG-3.1: Construction Equipment Exhaust Control

All diesel-fueled off-road construction equipment greater than 75 horsepower shall be zero-emissions or equipped with California Air Resources Board (CARB) Tier 4 compliant engines. Alternatively, CARB Tier 2 or Tier 3 compliant engines can be used if CARB Level 3 Verified Diesel Emissions Control Strategy (VDECS) filters are added to each piece of off-road diesel-fueled equipment. An exemption from these requirements may be granted by the City of Santa Cruz when equipment with the required tier is not reasonably available and when corresponding reductions in diesel particulate matter are achieved from other construction equipment on the project. An exemption may only be granted if total estimated project generated construction emissions will not exceed applicable Monterey Bay Air Resources District (MBARD) risk thresholds as verified using industry-standard emission estimation methodologies.

BIO-3 (*DPA EIR Impact 4.3-3*): Indirect Impacts to Nesting Birds. Future development as a result of the project could result in disturbance to nesting birds if any are present in the vicinity of construction sites along the San Lorenzo River (BIO-d).

Mitigation Measures

DPA EIR Mitigation 4.3-3: Preconstruction Nesting Survey

Require that a pre-construction nesting survey be conducted by a qualified wildlife biologist if construction, including tree removal, adjacent to the San Lorenzo River is scheduled to begin between March and late July to determine if nesting birds are in the vicinity of the construction sites. If nesting raptors or other nesting species protected under the Migratory Bird Treaty Act are found, construction may need to be delayed until late-August or after the wildlife biologist has determined the nest is no longer in use or unless a suitable construction buffer zone can be identified by the biologist. (Citywide Creeks and Wetlands Management Plan Standard 12).

CUL-3 (*DPA Impact 4.4.-1*): Tribal Cultural Resources. Future development accommodated by the project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 resource (CUL-d).

Mitigation Measure

MM CUL-3.1 Cultural Sensitivity Training and Tribal Monitoring

Require Native American construction monitoring of future development projects within the project area to include cultural sensitivity training for construction workers and tribal monitoring during ground disturbing construction.

2.3.3 Less-Than-Significant Impacts

The following impacts were found to be less-than-significant. Mitigation measures are not required.

- AES-1: Scenic Views
- AES-3: Visual Character of the Surrounding Area
- AES-4: Introduction of Light and Glare
- AQ/GHG-2: Criteria Pollutant Emissions
- AQ/GHG-3: Exposure of Sensitive Receptors
- AQ/GHG-4: Objectionable Odors
- BIO-1a (DPA EIR Impact 4.3-2): Impacts to Sensitive Riparian Habitat
- BIO-1b (DPA EIR Impact 4.3-1): Indirect Impacts to Special Status Species and Riparian and Aquatic Habitat
- BIO-2 (DPA EIR Impact 4.3-2): Indirect Impacts to Birds
- BIO-3 (DPA EIR Impact 4.3-3): Indirect Impacts to Nesting Birds
- CUL-1 (DPA EIR Impact 4.4-2): Historical Resources
- CUL-2 (DPA EIR Impact 4.4-1): Archaeological Resources
- CUL-3 (DPA Impact 4.4.-1): Tribal Cultural Resources
- HYDRO-1: Stormwater Drainage
- HYDRO-2: Water Quality
- HYDRO-3: Flood Hazards
- NOI-1: Permanent and Temporary Noise Increases
- NOI-2: Excessive Groundborne Vibration
- POP-1: Inducement of Substantial Population Growth
- POP-2: Displacement of People or Housing
- Pub-1a (DPA EIR Impact 4.6-1a): Fire Protection

- PUB-1b (DPA EIR Impact 4.6-1b): Police Protection
- PUB-1c (DPA EIR Impact 4.6-1c): Schools
- PUB-1d (DPA EIR Impact 4.6-1d): Parks
- PUB-2 (DPA EIR Impact 4.6-2): Parks and Recreation
- T-1: Conflict with Circulation Plan, Policy, or Ordinance
- T-2: Conflict with VMT Thresholds
- T-3: Design-Safety and Emergency Access
- UTIL-1 (DPA EIR Impact 4.8-1): Water Supply
- UTIL-2 (DPA EIR Impact 4.8-2): Wastewater Treatment
- UTL-3 (DPA EIR Impact 4.6-3): Solid Waste Generation
- UTL-4: Solid Waste Generation
- UTL-5 (DPA EIR Impact 4.6-4): Energy Use

2.3.4 Impacts Not Found to be Significant

The EIR found no impacts for the following:

- AES-1 (DPA EIR Impact 4.1-1): Scenic Views
- AES-2 (DPA EIR Impact 4.1-2): Scenic Resources
- AQ/GHG-1 (DPA EIR No Impact): Conflict with the AQMP
- BIO-5: Conflicts with Local Ordinances
- LU-1: Physically Divide and Established Community
- LU-2 (DPA EIR Impact 4.9-1): Conflicts with Policies and Regulations

2.4 Effects Not Found to be Significant

Pursuant to the CEQA Guidelines §15128, “An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.” This chapter of the Draft SEIR describes the resource areas which were found not to pose any potentially significant effects.

Based on the scope of the project, comment letters in response to the NOP, technical studies, background planning documents, including the General Plan EIR, the following resource topics were found to not have impacts that would be considered potentially significant. These environmental resource topics, therefore, are not subject to further detailed analysis in the EIR.

Additionally, some Thresholds of Significance for other environmental resource topics were determined to have no impact. These are discussed under the heading “Summary of No and/or Beneficial Impacts” for each respective environmental resource topic.

2.4.1 Agricultural and Forest Resources and Mineral Resources

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines, City of Santa Cruz plans and policies, and agency and professional standards, a project impact would be considered significant if the project would:

a) Convert prime farmland, unique farmland or farmland of state importance to non-agricultural uses;
b) Conflict with existing zoning for agricultural use or a Williamson Act contract;
c) Conflict with existing zoning for, or cause rezoning of, forest land;
d) Result in the loss of forest land or conversion of forest land to non-forest use; or
e) Involve other changes to the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.
f) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

The project area does not contain prime or other agricultural lands as mapped on the State Farmland Mapping and Monitoring Program but is designated as “Urban and Built-up Land” (General Plan 2030 DEIR, Figure 4.3-1). The area is not designated for agricultural uses in the City’s General Plan and is not located adjacent to lands that are in agricultural production. Therefore, the project would not interfere or conflict with agricultural operations. There are planted street trees within the project area, but these trees are not considered timber resources. The project area is not zoned Timberland Preserve. Thus, the project would not result in or lead to the conversion of agricultural or forest lands to other uses.

There are no designated mineral resources within the City, its existing Sphere of Influence or the General Plan 2030 planning area, and therefore, the project would have no impact to mineral resources.

2.4.2 Geology and Soils

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines, City of Santa Cruz plans and policies, and agency and professional standards, a project impact would be considered significant if the project would:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Strong seismic ground shaking?
iii. Seismic-related ground failure, including liquefaction?
iv. Landslides?

b) Result in substantial soil erosion or the loss of topsoil and subsequent sedimentation into local drainage facilities and water bodies;
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? or
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available.
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

(a-ii-iv, c) Seismic and Geologic Hazards

The project area is located in a seismically active region of California and the region is considered to be subject to very intense shaking during a seismic event. The City of Santa Cruz is situated between two major active faults: the San Andreas, approximately 11.5 miles to the northeast and the San Gregorio, approximately nine miles to the southwest. There are no active fault zones or risk of fault rupture within the City (General Plan 2030 DEIR).

According to maps developed as part of the City's recently adopted General Plan 2030 and included in the General Plan and General Plan EIR, the project area is located in an area identified as being subject to liquefaction hazards (General Plan 2030 and General Plan 2030 DEIR Figure 4.10-4). According to maps developed as part of the City's adopted General Plan 2030 and included in the General Plan EIR, the project area is not located in a mapped landslide area (General Plan 2030 DEIR Figure 4.10-3).

The project, and associated General Plan, Beach South of Laurel Area Plan, and Local Coastal Plan amendments do not change the area of future development. All new construction must conform to the requirements of the most recent version of the California Building Code (CBC), which sets forth structural design parameters for buildings to withstand seismic shaking without substantial structural damage. Adherence to existing regulations and standards, including the CBC, would minimize harm to people and structures from adverse geologic events and conditions.

Conformance to the CBC as required by state law and the City would ensure the maximum practicable protection available for structures and their associated trenches, excavations and foundations. The continuation of design review and code enforcement to meet current seismic

standards is the primary mitigation strategy to avoid or reduce damage from an earthquake, and seismic safety standards are a requirement for all building permits (City of Santa Cruz Local Hazard Mitigation Plan 2012-2017).

Typically, standard geotechnical engineering procedures, soil testing, and proper design can identify and mitigate liquefiable soils. By using the most up-to-date standards, potential damage related to liquefaction, including subsidence and settlement, can be reduced to levels that are generally considered acceptable (General Plan 2030 - DEIR). Furthermore, section 24.14.070 of the City's Municipal Code requires preparation of a site-specific geotechnical investigation for all development, except less than four units, in areas identified in the General Plan as having a high liquefaction potential to assess the degree of potential liquefaction and recommend appropriate design/mitigation measures.

Therefore, future development in the project area with or without the project would be required to be designed in accordance with CBC requirements and recommendations of project-level geotechnical reports, which would avoid potentially significant impacts due to exposure to seismic hazards, including liquefaction.

(b, d) Soils and Erosion

The project area is currently developed. According to the City's General Plan EIR, the project area is not located within an area subject to high erosion (General Plan 2030 - DEIR). Therefore, no impacts would directly or indirectly occur with adoption and implementation of the project .

(e) Use of Septic Systems

The project will be connected to City sanitary sewers and would not use septic systems.

(f) Unique Paleontological Resource

According to maps developed for the City's General Plan 2030 and included in the General Plan EIR, the project area is within an area mapped as Late Pleistocene alluvium formations (General Plan 2030, DEIR Figure 4.9-5). Late Pleistocene alluvium is one of the four geologic units in the General Plan area known to contain paleontological resources (General Plan 2030, DEIR).

The General Plan EIR Mitigation 4.9-2 added General Plan Action HA1.2.3, which requires the City to notify applicants within paleontologically sensitive areas of the potential for encountering such resources during construction and condition approvals that work will be halted, and resources examined in the event of encountering paleontological resources during construction. If the find is significant, the City would require treatment in accordance with the recommendations of the evaluating paleontologist. Treatment may include, but is not limited to, specimen recovery and curation or thorough documentation. This provision was added to the City's Municipal Code (section 24.12.431), and all projects are subject to this requirement, which is included as a project condition of approval.

Therefore, with implementation of the General Plan EIR mitigation measure, the project would not result in significant paleontological resource impacts.

2.4.3 Hazards and Hazardous Materials

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines, City of Santa Cruz plans and policies, and agency and professional standards, a project impact would be considered significant if the project 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 materials or waste within ¼ miles of an existing or proposed school;
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?;
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

(a-d) Hazardous Materials

The range of commercial and residential uses allowed in the downtown area typically would not result in creation of risks associated with hazardous material transport, use, or disposal and would not result in exposure to health hazards or creation of a health hazard. The project area is not included on a list of hazardous materials compiled pursuant to Government Code section 65962.5 (known as the Cortese List)), except for a number of leaking underground storage tank (LUST) sites that have been cleaned and cases closed.[1] One site with an address that does not currently exist is included on the list of Cease and Desist Orders and Cleanup and Abatement Orders, but does not concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

[1] Per California Environmental Protection Agency "Cortese Data List Resources", 2024, https://calepa.ca.gov/SiteCleanup/CorteseList/.

(e-f) Location Near Airports

The site is not located near an airport or airstrip. The site is not included in a state hazardous materials site list.

(g) Emergency Response

The City of Santa Cruz has an Emergency Operations Plan (EOP) that details the City's concept of operations in response to disasters. The EOP outlines how information and resources are coordinated for disasters or threat of disasters. The City of Santa Cruz Emergency Operations Center Manager endeavors to conduct annual trainings, tabletop exercises and other drills that support the preparedness and response capabilities of city staff and the readiness of the Emergency Operations Center. Information updates and tabletop discussions are conducted to clarify staff roles and responsibilities in the EOC, in the Department Operations Centers (DOCs) and in the field to help protect people and property (City of Santa Cruz Local Hazard Mitigation Plan 2012-2017). The project would not impair or physically interfere with the implementation of this emergency operations plan.

(h) Wildland Fire Hazard

According to maps developed as part of the City's adopted General Plan 2030 and included in the General Plan EIR and General Plan, the project area is not located within a high fire hazard area (General Plan 2030 DEIR Figure 4.6-1). The project area is within the developed downtown of the City of Santa Cruz.

2.4.4 Wildfire

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines, City of Santa Cruz plans and policies, and agency and professional standards, a project impact would be considered significant if the project would:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

(a-d) Emergency Plans and Wildfire Risks

According to maps developed as part of the City's adopted General Plan 2030 and included in the General Plan 2030 EIR and General Plan, the project area is not located within a high fire hazard area (General Plan 2030 DEIR Figure 4.6-1). The project area is within the developed downtown of the City of Santa Cruz.

Furthermore, the General Plan 2030 EIR found that the City's adopted "Local Hazard Mitigation Plan" includes mitigation strategies to avoid or reduce potential wildfires and that General Plan actions also seek to ensure that new development is sited and designed to accommodate facility emergency access and response (HZ1.2.5, HZ1.2.6, HZ1.5.5) and that street widths are adequate to safely accommodate emergency vehicles (M3.2.3). With implementation of the General Plan policies and actions as well as implementation of the City's "Local Hazard Mitigation Plan", the General Plan EIR concluded that indirect impact on fire protection services would be less-than-significant. Specifically, General Plan policies and actions related to future development include measures aimed are reducing wildfire hazards (HA1.5, HZ1.5.1) and regulating development siting/design to reduce wildland fires (HZ1.5.3 [setbacks], HZ1.5.4 [fire-resistant/retardant building materials]).

2.5 Alternatives to the project

CEQA Guidelines Section 15126.6 requires that an EIR describe and evaluate alternatives to the project that feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant effects of the project. The following alternatives are evaluated in Chapter 17 Alternatives:

- No Project – Required by CEQA
- Alternative 1: Reduced Project
- Alternative 2: Restricted Building Heights on Blocks B & D

Table 17-1: Comparison of Significant Impacts – Project and Alternatives, presents a comparison of project impacts between the project and the alternatives. None of the project alternatives, including the No Project Alternative, would avoid or substantially reduce identified significant impacts, and none would eliminate the identified significant and unavoidable impact to historical resources. All the alternatives would result in potentially reduced development potential than would occur with the proposed project.

Of the alternatives considered, Alternative 1 would best achieve the project objectives and because it would slightly reduce development and have incrementally less impacts, even though the significant and less-than-significant impact determinations are the same as the proposed project. Therefore, Alternative 1 is considered the environmentally superior alternative of the alternatives reviewed.

2.6 Known Areas of Controversy or Concern

The City of Santa Cruz, as the Lead Agency, has identified areas of concern based on the Initial Study and Notice of Preparation (NOP). The NOP for this SEIR was circulated for a 30-day comment period on September 16, 2022. The NOP was circulated to the State Clearinghouse and to local, regional, and federal agencies in accordance with State CEQA Guidelines. The NOP also was sent to organizations and interested citizens that have requested notification in the past for the project. Additionally, the NOP was circulated to owners of property contiguous to the project area in accordance with the City's CEQA Guidelines. The NOP is included in Appendix A. A public scoping meeting also was held on September 28, 2022.

Written comments were received from four public agencies (California Coastal Commission, Caltrans, CA Department of Fish and Wildlife, and CA Department of Toxic Substances Control). 40 comments were also received from general public. These letters are included in Appendix A. Comments received during the scoping period regarding environmental issues generally include the following concerns, which are further discussed in the EIR chapters that discuss the relevant topic:

- Aesthetics and impacts to the visual character of the surrounding area;
- Shadows and light and glare associated with new development;
- Air quality impacts associated with construction and operation;
- Biological impacts to San Lorenzo River habitat, including potential impacts to birds;
- Flood hazards and effects of climate change and sea level rise;
- Drainage and water quality impacts;
- Noise impacts from traffic and events;
- Population and housing impacts associated with new development;
- Traffic and parking impacts; and
- Alternatives analysis.

2.7 Issues to be Resolved

CEQA Guidelines section 15123 requires the Summary to identify "issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects." This EIR has presented mitigation measures and project alternatives, and the City Planning Commission will consider the Final EIR when considering the project. In considering whether to approve the project, the Planning Commission will take into consideration the environmental consequences of the project with mitigation measures and project alternatives, as well as other factors related to feasibility.

"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (State CEQA Guidelines, section 15364). Among the factors that may be taken into

account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or already owns the alternative site). No one of these factors establishes a fixed limit on the scope of reasonable alternatives. The concept of feasibility also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. Moreover, feasibility under CEQA encompasses "desirability" to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors.

3 Project Description

3.1 Project Location and Setting

As shown in Figure 1-1 South of Laurel Area District, the approximately 29-acre project area is located in downtown Santa Cruz.

3.2 Project Context and Background

The project area contains a variety of commercial and multi-family residential land uses. This includes the temporary Kaiser Permanente Arena (the arena), various single-story and ground-floor commercial retail and entertainment uses, multi-family housing, and a number of large at-grade paved parking lots. The southern end of the project area includes two hotels.

The project area is generally bound by Laurel Street on the north, the San Lorenzo River on the east, Front Street on the south, and Center Street, Cedar Street and neighborhoods west of Pacific Avenue on the west. The project area is located in the coastal zone and within the current boundaries of the Beach and South of Laurel Comprehensive Area Plan.

Being located between the Downtown and the beach, including the Santa Cruz Wharf and the Santa Cruz Beach Boardwalk, the project area serves as an important mobility role in linking these two areas. This includes Front Street and Pacific Avenue, the Laurel Street Extension, and the steps to Beach Hill from the Santa Cruz Riverwalk to Cliff Street and down to the beach area.

The San Lorenzo River bends from a southerly to easterly direction adjacent to the project area providing particularly scenic views of the river, the Laurel Street Bridge, and the San Lorenzo Riverside Gardens Park and surrounding neighborhood on the east side of the San Lorenzo River.

Relevant City planning documents that influence future development in the project area include:

- General Plan 2030 (2012 as amended)
- Local Coastal Program (1994 as amended)
- Beach/South of Laurel Comprehensive Area Plan (1998)
- Downtown Site Furnishing Standards (2022)
- Community-wide Climate Action Plan for 2030 (2022)
- San Lorenzo Urban River Plan 2003
- City of Santa Cruz Active Transportation Plan (2017)
- Santa Cruz Municipal Code

- Various infrastructure master/management plans

The project area is located adjacent to residential uses to west, including the multi-family Sycamore Street Commons, which are located in the Neighborhood Conservation Overlay District (NCOD, Santa Cruz Municipal Code Chapter 24 Part 31).

One of the primary objectives of the project (described below) is to provide additional housing in the downtown, consistent with the City's General Plan policies and Housing Element. The City was allocated 3,736 residential units as part of the Region Housing Need Allocation (RHNA) for the City's 6th 2023-2031 Housing Element update. The RHNA methodology is used for determining future housing need, by income category, within the State and is based on growth in population, households, and employment. The statewide determination is under the administration of State Department of Housing and Community Development (HCD). The quantified housing need is then allocated among the State's 18 Metropolitan Planning Organizations (MPOs). For Santa Cruz, this agency is the Association of Monterey Bay Area Governments (AMBAG).

As part of the 6th Cycle RHNA Sites Inventory (see Appendix G of the City's 2023 – 2031 Housing Element), the project area was identified as a key area to accommodate future housing and was determined to accommodate a total of 1,047 units (105 Very Low and Low Income; 105 Moderate Income, and 837 Above Moderate Income). For the purpose of the Housing Element, only the existing zoning capacity of the area was included.

Another objective of the project is to create zoning and development standards to better facilitate construction of a new arena for use by the Santa Cruz Warriors as well as other sporting and entertainment events. The Santa Cruz Warriors currently utilize a temporary arena (built in 2012) located in the project area which is more than 10 years old.

Implementation of the project would involve expanding the boundary of the City's Downtown Plan to include the project area. The Downtown Recovery Plan was first adopted in 1991 in the aftermath of the 1989 Loma Prieta Earthquake. The plan has been amended several times since, with the most recent significant update adopted in 2017, when it was renamed to the Downtown Plan. The 2017 amendments included measures that encourage new development along Front Street and Pacific Avenue between Water Street and Laurel Street, including increased height limits in some parts of the plan area, and adjustments to land uses allowed in the Downtown. These amendments, together with contemporaneous changes in the State Law, resulted in an increase in the number of housing applications in the City's core and allowed greater opportunities for creating both new market rate and substantial numbers of deed-restricted affordable housing units and supportive housing in recent years. Expanding the Downtown Plan boundary south of Laurel Street would provide additional opportunities to expand on these successes.

3.3 Project Objectives

Section 15124 of the State CEQA Guidelines indicates that the EIR Project Description shall include a statement of the objectives sought by the proposed Project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.

The CEQA project objectives, developed by the City, are as follows:

*(NOTE: The * indicates objectives that are also the core objectives as described in the Downtown Plan, Appendix 8: South of Laurel Area District Plan (as amended).*

3.3.1 Housing

1. Increase the total number of housing units that can be built in the City by adding capacity for multi-family housing, consistent with General Plan Land Use Element Policy 2.2 and Program 2.2.2. *
2. Provide additional housing to help the City meet its Regional Housing Needs Allocation (RHNA) as described in the City's 6th Cycle 2023-2031 Housing Element.
3. Facilitate the development of new housing focused in the downtown area, consistent with General Plan Housing Element Policy 1.2 and related programs.
4. Encourage a mix of housing types and affordability levels consistent with General Plan Housing Element Policies 2.1 and 2.2.

3.3.2 Development With a Mix of Uses

5. Provide a balanced mix of residential and commercial uses in the project area that integrate into the rest of downtown and surrounding neighborhoods and provide a safe and attractive environment for living and working consistent with the City's General Plan Land Use Element, in particular Policy 2.2 and Programs 2.2.2 and 2.6.3.
6. Provide uses that meet the Downtown Plan's objective to have higher-density housing, adjacent to commercial and employment opportunities.
7. Provide land uses and high-quality architecture that complement existing, adjacent land uses and development.
8. Ensure that all new development has sufficient public improvements, consistent with General Plan Land Use Element Program 4.1.4.

3.3.3 Economic Growth

9. Create new economic opportunities for local businesses and workers. *
10. Generate new tax revenue for the City. *
11. Work with the Warriors to establish design standards and use allowances that accommodate potential development of a new arena facility. *
12. Have a positive contribution to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
13. Add commercial, entertainment, and other uses that will have a synergy with and support the City's existing commercial and tourism economy, developed in an existing urbanized area, consistent with General Plan Land Use Element Policy 1.1.
14. Provide a mix of residential and commercial uses that achieves a financially feasible project.
15. Develop a project that supports the long-term success of existing and new commercial uses through careful site planning and infrastructure design.

3.3.4 Mobility and Connectivity

16. Create opportunities for public amenities and infrastructure such as parks, the Santa Cruz Riverwalk trail, or other spaces for community use. *
17. Better connect downtown with the river and beach areas, which will give the community better access to the river and beach and help visitors see more of Santa Cruz, including its local businesses and entertainment destinations. *
18. Improve the pedestrian experience through thoughtful urban design measures. *
19. Reconfigure block size and provide publicly accessible parkways, park corridors and paths to improve pedestrian connectivity between residential and commercial uses.
20. Provide and improve pedestrian connections within the project and across adjacent arterial streets to facilitate pedestrian activity between neighborhoods and within the development.
21. Facilitate new development that, to the extent practical, minimizes the number of automobile trips, consistent with General Plan Land Use Element Policies 5.1, 5.3 and 5.6.

3.3.5 Responsible Growth

22. Locate commercial and residential uses where such uses can take advantage of existing infrastructure and utilities.

23. Ensure that new development minimizes the obstruction of important views and viewsheds and complements the overall skyline of the greater downtown area consistent with General Plan Land Use Element Policy 1.6.
24. Develop underutilized land in the city limits that is well connected to existing neighborhoods and commercial areas.
25. Ensure that there is sufficient and reliable water supply to accommodate future growth and development using the City's existing and planned water supply, consistent with General Plan Land Use Element Policy 1.7.
26. Ensure that new development is consistent with the City's environmental protection plans, policies, and regulations, including the *Community-wide Climate Action Plan for 2030* (2022, as amended),
27. Ensure that new development minimizes or mitigates potentially significant environmental impacts in and around the project area consistent with General Plan Land Use Element Policy 1.4.
28. Provide mobility and recreation improvements along the San Lorenzo Riverwalk consistent with the City's San Lorenzo Urban River Plan and General Plan Land Use Element Program 3.4.11.

3.4 Project Overview

The project consists of a series of amendments to the City's Downtown Plan extending the boundary of the existing Downtown Plan to incorporate the project area and add development standards and design guidelines for the study area, and other policies and standards to the City's Downtown Plan (amended October 24, 2023) associated with future development or redevelopment within the project area. For consistency purposes, the project also includes amendments to the City's General Plan 2030, the Local Coastal Program (LCP), the Municipal Code (Zoning Ordinance and Zoning Map), the Beach and South of Laurel Comprehensive Area Plan, and the San Lorenzo Urban River Plan. The project would allow for increased development as a result of various circulation, land use and infrastructure revisions.

3.5 Project Components

3.5.1 Development Plan Overview

As shown in Figure 3-1 Downtown Plan Area, the project would expand the boundary of the current Downtown Plan to include the South of Laurel Area (the project area) and thereby creating a fifth new district in the downtown Plan, as shown in Figure 3-2 Downtown Plan Area Districts.

As shown in Figure 3-3 South of Laurel Area Conceptual Plan, redevelopment of the project area envisions a realignment and reconfiguration of the circulation pattern to improve

connectivity to the Santa Cruz Riverwalk, create opportunities for new public spaces and amenities, and improve connectivity to the beach area for all modes of travel. The development plan envisions the ultimate buildout of between 1,300 (base zoning density) and 1,800 (through use of Density Bonuses) new residential units. These units could be located above approximately 60,000 sf. of ground-floor retail and commercial uses. Redevelopment could replace any or all of the approximately 66 dwelling units and 76,770 gross sf. of commercial uses existing in the project area. Based on age of buildings, parcel size, current uses, and other factors, the project assumes that some of the existing land uses would remain. Project sites most likely to redevelop have been labeled Blocks A through H as shown in Figure 3-4 South of Laurel Area Redevelopment Blocks.

The land uses and associated policies described in the Downtown Plan (once amended) would provide the basis for future land use entitlements and the design character for both new buildings (i.e., private property) and the improved streets and open space (i.e., public spaces). Development standards and design guidelines would provide the regulatory context and envisioned urban character that is desired in the project area.

The development standards address issues associated with the built form and include building height and density (Floor Area Ratio), density bonus provisions, building setbacks, building length and active use frontages, and permitted uses.

3.5.2 Community Spaces

Community spaces in the project area include existing and planned public streets and the Santa Cruz Riverwalk, all designed to accommodate public gatherings and events such as pre- and post-arena events, holidays and festivals events, and informal gatherings. As shown in Figure 3-5 Community Spaces and described below, community spaces include Spruce Street (the Spruce Street Plaza), the Santa Cruz Riverwalk, and Pacific Avenue. Secondary community spaces include Front Street, the Laurel Street Extension, the Pacific Avenue / Front Street Roundabout, and the arena.

An overview of each of these community spaces is described below. A complete description, along with their respective development polices can be found in Appendix 8 of the Downtown Plan (as amended) and are incorporated herein by reference.

As shown in Figure 3-6 Existing and Proposed Circulation, the following roadway changes are envisioned as part of the creation of the community spaces:

- Create a new Spruce Street Plaza along Spruce Street by permanently closing Spruce Street to vehicular traffic east of Front Street to the Santa Cruz Riverwalk. Emergency, maintenance, and delivery vehicle access shall be maintained through the use of removable barriers or bollards.
- To create better opportunities for the public to engage with the San Lorenzo River, realign the connection to Laurel Street Extension to the base of Beach Hill, just north of

the Cliff Street stairs. This improvement can only be initiated after existing residents and support facilities have been relocated, consistent with City policies and State law.

- Consider removing the existing surface parking and northern end of the existing Laurel Street Extension, creating a more developable Block B. Permanent access to the City Pump Station No. 1 will be maintained at an alternative location to ensure adequate access.
- Construct a new roundabout and associated pedestrian and bicycle improvements at the southern convergence of Pacific Avenue and Front Street.
- As redevelopment proceeds, the City will further evaluate and discuss with the community the possibility of closing Spruce between Pacific and Front Street to auto traffic.

Spruce Street Plaza

Spruce Street is the primary east-west road through the SOLA, providing an important connection from Pacific Avenue to the San Lorenzo River. It will also serve as an important "front door" to the new arena. As new development takes place, and as soon as the roadway realignment of Laurel Street Extension is completed, the plan envisions that Spruce Street will be closed to automobile traffic east of Front Street and reserved for pedestrians and bicycles.

Improvements should include enhanced paving, clustered seating areas, one or more sculptural art features, street trees, bike racks, high-quality trash and recycling receptacles, permanent and removable bollards, and wayfinding signage. If feasible, the Spruce Street Plaza will be designed to meet the top of the levee at grade. Amenities will be incorporated to accommodate outdoor dining and include appropriately spaced electrical outlets and other features supportive of civic activities such as vendor kiosks, tree lighting, etc.

Santa Cruz Riverwalk

Located at the eastern terminus of Spruce Street, the Santa Cruz Riverwalk provides an important public access linkage for non-vehicular access north to the rest of the downtown, and south to the Beach Area.

New development adjacent to the Santa Cruz Riverwalk should be consistent with recommendations identified in the *River/Front & Lower Pacific Design Guidelines & Development Incentives* (May 2010), and the *San Lorenzo Urban River Plan* (2003), and comply with any applicable U.S. Army Corps of Engineers requirements. Creative design solutions may be considered to create a public space at the northern end of Block B while maintaining equipment access to the crucial infrastructure that is City's Pump Station No. 1.

Improvements to the Santa Cruz Riverwalk could include enhanced paving, viewpoints showcasing the San Lorenzo River, extensive seating, and low-profile landscaping with an emphasis on native plants. Improvements should be designed in coordination with the adjacent

private property owners and the U.S. Army Corps of Engineers to provide a coordinated design response with the appropriate level of public benefits and amenities.

Pacific Avenue

Serving as an extension to the existing Pacific Avenue retail and entertainment corridor north of Laurel Street, Pacific Avenue is envisioned to be an active and vibrant mix of retail, entertainment and residential uses that serves as linkage between the downtown and the Beach Area and serve as an anchor to the new arena and the greater SOLA neighborhood.

Front Street

Front Street is envisioned to be maintained as a street that accommodates through traffic for automobiles, transit, bicyclist, and trucks travelling between downtown and the Beach Area, with a greater focus on throughput in contrast to the proposed changes to Pacific Avenue.

Laurel Steet Extension

Laurel Street Extension is envisioned to be re-aligned to the south end of Block D along the toe of Beach Hill prior to reconstruction of the Spruce Street Plaza. This new street will maintain one-way access from Front Street to Beach Hill and Beach Flats; and will provide “back of house” two-way access to any new development on this block, either the new arena or other mixed-use buildings.

Pacific Avenue / Front Street Roundabout

A new roundabout is envisioned for the intersection of Pacific Avenue and Front. It would serve as a gateway to the SOLA and downtown, incorporate a significant art sculpture, tree, or other monument as a centerpiece of the roundabout. It would also include separated one-way bike lanes and pedestrian crossings.

Arena

As an anchor to the neighborhood a new multipurpose sports and entertainment arena is envisioned on Block C between Front Street and Pacific Avenue and south of Spruce Street or Block D, between Front Street and the Santa Cruz Riverwalk, the site of the current temporary arena. While privately owned and operated, the arena is included as a “community space” based on its unique land use and function.

The new arena is planned to have the capacity of approximately 3,200 fixed seats (e.g., for basketball games), and approximately 4,000 fixed and temporary seating for other entertainment events such as musical concerts. Ancillary uses include a secondary practice court, locker/team support facilities, food service/merchandising, and administrative support services. This would replace the existing 35,000 sf. temporary arena with 2,475 fixed seats and 3,100 fixed and temporary seating for other entertainment events.

The Santa Cruz Warriors will be the main tenant. There will be additional college, high school and youth sporting events and tournaments (e.g., basketball, volleyball etc.), and other similar

competitive sport uses in addition to many other uses including concerts, shows, corporate events, community and civic gatherings, and other similar events.

As a part of event programming, the owners of the arena will be encouraged to consider partnerships to allow for public recreational uses and collaborate with community organizations to provide bicycle valet service, in addition to required public bike racks adjacent to the arena facility.

A number of development standards and guidelines are included in Chapter 4 (Section K) of the Downtown Plan (as amended) to ensure the building serves as a distinctive architectural landmark to the greater downtown area and incorporates pedestrian-friendly active ground floor uses and activities (see Appendix B).

Beach Connectivity

One of the primary objectives of the Downtown Plan is to improve connectivity between the downtown and the beach. This linkage is important for economic reasons as a significant number of visitors come to the Beach Area, but do not frequent the downtown. Additionally, better pedestrian and bicycle linkages can help to reduce traffic congestion, especially during the busy summer tourist season.

Given the topography, pedestrians and bicyclists must either go over or around Beach Hill. The multi-use Santa Cruz Riverwalk provides access to Liebrandt and Riverside Avenues to the Santa Cruz Boardwalk. Pacific Avenue also provides pedestrian and bicycle access to the beach and Municipal Wharf. However, both routes, while flat, are circuitous and not pedestrian/bike friendly.

To improve non-vehicular connectivity, this plan recommends re-construction of the Cliff Street stairs, creating a new vista lookout at the top of the stairs and improving Cliff Street from the lookout to Beach Street. See Figure 3-7 Beach Connectivity Conceptual Plan.

3.5.3 Streetscape and Circulation

Redevelopment of private property in the SOLA will expand and significantly enhance opportunities for pedestrian and bicycle circulation that is integrated within the broader circulation network.

As shown in Figure 3-8 Existing Bike Circulation, the existing bike network consists of bike lanes on the arterial streets with the exception of Pacific Avenue, which is designated as a bike route, and the multi-use path along the Riverwalk.

As shown in Figure 3-9 Proposed Bike Circulation, the bike network within the project area will be expanded to include separated bike lanes on Laurel and Front Streets, the Laurel Extension, along Pacific Avenue south of the new Front/Pacific roundabout, and Center Street.

As shown in Figure 3-10 Proposed Pedestrian Circulation, sidewalks will be widened, including the creation of a new sidewalk and multi-use path along the realigned Laurel Street Extension. A portion of Spruce Street will become a public plaza, and the Santa Cruz Riverwalk will be improved with wider pathways and gathering spaces to support users of all ages. Design elements like on-street parking, curb bulb-outs, and lane markings (e.g., sharrows, bike boxes) will encourage safe, mixed vehicle and bike movement.

3.5.4 Sustainability and Resiliency

Consistent with the City's General Plan, Community-wide Climate Action Plan for 2030, and other policy documents including the requirements of the CALGreen Building Standards Code and the City's Green Building Program, future development in the SOLA will incorporate a range sustainability features intended to reduce energy and greenhouse gas emissions, promote water-use efficiency, and minimize waste.

The area will also be built as required to withstand the potential for inundation since the project area, like much of the Downtown, is located within the flood areas mapped by the Federal Emergency Management Agency (FEMA). All new development in the project area will be required to comply with the standards for floodplain development as established by the California Building Standards Code and the more restrictive of either the most updated mapping data published by FEMA, or any Letter of Map Revision (LOMR) submitted to FEMA for review, based upon the timing of building permit submittal.

Being located adjacent to the San Lorenzo River, future development will carefully consider and minimize any potential adverse biological and hydrologic effects including water quality, aquatic and riparian plant and animal species, and migratory birds.

3.6 Downtown Plan and Other Plan Amendments

The project consists of a series of amendments to the City's Downtown Plan, extending the boundary of the existing Downtown Plan to incorporate the project area and incorporate development standards and design guidelines, and other policies and standards to the City's Downtown Plan (last amended October 24, 2023) that will facilitate future redevelopment of sites within the project area. These amendments are summarized below and can be found in Appendix B.

Downtown Plan. A new Appendix 8 – South of Laurel Area District (the project area) will be added that includes a conceptual development plan, public realm improvements, streetscape design guidelines, and conceptual infrastructure improvements. Make revisions and add a new subsection to Chapter 4 in the Downtown Plan to expand the applicability of the Downtown Plan to include the project area, create design and development standards for the project area, and to amend and clarify existing standards.

General Plan and General Plan/LCP Land Use Map. Make minor clarifying changes to General Plan text for the Regional Visitor Commercial (RVC) Land Use Designation. Revise the General

Plan/LCP Land Use Map land use map to apply the Regional Visitor Commercial to all parcels in the project area as shown in Figure 3-11 Existing and Proposed General Plan/LCP Land Use Map.

Zoning Ordinance and Zoning Map. Amendments to delete the Central Business District Subdistrict E – Lower Pacific Avenue (CBD-E) zoning designation (text and map); make minor edits to the Central Business District (CBD) zoning designation text, clarify how parking obligations are determined in Parking District 1, and amend the zoning map to apply the CBD zone to all parcels in the project area, as shown in Figure 3-12 Existing and Proposed Zoning Map.

Local Coastal Program. Add footnote to table LU-11 clarifying that the Downtown Plan governs development allowances for all property within the boundary of that plan and make amendments to Map L-11: LCP Land Use Map to be consistent with the amended Land Use Designations in the General Plan. The proposed amendments to the Beach/South of Laurel Comprehensive Area Plan and Design Guidelines are also Local Coastal Program Amendments.

Beach / South of Laurel Comprehensive Area Plan and Design Guidelines. Make edits to remove outdated, irrelevant, or superseded text and to remove references to the project area from the plan and Design Guidelines. As shown in Figure 3-13 Existing and Proposed B/SOL Plan Area, modify the boundary to exclude the project area.

3.7 Project Development

Buildout of the project is anticipated to occur over the next approximately 15-25 years, depending on market conditions and other factors. Initial redevelopment efforts are anticipated to occur first in Blocks A through D associated with construction of a new arena and new housing projects.

Adoption of the project would not directly result in development, and the proposed amendments do not include site-specific development permits. However, the project would expand and specify the geographical areas in which increased development intensity and circulation improvements may be allowed. Therefore, the project could lead to reasonably foreseeable indirect physical changes in the environment.

3.7.1 Future Development Density and Development Standards

General Plan and Zoning

As shown in Figure 3-11 Existing and Proposed General Plan/LCP Land Use Map the proposed General Plan and General Plan/LCP amendments would modify Redevelopment Blocks B and D from High Density Residential (30.1 – 55 DUs/acre) to Regional Visitor Commercial where development intensity is instead governed by a floor area ratio (FAR) of 3.5. Block H would be modified from Medium Density Residential (20.1 – 30 DUs/acre) to Regional Visitor Commercial

as well. The remaining project area would remain Regional Visitor Commercial, the current condition.

Development density and lot coverage in the Regional Visitor Commercial land use designation in downtown Santa Cruz is determined based on FAR [2]. As shown in Figure 3-14 Floor Area Ratio, the FAR north of Laurel Street would remain 5.0. The FAR in the project area would be 3.5. This would result in an estimated residential development capacity of 1,307 units (exclusive of any density bonus, discussed below). For comparison purposes, this represents an increase of an estimated 260 residential units relative to the 1,047estimated total units that could be allowed under the existing General Plan/LCP land use designations, representing around a 25% increase in development capacity.

As shown in Figure 3-12 Existing and Proposed Zoning Map, zoning designations in the project area would change from CBD-E Subdistrict Lower Pacific Avenue, R-H Multiple Residence – High Density, R-M Multiple Residence – Medium Density, and R-T (C) Beach Commercial, to CBD Central Business District.

South of Laurel Street District Development Standards

In general, the existing Downtown Plan guidelines and standards established in Section B. Pacific Avenue Retail District - Development Standards, Section C. Pacific Avenue Retail District - Building Façade Standards and Guidelines, Section D. Pacific Avenue Retail District - Storefront Standards and Design Guidelines and Section E. Front Street/Riverfront Corridor - Development Standards and Design Guidelines will apply in the South of Laurel Area District (project area), with the standards for each area extending south to the point where Pacific Avenue and Front Street meet. Beyond that point the remainder of project area shall be generally subject to the standards established in Section E. Front Street/Riverfront Corridor - Development Standards and Design Guidelines. Additionally, the proposed Section K South of Laurel Area - Development Standards will also apply to any new development proposals.

Building Heights

As shown in Figure 3-15 Maximum Building Height, no new development shall exceed the base heights of 85 feet, 70 feet, or 50 feet except through use of a state or local density bonus program or provision (as discussed below). Building heights adjacent to Beach Hill hillside shall be similarly limited to no more than 70 feet to provide a transition in height adjacent to the Beach Hill neighborhood. Additional height is permitted through application of a State Density Bonus, City Density Bonus or the Downtown Density Bonus as described in Section 3.7.2.

[2] Floor area ratio (FAR) is a measurement of the relationship between a building's floor area and the size of the lot it's built on. It's calculated by dividing the total floor area of the building by the total area of the lot.

As part of the entitlement process, all future development and redevelopment proposals shall be required to prepare visual renderings from a pedestrian eye-level, showing the proposed development in context to the surrounding buildings and streetscape.

Building Stepbacks (Tapering)

To promote a pedestrian scale, increase light to the street, and reduce overall building mass and scale of development on parcels over one-half acre in size (with a street frontage dimension of 150 feet or more), buildings shall be required to be tapered above 55 feet in height, as shown in Figure 3-16 Building Elevation Schematic South of Laurel.

Upper-level facades should provide a counterpoint to the storefronts below and provide a visually interesting and varied edge to the public space of the street. In general, the upper-level façade should consist of carefully composed "punctured openings" within a richly detailed wall. A variety of treatments shall be introduced to create richness in both the horizontal and vertical planes. They shall be composed of façade variation and wall details; and a variety of treatments such as balconies, bay windows, flower boxes, awnings and other massing breaks.

Large, uninterrupted expanses of horizontal or vertical wall surface shall be avoided. Regardless of property lines, the appearance shall be of a street with varying architectural treatments at intervals of no more than 50 to 75 feet. The multiple rhythms shall be created through the careful design of building elements and three-dimensional articulation of building elements sufficient to mitigate the presence of long, blank walls along Pacific Avenue, Front Street, Cedar Street, the Spruce Street Plaza, the east-west streets, and the alleys.

As described in the amendments, Section K would be amended as applied to the project area to promote a pedestrian scale, to increase light to the street, and to reduce overall building mass and scale of development on sites over one-half acre in size (with a street frontage dimension of 150 feet or more). Specifically, buildings above 55 feet in height shall be stepped back (tapered) in the following manner:

1. The stories containing interior finished floor above 55 feet in height shall be no more than 90% of the interior finished floor area of the highest finished floor below 55 feet.
2. The first floorplate above 75 feet in height shall be no more than 75% of the floor area of the highest floor below 55 feet.
3. Any floorplate above 85 feet in height added through density bonus application shall be no more than 35% of the floor area of the highest floor below 55 feet in height.

Furthermore, redevelopment on Block D shall be developed in a manner that maintains the public view from the Cliff Street Stairs toward the San Lorenzo River by setting back all stories above 35' from grade level. The required setback will taper from 75 feet at the southern end to 35' at the north end of the parcel, measured from the western edge of the existing Riverwalk path.

Activated Roof Top Amenities

Activated roof top amenities will be encouraged to provide opportunities for usable residential or commercial spaces, community gardens, rooftop bars and pools, shade structures, and associated facilities. These amenities shall be required to comply with specific development standards related to height, setbacks, and floor area. In particular, roof top amenities shall extend no more than 15 feet above the otherwise maximum allowable height limit and shall be setback at least 15 feet from the edge of the roof.

Conceptual renderings of the project are shown in Figure 3-17 Conceptual Rendering of Project Looking South Along the Santa Cruz Riverwalk and Figure 3-18 Conceptual Rendering of Project Looking North from Lower Pacific Avenue.

3.7.2 Density Bonus

At their October 22, 2024 meeting, the City Council approved the City Planning staff recommendation to include a Downtown Density Bonus for the project area to create a greater number and greater percentage of housing units that are restricted to below-market rate costs than would be created by projects using the State Density Bonus to build similar projects.

State Density Bonus

The State Density Bonus is a State law that allows housing proposals to be larger and denser than would otherwise be permitted under local regulations in exchange for reserving some amount of the housing for very-low, low-, or moderate-income households (or for certain targeted groups like students, veterans, and seniors). There can be no specific height limit in place for a project that uses the State Density Bonus. Once a base project is calculated using existing development standards, those development standards can be waived if they help a project achieve its proposed bonus units. Typically, waivers will apply to site standards that regulate building massing – height, FAR, setbacks, open space, and parking are the most common. In addition to allowing waivers for physical constraints, the State Density Bonus also allows a limited number of concessions to be requested to remove financial constraints. Concessions are frequently used to adjust standards such as building materials, and architectural details, as well as requirements for ground floor commercial.

The City must review development applications using the State Density Bonus in the manner that they are submitted, without requiring the use of different waivers or concessions, and the City must approve the project if it complies with the remaining applicable local codes and standards. A bonus of 50% of density is not necessarily equivalent to a 50% increase in height – it is up to the building designer to decide how to arrange the bonus area into the project they wish to propose. In this manner, the existing development allowances in the Downtown, both north and south of Laurel Street, could theoretically be used to propose a building that is taller than the targeted 12-story height limit directed by City Council. That potential already exists today in the downtown and has for several years.

Downtown Density Bonus

City planning staff have identified options for development projects to encourage developers to use the local policy and agree to building heights no taller than either eight stories or twelve stories, depending on the option selected. To make these lower heights more appealing while still achieving a yield of at least 20% below market rate (BMR) units (the current City requirement), the policy proposes two Downtown Density Bonus options (described below) for granting a density bonus.

Because all sites in the project area are eligible for State Density Bonus, which would yield only 13-15% of the units being BMR and could result in heights greater than 12 stories, the Downtown Density Bonus would also be available to all property within the Downtown Plan Expansion area south of Laurel Street (the project area). This approach provides a higher likelihood of meeting the Council's direction, particularly related to the maximum desired height and increased percentage of affordable units.

All projects seeking a Downtown Density Bonus would be committing to using only the City's program and permanently forgoing any State Density Bonus for which they might otherwise qualify. All projects would be required to exceed the existing base inclusionary requirements, with the result being the production of permanently below-market, income-qualified housing units that total at least 20% of the total units. The proposed Downtown Density Bonus offers two options of development bonuses and three options of qualifying for those bonuses. The goal of the Downtown Density Bonus is to be more attractive to developers than the State Density Bonus and thereby meet the City's goals under the program.

Development Bonus Options

As described in Chapter 4 of the Downtown Plan (as amended), the Downtown Density Bonus consists of two options for taking a development bonus:

Option A: A qualifying proposal would be allowed up to 75% additional FAR on top of the base FAR of 3.5, and up to an additional 75% in height not to exceed 145 feet if the project agrees to go through a discretionary process that includes review by an Architectural Review Committee for recommendations to support high quality design and materials as well as a Planning Commission Subcommittee to review materials at the Building Permit stage.

Option B: A qualifying project would be allowed a waiver of the maximum FAR if the project conforms to the height limits set by the Downtown Plan (50, 70, 85 feet), and agrees to go through a discretionary process that includes review by an Architectural Review Committee for recommendations to support high quality design and materials as well as a Planning Commission Subcommittee to review materials at the Building Permit stage.

Qualification Options

Development projects will be able to qualify for a Downtown Density Bonus in any of the following three ways:

1) **On-Site**: Provide BMR units in an integrated market rate and BMR development project that meet both of the following criteria:

a) A minimum of 13.4% of the total units in the final project (density bonus plan) would be available to low-income households and

b) An additional 8% of the total units in the final project (density bonus plan) would be available to moderate-income households making up to 110% of AMI.

The number of BMR units would represent 21.4% of the total units in the project.

2) **Off-Site**: Provide BMR units at an off-site project with a minimum number of bedrooms in BMR units equivalent to 26.7% of the total bedrooms in the Downtown Density Bonus proposal and targeting households with incomes up to 80% of AMI.

a) The site with the BMR units must be located either:

i) within a half mile of the South of Laurel project area, or

ii) within the boundaries of the expanded Downtown Plan, or

iii) within the Coastal Zone. (see Maps, attached).

b) The off-site project must demonstrate the following:

i) Land control and an ability to achieve the required number of bedrooms in BMR units, and submission of building permit applications prior to building permit issuance for the market rate project, and

ii) That the project with the requisite BMR units begins construction before a certificate of occupancy is issued to the market-rate project. If that is not feasible, the applicant shall either identify units on site with the market rate project that can be used for BMR housing or post a bond in the amount of the in-lieu fee that would otherwise have been required to qualify for the Downtown Density Bonus.

3) **In-Lieu**: Pay a fee toward the City's affordable housing trust fund at a rate of $60 per square foot of housing units in the Downtown Density Bonus proposal.

a) The City is required to spend all of these funds on development and preservation projects serving lower-income households and a minimum of 50% of these funds must be spent inside the Coastal Zone.

3.7.3 SEIR Project Development Buildout Assumptions

No development projects have been formally proposed at this time and development indirectly accommodated by the project is estimated to occur over the next 15-25 years. Under current market conditions in the Downtown Plan area, a 50% density bonus is the upper limit of the most common bonus pursued by market rate developers, so City Planning staff has been using a 50% bonus as a standard for calculation for recent development projects. Using this assumption and an FAR of 3.5 for the project area (described above), it is estimated that 1,757 residential units could be developed in the project area (inclusive of density bonus). Based on this assumption, some future development projects would be taller than the maximum 85-foot height limit. As discussed above, use of the Downtown Density Bonus could result in certain sites achieving a development density that exceeds a 50% bonus. This SEIR analyzes only the project described in this section, and further environmental analysis would be required should future development seek to exceed the development thresholds described herein.

For the purposes of this SEIR and consistent with City Council direction (January 10, 2023), the following assumptions are analyzed:

- A maximum buildout of 1,800 units and up to 60,000 sf. of ground-floor retail and commercial uses. Redevelopment would replace approximately 66 dwelling units and 76,770 gross sf. of commercial uses, resulting in a potential net increase of 1,734 dwelling units and a potential net decrease of 16,770 square feet of commercial space.
- Construction of a new approximately 180,000 sf. sports and entertainment arena with a capacity of approximately 3,200 fixed seats for basketball, and approximately 4,000 fixed and temporary seating for other entertainment events such as musical concerts. Ancillary uses include a secondary practice court, locker/team support facilities, food service/merchandising, and administrative support services. This would replace the existing 35,000 sf. temporary arena with 2,475 fixed seats and 3,100 fixed and temporary seating for other entertainment events. The number of annual events is estimated (by the Santa Cruz Warriors) to be:

Number of Attendees	Annual Events
2,500+	60 (30 Warriors, 30 concerts/entertainment)
1,000-2,499	40 (20 Symphony, 20 concerts/entertainment)
150-1,000	50 (35 UC Santa Cruz sporting events, 15 other)
<150 Attendees	25

3.8 Project Approvals and Use of the EIR

The City of Santa Cruz is the lead agency and responsible for approving the project. After certification, this SEIR may be used by the City as a “first tier” document for later projects as authorized by section 15168 of the State CEQA Guidelines. Reviews of later projects under this

provision could, if not determined to be exempt from CEQA, be required to consider any project-specific impacts that were not adequately addressed in this SEIR. The specific later projects are not known at this time, but could include, for example, private development projects, mobility improvements, and development of public spaces such as the proposed Spruce Street Plaza.

For later individual projects proposed in the areas covered by the plans and amendments covered in this SEIR, the City will determine whether the individual project or subsequent activity is within the scope of this SEIR, meaning it is an activity within the same project as analyzed or within the same geographic area encompassed by the SEIR. Depending on the City's determination, including whether new effects could occur, or new mitigation measures would be required, the analysis for later projects could range from no new CEQA document to a new EIR.

The City potentially could apply one or more CEQA "streamlining" tools when it considers later projects, such as, but not limited to, the focused analytical routes offered under Public Resources Code sections 21155.2 and 21083.3 and CEQA Guidelines sections 15152, 15182, 15183, and 15183.3. If appropriate and applicable to a proposed project, the City may also consider one or more statutory or categorical exemptions.

Other public agencies that have review or approval authority of the project include:

- California Coastal Commission: Approval of Local Coastal Plan (LCP) and LCP Implementation Plan amendments

4 Introduction to Environmental Analysis

The focus of the environmental analyses described in the subsequent chapters is to evaluate the impacts to the environment resulting from implementation of the project which is described in Chapter 3 Project Description. This analysis considers the comments submitted during the scoping process, where applicable, (see Appendix A: Notice of Preparation and Comment Letters).

The following environmental resources are evaluated in this EIR:

- Aesthetics
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural and Tribal Resources
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Public Services
- Transportation
- Utilities, Services Systems, and Energy Conservation

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

This environmental analysis also references applicable Santa Cruz Municipal Code (SCMC) sections. The Municipal Code guides the City's control of land uses, in concert with General Plan goals, objectives, and policies. The City's Zoning Code (Title 24 of the Municipal Code) identifies land uses permitted and prohibited according to the zoning category of particular parcels. The Municipal Code and Zoning Code are utilized throughout this document as a regulatory document governing development and land use activities within the City. Regulatory information from the Municipal Code and Zoning Code is cited in various sections of this Draft SEIR.

The environmental settings is described with an emphasis on any changed conditions since the DPA Final EIR was certified. It identifies the applicable regulatory requirements and the approach (methodology) to identifying new impacts or impacts that have an increase severity from those previously identified in the DPA Final EIR.

The focus of the analysis in this SEIR is to determine if there are any new significant impacts or impacts where there is an increase in severity. This Draft SEIR identifies applicable mitigation measures identified in the DPA Final EIR, or where new mitigation measures are necessary to reduce or avoid significant impacts.

4.1 Format of Environmental Topic Chapters

Each environmental resource chapter describes the environmental setting, assesses impacts, and identifies mitigation measures for significant impacts.

4.1.1 Environmental Setting

The Environmental Setting sections describe existing conditions at the project area and throughout the city, if applicable, and describes the existing physical environment. Applicable federal, state, and local laws and regulations relevant to a discussion of impacts in the topic category also are identified, when relevant.

4.1.2 Environmental Impacts and Mitigation Measures

The Environmental Impacts and Mitigation Measures section identifies thresholds of significance used to evaluate whether an impact is considered significant, based on standards identified in or criteria derived from the California Environmental Quality Act (CEQA), State CEQA Guidelines and the City's CEQA Guidelines. In some cases, agency policies, regulations and/or standards or professional judgment are used to further define CEQA standards of significance.

The Impacts section first identifies issues for which no impacts have been identified. The section then evaluates and analyzes significant or potentially significant project impacts, states the level of significance prior to mitigation. Mitigation measures are provided for identified significant impacts. A statement regarding the level of significance of each impact after mitigation follows the mitigation measures for that impact. For impacts found to be less-than-significant, mitigation measures are not required.

4.1.3 Significance Determinations

In accordance with CEQA, specifically Public Resources Code Section 21068, a "significant effect on the environment" means a substantial or potentially substantial adverse change in the environment. The significance thresholds used for each environmental resource topic are presented in each chapter immediately before the discussion of impacts. For each impact described, one of the following significance determinations is made:

No Impact. This determination is made if there is no potential that the project could affect the resource at issue.

Less than Significant. This determination applies if there is a potential for some limited impact on a resource, but the impact is not significant in accordance with the identified thresholds of significance.

Less than Significant with Mitigation. This determination applies if there is the potential for a significant impact in accordance with the identified thresholds of significance, but mitigation is available to reduce the impact to a less-than-significant level.

Significant and Unavoidable. This determination applies to impacts that are significant, and for which there are no feasible mitigation measures available to substantially reduce the impact to a less-than-significant level.

5 Aesthetics

5.1 Introduction

This section analyzes impacts of the project related to aesthetics based on a visual assessment conducted as part of the preparation of this SEIR. This includes consideration of 3-D massing models and conceptual illustrations of the project area prepared for the City of Santa Cruz by the Dahlin Group.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

5.2 Scoping Issues Addressed

Public and agency comments related to aesthetics were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Potential impacts of the proposed new height standards along Front Street, Laurel Street, and Pacific Avenue; views from Beach Hill, and to public views along the Santa Cruz Riverwalk and adjacent public recreational facilities.
- Include visual simulations of the project, including from street views and from the Santa Cruz Riverwalk.
- An assessment of visual impacts from public vantage points, including from the Santa Cruz Riverwalk, the Laurel Street bridge, and from the top of Beach Hill.
- Potential impacts associated with shadows on public streets and the Santa Cruz Riverwalk and river caused by taller buildings.
- Potential impacts of light and glare and the quality of visibility of the night sky.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this SEIR. Public comments received during the public scoping period are included in Appendix A.

5.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR

was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

5.3.1 Regulatory Setting

Existing federal, state, and local regulations related to aesthetics are summarized on pages 4.1-1 to 4.1-4 of the DPA Draft EIR volume of the EIR and have not changed except for an addition to Local Regulations as discussed below. Existing local regulations identified DPA EIR include Chapter 24.12 of the Santa Cruz Municipal Code that provides community design standards, development standards in the Central Business (CBD) zone district, design permit requirements (Municipal Code section 24.08.430) and Planned Development Permit (PD) regulations (Municipal Code section 24.08.720) that may allow variation in height.

City of Santa Cruz

Santa Cruz Municipal Code

As shown in Table 5-1: Existing Zoning Height Limits, the project area contains four zoning districts as described in the Municipal Code, which control building height. The Zoning Code (Municipal Code section 24.22.162) defines building height as the vertical distance from average grade to the average midpoint of the highest pitched roof. Section 24.12.150 of the Zoning Code indicates that the height limitations do not apply to roof structures for the housing of elevators, stairways, tanks, ventilating fans, air conditioning, or similar equipment used solely to operate and maintain a building.

Table 5-1: Existing Zoning Height Limits

	Height Limit (feet) [1]		
Zoning District	**Principal**	**Accessory**	**Total Maximum**
CBD - E Subdistrict Lower Pacific Avenue	35	--	35
R-H / MU Multiple Residence – High Density	48	15	48
R-M / MU Multiple Residence – Medium Density	35	15	35
R-T (C) Beach Commercial	36	15	36

Notes:
1. Residential assumes three or more units. Exclusive of State Density Bonus for projects that conform to the City of Santa Cruz's Inclusionary Affordability ordinance.

Source: Santa Cruz Municipal Code

Proposed development projects that qualify for a State Density Bonus may be constructed above these height limits, depending on various factors including the amount of additional affordable housing proposed and parcel configuration.

The City's Zoning Code requires a "design permit" for most new construction in the City of Santa Cruz, including new construction of commercial structures. The purpose of the design permit is to promote the public health, safety and general welfare through the review of architectural and site development proposals and through application of recognized principles of design, planning and aesthetics, and qualities typifying the Santa Cruz community. Pursuant to the Design Permit requirements (Zoning Code Section 24.08.430), findings must be made that address ten identified criteria before the City issues a design permit.

Some of the criteria to be addressed in findings for a Design Permit include: consistency with General Plan and Local Coastal Program (LCP) policies; compatible exterior design and appearance with other existing buildings and structures in neighborhoods which have established architectural character worthy of preservation; maintaining a balance of scale, form and proportion, using design components which are harmonious, and materials and colors which blend with elements of the site plan and surrounding areas; protection of views along the ocean and of scenic coastal areas; encouraging alternatives to automobile travel by automobile where appropriate, through the provision of facilities for pedestrians, bicyclists, and public transit; and provision of complementary signs.

5.3.2 Regional and Downtown Setting

As described in the DPA Draft EIR (pages 4.1-5 to 4.1-6), the visual character of the City of Santa Cruz is influenced by a blend of natural features, historic neighborhoods and other development. Santa Cruz is strongly characterized by its coastal location along Monterey Bay, which defines the city's entire southern boundary. Key natural and open space features include:

- Coastline and beaches
- San Lorenzo River and other watercourses, parks and open space
- Background view of the Santa Cruz Mountains

The San Lorenzo River is a prominent natural and visual feature in the City and is prominently visible from numerous locations in the downtown, including the Soquel Avenue and Broadway Bridges. From these vantage points views of the river are the predominant visual feature, which is framed by the Santa Cruz Mountains to the north and Beach Hill to the south. Existing development is mostly visible along the west side of the river levee.

As described in the DPA Draft EIR (pages 4.1-5 to 4.1-6), the visual character of downtown is defined by existing development, as well as views of and along the San Lorenzo River at some elevated locations, such as bridges and from the Santa Cruz Riverwalk. Downtown is characterized by a mix of primarily commercial buildings, some of which have upper floor office and residential units. The area supports a mix of both pre- and post- Loma Prieta earthquake constructed structures with a variety of architectural styles and building heights.

Most of the existing buildings in the downtown north of Laurel Street are approximately 50 feet in height, which is the base building height maximum in the Downtown Plan, except for areas

along Cedar Street that have a 35-foot height limit. Some existing older buildings in the downtown are less than 50 feet in height. However, the Downtown Plan does allow additional height under specified conditions, and a number of buildings are under construction or approved that extend to 85 feet in height. Rooftop mechanical equipment that often exceeds the base height limits as permitted by the Downtown Plan and City regulations.

5.3.3 Visual Character of the Project Area

For the purposes of this aesthetics analysis, the project area is defined as the area within the proposed Downtown Plan expansion area and immediately adjacent neighborhoods, including the San Lorenzo River and adjacent neighborhoods to the east, Beach Hill, and the residential neighborhoods to the west.

The project area is characterized by a mix of commercial buildings, multi-family condominium and apartment buildings, and surface parking lots. The most prominent visual feature is the temporary Kaiser Permanente Arena located at the southeast corner of Spruce and Front Streets. Buildings along Pacific Avenue are typically one to three stories north of the intersection of Front Street. 555 Pacific Avenue, a relatively new mixed-use retail and apartment building, contains three floors of residential over ground-floor retail. Further south and along Center Street, building heights vary considerably from one story to four stories and are interspersed by surface parking.

South of the arena is a steep hillside that rises at the north end of Beach Hill which includes a variety of accommodation (i.e., hotels, motels, inns) and residential use. The public lookout at the top of the Cliff Street stairs, located just south of the Laurel Street Extension, provides panoramic views of the San Lorenzo River, residential neighborhoods to the northeast, the downtown, and the Santa Cruz Mountains in the distance.

Two-, three-, and four-story apartment buildings (e.g., Sycamore Commons) and predominantly one-story single-family residences are located directly west of the project area. This neighborhood is located in the Neighborhood Conservation Overlay District (NCOD, Santa Cruz Municipal Code Chapter 24 Part 31).

Buildings on Center Street include a three-story hotel, single-story commercial, and surface parking. Depot Park, which includes a playground and synthetic-turf ballfield, is located west of the Pacific Avenue / Center Street roundabout. 130 Center Street (Calypso) is a recently approved six-story mixed-use development project consisting of 233 residential Single Room Occupancy (SRO) units, 2,139 square feet of commercial retail space and 166 parking spaces. Once constructed, this development project will have building height of 65 feet.

Figure 5-1 (a-d) Project Area Existing Visual Character, illustrates the visual character of the project area.

5.3.4 Scenic Views

As described in the DPA Draft EIR (pages 4.1-6 to 4.1-7), prominent scenic views in Santa Cruz are primarily those that are oriented toward Monterey Bay and the Pacific Ocean or toward the Santa Cruz Mountains that frame the northern boundary of Santa Cruz (City of Santa Cruz, April 2012, DEIR volume). There are no designated scenic highways or roads within the City.

According to maps developed for the City's General Plan 2030 and included in the General Plan EIR, the project area is not within a mapped scenic panoramic view (City of Santa Cruz, April 2012, DEIR volume, Figure 4.3-1). Urban views, including those of the downtown project area, are identified along the San Lorenzo levee (Ibid.). The existing Local Coastal Plan identifies Beach Hill as part of an urban skyline with "visually distinctive structures" (City of Santa Cruz Local Coastal Plan, 1994, Map CD-3).

As shown in Figure 5-2 Local Coastal Plan Map CD-3 Scenic Views, views along the San Lorenzo Riverwalk from the Water Street bridge and Riverside Garden Park (southeast of the Laurel Street bridge) are designated as "Viewpoints and Panoramas." A southerly portion of Beach Hill is part of an "Urban Skyline" and within this area, a Victorian building located at 924 3rd Street (Golden Gate Villa) is designated as a "Visually Distinctive Structure". North of Laurel Street a multi-block area between Pacific Avenue and the Santa Cruz Riverwalk is also designated an "Urban Skyline." (City of Santa Cruz Local Coastal Plan, 1994, Map CD-3).

5.3.5 Scenic Resources

As described in the DPA Draft EIR (pages 4.1-7 to 4.1-8), the San Lorenzo River is east of a portion of the project area and is a prominent natural and open space feature in the project area. The Downtown Plan indicates that the river offers potential as an open space, habitat and a recreational amenity and provides opportunities for creation of linkages to the downtown. It also recommends strengthening connections from the project area to the San Lorenzo River, downtown and the beach area.

Landmarks are distinctive built and natural features that are highly visible or that help to define the identity of a particular place. In downtown, the Civic Auditorium, Clock Tower, and Depot Park are identified as visual landmarks in the City's General Plan Draft EIR (Figure 4.3-1). The Boardwalk and Santa Cruz Wharf are identified as landmarks in the beach area.

5.4 Impacts and Mitigation Measures

5.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

AES-a Cause a substantial adverse effect on a scenic vista such as eliminate or substantially adversely affect, modify, or obstruct a visually prominent or

significant public scenic vista, public viewing area, or public view corridor, including views of the ocean, to and along the shoreline, and panoramic background mountain views.

AES-b Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway or substantially damage scenic visually prominent trees or historic-landmark buildings in other locations within the City.

AES-c In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or if the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality or have a substantial, demonstrable, negative aesthetic effect.

AES-d Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

In addition to these CEQA thresholds, Public Resources Code section 21099, effective January 2014, defines projects located within one-half mile of a major transit stop or facility as transit-oriented development. Section 21099(d)(1) further indicates that: "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." While this provision does not apply to the proposed Plan amendments, it may be applicable to future development projects as the study area is within one-half mile of the Santa Cruz Metro Transit Center, a major transit facility. State law continues to allow local jurisdictions the ability to consider design review as part of a discretionary permit project level evaluation, including consideration of aesthetic impacts pursuant to local design review ordinances or other discretionary powers provided by other laws or policies.

5.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites.

The analysis reviews the potential increased heights and intensified development that could occur as a result of the proposed amendments-based site visits to view the study area from different vantage points in the vicinity to characterize the visual setting and visibility of the project area.

The analysis below evaluates the potential changes to the visual character of the downtown based on both existing conditions and the incremental difference between what is currently allowed and what would potentially be allowed with the project for CEQA purposes.

The impact analysis includes the use of diagrams superimposed on photographs (photo simulations) that show outlines of potential building mass with additional heights as seen from important viewpoints in the greater downtown and beach area. The diagrams do not represent actual projects or architecture as no project applications have been submitted, but they are intended to conceptually represent the upper limits of structural massing that could occur over time. The building mass depicted may or may not occur.

The photo simulations, while not required under CEQA, provide a scaled, accurate depiction of potential building mass as seen from pedestrian viewpoints, sufficient to inform the public and City decision makers about the hypothetical appearance of full buildout associated with the project.

5.4.3 Impacts and Mitigation Measures

Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding scenic views (AES-a), scenic resources (AES-b), the visual character of the site and surrounding area (AES-c), and light and glare (AES-d).

Impact AES-1 (*DPA EIR Impact 4.1-1*): Scenic Views. Future development accommodated by the proposed plan amendments would not eliminate or substantially adversely affect, modify, or obstruct a visually prominent or significant public scenic vista (AES-a). This is considered a *less-than-significant* impact.

The project area is located in the developed greater downtown area of the City of Santa Cruz. The visual character of downtown is defined by existing development along tree-lined streets. The General Plan indicates that prominent scenic views mostly are those that are oriented toward Monterey Bay and the Pacific Ocean or toward the Santa Cruz Mountains that frame the northern boundary of Santa Cruz (General Plan 2030 DEIR). According to maps developed for the City's General Plan 2030 and included in the General Plan EIR (General Plan 2030 DEIR Figure 4.3-1), the project area is not located within any mapped panoramic view areas and is not located within proximity to identified visual landmarks. The project is located in a developed, urban area, and no scenic views are available from the project area.

Urban views, including those of the downtown project area, are identified along the San Lorenzo levee, (General Plan 2030 DEIR). Potential impacts to urban views are addressed in Impact AES-3, below. None of the General Plan policies and actions directed toward protection of scenic views are applicable to the project as no scenic views would be affected by the project.

As shown in Figure 5-2 Local Coastal Plan Map CD-3 Scenic Views, the historic structure located 924 Third Street is identified as a "Visually Distinctive Structure." Depending on proposed

building heights, future development on Block C could partially impede views of this structure from distant northly views. However, taken in whole as a panoramic view, this impact is not considered to be significant.

Also shown in Figure 5-2, views from the Santa Cruz Wharf are considered panoramic views. Figure 5-3 Visual Simulation of Project Looking North from Santa Cruz Municipal Wharf, illustrates a reasonable worst-case scenario at buildout using the project development standards. As shown, the building height of potential future worst-case development would appear at or slightly above existing development on Beach Hill at intermittent locations. The foreground views of the Wharf and parking and other development on the Wharf, as well as distant views of development along Beach Street, including the Boardwalk, as well as existing Beach Hill development, would not be substantially altered. Future development as a result of the Downtown Plan amendments would not be visually prominent given existing development and distance from the Wharf and would not cause a significant change to distant ridgeline views. Furthermore, foreground and midground views of Monterey Bay are prominent views at this location. Views north from the Santa Cruz Wharf would be consistent with existing urban development and would not impact views of Main Beach nor the Santa Cruz Boardwalk. Therefore, proposed future development associated with the project would not eliminate, obstruct, or substantially alter a scenic view from the Santa Cruz Wharf.

While not considered a panoramic view as shown in Figure 5-2, the view from the top of the Cliff Street stairs provides a scenic view of the downtown, the San Lorenzo River, and adjacent northeasterly neighborhoods of the City. Figure 5-4 Visual Simulation of Project Looking North from Top of Cliff Street Stairs, illustrates a reasonable worst-case scenario at buildout using the project development standards. These standards include a requirement that redevelopment on Block D shall be developed in a manner that maintains the public view from the Cliff Street Stairs toward the San Lorenzo River by setting back all stories above 35 feet from grade level. The required setback shall taper from 75 feet at the southern end to 35 feet at the north end of the parcel, as measured from the western edge of the existing Riverwalk path. This setback would maintain views of the San Lorenzo River and adjacent northeasterly neighborhoods, however, if constructed at a worst-case full buildout, future development could obstruct existing views of the downtown and a portion of the distant Santa Cruz Mountains.

Although it is not known how future projects will be developed, it is conservatively concluded that the project could lead to taller and more massive development, particularly on Blocks B and D, however, the project would not have a substantial adverse effect on a mapped or observed scenic view because scenic ocean views would not be affected, and scenic views of distant mountains would only be potentially partially blocked in some locations that also have visible urban development within existing views. Thus, the project would not result in significant impacts to scenic views. As such, impacts are considered *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact AES-2 (*DPA EIR Impact 4.1-2*): Scenic Resources. Because there are no scenic resources in the project area, future development accommodated by the project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (AES-b). Therefore, there would be *no impact* to a scenic resource.

There are no designated state scenic highways or roads within the City. The project area is not located near a state scenic highway. The project area is developed with commercial and residential buildings, a temporary arena, and surface parking lots. There are no structures or features in the project area that would be considered scenic resources.

The southern portion of the project area is located adjacent to the Depot Park which is identified as a "visual landmark" in the City's General Plan Draft EIR (Figure 4.3-1). However, Depot Park and the project area are separated by Center Street and any future development in proximity to Depot Park would replace existing urban development and would not affect Depot Park.

Therefore, future development as a result of the project would not result in impacts to scenic resources. There would be *no impact*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact AES-3 (*DPA EIR Impact 4.1-3*): Visual Character of the Surrounding Area. Implementation of the project would result in future new development in the project area but would not conflict with applicable zoning or other regulations governing scenic quality (AES-c). This is considered a *less-than-significant impact*.

The project, as shown in Figure 3-11 Existing and Proposed General Plan/LCP Land Use Map would amend the General Plan land use designation for redevelopment Blocks B and D from High Density Residential (30.1 – 55 DUs/acre) to Regional Visitor Commercial. With this amendment, development intensity would be governed by a floor area ratio (FAR) of 3.5 instead of dwelling unit intensity. Block H would be changed from Medium Density Residential (20.1 – 30 DUs/acre) to Regional Visitor Commercial as well. The remaining project area would remain Regional Visitor Commercial, which is the current General Plan land use designation.

The City of Santa Cruz is an "urbanized area" under the definition of the term in CEQA Guidelines section 15387. Therefore, the standard of review is whether or not a project would conflict with applicable zoning and other regulations governing scenic quality. Applicable regulations include height limits established in the zoning ordinance, requirements for approval of a Design Permit, and existing LCP Design Guidelines for the project area.

Adoption and implementation of the project would result in new development in the project area. As shown in Figure 3-15 Maximum Building Heights, base building heights would not

exceed 85 feet. Building heights adjacent to Beach Hill hillside shall be similarly limited to no more than 70 feet to provide a transition in height adjacent to the Beach Hill neighborhood.

These building heights are comparable to other existing and proposed building heights in the downtown. However, these building heights are greater than the existing permitted building heights in the project area per the City's current zoning code (see Table 5-1: Existing Zoning Height Limits), in which building height limits range between 35 and approximately 50 feet. While the proposed project amendments would increase building heights in the project area, height limits established in the zoning ordinance are not established strictly in regard to governing scenic quality. Furthermore, additional height (existing and proposed project) is permitted through application of a State or local Density Bonus or the Downtown Density Bonus as described in Section 3.7.2.

Figure 5-5 Visual Simulation of Project Looking South from Laurel Street Bridge and Figure 5-6 Visual Simulation of Project Looking South from Soquel Avenue Bridge provide diagrams superimposed on photographs that show outlines of potential building mass with additional heights as seen from the Laurel Street and Soquel Avenue bridges, respectively. The diagrams do not represent actual projects or architecture as no project applications have been submitted, but they are intended to conceptually represent the upper limits of structural massing that could occur over time. The building mass depicted may or may not occur.

The purpose of Figures 5-5 and 5-6 is to illustrate a reasonable worst-case scenario at buildout under the project development standards. As can be seen, potential future worst-case development could appear more massive than existing conditions. However, illustrating the worst-case scenario does not typically reflect the actual development pattern over time. Nonetheless, the illustrations show that the additional future buildings could appear more massive than existing development, although this change would be noticeable even with more buildout under the existing 35 to 48 feet maximum height limits.

To promote a pedestrian scale, increase light to the street, and reduce overall building mass and scale, future development in the project area on sites over one-half acre in size and with a street frontage dimension of 150 feet or more shall be required to taper (stepbacks) above 55 feet (see Figure 3-16 Building Elevation Schematic South of Laurel). Upper-level facades should provide a counterpoint to the storefronts below and provide a visually interesting and varied edge to the public space of the street. In general, the upper-level façade should consist of carefully composed "punctured openings" within a richly detailed wall. A variety of treatments shall be introduced to create richness in both the horizontal and vertical planes. Roof top amenities shall extend no more than 15 feet above the otherwise maximum allowable height limit and shall be setback at least 15 feet from the edge of the roof. Based on the historic development pattern in the City and the proposed development standards, a varied-height is the most likely result of the project.

Large, uninterrupted expanses of horizontal or vertical wall surface shall be avoided. Regardless of property lines, the appearance shall be of a street with varying architectural treatments at

intervals of no more than 50 to 75 feet. The multiple rhythms shall be created through the careful design of building elements and three-dimensional articulation of building elements sufficient to minimize the presence of long, blank walls along Pacific Avenue, Front Street, Cedar Street, the Spruce Street Plaza, the east-west streets, and the alleys.

According to City staff, this "volumetric approach" is intended to ensure both vertical and horizontal building variation to avoid monolithic structures. To help ensure the intended pedestrian scale as described in the Downtown Plan (as amended), all new development and redevelopment proposals shall be required to prepare a visual rendering from a pedestrian eye-level, showing the proposed development in context of surrounding buildings and streetscape features.

Furthermore, continued landscaping with street trees along the public streets, as well as along on the inland side of the Riverwalk, will further screen building mass in all areas. For example, the dense canopy along Pacific often screens upper floors from a distance softens views of larger buildings and maintains a pedestrian-level scale.

Thus, existing and proposed design guidelines include design standards that will result in buildings of variable height, massing and architectural treatments, and the extent of allowable additional height is restricted to Redevelopment Blocks B, D and H. The design guidelines address many architectural features, including building mass and scale, facades, materials, colors and lighting, as well as landscaping. In addition, in allowing additional building heights, both the existing Downtown Plan and proposed amendments require the City to make findings including that: a) the additional height will contribute to an improved social and economic environment by including new housing; and b) the form of the development promotes the appearance of a grouping of buildings rather than large, monolithic building masses.

With implementation of requirements to limit heights, provision of stepbacks, implementation of design treatments to minimize building mass, and compliance with the Downtown Plan development standards and design guidelines (as amended), potential intensified development resulting from additional allowed heights would not significantly alter the visual character of the project area from what might be developed under the allowable standards or taller buildings that have been constructed in the downtown area. This conclusion is consistent with state law that will be applicable to future mixed-use projects proposed in the downtown area. CEQA provides that aesthetic impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment, although design review would still be required pursuant to local City requirements and regulations.

Future development would also be subject to approval of a Design Permit. Findings set forth in section 24.08.430 of the City's zoning ordinance for approval of a Design Permit require a site plan and building design to be consistent with design and development policies of the General Plan, any element of the General Plan, and any area plan, specific plan, or other city policy for physical development. One of the findings set forth in section 24.08.430 is that the site plan

shall be situated and designed to protect views along the ocean and of scenic coastal areas. As discussed in Impact AES-1, future development accommodated by the proposed project would not result in significant impacts to existing scenic views.

Because the project area is located within the Coastal Zone, section 24.08.250 also requires a finding with approval of a coastal permit that a development will maintain views between the sea and the first public roadway parallel to the sea. Future development projects would not be located between a road and the ocean; thus section 24.08.250 would not apply.

There is no required presumption under CEQA that taller buildings are necessarily a substantial adverse change in the existing visual environment. Such determinations are made on a case-by-case basis at a lead agency's discretion and in consideration of the relevant environmental setting or context, which here, is a nearly fully developed urban area. Future proposed buildings with additional height would not be considered to be substantially out of scale with other existing buildings in the downtown area as there are a substantial number existing, approved, and under construction buildings in downtown that exceed the existing 36 to 48 feet maximum height in the project area.

Therefore, the project would not conflict with regulations governing scenic quality, and the impact would be considered *less-than-significant*.

Mitigation Measures

Impact AES-4 (*DPA EIR Impact 4.1-3*): Introduction of Light and Glare. The project would allow increased heights and building coverage, and future development would include exterior and interior lighting typical of residential developments but would not result in introduction of a major new source of light or glare (AES-d). Thus, this is considered a *less-than-significant impact*.

Exterior Lighting

Future development accommodated by the project would not result in introduction of a major new source of light or glare, although there will be introduction of windows and exterior building lighting typically associated with commercial development.

The project includes design guidelines for the project area would require all lighting fixtures to be fully shielded and Dark Sky compliant and avoid over-lighting buildings that are intrusive to adjacent buildings, residence, and streetscapes.

Exterior building lighting would be further reviewed as part of the Design Permit review for future site-specific developments, and the project would be conditioned to install lighting such that it is directed downward and does not create light onto adjacent properties.

Therefore, the project would not result in a significant impact related to creation of a new source of substantial light or glare. This is consistent with the conclusions as described in both the General Plan 2030 EIR and the DPA Draft EIR and impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

5.5 References

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City of Santa Cruz. October 25, 1994. The City of Santa Cruz General Plan and Local Coastal Program 1990- 2005. [Local Coastal Program portion] Available online at: http://www.cityofsantacruz.com/government/city-departments/planning-and-community-development/general-plan

6 Air Quality and Greenhouse Gas Emissions

6.1 Introduction

This section analyzes impacts of the project related to project air emissions, including greenhouse gas (GHG) emissions, based on air quality modeling conducted by Dudek as part of the preparation of this EIR. The results of the air modeling are summarized in this section, and are included in Appendix C.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which consists of the Draft EIR volume (September 2011) and the Final EIR volume (August 2012) and was certified on June 26, 2012. These documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

6.2 Scoping Issues Addressed

Public and agency comments related to air quality and greenhouse gas emissions were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Evaluate weekend and weekday emissions from traffic congestion resulting from project, including events at the arena.
- Project effects on Climate Action Plan.
- Use of concrete and construction impacts related to CO_2 emissions.
- Evaluate project impacts, including tall buildings, on existing air quality and ability of air to flow freely.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

6.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

6.3.1 Regulatory Setting

No relevant changes to the air quality regulatory setting have been identified since the DPA Final EIR was certified, except there have been multiple regulations and plans that the State has adopted to reduce GHG emissions as described further below.

6.3.2 Effects of Air Quality Pollutants

No relevant changes to the effects of air quality pollutants have been identified since the DPA Final EIR was certified.

6.3.3 Sensitive Receptors

No relevant changes to the effects of air quality pollutants have been identified since the DPA Final EIR was certified. Sensitive receptors in the project vicinity include single- and multi-family residences along the western, southern, and northwestern project boundaries, as well as multi-family residences within the project boundaries.

6.3.4 Existing Air Quality Conditions

Criteria air pollutants are defined as pollutants for which the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards (AAQS) for outdoor concentrations to protect public health. State standards are established to protect public health, including the most sensitive members of the population.

National standards include a primary standard to protect public health and a secondary standard to protect the public welfare including property, vegetation, and visibility. However, the numerical values for both standards are the same (MBARD 2008). Criteria pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead. In California, sulfates (SO_4), hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles are also regulated as criteria air pollutants. An area is designated as “in attainment” when it is in compliance with the federal and/or state standards as further discussed below.

Since the DPA Final EIR was certified, the North Central Coast Air Basin (NCCAB), which is where the project is located, has been redesignated as in attainment for the state O_3 standards based on improved ambient air quality. However, the NCCAB remains designated as a nonattainment area for state PM_{10} standards. The NCCAB is designated as unclassified or attainment for all other state and federal standards (CARB, 2022a; U.S. EPA, 2023).

6.3.5 Air Basin Plans

No relevant changes to the air basin plans have been identified since the DPA Final EIR was certified.

6.3.6 Climate Change

Greenhouse Gas Emissions

GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, fluorinated gases (hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6) and nitrogen trifluoride (NF_3)), chlorofluorocarbons (CFCs), and hydrochlorofluorocarbons (HCFCs), in addition to water vapor.[3] Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2024a). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e).

Since certification of the DPA Final EIR, the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022, total United States GHG emissions were approximately 6,343.2 million MT CO_2e (MMT CO_2e) in 2022 (EPA 2024b). Total U.S. emissions have decreased by 3.0% from 1990 to 2022, down from a high of 15.2% above 1990 levels in 2007. Gross emissions increased from 2021 to 2022 by 0.2% (14.4 MMT CO_2e). Net emissions (i.e., including sinks) were 5,489.0 MMT CO_2e in 2022. Overall, net emissions increased 1.3% from 2021 to 2022 and decreased 16.7% from 2005 levels Between 2021 and 2022, the increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion due to the continued economic activity rebounding after the height of the COVID-19 pandemic. The CO_2 emissions from fossil fuel combustion increased by 1.0% from 2021 to 2022, including a 5.0% increase in residential sector emissions, 8.9% increase in commercial sector emissions, 2.6% increase in industrial emissions, a 0.1% decrease in transportation sector emissions and a 0.6% decrease in electric power sector emissions. Carbon sequestration in the Land Use, Land-Use Change, and Forestry sector offset 14.5% of total emissions in 2022 (EPA 2024b).

Since certification of the DPA Final EIR, California's 2000–2021 GHG emissions inventory (2023 edition) has been prepared, which indicates that California emitted approximately 381.3 MMT CO_2e in 2021, including emissions resulting from out-of-state electrical generation (CARB 2023). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 6-1: California GHG

[3] California Health and Safety Code 38505 identifies seven GHGs that CARB is responsible to monitor and regulate to reduce emissions: CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, and NF_3.

Emissions Source Categories presents California GHG emission source categories and their relative contributions to the emissions inventory in 2020.

Table 6-1: California GHG Emissions Source Categories

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total
Transportation	145.6	38.2%
Industrial uses	73.9	19.4%
Electricity generation [1]	62.4	16.4%
Residential and commercial uses	38.8	10.2%
Agriculture and forestry	30.9	8.1%
High-GWP substances	21.3	5.6%
Recycling and waste	8.4	2.2%
Totals	**381.3**	**100%**

Notes:
GHG = greenhouse gas; GWP = global warming potential; MMT CO_2e = million metric tons of carbon dioxide equivalent. Emissions reflect 2021 California GHG inventory. Totals may not sum due to rounding.
1. Includes emissions associated with imported electricity, which account for 19.82 MMT CO_2e.
Source: CARB 2023.

Per-capita GHG emissions in California have dropped from a 2001 peak of 13.8 MT per person to 9.7 MT per person in 2021, a 30% decrease. In 2016, statewide GHG emissions dropped below the 2020 GHG limit of 431 MMT CO_2e and have remained below that level since that time (CARB 2023).

Since certification of the DPA Final EIR, the City of Santa Cruz developed a GHG inventory for year 2019 as part of its 2030 Climate Action Plan (CAP) (City of Santa Cruz 2022), with citywide GHG emissions estimated at 274,584 MT CO_2e. Table 6-2: Estimated GHG Emissions in the City of Santa Cruz details those emissions.

California Regulations and Plans

Since the DPA Final EIR was certified, there have been multiple regulations and plans that the State has adopted to reduce GHGs. The most relevant are summarized below.

Regarding renewable energy and energy procurement, Senate Bill (SB) 100 (2018) established that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

Table 6-2: Estimated GHG Emissions in the City of Santa Cruz

Source Category	Annual GHG Emissions ($MT CO_2e$)	Percent of Total
Transportation and mobile services	188,930	69%
Residential energy	42,718	16%
Commercial energy	23,206	8%
Solid waste	18,976	7%
Water and wastewater [1]	754	0%
Total	**274,584**	**100%**

Notes:
GHG = greenhouse gas; GWP = global warming potential; MT CO2e = metric tons of carbon dioxide equivalent.
1. The "Percent of Total" for "Water and Wastewater" is listed at 0% based on rounding.
Source: City of Santa Cruz 2022.

The Legislature enacted Assembly Bill (AB) 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels. Although AB 1279 establishes an overall policy to achieve net zero GHG emissions as soon as possible, but no later than 2045, recognizing the need to implement CO_2 removal and carbon capture, utilization and storage technologies, the Legislature established a specific target of 85% below 1990 levels by 2045 for anthropogenic GHG emissions. Therefore, the net zero target does not directly apply to development projects, but the 2045 target of 85% below 1990 levels represents the reductions required to contribute to accomplishing the State's overall net zero policy.

The Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) was issued on November 16, 2022 (CARB 2022b) and approved on December 15, 2022. The 2022 Scoping Plan lays out a path not just to carbon neutrality by 2045 but also to the 2030 GHG emissions reduction target. The 2022 Scoping Plan analyzed four scenarios, with the objective of informing the most viable path to remain on track to achieve the 2030 GHG reduction target. The scenario modeling indicates that, if the plan described in the Proposed Scenario is fully implemented, and done so on schedule, the State would cut GHG emissions by 85% below 1990 levels, result in a 71% reduction in smog-forming air pollution, reduce fossil fuel consumption by 94%, create 4 million new jobs, among other benefits (CARB 2022b).

The 2022 Scoping Plan details "Local Actions" in Appendix D. The Local Actions includes recommendations intended to build momentum for local government actions that align with the State's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under CEQA. The recommendations provided in Appendix D are non-binding and should not be interpreted as a directive to local governments, but rather as

evidence-based analytical tools to assist local governments with their role as essential partners in achieving California's climate goals.[4] Appendix D recognizes consistency with a CEQA-qualified GHG reduction plan such as a Climate Action Plan as a preferred option for evaluating potential GHG emission impacts under CEQA. Absent a qualified GHG reduction plan, Appendix D provides recommendations for key attributes that residential and mixed-use projects should achieve that would align with the State's climate goals (CARB 2022b). Projects that achieve all key attributes are considered clearly consistent with the State's climate and housing goals and would have a less-than-significant GHG impact under CEQA (CARB 2022b). However, projects that do not achieve all attributes are not considered to result in a potentially significant GHG emission impact. Additional potential threshold options identified when a CEQA-qualified GHG reduction plan is not available included a net-zero threshold and use of air district recommended thresholds of significance.

The 2022 Scoping Plan also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage (CCS) from anthropogenic point sources, where CO_2 is captured as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete); and carbon dioxide removal (CDR) from ambient air, through mechanical (e.g., direct air capture with sequestration [DACS]) or nature-based (e.g., management of natural and working lands) applications.

Association of Monterey Bay Area Governments

The Association of Monterey Bay Area Governments (AMBAG) is the Metropolitan Planning Organization for the region, which includes Monterey, San Benito, and Santa Cruz counties. Since certification of the DPA Final EIR, AMBAG adopted the Monterey Bay 2045 Moving Forward – 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy in June 2022 (2045 MTP/SCS), the implementation of which is anticipated to achieve a 4%-per-capita reduction and nearly 7%-per-capita reduction in GHG emissions from passenger vehicles by 2020 and 2035, respectively (AMBAG 2022). The 2045 MTP/SCS outlines the region's proposed transportation network, emphasizing multimodal system enhancements, system preservation, and improved access to high quality transit, as well as land use development that complements this transportation network (AMBAG 2022). In addition, AMBAG is working with the Santa Barbara County Association of Governments and the San Luis Obispo Council of Governments to develop the Central Coast Zero Electric Vehicle Strategy that will identify gaps and opportunities to implement zero-emission vehicle infrastructure on the Central Coast, including on or near the State Highway System, major freight corridors, and transit hubs (AMBAG

[4] The threshold approaches outlined in the 2022 Scoping Plan, Appendix D, are recommendations only and are not requirements; they do not supplant lead agencies' discretion to develop their own evidence-based approaches for determining whether a project would have a potentially significant impact on GHG emissions.

2022).These transportation strategies would reduce vehicle miles traveled (VMT) and associated petroleum fuels.

City of Santa Cruz Climate Action Plan

Since certification of the DPA Final EIR, the City adopted its CAP in September 2022that that updates the previous 2020 CAP that was adopted in 2012 and outlines 31 measures and 152 associated individual actions that are intended to achieve the City's 2030 GHG emissions reduction target and the state's SB 32 goal of 40% below 1990 levels by 2030, as well as demonstrates the City's progress towards achieving the target of carbon neutrality in 2035 and beyond (City of Santa Cruz 2022). To further the City's progress toward reaching these targets, the CAP identifies measures intended to reduce the City's GHG emissions; these measures apply communitywide to municipal operations, as well as public and private projects. The measures include those related to: building energy use and reduction, transportation, public infrastructure, waste reduction, climate restoration, climate economy, and sustainable municipal government measures. Through implementation of its measures and actions, the CAP aims to reduce building energy consumption, vehicle miles traveled, solid waste generation, and increase carbon sequestration.

6.4 Impacts and Mitigation Measures

6.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

AIR-a	Conflict with or obstruct implementation of the air quality management plan (AQMP);
AIR-b	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
AIR-c	Expose sensitive receptors to substantial pollutant concentrations;
AIR-d	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of;
GHG-a	Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
GHG-b	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

For criteria pollutant emissions, the MBARD's CEQA Guidelines indicate that a project could result in potentially significant impact if the project would violate any air quality standards or contribute substantially to an existing or projected air quality violation, i.e. result in generation of emissions of or greater than 137 pounds per day for reactive organic gases (ROG) or oxides of nitrogen (NO_x) (which are O_3 precursors), 550 pounds per day of CO, 150 pounds per day of sulfur oxides (SO_x), 82 pounds per day of PM_{10}, and/or 55 pounds per day of $PM_{2.5}$ (MBARD 2008).

For localized CO, the MBARD's CEQA Guidelines indicate that a project could result in potentially significant CO emissions if the project would result in a decrease in intersection or road level of service (LOS) from D or better to E or F or increase delays by more than 10 seconds at intersections that operate at E or F. However, based on the City's General Plan EIR (2011), the MBARD has indicated that high concentrations of localized CO hotspots are generally not a problem in the region and future developments would need to address the potential for exposure of sensitive receptors to CO hotspots at the project level during environmental review (City of Santa Cruz 2012-Draft EIR volume). Additionally, because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the state has been steadily decreasing and alternative traffic screening levels have been developed by several other air districts as a better correlation than LOS as indicative of a potential CO hotspot. These screening levels for intersection traffic that could result in potential CO hotspots are described below to provide context of the magnitude of hourly volumes that could result in significant localized CO:

- The South Coast Air Quality Management District (SCAQMD) conducted CO modeling for its 2003 Air Quality Management Plan (SCAQMD 2003) for the four worst-case intersections in the South Coast Air Basin. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be more than 100,000 vehicles per day.
- The Bay Area Air Quality Management District (BAAQMD) determined that projects would result in a less-than-significant impact to localized CO concentrations if (1) project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour, or (2) project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) (BAAQMD 2023).

The BAAQMD screening criterion of 24,000 vehicles per hour has been applied to this project as a metric to evaluate CO hotspots. This is a conservative criterion, since vertical and/ or horizontal mixing is not limited at the affected intersections proximate to urban areas.

Regarding GHGs, the State CEQA Guidelines do not prescribe specific methodologies for performing a GHG emissions assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project in the NCCAB would be considered a cumulatively considerable contribution to global climate change, except the MBARD has an adopted guideline for stationary source projects in which a project would not have not a significant GHG emissions impact if the project emits less than 10,000 MT per year CO_2e or complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of GHG emissions (MBARD 2016).

6.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites.

The air quality and GHG analysis used the California Emissions Estimator Model (CalEEMod) (version 2022.1), which is recommended by the MBARD to quantify potential criteria air pollutant emissions resulting from future development accommodated by the project. Air pollutant emissions from the operational phase of the project were estimated using CalEEMod for the existing baseline conditions (year 2023) and for buildout of the project (year 2045) for mobile, area (consumer product use, landscape maintenance, and architectural coatings), and energy sources (natural gas combustion).[5] For GHG emissions, additional sources were accounted for including indirect emissions from the generation of electricity for building usage/lighting and water/wastewater treatment and conveyance, as

[5] As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHG emissions in CalEEMod, since criteria pollutant emissions would occur at the site of power plants, which are not on the project area. However, natural gas combustion would occur at the project area itself, in association with equipment that uses natural gas.

well as solid waste disposal, and refrigerants. Default water demand estimates in CalEEMod were also adjusted to match the values provided in the City Urban Water Management Plan.

Notably, since the project supports replacement of the existing temporary sports and entertainment arena with an expanded and permanent facility, which would have variable traffic depending on whether an event were occurring and the size/type of event, a maximum event day scenario (based on a large entertainment event with the most attendees) and annual average scenario (accounts for all events/attendees in a year for the facility) were assessed for the project and existing conditions. The maximum event day scenario was included to assess criteria air pollutant emissions, which were compared to the applicable MBARD daily significance thresholds. The annual average scenario was included for GHG emissions, which are presented on an annual basis.

No specific development projects are proposed, and no project-site specific development applications have been submitted to the City. City Planning Department staff estimate that potential development and buildout estimated for the purpose of assessing environmental impacts would occur over 15-25 years.

Construction emissions cannot be determined in the absence of specific development projects with identified construction schedules and equipment. Emissions from the operational phase of future development supported by the project and for the existing scenario were estimated using CalEEMod default emission factor values for mobile, area, energy, solid waste, and refrigerant sources. In addition, project-specific trip generation and water demand rates identified in this EIR were incorporated into CalEEMod. Model outputs and assumptions are included in Appendix C.

6.4.3 Impacts and Mitigation Measures

Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding conflicts with the AQMP (AIR-a), cumulative criteria pollutant emissions (AIR-b), exposure of sensitive receptors (AIR-c), generation of objectionable odors (AIR-d), greenhouse gas emissions (GHG-a) and conflicts with GHG reduction plans or policies (GHG-b).

Impact AQ/GHG-1 (*DPA EIR No Impact*): Conflict with the AQMP. Future development and growth accommodated by the project would not conflict with or obstruct implementation of the AQMP (AIR-a), resulting in *no* impact.

The MBARD CEQA Guidelines consider inconsistency with the AQMP to be a significant cumulative adverse air quality impact (MBARD 2008). The AQMP is prepared to address attainment of the AAQS. The plan accommodates growth by projecting growth in emissions based on different indicators. For example, population forecasts adopted by the AMBAG are used to forecast population-related emissions. Through the planning process, emissions growth is offset by basin-wide controls on stationary, area, and transportation sources of air pollution (MBARD 2008). Thus, population-related emissions have been forecast in the AQMP using population forecasts adopted by AMBAG, and population-changing projects which are

consistent with these forecasts are consistent with the AQMP. Projects that are not consistent with the AQMP's population projections have not been accommodated in the AQMP and would have a significant cumulative impact on regional air quality unless emissions are totally offset (MBARD 2008).

Adoption and implementation of the project would not directly result in impacts related to air quality. However, the project would facilitate additional development as a result of various circulation, land use and infrastructure revisions, indirectly resulting in potential impacts related to air quality.

For the purpose of the SEIR analyses, the City estimates that approximately 1,800 new dwelling units could be constructed as a result of the project , for a net increase of 1,733 units after accounting for the 67 units to be demolished. The City had 24,506 existing dwelling units as of January 1, 2024 (California Department of Finance 2024), and approximately 2,300 residential units are under construction or have been approved throughout the City, including residential development at the University of California Santa Cruz (UCSC)[6]. With the addition of these units, the City's housing units would total 26,806 dwelling units. That number would increase to 28,539 dwelling units with the addition of the net increase in units for the project, which is below the AMBAG Regional Growth Forecast of 29,335 units for the City of Santa Cruz for the year 2035 that were factored into the AQMP. [7]

As such, the housing units accommodated by the project for year 2045 would be 796 units *less* than what was assumed in the AQMP for year 2035 for the City of Santa Cruz. Therefore, although adoption and implementation of the project could indirectly result in increased dwelling units and population associated with potential development that would be accommodated by the project, this growth would not conflict with or obstruct implementation of the AQMP (6a) and would result in *no impact*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

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6 Residential projects at UCSC are primarily student housing projects, and there is one approved employee housing project. In general, part-year student housing is considered group quarters and year-round faculty / student family housing is counted as housing units (AMBAG 2022). For the 2014 forecast used in the AQMP, University population and housing projections were completed separately from jurisdiction population projections (AMBAG 2014). For the purpose of this review and in accordance with current AMBAG guidance, approved employee housing is considered as housing units, and student housing is considered group quarters and is not included as housing units.

7 Although AMBAG has adopted the 2022 Regional Growth Forecast, in order to determine consistency with the current AQMP, projects need to compare their housing units to the data incorporated into the AQMP (i.e., AMBAG's 2014 Regional Growth Forecast).

Impact AQ/GHG-2 (*DPA EIR Impact 4.2.1*): Criteria Pollutant Emissions. Future development and growth accommodated by the project would result in emissions of criteria pollutants, but would not exceed adopted thresholds of significance, violate any air quality standard or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under federal or state ambient air quality standards (AIR-b). This is a *less-than-significant* impact.

Construction Emissions

Future development accommodated by the project would result in construction-related emissions that could affect air quality by increasing criteria air pollutant emissions. The project could indirectly lead to new development that could result in generation of particulate emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application during construction. As reported in the DPA EIR, entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Particulate matter emissions can vary daily, depending on various factors, such as the level of activity, type of construction activity taking place, type of equipment in operation, and weather conditions. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (e.g., delivery trucks), and worker vehicles would result in emissions of ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$.

The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce ROG emissions. Based on the MBARD *CEQA Guidelines*, exhaust emissions from these typical construction activities generally would not result in a significant impact because their emissions are already accounted for in the emissions inventories of the state- and federally-required air plans, and they would not have a significant impact on the attainment and maintenance of the O_3 AAQS (MBARD 2008).

For the project, the scale and timing of construction is unknown, and construction activities would be variable over the construction period. The City's General Plan requires future development projects to implement applicable MBARD control measures and/or air quality mitigations in the design of new projects as set forth in the MBARD *CEQA Guidelines*. The MBARD CEQA Guidelines provide screening levels for potential significant impacts, and projects involving earthmoving (grading/excavation) that cover 2.2 or more acres may be required to implement dust suppression measures during construction unless future project-level construction-emissions modeling indicates that pollutant thresholds established by the MBARD would not be exceeded (MBARD 2008). Therefore, implementation and application of General Plan policies and MBARD recommended measures, if required, would reduce any future significant project construction emissions to a *less-than-significant* level.

Operational Emissions

Future development and growth accommodated by the project would generate criteria pollutant emissions from vehicular traffic, area sources (consumer products, architectural coatings, landscaping equipment), and energy sources (natural gas appliances, space and water

heating). The existing land uses that comprise the baseline conditions of the project area also generate emissions from these sources. The emissions associated with on-road mobile sources include running and starting exhaust emissions, evaporative emissions, brake and tire wear, and fugitive dust entrainment. The CalEEMod model was utilized to estimate operational emissions for the year 2045 for the project and for the year 2023 for existing conditions. Default trip rates in CalEEMod were adjusted to match the weekday trips for the project and existing scenarios (Kimley Horn 2024).

Table 6-3: Project Air Quality Emissions summarizes the results of the emissions modeling. As shown, daily emissions associated with project operation would not exceed the MBARD significance thresholds, and the net increase in emissions (after subtracting the existing baseline emissions) would be even less. Thus, the project would not exceed adopted thresholds of significance, violate any air quality standard or contribute substantially to an existing or projected air quality violation, and emissions of criteria pollutants associated with operation of the project would result in a *less-than-significant* impact.

Table 6-3: Project Air Quality Emissions

Emissions Source	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Project Scenario						
Mobile	27.98	13.92	156.10	0.36	40.74	10.44
Area	56.83	0.00	113.07	0.01	0.06	0.05
Energy	0.84	14.46	7.43	0.09	1.15	1.15
Total	85.64	28.37	276.61	0.46	41.96	11.64
Existing Scenario						
Mobile	29.60	19.89	148.43	0.21	17.10	4.50
Area	10.85	0.02	16.75	0.00	0.03	0.02
Energy	0.15	2.60	1.94	0.02	0.20	0.20
Total	40.60	22.51	167.12	0.23	17.33	4.73
Net Change in Emissions						
Net Change (Project – Existing)	45.04	5.86	109.49	0.23	24.63	6.91
MBARD Threshold	137	137	550	150	82	N/A
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**N/A**

Notes:
ROG = reactive organic gas; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; MBARD = Monterey Bay Air Resources District.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. Columns may not add due to rounding.
Emissions are based on a maximum event day scenario for the arena (based on a large entertainment event with the most attendees) to present the worst-case day.
See Appendix C for complete results.

CO emissions from traffic generated by the project would be the pollutant of concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of CO. The region is designated as attainment/unclassified for the CO AAQS, which indicates that CO levels have been at healthy levels (i.e., below state and federal standards) and reflects improvements in tailpipe emissions controls. To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation was conducted comparing the highest hourly traffic volumes at any studied intersection to the 24,000 vehicles-per-hour criterion. Based on traffic conditions considered for development of the project and described in the Local Transportation Analysis for the project (Kimley-Horn 2024), the maximum hourly volume would be approximately 7,893 vehicles at the intersection of Ocean Street and Water Street in the PM peak hour for the Cumulative Plus Project scenario, which would be substantially less than the screening criterion applied. Therefore, the development accommodated by the project would not significantly contribute to a CO hotspot, and this impact would be less-than-significant without mitigation.

Air pollution by nature is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the MBARD develops and implements plans for future attainment of ambient air quality standards. The MBARD recommends that:

> The air quality analysis of an EIR (Program EIR or otherwise) for a general plan, specific plan, or zoning ordinance should defer any unknown impacts for subsequent EIRs or negative declarations. When comparing the project to an adopted plan or policy, the analysis should examine the existing physical conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced as well as potential future conditions discussed in the existing plan (CEQA Guidelines §15125[e]). The EIR should focus on the project's cumulative air quality impact on regional ozone and its localized impact on carbon monoxide levels. A project's cumulative impact should be analyzed by determining its consistency with the AQMP.... Its localized impact should be assessed by identifying whether build-out would create or substantially contribute to carbon monoxide "hotspots" where federal or state AAQS are exceeded. (MBARD 2008)

As noted above, consistency with the AQMP is used by MBARD to determine a project's cumulative impact on regional air quality. Projects that are not consistent with the AQMP have not been accommodated in the AQMP and will have a significant cumulative impact on regional air quality unless emissions are totally offset (MBARD 2008). As discussed in Impact AQ/GHG-1, the project could indirectly result in increased housing units and population associated with potential development that would be accommodated by the project. However, this growth would not exceed housing unit estimates in the current AQMP, and thus the project would be consistent with the AQMP. As such, based on the recommended guidance of the MBARD, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable NAAQS or CAAQS. Further, since an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, then a project that is consistent with the AQMP would not result in adverse effects to human health. Based on the preceding considerations, this impact would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact AQ/GHG-3: Exposure of Sensitive Receptors. Future development and growth accommodated by the project would potentially expose sensitive receptors to substantial pollutant concentrations during short-term construction but not during long-term operations (AIR-c). This is a *potentially significan*t impact.

In addition to impacts from criteria pollutants, impacts from development accommodated by the project may include emissions of pollutants identified by the state and federal government

as TACs or hazardous air pollutants (HAPs). The greatest potential for TAC emissions during construction would be diesel-particulate matter (DPM) emissions from heavy equipment operations and heavy-duty trucks. DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts; however, no short-term, acute relative exposure level has been established for DPM.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

The potential for development of any individual project to result in a significant health risk at nearby sensitive receptors is dependent on many variables including, but not limited to, the total amount of DPM emissions generated during construction, the duration of construction and thereby exposure period, the proximity to nearby sensitive receptors, the predominant wind direction and other meteorological factors, and topography. Due to the unknown parameters of future development accommodated by the project, including the levels of potential TAC emissions in relation to the location of sensitive receptors, the potential associated health risk (including cancer risk and chronic hazard index) cannot be estimated with a level of accuracy. Therefore, the potential of the project to expose sensitive receptors to substantial pollutant concentrations and associated health risk during construction would be conservatively considered potentially significant without mitigation. MM AQ/GHG-3.1: Construction Equipment Exhaust Control would require all 75 hp or greater equipment to have CARB-compliant Tier 4 engines, which can reduce potential DPM emissions from construction equipment by up to 93% to 96% compared to equipment with engines meeting Tier 1 or Tier 2 emission standards.[8] Implementation of MM AQ/GHG-3.1 would substantially reduce DPM emissions from off-road equipment, and as such, TACs emitted during construction would not

[8] Particulate matter emissions benefits are estimated by comparing off-road particulate matter emission standards for Tier 1 and Tier 2 with Tier 4 final emissions standards. Tier 1 particulate matter emissions standards were established for equipment with 25 to <50 horsepower and equipment with horsepower <175. Tier 1 emissions standards for these engines were compared against Tier 4 final emissions standards, resulting in a 96% reduction in particulate matter. The EPA established particulate matter standards for engines with horsepower from 50 to <175 as part of the Tier 2 emission standards. For these engines, Tier 2 emissions standards were compared against Tier 4 final emissions standards, resulting in a 93%–95% reduction in particulate matter.

be expected to result in concentrations causing significant health risks. Therefore, this impact would be less-than-significant after mitigation.

Regarding operations, the future development accommodated by the project would be mixed-use, including residential, retail, restaurant, and arena land uses. Operation of the project would not result in any non-permitted direct emissions (e.g., those from a point source such as diesel generators) or in a substantial increase in diesel vehicles (i.e., delivery trucks greater than 100 per day). Thus, the project would not result in a long-term operational source of TAC emissions. Additionally, the 2022 Title 24 Standards require Minimum Efficiency Reporting Value (MERV) 13 air filters in new construction, which help to reduce particulate matter from outdoor air. MERV 13 filters have been demonstrated to remove approximately 90% of PM from intake air (EPA 2024c) and, therefore, would minimize any potential health risk to new on-site sensitive receptors. Project impacts associated with exposing sensitive receptors to substantial pollutant concentrations, specifically health risk associated with operation, would be *less-than-significant* without mitigation.

Mitigation Measures

Implementation of MM AQ/GHG-3.1 would reduce the impact to a *less-than-significant* level.

MM AQ/GHG-3.1: Construction Equipment Exhaust Control

All diesel-fueled off-road construction equipment greater than 75 horsepower shall be zero-emissions or equipped with California Air Resources Board (CARB) Tier 4 compliant engines. Alternatively, CARB Tier 2 or Tier 3 compliant engines can be used if CARB Level 3 Verified Diesel Emissions Control Strategy (VDECS) filters are added to each piece of off-road diesel-fueled equipment. An exemption from these requirements may be granted by the City of Santa Cruz when equipment with the required tier is not reasonably available and when corresponding reductions in diesel particulate matter are achieved from other construction equipment on the project. An exemption may only be granted if total estimated project generated construction emissions will not exceed applicable Monterey Bay Air Resources District (MBARD) risk thresholds as verified using industry-standard emission estimation methodologies.

Impact AQ/GHG-4: Objectionable Odors. Future development and growth accommodated by the project would not create objectionable odors in substantial concentrations, affecting a substantial number of people, which could result in injury, nuisance, or annoyance to a considerable number of persons, or would endanger the comfort, health, or safety of the public (AIR-d). This is a *less-than-significan*t impact.

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Potential temporary and intermittent odors may result from construction equipment exhaust, the application of asphalt, and architectural coatings. Temporary and intermittent construction-source emissions are controlled through existing requirements and industry best management practices addressing proper storage of and application of construction materials.

According to the MBARD, objectionable odors include sulfur compounds and methane, and typical sources of odors include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries (MBARD 2008). The project does not include any of these sources. As a mixed-use redevelopment, the project includes commercial and residential land uses that would not be expected to generate objectionable odors. Overall, the project would have a *less-than-significant* odor impact because it would not create substantial objectionable odors affecting a substantial number of people.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact AQ/GHG-5: Greenhouse Gas (GHG) Emissions. Future development and growth accommodated by the project would not generate GHGs that may have a significant impact on the environment (GHG-a) and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (GHG-b). Therefore, this is a *less-than-significan*t impact.

The future development accommodated by the project could result in generation of GHG emissions from off-road equipment and vehicle emissions during construction. However, the scale and timing of construction of new development or redevelopment is unknown, and construction activities would be variable throughout the overall construction period. Since construction activities and associated GHG emissions are speculative, only operational emissions have been quantified and are detailed herein.

Future development and growth accommodated by the project, as well as baseline conditions under the existing scenario, would result in GHG emissions from vehicular traffic, area sources (hearths and landscaping maintenance), electrical generation, natural gas consumption, water supply and wastewater treatment, solid waste, and refrigerants. No stationary source emissions (such as emergency generators) are anticipated at this time for future land uses accommodated by the project. As described in Section 6.4.2, the CalEEMod model was utilized to estimate operational emissions for the year 2045 for the project and for the year 2023 for existing conditions. CalEEMod defaults were incorporated into the emissions modeling for all sources except for on-road vehicles and water demand, which were adjusted based on the trip rates for the project and existing scenarios and the City Urban Water Management Plan, respectively. Table 6-4: Project GHG Emissions summarizes the results of the emissions modeling.

Table 6-4: Project GHG Emissions

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Project Scenario					
Mobile	4,632.12	0.24	0.23	0.82	4,706.60
Area	35.83	0.00	0.00	--	35.96
Energy	3,802.96	0.40	0.02	--	3,819.22
Water / Wastewater	55.91	2.17	0.05	--	125.65
Solid Waste	153.88	15.38	0.00	--	538.36
Refrigerants	--	--	--	10.03	10.03
Total	**8,680.70**	**18.19**	**0.30**	**10.85**	**9,235.82**
Existing Scenario					
Mobile	2,346.68	0.25	0.16	4.67	2,404.56
Area	8.50	0.00	0.00	--	8.57
Energy	738.97	0.08	0.01	--	742.57
Water / Wastewater	16.96	0.66	0.02	--	38.27
Solid Waste	23.80	2.38	0.00	--	83.25
Refrigerants	--	--	--	665.11	665.11
Total	**3,134.91**	**3.37**	**0.18**	**669.78**	**3,942.33**
Net Change (Project – Existing)	**5,545.80**	**14.81**	**0.12**	**(658.93)**	**5,293.49**

Notes:
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerants; CO_2e = carbon dioxide equivalent.
Values in (parentheses) represent a net reduction in emissions.
Columns may not add due to rounding. Emissions are based on the annual average trips for the arena. The reduction in refrigerant emissions based on the automobile care land uses being demolished.
See Appendix C for complete results.

As shown in Table 6-4, overall GHG emissions generated by the future development accommodated by the project scenario would be approximately 5,293 MT CO_2e per year more than the existing baseline conditions. Notably, based on the programmatic nature of the project, the emissions presented are worst-case as the analysis does not account for GHG reductions for future development from sustainable measures, such as rooftop solar electricity requirements, energy efficiency requirements for buildings in future years (per California Code of Regulations Title 24 Parts 6 and 11), energy efficient lighting and appliances, or solid waste diversion. In addition, default CalEEMod GHG intensity values were assumed to be conservative, because they are based on a 2019 baseline year and do not account for the greater future renewable portfolio standard (RPS) requirements for utility electricity generation

(per SB 100 and SB 1020). As such, the project 's net increase in GHG emissions would be lower than what is shown in Table 6-4.

It is expected that GHG emissions resulting from the project would be partially offset by the incorporation of energy and water conserving features and "green" building designs that would be required under City and State building regulations, including the City's Green Building requirements. Furthermore, the City's General Plan 2030 seeks to reduce citywide contribution to GHG emissions through land use planning, program development, investment in energy efficient infrastructure, and increased use of renewable energy. Green building policies and actions incorporate energy efficiency measures, water stewardship, use of sustainable building materials derived from renewable resources, reduction of waste through recycling and reuse, and smart growth and sustainable development practices. In addition to defining shorter-term strategies to address likely impacts of climate change on city infrastructure and resources, the City must also set planning goals to minimize future risks of sea level rise and climate change.

With regards to GHG reduction plans discussed in Section 6.3.6, the City's adopted CAP provides a quantification of emissions reductions that would result over time throughout the City through implementation of the measures and actions included in the CAP. For the purposes of CEQA, the City's 2030 CAP serves as a Qualified Climate Action Plan that the City can streamline the environmental review process of future projects. Pursuant to CEQA Guidelines section 15064.4(b)(2), a lead agency may consider a project's consistency with an adopted emissions reduction plan in determining significance of a project's GHG emissions.

The City of Santa Cruz has established consistency with the CEQA Guidelines for a qualified GHG reduction strategy with their most recent 2030 Climate Action Plan (CAP) (City of Santa Cruz, 2022). Pursuant to CEQA Guidelines Section 15183.5, a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances. In order for the CAP to be considered a qualified GHG reduction strategy and provide for CEQA streamlining of GHG analysis for future development, the CAP must identify those measures that are applicable to new development. The CAP includes measures that are applicable to existing developments and municipal government operations, as well as voluntary and mandatory measures to be applied to new development for public and private projects. The CAP includes 31 measures with 152 associated individual actions, intended to reduce GHG emissions throughout the City. The measures include those related to building energy use and reduction, transportation, public infrastructure, and other climate restoration and sustainable government measures. Through implementation of its measures and actions, the CAP aims to reduce building energy consumption, VMT, solid waste generation, and increase carbon sequestration.

The City developed a CAP Project Review Checklist to assist applicants and City staff with determining a project's consistency with the CAP. If it is shown that a project will implement the measures listed in the CAP Project Review Checklist, it can be concluded that the project is consistent with the CAP, and thus, a project's GHG emissions would be considered less-than-

significant. Completion of the CAP Project Review Checklist is voluntary. If an applicant opts out of CAP checklist submission or if a project will not implement all applicable measures in the checklist, the project may be subject to a project-specific GHG analysis as part of the project's required CEQA review. Future development projects accommodated by the project would be required to complete the CAP Project Review or submit additional analysis to the City to show that it is consistent with CAP. As such, the project would not conflict with the City's CAP, resulting in less-than-significant GHG emission impacts.

CARB is required to develop a Scoping Plan, which provides the framework for actions to achieve the state's GHG emission targets. While the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used as the sole basis for project-level evaluations, it is the official framework for the measures and regulations that will be implemented to reduce California's GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with applicable plans, policies, or regulations if it meets the Scoping Plan policies and would not impede attainment of the goals therein.

For the project , the relevant GHG emissions reduction targets include those established by SB 32 and AB 1279, which require GHG emissions be reduced to 40% below 1990 levels by 2030, and 85% below 1990 levels by 2045, respectively. In addition, AB 1279 requires the state achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter. CARB's 2017 Scoping Plan update was the first to address the state's strategy for achieving the 2030 GHG reduction target set forth in SB 32 (CARB 2017), and the most recent CARB 2022 Scoping Plan update outlines the state's plan to reduce emissions and achieve carbon neutrality by 2045 in alignment with AB 1279 and assesses that progress is making toward the 2030 SB 32 target (CARB 2022b). As such, given that SB 32 and AB 1279 are the relevant GHG emission targets, the 2017 and 2022 Scoping Plan updates that outline the strategy to achieve those targets, are the most applicable to the project.

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), increase stringency of the low-carbon fuel standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increase stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacement of fossil-fuel-fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022b). Many of the measures and programs included in the Scoping Plan would result in the reduction of proposed project-related GHG emissions with no action required at the project-level, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (low-carbon fuel standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy). In addition, future development projects accommodated by the project will be required to show consistency with the Development Compliance Checklist

and the applicable GHG reduction measures therein, which will help the City achieve its future GHG reduction targets and support the 2017 and 2022 Scoping Plan goals.

Based on the preceding considerations, the project would not generate GHGs that may have a significant impact on the environment (6f) and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (6g) and impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

6.5 References

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7 Biological Resources

7.1 Introduction

This section analyzes impacts of the project related to biological resources based on a review of existing habitat features within and adjacent to the project boundaries and assessment of potential impacts upon riparian and aquatic habitats and species by Dudek biologists conducted as part of the preparation of this EIR, as well as review of relevant City plans and other existing data.

As described in Section 1.2 Use of Earlier CEQA Analysis, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) FEIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 FEIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

7.2 Scoping Issues Addressed

Public and agency comments related to biological resources were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Consider impacts to habitat and biological resources, including impacts to San Lorenzo River, environmentally sensitive habitat areas (ESHAs) and wetlands.
- Prepare site-specific analysis to evaluate all direct, indirect impacts and cumulative impacts, temporary and permanent, impacts to special status species or sensitive habitats, loss or modification of breeding, nesting, dispersal and foraging habitat, habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic or human presence, and obstruction of movement corridors, fish passage or access to water sources and habitat features.
- The project has the potential to encroach into the riparian zone due to new development near the San Lorenzo River.
- The project could increase impervious surfaces and stormwater, potentially affecting fish and wildlife resources.
- Artificial lighting resulting from the project has the potential to significantly and adversely affect fish and wildlife.
- Address potential bird strike and other impacts caused by new 15- and 17-story buildings adjacent to the San Lorenzo River corridor and analyze the shading impacts of these buildings on wildlife in the San Lorenzo River.

- The location of very tall and lighted structures near bird habitats of the San Lorenzo River, Neary's Lagoon and beach areas may potentially negatively impact foraging, migrating and reproduction of local bird populations.
- Evaluate cumulative impacts on San Lorenzo River fauna and flora and specifically protected/endangered species, such as steelhead, tidewater goby, bald eagle and migratory birds since the San Lorenzo River is in the Pacific Flyway.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

7.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project, focusing on those areas where there have been changes made to the project, changes in the circumstances surrounding the project, or new information discovered since the DPA FEIR was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

7.3.1 Regulatory Setting

Existing federal, state, and local regulations related to biological resources are summarized on pages 4.3-1 to 4.3-6 of the DPA Draft EIR volume of the EIR and have not changed except for an addition to Local Regulations as discussed below. Existing regulations identified in the DPA EIR include the following:

- Federal regulations: Federal Endangered Species Act (FESA), Migratory Bird Treaty Act, Clean Water Act (regarding wetlands)and Birds of Conservation Concern;
- State regulations: California Endangered Species Act (CESA), Species of Special Concern and Fully Protected Species pursuant to California Department of Fish and Wildlife (CDFW) species lists and California Fish & Game Code requirements, respectively, the Native Plant Protection Act of 1977, and regulation of activities within streams and riparian areas under Section 1600 of the Fish and Game Code; and
- Local regulations: City of Santa Cruz Local Coastal Program (LCP) and General Plan 2020 policies, the City-wide Creeks and Wetlands Management Plan, the San Lorenzo Urban River Plan (SLURP) and regulations in the Santa Cruz Municipal Code, including Section 24.14.080 with provisions to protect wildlife habitat and protected species, section 24.08.21 regulating development adjacent to city watercourses, and Chapter 9.56 regarding heritage trees.

Local Regulations

City of Santa Cruz Bird Safe Building Design Standards

The City of Santa Cruz Bird-Safe Building Design Standards were first prepared in 2019 after certification of the DPA EIR and were updated in June 2022. The Standards apply in all districts where new construction or exterior changes to the façade of buildings or structures requiring a permit and are located adjacent to or within 300 feet of areas with specified General Plan recreational and open space land use designations; an open waterway mapped in the City-wide Creeks and Wetlands Management Plan; or any area within 300 feet of undeveloped property likely to provide significant bird habitat, as determined by the Zoning Administrator. Treatment is required for 90 percent of all glazing within 40 feet above grade, for portions of the buildings where glazing would have the potential to reflect vegetation or open water, and specific window and lighting treatments are specified in the Standards.

7.3.2 Existing Habitat Areas

The downtown area, including the proposed Downtown Plan expansion area, is developed and does not support sensitive habitat or special status species. However, the eastern edge of the project area is situated along the western San Lorenzo River levee. The San Lorenzo River and associated habitats are discussed on pages 4.3-7 to 4.3-9 of the DPA Draft EIR volume of the EIR and have not changed except as discussed below.

7.3.3 Sensitive Habitat Areas

The San Lorenzo River and associated habitat is a sensitive habitat as discussed on pages 4.3-8 to 4.3-10 of the DPA Draft EIR volume of the EIR, and this status has not changed. Relevant updates regarding the project area are provided below.

The project area is currently developed with a mix of commercial, residential, and public facilities, including the Warriors Sports Arena. According to maps developed for the City's General Plan 2030 and included in the General Plan EIR, the project area is not within a mapped sensitive habitat area (City of Santa Cruz April 2012-DEIR volume). However, a portion of the eastern edge of the project area (approximately 600 linear feet) adjacent to Laurel Street Extension is located adjacent to the San Lorenzo River levee. Vegetation along the river is mapped as a sensitive riparian habitat in the City's General Plan 2030, and vegetation along the banks of the segment of the San Lorenzo River adjacent to the project area also is mapped as sensitive riparian habitat in the City's LCP (City of Santa Cruz, 1994, Map EQ-9). The river also supports special-status species as described in the following section.

The project area is within the "Estuarine Reach" of the San Lorenzo River as described in the SLURP. This reach includes the area from Laurel Street Bridge to the river mouth. Within this reach, tidal action changes the to a brackish system, compared with the freshwater, aquatic environment of the upstream area analyzed in the DPA Draft EIR. The Estuarine Reach also becomes a lagoon at the river mouth in the summer, when a sandbar forms at the beach and closes the mouth, causing an estuary to fill (City of Santa Cruz, 2003).

The riparian habitat adjacent to the San Lorenzo River south of Laurel Street and adjacent to the project area includes a mix of willows and herbaceous cover on the river side of the river levee. Non-native grasses predominate on the landward side of the levee with a variety of planted native and non-native planted trees.

7.3.4 Special Status Species

Special status species associated with the San Lorenzo River aquatic and riparian habitats are discussed on pages 4.3-10 to 4.3-14. Species potentially occurring in the river along the project area are similar to those occurring in the area analyzed in the DPA Plan FEIR. Occurrence and status of the special-status species is similar to that identified in the DPA Plan FEIR. Species that have been identified within the San Lorenzo River and riparian habitat include central California coast steelhead, central California coast coho salmon, tidewater goby, "western pond turtle," yellow warbler and tricolored blackbird. However, it is noted that the U.S. Fish and Wildlife Service has recently proposed the western pond turtle, as "northwestern pond turtle," for listing under FESA. However, proposed species receive no protections under the ESA, unless they are officially listed. Additionally, habitat for this species likely becomes less suitable downstream of Laurel Street, progressing toward the river mouth.

7.3.5 Wildlife Movement and Breeding

Wildlife movement and breeding are discussed on pages 4.3-10 to 4.3-14. No relevant changes have been identified since the DPA FEIR was certified.

7.3.6 Relevant City Plans

Relevant City plans related to the project area include the City-wide Creeks and Wetlands Management Plan and the SLURP, which are discussed on pages 4.3-15 to 4.3-16 of the of the DPA Draft EIR volume of the EIR. Updates regarding the project area are provided below.

The City-wide Creeks and Wetlands Management Plan establishes requirements for structural setbacks and development standards and guidelines that would be applicable to future development along watercourses within the City. Within the project area, the eastern edges of some properties on the east side of Front Street south of Laurel Street are within the defined management area of the San Lorenzo River. Riparian and development setbacks for the San Lorenzo River are established in the Creeks Plan, except along the San Lorenzo River; according to the Creeks Plan, all projects in this area are subject to provisions of the SLURP.

As indicated above, the project area is within the "Estuarine Reach" of the San Lorenzo River as described in the SLURP. This reach includes the area from Laurel Street Bridge to the river mouth. Recommended improvements in the project area include replacement of the levee trail and installation of a "river view plaza" that were completed as part of a 2004 U.S. Army Corps of Engineers restoration project. A small plaza area is located at the intersection of Third Street and Laurel Street Extension.

7.4 Impacts and Mitigation Measures

7.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

BIO-a Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

BIO-b Have a substantial adverse effect, either directly or through habitat modifications on; or substantially reduce the number or restrict the range of any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

BIO-c Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

BIO-d Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

BIO-e Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

BIO-f Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan;

BIO-g Substantially reduce the habitat of a fish or wildlife species;

BIO-h Cause a fish or wildlife population to drop below self-sustaining levels; or

BIO-i Threaten to eliminate a plant or animal community.

7.4.2 Analytical Method

The impact analysis is based on a review by Dudek biologists and review of existing data and studies.

7.4.3 Impacts and Mitigation Measures

The project would not directly result in new development. However, the proposed Downtown Plan amendment would accommodate intensified redevelopment of existing developed sites and would result in increased building heights over those currently permitted for the project area. However, the conclusion of the DPA EIR regarding the following potential impacts remain unchanged with the project.

- Future redevelopment of existing developed sites would not result in impacts to special-status species or substantially reduce the habitat of a fish or wildlife species as none exist within the project area (BIO-b, BIO-g) due to existing development.
- Future development would not result in permanent fill of wetlands or future development within wetlands or waters of the U.S., and thus would not result in direct or indirect impacts to wetland habitat (BIO-c).
- The project area is within an existing developed area, and in addition to limits to wildlife movement due to existing development within the project area, development both upstream and downstream along the San Lorenzo River limits wildlife movement and connectivity along the only significant natural feature in the vicinity. Future redevelopment in the project area would not affect wildlife movement along the river corridor as future development would be within the existing development footprint in the downtown area. Therefore, adoption and implementation of the project would not directly or indirectly substantially interfere with wildlife movement or with established wildlife corridors (BIO-d).
- The proposed amendments do not conflict with an HCP or NCCP, as none exist for the project area (BIO-f). The City's approved Operations and Maintenance Habitat Conservation Plan (O&M HCP) is not applicable to the project or project area as it was developed to cover improvements or projects related to City facilities with the potential to result in take of federally listed species and other specified non-listed special-status species.
- The project would not directly or indirectly cause a fish or wildlife species to drop below self-sustaining levels or threaten to eliminate a plant or animal community, as no habitat would be directly affected by future development (BIO-h, BIO-i).

Other potential impacts addressed in the DPA EIR that could apply to the project are updated below, regarding sensitive San Lorenzo River riparian and aquatic habitats (BIO-a), wildlife movement and nesting birds (BIO-d) and potential conflicts with local tree protection regulations (BIO-e).

Impact BIO-1a (*DPA EIR Impact 4.3-2*): Impacts to Sensitive Riparian Habitat. Future development would not result in direct impacts to or loss of riparian habitat and would be required to comply with the city's riparian setbacks (BIO-a). This is considered a *less-than-significant* impact.

The project would not result in new development, and potential future development would not be located within riparian or other sensitive habitat areas. Thus, there would be no direct removal of riparian or other sensitive habitat.

As described in the amendments, Section K would be amended as applied to the project area to promote a pedestrian scale, to increase light to the street, and to reduce overall building mass and scale of development on sites over one-half acre in size (with a street frontage dimension of 150 feet or more). Specifically, buildings above 55 feet in height shall be setback (tapered) in the following manner:

1. The stories containing interior finished floor above 55 feet in height shall be no more than 90% of the interior finished floor area of the highest finished floor below 55 feet.

2. The first floorplate above 75 feet in height shall be no more than 75% of the floor area of the highest floor below 55 feet.

3. Any floorplate above 85 feet in height added through density bonus application shall be no more than 35% of the floor area of the highest floor below 55 feet in height.

The City-wide Creeks and Wetlands Management Plan establishes setbacks for development adjacent to riparian corridors along all creeks within the City based on review of habitat and hydrological values. The development setback area is the area outward from the edge of the designated riparian corridor where development is restricted. The development setback width is intended to provide an appropriate water quality and habitat buffer between the riparian corridor and development.

The City-wide Creeks and Wetlands Management Plan references the SLURP as the guiding management plan for the San Lorenzo River adjacent to the project area. The SLURP recommends a 10-foot setback between development and the western edge of the river levee, which also is an LCP policy. The Downtown Plan indicates that the 10-foot setback would be from the western edge of the Santa Cruz Riverwalk.

Future structures constructed as a result of the project would be required to be set back at least 10 feet from the western edge of the Santa Cruz Riverwalk and likely would be set back further than 10 feet in order to provide for additional open space adjacent to the Santa Cruz Riverwalk as required in the Downtown Plan.

Given the distance to the edge of the riparian corridor along the east side of the river levee, future development would be set back a minimum of approximately 25 feet from the edge of

riparian vegetation. Therefore, future development accommodated by the Plan amendments would be sited to be consistent with the required City setbacks from San Lorenzo River. It is noted that CDFW recommends a 50-foot riparian setback in its comments on the NOP. While future development may be closer within 50 feet, development would be consistent with the City-wide Creeks and Wetlands Management Plan and SLURP, which provide more detailed reviews of required setbacks based on biological and hydrological values. Therefore, this would be considered a *less-than-significant* impact

Impact BIO-1b (*DPA EIR Impact 4.3-1*): Indirect Impacts to Special Status Species and Riparian and Aquatic Habitat. Future development of taller buildings as a result of the project could result in indirect to impacts to riparian and aquatic special-status species due to increased shading as a result of increased building heights but would not substantially affect sensitive habitats (BIO-a). This is considered a *less-than-significant* impact.

The project would accommodate intensified development adjacent to the San Lorenzo River due to redevelopment of Redevelopment Blocks B and D. The proposed development standards (as amended) would allow for development of buildings up to 85 feet in height in these areas. However, the proposed amendments include a new policy to provide incentives for development of affordable housing, which could allow buildings to up to 12 stories and 145 feet in height. Further, a development application utilizing a state density bonus might exceed even the taller option created by City policy.

Additional building height and the resultant increase in shade is not likely to adversely impact the established native riparian species adjacent to the San Lorenzo River, which are primarily willow scrub and groundcover. The maturing landside trees were planted for habitat enhancement and landscape value during the 1999-2003 levee raising project, and some are now about 20-30 feet in height.

The waterside riparian trees in lower San Lorenzo River are all subject to regular vegetation management, which limits the size of both individual trees and the width of the riparian buffer zone on the riverbank. The dominant riparian species growing in the Project reach of the San Lorenzo River are generally those (cottonwoods, willows) that benefit from higher levels of light. These species are deciduous and lose their leaves during the winter.

Most plants achieve their highest relative growth rate (RGR) at between 25% and 50% light conditions, where plants growing completely in the open are exposed to 100% light conditions (Poorter 1999). While the tree species growing along the San Lorenzo River are not considered shade-tolerant species, the available light during the growing season would not substantially change. Under the proposed building height of up to 85 feet and potentially 145 feet, adjacent riparian habitat will receive less sunlight in late afternoon in winter months, when the potential impact to trees is less than it would be during the growing season. Shading would not substantially change during other times of the year as shown on Figures 7-1a-c Shadow Analysis, which illustrate the change in shadows created by taller buildings with the proposed additional height. Although all the factors currently contributing to shade levels are not known,

the change in shading from the increase in proposed building height would not likely reduce year-round levels below the threshold for limiting tree growth. Therefore, it would not significantly alter habitat conditions, including habitat for special-status species potentially occupying this area. As a result, no adverse impacts related to shading are anticipated to waterside riparian species. As reported in the DPA EIR, the levee crests are paved and the levee-top ruderal community is regularly mowed and weed-whipped for fire suppression and offers relatively little habitat value under existing or proposed conditions. Therefore, no adverse impacts related to shading are anticipated for landside species.

As reported in the DPA EIR, water temperatures in the lagoon at the mouth of the San Lorenzo River are unlikely to be impacted by the additional building heights. The existing lack of shaded riverine aquatic habitat in the lower San Lorenzo River results in high water temperatures in the lagoon system, particularly in the late summer and fall. These high temperature conditions can be deleterious to salmonid species. High water temperatures and poor water quality conditions are exacerbated by seasonal lagoon closures and low-flow conditions into the lagoon. Increased building shadows will not affect direct mid-day solar inputs during any season. High water temperatures are not an issue during winter when added late-afternoon shade may fall on the project reach.

Therefore, indirect impacts to riparian and aquatic special-status species due to increased shading due to increased building heights would not substantially affect sensitive habitats and impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact BIO-2 (*DPA EIR Impact 4.3-2*): Indirect Impacts to Birds. Future development of taller buildings as a result of the project could result in indirect impacts to birds in the area that could lead to bird mortalities from collisions with buildings (BIO-d). This is considered a *less-than-significant* impact.

The DPA EIR determined that increased building heights adjacent to the San Lorenzo River could result in indirect impacts to birds from two causes: (1) an increase in the area of glass that would result in mortality to birds mistaking the reflective glass as safe passage to habitat beyond, and (2) an increase in the amount of lighting and the resultant potential for mortality of birds related to disorientation during migration. The DPA EIR included Mitigation 4.3-2 to address these potential impacts to birds related to increased building heights adjacent to the San Lorenzo River. Mitigation 4.3-2 required inclusion of seven standards in the Downtown Plan, and these were subsequently adopted:

- Minimize the overall amount of glass on building exteriors facing the San Lorenzo River.
- Avoid mirrors and large areas of reflective glass.
- Avoid transparent glass skyways, walkways, or entryways, free-standing glass walls, and transparent building corners.

- Utilize glass/window treatments that create a visual signal or barrier to help alert birds to presence of glass. Avoid funneling open space to a building façade.
- Strategically place landscaping to reduce reflection and views of foliage inside or through glass.
- Avoid or minimize up-lighting and spotlights and turn non-emergency lighting off (such as by automatic shutoff), or shield it, at night to minimize light from buildings that is visible to birds, especially during bird migration season (February - May and August - November).

In 2018, the City adopted "Bird-Safe Building Design Standards" that that would apply to any buildings that require design review and are located within 300 feet of specified General Plan land use designations, including waterways mapped in the City-wide Creeks and Wetlands Management. These standards specify window and lighting treatments for buildings located near specified habitat areas to ensure that new buildings provide a safe design to prevent bird collisions in areas near natural features. The final design of the buildings (including glass and windows), landscaping, and lighting in the project area would be required to be consistent with these standards, and therefore plans submitted for building permit issuance would include window glazing treatments that create a visual barrier for birds for the majority of the glazing within the first 40 feet of the ground-level façade facing the Santa Cruz Riverwalk per the City's Bird-Safe Building Design Standards.

Furthermore, as indicated above, the project requires that development shall step back 10 feet from the exterior wall face above the 50-foot height level along the west side of the Santa Cruz Riverwalk, which would help break up building mass. Future development within 300 feet of the San Lorenzo River would be consistent with the development standards in the Downtown Plan (as amended) and the City of Santa Cruz Bird-Safe Building Design Standards.

Therefore, significant adverse indirect project impacts to sensitive riparian habitat due to potential bird collisions resulting from future development would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact BIO-3 (*DPA EIR Impact 4.3-3*): Indirect Impacts to Nesting Birds. Future development as a result of the project could result in disturbance to nesting birds if any are present in the vicinity of construction sites along the San Lorenzo River (BIO-d). This is a *potentially significant* impact.

While the project would not result in new development that would directly affect nesting birds, future development accommodated by the proposed amendments could result in impacts to nesting birds at the time of construction. Tree removal during the breeding season (generally March 1 to August 1) could result in direct mortality to nesting avian species protected under the Migratory Bird Treaty Act (MBTA) due to destruction if active nest sites are present.

Initiation of construction activity during the nesting season could result in noise and increased human presence that would indirectly affect nesting adults and result in nest abandonment or failure.

The DPA EIR found that measures in the City-wide Creeks and Wetlands Management Plan require pre-construction surveys where construction may affect nesting birds in order to prevent disturbance, if nesting is occurring when construction is initiated. This was considered a potentially significant impact in the DPA EIR and would also be a potentially significant impact resulting from future development accommodated by the project. The DPR EIR includes Mitigation 4.3-3, which requires pre-construction nesting surveys as set forth in the adopted Creeks Plan, which would reduce impacts to a less-than-significant level. This measure would be applicable to future development in the project area and would reduce the impact to a *less-than-significant* level.

Mitigation Measures

Implementation of DPA EIR MM 4.3-3 would reduce the impact to a *less-than-significant* level.

DPA EIR Mitigation 4.3-3: Preconstruction Nesting Survey

Require that a pre-construction nesting survey be conducted by a qualified wildlife biologist if construction, including tree removal, adjacent to the San Lorenzo River is scheduled to begin between March and late July to determine if nesting birds are in the vicinity of the construction sites. If nesting raptors or other nesting species protected under the Migratory Bird Treaty Act are found, construction may need to be delayed until late-August or after the wildlife biologist has determined the nest is no longer in use or unless a suitable construction buffer zone can be identified by the biologist. (Citywide Creeks and Wetlands Management Plan Standard 12).

Impact BIO-5: Conflicts with Local Ordinances. Construction of the project would not result in conflicts with local policies and ordinances protecting biological resources, such as a tree preservation policy or ordinance (BIO-e). Therefore, the project would result in *no* impact.

There are planted street trees throughout the downtown area. Future development as a result of the project could result in tree removal, including removal of heritage trees as defined in the City's Municipal Code. It is noted that heritage tree removal could occur with future redevelopment in the project area under existing conditions without the project.

Chapter 9.56 of the City Municipal Code defines heritage trees, establishes permit requirements for the removal of a heritage tree, and sets forth mitigation requirements as adopted by resolution by the City Council. Heritage trees are defined by size, historical significance, and/or horticultural significance; generally, trees with a 14-inch diameter or larger are heritage trees. Tree removal would be subject to approval under a tree removal permit pursuant to the City's Heritage Tree Ordinance and Street Tree Ordinance. Approval of a heritage tree removal permit automatically requires planting of replacement trees. Resolution NS-23,710 adopted by the City Council in April 1998 establishes the criteria for permitting removal of a heritage tree and

indicates that one or more of the following findings must be made by the Director of Parks and Recreation:

1. The heritage tree or heritage shrub has, or is likely to have, an adverse effect upon the structural integrity of a building, utility, or public or private right of way;
2. The physical condition or health of the tree or shrub, such as disease or infestation, warrants alteration or removal; or
3. A construction project design cannot be altered to accommodate existing heritage trees or heritage shrubs.

City regulations require tree replacement to include replanting three 15-gallon or one 24-inch size specimen for each heritage tree approved for removal or the current retail value which shall be determined by the Director of Parks and Recreation. In the coastal zone, LCP policy 6.1.2 requires tree replacement for removal of a street tree to consist of one replaced 15-gallon tree, or for removal of a heritage tree, to consist of replanting six 15-gallon or two 24-inch size specimens for each heritage tree approved for removal. In-lieu fees may also be accepted that go to the City's Tree Trust Fund for off-site planting of trees.

Future removal of heritage trees as part of development would be permitted by the City if found to be in accordance with the above criteria and requirements. Approval of a tree removal permit automatically requires replacement trees as set forth above. Removal of a heritage tree that is consistent with the criteria, provisions, and requirements set forth in City ordinances would not result in a conflict with a local ordinance. Since future development would be subject to City regulations, any future removal of trees would be required to comply with City requirements, and therefore, any removed heritage trees would be replaced in the ratio or in-lieu fee required by the City, and no significant impacts related to conflicts with local ordinances would occur.

Implementation of the project would support fill on the landward side of the San Lorenzo levee in order to expand public access along the Santa Cruz Riverwalk. If any trees are removed on the western landward side of the San Lorenzo River levee, tree removal, planting, and vegetation management is also subject to the Army Corps of Engineers (ACOE) Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures (EP 1110-2-18) and Interim Guidance for Section 3013 of the Water Resources Reform and Development Act of 2014, Vegetation Management Policy. In addition to management of flood risk and the impacts of vegetation on the structural integrity of the levee, the ACOE also considers the impacts of levee landscaping with regard to the preservation, protection, and enhancement of natural resources.

Because construction of the project would not result in conflicts with local policies and ordinances protecting biological resources, such as a tree preservation policy or ordinance the project would result in *no impact*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

7.5 References

City of Santa Cruz. April 2012. City of Santa Cruz General Plan 2030 Final EIR. SCH #2009032007. Certified June 26, 2012. Includes Draft EIR document, dated September 2011. Available online at: https://www.cityofsantacruz.com/government/city-departments/planning-and-community-development/long-range-policy-planning/general-plan.

City of Santa Cruz. Adopted by City Council on February 28, 2006, and certified by the California Coastal Commission on May 9, 2008. City-wide Creeks and Wetlands Management Plan. Available online at: https://www.cityofsantacruz.com/government/city-departments/planning-and-community-development/long-range-policy-planning/area-plans-and-city-zoning-code/city-wide-creeks-and-wetlands-management-plan.

City of Santa Cruz. Adopted June 24, 2003. *San Lorenzo Urban River Plan*. Prepared by City of Santa Cruz San Lorenzo Urban River Plan Task Force with assistance from Rivers, trails and Conservation Assistance Program of the National Park Service. Available online at: https://www.cityofsantacruz.com/home/showpublisheddocument/2371/635418232770030000.

Poorter, L. 1999. "Growth Responses of 15 Rain-Forests Tree Species to a Light Gradient: The Relative Importance of Morphological and Physiological Traits." Functional Ecology 13: 396-410.

8 Cultural and Tribal Cultural Resources

8.1 Introduction

This section analyzes impacts of the project on cultural resources based on a review of existing land uses within the project boundaries, a records search at the Northwest Information Center and review of relevant City plans. As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH #2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

Cultural resources encompass archaeological, historic resources and tribal cultural resources. Archaeology is the study of prehistoric human activities and cultures. Historic resources are associated with the more recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the state's history. Tribal cultural resources, defined in Section 21074(a) of the California Public Resources Code (PRC), are sites, features, places, cultural landscapes, sacred places, or objects which are of cultural value to a California Native American tribe.

8.2 Scoping Issues Addressed

Public and agency comments related to cultural resources were received during the public scoping period in response to the Notice of Preparation (NOP). No issues associated with Cultural and Tribal Cultural Resources were identified. Public comments received during the public scoping period are included in Appendix A.

8.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR was certified (see PRC section 21166; CEQA Guidelines, sections 15162 and 15168).

8.3.1 Regulatory Setting

Existing federal, state, and local regulations related to cultural resources are summarized on pages 4.4-1 to 4.4-4 of the DPA Draft EIR volume of the EIR and have not changed. Existing regulations identified DPA EIR include the following:

- Federal regulations: National Register of Historic Places (NRHP) and National Historic Landmarks;

- State regulations: California Register of Historical Resources (CRHR), Government Code sections 65352.3 and 65352.4, Assembly Bill (AB) 52 regarding tribal cultural resources, Health and Safety Code section 7050.5 regarding human remains and CEQA regarding definitions of Historical and archaeological resources; and
- Local regulations: City of Santa Cruz Santa Cruz Municipal Code regarding historical and archaeological resources.

8.3.2 Historical Background

The historical overview and context is discussed on page 4.4-4, which incorporates by reference the text included in the General Plan 2030 Draft EIR pages 4.9-6 to 4.9-16, which are incorporated by reference. No relevant changes have been identified since the Downtown Plan Amendments Plan Final EIR was certified.

8.3.3 Archeological Resources

City-wide archaeological resources are discussed on pages 4.4-4 to 4.4-5 of the of the DPA Draft EIR volume of the EIR. Updates regarding the project area are provided below.

According to a map developed for the City's *General Plan 2030* and included in the General Plan EIR and updated in 2018, the project area is located in an area identified as sensitive for archaeological resources (City of Santa Cruz 2018). A records search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC) located in Rohnert Park, California was conducted. The search included any previously recorded cultural resources and investigations for the project area boundary and the 200-foot radius from the project area boundaries. The CHRIS search also included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list.

Results of the CHRIS search indicate that 17 cultural resource studies were conducted within the project area, and there are an additional 12 studies outside the project area boundary but within the 200-foot records search radius. The records search results also indicated that two cultural resources have been previously identified within the project area boundary and four cultural resources have been previously identified within 200 feet of the boundary. The two recorded resources include one prehistoric site (CA-SCR-12; Beach Hill Site) and one built environment resource (Bridge 36C0102; San Lorenzo River/Laurel Street Bridge).

8.3.4 Tribal Cultural Resources

Tribal Outreach

Native American consultation is discussed on page 4.4-5 to 4.4-6 of the DPA EIR. Updates regarding the project area are provided below.

As indicated in the Downtown Plan Amendments EIR, prior to the adoption or amendment of a general plan, Government Code Sections 65352.3 and 65352.4 require a city or county to consult with local Native American tribes that are on the contact list maintained by the Native American Heritage Commission (NAHC). On August 16, 2024, a letter was sent to the NAHC in Sacramento requesting a Senate Bill 18 consultation list. NAHC responded that the NAHC Sacred Lands File completed for the project area was positive and provided a list of tribes to be contacted. On October 17, 2024, letters were sent to the tribes and tribal organizations identified by the NAHC to notify them of their opportunity to consult with the City regarding the General Plan amendments proposed as part of the project. To date, the City has received two responses to this notification: one from the Amah Mutsun Tribal Band of San Juan Bautista, and one from the Costanoan Rumsen Carmel Tribe. Pursuant to state law, tribes have 90 days to respond from the date of receipt of the letter, and the process must be completed before the decision-making body can act on the project.

Tribal Cultural Resources

AB 52, effective July 1, 2015, recognizes that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities. The law establishes a new category of resources in the CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation. PRC section 21074 defines a "tribal cultural resource" as either:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    a) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
    b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

The DPA EIR reported that no Native American tribes had requested notification pursuant to State Assembly Bill (AB) 52, but the City of Santa Cruz subsequently has received formal requests for notification on proposed projects pursuant to PRC section 21080.3.1 from two Native American tribes traditionally and culturally affiliated with the City. The City received the requests from the Amah Mutsun Tribe in April 2022 and from the Costanoan Rumsen Carmel Tribe in May 2024. Both of these tribes requested notification of development projects within the City pursuant to AB 52 requirements codified in PRC section 21080.3.1.

Pursuant to PRC section 21080.3.1, the City provided notification of the project to both tribes on August 22, 2024. While the project is not a development project, PRC section 21080.3.1(b)

requires notification and consultation, if requested, to be completed prior to release of a public review Draft EIR. This section of the PRC also requires that the notified tribe respond within 30 days to request consultation. Neither tribe responded within 30 days to request consultation. However, the Amah Mutsun Tribal Band of San Juan Bautista submitted a letter to the City on October 19, 2024, providing recommendations if any positive cultural or historic sensitivity findings have been identified.

8.3.5 Historic Resources

Historical resources are discussed on pages 4.4-6 to 4.4-9 of the of the DPA Draft EIR volume of the EIR. Updates regarding the project area are provided below.

A review by City Planning Department staff identified all the existing structures within the project area and found seven residential structures and 15 commercial structures that are over or near 50 years in age, which may be considered a historic resource.

As indicated in the DPA EIR, the City has three volumes of its "Historic Building Survey," which identifies and evaluates historic and architecturally significant buildings. The City has adopted criteria under Municipal Code Section 24.12.440 for listing properties as historic resources. The property can be a building, site, or object, and to be considered, must meet one seven criteria. A historic district must meet two additional criteria. Listed historical structures in the City's Historic Building Survey that are located within the project area include:

- 229 Laurel Street (Volume III)
- 611-613 Pacific Avenue (Volume I)
- 615 Pacific Avenue (Volume I)
- 703 Pacific Avenue (Volume I)
- 314 Spruce Street (Volume I)

8.4 Impacts and Mitigation Measures

8.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

CUL-a Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

CUL-b Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 or disrupt or adversely affect a prehistoric or archaeological site or property of historic or cultural significance to a community or ethnic or social group;

CUL-c Disturb any human remains, including those interred outside of formal cemeteries; or

CUL-d Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: (i) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020(k); or (ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

CEQA definitions of archaeological, historical and tribal cultural resources are provided in the DPA EIR pages 4.4-11 to 4.4-12. The DPA EIR also indicates that CEQA Guidelines Section 15064.5(b) defines a "substantial adverse change" to a historical resource as: "physical demolition, destruction, relocation or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historical Resources or in registers meeting the definitions in PRC Section 5020.1(k) or 5024.1(g).

8.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development.

However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites.

A records search for previously recorded prehistoric and historic cultural resources was conducted at the NWIC of the CHRIS at Sonoma State University for the project area as explained in Section 8.3.3. Native American tribes were contacted by the City Planning and Community Development Department in response to NAHC recommendations for making contact when the Sacred Lands File search was completed by NAHC. City staff also conducted required tribal consultations as summarized in Section 8.3.4. The following impact analyses are based on these reviews and consultations, as well as review of existing studies and City requirements for evaluation of cultural resources.

8.4.3 Impacts and Mitigation Measures

Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding historical resources (CUL-1), archaeological resources (CUL-2), disturbance of human remains (CUL-3) and tribal cultural resources (CUL-4).

Impact CUL-1 (*DPA EIR Impact 4.4-2*): Historical Resources. Future development accommodated by the proposed plan amendments could result in impacts to historical resources (CUL-a) due to alteration or modification of historical buildings. Therefore, this is a *potentially significant* impact.

The project would not result in new development but could lead to redevelopment and intensified development of existing developed properties in the project area with development projects proposed in the future. Future redevelopment of existing developed sites may result in alteration or removal of historical structures, affecting the significance of historical values if the structure is considered an historical resource under CEQA definitions. There are five structures within the project area that are listed in the City's Historic Building Survey, and seven residential structures and 15 commercial structures that are over or near 50 years in age, all of which may be considered a historic resource. Buildings that are over the age of 50 years old and are proposed for modification or alteration as part of future development projects would require evaluations to determine eligibility for listing in the CRHR, NRHP and/or City Historic Building Survey, and if so, could be determined to be historically significant.

Future development projects would be subject to conducting historical evaluations to determine whether the structure is a historic resource that could be significantly impacted under the definition of CEQA. It is assumed that such procedures would be implemented as part of the CEQA environmental review of future development applications. If a significant impact is identified, appropriate mitigation measures would be required and/or a project-specific CEQA review to consider substantial alteration or demolition of a historic resource that would substantially and materially alter the significance of the resource. It is noted that potential redevelopment of existing properties and potential impacts to historical resources could occur without the project.

PRC sections 21083.2(b)-(c) and CEQA Guidelines section 15126.4(b) provide information regarding the mitigation framework for historical resources and indicate that consistency with the Secretary of Interior Standards for the Treatment of Historic Properties would reduce an impact on historical resources to a less-than-significant level. Therefore, a significant historical resource impact could be mitigated to a less-than-significant level if designed to be consistent with these standards. However, since this is a program SEIR and no specific development projects are proposed, it is not possible to determine whether individual projects would be able to attain the Secretary of Interior's Standards. Furthermore, preservation, reuse, maintenance, and/or avoidance of historical resources may not always be feasible, especially with potential redevelopment and intensification of uses in the project area, and recordation of a significant historical resource, alone, would not constitute adequate mitigation for a substantial adverse change to a historical resource meeting the definitions under CEQA. Therefore, because the potential for future development accommodated by the project to cause a substantial adverse change to an historical resource cannot be precluded, impacts to historical resources are conservatively considered potentially significant.

Implementation of MM CUL-1.1: Historic Resources Assessment and Project-Level Mitigation would require the review of listed, eligible, or unevaluated sites or structures over 50 years old to determine whether an historical resource exists, and if so, provide mitigation to reduce potentially significant impacts to a less-than-significant level. With the addition of appropriate project conditions to ensure compliance with the Secretary of the Interior Standards pursuant to CEQA guidelines 15064.5(b)(3), any future impacts associated could be found to be less-than-significant with mitigation. However, if a future development project were found to be non-compliant with the Secretary of Interior Standards and other protection measures were not available or demolition of the structure were proposed to facilitate redevelopment of a site, the impact would remain significant and unavoidable.

Implementation of MM CUL-1.2: Resource Documentation provides on-site preservation guidance, and in the event that a structure or resource cannot be preserved, it ensures that actions would be taken to appropriately record and document an identified historical resource. Through compliance with existing federal, state, and local regulations, and implementation of mitigation measures, the potential for adverse effects to historic resources would be substantially reduced.

However, preservation, reuse, maintenance, and/or avoidance of historical resources may not always be feasible, and recordation of a significant historic resource does not constitute adequate mitigation for a substantial adverse change to that resource. Therefore, because the potential for permanent loss of a historic resource cannot be precluded, it is conservatively concluded that the project ’s indirect impact to historical resources would be *potentially significant and unavoidable*.

Mitigation Measures

MM CUL-1.1: Historic Resources Assessment and Project-Level Mitigation

Require preparation of an historic resources evaluation for any development proposal containing a structure or structures 50 years old or older and that are not identified as historic resources in the County HRI. If the structure(s) may potentially meet the criteria for listing as an historic resource, and proposed development would have the potential to impact the historic significance of the structure(s), the development applicant shall provide an historic assessment of the structure(s) prepared by a qualified historic consultant. If it is determined by the City Planning and Community Development Department based upon the historic assessment that a development would impact a structure that is eligible as an historic resource under CEQA definitions, the City shall consider measures that would enable the project to avoid direct or indirect impacts to the building or structure, including designs consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. If the building or structure can be preserved, but remodeling, renovation or other alterations are required, this work shall be conducted in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

MM CUL-1.2: Resource Documentation

If a significant historic building or structure is proposed for major alteration or renovation, or to be moved and/or demolished, the City shall ensure that a qualified architectural historian thoroughly documents the building and associated landscape and setting. Documentation shall include still and video photography and a written documentary record/history of the building to the standards of the Historic American Building Survey or Historic American Engineering Record, including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available. The record shall be prepared in consultation with the State Historic Preservation Officer and filed with the Office of Historic Preservation. The record shall be accompanied by a report containing site-specific history and appropriate contextual information. This information shall be gathered through site specific and comparative archival research, and oral history collection as appropriate.

Impact CUL-2 (*DPA EIR Impact 4.4-1*): Archaeological Resources. Future development accommodated by the proposed plan amendments could result to impacts to archaeological resources and human remains. However, City requirements for cultural resource investigations would ensure that future development projects assess and mitigate potential impacts (CUL-b, CUL-c). This is a *less-than-significant* impact.

The project would not result in new development but could result in intensified development in the project study area. Potential redevelopment of existing properties could occur without the project. As indicated in the DPA EIR, the City's General Plan includes a policy that requires preparation of archaeological investigations for any project located within a sensitive archaeological area (HA1.2.2). The investigation must include archival research, site surveys and

necessary supplemental testing as may be required, conducted by a qualified archaeologist, and the significance of identified resources shall be ascertained in accordance with CEQA definitions.

The measure requires that the report identify significant impacts and outline mitigation measures if significant impacts are identified, including, but not limited to recovery options and onsite monitoring by an archaeologist during excavation activities. A written report describing the archeological findings of the research or survey shall be provided to the City. This General Plan Action also allows exemption for minor project that generally involve spot excavation to a depth of 12 inches or less below existing grade. Exempt projects may include: building additions, outdoor decks, or excavation in soil that can be documented as previously disturbed.

Additionally, the City's accidental discovery procedures (Municipal Code Section 24.12.430) would also apply to properties in the study area in the event construction encounters unidentified archaeological deposits. This regulation requires that construction be stopped if archaeological resources are encountered during construction, and that the Planning Director be notified and the discovery analyzed. If determined not be an archaeological resource, construction could proceed, but it is determined to be a resource, implementation of appropriate measures would be required.

As indicated in the DPA EIR, future development projects within sensitive archaeological areas are required to prepare archaeological investigations prior to project approval, and any recommendations are included as Conditions of Approval. Therefore, the City's implementation of its policies and regulations ensure that archaeological and tribal cultural resources are addressed and mitigated as part of further development proposals. Thus, the project would not indirectly lead to potentially significant impacts. Additionally, it is noted that redevelopment of properties in the study area could occur without the project. Therefore, impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact CUL-3 (*DPA Impact 4.4.-1*): Tribal Cultural Resources. Future development accommodated by the project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 resource (CUL-d). Therefore, this is a *potentially significant impact*.

The California PRC section 21084.2 establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." The PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Project.

According to maps developed for the City's General Plan 2030 and included in the General Plan EIR and updated in 2018, the project area is located in an area mapped as "sensitive" for archaeological resources (City of Santa Cruz 2018), and the NAHC reported a positive finding for the Sacred Lands File search, although there are no details as to what resources may occur when there is a positive finding. The archaeological records search and the City's outreach to Native American tribes did not identify specific tribal cultural resources.

Neither the Amah Mutsun Tribal Band and the Amah Mutsun Land Trust nor the Costanoan Rumsen Carmel Tribe requested consultation after notification of the project was provided by the City pursuant to PRC requirements explained above in Section 8.3.4. However, the Amah Mutsun Tribal Band of San Juan Bautista submitted a letter to the City after the 30-day period to request consultation, providing recommendations if any positive cultural or historic sensitivity findings have been identified. These recommendations include the following when there is a positive cultural or historic sensitivity finding:

- Conduct Sacred Lands Files search and CHRIS records search and contact NAHC
- Provide construction crews with cultural sensitivity training
- Provide an archaeological monitor and Native American monitor during construction activities involving earth movement.

Adoption and implementation of the project would not directly result in new development, but future development indirectly accommodated by the plan could result in construction that could potentially result in impacts to tribal cultural resources if any exist on a site that is being developed. Compliance with the City's requirements for preparation of archaeological reports for development projects located in sensitive areas, compliance with local regulations regarding archaeological resources and accidental discovery of archaeological resources and human remains during construction, and notification and consultation requirements per state requirements in the PRC regarding tribal cultural resources would ensure protection of any tribal cultural resources identified. However, recommendations from two Native American tribes include construction worker training and monitoring during construction when there is a positive finding per the Sacred Lands Files search. Compliance with City and state requirements, and implementation of MM CUL-3.1 Cultural Sensitivity Training and Tribal Monitoring would reduce potential impacts to tribal cultural resources a *less-than-significant* level.

Mitigation Measure

MM CUL-3.1 Cultural Sensitivity Training and Tribal Monitoring

Require Native American construction monitoring of future development projects within the project area to include cultural sensitivity training for construction workers and tribal monitoring during ground disturbing construction.

8.5 References

City of Santa Cruz. July 2018. "Cultural Resources Background Report Update with Policies, Programs, and Maps, City of Santa Cruz, Santa Cruz County, California." Prepared by Dudek.

City of Santa Cruz. November 2017. City of Santa Cruz Downtown Plan Amendments Final EIR [SCH # 2017022050] Certified on November 14, 2017. Includes Draft EIR document, dated July 2017. Available online at: https://www.cityofsantacruz.com/Home/Components/BusinessDirectory/BusinessDirectory/101/2849

9 Hydrology and Water Quality

9.1 Introduction

This section analyzes impacts of the project related to hydrology and water quality based on a review of existing City plans and other existing data.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which consists of the Draft EIR volume (September 2011) and the Final EIR volume (August 2012) and was certified on June 26, 2012. These documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

9.2 Scoping Issues Addressed

Public and agency comments related to hydrology and water quality were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Potential risks of flood hazards, impacts from flooding and requirements for buildings to be elevated if located within a floodplain.
- Potential long-term impacts associated with sea level rise and tsunami hazards.
- Measures to reduce or eliminate runoff and pollution discharges into the San Lorenzo River.
- Potential risks to below-grade infrastructure from groundwater intrusion.
- Compliance with state and local regulations regarding the release of hazardous wastes/substances during construction.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this SEIR. Public comments received during the public scoping period are included in Appendix A.

9.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR

was certified (see Public Resources Code (PRC), Section 21166; CEQA Guidelines, Sections 15162 and 15168).

9.3.1 Regulatory Setting

Existing regulations regarding hydrology and water quality are summarized on pages 4.5-1 – 4.5-4 of the DPA Draft EIR volume of the EIR) and have not changed. Existing regulations identified in the DPA EIR include the following"

- Federal regulation: Responsibilities of the Federal Emergency Management Agency (FEMA) and U.S. Environmental Protection Agency (EPA) and the Clean Water Act of 1972 as amended:
- State regulations: Responsibilities of the California Water Board (State Water Resources Control Board) in implementing federal and state water quality laws, including the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act; and
- Local regulations: City of Santa Cruz Stormwater Management Program and Municipal Code requirements regarding drainage, erosion control and grading.

9.3.2 Regional Hydrological Setting

As described in the DPA Draft EIR (pages 4.5-4 and 4.5-5), the City of Santa Cruz encompasses approximately 12 square miles between the Monterey Bay and the Santa Cruz Mountains and lies on a narrow coastal plain at the mouth of the San Lorenzo River. The lower 2.5 miles (south of Highway 1) are channelized in a levee flood control project developed in cooperation with the U.S. Army Corps of Engineers (ACOE) in the late 1950s (City of Santa Cruz, April 2012, DEIR volume). Significant flood improvements along the river were completed in 2000 as part of the ACOE's San Lorenzo River Flood Control and Environmental Restoration Project. This project raised the river levee heights, provided landscaping and improved the pedestrian/bicycle path on the levee, and rehabilitated three of the four downtown bridges (over the San Lorenzo River) to increase flood flow capacity. The habitat enhancement efforts focused on the landside of the levees in the study area which were landscaped with native trees, shrubs, and groundcover.

9.3.3 Stormwater Drainage

As described in the DPA Draft EIR (pages 4.5-5 and 4.5-6), the City's downtown area drains to the San Lorenzo River. Although some stormwater reaches the river by absorption and gravity, the five pump stations along the river were installed in order to transfer the majority of the stormwater over (actually through) the river levees. There are three pump stations located on the west side of the river (adjacent to the Laurel Street Bridge and within the project area) and two on the east side (City of Santa Cruz, April 2012, DEIR volume).

State and federal storm water regulations require development and remodeling projects to incorporate design standards BMPs in order to reduce pollutant and storm water discharges to

the Maximum Extent Practicable. All future development projects will be subject to the City's mandatory BMPs, including the use of Low Impact Development (LID). LID is a site design approach that uses techniques to slow and infiltrate storm water, mimicking the natural, pre-development hydrology. LID design strategies can be applied to most new or redevelopment projects to meet storm water regulations, reduce downstream flooding and protect natural resources (City of Santa Cruz, 2014).

The project area is located within "Urban Sustainability Areas" defined in the City's BMP Manuals. These areas encompass the City's business centers and primary transportation corridors where the City's General Plan 2030 vision is to promote "Smart Growth" concepts of high-density mixed-use development. Certain exemptions to stormwater retention requirements are allowed for high-density projects that meet specified requirements.

9.3.4 Water Quality

As described in the DPA Draft EIR (pages 4.5-6), the primary pollutants of concern in the City watersheds are sediment and silt and fecal indicator bacteria. The City has targeted these primary pollutants of concern in the SWMP because certain water bodies within the City are listed on the Clean Water Act Section 303(3) list as impaired for these specific pollutants as further discussed below (Ibid.). As previously indicated, the City's SWMP is a comprehensive program to reduce the amount of pollutants discharged in urban runoff and to improve and protect water quality that includes requirements for stormwater treatment in development projects in accordance with the federal state requirements.

The Clean Water Act requires states to identify and prepare a list of water bodies that do not meet water quality objectives, and to establish Total Maximum Daily Loads (TMDL) for each water body to ensure attainment of water quality objectives. The City of Santa Cruz storm drain system (MS4) discharges into four water bodies that are currently on the 303(d) list of impaired water bodies, one of which is the San Lorenzo River. The San Lorenzo River is listed for: sediment, nutrients and pathogens. The City's SWMP addresses the primary pollutants of concern through City measures and BMPs to the Maximum Extent Practicable.

9.3.5 Hydrologic Hazards

As described in the DPA Draft EIR (pages 4.5-6 to 4.5-10), flooding and coastal storms present essentially the same risks and are frequently related types of hazards. The City of Santa Cruz Climate Adaptation Plan (CAP) considers flooding and severe coastal storms to be a considerable, potential risk to the city and its residents. Intense, increased rainfall may lead to larger flood flows. Noted in the CAP are the potential for greater storm surges, wind speeds and resultant coastal erosion. These events are predicted to occur more frequently due to climate change impacts, including the impacts from sea level rise (City of Santa Cruz, 2018).

Flood Hazards

As shown in Figure 9-1 Flood Hazard Areas, most of the project area is located in the FEMA 100-year floodplain and the area generally north of the convergence of Pacific Avenue and

Front Street may be subject to future climate change threats associated with sea level rise and/or storm surge. The City of Santa Cruz has worked to improve the flood capacity of the San Lorenzo River levees over the past twenty years. In 2002, FEMA re-designated much of the downtown and beach area from A-11 to the A-99 Flood Zone designation in recognition of the significant flood improvements resulting from the San Lorenzo River Flood Control and Environmental Restoration Project. Under the A-99 designation, new buildings and improvements are no longer mandated to meet FEMA flood construction requirements (City of Santa Cruz, 2013).

The downtown is also subject to high-tide intrusion when the San Lorenzo River becomes dammed by the sand bar that typically forms across the river mouth in mid- to late summer. During high tides, the impounded water level rises, at times extending upstream as far as the Highway One bridge. The City Public Works Department pumps ground water as much as 15 hours a day from beneath the Locust Street parking garage when the river backs up in the summer months (Griggs, Haddad, January 2011).

Tsunami Hazards

There are two primary types of tsunami vulnerability in Santa Cruz. The first is a distant source tsunami from elsewhere in the Pacific Ocean. This type of tsunami is capable of causing significant destruction in Santa Cruz. However, this type of tsunami would usually allow time for the Tsunami Warning System for the Pacific Ocean to warn at risk and threatened coastal areas in time for evacuation (City of Santa Cruz, 2013). The more vulnerable risk to the City of Santa Cruz is a tsunami generated as the result of an earthquake along one of the many earthquake faults in the region. A local source tsunami generated by an earthquake on any of the faults affecting Santa Cruz would arrive just minutes after the initial shock.

According to maps prepared for the General Plan 2030 and included in the General Plan EIR, the downtown and beach areas are located within a potential tsunami inundation area, as are most of the downtown and beach areas of Santa Cruz (City of Santa Cruz, April 2012, DEIR volume-Figure 4.7-2).

Sea-Level Rise

Sea level rise (SLR), storms of increasing intensity, and an alternating series of floods and droughts threaten the City of Santa Cruz in the coming decades. The City prepared a “Climate Adaptation Plan” with funding from FEMA (City of Santa Cruz, 2017). The objectives of this Plan are to identify and evaluate the potential impacts of climate change on the City of Santa Cruz, analyze the severity of the hazards that the City faces, and develop potential adaptation responses to reduce the risk and exposure of the City to these hazards. The potential risks were identified in a “Vulnerability Study” that identified potential facilities vulnerable to risks of SLR, including beaches, the City’s wastewater treatment facility, and the Santa Cruz Harbor (City of Santa Cruz, 2012).

The Climate Adaptation Plan Update 2018-2023, adopted by the City Council in October 2018, further addresses sea level rise. The coastal climate vulnerability maps used for the report identify hazard zones for each climate scenario for the three planning horizons (2030, 2060, & 2100) under three different regional emissions scenarios (High, Medium, and Low). The resulting model allows planners to understand the range of impacts that may be expected and build an understanding of the overall risk posed by SLR.

As shown in Figure 9-2 Cumulative Risks of Sea Level Rise, the project area is subject to the potential effects of SLR under the 2060 and 2100 planning horizons. However, the project area does not contain any contain any critical facilities, as listed in the Climate Adaptation Plan Update, which provide essential services and protect life and property within the City.

9.4 Impacts and Mitigation Measures

9.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

HYD-a Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

HYD-b Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

HYD-c Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) Result in substantial erosion or siltation on- or off-site;

(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

(iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or

(iv) Impede or redirect flood flows.

HYD-d In flood hazard, tsunami or seiche zones, risk release of pollutant due to project inundation.

HYD-e Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

9.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites. The project would increase FAR as defined in the General Plan but would not lead to development on sites not already considered in the General Plan and General Plan EIR. The proposed Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code amendments would not result in changes that could indirectly lead to intensified development. The following impact analyses are based on review of existing data and studies.

9.4.3 Impacts and Mitigation Measures

Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding potential stormwater impacts (HYD-a, HYD-b), water quality impacts (HYD-c), and exposure to flood (HYD-d through f) or tsunami (HYD-g) hazards.

Impact HYDRO-1 (*DPA Impact 4.5-1*): Stormwater Drainage. Future development accommodated by the project could result in stormwater runoff but would not substantially alter the existing drainage pattern of the area, substantially increase the rate or amount of surface runoff, exceed the capacity of existing or planned storm drain facilities, cause downstream or off-site drainage problems, or increase the risk or severity of flooding in downstream areas (HYD-a and -b). This is considered a *less-than-significant* impact.

The project would not directly result in new development but could lead to intensified development in the project area. The project area is largely developed or paved, and stormwater runoff would not be expected to substantially increase as the area already is developed with impervious surfaces.

Stormwater runoff from future development sites would be conveyed to existing storm drainage facilities that ultimately discharge into the San Lorenzo River. Existing City regulations will serve to manage stormwater runoff from future development accommodated by the project. Additionally, General Plan policies and actions require that new development maintain pre-development runoff levels (CC 5.1.8).

Because compliance with the City's stormwater regulations will be required of future developments, the project would not indirectly lead to potentially significant stormwater or drainage impacts. Additionally, it is noted that redevelopment of sites in the project area could occur without the project. Therefore, impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact HYDRO-2 (*DPA Impact 4.5-2*): Water Quality. Future development accommodated by the project could result in water quality degradation to San Lorenzo River from automobile oils and greases carried in stormwater runoff. Project grading could also result in erosion and potential downstream sedimentation if not properly managed (HYD-c). However, with compliance with City stormwater regulations and implementation of required controls, this is considered a *less- than-significant* impact.

As described in Impact HYDRO-1, the project would not directly result in new development but could lead to intensified development in the project area. The project area is currently developed, and it is expected future development would include enclosed parking garages instead of paved parking lots.

Future development projects will be required to comply with the City's stormwater regulations and required BMPs, which require pre-treatment of runoff. Compliance with City regulations, which were adopted pursuant to federal and state requirements, would include required measures to protect water quality as determined at the project level, and the project would not indirectly result in a substantial degradation of surface water quality.

Grading for future development projects will be subject to City approval of a grading permit, which includes an approved erosion control plan. For projects over one acre in size, preparation of a Stormwater Pollution Prevention Plan (SWPPP) also is required pursuant to the State's NPDES program. The purpose of a SWPPP is to identify sources of sediment and other pollutants that affect the quality of stormwater discharges and to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non- stormwater discharges.

For projects over one acre in size, a Notice of Intent also is filed with the SWPPP to the RWQCB. The project will be subject to these requirements. Preparation and implementation of the SWPPP and required erosion control plan will ensure that future development projects would not cause any increase in sedimentation, turbidity, or hazardous material concentrations within downstream receiving waters.

With compliance with City stormwater regulations and BMPs, and implementation of SWPPP and erosion control plans as may be required, potential water quality degradation would be controlled, resulting in a *less-than-significant* impact.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact HYDRO-3 (*DPA Impact 4.5-3*): Flood Hazards. Future development accommodated by the proposed plan amendments could result in exposure to flood hazards, including watercourse flooding, sea level rise or tsunami. (9d-g). However, with compliance with federal flood requirements and implementation of City plans and programs, the project would not lead to indirect impacts related to exposure to flood hazards (HYD-d through g). This is considered a *less-than-significant impact*.

Future development accommodated by the project could be subject to flood hazards in limited areas. These include areas of the project area that are located in the San Lorenzo River floodplain, although recent levee improvements have increased flood protection in these areas.

As sea level continues to rise, seawater could extend farther upstream in the San Lorenzo River flood control channel more frequently and rising gradually to higher elevations. This would lead to a rise in the water table beneath downtown. This area of the City has always been vulnerable to an elevated water table, but this will become a more significant issue in the future, likely resulting in the need for more pumping and implementation of other adaptation strategies (Griggs, Haddad, January 2011). Recommendations include continued monitoring of City pump stations along the San Lorenzo River with installation of additional monitoring wells and increase pumping capacity as necessary (Ibid.). Additionally, the City has evaluated the feasibility of installing a new pump station just south of Soquel Ave to reduce flows in the critically undersized 42”-48” Storm drain line between Soquel Ave and Pump Station 1, south of Laurel Street. [9]The City’s adopted Climate Adaptation Plan update includes a high priority action to implement measures to protect downtown from flooding.

Additionally, due to the potential for floodwater intrusion in the downtown, the Downtown Plan (as amended) requires that all new buildings in the South of Laurel Area shall be constructed in compliance with the standards for floodplain development as established by the California Building Standards Code and the more restrictive of either one of the following, based upon the timing of building permit submittal:

a) the most updated mapping data published by FEMA, or
b) any Letter of Map Revision (LOMR) submitted for review that postdates the published map applicable to the development site.

The project would not lessen or worsen the potential for tsunami damage, although it would indirectly lead to intensified development with an increase in the number of people potentially exposed to a tsunami hazards. However, because dangerous tsunamis typically have originated at such a great distance, it is possible to issue fairly long-range warnings of their approach and evacuate people if necessary. Thus, the City’s efforts to continue to periodically update its

[9] The City was recently (December 2024) awarded a FEMA Building Resilient Infrastructure and Communities (BRIC) grant to study to prepare a conceptual design and environmental permitting to upgrade Pump Station 1.

emergency evacuation procedures for tsunami hazard areas as well as coordination with other agencies as outlined in the City's adopted Hazard Mitigation Plan would respond to this concern. Therefore, impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

9.5 References

City of Santa Cruz. Adopted on October 9, 2018. *Climate Adaptation Plan Update 2018-2023*. An appendix to the 2018-2023 Local Hazard Mitigation Plan. Available online at: https://www.cityofsantacruz.com/home/showpublisheddocument/82484/637436621427930000

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Gary Griggs, Brent Haddad. January 22, 2011. "City of Santa Cruz City Climate Change Vulnerability Assessment."

10 Land Use and Planning

10.1 Introduction

This chapter describes the existing land use conditions of the project area and vicinity and reviews applicable plans, policies and regulations that pertain to the project as identified for review in the State CEQA Guidelines.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

10.2 Scoping Issues Addressed

Public and agency comments related to land use and planning were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Consistency with City plans and regulations including the General Plan, Local Coastal Plan, Climate Action Plan, Active Transportation Plan, and Safe Routes to School Plan.
- Potential impacts to adjacent residential neighborhoods.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

10.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

10.3.1 Regulatory Setting

The City of Santa Cruz General Plan 2030, the Local Coastal Plan, and Title 24 (Zoning) of the Municipal Code govern land use and development for parcels within City limits. The project area is located in the coastal zone and within the Beach and South of Laurel Comprehensive

Area Plan. Approval of the project would include removing the project area from the Beach and South of Laurel Comprehensive Area Plan.

10.3.2 Vicinity Land Uses

As shown in Figure 1-1 South of Laurel Area District, the approximately 29-acre project area is located in downtown Santa Cruz and is generally bound by Laurel Street on the north, the San Lorenzo River on the east, Front Street on the south, and Center Street, Cedar Street and neighborhoods west of Pacific Avenue on the west.

The project area contains a variety of commercial and multi-family residential land uses. This includes the temporary Kaiser Permanente Arena, various ground-floor commercial retail and entertainment uses, multi-family housing, and a number of large at-grade paved parking lots with very limited areas of landscaping.

Being located between the Downtown and the beach, including the Santa Cruz Wharf and the Santa Cruz Beach Boardwalk; the project area serves as an important mobility role in linking these two areas. This includes Front Street and Pacific Avenue, the Laurel Street Extension, and the steps to Beach Hill from the Santa Cruz Riverwalk to Cliff Street and down to the beach area.

The San Lorenzo River bends from a southerly to easterly direction adjacent to the project area providing particularly scenic views of the river, the Laurel Street Bridge, and the San Lorenzo Riverside Gardens Park and surrounding neighborhood on the east side of the San Lorenzo River.

The project area is located adjacent to residential uses to west, including the multi-family Sycamore Street Commons, which are located in the Neighborhood Conservation Overlay District (NCOD, Santa Cruz Municipal Code Chapter 24 Part 31).

10.3.3 Relevant Plans and Zoning Regulations

General Plan

The project area contains three General Plan designations; namely: 1) Regional Visitor Commercial (RVC) with a 0.25 to 3.5 floor area ratio; 2) High Density Residential with a density of 30.1 – 55 DUs/acre; and 3) Medium Density Residential with a density of 20.1 – 30 Dus/acre.

The RVC designation emphasizes a variety of commercial uses that serve Santa Cruz residents as well as visitors. Mixed-use development is strongly encouraged in RVC districts. South of Laurel Street, the RVC designation further emphasizes mixed-use and residential development along with visitor- serving and neighborhood commercial uses to connect the Beach Area with Downtown Santa Cruz. The Beach and South of Laurel Comprehensive Area Plan (B/SOL Plan) provides detailed requirements for this area. However, implementation of the project would remove the project area from the B/SOL Plan and add it to the Downtown Plan.

For most areas designated RVC, the minimum and maximum development intensity is specified in the Downtown Plan or the Beach and South of Laurel Comprehensive Area Plan. In areas that are designated RVC but are not addressed in an Area Plan, the minimum FAR is 0.25 and the maximum is 1.75.

Beach and South of Laurel Comprehensive Area Plan

The Beach and South of Laurel Comprehensive Area Plan (B/SOL, 1998) provides a planning framework and recommendations related land use, urban design, housing and circulation (transportation, transit, and parking) in the area south of Laurel Street, west of the San Lorenzo River, and east of Blackburn Street, and north of the Monterey Bay. Neighborhoods include a broad swath of neighborhoods south of Laurel Street, the project area, Beach Hill, and the Beach Flats.

Section 2 South of Laurel includes policies and goals that address residential and commercial development including General Plan and zoning amendment recommendations, which have been largely executed by the City, protecting certain existing residential neighborhoods, creating additional affordable housing and mixed-use development and circulation and streetscape improvements. The City and Coastal Commission successfully implemented most of the recommended actions in the plan and continue to apply the Design Guidelines to proposals for new development within the plan area. The Design Guidelines support development that achieves the vision of the plan, incorporating specific architectural, landscaping, and walkability features into development projects.

Neighborhood Conservation Overlay District

The Neighborhood Conservation Overlay District (NCOD) is comprised of Chapter 24 Part 31 of the Santa Cruz Municipal Code. The purpose of the NCOD is to: 1) Conserve and enhance the residential quality of life within designated neighborhoods; 2) Stimulate maintenance and reinvestment in structures consistent with design guidelines; 3) Facilitate homeownership; and 4) Ensure compatible development along district boundaries.

Local Coastal Program

The project area is located within the coastal zone. Pursuant to the California Coastal Act, the City has a Local Coastal Program (LCP) that has been certified by the California Coastal Commission (CCC). The LCP consists of a land use plan, implementing ordinances and maps applicable to the coastal zone portions of the City, and applies to all private and public projects located within the coastal zone. The Land Use Plan consists of text; policies, programs and maps; Area Plan coastal policies and maps; and a Coastal Access Plan. The Implementation Plan consists of ordinances and regulations used to implement the Land Use Plan, including sections in the Zoning Code, as well as the LCP which applies to private and public projects located within the coastal zone. Additionally, Chapter 4 of the Downtown Plan is incorporated by reference in the CBD zone district, and the district is part of the implementation section of the LCP.

Since the original certification of the City's LCP in 1985, additional plans have been prepared and policies incorporated into the LCP as amendments. The City adopted the San Lorenzo Urban River Plan (SLURP) in 2003 as a resource management protection plan for the river. Subsequent to the City Council approval, several resource-related and land use policies were included in the LCP and approved by the CCC as an amendment to the City's LCP. There are nine coastal policies based on the SLURP that pertain to development along Front Street within the coastal zone.

California Coastal Commission (CCC) staff have indicated that the standard of review for an LCP amendment is consistency with policies in the Coastal Act. A determination of Coastal Act consistency will be considered by the CCC at the time the LCP and LCP Implementation Plan amendments are reviewed by the Commission.

Zoning Code

The project area contains four zoning districts, namely: 1) CBD - E Subdistrict Lower Pacific Avenue, 2) R-H / MU Multiple Residence – High Density, 3) R-M / MU Multiple Residence – Medium Density, and 4) R-T (C) Beach Commercial. The Zoning Code includes development standards and regulations that address of variety of development requirements including building height and density, permitted uses, parking, etc.

Relevant Regional Plans

Metropolitan Transportation Plan / Sustainable Communities Strategy

The Association of Monterey Bay Area Governments (AMBAG), as a metropolitan planning organization (MPO), is required by state and federal laws to develop and adopt a long-range transportation planning document known as a Metropolitan Transportation Plan (MTP). California's 2008 Senate Bill (SB) 375 requires each of the state's 18 metropolitan areas to develop a Sustainable Communities Strategy (SCS)—an integrated transportation, land use, and housing plan that addresses ways to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks. Moving Forward Monterey Bay 2045 is the MTP/SCS for the three-county Monterey Bay Area.

At the heart of SB 375 is the requirement to coordinate transportation investments with land use patterns such that the region makes informed decisions about where to invest the region's limited resources and simultaneously reduces greenhouse gases by providing more direct access to destinations as well as by providing alternative transportation options. The Plan is required to analyze where people are going and how they want to get there in order to build a transportation network that addresses the mobility and accessibility needs of the region. One strategy included in the Plan to achieve this goal is more focused growth in high quality transit corridors. Another strategy is to provide more travel choices as well as a safe and efficient transportation system with improved access to jobs and education for the region's residents.

The MTP/SCS identifies Opportunity Areas with the highest chance for successful sustainable growth in the future. Opportunity Areas are generally located where Transit Priority Areas

(TPAs) and Economic Development Areas (EDAs) within the AMBAG region overlap. An Opportunity Area is an area within 0.5 miles of an existing or planned "high-quality transit corridor" (as defined in California Public Resources Code Section 21064.3) that has the potential for transit-oriented development, including mixed use. Opportunity Areas are places in the region with the highest chance for successful sustainable growth in the future. This effort also identified TPAs as locations that have both supportive land use densities and high-quality transit service/connections for each Opportunity Area. Opportunity Areas are used to identify a set of potential Transit Priority Projects that supports the SCS.

The project is located within Opportunity Area SC-2: City of Santa Cruz, Downtown including Water Street and Soquel Avenue. Opportunity Area SC-2 is designated as an existing/planned Opportunity Area as it currently has characteristics of both a TPA and EDA. Key factors considered in Opportunity Area SC-2's boundaries were existing transit and walksheds, and future high-quality transit thresholds, median household income, residential density, activity density, and Place Types. Place Types identified were primarily Urban, Town, and Suburban, which support the high activity densities identified in the area. A series of existing transit and proposed high-quality transit stops were identified throughout the area, primarily along Soquel Avenue, Water Street, and in Downtown Santa Cruz. Transit walksheds meeting the established thresholds were also identified in the area.

Santa Cruz County Regional Transportation Plan

Additionally, the Santa Cruz County Regional Transportation Commission's (SCCRTC) 2040 Santa Cruz County Regional Transportation Plan (RTP), adopted in June 2018, provides guidance for transportation policy and projects through the year 2040. The RTP identifies 11 "key destinations" (i.e., employment and commercial centers) within Santa Cruz County. Downtown Santa Cruz is identified as a key destination. The RTP's Target 1A seeks to increase the percentage of people who can travel to key destinations within a 30-minute walk, bike, or transit trip by 20 percent by 2020 and 40 percent by 2035. The project is located within the maximum travel buffer for the Downtown Santa Cruz key destination.

10.4 Impacts and Mitigation Measures

10.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

LU-a. Physically divide an established community; and

LU-b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of

avoiding or mitigating an environmental effect.

10.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites. The project would increase floor area ration (FAR) as defined in the General Plan but would not lead to development on sites not already considered in the General Plan and General Plan EIR. The proposed Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code amendments would result in changes that could indirectly lead to intensified development. The following impact analyses are based on review of existing data and studies.

Site visits of the project vicinity were conducted to ascertain surrounding land uses and development. Relevant City plans were reviewed with regards to land use concerns or policy issues with which the project might result in potential conflicts.

10.4.3 Impacts and Mitigation Measures

Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding physical division of a community (LU-a) and conflicts with policies or regulations for avoiding or mitigating impacts (LU-b).

Impact LU-1: Physically Divide and Established Community. Implementation of the project would not physically divide an established community (LU-a). Therefore there would be *no impact*.

The project area is located within downtown Santa Cruz. Implementation of the project would not directly result in the construction of new development. Future development projects would be considered in-fill redevelopment of an existing urban area and are consistent with the policies as described in the City's General Plan 2030 (see Table 10-1: Potential Project Conflicts with City of Santa Cruz General Plan Policies) and would not physically divide an established community. Therefore, there would be *no impact*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact LU-2 (*DPA EIR Impact 4.9-1*): Conflicts with Policies and Regulations. The project would not conflict with policies or regulations, adopted for the purpose of avoiding or mitigating an environmental effect (LU-b). Therefore, this would result in *no impact* related plans and policies.

The project consists of a series of amendments to the City's Downtown Plan, extending the boundary of the existing Downtown Plan to incorporate the project area and incorporate development standards and design guidelines, and other policies and standards to the City's Downtown Plan (last amended October 24, 2023) that will facilitate future redevelopment of the project area. These amendments are summarized below and can be found in Appendix B.

Downtown Plan. A new Appendix 8 – South of Laurel Area District (the project area) will be added that includes a conceptual development plan, public realm improvements, streetscape design guidelines, and conceptual infrastructure improvements. Make revisions and add a new subsection to Chapter 4 in the Downtown Plan to expand the applicability of the Downtown Plan to include the project area, create design and development standards for the project area, and to amend and clarify existing standards.

General Plan and General Plan/LCP Land Use Map. Make minor clarifying changes to General Plan text for the Regional Visitor Commercial (RVC) Land Use Designation. Revise the General Plan/LCP Land Use Map land use map to apply the Regional Visitor Commercial to all parcels in the project area as shown in Figure 3-11 Existing and Proposed General Plan/LCP Land Use Map.

Zoning Ordinance and Zoning Map. Amendments to delete the Central Business District Subdistrict E – Lower Pacific Avenue (CBD-E) zoning designation (text and map); make minor edits to the Central Business District (CBD) zoning designation text, clarify how parking obligations are determined in Parking District 1, and amend the zoning map to apply the CBD zone to all parcels in the project area, as shown in Figure 3-12 Existing and Proposed Zoning Map.

Local Coastal Program. Add footnote to table LU-11 clarifying that the Downtown Plan governs development allowances for all property within the boundary of that plan and make amendments to Map L-11: LCP Land Use Map to be consistent with the amended Land Use Designations in the General Plan. The proposed amendments to the Beach/South of Laurel Comprehensive Area Plan and Design Guidelines are also Local Coastal Program Amendments.

Beach / South of Laurel Comprehensive Area Plan and Design Guidelines. Make edits to remove outdated, irrelevant, or superseded text and to remove references to the project area from the plan and Design Guidelines. As shown in Figure 3-13 Existing and Proposed B/SOL Plan Area, modify the boundary to exclude the project area.

General Plan and Zoning

General Plan land use designations in the project area are Medium Density Residential (20.1 – 30 DU/acre), High Density Residential (30.1 – 55 DU/acre), and Regional Visitor Commercial. The project area is zoned Central Business District / Subdistrict Lower Pacific Avenue (CBD-E), Multiple Residence – High Density (R-H), Multiple Residence – Medium Density (R-M), Medium Density Residential (R-T [A]), and Beach Commercial (R-T[C]). Furthermore, the project location and uses are consistent with the sustainable transportation and land use planning goals set forth in the City's Climate Action Plan that encourage higher density development along transit corridors and activity centers to support efficient, accessible, and sustainable transportation options.

In accordance with Appendix G of the state CEQA Guidelines, the review focuses on potential project conflicts with policies or regulations adopted for the purpose of avoiding or mitigating an environmental impact. There are no apparent conflicts between the project and applicable plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect, as summarized in Table 10-1: Review of Applicable General Plan Policies.

The General Plan includes a number of policies and actions to promote use of alternative transportation modes. In accordance with significance criteria TRANS-f in Chapter 14 Transportation of this SEIR, the General Plan mobility policies were reviewed to determine potential project conflicts with adopted plans, plans or programs regarding public transit, bicycle or pedestrian facilities. The project would not conflict with any such policies as summarized on Table 10-1.

It is noted that there are other policies in these plans which are applicable to the project, and which address a broader range of land use, project design, circulation, and planning concerns. Project consistency with local adopted plans and policies will be determined ultimately by the City Council.

Because the policy language found in any city or county general plan is often susceptible to varying interpretations, it is often difficult to determine, in a draft EIR, whether a proposed project is consistent or inconsistent with such policies. Case law interpreting the Planning and Zoning Law (Gov. Code, § 65000 et seq.) makes it clear that: (i) the ultimate meaning of such policies is to be determined by the elected city council, as opposed to city staff and EIR consultants, applicants, or members of the public; and (ii) the city council's interpretations of such policies will prevail if they are "reasonable," even though other reasonable interpretations are also possible (See *No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3d 223, 245-246, 249.) Courts also have recognized that, because general plans often contain numerous policies emphasizing differing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or arguably inconsistent with some specific policies within a given general plan (*Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 719). Furthermore,

courts strive to "reconcile" or "harmonize" seemingly disparate general plan policies to the extent reasonably possible (*No Oil, supra*, 196 Cal.App.3d at p. 244).

Therefore, the project would not conflict with the City General Plan and Zoning and impacts would be *less-than-significant*.

Beach and South of Laurel Comprehensive Plan

The Downtown Plan (as amended) would remove the project area from the Beach and South of Laurel Comprehensive Area Plan (B/SOL) and incorporate the project area into the Downtown Plan. As such, the policies and goals in the B/SOL would no longer apply and would be replaced with the development standards and design guidelines as described in the (amended) Downtown Plan, including Appendix 8: South of Laurel Area. As such, the project would not conflict B/SOL and impacts would be *less-than-significant*.

Neighborhood Conservation Overlay District

The Neighborhood Conservation Overlay District (NCOD) is comprised of Chapter 24 Part 31 of the Santa Cruz Municipal Code. The purpose of the NCOD is to: 1) Conserve and enhance the residential quality of life within designated neighborhoods; 2) Stimulate maintenance and reinvestment in structures consistent with design guidelines; 3) Facilitate homeownership; and 4) Ensure compatible development along district boundaries.

The project area is located adjacent to the NCOD. As amended, the Downtown Plan would change the zoning adjacent to and east of the NCOD (Blocks E, F and G) from CBD-E Subdistrict Lower Pacific Avenue to CBD Central Business District, consistent with the rest of the downtown north of Laurel Street. The floor area ratio (FAR) of 3.5 would remain unchanged, and the existing building height of 35 feet would be modestly increased to only 50 feet. Therefore, the project would not conflict with the purpose of the NCOD, including ensuring compatible development along the district boundaries, and impacts would be *less-than-significant*.

Regional Plans

The State CEQA Guidelines section 15125(d) requires that a discussion be provided regarding any inconsistencies between a proposed project and applicable general and regional plans. Examples of other regional plans include air quality plans, water quality control plans, regional transportation plans, regional housing allocation plans, habitat conservation plans and regional land use plans.

As discussed in Chapter 6 Air Quality and Greenhouse Gas Emissions of this SEIR, the project would not conflict with the Monterey Bay Unified Air Pollution Control t "Air Quality Management Plan". As discussed in Chapter 9 Hydrology and Water Quality of this SEIR, here are no provisions in the current Basin Plan (water quality) that are applicable to the project. As discussed in Chapter 7 Biological Resources of this SEIR, there are no Habitat Conservation Plans in the project area or other regional plans with which the project may be in conflict.

Applicable regional transportation plans are discussed in Chapter 14 Transportation of this SEIR. The project includes residential development and does not conflict with regional housing allocation plans.

The project will not conflict with policies or regulations, adopted for the purpose of avoiding or mitigating an environmental effect (LU-b) and therefore, will result in *no impact* related to regional plans and policies.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

10.5 References

City of Santa Cruz. November 2017. City of Santa Cruz Downtown Plan Amendments Final EIR [SCH # 2017022050] Certified on November 14, 2017. Includes Draft EIR document, dated July 2017. Available online at: https://www.cityofsantacruz.com/Home/Components/BusinessDirectory/BusinessDirectory/101/2849

City of Santa Cruz. April 2012. City of Santa Cruz General Plan 2030 Final EIR. [SCH#2009032007] Certified June 26, 2012. Includes Draft EIR document, dated September 2011. Available online at: http://www.cityofsantacruz.com/government/city-departments/planning-and-community-development/general-plan

Table 10-1: Review of Applicable General Plan Policies

Includes policies related to avoiding or mitigating environmental impacts.

Element	Policy Number	Policy	Potential Conflict
General Plan 2030			
Community Design	**CD1.2**	Ensure that the scale, bulk and setbacks of new development preserve important public scenic views and vistas.	NO CONFLICT: The project area is not part of a scenic view, and the proposed development would not have an adverse effect on a scenic view as none have been identified, mapped or observed that include the project area.
	CD3.2	Ensure that the scale, bulk and setbacks of new development preserve public views of city landmarks where possible.	NO CONFLICT: Future development would not affect public views or City landmarks as none exist in the vicinity of the project.
Land Use	**LU1.2**	Ensure that growth and development does not lead to the overdraft of any water source, the creation of unacceptable levels of air pollution, or the loss of prime agricultural land.	NO CONFLICT: Project impacts have been evaluated, and the project would not lead to water source overdraft, significant air pollution, or loss of prime agricultural land.
	LU1.2.1	Environmental review for specific projects shall be accompanied by sufficient technical data and reviewed by appropriate departments.	NO CONFLICT: Project technical studies and EIR have been reviewed by City staff.
	LU1.3	Ensure that facilities and services required by a development are available, proportionate, and appropriate to development densities and use intensities.	NO CONFLICT: Public services are available.
	LU1.4	Ensure that new development pays its proportional share of the costs of expanded infrastructure needed to serve new development.	NO CONFLICT: Any expansion of infrastructure needed to serve the project would be accommodated by development impact fees and City-planned capital improvement projects.
	LU4.1.1	Support compact mixed-use development Downtown, along primary transportation corridors, and in employment centers.	NO CONFLICT: The project consists of a mixed-use development along Ocean Street, a primary transportation corridor, which will help facilitate alternative

Element	Policy Number	Policy	Potential Conflict
General Plan 2030			
			transportation and/or minimize transportation demand.
Mobility	**M3.1.3**	Strive to maintain the established "level of service" D or better at signalized intersections.	NO CONFLICT: With recommended improvements as described in the Santa Cruz Downtown Plan Expansion Local Transportation Analysis (Kimley-Horn 2024), project traffic would not result in a decrease in level of service below D at any signalized intersection.
	M3.3.4	Mitigate safety, noise, and air quality impacts from roadways on adjacent land uses through setbacks, landscaping, and other measures.	NO CONFLICT: Project-specific air emission impacts would be less-than-significant. Noise would be attenuated by screening all mechanical equipment and appurtenances as required by the City's standard conditions of approval that would be applied to the project.
Civic and Community Services	**CC5.1.8**	Require new development to maintain predevelopment runoff levels.	NO CONFLICT: Future development accommodated by the proposed Plan amendments will be required to comply with the City's stormwater requirements and regulations.
	CC5.1.9	Reduce stormwater pollution.	NO CONFLICT: Future development would be in compliance with City requirements.
	CC6.17	Require new developments to design service areas that encourage recycling.	NO CONFLICT: The project includes an on-site trash enclosure that includes areas for recycling facilities designed in accordance with City requirements.
Hazards, Safety, and Noise	**HZ2.2.1**	Require future development projects to implement applicable Monterey Bay Unified Air Pollution Control District (MBUAPCD) control measure and/ or air quality mitigations in the design of new projects as set forth in the District's "CEQA Guidelines."	NO CONFLICT: No significant air emission impacts were identified, and no mitigation is required.
	HZ3.1.1	Require land uses to operate at noise levels that do not significantly increase surrounding ambient noise.	NO CONFLICT: No significant impacts were identified related to project increases in ambient noise levels.

Element	Policy Number	Policy	Potential Conflict
General Plan 2030			
	HZ3.1.3	Ensure that construction activities are managed to minimize overall noise impacts on surrounding land uses.	NO CONFLICT: No significant impacts were identified related to project increases in ambient noise levels.
	HZ3.1.6	Require evaluation of noise mitigation measures for projects that would substantially increase noise.	NO CONFLICT: Inclusion of screening mechanical equipment and appurtenances in future development to attenuate exterior noise levels is a required standard condition of approval that would be applied to the project.
	HZ6.3.6	Require site specific geologic investigation(s) by qualified professionals for proposed development in potential liquefaction areas shown on the Liquefaction Hazard Map to assess potential liquefaction hazards and require developments to incorporate the design and other mitigation measures recommended by the investigation(s).	NO CONFLICT: Future development projects will be required to prepare a geotechnical report and implementation of recommendations will be required by the City.
	HZ4.4	Reduce the risk of exposure to hazardous materials from sites being developed or redeveloped.	NO CONFLICT: Future development projects would be subject to all appliable federal, state and local regulations to address the risk of exposure of hazardous materials. They would be required to provide for the proper disposal of impacted soils and groundwater, and lead and asbestos from demolished building materials.
Parks, Recreation, and Open Space	**PR1.3.1**	Ensure that adequate park land is provided in conjunction with new development.	NO CONFLICT: Future projects will be required to pay park dedication fee.
	PR4.2.3	Require development projects located along planned trail routes to dedicate trails or trail easements.	NO CONFLICT: The project would include improvements to the existing Santa Cruz Riverwalk and would not alter existing easements. Access to the Santa Cruz Riverwalk would be enhanced.
Natural Resources and Conservation	**NRC1.2.1**	Evaluate new uses for potential impacts to watershed, riverine, stream, and riparian environments.	NO CONFLICT: No potentially significant Project impacts to aquatic resources were identified.

Element	Policy Number	Policy	Potential Conflict
General Plan 2030			
	NRC2.1.3	Evaluate development for impacts to special-status plant and animal species.	NO CONFLICT: No potentially significant project impacts to special-status plant or animal species were identified.
	NRC 7.1.4	Require new development to provide for passive and natural heating and cooling opportunities, including beneficial site orientation and dedication of solar easement.	NO CONFLICT: Future development projects will be reviewed for consistency with City plans and regulations, including the City's Climate Action Plan and building code requirements to ensure that there is adequate passive and natural heating and cooling.
LCP Land Use Plan			
Community Design	**2.2**	Preserve important public views and viewsheds by ensuring that the scale, bulk and setback of new development does not impede or disrupt them.	NO CONFLICT: Future development would not impact public scenic views.

11 Noise and Vibration

11.1 Introduction

This section analyzes impacts of the project related to noise and vibration based on noise modeling conducted by Dudek (see Appendix D) and a review of existing City plans, regulations and other existing data.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

11.2 Scoping Issues Addressed

Public and agency comments related to noise and vibration were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Operational noise, particularly related to predicted noise levels associated with anticipated events hosted at the proposed permanent area.
- Impacts of noise and pollution on sensitive and endangered species.
- Noise from vehicles and events.
- Consistency with the City's goals, policies, and regulations regarding potential noise impacts.
- Take noise measurements throughout the area and during a timeframe when events will occur.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

11.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and

15168). The DPA EIR addressed noise in the Initial Study contained in Appendix A of the Draft EIR volume, and this section is a new section from what was included in the DPA EIR.

11.3.1 Regulatory Setting

Federal Regulations

There are no federal noise requirements or regulations applicable to local actions of the City of Santa Cruz. However, there are federal regulations that influence the audible landscape, where federal funding is involved. The Federal Highway Administration (FHWA) requires abatement of highway traffic noise for highway projects through rules in the Code of Federal Regulations (23 CFR Part 772), and the Federal Transit Administration (FTA) and Federal Railroad Administration (FRA) each recommend thorough noise and vibration assessments through comprehensive guidelines for any mass transit or high-speed railroad projects that would pass by residential areas. For housing constructed with assistance from U.S. Department of Housing and Urban Development, minimum noise insulation standards must be achieved (24 CFR Part 51, Subpart B).

State Regulations

The State of California establishes minimum noise insulation performance standards for hotels, motels, dormitories, apartment houses and dwellings other than detached single-family dwellings. Interior noise levels attributable to exterior sources shall not exceed 45 db in any habitable room, measured in either the Ldn or CNEL value, consistent with the General Plan, although Ldn is preferred as set forth in the California Building Code (Title 24, Chapter 12 Appendix Section 1207.11.2). The Ldn value (a.k.a., day-night level [“DNL”]) is a descriptor established by the U.S. Environmental Protection Agency to represent a 24-hour average noise level with a penalty applied to noise occurring during the nighttime hours (10 PM - 7 AM) to account for the increased sensitivity of people during sleeping hours. Where exterior noise levels exceed 60 dBA Ldn, a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise limit.

Local Regulations

Regulations within the City of Santa Cruz Municipal Code include performance standards regarding noise and vibration. Section 24.14 includes performance standards for the control of land uses to enable potential nuisance factors to be measured factually and objectively where possible and to protect the community as a whole from hazards and nuisances which can be prevented by methods of control and elimination. Sections 24.14.220 indicate that no land or building in any district shall be used or occupied in any manner so as to create noise or vibration in such a manner or in an amount as to adversely affect the surrounding area or adjoining premises. Section 24.14.260 establishes the maximum sound level that shall not be exceeded as more than five dBA above the local ambient for residential uses and six dBA for commercial uses. Section 24.14.262 indicates that no vibration (other than from transportation facilities or temporary construction work) shall be permitted which is discernible without

instruments at the points of measurement specified in the regulations. Chapter 9.36 regulates "offensive" and disturbing noise, which generally prohibits loud noise between the hours of 10 PM and 8 AM.

The City's General Plan 2030 includes goals, policies and actions that set forth measures to avoid and minimize adverse impacts on noise. In particular, noise-land use compatibility standards will be applied to all new residential, commercial and mixed-use projects (HZ3.2.1), and the proposed General Plan seeks to ensure that noise standards are met in the siting of noise-sensitive uses (HZ3.2). The policies also establish an interior noise level of 45 dBA for all residential uses, consistent with state law, and a target outdoor level of 65 dBA for activity areas associated with new multi-family development.

The General Plan also presents noise compatibility standards as recommended by the state of California. Denotation of a land use as "normally acceptable" implies that the highest noise level in that band is the maximum desirable for existing or conventional construction that does not incorporate any special acoustic treatment. In general, evaluation of land use that falls into the "normally acceptable" or "normally unacceptable" noise environments should include consideration of the type of noise source, the sensitivity of the noise receptor, the noise reduction likely to be provided by structures, and the degree to which the noise source may interfere with speech, sleep, or other activities characteristic of the land use. In instances where new development may be exposed to unacceptable noise levels, acoustical studies would be necessary to ensure that the building construction can meet state-required noise levels, as well as acceptable outdoor noise levels.

The General Plan also includes support of measures to attenuate noise exposure, such as soundwalls, berms and setbacks (HZ3.1.11) and includes policies to minimize and mitigate new sources of vehicular and stationary noise (HZ3.1, HZ3.1.1, HZ3.1.6, HZ3.1.8, HZ 3.1.9). The General Plan 2030 also includes numerous policies that seek to maintain or reduce existing noise levels (HZ3.1) and require mitigation for uses that would substantially increase noise levels (HZ3.1.6). Additionally, the General Plan addresses construction noise in that it seeks to minimize and monitor construction noise (HZ3.1.3, HZ3.1.5).

11.3.2 Noise Fundamentals

Definitions and Terminology

The General Plan 2030 EIR (Draft EIR volume) defines noise and measurements of noise on pages 4.13-3 to 4.13-4, which is incorporated by reference. As indicated, sound" is mechanical energy transmitted by pressure waves in a compressible medium such as air as further described below. "Noise" is generally defined as "unwanted or disturbing sound."

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed

in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dBA.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear. Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (Caltrans 2013). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (e.g., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening hours when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. The derivation of CNEL upgrades the sound levels of evening hours (7 PM to 10 PM) by 5 dB and the sound levels of nighttime hours (10 PM to 7 AM) by 10 dB. The day-night sound level (Ldn) is comparable but treats these three evening hours as unadjusted sound levels in its derivation; thus, CNEL and Ldn are comparable and often considered interchangeable by many jurisdictions for purposes of noise impact assessment.

Exterior Sound Attenuation

Noise sources are typically classified in two forms: (1) point sources, such as stationary equipment (e.g., building rooftop heating, ventilating, and air-conditioning [HVAC] systems) or the time-averaged geographic location of a group of construction vehicles and equipment working within a spatially limited area for a given period, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point

source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically “hard” sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically “soft” sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling of distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a “hard” or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically “soft” or absorptive site is characteristic of unpaved loose soil or vegetated ground.

11.3.3 Noise Setting

Existing Sources of Noise in Project Area

Noise sources in the project area are primarily associated with traffic along local roads, as well as occasional noise from events at the existing Warriors Sports arena. Non-transportation-related noise generators are commonly referred to as “stationary” “sources of noise and typically include noise generated by industrial uses, although none exist in the project area. As indicated in the General Plan 2030 EIR (Draft EIR volume), the Santa Cruz Beach Boardwalk also is the predominant noise source in the beach area during the summer months, although the Boardwalk is located outside of the project area.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound or vibration could adversely affect the use of the land. Residences, hospitals, nursing care or assisted living facilities, guest lodging, schools and churches would be considered noise- and vibration-sensitive. Parks in some settings may also be considered noise-sensitive. In addition, vibration-sensitive land uses also include institutional uses such as laboratories where the activities within the building are particularly sensitive to vibration.

Noise and vibration-sensitive receptors in the project vicinity include single- and multi-family residences along the western, southern and northwestern Project boundaries. While there are some parks west of the project area, such as Depot Park, these parks are within a highly used urban setting and not considered sensitive noise receptors.

Ambient Noise Survey

In order to establish existing baseline community noise levels (also known as outdoor ambient noise levels), Dudek performed a series of investigator-attended short-duration (i.e., approximately fifteen minutes each) sound pressure level (SPL) measurements at seven representative positions in the project vicinity to quantify and characterize the existing outdoor ambient noise levels.

The SoftdB Piccolo II model sound level meter (SLM) utilized for the field survey was equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier and meets the current

American National Standards Institute (ANSI) standard for a Type 2 (general purpose) sound measuring instrument. The accuracy of the SLM was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately five feet above the ground. Table 11-1, October 12, 2023 – Measured Short-Term Baseline Outdoor Noise Levels, provides the location and time at which these baseline noise level measurements were taken.

The seven short-term (ST1-ST7) noise level measurement locations were selected to represent existing sensitive receivers at the project boundaries, which could be subject to increases in ambient noise levels as a result of project implementation. These noise measurement locations are depicted on Figure 11-1 Ambient Noise Monitoring Locations. The common noise metrics measured at the short-term survey locations are provided in Table 11-1: Noise Measurement Locations. The higher ambient noise levels appearing in Table 11-1 generally correlate to measurement points adjacent to heavily traveled major roadways, while the lower levels (ST2 and ST6) are adjacent to local residential streets. Noise measurement data summarized in Table 11-1 is also included in Appendix D, along with field data sheets that provide additional information about field conditions and noise contributors to each measured sound level.

The noise descriptors that are used in Table 11-1 as measured in "A-weighted" decibels (dBA):

- **L_{eq} (Equivalent Noise Level):** The average noise level. In noise environments determined by major noise events, such as aircraft over-flights, the L_{eq} value is heavily influenced by the magnitude and number of single events that produce the high noise levels.
- **L_{max} (Maximum Noise Level):** The maximum instantaneous noise level during a specific period of time.
- **L_{min} (Minimum Noise Level):** The minimum instantaneous noise level during a specific period of time.
- **L_{90}:** the sound level exceeded 90 percent of the time.

Table 11-1: Noise Measurement Locations

Survey Position Tag*	Location Description (and project vicinity)	Time	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)	L_{90} (dBA)
ST1	North side of 3rd Street across from 1019 3rd Street (South of project)	11:12 AM to 11:27 AM	57.4	70.2	36.5	43.2
ST2	End of Cliff Street at 514 Cliff Street (Southeast of project)	11:39 AM to 11:54 AM	46.6	59.5	40.5	42.9
ST3	Along Santa Cruz Riverwalk (East of project)	12:06 PM to 12:21 PM	57.1	78.8	39.6	44.6
ST4	Southeast corner of Laurel Street and Front Street (Northeast of project)	12:33 PM to 12:44 PM	67.5	82.8	58.1	61.3
ST5	Southeast corner of Depot Park (Southwest of project)	1:07 PM to 1:23 PM	55.2	67.0	43.4	47.6
ST6	Southeast corner of Cedar Street and Sycamore Street (Southwest of project)	1:57 PM to 2:13 PM	45.7	60.6	36.1	38.8
ST7	Along Pacific Avenue in front of Yan Flower (eastern boundary for the northeastern portion of project)	2:25 PM to 2:39 PM	60.2	79.0	42.8	49.6

Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; ST = short-term noise measurement locations. *see Figure 11-1 Ambient Noise Monitoring Locations.
Source: Appendix D

11.4 Impacts and Mitigation Measures

11.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

NOI-a Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

NOI-b Result in excessive groundborne vibration or groundborne noise levels.

NOI-c Expose people residing or working in the project area to excessive noise levels in a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.

11.4.2 Analytical Method

New Arena

The noise analysis was prepared based on the information described in Chapter 3 Project Description, including the description of the envisioned new arena (see Section 3.5.2 Community Spaces Improvements).

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites, including future construction of a new, permanent arena for sports and other events.

Five distinct scenarios, labeled as scenario I through V, were modeled for the new arena at each proposed location:

I. Sporting event (but not Warriors basketball);
II. Symphony concert;
III. Popular music concert;
IV. Warriors basketball game; and
V. "Other" function or event using the new arena as a venue.

As modified by parameters such as expected attendance and anticipated overall sound magnitude for each of these five types of hosted events, the new arena has been modeled as a

five-sided (i.e., four walls and roof) building envelope source of noise emission. For purposes of this assessment, representative offsite noise-sensitive receivers are assumed to be at or near the seven geographic positions where baseline outdoor ambient sound levels were sampled and presented in Table 11-1: Noise Measurement Locations. In addition, the CadnaA software allows presentation of predicted noise levels as concentric color-coded bands or "contours" across a horizontal plane parallel with local grade (e.g., 5 feet above ground, typical of street-level pedestrians exposed to the predicted noise emission) so that the estimated noise level from these aggregate project stationary sources may be readily evaluated at any geographic location within the studied project vicinity.

Onsite Stationary Noise

The commercially available DataKustk CadnaA sound propagation modeling program was applied to predict aggregate operational noise associated with major producers of noise emission from future development: rooftop HVAC equipment (for each of the conceptual development lettered "blocks" that are assumed to represent multi-story buildings housing residential, commercial, or mixed-use spaces served by these sound sources) and types of events expected to be hosted within the new arena.

For the occupied new residential and commercial development building blocks, the magnitude of installed HVAC systems (represented as air handling units [AHU] and outdoor-exposed condenser fan arrays for air-cooled condensers [AC] of refrigeration systems) was estimated with minimum indoor air requirements and cooling loads based on expected building occupancy and function. These air volume and cooling demands (expressed as tons of refrigeration) inform calculations of AHU and AC equipment size and thus noise emission using commonly available and representative manufacturer/model sound level data.

Roadway Traffic Noise

Using a spreadsheet-based model that emulates the Federal Highway Administration (FHWA) RD-77-108 technique and reference data, roadway traffic noise was predicted for four cases (existing, existing plus Project, cumulative, and cumulative plus Project) at a total of 13 street segments that are proximate to existing residences and other noise-sensitive receivers in the vicinity of the project area, including the following (with endpoints tagged by intersection number as appearing in the Local Transportation Analysis [Kimley Horn 2024]):

- Laurel Street from Cedar Street (#4) to Center Street (#19);
- Laurel Street from Cedar Street (#4) to Pacific Avenue (#5);
- Laurel Street from Pacific Avenue (#5) to Front Street (#6);
- Pacific Avenue from Front Street (#1) to Spruce Street (#2);
- Pacific Avenue from Front Street (#1) to Pacific Avenue (#9);
- Pacific Avenue from Pacific Avenue (#9) to Second Street (#33);
- Third Street from Leibrandt Avenue (#7) towards Cliff Street;
- Center Street from Laurel Street (#19) to Cliff Street (#9);

- Front Street from Pacific Avenue (#1) to Laurel Street (#8);
- Pacific Avenue from Laurel Street (#5) to Spruce Street (#2);
- Front Street from Spruce Street (#3) towards Laurel Extension (#8);
- Front Street from Spruce Street (#3) to Laurel Street (#6); and
- San Lorenzo Boulevard from Laurel Street (#20) to Riverside Avenue.

Predicted traffic noise varies with roadway speed, proportions of vehicle types that comprise roadway traffic, and the average daily or peak hour volumes, the latter of which was calculated along the above-listed roadway segments from intersection volumes studied in the traffic impact assessment (Kimley Horn 2024). Application of the traffic noise model uniformly assumed standard exterior attenuation rates for "soft" site conditions, with complete worksheets included in Appendix D that present inputs and output values. The noise model does not take into account the sound-attenuating effect of intervening structures, barriers, vegetation, or topography. Therefore, the noise levels predicted by the model are considered conservative for purposes of this impact assessment. Contrasts of predicted traffic noise levels between the existing and existing-plus-project cases determine decibel changes that can be compared with relative allowable increase criteria to assess potential impact significance.

Construction Noise

Construction noise exposure level evaluated at a receptor location from multiple concurrent emission sources may be estimated with sound propagation models such as the FHWA Roadway Construction Noise Model (RCNM), which applies reference maximum sound levels and "acoustical usage factors" (AUF) based on equipment type and considers input distance between the receptor location and one or more types and quantities of noise-producing mobile or stationary construction equipment that may be utilized during a defined activity or phase of construction (e.g., site preparation, building erection, paving, etc.). But as such details of construction phases associated with Project development implementation are not known, any detailed predictions of noise exposure levels at offsite residences would be speculative and are not carried out herein. Further, the City of Santa Cruz does not have a quantifiable construction noise threshold in its current Municipal Code performance standards or its General Plan policies.

11.4.3 Impacts and Mitigation Measures

The project area is not located within two miles of a public airport and would not expose residents or workers to excessive noise levels related to aircraft noise (NOI-c). Potential impacts addressed below include generation of substantial temporary or permanent noise increases (NOI-a) and generation of excessive vibration (NOI-b).

Impact NOI-1: Permanent and Temporary Noise Increases. Future development and growth accommodated by the project would result in temporary and permanent increase in ambient noise levels in the vicinity of the project but would not be considered substantial or in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (NOI-a). This is considered a *less-than-significant* impact.

Permanent Operational Noise Increases

The project would not directly result in new development but could indirectly lead to future development and redevelopment within the project area. Future development would consist of primarily new residential development, as well as a new permanent sports/events arena. Future development would generate increased noise levels, primarily due to sporting and cultural events at the new sports arena and from increased vehicular traffic, as well as from the introduction of new electro-mechanical equipment such as HVAC systems that future new residential and commercial development projects would require. Other sources of operational noise would primarily be associated with noise generated by new residents and their guests, which is not an environmental impact under CEQA pursuant to Public Resources Code section 21085.

Stationary Sources

Table 11-2: Future Arena Predicated Noise Levels Compared to Municipal Code Limits presents the results of stationary source (i.e., non-transportation) operational noise prediction at the seven modeled receivers (refer to Figures 11-2A through 11-2J) for five studied cases associated with each of two arena development alternatives: 1) the envisioned new arena is constructed at Block C, or 2) on the current Arena site, Block D. Detailed information for the operational noise modeling, including the building rooftop HVAC systems and arena event parameters considered for this evaluation of potentially significant noise impacts is provided in Appendix D.

Table 11-2: Project Operational Noise Levels (per New Arena Development Location Alternatives) presents the results of the operational noise modeling at the seven modeled receivers (see Figure 11-1 Ambient Noise Monitoring Locations) at the two proposed Arena locations. The predicted L_{eq} values in Table 11-2 are compliant with Section 24.14.260 of the Santa Cruz Municipal Code in that they do not exceed measured samples of the pre-existing outdoor ambient sound environment by more than 5 dB at residential receptors or 6 dB at commercial receptors. Even if all HVAC equipment from added Project mixed-use development operated continuously over a 24-hour period, the predicted operational sound level (adjusted by an added 6.7 dB to convert an hourly L_{eq} to the CNEL value) at each of the seven modeled residential receiver locations would still fall below 60 dBA CNEL, which is the "normally acceptable" noise limit for residential uses identified in the City's General Plan 2030. Therefore, the addition of project operational noise would not perceptibly increase ambient noise levels above existing conditions.

Table 11-2: Project Operational Noise Levels (per New Arena Development Location Alternatives)

Receptor ID	Predicted Aggregate Project Operational Noise Level (dBA hourly L_{eq}) by Future Arena Location and Hosted Event Scenario									
	New Arena / Block C					New Arena / Block D				
	I	II	III	IV	V	I	II	III	IV	V
ST1	40.1	40.5	41.1	40.7	40.0	37.9	38.8	39.9	39.0	37.4
ST2	46.3	46.5	46.7	46.5	46.2	39.7	43.4	46.0	43.9	36.3
ST3	43.0	43.0	43.1	43.0	42.9	37.7	40.3	42.5	40.8	35.9
ST4	38.3	39.6	41.0	40.0	37.6	38.1	39.5	40.9	39.9	37.4
ST5	35.6	35.8	36.1	35.9	35.5	35.8	35.8	35.8	35.8	35.8
ST6	39.4	40.4	41.6	40.6	38.9	39.5	39.5	39.6	39.5	39.5
ST7	43.0	47.2	50.0	48.1	38.4	38.4	38.4	38.5	38.4	38.3

Notes: dBA = A-weighted decibels. Scenarios: I = Sporting Event (not Warriors Basketball); II = Symphony; III = Popular Music Concert; IV = Warriors Basketball; V = Other venue.
Source: Appendix D.

Figures 11-2A through 11-2J present the predicted noise contours across the project vicinity for the same ten cases (i.e., the five studied event type scenarios when the new arena is located at Project development Block C or D) appearing in Table 11-2. As illustrated in this set of predicted contours of aggregate stationary source noise emission and Table 11-2, offsite noise exposure levels from Project stationary sources are expected to be below 60 dBA CNEL, which as indicated above is the "normally acceptable" noise limit for residential uses identified in the City's General Plan 2030. Therefore, permanent noise increases due to stationary sources would result in a *less-than-significant* noise impact.

Indirect Traffic-Related Noise

The potential for off-site increases in traffic is the main source of noise in most urban areas. To determine the potential for roadway traffic noise level increases from project implementation, acoustical calculations were performed. Table 11-3: Existing and Future Roadway Traffic Noise Levels (Leq) presents predicted roadway peak hour traffic noise levels with potential future development resulting from the project at a perpendicular distance of 50 feet from the roadway centerline for each of the studied segments within and in the vicinity of the project. Traffic noise levels at greater distances from the roadway segment centerline would be lower due to attenuation provided by increased distance from the noise source.

The project, along with future regional growth and other approved projects to be developed within the project vicinity, would result in the addition of vehicle trips that would increase traffic noise. Existing traffic noise levels for the modeled segments range from 54.1 to 61.7 dBA Leq. Corresponding CNEL values, based on vehicle type proportions and traffic temporal distributions, would be 0.25 dB greater based on a Caltrans Technical Noise Supplement

conversion expression (Caltrans 2013) and are thus functionally comparable to the peak hour L_{eq} values appearing in Table 11-3. For purposes of impact assessment, the Federal Interagency Committee on Noise (FICON) offers guidance with respect to allowable increases in transportation noise with respect to the baseline levels as follows:

- where the existing noise level is already greater than 65 dBA CNEL, a potentially significant project impact would occur where the increase is 1.5 dB or more;
- where the existing noise level ranges between 60 and 65 dBA CNEL, a potentially significant project impact would occur where the increase is 3 dB or more;
- where the existing noise level is less than 60 dBA CNEL, a potentially significant project impact would occur where the increase is 5 dB or more.

These criteria are similar to those shown in section 4.13.3 of the 2030 City's General Plan 2030 EIR noise section, which uses Ldn values as the metric (that are comparable to CNEL for purposes of this assessment) and allows up to a 3 dB increase for all existing levels greater than 60 dBA. All predicted decibel differences appearing in Table 11-3: Existing and Future Roadway Traffic Noise Levels (Leq) would not exceed either the City's significance thresholds used in the General Plan 2030 EIR or FICON guidance-based conditions. Therefore, the project would result in a *less-than-significant* roadway traffic noise impact.

Table 11-3: Existing and Future Roadway Traffic Noise Levels (Leq)

	dBA Leq		
Street Segment	**Existing**	**Existing + Project**	**Difference**
Laurel St from Cedar St to Center St	61.2	61.8	0.6
Laurel St from Cedar St to Pacific Ave	61.0	61.6	0.6
Laurel St from Pacific Ave to Front St	61.7	62.2	0.5
Pacific Ave from Front St to Spruce St	54.1	55.3	1.2
Pacific Ave from Front St to Pacific Ave	61.3	61.7	0.4
Pacific Ave from Pacific Ave to Second St	60.0	60.2	0.2
Third St from Leibrandt Ave to Cliff St	57.0	57.0	0
Center St from Laurel St to Cliff St	57.7	57.9	0.2
Front St from Pacific Ave to Laurel St	60.1	60.7	0.6
Pacific Ave from Laurel St to Spruce St	54.6	56.0	1.4
Front St from Spruce St to Laurel Ext	60.7	61.5	0.8
Front St from Spruce St to Laurel St	61.1	62.1	1.0
San Lorenzo Blvd from Laurel St to Leibrandt Ave	59.4	59.7	0.3

Sources: SCDPE Traffic Study (Kimley-Horn 2024) and Traffic Noise Modeling Calculator (Dudek 2024).

Conclusion

Adoption and implementation of the project would not directly result in new development, but new future development accommodated by the plan would result in increased arena events and traffic that would increase ambient noise levels. However, ambient noise would be below 50 dBA Leq with a new permanent sports/events arena, and noise increases due to traffic from future development accommodated by the project would not exceed three decibels and would be below a 1.5 decibel increase. Thus, permanent increases in ambient noise levels would not be substantial, and permanent increases in ambient noise levels is considered a *less-than-significant* impact.

Furthermore, the City's General Plan 2030 includes goals, policies and actions that set forth measures to minimize increases in ambient noise levels, as well as future project-level environmental review, which would also reduce potential permanent ambient noise increases.

The General Plan 2030 includes policies to minimize and mitigate new sources of vehicular and stationary noise (HZ3.1, HZ3.1.1, HZ3.1.6, HZ3.1.8, HZ 3.1.9), to maintain or reduce existing noise levels (HZ3.1), and to require mitigation for uses that would substantially increase noise levels (HZ3.1.6). Therefore, the project would indirectly result in permanent increased noise levels that would not be considered substantial, resulting in a *less-than-significant* impact.

Temporary Construction-Related Noise

Future development would result in temporary increases in outdoor ambient noise levels due to construction activities resulting from future development. Construction-related noise levels would vary throughout the day, depending on the type of equipment in use at any one time and the distance to the receptors, and noise impacts from construction may vary greatly depending on the duration and complexity of the project. However, construction-related noise impacts are temporary and often of a short-term duration. Noise generated during construction could be considered a nuisance to some residents and/or employees in the proximity to such construction.

Potential heavy and mobile construction equipment includes, but is not limited to, what is typically used for demolition (of existing site structures), excavation, site grading, construction of structures, paving, and architectural finishes. Stationary equipment tends to operate either continuously at a fixed location for one or more days at a time to provide power, ventilation or otherwise serve other onsite equipment (e.g., pumps, generators, fans, compressors); or, intermittently to perform an onsite task or process (e.g., pile drivers, pavement breakers, drills, rock crushers, concrete batch plants). Mobile equipment moves around the construction site with power applied in cyclic fashion (e.g., bulldozers or front-end loaders exerting power under loads), or to and from the site (haul trucks). As a result of the equipment mix for any given project, each phase has its own noise characteristics; some have higher continuous noise levels than others, some have high impact noise levels.

Table 4.13-5 in the City's General Plan 2030 EIR (Draft EIR volume), which is incorporated by reference, shows typical noise levels associated with different types of construction equipment at a representative distance of 50-feet, along with their typical usage factors (percentage of time typically actively operating). As shown, the maximum reference noise levels generated by individual pieces of construction equipment can range from 77 to 90 dBA L_{max}, with blasting noise levels reaching 94 dBA L_{max} at 50-feet. These noise levels would decrease with distance from the construction operation at a rate of approximately 6 dBA per doubling of distance (Caltrans 2013).

Table 1 from the FHWA RCNM User's Guide shows that maximum sound levels (L_{max}) for typical stationary and mobile equipment range from 70 dBA (generator for lighting) to 94 dBA (blasting) at a source-to-receptor distance of 50 feet, and their corresponding AUF values that represent how frequently (within a given period) such L_{max} values may occur (FHWA 2006). Consequently, an L_{eq} value can be estimated for construction equipment by applying the base-ten logarithm of the AUF as an adjustment to the magnitude of the L_{max} value at 50 feet.

Noise emission resulting from construction activity associated with future development estimated with such predictive calculations would likely cause audible but temporary increases to the existing or future outdoor sound environment. However, and consistent with the conclusion from the City of Santa Cruz 2030 General Plan Update EIR, "with implementation of the proposed General Plan 2030 [that] includes goals, policies and actions that set forth measures to minimize exposure construction noise levels, the increase in temporary noise levels from construction-related activities would be considered less-than-significant."

The City's General Plan 2030 requires that construction activities are managed to minimize overall noise impacts on surrounding land uses (HZ3.1.3). In particular, the General Plan seeks to ensure that construction activities are managed to minimize overall noise impacts on surrounding land uses (HZ3.1.3).

Development projects are reviewed on a case-by-case basis, and typical conditions of approval include limiting the day and times of day during which construction and/or heavy construction can be conducted, provision of notification to neighbors regarding construction schedules, and implementation of a process to receive and respond to noise complaints. These are some of the types of measures that would be implemented by the City to manage and minimize construction noise impacts per General Plan Actions HZ3.1.3 and HZ3.1.5. Future development in the project area would be reviewed to determine whether conditions of approval would be added to an individual project.

Therefore, with compliance with City policies, future temporary increases in noise levels due to construction of individual development projects would not be considered substantial, and impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact NOI-2: Excessive Groundborne Vibration. Future development and growth accommodated by the project would not result in excessive groundborne vibration or groundborne noise levels (NOI-b). This is considered a *less-than-significant* impact.

The project would not directly result in the generation of groundborne noise or vibration levels; however, future construction of development projects have the potential to generate groundborne noise and vibration. Construction activities resulting from future development could result in varying degrees of temporary groundborne vibration or noise, depending on the specific construction equipment used and operations involved. Representative groundborne vibration levels for various types of construction equipment, developed by FTA, are summarized in Table 11-4: Representative Vibration Levels for Construction Equipment. Heavier pieces of construction equipment, such as a bulldozer and excavator equipped with a hoe-ram have been documented to generate peak particle velocities (PPV) of approximately 0.089 in/sec. PPV or less at a reference distance of 25 feet (FTA 2018).

Table 11-4: Representative Vibration Levels for Construction Equipment

Equipment	PPV at 25 feet (in/sec)1,3	Approximate Lv (VdB) at 25 feet2
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Heavy-duty Trucks (Loaded)	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Notes:
Where PPV is the peak particle velocity.
Where Lv is the RMS velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.
Vibration levels can be approximated at other locations and distances using the above reference levels and the following equation: $PPV_{equip} = PPV_{ref} (25/D)^{1.5}$ (in/sec); where "PPV ref" is the given value in the above table, "D" is the distance for the equipment to the new receiver in feet.
Source: FTA 2018.

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. Using standard FTA vibration attenuation formulas, non-pile driving construction activities would exceed the Caltrans recommended threshold of significance of 0.3 in/sec. PPV at a distance of approximately 11 feet. It is unlikely that the center of operations for heavy construction equipment would operate within 11 feet of sensitive receptors/structures based on the mandatory buffers set forth by the SCCC (e.g., setbacks, buffers, easements, rights-of-way, etc.), which would result in structures typically separated by at least 12 feet, and thus construction activities would not be anticipated to generate groundborne noise and vibration levels in excess of the Caltrans guideline threshold criteria of 0.3 in/sec PPV. As such, vibration impacts are considered less-than-significant.

Because Section 24.14.262 from the City's Municipal Code excludes limitations on perceptible vibration (i.e., "discernible without instruments") for "transportation facilities" and "temporary construction work", there is no applicable City standard to assess vibration impacts resulting from future development with respect to these two circumstances. While operation of building HVAC equipment includes rotating or reciprocating components or other oscillating electro-mechanical or fluid dynamic phenomenon, such equipment is designed, engineered, installed, and serviced to maintain acceptably low levels of vibration and thus help ensure long and reliable operational performance. Hence, vibration from operation of such installed systems is unlikely to conflict with Section 24.14.262 or be considered substantial, resulting in a *less-than-significant* impact.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

11.5 References

California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. Prepared by R. Hendriks, B. Rymer, D. Buehler, and J. Andrews. Sacramento: Caltrans. September 2, 2013. Available online at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf.

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Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC: FTA. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

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12 Population and Housing

12.1 Introduction

This section analyzes impacts of the project related to population and housing based on a review of regional growth forecasts and existing City plans.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

12.2 Scoping Issues Addressed

Public and agency comments related to population and housing were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Estimate the number of below market-rate affordable housing units that will be built, by income category; as well as the ratio of for sale and rental apartment units.
- Identify the number of existing housing units that will be demolished, and the number of residents affected.
- Analyze the number of housing units that are allowed under the current General Plan, including accessory dwelling units (ADUs) and the likely number of new units resulting from SB 9, and whether the proposed 1,800 (or 1,600) units are required to meet the new Regional Housing Needs Allocation (RHNA) targets.
- Evaluate how the project will impact and benefit the city's unhoused population.
- Evaluate potential displacement of existing residents in the project area.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

12.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project, focusing on those areas where there have been changes made to the project, changes in the circumstances surrounding the project, or new information discovered since the DPA Final EIR

was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

12.3.1 Regulatory Setting

There are no federal, state or local agency regulations regarding population.

State

Senate Bill 649

SB 649 requires that lower income individuals residing in neighborhoods and communities experiencing significant displacement pressures and gentrification due to rapid growth or increasing housing prices need access to housing that is affordable and that assists those households in avoiding displacement. The bill requires that, to the extent feasible and consistent with other laws, the low-income housing tax credit program and tax-exempt bonds for qualified residential rental property used for affordable housing may be used to support access to housing that would allow households facing or at risk of displacement to remain in the community.

California Health and Safety Code - Section 17975-17975.10 :: Article 2.5. Tenant Relocation Assistance

Any tenant who is displaced or subject to displacement from a residential rental unit as a result of an order to vacate or an order requiring the vacation of a residential unit by a local enforcement agency as a result of a violation so extensive and of such a nature that the immediate health and safety of the residents is endangered, shall be entitled to receive relocation benefits from the owner as specified in this article. The local enforcement agency shall determine the eligibility of tenants for benefits pursuant to this article.

California Civil Code – Section 1946.2

Notwithstanding any other law, after a tenant has continuously and lawfully occupied a residential real property for 12 months, the owner of the residential real property shall not terminate the tenancy without just cause, which shall be stated in the written notice to terminate tenancy. If any additional adult tenants are added to the lease before an existing tenant has continuously and lawfully occupied the residential real property for 24 months, then this subdivision shall only apply if either of the following are satisfied:

1. All of the tenants have continuously and lawfully occupied the residential real property for 12 months or more.
2. One or more tenants have continuously and lawfully occupied the residential real property for 24 months or more.

Section 1946.2(d)(1) provides that tenants who have occupied their rental unit for at least 12 months must be compensated with relocation payments or waivers equal to a month's rent if they are evicted without just cause.

Local

City of Santa Cruz Affordable Housing Provisions

The requirements provision of affordable housing to moderate, low- or very low-income households as a part of new residential development are included in the City's Municipal Code, Chapter 24.16 – "Affordable Housing Provisions." The purpose of the inclusionary housing requirements is to enhance the public welfare by adopting policies to utilize remaining developable land in the city in a manner consistent with state and local housing policies and needs, meet the city's share of regional housing needs, implement the housing element's goals and objectives, improve the feasibility of rental housing development, assure compatibility between market rate units and inclusionary units, and make housing available for households of all income levels. Chapter 24.16 also addresses accessory dwelling units, density bonuses for residential units, and fee waiver for affordable units.

Association of Monterey Bay Area Governments

The Association of Monterey Bay Area Governments (AMBAG) prepares and updates population, housing and employment forecasts for the Monterey Bay region, which includes Santa Cruz, Monterey and San Benito Counties. These forecasts are used in other regional planning efforts, including but not limited to, air quality management plans and housing elements.

12.3.2 Population and Housing Trends and Forecasts

As of 2024, the City has a population of 62,776 and an estimated 24,506 housing units in the City (California Department of Finance 2024). The Association of Monterey Bay Area Governments (AMBAG) develops population and housing forecasts for the region. The 2022 Regional Growth Forecast for the City of Santa Cruz forecast for the year 2040 a population of 78,828. This is an increase of 14,404 persons as compared to the 2020 estimate of 64,424 persons. Similarly for the same time period, the number of housing units is forecast to increase from 23,954 units to 26,295 units, for a net increase of 2,341 units.

Population increases and growth trends within the City have fluctuated over the years. Spurred in part by the establishment of the University of California Santa Cruz (UCSC) campus, the City's population increased 29% during the 1970s, which represented an annual average growth rate of approximately 2.9%. Growth slowed to an average annual rate of about 2% during the 1980s. Between 1990 and 2008, City population grew at an average annual growth rate of about 1%.

As of 2020, according to the U. S. Census, there are a total of 22,067 occupied households in the City of Santa Cruz. The average household size city-wide is 2.24 people (CA Department of Finance, 2024). In the downtown area, the average household size is 1.83 persons per household (American Community Survey, 2020, Table S1101). Of the total households (24,036), 11,416 (47%) are occupied by renters.

The City of Santa Cruz, similar to many communities with large university campuses, has a higher proportion of non-family households (e.g., unrelated individuals) than the County or the region. In 2020, approximately 50% of the City's households were non-family, compared to 38% Countywide and just 36% for the region, per the U. S. Census.

12.4 Impacts and Mitigation Measures

12.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

POP-a Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure;

POP-b Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere; or

POP-c Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

12.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites. The project would increase the FAR on a portion of the project area as defined in the General Plan but would not lead to development on sites not already considered in the General Plan and General Plan EIR. The proposed Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code amendments would result in changes that could indirectly lead to intensified development.

The following impact analyses are based on review of existing data and studies.

12.4.3 Impacts and Mitigation Measures

Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding population growth (POP-a) and displacement of housing (POP-b) and people (POP-c).

Impact POP-1: Inducement of Substantial Population Growth. Future development and growth accommodated by the project would increase the number of residents living in the downtown. However, this growth is consistent with policies identified in the City's General Plan 2030, including the Housing Element, as well as regional growth population estimates (POP-a). Therefore, this is considered a *less-than-significant* impact.

As of 2024, the City has a population of 62,776 and an estimated 24,506 housing units in the City (California Department of Finance 2024).

The project assumes maximum buildout of 1,800 units and up to 60,000 sf. of ground-floor retail and commercial uses. Redevelopment would replace approximately 66 dwelling units and 76,770 gross sf. of commercial uses, resulting in a potential net increase of 1,734 dwelling units and a potential net decrease of 16,770 square feet of commercial space. Assuming an average household size the downtown of 1.83 persons (American Community Survey 2020), this would result in up to 3,173 new residents.

One of the primary objectives of the project is to provide additional housing in the downtown, consistent with the City's General Plan policies and Housing Element. As part of the City's 6th Cycle 2023 – 2031 Housing Element update (2023), the City was allocated 3,736 residential units as part of the Region Housing Need Allocation (RHNA). The RHNA methodology is used for determining future housing need, by income category, within the State and is based on growth in population, households, and employment. The statewide determination is under the administration of State Department of Housing and Community Development (HCD). The quantified housing need is then allocated among the State's 18 Metropolitan Planning Organizations (MPOs). For Santa Cruz, this agency is the Association of Monterey Bay Area Governments (AMBAG).

The General Plan 2030 EIR estimated population and housing increases that could result from potential development and buildout accommodated by the plan that included 3,350 residential dwelling units with an associated population increase of 8,040 residents by the year 2030.

As part of the 6th Cycle RHNA Sites Inventory (see Appendix G of the City's 2023 – 2031 Housing Element), the project area was identified as a key area to accommodate future housing and was allocated a total of 1,047 units (105 Very Low and Low Income; 105 Moderate Income, and 837 Above Moderate Income). For the purpose of the Housing Element, only the existing zoning capacity was included.

The Association of Monterey Bay Area Governments (AMBAG) develops population and housing forecasts for the region. For the year 20230, the period closest to expected completion of the project, the 2022 Regional Growth Forecast for the City of Santa Cruz estimates a population of 72,218 and 25,578 housing units. With the new housing units and population resulting from the project, the City's population would be 65,949, which is below the regional population forecast for the year 2030. Therefore, while the project would directly induce

population growth, the new population resulting from the project would not be substantial as it would be within regional forecasts.

With the additional housing units and population potentially resulting from the project, the City of Santa Cruz will still be below these forecasts. Furthermore, it is expected that development pursuant to the proposed amendments will occur over a 15–25-year period. Therefore, population and housing growth due to the project is not substantial. Thus, future development and growth accommodated by the project is consistent with regional growth population estimates, as well as the City's Housing Element, and would not induce substantial unplanned population growth, resulting in a *less-than-significant impact*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact POP-2: Displacement of People or Housing. Future development and growth accommodated by the project would potentially displace up to 66 existing dwelling units and 121 persons living in the project area (POP-b and c). This is considered a *potentially-significant* impact.

Future development would potentially replace approximately 66 dwelling units that exist in the project area. Assuming an average household size the downtown of 1.83 persons (American Community Survey 2020), this would result in the displacement of approximately 121 residents.

Many of these residents live in multi-family apartments and condominiums. Additionally, Santa Cruz County operates the Front Street Residential Care facility (managed by Front St. Inc.), located at 126 Front Street on Block D.

As described in Appendix 8 of the Downtown Plan (as amended) the City will explore options to expand anti-displacement policies such as the current local preference policy in SCMC 24.16.045 consistent with all relevant state and federal laws, as expanded by SB 649 (2022) with a focus specifically on households at elevated risk of displacement.

Furthermore, state regulations (i.e., SB 649, California Health and Safety Code - Section 17975-17975.10 :: Article 2.5. Tenant Relocation Assistance, and California Civil Code – Section 1946.2) will continue to require one-to-one replacement of existing housing units currently or recently occupied by lower income households, in conjunction with relocation expenses and first right of refusal requirements for existing tenants.

Future development associated with the project will be required to comply with all relevant state and local requirements regarding the displacement of people and housing, and therefore impacts are considered *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

12.5 References

California Department of Finance. 2024. Population and Housing Estimates for Cities, Counties, and the State — January 1, 2023, and 2024. Available online at: https://dof.ca.gov/forecasting/demographics/estimates-e1/.

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U. S. Census Bureau. November 2024. American Community Census. Available online at: https://data.census.gov/table/ACSDP5Y2022.DP05?g=160XX00US0669112

13 Public Services

13.1 Introduction

This section analyzes impacts of the project related to following public services based on a review of existing City plans and other existing data, as well as review with City staff. Water and wastewater utility services are addressed in Chapter 15 Utilities, Service Systems, and Energy Conservation.

- Fire Protection Services
- Police Protection Services
- Parks and Recreation
- Schools

The City of Santa Cruz is the provider for all services, except for schools, which is provided by Santa Cruz City Schools (SCCS).

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. These documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

13.2 Scoping Issues Addressed

Public and agency comments related to public services were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Capacity of existing public services (e.g., police and fire services) to adequately serve the project.
- Potential impacts to schools and adequate capacity.
- Potential impacts associated with evacuation routes during an emergency and potential emergency vehicle access to Beach Hill and the Beach Area.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

13.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

13.3.1 Regulatory Setting

The DPA EIR incorporated by reference state laws and regulations governing the provision of specified services that are discussed in the General Plan 2030 EIR (DEIR volume) on pages 4.6-1-4.6-2, 4.6-5-4.6- 6, 4.6-20, 4.6-21-4.6-22, and 4.6-25, which have not changed except has discussed below.

State

Fire Protection

Fire hazards are addressed mainly through the application of the California Fire Code (CFC) and the California Building Code (CBC). The Fire Code addresses access, including roads, and vegetation removal in high fire hazard areas. The CBC requires development in high fire hazard areas to show proof of nearby water sources and adequate fire flows.

Police Services

All law enforcement agencies within California are organized and operate in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for police officers.

Schools

Senate Bill (SB) 50 (1998), which is funded by Proposition 1A, limits the power of cities and counties to require mitigation of developers as a condition of approving new development and provides instead for a standardized fee. SB 50 generally provides for a 50/50 state and local school facilities match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether state funding is available; whether the school district is eligible for state funding; and whether the school district meets certain additional criteria involving bonding capacity, year-round schools, and the percentage of moveable classrooms in use.

California Government Code sections 65995–65998 set forth provisions to implement SB 50. Specifically, in accordance with Section 65995(h), the payment of statutory fees is “deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities.”

The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Pursuant to Government Code section 65995(i), "A state or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073 on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to this section or pursuant to Section 65995.5 or 65995.7, as applicable."

California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.

13.3.2 Fire Protection Services

The City of Santa Cruz Fire Department is an all-hazard emergency response and fire protection agency that serves the City, the University of California at Santa Cruz (UCSC), and participates in mutual aid responses within the County and State. The Fire Department has a long-term contract for full fire protection services with UCSC, and an automatic aid agreement with County Fire/CalFire into Paradise Park. The City of Santa Cruz Fire Department maintains mutual aid agreements with all surrounding fire agencies to provide, and receive, aid on an as needed basis. The department is also a participant in the California Fire Assistance Agreement (CFAA) which allows for statewide mutual aid.

The Fire Department provides the following services: structural fire suppression, wildland fire suppression; emergency medical services (paramedic), hazardous materials incident response; marine rescue, technical rope/cliff rescue, technical rescue and fire investigation[10]. In addition, the department serves the community through a wide array of non-emergency interactions by providing fire prevention, community risk reduction, public education, disaster preparedness training, and ongoing emergency management preparation.

Existing Facilities and Operations

Existing Fire Department facilities and operations are discussed on pages 4.6-2 to 4.6-3 of the DPA EIR (Draft EIR volume), which is incorporated by reference, and have not changed except has discussed below.

The Department is staffed with over 70 staff members, which includes firefighter/paramedics, captains, battalion chiefs, division chiefs, fire prevention staff, training staff, and administrative staff. Additionally, the Department employes about 70 seasonal lifeguards, as well as six

10 City of Santa Cruz Fire Department website: https://www.cityofsantacruz.com/government/city-departments/fire-department/about.

temporary workers that service fire hydrants and conduct life safety inspections throughout the City. The Fire Department has a minimum staffing standard of 15 firefighters and one battalion chief on duty per day.[11] The Department currently has four engines, one type 3 engine and one truck.

Average response times from each of the four fire stations is approximately 5 minutes. The Department's goal is to respond to emergency calls (fire suppression, EMS and special operations) in less than five minutes 90% of the time. In 2023, the Department had an estimated 100 fire investigations, 400 construction-project inspections, 146,087 lifeguard contacts with the public and 9,500 911 calls for service. Approximately 90 percent of the emergency service calls were responded to within five minutes (Shields, Fire Department, personal communication, May 2024).

Since 2017, the Department has recognized the need for additional staff and facilities, including expanded fire station and additional equipment, to accommodate City growth, particularly new taller buildings. In addition, the Department does not have a Training Facility, the construction of which was included as a recommendation in the Department's "Three Year Strategic Plan, 2009-2011." A Standards of Coverage study is underway to assess Department operations, response times and facility and staffing needs is underway and is expected to be completed in the fall of 2024 (Shields, Fire Department, personal communication, May 2024).

13.3.3 Police Protection Services

The City of Santa Cruz Police Department provides crime protection and prevention activities throughout the City and has mutual aid agreements with other law enforcement agencies (Sheriff's Office, Capitola, Scotts Valley, Watsonville, California Highway Patrol, State Parks and UCSC Police Departments). The City of Santa Cruz Police Department services and operations are discussed on page 4.6-3 of the DPA EIR (Draft EIR volume), which is incorporated by reference, and have not changed except as discussed below.

The City of Santa Cruz Police Department provides crime protection and prevention activities throughout the City, including patrols, response to calls, crime prevention strategies through community-oriented policing, education, and outreach. Its range of services includes patrol, investigations, traffic, school resource officers, and other various other specialized teams. The Police Department operates out of one police station/headquarters, located in downtown Santa Cruz. The Department's existing facility and vehicles are adequate for the existing population (Garcia, Police Department, personal communication, May 2024). The Department is currently authorized 94 sworn police officer positions and 25 professional staff positions.[12] Police Department staff have indicated that the department is currently understaffed, and that

[11] City of Santa Cruz Fire Department website: https://www.cityofsantacruz.com/government/city-departments/fire-department/about.
[12] City of Santa Cruz Police Department website: https://www.cityofsantacruz.com/government/city-departments/police/about-the-scpd.

a study regarding staffing requirements will be initiated in the next twelve months. The average response time within the City in 2023 for high priority incidents was five minutes, 30 seconds.

13.3.4 Parks and Recreation

Santa Cruz offers residents and visitors a wide range of parks, open space, beaches, trails, and recreational opportunities. The City manages, maintains and operates more than 1,700 acres of parks and open space lands, including neighborhood parks, community/regional parks, community facilities, and recreational programs. Most of these parks, facilities and programs are operated and maintained by the City Parks and Recreation Department. Some facilities and programs are operated and organized in partnership with community organizations.

Parks and recreational facilities within and near the downtown area of Santa Cruz are discussed on pages 4.6-4 to 4.6-5 of the DPA EIR (Draft EIR volume), which is incorporated by reference, and have not changed except has discussed below.

There are no neighborhood or community parks within the project area. However, the Santa Cruz Riverwalk is adjacent to a portion of the project area on the east, which provides recreational opportunities. Other parks near the project area include: Depot Park, Bicycle Trip Bike Park, and Scott Kennedy Fields Park; Mimi de Marta Dog Park; Laurel Park; Chestnut Park; Cowell Beach; Main Beach; Santa Cruz Wharf; Neary Lagoon Wildlife Refuge; and Neary Lagoon Park.

The City's Parks Master Plan 2030 was completed in August 2020 and is a tool to guide the City in parks, facility, beach and open space planning on a long-term basis. The Plan was adopted by the City Council in October 2020. The Plan includes goals, policies and actions for the provision of parks and recreational services. These include general recommendations for new and/or expanded recreational uses. The Master Plan also provides specific recommendations for improvements at the City's individual parks, beaches, open spaces, and recreational facilities. It also includes improvements to existing facilities, but no new parks or facilities are specifically identified.

The Parks Master Plan does not specify locations for new parks or recreational facilities, but some of the Plan's policies and actions support new and expanded recreational uses and/or facilities. For many recommended new or expanded uses, specific site locations are not identified in the Master Plan, and, in some cases additional study is recommended in order to identify suitable locations. The Parks Master Plan supports consideration of recreational facilities identified below after additional studies are conducted in the future to further evaluate potential uses and site locations. In addition, new, expanded or renovated facilities or structures are recommended in the Parks Master Plan at a variety of existing parks throughout the City, including some parks in the project vicinity (Depot Park, Bicycle Trip Bike Park, and Scott Kennedy Fields Park; Cowell Beach/Main Beach; and Santa Cruz Wharf) (City of Santa Cruz 2020).

- Public Recreational Use in the new Arena: Goal III-Policy H, Action 5 describes considering partnerships to allow for public recreational uses in the permanent Kaiser Permanente Arena during the Santa Cruz Warriors off-season. This includes evaluating potential Parks and Recreation programming uses, events, designs, and costs during the planning phases of the arena and exploring mechanisms to facilitate Parks and Recreation Department programming to facilitate multi-purpose sports and events throughout the year.
- Athletic Fields: Goal III-Policy D, Action 1 calls for conducting an athletic field feasibility study to explore locations and options for additional multi-use field space.
- Bike Parks and Mountain Bike Facilities: Goal III-Policy G, Action 1, calls for development of more bike parks, pump tracks, and jump facilities and features to meet a variety of skill levels, and Goal III-Policy F, Action 1 calls for consideration of spurs from multi-use trails for mountain bikers.
- Community Gardens: Community garden space is supported in higher-density or lower-income areas (Goal 1-Policy C, Action 4), on the east side of the San Lorenzo River and in the Beach area (Goal III-Policy G, Action 1c), and is suggested for consideration at specific locations (Round Tree Park, Star of the Sea Park, and Beach Area neighborhood).
- Dog Facilities: Goal III-Policy I and supporting actions directs the City to seek opportunities to enhance off-leash dog use experiences while minimizing conflicts with other park uses and wildlife.
- Playgrounds. Potential opportunities for new or expanded playground areas are recommended at Central Park, Garfield Park, Harvey West Park, DeLaveaga Park, Main Beach, San Lorenzo Park, Sgt. Derby Park, and University Terrace Park.
- Pickleball Courts: Goal III-Policy G, Action 1g calls for the identification of a location for a pickleball facility with 6-10 courts and/or smaller facilities that can be located in different areas of the City. Potential partnerships or locations for further consideration include: the UCSC tennis courts at 207 Natural Bridges Drive, Lower DeLaveaga Park and Washington Grove, Frederick Street Park, Sgt. Derby Park, San Lorenzo Park, and Star of the Sea Park.
- Tennis Courts: The proposed plan supports consideration of adding a tennis court facility on the east side of the San Lorenzo River (Goal III-Policy G, Action 1f).
- Trails: Goal II-Policy F, calls for enhancement of trail programs, trails, and infrastructure. (City of Santa Cruz 2020).

The City imposes a “Parks and Recreation Facilities Tax” (pursuant to Chapter 5.72 of the Municipal Code) on new residential development (including mobile homes) within the City, payable at the time of issuance of a building permit. The collected taxes are placed into a special fund, and “shall be used and expended solely for the acquisition, improvement and expansion of public park, playground and recreational facilities in the city” (section 5.72.100). Projects that have dedicated land or fees for parks in accordance with Municipal Code Chapter

23.28 requirements for subdivisions are exempt from this tax. The City also is preparing a study of park fees that is expected to be completed by Fall 2024.

13.3.5 Schools

Schools and educational services are provided to City residents by the Santa Cruz City Schools (SCCS), as well as a number of private schools, for grades K through 12. School facilities within and near the downtown area of Santa Cruz are discussed on pages 4.6-5 to 4.6-6 of the DPA EIR (Draft EIR volume), which is incorporated by reference, and have not changed except has discussed below.

The project would be served by SCCS schools including Gault Elementary, Mission Hill Middle School, and Santa Cruz High School. The capacity of each school serving the project is provided in the City's General Plan EIR (City of Santa Cruz 2012). Current enrollment data as reported by California Department of Education was compared to capacity as reported in the City's General Plan, which is summarized on Table 13-1: School Capacities and Enrollments. It is noted that existing enrollments are slightly lower than enrollments reported in the 2017 DPA EIR.

According to the District's updated 2024 Developer Fee Justification Study for the Santa Cruz School Districts, District facilities have the capacity to accommodate 6,262 students(Schoolworks, Inc. 2024). The 2024 Fee Study identifies a capacity need for 6,828 students based on projected development is needed, resulting in a deficit capacity for 566 students.[13] The District has identified a need for 2.85 acres for new facilities (1.12 acres for grades Kindergarten-6 and 1.73 acres for grades 9-12). No sites have been identified to accommodate this demand.

Local school districts are empowered under state law to impose school impact fees, which are collected by local governments at the time of building permit issuance. The Santa Cruz City Elementary and High School Districts currently charge school impact fees.

Table 13-1: School Capacities and Enrollments

School	Capacity [1]	Current Enrollment[2]
Gault Elementary	480	291
Mission Hill Middle	690	500
Santa Cruz High	1,362	1,104
Total	**2,656**	**2,075**

[13] Per the District's 2024 Developer Fee Study, available capacity consists of: grades Kindergarden-6 = (529 deficit); grades 7-8 = 201, grades 9-12 = (220 deficit), and special education = (18 deficit).

Notes:
1. As reported in the City's General Plan 2030 EIR (City of Santa Cruz 2012)
2. California Department of Education 2024.

13.4 Impacts and Mitigation Measures

13.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

PUB-a Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire Protection
- Police Protection
- Schools
- Parks

PUB-b Increase the use of existing neighborhood and community parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;

PUB-c Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment; or

PUB-d Conflict with established recreational, educational, religious, or scientific uses of the area.

13.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites.

As described in Section 3.7.3 SEIR Project Development Buildout Assumptions, the project could lead to redevelopment of existing sites resulting in a potential net increase of 1,734 residential units, a net decrease of approximately 16,700 square feet of commercial space, and

construction of a new arena with a slightly higher capacity than currently exists. Assuming an average household size the downtown of 1.83 persons (American Community Survey 2020), this would result in up to 3,173 new residents.

Future service demands and impacts resulting from the project are assessed based on review existing plans and consultation with staff of agencies responsible for provision of services addressed in this section.

13.4.3 Impacts and Mitigation Measures

The project does not include facilities or require construction or expansion of recreational facilities (PUB-c). The project does not conflict with established recreational, education, religious, or scientific uses of the area as none exist in the area adjacent to or in proximity of the project area (PUB-d). Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding scenic potential indirect impacts to public services that would require new or physically altered police, or fire protection facilities (PUB-a) and potential impacts to existing parks and recreational facilities (PUB-b).

Impact Pub-1a (*DPA EIR Impact 4.6-1a*): Fire Protection. Future development and growth accommodated by the project would indirectly result in increased fire protection and emergency service demands, which would result in the need to construct new or expanded fire station. However, the impacts of fire station construction or expansion are not expected to be significant (PUB-1a). Therefore, this is considered is a *less-than-significant* impact.

The project would not directly result in new development but could lead to intensified development in the project study area with an increased population in the downtown area. The project would result in indirect impacts related to increases in service calls. It is not expected that the project would reduce response times. However, the development and growth accommodated by the project would contribute to an existing facility deficiency experienced by the Fire Department, as well as contribute to a cumulative impact regarding Fire Department facility deficiencies that is addressed in Chapter 16 Other CEQA Considerations.

The City's Fire Department has identified the need for an expanded or new fire station and has indicated that the existing downtown fire station is inadequate in terms of space and equipment to meet existing needs, as well as, future growth. The project would contribute to an existing need for additional facilities. The Fire Department has indicated that it is likely that expanded or new fire facilities would be at the site of Station 2 on Soquel Avenue in the eastern part of the City or potentially near UCSC. Expansion or new construction at these locations would be considered infill development on a sites surrounded by development. The site on the east side of the City is also adjacent to a City-owned, paved, public parking lot. Development to accommodate potential new or expanded fire protection facilities in the future would not be expected to result in significant physical impacts as potential sites would be located within existing developed areas and sites.

Therefore, the impact related to increased fire protection demands and the need for new or expanded facilities is *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact PUB-1b (*DPA EIR Impact 4.6-1b*): Police Protection. Future development and growth accommodated by the project would indirectly result in increased police protection service demands. However, future development and growth would not result in the need to construct new or expanded police facilities (13a). Therefore, this is considered a less-than-significant impact.

The project would not directly result in new development but could lead to intensified development in the project area with an increased downtown population that could lead to potential increased calls for service. According to the City's Police Department, there are adequate police protection facilities to serve the growth potentially resulting from the project. Review with the City Police Department indicates that no additional equipment or facilities will be needed to maintain acceptable response times and service levels. The project would not reduce response times or require new or physically altered police protection facilities that could result in significant physical impacts.

Therefore, the impact related to increased police protection demands and the need for new or expanded facilities is *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact PUB-1c (*DPA EIR Impact 4.6-1c*): Schools. Future development and growth accommodated by the project would indirectly result in increased population that would generate elementary school student enrollments that could reach, but not exceed, capacity of existing schools (PUB-a). This is considered is a *less-than-significant* impact.

The project would not directly result in new development but could lead to intensified development in the project area, resulting in increased student enrollments. Based on the District's updated student generation rate of 0.2132 students per household, development resulting from the project could result in approximately 370 students. However, it is expected that new residential units within the expanded Downtown Plan area would be smaller and potentially likely to generate fewer students.

To determine whether the project would result in increased demand for school facilities, potential new enrollment as a result of the project was estimated using Census tract data for downtown Santa Cruz. Project school generation was then compared to existing enrollment and capacity. American Community Survey five-year Census data provides information on the number of households with children and enrollment. Based on data for the Census tract that

contains the project, 11% of households have children and the average household size is 1.83 (American Community Survey 2020). Given the small household size in the project area, it was assumed that households with children are likely to have one child. Based on the estimated net increase of 1,734 residential units, this would result in a school age population of approximately 175 students.

Census enrollment data shows that the split of enrollment between elementary, middle, and high school is 51%, 27%, and 23% respectively. It was assumed that all these children would be enrolled in school, which is a conservative assumption as some of these children would be below school age. Using these assumptions and the Census data split for enrollment the project would potentially generate 101-190 new elementary school students, 53-100 middle school students and 46-85 high school students based on Census information, as well as the District's updated student generation rate.

Based on these assumptions, it is anticipated Santa Cruz High and Mission Hill Middle would remain under capacity as a result of the project, and capacity would be reached at Gault Elementary School based on the District's student generation rates as shown in Table 13-2: School Capacities & Projected Enrollments. Additionally, the development that may occur as a result of the project would occur over the next 20 + years and school enrollment associated with future development also would fluctuate over time.

Table 13-2: School Capacities & Projected Enrollments

School	Capacity [1]	Current Enrollment	Enrollment from Project	Percent Capacity with Project
Gault Elementary	480	291	101-190	82-100%
Mission Hill Middle	690	500	53-100	80-87%
Santa Cruz High	1,362	1,104	46-85	85-87%
Total	**2,656**	**2,075**	**198-370**	**--**

Notes:
1. As reports in the City's General Plan (City of Santa Cruz 2012)
Source: City of Santa Cruz 2012 and CA Department of Education, 2024.

The General Plan 2030 (2012) includes a number of policies that serve to mitigate potential impacts to existing school facilities as a result of new residential development and population growth including ensuring and planning for adequate school sites (CC8.2, CC8.2.2) and cooperating with the school district to monitor impacts of housing on elementary school populations (CC8.1.1). The General Plan also encourages joint-use facilities that combine educational and community uses (CC8.2.1).

The school impact fee study prepared for the School District indicates that the District's planned use of the development impact fees would include the following types of projects:

- New Schools: When there is enough development activity occurring in a single area, the District would build a new school.
- Additions to Existing Schools: The District would accommodate students at existing schools by building needed classrooms and/or support facilities such as cafeterias, restrooms, gyms and libraries as needed to increase the school capacity. Schools may also need upgrades of the technology and tele-communication systems to be able to increase their capacity.
- Portable Replacement Projects: Some of the District's capacity is in temporary facilities, which could be replaced with new permanent or modular classrooms to provide adequate space for students. In addition, old portables that have reached the end of their life expectancy, will need to be replaced to maintain the existing service level. These types of projects are considered modernization projects in the State Building Program.
- Modernization/Upgrade Projects: The District would modernize or upgrade older schools to be equivalent to new schools so students will be housed in equitable facilities to those students housed in new schools. These projects may include updates to the building structures to meet current building standards, along with upgrades to the current fire and safety standards and any access compliance standards (Schoolworks Inc. 2024).

The project would not directly result in new development, but increased population resulting from development accommodated by the project could increase student enrollments in grades K-12, which could potentially reach existing elementary school facility capacity over time. With required payment of school impact fees to fund necessary facility expansion and/or additions, the impact would be mitigated to a less-than-significant level. Potential addition or expansion of school classroom facilities is not expected to result in significant physical impacts due to the location of existing facilities within developed footprints.

Additionally, per current California Government Code Section 65995(h), the payment of statutory fees is "deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities."

Therefore, impacts to schools would be *less-than-significant* and no mitigation is required.

Mitigation Measures

No mitigation measures are required beyond payment of school impact fees that will be collected at the time of issuance of a building permit.

Impact PUB-1d (*DPA EIR Impact 4.6-1d*): Parks. Future development and growth accommodated by the project would indirectly result in increased demands for parks, potentially resulting in the need to expand existing parks or acquire new parks (PUB-1c). This is considered is a *potentially significant* impact.

The project would not directly result in new development but could lead to intensified development in the project area, resulting in increased population and in increased demands for park and recreational facilities. As indicated above, the project could indirectly result in an increase in the downtown residential population by approximately 3,295 people. Residents would have access to several nearby parks and other recreational facilities.

As previously discussed, the City currently does not meet the desired level of service for neighborhood and community parks and is deficient by approximately 67 acres. Thus, existing developed neighborhood parks could be considered at capacity use, in general, based on the City's park service standards. Based on the City's parks standards set forth in the General Plan, the potential population indirectly resulting from the project could result in the need for approximately 6.6 acres of additional neighborhood park land and approximately 8.2 acres of additional community park land.

While, the City's Parks Master Plan 2030 identifies an existing deficit of 67 acres of park land throughout the City, this is an existing condition, and future development in the project area, as well as throughout the City, would contribute to the existing deficiency and increase park needs. The City's 2030 Parks Master Plan identifies park needs and improvements to existing parks and recreational facilities but does not propose creating additional park land. The Master Plan includes improvements to existing facilities, and no new parks or facilities are specifically identified. The projects and recommendations in the Parks Master Plan are intended support the City's resident and visitor population. Furthermore, the Parks Master Plan identifies potential new facilities and uses that could be developed throughout the City after further study and also recommends a broad range of improvements and upgrades for existing facilities and potential new facilities, which would be in support of the Plan's goals and policies to provide adequate parks and recreational facilities throughout the City for its population.

The City's 2030 Parks Master Plan identifies park needs and improvements to existing recreation facilities but does not propose creating additional park land. Additionally, the City's General Plan 2030 includes a number of policies that serve to mitigate potential impacts to existing parks and recreation facilities as a result of new residential development and population growth. The policies, which are summarized in Table 13-3: General Plan 2030 Policies and Actions that Reduce Park Impacts, address development of new parks which would lessen the projected increased use of existing parks, as well as maintenance of existing parks and recreational facilities.

Table 13-3: General Plan 2030 Policies and Actions that Reduce Park Impacts

Type of Measure / Action	Policies / Actions
Plan and provide for new parks	▪ Provide & manage parks: PR1.1 ▪ Develop and maintain city Master Parks Plan: PR1.1.2, Pr1.1.4 (plan for adequate parks and recreation facilities) ▪ Level of Service standards: PR1.3, PR1.3.2, PR1.3.3 ▪ Evaluate lands for small parks: PR1.1.3 ▪ Coordinate with schools to expand parks: PR1.2.1, PR1.2.3 ▪ Examine developing new or expanding existing athletic fields: PR1.2.2 ▪ Development park dedication or in-lieu fees: PR1.7, 1.7.1 ▪ Maintain a Parks and Recreation Facilities excise tax on new construction: PR1.9, PR1.9.1, PR1.9.2 ▪ Acquire parcels that provide access to City-owned open space lands and coast: PR3.2
Ensure maintenance and management	▪ Ensure ongoing maintenance: PR1.3.4 ▪ Identify maintenance funding sources: PR1.10 ▪ Protect & Manage open space: LU2.3 LU2.3.1, LU2.3.2, LU2.3.3, LU2.3.4 (UCSC), LU3.11 ▪ Greenbelt Management: LU2.3.3, LU3.11.3, NRC6.3
Provide access to open space lands and coast	▪ Assure access to open space lands and coast: PR1.6.5, PR3.1 ▪ Coastal access: PR3.2, PR3.3, PR3.3.5 ▪ Access to river & riparian: NRC1.1, NRC1.1.2
Provide trails	▪ Provide and maintain Integrated trail system: PR4.1, PR4.1.1 ▪ Provide and maintain trails in parks: PR4.2, PR4.2.1, PR4.2.2 ▪ Require development to dedicate trails or easements along planned trail routes: PR4.2.3

The General Plan seeks to update and modify park system and park services to accommodate changes in the population and its recreational need (PR1.1.1). A number of policies and actions seek to provide a system of parks and recreational facilities (PR1.1.1), planning for new parks and facilities (PR1.1.2, PR1.1.4), evaluating and acquiring parks (PR1.1.3, PR3.2 [parcels that provide access to City-owned open space lands]), developing new or expanding existing athletic fields (PR1.2.2), and coordinating with local schools to expand park and recreation opportunities (PR1.2.1, PR1.2.3). To this end, the plan establishes service standards (PR1.3, PR1.3.2, PR1.3.3), seeks to ensure that adequate park land is provided in conjunction with new development (PR1.3.1), and requires park dedication or payment of in-lieu fees from new development (PR1.7, PR1.7.1).

While specific new park locations are not designated in the proposed General Plan 2030, the policies and actions set forth a strategy to plan and acquire additional park lands in the future.

The plan also seeks to ensure that ongoing maintenance needs are addressed in the development and funding plans for any new or expanded parks, recreational facilities, or open space areas (PR1.3.4, PR1.10). Maintenance of the City's Parks and Facilities tax also is recommended (PR1.9, PR1.91, PR1.9.2).

Furthermore, the City imposes a "Parks and Recreation Facilities Tax" (pursuant to Chapter 5.72 of the Municipal Code) on new residential development (including mobile homes) within the City, payable at the time of issuance of a building permit. The collected taxes collected are placed into a special fund, and "shall be used and expended solely for the acquisition, improvement and expansion of public park, playground and recreational facilities in the city" (section 5.72.100). Projects that have dedicated land or fees in accordance with Municipal Code Chapter 23.28 requirements for subdivisions are exempt from this tax.

In addition, the proposed Downtown Plan amendments as evaluated in this EIR consider construction of a new permanent arena that could accommodate a variety of recreational and cultural events. This is consistent with Goal III-Policy H, Action 5 of the Parks Master Plan that describes considering partnerships to allow for public recreational uses in the permanent Kaiser Permanente Arena during the Santa Cruz Warriors off-season. This includes evaluating potential Parks and Recreation programming uses, events, designs, and costs during the planning phases of the arena and exploring mechanisms to facilitate Parks and Recreation Department programming to facilitate multi-purpose sports and events throughout the year. Thus, the proposed project supports expanded uses within a new facility.

Mitigation Measures

With implementation of the proposed General Plan 2030 goals, policies and actions that set forth measures to avoid and minimize adverse impacts on parks and recreational facilities as summarized in Table 13-3, implementation of the City's 2030 Parks Master Plan and required payment of park fees as part of future developments, the project 's indirect impact on parks and recreational facilities would be considered less- than-significant. Furthermore, the new arena could potentially accommodate public recreational uses during the Santa Cruz Warriors off-season. Future planning could evaluate uses, events, and designs to accommodate public parks and recreation needs.

Impact PUB-2 (*DPA EIR Impact 4.6-2*): Parks and Recreation. Future development and growth accommodated by the project would indirectly result in increased demand for parks and recreational facilities that could result in some deterioration of existing parks and recreational facilities (PUB-b). This is considered is a *less-than-significant* impact.

The project could indirectly result in a net increase of approximately 3,295 new residents over the next 15-25 years, as described above. Project residents would have access to several nearby parks and other recreational facilities throughout the City and region.

The City's 2030 Parks Master Plan identifies park needs and improvements to existing recreation facilities and potential new facilities or uses after further study. The projects and

recommendations in the Parks Master Plan are intended support the City's resident and visitor population. While increased use at some facilities may occur as a result of the project, the level of incremental use by Project residents would not be expected to be of a magnitude that would cause substantial physical deterioration to existing parks or recreational facilities. Furthermore, the policies and actions included in the Parks Master Plan are intended to maintain and enhance parks and recreation facilities such that they do not substantially deteriorate (City of Santa Cruz 2020). Most importantly, the new arena could be designed to accommodate public recreation during the Santa Cruz Warriors offseason, thereby expanding recreational opportunities to the surrounding neighborhood and community.

Furthermore, the City imposes a "Parks and Recreation Facilities Tax" (pursuant to Chapter 5.72 of the Municipal Code) on new residential development (including mobile homes) within the City, payable at the time of issuance of a building permit. The collected taxes collected are placed into a special fund, and "shall be used and expended solely for the acquisition, improvement and expansion of public park, playground and recreational facilities in the city" (section 5.72.100). Projects that have dedicated land or fees in accordance with Municipal Code Chapter 23.28 requirements for subdivisions are exempt from this tax.

Therefore, the impact related to increased park use and potential substantial deterioration of existing parks and recreational facilities is *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

13.5 References

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14 Transportation

14.1 Introduction

This section analyzes impacts of the project related to transportation based on a review of existing City plans and other existing data.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

14.2 Scoping Issues Addressed

Public and agency comments related to transportation were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Automobile VMT per capita above the threshold of significance for existing (i.e. baseline) city-wide or regional values for similar land use types.
- In addition to Vehicle Miles Travelled (VMT) evaluate level of service per General Plan policies, particularly Goal M3.1.3.
- Reduce GHG emissions associated with the transportation sector, both at the project level, and in long-term plans (including general plans, climate action plans, specific plans, and transportation plans) and supporting Sustainable Community Strategies developed under SB 375.
- Analyze summer and weekend conditions as part of the cumulative analysis.
- Evaluate alternative transportation demand management (TDM) measures to reduce impacts.
- Analyze potential impacts associated with the proposed roadway improvements as it relates to pedestrian and bike safety in the project area.
- Potential impacts associated with evacuation routes during an emergency and potential emergency vehicle access to Beach Hill and the Beach Area.
- Use updated traffic estimates including recently approved projects in the downtown.
- Provision of bicycle facilities associated with new residential development.
- The SEIR should include a transportation Level of Service (LOS) analysis.
- Develop a plan to divert beach-visitor vehicular traffic away from Beach Hill so the redevelopment can thrive.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

14.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

14.3.1 Regulatory Setting

Federal

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination toward people with disabilities and guarantees that they have equal opportunities as the rest of society to become employed, purchase goods and services, and participate in government programs and services. The ADA includes requirements pertaining to transportation infrastructure. The Department of Justice's revised regulations for Titles II and III of the ADA, known as the 2010 ADA Standards for Accessible Designs, set minimum requirements for newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. These standards apply to accessible walking routes, curb ramps, and other facilities.

Surface Transportation Assistance Act Routes (STAA – Federal Designation)

The Surface Transportation Assistance Act (STAA) of 1982 allows large trucks, referred to as STAA trucks that comply with maximum length and width requirements, to operate on routes that are part of the National Network. The National Network includes the Interstate System and other designated highways that were a part of the Federal-Aid Primary System on June 1, 1991; states are encouraged, however, to allow access for STAA trucks on all highways. Highway 17 is classified as an STAA route (Terminal Access).

State

Senate Bill 743 – Transportation Impacts

Adopted in 2013, Senate Bill (SB) 743 changed how transportation impacts are evaluated under CEQA. Previously, CEQA analysis was conducted using an LOS measurement that evaluated traffic delay. As specified under SB 743 and implemented under Section 15064.3 of the State CEQA Guidelines (effective December 28, 2018), VMT is the required metric to be used for identifying CEQA impacts and mitigation. In December 2018, the Governor's Office of Planning

and Research (OPR) published a Technical Advisory on Evaluating Transportation Impacts, including guidance for VMT analysis. The Office of Administrative Law approved the updated CEQA Guidelines and lead agencies were given until July 1, 2020, to implement the updated guidelines for VMT analysis.

VMT was chosen as the primary metric to better integrate land use and multimodal transportation choices, to encourage alternative transportation, promote greater efficiency, and reduce GHG emissions. The most recent technical guidance on analyzing the transportation impacts under CEQA, released by OPR in December of 2018, provides recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR offered a generalized recommendation of a 15 percent reduction below existing VMT as a threshold of CEQA significance.

For the VMT analysis, OPR recommends using a trip-based assessment of VMT that captures the full extent of the vehicle trip length – even the portion that extends beyond the jurisdictional boundary (trips that extend into another county). This differs from the traditional boundary- based assessment of VMT impacts that quantifies only the length of the vehicle trips that occurs within the boundaries of a jurisdiction.

Additionally, SB 743 also amended the State congestion management program statutes lifting the sunset clause for the designation of infill opportunity zones, where CMP LOS standards would no longer apply.

California Complete Streets Act of 2008

This act requires that the circulation elements of local general plans accommodate a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the jurisdiction. Users are defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and riders of public transportation.

California Transportation Development Act

The Mills-Alquist-Deddeh Act (SB 325) (also known as the Transportation Development Act [TDA]) was enacted in 1971 to improve public transportation services and encourage regional transportation coordination. This law provides funding to be allocated to transit- and non-transit-related purposes that comply with regional transportation plans. The TDA provides two funding sources: 1) the Local Transportation Fund (LTF), which is derived from a ¼ cent of the general sales tax collected statewide, and 2) the State Transit Assistance fund (STA), which is derived from the statewide sales tax on diesel fuel.

Local

Santa Cruz County

2016 Measure D: Transportation Improvement Expenditure Plan (Amended February 2020).

Measure D provides a balanced vision to improve, operate and maintain Santa Cruz County's transportation network. Projects in the Expenditure Plan will provide safer routes to schools for local students; maintain mobility and independence for seniors and those with disabilities; invest in bicycle and pedestrian pathways and bridges on an unprecedented scale; repave roadways, repair potholes and improve safety on local streets; ease congestion on major roadways; and invest in transportation projects that reduce the pollution that causes global warming. The City of Santa Cruz annually adopts a rolling 5-year Measure D investment plan that outlines the planned projects. Transportation projects in the project area would be eligible for Measure D funds, however no funds are currently allocated to the project area.

14.3.2 Roadway Network

The following is a summary description of the primary roadways in the vicinity of the project area. A more complete description of the roadway network is provided in the Draft Santa Cruz Downtown Expansion Plan Local Transportation Analysis (Kimley Horn 2024) and is incorporated herein by reference.

Local Streets and Roads

Front Street is a north-south minor arterial roadway that extends from Water Street to Pacific Avenue. Front Street is a one-way southbound street between Water Street and River Street.

Cedar Street is a two-lane north-south collector local roadway that extends from Center Street at the far north end of the Downtown and ends at Sycamore Street.

Pacific Avenue is a two-lane north-south collector roadway that extends from Water Street at the north end of the Downtown and ends at Beach Street and ends at Water Street. Pacific Avenue is a one-way street, northbound, between Cathcart Street and Church Street.

Center Street is a two-lane north-south collector minor arterial roadway between Water Street and the roundabout at Pacific Avenue and Washington Blvd.

Laurel Street is a two-lane east-west minor arterial roadway that extends from Escalona Drive and ends at Broadway/San Lorenzo Blvd.

Laurel Street Extension is a two-lane north-south collector local roadway between Front Street, the City's Pump Station 1, and a private driveway. South of the private driveway Laurel Street Extension becomes a one-way southbound collector street and ends at 3rd Street.

Spruce Street is a two-lane east-west collector local roadway between Cedar Street and Laurel Street Extension.

Sycamore Street is a two-lane east-west collector local roadway between Cedar Street and Pacific Avenue.

State Highways

State highways that are in the vicinity of the project area include segments of State Routes 1 and 17; State Route 1 is located approximately one mile driving distance northwest of the project area. Though referenced as "state routes" in Caltrans documents, the more common term, "highway", is used in this EIR. Highways 1 and 17 serve regional traffic, including motorists who commute to jobs in the Santa Clara Valley and motorists who travel into Santa Cruz County for recreational opportunities offered in the county (City of Santa Cruz, April 2012, DEIR volume).

Highway 1 provides access to San Francisco to the north and Monterey to the south. Regionally, Highway 1 is the major inter- and intra-county route for Santa Cruz County. Within the City of Santa Cruz, it is oriented in an east-west direction, although the interregional alignment of Highway 1 is primarily north-south. It is a four-lane arterial along Mission Street from the west side of Santa Cruz to Chestnut Street Extension, a four-lane expressway between Mission Street- Chestnut Street and River Street, and a four-lane freeway east of River Street. The speed limit on Highway 1 is 25 mph along Mission Street, 45 mph along the expressway section, and 55 and 65 mph on the freeway sections. Recurrent congestion results in queuing on Highway 1 that extends for several miles during peak hours. Accidents, events, and other incidents in the corridor can further increase congestion-related delays in either direction, on any day, including weekends (City of Santa Cruz, April 2012, DEIR volume).

Highway 9 is a multi-lane highway between Highway 1 and Encinal Street. It is two-lanes north of Encinal Street that connects the City of Santa Cruz with the San Lorenzo Valley, and eventually, Saratoga and Los Gatos.

Highway 17 connects Santa Cruz with Scotts Valley and San Jose and other Santa Clara County communities. It is a four-lane freeway north of the Highway 1/ Highway 9 intersection. Highway 17 is the primary route between the Santa Clara Valley and Santa Cruz County that serves as both a commuter route for Santa Cruz County residents that work in Santa Clara County and as a route for recreational visitors that come to Santa Cruz County. Congestion occurs both during weekday commute times and on summer weekends. This winding, four-lane road has steep sections, frequent road crossings, and substandard median shoulders and outside shoulders for most of its length. In addition to the challenging roadway configuration, weather-related conditions such as thick fog, heavy rains and mudslides affect roadway operations (City of Santa Cruz, April 2012, DEIR volume).

14.3.3 Other Transportation Modes

Pedestrian and Bicycle Facilities

Pedestrian facilities within the study area include sidewalks, crosswalks, ADA ramps and pedestrian signal heads. The sidewalks on Pacific Avenue are 10 to 25 feet wide and crosswalks

with ADA ramps are provided at every intersection. The sidewalks on Front Street are generally 8 to 10 feet wide and crosswalks are provided at intersections as well as in front of the Pacific Station transit center. Bicycle amenities include bicycle parking (located at Pacific Station), Class II facilities (bicycle lanes) and the San Lorenzo Riverwalk.

The San Lorenzo Riverwalk is a north-south bicycle and pedestrian path that follows the San Lorenzo River in Santa Cruz for approximately 2.5 miles. The paved trail is on the river levee on both the east and west sides of the river, except for a short segment in the vicinity of the County Building north of Soquel Avenue, which is currently under construction. A pedestrian/bicycle bridge north of Soquel Avenue connects both sides of the levee trail system, and can be accessed from River Street, approximately 750 feet north of the project area.

Public Transit Service

Public transit service in the City and County of Santa Cruz is provided by the Santa Cruz Metropolitan Transit District (SCMTD). The METRO Pacific Station, located on the east side of Pacific Avenue between Elm Street and Maple Street is located two blocks north of the project area. The station is currently operating under temporary off-site conditions as part of a redevelopment project that is scheduled to be completed in February 2026. [14]

Transit routes serving the project area include routes 18 and 16 along Laurel Street and 19 and 20 along Front Street and lower Pacific Avenue.

14.4 Impacts and Mitigation Measures

14.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

TRANS-a	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
TRANS-b	Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) or cause an increase of vehicle miles traveled (VMT) that is greater than fifteen (15) percent below the regional average VMT.
TRANS-c	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

[14] Note that AB2097 prohibits a public agency from imposing any minimum automobile parking requirement on any residential, commercial, or other development project, as defined, that is located within a half-mile of public transit.

TRANS-d Result in inadequate emergency access.

14.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites.

As described in Section 3.7.3 SEIR Project Development Buildout Assumptions, the project could lead to redevelopment of existing sites resulting in a potential net increase of 1,734 residential units, a net decrease of approximately 16,700 square feet of commercial space, and construction of a new arena with a slightly higher capacity than currently exists. Assuming an average household size the downtown of 1.83 persons (American Community Survey 2020), this would result in up to 3,173 new residents.

The analysis below relies on existing City plans and policies and the Santa Cruz Downtown Plan Expansion Local Traffic Analysis (Kimley Horn 2024).

Vehicle Miles Traveled

The thresholds to consider for projects located within the City of Santa Cruz are defined by Exhibit 5 of the City's SB 743 Guidelines as shown in Table 14-1: City of Santa Cruz VMT Thresholds of Significance.

Table 14-1: City of Santa Cruz VMT Thresholds of Significance

Land Use	VMT Threshold	Basis
Residential	11.9 VMT/Capita [1]	15% below existing county-wide average VMT per capita
Office	6.4 Work VMT/Employee [2]	15% below existing county-wide average Work VMT per employee
Retail	Net regional change	Using the county as the basis
Other Employment	Work VMT/Employee [3]	15% below existing county-wide average Work VMT per employee for similar land uses
Other Customer	Net regional change [3]	Using the county as the basis

Notes:
1. Residential VMT specifically applies to all Home-Based trips residential trips as represented in the Travel Demand Model. Refer to Appendix A for additional information.
2. Work VMT specifically applies to commute trips as represented in the Travel Demand Model. Refer to Appendix A for additional information.
3. Work VMT specifically applies to commute trips as represented in the Travel Demand Model. Refer to Appendix A for additional information. The inclusion of "Other Employment" and "Other Customer" refers to all other service and goods providers that are not included in the basic office/retail categories. As shown, they follow a similar approach to the office/retail categories with the principal difference being that the average/basis for of the threshold would the aggregation of the specific "other" land use across the county (i.e. an industrial project would use industrial uses, etc.).
Source: City of Santa Cruz SB 743 Implementation Guidelines, May 2022.

Methodology and Assumptions

Based on the land use information provided, for the purposes of VMT analysis and the determination of transportation-related significant impacts, the following land uses were analyzed:

- Residential
- Retail
- Arena (evaluated as "Other Employment" using event attendees in place of employees, per Table 14-1, above.)

14.4.3 Impacts and Mitigation Measures

Impact T-1: Conflict with Circulation Plan, Policy, or Ordinance. Future development and growth accommodated by the project would indirectly result in increased transportation demands. However, future development would not be in conflict with a circulation plan, policy, or ordinance (TRANS-a). Therefore, this is considered is a *less-than-significant* impact.

The General Plan 2030 includes goals, policies and actions that set forth comprehensive measures to reduce vehicle trips, increase vehicle occupancy, encourage use of alternative transportation modes, and promote alternative-sustainable land use patterns, all of which would help reduce vehicle trips, avoid and minimize adverse impacts related to traffic. The City's General Plan strives to maintain the established "level of service" D or better at signalized intersections (M3.1.3). "Level of service" (LOS) is typically used to evaluate traffic operations, in which operating conditions range from LOS "A" (free-flowing) to LOS "F" (forced-flow). Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities. Delays for signalized intersections are evaluated for the overall peak hour as an "average." The methodologies for unsignalized intersections also evaluate the delays for the each "critical" movement (e.g. stop sign-controlled approaches on the minor street and main line left turn). The City's General Plan also accepts a lower level of service and higher congestion at major regional intersections, if necessary, improvements would be prohibitively costly or result in significant, unacceptable environmental impacts (M3.1.4).

According to the Santa Cruz Downtown Expansion Plan Local Transportation Analysis (LTA) (Kimley Horn 2024), the project would result in a net increase of 6,307 daily trips, with 544 new trips occurring the AM peak-hour and 442 trips occurring during the PM peak hour (see LTA Table 2 - Existing (2023) Plus Approved Projects Conditions Project Trip Generation).

Under the Existing Conditions scenario, the LTA found that all 34 intersections in the project transportation study area operate under Level of Service (LOS) C or better with the exception of the following study intersections which were determined to operate at an unacceptable level of service:

- Intersection #6: Front St & Laurel St – AM Conditions

- Intersection #18: Chestnut St & Laurel St – AM & PM Conditions
- Intersection #23: Ocean St & Soquel Ave – PM Conditions

Under the Existing Plus Approved Projects Plus Project Conditions scenario, the LTA found that all intersections in the project transportation study area operate under Level of Service (LOS) C or better with the exception of the following study intersections which were determined to operate at an unacceptable level of service:

- Intersection #6: Front St & Laurel St

The LTA determined that revising the signal timing at this intersection would improve this intersection to an acceptable LOS D (see LTA, Table 12 - Existing [2023] Plus Approved Projects Plus Project Intersection Levels of Service). The timing improvements will be completed as part of regular observation and maintenance of the Laurel Street traffic signals.

The City's General Plan 2030 EIR concluded that adoption and implementation of the General Plan 2030 would accommodate future development that would result in increased vehicle trips and traffic, which would cause changes in some intersection LOS to unacceptable levels or further deterioration of intersections currently operating at unacceptable levels of service at some locations. The General Plan EIR did not identify intersections in the project vicinity that would operate at deficient LOS nor did the General Plan EIR identify any impacted intersections in the downtown area with development accommodated by the General Plan 2030.

Subsequent to adoption of the General Plan, the City adopted a series of amendments to the Downtown Plan (DPA, 2017) that could result in additional development in the downtown area beyond what was considered in the General Plan EIR. However, a traffic analysis conducted for the DPA EIR found that traffic associated with development resulting from the DPA would not result in degradation of LOS to below acceptable levels at the intersections studied in DPA EIR under the jurisdiction of the City.

Two regional Caltrans intersections (Highway 1 / Highway 9 and Chestnut Street / Mission Street) would continue to operate at LOS E as a result of the DPA. There are improvements identified for the Highway 1 / Highway 9-River Street intersection (which has been completed), and the Chestnut Street / Mission Street intersection is included in the Regional Transportation Improvement Program (RTIP). These improvements were already required under existing conditions without development resulting from the General Plan or the DPA. Traffic associated with the project would not further degrade the LOS at the two Caltrans intersections and would not substantially increase delay (DPA DEIR). Therefore, the DPA EIR concluded that traffic associated with the growth resulting from the project would not cause existing or planned intersections to operate at an unacceptable Level of Service (LOS) or further degrade intersections that already operate at an unacceptable LOS, resulting in a less-than-significant impact.

The General Plan EIR found that with implementation of the identified intersection improvements and General Plan 2030 policies and actions to reduce vehicular traffic, increase vehicle occupancy and support/encourage use of alternative transportation measures, the identified impact could be reduced to a less-than-significant level at the remaining impacted intersections. However, funding availability likely would remain constrained for major facility improvements and expansion of transit service into the foreseeable future. The General Plan concluded that implementation of recommended improvements and alternative transportation facilities cannot be assured, and that the impact to the intersections identified as operating at unacceptable levels of service under the proposed General Plan 2030 was conservatively assumed to be significant.

Future specific development proposals within the project area would be subject to payment of traffic impact fees that are applied uniformly throughout the City to all new development as part of the City-wide TIF program. The project would not conflict with any policies, programs or regulations addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The project is located in a developed area near transit, services, and recreation with a sidewalk and bike lane network. Future development projects would be required to provide onsite bicycle parking facilities in accordance with City requirements. The project location is in proximity to transit, bicycle, and pedestrian facilities, which would facilitate use of alternative modes of transportation, consistent with General Plan transportation policies and goals. To improve vehicular, pedestrian and bicycle circulation, Appendix 8 of the Downtown Plan (as amended) includes a number of circulation improvements that would be implemented as part of future development.

The project would not conflict with General Plan mobility policies regarding level of service goals, transportation improvements, reduction of vehicle trips, and encouraging multi-modal and alternative transportation systems. The project would not conflict with adopted policies, plans or programs that support alternative transportation.

In addition, subsequent to the City Council's certification of the Final EIR for the General Plan, provisions of CEQA essentially outlawing the use of level of service as a basis for finding significant transportation impacts took effect. Senate Bill (SB) 743, enacted in 2013, created Public Resources Code section 21099, which directed the Governor's Office of Planning and Research (OPR) and the Secretary of the Natural Resources Agency to establish criteria for determining the significance of transportation impacts of projects within transit priority areas, with the option of creating new statewide criteria. The significance criteria for transit priority areas were to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the new criteria, OPR and the Secretary were to recommend potential metrics that included, but were not limited to, vehicle miles traveled [VMT], vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. Section 21099 further provided that, once the CEQA Guidelines had been updated as required by the statute, "automobile delay, as described solely by level of service [LOS] or similar measures of vehicular capacity or traffic congestion

shall not be considered a significant impact on the environment pursuant to [CEQA], except in locations specifically identified in the guidelines, if any."

Consistent with these directives, the Natural Resources Agency promulgated CEQA Guidelines section 15064.3, which became effective in late 2018. It provides that "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts," with VMT referring to "the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel." Rather than limit its scope only to transit priority areas, the section changed the approach to assessing transportation impacts under CEQA all over the State. By its own terms, however, the section did not require agencies to begin using VMT as a new metric until July 1, 2020. LOS had ceased to be a valid significance criterion as of late 2018, however. (See *Citizens for Positive Growth & Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609, 625-626.)

As described above, the project would be subject to payment of traffic impact fees that are applied uniformly throughout the City to all new development as part of the city-wide TIF program. TIF fees are used to address needed traffic improvements at key intersections for circulation and also for alternative transportation improvements; 15 percent of the collected TIF fees are allocated to alternative transportation improvements.

For these reasons, the City would not find a significant transportation-related effect from the project even if the project resulted in LOS worse than what was anticipated in the General Plan EIR (it would not). Therefore, future development would not be in conflict with a circulation plan, policy, or ordinance and impacts would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact T-2: Conflict with Vehicle Miles Traveled (VMT) Guidelines. Future development and growth accommodated by the project would indirectly result in increased transportation demands. However, future development would not be in conflict with Vehicle Miles Traveled (VMT) Guidelines (TRANS-b). Therefore, this is considered is a *less-than-significant* impact.

Subsequent to certification of the General Plan 2030 EIR, amendments to the State CEQA Guidelines at the end of 2018 added a new question of whether or not a project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). As explained above, this is a new section that codifies the switch from LOS to VMT as the metric for transportation analysis pursuant to state legislation adopted in 2013, SB 743.

CEQA Guidelines section 15064.3(b) indicates that development projects that exceed an applicable VMT threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation

impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less-than-significant transportation impact.

City of Santa Cruz VMT Implementation Guidelines

In accordance with the amended CEQA Guidelines, the City has transitioned from intersection LOS formerly used for traffic impact analyses to VMT as the metric for determining potentially significant impacts. The City adopted a VMT transportation threshold on June 9, 2020, in accordance with CEQA and state requirements, as well as VMT Implementation Guidelines that are consistent with the State's SB 743 Guidelines. The threshold generally establishes that a project exceeding a level of 15 percent below the County-wide average VMT may result in a significant transportation impact. The City's adopted SB 743 (VMT) Implementation Guidelines include potential Transportation Demand Management (TDM) measures to help achieve VMT reduction. Updates to the City's Guidelines were adopted on June 14, 2022.

The City's guidelines to determine whether a land use project is within the VMT threshold includes a screening process in which situations are identified under which projects are determined to not have a significant impact and further VMT analysis is not required. The guidelines require that each distinct land use for a mixed-use project be analyzed separately unless they are determined to be insignificant to the total VMT. The guidelines also state that housing projects are expected to cause a less-than- significant impact on VMT if a high percentage of the project is affordable, as determined by the City. Furthermore, projects, or portions of a project, which meet the screening criteria do not require a CEQA transportation analysis, and such projects, or portions of a project, will have a non-significant CEQA transportation impact based on their project location and characteristics. According to the City's guidelines, projects that would not be expected to result in a significant VMT impact and that are screened out from further transportation impact review include:

- Small projects that generate fewer than 110 trips per day;
- Projects near high quality transit: within a ½ mile of a major transit stop or a high-quality transit corridor with a combined service interval frequency of 15 minutes or less during the AM and PM peak hours;
- Local-serving retail if a single store is less than 50,000 square feet or project is a local-serving project as determined by the City;
- Affordable housing projects that provide a high percentage of affordable housing as determined by the City;
- Local essential service, including day care center, public K-12 schools, police or fire facility, medical/dental office building, government offices, and supportive housing types (assisted living, permanent supportive housing, memory care, etc.);
- Map based screening if the project represents significant growth as to substantially change regional travel patterns as determined by the City of Santa Cruz; and

- Redevelopment projects that do not result in a net increase in VMT (City of Santa Cruz 2022).

City staff has reviewed the project in accordance with the City's adopted guidelines. The traffic study concluded that the project meets the screening criteria because it is located in a VMT Efficient Area based on the Santa Cruz City Residential Screening Map, and, therefore, the project is located in an area that produces VMT per capita that is at least 15-percent below the Countywide average (Kimley Horn 2024). As described above, the project is also within ½ mile of a major transit stop that provides service at an interval of 15 minutes or less during AM and PM peak hours. Additionally, each of the project elements can use the screening criteria in the City's SB 743 Implementation Guidelines as follows.

- Projects near High-Quality Transit: This screening criterion is met as the project is within one-half mile of a high-quality transit stop (Santa Cruz Metro Center) as defined by California Public Resources Code section 21064.
- Local-Serving Retail: This screening criterion covers the net decrease of approximate 16,770 square feet of commercial space that would be considered local-serving retail uses, which is substantially less than the screening level of 50,000 square feet.
- Local Essential Service: this screening criterion covers the community services (e.g., daycare) and government offices uses (City of Santa Cruz 2022).

The new arena, which would replace and enlarge the existing arena, also qualifies for the high-quality transit screening criteria as it is located less than a quarter mile from the Santa Cruz Metro Center, which qualifies as a major transit stop under California Public Resources Code section 21064. Additionally, arena is directly served by Route 19, which operates with a 15-minute headway and has an existing transit stop on Front Street near Spruce Street (between Blocks C and D) where the new arena is proposed. Route 19 provides service to University of California, Santa Cruz (UCSC) students and connects to the Santa Cruz Metro Center, facilitating access to bus routes serving the entire City.

Proposed New Arena VMT Analysis

To provide context regarding potential VMT impacts of the new arena, an analysis was conducted for informational purposes, despite the fact that the project meets the high-quality transit screening criteria and is therefore exempt from VMT.

VMT Analysis Methodology and Findings

While travel demand models (TDMs) are broadly considered the most accurate of available tools to assess VMT, their use is not always an ideal fit depending on the unique characteristics of the project being evaluated. This was determined to be the case for VMT evaluation for the new arena for two principal reasons:

Service Area Extent: Both the existing and proposed new arena attracts attendees from beyond Santa Cruz County, exceeding the scope of the Santa Cruz County Travel Demand Model (SCCTDM).

Event Diversity: The diverse nature of events held at the existing and new arena results in complex trip-making patterns that cannot be accurately modeled using the SCCTDM.

In lieu of using a TDM, alternative data sources and assumptions formed the basis for estimating the VMT associated with the existing and proposed new arena using ZIP code data from credit card ticket sales for Santa Cruz Warriors' basketball games held on November 8, 9, and 15, 2024. Absent other data sources, this data served as a proxy (baseline assumption) for trip origins for all events. Table 14-2: Existing and Future Estimated Arena Annual Events provides the basis for calculating VMT associated with the project.

Table 14-2: Existing and Future Estimated Arena Annual Events

Event	Existing			Future Estimated			Net Change
	Events	Average # of Attendees per Event	Total Annual Attendees	Events	Average Attendees per Event	Total Annual Attendees	Total Annual Attendees
Santa Cruz Warriors [1]	24	2,206	52,938	28	2,822	79,016	26,078
Santa Cruz Symphony	7	875	6,125	7	875	6,125	0
Other Entertainment (e.g., concerts) [1]	5	2,737	13,685	30	3,502	105,060	91,375
UCSC Sporting Events	35	100	3,500	40	100	4,000	500
Trade Shows	5	750	3,750	15	1,000	15,000	11,250
Small Events	5	200	1,000	10	200	2,000	1,000
Total	**81**		**80,998**	**130**		**211,201**	**130,203**

Notes:
1. Assumes 85% attendee occupancy rate, plus 102 employees.
Source: Santa Cruz Warriors and Santa Cruz Symphony, 2024.

ZIP codes associated with credit card ticket sales were mapped using the Geographic Information System (GIS) functions in TransCAD. The analysis was limited to origins within a 150-mile radius, excluding distant locations unlikely to generate roundtrip travel for single events (i.e., the purchaser no longer lives at the ZIP code associated with the credit card and/or would not drive to the arena and back for an event). Of the 5,688 tickets sold during the three days analyzed, 154 (2.7%) were walk-up tickets (sold in person at the box office), and 210 (3.7%) were sold to a single account that resells the tickets on a secondary marketplace. The remaining 5,324 (93.6%) of tickets sold were included in the analysis.

Because the area covered includes multiple ZIP codes, ticket sales were proportionally distributed by census block groups based on the assumption that block groups with higher populations would purchase more tickets than those with lower populations. Block groups were then converted to centroid points based on their polygon boundaries to allow for routing along the street network to better estimate the distance to the project site. The dataset was then used as the basis for a multi-path analysis utilizing TransCAD to identify logical paths and estimate trip lengths for calculating VMT.

The distance along the roadway network was then multiplied by the number of tickets sold to each block group to obtain a total VMT for the project. This resulted in a total VMT of 102,720 for the three events based on the one-way distance between the block groups and the project site. This equates to 8.25 VMT per person per trip for each event. Note that this does not establish a threshold for the project, but merely describes the baseline VMT on a per person basis.

To determine the average daily VMT generated by new attendees for all events, the estimated 130,203 annual additional attendees was divided by 365 (days), resulting in an average daily total of 357 attendees. To convert the number of daily attendees into vehicle trips, the basis for VMT, this total was divided by 2.5, the average vehicle occupancy for special events provided by the Federal Highway Administration[15] (FHWA). This resulted in 143 net new daily vehicle trips generated by the project. This was then multiplied by the baseline daily VMT (under the conservative assumption that all new attendees will travel by vehicle to events and that the distribution of new attendees will follow the existing distribution) resulting in a net new daily VMT of 1,178. If this amount of VMT were considered the baseline that would need to be mitigated (i.e., if the arena had not been exempt), a reduction of 15-percent would be required, consistent with City and State guidance, requiring a net new daily reduction of 177, which is considered a very nominal (*less-than-significant*) amount of daily VMT in context to the regional transportation network.

VMT Credit Reductions

Based on the characteristics of the project as described in Chapter 3 Project Description, VMT credit reductions were determined based on methodologies provided in the California Air Pollution Control Officers Association's (CAPCOA's) VMT Reduction Handbook, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*[16]. Four measures were identified as potentially relevant to the project:

[15] *Managing Travel for Planned Special Events*. Federal Highway Administration. 2005. https://ops.fhwa.dot.gov/publications/fhwaop04010/chapter5_03.htm. Accessed December 2, 2024.
[16] *Handbook for analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. California Air Pollution Control Officers Association (CAPCOA). January 2022.

- Measure T-9: Transit Fare Subsidy: Free transit fare for Santa Cruz Metro buses would be provided with each ticket purchased.
- Measure T-10: End-of-Trip Bicycle Facilities: Secure and non-secure bicycle parking will be available at the new arena.
- Measure T-20: Expand Bikeway Network: Bicycle network improvements as part of the Plan will provide direct access to the arena.
- Measure T-22-B: Electric Bikeshare Program: Expansion of the City of Santa Cruz's electric bikeshare program will include stations at or near the arena.

Other CAPCOA measures were deemed inapplicable or duplicative, such as T-19-A/B (Construct or Improve Bike Facility/Boulevard), which overlaps with Measure T-20.

The equations contained in the CAPCOA handbook were used to determine the percentage of VMT reductions attributable to each project feature, as shown in Table 14-3: Project VMT Percent Reductions below.

Table 14-3: Project VMT Percent Reductions

VMT Credit	Percent VMT Reduction
T-9: Transit Fare Subsidy	-1.44%
T-10: End-of-Trip Bicycle Facilities	-0.09%
T-20: Expand Bikeway Network	-0.01%
T-22-B: Electric Bikeshare Program	-0.05%
Total Reductions	**-1.59%**

Source: CAPCOA and Kimley-Horn & Associates, 2025.

The total VMT reduction due to applicable project features is 1.59%. When applied to the 1,178 daily VMT generated by new attendees, this results in a daily VMT reduction of 19 VMT per attendee. The total number of annual attendees (211,201) was converted to daily attendees (579 attendees) and then vehicle trips, resulting in 231 daily vehicle trips. Using the same average trip distance of 8.25 miles, this results in a total daily VMT of 1,910 for all attendees. Applying the 1.59% trip reduction to the daily VMT for all attendees results in a daily VMT reduction of 30 VMT, or net new of 201 VMT per average daily vehicle trip. Note that this VMT reduction is provided for informational purposes as the high-quality transit screening criteria exempts the project from further VMT analysis but demonstrates that project features will further reduce VMT when implemented.

Santa Cruz General Plan 2030

The General Plan 2030 includes goals, policies and actions that set forth comprehensive measures to reduce vehicle trips, increase vehicle occupancy, encourage use of alternative

transportation modes, and promote alternative-sustainable land use patterns, all of which would help reduce vehicle trips and VMT, and avoid and minimize adverse impacts related to traffic. General Plan EIR indicates that Policies M3.1.1 and M3.1.2 direct the City to seek ways to reduce vehicle trip demand, reduce the number of peak hour vehicle trips, and encourage high occupant vehicle travel. General Plan policies also encourage employment-related strategies (i.e., flex- time, telecommuting, parking management, ridesharing) (M3.1.7, M3.1.8, M2.4.4) as ways to reduce vehicle trips, which would also reduce VMT.

Although no VMT standards had been developed within the City at the time the Downtown Plan Amendments EIR was prepared, a preliminary per capita VMT estimate included in the EIR showed that VMT resulting from downtown development would be below existing and projected county-wide estimates, which in large part is a reflection of the project's location downtown and in proximity to transit, bicycle and pedestrian facilities (DPA Final EIR 2012).

While the General Plan EIR and Downtown Plan Amendments EIR did not analyze VMT, as the requirement to do so was not in place, the project does not exceed the City's VMT threshold, which was adopted after certification of the General Plan 2030 and Downtown Plan Amendments EIRs. Furthermore, the proposed services to support residents that are included in the project, such as commercial space, and community gathering places, would serve to reduce VMT, consistent with General Plan policies and actions to reduce vehicle trips. General Plan Policy LU4.2 encourages land use changes that reduce the need for automobiles. The project locates new residents to a downtown area that supports businesses, employment opportunities, and pedestrian, bicycle and public transportation; therefore, the project would promote types of transportation other than automobiles.

Conclusion

Based on the fact that: 1) the project is located within a half-mile of high quality transit and is therefore exempt from VMT per the City's adopted threshold and guidelines; 2) the net new VMT generated by the project would not represent significant growth as to substantially change regional travel patterns; and 3) the project would be required to be consistent with the City's General Plan 2030 goals, policies and actions that set forth comprehensive measures to reduce vehicle trips, increase vehicle occupancy, encourage use of alternative transportation modes, and promote alternative-sustainable land use patterns, all of or any one of which individually would help reduce vehicle trips and VMT, and avoid and minimize adverse impacts related to traffic; the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3 regarding VMT, would not result in a significant VMT impact or exceed the City's adopted VMT threshold, and the impact would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact T-3: Design-Safety and Emergency Access. Future development and growth accommodated by the project would indirectly result in reconstruction of the circulation network within the project area. However, future development would not substantially increase hazards due to a geometric design feature nor disrupt emergency access (TRANS-c, d). Therefore, this is considered is a *less-than-significant* impact.

The project has been designed in accordance with standard City requirements and there are no access designs that would substantially increase hazards or emergency access. As described in Section 3.5.2 Community Spaces and shown in Figure 3-6 Existing and Proposed Circulation, the project includes a number of roadway, pedestrian, and bike improvements designed to be safe and comfortable for walking, bicycling, and shared mobility; will provide for convenient access to transit and local destinations; and to support community activity. Ample sidewalks will be created that provide continuous path of pedestrian travel and provide space for trees, outdoor dining, bicycle parking, and landscape, as appropriate. Traffic lanes will be designed to accommodate yet slow traffic flows, reduce pedestrian crossing distances, and create human-scaled environments, maintaining ease of flow for all mobility modes and civic activities.

Design of the streetscape will incorporate a "complete streets" approach that prioritizes creation of a truly multi-modal transportation system. This is consistent with the City's General Plan goals and policies that encourage providing infrastructure and design features into street design that are safe, comfortable, and convenient for walking, bicycling and public transportation.

As part of the entitlement review process, all future development projects will be reviewed to ensure that there is adequate sight distance for exiting vehicles of both oncoming vehicles and pedestrians and that adequate fire truck access be provided from all public roadways. Furthermore, the project would be designed in accordance with City police and fire department requirements and would provide for adequate emergency access.

The project would not result in increased hazards related to project design and would not provide inadequate emergency access. Therefore, future development would not be in conflict with design safety and emergency access and impacts are considered *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

14.5 References

California Air Pollution Control Officers Association (CAPCOA). January 2022. Handbook for analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity.

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15 Utilities, Service Systems, and Energy Conservation

15.1 Introduction

This section analyzes impacts of the project related to public utilities (water supply, wastewater treatment and solid waste disposal) and energy conservation based on a water supply evaluation prepared by the City Water Department as part of this EIR, and review of existing City plans and other existing data.

As described in Section 1.2 Use of a Subsequent EIR, this environmental analysis is a Subsequent EIR (SEIR) to the Downtown Plan Amendments (DPA) Final EIR (SCH # 2017022050), which was certified on November 14, 2017. The DPA Final EIR consists of the Draft EIR volume dated July 2017 and the Final EIR volume dated October 2017. The analysis also draws from the City of Santa Cruz General Plan 2030 Final EIR (SCH # 2009032007), which was certified on June 26, 2012. Both of these documents are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines and are available for review online at the City Planning and Community Development Department at locations identified in Section 1.2.

15.2 Scoping Issues Addressed

Public and agency comments related to utilities and service systems were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Evaluation of the project's impact on water supply.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

15.3 Environmental Setting

This section describes the physical characteristics and setting with regard to the project , focusing on those areas where there have been changes made to the project , changes in the circumstances surrounding the project , or new information discovered since the DPA Final EIR was certified (see Public Resources Code, Section 21166; CEQA Guidelines, Sections 15162 and 15168).

15.3.1 Regulatory Setting

Existing state and local regulations regarding water and wastewater are summarized on pages 4.8-2 to 4.8-3 of the DPA EIR. The DPA EIR incorporated by reference state laws and regulations governing the solid waste disposal that are discussed in the General Plan 2030 EIR (DEIR volume) on pages 4.6-1-4.6-2, 4.6-5-4.6- 6, 4.6-20, 4.6-21-4.6-22, and 4.6-25. Existing

regulations identified and/or referenced in the DPA EIR have not changed except has discussed below.

State

California Water Code - Water Supply Assessments

The requirements for preparation of a "water supply assessment" as set forth (WSA) is required for projects subject to CEQA that meet specified criteria regarding project size as set forth in California Water Code section 10910 et seq. and as explained in the DPA EIR. A WSA is required for "projects" of 500 or more residential units, 500,000 square feet or more of retail commercial space, 250,000 square feet or more of office commercial space, 500 or more hotel rooms, specified industrial uses, or a project that would result in a water demand equal to or greater than the amount needed to serve a 500-unit residential project. These assessments, prepared by "public water systems" responsible for service, address whether there are adequate existing or projected water supplies available to serve proposed projects over a 20-year period, in addition to existing demand and other anticipated development in the service area. The project consists of amendments to City plans and is not a development project. Therefore, the proposed project uses do not meet the requirements for preparation of a WSA. However, a Water Supply Evaluation consistent with the requirements of state regulations has been prepared for the project by the City of Santa Cruz Water Department and is included in Appendix E.

Green Building Standards Code

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (hereafter the "CALGreen Code") that requires the installation of water-efficient indoor infrastructure for all new projects beginning after January 1, 2011. The CALGreen Code was incorporated as Part 11 into Title 24 of the California Code of Regulations. The CALGreen Code was revised in 2013 with the revisions taking effect on January 1, 2014; however, these revisions do not have substantial implications to the water use already contemplated by the 2010 CALGreen Code. The CALGreen Code applies to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. All new development must satisfy the indoor water use infrastructure standards necessary to meet the CALGreen Code. The CALGreen Code requires residential and nonresidential water efficiency and conservation measures for new buildings and structures that will reduce the overall potable water use inside the building by 20%. The 20% water savings can be achieved in one of the following ways: 1) installation of plumbing fixtures and fittings that meet the 20% reduced flow rate specified in the CALGreen Code, or 2) by demonstrating a 20% reduction in water use from the building "water use baseline".

Making Conservation a California Way of Life Regulations

On July 3, 2024, the State Water Resources Control Board adopted the Making Conservation a California Way of Life regulation, which becomes effective in 2025. The regulation implements Assembly Bill 1668 and Senate Bill 606, which were signed into law in 2018, to develop a

regulatory framework to achieve long-term water use efficiency with the purpose of adapting to climate change and more intense and frequent droughts in California. Making Conservation a California Way of Life establishes individualized efficiency goals for each Urban Retail Water Supplier. Urban Retail Water Suppliers would be held to annual "urban water use objectives." These goals are based on the unique characteristics of the supplier's service area and give suppliers the flexibility to implement locally appropriate solutions. The proposed regulation would require suppliers to annually calculate their objective, which is the sum of efficiency budgets for a subset of urban water uses: residential indoor water use, residential outdoor water use, real water loss and commercial, industrial and institutional landscapes with dedicated irrigation meters. Each efficiency budget will be calculated using a statewide efficiency standard and local service area characteristics such as population, climate, and landscape area. Once implemented, these goals are expected to reduce urban water use, helping California adapt to the water supply impacts brought on by climate change (California Water Boards 2024b). The regulation will lessen the need for the emergency water use reduction targets that were important in recent droughts (California Water Boards 2024a).

California Integrated Waste Management Act

AB 939, known as the California Integrated Waste Management Act of 1989, required all California cities and counties to divert 50% of the waste generated within their boundaries by the year 2000. The act requires each California city and county to prepare, adopt, and submit to CalRecycle a Source Reduction and Recycling Element (SRRE) that demonstrates how the jurisdiction will meet the California Integrated Waste Management Act's mandated diversion goals. Each jurisdiction's SRRE must include specific components, as defined in California Public Resources Code sections 41003 and 41303. In addition, the SRRE must include a program for the management of solid waste generated in the jurisdiction consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation, and (4) land disposal.

Assembly Bill 341

AB 341, adopted in October 2011, amended the California Integrated Waste Management Act and established a statewide policy goal to divert 75% of solid waste from landfills by 2020. AB 341 focused on mandatory commercial recycling and requires California commercial enterprises and public entities that generate 4 or more cubic yards per week of waste to arrange for recycling services. As noted above in Section 4.16.1.3, Solid Waste, the County's diversion rate is approximately 58%. The State of California also did not meet the meet the 75% recycling goal by 2020 as set out in AB 341 (the state's 2019 recycling rate was 37%), CalRecycle remains committed to achieving this goal (CalRecycle 2021a).

Assembly Bill 1826

AB 1826 (2014) requires businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate on a weekly basis. Additionally, AB 1826 requires that, after January 1, 2016, all local jurisdictions implement an organic waste recycling

program to divert organic waste generated by businesses, including multifamily residential dwellings with five or more units. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time.

Local

City of Santa Cruz 2020 Urban Water Management Plan

In 1983, the California State Legislature (Legislature) enacted the Urban Water Management Planning Act (California Water Code, sections 10610–10656), which requires specified urban water suppliers within the state to prepare an Urban Water Management Plant (UWMP) and update it every 5 years. The City's 2020 UWMP, which was adopted in 2021, provides information on water usage, water supply sources, including planned future sources, and water reliability planning within the Santa Cruz Water Department's service area. Additionally, the UWMP evaluates the reliability of water supplies in five-year increments to the year 2045 for the following scenarios: normal year, single dry year, and a five-year drought period.

City of Santa Cruz General Plan

The Civic and Community Facilities Element of the City's General Plan 2030 includes goals, policies, and actions that set forth measures to promote water use efficiency and to reduce solid waste generation and promote recycling. Specifically, Policy CC3.5 and supporting actions promote maximum water use efficiency and water conservation, and Action CC3.11.1 promotes water conservation. Goal CC6 strives for minimal solid waste production and includes policies that seek to achieve a goal of zero waste (Policy CC6.1); provide convenient, economical and efficient waste and recycling collection service (Policy CC6.2); operate and maintain the City's Resource Recovery Facility (RRF) in compliance with adopted plans and regulations, ensuring public health and environmental protection (Policy CC6.3); and extend the life of the City's landfill (Policy CC6.4).

City of Santa Cruz Municipal Code

The City's Municipal Code, Chapter 6.12, focuses on regulations and requirements for solid waste. Specifically, the City's Municipal Code, Section 6.12.030, requires the collection of acceptable waste and recyclables be made at least once per week, and requires that refuse be separated into solid waste, green waste, food waste, or recyclable materials. The City's Municipal Code, Section 6.12.050, requires waste receptacle be stored in a manner that facilitates a safe and sanitary condition that does not impose a barrier to efficient and physically safe collection by City collection crews.

Additionally, Chapter 24.15: Green Building Regulations, regulates construction of new and renovation of existing buildings within the City to ensure a high standard of energy efficiency and resource conservation. These standards require new buildings in Santa Cruz exceed state efficiency requirements and provide a higher level of long-term efficiency, ensuring that energy, water, and resource recovery capacity are used efficiently and maintained for future

generations of Santa Cruz residents. The Green Building Program includes both guidelines and a checklist for each type of construction and provides incentives for outstanding building design. The City's Energy Reach Code which provides a range of options with regard to the type of equipment and energy supplied to new buildings to help the City meet the 2030 Greenhouse Gas emissions target established by the Climate Action Plan.

15.3.2 Water Supply

Potable water supplies are provided to City residents, businesses, and institutions within the City's boundaries by the City of Santa Cruz discussed on pages 4.8-4 to 4.8-12 of the DPA EIR-Draft EIR volume of the Final EIR. Updates and/or new information since the Final EIR was certified are provided herein.

City of Santa Cruz Water Service Area

As indicated in the DPA EIR, the City of Santa Cruz provides drinking water to an area approximately 20 square miles in size, including the entire City of Santa Cruz, adjoining unincorporated areas of Santa Cruz County, a small part of the City of Capitola, and coastal agricultural lands north of the city and the University of California at Santa Cruz campus. The unincorporated areas served by the City of Santa Cruz include Live Oak, the area along Graham Hill Road that extends north of the city, and limited service along the coast north of the city, primarily along State Highway 1. The City's service on the coast north of the city consists of limited numbers of connections that primarily derive from the City's agreements with landowners along its water pipelines. The City also provides approximately 12 million gallons per year of raw water for agricultural irrigation along the coast north of the City (City of Santa Cruz Water Department 2021b).

Since certification of the DPA EIR, the population and number of connections served by the City has slightly increased. The City currently serves approximately 25,000 connections with an estimated population of 96,186 people residing in the City's water service area. Approximately two-thirds of the total population, almost 64,000, live inside the city limits, and almost 32,000 people, or about one-third of the service area population, live outside the city limits. Within the city, about 9,100 people including students, faculty, staff, and their families reside on the University of California Santa Cruz campus. (City of Santa Cruz Water Department 2021a).

Existing Water Supplies

The City's water supplies and water system has not substantially changed since certification of the DPA EIR. However, an update is provided consistent with the findings of the City's current Urban Water Management Plan (UWMP), which has been updated since certification of the DPA EIR, and the Water Supply Evaluation prepared by the City for the project.

All of the City's water supplies are obtained from local sources. No water is purchased from state or federal sources or imported to the region from outside the Santa Cruz area. The City's water system relies predominantly on local surface water supplies, which include the North Coast sources (Liddell Spring and Laguna, Majors, and Reggiardo Creeks), the San Lorenzo River

(Felton Diversion, Tait Diversion, and Tait Wells), and Loch Lomond Reservoir. Together, these surface water sources represent approximately 95% of the City's total annual water production. The balance of the City's supply comes from groundwater, all of which is extracted from the Beltz Well system the Santa Cruz in the Santa Cruz Mid-County Groundwater Basin (City of Santa Cruz 2021a). During the past ten years, the North Coast sources represented 20 percent of the total water supply, the San Lorenzo River represented 58 percent, Loch Lomond Reservoir (Newell Creek) represented 16 percent, and Beltz Well system contributed the remaining 6 percent. (City of Santa Cruz Water Department 2024).

The North Coast water sources consist of surface diversions from three coastal creeks and a natural spring located approximately 6 to 8 miles northwest of downtown Santa Cruz. The San Lorenzo River is the City's largest source of water supply, and the main water diversion is the Tait Diversion adjacent to the Coast Pump Station on State Highway 9 near City limits. The Tait Diversion is supplemented by shallow, auxiliary wells located directly across the river referred to as the Tait Wells. The Felton Diversion, which is an inflatable dam and intake structure built in 1974, located about six miles upstream from the Tait Diversion. When the Felton Diversion is being operated, water is pumped through the Felton Booster Station to Loch Lomond Reservoir (City of Santa Cruz Water Department 2021a).

Loch Lomond Reservoir is located near the town of Ben Lomond in the Santa Cruz Mountains. The reservoir was constructed in 1960 and has a maximum capacity of 2,810 million gallons. The reservoir provides surface water storage, and the reservoir and surrounding watershed also are used for public recreation purposes, including fishing, boating, hiking, and picnicking (swimming and wading are prohibited). In addition to the City, the San Lorenzo Valley Water District is entitled by contract to receive a portion of the water stored in Loch Lomond (City of Santa Cruz 2021a).

The water stored in Loch Lomond Reservoir is used to help meet dry-season water demand and provide back-up supply during winter storms when river diversions can be problematic due to turbidity issues. The City follows a variety of policies, procedures and legal restrictions in operating its water supply system, and the amount of water produced from each of the City surface water sources is controlled by different water rights and operational agreements. In general, the water supply system is managed to use available flowing sources to meet daily demands as much as possible. Groundwater and stored water from Loch Lomond Reservoir are used primarily in the summer and fall months when flows in the coast and river sources decline (City of Santa Cruz 2021b).

Even though groundwater constitutes only up to about 5% of the City water supply on an annual basis, it is a crucial component of the water system for meeting peak season demands, maintaining pressure in the eastern portion of the distribution system, and for weathering periods of drought. The Beltz Well system consists of four production wells and two water treatment plants located in the eastern portion of the City water service area (City of Santa Cruz 2021a). The wells are in the Mid-County groundwater basin, and the City is a member agency of the Santa Cruz Mid-County Groundwater Agency (MGA). The MGA prepared a

Groundwater Sustainability Plan as required by the passage of the State's Sustainable Groundwater Management Act (SGMA) in 2014. The DWR classifies the Basin as a high priority basin in a state of critical overdraft because of active seawater intrusion.

The City does not currently operate a recycled water system in its service area; however, the Pasatiempo Golf Course, located within the City's service area, now receives disinfected secondary effluent from the City of Scotts Valley that it treats to tertiary standards at the Pasatiempo Golf Course Tertiary Plant for use as recycled water golf course irrigation. This reduces the demand for potable water from the Santa Cruz water system that would otherwise be used for irrigation (City of Santa Cruz 2021a).

In 2019, the City approved an agreement with the Soquel Creek Water District to allow the District to utilize a portion of the treated effluent produced by the City's wastewater Treatment Facility (WWTF) for groundwater replenishment as part of the District's Pure Water Soquel project. Pure Water Soquel will treat a portion of secondary effluent water from the City's WWTF with a new tertiary treatment facility located at the City's WWTF. That tertiary-treated water will then be pumped to a new Advanced Water Purification Facility located in Live Oak for further purification using advanced water purification methods for injection into the ground to replenish the groundwater basin. The agreement also included additional benefits of providing a facility to produce Title 22 recycled water for the City's use at the WWTF. In the future, a portion of that water could be used for a recycled water and irrigation water for La Barranca Park, which runs along Bay Street near the WWTF. Pure Water Soquel will also reduce the City's discharge of treated secondary wastewater to the Monterey Bay National Marine Sanctuary (City of Santa Cruz 2020).

Water Supply Augmentation Strategies

Since 2015, the City of Santa Cruz has been pursuing its Water Supply Augmentation Strategy (WSAS) developed by the Water Supply Advisory Committee (WSAC) as described in the 2020 UWMP. The WSAC was formed in 2014 when the City Council approved formation and membership of the citizen committee with the charge to "explore, through an iterative, fact-based process, the City's water profile, including supply, demand and future risks; analyze potential solutions to deliver a safe, adequate, reliable, affordable and environmentally sustainable water supply; and, to develop recommendations for City Council consideration" (WSAC 2015). The committee developed the Water Supply Advisory Committee Final Report on Agreements and Recommendations, which was accepted by the City Council in November 2015. The Final Report was incorporated by reference into the 2015 Urban Water Management Plan, and the guiding recommendations continue to serve as the water supply management strategy for the City.

The WSAC recommendations are designed to address the "Problem Statement" included in the WSAC Final report:

> "Santa Cruz's water supply reliability issue is the result of having only a marginally adequate amount of storage to serve demand during dry and critically dry years

> when the system's reservoir doesn't fill completely. Both expected requirements for fish flow releases and anticipated impacts of climate change will turn a marginally adequate situation into a seriously inadequate one in the coming years. Santa Cruz's lack of storage makes it particularly vulnerable to multi-year droughts. The key management strategy currently available for dealing with this vulnerability is to very conservatively manage available storage. This strategy typically results in regular calls for annual curtailments of demand that may lead to modest, significant, or even critical requirements for reduction. In addition, the Santa Cruz supply lacks diversity, thereby further increasing the system's vulnerability to drought conditions and other risks…" (WSAC 2015)

The overarching goal of the WSAS is to provide significant improvement in the sufficiency and reliability of the City water supply. As presented in the 2015 UWMP, the WSAS portfolio elements include the following (WSAC 2015):

- Element 0: Demand Management. Additional water conservation with a goal of achieving an additional 200 to 250 MGY of demand reduction by 2035 by expanding water conservation programs.
- Element 1: Transfers and Exchanges. Passive recharge of regional aquifers by working to develop agreements for delivering surface water to the Soquel Creek Water District and/or the Scotts Valley Water District so they can rest their groundwater wells, help the aquifers recover, and potentially store water for use by the City in dry periods.
- Element 2: Aquifer Storage and Recovery (ASR). Active recharge of regional aquifers by using existing infrastructure and potential new infrastructure in the Purisima aquifer in the Soquel-Aptos Basin (now referred to as the Santa Cruz Mid-County Groundwater Basin), in the Santa Margarita/Lompico/Butano aquifers (now referred to as the Santa Margarita Groundwater Basin) in the Scotts Valley area, or in both to store water that can be available for use by the City in dry periods.
- Element 3: Recycled Water or Desalination. A potable water supply using advanced-treated recycled water as its source as a supplemental or replacement supply in the event the groundwater storage strategies described in Element 1 and Element 2 prove insufficient to meet the goals of cost-effectiveness, timeliness, or yield. In the event advanced-treated recycled water does not meet the City's needs, desalination would become Element 3.

The Santa Cruz Water Department has been actively pursuing these recommendations since 2015 and continues to make steady progress. The WSAC recommended that the Water Department prepare information about the range of water supply augmentation projects to be compared to support a data-driven decision making about which options to pursue to address the water supply reliability gap.

Additionally, in collaboration with the Soquel Creek Water District (District), the City is currently working on the Santa Cruz Mid-County Regional Water Resources Optimization Study. The primary purpose of the Optimization Study is for the District and City to collaboratively identify and evaluate potential opportunities to optimize select projects and management actions (PMA) identified in the Basin's Groundwater Sustainability Plan to most effectively achieve/maintain groundwater basin sustainability. Additionally, the Study is evaluating the PMAs for their ability to improve regional water supply reliability. Projects that are the focus of the Optimization Study include:

- Water transfers/exchanges between the District and the City
- City's ASR Project
- District's Pure Water Soquel Project (City of Santa Cruz Water Department 2024).

Progress toward implementation of Elements 1 through 3 is described below as reported in a recent City evaluation (City of Santa Cruz Water Department 2024), followed by a discussion of water supply policy and implementation plan development. Conservation, or demand management, is not considered a water supply for the purposes of this evaluation.

Implementation of Transfers and Exchanges (WSAS Element 1)

The City has been working with Soquel Creek Water District to evaluate the feasibility of water transfers and exchanges since 2015 through the development of a formal pilot agreement, studies to assess the compatibility of surface and groundwater resources in distribution systems, and eventually piloting of water transfers since 2018. The transfer agreement extends through 2026, and additional piloting will continue as water supply conditions allow.

The City and Scotts Valley Water District are currently pursuing the Intertie-1 Project to construct an intertie and pump station to link the two water systems. In 2022, the Department of Water Resources awarded a $9,449,786 grant under the Urban and Multi-benefit Drought Relief Grant Program that includes funding for the project. Project design has been completed, and construction is planned to begin in late 2024.

Future transfers and exchanges with local agencies, including Soquel Creek Water District, Scotts Valley Water District, Central Water District, and San Lorenzo Valley Water District would be facilitated by the water rights modifications to place of use proposed in the Santa Cruz Water Rights Project described herein. The Santa Cruz Water Rights Project EIR additionally examines implementation of water transfers and exchanges with local agencies.

Limitations of the transfer and exchange strategy include that it is limited both by availability of surface water for transfer and by the demand of other-agency systems to utilize transferred water when available.

Implementation of Aquifer Storage and Recovery (WSAS Element 2)

The City has been evaluating the feasibility of ASR in both the Santa Cruz Mid-County and in the Santa Margarita Groundwater Basins, with the most recent work primarily focused on the portion of Santa Cruz Mid-County Basin within the City of Santa Cruz service area. To help advance the ASR project, the City has completed groundwater modeling of over 20 scenarios, a well siting study, a geochemical analysis study, pilot testing at the existing Beltz 12, Belt 9 and Beltz 8 wells, and demonstration studies at the existing Beltz 12 and Beltz 8 well facilities to better understand potential water quality and operational constraints.

ASR in both basins would be facilitated by the water rights modifications proposed in the Santa Cruz Water Rights Project. The Santa Cruz Water Rights Project EIR additionally examines implementation of ASR. Next steps for the City's ASR project include finalizing designs and initiation of construction for permanent ASR operations at Beltz 8 and Beltz 12.

Implementation of Recycled Water or Desalination (WSAS Element 3)

Since 2000, the City has been examining the use of recycled water through commissioned engineering studies regarding potential uses of recycled water for agricultural irrigation, landscape irrigation, groundwater recharge, direct potable reuse, and use of recycled water from neighboring water districts. These studies include the following:

- Alternative Water Supply Study (Carollo Engineers, 2000)
- Evaluation of Regional Water Supply Alternatives (Carollo Engineers, 2002)
- Integrated Water Plan Environmental Impact Report (EIR) (City of Santa Cruz, 2005)
- Opportunities and Limitations for Recycled Water Use (Kennedy/Jenks, 2010)
- Current and Potential Future Opportunities for Indirect and Direct Potable Reuse of Recycled Water Use (Kennedy/Jenks, 2010)
- Regional Recycled Water Facilities Planning Study, Phase 1 (Kennedy/Jenks, 2018).

The City of Santa Cruz is continuing to actively investigate the feasibility of recycled water through an ongoing Santa Cruz Recycled Water Feasibility Study Phase 2.

While further study of recycled water has currently been prioritized over seawater desalination, the feasibility of desalination continues to be explored. In 2018, the Desalination Feasibility Update Review was prepared, and an updated review of feasibility is now being prepared as part of the Water Supply Augmentation Implementation Plan described below.

Securing Our Water Future Policy and Water Supply Augmentation Implementation Plan

In 2022, the Water Department worked extensively with the Water Commission to complete a comparison of the water supply augmentation strategies identified in the WSAS, to develop a water supply augmentation policy, Securing Our Water Future (SOWF), since adopted by City

Council, and to initiate the Water Supply Augmentation Implementation Plan (WSAIP) as part of the final phase of implementing the WSAS.

The SOWF policy provides a comprehensive framework to guide selection and incremental implementation of necessary water supply augmentation projects. It defines how water supply projects will be selected and provides estimated high-level yield and costs associated with water supply augmentation projects. The policy direction includes a provision that the volume of water needed to meet the reliability goal be reviewed and potentially revised no less frequently than every five years based on ongoing research and monitoring of the impacts of climate change on local water conditions. This "adaptive management" approach is critically important to support appropriate timing of implementation of water supply augmentation projects.

The objective of the WSAIP which is now underway is to continue the assessment to develop one or more projects to prepare a water supply portfolio to ensure water supply is available to meet the City's public health and safety and economic sustainability goals. The WSAIP will utilize guiding principles and criteria defined in the SOWF and set expectations for transparence in how the projects will be evaluated and prioritized.

Santa Cruz Water Rights Project

The Santa Cruz Water Rights Project supports the implementation of the WSAS and involves the modification of the City's existing water rights to increase the flexibility of the water system by improving the City's ability to utilize surface water within existing allocations. This project also adds into the City's water rights Agreed Flows bypass flow requirements for all of the City's surface water sources which are protective of local anadromous fisheries. The success of this project is necessary for fisheries protection and to facilitate future water supply projects. The primary components of the Santa Cruz Water Rights Project include:

- Water rights modifications related to place of use, method of diversion, points of diversion and re-diversion, underground storage and purpose of use, extension of time, and Agreed Flows stream bypass requirements for fish habitats (see Table 6-3 above);
- Water supply augmentation components, including new ASR facilities at unidentified locations, ASR facilities at the existing Beltz well facilities, water transfers and exchanges and intertie improvements; and
- Surface water diversion improvements, including the Felton Diversion fish passage improvements and the Tait Diversion and Coast Pump Station improvements.

The State Water Resources Control Board noticed the City's water rights change petitions in February 2021. Subsequently, the project's Draft EIR was released for public review in summer 2021. The Final EIR was certified by Santa Cruz City Council in November 2021 (City of Santa Cruz 2021b). The State Water Resources Control Board is considering action on the City's water rights change petitions.

Santa Cruz Water Program (Capital Investment Program)

City of Santa Cruz has embarked on an ambitious capital investment program, the Santa Cruz Water Program, to secure the City's future water supply portfolio, to improve reliability and resiliency in the face of climate change, and to address aged infrastructure. Major investments are planned in the coming years to meet these goals. Some elements of the program will help contribute to the WSAS and support water supply reliability such as improvements to the Graham Hill Water Treatment Plant, raw water pipeline improvements, and Tait diversion, as described below as reported in a recent City evaluation (City of Santa Cruz Water Department 2024).

Graham Hill Water Treatment Plant Projects

Upgrades to the City's Graham Hill Water Treatment Plant are critical to the implementation of the WSAS to allow treatment of higher turbidity source water that otherwise would need to be bypassed during high flow periods such as during and after storm events. Recent and ongoing projects include major maintenance repairs to the flocculation, sedimentation and filtration basins that have been completed, and replacement of three of the four concrete tanks that is currently underway. Simultaneous with these component repair and replacement projects, staff has been developing the Climate Resilient Santa Cruz: Graham Hill Water Treatment Plant Facility Improvements Project (FIP).

The FIP consists of improvements at the facility to address aging infrastructure and to provide for efficiently and reliably meeting future water quality objectives and water supply needs. At this time, the FIP is finalizing 100% design drawings. The project includes the following:

- Reliable Water Treatment Plant Capacity. The Proposed Project would be designed to reliably produce a maximum of 18.2 million gallons per day, under a broad range of source water conditions.
- New and Upgraded Water Treatment and Related Processes.
- New and Upgraded Buildings.
- Infrastructure and Site Improvements.
- Project Operations and Maintenance.
- Project Construction.

The Final Environmental Impact Report was released in July 2024 and certified by City Council in September 2024. The project construction is anticipated to commence in phases over a four-year period (from 2025 through 2030) while maintaining ongoing operations and continuous production of drinking water at GHWTP.

Raw Water Transmission Pipeline Projects

The City is planning improvements to raw water conveyance through upgrades to both the North Coast system and Newell Creek Pipeline. These projects will improve reliability and reduce hydraulic constraints to improve delivery of raw water to the Graham Hill Water Treatment Plant.

The Water Department operates a network of diversions and 19 miles of pipeline to extract and bring raw from the North Coast sources into the City. In 2005, the City certified the programmatic Final Environmental Impact Report for the North Coast System analyzing system-wide improvements to the network and has since completed three phases of pipeline replacement and diversion improvements.

To complete the remainder of the improvements, in 2021, the City completed a new Planning Study and Implementation Plan to consider a number of changes that have occurred in the North Coast System since the 2005 Environmental Impact Report. The study provided recommendations for a slightly modified alignment as well as detailed estimates for construction timelines and budget. The remaining segments of the pipeline replacement and rehabilitation of the Majors Diversion have been combined into a single final project, the North Coast System Phase 4 project. Project design is estimated to commence in 2030 and project completion is targeted for early 2030s.

The Newell Creek Pipeline Improvement Project will replace the existing Newell Creek Pipeline (NCP), which is a 9.25-mile-long raw water pipeline constructed in 1960 in conjunction with construction of the Newell Creek Dam and Graham Hill Water Treatment Plant. The NCP is a critical component of the City's raw water supply infrastructure. It conveys untreated water to and from the Loch Lomond Reservoir, which is the City's only raw water storage facility. The NCP conveys water from City's Felton Diversion to Loch Lomond Reservoir and also conveys water from the Reservoir to the Graham Hill Water Treatment Plant.

The pipeline is critical to supplying the water system during dry seasons and during storm events when other water sources cannot be treated at the water treatment plant. The pipeline generally would be installed within existing road pavement, road right-of-way, which includes road pavement and unpaved shoulders adjacent to the paved road, and/or existing City easements. The Final Environmental Impact Report for the NCP Improvement Project was certified by Santa Cruz City Council in May 2022. Construction of the project will proceed in three phases, with completion all phases anticipated by early 2030s.

Tait Diversion Improvements

The City is also investigating improvements to the Tait Diversion facility that would improve reliability and fish screening. As described in the Santa Cruz Water Rights Project EIR, if the Tait Diversion is added as a new point of diversion to existing Felton water rights, Tait Diversion capacity would be increased to accommodate the combined diversion of water under both the Tait and the Felton water rights at this facility. This could benefit fisheries by allowing water

diverted under the Felton water rights to bypass the Felton Diversion and remain in the San Lorenzo River until it reaches the Tait Diversion downstream. Planning, design and construction is anticipated to be completed by early 2030s.

Existing and Future Water Demand

The City's 2020 UWMP reports that until the early 2000s, the general trend in the City of Santa Cruz water system use was one in which water use rose roughly in parallel with account and population growth over time, except during two major drought periods in the late 1970s and the early 1990s. Around 2000, this pattern changed and system demand began a long period of decline, accelerated by rate increases, drought, economic downturn, and other factors.

In 2015, after two years of water rationing, annual water use fell to a level of about 2.5 billion gallons, similar to the level experienced during the 1970s drought. In 2023, demand was still at a similar level as 2015, about 2.5 billion gallons, despite several years of above long-term average rainfall from 2016 and 2023. While demand did rebound following droughts in the 1970s and 1980s, demand has not rebounded to pre-drought conditions following 2014, contrary to previous projections.

Today, even with 30 percent population growth since the 1980s, the City is using less water than in the 1980s due to conservation efforts including plumbing code changes and water efficient appliances and landscapes. In 2023, water demand in the service area was slightly below 2,500 MGY (City of Santa Cruz Water Department 2024).

In September 2024, the Water Department updated its demand projections to reflect known cumulative development projects and anticipated growth within the Water Department's service area, including the proposed Project, and prepared a Water Supply Evaluation to assess water demand potentially resulting from the project and other City development, which is included in Appendix E. The results indicate that demand could reach 2,800 MGY by the year 2035 and reach approximately 3,000 MGY year by 2045, which is about 8.6 percent higher than forecast in the 2020 UWMP due to higher projected levels of housing development, particularly with respect to multi-family and accessory dwelling unit (ADU) residential development. For reference, the estimated projected demand in 2045, 3,000 MGY, is approximately equal to the City's water use in 1968 (City of Santa Cruz Water Department 2024).

Water Supply Availability

The water supply reliability and drought risk assessments included in 2020 UWMP found water supply to be adequate in normal and single dry years but show a potential lack of adequate supplies during near-term multiple consecutive dry years. Santa Cruz has had periodic water shortages for the last several decades, driven by droughts. Yet, even with 30 percent population growth since the 1980s, the City is using less water now than it was then as indicated above.

The City's supply problem has been caused by cyclical shortfalls in rain, exacerbated by a long-term lack of ability to capture and store rainfall – features of the emerging climate change phenomenon of "weather whiplash" that results in so-called "normal" rainfall years becoming a

thing of the past. Because of climate change, the City's water supply problem must be solved regardless of whether or not the City grows. To address supply vulnerability, the City is implementing its WSAS developed and recommended by the WSAC, in addition to ongoing water conservation, including the development of ASR facilities, transfers and/or exchanges with neighboring water districts, and increased use of recycled water, as described further below.

The City's updated its water supply analysis with the updated 2024 demand projections. The data, methods, and basis for assumed water shortage conditions are consistent with those in the City's 2020 UWMP.

The City of Santa Cruz utilized the Confluence® model to analyze the variability of water supplies to determine potential water supply shortages. The City has been utilizing the Confluence® model to support water supply planning activities since 2003 and this model was also used to generate the results for the 2010, 2015, and 2020 UWMP. The model accounts for the variation in demand both within and between years, the availability of water from various sources, and the capacity of infrastructure to pump and treat the water.

The City is in the process of transitioning to a new water system model developed by University of Massachusetts' Hydrosystem Research Group. Before the Confluence® model was retired from use by the City, model runs for the current scenario were completed under projected demands of up to 2,900 MGY which form the basis for this analysis (City of Santa Cruz Water Department 2024).

The City is safeguarding against future water shortages by actively implementing future water projects as described above. Implementation of these projects is therefore assumed in the City's water supply planning process. Consistent with the WSAS and 2020 UWMP, the following assumptions about future water projects have been used in developing projected water supplies over the 25-year planning horizon of this evaluation.

- In 2025, the City will have implemented proposed water rights modifications, including implementation of the Agreed Flows which are protective of local anadromous fisheries, as described in the Santa Cruz Water Rights Project Final EIR
- In 2030, the City will have implemented the following components of the WSAS and planned infrastructure projects:
    - ASR in the Santa Cruz Mid-County Groundwater Basin and/or the Santa Margarita Groundwater Basin, sized for up to 4.5 million gallons per day (MGD) injection and 8.0 MGD extraction as described in the Santa Cruz Water Rights Project Final EIR,
    - Improvements to the Tait Diversion on the San Lorenzo River as described in the Santa Cruz Water Rights Project Final EIR and as included in the Santa Cruz Water Program,

- Facility improvements at the Graham Hill Water Treatment Plan that will allow treatment of more turbid water as included in the Santa Cruz Water Program, and
- Replacement of major transmission pipelines on the North Coast and the NCP as included in the Santa Cruz Water Program.

For the purposes of assessing water system reliability, the City has selected the following years from the historical record to represent DWR definitions for year type:

- Average/Normal Year: This condition represents the water supplies available during normal conditions. This could be a single year or averaged range of years that most closely represents the average water supply available. In this reliability assessment, the year 2010 is used to represent the average year because flows in the San Lorenzo River during this year were very close to the historical average.
- Single Dry Year: A year that represents the lowest water supply available to the agency. In this reliability assessment, the year 1977 is used as the single dry year because it was the single driest year in this historical record.
- Multiple Dry Years: Multiple dry years in this evaluation is consistent with the five-consecutive-year drought representing the driest five-year historical period for the supplier. The period 1973-1977 is used as the five-consecutive-year drought because it is the period in the historic record that was most challenging from a water supply perspective, particularly due to the two extremely dry years of 1976-1977.

To demonstrate supply reliability over time for each base year type modelled, Table 15-1: Projected Supply and Demand Comparison through 2045 illustrates projected supply available relative to demand over the 20-plus-year planning horizon of 2024 update used in this assessment. As illustrated, in the near term (2025) with proposed water rights modifications assumed but before implementation of ASR and planned infrastructure projects, City projects having sufficient water supply available in normal years and single dry years. Under near-term multi-year drought conditions, with proposed water rights modifications assumed but before implementation of the ASR and planned infrastructure projects, available supplies would meet projected demand in years one through three of the multi-year drought scenario but would fall short of demand by four percent in year four, and 23 percent in year five (City of Santa Cruz Water Department 2024).

In the 2030 – 2040 analysis period, assuming implementation of the City's proposed water rights modifications, ASR and planned infrastructure improvements, the City projects having sufficient water supply available in normal years, single dry years, and multiple dry years to serve anticipated demand (City of Santa Cruz Water Department 2024).

Table 15-1: Projected Supply and Demand Comparison through 2045

			2025 (MG)	2030 (MG)	2035 (MG)	2040 (MG)	2045* (MG)
Normal Year		Forecast Demand	2,600	2,800	2,800	2,900	3,000
		Modeled Supply	2,600	2,800	2,800	2,900	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
Single Dry Year		Forecast Demand	2,600	2,800	2,800	2,900	3,000
		Modeled Supply	2,600	2,800	2,800	2,900	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
Multiple Dry Years	**First year**	Forecast Demand	2,600	2,800	2,800	2,900	3,000
		Modeled Supply	2,600	2,800	2,800	2,900	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
	Second year	Forecast Demand	2,600	2,800	2,800	2,900	3,000
		Modeled Supply	2,600	2,800	2,800	2,900	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
	Third year	Forecasted Demand	2,600	2,800	2,800	2,900	3,000
		Modeled Supply	2,600	2,800	2,800	2,900	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
	Fourth year	Forecast Demand	2,600	2,800	2,800	2,900	3,000
		Modeled Supply	2,500	2,800	2,800	2,900	2,900
		Supply Shortage	**100**	**0**	**0**	**0**	**100**
	Fifth year	Forecast Demand	2,600	2,800	2,800	2,900	3,000
		Modeled Supply	2,000	2,800	2,800	2,900	2,900
		Supply Shortage	**600**	**0**	**0**	**0**	**100**

NOTES: Projected water supply values shown in this table represent output values from the City's Confluence® (water supply) model utilizing historic hydrology and demands up to 2,900 MG. The Confluence® model utilizes system demands to model water supply from City sources. Consistent with the WSAS, the following assumptions about future water projects have been used in developing projected water supplies. In 2025, the City will have implemented proposed water rights modifications as described in the Santa Cruz Water Rights Project Final EIR, and in 2030, the City will have implemented the following components of the WSAS and planned infrastructure projects: ASR in the Santa Cruz Mid-County Groundwater Basin and/or the Santa Margarita Groundwater Basin, sized for up to 4.5 MGD injection and 8.0 MGD extraction as described in the Santa Cruz Water Rights Project Final EIR (specifically for this analysis, 3.0 MGD injection and 6.0 MGD extraction was assumed); improvements to the Tait Diversion on the San Lorenzo River as described in the Santa Cruz Water Rights Project Final EIR and as included in the Santa Cruz Water Program; facility improvements at the Graham Hill Water Treatment Plant that will allow treatment of more turbid water as included in the Santa Cruz Water Program; and replacement of major transmission pipelines on the North Coast and the NCP as included in the Santa Cruz Water Program. Projected demand is based upon the 2024 Update of the City of Santa Cruz's Long-Range Water Demand Forecast (City of Santa Cruz Water Department 2024, Appendix A).

* Although the demand projected for 2045 is 3,000 MG, the maximum demand modeled in the Confluence® model was 2,900 MG. While this results in an apparent three percent shortage in all 2045 scenarios, it is anticipated that the modeled shortages would have been smaller or absent if Confluence® model runs had been completed using 3,000 MG as the maximum demand.

Source: City of Santa Cruz Water Department 2024

In 2045, the analysis shows a three percent deficit across all year types. A three percent shortage is considered a negligible amount in the scale of this twenty-year supply and demand analysis. Furthermore, although the demand projected for 2045 is 3,000 MG, the maximum demand modeled in the Confluence® model before it was retired from use by the City was 2,900 MG. While this results in an apparent three percent shortage in all 2045 year-type scenarios, it is anticipated that the modeled shortages would have been smaller or absent if Confluence® model runs had been completed using 3,000 MG as the maximum demand. That is, if the model had been instructed to keep supplying water up to 3,000 MG, rather than stopping when the modeled demand of 2,900 MG was satisfied, the system would likely have had additional water available which the model did not supply since the set demand of 2,900 MG was already met. Moreover, implementation of the City's SOWF Policy and its adaptive management approach would ensure that future water supply projects would be fine-tuned to eliminate any minor projected future shortages (City of Santa Cruz Water Department 2024).

The City has chosen to conduct this analysis using both historic hydrology and a selected climate change hydrology, CMIP-5, mirroring the approach utilized for the 2020 Urban Water Management Plan. The scenario used is the CMIP5 50-99 scenario which has been adjusted to include warmer air temperatures. The five-year consecutive drought period was selected as the driest period identified from the climate change hydrology resulting in the greatest projected supply shortages (City of Santa Cruz Water Department 2024).

To demonstrate supply reliability over time for each base year type modelled under a climate change scenario, Table 15-2: Climate Change Scenario Projected Supply and Demand Comparison illustrates projected supply available relative to demand over the 20-plus-year planning horizon of this assessment. As shown, in the near term (2025) in this climate change scenario with proposed water rights modifications but before implementation of ASR and planned infrastructure projects, the City projects having sufficient water supplies available in normal years. In a near-term single dry year in this climate scenario, a four percent shortage would result. In the multi-year drought scenario, available supplies would meet projected demand in years one through three but would fall short of demand by 19 percent in year four and 15 percent in year five (City of Santa Cruz Water Department 2024).

In the 2030 – 2040 analysis period, with implementation of ASR and planned infrastructure projects, available supplies would meet projected demand in normal and single dry years. In the multi-year drought scenario, available supplies would meet projected demand in years one through four of the multi-year drought scenario but would fall short of demand in year five by four percent (2030, 2035) to seven percent (2040) (City of Santa Cruz Water Department 2024).

In 2045, the analysis shows a three percent deficit across a normal year, single dry year, and years one through four of the multi-year dry sequence, increasing to ten percent in year five. Although the demand projected for 2045 is 3,000 MG, the maximum demand modeled in the Confluence® model before it was retired from use by the City was 2,900 MG. While this results in an apparent three to ten percent shortage in the 2045 scenarios, it is anticipated that the modeled shortages would have been smaller or absent if Confluence® model runs had been

completed using 3,000 MG as the maximum demand. That is, if the model had been instructed to keep supplying water up to 3,000 MG, rather than stopping when the modeled demand of 2,900 MG was satisfied, the system would likely have had additional water available which the model did not supply since the set demand of 2,900 MG was already met(City of Santa Cruz Water Department 2024).

While a shortage is projected under these scenarios with implementation of the ASR and planned infrastructure projects, the City is currently planning for water supply augmentation through its SOWF Policy and WSAIP that would meet projected supply under plausible worst-case conditions. Moreover, implementation of the adaptive management approach from SOWF Policy would ensure that future water supply projects would be fine-tuned to eliminate any projected future shortages (City of Santa Cruz Water Department 2024).

Table 15-2: Climate Change Scenario Projected Supply and Demand Comparison

			2025 (MG)	2030 (MG)	2035 (MG)	2040 (MG)	2045* (MG)
Normal Year		Forecast Demand	2,600	2,800	2,800	2,800	3,000
		Modeled Supply	2,600	2,800	2,800	2,800	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
Single Dry Year		Forecast Demand	2,600	2,800	2,800	2,800	3,000
		Modeled Supply	2,500	2,800	2,800	2,800	2,900
		Supply Shortage	**100**	**0**	**0**	**0**	**100**
Multiple Dry Years	**First year**	Forecast Demand	2,600	2,800	2,800	2,800	3,000
		Modeled Supply	2,600	2,800	2,800	2,800	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
	Second year	Forecast Demand	2,600	2,800	2,800	2,800	3,000
		Modeled Supply	2,600	2,800	2,800	2,800	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
	Third year	Forecast Demand	2,600	2,800	2,800	2,800	3,000
		Modeled Supply	2,600	2,800	2,800	2,800	2,900
		Supply Shortage	**0**	**0**	**0**	**0**	**100**
	Fourth year	Forecast Demand	2,600	2,800	2,800	2,800	3,000
		Modeled Supply	2,100	2,800	2,800	2,800	2,900
		Supply Shortage	**500**	**0**	**0**	**0**	**100**
	Fifth year	Forecast Demand	2,600	2,800	2,800	2,800	3,000
		Modeled Supply	2,200	2,700	2,700	2,700	2,700
		Supply Shortage	**400**	**100**	**100**	**100**	**300**

Notes: Projected water supply values shown in this table represent output values from the City's Confluence® (water supply) model utilizing historic hydrology. The Confluence® model utilizes system demands to model water supply from City sources. Consistent with the WSAS, the following assumptions about future water projects have been used in developing projected water supplies. In 2025, the City will have implemented proposed water rights modifications as described in the Santa Cruz Water Rights Project Final EIR, and in 2030, the City will have implemented the following components of the WSAS and planned infrastructure projects: ASR in the Santa Cruz Mid-County Groundwater Basin and/or the Santa Margarita Groundwater Basin, sized for up to 4.5 MGD injection and 8.0 MGD extraction as described in the Santa Cruz Water Rights Project Final EIR (specifically for this analysis, 4.5 MGD injection and 6.5 MGD extraction was assumed); improvements to the Tait Diversion on the San Lorenzo River as described in the Santa Cruz Water Rights Project Final EIR and as included in the Santa Cruz Water Program; facility improvements at the Graham Hill Water Treatment Plant that will allow treatment of more turbid water as included in the Santa Cruz Water Program; and replacement of major transmission pipelines on the North Coast and the NCP as included in the Santa Cruz Water Program. Projected demand is based upon the 2024 Update of the City of Santa Cruz's Long-Range Water Demand Forecast (City of Santa Cruz Water Department 2024, Appendix A).
* Although the demand projected for 2045 is 3,000 MG, the maximum demand modeled in the Confluence® model was 2,900 MG. While this results in an apparent three to ten percent shortage in the 2045 scenarios, it is anticipated that the modeled shortages would have been smaller or absent if Confluence® model runs had been completed using 3,000 MG as the maximum demand.

Source: City of Santa Cruz Water Department 2024

The SOWF was structured to incorporate changing demands and climate projections over time and includes a reliability goal based on adequate supply to meet all customer demand. As noted in the SOWF, expected increases in demand in the water service area are not expected to drive the size or timing of needed water supply augmentation projects. Longer dry periods under climate change conditions are understood to be the primary challenge driving the need to augment the City's water supply (City of Santa Cruz Water Department 2024).

15.3.3 Wastewater Treatment

Wastewater treatment is provided by the City of Santa Cruz to City residents, businesses, and institutions within the City's boundaries, as well as some unincorporated areas of Santa Cruz County as discussed on pages 4.8-4 and 4.8-12 to 4.8-14 of the DPA Draft EIR volume of the Final EIR. Updates and/or new information since the Final EIR was certified are provided herein.

The City's Wastewater Treatment Facility (WWTF) serves the cities of Santa Cruz and Capitola and parts of unincorporated Santa Cruz County. In addition to the City of Santa Cruz, the WWTF serves the Santa Cruz County Sanitation District (SCCSD) and County Service Area (CSA) 10. The City also provides septage disposal for CSA 12 and provides capacity for the City of Scotts Valley to discharge its treated wastewater into the Pacific Ocean via the City's discharge.

In 2019, the City approved an agreement with Soquel Creek Water District (SqCWD) to allow SqCWD to utilize a portion of the treated effluent produced by the City's WWTF for groundwater replenishment as part of Pure Water Soquel approved by the SqCWD. Pure Water Soquel will treat a portion of secondary effluent water from the City's WWTF with a new tertiary treatment facility, located at the City's WWTF. That tertiary-treated water will then be pumped to a new Advanced Water Purification Facility located in Live Oak for further purification using advanced water purification methods for injection into the ground to replenish the groundwater basin. The agreement also included additional benefits of providing a facility to produce Title 22 recycled water for the City's use at the WWTF. In the future, a portion of that water could be used for a recycled water and irrigation water for La Barranca Park, which runs along Bay Street near the WWTF. Pure Water Soquel will also reduce the City's discharge of treated secondary wastewater to the Monterey Bay National Marine Sanctuary (City of Santa Cruz 2020).

The WWTF capacity of 17.0 million gallons per day (mgd) remains unchanged. The City contributes approximately 5.5 mgd and has a remaining capacity of approximately 4.0 mgd. The SCCSD has treatment capacity rights of 8 mgd at the City's WWTF.

15.3.4 Solid Waste Disposal

Solid waste collection and disposal services, including recycling services, are provided to City residents, businesses, and institutions within the City's boundaries by the City of Santa Cruz

discussed on pages 4.6-6 to 4.6-7 of the DPA Draft EIR volume of the Final EIR. Updates and/or new information since the Final EIR was certified are provided herein.

The City's Resource Recovery Facility (RRF) is located approximately three miles west of the City off Highway 1 at 605 Dimeo Lane. The site covers 100 acres with 67 acres available for disposal use. The RRF only accepts municipal solid waste and serves as a sorting facility to remove any recyclable or composting materials. The recycling center accepts a variety of recyclable materials.

The RRF is permitted to receive a total of 10,484,325 cubic yards (cy) of solid waste, including wood waste, tires, sludge (biosolids), mixed municipal wastes, metals, inert wastes, industrial wastes, green materials, dead animals, and construction/demolition wastes. Based on the most recent facility capacity evaluation in May 2017, the landfill had a remaining capacity of 4,806,477 cy (approximately 46%) and an estimated closure date of January 2062 (CalRecycle 2023). State law requires that facilities begin planning for future waste disposal/reuse facilities at least 15 years in advance of existing landfill closure dates, which would be around the year 2047. The RRF has a maximum permitted daily solid waste throughput capacity of 535 tons, and a maximum permitted green waste throughput capacity of 12,500 cy (CalRecycle 2023). In 2022, 50,730 tons of solid waste were disposed of at the RRF (CalRecycle 2022), which is an average of approximately 139 tons per day (approximately 26% of daily capacity).

Operations at the RRF comply with all regulations, plans, and permits required by the California Integrated Waste Management Board, the State Water Resources Control Board (SWRCB), and the MBARD (City of Santa Cruz 2019). In late 2019, the City installed a food scrap preprocessing system at the RRF and launched its curbside food scrap collection program in 2022, in compliance with SB 1383 to reduce GHG emissions. Approximately 40 tons of food waste per week is diverted from the landfill through residential and commercial collections. Preprocessed food scrap mash is delivered from the RRF to a facility operated by the East Bay Municipal Utilities District for co-digestion.

The RRF is permitted to receive a total of 10,484,325 cubic yards (cy) of solid waste, including wood waste, tires, sludge (biosolids), mixed municipal wastes, metals, inert wastes, industrial wastes, green materials, dead animals, and construction/demolition wastes (CalRecycle 2024b). As of July 31, 2021, the landfill had a remaining capacity of approximately 5.3 million cy (approximately 51%) and is anticipated to reach maximum final capacity in the year 2054 (City of Santa Cruz 2021c). The RRF has a maximum permitted daily solid waste throughput capacity of 535 tons, and a maximum permitted green waste throughput capacity of 12,500 cy (CalRecycle 2024b). In 2023, 65,687 tons of solid waste were disposed of at the RRF (CalRecycle 2023), which is an average of approximately 180 tons per day (approximately 34% of daily capacity).

Operations at the RRF comply with all regulations, plans, and permits required by the California Integrated Waste Management Board, the SWRCB, and the MBARD (City of Santa Cruz 2019). In late 2019, the City installed a food scrap preprocessing system at the RRF and launched its

curbside food scrap collection program in 2022, in compliance with SB 1383 to reduce GHG emissions. Approximately 40 tons of food waste per week is diverted from the landfill through residential and commercial collections. Preprocessed food scrap mash is delivered from the RRF to a facility in Santa Clara, where it is processed into animal feed. Eventually, the City plans to process all food scraps into energy at the Wastewater Treatment Facility (City of Santa Cruz 2022, 2023).

15.3.5 Electrical and Natural Gas Utilities

Electrical and Natural Gas Utilities

Pacific Gas and Electric Company (PG&E) provides electrical and natural gas service to the City. Incorporated in California in 1905, PG&E is one of the largest combination natural gas and electric utilities in the United States. PG&E and other utilities in the state are regulated by the California Public Utilities Commission (CPUC) (City of Santa Cruz, April 2012-DEIR volume).

In 2022, residential, commercial and industrial energy users in the Santa Cruz County consumed about 1,177 million kilowatts of electricity (California Energy Commission [CEC] 2024a). All residential, commercial, and industrial PG&E electricity accounts were opted into Monterey Bay Community Power's (MBCP) community choice energy program in Spring 2018. At that time, switching the City's overall electricity procurement to MBCP will increase the proportion of electricity supplied from renewable sources from 30% (with PG&E) to 50% and eventually consumers may elect to pay a premium for electricity from 100% renewable sources.

CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. Biogas (e.g., from wastewater treatment facilities or dairy farms) is just beginning to be delivered into the gas utility pipeline systems; however, the State has adopted regulations requiring its development to reduce statewide emissions of methane by 40% below 2013 levels by 2030 (CPUC 2022). In 2022, PG&E had delivered approximately 52 million therms to Santa Cruz County (CEC 2024b), which equates to about 5.2 billion kilo British thermal units (kBtu).

Studies have demonstrated the value and cost-effectiveness of weather-stripping, replacing single pane windows, old appliances and lighting, and increasing insulation in reducing energy use and saving money. Significant energy and cost savings have already been achieved through the implementation of such measures throughout the City of Santa Cruz, although further savings could be achieved (City of Santa Cruz 2022). Over the past 20 years, the combined influences of energy efficiency rebate programs, a public education campaign, and significant increases in energy prices have led to a 22% reduction in energy use within Santa Cruz homes. While this drop in energy use is significant, home energy use in Santa Cruz is again on the rise, but still far below 1996 levels.

In 2007, Santa Cruz became one of the first municipalities in the nation to require new construction to include the adoption of environmentally superior building materials and

designs. Builders in Santa Cruz now use best practices for their construction projects that enhance building energy efficiency and water conservation as well as to improve air quality, waste reduction and recycling, and erosion and runoff control. The Green Building Program currently includes residential and commercial development. Reviews conducted as part of the preparation of the City's 2030 Climate Action Plan indicates that an "award-winning" home under the City's Green Building Program produces a home that is more efficient than standard homes built in 2008 and almost twice as efficient as homes built in 1990 (City of Santa Cruz September 2022).

The AMBAG Energy Watch Program is a partnership between AMBAG and PG&E, which seeks to reduce energy use in the Monterey Bay region by providing the resources listed below to eligible PG&E customers.

- Energy assessments and audits
- Direct installation of energy efficient equipment
- Technical assistance and financial incentives for energy efficient retrofits in municipal buildings
- Energy efficiency seminars and training courses in the region.
- Information on other PG&E energy efficiency programs and services

The AMBAG Sustainability Program originated with the creation of the Energy Watch program in 2006. The AMBAG Energy Watch program was a partnership between AMBAG and PG&E funded under the auspices of the California Public Utilities Commission and designed to serve the energy efficiency needs of the AMBAG region as well as to help foster a commitment to sustainability in every AMBAG jurisdiction. The projects developed and funded by the AMBAG Energy Watch Program from its inception in 2006 to its sunset in 2020 have created more than 110 million annual kWh, which translates to $15M of yearly avoided utility costs.

Transportation-Related Energy Consumption

According to the U.S. Energy Information Administration (EIA), California used approximately 628 million barrels of petroleum in 2022, with the majority (534 million barrels) used for the transportation sector (EIA 2024). There are 42 U.S. gallons in a barrel, so in 2022, total daily use of approximately 61.4 million gallons of total petroleum was consumed in California. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce VMT. Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has

increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend will likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state. According to the California Air Resources Board's (CARB's) Emission Factor (EMFAC) Web Database, Santa Cruz County on-road transportation sources are projected to consume about 63.8 million gallons of petroleum in 2045 (California Air Resources Board [CARB] 2021), which is analyzed as the first year of project operations herein.

15.4 Impacts and Mitigation Measures

15.4.1 Thresholds of Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), the City of Santa Cruz CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

UTIL-a	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
UTIL-b	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
UTIL-c	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
UTIL-d	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
UTIL-e	Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.
UTIL-f	Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources, during project construction or operation.
UTIL-g	Result in conflicts with or obstruct a state or local plan for renewable energy or energy efficiency.

15.4.2 Analytical Method

The project consists of amendments to the City's Downtown Plan, General Plan, Local Coastal Plan, Beach and South of Laurel Comprehensive Area Plan, and Zoning Code regarding development in the project area. The project would not directly result in new development. However, it would expand areas for potential additional building height that could accommodate intensified redevelopment of existing developed sites.

As described in Section 3.7.3 Project Development Buildout Assumptions, the project could lead to redevelopment of existing sites resulting in a potential net increase of approximately 1,730 residential units (accounting for the potential for Density Bonus projects), a net decrease of approximately 16,700 square feet of commercial space, and construction of a new arena with a slightly higher capacity than currently exists. Assuming an average household size the downtown of 1.83 persons (American Community Survey 2020), this would result in up to 3,173 new residents.

Future service demands and impacts resulting from the project are assessed based on review existing plans and consultation with staff of agencies responsible for provision of services addressed in this section. Impacts to water supply are based on the Water Supply Evaluation for the Downtown Plan Expansion Project prepared by the City of Santa Cruz Water Department.

Energy Demand Methodology

This analysis used CalEEMod based on the same assumptions detailed in Chapter 6 Air Quality and Greenhouse Gas Emissions. Construction energy demand cannot be determined in the absence of specific development projects with identified construction schedules, equipment, and vehicles. As such, this energy assessment is based on long-term operations. A brief overview of the methodology applied to assess the project 's potential operational energy impacts is provided below:

Electricity and Natural Gas

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Natural gas consumption is attributed to systems like heating, ventilation, and air conditioning and water heating. Default assumptions were assumed for electricity and natural gas demand for the existing baseline conditions (year 2023) and for buildout of the project (year 2045). Notably, in CalEEMod 2022.1, the default energy use from nonresidential land uses is based on 2019 consumption estimates from the CEC's 2018-2030 Uncalibrated Commercial Sector Forecast (Commercial Forecast), and the energy use from residential land uses is based on the 2019 Residential Appliance Saturation Survey (RASS).

The Commercial Forecast and RASS datasets derive energy intensities of different end use categories for different land use subtypes for electricity demand forecast zones (EDFZ) throughout the state. However, the energy use estimates are based on existing buildings and residences and are not representative of those constructed in compliance with energy

efficiency requirements of the latest Title 24 Building Energy Efficiency Standards (e.g., the average residence surveyed in the RASS was constructed in 1974).

Therefore, per Appendix D, Technical Source Documentation for Emissions Calculations, of the CalEEMod Version 2022.1 User Guide, "the default energy consumption estimates provided in CalEEMod based on the Commercial Forecast and RASS are very conservative, overestimating expected energy use compared to what would be expected for new buildings subject to the latest Energy Code with more stringent energy efficiency measures" (CAPCOA 2022).

Petroleum

Potential impacts were assessed through projected traffic trip generation for the existing baseline conditions (year 2023) and for buildout of the project (year 2045), as provided by the CalEEMod outputs (Appendix C). Fuel consumption from vehicle trips was estimated by converting the total CO2 emissions anticipated to be generated during each scenario to gallons using conversion factors for CO2 to gallons of gasoline or diesel (The Climate Registry 2023).

15.4.3 Impacts and Mitigation Measures

The project would not require or result in the need for relocation or construction of new expanded water, wastewater treatment, stormwater drainage, or energy facilities (UTIL-a). Potential impacts addressed in the DPA EIR that could be affected by the project are updated below regarding availability of sufficient water supplies (UTIL-b), adequacy of wastewater treatment capacity (UTIL-c), generation of solid waste (UTIL-d), conflicts with regulations regarding solid waste (UTIL-e), potential wasteful or inefficient energy consumption (UTIL-f) and conflicts with plans regarding renewable energy or energy efficiency (UTIL-g).

Impact UTIL-1 (*DPA EIR Impact 4.8-1*): Water Supply. Future development and growth accommodated by the project would indirectly result in new development with a demand for potable water in a system that, under existing conditions, has adequate supplies during normal years and single-dry years, but is subject to potential supply shortfalls during the fourth and fifth years of a multi-year drought scenario. The additional Project demand would not result in a substantial increase in water demand during dry years and would not be of a magnitude to affect the level of curtailment that might be in effect (UTIL-b). Therefore, the impact is considered a *less-than-significant impact*.

The project would not directly result in new development but could indirectly lead to intensified development in the project area, resulting in an increased water demand over the next 20 years. The project could lead to development, resulting in a net increase of approximately 1,734 new multi-family residential units and a net decrease of approximately 16,700 square feet of commercial uses. Based on water demand rates documented in the City's adopted 2020 UWMP, the project could result in a water demand of approximately 50 MGY, based on multi-family residential (MFR) water demand rates used in the 2020 UWMP and rates for commercial uses developed by the City and included in the General Plan 2030 EIR. This

water demand represents approximately two percent of the total existing 2,800 MGY of future water demand projected for the year 2030 with the 2024 demand projections. There would also be a net increase in water use with construction of a new arena that would have a higher seat capacity and an anticipated increase in annual events, although exact water demand that may result will fluctuate depending on the actual number of annual events and attendance per event.

Potential development resulting from the project and other development projects that are under construction, approved, or have pending development applications were considered in the 2024 water demand projections and updated Water Supply Evaluation. Thus, the project and other foreseeable development water demand is within the water demand accounted for in this update.

The 2024 updated water demand projections and Water Supply Evaluation indicate that in the near term (2025), the City projects having sufficient water supply available in normal years and single dry years. Under near-term multi-year drought conditions, available supplies would meet projected demand in years one through three of the multi-year drought scenario but would fall short of demand by four percent in year four, and 23 percent in year five.

In the 2030-2040 analysis period, the City projects having sufficient water supply available in normal years, single dry years, and multiple dry years to serve anticipated demand.

In 2045, the analysis shows a negligible three percent deficit across all year types. Although the demand projected for 2045 is 3,000 MG, the maximum demand modeled in the Confluence® model was 2,900 MG. While this results in an apparent three percent shortage in all 2045 year-type scenarios, it is anticipated that the modeled shortages would have been smaller or absent if Confluence® model runs had been completed using 3,000 MG as the maximum demand.

Under the climate change scenario in the near term (2025), the City projects having sufficient water supplies available in normal years. In a near-term single dry year in the climate scenario, a four percent shortage would result. In the multi-year drought scenario, available supplies would meet projected demand in years one through three but would fall short of demand by 19 percent in year four and 15 percent in year five.

Under the climate change scenario in the 2030-2040 analysis period, available supplies would meet projected demand in normal and single dry years. In the multi-year drought scenario, available supplies would meet projected demand in years one through four of the multi-year drought scenario but would fall short of demand in year five by four percent (2030, 2035) to seven percent (2040).

Under the climate change scenario in 2045, the analysis shows a three percent deficit across a normal year, single dry year, and years one through four of the multi-year dry sequence, increasing to ten percent in year five. Although the demand projected for 2045 is 3,000 MG, the maximum demand modeled in the Confluence® model before it was retired from use by the

City was 2,900 MG. While this results in an apparent three to ten percent shortage in the 2045 scenarios, it is anticipated that the modeled shortages would have been smaller or absent if Confluence® model runs had been completed using 3,000 MG as the maximum demand.

In the near-term, the projected shortfall would require aggressive reduction savings according to the City's Water Shortage Contingency Plan (2021a). As required by California Water Code and to manage risks due to water supply shortages that can be expected in the future, the 2020 UWMP includes a Water Shortage Contingency Plan that addresses how the City's water system would be managed during a water shortage emergency that arises as a result of drought, which could result in required customer water use reductions when shortfalls occur. With implementation of planned water augmentation projects and strategies and after the year 2030, potential shortfalls are projected to be a negligible four percent.

During periods of dry years and drought, water customers could be subject to water curtailment as enacted by the City. A multiple-dry year scenario could require substantial curtailment by all water customers until a number of planned water supply projects and strategies are expected to be implemented by 2030. The project is expected to be constructed and occupied in 2028, which would be within the period of projected near-term water shortages during the fifth year of a drought. However, the project's estimated water demand is very minimal compared to the total projected water demand in 2030 (approximately 0.04 percent of the total demand). If a shortage and subsequent curtailment were to occur, the project's demand when spread out among all users would not be a substantial increase as to cause further curtailment than would already be required throughout the service area. Therefore, the impact of increased water demand on water supplies due to the project is considered less-than-significant as there are sufficient supplies from existing sources to serve the project during normal and single-year dry periods, and the project's minimal demand during multiple-year droughts would not be substantial in comparison to total demand.

Project users would be required to comply with required curtailment orders if imposed as would all of the service area customers. In addition, the project would be subject to City development standards and requirements that include requirements for installation of water conservation fixtures and landscaping for new construction. In addition, the project would pay the required "System Development Charge" for the required new service connection. This charge as set forth in Chapter 16.14 of the City's Municipal Code is intended to mitigate the water supply impacts caused by new development in the City of Santa Cruz water service area, and the funds are used for construction of public water system improvements and conservation programs.

The City also considered availability of water supplies to serve the project and other "reasonably foreseeable future development," which the City determined to be projects that are under construction or have been approved. The 2024 updated water demand projections and water supply analysis considered all cumulative development projects, including pending permit applications as well as approved projects and projects under construction (see Appendix G). Thus, based on results of the 2024 demand projections and analysis explained above, the

demand from the project and reasonably foreseeable development would not result in more stringent contingency measures than already anticipated for a multiple dry year period.

Therefore, water supplies with implementation of planned augmentation projects are sufficient to serve the project and reasonably foreseeable development, and the impact regarding water supply availability is *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact UTIL-2 (*DPA EIR Impact 4.8-2*): Wastewater Treatment. Future development and growth accommodated by the project would indirectly result in new development that would result in indirect generation of wastewater that could be accommodated by the existing remaining wastewater treatment capacity (UTIL-b). Therefore, the impact is considered a *less-than-significant impact*.

The project would not directly result in new development but could indirectly lead to intensified development in the project area, resulting in increased wastewater generation over the next 20 years. As indicated in the DPA EIR, the City Public Works Department generally estimates wastewater flows as a percentage of water use. Based on City water demand rates, future development and growth could result in an increase of approximately 0.12 mgd of daily wastewater flows. This is well within the remaining treatment plant capacity – both permitting capacity as well as the City's remaining portion (4.0), and thus the impact regarding availability of wastewater treatment capacity would be less-than-significant.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact UTL-3 (*DPA EIR Impact 4.6-3*): Solid Waste Generation. Future development and growth accommodated by the project would indirectly result in new development that would result in indirect generation of solid waste. However, future development and growth would not generate solid waste in excess or state or local standards, or of the capacity of local infrastructure, or impair attainment of solid waste reduction goals (UTIL-d). Therefore, this is considered is a less-than-significant impact.

The project would result in an increase in the generation of solid waste from construction and operation of the project. Construction activities would result in generation of solid waste that would likely include scrap lumber, concrete, residual wastes, packing materials, plastics, and soils. Per CALGreen, at least 65% of all construction and demolition waste is required to be diverted from landfills. Any hazardous wastes that are generated during construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws. The remaining 35% of construction material that is not required to be recycled would either be disposed of or voluntarily recycled at a solid waste facility with available capacity. It is expected that construction waste would generally be recycled and reused to the maximum

extent possible, due to the cost of disposing of such materials, in accordance with applicable regulations.

Project operation would result in the generation of solid waste on a regular basis in association with the residential and commercial uses on site. As described above, CalRecycle provides general information for planning purposes on estimated solid waste generation rates based on land use (CalRecycle 2024a). For multifamily residential uses, the estimates provided range from a minimum of 3.6 pounds per unit per day to 8.6 pounds per unit per day. Single-family uses generate an estimate 7.8 pounds per unit per day to 11.4 pounds per unit per day. Estimates for commercial retail uses range from 2.5 pounds per 1,000 square feet per day to 0.046 pounds per square foot per day.

Based on the highest estimated solid waste generation rates provided by CalRecycle, the future potential development resulting from the project would generate approximately 14,900 pounds or 7.5 tons of solid waste per day within the next 20 years. It is expected that construction waste would generally be recycled and reused to the maximum extent possible, due to the cost of disposing of such materials, in accordance with applicable regulations.

As described above, solid waste generated by future development accommodated by the project would be disposed of at the City's RRF, which is expected to reach capacity in the year 2054. The City's RRF has a remaining capacity of approximately 51%, respectively, or approximately 5.3 million cy of solid waste. Daily throughput in 2023 averaged 34% of the RRF's permitted daily capacity of 535 tons. Given this, the City's RRF would have adequate capacity to accommodate the net increase in solid waste generated by the project of 1.55 tons per day, and the impact would be *less-than-significant*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact UTL-4: Compliance with Solid Waste Regulations. Development accommodated by the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste (UTIL-e). This is considered is *a less-than-significant* impact.

Future development accommodated by the project would be required to comply with all applicable regulations associated with the reduction of solid waste entering landfills, including the California Integrated Waste Management Act, potentially new more aggressive statewide resource recovery goals (i.e., AB 341 policy goal of 75% reduction), as well as the City's plans, policies, and programs related to recycling/diversion and disposal of solid waste. As previously noted, during construction, all wastes would be expected to be recycled to the maximum extent possible, in accordance with applicable regulations. All nonhazardous solid waste generated from the project once operational would be recycled, with a goal of 75%, in compliance with the Integrated Waste Management Act. Unsalvageable materials generated from the project would be disposed of at authorized sites in accordance with all applicable federal, state, and local statutes and regulations.

Thus, the project would comply with state and local statutes and regulations related to solid waste during construction and operation and the impact would be less-than-significant.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact UTL-5 (*DPA EIR Impact 4.6-4*): Energy Use. Adoption of the proposed plan amendments could indirectly result in increased population associated with potential development that could be accommodated by the Plan, which could result in indirect increased energy demands, which would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources (UTIL-f) or conflict with or obstruct a state or local plan for renewable energy or energy efficiency (UTIL-g). This is considered is a *less-than-significant* impact.

Electricity and Natural Gas

Project (2045) and Existing (2023) scenario land uses would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Natural gas consumption during operation would be required for various purposes, including building heating and cooling. CalEEMod was used to estimate electricity and natural gas demand for both scenarios (see Appendix C for calculations). Table 15-1: Table Annual Electricity Demand and Table 15-2: Annual Natural Gas Demand present the net increase in electricity demand and natural gas demand for the project, respectively.

Table 15-1: Table Annual Electricity Demand

Scenario	kWh/Year
Project (2045)	8,682,790
Existing (2023)	2,354,321
Net Increase in Electricity Demand	**6,328,469**

Note: kWh = kilowatt-hour.
Source: Appendix C.

Table 15-2: Annual Natural Gas Demand

Scenario	kBtu/Year
Project (2045)	56,531,904
Existing (2023)	9,821,599
Net Increase in Natural Gas Demand	**46,710,305**

Note: kBtu = thousand British thermal units.
Source: Appendix C.

According to these estimations, the net increase in energy demand for the project would be 6,328,469 kWh per year of electricity and 46,710,305 kBtu per year of natural gas. However,

these estimates are based on the conservative default assumptions in CalEEMod 2022.1, which do not account for greater energy efficiency standards in future years per Title 24, which project land uses would be required to comply with. As such, the project 's net increase in electricity and natural gas consumption would be lower than that shown in Tables 15-1 and 15-2.

Overall, although electricity and natural gas consumption would increase with development accommodated by the project, land uses to be developed would be required to comply with the efficiency standards of the California Building Code (Title 24 Part 6 and Part 11), and the additional electricity and natural gas demand for the project would not be unusual or wasteful as compared to overall local and regional demand for energy resources. For these reasons, electricity and natural gas consumption of the project would not be considered inefficient or wasteful, and impacts would be less-than-significant.

Petroleum

Petroleum fuel consumption associated with motor vehicles traveling to and from land uses under the project (2045) and Existing (2023) scenarios is a function of the VMT and vehicle fuel efficiency. The fuel estimates were back calculated based on the total CO_2 emissions from CalEEMod and are provided in Table 15-3: Annual Operational Petroleum Demand.

Table 15-3: Annual Operational Petroleum Demand

Scenario	Gallons
Project (2045)	
Gasoline	422,662
Diesel	93,730
Total Project Petroleum Use	**516,392**
Existing (2023)	
Gasoline	207,834
Diesel	51,949
Total Existing Petroleum Use	**259,783**
Net Change in Petroleum Demand	**256,609**

Source: Appendix C.

As shown in Table 15-3, the land uses under the project would potentially result in an annual net increase of 256,609 gallons of petroleum consumption. Fuel would be provided by current and future commercial vendors. Trip generation and VMT associated with the project are consistent with other mixed-use projects of similar scale and configuration in that the project does not propose uses or operations that would inherently result in excessive and wasteful

activities, nor associated excess and wasteful vehicle energy consumption. In addition, although not all are accounted for in CalEEMod, there are numerous regulations in place that require and encourage increased fuel efficiency.

For example, CARB has adopted an approach to passenger vehicles that combines the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards (termed Advanced Clean Cars). The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles, including that all new passenger cars, trucks, and SUVs sold in California will be zero emissions by 2035 (CARB 2024). Also, use of transit and non-vehicular modes of transportation is anticipated to increase over time, as local and regional plans and policies facilitating increased use and development of transit and non-vehicular transportation modes are implemented.

Finally, development accommodated by the project is the type of compact land use development that is encouraged by AMBAG to reduce VMT in order to achieve the energy use and GHG reductions from the land use and transportation sectors. Given these considerations, the petroleum consumption associated with the project would not be considered inefficient or wasteful, and impacts would be *less-than-significant*.

Plan Consistency

Future land uses that would be accommodated under the project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6) and the California Green Building Standards Code (CALGreen) (24 CCR, Part 11). Part 6 of Title 24 establishes energy efficiency standards for residential and non-residential buildings constructed in California in order to reduce energy demand and consumption. These energy efficiency standards are reviewed every 3 years by the Building Standards Commission and the California Energy Commission (CEC) and revised if necessary (California Public Resources Code Section 25402[b][1]). As such, land uses under the project would comply with the then-current California code requirements for energy efficiency at the time of development.

Part 11 of Title 24 sets forth voluntary and mandatory energy measures that are applicable to the project under CALGreen. CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, high-rise residential, state-owned buildings, schools, and hospitals, as well as certain residential and non-residential additions and alterations.

Furthermore, as explained in Section 15.3.5, 3CE started providing clean energy to the county as of 2018. 3CE is on a pathway to 60% clean and renewable energy by 2025 and 100% clean and renewable energy by 2030 (3CE 2024). Although residents and commercial tenants are automatically enrolled into the default tier of 3CE, recognizing the diverse needs of the community, customers can either stay with the default tier, opt out of using 3CE altogether, or opt up to 100% clean and renewable energy. Overall, however, the City's procurement of energy through 3CE and the projected 100% clean and renewable energy sourcing by 2030 will

give customers the option of purchasing this clean energy 15 years ahead of California's SB 100 requirement of zero carbon energy by 2045.

Lastly, the City's CAP and General Plan 2030 established policies that address lighting and energy conservation measures. For example, General Plan GOAL NRC7 seeks to reduce energy use with a significant production and use of renewable energy. Its four policies and accompanying actions would promote reduction of electricity and natural gas consumption, use of renewable energy sources, and use of energy-efficient lighting, vehicles, and water fixtures and appliances. The project would not conflict with the City's ability to implement the CAP and General Plan policies.

Because the land uses to be developed under the project would comply with all applicable state and local energy standards and regulations, the project would result in a *less-than-significant* impact associated with the potential to conflict or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

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16 Other CEQA Considerations

As indicated in the Downtown Plan Amendments (DPA) EIR on page 5-1, section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. The EIR must also discuss (1) significant environmental effects of the project, (2) significant environmental effects that cannot be avoided if the project is implemented, (3) significant irreversible environmental changes that would result from implementation of the project, and (4) growth-inducing impacts of the project.

Chapter 2 Summary, and Chapters 5 through 15 of this SEIR provide a comprehensive identification and evaluation of the project's environmental effects, mitigation measures, and the level of impact significance both before and after mitigation.

This section updates evaluations presented in the DPA EIR for the above topics, as well as for cumulative impacts.

16.1 Significant Unavoidable Impacts

The State California Environmental Quality Act (CEQA) Guidelines require a description of any significant impacts, including those that can be mitigated but not reduced to a level of insignificance (section 15126.2(c)). Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

As described in this EIR, all potentially significant impacts can be mitigated to a less-than-significant level with the exception of Impact CUL-1 (DPA EIR Impact 4.4-2): Historical Resources. Mitigation measures MM CUL-1.1: Historic Resources Assessment and Project-Level Mitigation and MM CUL-1.2: Resource Documentation would help reduce these impacts, however, because the potential for permanent loss of a historic resource cannot be precluded, it is conservatively concluded that the project's indirect impact to historical resources would be *potentially significant and unavoidable*.

16.2 Significant Irreversible Environmental Changes

The State CEQA Guidelines require a discussion of significant irreversible environmental changes with project implementation, including uses of nonrenewable resources during the initial and continued phases of the project (section 15126.6(c)). The Guidelines indicate that use of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Irreversible damage can also result from environmental accidents associated with the project.

Section 15227 further requires this discussion only for adoption of a plan, policy or ordinance by a public agency; the adoption by a Local Agency Formation Commission (LAFCO) of a resolution making determinations; and projects which require preparation of an EIS under the National Environmental Policy Act (NEPA). The Project does not meet these requirements as a mixed-use development project, and no further review is required.

Changes that Commit Future Generations to Similar Uses

The project would result in some changes to the current General Plan land use designation and zoning within the project area and commit future generations to similar land uses. Depending on market demand, the residential use could change or be replaced in the future. However, residential development, once constructed, is rarely replaced by new uses within the first few generations after construction.

Use of Nonrenewable Resources

According to Appendix F of the State CEQA Guidelines, the goal of conserving energy implies the wise and efficient use of energy including decreasing reliance on natural gas and oil and increasing reliance on renewable energy sources. The project would be constructed to Title 24 standards, which would reduce energy demand as compared to traditional development. Furthermore, as discussed in Chapter 15 Utilities, Service Systems, and Energy Conservation, the project would not result in significant impacts related to energy use. Therefore, the project would not result in substantial or wasteful consumption of energy.

Construction of the future development projects and a result of the project would consume natural resources (gasoline, sand and gravel, asphalt, oil, etc.) during construction activities. During operation of the residential units, energy would be consumed for lighting, heating/cooling, and transportation. Neither the construction nor operation would consume nonrenewable resources in amounts substantially different from or greater than typical urban development or similar land uses. The project would not affect agricultural resources or mineral resources or access to such resources. Therefore, the project would not involve a large commitment of nonrenewable resources.

Irreversible Damage from Environmental Accidents

Future development may include storage of hazardous materials, such as cleaning products and other products, which would not be regarded as sufficient to create a significant hazard to the public. All hazardous materials would be subject to existing storage, handling, and disposal regulations that limit the potential exposure to workers and the public.

16.3 Growth Inducement

CEQA requires that any growth-inducing aspect of a project be discussed in an EIR. This discussion should include consideration of ways in which the project could directly or indirectly foster economic or population growth in adjacent and/or surrounding areas. Projects which could remove obstacles to population growth (such as major public service expansion) must

also be considered in this discussion. According to CEQA, it must not be assumed that growth in any area is necessarily beneficial, detrimental or of little significance to the environment.

The project assumes maximum buildout of 1,800 units and up to 60,000 sf. of ground-floor retail and commercial uses. Redevelopment would replace approximately 66 dwelling units and 76,770 gross sf. of commercial uses, resulting in a potential net increase of 1,734 dwelling units and a potential net decrease of 16,770 square feet of commercial space. Assuming an average household size the downtown of 1.83 persons (American Community Survey 2020), this would result in up to 3,173 new residents.

The project also involves the construction of a new arena with a capacity of approximately 3,200 fixed seats (e.g., for basketball games), and approximately 4,000 fixed and temporary seating for other entertainment events such as musical concerts. This would replace the existing 35,000 sf. temporary arena with 2,475 fixed seats and 3,100 fixed and temporary seating for other entertainment events.

Thus, the project could directly foster population growth but might not foster economic growth with a reduction of commercial space, although depending on the types of uses that ultimately occupy the project, commercial uses could also generate more revenue than existing commercial uses on the project area. In addition, some of the non-residential space could be used for services for the project residents.

As of 2024, the City has a population of 62,776 and an estimated 24,506 housing units in the City (California Department of Finance 2024). The Association of Monterey Bay Area Governments (AMBAG) develops population and housing forecasts for the region. For the year 20230, the period closest to expected completion of the project, the 2022 Regional Growth Forecast for the City of Santa Cruz estimates a population of 72,218 and 25,578 housing units. With the new housing units and population resulting from the project, the City's population would be 65,949, which is below the regional population forecast for the year 2030. Therefore, while the project would directly induce population growth, the new population resulting from the project would not be substantial as it would be within regional forecasts.

With the additional housing units and population potentially resulting from the project, the City of Santa Cruz will still be below these forecasts. Furthermore, it is expected that development pursuant to the proposed amendments will occur over a 20 +year period. Therefore, population and housing growth due to the project is not substantial.

The Project does not include offsite improvements or extension of water or sewer into undeveloped areas, and thus, the project area would not remove obstacles to development and population growth. Therefore, the project would not indirectly foster population or economic growth.

16.4 Cumulative Impacts

16.4.1 State CEQA Requirements

The State CEQA Guidelines section 15130(a) requires that an EIR discuss cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." As defined in Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. As defined in section 15065(a)(3), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider the effect significant.

CEQA requires an evaluation of cumulative impacts when they are significant. When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. Furthermore, according to the California State CEQA Guidelines section 15130 (a)(1), there is no need to evaluate cumulative impacts to which the project does not contribute.

An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus not significant when, for example, a project funds its fair share of a mitigation measure designed to alleviate the cumulative impact. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide detail as great as that provided for the impacts that are attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness and should focus on the cumulative impact to which the identified project contributes.

Discussion of cumulative impacts may consider either a list of past, present, and probable future projects producing cumulative impacts; or a summary of growth projections contained in an adopted plan that evaluates conditions contributing to cumulative impacts, such as those contained in a General Plan. If a lead agency determines that a cumulative effect has been adequately addressed in a prior EIR, that cumulative effect is not required to be examined in a later EIR pursuant to CEQA (Pub. Resources Code section 21094(e)(1). The section further indicates that cumulative effects are adequately addressed if the cumulative effect has been mitigated or avoided as a result of the prior EIR and adopted findings or can be mitigated or avoided by site-specific revisions, imposition of conditions or other means in connection with the approval of the later project (Id., subsection (e)(4)).

If a cumulative impact was addressed adequately in a prior EIR for a general plan, and the project is consistent with that plan or action, then an EIR for such a project need not further analyze that cumulative impact, as provided in the State CEQA Guidelines section 15183(j). Therefore, future projects that are determined to be consistent with the General Plan may rely on this analysis to streamline their environmental review.

16.4.2 Cumulative Analysis

Cumulative Development

The analysis of cumulative impacts may consider either (1) a list of past, present, and probable future projects producing cumulative impacts or (2) a summary of growth projections contained either in an adopted plan that evaluates conditions contributing to cumulative impacts or in a certified environmental document for such a plan. Examples of plans that can be used for such purposes include a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. Projects that are relevant to the cumulative analysis include projects that could:

- Contribute incremental environmental effects on the same resources as, and would have similar impacts to, those discussed in this EIR applicable to the Proposed Project.
- Be located within the defined geographic scope for the cumulative effect. The defined geographic scope is dependent on the environmental resource affected.
- Contribute impacts that coincide with Project impacts during either construction (short-term) or operation (long-term).

This EIR uses the list-based approach for the identification of cumulative projects. Based on the above factors, cumulative projects considered for the analysis include other residential and commercial development projects that are under construction or approved within the City or whose impacts would otherwise combine with the impacts of the project.

Based on the most current list maintained by the City, cumulative projects would result in approximately 3,250 new residential units, a net reduction in commercial and office space of 90,000 and 3,500 square feet, respectively, an increase of approximately 46,500 square feet of industrial space, and approximately 400 new hotel rooms throughout the City as shown on Table 16-1: City of Santa Cruz Cumulative Projects. Future improvements and expansion of the Santa Cruz Wharf also are considered.

Table 16-1: City of Santa Cruz Cumulative Projects

	Residential (DUs)	Commercial (sf)	Industrial (sf)	Office (sf)	Hotel (rooms)
Finaled Permits in 2024	2	450	8,870		
Under Construction	569	-57,605	7,500	590	165
Approved	1,732	-51,251	22,015	-4,131	232
Pending Applications	655	6,944	3,080	81	
Others [1]					
831 Almar [2]	120	4,000	5,000		
530, 542, 548 Ocean [2]	199	3,000			
2020 North Pacific [2]	260	11,125			
201 River	12				
313 Swift - School	80				
Subtotal	**3,629**	**-94,127**	**46,465**	**-3,460**	**397**
Proposed Project [3]	1,732	-16,770			
TOTAL	**5,361**	**-110,897**	**46,465**	**-3,460**	**397**

Notes:
1. Pre-application or Significant Projects on City Planning and Community Development Department website.
2. Does not account for existing non-residential sf.
3. The project supports construction of a new arena that could result in a slight increase in capacity (approximately 700-1,500 seats) and number of annual events
Source: City of Santa Cruz (Through April 2024).

In addition to development within the City, residential development at the University of California Santa Cruz (UCSC) campus would result in 39 new employee housing units, a net decrease of 59 student housing units, and a net increase of approximately 2,580 student beds.

The area within which a cumulative effect can occur varies by resource. For example, air quality impacts generally affect a large area (such as the regional Air Basin), while traffic impacts are typically more localized. For this reason, the geographic scope for the analysis of cumulative impacts is identified for each resource area in the following chapters.

The analysis of cumulative effects considers several variables, including geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is based on the topography surrounding the project and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects, but not beyond the scope of the direct and indirect effects of the project.

In addition, each project has its own implementation schedule, which may or may not coincide or overlap with the project's schedule. This is a consideration for short-term impacts from the project. However, to be conservative, the cumulative analysis assumes that all projects in the cumulative scenario are built and operating during the operating lifetime of the project and residential development on the project area that may result from the project.

Cumulative Impact Analysis

Cumulative impacts addressed in the DPA EIR on pages 5-8 to 5-14 that could be affected by the project are updated to reflect the project and updated environmental conditions for the following topics: Noise, Population and Housing, Public Services, Transportation, and Utilities. Conclusions for other cumulative impacts evaluated in the DPA EIR remain unchanged.

Noise

As indicated in the DPA EIR, the geographic area for consideration of cumulative impacts would be the project area and areas with similar exposure to noise levels as the project area.

There are no other cumulative projects that would be exposed to noise levels similar to the project, and the project would not contribute to cumulative noise impacts. However, cumulative development would contribute to increased trips on area roadways. The transportation analysis for the project (Kimley Horn 2024) includes consideration of anticipated regional traffic growth and contribution of approved projects in the area. As indicated in Table 16-2: Modeled Traffic Noise Levels (Hourly Leq [dBA]) for Selected Roadway Segments, Laurel Street between Center Street and Front Street would experience noise increases of 3.7 to 4.3 decibels that would exceed 3 dB over existing conditions, resulting in a significant cumulative noise impact related to traffic noise level increases.

Table 16-2: Modeled Traffic Noise Levels (Hourly L_{eq} [dBA]) for Selected Roadway Segments

Studied Roadway Segment	A Existing	B Cumulative	C Cumulative + Project	*C – A Decibel Difference*	*C – B Decibel Difference*
Laurel Street from Cedar Street to Center Street	61.2	65.0	65.2	***4.0***	*0.2*
Laurel Street from Cedar Street to Pacific Avenue	61.0	65.1	65.3	***4.3***	*0.2*
Laurel Street from Pacific Avenue to Front Street	61.7	65.2	65.4	***3.7***	*0.2*
Pacific Avenue from Front Street to Spruce Street	54.1	55.3	56.2	*2.1*	*0.9*
Pacific Avenue from Front Street to Pacific Avenue	61.3	62.7	62.9	*1.6*	*0.2*
Pacific Avenue from Pacific Avenue to Second Street	60.0	62.9	63.0	*3.0*	*0.1*
Third Street from Leibrandt Avenue to Cliff Street	57.0	57.0	57.0	*0*	*0*
Center Street from Laurel Street to Cliff Street	57.7	59.4	59.6	*1.9*	*0.2*
Front Street from Pacific Avenue to Laurel Street	60.1	60.8	61.3	*1.2*	*0.5*
Pacific Avenue from Laurel Street to Spruce Street	54.6	57.1	58.0	*3.4*	*0.9*
Front Street from Spruce Street to Laurel Extension	60.7	61.9	62.6	*0.9*	*0.7*
Front Street from Spruce Street to Laurel Street	61.1	61.9	62.7	*1.6*	*0.8*
San Lorenzo Blvd from Laurel St to Riverside Ave	59.4	61.8	61.9	*2.5*	*0.1*

Notes:
Bold indicates segments that exceed 3 dB over existing conditions.
Sources: SCDPE Local Transportation Analysis (Kimley-Horn 2024) and Traffic Noise Modeling Calculator (Dudek 2024).

The project's contribution to cumulative noise represents about one-half of one percent, which would not be considered cumulatively considerable. In addition, sound levels would slightly exceed 65 decibels, which is within conditionally acceptable noise levels for residential uses.

With respect to noise emission from stationary sources associated with the project (i.e., rooftop HVAC and new Arena events), its potential for being cumulatively considerable among other cumulative development noise sources assessed at a common offsite receptor depends on the distance and the intensity or magnitude of those other non-Project noise sources. But because noise emission from both the project and cumulative development sources need to comply with City noise ordinance thresholds with respect to existing outdoor ambient sound levels, and the predicted project noise levels presented in Table 11-2: Project Operational Noise Levels (per New Arena Development Location Alternatives) are anticipated to be several dB lower than samples of existing outdoor sound level as shown in Table 11-1: Noise Measurement

Locations, the cumulative development is expected to result in a less-than-significant cumulative noise impact with regards to stationary sources.

Public Services

The geographic area for consideration of cumulative impacts would be the City of Santa Cruz service area in which the project area is located that is served by the City Fire, Police and Parks Departments.

Fire Protection

Cumulative development and growth could result in the need for expanded or new fire facilities. According to the City's Fire Department, the existing downtown fire station is inadequate in terms of space and equipment to meet existing needs, which would be further impacted by the project and other cumulative development. Should expansion be proposed, it is likely that expanded or new fire facilities would be at the existing eastside location of Station 2 or potentially near UCSC. Expansion or new construction at these locations would be considered infill development on sites surrounded by development. While existing and cumulative development may require new or physically altered fire protection facilities, locations for expansion or construction are expected to be located within developed areas and are not expected to result in significant physical impacts. Therefore, no significant cumulative impact related to fire protection services is anticipated as potential expansion of existing facilities or construction of new facilities would not result in significant physical impact on the environment. It is noted that cumulative development would result in increased calls for service and likely require additional staff.

Police Protection

Cumulative development and growth would result in increased service calls with additional population, and minimal increases in non-residential square footage. According to the City's Police Department, the department is currently understaffed, and a planned future staffing study will help determine additional staffing as development and population growth occur. While additional staff and/or vehicles may be needed in the future to serve cumulative development, it is not expected that a potential increase would lead to the need for new or expanded Police Department facilities. Therefore, cumulative development and growth would not result in a significant cumulative impact related to police protection services as no new facilities would be required to serve cumulative development.

Schools

Schools and educational services are provided to City residents by the Santa Cruz City Schools District (District), as well as a number of private schools, for grades K through 12. Potential cumulative development that could affect school enrollment includes development and growth within the City and surrounding areas as well as the project.

According to the District's updated 2024 Developer Fee Justification Study for the Santa Cruz School Districts (Table 8), District facilities have the capacity to accommodate 6,262 students.

The District's updated 2024 Fee Study identifies a capacity need for 6,828 students based on projected development is needed, resulting in a deficit capacity for 566 students.[17] The District has identified a need for 2.85 acres for new facilities (1.12 acres for grades Kindergarten-6 and 1.73 acres for grades 9-12). No sites have been identified to accommodate this demand.

As shown in Table 16-1: City of Santa Cruz Cumulative Projects, the project and other cumulative projects would result in a net increase of 3,629 residential units, resulting in a cumulative estimated enrollment increase of approximately 774 students based on the District's updated student generation rate of 0.2132 students per household and up to 972 to 1,144 students with the project. Since the enrollment space needed exceeds the District's existing school capacity, except for grades 7-8, there is no existing excess capacity available to accommodate students from cumulative development.

While existing and cumulative development may require new or physically altered school facilities, locations for expansion or construction currently are unknown, but are expected to be within developed areas. The school impact fee study prepared for the School District indicates that the District's planned use of the development impact fees would include the following types of projects:

- New Schools: When there is enough development activity occurring in a single area, the District would build a new school.
- Additions to Existing Schools: The District would accommodate students at existing schools by building needed classrooms and/or support facilities such as cafeterias, restrooms, gyms and libraries as needed to increase the school capacity. Schools may also need upgrades of the technology and tele-communication systems to be able to increase their capacity.
- Portable Replacement Projects: Some of the District's capacity is in temporary facilities, which could be replaced with new permanent or modular classrooms to provide adequate space for students. In addition, old portables that have reached the end of their life expectancy, will need to be replaced to maintain the existing service level. These types of projects are considered modernization projects in the State Building Program.
- Modernization/Upgrade Projects: The District would modernize or upgrade older schools to be equivalent to new schools so students will be housed in equitable facilities to those students housed in new schools. These projects may include updates to the building structures to meet current building standards, along with upgrades to the

[17] Per the District's 2024 Developer Fee Study, available capacity consists of: grades Kindergarden-6 = (529 deficit); grades 7-8 = 201, grades 9-12 = (220 deficit), and special education = (18 deficit).

current fire and safety standards and any access compliance standards.

Potential addition or expansion of school classroom facilities is not expected to result in significant physical impacts due to the location of existing facilities within developed areas or within developed footprints of existing school facilities. It is not known which campuses may need to be expanded in the future to accommodate the additional enrollment. A new school campus within the City would likely occur within developed areas on sites with existing or previous development, and thus, construction of new facilities are not expected to result in significant physical impacts.

Additionally, the project and other cumulative projects would be required to pay school impact fees to fund necessary facility expansion and/or additions, which are considered mitigation for development projects pursuant to state law. Therefore, student generation arising from cumulative development and potential school facility expansion would not be expected to result in significant physical impacts, and thus, would not result in a significant cumulative impact.

Parks and Recreation

Cumulative development, including the project and development identified in Table 16-1: City of Santa Cruz Cumulative Projects, could result in construction of approximately 5,361 new residential units, resulting in an associated increased population of approximately 11,303 new residents. Cumulative development would result in the need for additional park lands given the City's park land per population standards included in the City's adopted Parks Master Plan 2030. Given these standards, a need for approximately 16 acres of new neighborhood parks would be required, which would be in addition to an existing deficiency of approximately 67 acres.

As discussed in Chapter 13 Public Services, the Parks Master Plan does not specify locations for new parks, but some of the Plan's policies and actions support new and expanded recreational uses and/or facilities. Overall, the Plan's goals, policies and actions address the provision of additional parks and recreational facilities and new or expanded recreational uses. The Parks Master Plan supports consideration of recreational facilities after additional studies are conducted in the future to further evaluate potential uses and site locations. The Plan does recommend new, expanded or renovated facilities at a variety of parks throughout the City. The goals, policies and actions also promote sustainability and include specific actions to avoid environmental impacts associated with future park and recreational facility improvements or expanded uses.

The EIR prepared for the Parks Master Plan concluded that potential impacts resulting from future development of park and trail improvements would be avoided or minimized with implementation of the policies and actions included in the Master Plan, compliance with regulations, and implementation of mitigation measures specified in the EIR that would be applicable to types of park and recreational development specified in the EIR, which would

impacts to a less-than-significant level (City of Santa Cruz 2020). Therefore, cumulative development would not result in a significant cumulative impact related to potential physical impacts associated with provision of future new parks and recreational facilities to maintain service objectives.

Furthermore, the City imposes a "Parks and Recreation Facilities Tax" (pursuant to Chapter 5.72 of the Municipal Code) on new residential development (including mobile homes) within the City, payable at the time of issuance of a building permit. The collected taxes collected are placed into a special fund, and "shall be used and expended solely for the acquisition, improvement and expansion of public park, playground and recreational facilities in the city" (section 5.72.100).

Additionally, potential for increased use of existing parks resulting from cumulative development is expected to be spread throughout the City so that no substantial deterioration would occur at any one facility. Cumulative impacts resulting from citywide development growth, including the project, UCSC growth, and other development would not result in a significant cumulative impact to parks such that a substantial deterioration would occur at any one park or recreational facility within the City. Furthermore, a new arena could be programmed to accommodate public recreational events during the Santa Cruz Warriors offseason, thereby expanding recreational opportunities to the surrounding neighborhood and community that would reduce the project's contribution to a cumulative impact.

Therefore, cumulative development would not result in a significant cumulative impact on parks and recreational facilities.

Utilities

The geographic area for consideration of cumulative impacts would be the City of Santa Cruz service area in which the project area is located. All City services supplied to the project area include the entire City, except for water and wastewater treatment services, which also include areas located outside the City.

Water Supply

Background on the existing and projected future demand and supplies is provided in Chapter 15 Utilities and Service Systems, which indicates that supplies are adequate in the near term (to 2030) under normal and single-dry year periods, but there would be a shortage of four to twenty three percent in years four and five of the multiple dry year scenario. After 2030, the analysis shows no shortages through 2040. However, by 2045 the analysis shows a slight shortfall (approximately three percent) in normal, single dry and all years of a multiple dry period.

Under the climate change scenario in the near term, the analysis shows a four percent shortage in a single dry year and nineteen to fifteen percent shortages in years four and five of a multi-year drought. Under the climate change scenario after 2030, the analysis shows four to seven percent shortages in year five of a multi-year drought through 2040. Under the climate change

scenario by 2045 the analysis shows a slight shortfall (approximately three percent) in normal, single dry and years one through four of multi-year drought and a larger ten percent shortage in year five of a multi-year drought.

Although the demand projected for 2045 is 3,000 MG, the maximum demand modeled in the Confluence® model was 2,900 MG. While this results in an apparent three to ten percent shortage in the 2045 scenarios, it is anticipated that the modeled shortages would have been smaller or absent if Confluence® model runs had been completed using 3,000 MG as the maximum demand.

Cumulative development shown in Table 16-1: City of Santa Cruz Cumulative Projects was included in the 2024 updated water demand projections, which also included updated projections within the City's water service area. Overall, the updated demand projection is higher in 2045 (3,000 MGY) than the 2,800 MGY projection identified in the 2020 UWMP. The 2024 water demand projections also account for additional growth in the City and service area within unincorporated Santa Cruz County beyond the cumulative development projects considered in this EIR. Total water demand within the City's water service area would increase from a current demand of approximately 2,600 MGY to a forecasted demand of 3,000 MGY in 2045 based on the 2024 updated demand projections.

Without augmented water supplies, cumulative development and associated water demand during dry periods would result in a potentially significant cumulative impact on water supplies. Water demand resulting from cumulative development projects, would lead to potential near-term shortfalls (2025-2030) depending on the level of development construction, and also negligible shortfalls (approximately four percent) in the fifth year of a multi-year drought under climate change forecasts to the year 2040 and in normal, single dry year and multiple dry years by the year 2045, with a slightly higher shortfall in the fifth year of a multi-year drought. This is considered a *significant cumulative impact* without implementation of the City's water supply augmentation projects and strategies.

The City is currently planning for water supply augmentation through its SOWF Policy and Water Supply Augmentation Implementation Plan, which the City anticipates would meet projected supply under worst-case conditions (City of Santa Cruz Water Department 2024). Furthermore, projected increases in water demand within the service area are not expected to drive the size or timing of needed water supply augmentation projects. Longer dry periods under the climate change scenario are the primary factor driving the need to augment the City's water supply.

Future development resulting from the project would contribute to significant cumulative impacts related to water supply availability over the next 20 years. However, all development projects would be subject to City requirements for installation of water-conserving fixtures and landscaping in accordance with current Municipal Code and building requirements. Under multi-year drought conditions, the project, like other City customers, could be subject to water use restrictions. The increase in water demand due to the project would not substantially

exacerbate water supply reliability in the future or during a drought because the amount of additional demand associated with development resulting from the project over the next 20 years when spread across all service area customers would not result in any noticeable increase in the timing or extent of curtailment in customer use that would otherwise be implemented during drought conditions.

In addition, the project would pay the required "System Development Charge" that is required for a new or upgraded service connection or where a project adds new residential uses. This charge, as set forth in Chapter 16.14 of the Municipal Code, funds public water system improvements, and is assessed so projects pay the proportional share of the costs of new and existing water facilities necessary to meet the demand resulting from new or enlarged water services. This charge is intended to mitigate the water supply impacts caused by new development in the City's water service area, and the funds are used for construction of public water system improvements and conservation programs.

Payment of the System Development Charge and implementation of other water conservation measures would mitigate the project's contribution to cumulative water supply impacts. Therefore, the project's incremental contribution to a significant cumulative water supply impact would not be cumulatively considerable.

Wastewater Treatment

The geographical area for the analysis of cumulative wastewater impacts includes the area served by the City's wastewater treatment facility (WWTF), which includes the City of Santa Cruz and lands within the Santa Cruz Sanitation District (south to Seascape) and two small county service areas. The City and County each have specified rights to treatment capacity.

Wastewater generated by cumulative growth within the City is estimated at approximately 0.4 mgd based on estimated water use and factoring out landscaping water use. There is adequate remaining capacity within the City's treatment allocation (4.0 mgd remaining) to accommodate cumulative growth, including the project. Thus, cumulative impacts on wastewater treatment would be *less-than-significant*.

Solid Waste

The geographic area considered for the analysis of cumulative impacts related to solid waste generation and landfill capacity is the area served by the City's Resource Recover Center (RRF). As indicated above, the City's RRF has a remaining capacity of approximately 5.3 million cy and an estimated closure year of 2054 (City of Santa Cruz 2021c).

Construction and operation of past, present, and reasonably foreseeable future projects in the City would require disposal at the City's RRF. Cumulative development described in Table 16-1: City of Santa Cruz Cumulative Projects could generate a net increase in solid waste of

approximately 18 tons per day, or 6,701 tons per year, based on estimated solid waste generation rates provided by CalRecycle.[18]

As indicated above, the RRF has a maximum permitted daily solid waste throughput capacity of 535 tons (CalRecycle 2024b), and in 2023, an average of 180 tons per day (approximately 34% of daily capacity) were disposed of at the RRF (CalRecycle 2023). Therefore, the RRF would be expected to have sufficient capacity to accommodate the net increase in solid waste generated from cumulative development, estimated to be approximately 18 tons per day, plus the net increase of solid waste generated from the project, estimated to be 1.55 tons per day, while still remaining well below its maximum permitted daily solid waste throughput capacity.

Furthermore, cumulative projects would be required to adhere to applicable solid waste regulations, including the California Integrated Waste Management Act and related regulations, which would serve to continue to require reduction, recycling, and reuse to reduce the amount of solid waste sent to landfills. Therefore, given regulatory requirements related to reuse and recycling, as well as remaining landfill capacities, area landfills would have adequate capacity to serve cumulative development, and cumulative impacts on landfill capacity would be *less-than-significant*.

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17 Alternatives

17.1 Introduction

According to State CEQA Guidelines (section 15126.6), an EIR shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. The guidelines further require that the discussion focus on alternatives capable of eliminating significant adverse impacts of the project or reducing them to a level of insignificance even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly. The alternatives analysis also should identify any significant effects that may result from a given alternative. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible.

The lead agency is responsible for selecting a range of potentially feasible project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives is governed by a "rule of reason" that requires the EIR to set forth only those potentially feasible alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the project. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. Alternatives in an EIR must be "potentially feasible." Agency decision makers ultimately decide at the time they consider project approval whether any of the alternatives reviewed in an EIR are "actually feasible."

"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (State CEQA Guidelines, section 15364). Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or already owns the alternative site). None of these factors establishes a fixed limit on the scope of reasonable alternatives. The concept of feasibility also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. Moreover, feasibility under CEQA encompasses "desirability" to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors.

17.2 Summary of Impacts and Project Objectives

17.2.1 Significant Project Impacts

The following potentially significant impacts have been identified. Impacts AQ/GHG-3, BIO-3 and CUL-3 can be mitigated to a less-than-significant level, but Impact CUL-1 cannot and is therefore a significant unavoidable impact.

> AQ/GHG-3: Exposure of Sensitive Receptors. Future development accommodated by the project would potentially expose sensitive receptors to substantial pollutant concentrations during short-term construction but not during long-term operations (AIR-c).
>
> BIO-3 (*DPA EIR Impact 4.3-3*): Indirect Impacts to Nesting Birds. Future development as a result of the project could result in disturbance to nesting birds if any are present in the vicinity of construction sites along the San Lorenzo River (BIO-d).
>
> CUL-1 (*DPA EIR Impact 4.4-2*): Historical Resources. Future development accommodated by the proposed plan amendments could result in impacts to historical resources (CUL-1) due to alteration or modification of historical buildings.
>
> CUL-3 (*DPA Impact 4.4.-1*): Tribal Cultural Resources. Future development accommodated by the project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 resource (CUL-4).

17.2.2 Summary of Project Objectives

The project objectives developed by the City are described in Section 3.3 Project Objectives and address topics related to housing, mixed-use development, economic growth, mobility and connectivity, and responsible growth.

17.2.3 Scoping Issues Addressed

Public and agency comments related to alternatives were received during the public scoping period in response to the Notice of Preparation (NOP) (see Appendix A). Issues raised in these comments include:

- Analyze a baseline (No Project) alternative utilizing existing height and Floor Area Ratios but with maximum allowable density bonuses.
- An alternative using the project building heights and housing unit counts and assuming the maximum allowable State Density Bonus.
- Analyze a project alternative with smaller sized housing units so as to minimize the height and floor area.

- Analyze an alternative that does not alter views from Beach Hill and Main (Cowell) Beach.
- Analyze alternatives with maximum building heights of 5, 10, 15, and 17 stories.
- Evaluate alternatives to the proposed new height standards that meet most of the project objectives but also reduce potential aesthetic impacts.

17.3 Alternatives Analysis

Section 15126.6(c) of State CEQA Guidelines indicates that the range of potential alternatives shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. In developing the alternatives, consideration was given to modification and/or elimination of Project elements or recommendations that would eliminate or substantially reduce identified significant impacts while attaining most of the project objectives.

The EIR also should identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts.

17.3.1 Alternatives Eliminated from Further Consideration

The EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts. The following alternatives were considered but dismissed from further consideration as explained below.

No Downtown Density Bonus

As described in Section 3.7.2 Density Bonus, the project includes two options for a future development project to take advantage of a Downtown Density Bonus in lieu of utilizing a State Density Bonus, namely:

Option A: A qualifying proposal would be allowed to build up to twelve stories and 145 feet in height and up to 6.125 FAR (3.5 FAR base + 75% bonus) if the project agrees to go through a discretionary process that includes review by an Architectural Review Committee for recommendations to support high quality design and materials as well as a Planning Commission Subcommittee to review materials at the Building Permit stage.

Option B: A qualifying project would be allowed to build up to a height of 85 feet with no limit on FAR if the project agrees to go through a discretionary process that includes review by an

Architectural Review Committee for recommendations to support high quality design and materials as well as a Planning Commission Subcommittee to review materials at the Building Permit stage.

The goal of the Downtown Density Bonus is to be more attractive to developers than the State Density Bonus and thereby be more consistent with the project objectives. These include providing additional housing to help the City meet its Regional Housing Needs Allocation, increasing the total number of housing units in the City, and encouraging a mix of housing types and affordability levels. The discussions below explain how development in the project area would be shaped under a scenario where the City's Downtown Density Bonus could not be applied in the project area.

On-Site Below-Market Rate

At their January 2023 meeting, the City Council provided direction to City staff that included a provision that the project include 1,600 housing new housing units of which 20% of them (320 units be available at below-market rate (BMR) rent or sales price. Under the California State Density Bonus Law, required percentages of affordable units pursuant to inclusionary requirements and State Density Bonus requirements 1) are based on the initial, base project, before any bonus units are added to the project, and 2) are not mutually exclusive, meaning that affordable units meeting the State Density Bonus requirement count towards meeting the City's inclusionary requirement and vice versa. This means that for a project using the State Density Bonus, the City's 20% inclusionary requirement ends up generating BMR units that are just over 13% to around 15% of the project's total units, depending on the number of bonus units included. Therefore, to achieve the goal of a final yield of BMR housing that is no less than 20% of all new units, the requirements on the base projects will need to be greater than the current inclusionary requirements.

Under current market conditions in the Downtown Plan area, the 50% density bonus is the upper limit of the most common bonus pursued by market rate developers in the downtown area, so City staff has been using a 50% bonus as a standard for calculation. The City cannot readily increase the current inclusionary requirement to 30% to achieve a 20% total unit outcome in a 50% Density Bonus scenario. The level of subsidy required for private housing developers to meet that kind of standard is higher than any financial model has found to be feasible for housing in Santa Cruz. The Downtown Density Bonus is designed to create a new local incentive to compete with the State Density Bonus and entice developers to instead follow City policies. If the incentives are right, housing development could increase the percentage of BMR units tied to the project and commit developers to following local standards such as Council's desired 12-story height limit.

The Downtown Density Bonus proposes to grant the development bonus as additional FAR, rather than a number of units based on a set of base plans. This method eliminates any disadvantage for buildings required to incorporate commercial ground floor space, because the bonus is based on the total building FAR, not just the residential portion of the building.

Further, the proposed bonus would offer more development potential than could be achieved through the 50% State Density Bonus. By offering a 75% bonus on the base FAR in Option A and unlimited FAR in Option B, the Downtown Density Bonus offers more options for feasible development projects, making the City program more attractive than the State Density Bonus.

Off-Site Below-Market Rate

The State Density Bonus does not allow for BMR units to be constructed off-site. The Downtown Density Bonus would allow off-site construction of BMR units as part of 100% BMR development projects. This would create a greater total amount of BMR housing and allow those units to be provided at a deeper level of affordability. 100% BMR projects can qualify for public funding that can allow Very-Low- and even Extremely-Low Income households to be served. These levels of subsidy are challenging to provide in any substantial number as part of market rate development. Because of additional public financing options related to building a 100% BMR project versus inclusion of the units into a market rate project, offering an off-site option would create a better economic incentive and can support a higher percentage of BMR units as compared to the on-site option.

Ability to Meet Project Objectives and/or Avoid/Minimize Significant Impacts

While this No Downtown Density Bonus alternative would partially meet the project objectives, it would not maximize the number and type of affordable housing units that could be built. The Downtown Density Bonus would create a greater number and greater percentage of housing units that are restricted to below-market rate costs than would be created by projects using the State Density Bonus to build similar projects. While the depth of affordability creates a tradeoff between the two Density Bonus programs, the Downtown Density Bonus seeks to achieve a minimum of 20% of the *total* new housing at below-market costs, in contrast to the State Density Bonus which typically creates 11%-15% of the total new housing at below-market cost.

The Downtown Density Bonus mix of BMR units promotes economic diversity in the downtown area. Projects using the State Density Bonus will typically have Very-Low, Low-, and Above-Moderate Income units, and projects consisting of 100% BMR units will typically have Very-Low and Extremely-Low Income units. The incentive structure in existing State Density Bonus policy and in state and federal funding currently focuses on creating and supporting these lower-income households, leaving Moderate Income households with few options in high-cost areas where they still fall below the income needed to easily afford market rate housing.

While excluding the Downtown Density Bonus would meet most of the project objectives, it would not fully promote development of downtown housing for more diverse economic segments of the community. As such, this No Downtown Density Bonus alternative was determined to be infeasible as a policy because it is inconsistent with the City's decisionmakers' prior direction and intent for the implementation of the Downtown Density Bonus and therefore it was eliminated from further consideration.

No Spruce Street Plaza / Realignment of the Laurel Street Extension

The existing alignment of the Laurel Street Extension extends from the western terminus of Spruce Street adjacent to the Santa Cruz Riverwalk and south along the San Lorenzo River to Third Street and the Beach Hill neighborhood. The proposed re-alignment would create a new road south of Spruce Street accessed from Front Street along the toe of the hillside to the Laurel Street Extension.

Future development without the Spruce Street Plaza and realignment of the Laurel Street Extension would still occur under this alternative. Impacts would be similar to those analyzed for the project and no significant impacts would be avoided or reduced.

This alternative was eliminated from further analysis because it would not meet many of the project objectives for increasing public amenities, supporting mixed-use development, and improving mobility and circulation in the project area. This includes creating a new Spruce Street Plaza, reconfiguring block sizes, and improving pedestrian access to the San Lorenzo River. Therefore, this alternative was eliminated from further consideration.

17.3.2 Alternatives Considered

Based on the above discussion, the following section evaluates the following alternatives:

- No Project Alternative: Required by CEQA
- Alternative 1: Reduced Project
- Alternative 2: Restricted Building Heights on Blocks B & D

Each alternative is described and analyzed below, including the ability of each alternative to meet project objectives.

No Project Alternative

Section 15126.6(e) of the State CEQA Guidelines requires that the impacts of a "no project" alternative be evaluated in comparison to the project. Section 15126(e) also requires that the No Project Alternative discuss the existing conditions that were in effect at the time the Notice of Preparation was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

Project Description

Under the No Project Alternative, the project would not be approved and therefore the identified project impacts would not occur in the manner analyzed by this EIR. For the purpose of the Alternatives discussion, the No Project Alternative assumes that in the foreseeable future, proposed amendments to the Downtown Plan, General Plan, Local Coastal Program (LCP), zoning, and Beach/South of Laurel Comprehensive Area Plan (B/SOL Area Plan) would not be adopted. Thus, any future redevelopment of the area would be subject to provisions of the

City's existing adopted plans and zoning, as well as provisions of State law. Since redevelopment of the project area is encouraged in the City's General Plan and Beach / South of Laurel Comprehensive Area Plan to provide future development and housing, it is likely that some form of mixed-used commercial-residential projects would be proposed at some point in the future, although the type and timing of such projects are not known at this time. Based on City staff estimates, approximately 1,050 residential units could be developed under existing land use designations and zoning, and a reduction in existing commercial square footage could be expected with future redevelopment in the DPE area. Thus, future redevelopment under the No Project alternative could result in potentially around 260 fewer residential units than could potentially be developed under the project, excluding the option of any Density Bonus. The No Project Alternative could result in development that uses a State or Local Density Bonus to exceed development standards for height, FAR, residential density, stepback requirements, and any other standards restricting the potential development envelope of a project within the limits established by the State Density Bonus Law or local policy. Construction of a new arena would not be specifically supported in the absence of the project, but could be proposed in the future, which would require General Plan, LCP and zone district amendments.

Impacts

The No Project Alternative would not have substantially different impacts than the project because the No Project Alternative allows for substantial redevelopment of the project area over time, including projects that utilize a density bonus. While development of residential units could be somewhat lower under the No Project Alternative, the impacts related to redevelopment of the project area identified in this EIR could occur at some time in the future depending on the redevelopment proposal.

Cultural Resources – Historical Resources

Future redevelopment of properties could still result in the demolition of some or all of the five structures listed in the City's Historic Building Survey and seven residential structures and 15 commercial structures that are over or near 50 years in age in the project area. Therefore, because the potential for permanent loss of a historic resource cannot be precluded, potential impacts to historical resources could remain significant and unavoidable under the No Project alternative.

Cultural Resources – Tribal Cultural Resources

Future redevelopment could occur under this alternative, and Impact CUL-3 would continue to be a potentially significant impact, similar to the project. Mitigation (MM CUL-3.1 Cultural Sensitivity Training and Tribal Monitoring) requested from two Native American tribes to include construction worker training and monitoring during construction would still be required to reduce impacts to a less-than-significant level.

Air Quality/GHG Emissions – Exposure to Sensitive Receptors

Future development would occur under this alternative and Impact AQ/GHG-3 would continue to be a potentially significant impact, similar to the project. Due to the potential for future development under this alternative to expose sensitive receptors to substantial pollutant concentrations and associated health risk during construction, MM AQ/GHG-3.1: Construction Equipment Exhaust Control would still be required to reduce impacts to a less-than-significant level.

Biological Resources – Nesting Birds

Future development would occur under this alternative and Impact BIO-3 would continue to be a potentially significant impact, similar to the project. This was considered a potentially significant impact in the DPA EIR and would also be a potentially significant impact resulting from future development accommodated by the project. The DPR EIR includes Mitigation 4.3-3, which requires pre-construction nesting surveys. This measure would also be applicable to Alternative 1 and would reduce the impact to a less-than-significant level. Future development under existing policies and regulations under this alternative would result in development located further from the San Lorenzo River, eliminating potential indirect impacts to sensitive habitat and wildlife species.

Other Impacts

Future development in the project area under the No Project Alternative would be subject to existing regulations regarding building heights and FAR, which could be exceeded with waivers and/or concessions approved as part of density bonuses approved pursuant to State Density Bonus Law. Similar to the project, there would be no significant impacts on scenic views or scenic resources, nor conflicts with applicable zoning or other regulations governing scenic quality, and these impacts would remain less-than-significant.

Due to the reduction in the number of potential residential units, operational impacts associated with air quality and greenhouse gas emissions would be reduced due to fewer vehicle emissions and reduced operational energy requirements. These impacts would remain less-than-significant.

Similarly, impacts associated with public services (fire or police protection facilities, schools, or parks) and utilities and service systems (water supply, wastewater treatment, solid waste, and energy) would result in slightly reduced demand for services. However, new or expanded fire protection facilities would be needed, as they are currently and with the proposed project, but no new facilities would be anticipated for other public services, similar to the proposed project, resulting in less-than-significant impacts to public services and utilities.

Impacts associated with hydrology and water quality, noise and vibration, and land use and planning impacts would remain unchanged. Impacts associated with population and housing and transportation would be slightly reduced due to potential reduction of around 260

residential units exclusive of any density bonus and the fact that a new arena would not be specifically supported.

Ability to Meet Project Objectives

The No Project alternative would not meet all of the project objectives. In particular, the objectives to improve mobility and connectivity and to create new public amenities would not be met. Additionally, the project objectives to provide additional housing, including below market rate housing and future development with a mix of uses would only be partially met with potentially fewer residential units. Objectives to promote economic growth would only be partially met. Economic growth objectives related to a new arena would not be met.

Alternative 1: Reduced Project

Project Description

Alternative 1 would maintain the existing General Plan and zoning designations in the project area. As shown in Figure 3-11 Existing and Proposed General Plan/LCP Land Use Map, the General Plan and LCP designations on Blocks B and D would remain High Density Residential (30.1 – 55 DUs/acre), and Block H would remain Medium Density Residential (20.1 – 30 DUs/acre) (instead of being designated Regional Visitor Commercial like the remainder of the project area as proposed). As shown in Figure 3-12 Existing and Proposed Zoning Map, zoning designations in the project area would remain CBD-E Subdistrict Lower Pacific Avenue, R-H Multiple Residence – High Density, R-M Multiple Residence – Medium Density, and R-T (C) Beach Commercial (instead of being designated CBD Central Business District as proposed).

Development intensity in the Regional Visitor Commercial designation is governed by a floor area ratio (FAR) of 3.5. Changing the General Plan designations would have resulted in an estimated residential development capacity of 1,310 units exclusive of any density bonus, and up to 1,800 units assuming some sites pursue density bonus projects increasing development capacity by 50% or more. Under this Alternative 1, an estimated 1,050 units could be built exclusive of any density bonus, representing a reduction of about 260 residential units in the base case (20% less than proposed project). Because commercial development is permitted in the High and Medium Density Residential designations, this alternative assumes a future buildout of up to 60,000 sf of ground-floor retail for a net decrease of 16,700 sf, similar to the project.

Building heights on Blocks B, D and H would be governed by existing zoning. The R-H Multiple Residence – High Density (Blocks B and D) and R-M Multiple Residence – Medium Density (Block H) designations allow a maximum building height of 48 and 35 feet, respectively (exclusive of density bonus). Development standards associated with building stepbacks (tapering) would be the same as the project, as would the requirement to prepare visual renderings for all future development and redevelopment proposals, since those standards from the new plan would apply to the sites even if their existing General Plan and Zoning designations do not change. Alternative 1 could result in development that uses a State or Local

Density Bonus to exceed development standards for height, FAR, residential density, stepback requirements, and any other standards restricting the potential development envelope of a project within the limits established by the State Density Bonus Law or local policy.

Impacts

Under this alternative, the identified significant unavoidable impact CUL-1 related to historical resources would remain unchanged. The identified significant impact AQ/GHG-3 related to exposure to sensitive receptors would be slightly reduced. The identified significant impacts BIO-3 and CUL-3 would remain unchanged. No new significant impacts would occur under this alternative. Other identified less-than-significant impacts would be remain the same as the project or slightly reduced in magnitude due to the reduction in the number of housing units.

Cultural Resources – Historical Resources

Future development could still require the demolition of some or all of the five structures listed in the City's Historic Building Survey and seven residential structures and 15 commercial structures that are over or near 50 years in age in the project area. Therefore, because the potential for permanent loss of a historic resource cannot be precluded, potential indirect impacts to historical resources under Alternative 1 would remain significant and unavoidable.

Cultural Resources – Tribal Cultural Resources

Future development could occur under this alternative, although at a slightly reduced amount. However, future development would continue to result in site disturbance, as would also occur under the proposed project, and Impact CUL-3 would continue to be a potentially significant impact, similar to the project. Mitigation (MM CUL-3.1 Cultural Sensitivity Training and Tribal Monitoring) requested from two Native American tribes to include construction worker training and monitoring during construction would still be required to reduce impacts to a less-than-significant level.

Air Quality/GHG Emissions – Exposure to Sensitive Receptors

Future development would occur under this alternative, and Impact AQ/GHG-3 would continue to be a potentially significant impact, similar to the project. Due to the potential for the project to expose sensitive receptors to substantial pollutant concentrations and associated health risk during construction, MM AQ/GHG-3.1: Construction Equipment Exhaust Control would still be required to reduce impacts to a less-than-significant level.

Biological Resources – Nesting Birds

Future development would occur under this alternative, potentially resulting in tree removal and impacts to nesting birds if present, and Impact BIO-3 would continue to be a potentially significant impact, similar to the project. This was considered a potentially significant impact in the DPA EIR and would also be a potentially significant impact resulting from future development accommodated by the project. The DPR EIR includes Mitigation 4.3-3, which requires pre-construction nesting surveys. This measure would also be applicable to Alternative 1 and would reduce the impact to a less-than-significant level.

Other Impacts

Alternative 1 would reduce the maximum allowable building heights on Block B and the northern portion of Block D to 48 feet and 35 feet on Block H and the southern portion of Block D (exclusive of density bonus). Similar to the project, there would be no significant impacts on scenic views or scenic resources, nor conflicts with applicable zoning or other regulations governing scenic quality, and these impacts would remain less-than-significant.

Due to the reduction in the number of residential units, operational impacts associated with air quality and greenhouse gas emissions would be reduced due to less vehicle emissions and reduced operational energy requirements. These impacts would remain less-than-significant.

Similarly, impacts associated with public services (fire or police protection facilities, schools, or parks) and utilities and service systems (water supply, wastewater treatment, solid waste, and energy) would result in slightly reduced demand for services than with the proposed project due to a potential reduction in the number of residential units that could be developed. However, new or expanded fire protection facilities would be needed as currently exists and with the proposed project, but no new facilities would be anticipated for other public services, similar to the proposed project. Thus, these impacts would remain less-than-significant under Alternative 1.

Impacts associated with hydrology and water quality, noise and vibration, and land use and planning impacts would remain unchanged. Impacts associated with population and housing and transportation would be slightly reduced due to the reduction of 260 residential units (20% less).

Ability to Meet Project Objectives

This alternative would generally meet the project objectives by providing future development with a mix of uses, improving mobility and connectivity, and promoting economic and responsible growth. However, due to a reduction of housing units, this alternative would only partially meet the project objectives regarding supporting goals of the Housing Element, facilitating the development of new housing focused in the downtown area, and encouraging a mix of housing types and affordability levels.

Alternative 2: Restricted Building Heights on Blocks B & D

Project Description

Alternative 2 would restrict the maximum building heights on Blocks B and D to a maximum of 70 feet (exclusive of density bonus). This height limit would be consistent with parcels fronting the San Lorenzo River north of Laurel Street in the Downtown Plan area, as shown in Figure 3-15 Maximum Building Heights. The maximum building heights on Blocks A and C would remain at 85 feet, consistent with the project and existing building heights north of Laurel Street. All other design requirements, including building stepbacks, would be the same as the project.

This alternative would reduce the maximum allowable building heights by 15 feet on Blocks B and D as compared to the project but would not affect the amount of building area and would not change the number of residential units, as defined by the Floor Area Ratio Limit, that could be constructed on site. The Floor Area Ratio is a ratio between total site area and building floor area that regulates the total amount of square footage that can be built on a site. Height and FAR work together to dictate the volume and dimensions of a building, and in this case, by changing the height limit for these sites this alternative removes an allowance for slightly more variation in height on a property but does not impact the total amount of square footage that could be built, excluding consideration of any Density Bonus. Alternative 2 could result in development that uses a State or Local Density Bonus to exceed development standards for height, FAR, residential density, stepback requirements, and any other standards restricting the potential development envelope of a project within the limits established by the State Density Bonus Law or local policy.

Impacts

Under this alternative, the identified significant unavoidable impact CUL-1 related to historical resources would remain unchanged. The identified significant impact AQ/GHG-3 related to exposure to sensitive receptors would be similar to the project. The identified significant impacts BIO-3 and CUL-3 would remain unchanged. No new significant impacts would occur under this alternative. Other identified less-than-significant impacts would remain the same as the project.

Cultural Resources – Historical Resources

Future development could still require the demolition of some or all of the five structures listed in the City's Historic Building Survey and seven residential structures and 15 commercial structures that are over or near 50 years in age in the project area. Therefore, because the potential for permanent loss of a historic resource cannot be precluded, the project's indirect impact to historical resources would remain significant and unavoidable.

Cultural Resources – Tribal Cultural Resources

Future development would occur under this alternative, although at a slightly reduced amount than the proposed project. However, future development would continue to result in site disturbance as would occur under the proposed project, and Impact CUL-3 would continue to be a potentially significant impact, similar to the project. Mitigation (MM CUL-3.1 Cultural Sensitivity Training and Tribal Monitoring) requested from two Native American tribes to include construction worker training and monitoring during construction would still be required to reduce impacts to a less-than-significant level.

Air Quality/GHG Emissions – Exposure to Sensitive Receptors

Future development would occur under this alternative and Impact AQ/GHG-3 would continue to be a potentially significant impact, similar to the project. Due to the potential for the project to expose sensitive receptors to substantial pollutant concentrations and associated health risk

during construction, MM AQ/GHG-3.1: Construction Equipment Exhaust Control would still be required to reduce impacts to a less-than-significant level.

Biological Resources – Nesting Birds

Future development would occur under this alternative, potentially resulting in tree removal and impacts to nesting birds if present, and Impact BIO-3 would continue to be a potentially significant impact, similar to the project. This was considered a potentially significant impact in the DPA EIR and would also be a potentially significant impact resulting from future development accommodated by the project. The DPR EIR includes Mitigation 4.3-3, which requires pre-construction nesting surveys. This measure would also be applicable to Alternative 2 and would reduce the impact to a less-than-significant level.

Other Impacts

Alternative 2 would reduce the maximum allowable building heights on Blocks B and D to 70 feet (exclusive of density bonus). Any impacts related to population or construction would be the same as the project in this alternative. Aesthetics impacts would not substantially change. Similar to the project, there would be no significant impacts on scenic views or scenic resources, nor conflicts with applicable zoning or other regulations governing scenic quality, and these impacts would remain less-than-significant.

Operational impacts associated with air quality and greenhouse gas emissions would be the same as the project due to this alternative resulting in the same number of housing units, vehicle emissions and operational energy requirements. These impacts would remain less-than-significant.

Similarly, impacts associated with public services (fire or police protection facilities, schools, or parks) and utilities and service systems (water supply, wastewater treatment, solid waste, and energy) would result in the same demand for services as with the proposed project because there is no change in the number of residential units that could be developed. New or expanded fire protection facilities would be needed as currently exists and with the proposed project, but no new facilities would be anticipated for other public services, similar to the proposed project. Thus, these impacts would remain less-than-significant.

Impacts associated with hydrology and water quality, noise and vibration, and land use and planning impacts would remain unchanged. Impacts associated with population and housing and transportation would be the same.

Ability to Meet Project Objectives

This alternative would meet the project objectives of providing additional housing, future development with a mix of uses, improving mobility and connectivity, promoting economic growth and responsible growth.

17.4 Environmentally Superior Alternative

According to CEQA Guidelines section 15126.6(e), if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Furthermore, Sections 21002 and 21081 of CEQA require lead agencies to adopt feasible mitigation measures or feasible alternatives in order to substantially lessen or avoid otherwise significant adverse environmental effects, unless specific social or other conditions make such mitigation measures or alternatives infeasible. Where the environmentally superior alternative also is the no project alternative, CEQA Guidelines in Section 15126(d)(4) requires the EIR to identify an environmentally superior alternative from among the other alternatives.

Table 17-1: Comparison of Significant Impacts – Project and Alternatives, presents a comparison of project impacts between the project and the alternatives. None of the project alternatives, including the No Project Alternative, would avoid or substantially reduce identified significant impacts, and none would eliminate the identified significant and unavoidable impact to historical resources. Alternative 1 would result in reduced development potential than would occur with the proposed project, and Alternative 2 would not reduce development potential relative to the project.

Of the alternatives considered, Alternative 1 would best achieve the project objectives, and because it would slightly reduce development, potential impacts would be slightly reduced, even though the significant impacts would remain the same as the proposed project. Therefore, Alternative 1 is considered the environmentally superior alternative of the alternatives reviewed.

Table 17-1: Comparison of Significant Impacts – Project and Alternatives

Impact	Project	No Project	Alternative 1: Reduced Project	Alternative 2: Restricted Building Heights on Blocks B & D
AES-1: Scenic Views	LTS	NI	LTS	LTS
AES-3: Visual Character of the Surrounding Area	LTS	LTS	LTS	LTS
AES-4: Introduction of Light and Glare	LTS	LTS⇩	LTS	LTS
AQ/GHG-2: Criteria Pollutant Emissions	LTS	LTS⇩	LTS⇩	LTS⇩
AQ/GHG-3: Exposure of Sensitive Receptors	LTSM	LS	LTSM	LTSM
AQ/GHG-4: Objectionable Odors	LTS	LTS	LTS	LTS
AQ/GHG-45: GHG Emissions	LTS	LTS⇩	LTS⇩	LTS
BIO-1a (DPA EIR Impact 4.3-2): Impacts to Sensitive Riparian Habitat	LTS	NI	LTS	LTS
BIO-1b (DPA EIR Impact 4.3-1): Indirect Impacts to Special Status Species and Riparian and Aquatic Habitat	LTS	NI	LTS	LTS
BIO-2 (DPA EIR Impact 4.3-2): Indirect Impacts to Birds	LTS	LTS	LTS	LTS⇩
BIO-3 (DPA EIR Impact 4.3-3): Indirect Impacts to Nesting Birds	LTSM	LTSM	LTSM	LTSM
CUL-1 (DPA EIR Impact 4.4-2): Historical Resources	SU	SU	SU	SU
CUL-2 (DPA EIR Impact 4.4-1): Archaeological Resources	LTS	LTS	LTS	LTS
CUL-3 (DPA Impact 4.4.-1): Tribal Cultural Resources	LTSM	LTSM	LTSM	LTSM
HYDRO-1: Stormwater Drainage	LTS	LTS	LTS	LTS
HYDRO-2: Water Quality	LTS	LTS	LTS	LTS
HYDRO-3: Flood Hazards	LTS	LTS	LTS	LTS
NOI-1: Permanent and Temporary Noise Increases	LTS	LTS	LTS	LTS
NOI-2: Excessive Groundborne Vibration	LTS	LS	LTS	LTS
POP-1: Inducement of Substantial Population Growth	LTS	LTS⇩	LTS⇩	LTS⇩

Impact	Project	No Project	Alternative 1: Reduced Project	Alternative 2: Restricted Building Heights on Blocks B & D
POP-2: Displacement of People or Housing	LTS	LTS⇩	LTS⇩	LTS
Pub-1a (DPA EIR Impact 4.6-1a): Fire Protection	LTS	LTS	LTS	LTS
PUB-1b (DPA EIR Impact 4.6-1b): Police Protection	LTS	LTS	LTS	LTS
PUB-1c (DPA EIR Impact 4.6-1c): Schools	LTS	LTS	LTS	LTS
PUB-1d (DPA EIR Impact 4.6-1d): Parks	LTS	LTS	LTS	LTS
PUB-2 (DPA EIR Impact 4.6-2): Parks and Recreation	LTS	LTS	LTS	LTS
T-1: Conflict with Circulation Plan, Policy, or Ordinance	LTS	LTS	LTS	LTS
T-2: Conflict with VMT Thresholds	LTS	LTS	LTS⇩	LTS
T-3: Design-Safety and Emergency Access	LTS	LTS	LTS	LTS
UTIL-1 (DPA EIR Impact 4.8-1): Water Supply	LTS	LTS⇩	LTS⇩	LTS
UTIL-2 (DPA EIR Impact 4.8-2): Wastewater Treatment	LTS	LTS⇩	LTS⇩	LTS
UTL-3 (DPA EIR Impact 4.6-3): Solid Waste Generation	LTS	LTS⇩	LTS⇩	LTS
UTL-4: Solid Waste Generation	LTS	LTS⇩	LTS⇩	LTS
UTL-5 (DPA EIR Impact 4.6-4): Energy Use	LTS	LTS⇩	LTS⇩	LTS

NI = No Impact
LTS = Less than Significant
LTSM = Less than Significant with Identified Mitigation Measures
SI = Significant Impact
SU = Significant and Unavoidable Impact with Identified Mitigation Measures
⇧ = Impact of Greater Severity than Under the project
⇩ = Impact with Lesser Severity than Under the project

18 EIR Preparers

18.1 Agencies and Persons Contacted

City of Santa Cruz

- Fire Department: Tim Shields
- Planning and Community Development Department: Lee Butler, Samantha Haschert, Eric Marlatt
- Parks and Recreation Department: Mike Godsy, Leslie Keely, Noah Downing, Lindsay Bass
- Police Department: Jon Bush, Jose Garcia
- Water Department: Sarah Easley Perez
- Public Works Department: Matt Starkey, Katie Stewart, Bob Nelson, Claire Gallogly
- Economic Development: Bonnie Lipscomb, Brian Borguno

18.2 List of Preparers

City Staff

- Sarah Neuse, Senior Planner, Planning and Community Development Department
- Matt VanHua, Principal Planner, Planning and Community Development Department

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- Bill Wiseman, Project Director
- Daniel Vermeulen, Assistant Planner
- Peter Salindong, Graphics
- Frederik Venter, Transportation
- Colin Ogilvie, Transportation

Dudek

- Stephanie Strelow, Project Director
- Dave Compton, Biological Resources
- Matthew Morales, Air Quality, GHG Emissions, Energy
- Catherine Wade, Public Services, Utilities
- Mark Storm, Noise
- Carson Wong, Noise