



AGENDA
REGULAR MEETING OF THE OAKLEY PLANNING COMMISSION

Tuesday, May 6, 2025
6:30 PM

Oakley City Council Chambers located at 3231 Main Street, Oakley, California 94561.
Unless stated otherwise on the agenda, every item on the agenda is exempt from CEQA
Guidelines Sections 15060(c), 15061(b)(3), 15273, 15378, 15301, 15323 and/or Public
Resources Code Section 21065.

MISSION STATEMENT: The City of Oakley will create a resilient future that fosters and attracts a vibrant and evolving community that welcomes and values all people.

VISION STATEMENT: The City of Oakley celebrates our unique Delta lifestyle and small-town feel where we Live in a safe, dynamic community, **Work** together to build the future, and **Play** in our own backyard.

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A complete packet of information containing staff reports and exhibits related to each item is available for public review prior to an Oakley Planning Commission meeting at Oakley City Hall, 3231 Main Street, Oakley, CA 94561. Any writings or documents provided to a majority of the Oakley Planning Commission regarding any item on this agenda will be made available for public inspection, during regular business hours, in the Main Lobby of Oakley City Hall.

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Please keep cell phones/electronic devices turned off during the meeting. Please be advised that Oakley Planning Commission meetings are video recorded and attendees may appear on video.

Members of the public may address the Oakley Planning Commission on items of interest that

are within the City's jurisdiction. Public comment on items not listed on the agenda will be heard under the Public Comments section of the agenda. In compliance with State law, the Oakley Planning Commission may not take action on an item that is not specifically listed on the agenda. If you would like to speak on any agenda item, please fill out a public speaker card available in the lobby and submit it to the City Clerk prior to the agenda item being called. The Oakley Planning Commission Chair will call you by name to the podium to hear your comments and you have up to 3 minutes to speak.

1. OPENING MATTERS

1.1 Call to Order and Roll Call of the Oakley Planning Commission

1.2 Pledge of Allegiance to the Flag.

2. PUBLIC COMMENTS

At this time, the public is permitted to address the Planning Commission on non-agendized items.

3. CONSENT CALENDAR

Consent Calendar items are typically non-controversial in nature and are considered for approval by the Planning Commission with one single action. Members of the audience, Staff or the Planning Commission who would like an item removed from the Consent Calendar for purposes of public input may request the Chair remove the item. The public may request to remove an item(s) to provide input by completing a public speaker card and submitting it to the City Clerk prior to the item(s) being called by the Chair.

3.1 Approve Minutes from the Regular Planning Commission Meeting held April 1, 2025 (Kim Snodgrass, City Clerk)
[Minutes](#)

4. PUBLIC HEARINGS

4.1 Adoption of a Resolution Recommending the City Council Adopt the City of Oakley Climate Action Plan 2025 (Jose Cortez, Senior Planner)

Staff Recommendation: 1) Receive the Staff Report, 2) Receive Questions from the Planning Commission, 3) Open the Public Hearing, 4) Receive Public Testimony, 6) Close the Public Hearing, 7) Deliberate, 8) Summarize the Deliberation 9) Adopt the Resolution

[Staff Report](#)

- [1. Notice of Public Hearing](#)
- [2. City of Oakley Climate Action Plan 2025](#)
- [3. Public Comment Register](#)
- [4. Summary of Feedback Addressed](#)
- [5. Proposed Resolution](#)

4.2 Cypress Ranch (Formerly Burroughs) Subdivision 9557 Design Review and Final Development Plan (DR 25-01, FDP 25-01) (Evan Gorman, Associate Planner)

Staff Recommendation: 1) Receive the Staff Report 2) Receive Questions from

Staff Recommendation. 1) Receive the Staff Report, 2) Receive Questions from the Planning Commission, 3) Open the Public Hearing, 4) Receive Comments from the Applicant, 5) Receive Public Testimony, 6) Close the Public Hearing, 7) Deliberate, 8) Summarize the Deliberation 9) Adopt the Resolution

Staff Report

1. Vicinity Map
2. Public Hearing Notice
3. Originally Approved Plans
4. Applicants Plans
5. Proposed Resolution

5. REGULAR CALENDAR

5.1 Adopt a Resolution Appointing a Planning Commissioner Representative and Alternate to the TRANSPLAN Committee for a Two-Year Term (Ken Strelo, Community Development Director)

Staff Report

1. Proposed Resolution

6. REPORTS

6.1 Reports from Staff Members

6.2 OAKLEY PLANNING COMMISSION
(a) Reports from Commission Members
(b) Requests for Future Agendas

7. ADJOURN



Minutes of the Regular Meeting of the Oakley Planning Commission held April 1, 2025

1. OPENING MATTERS

1.1 Call to Order and Roll Call of the Oakley Planning Commission

Chair Diego Verduzco called the meeting to order at 6:30 p.m. in the Oakley City Council Chambers located at 3231 Main Street, Oakley, California. Vice Chair, Leonard Price and Commissioners Oleksii Chuiko, Kerry Harvey and Yared Oliveros were also present.

1.2 Pledge of Allegiance to the Flag.

Chair Verduzco led the Pledge of Allegiance to the Flag.

2. PUBLIC COMMENTS-None

3. CONSENT CALENDAR

3.1 Approve Minutes from the Regular Planning Commission Meeting held March 18, 2025 (Kim Snodgrass, City Clerk)

It was moved by Commissioner Chuiko and seconded by Commissioner Harvey to approve the Consent Calendar. Motion was unanimous and so ordered. (5-0)

4. PUBLIC HEARINGS

4.1 Town Place Suites Extension (EXT 2025-01) - Request to review an Extension for the previously approved Variance (VA 03-22) and Design Review (DR 10-22) for a 117-room, four story hotel, located at 5542 Bridgehead Road, northeast of the intersection of Main Street and Bridgehead Road. APN: 037-440-026-9 and 037-040-027-7 (Jose Cortez, Senior Planner)

Senior Planner Jose Cortez presented the report.

There were no questions from Commissioners, so Chair Verduzco opened the Public Hearing.

There were no public comments, so he closed the Public Hearing.

It was moved by Commissioner Harvey and seconded by Commissioner Chuiko to approve item 4.1. Motion was unanimous and so ordered. (5-0)

5. REGULAR CALENDAR

None

6. REPORTS

6.1 Reports from Staff Members

Community Development Director Ken Strelo reported the Second Climate Action Plan Workshop was held on March 20th and the next Planning Commission meeting will be on May 6th at 6:30.

6.2 OAKLEY PLANNING COMMISSION

(a) Reports from Commission Members

Commissioner Harvey reported she attended the Second Climate Action Plan Workshop.

(b) Requests for Future Agendas

None

7. ADJOURN

There being no further business, the meeting was adjourned at 6:38 p.m.

Respectfully Submitted,

Kim Snodgrass
City Clerk

DATE: May 6, 2025
TO: Joshua McMurray, City Manager
FROM: Jose Cortez, Senior Planner
SUBJECT: City of Oakley Climate Action Plan 2025 – Adoption of a Resolution Recommending the City Council Adopt the City of Oakley Climate Action Plan 2025

Approved and
Forwarded to the
Planning Commission

Summary

A Climate Action Plan (CAP) is a document that lays out a plan for how an agency will aim to reduce greenhouse gas (GHG) emissions, usually through decarbonization and greening efforts, and bolster infrastructural and community-wide resilience to the impacts of climate change. The City's project leads and its consultant partner, Cumming Group, have prepared the Climate Action Plan for adoption after a 14-month process that involved public workshops, a joint work session, and a public comment period on the draft CAP. The final document provides a roadmap to achieve the City's climate goals and to eliminate emissions from City operations by 2040 and to neutralize community-wide emissions by 2045.

Background and Analysis

The City of Oakley ("City") initiated the preparation of its Climate Action Plan on November 14, 2023, through City Council approval of the Request for Proposals and Qualifications ("RFP") for the purposes of securing planning consulting services to support the City in completing a Climate Action Plan (City Council Resolution 111-23). On March 26, 2024, the City of Oakley adopted Resolution 42-24 to formally develop a Climate Action Plan and engaged consultant Cumming Group to manage and execute this process.

The City of Oakley has engaged in a variety of past planning efforts to mitigate climate change impacts, including conducting prior greenhouse gas (GHG) inventories, addressing climate mitigation and adaptation topics in planning documents, and maintaining a variety of active climate mitigation and energy efficiency initiatives City-wide. The CAP will build upon the successes of prior efforts by establishing achievable goals for municipal and community-wide GHG reductions and climate adaptation in the City of Oakley. The CAP will align with the State of California's GHG emissions reduction targets to achieve carbon neutrality by 2045, which includes a 48% reduction in GHG emissions from 1990 levels by 2030. The CAP will further establish plans for community-wide climate and social resilience in the face of climate change, aligned with state-wide best practices and recommendations. In alignment with federal and state



guidelines, as well as various City plans, the CAP best positions the City to access funding for future activity implementation outlined in the document.

The CAP aims to achieve carbon neutrality by outlining 14 overarching goals supported by 39 quantitative or time-bound targets and accompanying specific actions across four sustainability categories: Governance and Leadership, Buildings and Energy, Transportation and Land Use, and Adaptation and Resilience. This roadmap is intended to guide the CAP's implementation, identifying 113 specific actions that the City can take towards the CAP goals and targets with information about estimated cost and emissions impacts. The 113 actions provide the City with a menu of actions and flexibility in the implementation of the number of actions used.

Planning Process

PUBLIC ENGAGEMENT

As part of the development of the CAP, City Staff and Cumming Group held 2 public workshops, a joint work session between the City Council and Planning Commission, and provided a public comment period on the draft document. The two public workshops provided different approaches for the public's engagement. The first workshop held on November 18, 2024, focused on introducing the public to the concept of the CAP, the goals of the document, and receiving input on what the public wants to see as part of the document's adoption and implementation. The second workshop held on March 20, 2025, provided the public with a more focused approach where Cumming Group presented the CAP Goals and Targets and asked the public to participate in a Stoplight Poll. The poll allowed the public to provide feedback on the goals and targets that would be outlined in the CAP. The Cumming Group and Staff compiled the feedback from both workshops and implemented feedback throughout the document.

On January 28, 2025, the City of Oakley held a public Joint Work Session between the City Council and the Planning Commission with the goal of reporting out on the progress on the City of Oakley's CAP and review of the initial menu of goals, targets, and actions for the plan. The City Council and Planning Commission provided feedback on the four sustainability categories (Governance and Leadership, Buildings and Energy, Transportation and Land Use, and Adaptation and Resilience) presented by the Cumming Group and Staff.

PUBLIC COMMENT RECEIVED

The Public Draft Climate Action Plan was released for public comment on March 13, 2025, and closed on April 9, 2025. During the comment period, staff received approximately 85 different comments from participants of the second public workshop and comment letters via email. A Public Comment Register and a Summary of Feedback Addressed are included as attachments to this Staff Report.



IMPLEMENTATION, MONITORING, AND REPORTING

Implementation of the CAP includes a multifaceted approach. Once adopted, the CAP outlines a series of steps to guide the implementation process. The CAP suggests that the City will first convene decision-makers after adoption to review all actions within the CAP and prioritize based on select criteria to determine which items can be implemented in the short term (i.e., 0-2 years), medium term (i.e., 3-5 years), and long term (more than five years).

As items are prioritized, actions will be folded into budgetary and project planning, at which point the City will evaluate its capacity and determine where it can use existing resources to implement, as well as where it may need to secure external funding. The CAP further outlines the process for monitoring and reporting on its progress, inclusive of assigning responsibility to appropriate departments; establishing a Steering Committee to integrate CAP implementation into existing workflows; and routinely updating inventories, reporting progress on the CAP; and updating the CAP every five years.

California Environmental Quality Act (“CEQA”)

Pursuant to the California Environmental Quality Act (“CEQA”) Guidelines Section 15060(c), the Climate Action Plan is potentially considered a project under CEQA. Pursuant to CEQA Guidelines Section 15061(b)(3) the activity is covered by the “Common Sense” Exemption that excludes projects where “The activity is covered by the general rule that CEQA applies only to projects, which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.”

The Climate Action Plan does not propose any specific development projects, rather it establishes goals, quantitative or time-bound targets and accompanying specific actions across four sustainability categories.

Consistency with the Oakley Strategic Plan 27+

Work on the Climate Action Plan is consistent with the Strategic and Thoughtful Growth Objectives within Oakley’s Strategic Plan 27+, as it furthers the City’s efforts to encourage objective decision-making versus subjective decision-making for application approvals to meet Oakley’s vision and economic goals. This is done by focusing on formal plans and study outcomes.

The Climate Action Plan aligns with the City of Oakley’s Strategic Plan 27+ objectives, specifically the Strategic and Thoughtful Growth objective, by promoting environmental stewardship through goals related to energy efficiency, air quality, and greenhouse gas



emissions. The Strategic Plan further recommends adoption and implementation of a Climate Action Plan by 2025 that meets the State's greenhouse gas reduction targets and supports the broader goals of the Oakley General Plan. The Climate Action supports the objectives and goals outlined in the Strategic Plan.

Fiscal Impact

The City had budgeted \$100,000 for adoption of the CAP. The contract with Cumming Group was approved by the City Council on March 26, 2024, for an amount not to exceed \$99,947.81. The contract amount is covered by appropriate funds under Consulting administered by the Planning Division in the General Fund. City Staff time and materials are covered as part of regular salaries under the General Fund.

There are no immediate financial obligations with the adoption of the CAP. However, additional funding would be required to be allocated and found for implementation of various action items within the CAP. When funding is necessary for implementation of an action, Staff will present financial considerations to the City Council at that time. It should be noted that Staff will also seek state and federal funding through grants and payment programs to aide in CAP activity implementation.

Staff Recommendation

Staff recommends the Planning Commission adopt a resolution recommending the City Council adopt the City of Oakley Climate Action Plan 2025.

Attachments

1. Notice of Public Hearing
2. City of Oakley Climate Action Plan 2025
3. Public Comment Register
4. Summary of Feedback Addressed
5. Proposed Resolution





NOTICE OF PUBLIC HEARING

Notice is hereby given that on **May 6, 2025 at 6:30 p.m.**, or as soon thereafter as the matter may be heard, the Planning Commission of the City of Oakley will hold a Public Hearing at the Council Chambers located at 3231 Main Street, Oakley, CA 94561 for the purposes of considering application as described below:

Project Name: City of Oakley Climate Action Plan (CAP) 2025

Project Location: Citywide

Applicant: City of Oakley, 3231 Main Street, Oakley, CA 94561

Request: Planning Commission receive a presentation on the City of Oakley Climate Action Plan (CAP) 2025 for the purposes of receiving public comments and making recommendations to the City Council on adoption of the Climate Action Plan. More information on the City of Oakley Climate Action Plan can be found at : <https://www.oakleyca.gov/232/Environmental-Programs>

How to Review: The Staff Report and its attachments will be available for public review, on or before **April 29, 2025** at City Hall, 3231 Main Street, Oakley, CA 94561 or online at <https://www.oakleyca.gov/129/Agendas-Minutes> by navigating to the **May 6, 2025 Planning Commission** agenda and clicking the project title link. (Note: City Hall is closed on the 1st and 3rd Fridays of each month). Interested persons are invited to submit written comments prior to and may testify at the public hearing. Written comments may be submitted to Jose Cortez, Senior Planner at the City of Oakley, 3231 Main Street, Oakley, CA 94561 or by email to JCortez@ci.Oakley.ca.us.

NOTICE IS ALSO GIVEN pursuant to Government Code Section 65009(b) that, if this matter is subsequently challenged in Court by you or others, you may be limited to raising only those issues you or someone else has raised at a Public Hearing described in this notice or in written correspondence delivered to the City of Oakley City Clerk at, or prior to, the Public Hearing.

Climate Action Plan

2025



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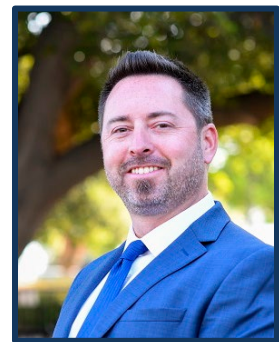
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FOREWORD

To the residents of Oakley,

Climate change poses challenges to our city. As greenhouse gases and air pollutants are released, they contribute to changing environmental conditions that may impact our community. Since its incorporation in 1999, Oakley has grown into a strong and thriving city—one with great potential and much to preserve for future generations.

In our 5-Year Strategic Plan 2027+ (SP27+), we established a clear vision for Oakley's future, including responsible environmental management. As part of this effort, we present this Climate Action Plan, which outlines strategies to improve the sustainability of City operations by 2040, reduce community-wide emissions by 2045, and strengthen our ability to address environmental challenges. SP27+ identified key goals to support community and economic development, including the adoption of a climate action plan. Thanks to your input, we have taken this first step.



We appreciate the contributions of City staff, consultants, and—most importantly—the Oakley residents who helped shape this plan. This plan reflects the community's priorities and commitment to long-term sustainability. The work ahead will require careful planning and collaboration to implement the outlined strategies in a way that supports broader community initiatives and priorities.

Moving forward, we invite you to be part of this effort. Together, we can continue to foster a strong and resilient Oakley. We look forward to working alongside you to help ensure a stable and prosperous future for our city.

Shannon Shaw

Mayor

Joshua McMurray

City Manager

ACKNOWLEDGMENTS

Community Acknowledgments

First, we give our thanks to the Oakley residents who actively participated in the development of this *Climate Action Plan* and provide invaluable feedback throughout the process. We appreciated your participation in our public workshops and public comment period, and we look forward to a continued partnership as we implement this CAP.

City Acknowledgments

We give thanks to Oakley's elected officials and their offices who provided invaluable feedback throughout the development of this CAP.

City Council and City Manager

- Shannon Shaw
Mayor (District 4)
- Hugh Henderson
Vice Mayor (District 2)
- Aaron Meadows
Councilmember (District 1)
- George Fuller
Councilmember (District 5)
- Anissa Williams
Councilmember (District 3)
- Joshua McMurray
City Manager

Planning Commission

- Diego Verduzco
Chair
- Leonard Price
Vice Chair
- Oleksii Chuiiko
Commissioner
- Kerry Ann Harvey
Commissioner
- Yared Oliveros
Commissioner
- Jeanne Krieg
Commissioner (through 2/28/2025)
- Jimmy Ramirez
Commissioner (through 2/28/2025)

Project Team Acknowledgements

Finally, we thank our City staff and the consulting team who spearheaded the development of this CAP.

City Project Team

- Kenneth Strelow
Community Development Director
- Jose Cortez
Senior Planner
- Evan Gorman
Associate Planner

Consultant Team

- Cumming Group
- Kimley-Horn



EXECUTIVE SUMMARY

About Oakley's Climate Action Plan

This Climate Action Plan (CAP) establishes progressive, achievable goals for municipal and community-wide greenhouse gas (GHG) reductions and climate adaptation in the City of Oakley. In particular, it establishes official goals for the City of Oakley to eliminate emissions from City operations by 2040 and to neutralize community-wide emissions by 2045, aligning with the State of California's GHG emissions reduction target to achieve carbon neutrality by 2045. The CAP further establishes plans for community-wide climate and social resilience in the face of climate change, aligned with best practices laid out by California's *Climate Adaptation and Planning Guide* and *Climate Adaptation Strategy*. Critical to the success and impact of these efforts is Oakley's emphasis on engaging community members in climate planning. The City is dedicated to ensuring that the CAP resonates with Oakley residents, reflects the City's vision for the future, and fosters a shared sense of responsibility around climate action.

CLIMATE ACTION PLAN GOALS:

1. Achieve carbon neutrality for City operations by 2040
2. Achieve community-wide carbon neutrality by 2045

This plan is the City of Oakley's roadmap to eliminate municipal and community-wide emissions, as well as to bolster infrastructural and community-wide resilience to the impacts of climate change. Consequently, the CAP has committed to 14 goals across four different categories of action: **Governance and Leadership**, **Buildings and Energy**, **Transportation and Land Use**, and **Adaptation and Resilience**. These are accompanied by quantitative or time-bound targets to help measure progress towards those goals.

Planning Process and Timeline

The City of Oakley developed the CAP over the course of approximately one year between spring 2024 and spring 2025, and included the following structural components:



- An existing conditions assessment, including an evaluation of Oakley’s preexisting climate policies and initiatives, baseline greenhouse gas emissions inventories (municipal and community-wide), and a climate vulnerability and risk assessment;
- Community engagement, inclusive of two public workshops;
- A joint work session with the Oakley City Council and Planning Commission; and
- A public comment period on the draft CAP.

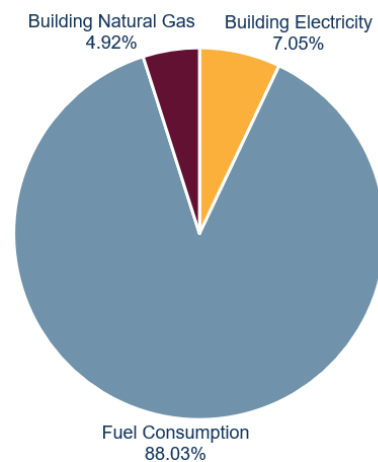
Greenhouse Gas Emissions

The City of Oakley prepared baseline inventories of municipal greenhouse gas (GHG) emissions and community-wide GHG emissions, using the baseline year of calendar year (CY) 2023 (see: “Chapter 2: Greenhouse Gas Emissions”). The municipal inventory comprises emissions generated from municipal assets, operations, and activities, whereas the community-wide inventory comprises emissions from residential and commercial buildings and activities. Drawing on the baseline inventories, the City produced emissions forecasts for both municipal and community-wide emissions through 2050.

Municipal Greenhouse Gas Emissions

In 2023, the City of Oakley emitted 610 MTCO₂e (metric tons of carbon dioxide equivalent), 92.9% of which can be attributed to Scope 1 (direct emissions from Oakley assets). Emissions from stationary combustion (i.e., natural gas use in buildings) accounted for nearly 5% of all emissions, whereas mobile combustion (i.e., City vehicles) accounted for just over 88%. Scope 2 emissions (indirect emissions from purchased electricity), all of which are attributed to procured electricity from Pacific Gas & Electric and MCE Clean Energy, totaled 43 MTCO₂e and made up just over 7% of municipal emissions.

Figure E-1. Municipal Greenhouse Gas Emissions (2023)



To better understand the City's key pathways to reduce emissions over time, projections were prepared to show anticipated GHG emissions through 2050. In a **business-as-usual** (BAU) or 'do-nothing' scenario (i.e., only accounting for external factors not within Oakley's control and excluding regulatory impacts, such as population control), Oakley's municipal emissions would increase by 75.6% by 2050 (from 2023

levels). In a **business-as-planned** (BAP) scenario (i.e., accounting for existing actions and the impacts of state and federal regulations), municipal emissions would decline by 89.9% by 2050.

Community-wide Greenhouse Gas Emissions

Community-wide emissions totaled 179,248 MTCO_{2e} in 2023, nearly all of which fall under Scope 1 (>99%). Over 17% of emissions could be attributed to natural gas use in buildings across the residential and commercial sectors, whereas over 82% can be attributed to fuel combustion from vehicles moving within and across Oakley. Scope 2 emissions made up a non-significant share of emissions, totaling 0.19% of all community-wide emissions.

Without any action by the City or impact from regulations, community-wide emissions will increase by 76.7% by 2050 (from 2023 levels). However, accounting for the impact of the aforementioned regulations, we expect Oakley's emissions in a business-as-planned scenario to decline by 69.2% from the 2023 baseline by 2050.

Figure E-2. Municipal Greenhouse Gas Emissions
Projections through 2050

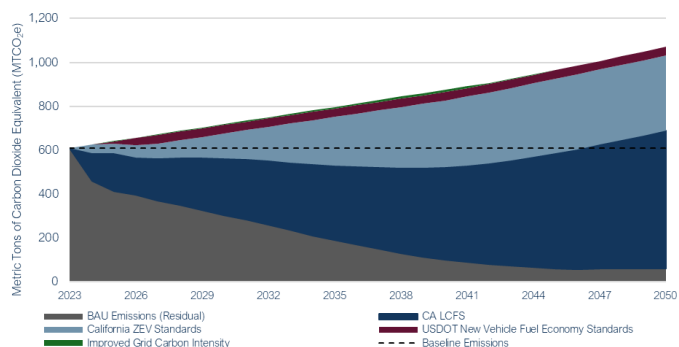


Figure E-3. 2023 Community-wide Greenhouse Gas Emissions

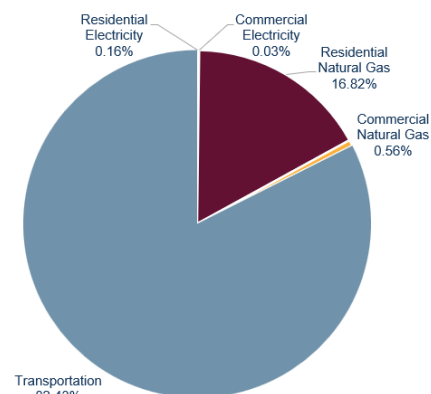
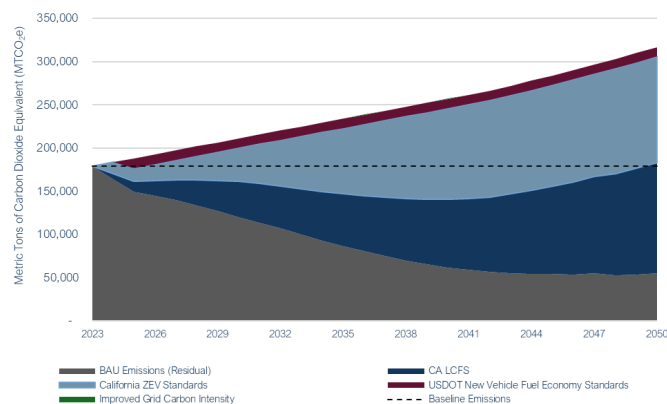


Figure E-3. 2023 Community-wide Greenhouse Gas
Projections through 2050



Climate Vulnerability and Risk Assessment

The City conducted a community-wide climate vulnerability and risk assessment (CVRA), the approach for which can be summarized by the following steps:

1. Identify and organize City assets under specific sectors.
2. Identify potential climate hazards per sector;
3. Pairing assets and hazards
4. Describe potential climate impacts, asset exposure, non-climate stressors, and climate impact consequences of each asset-hazard pair;
5. Identify priority climate hazards affecting the City; and
6. Review existing plans for preliminary adaptation strategies.

As part of the CVRA, the City's key assets were reviewed and identified to be either owned and operated by the City, quasi-public agencies, or private entities. Consequently, Oakley identified the following climate-related effects and hazards as applicable to Oakley:

1. changes in precipitation patterns and amounts;
2. increased risk of flooding;
3. higher temperatures;
4. sea level rise; and
5. increased risk of wildfires.

Per state guidance, a high emissions scenario was used to analyze potential climate hazards to the City. Each identified asset was then evaluated for its exposure or **sensitivity** to a given climate hazard, the **probability** of each hazard's occurrence, the asset's **adaptive capacity** (i.e., how adaptive the asset is to disturbances), and the **magnitude** of impact of a given hazard for that asset (e.g., significant functional and physical costs). The City also evaluated social vulnerability, accounting for demographic and socioeconomic characteristics across Oakley that may be disproportionately impacted by climate risks.

From the intermediary steps listed above, fifteen broad asset categories were identified and paired with priority hazards to determine probability, magnitude, and climate risk. These "asset-hazard pairs" were assessed and given a composite risk rating: "Take Action" or "Accept Risk." It is important to note that the outcome of "Take Action" or "Accept Risk" for the composite risk rating should not be understood as a "final" decision by the City, but rather a recommended next step for the City as it evaluates further action. These findings are shown in Chapter 4 and elaborated upon in the Appendix C and Appendix D.

Climate Action Roadmap

To reduce GHG emissions and enhance climate resilience in the City of Oakley, this plan identifies 14 overarching **goals** supported by 39 quantitative or time-bound **targets** and accompanying specific **actions** across four sustainability categories: Governance and Leadership, Buildings and Energy, Transportation and Land Use, and Adaptation and Resilience. This roadmap is intended to guide the CAP's implementation, identifying 113 specific actions that the City can take towards the CAP goals and targets with information about estimated cost and emissions impacts. The goals are summarized in the diagram below.

Governance and Leadership	
G-1	Implement carbon reduction and climate resilience practices across City operations and facilities
G-2	Bolster regional partnerships to identify and achieve shared climate goals
G-3	Develop outreach and communications strategies for climate action and adaptation efforts
G-4	Identify and secure funding for municipal climate efforts
Buildings and Energy	
B-1	Reduce overall energy demand through building electrification and other energy efficiency measures
B-2	Install and promote distributed energy resources (DERs) to provide local renewable energy and promote grid resilience
Transportation and Land Use	
T-1	Promote active and public mobility options across Oakley
T-2	Encourage the transition to electric vehicles (EVs) for vehicle trips that are unavoidable
T-3	Implement zoning and land use tools that promote transit-oriented development (TOD) and reduce vehicles miles traveled (VMT)
Adaptation and Resilience	
A-1	Improve city infrastructure and open spaces to withstand climate impacts (e.g., extreme heat, fires, floods)
A-2	Bolster community-wide emergency response networks and resource-sharing
A-3	Evaluate city infrastructure standards periodically to incorporate strategies for climate impacts (e.g., extreme weather, precipitation, sea level rise, high heat, wildfires)
A-4	Establish land use patterns that increase the resilience of the built environment, ecosystems, and communities to climate impacts
A-5	Ensure agriculture adaptation resources are coordinated, funded and staffed to support farmers in making informed business decisions in a changing climate

Implementing this Climate Action Plan

To implement this Climate Action Plan, the City will first convene decision-makers after adoption to review all actions within the CAP and prioritize based on select criteria to determine which items can be implemented in the short term (i.e., 0-2 years), medium term (i.e., 3-5 years), and long term (more than five years). As items are prioritized, actions will be folded into budgetary and project planning, at which point the City will evaluate its capacity and determine where it can use existing resources to implement, as well as where it may need to secure external funding. The City also commits to monitoring and reporting on its progress, inclusive of assigning responsibility to appropriate departments; establishing a Steering Committee to integrate CAP implementation into existing workflows; and routinely updating inventories, reporting progress on the CAP; and updating the CAP every five years.



1 INTRODUCTION

1.1 About the City of Oakley

Situated along the Sacramento–San Joaquin River Delta (or “California Delta”) in east Contra Costa County, just an hour outside of San Francisco and Sacramento, the City of Oakley is one of California’s youngest incorporated cities. The land holds a deep agricultural history: its rolling hills, orchards, and vineyards recall its roots as a quiet farming town. Today, Oakley’s verdant landscape is interspersed with residential neighborhoods, schools, landscaped parks, recreational opportunities, and business and commercial developments. Since its formal incorporation in 1999, the City has committed to maintaining its small-town character while simultaneously building a prosperous future for future generations. Critically, this includes planning for future climate change impacts.

The United Nations’ International Panel on Climate Change (IPCC) has confirmed that human-caused climate change is affecting weather and climate extremes in every region across the globe.¹ This includes Contra Costa County, which will likely experience higher levels of extreme heat, poor air quality, sea level rise, drought, storm severity, and flood events due to climate change.² In order to effectively plan for the future, Oakley must plan for climate change impacts. In doing so, Oakley can not only reduce its emissions and enhance climate resilience but foster increased economic opportunity and improved public health outcomes for generations to come.

According to the International Panel on Climate Change (IPCC), human-caused climate change is affecting weather and climate extremes in every region across the globe.

1.2 Past Climate Efforts

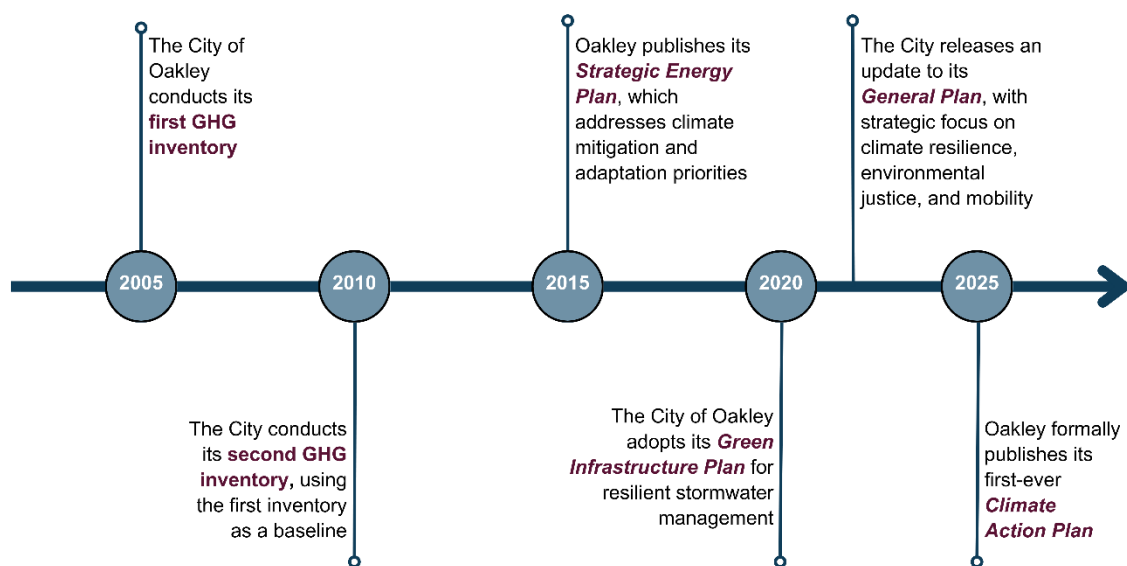
The City of Oakley has engaged in a variety of prior planning efforts to account for climate change. The City conducted its first GHG inventories in 2005 and 2010. It addressed climate mitigation and adaptation activities through its 2015 *Strategic Energy Plan* and 2020 *Green Infrastructure Plan*. Oakley adopted an update to the Oakley *General Plan* in 2022, with a strategic focus on environmental justice, mobility, and climate resilience. Its five-year *Strategic Plan 2027+ (SP27+)*, also adopted in 2022, established responsible environmental stewardship and thoughtful economic growth as key priorities for the City’s future. Oakley

¹ IPCC, 2023: Summary for Policymakers. In: *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001

² Contra Costa County. “Climate Action Plan.” December 2025.

maintains a variety of climate mitigation and energy efficiency programs and initiatives, focusing on strategies to reduce waste, implement energy efficient design standards, and expand renewable energy opportunities. In 2024, the City Council adopted a resolution to formally develop a *Climate Action Plan* (CAP). Oakley is committed to integrating and building upon these previous climate initiatives and successes through this Plan.

Figure 1. Timeline of Oakley's actions to address climate change



1.3 About this Climate Action Plan

This CAP establishes achievable goals for municipal and community-wide greenhouse gas (GHG) reductions and climate adaptation in the City of Oakley. In particular, it establishes official goals for the City of Oakley to eliminate emissions from City operations by 2040 and to neutralize community-wide emissions by 2045, aligning with the State of California's GHG emissions reduction target to achieve carbon neutrality by 2045.³ The CAP further establishes plans for community-wide climate and social resilience in the face of climate change, aligned with best practices laid out by California's *Climate Adaptation and Planning Guide* and *Climate*

CLIMATE ACTION PLAN GOALS:

1. Achieve carbon neutrality for City operations by 2040
2. Achieve community-wide carbon neutrality by 2045

³ California Air Resources Board. "2022 Scoping Plan Documents." n.d.

Adaptation Strategy. Critical to the success and impact of these efforts is Oakley's emphasis on engaging community members in climate planning. The City is dedicated to ensuring that the CAP resonates with Oakley residents, reflect the City's vision for the future, and foster a shared sense of responsibility around climate action.

This plan is the City of Oakley's roadmap to eliminate municipal and community-wide emissions, as well as to bolster infrastructural and community-wide resilience to the impacts of climate change. Consequently, the CAP has committed to 14 goals across four different categories of action: **Governance and Leadership**, **Buildings and Energy**, **Transportation and Land Use**, and **Adaptation and Resilience**. These are accompanied by 39 quantitative or time-bound targets to help measure progress towards those goals.

This Plan also provides a roadmap to implementation, identifying 113 specific actions that the City can take towards the CAP goals and targets with information about estimated cost and emissions impacts. This information serves as a guide for Oakley's City Council, Planning Commission, and Staff to prioritize strategies with a mind toward those that create the greatest impact at the lowest cost to the City. This roadmap is accompanied by the City's commitments to monitor, evaluate, and report on its progress. All goals, targets, and actions within this plan have been informed by City decision-makers and staff, and most importantly by community members.

1.3.1 Planning Process and Timeline

The City of Oakley developed the CAP over the course of approximately one year between spring 2024 and spring 2025. The City began by conducting an existing conditions assessment that evaluated Oakley's preexisting climate policies and initiatives in comparison to statewide goals and best practices. This assessment phase included extensive research into Oakley's existing programs, code and ordinances, technical resources, community engagement activities, and other projects that were relevant to the CAP. This phase also included review of relevant planning and guidance documents from Contra Costa County, the Association of Bay Area Governments (ABAG), peer municipality best practices, and relevant policies and programs on local, regional, state, and federal levels.



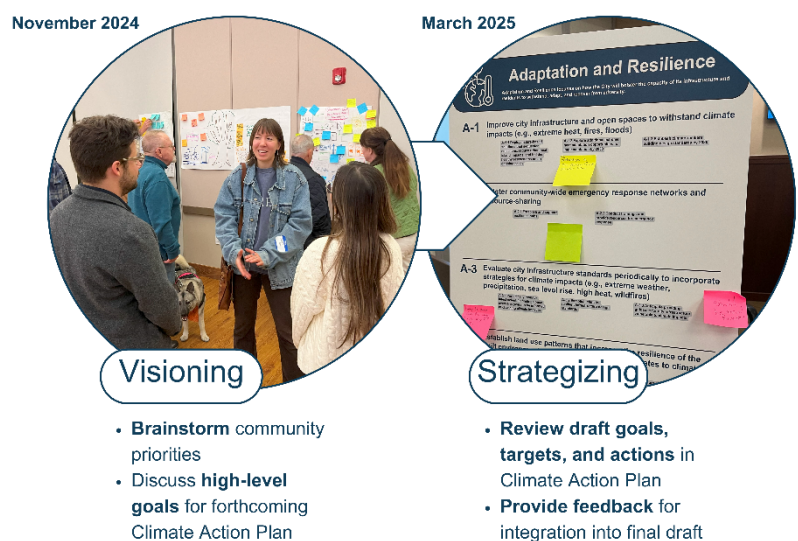
The City next conducted a GHG emissions inventory in accordance with internationally recognized standards and guidance, in collaboration with relevant City Departments and entities (see “Chapter 2: Greenhouse Gas Emissions”). The City prepared resulting emissions projections through 2050, showing how GHG emissions in Oakley would change if the City did nothing versus if the City acted with reduction measures. The City also developed a climate vulnerability and risk assessment to analyze the risks that Oakley’s infrastructure, functions, and population are likely to face as climate impacts become more pronounced in coming years (see “Chapter 3: Climate Risk Reduction”). The City assessed the adaptive capacity of various resources to projected environmental stressors, with particular focus on identifying community members most susceptible to climate impacts, such as children, seniors, low-income residents, and people with disabilities.

In November 2024 and March 2025, the City conducted public workshops to ensure CAP strategies and goals meaningfully reflect community member priorities (see “Section 1.3.2: Community and Stakeholder Engagement”). Based on the results of all prior research efforts and activities, the CAP was formally drafted through a collaborative effort with a diverse cohort of cross-department and community stakeholders. The initial draft was posted for public comment in March 2025. The City integrated feedback from the public into a final plan, which was approved by the Oakley Planning Commission and Oakley City Council in May 2025.

1.3.2 Community and Stakeholder Engagement

Community engagement activities play a key role in ensuring community priorities and feedback are meaningfully reflected in the City’s climate planning efforts. To this end, Oakley held two in-person workshops to raise awareness about the CAP and integrate community goals. First, the City held a visioning workshop in November that focused on brainstorming and outlining community priorities to be integrated into the forthcoming CAP. Second, the City held a strategizing workshop in March that focused on reviewing the draft plan and ensuring that community members have the opportunity to provide comments and feedback on the complete draft. These activities directly shaped the goals, targets, and actions laid out in this CAP.

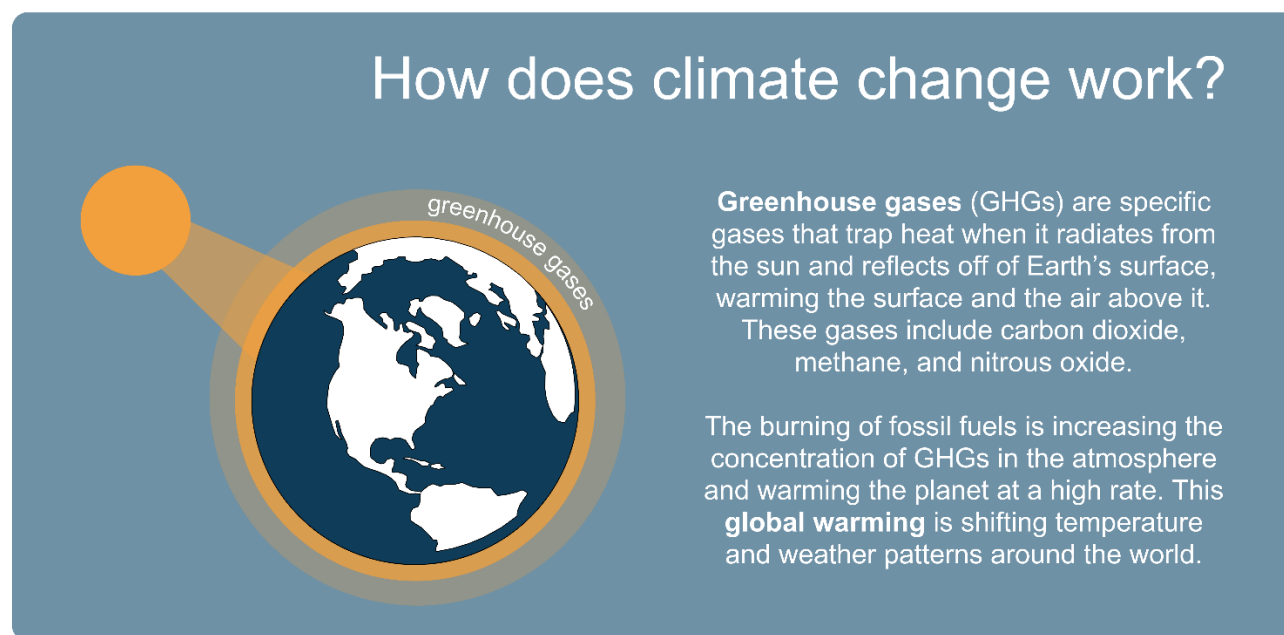
Figure 2. Oakley CAP Community Engagement Process



2 GREENHOUSE GAS EMISSIONS

2.1 Background

The City of Oakley prepared baseline inventories of municipal greenhouse gas (GHG) emissions and community-wide GHG emissions, using the baseline year of calendar year (CY) 2023. The municipal inventory comprises emissions generated from municipal assets, operations, and activities, whereas the community-wide inventory comprises emissions from residential and commercial buildings and activities. Drawing on the baseline inventories, the City produced emissions forecasts for both municipal and community-wide emissions through 2050. The findings from the inventories and scenario projections were ultimately used to help develop the goals, targets, and actions in this CAP (see: “Chapter 4: Climate Action Roadmap.”)



2.2 Municipal Greenhouse Gas Emissions

2.2.1 Scope and Boundary

The municipal GHG emissions inventory includes Scope 1 emissions, which include emissions directly produced by Oakley's buildings and vehicles, and Scope 2 emissions, which are indirect emissions from purchased electricity. In the case of City operations, Scope 1 emissions included stationary combustion (i.e., natural gas use in municipal buildings) and mobile combustion (i.e., fuel used by City-owned vehicles). The municipal GHG inventory does not include any Scope 3 emissions, which would include other indirect

emissions from upstream or downstream activities (e.g., waste, employee commuting, business travel, etc.). The municipal inventory is limited to emissions City-owned assets and activities within CY 2023.⁴ Emissions are measured and listed in metric tons of carbon dioxide equivalent (MTCO₂e).

2.2.2 Municipal Emissions Inventory

In 2023, the City of Oakley emitted 610 MTCO₂e, 92.9% of which can be attributed to Scope 1 (or direct emissions). Emissions from stationary combustion (i.e., natural gas use in buildings) accounted for nearly 5% of all emissions, whereas mobile combustion (i.e., City vehicles) accounted for just over 88%. Scope 2 emissions, all of which are attributed to procured electricity from Pacific Gas & Electric and MCE Clean Energy, totaled 43 MTCO₂e and made up just over 7% of municipal emissions. The majority of the City's electric accounts are enrolled in MCE Clean Energy, which provides electricity at a significantly lower carbon intensity. Emissions are summarized in Table 1 and in Figure 3.

Figure 3. Municipal Greenhouse Gas Emissions by Source (CY 2023)

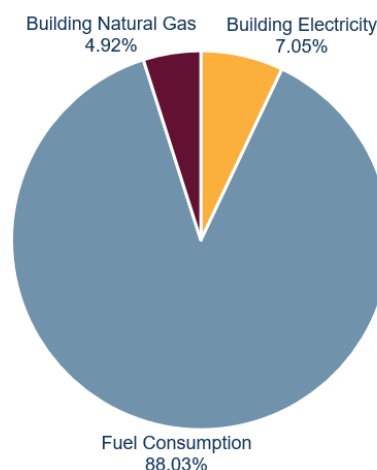


Table 1. Municipal Greenhouse Gas Emissions (CY 2023)

Emissions Scope/Category	Emissions (MTCO ₂ e)	Percentage (%)
	610	100.00%
Scope 1 (Direct Emissions)	567	92.90%
Stationary Combustion (Facilities)	30	4.89%
Mobile Combustion (Fleet)	537	88.01%
Scope 2 (Indirect Emissions)	43	7.10%
Pacific Gas & Electric (PG&E)	1	0.15%
MCE Clean Energy	42	6.95%

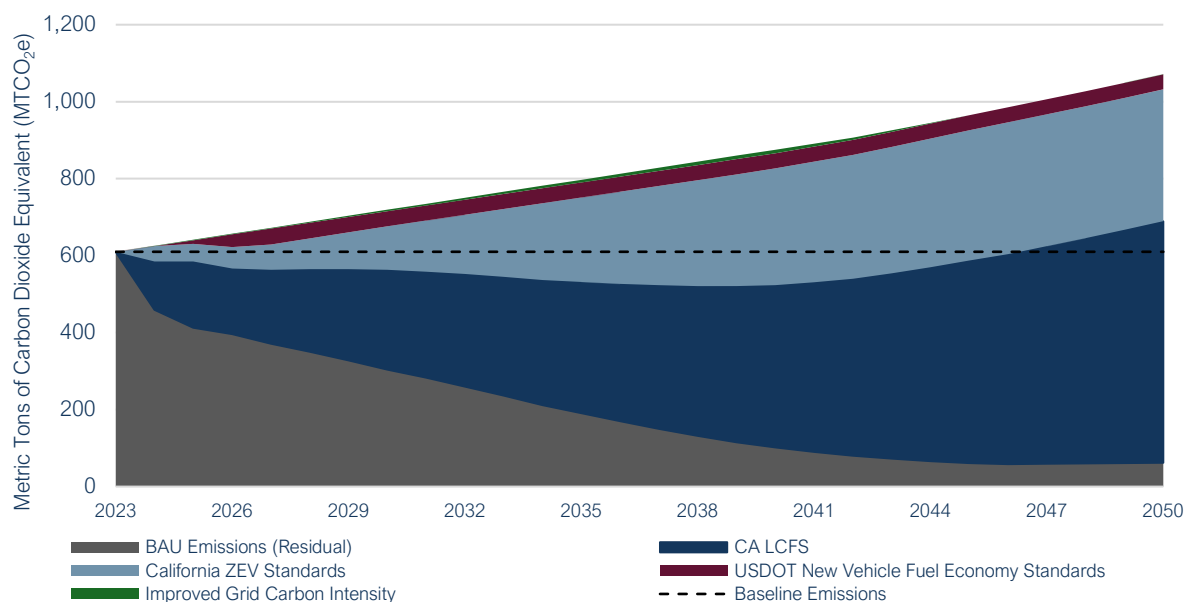
⁴ The methodology for the development of the municipal emissions inventory is described in detail in Appendix B.

2.2.3 Municipal Emissions Projections

To better understand the City's key pathways to reduce emissions over time, projections were prepared to show anticipated GHG emissions through 2050. As shown in Figure 4, the black dotted line shows baseline emissions (CY 2023). If one were to follow the top of the stacked area chart as a line, that total indicates Oakley's municipal emissions in a **business-as-usual** (BAU) or 'do-nothing' scenario. Specifically, that scenario shows how Oakley's municipal emissions portfolio would change if all that were accounted for were external factors not under Oakley's control and if we ignored the impacts of regulatory action. In this case, the key driver of emissions growth would solely be population growth,⁵ and it would lead to an increase in overall municipal emissions by 75.6% by 2050 (from 2023 levels).

Figure 4 also shows a **business-as-planned** (BAP) scenario, indicating the impact of pertinent state and federal regulations as well as any existing City initiatives to reduce its municipal emissions. In particular, it accounts for anticipated emissions reductions from the California Low Carbon Fuel Standard (LCFS), U.S. Department of Transportation (USDOT) New Vehicle Fuel Economy Standards, California Zero Emissions Vehicle (ZEV) Standards, and improvements to grid carbon intensity per the California Renewable Portfolio Standard (i.e., 100% carbon-free electricity by 2045). If one were to follow the top of the dark grey wedge at the bottom of the chart, it shows that the impact of these regulations are actually expected to reduce Oakley's municipal emissions by 89.9% despite anticipated growth.

Figure 4. Oakley Municipal Greenhouse Gas Emissions Projections through 2050



⁵ Population growth, as accounted for in this model, is derived from Oakley's population growth projections as included in our 2022 Focus General Plan Update. Similar levels of growth are assumed to continue from 2043 through 2050.

2.3 Community-wide Greenhouse Gas Emissions

2.3.1 Scope and Boundary

Oakley's community-wide greenhouse gas emissions inventory accounts for all emissions within the geographic boundary of the City of Oakley, including emissions from the residential, commercial, and transportation sectors.⁶ These emissions exclude those attributed to City-owned assets, operations, or activities. As with municipal emissions, these include emissions that would be classified under Scope 1 (direct emissions) and Scope 2 (indirect emissions from purchased electricity), but do not include any emissions that would be classified under Scope 3 (indirect emissions from upstream and downstream activities within the City's value chain).

2.3.2 Community-wide Emissions Inventory

Community-wide emissions totaled 179,248 MTCO₂e in 2023, nearly all of which fall under Scope 1 (>99%). Over 17% of emissions could be attributed to natural gas use in buildings across the residential and commercial sectors, whereas over 82% can be attributed to fuel combustion from vehicles moving within and across Oakley. Scope 2 emissions made up a non-significant share of emissions, totaling 0.19% of all community-wide emissions. This is because the majority of residential and commercial electric accounts within the City are enrolled under an MCE Clean Energy rate option that provides them electricity at a lower carbon intensity. Emissions are summarized in Table 2 and Figure 5.

Table 2. Community-wide Greenhouse Gas Emissions (CY 2023)

Emissions Scope/Category	Emissions (MTCO ₂ e)	Percentage (%)
	179,248	100.00%
Scope 1 (Direct Emissions)	178,901	99.81%
Residential (Buildings)	30,215	16.86%
Commercial (Buildings)	998	0.56%
Transportation (Vehicles)	147,668	82.39%
Scope 2 (Indirect Emissions)	347	0.19%
Residential	295	0.16%
Commercial	52	0.03%

⁶ Other sectors were not included either because no such data was available or because no emissions could be attributed to that sector within the City boundary. This also does not include emissions tied to other agencies that service Oakley, such as Diablo Water District or nearby transit agencies.

2.3.3 Community-wide Emissions Projections

As with municipal emissions, community-wide emissions were projected through 2050. As shown in Figure 6, the dotted line again shows baseline emissions (CY 2023), and the top line of the chart indicated community-wide emissions in a business-as-usual scenario. As with municipal emissions, the primary driver of emissions through 2050 is population growth in Oakley, which without any action by the City or impact from regulations would lead to a 76.7% increase in emissions by 2050 (from 2023 levels).

However, accounting for the impact of the aforementioned regulations, we expect Oakley's emissions in a business-as-planned scenario to decline by 69.2% from the 2023 baseline by 2050.

Figure 5. Community-wide Greenhouse Gas Emissions by Source (CY 2023)

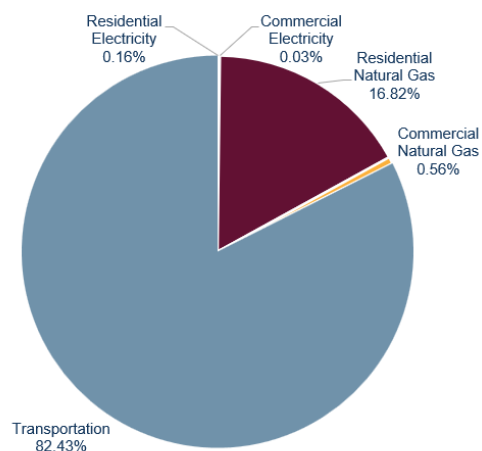
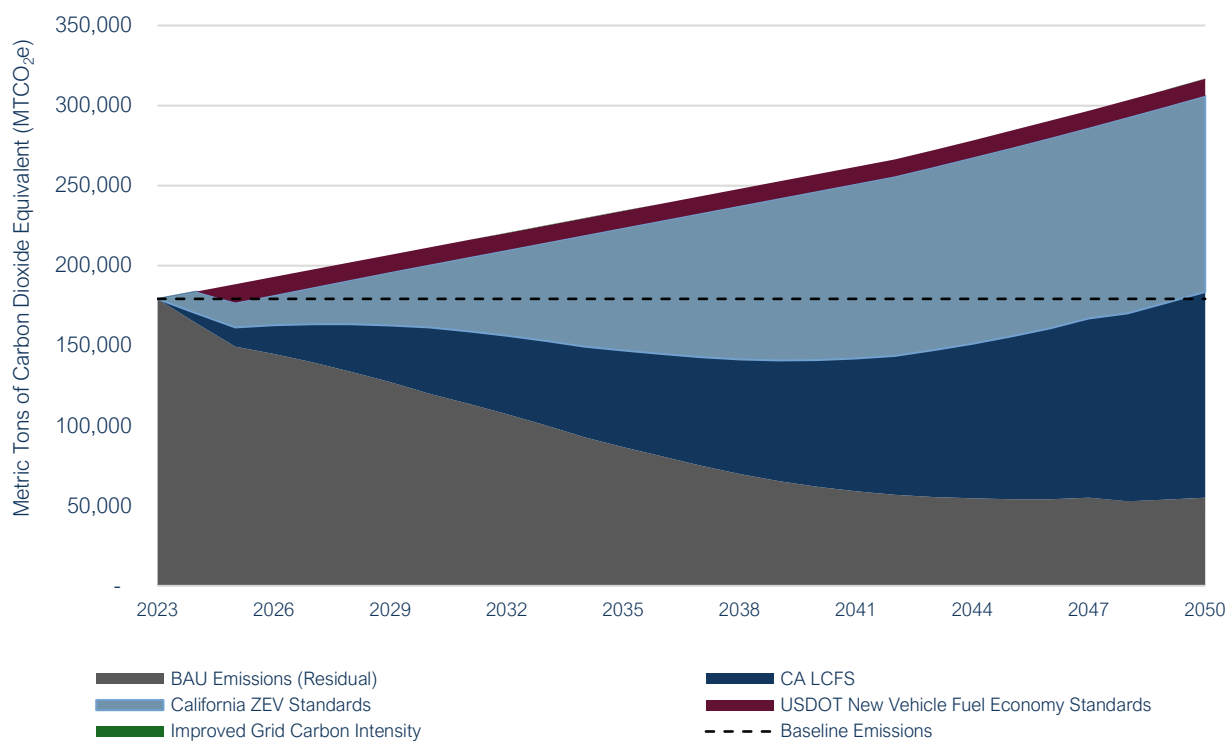


Figure 6. Oakley Community-wide Greenhouse Gas Emissions Projections through 2050



3 CLIMATE VULNERABILITY AND RISK

3.1 Background

Climate change is a global issue that impacts communities in various ways. To address a changing climate, many states have enacted legislation targeted at reducing greenhouse gas emissions and focusing on climate resilient infrastructure. Consequently, cities and counties need to create, view, and update CAPs. A CAP should reflect the latest greenhouse gas emissions forecasts and relevant climate adaptation and resilience strategies. In addition, a CAP should include goals, policies, and objectives based on a climate vulnerability and risk assessment (CVRA). As described in detail in the California Air Resources Board *2022 Scoping Plan*, a CVRA serves as a fundamental foundation for a CAP.⁷ For Oakley, this analysis provides a basis for the goals, targets, and actions identified in our Climate Action Roadmap (Chapter 4).

3.2 Approach

Based on guidance from the California Governor's Office of Emergency Services (Cal OES) California Adaptation Planning Guide⁸ and the Southern California Climate Adaptation Planning Guide,⁹ the City applied the following five steps as required to assess community-wide vulnerability to the effects of climate change:¹⁰

1. **Exposure** – Identify the climate change effects a community will experience.
2. **Sensitivity** – Identify the key community structures, functions, and populations that are potentially susceptible to each climate change exposure.
3. **Potential Impacts** – Analyze how climate change exposure will affect the community structures, functions, and populations (impacts). Adjust the impact assessment to account for uncertainty, timing, and adaptive capacity.
4. **Adaptive Capacity** – Evaluate the community's current ability to address the projected impacts.
5. **Vulnerability Scoring** – Determine and rank potential impacts and adaptive capacity.

⁷ California Air Resources Board (CARB), 2022 Scoping Plan for Achieving Carbon Neutrality. Available at <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>.

⁸ Governor's Office of Emergency Services, California Adaptation Planning Guide, June 2020 Final Draft. Available at <https://www.caloes.ca.gov/wp-content/uploads/Hazard-Mitigation/Documents/CA-Adaptation-Planning-Guide-FINAL-June-2020-Accessible.pdf>. Accessed July 29, 2024.

⁹ Association of Bay Area Governments (ABAG), Regional Resilience Toolkit, 2019. Available at https://abag.ca.gov/sites/default/files/regional_resilience_toolkit_0.pdf. Accessed July 29, 2024.

¹⁰ These five steps and data for this CVA are further described in Appendix C: City of Oakley Vulnerability Assessment.

From those steps, the City undertook the following intermediary steps to complete the analysis and formulate the adaptation and resilience strategies included in the CAP:

1. Identify and organize City assets under specific sectors;
2. Identify potential climate hazards per sector;
3. Pairing assets and hazards;
4. Describe potential climate impacts, asset exposure, non-climate stressors, and climate impact consequences of each asset-hazard pair;
5. Identify priority climate hazards affecting the City; and
6. Review existing plans for preliminary adaptation strategies.

3.2.1 Assets and Hazards

As part of the CVRA, the City's key assets were reviewed and identified to be either owned and operated by the City, quasi-public agencies, or private entities. According to the 2023 Department of Energy (DOE) Guidance, assets are defined as community groups, places, natural resources, infrastructure, and service that the community finds valuable and wants to protect against climate-exacerbated hazardous events. Assets include but are not necessarily limited to administrative buildings, historic sites, transportation infrastructure, and facilities that are owned and managed by the City.

Because climate change effects may vary depending on a community's geography, density of urban development, and existing environmental factors, only select primary and secondary hazards were selected as potentially applicable to Oakley (see Table 3).¹¹



¹¹ Each of these hazards are discussed in detail in Appendix C with the goal of characterizing the community's exposure and projected climate hazards.

Table 3. Climate-Related Effects and Hazards Potentially Applicable to Oakley

Primary Hazard	Secondary Hazard
Air Quality	Public health effects
Changed temperature and/or precipitation patterns	Drought, wildfire
Flooding	Flooding, erosion, mud or landslides; Dam and levee failure
Sea Level Rise	Storm surge, flooding, groundwater intrusion
Severe storms and extreme weather	Intense rainstorms, severe wind, flooding, lightning, hail
Temperature changes – warming	Extreme heat/heat waves
Wildfire	Erosion, landslides

3.2.2 Emissions Scenarios

The likelihood, timing, and severity of primary and secondary hazards impacting the City are projected based on the trajectory of greenhouse gas concentrations in the Earth's atmosphere, known as Representative Concentration Pathways (RCPs). RCPs combine historical data with estimates of GHG concentrations through 2100, based on various human behavior scenarios. These pathways outline different potential climate futures, depending on GHG emission levels in the coming years. In its latest assessment, the Intergovernmental Panel on Climate Change (IPCC) adopted several RCPs and focused on three key pathways representing a range of possible outcomes:

1. **A low-emissions scenario (RCP-2.6)** – this represents an aggressive emissions reduction scenario that assumes global greenhouse gas emissions will be significantly curtailed. RCP-2.6 most closely corresponds to the aspirational goals of the United Nations Framework Convention on Climate Change 2015 Paris Agreement.
2. **A medium-emissions scenario (RCP-4.5)** – this represents a mitigation scenario where global greenhouse gas emissions peak by 2040 and then decrease for the rest of the century.
3. **A high-emissions scenario (RCP-8.5)** – this represents a “business-as-usual” scenario where global greenhouse gas emissions continue to rise throughout the 21st century.

Both the RCP-2.6 and RCP-4.5 scenarios depend on substantive changes in the current set of world-wide policies, regulations, and behaviors. Therefore, they are considered unlikely and may not be useful for this climate vulnerability and risk assessment. Per guidance from the California Office of Land Use and Climate

Innovation (formerly known as the Office of Planning and Research), the RCP-8.5 scenario (high emissions) was used to analyze potential climate hazards to the City.¹²

Each identified asset was then evaluated for its exposure or **sensitivity** to a given climate hazard, the **probability** of each hazard's occurrence, the asset's **adaptive capacity** (i.e., how adaptive the asset is to disturbances), and the **magnitude** of impact of a given hazard for that asset (e.g., significant functional and physical costs).

3.2.3 Social Vulnerability

Demographic and socioeconomic characteristics of the City that are disproportionately impacted by climate change risks include but are not limited to communities that are low-income, non-white, and disabled. For example, these populations may live in geographic areas that are sited next to major roadways and thus be disproportionately exposed to pollution from vehicles caused by industry and commerce. These populations may also be particularly exposed to extreme heat, which can have a compounding effect with air pollution. The California Environmental Protection Agency (CalEPA) identifies these areas as “disadvantaged communities” (DAC) and utilizes funding provided by SB 535 (De Leon, 2012) and AB 1550 (Gomez, 2016) to invest in planning and infrastructure upgrades.

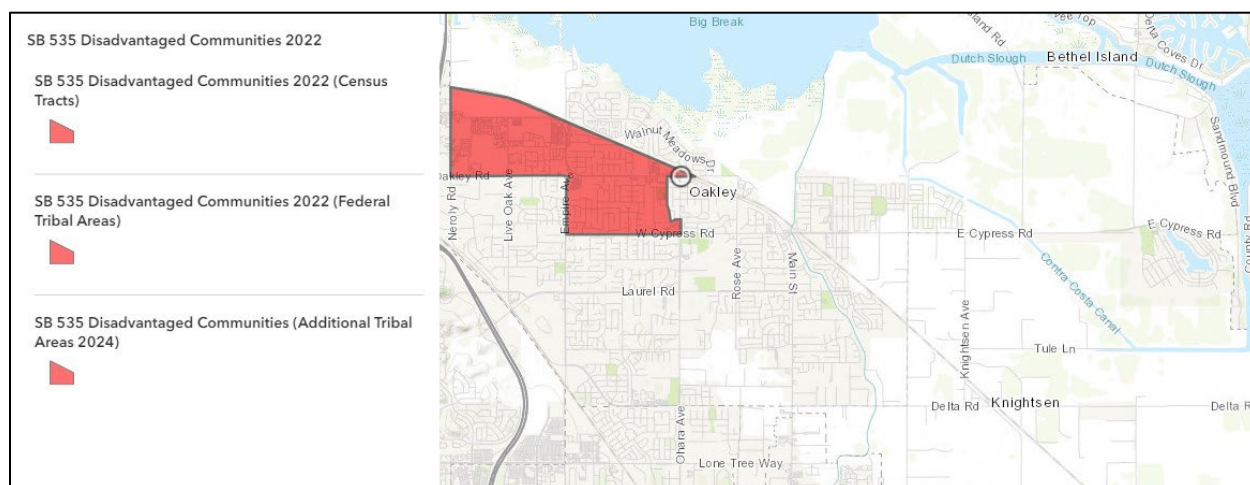
Vulnerable Populations

Oakley's population comprises mainly young children and young adults with the largest racial and ethnic group identified as Non-Hispanic White; however, Hispanic or Latinx and other non-Hispanic race groups are the fastest growing racial groups and make up more than half the City's population.¹³ The City contains a census tract that is identified as a disadvantaged community (see Figure 7). The census tract is generally located in northwest Oakley and is adjacent to a former chemical plant that is currently operated as an industrial logistics center located east of Bridgehead Road and north of the railway. Within the census tract, there are also hazardous materials facilities such as metal scrap yards and auto repair shops.¹⁴

¹² The details to this analysis are further described in Appendix C.

¹³ 2023-2031 Oakley Housing Element, Chapter 2

¹⁴ 2024 County Local Hazard Mitigation Plan, City of Oakley Annex

Figure 7. SB 535 Disadvantaged Communities in Oakley

In addition to the measure of social vulnerability discussed above, there are two other methods of social vulnerability measurement: Costs to consumer and the California Healthy Places Index (HPI). Costs to the consumer is identified through the California Air Resources Board (CARB) climate vulnerability metric (CVM) to provide a perspective of assessing climate change impacts at the census tract level. Based on the CVM, the City is anticipated to experience an annual impact on human welfare equivalent to roughly one percent of tract-level income by mid-century.¹⁵ This indicates projections such as: flood-related property damage costs to increase, electricity consumption to remain stable, and natural gas consumption to decrease. Similarly, the California HPI measures social vulnerability by a percentile ranking based on a jurisdiction's community conditions. The conditions include education, job opportunities, access to clean air and water, access to transportation options and healthcare, dignified housing, and other attributes as indicators of a healthy community. The City is identified to have 67.3% healthier conditions compared to other jurisdictions in California; however, it is lower than the Contra Costa County (County) average (91.1 percentile); thus, indicating significant disparities may be present among jurisdictions within the County.

¹⁵ CARB Climate Vulnerability Metric. 2022.

3.3 Findings

3.3.1 Climate Hazards

The long-term climate effects predicted to be experienced by the City include:

1. changes in precipitation patterns;
2. increased risk of flooding;
3. higher temperatures;
4. sea level rise; and
5. increased risk of wildfires.

Climate change effects

In the coming years, Oakley will likely experience **changes in precipitation patterns, increased flooding and wildfire risk, higher temperatures, and sea level rise** as a result of climate change.

For instance, local annual levels of precipitation in the City are not anticipated to change drastically; however, there may be slight increases towards the end of the century. Temperature changes in the City are projected to change in terms of extreme heat days, which in turn can exacerbate and expand wildfire risks. Although annual precipitation in the City is not projected to be influenced much by future climate change, the pattern of precipitation is predicted to change. Storms with higher rain intensities and a shorter wet season may lead to increased urban and riverine flooding accompanying future storm events. In addition, rising sea levels may compound the impacts of high precipitation events, may lead to coastal flooding during storm surge, and is predicted to contribute to inland flooding by increasing groundwater levels.

3.3.2 Asset Vulnerability and Risk

From the intermediary steps listed above, fifteen broad asset categories were identified and paired with priority hazards to determine probability, magnitude, and climate risk. These “asset-hazard pairs” were assessed according to low, medium, and high definitions to reach a composite risk rating.¹⁶ It is important to note that the outcome of “Take Action” or “Accept Risk” for the composite risk rating should not be understood as a “final” decision by the City, but rather a recommended next step for the City as it evaluates further action. Drawing on Table 4, asset-hazard pairs identified to have a “Take Action” result were evaluated for anticipated future actions, which included:

- Recommendation for future study;
- Coordination with other agencies;
- Plan for inclusion in future capital investment programs (CIPs); and
- Create/modify policy, goal, or ordinance(s).

¹⁶ The low, medium, and high definitions for sensitivity, adaptive capacity, probability and magnitude are summarized in Appendix D.

Table 4. Asset Vulnerability and Climate Hazard Risks

Asset(s)	Precipitation	Flooding	Severe Storms and Extreme Weather	Temperature Changes – Warming	Wildfire	Sea Level Rise
Farmland and Vineyards	Take Action	Accept Risk	Accept Risk	Take Action	Accept Risk	Accept Risk
Legless Lizard Preserve	Accept Risk	Accept Risk	Accept Risk	Take Action	Accept Risk	Accept Risk
Big Break and Driftwood Marina	Accept Risk	Accept Risk	Accept Risk	Accept Risk	Accept Risk	Take Action
Detention Basins	Accept Risk	Accept Risk	Accept Risk	Take Action	Accept Risk	Accept Risk
Randall-Bold Water Treatment Plant	Accept Risk	Accept Risk	Accept Risk	Take Action	Accept Risk	Accept Risk
Levees	Take Action	Take Action	Take Action	Take Action	Accept Risk	Accept Risk
Educational Facilities	Take Action	Accept Risk	Accept Risk	Accept Risk	Accept Risk	Accept Risk
Utilities	Take Action	Accept Risk	Accept Risk	Accept Risk	Accept Risk	Accept Risk
Residential	Take Action	Take Action	Accept Risk	Take Action	Accept Risk	Take Action
Commercial Designations	Take Action	Take Action	Take Action	Take Action	Accept Risk	Accept Risk
Hospitals, clinics, medical centers, etc.	Accept Risk	Accept Risk	Accept Risk	Take Action	Accept Risk	Accept Risk
Highway bridges, road pass, rail, bike lanes	Take Action	Take Action	Accept Risk	Take Action	Accept Risk	Take Action
Ironhouse Sanitary District	Take Action	Take Action	Accept Risk	Accept Risk	Accept Risk	Accept Risk
Solid waste/recycling and hazardous materials services	Take Action	Accept Risk	Accept Risk	Accept Risk	Accept Risk	Accept Risk
Downtown Oakley	Take Action	Take Action	Take Action	Take Action	Accept Risk	Accept Risk

4 CLIMATE ACTION ROADMAP

4.1 Overview

To reduce GHG emissions and enhance climate resilience in the City of Oakley, this plan identifies 14 overarching **goals** supported by 39 quantitative or time-bound **targets** and accompanying specific **actions** across four sustainability categories: Governance and Leadership, Buildings and Energy, Transportation and Land Use, and Adaptation and Resilience. This roadmap is intended to guide the CAP's implementation, identifying 113 specific actions that the City can take towards the CAP goals and targets with information about estimated cost and emissions impacts.

4.2 How to Read this Roadmap

All goals and targets are organized numerically, with the targets folding underneath each goal and individual actions folding underneath each target. Each action is accompanied by additional supporting information that is included to help guide Oakley as it prioritizes CAP implementation efforts. This supporting information includes:

- A **scope**, municipal or community-wide, which refers to the intended target area and reach for that particular action
- **Rough order of magnitude (ROM) cost**, defined as:
 - \$ = \$0–\$100,000
 - \$\$ = \$100,001–\$500,000
 - \$\$\$ = \$500,001–\$1,000,000
 - \$\$\$\$ = > \$1,000,000
 - FTE (Full-time Employee) = Estimated staff time required by existing employee(s)
- **ROM emissions reduction**, defined as:
 - 🍃 = Very low emissions reduction potential
 - 🍃🍃 = Low emissions reduction potential
 - 🍃🍃🍃 = Moderate emissions reduction potential
 - 🍃🍃🍃🍃 = High emissions reduction potential
 - 🍃🍃🍃🍃🍃 = Very high emissions reduction potential

4.3 Governance and Leadership

To successfully implement this CAP, the City must weave climate action into its governance. This includes embedding carbon reduction and resilience practices across City facilities and operations, pursuing strong, long-lasting regional partnerships to achieve collective climate goals, establishing communications and outreach strategies for climate efforts, and identifying and securing funding opportunities to support these activities.

Goal G-1 Implement carbon reduction and climate resilience practices across City operations and facilities					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
G-1.1	Formalize climate and sustainability priorities and metrics in city budgeting, management, and other operations processes by 2028	Develop sustainability goals priorities for each department and incorporate into performance objectives, annual reviews, and budgeting	Municipal	0.5 FTE	🌿🌿🌿
		Issue biennial progress reports on CAP implementation and update the CAP every five (5) years	Municipal	0.5 FTE	🌿🌿
G-1.2	Mobilize and provide resources to staff to oversee CAP implementation and sustainability initiatives by 2026	Formulate a Climate Action Steering Committee or Working Group with a dedicated team of key departmental leads responsible for overseeing the implementation of CAP and adjacent sustainability programs and policies	Municipal	3-4 FTE	🌿🌿🌿🌿

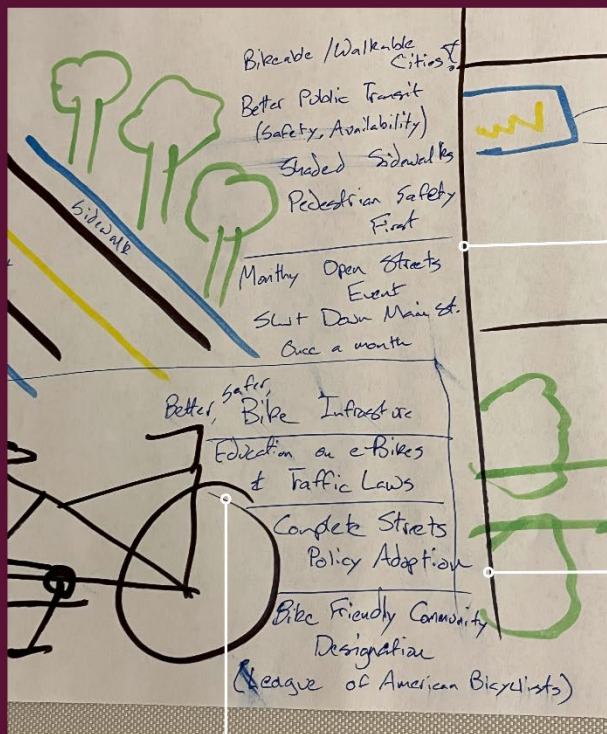
Goal G-2 Bolster regional partnerships to identify and achieve shared climate goals					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
G-2.1	Establish formal collaborations with neighboring jurisdictions to adopt coordinated climate-adapted mitigation and resilience strategies by 2030	Assemble a Sustainability or Climate Action Advisory comprising key stakeholders in Oakley and nearby jurisdictions to identify and work toward shared priorities	Municipal + Community -wide	1 FTE	🌿🌿🌿
		Develop key regional metrics and evaluate progress toward achieving these metrics on an ongoing basis	Municipal + Community -wide	1 FTE	🌿🌿🌿
G-2.2	Develop guidelines for effective engagement and collaboration with Community-based Organizations (CBOs) regarding climate and sustainability initiatives by 2028	Identify and collaborate with key CBO partners, such as Sustainable Contra Costa, to develop and publish working guidelines for CBO engagement and collaboration on climate initiatives	Municipal + Community -wide	0.5 FTE	🌿🌿
		Highlight examples of successful CBO partnership on climate initiatives in public-facing reporting and marketing materials	Municipal	0.5 FTE	🌿🌿
G-2.3	Partner with the Diablo Water District (DWD) and local business groups to coordinate energy and water efficiency, sustainable purchasing, waste reduction, professional development opportunities, and other sustainable practices by 2026	Convene a working group of DWD representatives and members of Oakley's business community on a recurring basis to identify and progress toward key sustainability priorities and concerns	Municipal + Community -wide	0.5 FTE	🌿🌿🌿
		Partner and routinely convene with the Oakley Chamber of Commerce on sustainability and climate action initiatives that support sustainable business practices	Municipal + Community -wide	0.5 FTE	🌿🌿🌿

Goal G-3 Develop outreach and communications strategies for climate action and adaptation efforts					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
G-3.1	Develop a public-facing dashboard to show progress on specific CAP climate goals and metrics by 2027	Identify a dashboard platform to report progress on CAP goals, sustainability metrics, and key actions	Municipal	\$	☹☹
		Update dashboard and GHG inventories every 2 years	Municipal	\$\$\$	☹☹
G-3.2	Issue recurring (monthly, quarterly, or biannual) communications to Oakley community members reporting out on CAP progress, starting in 2025	Create and adopt a template format and channel (e.g., Outreach e-News, Oak Leaf Newsletter, social media, blog-style posts on website) for recurring CAP progress updates	Municipal	\$	☹☹
		Develop system for tracking and showing success stories for highlighting in public communications	Municipal	0.5 FTE	☹☹
G-3.3	Plan recurring (e.g., quarterly, biannual, annual) community events related to climate activities to engage community members and hear feedback on city progress, starting in 2025	Hold 1-2 community events per year in partnership with community stakeholders on key climate topics	Municipal + Community-wide	\$\$\$	☹☹☹
		Establish feedback channels for community members to engage the City on CAP initiatives and progress	Municipal + Community-wide	0.5 FTE	☹☹☹
G-3.4	Develop a public-facing sustainability toolkit for community members with tips for behavior change that promotes climate change adaptation and mitigation by 2026	Develop toolkit in collaboration with subject matter experts, CBOs, and other key stakeholders	Municipal + Community-wide	0.5 FTE	☹☹
		Publish toolkit on Oakley's website and market to other channels (e.g., physical flyers at Oakley library, schools, Oakley Senior Center, and other community hubs)	Municipal + Community-wide	\$\$	☹☹☹

Goal G-4 Identify and secure funding for municipal climate efforts					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
G-4.1	Develop a funding strategy for successful implementation of CAP and related sustainability initiatives by Fiscal Year (FY) 2026	Identify federal and statewide funding sources and levels for CAP goals and targets	Municipal	0.5 FTE	☹☹
		Track and report out on funding for CAP implementation as part of annual reporting process	Municipal	0.5 FTE	☹
G-4.2	Secure additional local, regional, state, and federal funding for Oakley's climate efforts and initiatives on an ongoing basis	Apply for and secure grants and funding opportunities for Oakley's climate efforts from local, regional, state, and federal funding sources	Municipal	1 FTE	☹☹☹☹☹
		Partner with other cities, agencies, and jurisdictions on larger grant funding opportunities for community-wide climate action	Municipal + Community-wide	1 FTE	☹☹☹☹☹
G-4.3	Identify alternate funding streams to support CAP implementation and climate activities on an ongoing basis	Explore opportunities to allocate a portion of preexisting municipal revenue-generating activities into CAP implementation funding	Municipal	0.5 FTE	☹☹
		Explore community fundraising opportunities associated with future climate community events and working groups	Municipal + Community-wide	\$\$	☹☹

What we heard

In public workshops, community members emphasized the need for community events and educational resources related to climate activities. They emphasized the importance of tracking and reporting on key climate action initiatives, as well as the need for City staff to thoughtfully and thoroughly integrate climate action goals and metrics into City policy, budgeting, and initiatives.



G-3.3

Plan recurring (e.g., quarterly, biannual, annual) community events related to climate activities to engage community members and hear feedback on city progress, starting in 2025

G-1.1

Formalize climate and sustainability priorities and metrics in city budgeting, management, and other operations by 2028

G-3.4

Develop a public-facing sustainability toolkit for community members with tips for behavior change that promotes climate change adaptation and mitigation by 2026









4.4 Buildings and Energy

Some of the residual emissions to be neutralized across City operations and community-wide come from the building sector, specifically having to do with energy demand and natural gas use. Oakley will take steps to ensure that the City's energy systems are efficient and resilient far into the future. This includes decarbonizing identifying opportunities to reduce energy demand across municipal and community-wide buildings, as well as promoting grid resilience through local renewable energy.

Goal B-1 Reduce overall energy demand through building electrification and other energy efficiency measures					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
B-1.1	Electrify municipal buildings and assets by 2035	Benchmark energy use across municipal buildings and establish targets for reducing energy consumption	Municipal	0.5 FTE	■
		Install LED lighting in municipal buildings and infrastructure	Municipal	\$	■
		Enroll remaining City electric accounts into MCE Clean Energy rate options for 100% carbon-free electricity, as financially feasible	Municipal	\$\$	■■■
		Require energy audits during significant remodels for municipal buildings	Municipal	\$	■■
B-1.2	Improve energy efficiency across residential and commercial buildings by 2040	Promote energy efficiency initiatives and programs	Community-wide	\$	■
		Enroll remaining electricity accounts for MCE Clean Energy	Community-wide	\$	■■
		Establish programs to promote customer enrollment in 100% renewable options	Community-wide	\$	■■
		Require energy performance ratings, disclosures, and educational materials for all buildings to inform buyers or renters	Community-wide	\$	■

Goal B-1 (continued) Reduce overall energy demand through building electrification and other energy efficiency measures					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
B-1.2	Improve energy efficiency across residential and commercial buildings by 2040	Develop public-facing educational materials for buyers or renters to better understand energy performance ratings or disclosures	Community-wide	\$	■
		Implement energy audit and retrofit program for building and property owners to advance adoption of energy-efficient appliances in alignment with State regulations, emphasizing older buildings and buildings not recently audited	Community-wide	1 FTE	■■■■■
		Adopt policies that require residential and commercial buildings to undergo energy audits during significant remodels	Community-wide	\$	■■■
		Partner with PG&E and MCE Clean Energy to provide educational resources and financial support to homeowners to enroll in green electricity programs	Community-wide	\$	■■■■■
		Identify and provide educational resources to building owners on the benefits of electrification and how to reduce carbon emissions from their buildings; ensure resources and support reach low-income community members	Community-wide	\$	■■■■■
		Streamline permitting and/or incentivize solar installations and/or energy storage systems on residential and non-residential buildings and properties	Community-wide	\$	■

Goal B-1 (continued) Reduce overall energy demand through building electrification and other energy efficiency measures					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
B-1.3	Establish energy efficiency and electrification requirements for all new municipal and community-wide buildings by 2030	Establish energy and water efficiency requirements in new construction in alignment with regional and statewide regulations	Municipal + Community-wide	\$	■ ■ ■ ■
		Incentivize projects that meet green building standards or certifications through land use tools (e.g., density bonus, parking reductions)	Municipal + Community-wide	\$\$	■
		Support city staff pursuing green building certifications and accreditations through department training budgets and tuition reimbursement opportunities	Municipal + Community-wide	\$	■
B-1.3	Establish energy efficiency and electrification requirements for all new municipal and community-wide buildings by 2030	Explore development code amendments that establish solar-ready construction requirements in alignment with state goals	Municipal + Community-wide	\$	■
		Develop guidelines for sustainable deconstruction and materials salvaging for reuse	Municipal + Community-wide	\$	■ ■

Goal B-2 Install and promote distributed energy resources (DERs) to provide local renewable energy and promote grid resilience					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
B-2.1	Install 1 Megawatt (MW) of new solar photovoltaic (PV) capacity on all available and feasible municipal sites (buildings, carports) by 2030	Identify available and feasible municipal sites (buildings, carports) for solar PV installation	Municipal	\$\$	
		Coordinate with electric utilities to install battery energy storage systems in municipal facilities	Municipal	\$\$	
		Devote municipal properties as host sites for community solar and renewable energy projects	Municipal	\$	
B-2.2	Establish equipment replacement plans to electrify equipment for building construction and maintenance by 2027	Partner with Bay Area Regional Energy Network (BayREN) to promote and distribute electrification incentives	Community-wide	\$	 
B-2.3	Collaboratively develop incentive and rebate programs for residential and community solar installations on an ongoing basis	Work with BayREN, MCE, and other regional partners to identify and secure funding for residential and community solar and microgrid installations	Community-wide	\$	 
		Provide and promote educational resources and programs to encourage Oakley residents to enroll in community solar and community microgrids	Community-wide	\$	

What we heard

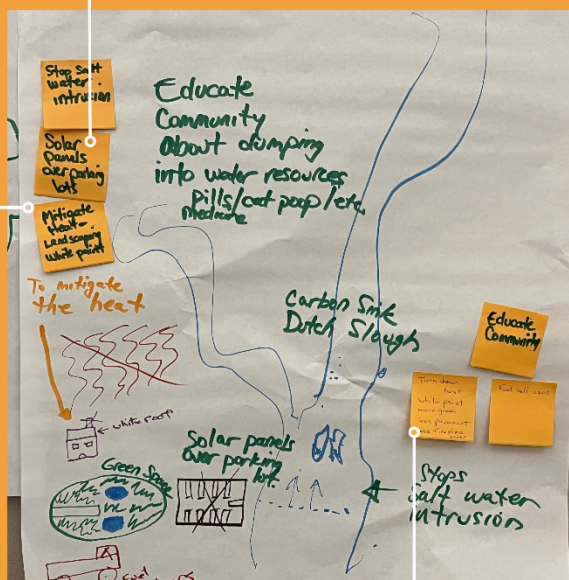
During public workshops, Oakley residents expressed that energy efficiency and electrification were critical priorities for the City to pursue. In addition, residents offered their ideas for how the City could establish critical goals for green building requirements and increasing solar installations community-wide in the coming years.

B-2.1

Install 1 MW of new solar photovoltaic (PV) capacity on all available and feasible municipal sites (buildings, carports) by 2030

B-1.2

Improve energy efficiency across residential and commercial buildings by 2040



B-1.3

Establish energy efficiency and electrification requirements for all new municipal and community-wide buildings by 2030

4.5 Transportation and Land Use

Most municipal and community-wide emissions in Oakley can be attributed to transportation. To reduce these emissions, the City will take a variety of steps, including promoting active and public transportation options for Oakley residents, encouraging a community-wide transition to electric vehicles (EVs), and using zoning and land use tools to encourage transit-oriented development (TOD) and reduce vehicle miles traveled (VMT).

Goal T-1 Promote active and public mobility options across Oakley					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
T-1.1	Encourage and monitor the shift toward active transportation (e.g., walking, biking, rolling) or shared transportation (e.g., rideshare, carpooling, school busing) as climate resilient mobility options on an ongoing basis	Implement mobility projects and street-level enhancements that encourage safe active transportation through 'complete streets' planning (e.g., seating, shade, ADA ramps, protected bike lanes)	Municipal	\$\$	■ ■ ■ ■
		Explore bike-share programs and encourage expansion of bike-share stations and dedicated bike parking areas	Municipal	\$\$\$	■ ■
		Explore safety and feasibility of electric shared mobility programs and provide resources for communities that are lower-income and/or face mobility barriers	Municipal	\$\$\$	■ ■ ■
		Support bike- and roll-to-school events and activities in coordination with local school districts	Municipal + Community-wide	\$	■ ■
		Partner with local school districts to explore bus rollouts to mitigate congestion and vehicle miles traveled (VMT)	Municipal + Community-wide	\$\$\$	■ ■ ■
		Amplify Contra Costa Transportation Authority's E-Bike Rebate Program, which provides rebates for e-bikes, with larger rebates for low-income households	Municipal	0.5 FTE	■ ■

Goal T-1 (continued) Promote active and public mobility options across Oakley					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
T-1.1	Encourage and monitor the shift toward active transportation (e.g., walking, biking, rolling) or shared transportation (e.g., rideshare, school busing) as climate resilient mobility options on an ongoing basis	Establish mode shift targets and strategies for achieving these targets, such as car-free corridors in appropriate areas	Municipal	\$	■ ■ ■
		Collaborate with local businesses, CBOs, and advocates to host 'open street' events that close streets to car traffic and feature family-friendly activities	Municipal + Community-wide	\$\$	■
T-1.2	Invest in at least three programs or initiatives that encourage community-wide use of public transit, with a focus on urban growth areas and communities with disadvantaged or vulnerable individuals by 2030	Collaborate with Tri Delta Transit and other transit agencies serving Oakley to increase service areas, service frequency, system efficiency, and accessibility through system enhancements	Municipal	\$\$	■ ■ ■ ■
		Partner with local businesses and schools to provide free or reduced transit fares for youth, students, seniors, low-income riders, and riders with disabilities	Municipal + Community-wide	1 FTE	■ ■
		Invest in bus stop improvements by installing shelters, shade trees, seating, and other improvements for rider safety and comfort	Municipal	\$\$\$	■ ■ ■
		Develop and distribute accessible community education resources that inform Oakley residents about the benefits of public transit and local service offerings	Municipal	1 FTE	■
T-1.3	Leverage partnerships with local, regional, and national institutions to promote mode shift and active transportation on an ongoing basis	Coordinate with pedestrian and bike plans of neighboring jurisdictions to expand and strengthen safer walking and bicycling infrastructure	Municipal	\$	■ ■ ■

Goal T-2 Encourage the transition to electric vehicles (EVs) for vehicle trips that are unavoidable					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
T-2.1	Install Level 2 and Level 3 and public EV chargers to meet community-wide demand by 2035	Streamline permitting process for EV charging installation city-wide	Municipal	\$	☹ ☹
		Explore opportunities to further expand Oakley's publicly available EV charging network	Municipal	\$\$	☹ ☹ ☹
		Partner with schools and major employers to install additional charging stations in parking lots for employees	Municipal + Community-wide	\$	☹ ☹
		Establish EV charger installation incentives and educational resources for multi-family residences and affordable housing developments	Municipal	\$	☹ ☹
		Increase consumer awareness about EV options, incentives, and charging installation options through partnerships with industry experts, environmental advocates, and local businesses	Municipal + Community-wide	\$	☹ ☹
T-2.2	Transition Oakley's municipal fleet to zero-emission vehicles (ZEV) by 2040	Develop a municipal fleet management plan that mandates newly-purchased city vehicles are zero-emission vehicles (ZEV)	Municipal	\$	☹ ☹
		Introduce bicycles and e-bikes as fleet vehicle alternatives where appropriate	Municipal	\$\$	☹ ☹
		Partner with Oakley Union Elementary School District, Antioch Unified School District, and Liberty Union High School District to transition to zero-emission bus fleets over time	Municipal + Community-wide	\$\$\$\$	☹ ☹ ☹
		Increase quantity of EV charging stations on municipal property, particularly to meet the projected increased demand from additional municipal fleet vehicles	Municipal	\$\$	☹ ☹

Goal T-3 Implement zoning and land use tools that promote transit-oriented development (TOD) and reduce vehicles miles traveled (VMT)					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
T-3.1	Pursue '15-minute city' planning efforts such that at least 75% of community members have access to basic amenities within a 15-minute walk or bike ride from home by 2035	Identify key infrastructure components and amenities needed for effective '15-minute city' planning and infill development	Municipal	2 FTE	☹☹
		Support zoning and code adjustments to make public investments in key '15-minute city' amenities identified	Municipal	\$	☹☹☹☹
		Collaborate with jurisdictions and advocates to bolster a regionally-connected, safe bike and pedestrian network that encourages active transportation	Municipal + Community-wide	\$	☹☹☹☹
		Improve connections between existing trail systems to facilitate greater accessibility and use among Oakley residents and visitors	Municipal	\$\$	☹
T-3.2	Incentivize the transition toward a greater percentage of high- and gentle-density measures in high-frequency transit areas	Encourage higher density affordable housing development along high-frequency transit corridors	Municipal	\$	☹☹☹
		Expand 'missing middle' housing typologies (e.g., duplexes, triplexes) through code changes and other planning initiatives to increase housing diversity	Municipal	\$	☹☹☹
T-3.3	In alignment with state goals, measure and reduce per capita vehicle miles traveled (VMT) across Oakley by 25% from 2019 levels and 30% by 2045 through active transportation and land use projects and initiatives	Execute a first/last-mile analysis that identifies communities with low public transportation access and recommends supplemental solutions to enhance Oakley's transportation network	Municipal	\$	☹☹☹
T-3.4	Assess parking needs in areas with higher-quality public and active transportation options and implement at least two pilot projects for reducing excessive parking by 2030	Identify criteria for when parking minimums could be reduced or removed, as well when parking maximums could be established	Municipal	1 FTE	☹☹
		Implement and evaluate pilot projects related to parking minimums and/or maximums for reducing excessive parking	Municipal	\$\$	☹☹

What we heard

Oakley residents and community stakeholders stressed the importance of reducing emissions from transportation. These included, but were not limited to, investments in charging for electric vehicles, active transportation, and public transit. Furthermore, residents emphasized the need for increased mobility options across Oakley for low-income community members and residents with mobility barriers.

T-1.2

Invest in at least three programs or initiatives that encourage community-wide use of public transit, with a focus on urban growth areas and communities with disadvantaged or vulnerable individuals by 2030

T-1.1

Encourage and monitor the shift toward active transportation (e.g., walking, biking, rolling) or shared transportation (e.g., rideshare, carpooling, school busing) as climate resilient mobility options on an ongoing basis















T-2.1




Install Level 2 and Level 3 public EV chargers to meet community-wide demand by 2035










4.6 Adaptation and Resilience

In order to effectively plan for the future of climate change impacts, the City of Oakley will bolster the capacity of city infrastructure and Oakley residents to withstand, adapt, and recover from adversity. The City will take steps to better monitor and improve municipal infrastructure to weather climate impacts, improve resource resilience of the built environment, ecosystems, and agricultural infrastructure.



Goal A-1					
Improve city infrastructure and open spaces to withstand climate impacts (e.g., extreme heat, fires, floods)					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
A-1.1	Deploy nature-based solutions that sequester emissions, reduce urban heat island impacts, and bolster healthy ecosystems on an ongoing basis	Plant and maintain additional shade-providing street trees and urban greenery, with particular emphasis on native and drought tolerant plants	Community-wide	\$	
		Conduct an equity-based analysis of tree canopy coverage to identify climate burdened communities most in need of additional shading	Community-wide	\$	
		Partner with designers and landscapers to install and maintain rain gardens, infiltration basins, and other nature-based solutions for stormwater capture on municipal land	Community-wide	\$\$	
		Partake in early action to eliminate or control non-native invasive insect species that take advantage of climate impacts	Community-wide	\$	
		Explore Indigenous practices and nature-based solutions for proactively wildfire management resilience, such as prescribed burns	Community-wide	\$	

Goal A-1 (continued) Improve city infrastructure and open spaces to withstand climate impacts (e.g., extreme heat, fires, floods)					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
A-1.2	Explore additional extreme heat adaptation opportunities for implementation by 2030	Identify locations for and install additional amenities like shade structures, splash pads, and water bottle filling and drinking water fountains	Community-wide	\$	
		Prioritize retrofitting public buildings to strengthen safe community spaces	Community-wide	\$\$-\$\$\$	
		Develop and implement an extreme heat resilience strategy that includes land use, urban design, urban greening, and waste heat reduction actions	Community-wide	\$\$-\$\$\$\$	
A-1.3	Establish climate-resilient building design standards by 2030	Establish guidance for cool roofs and surfaces on building roofs/surfaces, roadways, sidewalks, and parking lots	Community-wide	\$	
		Review and update long range plans every five years to ensure that storm water design relies upon the latest scientific findings on changing precipitation patterns	Community-wide	\$	
		Coordinate with other agencies (federal or state) on sea level rise (SLR) adaptation measures	Community-wide	\$	
		Select native drought and pest resistant trees, shrubs, and grasses for landscaping in building design plans	Community-wide	\$	

Goal A-2 Bolster community-wide emergency response networks and resource-sharing					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
A-2.1	Establish and support resilience hubs on an ongoing basis	Partner with community-based organizations (CBOs) such as Sustainable Contra Costa, peer agencies (e.g., East Bay Regional Parks District), schools, faith-based institutions, and other groups to ensure that their communities are prepared for climate emergencies	Community-wide	\$	
A-2.2	Conduct training and provide resources for emergency response on an ongoing basis	Develop and conduct training with local businesses, homeowners associations, tenant organizations, and other groups to share information about Oakley's climate resilience programs and emergency response protocol	Community-wide	\$	
		Collaborate with community-based organizations (CBOs) and other agencies to develop programs that identify and support vulnerable individuals during climate emergencies	Community-wide	\$	

Goal A-3 Evaluate city infrastructure standards periodically to incorporate strategies for climate impacts (e.g., extreme weather, precipitation, sea level rise, high heat, wildfires)					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
A-3.1	Periodically monitor latest scientific findings once every five years to be informed of changing climate impacts	Coordinate with federal and state agencies on SLR indicators, trends, and projections	Community-wide	\$	
		Coordinate with federal and state agencies on flooding and precipitation indicators, trends, and projections	Community-wide	\$	
		Coordinate with federal and state agencies on warming and wildfire indicators, trends, and projections	Community-wide	\$	
A-3.2	Establish climate-resilient infrastructure design standards by 2030	Select native drought and pest-resistant trees, shrubs, and grasses for landscaping in infrastructure design plans	Community-wide	\$	
		Develop and provide home-hardening information to educate community members against possible wildfire risks and resilience measures, prioritizing outreach for vulnerable populations	Community-wide	\$	
A-3.3	Provide annual guidance for city infrastructure vulnerable to climate impacts	Map transportation infrastructure vulnerable to repeated floods, landslides, wildfires, and other natural hazards, and designate alternative routes for critical transportation corridors	Community-wide	\$-\$\$	
		Incorporate SLR information, along with tsunami hazard mapping and evacuation route signage, into critical area delineation for recreational areas and ecological preserves	Community-wide	\$	
		Develop green infrastructure in capital projects to help capture, filter, store, and reuse stormwater runoff	Community-wide	\$\$\$-\$\$\$\$	
		Ensure energy infrastructure is able to accommodate high heat events and accommodate renewable energy opportunities	Community-wide	\$\$-\$\$\$	

Goal A-4 Establish land use patterns that increase the resilience of the built environment, ecosystems, and communicates to climate impacts					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
A-4.1	Encourage strategic development for increased resiliency on an ongoing basis	Require developers to demonstrate appropriate solutions in applications for development at urban or suburban densities in 100-year floodplain areas, 200-year floodplain areas, and/or other flood-prone areas	Community-wide	\$\$-\$\$\$\$	●
		For facilities identified in City of Oakley Routes of Regional Significance, maintain acceptable service standards specified in the East County Action Plan Final 2000 Update (or more recent/future update) as adopted with consideration of climate-induced hazards	Community-wide	\$\$-\$\$\$\$	●
		Include climate considerations in waste management citing and design decisions for major capital expenditures	Community-wide	\$\$-\$\$\$\$	●
		Develop water reuse and storage systems to satisfy environmental regulations and protect against future threats to water availability	Community-wide	\$\$-\$\$\$\$	●
A-4.2	Protect significant historic and ecological sites to ensure resiliency to climate impacts on an ongoing basis	Protect significant historic sites from climate-induced damages by incorporating the latest building design retrofits	Community-wide	\$\$\$-\$\$\$\$	●
		Encourage preservation and protection of Delta ecosystems to foster ecological health and bolster climate resilience	Community-wide	\$	●●
A-4.3	Collaborate with purveyors to ensure city utilities and services (e.g., sanitary, water, stormwater) are enhanced according to climate projections	Investigate funding mechanisms, grants, and/or matching funds for residential establishments to account for temperature warming	Community-wide	\$-\$\$	●
		Work with energy utilities to improve the safety and reliability of infrastructure vulnerable to climate impacts	Community-wide	\$-\$\$	●

Goal A-5 Ensure agriculture adaptation resources are coordinated, funded and staffed to support farmers in making informed business decisions in a changing climate					
Target No.	Target	Actions	Scope	ROM Cost	Emissions Reduction
A-5.1	Prepare the City of Oakley to anticipate changes to standard agricultural practices and economic impacts.	Encourage regenerative agriculture and ocean farming where practicable	Community-wide	\$\$-\$\$\$	
		Support changes to agricultural crops and irrigation methods in anticipation of precipitation changes and temperature warming	Community-wide	\$\$-\$\$\$	

What we heard

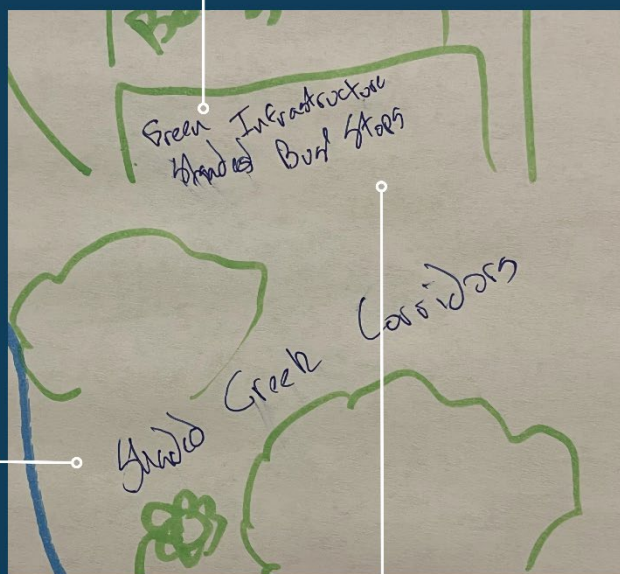
Throughout the planning process, Oakley residents and stakeholders emphasized the need for climate-resilient infrastructure design and nature-based solutions to foster resilience to extreme heat and ecosystem health far into the future. Multiple stakeholders highlighted the importance of the Delta and water resource systems as integral to community-wide resilience.

A-1.2

Explore additional extreme heat adaptation opportunities for implementation by 2030

A-1.1

Deploy nature-based solutions that sequester emissions, reduce urban heat island impacts, and bolster healthy ecosystems on an ongoing basis



A-3.2

Establish climate-resilient infrastructure design standards

4.7 Implementing the Climate Action Plan

This *Climate Action Plan* will require the City to take several steps in the short term to implement this plan. First, the City will convene decision-makers to review all actions within the CAP and prioritize based on select criteria to determine which items can be implemented in the short term (i.e., 0-2 years), medium term (i.e., 3-5 years), and long term (more than five years). As items are prioritized, actions will be folded into budgetary and project planning, at which point the City will evaluate its capacity and determine where it can use existing resources to implement, as well as where it may need to secure external funding.

4.7.1 Prioritization Criteria

The actions listed within this plan are not intended to be implemented concurrently, and not all actions will be possible to implement immediately. Consequently, the City will assess the complete menu of actions in the context of the following criteria.

- **Costs and benefits** – Prioritize actions at the lowest overall cost to the City and its taxpayers, accounting for potential benefits, savings, and revenues from any given action.
- **Emissions reduction potential** – Prioritize activities with the greatest potential to reduce GHG emissions upon implementation.
- **Resilience and equity co-benefits** – Prioritize actions that center climate resilience and community-wide equity, or otherwise present tangible resilience and equity co-benefits (e.g., improved infrastructure, increased mobility, reduced air pollution, more greenspace, protection from climate hazards, etc.)
- **Staffing and funding availability** – Determine if a given action has staff to support it, and if the City has budget available to implement the action in part or in whole.
- **Funding and partnership opportunities** – Determine if the action may be accompanied by a grant opportunity at the regional, state, or federal level, and/or can be achieved in partnership with other jurisdictions or agencies.

4.7.2 Monitoring and Reporting

In addition, to ensure that the City makes progress on the CAP, it will commit to the following steps:

1. Assign responsibility through the City Manager's office to appropriate departments to execute actions within the CAP.
2. Coordinate with department heads form a Steering Committee that will integrate the implementation of the CAP into existing workflows and provide updates on progress.
3. Develop updated GHG emissions inventories at least once every two years and issue a public report on progress against the CAP, with the goal of updating the CAP every five years.

CONCLUSION

As one of California's youngest incorporated cities, we are proud to offer residents and families a vibrant and diverse place to call home. Our city is quickly evolving, and we will continue to strive to keep Oakley's small-town character while incentivizing development and opportunity in our community to keep growing. But everything we are doing, and everything we hope to do in the future, will be at risk if we do not act on climate change now.

This Climate Action Plan is more than just a statement of intent, but it is also a call to action. Everything we hope to achieve in this Plan is only possible with a united and active community, and we believe this Plan offers one of the most critical opportunities yet for Oakley residents to work together to make our home a safe and welcoming place now and well into the future. We invite residents to join us for future workshops, listening sessions, and City events and to lend us their voice on this issue. We also invite our partners along the Delta and across both Contra Costa County and the state of California to partner with us on ways to make our region more resilient to the impacts of climate change. So much more is possible when we work together.



APPENDIX A: GLOSSARY AND ABBREVIATIONS

A-1 Glossary

Adaptation – Adjustment or preparation of natural or human systems to a new or changing environment which moderates harm or exploits beneficial opportunities.¹⁷

Adaptive capacity – The ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.¹⁸

Anthropogenic (human-caused) GHG (greenhouse gas) emissions – Emissions of greenhouse gases (GHGs), precursors of GHGs and aerosols caused by human activities. These activities include the burning of fossil fuels, deforestation, land use and land-use changes, livestock production, fertilization, waste management and industrial processes.¹⁹

Business-as-usual (BAU) scenario – A projection of future environmental and social conditions based on the assumption that current trends and practices will continue without significant change.

Business-as-planned (BAP) scenario – A projection of future environmental and social conditions that accounts for existing actions and the impacts of state and federal regulations.

Carbon dioxide equivalent (MTCO_{2e}) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential. Carbon dioxide equivalents are commonly expressed as metric tons of carbon dioxide equivalents (MTCO_{2e}). The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated global warming potential. MTCO_{2e} = (metric tons of a gas) * (global warming potential of the gas).²⁰

Carbon neutrality – The state in which an organization has a net-zero carbon footprint, meaning that their overall greenhouse gas emissions are balanced by removing an equivalent amount of carbon dioxide from the atmosphere, or by offsetting emissions through investments in renewable energy or other carbon-reducing projects.

Climate change – A long-term shift in average weather patterns. It is caused mainly by burning fossil fuels for energy, which releases greenhouse gases. These gases form a blanket of pollution over the earth that traps heat in the atmosphere. This effect, also known as global warming, is causing our planet to overheat, leading to more severe wildfires, droughts, floods, and more.²¹

Climate hazards – Risks posed to human societies, ecosystems, and economies by extreme weather events and other environmental changes resulting from global climate change.

¹⁷ U.S. Environmental Protection Agency (EPA), Glossary of Climate Change Terms, 2016. Available at https://19january2017snapshot.epa.gov/climatechange/glossary-climate-change-terms_.html. Accessed March 3, 2025.

¹⁸ IPCC (Intergovernmental Panel on Climate Change), Special Report: Global Warming of 1.5° C, Annex I: Glossary, 2018. Available at <https://www.ipcc.ch/sr15/chapter/glossary/>. Accessed March 3, 2025.

¹⁹ IPCC (Intergovernmental Panel on Climate Change), Special Report: Global Warming of 1.5° C, Annex I: Glossary, 2018. Available at <https://www.ipcc.ch/sr15/chapter/glossary/>. Accessed March 3, 2025.

²⁰ Eurostat, Statistics Explained, Glossary, n.d. Available at https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Carbon_dioxide_equivalent. Accessed March 3, 2025.

²¹ California Environmental Protection Agency (CalEPA), California Climate Dashboard, 2025. Available at <https://calepa.ca.gov/climate-dashboard/>. Accessed March 3, 2025.

(Climate) exposure – The presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.²²

(Climate) resilience – A capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.²³

Climate sensitivity – The level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.²⁴

Climate vulnerability – The propensity of exposed elements such as human beings, their livelihoods, and assets to suffer adverse effects when impacted by hazard events.²⁵

Disadvantaged community (DAC) – The areas throughout California which most suffer from a combination of economic, health, and environmental burdens. These burdens include poverty, high unemployment, air and water pollution, presence of hazardous wastes as well as high incidence of asthma and heart disease.²⁶

Greenhouse Gas (GHG) – Those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth's surface, the atmosphere itself and by clouds. This property causes the greenhouse effect. Water vapor (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄) and ozone (O₃) are the primary GHGs in the Earth's atmosphere.²⁷

Micromobility (or micro-transit) – Any small, low-speed, human or electric-powered transportation device, including bicycles, scooters, electric-assist bicycles (e-bikes), electric scooters (e-scooters), and other small, lightweight, wheeled conveyances.²⁸

Mode shift – A change in the way people travel between different modes of transportation, such as from driving a car to using public transit, biking, or walking. It typically involves a shift from single-occupancy vehicles, which are associated with traffic congestion, air pollution, and greenhouse gas emissions, towards more sustainable and efficient modes of transportation.

Scope 1 emissions – Direct greenhouse gas emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles, etc.).

²² California's Fourth Climate Change Assessment, Statewide Summary Report, 2018. Available at https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf. Accessed March 3, 2025.

²³ U.S. Environmental Protection Agency (EPA), Glossary of Climate Change Terms, 2016. Available at https://19january2017snapshot.epa.gov/climatechange/glossary-climate-change-terms_.html. Accessed March 3, 2025.

²⁴ California's Fourth Climate Change Assessment, Statewide Summary Report, 2018. Available at https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf. Accessed March 3, 2025.

²⁵ IPCC (Intergovernmental Panel on Climate Change), Determinants of Risk: Exposure and Vulnerability, 2018. Available at https://www.ipcc.ch/site/assets/uploads/2018/03/SREX-Chap2_FINAL-1.pdf. Accessed March 3, 2025.

²⁶ California Public Utilities Commission (CPUC), Disadvantaged Communities, 2025. Available at <https://www.cpuc.ca.gov/discom/>. Accessed March 3, 2025.

²⁷ IPCC (Intergovernmental Panel on Climate Change), Special Report: Global Warming of 1.5° C, Annex I: Glossary, 2018. Available at <https://www.ipcc.ch/sr15/chapter/glossary/>. Accessed March 3, 2025.

²⁸ U.S. Department of Transportation Federal Highway Administration, Micromobility, 2025. Available at https://www.fhwa.dot.gov/livability/fact_sheets/mm_fact_sheet.cfm. Accessed March 3, 2025.

Scope 2 emissions – Indirect greenhouse gas emissions associated with the purchase of electricity, steam, heat, or cooling. Although Scope 2 emissions physically occur at the facility where they are generated, they are accounted for in an organization's GHG inventory because they are the result of the organization's energy use.

Scope 3 emissions – Indirect emissions from activities or assets not owned or controlled by the reporting organization, but that the organization indirectly affects in its value chain. Scope 3 emissions include all sources not within an organization's scope 1 and 2 boundary. The scope 3 emissions for one organization are the scope 1 and 2 emissions of another organization.

Social vulnerability – The demographic and socioeconomic factors (such as poverty, lack of access to transportation, and crowded housing) that adversely affect communities that encounter hazards and other community-level stressors. These stressors can include natural or human-caused disasters (such as tornadoes or chemical spills) or disease outbreaks (such as COVID-19).²⁹

Vehicle miles traveled – A measure used in transportation planning for a variety of purposes. It measures the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period.³⁰

²⁹ Centers for Disease Control – Agency for Toxic Substances and Disease Registry, Social Vulnerability Index, 2024. Available at <https://www.atsdr.cdc.gov/place-health/php/svi/index.html#:~:text=Social%20vulnerability%20refers%20to%20the%20demographic%20and%20socioeconomic,communities%20that%20encounter%20hazards%20and%20other%20community-level%20stressors>. Accessed March 3, 2025.

³⁰ U.S. Department of Transportation, National Transportation Library, Methodologies used to estimate and forecast vehicle miles traveled (VMT): final report, 2016. Available at <https://rosap.ntl.bts.gov/view/dot/32689>. Accessed March 3, 2025.

A-2 Abbreviations

- **ABAG:** Association of Bay Area Governments
- **ADA:** Americans with Disabilities Act
- **BAP:** Business-as-Planned
- **BAU:** Business-as-Usual
- **BayREN:** Bay Area Regional Energy Network
- **Cal LCI:** California Governor's Office of Land Use and Climate Innovation
- **Cal OES:** California Governor's Office of Emergency Services
- **CalEPA:** California Environmental Protection Agency
- **CAP:** Climate Action Plan
- **CARB:** California Air Resources Board
- **CBO:** Community-based Organization
- **CH₄:** Methane
- **CO₂:** Carbon Dioxide
- **CVM:** Climate Vulnerability Metric
- **CVRA:** Climate Vulnerability and Risk Assessment
- **DAC:** Disadvantaged Communities
- **DER:** Distributed Energy Resources
- **DOE:** Department of Energy
- **DWD:** Diablo Water District
- **EV:** Electric Vehicle
- **GHG:** Greenhouse Gas
- **FTE:** Full-time Employee
- **FY:** Fiscal Year
- **HPI:** Healthy Places Index
- **IPCC:** Intergovernmental Panel on Climate Change
- **LCFS:** Low Carbon Fuel Standard
- **LED:** Light-emitting Diode
- **MTCO_{2e}:** Metric Tons of Carbon Dioxide Equivalent
- **MW:** Megawatt
- **N₂O:** Nitrous Oxide
- **PV:** Photovoltaic
- **RCPs:** Representative Concentration Pathways
- **ROM:** Rough Order of Magnitude
- **SLR:** Sea Level Rise
- **TOD:** Transit-Oriented Development
- **USDOT:** U.S. Department of Transportation
- **VMT:** Vehicle Miles Traveled
- **ZEV:** Zero-Emission Vehicle

APPENDIX B: GREENHOUSE GAS EMISSIONS

B-1 Baseline Emissions Inventory

The City of Oakley's baseline greenhouse gas (GHG) emissions prepared baseline greenhouse gas emission inventories for municipal and city-wide emissions. The municipal inventory is comprised of emissions resulting from the City of Oakley's operational assets and activities, including facilities, transit and other service vehicles. The community-wide inventory is comprised of emissions resulting from city-wide electricity use, gas use, and vehicles. Oakley prepared the inventory in alignment with internationally recognized standards and guidance, including ISO 14064-1:2018, the World Resources Institute (WRI), the Greenhouse Gas Protocol, the U.S. Environmental Protection Agency, and the California Air Resources Board (CARB).

B-1.1 Inventory Boundary and Scope

GHG emissions inventories are conventionally prepared within specific geographical, physical, and temporal boundaries that clearly define the coverage area, or boundary, of emissions recorded. For Oakley's municipal emissions inventory, Oakley established a physical boundary of Oakley-owned and -operated assets with respect to the agency's daily activities (excluding emissions from construction and demolition). The established physical boundary of the community-wide emissions inventory, Oakley established a physical boundary of within the city limits of Oakley. For both emissions inventories, Oakley established a temporal boundary of the year 2023, covering the period of January 1, 2023, all the way through December 31, 2023. Per internationally recognized standards, emissions inventories are categorized into scopes that identify emissions based on the reporting entity's ownership of, or influence over, the activities generating those emissions. Per the GHG Protocol, emissions are typically categorized into different scopes:³¹

- **Scope 1 emissions** – Direct GHG emissions that occur from sources controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).
- **Scope 2 emissions** – Indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.³²
- **Scope 3 emissions** – Indirect emissions from activities or assets not owned or controlled by the reporting organization, but that the organization in directly affects in its value chain.³³

³¹ Greenhouse Gas Protocol. "Standards." n.d. <<https://ghgprotocol.org/standards>>.

³² Although scope 2 emissions physically occur at the facility where they are generated, they are accounted for in an organization's GHG inventory because they are a result of the organization's energy use.

³³ Scope 3 emissions may include some or all sources that are not otherwise included in a reporting entity's Scope 1 or Scope 2 emissions. Furthermore, some Scope 3 emissions may include Scope 1 or Scope 2 emissions that belong to another reporting entity.

B-1.2 Inventory Data Sources and Details

Data sources for emissions calculations are listed in Tables B-1, B-2 and B-3 and are categorized by scope.

Table B-1. Municipal Scope 1 Emissions Sources and Details

Scope 1 Emissions	Services	Fuel/Resource Types	Data Provider(s)
Stationary combustion	Energy	Natural Gas	Pacific Gas & Electric
Mobile combustion	Diesel Vehicles	Diesel	City of Oakley
	Gasoline Vehicles	Unleaded Gasoline	City of Oakley CARB EMFAC ³⁴
	Electric Vehicles	Electricity	City of Oakley CARB EMFAC

Table B-2. Community-wide Scope 1 Emissions Sources and Details

Scope 1 Emissions	Services	Fuel/Resource Types	Data Provider(s)
Stationary combustion	Energy	Natural Gas	Pacific Gas & Electric
Mobile combustion	Diesel Vehicles	Diesel	CARB EMFAC
	Gasoline Vehicles	Unleaded Gasoline	CARB EMFAC
	Natural Gas Vehicles	Natural Gas	CARB EMFAC
	Electric Vehicles	Electricity	CARB EMFAC
	Hybrid Plug-In Vehicles	Electricity and Unleaded Gas	CARB EMFAC

With respect to Scope 2 emissions, purchased electricity data prepared by Pacific Gas & Electric (PGE) was used exclusively. Electricity consumption covers multiple end uses.

Table B-3. Municipal Scope 2 Emissions Sources and Details

Scope 2 Emissions	Services	Fuel/Resource Types	End Use(s)	Data Provider(s)
Purchased electricity	All	Electricity	Facilities, Traffic Signals	Pacific Gas & Electric, MCE Clean Energy

Table B-4. Community-wide Scope 2 Emissions Sources and Details

Scope 2 Emissions	Services	Fuel/Resource Types	End Use(s)	Data Provider(s)
Purchased electricity	All	Electricity	Residential and Commercial Electricity	Pacific Gas & Electric, MCE Clean Energy

³⁴ Refers to the California Air Resources Board's *EMission FACTors Model*.

While data was collected exclusively from PG&E, Oakley is within MCE Clean Energy's (the region's community choice energy provider) service area. Meters were assumed and confirmed to be enrolled under the CCA.

B-1.2 Emissions Calculation Resources and Assumptions

Emissions Factors

Emissions factors were assigned and used as follows:

- Emission factors from The Climate Registry (TCR) were applied for the stationary energy and mobile combustion emission calculations.
- Supplier-specific emission factors from Pacific Gas & Electric and MCE Clean Energy were applied in the market-based electricity emission calculation.

Data Aggregation and Quality Assurance

To ensure data quality and accuracy, a quality assurance and quality control process was used to ensure the integrity of the data through all collection, cleaning, aggregation, and calculation phases before being finalized. Data quality assurance criteria included but were not limited to unit measure checks, data boundary checks, reporting data timeframe checks, validity of data sources, etc.

Estimations

Estimations were not made in Oakley's municipal greenhouse gas emission inventory. Listed below are key assumptions made in the calculation of Oakley's baseline community-wide greenhouse gas emissions:

- **Transportation (vehicle) emissions** – On-road vehicle emissions were derived from CARB's EMFAC tool. The tool is a model developed and used by the CARB to assess emissions from on-road vehicles including cars, trucks, and buses in California. In the case of community-wide transportation emissions, community-wide mileages and fuel consumption were collected at the county-wide level for Contra Costa county, as these figures are not available at the city level. To obtain useful community-wide figures for Oakley, a proportion of these mileages and fuel consumption figures was taken based on the share of Oakley's population relative to the entire population of Contra Costa county.

B-2 Emissions Forecasting

The City of Oakley developed Excel-based emission scenario models to forecast emissions for municipal and community-wide emissions through 2050.

B-2.1 Forecasting Scenarios

Both business-as-usual (BAU) and business-as-planned (BAP) scenarios were modeled. Relevant assumptions were made and documented for each scenario based on the best available sources and information:

- **Business as Usual (BAU)** – The BAU scenario assumes the normal execution of currently existing operations within the City, with no planned or newly developed activities. In this scenario, GHG emissions are only impacted by external factors outside Oakley’s control – namely, population growth.
- **Business as Planned (BAP)** – This scenario incorporates currently planned activities, including compliance with state regulations, to mitigate emissions. However, no new strategies or measures are incorporated. In this scenario, on top of population growth, the impact federal and state regulations (e.g., the California Low Carbon Fuel Standard, the California Renewable Portfolio Standard, etc.) are incorporated into the emissions trajectory.

B-2.2 Source Data

Emissions forecasts derived their source data from those provided for the baseline emissions inventories. Additional information about the impact of regulatory drivers were collected online from pertinent government agency websites.

B-2.3 Forecast Assumptions

The key assumptions to develop the BAU and BAP emissions forecasts are listed below:

1. The carbon intensity of transportation fuels will be reduced to 20% below 2010 levels by 2030 due to the California Low Carbon Fuel Standard. This data was used to calculate the impact emissions from fuel through 2030, with the assumption that impact will remain level after 2030.
2. It is assumed that the California grid emission intensity will decrease linearly year by year from 2022 to 2045 and 100% clean electricity in 2045 to align with the California Climate Commitment.
3. It is assumed that passenger cars, trucks, and SUVs in Oakley will decrease due to the Advanced Clean Cars II regulation requiring that all new passenger cars, trucks, and SUVs sold in California will be zero-emission vehicles by 2035. The City of Oakley calculated the Zero Emissions Vehicle penetration forecast to calculate the rate of transition to zero emissions vehicles in the city.
4. It is assumed the City of Oakley population will grow to 68,000 people by 2042 (based on the City’s General Plan). This projection was used to calculate the year-over-year population growth through 2050.

APPENDIX C: CLIMATE VULNERABILITY AND RISK ASSESSMENT

Appendix begins on the next page as a distinct attachment.

City of Oakley – Climate Vulnerability Assessment

Climate change is a global phenomenon that may affect each community differently. In recognition of this, many State legislations have been passed to reduce overall greenhouse gas emissions and “futureproof” local infrastructure against increasing climate-exacerbated risks.¹ Thus, a city or county’s climate action plan is to be established, reviewed and/or updated as necessary to address updated GHG emissions forecasts and applicable climate adaptation and resiliency strategies, including a set of goals, policies, and objectives based on a vulnerability assessment. A Climate Vulnerability Assessment (CVA) serves as the foundation for the Climate Action Plan, as described in the California Air Resources Board 2022 Scoping Plan.²

Based on guidance from the California Governor’s Office of Emergency Services (Cal OES) California Adaptation Planning Guide (APG)³ and the Southern California Climate Adaptation Planning Guide⁴ the following five steps must be completed to assess the vulnerability of the City of Oakley (City) to the effects of climate change:

1. **Exposure** – Identify the climate change effects a community will experience.
2. **Sensitivity** – Identify the key community structures, functions, and populations that are potentially susceptible to each climate change exposure.
3. **Potential Impacts** – Analyze how climate change exposure will affect the community structures, functions, and populations (impacts). Adjust the impact assessment to account for uncertainty, timing, and adaptive capacity.
4. **Adaptive Capacity** – Evaluate the community’s current ability to address the projected impacts.
5. **Vulnerability Scoring** – Determine and rank potential impacts and adaptive capacity.

Each of these steps is described in detail below. Data for this CVA was collected from sources including the following:

- CalAdapt Climate Tool
- California’s Fourth Climate Change Assessment, 2018⁵
- California’s Fourth Climate Change Assessment, San Francisco Bay Area Regional Report, 2018
- Contra Costa County Local Hazard Mitigation Plan, 2024
- Association of Bay Area Governments, Regional Resilience Toolkit, 2019

¹ Assembly Bill 32, Senate Bill 32, Assembly Bill 1279. California Climate Policy Dashboard, Berkeley Law. Available at <https://www.law.berkeley.edu/research/clee/research/climate/climate-policy-dashboard/>. Accessed October 2024.

² California Air Resources Board (CARB), 2022 Scoping Plan for Achieving Carbon Neutrality. Available at <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>.

³ Governor’s Office of Emergency Services, California Adaptation Planning Guide, June 2020 Final Draft. Available at <https://www.caloes.ca.gov/wp-content/uploads/Hazard-Mitigation/Documents/CA-Adaptation-Planning-Guide-FINAL-June-2020-Accessible.pdf>. Accessed July 29, 2024.

⁴ Association of Bay Area Governments (ABAG), Regional Resilience Toolkit, 2019. Available at https://abag.ca.gov/sites/default/files/regional_resilience_toolkit_0.pdf. Accessed July 29, 2024.

⁵ OPR, State of California Energy Commission, and California Natural Resources Agency, California’s Fourth Climate Change Assessment, 2018. Available at <https://www.climateassessment.ca.gov/>. Accessed July 29, 2024.

- California Adaptation Planning Guide
- California Healthy Places Index

1. Potential Climate-Related Effects

Climate change affects communities all around the world regardless of their contribution to this phenomenon. Jurisdictions across California are expected to experience different climate change effects to varying degrees based on geography, density of urban development, and environmental factors. **Table 1: Climate-Related Effects and Hazards Potentially Applicable to Oakley** below, based on guidance from the California Adaptation Planning guide, identifies the direct effects of climate change and the associated secondary effects potentially applicable to Oakley. Each of the seven is discussed in detail below. The goal of the exposure step is to characterize the community's exposure to current and projected climate hazards.

Table 1: Climate-Related Effects and Hazards Potentially Applicable to Oakley

Primary Hazard	Secondary Hazard
Air quality	Public health effects
Changed temperature and/or precipitation patterns	Drought, wildfire
Flooding	Flooding, erosion, mud or landslides; Dam and levee failure
Sea Level Rise	Storm surge, flooding, groundwater intrusion
Severe storms and extreme weather	Intense rainstorms, severe wind, flooding, lightning, hail
Temperature changes – warming	Extreme heat/heat waves
Wildfire	Erosion, landslide

The projection of the likelihood, timing, and severity of these primary and secondary hazards to impact the City is based on the trajectory of greenhouse gas (GHG) concentrations in the Earth's atmosphere, commonly referred to as Representative Concentration Pathways (RCPs). RCPs represent a combination of the historical data and estimates of concentrations through 2100, based on a set of formulated human behaviors. The pathways describe different climate futures, all of which are considered possible depending on the volume of GHGs emitted in the years to come. The Intergovernmental Panel on Climate Change (IPCC) adopted a number of RCPs in its latest assessment in its recent guidance and chose to focus on three RCPs representing a reasonable range of outcomes, as follows:

1. A low emissions scenario (RCP2.6) – this represents an aggressive emissions reduction scenario that assumes global greenhouse gas emissions will be significantly curtailed. RCP 2.6 most closely corresponds to the aspirational goals of the United Nations Framework Convention on Climate Change 2015 Paris Agreement.
2. A medium emissions scenario (RCP4.5) – this represents a mitigation scenario where global greenhouse gas emissions peak by 2040 and then decrease for the rest of the century.
3. A high emissions scenario (RCP8.5) – this represents a “business-as-usual” scenario where global greenhouse gas emissions continue to rise throughout the 21st century.

Because the RCP2.6 scenario depends on substantive changes in the current set of world-wide policies, regulations, and behaviors, it is considered unlikely, and therefore not especially helpful in a climate

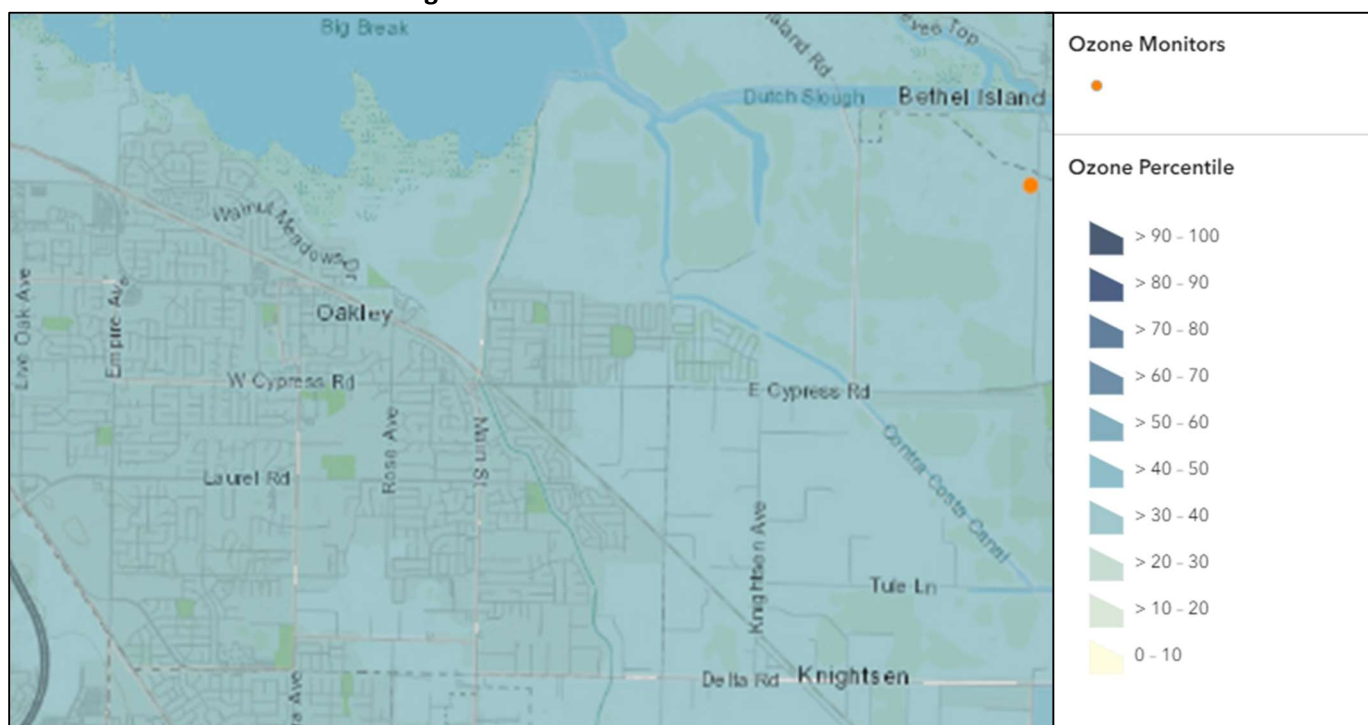
vulnerability assessment. This CVA will rely primarily on RCP8.5, the high emissions scenario, in alignment with OPR's recommendation that agencies use RCP8.5 when considering impacts through 2050 because there are minimal differences between the low and high emissions scenarios through the first half of the century. When available and illustrative, the RCP4.5 scenario may be shown for additional context.

1.1. Air Quality

The City is located in Contra Costa County, which lies in the central portion of the San Francisco Bay Air Basin (Basin). As such, the Bay Area Air Quality Management District is tasked with setting regulations to ensure that the Basin obtain and maintain the National Ambient Air Quality Standards (NAAQS) and continue progress towards meeting more stringent California Ambient Air Quality Standards (CAAQS).

According to CalEnviroScreen 4.0, as shown in **Figure 1: CalEnviroScreen 4.0 - Ozone**, census tracts in Oakley are in ozone percentiles from 35 to 40 percentile, which means the summed concentration of ozone for census tracts in Oakley is higher than 35 to 40 percent of census tracts in the State. Oakley's ozone concentrations are relatively high in comparison to the entire County, but low in comparison to the State.

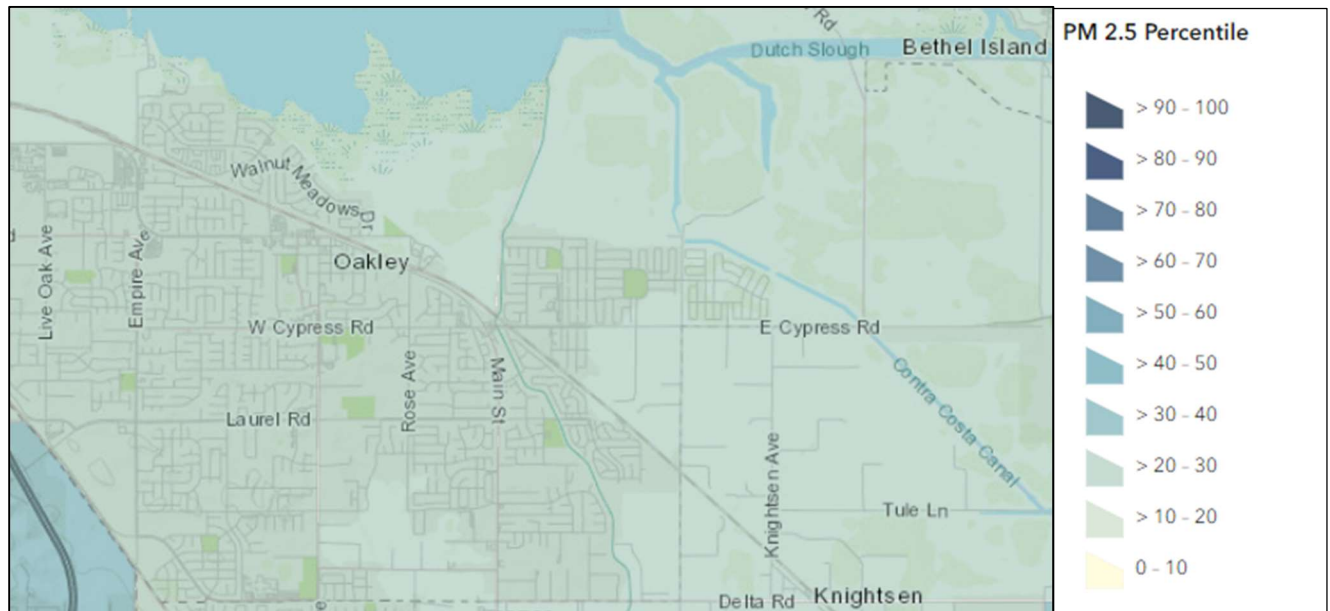
Figure 1: CalEnviroScreen 4.0 - Ozone



Source: CalEnviroScreen 4.0, Ozone Pollution Burden.

According to CalEnviroScreen 4.0, as shown in **Figure 2: CalEnviroScreen 4.0 – PM2.5**, census tracts in Oakley are in PM2.5 percentiles from 27 to 30 percentile, which means the summed concentration of PM2.5 for census tracts in Oakley is higher than 27 to 30 percent of census tracts in the State. Oakley's PM2.5 concentrations are average in comparison to the entire County, and low in comparison to the State.

Figure 2: CalEnviroScreen 4.0 – PM2.5



Source: CalEnviroScreen 4.0, PM2.5 Pollution Burden

Changes in climate can result in impacts to local air quality. Ozone is not emitted directly, rather it is formed when emissions of oxides of nitrogen (primarily from the combustion of fossil fuels) and reactive organic gases (from evaporative sources such as gasoline, solvents, paints, and other consumer and industrial products and processes) react in the presence of sunlight. Thus, it is widely recognized that atmospheric warming associated with climate change has the potential to increase ground-level ozone formation. Locally, this threatens the ability of the Basin to obtain the applicable ozone NAAQS and CAAQS under the business-as-usual (BAU) (RCP8.5) scenario.

PM is caused both by natural and anthropomorphic activities; it is emitted directly from sources (such as earth moving, smokestacks, and fires) and also forms secondarily in the atmosphere when gases and aerosols combine (from sources such as power plants, industries and automobiles). According to the United States Environmental Protection Agency (USEPA), the impact of climate change on PM is less certain, but research is underway to address these uncertainties. Climate change, such as decreasing precipitation and increasing wildfires, can result in higher emission of PM into the atmosphere.

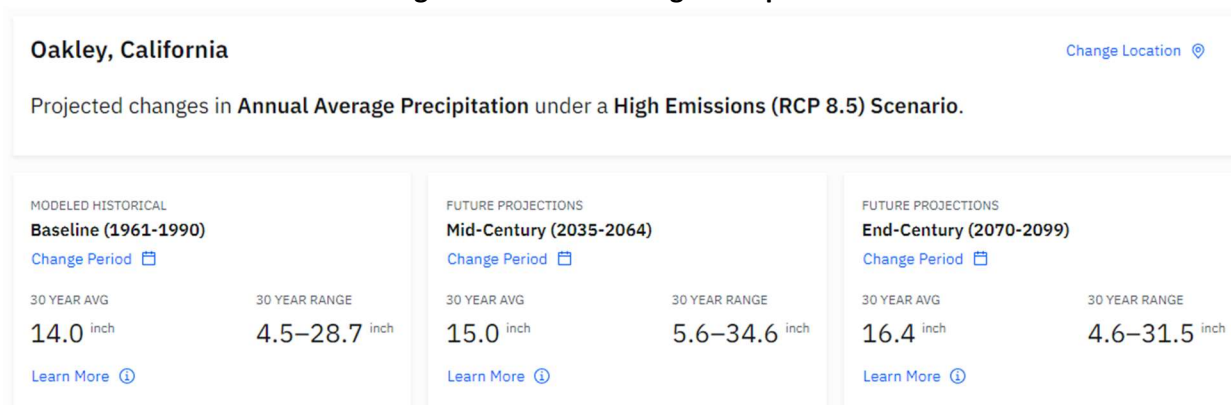
Contra Costa County is located within the Bay Area Air Quality Management District (BAAQMD). BAAQMD consists of over 30 stations that collect local air quality data, including measurements of significant air pollutants. According to the California Air Resources Board, the closest air monitoring stations to Oakley are Bethel Island (ARB #7442), Concord (ARB #07448), and San Ramon (ARB #60341). These locations were purposefully selected because these are areas with higher levels of sources and activities that emit PM.

1.2. Precipitation Changes

Oakley, like most of the Contra Costa region, is characterized by wet winters. The average precipitation observed in Oakley between 1961 and 1990 was 14.0 inches with a high of 28.7 inches and a low of 4.5 inches.⁶

As presented in **Figure 3: Annual Average Precipitation**, local annual levels of precipitation are not anticipated to change drastically for the City. It is projected that the average precipitation in Oakley from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in the 2070 to 2099 timeframe under the RCP8.5 scenario.⁷ Changes in annual precipitation of these minimal ranges alone are not expected to pose much risk to the built or human environment. The role of changing precipitation amounts and patterns in expanding the extent or geographic distribution of vector-borne disease is not clearly understood at this time.⁸

Figure 3: Annual Average Precipitation



Source: Cal-Adapt, Annual Average Precipitation.

However, much of the subregion's potable water supply is provided by several sources, including both surface water from the Sacramento-San Joaquin Delta (Delta) and groundwater from existing wells located in the East Contra Costa Subbasin. The Diablo Water District (District) serves the City with its two sources of water derived from local groundwater and Delta water.⁹ In addition, the District recognizes the City resides in a mediterranean climate that is prone to cycles of prolonged droughts. Thus, the District provides free ways for water conservation, water saving tips, gardening tips, lawn to garden rebates, and additional rebates. Based on Cal-Adapt, a climate change induced decline in the northern Sierra Nevada of 32 percent in snow water equivalence by 2050 and 77 percent by 2099 is anticipated, and declines in the southern Sierra Nevada of up to 10 percent and up to 40 percent by 2050 and 2099, respectively. Projected heat-trapping emissions could continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier; thus, reducing the Sierra Nevada Spring snowpack by as much as 70 to 90 percent.¹⁰

⁶ Cal-Adapt, Annual Averages. Available at <https://cal-adapt.org/tools/annual-averages/>. Accessed August 2024.

⁷ Cal-Adapt, Annual Averages. Available at <https://cal-adapt.org/tools/annual-averages/>. Accessed August 2024.

⁸ Vicki Kramer, PhD, Impact of Climate Change on Vector-Borne Diseases. Available at <https://oehha.ca.gov/media/downloads/climate-change/document-presentation/13humankramer.pdf>. Accessed August 2024.

⁹ Diablo Water District, Your Water. Available at <https://diablowater.org/your-water/>. Accessed August 2024.

¹⁰ Cal-Adapt, Snowpack. Available at: <https://cal-adapt.org/tools/snowpack/>. Accessed August 2024.

Precipitation levels are not expected to change significantly for the Colorado River Basin. However, as temperatures rise and precipitation levels decrease on a larger geographic scale, the snowpack volume is expected to drop, potentially resulting in a 9 percent decline in the total flow of the Colorado River. According to *California's Fourth Climate Change Assessment*, the changes in Sierra Nevada snowpack will “undeniably pressure California to preemptively invest in climate adaptation measures, such as alternative water storage, water-use efficiency, and updated reservoir storage operations.”¹¹

Droughts are common in California, and it is widely recognized that dry conditions may be experienced more regularly in the future given the impact of climate change on California's snowpack. Currently, the Oakley and Bay Area region are classified within the -2 to 4 range of the Palmer Drought Severity Index (PDSI), where a value of -6 represents “extreme drought.”¹² Drought can lead to reductions in the quality and quantity of water, degradation of air quality, increase in agricultural vectors and disease, and decreases in crop yield.¹³ According to the California Department of Public Health, health consequences of drought may impact the following vulnerable/sensitive populations most: “the elderly, children, individuals of low socioeconomic status, rural communities, populations living in nursing homes, hospitalized patients, those who rely on electrical equipment to survive, farmers, and agricultural workers.”¹⁴

1.3. Flooding

The accumulation of excess water due to increase precipitation or natural water flows has the potential to result in the flooding of nearby floodplains or low-lying valleys. Floodplains, or areas adjacent to water bodies, are especially susceptible to flooding hazards. The severity of flooding within a floodplain is directly related to the capacity and volume of the neighboring body of water or waterway. Flooding within larger, flatter floodplains occurs more predictably for longer durations.

Although CalAdapt does not provide emissions-based flooding projections, the 2024 County Local Hazard Mitigation Plan (LHMP) and San Francisco Bay Conservation and Development Commission (BCDC) Adapting to Rising Tides (ART) Web Map shows the existing flooding risks present in the City.^{15 16} According to the County's LHMP and BCDC ART map, areas within the City that are vulnerable to flooding include Big Break Regional Shoreline/ Delta Discovery Experience shoreline area, port facilities, and areas to the north

¹¹ California's Fourth Climate Change Assessment – San Francisco Bay Area Region Report. Available at https://www.energy.ca.gov/sites/default/files/2019-11/Reg_Report-SUM-CCCA4-2018-005_SanFranciscoBayArea_ADA.pdf. Accessed August 2024.

¹² WestWideDroughtTracker, California – PDSI. Available at <https://wrcc.dri.edu/wwdt/index.php?region=ca>. Accessed August 2024.

¹³ California Department of Public Health (CDPH), California Building Resilience Against Climate Effects (CalBRACE) Project. Available at https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHVIs/Drought_802_Narrative_11-8-2016.pdf. Accessed August 2024.

¹⁴ CDPH, CalBRACE Project, page 1.

¹⁵ Contra Costa County Local Hazard Mitigation Plan, 2024. Available at <https://www.contracosta.ca.gov/6415/Local-Hazard-Mitigation-Plan>. Accessed March 2025.

¹⁶ BCDC ART. East Contra Costa County Web Map. Available at <https://eccexplorer.adaptingtorisingtides.org/explorer>. The interactive map displays flooding extent from 100-year storm events and may vary due to “the variable influence of large rivers in the Delta” such as peak riverine stream flows and soil deposits.

surrounding Marsh Creek Watershed. There are no major roads that pass through the 100-year floodplain, however the roads provide access to Port facilities that connect to the broader Bay Area. Additionally, some roads are built above the flood level, and others function as levees to prevent flooding.¹⁷ Since precipitation is expected to remain fairly consistent, increased flood hazards due to annual average precipitation is unlikely. However, the increase in the frequency and intensity of severe rainstorms in the future (see Section 1.5.1 below) may result in increased risk of localized flooding events.

1.4. Sea Level Rise

Sea level rise is described in the CA Adaptation Planning Guide as “...the long-term rise of mean high tide levels along the coast” that occurs over the course of decades. The phenomenon occurs from the rapid and permanent melt of glaciers and ice sheets that swell ocean systems. Secondary impacts of sea level rise include coastal flooding from storm surges, flooding from groundwater intrusion, and shoreline erosion. Salinity and pH levels can also increase as previously dry areas of the delta are under water, impacting water quality and habitat quality. Sea level rise can also result in inundation of toxic waste facilities or brownfields, further exacerbating water pollution and human health conditions. According to the San Francisco Bay Conservation and Development Commission, delta regions in eastern Contra Costa County are expected to experience 7- to 13-inches of sea level rise by mid-century^{18 19}. SLR projections are based on global greenhouse gas emissions modeled from current “business-as-usual” scenarios. Shorelines provide a natural buffer from storms and flooding that protect inland infrastructure; however, severe storm events combined with sea level rise can exacerbate flooding due to the Delta’s large freshwater inflows. Sea level rise can also result in increased algal blooms and saltwater intrusion that alters the biological composition of wetland areas. Additional impacts to urban environments include overtopped levees, saltwater intrusion, decreased recreational opportunities, destruction to physical buildings and roads, and decreased water availability that reduces productivity of agricultural farmlands. The Alameda tide gauge provides locally relevant predictions for the Delta region in San Francisco Bay, including the City. Additionally, increased frequency of severe storm events, further described in **Section 1.5 Severe Storms and Extreme Weather** below, is anticipated to accelerate flooding and erosion of land mass that impacts existing infrastructure and puts future development along shorelines in question.

The City is situated along the Sacramento-San Joaquin River delta which experiences tidal influence from the larger San Francisco Bay and Suisun Bay west of the City. The City boundaries to the north encompass the shoreline area and includes City assets such as the Big Break Regional Shoreline. The East Contra Costa ART Sea level rise projections map is the best available science for mapping sea level rise inundation for inland delta communities in the Bay area. According to the East Contra Costa ART Project²⁰, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid-century, as shown in **Figure 4: Projected Sea Level Rise – 12” Scenario**. **Figure 5: Projected Sea level Rise – 100-year storm and 12” Scenario** is an extreme scenario and shows that infrastructure located within approximately 200

¹⁷ Contra Costa County Local Hazard Mitigation Plan, 2024.

¹⁸ Ocean Protection Council (OPCC), “State of California Sea-Level Rise Guidance 2018 Update”. Available at https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf. Accessed August 2024.

¹⁹ The webtool, ART East Contra Costa Flood Explorer, utilizes 2018 SLR models. A 2024 guidance document with updated SLR models was adopted in June 2024 and replaces the previous 2018 guidance document.

²⁰ East Contra Costa Adapting to Rising Tides (ART) Map. Accessed on September 2024 at <https://eccexplorer.adaptingtorisingtides.org/about>.

to 2,000 feet (or below a 10-foot elevation) of the shoreline is anticipated to be overtopped and would inundate City assets. Assets affected includes roads such as Lauritzen Lane and Tule Lane, Delta Discovery Experience, residences surrounding Delaney Park, Willow Park marina, and other development surrounding the canal. An existing levee along East Cypress Road & Bethel Island Road protects the residential development of Summer Lake but under extreme conditions is anticipated to inundate the surrounding area, including residential development along Sandmound Boulevard and E. Cypress Road, and County Fire Station No. 95. Some assets, such as roads and parks, are more adaptive to SLR inundation.

Figure 4: Projected Sea Level Rise – 12” Scenario

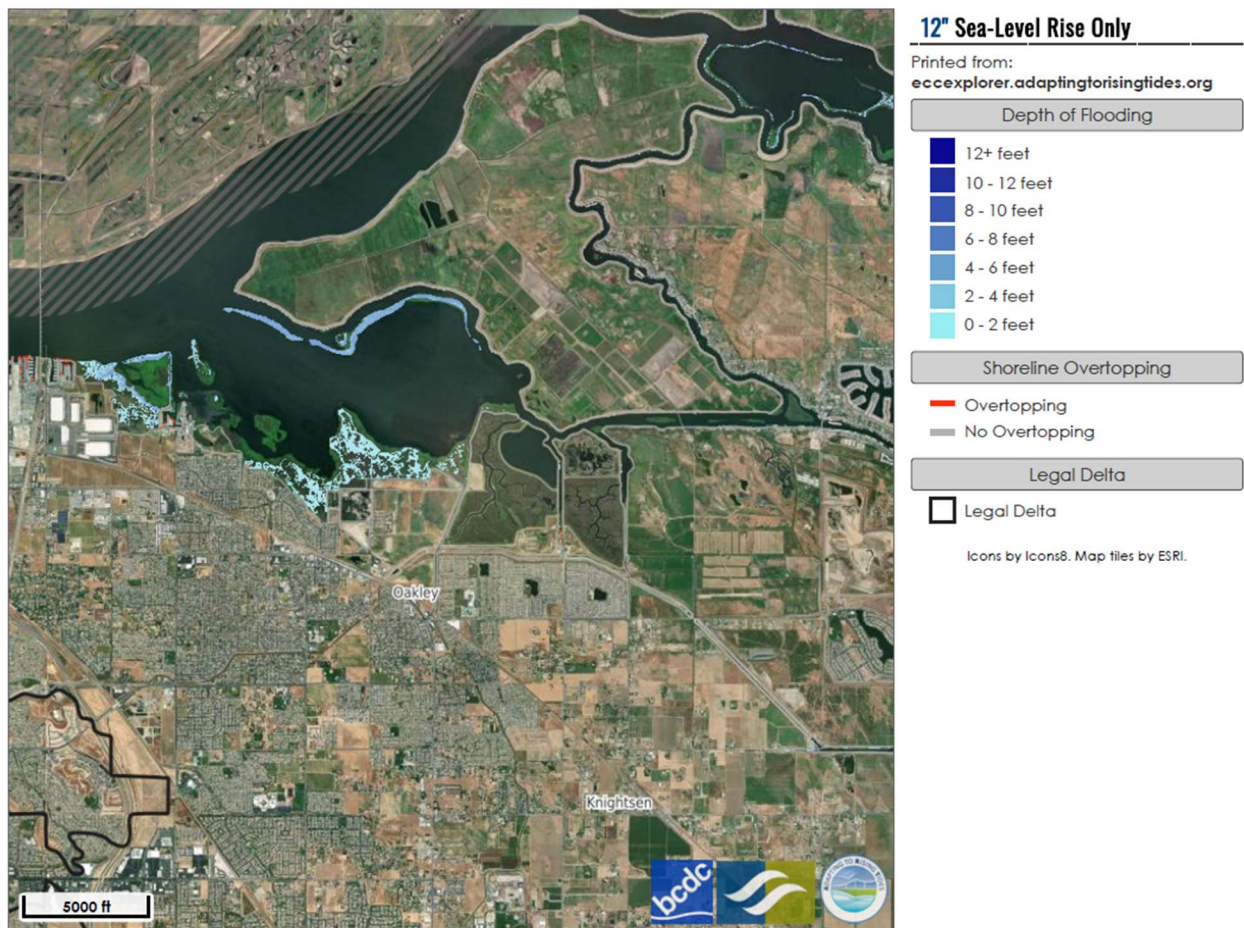
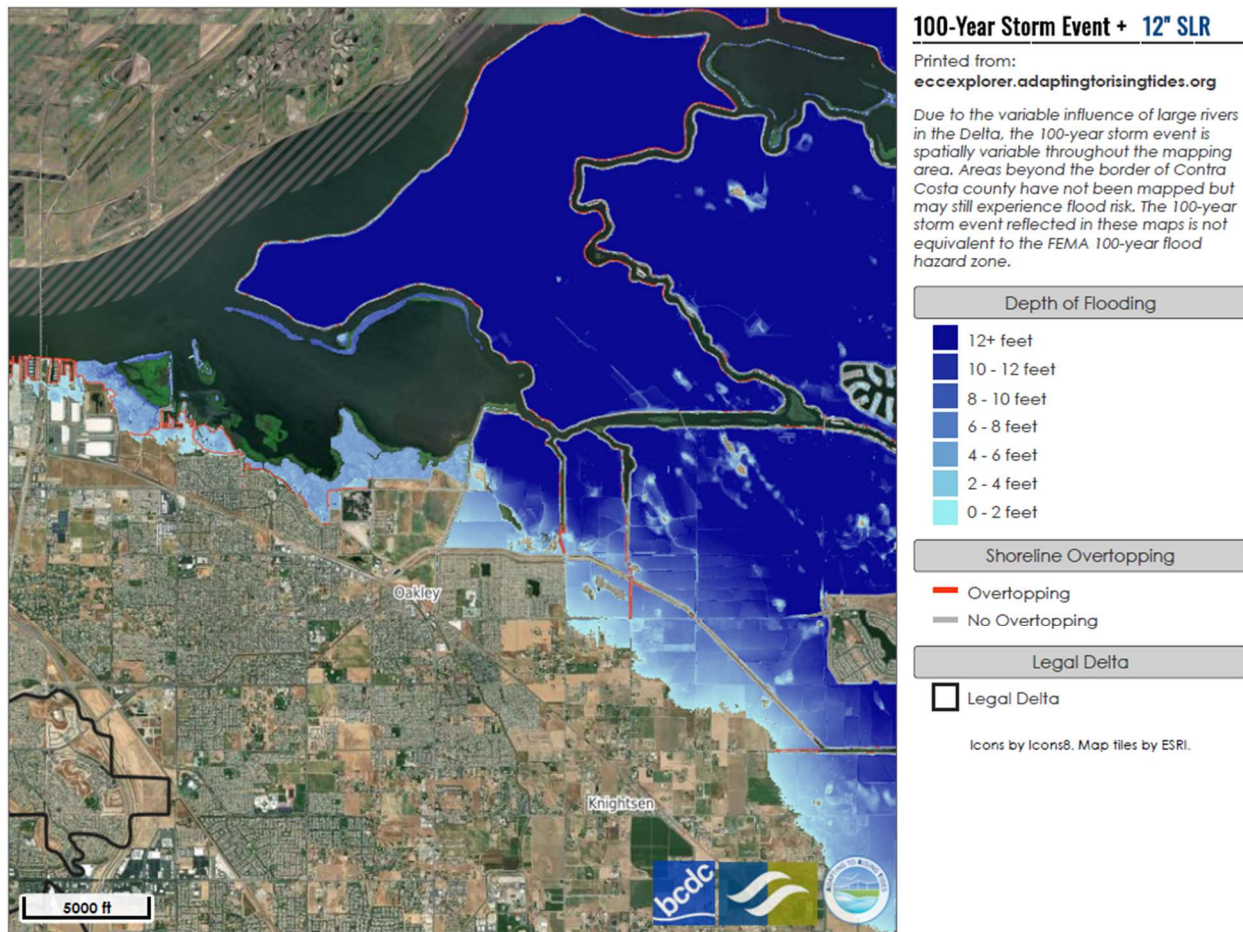


Figure 5: Projected Sea Level Rise –12” Scenario with 100 Year Storm Event



1.5. Severe Storms and Extreme Weather

California's Fourth Climate Change Assessment explains that, despite model predictions of only small changes in average precipitation in the Bay Area region, overall, precipitation in the Bay Area will continue to exhibit high year-to-year variability with very wet and very dry years. Please refer to the discussion of precipitation changes and droughts in Section 1.2 above. This section also addresses land and mudslides that may result from severe rain events.

1.5.1. Severe Rainstorms

In the Bay Area, extreme precipitation often arrives via so called "atmospheric rivers," which the National Oceanic and Atmospheric Administration (NOAA) defines as "a flowing column of condensed water vapor in the atmosphere responsible for producing significant levels of rain and snow, especially in the Western United States."²¹ Further, the NOAA recognizes that atmospheric rivers "that contain the largest amounts of water vapor and the strongest winds can create extreme rainfall and floods."²² Data presented in *California's Fourth Climate Change Assessment* suggests that little change is projected for summer and

²¹ National Oceanic and Atmospheric Administration (NOAA), What are atmospheric rivers?. Available at <https://www.noaa.gov/stories/what-are-atmospheric-rivers>. Accessed August 2024.

²² Ibid.

fall precipitation, but larger changes may occur in winter and spring. In general, precipitation in northern regions of California is projected to increase. The data also suggests that the frequency of atmospheric river events may increase in the future. Please refer to Section 1.3 for discussion of the change in potential flooding impacts that could affect the City.

1.5.2. Extreme Weather

In addition to extreme rain events, other severe weather phenomena, including strong winds, hail, and lightning, may occur with increased frequency. Severe weather can pose direct hazards resulting in injury or death, damage to buildings, structures, infrastructure, and trees, fires, and diminished or blocked transportation access. Extreme weather can lead to secondary effects, such as wildfires, and can lead to increased fire spread and intensity. According to the County's LHMP, "incapacity and loss of roads [and utilities] are the primary...failures resulting from severe weather".²³

1.5.3. Diablo Winds

During the spring and fall, hot and dry winds, known as the Diablo winds, from the northeast occur in the Bay Area. Diablo winds occur below canyons in the East Bay Hills (Diablo range) and in extreme cases can exceed 60 miles per hour (mph). The winds blow into the inner Bay Area from the direction of Mount Diablo and are created by a combination of strong inland high pressure at the surface, strongly sinking air aloft, and lower pressure off the California coast. Oakley and Contra Costa County is subject to high winds from thunderstorms and other severe weather events. Contra Costa County is located in the Federal Emergency Management Agency (FEMA)'s Wind Zone I, where wind speeds can reach up to 130 mph. *California's Fourth Climate Change Assessment* recognizes the uncertainty in predicted changes to the patterns of winds due to global climate change. Hot and dry conditions, combined with offshore winds (Diablo winds) in autumn create high risk conditions that spread fires.

The Bay Area electrical grid is vulnerable to power outages during wind and wildfire events. Under scenarios of climate change, extreme storm events with stronger winds may become more frequent. The electrical grid may face more frequent and severe threats in the coming decades.²⁴

1.5.4. Landslides

Weather-induced landslides occur when a hillside becomes unstable, caused by severe or persistent rain events, causing soil and rocks to slide downslope. In some cases, the hillsides can become so saturated that slope failures result in a mudslide, a mixture of soil and water moving downslope. Unstable hillsides, such as those denuded of vegetation by wildfires or drought, are at greater risk of land- and mudslides. The climate change-induced increase in rainfall, especially severe rain events, may result in an increase in landslides and mudslides.

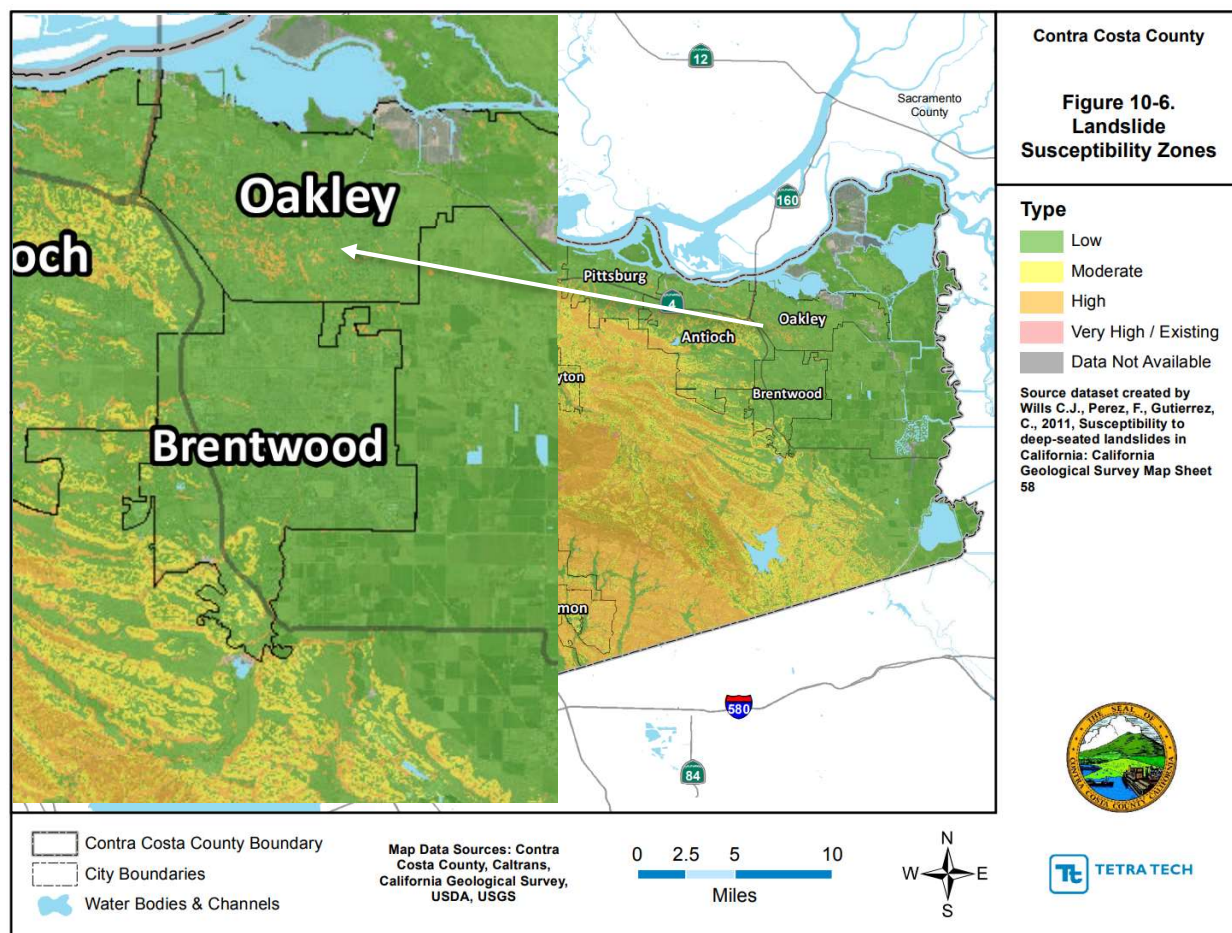
Landslides caused by seismic hazards, liquefaction, ground shaking, and subsidence are of high concern in the City. Although seismic hazards are not climate related, geologic hazards can constrain evacuation routes and limit the City's ability to respond to emergencies. As discussed in the LHMP, "climate change may impact storm patterns, increasing the probability of more frequent, intense storms with varying duration. Increase in global temperature is likely to affect the snowpack and its ability to hold and store water. Warming temperatures also could increase the occurrence and duration of droughts, which would increase the probability of wildfire, reducing the vegetation that helps to support steep slopes. All of these

²³ Contra Costa Draft Hazard Mitigation Plan, page 11-12, 11-14.

²⁴ California's Fourth Climate Change Assessment, San Francisco Bay Area Region, page 46.

factors would increase the probability for landslide occurrences.”²⁵ The LHMP ranks landslides with a high hazard risk ranking for Contra Costa County; however, most of Oakley is rated as low landslide susceptibility with a few pockets of high landslide susceptibility, as shown in **Figure 6: Landslide Zones**. The majority of landslide zones are located in areas of higher topography, such as Marsh Creek State Park. Given the relatively level slopes throughout the majority of the City, the landslide potential is low. The landslide potential increases in hilly terrain towards the west and south. The LHMP details the estimated value of structures and assets within the City, valuating at \$422,038,535.

Figure 6: Landslide Zones



Source: Contra Costa County, Local Hazard Mitigation Plan.

1.6. Temperature Changes

A rise in temperature has been observed in many California communities, including those in Contra Costa County. The County LHMP does not provide temperature change information specific to the City; however, CalAdapt provides multiple temperature change variables to consider. Overall, trends in Bay Area annual average, maximum, and minimum temperatures is expected to increase by 4.6°F from 1961 to 1990 under RCP8.5 high emissions scenarios by mid-century. Average maximum temperatures and

²⁵ Contra Costa Local Hazard Mitigation Plan, page 14-12.

extreme heat days are expected to continue to rise. Extreme heat days are anticipated to increase by 16 days.

In the projections based on the RCP8.5 scenario, Oakley could experience an average maximum temperature of 77.9°F during the years 2035 to 2064. Through 2099, the projections for Oakley include an average maximum temperature of 81.3°F. **Figure 7: Annual Average Maximum Temperature** provides the estimated annual average of hottest daily temperatures for Oakley in an RCP8.5 scenario. According to the California Office of Environmental Health Hazard Assessment (OEHHA) and California Department of Public Health (CDPH), disruptions in weather patterns due to global climate change, such as warmer spring temperatures and overall increases in temperatures will “likely alter the distribution and occurrence of West Nile virus, Lyme disease, hantavirus, and other insect or animal transmitted diseases in California.”²⁶

Figure 7: Annual Average Maximum Temperature

Observed (1961-1990) 30yr Average: 73.0 °F			
		30yr Average	30yr Range
Baseline (1961-1990)			
MODELED HISTORICAL	-	73.1 °F	72.9 - 73.4 °F
Mid-Century (2035-2064)			
MEDIUM EMISSIONS (RCP 4.5)	+3.7 °F	76.8 °F	75.3 - 78.0 °F
HIGH EMISSIONS (RCP 8.5)	+4.6 °F	77.7 °F	75.9 - 79.5 °F
End-Century (2070-2099)			
MEDIUM EMISSIONS (RCP 4.5)	+4.8 °F	77.9 °F	76.0 - 80.2 °F
HIGH EMISSIONS (RCP 8.5)	+8.0 °F	81.1 °F	78.2 - 84.8 °F

Source: Cal-Adapt, Annual Average Maximum Temperature.

1.6.1. Extreme Heat Days

According to *California’s Fourth Climate Change Assessment*, “while all parts of the Bay Area are projected to get warmer, inland areas will heat up more than coastal areas.” Extreme heat days are defined as a day in a year when the daily maximum temperature on any day in April through October exceeds the 98th historical percentile of maximum temperatures between 1961 and 1990.²⁷ According to CalAdapt, the extreme heat temperature threshold is 101.3°F for Oakley. The average number of extreme heat days observed for the City in the years 1961 to 1990 was four days per year. In the RCP8.5 high emissions scenario, Oakley is projected to experience 11 to 31 additional extreme heat days per year between the years 2035 and 2064. **Figure 8: Number of Extreme Heat Days by Year** provides an estimated number of extreme heat days for the City in an RCP8.5 scenario. This is a 16-day increase from the annual extreme heat days observed during the years 1961 and 1990. Models predict the number of extreme heat days in Oakley may rise to 33 days per year in the 2070 to 2099 timeframe.

An increase in extreme heat days can correlate with an overall increase in temperature. Further, the heightened frequency of extreme heat days can pose a risk to sensitive communities such as persons with

²⁶ Vicki Kramer, PhD, Impact of Climate Change on Vector-Borne Diseases.

²⁷ Cal-Adapt, Extreme Heat. Available at <https://cal-adapt.org/tools/extreme-heat/>. Accessed January 31, 2024.

homelessness, senior citizens, and persons with disabilities. This would create a greater reliance on high energy demand electrical equipment, such as air conditioning. The increased use of equipment may impact the demands in the State’s power grid and could increase the risk of blackout events. Heat waves pose increased health risks due to urban heat islands and lack of local experience and cooling infrastructure (air conditioning) in bayside cities. These risks are compounded for low-income communities.²⁸

Figure 8: Number of Extreme Heat Days by Year

Observed (1961-1990) 30yr Average: 4 days

		30yr Average	30yr Range
Baseline (1961-1990)			
MODELED HISTORICAL	-	4 days	3 - 5 days
Mid-Century (2035-2064)			
MEDIUM EMISSIONS (RCP 4.5)	+12 days	16 days	10 - 25 days
HIGH EMISSIONS (RCP 8.5)	+15 days	19 days	11 - 31 days
End-Century (2070-2099)			
MEDIUM EMISSIONS (RCP 4.5)	+16 days	20 days	12 - 37 days
HIGH EMISSIONS (RCP 8.5)	+33 days	37 days	24 - 70 days

Source: Cal-Adapt, Extreme Heat Days.

1.7. Wildfire

Across California, wildfire season typically runs between late summer to early spring, but the California Department of Forestry and Fire Protection (CalFire) reports that fires are starting earlier and ending later with each passing year. Intense dry seasons, warmer spring and summer temperatures, reduced snowpack, and earlier snowmelt make forests and vegetation more susceptible to wildfires. CalFire estimates the length of fire season had increased by 75 days in 2020. Natural events, such as warm and dry Diablo winds, which typically occur in the spring and fall, further increase the growth of fires and threat to the region. According to the LHMP, the geography, weather patterns, and vegetation in the East Bay area provide ideal conditions for recurring wildfires.

According to the National Fire Protection Association (NFPA), during 2011-2015, fire departments throughout the United States responded to an estimated average of 306,000 brush, grass, and forest fires per year.²⁹ According to the Global Institute of Sustainable Forestry at Yale University, taxpayers spent more than \$1.6 billion to combat more than 88,400 fires nationwide.³⁰ Many of these fires burned in wildland urban interface (WUI) areas and exceeded the fire suppression capabilities of those areas. Additionally, in 2021, the Forest Service spent \$3.7 billion and the Department of Interior spent \$648,000

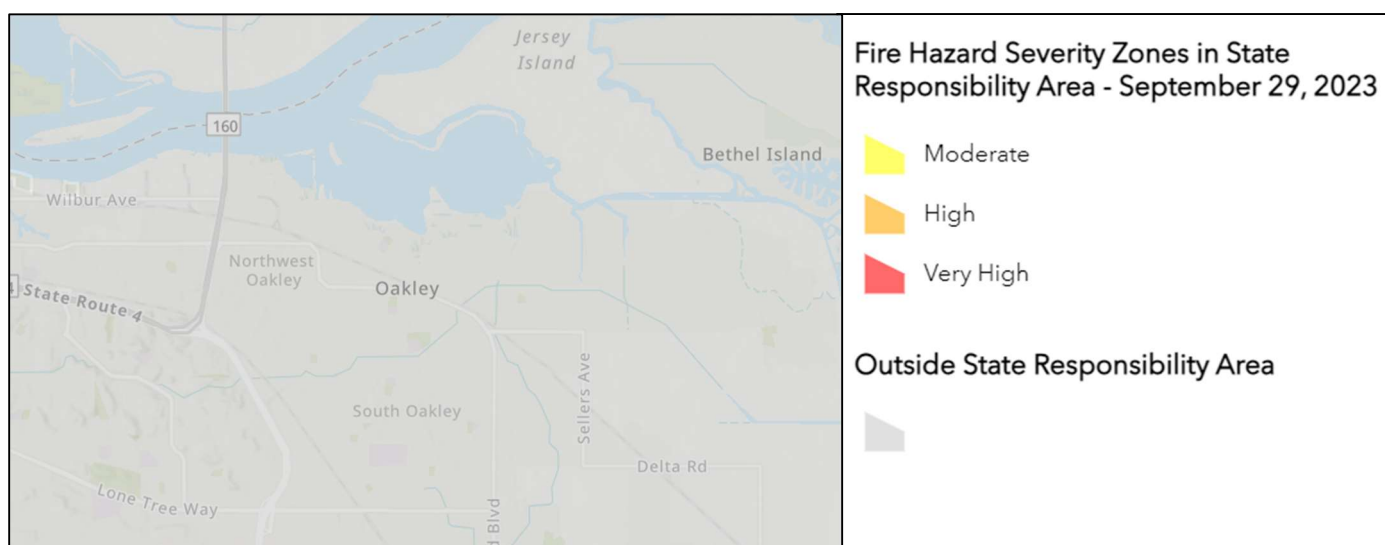
²⁸ California’s Fourth Climate Change Assessment, San Francisco Bay Area Region Report, page 8.

²⁹ National Fire Protection Association (NFPA), Brush, Grass, and Forest Fires, September 2018. Available at <https://www.nfpa.org/education-and-research/research/nfpa-research/fire-statistical-reports/brush-grass-and-forest-fires>. Accessed August 2024.

³⁰ Morton et al, Assessing the Environmental, Social, and Economic Impacts of Wildfire, May 2003. Available at [https://yff.yale.edu/sites/default/files/files/wildfire_report\(1\).pdf](https://yff.yale.edu/sites/default/files/files/wildfire_report(1).pdf). Accessed August 2024.

in fire suppression costs. ³¹According to CalFire’s Very High Fire Hazard Severity Zone (VHFHSZ) Map and Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any High, Moderate or other Fire Hazard Severity Zone (FHSZ) (Refer to **Figure 9: Fire Hazard Severity Zones**). In terms of wildland and urban fire hazards, the City is entirely within the boundaries of critical Fire Weather Class 3, which correlates to 9 ½ or more days per year of moderate, high, and extreme fire hazard. The Class 3 category is the highest in the County, with Class 1 having less than 1 day per year, and Class 2 having 1 to 9 ½ days per year. ³² Though the City does not have any VHFHSZs or FHSZ, the General Plan includes goals, policies, and programs related to fire hazards and protection. An example of a goal is to promote a high level of emergency preparedness to protect public health and safety in the event of a natural or human-caused disaster. A policy under this goal is to require the provision of fire fighting equipment access to open space areas in accordance with the Fire Protection Code and to all future development in accordance with Fire Access Standards.

Figure 9: Fire Hazard Severity Zones



2. Social Vulnerability

This section describes demographic and socioeconomic characteristics of the City that are potentially disproportionately impacted by climate change risks. Some populations, particularly those that are low-income, non-white, and disabled disproportionately experience pollution burdens caused by industry and commerce. The impacts are accelerated by climate change and can decrease economic opportunities, public health, and overall quality of life. CalEPA identifies these areas as “disadvantaged communities” and utilizes funding provided by SB 535 (De Leon, 2012) and AB 1550 (Gomez, 2016) to invest in planning and infrastructure upgrades. This section follows the California Air Resources Board Climate Vulnerability Metric to identify categories of social vulnerability i.e., age, energy costs, employment sectors, and property insurance claims, and the impacts on social groups based on projected climate scenarios.

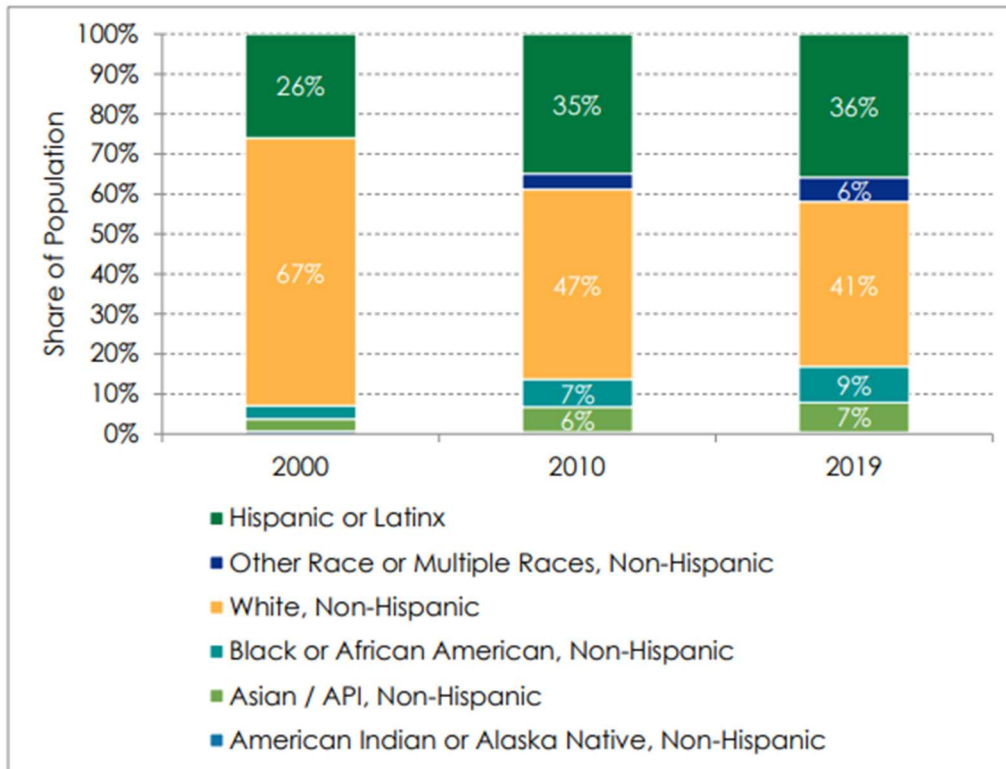
³¹ United States Senate, A Burning Issue: The Economic Costs of Wildfires. Available at <https://www.budget.senate.gov/imo/media/doc/Mr.%20Nicolas%20Loris%20-%20Testimony%20-%20Senate%20Budget%20Committee3.pdf>. Accessed August 2024.

³² City of Oakley, General Plan Focused General Plan Update. Available at <https://b0b2eb52.rocketcdn.me/wp-content/uploads/2022/07/Oakley-General-Plan-Adopted-2022-01-11.pdf>. Accessed August 2024

2.1 Vulnerable Populations

Young children and young adults make up more than a third of the City's population. According to the US Census Bureau 2019 ACS estimates, the highest percentage of age groups are ages 5-14 (17.7%) and age 15-24 (15.2%). The largest racial and ethnic group are Non-Hispanic White; however, Hispanic or Latinx and other non-Hispanic race groups are the fastest growing racial groups and make up more than half of the City's population³³ (see **Figure 10: Racial and Ethnic Composition, City of Oakley** below). According to the US Census Bureau 2019 ACS 5-year estimates, more than half of households in the City have an income of \$100k or greater³⁴. Households with moderate to above-moderate median incomes tend to be homeowners and White. In the City, 10.7% of the population has a disability of some kind with ambulatory and cognitive difficulties being the most common type of disability. Although housing tenure (renter, owner) among racial groups vary, low-income renters with disabilities and young children are considered vulnerable populations and may be more exposed to climate change impacts.

Figure 10. Racial and Ethnic Composition, City of Oakley³⁵



Notes: Data for 2019 represents 2015-2019 ACS estimates.

The Census Bureau defines Hispanic/Latino ethnicity separate from racial categories. For the purposes of this graph, the "Hispanic or Latino" racial/ethnic group represents those who identify as having Hispanic/Latino ethnicity and may also be members of any racial group. All other racial categories on this graph represent those who identify with that racial category and do not identify with Hispanic/Latino ethnicity.

Source: ABAG Housing Element Data Package, U.S. Census Bureau, Census 2000, Table P004; U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B03002.

³³ 2023-2031 Oakley Housing Element, Chapter 2

³⁴ The median income for a single-person householder is \$99,950.

³⁵ Ibid.

Significant income disparities exist among households in the City. Households with limited income may experience less access to a wide range of resources that are perpetuated by historic redlining and discrimination. The City contains a census tract (6013302005) that is identified as a disadvantaged community, as shown in **Figure 11: SB 535 Disadvantaged Communities** below. The census tract is adjacent to former chemical plant that is currently an industrial logistics center located south of the railway. The census tract also contains hazardous materials facilities such as auto repair shops and metal scrap yards³⁶. The definition considers CalEnviroScreen scores in its identification of disadvantaged communities, as shown in **Section 1.1 Air Quality** above.

Another measure of social vulnerability to climate change is through costs to the consumer. The CARB climate vulnerability metric (“CVM”) provides another perspective of assessing the impacts of climate change at the census tract level. According to the CVM, the City of Oakley is anticipated to experience an annual damage to human welfare equivalent to roughly one percent of tract-level income by mid-century³⁷. The metric is primarily driven by higher mortality risk and lower hours worked in the City and larger Bay Area compared to the rest of the State. Flood-related property damage costs is anticipated to increase. Electricity consumption appears to remain stable while natural gas consumption decreases. The CVM shows that how climate, demographics, and socioeconomic conditions vary as the climate warms through mid-century under a moderate emissions scenario (RCP4.5).

The California Healthy Places Index (HPI) also provides another measure of social vulnerability by utilizing a percentile ranking based on a jurisdiction’s community conditions. Conditions consider the social drivers of health i.e., education, job opportunities, access to clean air and water, access to transportation options and healthcare, dignified housing, and other attributes as indicators of a healthy community (Refer to **Figure 12: City of Oakley HPI Score**). The City has healthier conditions than 67.3% of other jurisdictions in California; however, it is lower than the County average (91.1 percentile) indicating that significant disparities may exist among jurisdictions within the County. Assessing social vulnerability across the City can help jurisdictions understand their community’s resilience when interacting with climate change phenomena.

³⁶ 2024 County Local Hazard Mitigation Plan, City of Oakley Annex.

³⁷ CARB Climate Vulnerability Metric. 2022. Accessed on October 2024 at https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-k-climate-vulnerability-metric_0.pdf.

Figure 11: SB 535 Disadvantaged Communities

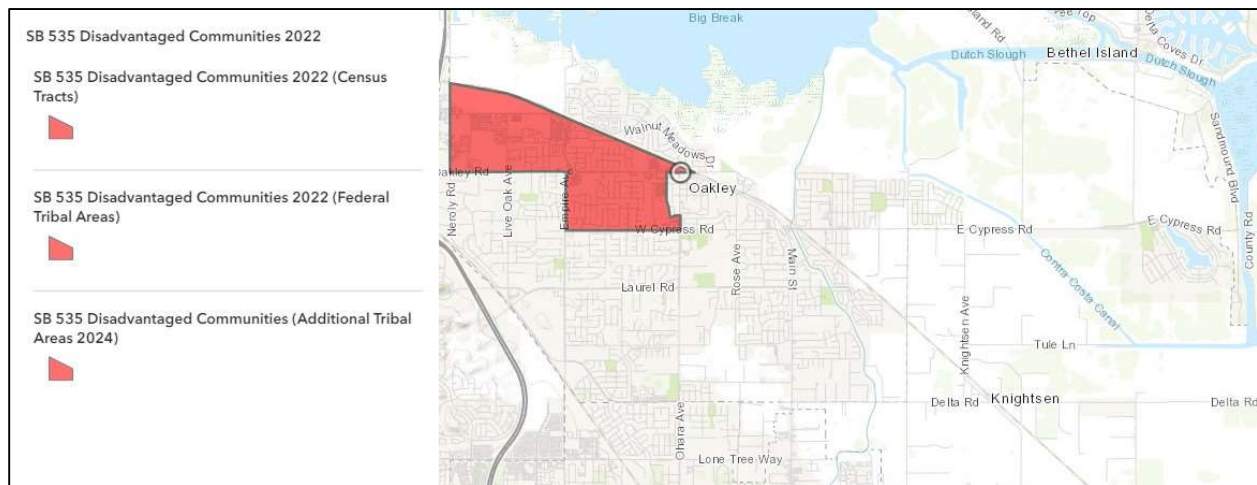
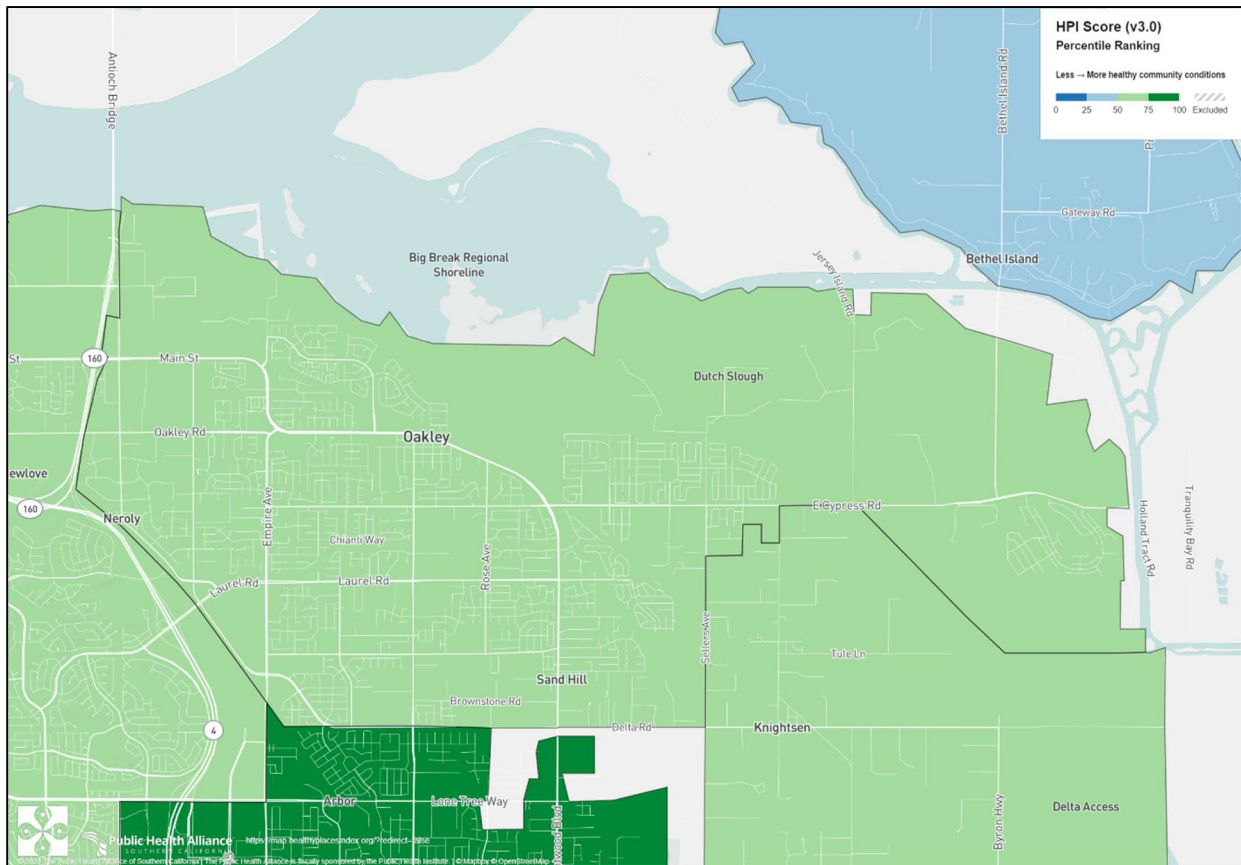


Figure 12: City of Oakley HPI Score



3. Conclusion

The long-term climate effects predicted to be experienced by Oakley include changes in precipitation amounts and patterns, increase in flooding, increased temperature, increase in SLR, and wildfires. Local annual levels of precipitation in Oakley are not anticipated to change drastically with slight increases in the latter decades of this century. The City's flood risk due to annual average precipitation is not projected to be substantially impacted by climate change as precipitation is expected to remain fairly consistent. However, the increase in the frequency and intensity of severe rainstorms in the future may result in increased risk of localized flooding events.

In general, precipitation in northern regions of California is projected to increase. As the City is part of the Delta region, SLR is also anticipated to increase and secondary impacts such as storm surge, groundwater inundation, and erosion may intensify. Temperature changes in Oakley are projected to change in terms of extreme heat days, with a resultant increase on the reliance of climate modifying appliances such as air conditioning. An increase of extreme heat days poses a greater risk to sensitive communities such as homeless residents, senior citizens, and people with disabilities. In terms of wildfire, no areas within the City were identified in a VHFHSZ or FHSZ, and the City's vulnerability to wildfire is likely to remain the same even with a changing climate. Vulnerable communities in the City reside in the census tract 6013302005 as it is adjacent to a former chemical plant and is surrounded by other hazardous material facilities. The City was also found to have an HPI score of 67.3%; thus, indicated, the City has 67.3% healthier conditions than other jurisdictions in California.

APPENDIX D: CLIMATE ANALYSIS

Appendix begins on the next page as a distinct attachment.

Asset	Address	Ownership	Built	Use Category	Asset Type	Source	KH Notes	City Notes
Del Antico Basin	37.992742, -121.708840			Detention basin	Water Resources	City GIS map		
Teakwood Basin	37.995870, -121.728593			Detention basin	Water Resources	City GIS map		
Sandy Lane Basin	38.002132, -121.744906			Detention basin	Water Resources	City GIS map		
Live Oak Basin	38.003682, -121.739674			Detention basin	Water Resources	City GIS map		
Stirrup Drive Basin	37.993953, -121.746826			Detention basin	Water Resources	City GIS map		
Frondoras Circle Drainage Channel	37.991724, -121.754762			Detention basin/Levee	Water Resources	City GIS map		
Piper Channel	38.007024, -121.727946			Detention basin/Levee	Water Resources	City GIS map		
Terra Verde Lane Basin	37.990880, -121.749372			Detention basin	Water Resources	City GIS map		
Diablo Water District	87 Carol Lane, Oakley Ca 94561	County Water District Law of California	1953	Also serves Cypress Corridor, and Hotchkiss Tract, as well as Summer Lakes, and portions of Bethel Island and Knightsen.	Water Resources	City of Oakley Emergency Operations Plan; 2024 County LHMP		
Freedom High School	1050 Neroly Rd, Oakley, CA 94561	Liberty Union High School District	2002	Joint-use school/community park area	Educational	Parks, Trails, Recreation Master Plan 2030; 2024 County LHMP	Also contains communication facilities (critical infrastructure)	
Gehringer School	100 Simoni Ranch Rd, Oakley, CA 94561	Operated by Oakley Union Elementary School District	1980	Joint-use school/community park area	Educational	Parks, Trails, Recreation Master Plan 2031		
Laurel Elementary School	South of Laurel Road near Nutmeg Fields Street	Operated by Oakley Union Elementary School District		Joint-use school/community park area	Educational	Parks, Trails, Recreation Master Plan 2032		
Oakley Elementary School	Corner of Norcross Lane and West Ruby Street	Operated by Oakley Union Elementary School District		Joint-use school/community park area	Educational	Parks, Trails, Recreation Master Plan 2033		
Antioch/Oakley Regional Shoreline Park	End of Bridgehead Road. At the site of the old Highway 160 Bridge				Recreational	Parks, Trails, Recreation Master Plan 2038	High biological sensitivity	
Big Break Regional Shoreline/ Delta Discovery Experience	69 Big Break Rd, Oakley CA 94561	East Bay Regional Park Districts		Used for environmental education, recreation, and ecological restoration	Recreational and nature preserve	City of Oakley Website -Recreation/Parks section	Appurtenant structures include trails, picnic and meadow areas, amphitheater, boat launch facilities, Antioch fishing pier, visitor center building. Much of property is underwater or tidal marshlands, with some uplands along the southerly edge. Sensitive to changes in water quality i.e., algal blooms. High biological sensitivity.	The Antioch fishing pier is by the bridge. This location has a much smaller covered dock structure. I'm unsure if it has a name. This website has much better info: https://www.ebparks.org/parks/big-break
Big Break Marina	100 Big Break Rd unit B, Oakley, CA 94561				Recreational and industrial	2020 General Plan	Located in Northwest Oakley Planning Area - visions for future as primary employment center	This area is not industrial although an adjacent use is a legal non-conforming construction materials business with shipping access. The marin is zoned Commercial Recreation-Aquatic (CR-A) District. The reference to industrial and a vision for an employment center is for the Northwest Oakley Planning Area, but not specifically this or any of the mrains in the subarea.
Driftwood Marina	6338 Bridgehead Rd, Oakley, CA 94561				Recreational	2020 General Plan	Located in Northwest Oakley Planning Area - visions for future as primary employment center	
Antioch fishing pier	38.019559, -121.750840				Recreational	City of Oakley Website -Recreation/Parks section		
Legless Lizard Preserve		Owned by the District		Home to endangered species of the legless lizard and was fenced off to provide protection and habitat for research and study primarily for agricultural use.	Recreational	City of Oakley Website -Recreation/Parks section		This is listed as a park, but it is not for recreational purposes. The preserve is off-limits to human activity.
EBMUD Aqueduct	From the Delta area of Black Diamond and Contra Loma Regional Parks				Recreational	City of Oakley Website -Recreation/Parks section		
Marsh Creek Regional Trail	Meanders along the Marsh Creek flood control channel and connects to the Big Break access trail. Between Oakley and Brentwood				Recreational	City of Oakley Website -Recreation/Parks section		
Oakley Police Department	3231 Main St, Oakley, CA 94561		2016		Government Building	City of Oakley Website - Police section		
East Contra Costa Fire Protection District Station 93	540 O'Hara Ave, Oakley, CA 94561	Contra Costa County Fire Protection District	2011		Government Building	City of Oakley Website - Fire section; Measures E&G section; CCCFPD website	Fire protection and emergency response services	The East Contra Costa Fire Protection District no longer exists. All operations were absorbed by the Contra Costa County Fire Protection District. URL to Fire District's website: https://www.cccfpd.org/
Contra Costa County Fire Station No. 95	3200 E Cypress Rd, Oakley, CA 94561	Contra Costa County Fire Protection District			Government Building	City of Oakley Website - Fire section; Measures E&G section; CCCFPD website	Fire protection and emergency response services	
City Hall	3231 Main St, Oakley CA 94561	City of Oakley		Administrative services	Government Building	City of Oakley website	Emergency operations center and response	
Mt. Diablo Resource Recovery	85 Carol Lane, Oakley, Ca 94561	Service provided through a franchise agreement. Agreement between the City of Oakley and Oakley Disposal Service.		Disposal Services	Waste Management	City of Oakley Emergency Operations Plan		
Randall-Bold Water Treatment Plant	38.000674, -121.702133	Diablo Water District (joint owner)	1992		Water Resources	2024 County LHMP	Provides sewage collection, treatment and disposal services to the City of Oakley	I think the descriptions in the notes for this and the item below are mixed up. Randall-Bold water treatment plan only treats water. Ironhouse Sanitary District only treats sewage.
Iron House Sanitary District	450 Walnut Meadows Drive Oakley, CA 94561		1945		Water Resources	City of Oakley Emergency Operations Plan; 2024 County LHMP	Provides treated water to about 360,000 people in central and east areas of County	"Ironhouse" (one word) Sanitary District. Does not provide treated water, handles sewage. I believe this site is mislabeled as "Randall-Bold" on some online maps, perhaps Google Maps. Randall-Bold is located south or Laurel Road and east of Neroly Road.
La Clinica Oakley	2021 Main St, Oakley, CA 94561		2011		Medical	City of Oakley Website - Hospital/Clinics section		
John Muir Medical Center	2400 Balfour Road, Brentwood, (the end of Highway 4 Bypass at Balfour Road and Concord Avenue	City of Brentwood - provides service to Greater Brentwood/East County region			Medical	City of Oakley Website - Hospital/Clinics section		
Kaiser Permanente	5601 Deer Valley Rd, Antioch	City of Antioch			Medical	City of Oakley Website - Hospital/Clinics section	Level one trauma center	
Sutter Delta Medical Center	3901 Lone Tree Way, Antioch	City of Antioch			Medical	City of Oakley Website - Hospital/Clinics section		
Contra Costa Regional Medical Center	2500 Alhambra Avenue in Martinez	City of Martinez - serves the entire county			Medical	City of Oakley Website - Hospital/Clinics section		

Almond Grove School	5000 Amarylilis Street Oakley, CA 94561	Operated by Oakley Union Elementary School District	2014		Educational	City of Oakley Website - School section		
Delta Vista Middle School	4901 Frank Hengel Way, Oakley, CA 94561	Operated by Oakley Union Elementary School District	2001		Educational	City of Oakley Website - School section		
Iron House School	4801 Frank Hengel Way, Oakley, CA 94561	Operated by Oakley Union Elementary School District	1862		Educational	City of Oakley Website - School section		
Summer Lake School	4320 E Summer Lake Dr, Oakley, CA 94561	Operated by Oakley Union Elementary School District	2020		Educational	City of Oakley Website - School section		
The Commons at Oak Grove Apartments	53 Carol Lane, Oakley				Residential - Senior and family Housing	City of Oakley Website - Seniors Section		
Summer Creek Place	4950 Empire Ave, Oakley		2001		Residential - Senior and family Housing	City of Oakley Website - Seniors Section		
Golden Oak Manor	5000 Kelsey Lane, Oakley		1995		Residential - Senior and family Housing	City of Oakley Website - Seniors Section		
Kamps Propane	1433 Main Street, Oakley			Hazardous Materials Facilities	Industrial	City of Oakley Emergency Operations Plan	Identified as hazardous facility in EOP	
Kragen Auto Parts	100 E Cypress, Oakley			Hazardous Materials Facilities	Commercial	City of Oakley Emergency Operations Plan	Identified as hazardous facility in EOP	
Suburban Propane	30 Delta Rd, Oakley			Hazardous Materials Facilities	Industrial	City of Oakley Emergency Operations Plan	Identified as hazardous facility in EOP	
Telephone Systems	Throughout City			Overhead utilities	Utility	City of Oakley Emergency Operations Plan; GIS Map		
Radio Systems	Throughout City			Overhead utilities	Utility	City of Oakley Emergency Operations Plan; GIS Map		
Microwave Systems	Throughout City			Overhead utilities	Utility	City of Oakley Emergency Operations Plan; GIS Map		
Transmission Lines	Throughout City			Overhead utilities	Utility	City of Oakley Emergency Operations Plan; GIS Map		
Substations/generation	Throughout City				Utility	City of Oakley Emergency Operations Plan		
PG&E Company Antioch Gas Terminal Facility	5900 Bridgehead Rd, Oakley CA 94561	Pacific Gas and Electric Co.		Underground gas pipes	Utility	Google Maps		
Oakley Generating Station	6000 Bridgehead Rd, Oakley CA 94561	Pacific Gas and Electric Co.	1996	Natural gas fired power plant	Utility	Google Maps	Filed for permanent closure of facility to CA Energy Commission in 2019	This facility was never constructed.
Mantell Pump Station #4	37.983120, -121.623709				Utility	City GIS map		
Sandhoun Pump Station #3	37.996088, -121.625475				Utility	City GIS map		
Dutch Slough Pump Station #2	38.011549, -121.649787				Utility	City GIS map		
Burroughs Pump Station #1	38.010630, -121.663192				Utility	City GIS map		
Main and Minor Pumps	Throughout City (north of E Cypress Rd & east of Main St)				Utility	City GIS map		
Natural gas pipelines	Along E Cypress Rd, Laurel Rd, Empire Ave, Hwy 4, and Hwy 160				Utility	City GIS map		
Highway 4 (Main Street)	Critical areas include the Highway 4/Highway 160 Exchange and the Rose Avenue Bridge				Transportation	City of Oakley Emergency Operations Plan		Routes that could be used to evacuate the City: - Laurel Road due west to Highway 4 interchange or City of Antioch beyond. - Main Street due west to Highway 160 interchange or City of Antioch beyond. - Empire Avenue due south to Cities of Antioch and Brentwood. - O'Hara Avenue due south to City of Brentwood. - Main Street due south to City of Brentwood. - Sellers Avenue to south to Unincorporated Contra Costa County. - Interchange at Wilbur Avenue and Highway 160.
Vintage Parkway Overpass	38.000289, -121.719097			Highway bridge	Transportation	City of Oakley Emergency Operations Plan	Bridge that bisects railway - overpass	
Rose Avenue Overpass	37.995245, -121.704082			Railway bridge	Transportation	Google Maps	Railway overpass above Rose Avenue - connects to water district facilities across from railway	
E Cypress Rd Pass	37.990651, -121.694888			At-grade railway and road pass	Transportation	Google Maps		
Marsh Creek Overpass	37.991439, -121.696063			Railway bridge	Transportation	Google Maps	Railway overpass above Marsh Creek Regional Trail - located near levees to the north; Asset may be inundated; ART map shows depth of flooding = 1.25 feet (12: SLR w/ 100yr storm)	
Bridgehead Road Overpass	5825-5751 Bridgehead Rd, Oakley, CA 94561			Railway bridge	Transportation	Google Maps	Railway overpass bridge above Bridgehead Rd	
Burlington northern and Santa Fe (BNSF) Railway					Transportation	City of Oakley Emergency Operations Plan	For e-commerce (delivery for logistics centers)	
Bike Lanes (Class I, II, and III)	Throughout City				Transportation	https://cityofOakley.maps.arcgis.com/apps/mappviewer/index.html?layers=faf5e3b965f347f4a9ee2fe845838e9		
Holland Tract Road and Delta Road					Transportation	City of Oakley Website - East Cypress Emergency Evacuation Information		
Oakley Library and Community Center	1050 Neroly Rd, Oakley, CA 94561	Contra Costa County operates the Oakley library			Civic	City of Oakley Website - Oakley Library		
Tri Delta Transit (aka Eastern Contra Costa Transit Authority (ECCTA))	Throughout City (multiple stops). A few are included below: Main Street and Norcross Lane Ohara Ave and Acme Street Ohara Ave and East Home Street Ohara Ave and West Home Street Ohara Ave and Las Dunas Ave				Transportation	City of Oakley Website - Transportation Transit Services	Providing public transit fixed route and paratransit service	
Oakley Park & Ride Lot	37.992714, -121.699017	ECCTA Special Purpose District			Transportation	2024 County LHMP	Identified as critical facility for Tri Delta Transit	
Bay Area Rapid Transit (BART)	Nearest one to Oakley is the Antioch Station				Transportation	City of Oakley Website - Transportation Transit Services		
Amtrak Station	Previously Antioch Station. Station will be located behind Main Street between Second Street and Norcross Lane.				Transportation	City of Oakley Website - Transportation Transit Services		

CalTrain	Downtown Oakley, north of the Main Street and O'Hara Avenue intersection.				Transportation	City of Oakley Website - Transportation Transit Services		CalTrain Oakley Platform curent start of construction ETA is early 2025.
Oakley Port & Yard	38.010292, -121.730800				Economic Development	GIS Web Map; 2020 Oakley General Plan	Zoned for business park and commercial recreational	
Agricultural farmland	Throughout City	Various private owners		Row crops, vineyards	Agriculture	2020 Oakley General Plan		
Mazzoni-Live Oak Vineyard	5181 Live Oak Ave, Oakley CA 94561					https://historicvineyardsociety.org/vineyard/live-oak		
Downtown Oakley	Main St (between 2nd St and Cure Dr)				Zoning & Development	2020 Oakley General Plan	Downtown Specific Plan area - planned for mixed use development to accommodate forecasted growth	
Levees	Eastern City boundaries surrounding Summer Lake subdivision, along Sandmound Blvd, Dutch slough Dr, Marsh Creek regional trail, north Sellers Ave, and along Contra Costa Canal)	Reclamation District		Flood management	Water Resources	2024 County LHMP	Protections against flooding	
Storm Drain Lines	Throughout City	City of Oakley Public Works		Flood management	Water Resources	https://cityofOakley.maps.arcgis.com/apps/mapviewer/index.html?id=1a56fc55b35e413dbcc2f305f2ee45da	Some areas w/in City with vineyards designated Agricultural Land Use (to protect and provide reflections on the City's historic and continuing agrarian practices); Ag lots for sale - rapidly being converted to logistics or housing.	
Former DuPont Chemical Plant	northwest Oakley area along Neroly Rd			Hazardous Materials Facilities	Waste Management	2020 Oakley General Plan; 2024 County LHMP	Oakley has a hazardous materials facility located in a floodplain; DuPont site is in the cleanup process.	- The site has been cleaned up and developed as the Oakley Logistics center (also referred to as Contra Costa Logistics center).
Auto Repair/Metal Scrap Yard	northwest Oakley area along Neroly Rd			Hazardous Materials Facilities	Waste Management	2021 Oakley General Plan; 2024 County LHMP		
Lauritzen Yacht Harbor	northwest Oakley near Lauritzen Ln and Antioch bridge				Recreational	2020 Oakley General Plan	Located in Northwest Oakley Planning Area - visions for future as primary employment center	

Note:
Additional Source: <https://cityofOakley.maps.arcgis.com/apps/webappviewer/index.html?id=1a56fc55b35e413dbcc2f305f2ee45da>
Empty cells indicate relevant data was not available

Sectors	Climate Hazard	Special Asset	Sensitivity	Probability	Vulnerability	Magnitude	Adaptive Capacity	Take Action or Accept Risk	Type of Action Anticipated	Adaptation Strategy
Agriculture	Precipitation Changes	Farmland and Vineyards	As the city of Oakley has a connection to the Delta, agriculture is a fundamental component of the community's character. Historically, agriculture has been the economic activity in and around the city. The total developed agricultural land in the city is 38.6 acres. Based on the Oakley general plan, agricultural limited zones bordered by Carpenter Road, Brown Road, and Laurel Road. Zoned agriculture areas are to the southeast of the city west of Carpenter Road and the near the central east of the city near Knighten Avenue, Sellers Avenue, and East Cypress Road. The city of Oakley is characterized by wet winters; however, the city resides in a mediterranean climate that is prone to cycles of prolonged droughts. The city of Oakley is comprised primarily of lowland soil associations, with some tidal flat-delta-marsh lowland along the northern boundary of the City. Lowland soil associations are classified as slow to very slow permeability, highly expansive, and corrosive with slight erosion hazards. The tidal flat-delta-marsh lowland soils are highly expansive, very highly corrosive and moderately to slowly permeable. In addition, majority of Oakley is comprised of Class Delta sand - used to grow irrigated almonds, vineyards and other fruit crops, and some walnuts - which is classified as "excessively drained soils" where runoff is slow or very slow. - Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 55.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year. - Medium Probability	The expected annual loss for agriculture value due to precipitation changes (e.g. drought) is \$426,670 with a expected annual FEMA NRI loss score of 77.7 (relatively high). - High Magnitude As agriculture is one of the main economic activities in and around the city, precipitation changes may negatively impact existing farmland and vineyards; thus, reducing economic opportunities for the city. Agriculture is also considered a fundamental component of the community's character. Loss of agriculture due to precipitation changes would significantly jeopardize the future community of Oakley.	Measures to combat precipitation changes include plant protection products that can help protect vineyards from fungal diseases. Canopy management is also a potential solution as it will shade agriculture from excessive water; however, these operations require labor and should be implemented at the earliest convenience of plant growth. - Low Adaptive Capacity	Take Action	Coordinate with other agencies	Continue or initiate coordination with agencies such as, but not limited to, Contra Costa County Department of Conservation and Development, Contra Costa Health Services, Hazardous Materials Program Office, Contra Costa County Fire Protection District, Contra Costa County Office of Emergency Services, Contra Costa County Cities Citizen Corps, Contra Costa County Office of the Sheriff.	
Agriculture	Flooding	Farmland and Vineyards	As the city of Oakley has a connection to the Delta, agriculture is a fundamental component of the community's character. Historically, agriculture has been the economic activity in and around the city. The total developed agricultural land in the city is 38.6 acres. Based on the Oakley general plan, agricultural limited zones bordered by Carpenter Road, Brown Road, and Laurel Road. Zoned agriculture areas are to the southeast of the city west of Carpenter Road and the near the central east of the city near Knighten Avenue, Sellers Avenue, and East Cypress Road. Based on the FEMA National Risk Index (NRI), the City of Oakley was identified to have a very high rating and a score of 80.7 - High Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. - Low Probability Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity.	The expected annual loss for agriculture value due to flooding (e.g. riverine flooding) is \$164,465 with a expected annual FEMA NRI loss score of 51.8 (relatively moderate). The flooding of farmlands and vineyards would heavily oversaturate soils; thus, potentially rotting away the roots of crops. The loss of economic value due to flooding for agriculture is therefore moderate. - Medium Magnitude Zoned agricultural areas are streets away from potential riverine flooding sources (e.g. the Contra Costa Canal); thus magnitude of impacts would low moderate.	Measures to combat flooding include adequate drainage systems. This may include a system that maintains the watercourse, improves drainage, and removes sediment that accumulates over time. In addition to an adequate drainage system, in-ditch and downstream conservation practices can help control water to protect landscapes. - Medium Adaptive Capacity	Accept Risk			
Agriculture	Severe storms and extreme weather	Farmland and Vineyards	As the city of Oakley has a connection to the Delta, agriculture is a fundamental component of the community's character. Historically, agriculture has been the economic activity in and around the city. The total developed agricultural land in the city is 38.6 acres. Based on the Oakley general plan, agricultural limited zones bordered by Carpenter Road, Brown Road, and Laurel Road. Zoned agriculture areas are to the southeast of the city west of Carpenter Road and the near the central east of the city near Knighten Avenue, Sellers Avenue, and East Cypress Road. The city of Oakley is characterized by wet winters; however, the city resides in a mediterranean climate that is prone to cycles of prolonged droughts. The city of Oakley is comprised primarily of lowland soil associations, with some tidal flat-delta-marsh lowland along the northern boundary of the City. Lowland soil associations are classified as slow to very slow permeability, highly expansive, and corrosive with slight erosion hazards. The tidal flat-delta-marsh lowland soils are highly expansive, very highly corrosive and moderately to slowly permeable. In addition, majority of Oakley is comprised of Class Delta sand - used to grow irrigated almonds, vineyards and other fruit crops, and some walnuts - which is classified as "excessively drained soils" where runoff is slow or very slow. - Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. - Low Probability	The expected annual loss for agriculture value due to severe storms (e.g. hail) is \$35,350 with a expected annual FEMA NRI loss score of 20.4 (relatively low). - Low Magnitude	Measures to combat severe storms and extreme weather include plant protection products that can help protect vineyards from fungal diseases. Canopy management is also a potential solution as it will shade agriculture from excessive water; however, these operations require labor and should be implemented at the earliest convenience of plant growth. - Low Adaptive Capacity	Accept Risk			
Agriculture	Temperature changes - warming	Farmland and Vineyards	As the city of Oakley has a connection to the Delta, agriculture is a fundamental component of the community's character. Historically, agriculture has been the economic activity in and around the city. The total developed agricultural land in the city is 38.6 acres. Based on the Oakley general plan, agricultural limited zones bordered by Carpenter Road, Brown Road, and Laurel Road. Zoned agriculture areas are to the southeast of the city west of Carpenter Road and the near the central east of the city near Knighten Avenue, Sellers Avenue, and East Cypress Road. The extreme heat temperature threshold for the city of Oakley is 101.3 degrees Fahrenheit. - High Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. - Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	The expected annual loss for agriculture value due to severe weather (e.g. heat wave) is \$55,350 with a expected annual FEMA NRI loss score of 62.2 (relatively high). Further, some primary areas zoned agriculture are mainly concentrated near the intersection of Laurel Road and Brown Road. This area is not located near the Big Break shorelines; thus, ocean cooling would not be applicable to combat extreme warm temperatures. However, there are some pockets of land located near the shoreline such as near Seminouth Boulevard within the northeast boundary of the City which is near the water body, Dutch Slough. Ocean cooling may help combat warmer temperatures here. - High Magnitude	Measures to combat temperature warming include proper irrigation management, fertilization, and crop selection. The city of Oakley mostly includes agriculture such as grapes, almonds, and apricots which all require large quantities of water and are sensitive to extreme heat. - Low Adaptive Capacity	Take Action	Coordinate with other agencies	Continue or initiate coordination with agencies such as, but not limited to, Contra Costa County Department of Conservation and Development, Contra Costa Health Services, Hazardous Materials Program Office, Contra Costa County Fire Protection District, Contra Costa County Office of Emergency Services, Contra Costa County Cities Citizen Corps, Contra Costa County Office of the Sheriff.	
Agriculture	Wildfire	Farmland and Vineyards	As the city of Oakley has a connection to the Delta, agriculture is a fundamental component of the community's character. Historically, agriculture has been the economic activity in and around the city. The total developed agricultural land in the city is 38.6 acres. Based on the Oakley general plan, agricultural limited zones bordered by Carpenter Road, Brown Road, and Laurel Road. Zoned agriculture areas are to the southeast of the city west of Carpenter Road and the near the central east of the city near Knighten Avenue, Sellers Avenue, and East Cypress Road. According to Contra Costa County Local Hazard Mitigation Plan, the geography, weather patterns, and vegetation in the East Bay area provide ideal conditions for recurring wildfires. Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. - Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. - Low Probability	The expected annual loss for agriculture value due to wildfire is \$1,743 with a expected annual FEMA NRI loss score of 27.4 (relatively low). - Low Magnitude	Measures to combat wildfire include creating greenbelt buffer zones from agriculture, reducing vegetation, and occasional prescribed fires. - High Adaptive Capacity	Accept Risk			
Agriculture	Sea Level Rise	Farmland and Vineyards	As the city of Oakley has a connection to the Delta, agriculture is a fundamental component of the community's character. Historically, agriculture has been the economic activity in and around the city. The total developed agricultural land in the city is 38.6 acres. Based on the Oakley general plan, agricultural limited zones bordered by Carpenter Road, Brown Road, and Laurel Road. Zoned agriculture areas are to the southeast of the city west of Carpenter Road and the near the central east of the city near Knighten Avenue, Sellers Avenue, and East Cypress Road. The City of Oakley is situated along the San Joaquin River delta which experiences tidal influence from the larger San Francisco Bay and Suisun Bay west of the City. The city of Oakley is characterized by wet winters; however, the city resides in a mediterranean climate that is prone to cycles of prolonged droughts. The city of Oakley is comprised primarily of lowland soil associations, with some tidal flat-delta-marsh lowland along the northern boundary of the City. Lowland soil associations are classified as slow to very slow permeability, highly expansive, and corrosive with slight erosion hazards. The tidal flat-delta-marsh lowland soils are highly expansive, very highly corrosive and moderately to slowly permeable. In addition, majority of Oakley is comprised of Class Delta sand - used to grow irrigated almonds, vineyards and other fruit crops, and some walnuts - which is classified as "excessively drained soils" where runoff is slow or very slow. - Medium Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. Under a 12-inch, 24-inch, 36-inch, and 83-inch sea level rise scenarios, zoned agricultural lands are anticipated to have a maximum inundation depth ranging from 0 to 2 feet. - Low Probability	The expected annual loss for agriculture value due to sea level rise is \$0 with a expected annual FEMA NRI loss score of 0.0 (no expected annual losses). With a 12-inch SLR scenario and 100+ year storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2 to 45 inches. - Low Magnitude	Measures to combat sea level rise include improving the soil health (e.g., planting cover crops and deep-rooted perennials) where some agriculture grow. This can help soil health by making it more resilient to damp an dry periods. - Medium Adaptive Capacity	Accept Risk			
Recreational	Precipitation Changes	Jagless Lizard Preserve	This preserve is approximately 7.5 acres that includes tree-covered sand dunes and is located between the Alhambra Topanga & Santa Fe railroad right-of-way and Walnut Meadows Drive in the Big Break Area. - Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 55.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year. - Medium Probability	Legless lizards usually prefer loose, sandy soils with some plant cover and moisture. With precipitation changes (heavier precipitation), legless lizards may have increased difficulty finding dry shelter. In addition, as the preserve itself comprises of tree-covered sand dunes, precipitation changes could oversaturate the soils in the dunes; thus impacting the natural habitat for the lizards. The lizards may also be more active and require more food supply. On the contrary, with precipitation changes (drought), legless lizards may face increased dehydration and food shortages due to the lack of water for their prey. - Medium Magnitude	As the preserve is located on the 100-year floodplain, the surface and subsurface conditions help slow runoff and allow time for ground infiltration. This also helps recharge groundwater aquifers and naturally purify the water. - High Adaptive Capacity	Accept Risk			

Recreational	Flooding	Legless Lizard Preserve	This preserve is approximately 7.5 acres that includes tree-covered sand dunes and is located between the Atchison Topoka & Santa Fe railroad right-of-way and Walnut Meadows Drive in the Big Break Area. + Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. + Low Probability	Increased flooding may impact legless lizards by drowning them in low-lying areas. In addition, as the preserve itself comprises of tree-covered sand dunes, precipitation changes could oversaturate the soils in the dunes, thus impacting the natural habitat for the lizards. + High Magnitude	As the preserve is located on the 100-year floodplain, the surface and subsurface conditions help slow runoff and allow time for ground infiltration. This also helps recharge groundwater aquifers and naturally purify the water. + High Adaptive Capacity	Accept Risk		
Recreational	Severe storms and extreme weather	Legless Lizard Preserve	This preserve is approximately 7.5 acres that includes tree-covered sand dunes and is located between the Atchison Topoka & Santa Fe railroad right-of-way and Walnut Meadows Drive in the Big Break Area. + Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. + Low Probability	Severe storms and extreme weather may after the existing preserve; thus, increasing the difficulty for the wildlife in the preserve. Severe storms may include secondary hazards such as flooding which may impact wildlife by drowning them in low-lying areas. + High Magnitude	As the preserve is located on the 100-year floodplain, the surface and subsurface conditions help slow runoff and allow time for ground infiltration. This also helps recharge groundwater aquifers and naturally purify the water. + High Adaptive Capacity	Accept Risk		
Recreational	Temperature changes - warming	Legless Lizard Preserve	This preserve is approximately 7.5 acres that includes tree-covered sand dunes and is located between the Atchison Topoka & Santa Fe railroad right-of-way and Walnut Meadows Drive in the Big Break Area. + Medium Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. + Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	Temperature changes in terms of warming may impact the livelihood of wildlife in the preserve. This is because extreme heat can lead to slowed metabolism and movement. Dehydration of wildlife may also occur as secondary hazards from warmer temperatures is drought. + High Magnitude	Measures to combat temperature warming include implementing shade guards/infrastructure throughout the preserve to act as cooler spaces for wildlife. + High Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in citing and designing decisions of major capital expenditures
Recreational	Wildfire	Legless Lizard Preserve	This preserve is approximately 7.5 acres that includes tree-covered sand dunes and is located between the Atchison Topoka & Santa Fe railroad right-of-way and Walnut Meadows Drive in the Big Break Area. Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. + Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildfires are infrequent with moderate severity. + Low Probability	Potential impacts for the legless lizard preserve due to wildfire is loss of habitat, decreased air quality, and potential wildlife casualties. As no parcels within the city (i.e. areas of the legless lizard preserve) are considered to be in a very high fire hazard severity zone, the magnitude of potential impacts would be low. + Low Magnitude	Measures to combat wildfire include grazing by livestock to help reduce the amount of fine fuels or implementing prescribed burns to reduce the risk of high-severity fires. + Medium Adaptive Capacity	Accept Risk		
Recreational	Sea Level Rise	Legless Lizard Preserve	This preserve is approximately 7.5 acres that includes tree-covered sand dunes and is located between the Atchison Topoka & Santa Fe railroad right-of-way and Walnut Meadows Drive in the Big Break Area. + Medium Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. + Low Probability	As the preserve is located between Atchison Topoka and Santa Fe railroad and Walnut Meadows Drive in the Big Break Area, the preserve may experience coastal erosion. Coastal erosion of the preserve would impact the habitat of the wildlife in the preserve. This may impact the survival rates of wildlife in the preserve. With a 12-inch SLR scenario and 100-year storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches. Preserve is a park but no recreational facilities. + Medium Magnitude	Measures to combat sea level rise include building barriers that can prevent coastal erosion and potentially flooding of some areas of the preserve. + Medium Adaptive Capacity	Accept Risk		
Recreational	Flooding	Big Break and Driftwood Marina	Based on the Contra Costa County Local Hazard Mitigation Plan and San Francisco Bay Conservation and Development Commission, the Big Break Regional marina/shoreline is vulnerable to flooding. Based on the 2022 Oakley General Plan, these areas are within the 100-year flood zone. + High Sensitivity	With a 12-inch sea level rise scenario, the shoreline area is anticipated to experience sea level rise inundation at a depth of 2 to 45 inches. Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. + Low Probability	Flooding could lead to a loss of property and associated tax revenue, as well as potential loss of businesses. Business interruption losses associated with a flood event include not the inability to operate a business because of damages sustained because of the flood (including inventory, equipment, structure, wages, relocation costs, etc.) but also include temporary living expenses for those individuals displaced from their homes; thus, individuals may relocate out of the area, impacting the economy. + High Magnitude	Adaptive measures include development regulations to minimize damage to life and property, or eminent domain of hazardous properties. + Medium Adaptive Capacity	Accept Risk		
Recreational	Severe storms and extreme weather	Big Break and Driftwood Marina	Based on the Contra Costa County Local Hazard Mitigation Plan and San Francisco Bay Conservation and Development Commission, the Big Break Regional marina/shoreline is vulnerable to flooding. Based on the 2022 Oakley General Plan, these areas are within the 100-year flood zone. + High Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. + Low Probability	As the Big Break Regional marina/shoreline are within the 100-year flood zone, secondary impacts of severe storms such as sea level rise may lead to coastal erosion of the marina. Flooding is also a secondary impact of severe storms which may lead to loss of functionality of the marina and building/port damages. + Medium Magnitude	Adaptive measures include development regulations to minimize damage to life and property, or eminent domain of hazardous properties. + Medium Adaptive Capacity	Accept Risk		
Recreational	Temperature changes - warming	Big Break and Driftwood Marina	The Big Break and Driftwood Marina are close to water bodies that can counter extreme warm temperature changes. + Low Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year. + Low Probability	As the Big Break Regional marina/shoreline are near large bodies of water, the impacts of temperature warming are not anticipated to be significant. + Low Magnitude	Adaptive measures include development regulations to minimize damage to life and property, or eminent domain of hazardous properties. + Medium Adaptive Capacity	Accept Risk		
Recreational	Wildfire	Big Break and Driftwood Marina	Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. + Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildfires are infrequent with moderate severity. + Low Probability	As the Big Break Regional marina/shoreline are near large bodies of water, the impacts of temperature warming are not anticipated to be significant. + Low Magnitude	Adaptive measures include development regulations to minimize damage to life and property, or eminent domain of hazardous properties. + Medium Adaptive Capacity	Accept Risk		
Recreational	Sea Level Rise	Big Break and Driftwood Marina	The City boundaries to the north encompasses the shoreline area which include Big Break. + High Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. + Low Probability	With a 12-inch SLR scenario and 100-year storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches. Sea level rise would increase the severity of coastal erosion at the marina. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass; thus, causing a significant economic impact on the region. + High Magnitude	Stabilization allowed for all uses in unstable bluff areas, except breakwaters, jetties, and groins. Alternatives for protection against SLR inundation and wave action includes beach nourishment, managed retreat, hard armoring (groins, seawall, bluff stabilization), and soft armoring (groynes, wetland, nature-based solutions) which requires political buy-in. + Low Adaptive Capacity	Modify Policy 8.2.4 and 8.2.6. Strikeout indicate removed terms and underlines indicate added terms. Policy 8.2.4: Existing and proposed Whittable area of structures near the shoreline of the Delta and in flood-prone areas shall be sited above the highest water level expected during the life of the project, or shall be protected for the expected life of the project by levees of an adequate design. Policy 8.2.6: Review flooding policies and attendant geographic data in the General Plan for mid-century and end-of-century climate change scenarios every year in order to incorporate any new scientific findings, revised geographic information, or federal and State requirements regarding the potential for flooding and projected increases in sea levels.	Take Action	Create /modify policy, goal, or ordinance
Water Resources	Precipitation Changes	Detention Basins	The City maintains approximately 110 miles of closed storm drain lines and multiple detention basins. The City slopes gradually to the Delta with the highest points nearest the southern boundaries. + Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.1 inches. It is projected that average precipitation from 2035 to 2064 will increase to 35.0 inches and would increase slightly to 36.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,338 with an annualized frequency of 61.7 events per year. + Medium Probability	Secondary hazards related to precipitation changes include drought which may require detention basins to raise the need for stormwater retention solutions. Dry detention basins may also increase the temperature of the stormwater they receive. In addition, with precipitation changes, this may lead to increased precipitation in upcoming years; as such, older detention basins may not be designed for larger water capacities; thus, risk overflowing. However, as the city slopes gradually to the Delta, the risk of overflowing may be considered moderate. + Medium Magnitude	Based on the 2022 Oakley General plan, detention basins should be designed for multiple uses such as parks and playing fields when not used for holding water; where possible, in addition, detention basin designs shall ensure that water entering the basin buffer flow completely within a specified time; thus, minimizing standing water or long-term saturation within the basin. Further, as dry detention basins may increase the temperature of the stormwater they receive, mitigations for this include implementing designs that would lower the detention time. Increased maintenance of the detention basins will also help ensure proper functionality and longevity of the basin. + Medium Adaptive Capacity	Ensure that climate considerations are included in citing and designing decisions of major capital expenditures	Take Action	Plan for inclusion in future CIPs

Water Resources	Flooding	Detention Basins	The City maintains approximately 110 miles of closed storm drain lines and multiple detention basins. The City slopes gradually to the Delta with the highest points nearest the southern boundaries. + Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. + Low Probability	Detention basins are designed to collect and store floodwater which can then be released slowly once the risk of flooding has passed. Further, in the scenario that detention basins overflow due to severe storms and extreme weather, impacts would not be as significant as excess water flow has been accounted for by the fact that the City slopes gradually to the Delta. + Low Magnitude	Based on the 2022 Oakley General plan, detention basins should be designed for multiple uses such as parks and playing fields when not used for holding water, where possible. In addition, detention basin designs shall ensure that water entering the basin outflow completely within a specified time, thus, minimizing standing water or long-term saturation within the basin. Detention basins are also encouraged to use low flow piping to speed drainage from detention basins to minimize water accumulation and ground water saturation within basins. Positive drainage is also considered by grading the basin bottom to a maximum cross-slope of 2%. Further, a number of drainage basins also detain stormwater and runoff for the purposes of flood control. These basins are located in new residential subdivisions on the eastern side of the City with Holly Creek Park, on the west side of the City serving as both a stormwater detention basin and a recreation area. + Medium Adaptive Capacity	Accept Risk		
Water Resources	Severe storms and extreme weather	Detention Basins	The City maintains approximately 110 miles of closed storm drain lines and multiple detention basins. The City slopes gradually to the Delta with the highest points nearest the southern boundaries. During severe storms, Freedom basin has insufficient capacity. There is also deficient drainage infrastructure at Brightleaf Road. + Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. + Low Probability	Detention basins are designed to collect and store floodwater which can then be released slowly once the risk of flooding has passed. Further, in the scenario that detention basins overflow due to severe storms and extreme weather, impacts would not be as significant as excess water flow has been accounted for by the fact that the City slopes gradually to the Delta. + Low Magnitude	Based on the 2022 Oakley General plan, detention basins should be designed for multiple uses such as parks and playing fields when not used for holding water, where possible. In addition, detention basin designs shall ensure that water entering the basin outflow completely within a specified time, thus, minimizing standing water or long-term saturation within the basin. Detention basins are also encouraged to use low flow piping to speed drainage from detention basins to minimize water accumulation and ground water saturation within basins. Positive drainage is also considered by grading the basin bottom to a maximum cross-slope of 2%. Further, a number of drainage basins also detain stormwater and runoff for the purposes of flood control. These basins are located in new residential subdivisions on the eastern side of the City with Holly Creek Park, on the west side of the City serving as both a stormwater detention basin and a recreation area. + Medium Adaptive Capacity	Accept Risk		
Water Resources	Temperature changes - warming	Detention Basins	The City maintains approximately 110 miles of closed storm drain lines and multiple detention basins. + Low Sensitivity In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. + Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In addition, with precipitation changes, this may lead to increased precipitation in upcoming years; as such, older detention basins may not be designed for larger water capacities; thus, risk overflowing. However, as the city slopes gradually to the Delta, the risk of overflowing may be considered moderate. + Medium Magnitude	Secondary hazards related to precipitation changes include drought which may require detention basins to raise the need for stormwater retention solutions. Dry detention basins may also increase the temperature of the stormwater they receive. In addition, with precipitation changes, this may lead to increased precipitation in upcoming years; as such, older detention basins may not be designed for larger water capacities; thus, risk overflowing. However, as the city slopes gradually to the Delta, the risk of overflowing may be considered moderate. + Medium Magnitude	Based on the 2022 Oakley General plan, detention basins should be designed for multiple uses such as parks and playing fields when not used for holding water, where possible. In addition, detention basin designs shall ensure that water entering the basin outflow completely within a specified time, thus, minimizing standing water or long-term saturation within the basin. Further, as dry detention basins (from extreme heat) may increase the temperature of the stormwater they receive, mitigations for this include implementing designs that would lower the detention time. Increased maintenance of the detention basins will also help ensure proper functionality and longevity of the basin. + Medium Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Water Resources	Wildfire	Detention Basins	The City maintains approximately 110 miles of closed storm drain lines and multiple detention basins Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. + Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildfire fires are infrequent with moderate severity. + Low Probability	Detention basins may be impacted by wildfire as aftermath debris and channels can be impacted by excavation and cleaning schedules. Further, water that would normally flow into the detention basins may be heavily polluted by ash and soot, thus, impacting the longevity and smooth functionality of the detention basins. However, as no parcels within the city are located in a VHFHSZ or in any high moderate/other fire hazard severity zones, the magnitude of impacts may not be detrimental. + Low Magnitude	Based on the 2022 Oakley General plan, detention basins should be designed for multiple uses such as parks and playing fields when not used for holding water, where possible. In addition, detention basin designs shall ensure that water entering the basin outflow completely within a specified time, thus, minimizing standing water or long-term saturation within the basin. Further, as dry detention basins (from extreme heat) may increase the temperature of the stormwater they receive, mitigations for this include implementing designs that would lower the detention time. Increased maintenance of the detention basins will also help ensure proper functionality and longevity of the basin. + Medium Adaptive Capacity	Accept Risk		
Water Resources	Sea Level Rise	Detention Basins	The City maintains approximately 110 miles of closed storm drain lines and multiple detention basins. The City slopes gradually to the Delta with the highest points nearest the southern boundaries. + Low Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. + Low Probability	With a 12-inch SLR scenario and 100-year storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45 inches by mid-century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. + Medium Magnitude	Based on the 2022 Oakley General plan, detention basins should be designed for multiple uses such as parks and playing fields when not used for holding water, where possible. In addition, detention basin designs shall ensure that water entering the basin outflow completely within a specified time, thus, minimizing standing water or long-term saturation within the basin. Detention basins are also encouraged to use low flow piping to speed drainage from detention basins to minimize water accumulation and ground water saturation within basins. Positive drainage is also considered by grading the basin bottom to a maximum cross-slope of 2%. Further, a number of drainage basins also detain stormwater and runoff for the purposes of flood control. These basins are located in new residential subdivisions on the eastern side of the City with Holly Creek Park, on the west side of the City serving as both a stormwater detention basin and a recreation area. + Medium Adaptive Capacity	Accept Risk		
Water Resources	Precipitation Changes	Randall Bold Water Treatment Plant	Surface water is treated at this water treatment plant (WTP) which was designed for an initial capacity of 40 million gallons per day with the capability to expand to 80 mgd. Approximately 30 percent of the WTP capacity is allocated to the Diablo Water District (DWD), with the remaining capacity allocated to the Contra Costa Water District (CCWD). + Low Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year. + Medium Probability	Reduced process efficiency may lead to reduced water quality; thus, can lead to reduced water which can lead to serious effects on aquatic organisms and plants, as well as potential human costs. The magnitude of impact precipitation to water infrastructure focuses on reduced process efficiency and operational costs. As there is a high probability of increased precipitation changes affecting water infrastructure, the magnitude of increased process efficiency and operation costs is heightened. Treated water faces a higher risk of being treated improperly, thus, impacting the subjects listed above. Further, the initial plant cost in 1992 was \$49.6 million with a plant upgrade in 2007 costing \$16 million. Potential increased plant upgrades to account for precipitation changes may call for similar upgrade costs or significantly higher. + Medium Magnitude	Design standards and implementation of innovative process treatments could be implemented to handle increased water flows due to the increased precipitation changes. This may cost large economic investments, time, and designs. + Low Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Water Resources	Flooding	Randall Bold Water Treatment Plant	Surface water is treated at this water treatment plant (WTP) which was designed for an initial capacity of 40 million gallons per day with the capability to expand to 80 mgd. Approximately 30 percent of the WTP capacity is allocated to the Diablo Water District (DWD), with the remaining capacity allocated to the Contra Costa Water District (CCWD). + Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. + Low Probability	Increased process efficiency may lead to reduced water quality; thus, can lead to reduced water which can lead to serious effects on aquatic organisms and plants, as well as potential human costs. This may occur as the plant may not be designed for the anticipated flood capacity. The magnitude of impact precipitation to water infrastructure focuses on reduced process efficiency and operational costs. As there is a high probability of increased precipitation changes affecting water infrastructure, the magnitude of increased process efficiency and operation costs is heightened. Treated water faces a higher risk of being treated improperly, thus, impacting the subjects listed above. Further, the initial plant cost in 1992 was \$49.6 million with a plant upgrade in 2007 costing \$16 million. Potential increased plant upgrades to account for precipitation changes may call for similar upgrade costs or significantly higher. However, based on the 2022 Oakley general plan, the plant is not located in a 100-year or 500-year flood hazard area. + Low Magnitude	Design standards and implementation of innovative process treatments could be implemented to handle increased water flows due to the floods. This may cost large economic investments, time, and designs. + Low Adaptive Capacity	Accept Risk		

Water Resources	Severe storms and extreme weather	Randall-Bold Water Treatment Plant	Surface water is treated at this water treatment plant (WTP) which was designed for an initial capacity of 40 million gallons per day with the capability to expand to 80 mgd. Approximately 30 percent of the WTP capacity is allocated to the Diablo Water District (DWD), with the remaining capacity allocated to the Contra Costa Water District (CCWD). • Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. • Low Probability	Increased process efficiency may lead to reduced water quality, thus, can lead to reduced water which can lead to serious effects on aquatic organisms and plants, as well as potential human costs. This may occur as the plant may not be designed for the anticipated flood capacity. The magnitude of impact precipitation to water infrastructure focuses on reduced process efficiency and operational costs. As there is a high probability of increased precipitation changes affecting water infrastructure, the magnitude of increased process efficiency and operation costs is heightened. Treated water faces a higher risk of being treated improperly, thus, impacting the subjects listed above. Further, the initial plant cost in 1992 was \$48.6 million with a plant upgrade in 2007 costing \$16 million. Potential increased plant upgrades to account for precipitation changes may call for similar upgrade costs or significantly higher. However, based on the 2022 Oakley general plan, the plant is not located in a 100-year or 500-year flood hazard area. • Low Magnitude	Design standards and implementation of innovative process treatments could be implemented to handle increased water flow due to the severe storms and extreme weather. This may cost large economic investments, time, and designs. • Low Adaptive Capacity	Accept Risk		
Water Resources	Temperature changes - warming	Randall-Bold Water Treatment Plant	Surface water is treated at this water treatment plant (WTP) which was designed for an initial capacity of 40 million gallons per day with the capability to expand to 80 mgd. Approximately 30 percent of the WTP capacity is allocated to the Diablo Water District (DWD), with the remaining capacity allocated to the Contra Costa Water District (CCWD). • Low Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 83.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. • Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	For the Randall-Bold Water Treatment Plant, the treatment process includes hydraulic mixing, flocculation/ sedimentation, intermediate aeration, filtration and post-aeration. At elevated temperatures such as warming, bacterial floc quality may begin to deteriorate, thus, impacting the flocculation/ sedimentation treatment process of the plant. This would impact the treatment efficiency and quality. As the city is projected to experience an increase in additional extreme heat days, the magnitude of impacts would be moderate. • Medium Magnitude	Innovative treatment processes such as thermoregulatory devices, effluent cooling systems, thermally stable polymeric membranes, plate heat exchangers, and shell and tube heat exchangers. These processes may be costly and time consuming. • Low Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Water Resources	Wildfire	Randall-Bold Water Treatment Plant	Surface water is treated at this water treatment plant (WTP) which was designed for an initial capacity of 40 million gallons per day with the capability to expand to 80 mgd. Approximately 30 percent of the WTP capacity is allocated to the Diablo Water District (DWD), with the remaining capacity allocated to the Contra Costa Water District (CCWD). Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. • Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildfires are infrequent with moderate severity. • Low Probability	Debris (logs) from wildfires may compromise treatment of water and expedite filter deterioration in water treatment processes. Further, compromised treatment of water may impact outflow of water which may contaminate groundwater aquifers and nearby waterways. However, no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone. • Low Magnitude	Infrastructure improvements for the plant may be implemented to combat wildfire risks such as stronger material choice (e.g. nonflammable) and advanced treatment processes. Advanced water treatment processes that can help with wildfire include sediment traps and debris booms, sediment retention basins, containment lagoons, and lead-resident pipes to name a few. • Low Adaptive Capacity	Accept Risk		
Water Resources	Sea Level Rise	Randall-Bold Water Treatment Plant	Surface water is treated at this water treatment plant (WTP) which was designed for an initial capacity of 40 million gallons per day with the capability to expand to 80 mgd. Approximately 30 percent of the WTP capacity is allocated to the Diablo Water District (DWD), with the remaining capacity allocated to the Contra Costa Water District (CCWD). • Low Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. • Low Probability	With a 12-inch SLR scenario and 100 yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. However, as the plant is not located near the shoreline, the magnitude of impacts would be low. • Low Magnitude	Not applicable as plant is not located near the shoreline. Some measures for coastal plants include armoring, moving, or elevating plants.	Accept Risk		
Water Resources	Precipitation Changes	Levees	Levees are located throughout the city of Oakley with primary areas being along the Contra Costa Canal, Delta Recreation area, and near Summer Lake. • Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.1 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year. • Medium Probability	Precipitation changes can adversely impact the stability of levees in terms of the structural integrity, and overtopping, seepage. Overtopping of the levee would cause the levee to weaken and eventually give away. Seepage of the levee would indicate excessive water seeping beneath the levee, thus can lead to the formation of destructive boils on the landside of the levee. As there are increased precipitation changes for Oakley, the magnitude of these impacts would be moderate. • Medium Magnitude	Based on the Oakley HMP, new levees and pump stations will be built according to FEMA guidelines, in conjunction with the Reclamation Districts. This project duration is ongoing with a high estimated cost and high implementation priority. Potential funding sources are private/non-profit funds. This project was initiated in 2018 and before with the City of Oakley Public Works and Engineering Department as the lead agency. • Medium Adaptive Capacity Provision of adequate flood protection will likely require a combination of improvements of March Creek banks and levees, as well as a pump facility to discharge water toward the Delta. Based on the 2022 Oakley General Plan, the improvement of existing levees within the City are anticipated as well as (when appropriate), compliance and certification from the United States Army Corps of Engineers.	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Water Resources	Flooding	Levees	Levees are located throughout the city of Oakley with primary areas being along the Contra Costa Canal, Delta Recreation area, and near Summer Lake. Levees of the Contra Costa Canal provide some protection against Delta flooding; however, these levees were not designed for flood control purposes and are not certified by the Army Corps of Engineers. • High Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hurricane flooding) is 2 with an annualized frequency of 0.0 events per year. Under 100-year flood conditions, it is anticipated the Marsh creek would back-up, thus, resulting in localized flooding in the northwestern portion of this area. Further, limitations of the Marsh Creek capacity are not anticipated to be able to convey storm runoff into Marsh Creek. • High Probability Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. • High Probability	Flooding can adversely impact the stability of levees in terms of the structural integrity, and overtopping, seepage. Overtopping of the levee would cause the levee to weaken and eventually give away. Seepage of the levee would indicate excessive water seeping beneath the levee, thus can lead to the formation of destructive boils on the landside of the levee. As many levees are located near water bodies, the magnitude of these impacts would be high. • High Magnitude	Based on the Oakley HMP, new levees and pump stations will be built according to FEMA guidelines, in conjunction with the Reclamation Districts. This project duration is ongoing with a high estimated cost and high implementation priority. Potential funding sources are private/non-profit funds. This project was initiated in 2018 and before with the City of Oakley Public Works and Engineering Department as the lead agency. • Medium Adaptive Capacity Provision of adequate flood protection will likely require a combination of improvements of March Creek banks and levees, as well as a pump facility to discharge water toward the Delta. Based on the 2022 Oakley General Plan, the improvement of existing levees within the City are anticipated as well as (when appropriate), compliance and certification from the United States Army Corps of Engineers.	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Water Resources	Severe storms and extreme weather	Levees	Levees are located throughout the city of Oakley with primary areas being along the Contra Costa Canal, Delta Recreation area, and near Summer Lake. Levees of the Contra Costa Canal provide some protection against Delta flooding; however, these levees were not designed for flood control purposes and are not certified by the Army Corps of Engineers. • High Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. Under 100-year flood conditions, it is anticipated the Marsh creek would back-up, thus, resulting in localized flooding in the northwestern portion of this area. Further, limitations of the Marsh Creek capacity are not anticipated to be able to convey storm runoff into Marsh Creek. • High Probability	Flooding can adversely impact the stability of levees in terms of the structural integrity, and overtopping, seepage. Overtopping of the levee would cause the levee to weaken and eventually give away. Seepage of the levee would indicate excessive water seeping beneath the levee, thus can lead to the formation of destructive boils on the landside of the levee. As many levees are located near water bodies, the magnitude of these impacts would be high. • High Magnitude	Based on the Oakley HMP, new levees and pump stations will be built according to FEMA guidelines, in conjunction with the Reclamation Districts. This project duration is ongoing with a high estimated cost and high implementation priority. Potential funding sources are private/non-profit funds. This project was initiated in 2018 and before with the City of Oakley Public Works and Engineering Department as the lead agency. • Medium Adaptive Capacity Provision of adequate flood protection will likely require a combination of improvements of March Creek banks and levees, as well as a pump facility to discharge water toward the Delta. Based on the 2022 Oakley General Plan, the improvement of existing levees within the City are anticipated as well as (when appropriate), compliance and certification from the United States Army Corps of Engineers.	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Water Resources	Temperature changes - warming	Levees	Levees are located throughout the city of Oakley with primary areas being along the Contra Costa Canal, Delta Recreation area, and near Summer Lake. • Low Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 83.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. • Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	Temperature changes in terms of warming may impact levees as loss in efficiency as cracks, breaks, and elevation shifts from subsidence expand may occur. As Oakley is projected to experience 11-31 additional extreme heat days per year from 2035 to 2064, the magnitude of impacts would be moderate. • Medium Magnitude	Based on the Oakley HMP, new levees and pump stations will be built according to FEMA guidelines, in conjunction with the Reclamation Districts. This project duration is ongoing with a high estimated cost and high implementation priority. Potential funding sources are private/non-profit funds. This project was initiated in 2018 and before with the City of Oakley Public Works and Engineering Department as the lead agency. • Medium Adaptive Capacity Provision of adequate flood protection will likely require a combination of improvements of March Creek banks and levees, as well as a pump facility to discharge water toward the Delta. Based on the 2022 Oakley General Plan, the improvement of existing levees within the City are anticipated as well as (when appropriate), compliance and certification from the United States Army Corps of Engineers.	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.

Water Resources	Wildfire	Levees	Levees are located throughout the city of Oakley with primary areas being along the Contra Costa Canal, Delta Recreation areas, and near Summer Lake. ➔ Medium Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. ➔ Low Probability	As no parcels within the city are located in a VHRFSZ or in any high moderate/other fire hazard severity zones, the magnitude of impacts may not be detrimental. ➔ Low Magnitude	New levees and pump stations will be built according to FEMA guidelines, in conjunction with the Reclamation Districts. This project duration is ongoing with a high estimated cost and high implementation priority. ➔ High Adaptive Capacity Provision of adequate flood protection will likely require a combination of improvements of March Creek banks and levees, as well as a pump facility to discharge water toward the Delta. Based on the 2022 Oakley General Plan, the improvement of existing levees within the City are anticipated as well as (when appropriate), compliance and certification from the United States Army Corps of Engineers.	Accept Risk		
Water Resources	Sea Level Rise	Levees	Levees are located throughout the city of Oakley with primary areas being along the Contra Costa Canal, Delta Recreation areas, and near Summer Lake. Existing levee along East Cypress Road & Bethel Island Road protects the residential development of Summer lake; however, with extreme conditions, residential development along East mound Boulevard and East Cypress Road are anticipated to face inundation. ➔ Medium Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. ➔ Low Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion, structural instability, and overtopping of levees. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on residential, recreational, and agricultural structures and infrastructure and loss of land mass; thus, causing a significant economic impact on the region. ➔ Medium Magnitude	Based on the Oakley HMP, new levees and pump stations will be built according to FEMA guidelines, in conjunction with the Reclamation Districts. This project duration is ongoing with a high estimated cost and high implementation priority. Potential funding sources are private/non-profit funds. This project was initiated in 2018 and before with the City of Oakley Public Works and Engineering Department as the lead agency. ➔ High Adaptive Capacity	Accept Risk		
Buildings & Energy	Precipitation Changes	Educational Facilities	The City of Oakley has three main school districts: Oakley Union Elementary School District (9 schools), Antioch Unified School District (3 schools), and Liberty Union High School District (1 school). ➔ Low Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year. ➔ Medium Probability	The expected annual loss for buildings due to precipitation changes (e.g. drought) is \$426,670 with a expected annual FEMA NRI loss score of 77.7 (relatively high). ➔ High Magnitude	Based on the Oakley HMP, a new library and community center facility will be constructed to serve as the primary Emergency Operations Center (EOC), space for veteran, seniors and children, and serve as a warming/cooling center and possible shelter. This project duration is anticipated to be short; however, with a high cost and high implementation priority. This project would be a new project for initiation in 2024 and is funded by local budgeted funds, HMSG, BRIC, FMA, and other. ➔ Medium Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Buildings & Energy	Flooding	Educational Facilities	The City of Oakley has three main school districts: Oakley Union Elementary School District (9 schools), Antioch Unified School District (3 schools), and Liberty Union High School District (1 school). ➔ Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. ➔ Low Probability	The expected annual loss for buildings due to precipitation changes (e.g. riverine flooding) is \$104,458 with a expected annual FEMA NRI loss score of 18.8 (relatively moderate). ➔ Medium Magnitude	A new library and community center facility will be constructed to serve as the primary Emergency Operations Center (EOC), space for veteran, seniors and children, and serve as a warming/cooling center and possible shelter. This project duration is anticipated to be short; however, with a high cost and high implementation priority. ➔ Medium Adaptive Capacity	Accept Risk		
Buildings & Energy	Severe storms and extreme weather	Educational Facilities	The City of Oakley has three main school districts: Oakley Union Elementary School District (9 schools), Antioch Unified School District (3 schools), and Liberty Union High School District (1 school). ➔ Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. ➔ Low Probability	The expected annual loss for buildings due to severe storms (e.g. hail) is \$335 with a expected annual FEMA NRI loss score of 30.4 (relatively low). ➔ Low Magnitude	A new library and community center facility will be constructed to serve as the primary Emergency Operations Center (EOC), space for veteran, seniors and children, and serve as a warming/cooling center and possible shelter. This project duration is anticipated to be short; however, with a high cost and high implementation priority. ➔ Medium Adaptive Capacity	Accept Risk		
Buildings & Energy	Temperature changes - warming	Educational Facilities	The City of Oakley has three main school districts: Oakley Union Elementary School District (9 schools), Antioch Unified School District (3 schools), and Liberty Union High School District (1 school). ➔ Low Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. ➔ Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	The expected annual loss for buildings due to severe weather (e.g. heat wave) is \$15,350 with a expected annual FEMA NRI loss score of 62.2 (relatively high). ➔ High Magnitude	A new library and community center facility will be constructed to serve as the primary Emergency Operations Center (EOC), space for veteran, seniors and children, and serve as a warming/cooling center and possible shelter. This project duration is anticipated to be short; however, with a high cost and high implementation priority. ➔ Medium Adaptive Capacity	Accept Risk		
Buildings & Energy	Wildfire	Educational Facilities	The City of Oakley has three main school districts: Oakley Union Elementary School District (9 schools), Antioch Unified School District (3 schools), and Liberty Union High School District (1 school). Based on the CalFire Very High Fire Hazard Severity Zone (VHRFSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHRFSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. ➔ Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. ➔ Low Probability	The expected annual loss for buildings due to wildfire is \$1,742 with a expected annual FEMA NRI loss score of 27.5 (relatively low). ➔ Low Magnitude	A new library and community center facility will be constructed to serve as the primary Emergency Operations Center (EOC), space for veteran, seniors and children, and serve as a warming/cooling center and possible shelter. This project duration is anticipated to be short; however, with a high cost and high implementation priority. ➔ Medium Adaptive Capacity	Accept Risk		
Buildings & Energy	Sea Level Rise	Educational Facilities	The City of Oakley has three main school districts: Oakley Union Elementary School District (9 schools), Antioch Unified School District (3 schools), and Liberty Union High School District (1 school). Schools are not located in SLR inundation zones, however, temporary flooding may disrupt learning progress. ➔ Low Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. ➔ Low Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass; thus, causing a significant economic impact on the region. ➔ Medium Magnitude	Freedom High School contains communication facilities for emergencies (critical infrastructure). A new library and community center facility will be constructed to serve as the primary Emergency Operations Center (EOC), space for veteran, seniors and children, and serve as a warming/cooling center and possible shelter. This project duration is anticipated to be short; however, with a high cost and high implementation priority. ➔ Medium Adaptive Capacity	Accept Risk		
Buildings & Energy	Precipitation Changes	Utilities	Based on the 2022 Oakley General Plan, major utility energy areas are located on the northwest boundary of Oakley near the intersection of the CA-160 highway and Main Street. ➔ Low Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year. ➔ Medium Probability	Precipitation changes can impact utilities in terms of storm damage to utility infrastructure, hydroelectrical power loads, etc. As one of Oakley's utility provider is the Pacific Gas and Electric Company (PG&E), they may experience changes to their hydroelectrical energy production due to precipitation changes. However, as the average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase to 16.4 inches in 2070 to 2099, it is likely the hydroelectrical energy production would not be negatively impacted. Other utility infrastructure such as electrical lines, pipelines, substations, etc may face structural damage though. ➔ Medium Magnitude	Common measures for utilities to combat precipitation changes include building flood barriers, elevating utility equipment, or relocating facilities (e.g., facilities) to higher ground. ➔ Medium Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Buildings & Energy	Flooding	Utilities	Based on the 2022 Oakley General Plan, major utility energy areas are located on the northwest boundary of Oakley near the intersection of the CA-160 highway and Main Street. ➔ Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. ➔ Low Probability	Flooding can impact utilities in terms of storm damage to utility infrastructure, hydroelectrical power loads, etc. As one of Oakley's utility provider is the Pacific Gas and Electric Company (PG&E), they may experience changes to their hydroelectrical energy production. However, Oakley does not have any hydroelectrical facilities at this time. Other utility infrastructure such as electrical lines, pipelines, substations as zoned in the 2022 Oakley General Plan are not on a 100-year or 500 year flood zone. ➔ Low Magnitude	Common measures for utilities to combat flooding include building flood barriers, elevate utility equipment, or relocating facilities (e.g., facilities) to higher ground. ➔ Medium Adaptive Capacity	Accept Risk		
Buildings & Energy	Severe storms and extreme weather	Utilities	Based on the 2022 Oakley General Plan, major utility energy areas are located on the northwest boundary of Oakley near the intersection of the CA-160 highway and Main Street. Levee breaches or roadway washouts could impact underground utilities along bridgehead road. Total developed utilities energy area in the city is 4.6 acres. ➔ Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. ➔ Low Probability	Severe storms and extreme weather can impact utilities in terms of storm damage to utility infrastructure, hydroelectrical power loads, etc. As one of Oakley's utility provider is the Pacific Gas and Electric Company (PG&E), they may experience changes to their hydroelectrical energy production. However, Oakley does not have any hydroelectrical facilities at this time. Other utility infrastructure such as electrical lines, pipelines, substations as zoned in the 2022 Oakley General Plan are not on a 100-year or 500 year flood zone. ➔ Low Magnitude	Common measures for utilities to severe storm and extreme weather include building flood barriers, elevate utility equipment, or relocating facilities (e.g., facilities) to higher ground. ➔ Medium Adaptive Capacity	Accept Risk		

Buildings & Energy	Temperature changes - warming	Utilities	<p>Based on the 2022 Oakley General Plan, major utility energy areas are located on the northwest boundary of Oakley near the intersection of the CA-160 highway and Main Street. + Low Sensibility</p> <p>Total developed utilities energy area in the city is 4.6 acres.</p>	<p>The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2039, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year.</p> <p>In the years 2025 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. + Medium Probability</p> <p>Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.</p>	<p>With the potential of warmer temperatures, utilities may be impacted in terms of increased demand of air conditioning, reduced plant, substation, and power lines on efficiency. Utility infrastructure may also face overheating which may lead to blackouts and loss of operations for many residential, commercial, and industrial facilities. As the city is projected to experience 11-31 additional extreme heat days per year in 2035 to 2064, the magnitude of these impacts is moderate. + Medium Magnitude</p>	<p>Common measures for utilities to combat extreme heat risks include utilizing heat exchangers, monitoring weather, and encouraging public awareness for high energy usage during hotter days. + Medium Adaptive Capacity</p>	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in siting and designing decisions of major capital expenditures.
Buildings & Energy	Wildfire	Utilities	<p>Based on the 2022 Oakley General Plan, major utility energy areas are located on the northwest boundary of Oakley near the intersection of the CA-160 highway and Main Street. Total developed utilities energy area in the city is 4.6 acres.</p> <p>Based on the CalFire Very High Fire Hazard Severity Zone (VHHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHHSZ nor in any high moderate or other fire hazard severity zone.</p> <p>The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. + Low Sensibility</p>	<p>Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year.</p> <p>Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. + Low Probability</p>	<p>Wildfires may impact utilities by causing physical damage to energy infrastructure, disrupting power service, and may potentially lead to severe financial distress. However as no parcels within the City that are located in a VHHSZ nor in any high moderate or other fire hazard severity zone, the magnitude of impacts are low. + Low Magnitude</p>	<p>Common measures for utilities to combat wildfire risks include a public safety power shutoff where P&M could proactively turn off power when and where conditions present an increased wildfire risk. + Medium Adaptive Capacity</p>	Accept Risk		
Buildings & Energy	Sea Level Rise	Utilities	<p>Based on the 2022 Oakley General Plan, major utility energy areas are located on the northwest boundary of Oakley near the intersection of the CA-160 highway and Main Street. Total developed utilities energy area in the city is 4.6 acres. + Low Sensibility</p>	<p>Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. + Low Probability</p>	<p>With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. However, based on the 2022 Oakley General Plan, utility areas are not near the shorelines; thus, the magnitude of impacts are low. + Low Magnitude</p>	<p>New levees and pump stations will be built according to FEMA guidelines, in conjunction with the Reclamation Districts. This project duration is ongoing with a high estimated cost and high implementation priority. + High Adaptive Capacity</p>	Accept Risk		
Buildings & Energy	Precipitation Changes	Residential	<p>Total area of rural residential in the city is 493.9 acres which consists of 285.8 developed acres and 208.1 underdeveloped acres. Total area of low residential is 648.7 acres which consists of 287.0 developed acres and 361.7 underdeveloped acres. Total area of medium residential is 171.7 acres which consists of 103.5 developed acres and 68.2 underdeveloped acres. Total area of high residential is 50.6 acres which consists of 8.4 developed acres and 42.4 underdeveloped acres. Total area of residential mobile homes is 14.1 acres which consists of 14.1 developed acres and 0 underdeveloped acres.</p> <p>Rural residential areas of the city are primarily located on the western boundaries near Oakley road, Neroly road, Live Oak Avenue, and Empire Road. Other rural residential areas are located near the southeast border of the city. Primary low residential areas are located near the southeast border of the city with some low areas in general Oakley and near East Cypress Road. Medium residential areas are more scattered throughout the city with some major areas near Main Street (on western side of Oakley), Empire Ave, and near the intersection of East Cypress Road and Sellers Avenue. High residential homes limited with main areas near Main Street (on western side of Oakley) and near the intersection of Main Street and East Cypress Road. Mobile homes are located near the eastern boundaries of Oakley near the intersection of Empire Ave and Oakley Road. + Medium Sensibility</p>	<p>Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches.</p> <p>It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099.</p> <p>Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year.</p> <p>+ Medium Probability</p>	<p>The expected annual loss for buildings due to precipitation changes (e.g. drought) is \$426,670 with a expected annual FEMA NRI loss score of 77.7 (relatively high). + High Magnitude</p>	<p>Residential areas may also be renovated to combat precipitation changes. For instance, structural changes that may include more durable materials (water resistant, mold resistant, etc.) and upgraded drainage systems. + Medium Adaptive Capacity</p>	Take Action	Create /modify policy, goal, or ordinance	
Buildings & Energy	Flooding	Residential	<p>Total area of rural residential in the city is 493.9 acres which consists of 285.8 developed acres and 208.1 underdeveloped acres. Total area of low residential is 648.7 acres which consists of 287.0 developed acres and 361.7 underdeveloped acres. Total area of medium residential is 171.7 acres which consists of 103.5 developed acres and 68.2 underdeveloped acres. Total area of high residential is 50.6 acres which consists of 8.4 developed acres and 42.4 underdeveloped acres. Total area of residential mobile homes is 14.1 acres which consists of 14.1 developed acres and 0 underdeveloped acres.</p> <p>Rural residential areas of the city are primarily located on the western boundaries near Oakley road, Neroly road, Live Oak Avenue, and Empire Road. Other rural residential areas are located near the southeast border of the city. Primary low residential areas are located near the southeast border of the city with some low areas in general Oakley and near East Cypress Road. Medium residential areas are more scattered throughout the city with some major areas near Main Street (on western side of Oakley), Empire Ave, and near the intersection of East Cypress Road and Sellers Avenue. High residential homes limited with main areas near Main Street (on western side of Oakley) and near the intersection of Main Street and East Cypress Road. Mobile homes are located near the eastern boundaries of Oakley near the intersection of Empire Ave and Oakley Road.</p> <p>With severe flooding, Marsh creek could overflow and impact several residential neighborhoods (e.g., Parkland, Creekside, Marsh Glen).</p> <p>Areas with reduced flood risk due to levees include low/medium residential north of East Cypress Road. + Medium Sensibility</p>	<p>Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year.</p> <p>Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. + Low Probability</p>	<p>The expected annual loss for buildings due to precipitation changes (e.g. riverine flooding) is \$104,458 with a expected annual FEMA NRI loss score of 51.8 (relatively moderate). + Medium Magnitude</p>	<p>A number of drainage basins also detain stormwater and runoff for the purposes of flood control. These basins are located in new residential subdivisions on the eastern side of the City with Holly Creek Park, on the west side of the City serving as both a stormwater detention basin and a recreation area.</p> <p>Residential areas may also be renovated to combat precipitation changes. For instance, structural changes that may include more durable materials (water resistant, mold resistant, etc.) and upgraded drainage systems. + Medium Adaptive Capacity</p>	Take Action	Coordinate with other agencies	Continue or initiate coordination with agencies such as, but not limited to, Contra Costa County Department of Conservation and Development, Contra Costa Health Services, Hazardous Materials Program Office, Contra Costa County Fire Protection District, Contra Costa County Office of Emergency Services, Contra Costa County Cities Citizen Corps, Contra Costa County Office of the Sheriff.
Buildings & Energy	Severe storms and extreme weather	Residential	<p>Total area of rural residential in the city is 493.9 acres which consists of 285.8 developed acres and 208.1 underdeveloped acres. Total area of low residential is 648.7 acres which consists of 287.0 developed acres and 361.7 underdeveloped acres. Total area of medium residential is 171.7 acres which consists of 103.5 developed acres and 68.2 underdeveloped acres. Total area of high residential is 50.6 acres which consists of 8.4 developed acres and 42.4 underdeveloped acres. Total area of residential mobile homes is 14.1 acres which consists of 14.1 developed acres and 0 underdeveloped acres.</p> <p>Rural residential areas of the city are primarily located on the western boundaries near Oakley road, Neroly road, Live Oak Avenue, and Empire Road. Other rural residential areas are located near the southeast border of the city. Primary low residential areas are located near the southeast border of the city with some low areas in general Oakley and near East Cypress Road. Medium residential areas are more scattered throughout the city with some major areas near Main Street (on western side of Oakley), Empire Ave, and near the intersection of East Cypress Road and Sellers Avenue. High residential homes limited with main areas near Main Street (on western side of Oakley) and near the intersection of Main Street and East Cypress Road. Mobile homes are located near the eastern boundaries of Oakley near the intersection of Empire Ave and Oakley Road. + Medium Sensibility</p>	<p>With a 100-year storm event, shoreline infrastructure is anticipated to be overtopped and inundate residences surrounding Delaney Park.</p> <p>Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. + Low Probability</p>	<p>The expected annual loss for buildings due to severe storms (e.g. hail) is \$1335 with a expected annual FEMA NRI loss score of 30.4 (relatively low). + Low Magnitude</p>	<p>Residential areas may also be renovated to combat floods. For instance, structural changes that may include more durable materials (water resistant, mold resistant, etc.) and upgraded drainage systems. + Medium Adaptive Capacity</p>	Accept Risk		

Buildings & Energy	Temperature changes - warming	Residential	<p>Total area of rural residential in the city is 493.9 acres which consists of 283.8 developed acres and 208.1 undeveloped acres. Total area of low residential is 648.7 acres which consists of 287.0 developed acres and 361.7 undeveloped acres. Total area of medium residential is 171.7 acres which consists of 103.5 developed acres and 68.2 undeveloped acres. Total area of high residential is 50.6 acres which consists of 8.4 developed acres and 42.4 undeveloped acres. Total area of residential mobile homes is 14.1 acres which consists of 14.1 developed acres and 0 undeveloped acres.</p> <p>Rural residential areas of the city are primarily located on the western boundaries near Oakley road, Neroly road, Live Oak Avenue, and Empire Road. Other rural residential areas are located near the southeast border of the city. Primary low residential areas are located near the southeast border of the city with some low area in central Oakley and near East Cypress Road. Medium residential areas are more scattered throughout the city with some major areas near Main Street (on western side of Oakley, Empire Ave, and near the intersection of East Cypress Road and Sellers Avenue. High residential homes limited with main areas near Main Street (on western side of Oakley) and near the intersection of Main Street and East Cypress Road. Mobile homes are located near the eastern boundaries of Oakley near the intersection of Empire Ave and Oakley Road.</p> <p>During the summer months, the city of Oakley is known to have extreme heat. = Medium Sensitivity</p>	<p>The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2039, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year.</p> <p>In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline.</p> <p>Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.</p> <p>= Medium Probability</p>	<p>With an increase in extreme days, this may also correlate with an overall increase in energy demand for electric power during the summer months for homeowners, senior citizens, and persons with disabilities. This would lead to a greater reliance on high energy demand electrical equipment. Increased use of these high energy demand electrical equipment may put strain on the California state power grid; thus, increase the risk of blackout events.</p> <p>The expected annual loss for buildings due to severe weather (e.g. heat wave) is \$15,350 with an expected annual FEMA NRI loss score of 0.2 (relatively high). = High Magnitude</p>	<p>Residential areas may also be renovated to combat warmer temperatures. For instance, structural changes that may include more durable materials (heat resistant, etc.) and upgraded cooling systems. = Medium Adaptive Capacity</p>	Take Action	Create /modify policy, goal, or ordinance	Create new policies regarding existing and proposed residential building standards to combat climate-induced impacts.
Buildings & Energy	Wildfire	Residential	<p>Total area of rural residential in the city is 493.9 acres which consists of 283.8 developed acres and 208.1 undeveloped acres. Total area of low residential is 648.7 acres which consists of 287.0 developed acres and 361.7 undeveloped acres. Total area of medium residential is 171.7 acres which consists of 103.5 developed acres and 68.2 undeveloped acres. Total area of high residential is 50.6 acres which consists of 8.4 developed acres and 42.4 undeveloped acres. Total area of residential mobile homes is 14.1 acres which consists of 14.1 developed acres and 0 undeveloped acres.</p> <p>Rural residential areas of the city are primarily located on the western boundaries near Oakley road, Neroly road, Live Oak Avenue, and Empire Road. Other rural residential areas are located near the southeast border of the city. Primary low residential areas are located near the southeast border of the city with some low area in central Oakley and near East Cypress Road. Medium residential areas are more scattered throughout the city with some major areas near Main Street (on western side of Oakley, Empire Ave, and near the intersection of East Cypress Road and Sellers Avenue. High residential homes limited with main areas near Main Street (on western side of Oakley) and near the intersection of Main Street and East Cypress Road. Mobile homes are located near the eastern boundaries of Oakley near the intersection of Empire Ave and Oakley Road.</p> <p>Based on the CalFire Very High Fire Hazard Severity Zone (VHRHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHRHSZ nor in any high moderate or other fire hazard severity zone.</p> <p>The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. = Low Sensitivity</p>	<p>Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year.</p> <p>Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. = Low Probability</p>	<p>The expected annual loss for buildings due to wildfire is \$1,743 with a expected annual FEMA NRI loss score of 27.6 (relatively low). = Low Magnitude</p>	<p>Residential areas may also be renovated to combat wildfire. For instance, structural changes that may include more durable materials (heat resistant, non-flammable, etc.) and upgraded air filtration systems. = Medium Adaptive Capacity</p>	Accept Risk		
Buildings & Energy	Sea Level Rise	Residential	<p>Total area of rural residential in the city is 493.9 acres which consists of 283.8 developed acres and 208.1 undeveloped acres. Total area of low residential is 648.7 acres which consists of 287.0 developed acres and 361.7 undeveloped acres. Total area of medium residential is 171.7 acres which consists of 103.5 developed acres and 68.2 undeveloped acres. Total area of high residential is 50.6 acres which consists of 8.4 developed acres and 42.4 undeveloped acres. Total area of residential mobile homes is 14.1 acres which consists of 14.1 developed acres and 0 undeveloped acres.</p> <p>Rural residential areas of the city are primarily located on the western boundaries near Oakley road, Neroly road, Live Oak Avenue, and Empire Road. Other rural residential areas are located near the southeast border of the city. Primary low residential areas are located near the southeast border of the city with some low area in central Oakley and near East Cypress Road. Medium residential areas are more scattered throughout the city with some major areas near Main Street (on western side of Oakley, Empire Ave, and near the intersection of East Cypress Road and Sellers Avenue. High residential homes limited with main areas near Main Street (on western side of Oakley) and near the intersection of Main Street and East Cypress Road. Mobile homes are located near the eastern boundaries of Oakley near the intersection of Empire Ave and Oakley Road.</p> <p>The City of Oakley has a shoreline along the tide influenced delta. = Low Sensitivity</p>	<p>Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. = Low Probability</p>	<p>With a 12-inch SLR scenario and 100-year storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid-century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. Shoreline residences and docks are particularly affected and will cost millions of dollars. = High Magnitude</p>	<p>Residences are required to be NFIP-insured. Residential areas may also be renovated to combat sea level rise. Adjacent levees may be heightened. For instance, structural changes that may include elevation changes, floodproofing, and improved foundation changes. = Low Adaptive Capacity</p>	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in citing and designing decisions of major capital expenditures.
Economic Development	Precipitation Changes	Commercial designations	<p>Based on the 2022 Oakley General Plan, major commercial areas are in eastern county just north of Main Street, the intersection between Laurel Road and O'Hara Avenue, and the intersection between Oakley Road and Empire Avenue. Further areas zoned as business parks are primarily located within the Delta Recreation areas. = Medium Sensitivity</p>	<p>Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches.</p> <p>It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099.</p> <p>Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year.</p> <p>= Medium Probability</p>	<p>Extreme precipitation would decrease likelihood for product consumption; thus, decreasing the flow of income for many store as well as shutting down stores during severe storms. As there are major commercial areas throughout Oakley, the magnitudes of impacts would be moderate. = Medium Magnitude</p>	<p>Existing and new commercial designations may be renovated to combat precipitation changes. For instance, structural changes that may include more durable materials (water resistant, mold resistant, etc.) and upgraded drainage systems. = Medium Adaptive Capacity</p>	Take Action	Create /modify policy, goal, or ordinance	Modify Policy 8.2.1. Strikeout indicate removed terms and underlines indicate added terms.
Economic Development	Flooding	Commercial designations	<p>Based on the 2022 Oakley General Plan, major commercial areas are in eastern county just north of Main Street, the intersection between Laurel Road and O'Hara Avenue, and the intersection between Oakley Road and Empire Avenue. Further areas zoned as business parks are primarily located within the Delta Recreation areas. = Medium Sensitivity</p>	<p>Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year.</p> <p>Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. = Low Probability</p>	<p>Flooding could lead to a loss of property and associated tax revenue, as well as potential loss of businesses. Business interruption losses associated with a flood event include not the inability to operate a business because of damages sustained because of the flood (including inventory, equipment, structure, wages, relocation costs, etc.) but also include temporary living expenses for those individuals displaced from their homes; thus, individuals may relocate out of the area, impacting the economy. = Medium Magnitude</p>	<p>Commercial designations may be renovated to combat floods. For instance, structural changes that may include more durable materials (water resistant, mold resistant, etc.) and upgraded drainage systems. = Medium Adaptive Capacity</p>	Take Action	Create /modify policy, goal, or ordinance	Modify Policy 8.2.1. Strikeout indicate removed terms and underlines indicate added terms.
Economic Development	Severe storms and extreme weather	Commercial designations	<p>Based on the 2022 Oakley General Plan, major commercial areas are in eastern county just north of Main Street, the intersection between Laurel Road and O'Hara Avenue, and the intersection between Oakley Road and Empire Avenue. Further areas zoned as business parks are primarily located within the Delta Recreation areas. = Medium Sensitivity</p>	<p>Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. = Low Probability</p>	<p>As flooding is a secondary hazard of severe storms and weather, it could lead to a loss of property and associated tax revenue, as well as potential loss of businesses. Business interruption losses associated with a flood event include not the inability to operate a business because of damages sustained because of the flood (including inventory, equipment, structure, wages, relocation costs, etc.) but also include temporary living expenses for those individuals displaced from their homes; thus, individuals may relocate out of the area, impacting the economy. = Medium Magnitude</p>	<p>Commercial designations may be renovated to combat severe storms and extreme weather. For instance, structural changes that may include more durable materials (water resistant, mold resistant, etc.) and upgraded drainage systems. = Medium Adaptive Capacity</p>	Take Action	Create /modify policy, goal, or ordinance	Modify Policy 8.2.1. Strikeout indicate removed terms and underlines indicate added terms.
Economic Development	Temperature changes - warming	Commercial designations	<p>Based on the 2022 Oakley General Plan, major commercial areas are in eastern county just north of Main Street, the intersection between Laurel Road and O'Hara Avenue, and the intersection between Oakley Road and Empire Avenue. Further areas zoned as business parks are primarily located within the Delta Recreation areas. = Medium Sensitivity</p>	<p>The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2039, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year.</p> <p>In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline.</p> <p>Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.</p> <p>= Medium Probability</p>	<p>Temperature changes in terms of warming, impact commercial designations as it increases energy usage, risk of accidents, and structural damage. In addition, energy efficiency may be reduced. As the city is projected to experience 11 to 31 additional extreme heat days per year from 2035 to 2064, the magnitude of these impacts are moderate. = Medium Magnitude</p>	<p>Commercial designations may also be renovated to combat warmer temperatures. For instance, structural changes that may include more durable materials (heat resistant, etc.) and upgraded cooling systems. = Medium Adaptive Capacity</p>	Take Action	Create /modify policy, goal, or ordinance	Create new policies regarding existing and proposed commercial building standards to combat climate-induced impacts.

Economic Development	Wildfire	Commercial designations	Based on the 2022 Oakley General Plan, major commercial areas are in eastern county just north of Main Street, the intersection between Laurel Road and O'Hara Avenue, and the intersection between Oakley Road and Empire Avenue. Further areas zoned as business parks are primarily located within the Delta Recreation areas. Based on the CalFire Very High Fire Hazard Severity Zone (VHHFSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHHFSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. = Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. = Low Probability	Wildfires may directly destroy commercial buildings by burning down the infrastructure. However, as no parcels within the City that are located in a VHHFSZ nor in any high moderate or other fire hazard severity zone, the magnitude of impacts is low. = Low Magnitude	Commercial designations may also be removed to combat wildfire. For instance, structural changes that may include more durable materials (heat resistant, non-flammable, etc.) and upgraded air filtration systems. = Medium Adaptive Capacity	Accept Risk	
Economic Development	Sea Level Rise	Commercial designations	Based on the 2022 Oakley General Plan, major commercial areas are in eastern county just north of Main Street, the intersection between Laurel Road and O'Hara Avenue, and the intersection between Oakley Road and Empire Avenue. Further areas zoned as business parks are primarily located within the Delta Recreation areas. = Low Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. = Low Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2' to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. = Medium Magnitude	Commercial designations may also be removed to combat sea level rise. For instance, structural changes that may include elevation changes, floodproofing, and improved foundation changes. = Medium Adaptive Capacity	Accept Risk	
Human Health	Precipitation Changes	Hospitals, clinics, medical centers, etc.	The only hospital/clinic within the City of Oakley is La Clinica which is located on 2021 Main street in the Oakley Raley's Shopping center. Other hospital/clinics such as John Muir Medical Center, Kaiser Permanente, Contra Costa Regional Medical Center, and Sutter Delta Medical Center, are located in Brentwood, Antioch, Martinez, and Antioch respectively. = Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,318 with an annualized frequency of 61.7 events per year. = Medium Probability	As there is a projected increase in precipitation from 2035 to 2064 and 2070 to 2099, anticipated structural damage, accidents, closures, and undue burden on staff may occur. As the baseline average precipitation between 1961 to 1990 was 14 inches, the increased precipitation in future years is not significantly higher. = Low Magnitude	Infrastructure improvements for medical facilities may be implemented for precipitation changes such as stronger material choice, advanced storm drainage systems, and overall structural upgrades. = Medium Adaptive Capacity	Accept Risk	
Human Health	Flooding	Hospitals, clinics, medical centers, etc.	The only hospital/clinic within the City of Oakley is La Clinica which is located on 2021 Main street in the Oakley Raley's Shopping center. Other hospital/clinics such as John Muir Medical Center, Kaiser Permanente, Contra Costa Regional Medical Center, and Sutter Delta Medical Center, are located in Brentwood, Antioch, Martinez, and Antioch respectively. = Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. marine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. = Low Probability	As there is a projected increase in precipitation from 2035 to 2064 and 2070 to 2099, anticipated structural damage, accidents, closures, and undue burden on staff may occur. Flooding is a secondary impact from increased precipitation changes; thus similar impacts would occur. Based on the 2022 Oakley General Plan, the La Clinica is the city is not located on a 100-year or 500-year flood zone; thus, the magnitude of impacts is low. = Low Magnitude	Infrastructure improvements for medical facilities may be implemented for precipitation changes such as stronger material choice, advanced storm drainage systems, and overall structural upgrades. = Medium Adaptive Capacity	Accept Risk	
Human Health	Severe storms and extreme weather	Hospitals, clinics, medical centers, etc.	The only hospital/clinic within the City of Oakley is La Clinica which is located on 2021 Main street in the Oakley Raley's Shopping center. Other hospital/clinics such as John Muir Medical Center, Kaiser Permanente, Contra Costa Regional Medical Center, and Sutter Delta Medical Center, are located in Brentwood, Antioch, Martinez, and Antioch respectively. = Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. = Low Probability	As there is a projected increase in precipitation from 2035 to 2064 and 2070 to 2099, anticipated structural damage, accidents, closures, and undue burden on staff may occur. Increased precipitation is under the umbrella of severe storms and extreme weather; thus, impacts would be similar. = Medium Magnitude	Infrastructure improvements for medical facilities may be implemented for severe storms and extreme weather such as stronger material choice, advanced storm drainage systems, and overall structural upgrades. = Medium Adaptive Capacity	Accept Risk	
Human Health	Temperature changes - warming	Hospitals, clinics, medical centers, etc.	The only hospital/clinic within the City of Oakley is La Clinica which is located on 2021 Main street in the Oakley Raley's Shopping center. Other hospital/clinics such as John Muir Medical Center, Kaiser Permanente, Contra Costa Regional Medical Center, and Sutter Delta Medical Center, are located in Brentwood, Antioch, Martinez, and Antioch respectively. = Medium Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. = Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	With a potential increase in warmer spring temperatures and overall temperatures, the distribution and occurrence of West Nile virus, Lyme disease, hantavirus, and other insect or animal transmitted diseases may change significantly. A heightened frequency of extreme heat days can pose a risk to sensitive communities such as persons with homelessness, senior citizens, and persons with disabilities. = Medium Magnitude	Infrastructure improvements for medical facilities may be implemented for warmer temperatures such as energy efficient cooling systems to prevent energy outages these facilities. Thus, operation and functionality of these facilities would not be heavily impacted. = Medium Adaptive Capacity	Take Action	Create /modify policy, goal, or ordinance
Human Health	Wildfire	Hospitals, clinics, medical centers, etc.	The only hospital/clinic within the City of Oakley is La Clinica which is located on 2021 Main street in the Oakley Raley's Shopping center. Other hospital/clinics such as John Muir Medical Center, Kaiser Permanente, Contra Costa Regional Medical Center, and Sutter Delta Medical Center, are located in Brentwood, Antioch, Martinez, and Antioch respectively. Based on the CalFire Very High Fire Hazard Severity Zone (VHHFSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHHFSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. = Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. = Low Probability	Wildfires may directly destroy hospitals, clinics, medical centers, etc. by burning down the infrastructure. In addition, wildfires may cause more accidents and an increased need for health care for people! However, there are no parcels within the City that are located in a VHHFSZ nor in any high moderate or other fire hazard severity zone, the magnitude of impacts is low. = Low Magnitude	There are available technologies available to increase filtration efficiency to combat wildfire impacts. Cost and implementation of this technology is dependent on market fluctuations. = Low Adaptive Capacity	Accept Risk	
Human Health	Sea Level Rise	Hospitals, clinics, medical centers, etc.	The only hospital/clinic within the City of Oakley is La Clinica which is located on 2021 Main street in the Oakley Raley's Shopping center. Other hospital/clinics such as John Muir Medical Center, Kaiser Permanente, Contra Costa Regional Medical Center, and Sutter Delta Medical Center, are located in Brentwood, Antioch, Martinez, and Antioch respectively. = Low Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. = Low Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2' to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. However, the asset is not located near coastal shorelines; thus, the magnitude of impacts is low. = Low Magnitude	Not applicable as asset is not located near the shoreline.	Accept Risk	
Transportation	Precipitation Changes	Highway Bridges, road pass, rail, bike lanes	All transportation routes may be impacted by precipitation changes as subsidence - sinking of the ground - can occur as groundwater is removed. Sinks beneath transportation routes may also face soil changes as the soil may start cracking due to precipitation changes (e.g. drought). = Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,318 with an annualized frequency of 61.7 events per year. = Medium Probability	Roads and facility closures occur during severe storms w/ extreme precipitation, and may increase with increased magnitude of storms. Existing evacuation routes may also not be accessible anymore due to increased precipitation risks. = High Magnitude	Adaptation measures include regular maintenance, updating building codes to withstand increasing hazards, or technology/design (i.e. polymer layer reinforced window panels, shutters, weather resistant shingles, permeable asphalt, etc.) = Low Adaptive Capacity	Take Action	Create /modify policy, goal, or ordinance Modify Policy 3.1.2 Strikeout indicate removed terms and underlines indicate added terms. Policy 3.1.2: For those facilities identified as Routes of Regional Significance <u>and existing transportation modes</u> , maintain the minimum acceptable service standards specified in the <u>East County Action Plan Four 2020 update</u> , or future Action Plan updates as adopted <u>with consideration of climate induced hazards</u> .
Transportation	Flooding	Highway Bridges, road pass, rail, bike lanes	There are no major roads that pass through the 100-year floodplain. Some roads are also built on higher elevation than the flood level. BNSF railway intersects roadways throughout City (Vintage Parkway, Rose Avenue, E Cypress Rd, Marsh Creek, Bridgehead Road) with railway bridge and underground roads or at-grade passies and may be subject to flooding. For example, railway overpass above Marsh Creek Regional Trail is located near levees to the north and is anticipated to flood due to SLR inundation at 1.25 feet (12" SLR w/ 100yr storm scenario). Bypass is a recreational trail and impact is low. = Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. Flash floods and riverine floods from high intensity, short duration (1-3 hours) storms are more common during winter months (1-3 months) and typically concentrated on stream reaches with already saturated soils. In the past, flooding of delta islands in north City area are a result of structural failure followed by overtopping of levees (i.e., Big Break). Records show delta flooding from levee failure occurring in north City since 1860s, large scale floods coincidental occurrence interval of 1-3 years (data pay from 1980 to current). Floods and flash floods have a 30 percent chance of occurring in any given year and heavy rain events have a 66 percent chance. Generally, flooding will likely continue to be an annual hazard. = Low High Probability	Roads and facility closures occur during severe storms w/ extreme precipitation, and may increase with increased magnitude of storms. Shallow flooding with high velocities can cause as much damage as deep flooding with slow velocity, resulting in temporary or permanent pooling of water on roads. Existing evacuation routes may also not be accessible anymore due to flooding from increased precipitation risks. Further alternatives to street closures and existing evacuation routes may be inaccessible during floods. As no major roads pass through the 100-year floodplain, the magnitude of impacts would be low. = Low Magnitude	Bridgehead road reconstruction from Wilbur to main street will comprise of the reconstruction of a new overcrossing over railroad and associated roadway widening on both sides of overcrossing. This project duration is anticipated to be short term; however, with a high estimated cost and high implementation priority. Cypress Road Widening from Bethel Island Road to Jersey Island Road - bring continuation of the roadway to City standards including undergrounding utilities and storm infrastructure construction. Update (extend and widen) Laurel Road from Teton to Saffers Avenue over railroad tracks to provide a grade separated evacuation route and add new signaled intersection sellers. Routes that could be used to evacuate the city include: Laurel Road due west to Highway 4 interchange or City of Antioch beyond Main Street due west to Highway 160 interchange or City of Antioch beyond. Empire Avenue due south to Cities of Antioch and Brentwood. O'Hara Avenue due south to City of Brentwood. Main Street due south to City of Brentwood. Sellers Avenue due south to Unincorporated Contra Costa County. Interchange at Wilbur Avenue and Highway 160. = Medium Adaptive Capacity	Take Action	Coordinate with other agencies

Transportation	Severe storms and extreme weather	Highway Bridges, road pass, rail, bike lanes	There are no major roads that pass through the 100-year floodplain. Some roads are also built on higher elevation than the flood level. • Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. • Low Probability	Roads and facility closures occur during severe storms w/ extreme precipitation, and may increase with increased magnitude of storms. Shallow flooding due to severe storms and extreme weather with high velocities can cause as much damage as deep flooding with slow velocity, resulting in temporary or permanent pooling of water on roads. Existing evacuation routes may also not be accessible anymore due to increased precipitation risks. Further alternatives to street closures and existing evacuation routes may be accessible during floods. As no major roads pass through the 100-year floodplain, the magnitude of impacts from severe storms and extreme weather would be low. • Low Magnitude	Bridgehead road reconstruction from Wilbur to main street will comprise of the construction of a new overcrossing over railroad and associated roadway widening on both sides of overcrossing. This project duration is anticipated to be short term; however, with a high estimated cost and high implementation priority. Cypress Road Widening from Bethel Island Road to Jersey Island Road - bring construction of the roadway to City standards including undergrounding utilities and storm infrastructure construction. Upsize (extend and widen) Laurel Road from Teton to Sellers Avenue over railroad tracks to provide a grade separated evacuation route and add new signaled intersection sellers. Routes that could be used to evacuate the city include: Laurel Road due west to Highway 4 interchange or City of Antioch beyond Main Street due west to Highway 160 interchange or City of Antioch beyond. Empire Avenue due south to Cities of Antioch and Brentwood. O'Hara Avenue due south to City of Brentwood. Main Street due south to City of Brentwood. Sellers Avenue due south to Unincorporated Contra Costa County. Interchange at Wilbur Avenue and Highway 160. • Medium Adaptive Capacity	Accept Risk		
Transportation	Temperature changes - warming	Highway Bridges, road pass, rail, bike lanes	All transportation routes may be impacted by extreme heat as asphalt pavements may soften or even begin to rut. Soils beneath transportation routes may also face soil changes as the soil may start cracking due to warmer temperature changes. • Medium Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. • Medium Probability Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year.	With the potential of warmer temperatures, methods of transportation may be impacted as asphalt can soften or melt thus making road surfaces slick and difficult to control. Further, this can increase the risk of skidding or sliding. Transportation infrastructure may also be impacted as extreme heat can cause risks to trucks, electric lines to sag, and trains can deform. • Medium Magnitude	Routes that could be used to evacuate the city include: Laurel Road due west to Highway 4 interchange or City of Antioch beyond Main Street due west to Highway 160 interchange or City of Antioch beyond. Empire Avenue due south to Cities of Antioch and Brentwood. O'Hara Avenue due south to City of Brentwood. Main Street due south to City of Brentwood. Sellers Avenue due south to Unincorporated Contra Costa County. Interchange at Wilbur Avenue and Highway 160. • Medium Adaptive Capacity	Take Action	Coordinate with other agencies	Continue or initiate coordination with agencies such as, but not limited to, Contra Costa County Department of Conservation and Development, Contra Costa Health Services, Hazardous Materials Program Office, Contra Costa County Fire Protection District, Contra Costa County Office of Emergency Services, Contra Costa County Cities Citizen Corps, Contra Costa County Office of the Sheriff.
Transportation	Wildfire	Highway Bridges, road pass, rail, bike lanes	Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high-moderate or other fire hazard severity zone. City is more likely to experience secondary impacts from wildfire smoke - elderly, children, and adults with preexisting health conditions are more sensitive. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. • Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. • Low Probability	Wildfires can impact the structural integrity of transportation routes. This is required through increased potholes, erosion, and pavement cracks. However, there are no parcels within the city that are located in a VHFHSZ nor in any high-moderate or other fire hazard severity zone, the magnitude of impacts is low. • Low Magnitude	Cypress Road Widening from Bethel Island Road to Jersey Island Road - bring construction of the roadway to City standards including undergrounding utilities and storm infrastructure construction. Upsize (extend and widen) Laurel Road from Teton to Sellers Avenue over railroad tracks to provide a grade separated evacuation route and add new signaled intersection sellers. Routes that could be used to evacuate the city include: Laurel Road due west to Highway 4 interchange or City of Antioch beyond Main Street due west to Highway 160 interchange or City of Antioch beyond. Empire Avenue due south to Cities of Antioch and Brentwood. O'Hara Avenue due south to City of Brentwood. Main Street due south to City of Brentwood. Sellers Avenue due south to Unincorporated Contra Costa County. Interchange at Wilbur Avenue and Highway 160. • Medium Adaptive Capacity	Accept Risk		
Transportation	Sea Level Rise	Highway Bridges, road pass, rail, bike lanes	Transportation routes near Big Break, San Joaquin river, and the Dutch Slough would be more vulnerable to sea level rise due to its close proximity to the shorelines. The routes include recreational trails and access to residences that may act as evacuation routes for nearby residences. Additionally, BNSF railway intersects roadways throughout City (Vintage Parkway, Rose Avenue, E Cypress Rd, Marsh Creek, Bridgehead Road) with railway bridge and underground roads or at grade passes and may be subject to flooding. For example, railway overpass above Marsh Creek Regional Trail is located near levees to the north and is anticipated to flood due to 5.8' foundation at 1.15' feet (12" SLR w/ 100yr storm scenario). Bypass is a recreational trail and impact is low. • High Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. Based on the 12-inch sea level rise scenario, roads north of East Cypress Road near the northeast boundary of Oakley are anticipated to experience 0-2 feet of sea level rise. Roads closer to the shoreline there are anticipated to progressively experience higher depths of flooding with a maximum depth ranging from 14.16 feet. These findings are similar for the 24-inch, 36-inch, and 83-inch sea level rise scenarios. • Medium Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. • Medium Magnitude	Cypress Road Widening from Bethel Island Road to Jersey Island Road - bring construction of the roadway to City standards including undergrounding utilities and storm infrastructure construction. Upsize (extend and widen) Laurel Road from Teton to Sellers Avenue over railroad tracks to provide a grade separated evacuation route and add new signaled intersection sellers. Routes that could be used to evacuate the city include: Laurel Road due west to Highway 4 interchange or City of Antioch beyond Main Street due west to Highway 160 interchange or City of Antioch beyond. Empire Avenue due south to Cities of Antioch and Brentwood. O'Hara Avenue due south to City of Brentwood. Main Street due south to City of Brentwood. Sellers Avenue due south to Unincorporated Contra Costa County. We also have an interchange at Wilbur Avenue and Highway 160. • Medium Adaptive Capacity	Take Action	Coordinate with other agencies	Continue or initiate coordination with agencies such as, but not limited to, Contra Costa County Department of Conservation and Development, Contra Costa Health Services, Hazardous Materials Program Office, Contra Costa County Fire Protection District, Contra Costa County Office of Emergency Services, Contra Costa County Cities Citizen Corps, Contra Costa County Office of the Sheriff.
Waste Management	Precipitation Changes	Ironhouse Sanitary District	Ironhouse Sanitary District (ISD) utilizes gravity and pressure pipelines, pumping stations, and the Ironhouse Water Recycling Facility (IWR). The IWR is located on 285 acres adjacent to the south side of the Big Break and the San Joaquin River. The IWR has a current treatment capacity of 4.3 mgd dry weather flow and 8.6 mgd maximum wet weather flow. • Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1.358 with an annualized frequency of 61.7 events per year. • Medium Probability	Increased extreme precipitation from increased magnitude of storms means higher expenses for maintenance and repairs during critical facility failures. Destruction to asset would cost millions to replace and conduct clean up activities. As there is projected precipitation changes from 2035 to 2064 and 2070 to 2099, treatment processes and infrastructure of the ISD and IWR may be moderately impacted. Further, based on the 2022 Oakley General Plan, the plants ISD is located within the 100-year flood zone. • Medium Magnitude	Design standards and implementation of innovative process treatments could be implemented to handle increased water flow due to the increased precipitation changes. This may cost large economic investments, time, and designs. • Low Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in citing and designing decisions of major capital expenditures.
Waste Management	Flooding	Ironhouse Sanitary District	Ironhouse Sanitary District (ISD) utilizes gravity and pressure pipelines, pumping stations, and the Ironhouse Water Recycling Facility (IWR). The IWR is located on 285 acres adjacent to the south side of the Big Break and the San Joaquin River. The IWR has a current treatment capacity of 4.3 mgd dry weather flow and 8.6 mgd maximum wet weather flow. • Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. • Low Probability	Flooding is a secondary impact of increased extreme precipitation; thus, higher expenses for maintenance and repairs during critical facility failure can be anticipated. Destruction to asset would cost millions to replace and conduct clean up activities. As there is projected precipitation changes from 2035 to 2064 and 2070 to 2099, treatment processes and infrastructure of the ISD and IWR may be moderately impacted. Further, based on the 2022 Oakley General Plan, the plants ISD is located within the 100-year flood zone. • Medium Magnitude	Design standards and implementation of innovative process treatments could be implemented to handle increased water flows due to floods. This may cost large economic investments, time, and designs. • Low Adaptive Capacity	Take Action	Plan for inclusion in future CIPs	Ensure that climate considerations are included in citing and designing decisions of major capital expenditures.
Waste Management	Severe storms and extreme weather	Ironhouse Sanitary District	Ironhouse Sanitary District (ISD) utilizes gravity and pressure pipelines, pumping stations, and the Ironhouse Water Recycling Facility (IWR). The IWR is located on 285 acres adjacent to the south side of the Big Break and the San Joaquin River. The IWR has a current treatment capacity of 4.3 mgd dry weather flow and 8.6 mgd maximum wet weather flow. • Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. • Low Probability	Increased extreme precipitation from increased magnitude of storms means higher expenses for maintenance and repairs during critical facility failures. Destruction to asset would cost millions to replace and conduct clean up activities. As there is projected precipitation changes from 2035 to 2064 and 2070 to 2099, treatment processes and infrastructure of the ISD and IWR may be moderately impacted. • Medium Magnitude	Design standards and implementation of innovative process treatments could be implemented to handle increased water flows due to severe storms and extreme weather. This may cost large economic investments, time, and designs. • Low Adaptive Capacity	Accept Risk		
Waste Management	Temperature changes - warming	Ironhouse Sanitary District	Ironhouse Sanitary District (ISD) utilizes gravity and pressure pipelines, pumping stations, and the Ironhouse Water Recycling Facility (IWR). The IWR is located on 285 acres adjacent to the south side of the Big Break and the San Joaquin River. • Medium Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year. • Medium Probability	Temperature changes in terms of warming may impact the process efficiency at the plant. For instance, bacterial activity can be negatively impacted which would decrease the efficiency of flocculation. The quality of sludge solids may also be impacted as extreme heat may lead to excessive sludge aging. As there is an increase in extreme heat days for future years, the magnitude of these impacts would be moderate. • Medium Magnitude	innovative treatment processes such as air cooled chiller, WSAC coolers, heat exchangers, and the insulation of pipes, tanks, and equipment's may be implemented. These processes may be costly and time consuming. • Low Adaptive Capacity	Accept Risk		

Waste Management	Wildfire	Ironhouse Sanitary District	Ironhouse Sanitary District (ISD) utilizes gravity and pressure pipelines, pumping stations, and the Ironhouse Water Recycling Facility (IWRP). The IWRP is located on 285 acres adjacent to the south side of the Big Break and the San Joaquin River. Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high/moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. = Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. = Low Probability	Wildfire can cause diverse impacts to the plant. For example, direct infrastructure damage to the plants, power loss, pump blockages, and introduce stormwater contaminants. However, as the plants are not located in a VHFHSZ nor in any high/moderate or other fire hazard severity zone, the magnitude of impacts is low. = Low Magnitude	Measures to combat wildfire include improving treatment processes (e.g. seasonal treatment systems & adding additional treatment phases for fine particulates), water quality monitoring, building codes, and general infrastructure. = Low Adaptive Capacity	Accept Risk		
Waste Management	Sea Level Rise	Ironhouse Sanitary District	Ironhouse Sanitary District (ISD) utilizes gravity and pressure pipelines, pumping stations, and the Ironhouse Water Recycling Facility (IWRP). The IWRP is located on 285 acres adjacent to the south side of the Big Break and the San Joaquin River. The IWRP has a current treatment capacity of 4.3 mgd dry weather flow and 8.6 mgd maximum wet weather flow. = Low Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. = Low Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid-century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. However, as the plants are not located near coastal shorelines, the magnitude of impacts is low. = Low Magnitude	Not applicable as asset is not located near the shoreline.	Accept Risk		
Waste Management	Precipitation Changes	Solid waste/recycling and hazardous materials services	Solid waste services are provided to the city of Oakley through Mt. Diablo Resource Recovery, Mt. Diablo Recycling is located in Pittsburg. Collection centers that accept motor oil are not located in Oakley and are instead located in communities nearby. For instance, the Delta Household Hazardous Waste Collection Facility is located in Antioch. = Low Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,318 with an annualized frequency of 61.7 events per year. = Medium Probability	Increased extreme precipitation from major storm events may disrupt waste collection services for City residents. As there is an increase in precipitation for future years, the magnitude of impacts is moderate. = Medium Magnitude	Solid waste storage areas can be renovated to handle increased precipitation changes. For instance, structural changes that may include more durable materials and upgraded drainage systems. = Medium Adaptive Capacity	Take Action	Create /modify policy, goal, or ordinance	Modify Policy 4.7.3. Strikeout indicate removed terms and underlines indicate added terms. Policy 4.7.3.: Encourage the development of waste transfer, processing, and disposal facilities which satisfy the highest established environmental standards, and regulations, <u>and</u> potential climate induced impacts.
Waste Management	Flooding	Solid waste/recycling and hazardous materials services	Solid waste services are provided to the city of Oakley through Mt. Diablo Resource Recovery, Mt. Diablo Recycling is located in Pittsburg. Collection centers that accept motor oil are not located in Oakley and are instead located in communities nearby. For instance, the Delta Household Hazardous Waste Collection Facility is located in Antioch. = Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. = Low Probability	As flooding is a secondary hazard to increases in extreme precipitation, waste collection services for City residents may become disrupted. However, as these services of the city are not located in Oakley (i.e., not on existing 100-year or 500-year flood zones), the magnitude of impacts is low. = Low Magnitude	Solid waste storage areas can be renovated to floods. For instance, structural changes that may include more durable materials and upgraded drainage systems. = Medium Adaptive Capacity	Accept Risk		
Waste Management	Severe storms and extreme weather	Solid waste/recycling and hazardous materials services	Solid waste services are provided to the city of Oakley through Mt. Diablo Resource Recovery, Mt. Diablo Recycling is located in Pittsburg. Collection centers that accept motor oil are not located in Oakley and are instead located in communities nearby. For instance, the Delta Household Hazardous Waste Collection Facility is located in Antioch. = Low Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.5 events per year. = Low Probability	Increased extreme precipitation from major storm events may disrupt waste collection services for City residents. As there is an increase in precipitation for future years, the magnitude of impacts is moderate. = Medium Magnitude	Solid waste storage areas can be renovated to handle increased severe storms and extreme weather. For instance, structural changes that may include more durable materials and upgraded drainage systems. = Medium Adaptive Capacity	Accept Risk		
Waste Management	Temperature changes - warming	Solid waste/recycling and hazardous materials services	Solid waste services are provided to the city of Oakley through Mt. Diablo Resource Recovery, Mt. Diablo Recycling is located in Pittsburg. Collection centers that accept motor oil are not located in Oakley and are instead located in communities nearby. For instance, the Delta Household Hazardous Waste Collection Facility is located in Antioch. = Low Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 81.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeframes. Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year. = Medium Probability	Temperature warming impacts to solid waste/recycling and hazardous material services include the acceleration of waste decomposition and infrastructure damage (e.g., waste collection vehicles and equipment), increases in leachate, methane emissions, pest attraction, and odors may also become severe. However, as the solid waste services provided for the city are not within Oakley, the magnitude of impacts are low. = Low Magnitude	Solid waste storage areas can be renovated to handle increased severe storms and extreme weather. For instance, structural changes that may include more durable materials and upgraded cooling systems. = Medium Adaptive Capacity	Accept Risk		
Waste Management	Wildfire	Solid waste/recycling and hazardous materials services	Solid waste services are provided to the city of Oakley through Mt. Diablo Resource Recovery, Mt. Diablo Recycling is located in Pittsburg. Collection centers that accept motor oil are not located in Oakley and are instead located in communities nearby. For instance, the Delta Household Hazardous Waste Collection Facility is located in Antioch. Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high/moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. = Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildland fires are infrequent with moderate severity. = Low Probability	Wildfires may cause infrastructure damage to the solid waste/recycling and hazardous materials services. However as the services are not located within Oakley, the magnitude of impacts is low. = Low Magnitude	Solid waste storage areas can be renovated to handle increased severe storms and extreme weather. For instance, structural changes that may include more durable materials and upgraded filtration systems. = Medium Adaptive Capacity	Accept Risk		
Waste Management	Sea Level Rise	Solid waste/recycling and hazardous materials services	Solid waste services are provided to the city of Oakley through Mt. Diablo Resource Recovery, Mt. Diablo Recycling is located in Pittsburg. Collection centers that accept motor oil are not located in Oakley and are instead located in communities nearby. For instance, the Delta Household Hazardous Waste Collection Facility is located in Antioch. = Low Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. = Low Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid-century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass, thus, causing a significant economic impact on the region. However as the facility is not located near coastal shorelines = Low Magnitude	Not applicable as asset is not located near the shoreline.	Accept Risk		

zoning and Development	Precipitation Changes	Downtown Oakley	Commercial downtown in the city comprises of 80.9 total acres which consists of 41.8 developed acres and 39.1 underdeveloped acres. Commercial downtown is primarily near the intersection of Main Street and O'Hara avenue. + Medium Sensitivity	Average precipitation between 1961 to 1990 was 14 inches with a high of 28.7 inches and a low of 4.5 inches. It is projected that average precipitation from 2035 to 2064 will increase to 15.0 inches and would increase slightly to 16.4 inches in 2070 to 2099. Based on the FEMA NRI, total events on record from precipitation changes (e.g. drought) is 1,358 with an annualized frequency of 61.7 events per year. + Medium Probability	Extreme precipitation would decrease likelihood for product consumption; thus, decreasing the flow of income for many stores as well as shutting down stores during severe storms. As there are major commercial areas throughout downtown Oakley, the magnitude of impacts would be moderate. + Medium Magnitude	Downtown Oakley areas can be renovated to floods. For instance, structural changes that may include more durable materials and upgraded drainage systems. + Medium Adaptive Capacity	Take Action	Create /modify policy, goal, or ordinance	Create new policies regarding existing and proposed development in Downtown Oakley to combat climate-induced impacts.
zoning and Development	Flooding	Downtown Oakley	Commercial downtown in the city comprises of 80.9 total acres which consists of 41.8 developed acres and 39.1 underdeveloped acres. Commercial downtown is primarily near the intersection of Main Street and O'Hara avenue. + Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. riverine flooding) is 2 with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, floods are infrequent but can range from low, moderate, and high severity. + Low Probability	Flooding could lead to a loss of property and associated tax revenue, as well as potential loss of businesses. Business interruption losses associated with a flood event include not the inability to operate a business because of damages sustained because of the flood (including inventory, equipment, structure, wages, relocation costs, etc.) but also include temporary living expenses for those individuals displaced from their homes; thus, individuals may relocate out of the area, impacting the economy. + Medium Magnitude	Downtown Oakley areas can be renovated to floods. For instance, structural changes that may include more durable materials and upgraded drainage systems. + Medium Adaptive Capacity	Take Action	Create /modify policy, goal, or ordinance	Create new policies regarding existing and proposed development in Downtown Oakley to combat climate-induced impacts.
zoning and Development	Severe storms and extreme weather	Downtown Oakley	Commercial downtown in the city comprises of 80.9 total acres which consists of 41.8 developed acres and 39.1 underdeveloped acres. Commercial downtown is primarily near the intersection of Main Street and O'Hara avenue. + Medium Sensitivity	Based on the FEMA NRI, total events on record from severe weather (e.g. hail) is 30 with an annualized frequency of 1.8 events per year. + Low Probability	As flooding is a secondary hazard of severe storms and weather, it could lead to a loss of property and associated tax revenue, as well as potential loss of businesses. Business interruption losses associated with a flood event include not the inability to operate a business because of damages sustained because of the flood (including inventory, equipment, structure, wages, relocation costs, etc.) but also include temporary living expenses for those individuals displaced from their homes; thus, individuals may relocate out of the area, impacting the economy. + Medium Magnitude	Downtown Oakley areas can be renovated to floods. For instance, structural changes that may include more durable materials and upgraded drainage systems. + Medium Adaptive Capacity	Take Action	Create /modify policy, goal, or ordinance	Create new policies regarding existing and proposed development in Downtown Oakley to combat climate-induced impacts.
zoning and Development	Temperature changes - warming	Downtown Oakley	Commercial downtown in the city comprises of 80.9 total acres which consists of 41.8 developed acres and 39.1 underdeveloped acres. Commercial downtown is primarily near the intersection of Main Street and O'Hara avenue. + Medium Sensitivity	The city of Oakley could experience an average temperature of 77.9 degrees Fahrenheit during the years 2035 to 2064. Through 2099, this projection is anticipated to increase to an average maximum temperature of 83.3 degrees Fahrenheit. The average number of extreme heat days recorded for the City in the years 1961 to 1990 was four days per year. In the years 2035 to 2064, the city is projected to experience 11 to 31 additional extreme heat days per year. Further, models predict the number of extreme heat days in the city may rise to 33 days per year in the 2070 to 2099 timeline. Based on the FEMA NRI, total events on record from severe weather (e.g. heat wave) is 0.0 with an annualized frequency of 0.0 events per year. + Medium Probability	Temperature changes in terms of warming, may impact buildings in Downtown Oakley as it increases energy usage, risk of accidents, and structural damage. In addition, energy efficiency may be reduced. As the city is projected to experience 11 to 31 additional extreme heat days per year from 2035 to 2064, the magnitude of these impacts are moderate. + Medium Magnitude	Downtown Oakley areas can be renovated to floods. For instance, structural changes that may include more durable materials and upgraded cooling systems. + Medium Adaptive Capacity	Take Action	Create /modify policy, goal, or ordinance	Create new policies regarding existing and proposed development in Downtown Oakley to combat climate-induced impacts.
zoning and Development	Wildfire	Downtown Oakley	Commercial downtown in the city comprises of 80.9 total acres which consists of 41.8 developed acres and 39.1 underdeveloped acres. Commercial downtown is primarily near the intersection of Main Street and O'Hara avenue. Based on the CalFire Very High Fire Hazard Severity Zone (VHFHSZ) Map and City of Oakley General Plan, there are no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone. The city is within the boundaries of critical fire weather class 3 which correlates to 9.5 more days per year of moderate, high, and extreme fire hazard. + Low Sensitivity	Based on the FEMA NRI, total events on record from wildfire is not applicable with an annualized frequency of 0.0 events per year. Based on the City of Oakley Emergency Operations Plan, wildfire fires are infrequent with moderate severity. + Low Probability	Wildfires may directly destroy downtown Oakley by burning down the existing infrastructure. However, as no parcels within the City that are located in a VHFHSZ nor in any high moderate or other fire hazard severity zone, the magnitude of impacts is low. + Low Magnitude	Downtown Oakley areas can be renovated to floods. For instance, structural changes that may include more durable materials (heat resistant and non-flammable) and upgraded air filtration systems. + Medium Adaptive Capacity	Accept Risk		
zoning and Development	Sea Level Rise	Downtown Oakley	Commercial downtown in the city comprises of 80.9 total acres which consists of 41.8 developed acres and 39.1 underdeveloped acres. Commercial downtown is primarily near the intersection of Main Street and O'Hara avenue. + Medium Sensitivity	Based on the FEMA NRI, total events on record from sea level rise is not applicable with an annualized frequency of 0.0 events per year. + Low Probability	With a 12-inch SLR scenario and 100-yr storm event, the shoreline area is anticipated to experience SLR inundation at a depth of 2- to 45-inches by mid century. Sea level rise would increase the severity of coastal erosion. As sea levels continue to rise, more area is susceptible to potential erosion, or in some cases accretion. This could also lead to costly impacts on structures and infrastructure and loss of land mass; thus, causing a significant economic impact on the region. However, as downtown Oakley is near coastal shorelines, the magnitude of impacts is low. + Low Magnitude	Not applicable as asset is not located near the shoreline.	Accept Risk		

Sources:
City of Oakley General Plan
City of Oakley Hazard Mitigation Plan
Contra Costa Draft Local Hazard Mitigation Plan Volume 1 and 2
City of Oakley Emergency Plan
City of Oakley Parks Master Plan
CalAdapt
[Infrastructure Breaks Under Extreme Heat | Emerging Issues | Sustainable Business Network and Consultancy | BSR](#)
[How sea level rise could pose risk on your farm | farmprogress.com](#)
[Residential land use and flood risk development: Engaging with stakeholders in North Yorkshire - ScienceDirect](#)
[Managing programmes during a heat strike | DSV Extension Services |logosportable.edu](#)
[Water Treatment Plant |cwater.com](#)

Accept Risk
Take Action

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Sensitivity Low = Minor repairs and accommodations required with routine maintenance. Slight inconveniences that could be resolved.

Sensitivity Medium = Temporary loss of functionality and operations closure. Moderate repairs and replacements required outside of routine maintenance. Repairs are more extensive and expensive.

Sensitivity High = Significant impact requiring reconstruction of parts or an entirety of an asset. Extensive rehabilitation of assets outside of routine maintenance and repairs. Major expenses required with long durations of repair and loss of functionality. Loss of services.

Low Adaptive Capacity = Adaptive solutions are innovative and costly, but have opportunity for implementation. Adaptive approaches may require coordination with multiple agencies; thus, may lead to disruptions in service and longer implementation times. Solutions may require change in lifestyle or change in political.

Medium Adaptive Capacity = Impacts/threats can be reduced or mitigated to a certain extent; however, adaptive solutions are only feasible for limited assets. Some assets may face difficulties in adapting in terms of cost and implementation. In addition, required coordination with third party agencies may be necessary for adaptivity measures.

High Adaptive Capacity = Assets can adapt with little to no difficulty. Direct influence on the implementation of strategies or solutions for the asset is apparent. Adaptive solutions are highly feasible for most, if not all assets with affordable costs.

Low Probability: Very limited historic events recorded. Frequency of hazardous events to occur is periodic with likelihood of future events to occur periodically. Likelihood of hazardous event(s) to occur once in 20 years.

Medium Probability: Limited, but some available historic events recorded. Frequency of hazardous events to occur is somewhat periodic. Likelihood of hazardous event(s) to occur once in 5 to 20 years.

High Probability: Recent, multiple historic events recorded. Hazardous events occur frequently. Likelihood of hazardous event(s) to occur within 5 years.

Low Magnitude: Minimal destruction to applicable assets with adequate functionality. In addition, minimal injuries and functionality to daily livelihood. Applicable assets may be easily repaired with available resources within a short duration of time without complications.

Medium Magnitude: Moderate destruction to applicable assets with decreased functionality. Injuries and functionality to daily livelihood are moderately heightened. Applicable assets may have increased difficulty for repair and functionality due to increased restoration times and complications. Health concerns are also a higher likelihood with strong suggestions for evacuation plans.

High Magnitude: Extreme destruction to applicable assets with little to no functionality. Injuries and functionality to daily livelihood are extremely heightened. Applicable assets will have significant challenges for repair and elongated periods of construction before functionality can be resumed. Health concerns are at an extreme likelihood with strong coercion for evacuation plans.

City of Oakley Climate Action Plan
Draft CAP Public Comment Register

2025

COMMENT REGISTER

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/10/2025	Paul Seger	Sierra Club	Form a Stakeholder Advisory Group: The final CAP should be revised through an inclusive process that actively involves nonprofits, community groups, local watershed and salmon run advocates, and other interested parties. This collaborative approach will ensure that our collective expertise and local knowledge shape the CAP's measurable targets and enforcement strategies.	Cumming Group	This is not currently feasible given City resources, project timeline, and staff capacity. No changes were made, but the City will take this under advisement.	Resolved
4/10/2025	Paul Seger	Sierra Club	Request an Extension of the Public Comment Period: Given the significant gaps and the need for more robust stakeholder input, we respectfully request that the City extend the public comment period. An extension will allow time to form a stakeholder advisory group and will facilitate a more comprehensive, community-driven revision process. We respectfully call on the City Council to: *Extend the CAP review period by at least 45 days *Hold a second public workshop, co-hosted with local partners *Invite local environmental groups, watershed councils, and equity advocates into a short-term working group to improve the plan's content	Cumming Group	This is not currently feasible given City resources, project timeline, and staff capacity. No changes were made, but the City will take this under advisement.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Availability of mitigation for residents?	Cumming Group	There are actions within the Plan that emphasize partnerships and programs to provide resources to residents to support GHG mitigation.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Has this plan been shared with youth? OYAC? High schools?	Cumming Group	The City facilitated a General Public Comment period and two public workshops for all residents and age groups.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Add to historical intro in CAPRO (?) 1. Dupont chemical plant 1956-1998 20 years remediation 2. Zhuc (?) 96 capped and abandoned gas wells	Cumming Group	Comment is repeated through a separate comment below which has been addressed there.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	School district food services link with local farms to purchase local fruit and produce for student meals	Cumming Group	Reference to sustainable food systems has been added in G-3.3 which lists partnerships with school districts on key topics.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	For your diesel vehicles have you looked at Renewable Diesel to reduce your GHGs?	Cumming Group	The City will take this under advisement.	Resolved
4/2/2025	Gary Farber	N/A	Re: Municipal Electricity: Report indicates that the city uses both PG&E and MCE electricity (2.2.2 on p. 17). The city should use MCE 100% renewable power as soon as this change can be made.	Cumming Group	This has been addressed through the goals, targets, and actions in the CAP.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	How does this take into account solar already installed or agencies like DWD that are nearly carbon neutral and will be by Dec 21, 2027?	Cumming Group	Appendix revisions speak to this point: "This also does not include emissions tied to other agencies that service Oakley, such as Diablo Water District or nearby transit agencies."	Resolved
4/2/2025	Gary Farber	N/A	The report does not address whether there are toxic waste facilities where sea level rise could cause toxins that are below the surface to migrate beyond their current field to areas where the toxins would cause danger to important ecosystems and to human-occupied areas. See the CA DTSC's Sea Level Rise web page at https://dtsc.ca.gov/climate-change/	Kimley Horn/Cumming Group	Language has been inserted to address this point.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/5/2026	Dapushka	N/A	Stop wasting time, and money on this nonsense! The 15 minute City with a bicycle? Here? Come on? There are areas of this city where streets need resurfacing. Spend money there. Require residents to keep up property. I saw photos of trash 6 feet high built up at the apartment complex on Carol Lane. Like a 3rd world country! It has taken all my strength not to blast it on X. Let whatever farmers you have left be farmers. Let people just be for God's sake! Go to China, and speak to them about the pollution they create that comes to this area via the Jet Stream. Worry about the homeless on narcotics walking around, and sleeping on the streets here. This nonsense Climate business is over.	Cumming Group	The City will take this under advisement.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	numbering doesn't start at 1.)	Cumming Group	Numbering has been revised to start at 1.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	Higher sea level (bay / delta) levels will compound the impacts of high precipitation events.	Kimley Horn/Cumming Group	Language has been inserted to address this point.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	The average annual may stay near consistent, but storms are projected to have higher rain intensities.	Kimley Horn/Cumming Group	Language has been inserted to address this point.	Resolved
4/6/2025	Zoe Siegel	Greenbelt Alliance	<p>6.</p> <p>Important Modifications to Asset Vulnerability Table The Asset Vulnerability and Climate Hazard Risks Table (Table 4, page 28), lists out the risks and where the city plans to take action. The mitigation strategies for precipitation, flooding and sea level rise are all essentially interchangeable (eg, precipitation and SLR cause flooding) and should be in one column.</p> <p>Additional recommendations include:</p> <ul style="list-style-type: none"> • Add a Legend or Clarify Definitions: "Take Action" vs. "Accept Risk" could be interpreted in many ways. A brief legend could define: <ul style="list-style-type: none"> ◦ What qualifies as a "Take Action" level of risk (e.g., high vulnerability + high consequence?) ◦ What "Accept Risk" means — does it imply low vulnerability, or just lower priority? ◦ Whether "Take Action" implies an existing adaptation plan or a need for one. 	Kimley Horn/Cumming Group	Language has been inserted to address this point.	Resolved
4/6/2025	Zoe Siegel	Greenbelt Alliance	<ul style="list-style-type: none"> • Indicate Time Horizon or Trend: Are these risks current, near-term, or long-term (e.g., 2050 vs. 2100)? <ul style="list-style-type: none"> ◦ This would help prioritize adaptation investments based on when impacts are expected. • Link to Existing Plans or Actions. Add icons or footnotes indicating whether an asset: <ul style="list-style-type: none"> ◦ Already has a mitigation/adaptation plan. ◦ Has funding allocated or an ongoing project. ◦ Is under jurisdiction of a specific agency (for accountability or coordination). • Group or Layer Assets by Type or System <ul style="list-style-type: none"> ◦ Grouping assets by sector (natural, infrastructure, community) could show which systems are most broadly exposed. ◦ For instance: <ul style="list-style-type: none"> ■ Ecosystems: Legless Lizard Preserve, Big Break, etc. ■ Lifeline Infrastructure: Water, utilities, hospitals, roads. ■ Community Assets: Downtown Oakley, schools, housing. 	Kimley Horn/Cumming Group	Language has been inserted to address this point.	Resolved
4/10/2025	Paul Seger	Sierra Club	Establish a "Climate Resilience Impact Fee" fund, based on parcel-level flood, fire, and heat risk data, and supported by CEQA nexus findings.	Cumming Group	The City will take this under advisement but will not include in the CAP at this time.	Resolved
4/10/2025	Paul Seger	Sierra Club	Adopt electrification and EV reach codes effective 2026, and promote builder access to CalGreen Tier 2 incentives, federal 45L tax credits, and CEC's \$25M reach code implementation support fund.	Cumming Group	The City will take this under advisement but will not include in the CAP at this time.	Resolved
4/10/2025	Paul Seger	Sierra Club	Better attract public and private investment through a CAP that is enforceable (will make the city more favorable for various funding and grants, less vulnerable to higher insurance risk scoring/exclusion from regional funding consortia etc.)	Cumming Group	Funding section includes Actions that aim to be enforceable and effectively attract public and private investment.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/10/2025	Paul Seger	Sierra Club	The CAP is riddled with vague language like "consider incentives," "explore options," and "support sustainability efforts" without any measurable goals, deadlines, or enforcement	Cumming Group	Before finalizing and publishing, completed a pass to ensure at least all targets and actions are measurable/quantifiable/have deadlines to the extent feasible.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Let's be an example for Contra Costa Cities	Cumming Group	Comment has been integrated as a short statement in the Introduction.	Resolved
4/10/2025	Paul Seger	Sierra Club	Require Enforceable Deadlines, Metrics, and City Council Oversight	Cumming Group	CAP integrates enforceable deadlines and metrics to the extent possible.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: G-2.1) A non-profit, special districts etc.	Cumming Group	CBOs are explicitly mentioned in the next item, no further changes needed.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: G-2.1) Coordinate with Co	Cumming Group	CO could mean community organizations or county but hard to say without context. With reference to "jurisdictions" at many levels, no further changes are needed.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	(Re: G-2.3) DWD should be part of this too.	Cumming Group	DWD has been added accordingly.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: G-2.3) Define collaboration	Cumming Group	This item doesn't mention collaboration but it does mention partnering, which is further defined in the Actions (which were not included in the workshop) so this comment is integrated.	Resolved
4/2/2025	Gary Farber	N/A	(Re: G-3.1, also applies to G-3.2): While the State requires local jurisdictions to report local climate impacts in terms of GHG emissions, the calculations for this metric rely on an array of assumptions that may or may not be close to reflecting real conditions. And GHG emissions reports are not very informative to the general public as to the specific types and nature of actions being undertaken to diminish climate impacts. What would be more useful for the community, and policymakers, to track progress is to report existing conditions and changed conditions of specific systems that impact climate. Such reporting could be updated every one to two years, and report actual quantities – so that residents can gain a real understanding of how much progress has occurred, and how much remains to be done (i.e. the "opportunity" for additional progress in addressing the climate crisis). Example items to monitor, in total community quantities (where "community" includes residential and commercial properties): . Space Heating, gas systems, gas to heat pump alterations (community and municipal) . Water Heating, gas systems, gas to heat pump alterations (community and municipal) . Total vehicles, electric vehicles, plug-in hybrid vehicles (community and municipal) . EV charging at existing multifamily (MF) communities	Cumming Group	The City takes these examples under advisement and will consider them upon implementation.	Resolved
4/8/2025	Marti Roach	350 Contra Costa	A dashboard and regular reports to the public are important accountability measures. These should indicate metrics on actual actions taken that implicitly reduce greenhouse gas emissions. For example, the quantity of municipal, residential and commercial buildings that transitioned to operating with GHG free appliances. This plan, in general, lacks measurable targets and measurable actions—key to clear action pathways and accountability.	Cumming Group	The City takes these examples under advisement and will consider them upon implementation.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: G-3.3) Do this more than annually!	Cumming Group	The City will take this under advisement.	Resolved
4/6/2025	Zoe Siegel	Greenbelt Alliance	5. Secure Additional Funding for Adaptation to Minimize Taxpayer Burden (Goal G-4: Climate Finance) ● Apply for federal/state climate grants: Pursue FEMA, California Adaptation Grants, and Infrastructure Resilience Funds. ● Implement a climate resilience fee: Introduce developer fees for new construction in high-risk areas to fund local adaptation measures. ● Collaborate with regional partners: Work with Contra Costa cities to secure joint funding for transportation, flood control, and resilience projects.	Cumming Group	The first suggestion (federal/state climate grants) and the third suggestion (collaborating with regional partners) are already reflected here in the Actions. The second suggestion (climate resilience fee) has been considered but ultimately not integrated.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/8/2025	Marti Roach	350 Contra Costa	Funding. It is commendable that you addressed funding as an action area. In our experience, the only way a municipality can move forward significantly is to allocate dedicated funds from the general fund or another stable funding stream to anchor the necessary staff time and/or consultant assistance. Grants can supplement, but this effort will fail to reach its timed targets with no committed core funding. Related to this, your FTE estimates in the goal table are unclear as they do not indicate the time-frame needed for the FTE requirement. What is your baseline estimate of the FTEs needed between now and 2040 to significantly lead this work?	Cumming Group	Language/fine tuning in the ROM Cost columns related to FTEs have been added accordingly.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Monitor federal EPA (funding opportunities)	Cumming Group	Federal funding is included in Actions that were not included in the workshop materials, so no action needed.	Resolved
4/10/2025	Paul Seger	Sierra Club	There is no dedicated funding plan for implementing their sustainability goals, which makes their entire strategy meaningless.	Cumming Group	A key action in the CAP is developing a funding strategy.	Resolved
4/10/2025	Paul Seger	Sierra Club	Oakley's CAP is filled with language like "explore," "consider," and "support." These are not action verbs. They do not meet the standard of SB 379, AB 1279, or the Governor's Executive Orders requiring measurable emissions reduction and resilience progress.	Cumming Group	Did a pass replacing some of this language with stronger action verbs for enforceability.	Resolved
4/1/2025	Mike Moore	Diablo Water District (DWD)	(Re: gas well sites within the East Cypress Corridor Specific Plan) I would like to bring to your attention an issue that would be of direct concern for the City of Oakley but only tangentially concerning the Climate Action Plan.	Cumming Group	This falls outside of the scope for this CAP, but will be take under advisement by the City.	Resolved
4/8/2025	Marti Roach	350 Contra Costa	Recommended areas for new actions: Note: the first three are from the SPUR Toolbox on transitioning to zero pollution building equipment. https://www.spur.org/sites/default/files/2024-04/SPUR_Fossil_Free_Heat.pdf 1. Develop programs with oversight from building inspectors to allow licensed contractors to permit, inspect, and certify installations of zero-emission appliances. 2. Streamline city permitting and inspections and amend local zoning and planning codes to reduce barriers to heat pump installation, including restrictions on available space. 3. Ensure that contractors are legally able to offer temporary loaner gas furnaces and water heaters (or 120V heat pump water heaters) while permanent zero-pollution equipment is being installed. 4. Exploring adding incentives for heat pump and induction stove technology in the permitting process. 5. Partner with MCE, community groups to identify ways to support low-income households making the transition to heat pump technology.	Cumming Group	Recommended additional actions are all too specific to heat pumps, so no additional action is needed, but the City will take these under advisement.	Resolved
4/2/2025	Gary Farber	N/A	Replace such terms as "decarbonization", "decarbonize", etc. with such terms as "electrification", "phasing out GHG emissions" and "phasing out fossil fuels". Science tells us that we need to phase out not only CO2, but also methane (the primary ingredient in natural gas) and other warming gasses	Cumming Group	Per 350 Contra Costa's similar note, several suggested terminology changes have been made accordingly.	Resolved
4/8/2025	Marti Roach	350 Contra Costa	Revise to: "Reduce overall energy demand by electrifying municipal buildings and instituting other energy efficiency measures." (decarbonization covers burning fossil fuels and embodied carbon so is less useful a term)	Cumming Group	This comments aligns with a similar comment from GF. Recommendation has been made with a few tweaks.	Resolved
4/8/2025	Marti Roach	350 Contra Costa	1. Add an Action: "When HVAC and water heater systems need replacing, replace with heat pump technology." 2. Add an Action: "Replace cooktops, when needed, with induction technology."	Cumming Group	B-1.2 Action 2 covers both items, no additional changes are needed.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/2/2025	Gary Farber	N/A	<p>Re: Existing Municipal Buildings:</p> <p>A) B1.1 is described as phasing out fossil fuels ("decarbonization" in the report's terminology), but does not mention existing fossil fuel systems! All existing fossil fuels systems should be evaluated for replacement with electric systems, ASAP.</p> <p>B) To focus resources where they will be most useful, audits should only be required on buildings that are more than 20 years old. This is a reflection of the fact that, in terms of energy efficiency, the state's building energy code was fairly stringent 20 years ago (although it did not address building GHG emissions at that time).</p> <p>C) Rather than 'significant remodeling' being a trigger for municipal building audits, any municipal building that is over 20 years old that has not had an energy audit in over 15 years ought to receive an energy audit ASAP.</p> <p>D) LED lighting? Most older buildings use fluorescent lighting. LED lighting is modestly more energy-efficient. However, whether switching from fluorescent to LED is practical should be decided after an energy audit that would assess the cost and energy savings of a variety of energy upgrades. Certainly, any current incandescent lighting should be replaced with LED lighting ASAP, and any current fluorescent lighting should be replaced with LED when the fluorescent lighting has reached the end of its useful life.</p>	Cumming Group	<p>(A) GF has similar comments throughout the report requesting that "decarbonization" be replaced with electrification and be more specific about fossil fuels. This also aligns with 350 Contra Costa's comments. Terminology revisions have been made throughout accordingly.</p> <p>(B) New mention of "older buildings" now in B-1.2 action 2</p> <p>(C) Do not recommend removing the item about significant remodels being a trigger, but now have new mention of "older buildings" and have also added a new mention about "recent" audits</p> <p>(D) LED lighting is already in the Actions in B-1.1, no action needed</p>	Resolved
4/8/2025	Marti Roach	350 Contra Costa	(Re: Goal B-1) Revise to: "Electrify appliances in municipal buildings and assets by 2035."	Cumming Group	This aligns with GF's comments as well; suggestions have been made accordingly.	Resolved
4/2/2025	Gary Farber	N/A	<p>Re: Existing Residential and Commercial Buildings:</p> <p>A) Draft calls for adoption of "Energy-Efficient" Appliances. Building energy-efficiency is very important, and the report's inclusion of building energy audits for existing buildings are welcome. However, the State's building energy code already calls for use of energy-efficient space and water heating systems. Therefore, the emphasis should change from energy-efficient appliances to phasing out fossil fuel (e.g. natural gas) appliances within the existing building stock. The city should establish a strong program of education and incentives to help property owners understand the benefits of switching to electric systems, and to provide financial help where necessary.</p> <p>B) Is financial support necessary for Oakley residents to use clean, renewable electricity? MCE rates are almost identical to PG&E rates as of March 2025.</p> <p>C) A very important element is missing from the draft plan's suggested policies regarding existing buildings: Preparing for the upcoming elimination of natural gas water heating and space heating systems, per BAAD regulations. The city needs to help educate property owners about the new regulations, and the need to assess whether their properties are ready for the switch from gas to heat pump water and heat pump space conditioning systems. Furthermore, the city should help those for whom upgrade costs will exceed their financial means.</p>	Cumming Group	<p>(A) Energy efficient appliances for existing housing stock is already in B-1.2 action 2. Various actions across B-1 mention educational resources and incentives, but language has been clarified little more in B 1.2 action 5.</p> <p>(B) Language re: financial support for low-income community members should not be removed entirely; but content has been moved to a later action where it worked a little better.</p> <p>(C) B-1.2 action 2 has been tweaked to mention educational resources.</p>	Resolved
4/8/2025	Marti Roach	350 Contra Costa	(Re: B-1.2): Replace with "Existing residential and commercial buildings will be more energy efficient and rely on non-polluting energy by 2040."	Cumming Group	As this aligns with GF's comments as well, have made a revised adjustment accordingly.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Need building electrification code by City - needs CEC approval. Define collaborate.	Cumming Group	The City will take this under advisement. No changes made to language.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/2/2025	Gary Farber	N/A	<p>Re: New Municipal Buildings:</p> <p>A) The 2025 CA building energy code (effective date 1/1/26) will make electric (i.e. heat pump space and water heating the "standard" (Prescriptive) systems for most buildings. For its municipal buildings, Oakley could simply require that all new buildings use electric heating systems (which inexplicably the current draft SAP does not call for). (see item 2A on page 3 of this letter for additional information on new building electrification trends)</p> <p>B) There is no need to call for "solar ready" construction. The current CA building energy code includes a Prescriptive solar electric mandate for most buildings, and calls for solar ready accommodations when solar electric systems are not installed.</p> <p>C) At both existing and new municipal buildings, the CAP should establish a goal for these buildings to include solar electric (PV) collectors, whole building battery systems, and EV charging that is tied to the solar/battery system.</p>	Cumming Group	<p>(A) B-1.3 specifically is about establishing energy efficiency requirements like electric appliances for new buildings. No further action needed.</p> <p>(B) Have "softened" B-1.3 action 1 accordingly and now specifically mention alignment with state goals.</p> <p>(C) B-1.2 last action already includes PV installation/energy storage incentivization for different building types. EV charging is in a different category so doesn't specifically need a call out here.</p>	Resolved
4/2/2025	Gary Farber	N/A	<p>Re: New Residential and Commercial Buildings:</p> <p>A) The 2025 CA building energy code (effective date 1/1/26) will make electric (i.e. heat pump) space and water heating the "standard" 4 systems for all residential, and most non-residential, buildings. Already, the current 2022 energy code, which (for the first time) contained a residential building Prescriptive requirement for heat pump water heating in some Climate Zones, heat pump space conditioning in other Climate Zones, and heat pump space conditioning for most nonresidential buildings in all Climate Zones, may be spurring the large majority of new buildings in the State that are being built as all-electric. With the State's building energy code already considered to be fairly stringent in terms of energy efficiency measures (envelope, lighting and mechanical), and with most new buildings now being designed as all-electric (per IOU data referenced in footnote 5), I recommend that the city focus their efforts on phasing out fossil fuel use within the existing building stock, rather than investing time and effort in developing greater "energy-efficiency" requirements for new buildings. Furthermore, it is well established that building departments in CA often miss errors in energy compliance reports, in construction documents (i.e. not specifying compliant systems and materials), and in the field miss non-compliant construction features. Improving training of building department staff that are tasked with energy code compliance can be very helpful in improving compliance and reducing energy use and GHG emissions.</p>	Cumming Group	<p>(A) B-1.2 already has goals related to existing housing stock retrofits.</p> <p>(B) Have "softened" the solar-ready note and it now mentions alignment with state goals.</p>	Resolved
4/2/2025	Gary Farber	N/A	<p>B) There is no need to call for "solar ready" construction. The current CA building energy code includes a Prescriptive solar electric mandate for most buildings, and calls for solar ready accommodations when solar electric systems are not installed.</p>	Cumming Group	<p>(A) B-1.2 already has goals related to existing housing stock retrofits.</p> <p>(B) Have "softened" the solar-ready note and it now mentions alignment with state goals.</p>	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/10/2025	Paul Seger	Sierra Club	<p>To avoid placing unfunded mandates on homeowners later, the CAP should commit to front-loading climate responsibility at the point of new development—when it is most feasible and cost-effective. We propose the following:</p> <p>Climate Resilience Impact Fees:</p> <ol style="list-style-type: none"> 1.New development must contribute to local infrastructure that mitigates its own impact (e.g., stormwater upgrades, urban forestry, cooling infrastructure). 2.Tier fees based on risk zone (e.g., creek-adjacent parcels, heat islands, areas with known poor drainage). 3.Direct revenues to a Climate Resilience Fund, publicly tracked. <p>Reach Code Requirement for All Permitted Construction by 2026:</p> <ol style="list-style-type: none"> 1.Require all-electric, solar-ready, EV-ready new builds 2.Offer rebates to developers who build above code via state and federal incentives 3.Include performance compliance deadlines within 18 months of plan approval <p>Equity Offset Program:</p> <ol style="list-style-type: none"> 1.Developer contributions must include a small percentage for retrofits and rebates to help low-income homeowners upgrade older buildings (e.g., for electrification, shade installations, floodproofing) 	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
4/10/2025	Paul Seger	Sierra Club	The plan does not require net-zero energy construction or all-electric building mandates for new projects.	Cumming Group	Actions already have similar goals accordingly.	Resolved
	Daniel Muelrath		(Re: B-1.3) Energy and water	Cumming Group	Language has been revised accordingly.	Resolved
4/8/2025	Marti Roach	350 Contra Costa	The plan does not reference the Bay Area Air District Appliance rules taking effect in 2027, 2029 and 2031. https://www.baaqmd.gov/rules-and-compliance/ruledevelopment/building-appliances . Targets and Actions should include planning/action supporting the upcoming elimination of natural gas water heating and space heating systems through education, policies and practices.	Cumming Group	Reference has been added to alignment with regional and statewide regulations in B-1.2 and B-1.3.	Resolved
4/10/2025	Paul Seger	Sierra Club	We urge the City to introduce a Climate Resilience Fee for new developments in vulnerable areas. Such a fee would fund necessary adaptation projects (e.g., levee reinforcement, creek buffer restoration) and ensure that developers share the long-term costs of climate adaptation, rather than shifting these burdens to homeowners.	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: Goal B-1) Free or cheap energy is core to economic success	Cumming Group	The City will take this under advisement.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Work with contractors (landscape) that use electrical equipment. Non-gas powered equipment, trucks/vehicles that are electric, etc.	Cumming Group	The City will take this under advisement. Support for vehicle electrification and Evs is included in the CAP.	Resolved
4/2/2025	Gary Farber	N/A	Re: Landscape Maintenance Equipment: This category does not appear to be included in the draft CAP. Gasoline powered landscape maintenance equipment is a large source of both toxic air pollutants and GHG emissions. While CA has banned the sale of many types of gasoline powered maintenance equipment, the State has not banned their use. Many local jurisdictions have banned their use – to reduce both air and noise pollution. Oakley ought to consider phasing out the use of such fossil fuel burning equipment at both municipal operations and throughout the community.	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Solar for homes = cheaper	Cumming Group	The City will take this under advisement.	Resolved
4/10/2025	Paul Seger	Sierra Club	The solar energy targets are weak, relying on "encouragement" rather than mandates for commercial/industrial buildings to install on-site renewables.	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time given present resources.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Plan your trips - encourage neighbors to coordinate shopping	Cumming Group	The City will take this under advisement.	Resolved
4/10/2025	Paul Seger	Sierra Club	There is no serious commitment to public transit expansion—just vague references to "collaboration"	Cumming Group	Public transit expansion does not fall under the City's jurisdiction, but the City takes this under advisement.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/2/2025	Gary Farber	N/A	<p>Re: Encourage Transition to Electric Vehicles:</p> <p>A) Private Vehicles: Accommodate Electric Vehicles (EVs) (T-2.1 (p. 40): There is now fairly wide availability of public charging infrastructure. However, public chargers are more expensive to use, and less convenient, than chargers located where residents live. Most plug-in hybrids cannot use DC fast chargers. And studies show that routine (rather than occasional) use of fast charging has a negative impact on battery life. The 2025 CalGreen "green building" code (effective date 1/1/26) will require generous charging infrastructure for new multi-family (MF) buildings. However, there are no State requirements for adding charging infrastructure to existing MF buildings (except for certain alterations and additions). Low-power overnight EV charging is the most convenient and least expensive way to charge. However, most residents of existing MF communities do not have access to power for charging plug-in vehicles. Therefore, it is incumbent upon Oakley to provide education and incentives to owners of existing MF communities (excepting dwellings equipped with private garages). Note that BAAD has an incentive program for adding EV charging infrastructure to existing MF communities; however, most landlords may not be aware of EV charging infrastructure incentive programs.</p> <p>B) Mandate, or encourage, solar electric plus battery systems at new commercial EV charging stations. Offer incentives for retrofitting solar plus batteries at existing commercial EV charging stations. Incorporating solar plus batteries at charging stations reduces the load on the grid, and would allow the charging station to provide some charging even during grid blackouts.</p>	Cumming Group	<p>(A) Point addressed re: multi-family chargers, have added reference to it in T-2.1 action 4.</p> <p>(B) The City will take this under advisement.</p>	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: Goal T-2) Concerns grid can't keep up with demand	Cumming Group	Already have promoting grid resilience embedded throughout this document, so no further action here is needed.	Resolved
4/10/2025	Paul Seger	Sierra Club	The CAP fails to mandate EV charging infrastructure in all new developments.	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Can this be achieved sooner than 2040? Need specific plan and timetable for swapping gas powered city vehicles for Evs	Cumming Group	"Specific plan" is well-reflected in the actions; current targets have not been changed but the City will take this under advisement.	Resolved
4/2/2025	Gary Farber	N/A	<p>Re: Municipal Fleet fossil fuel phase-out:</p> <p>Municipal Fleet fossil fuel phase-out: T-2.2 (p. 40) calls for developing a plan for all new municipal vehicles to be ZEVs. However, the SAP provides no timetable, and it is likely that not all EVs or other possible ZEVs will meet necessary criteria in every case. Therefore, we suggest that the city adopt the following plan, to take affect immediately upon adoption:</p> <p>A) All new city vehicles shall be EVs (or other ZEVs) when available ZEVs meet city criteria.</p> <p>B) Where available EVs do not meet city criteria, new city vehicles shall be plug-in hybrids where they meet city criteria; where available plug-in hybrids do not meet city criteria, new city vehicles shall be "mild" hybrids.</p>	Cumming Group	<p>The plan does provide a timetable (it says transition by 2040) so no additional response to that point is needed.</p> <p>The plan already says that newly-purchased city vehicles should be ZEVs so no additional response is needed.</p> <p>All fleet vehicles would eventually be ZEV through the "fleet management plan" that is developed.</p>	Resolved
4/1/2025	Mike Moore	Diablo Water District (DWD)	There should be a definite plan to transition from internal combustion trucks to fully electric vehicles in the city's fleet...heavy duty electric vehicles are only 6-8 years behind electric and will catch up if the right conditions are met.	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
4/10/2025	Paul Seger	Sierra Club	The CAP...does not require businesses or government buildings to transition fleet vehicles to electric.	Cumming Group	The CAP includes actions pertaining to fleet vehicle transition. Fleet requirements for businesses is left to CARB to address and does not fall under Oakley's jurisdiction.	Resolved
4/2/2025	Gary Farber	N/A	<p>Re: Smart Zoning and Land-use Planning:</p> <p>Oakley is a classic example of suburban sprawl type development. I applaud the CAP for addressing the need to encourage more compact development in locations that will not only decrease dependence on automobiles, and encourage the use of auto alternatives (transit and active transportation), but also create more convenient mixed use, walkable neighborhoods for those that prefer to live in areas that are not so focused on accommodating private motor vehicles.</p>	Cumming Group	The City will take this under advisement.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/6/2025	Zoe Siegel	Greenbelt Alliance	<p>1. Strengthen Flood Resilience (Aligns with Goal A-1: Improve City Infrastructure)</p> <ul style="list-style-type: none"> Expand stormwater capture projects: Install rain gardens, infiltration basins, and green infrastructure in municipal areas to reduce urban flooding. Upgrade drainage systems: Conduct flood risk mapping and enhance stormwater basins to protect residential areas near Marsh Creek and East Cypress Road. Coordinate with Contra Costa agencies: Improve levee maintenance and drainage infrastructure by leveraging partnerships with Contra Costa County and regional flood control agencies. 	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved
4/6/2025	Zoe Siegel	Greenbelt Alliance	<p>3. Increase Wildfire Preparedness (Goal A-1.1: Wildfire Management)</p> <ul style="list-style-type: none"> Improve fire buffer zones: Establish vegetation clearing programs near Oakley's grassland-urban interface. Mandate defensible space around homes and businesses to lower the risk of total property loss. Enhance emergency evacuation plans: Develop fire escape route maps and ensure clear signage in high-risk zones. Incorporate prescribed burns: Work with regional fire departments and Indigenous groups on controlled burns to reduce wildfire fuel loads. 	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Establish a tree/urban forest master plan	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved
4/6/2025	Zoe Siegel	Greenbelt Alliance	<p>2. Improve Heat Resilience to Lower Energy Costs and Increase Livability (Goal A-1.2: Extreme Heat Adaptation by 2030)</p> <ul style="list-style-type: none"> Expand tree canopy: Target low-income and high-heat neighborhoods for shade tree planting and prioritize drought-resistant, native species. This would also reduce cooling costs for homeowners and businesses. Install shade structures and cooling amenities: Provide splash pads, shaded bus stops, and public drinking fountains in heat-vulnerable areas. Retrofit public buildings as cooling centers: Upgrade community centers with battery storage and backup power to function as cooling hubs. 	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved
3/24/2025	Mike Moore	Diablo Water District (DWD)	Consider adding a new action about exploring water reduction guidelines for new municipal/community-wide buildings, per an earlier DWD note.	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
4/6/2025	Zoe Siegel	Greenbelt Alliance	<p>4. Implement Sea Level Rise Protections to Prevent Property Devaluation (Goal A-3: Infrastructure Design for Climate Impacts)</p> <ul style="list-style-type: none"> Enhance coastal defenses: Work with state and federal agencies to monitor sea level rise projections Update building codes: Require elevated foundations and flood-resistant materials in new developments near flood-prone zones. Support wetland restoration: Restore marshland buffers to absorb storm surges and prevent coastal erosion. 	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: Goal A-3) Every 5 years feels too long. Maybe every 2?	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	(Re: Goal A-3.3) Should be annual review	Cumming Group	"Annual" has been added accordingly.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	(Re: Goal A-3.3) Mapping and evacuation road routes.	Cumming Group	Language has been added accordingly.	Resolved

Date	Name/Source	Role/Affiliation	Comment	Resolver	Resolution or Response	Status
4/10/2025	Paul Seger	Sierra Club	The CAP should include legally enforceable deadlines and specific performance measures for key areas—such as flood resilience (and what that means), shoreline and creekbank protection, and riparian habitat restoration. This must include clear metrics for developer contributions to adaptation infrastructure that will mitigate risks such as sea level rise and groundwater contamination.	Cumming Group	A recent pass has been done to make Actions are measurable/quantifiable.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	This is vague...what does it mean?	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	1.Dupont chemical former plant 2.96 capped and abandoned gas wells	Cumming Group	The City will take this under advisement, though this does not fall within the scope of the CAP.	Resolved
4/10/2025	Paul Seger	Sierra Club	The CAP lacks policies for mandatory conservation easements, which would ensure that some land is permanently protected.	Cumming Group	Addressed through Kimley Horn's edits.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	(Re: A-4.3) Should apply to stormwater, water, sanitary, etc.	Cumming Group	Language has been added accordingly.	Resolved
4/10/2025	Paul Seger	Sierra Club	Oakley has no strategy to prevent farmland destruction, as evidenced by the Bridgehead project and previous rezoning actions that replaced prime agricultural land with warehouses.	Cumming Group	The City will take these recommendations under advisement, but will not integrate into the CAP at this time.	Resolved
3/20/2025	Unknown	March Strategizing Workshop Attendee	Work with entities doing this work! Contra Costa Resource Conservation District, Land Trusts Cooperative Extension. All of the above if possible.	Cumming Group	New explicit mentions to parallel organizations have been added accordingly.	Resolved
4/1/2025	Daniel Muelrath	Diablo Water District (DWD)	Seems like a miss to not mention Sustainable Coco somewhere in the CAP as they are a huge potential resource.	Cumming Group	Have added direct mention under G-2.2 (Develop guidelines for effective engagement and collaboration with CBOs)	Resolved
	Daniel Muelrath		(Re: Table B-1) What about renewable diesel?	Cumming Group	The City will take this under advisement.	Resolved
3/24/2025	Mike Moore	Diablo Water District (DWD)	There are references in Oakley Climate Action Plan to a 2018 Local Hazard Mitigation Plan (LHMP). The City Council of Oakley approved the 2024 Oakley LHMP Annex on February 11, 2025 and the County Board of Supervisors approved the County LHMP Vol 1 at the November 5, 2024 Board Meeting. These are the following CAP pages where I found references to the 2018 LHMP: 66, 70, 71, 73, 80, 81, 82. KS: This is a comment we also received from DWD. We do need to update the document to reference the currently approved 2024 Hazard Mitigation Plan. Link to County's main page with Oakley's annex and County's plan: Local Hazard Mitigation Plan Contra Costa County, CA Official Website	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved
4/1/2025	Mike Moore	Diablo Water District (DWD)	DWD has a series of detailed comments throughout Appendices C and D highlighted in purple. @KH team I have provided those PDF comments directly in my email thread.	Kimley Horn/Cumming Group	Language has been added accordingly.	Resolved

City of Oakley

Climate Action Plan

Public Comment Period: Summary of Feedback Addressed

In response to the 100+ comments generated from the City of Oakley's Public Comment Period between March and April 2025, the project team organized, considered, and in many cases integrated Climate Action Plan (CAP) edits into the final CAP. A summary of major public comment feedback integrated into the final CAP is included below.

Enforceable Language

In response to comments from members of the public as well as climate organizations such as the Sierra Club and 350 Contra Costa, the final CAP includes changes to language to ensure that Targets and Actions are measurable and quantifiable to the extent feasible (e.g., replacing "Adopt policies" with "Require").

Buildings and Energy Section Refinement

In accordance with feedback from members of the public as well as local climate organizations such as 350 Contra Costa and the Sierra Club, the final CAP includes a variety of refinements to the Buildings and Energy category. These edits include increased specificity in language by replacing terms like "decarbonization" with "electrification", adjustments to goals related to older buildings and building retrofits and their relationship to energy efficiency upgrades and appliance replacements, and clarification surrounding EV charging incentives and the transition to an electric municipal fleet.

Climate Vulnerability and Adaptation Iteration

In response to comments from members of the public as well as peer agencies like the Diablo Water District, the final CAP includes adjustments in its references to future precipitation patterns, flooding/storm risk and resilience, wildfire risk, and extreme heat, in alignment with local subject matter experts.

Direct References to Collaborating Entities

In accordance with comments from Oakley's March public workshop as well as peer agencies like the Diablo Water District, the final CAP includes more direct references to collaborating jurisdictions, entities, and organizations, such as Contra Costa County, Tri Delta Transit, Diablo Water District, and Sustainable Contra Costa.

Date and Cadence Updates

In response to wide-ranging comments regarding CAP enforceability and timeline for goals, the final CAP includes a variety of smaller adjustments to elements such as cadence for recurring activities, estimated completion dates, and other language adjustments.

RESOLUTION NO. -25

A RESOLUTION OF THE CITY OF OAKLEY PLANNING COMMISSION RECOMMENDING THE CITY COUNCIL ADOPT THE CITY OF OAKLEY CLIMATE ACTION PLAN 2025

WHEREAS, a Climate Action Plan (CAP) is a document that lays out a plan for how an agency will aim to reduce greenhouse gas (GHG) emissions, usually through decarbonization and greening efforts, and bolster infrastructural and community-wide resilience to the impacts of climate change; and

WHEREAS, the State of California has set forth climate goals for continued reduction of GHG emissions and total carbon neutrality by 2045; and

WHEREAS, the State's Climate Change Scoping Plan encourages local governments to adopt goals to reduce GHG emissions consistent with the State's goals which are 15% below 1990 levels by 2020, 40% below 1990 levels by 2030, and 80% below 1990 levels by 2050; and

WHEREAS, Oakley General Plan Program 6.2.B states, "Adopt and implement a Climate Action Plan by 2025 that complies with State greenhouse gas emission targets;" and

WHEREAS, adopting a CAP that complies with the State's GHG reduction targets is a crucial next step for the City to meet the State's GHG emission targets; and

WHEREAS, on November 14, 2023, the City Council adopted Resolution 111-23 for the purposes of soliciting Request for Proposals and Qualifications ("RFP") for the purposes of securing planning consulting services to support the City in completing a Climate Action Plan. The RFP included an amount not to exceed \$100,000, all of which was appropriated under Consulting for the Planning Division in the 2023-2024 Fiscal Year General Fund budget; and

WHEREAS, on March 26, 2024, the City of Oakley adopted Resolution 42-24 to formally develop a Climate Action Plan and engaged consultant Cumming Group to manage and execute this process; and

WHEREAS, the City of Oakley held a public workshop on November 18, 2024, focused on introducing the public to the concept of the CAP, the goals of the document, and receiving input on what the public wants to see as part of the document's adoption and implementation; and

WHEREAS, the City of Oakley held a public Joint Work Session On January 28, 2025, with the City Council and the Planning Commission with the goal of reporting out on the progress on the City of Oakley's CAP and review of the initial menu of goals, targets, and actions for the plan. The City Council and Planning Commission provided

feedback on the four sustainability categories (Governance and Leadership, Buildings and Energy, Transportation and Land Use, and Adaptation and Resilience) presented by the Cumming Group and Staff; and

WHEREAS, the City of Oakley held a second public workshop on March 20, 2025, provided the public with a more focused approach where Cumming Group presented the CAP Goals and Targets and asked the public to participate in a Stoplight Poll. The poll allowed the public to provide feedback on the goals and targets that would be outlined in the CAP; and

WHEREAS, The CAP is consistent with the Strategic and Thoughtful Growth Objectives within Oakley's Strategic Plan 27+, as it furthers the City's efforts to encourage objective decision-making versus subjective decision-making for application approvals to meet Oakley's vision and economic goals. This is done by focusing on formal plans and study outcomes; and

WHEREAS, The CAP aligns with the City of Oakley's Strategic Plan 27+ objectives, specifically the Strategic and Thoughtful Growth objective, by promoting environmental stewardship through goals related to energy efficiency, air quality, and greenhouse gas emissions. The Strategic Plan further recommends adoption and implementation of a Climate Action Plan by 2025 that meets the State's greenhouse gas reduction targets and supports the broader goals of the Oakley General Plan. The CAP supports the objectives and goals outlined in the Strategic Plan; and

WHEREAS, Pursuant to the California Environmental Quality Act ("CEQA") Guidelines Section 15060(c), the Climate Action Plan is potentially considered a project under CEQA; and

WHEREAS, Pursuant to CEQA Guidelines Section 15061(b)(3) the Climate Action Plan is covered by the "Common Sense" Exemption that excludes projects where "The activity is covered by the general rule that CEQA applies only to projects, which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA."; and

WHEREAS, on or before April 25, 2025, the Notice of Public Hearing for the project was duly noticed in the East Bay Times, a newspaper of general distribution, was posted at Oakley City Hall located at 3231 Main Street, outside the gym at Delta Vista Middle School located at 4901 Frank Hengel Way, and outside the library at Freedom High School located at 1050 Neroly Road, and was mailed out to outside agencies, and parties requesting such notice; and

WHEREAS, on May 6, 2025, the Planning Commission opened the public hearing at which it received a report from City Staff and the City's consultant, oral and written testimony from the public, and deliberated on the project. At the conclusion of its

deliberations, the Planning Commission took a vote and adopted this resolution to recommend the City Council approve the City of Oakley Climate Action Plan 2025; and

WHEREAS, if any term, provision, or portion of these Findings or the application of these Findings to a particular situation is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of these Findings, or their application to other actions related to the Project, shall continue in full force and effect unless amended or modified by the City; and

WHEREAS, these Findings are based on the City's General Plan, the City's Zoning Ordinance, and the information submitted to the Planning Commission at its May 6, 2025 meeting, both written and oral, including oral information provided by the applicant, as reflected in the minutes of such meetings, together with the documents contained in the file for the project (hereinafter the "Record").

NOW, THEREFORE, BE IT RESOLVED THAT, on the basis of the above findings of fact and the entire Record, the Planning Commission makes the following additional findings in support of the approvals:

- A. The foregoing recitals are true and correct and are incorporated by reference into this action;
- B. The Climate Action Plan conforms to the provisions and standards of the General Plan;
- C. The Climate Action Plan is consistent with the balance of the General Plan.
- D. The Climate Action Plan is necessary to implement the goals and objectives of the General Plan, specifically General Plan Program 6.2.B that states, "Adopt and implement a Climate Action Plan by 2025 that complies with State greenhouse gas emission targets;
- E. The Climate Action Plan is consistent with the Strategic and Thoughtful Growth Objectives within Oakley's Strategic Plan 27+, as it furthers the City's efforts to encourage objective decision-making versus subjective decision-making for application approvals to meet Oakley's vision and economic goals;
- F. The Climate Action Plan aligns with the City of Oakley's Strategic Plan 27+ objectives, specifically the Strategic and Thoughtful Growth objective, by promoting environmental stewardship through goals related to energy efficiency, air quality, and greenhouse gas emissions.
- G. The Climate Action Plan is consistent with the Strategic Plan's recommendation to adopt and implement a Climate Action Plan by 2025 that meets the State's greenhouse gas reduction targets and supports the broader goals of the Oakley General Plan;

DATE: May 6, 2025
TO: Joshua McMurray, City Manager
FROM: Evan Gorman, Associate Planner
SUBJECT: **Cypress Ranch (Formerly Burroughs) Subdivision 9557 Design Review and Final Development Plan (DR 25-01, FDP 25-01) –**
Request for Design Review approval of floor plans and elevations and a final development plan for 191 single-family detached homes located in the Cypress Ranch (TM 9557) subdivision.

Approved and
Forwarded to the
Planning Commission

Summary

This is an application by KB Home North Bay (“Applicant”) requesting Design Review (DR 25-01) approval of a development plan, elevations, floor plans, roof plans, conceptual landscape plans, colors and materials detail for 191 single-family residential lots located within the Cypress Ranch subdivision (formerly known as “Burroughs Subdivision”) (Tentative Map 9557) (“Project”). The proposed homes consist of seven floor plans (five two-story plans and two single-story plans) ranging from 1,438 to 2,566 square feet of livable area. The project site is located on the north side of East Cypress Road, between Knightsen Avenue and Jersey Island Road each intersect East Cypress Road. The site is zoned P-1 (Planned Unit Development) District. (APNs: 032-081-025 & 032-081-026)

Figure 1 – Project Site (Center)



Background

GENERAL PLAN

Residential Low/Medium (RLM) – This designation provides for moderately dense single-family residential development that is consistent with suburban uses. This designation allows for a higher density suburban neighborhood with smaller lots than those that are commonly seen in traditional urban and suburban neighborhoods. Primary land uses include detached single-family homes and accessory structures. Public and semi-public uses and similar and compatible uses are also allowed.

ZONING

P-1 (Planned Unit Development) District – The purpose of the Planned Unit Development district is to provide an opportunity for large-scale or infill development to incorporate cohesive, site-specific design through the use of flexible zoning standards. In contrast to conventional regulations—typically intended for individual lot development—P-1 zoning enables context-sensitive planning that avoids the uniformity and design limitations that can result from applying standard regulations to complex or expansive sites.

PROJECT SITE

The 43.24-acre Cypress Ranch (formerly ‘Burroughs’) project site is located to the northeast of the intersection of East Cypress Road and Knightsen Avenue. The site is bordered to the west by the Delaney Park subdivision, to the south by East Cypress Road and unincorporated County land beyond, to the north and northeast by an underground section of the Contra Costa Canal, and to the east by both the Contra Costa Canal and Jersey Island Road. The City of Oakley previously owned a 27-acre portion of the site, which was later sold to KB Home. Seventeen lots from the resulting subdivision will be excluded from the KB Home development and transferred back to the City for future affordable housing development. Those 17 lots are not included in this Design Review application.

ENTITLEMENT HISTORY

On May 25, 2021, the City Council approved the Tentative Map for Subdivision 9557 and the associated Mitigated Negative Declaration through City Council Resolution No. 58-21. The Tentative Map received a three-year entitlement period. On July 9, 2024, the City Council approved a six (6) year extension of the approved tentative map.

Project Description

The Design Review application features 191 single-family homes organized into two “neighborhoods” made up of three groups of typical lot sizes. The three groups



include the approximately 45' x 75' lots, 50' x 80' lots, and 65' x 80' lots. The homes come in seven different floorplans - two single-story and five two-story designs. Each of the seven house plans have three different possible styles, "Spanish", "Craftsman", and "Prairie". Each style has three different "schemes", with different paint and material colors. The seven floor plans range from 1,438 sf. to 2,566 sf. of livable area. Table 1 provides a summary of each plan's general features.

Figure 2 – Cypress Ranch, Front Elevations Excerpt

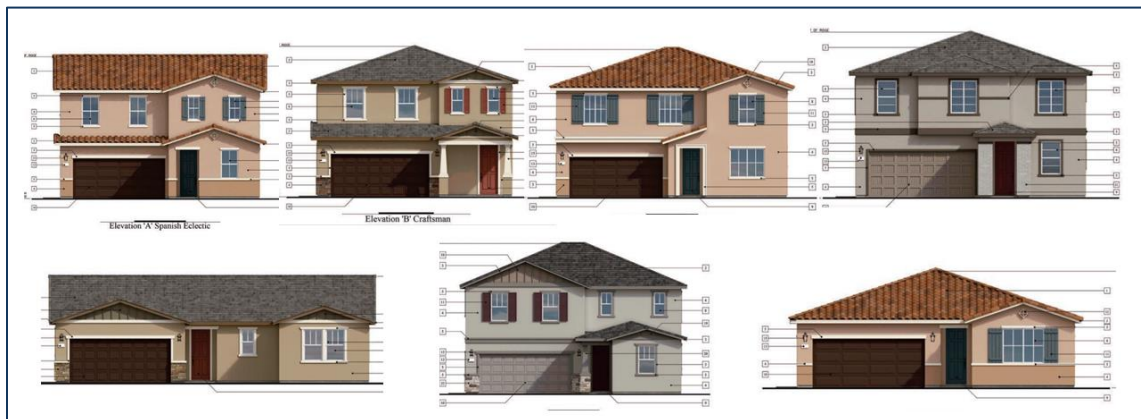


Table 1 – Summary of Proposed Plans

	Square Feet (Livable)	Stories	Bedrooms	Bathrooms	Garage Spaces
Plan 1	2,016	2	4	3	2
Plan 2	2,142	2	4	3	2
Plan 3	2,378	2	5	3	2
Plan 4	1,438	1	3	2	2
Plan 5	2,324	2	5	3	2
Plan 6	2,566	2	5	3	2
Plan 7	1,824	1	4	2	2

FINAL DEVELOPMENT PLAN

Final Development Plans are exhibits approved with rezones to P-1 (Planned Unit Development) that provide details on the proposed custom development standards for a large-scale development. The original Final Development Plan for the project site, approved in 2021, consisted of a diagram of the proposed lots for the subdivision along with development regulations and conceptual elevations for



homes. With this new application, KB Home is seeking to amend the Final Development Plan. The proposed Cypress Ranch Final Development Plan reflects small changes in the layout of the lots and subdivision's cul-de-sacs that the Applicant is working through the separate Final Map Process to achieve.

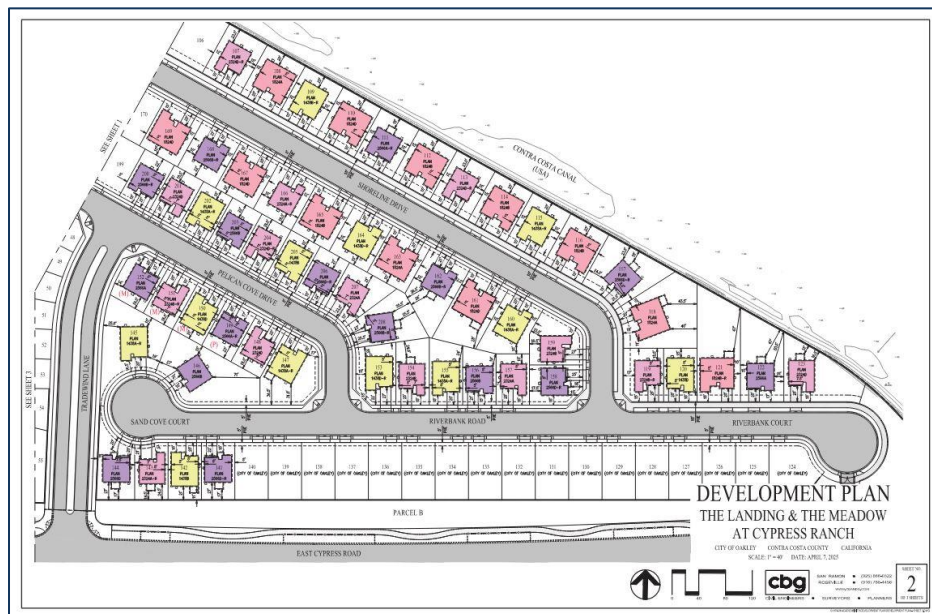
The Applicant also presents the plotting of all of the homes with accurate building-footprints on the proposed Final Development Plan. The proposed Final Development Plan shows how homes are organized along each street based on typical lot size. Smaller lots are concentrated along the southwest portion of the site, where three two-story floorplans have been grouped together to form the 'Landing at Cypress Ranch' neighborhood, identified by blue and grey building footprints.

Figure 3 – Cypress Ranch Final Development Plan



Larger lots are situated along the northern and eastern portions of the site, where a mix of single-story and larger two-story homes comprise 'The Meadow at Cypress Ranch' neighborhood. This area features a broader range of floorplans, including single-story plans with expanded footprints, and is identified by pink, purple, and yellow building footprints on the development plan.

Figure 4 - Cypress Ranch Final Development Plan, Focus on The Meadow at Cypress Ranch



Analysis

The proposed plans were analyzed for consistency with the adopted City of Oakley Residential Guidelines ("Guidelines"). Since the Vesting Tentative Map is already approved, Staff have focused this analysis on home design, home plotting, and landscaping.

NEIGHBORHOOD LAYOUT AND DESIGN

Although the tentative map was previously approved, the submittal of detailed landscaping, neighborhood entry, and pedestrian pathway plans has provided additional clarity regarding the project's consistency with the City's Residential Design Guidelines. The developer has proposed a distinct neighborhood entry with monument signage, consistent with the Oakley Residential Design Guidelines. The plans also show clearly defined neighbor edges created by areas with walking paths and extensive landscaping. The paths also connect to existing sidewalks along East Cypress and establish safe and efficient pedestrian and bicycle circulation.



ARCHITECTURAL CHARACTER

The proposed elevations are consistent with the City's Residential Design Guidelines, demonstrating a coherent architectural style across each elevation type. Each plan offers three distinct and regionally appropriate styles—Spanish (characterized by S-tile roofing and accent tiles), Craftsman (featuring board and batten gables with stone veneer), and Prairie (defined by low-hipped roofs and brick veneer). Exterior materials wrap appropriately around building corners, and the two-story elevations incorporate horizontal banding, projecting first-floor elements, and articulated façades to reduce visual mass. Several models include prominent entry porches that enhance the streetscape. Roof forms and tile types vary by style, and each elevation uses a limited palette of muted, earth-tone colors with no more than three cladding materials, as encouraged by the guidelines. Façade and upper-story windows include divided-lite patterns to further reinforce architectural character. Staff have included proposed conditions of approval to further enhance the project's consistency with the design guidelines, including additional brick veneer on a specific model and style combination.

FINAL DEVELOPMENT PLAN

The homes are plotted on the Final Development Plan in a manner consistent with the City's Residential Design Guidelines. In addition to meeting all required setbacks, front yard setbacks have been intentionally varied to create visual interest and avoid the appearance of a uniform "wall" of homes along the streets. The plan also includes a minimum of 20 percent single-story homes, consistent with requirements in the guidelines. Several of the home designs feature front porches that extend into the front yard setback, enhancing architectural variety and contributing to a more engaging streetscape. Rear setbacks along major roadways have also been varied to prevent visual monotony and promote a more dynamic neighborhood edge. The changes to lot lines and cul-de-sacs on the Final Development Plan are found to be substantially compliant with the original approval, as the same number of lots remain and the average lot size is approximately the same.

Environmental Review

The proposal for home designs and site design elements of the subdivision fall within the scope of the original subdivision's California Environmental Quality Act (CEQA) analyses. Subdivision 9557 was analyzed through an Initial Study, and a Mitigated Negative Declaration (State Clearinghouse # 2021040251) which was prepared and dated April 9, 2021. No further environmental analysis is required.

Findings

Draft findings for the Design Review and Final Development Plan Review can be found in the proposed resolution.



Consistency with the Oakley Strategic Plan 27+

Approval of this application would be consistent with the goals in the section of the Oakley Strategic Plan 27+ entitled, “Community and Economic Development Goal”. Careful consideration of the project in relation to the findings for approval and the proposed conditions of approval ensure the use meets community service demands while remaining compatible with Oakley’s neighborhoods.

Fiscal Impact

The approval of these entitlements will not impact the General Fund. This is a developer funded account. All Staff time and City of Oakley generated materials are charged to the account and paid for by the developer.

Staff Recommendation

Staff recommends the Planning Commission adopt the resolution approving “Cypress Ranch Subdivision 9557 Design Review (DR 25-01, FDP 25-01)”, as conditioned.

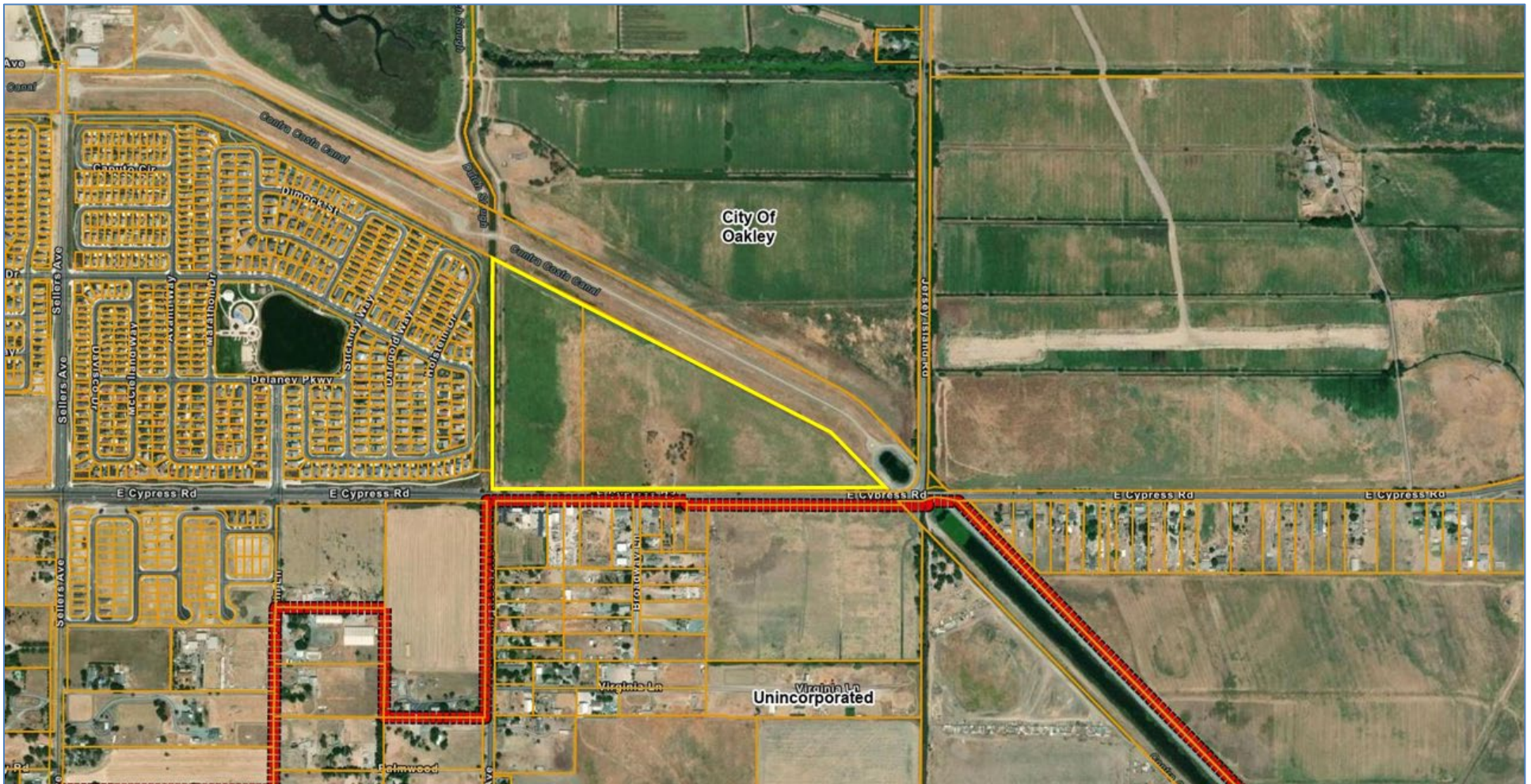
Attachments

1. Vicinity Map
2. Notice of Public Hearing
3. Originally Approved Plans
4. Applicant’s Plans
5. Proposed Resolution



Vicinity Map

Cypress Ranch (Formerly Burroughs) Subdivision 9557 Design Review (DR 25-01, FDP 25-01),
Oakley, CA 94561 APN: 032-081-025, 032-081-026





NOTICE OF PUBLIC HEARING

Notice is hereby given that on **May 6, 2025, at 6:30 p.m.**, or as soon thereafter as the matter may be heard, the Planning Commission of the City of Oakley will hold a Public Hearing at the Council Chambers located at 3231 Main Street, Oakley, CA 94561 for the purposes of considering the application described below:

Project Name: Cypress Ranch Subdivision 9557 Design Review (DR 25-01, FDP 25-01)

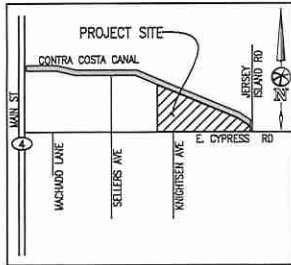
Project Location: The project is located at the northeast corner of East Cypress Rd. and Knightsen Ave. (APNs. 032-081-025 and 032-081-026)

Applicant: KB Home North Bay & Central Valley Division, 4830 Business Center Drive, Suite 150, Fairfield, CA 94534, mstover@kbhome.com

Request: Application by KB Home North Bay requesting Design Review, approval of a development plan, elevations, floor plans, roof plans, conceptual landscape plans, colors and materials detail for 191 single-family residential lots located within the Cypress Ranch subdivision (formerly known as "Burroughs Subdivision") (Tentative Map 9557). Proposed homes consist of seven home plans (five two-story plans and two one-story plans) ranging from 1,438 to 2,566 square feet of livable area. The project site is located on the north side of East Cypress Road, between where Knightsen Avenue and Jersey Island Road each intersect East Cypress Road. The site is zoned P-1 (Planned Unit Development) District. (APNs: 032-081-025 & 026)

How to Review: The Staff Report and its attachments will be available for public review, on or before **May 1, 2025**, at City Hall, 3231 Main Street, Oakley, CA 94561 or online at www.ci.oakley.ca.us/agendas-minutes-videos-archive/ by navigating to the **May 6, 2025, Planning Commission** agenda and clicking the project title link. (Note: City Hall is closed on the 1st and 3rd Fridays of each month). Interested persons are invited to submit written comments prior to and may testify at the public hearing. Written comments may be submitted to Evan Gorman, Associate Planner at the City of Oakley, 3231 Main Street, Oakley, CA 94561 or by email to Gorman@ci.Oakley.ca.us.

NOTICE IS ALSO GIVEN pursuant to Government Code Section 65009(b) that, if this matter is subsequently challenged in Court by you or others, you may be limited to raising only those issues you or someone else has raised at a Public Hearing described in this notice or in written correspondence delivered to the City of Oakley City Clerk at, or prior to, the Public Hearing.



VICINITY MAP

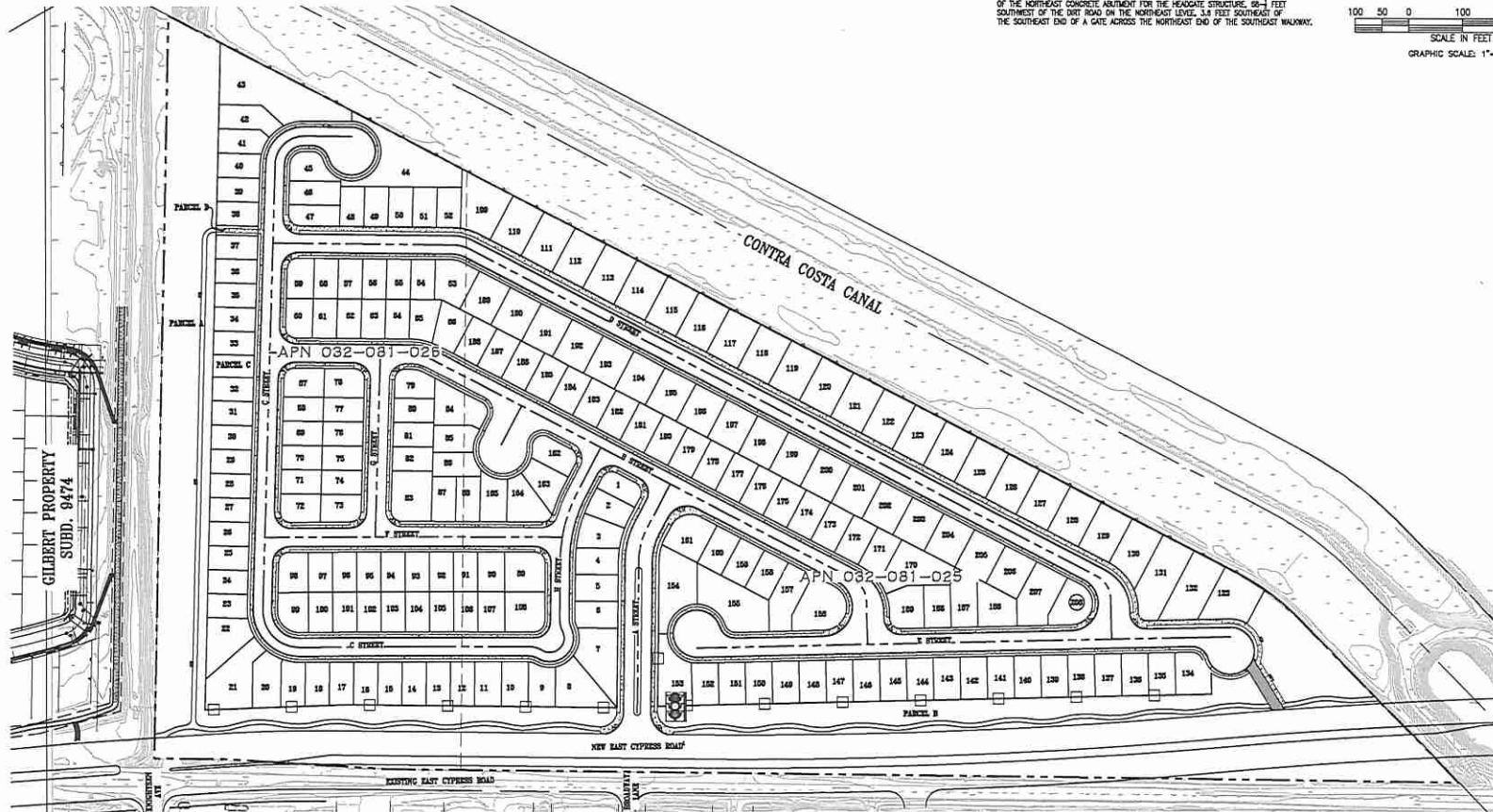
NO SCALE

TOTAL PROPOSED LOTS 308

PARCEL NAME	AREA (AC)	USAGE
A	3.27	OPEN SPACE
B	1.49	OPEN SPACE
C	0.08	OPEN SPACE
D	0.02	OPEN SPACE

GRADING SUMMARY QUANTITIES	
CUT	5,800 CY
FILL	176,100 CY
TOTAL IMPORT	170,300 CY

1. = NEW EAST CYPRESS ROAD SHOWN PER CITY OF OAKLEY APPROVED "EAST CYPRESS ROAD PRECISE PLAN". NEW ECR TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF OAKLEY THROUGH THE CITY'S CIP PROGRAM.



GENERAL NOTES

OWNER: CITY OF OAKLEY
3231 MAIN STREET
OAKLEY, CA 94581
(925)-425-7000

DEVELOPER: WESTSIDE VENTURES, LLC
2551 SAN RAMON VALLEY BLVD #224
SAN RAMON, CA 94583
ADAM TOWNSEND - (925)-400-5078

ENGINEER: BELLECCI & ASSOCIATES, INC.
2290 DIAMOND BLVD #100
CONCORD, CA 94520
(925)-425-4589

APN: 032-081-025 (CITY OF OAKLEY)
032-081-026 (SURREYWOODS)

SITE AREA: 43.24 ACRES

EXISTING ZONING: A-3

PROPOSED ZONING: P-1

EXISTING USE: VACANT

PROPOSED USE: SINGLE FAMILY RESIDENTIAL

SERVICES:
WATER SUPPLY-
SANITARY SEWER-
STORM DRAIN-
GAS & ELECTRIC-
FIRE-
TELEPHONE-
CABLE TV-

DAIRY WATER DISTRICT
IRONHOUSE SANITARY DISTRICT
CITY OF OAKLEY
PACIFIC GAS & ELECTRIC
EAST CONTRA COSTA FIRE PROTECTION DISTRICT
AET
CONCAST

FLOODING: SITE FALLS WITHIN FIRM FLOOD MAPS 06013C 0300G, ZONE AE
(EL. 9.1988WAD) - DATED MARCH 21, 2017
100 YEAR FLOOD ELEVATION = 9.32
NOTE: THE ENTIRE SITE FALLS WITHIN THE 100 YEAR FLOOD PLAN

TOPOGRAPHY: AERIAL TOPOGRAPHY PROVIDED BY: 300 AERIAL SURVEYS
DATED JANUARY 15, 2020

BASIS OF ELEVATION: ELEVATIONS SHOWN ARE BASED 1928 MAM

BASIS OF BEARINGS: CALIFORNIA COORDINATE SYSTEM, ZONE II (NAD 83).

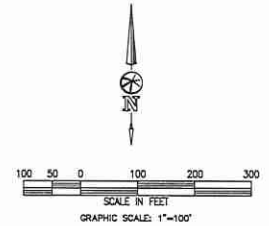
BENCHMARK: USGS DESIGNATION - 11.19 USBR, HSB7089 ELEVATION 13.8. BENCHMARK LOCATED AT THE CONTRA COSTA CANAL FISH SCREEN, IN THE TOP OF THE SOUTHWEST END OF THE NORTHEAST CONCRETE ABUTMENT FOR THE HEADGATE STRUCTURE, 26-7 FEET SOUTHWEST OF THE DIRT ROAD ON THE NORTHEAST LEV. 3.9 FEET SOUTHWEST OF THE SOUTHEAST END OF A GATE ACROSS THE NORTHEAST END OF THE SOUTHWEST WALKWAY.

SUBDIVISION 9557 VESTING TENTATIVE MAP COVER SHEET

CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA

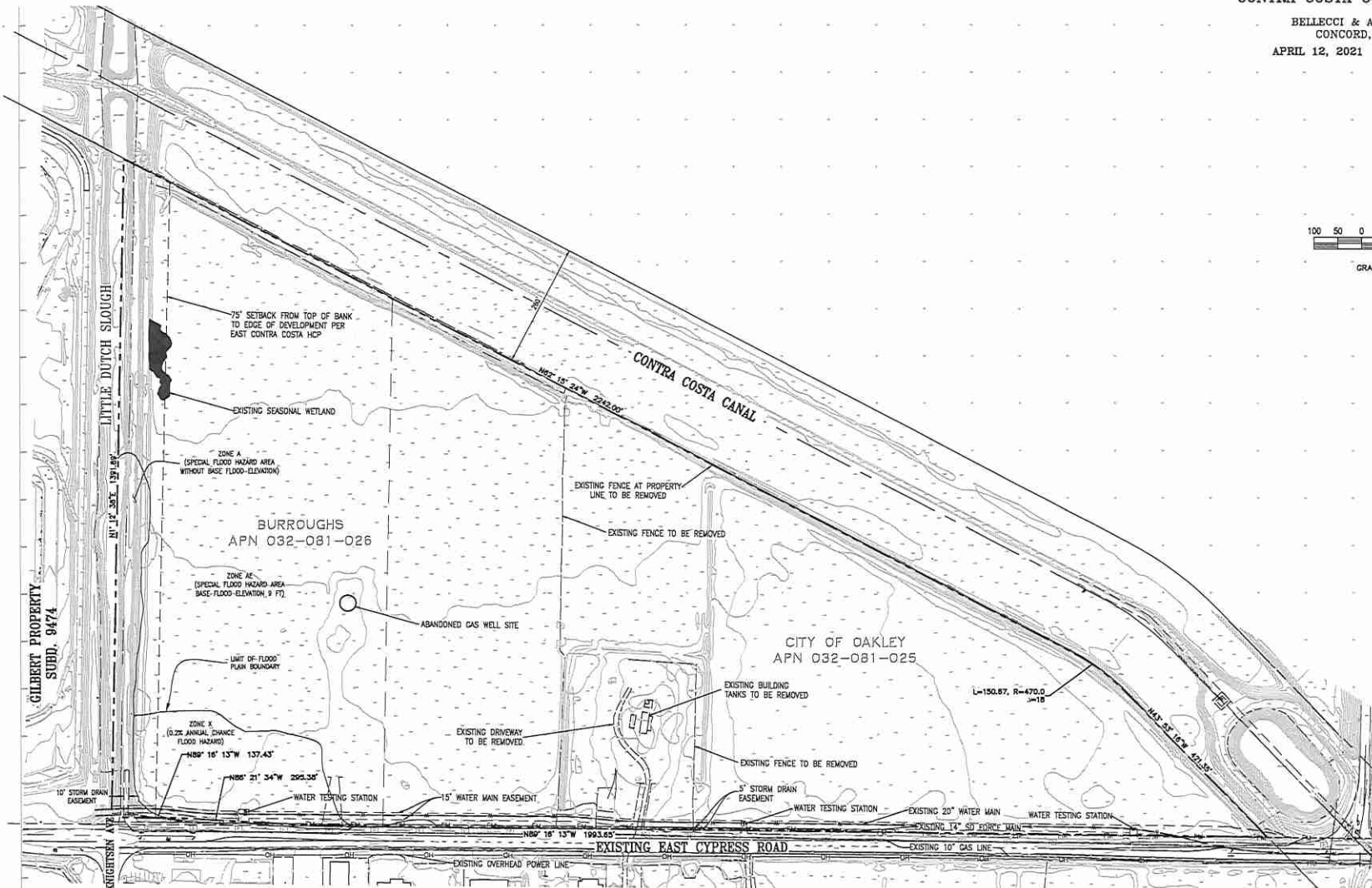
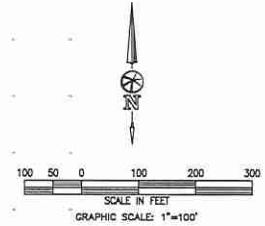
APRIL 12, 2021 SCALE: 1"=100'



SUBDIVISION 9557
VESTING TENTATIVE MAP
EXISTING CONDITIONS AND CONSTRAINTS MAP

CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA
APRIL 12, 2021 SCALE: 1"=100'

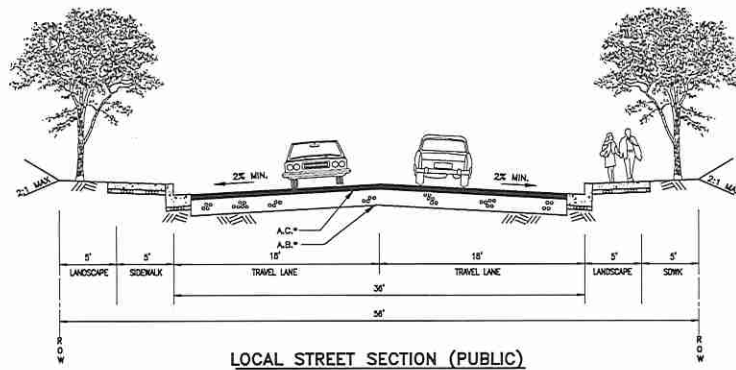
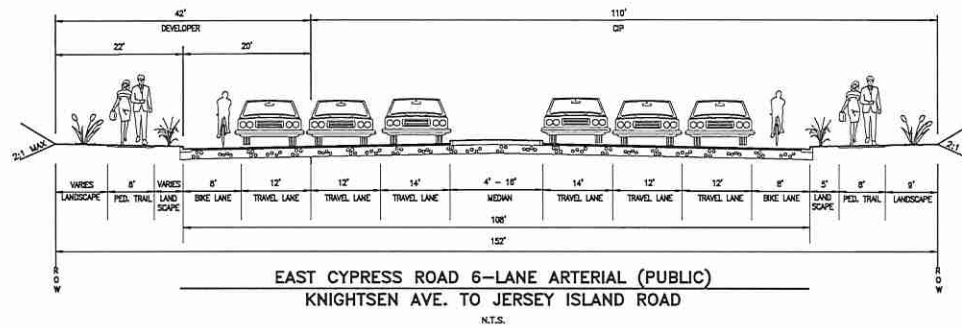


SUBDIVISION 9557
VESTING TENTATIVE MAP
TYPICAL STREET SECTIONS

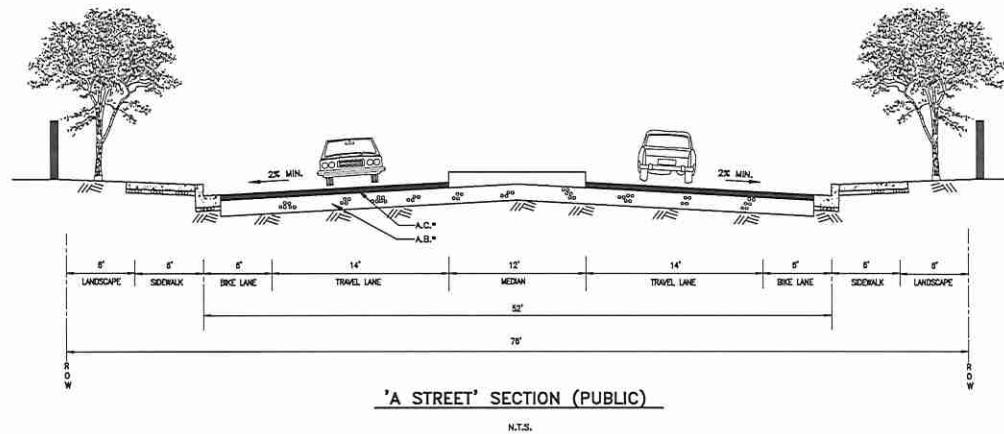
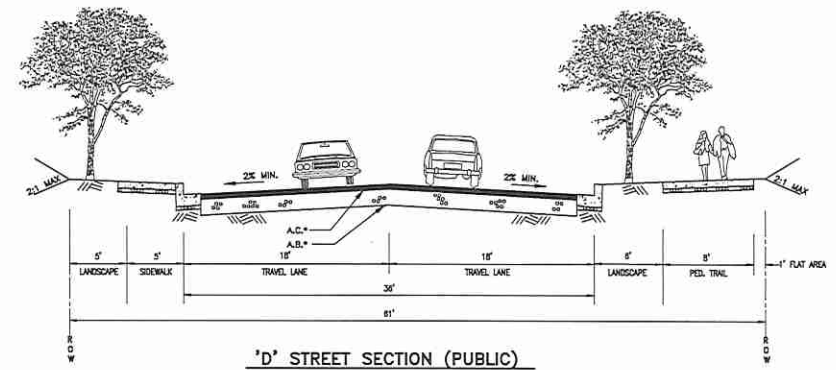
CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA
APRIL 12, 2021

NOTE:
* = AC AND AB SECTIONS TO BE BASED ON ROADWAY AND R VALUES



N.T.S.
B STREET, C STREET, E STREET,
F STREET, G STREET, H STREET

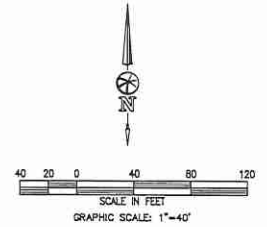


SUBDIVISION 9557 VESTING TENTATIVE MAP PRELIMINARY SITE PLAN

CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA

APRIL 12, 2021 SCALE: 1"=40'

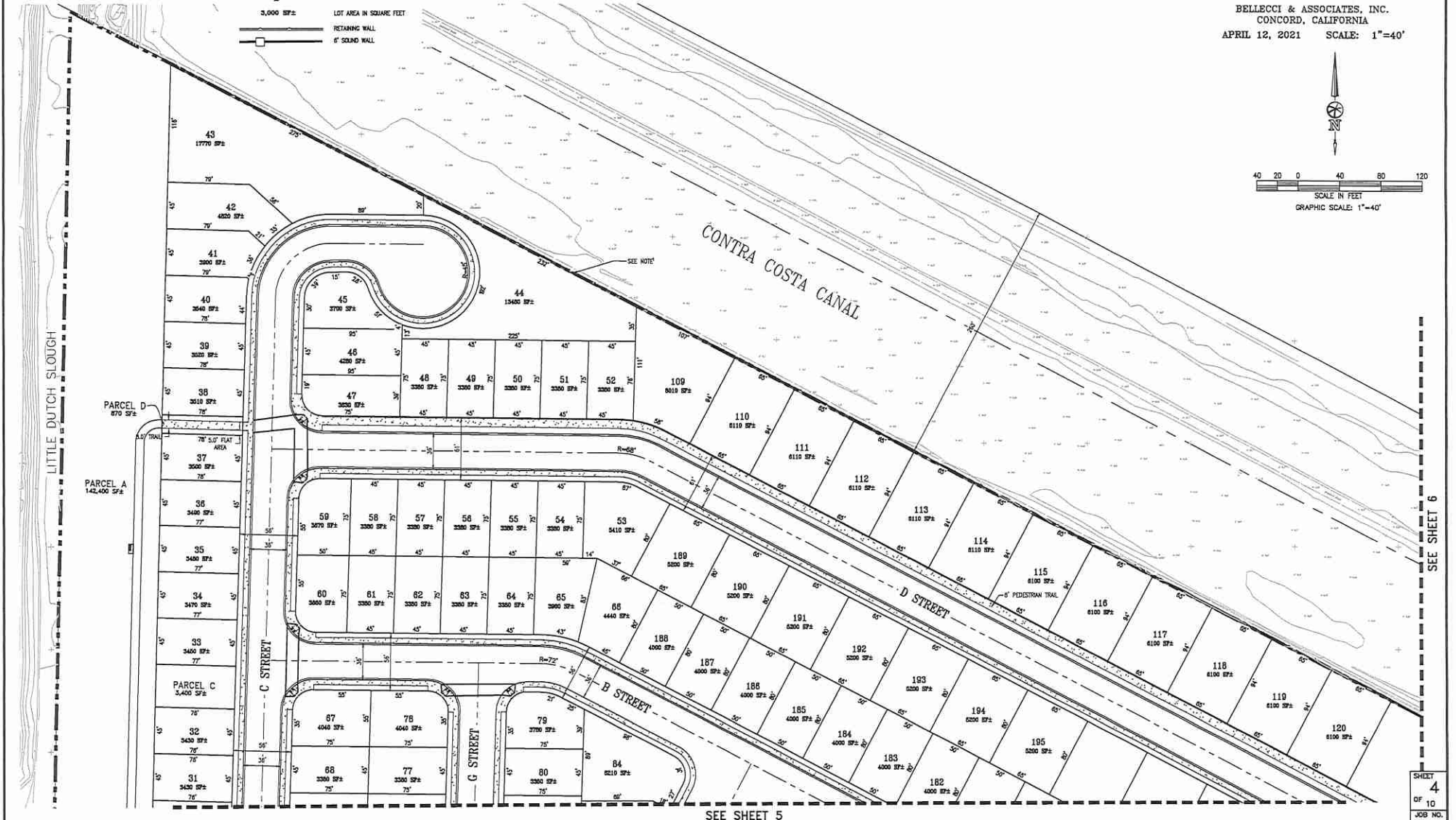


NOTE:

1. THE WALL ALONG CONTRA COSTA CANAL MUST BE DESIGNED AS FLOOD WALL AS THE PROJECT SITE IS BEING ELEVATED TO ACHIEVE FLOOD PROTECTION

LEGEND

SYMBOL	DESCRIPTION
---	SUBDIVISION BOUNDARY
---	LOT LINE
1	LOT NUMBER
3,000 SF±	LOT AREA IN SQUARE FEET
---	RETAINING WALL
---	6" SOUND WALL



LEGEND

SYMBOL	DESCRIPTION
---	SUBDIVISION BOUNDARY
---	LOT LINE
1	LOT NUMBER
0,000 SF±	LOT AREA IN SQUARE FEET
---	RETAINING WALL
---	6" SOUND WALL

NOTE

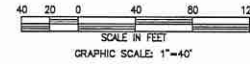
1. = NEW EAST CYPRESS ROAD SHOWN PER CITY OF OAKLEY APPROVED "EAST CYPRESS ROAD PRECISE PLAN". NEW EDR TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF OAKLEY THROUGH THE CITY'S CIP PROGRAM.
2. = APPROXIMATE LOCATION OF ABANDONED GASWELL.

**SUBDIVISION 9557
VESTING TENTATIVE MAP
PRELIMINARY SITE PLAN**

CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA

APRIL 12, 2021 SCALE: 1"=40'



SEE SHEET 4



SEE SHEET 6

**SUBDIVISION 9557
VESTING TENTATIVE MAP
PRELIMINARY SITE PLAN**

**CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA**

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA

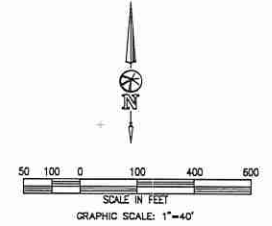
APRIL 12, 2021 SCALE: 1"=40'

NOTE

1. = NEW EAST CYPRESS ROAD SHOWN PER CITY OF OAKLEY APPROVED "EAST CYPRESS ROAD PRECISE PLAN", NEW ECR TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF OAKLEY THROUGH THE CITY'S CIP PROGRAM.
2. = THE WALL ALONG CONTRA COSTA CANAL MUST BE DESIGNED AS FLOOD WALL AS THE PROJECT SITE IS BEING ELEVATED TO ACHIEVE FLOOD PROTECTION

LEGEND

PROPOSED	DESCRIPTION
---	SUBDIVISION BOUNDARY
---	LOT LINE
1	LOT NUMBER
5,000 SF±	LOT AREA IN SQUARE FEET
---	RETAINING WALL
---	6" SOUND WALL



SYMBOL	DESCRIPTION
	PROPERTY LINE
	CENTERLINE
	WATER MAIN
	SANITARY SEWER PIPE
	SANITARY SEWER MANHOLE
	STORM DRAIN PIPE
	STORM DRAIN MANHOLE
	STORM DRAIN CATCH BASIN

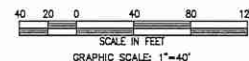
NOTES

1. ALL STREET GRADES TO BE 0.75% MINIMUM
2. EXISTING TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY IN 2020
3. ALL ELEVATIONS ARE BASED ON 1988 NAVD

SEE SHEET 7

NOTE

1. = NEW EAST CYPRESS ROAD SHOWN PER CITY OF OAKLEY APPROVED "EAST CYPRESS ROAD PRECISE PLAN". NEW ECR TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF OAKLEY THROUGH THE CITY'S CIP PROGRAM.
2. = APPROXIMATE LOCATION OF ABANDONED GASWELL



CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA

APRIL 12, 2021 SCALE: 1"=40'



SEE SHEET 9

SUBDIVISION 9557 VESTING TENTATIVE MAP GRADING AND UTILITY PLAN

CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA

APRIL 12, 2021 SCALE: 1"=40'

NOTE

1. = NEW EAST CYPRESS ROAD SHOWN PER CITY OF OAKLEY APPROVED "EAST CYPRESS ROAD PRELIMINARY PLAN, NEW ECR TO BE DESIGNED AND CONSTRUCTED BY THE CITY OF OAKLEY THROUGH THE CITY'S CIP PROGRAM.

LEGEND

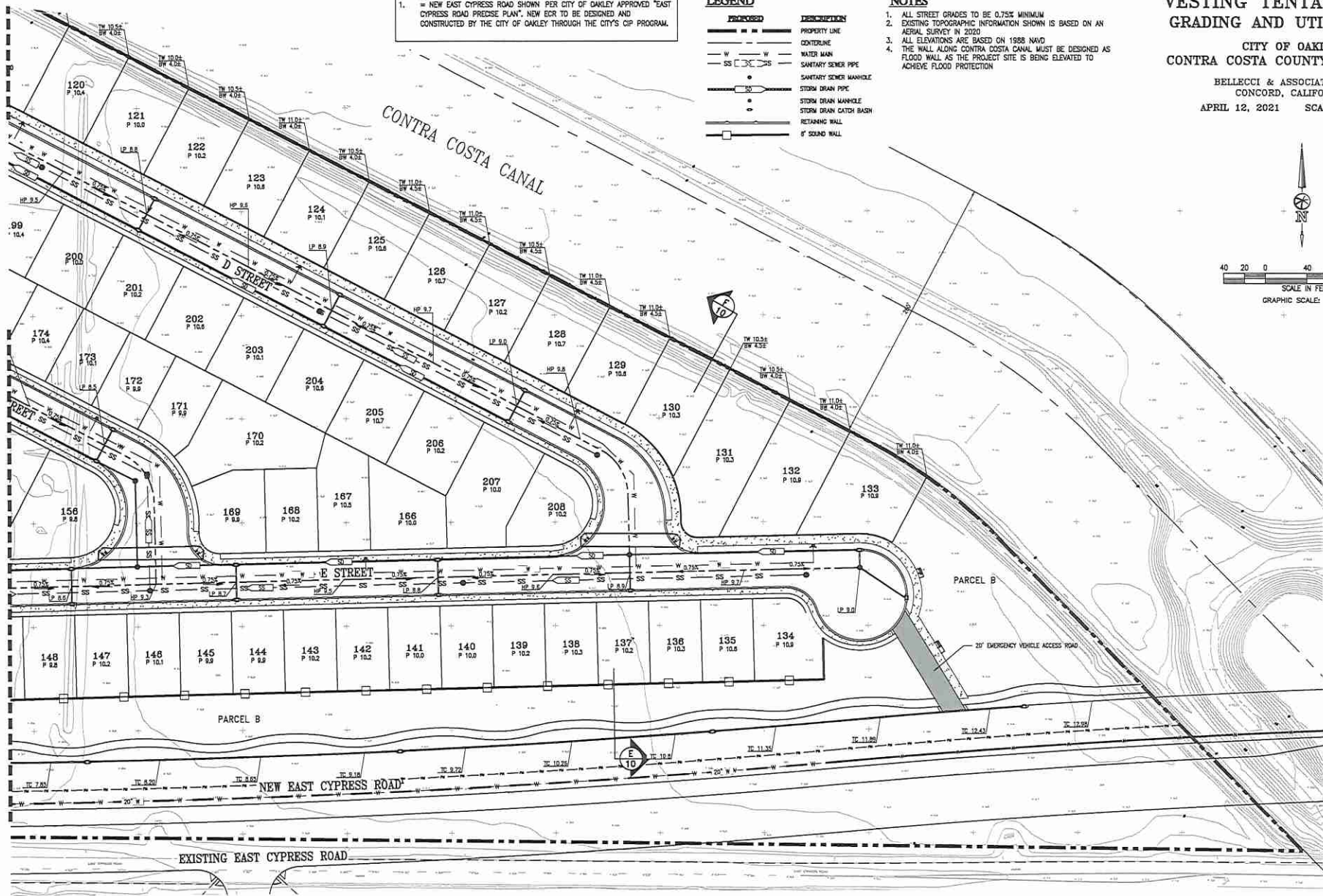
PROPOSED	DESCRIPTION
---	PROPERTY LINE
---	CONTOUR
W	WATER MAIN
SS	SANITARY SEWER PIPE
SC	SANITARY SEWER MANHOLE
SD	STORM DRAIN PIPE
SO	STORM DRAIN MANHOLE
SB	STORM DRAIN CATCH BASIN
SW	RETAINING WALL
S	8' SOUND WALL

NOTES

1. ALL STREET GRADES TO BE 0.75% MINIMUM
2. EXISTING TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AN AERIAL SURVEY IN 2020
3. ALL ELEVATIONS ARE BASED ON 1988 NAVD
4. THE WALL ALONG CONTRA COSTA CANAL MUST BE DESIGNED AS FLOOD WALL AS THE PROJECT SITE IS BEING ELEVATED TO ACHIEVE FLOOD PROTECTION

SEE SHEET 7

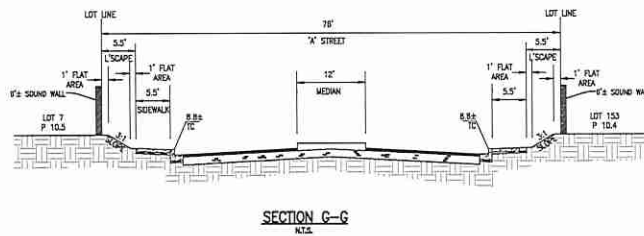
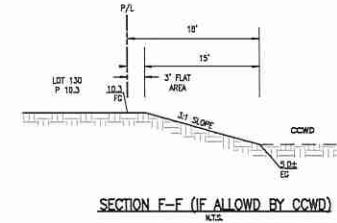
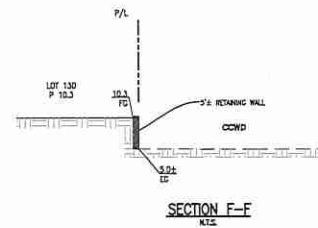
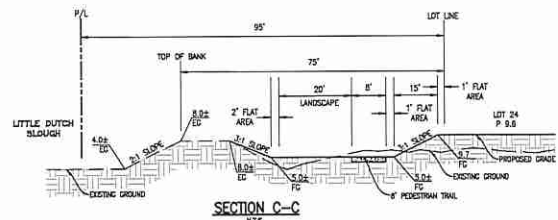
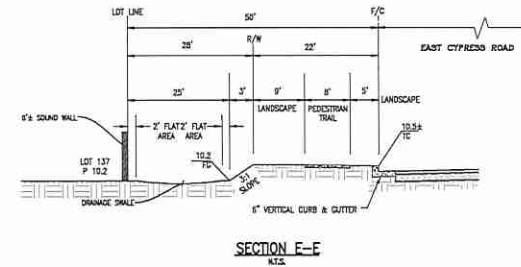
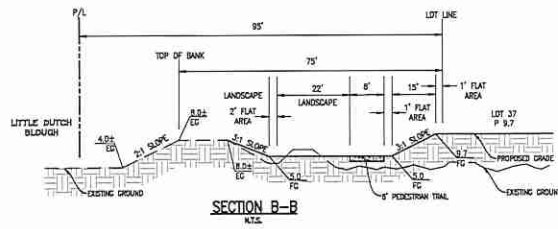
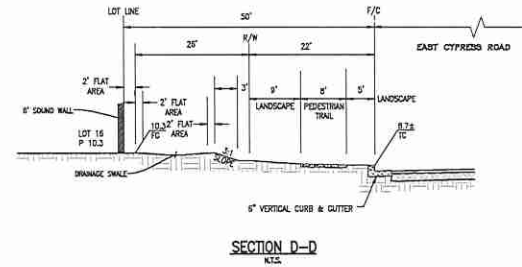
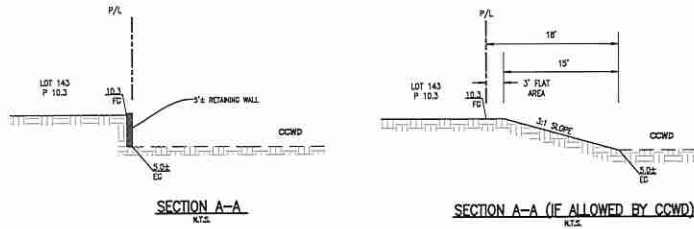
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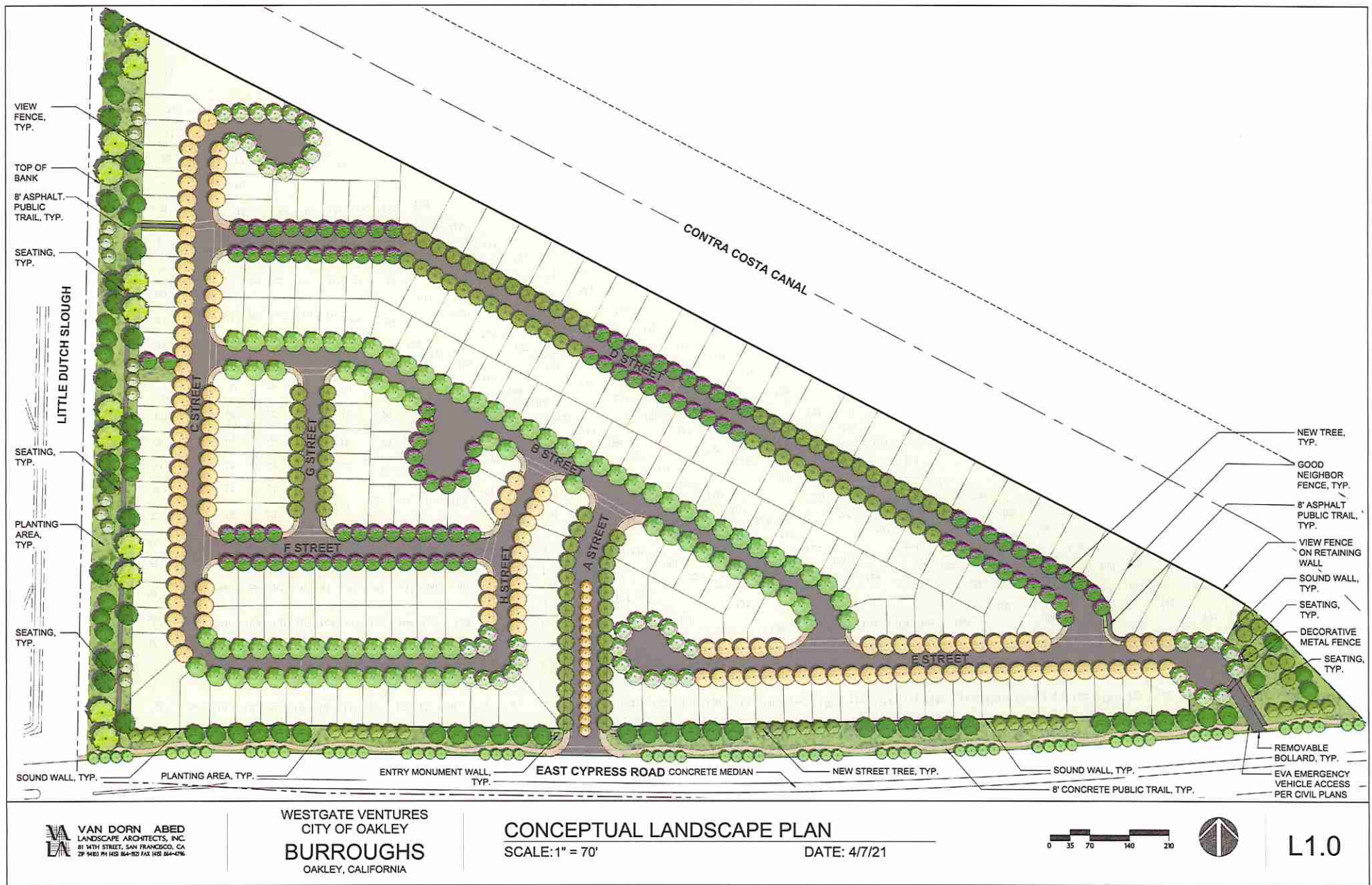


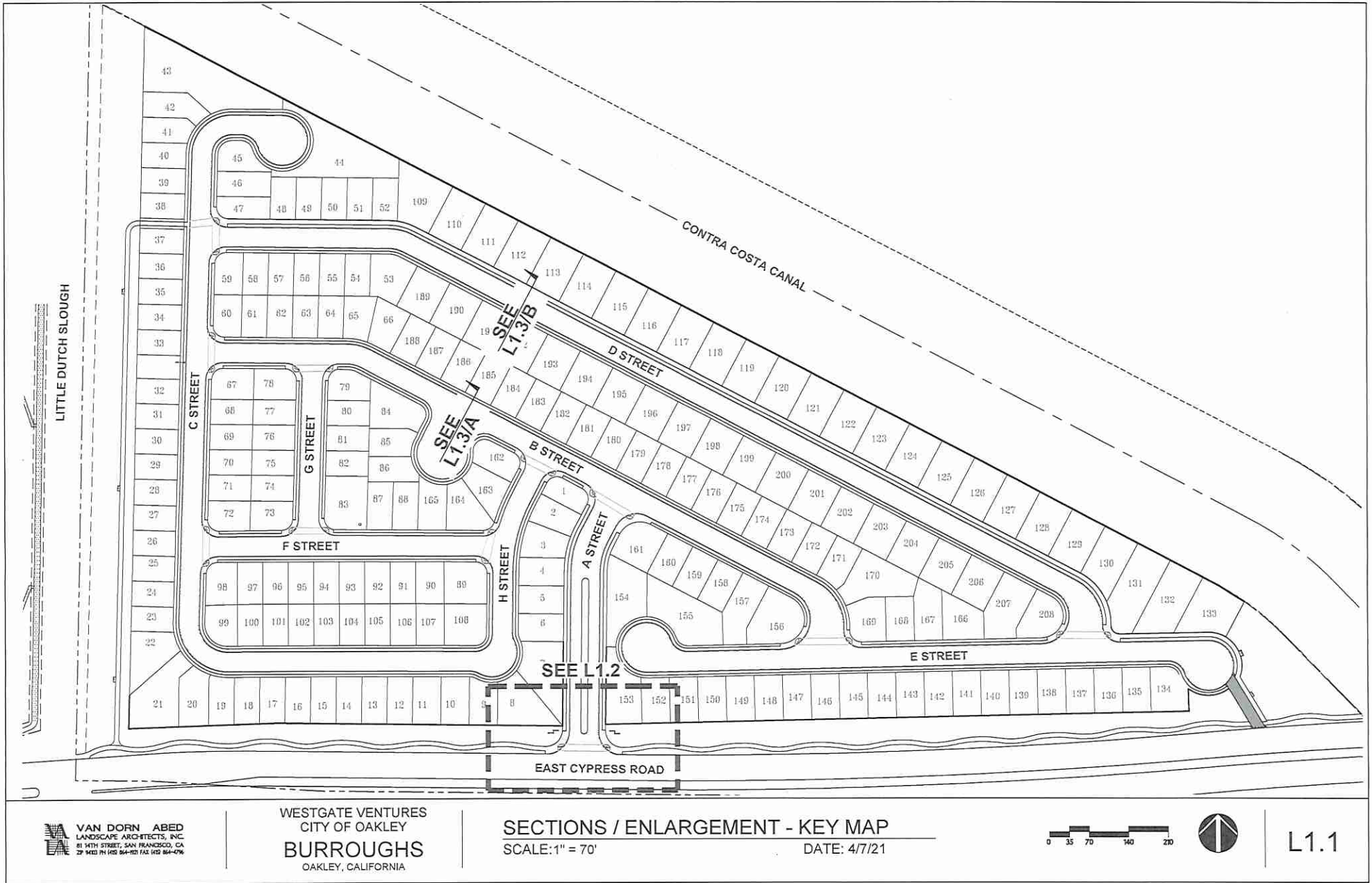
SUBDIVISION 9557
VESTING TENTATIVE MAP
GRADING SECTIONS

CITY OF OAKLEY
CONTRA COSTA COUNTY, CALIFORNIA

BELLECCI & ASSOCIATES, INC.
CONCORD, CALIFORNIA
APRIL 12, 2021

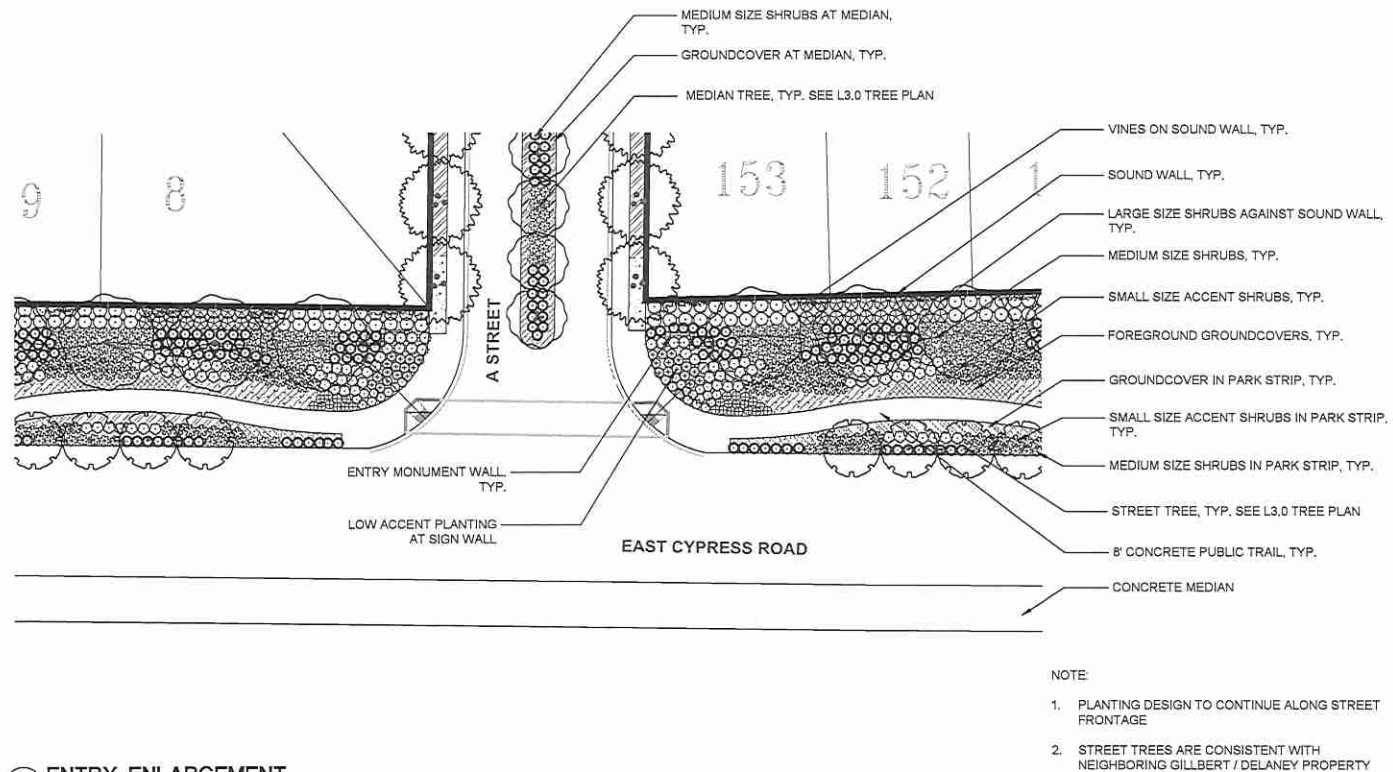




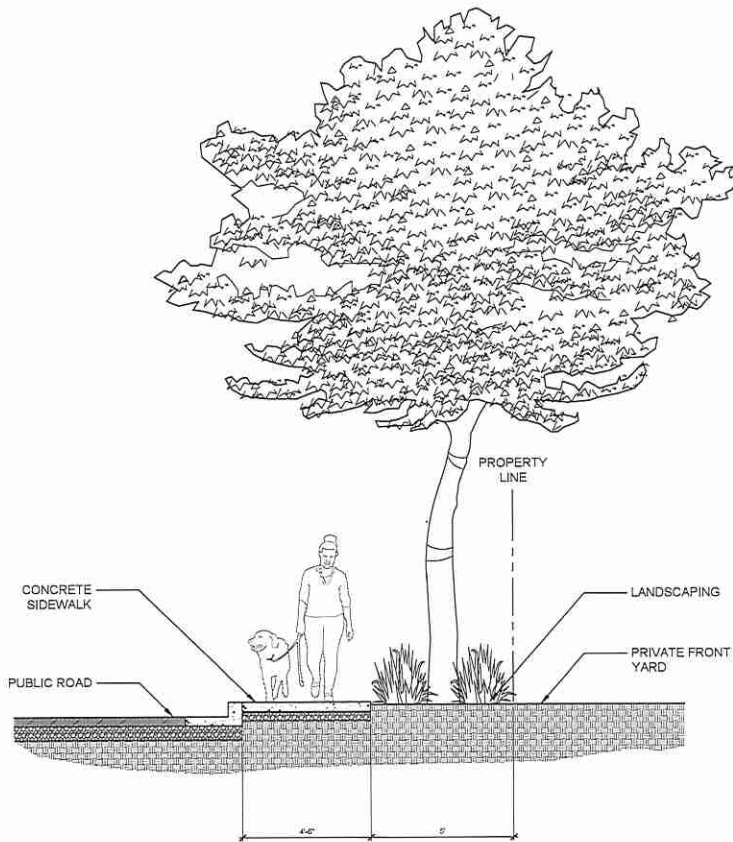


VAN DORN ABED
 LANDSCAPE ARCHITECTS, INC.
 81 14TH STREET, SAN FRANCISCO, CA
 415 398-1100 FAX 415 398-0706

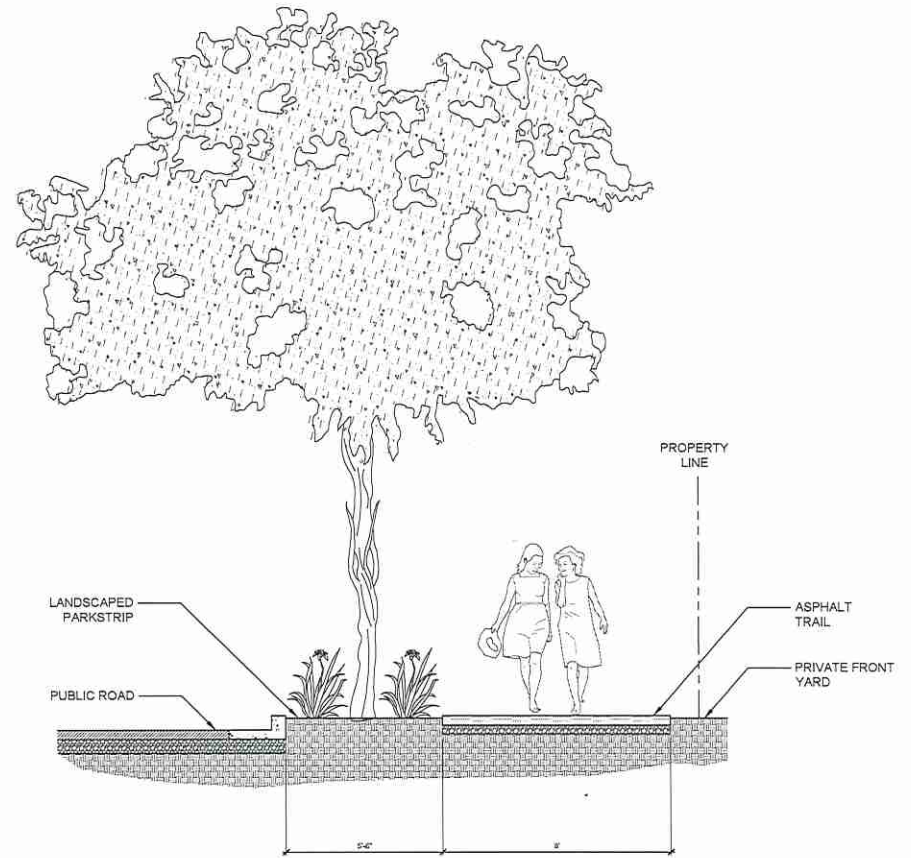
WESTGATE VENTURES
 CITY OF OAKLEY
BURROUGHS
 OAKLEY, CALIFORNIA



A ENTRY ENLARGEMENT



A TYPICAL SIDEWALK SECTION



B TYPICAL TRAIL SECTION



**DECORATIVE
METAL FENCE**



**GOOD NEIGHBOR
FENCE**



VIEW FENCE



SOUND WALL



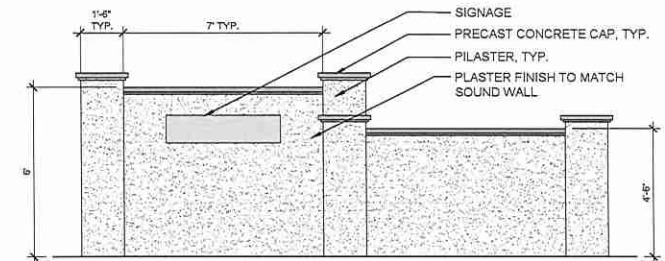
ASPHALT TRAIL



BENCH



**REMOVABLE
BOLLARD**



ENTRY MONUMENT WALL

SCALE: 1/2" = 1'-0"



Acer macrophyllum
Bigleaf Maple



Alnus rhombifolia
White Alder



x Chitalpa tashkentensis
Chitalpa



Crataegus phaenopyrum
Washington Hawthorn



Ginkgo biloba
Maidenhair Tree



Ginkgo biloba 'Princeton Sentry'
Princeton Sentry Maidenhair Tree



Populus fremontii 'Nevada'
Fremont Cottonwood



Pyrus calleryana 'New Bradford'
New Bradford Flowering Pear



Quercus agrifolia
Coast Live Oak



Robinia 'Purple Robe'
Locust



Tristaniaopsis laurina 'Elegant'
Elegant Water Gum



Ulmus parvifolia
Chinese Elm

TREES

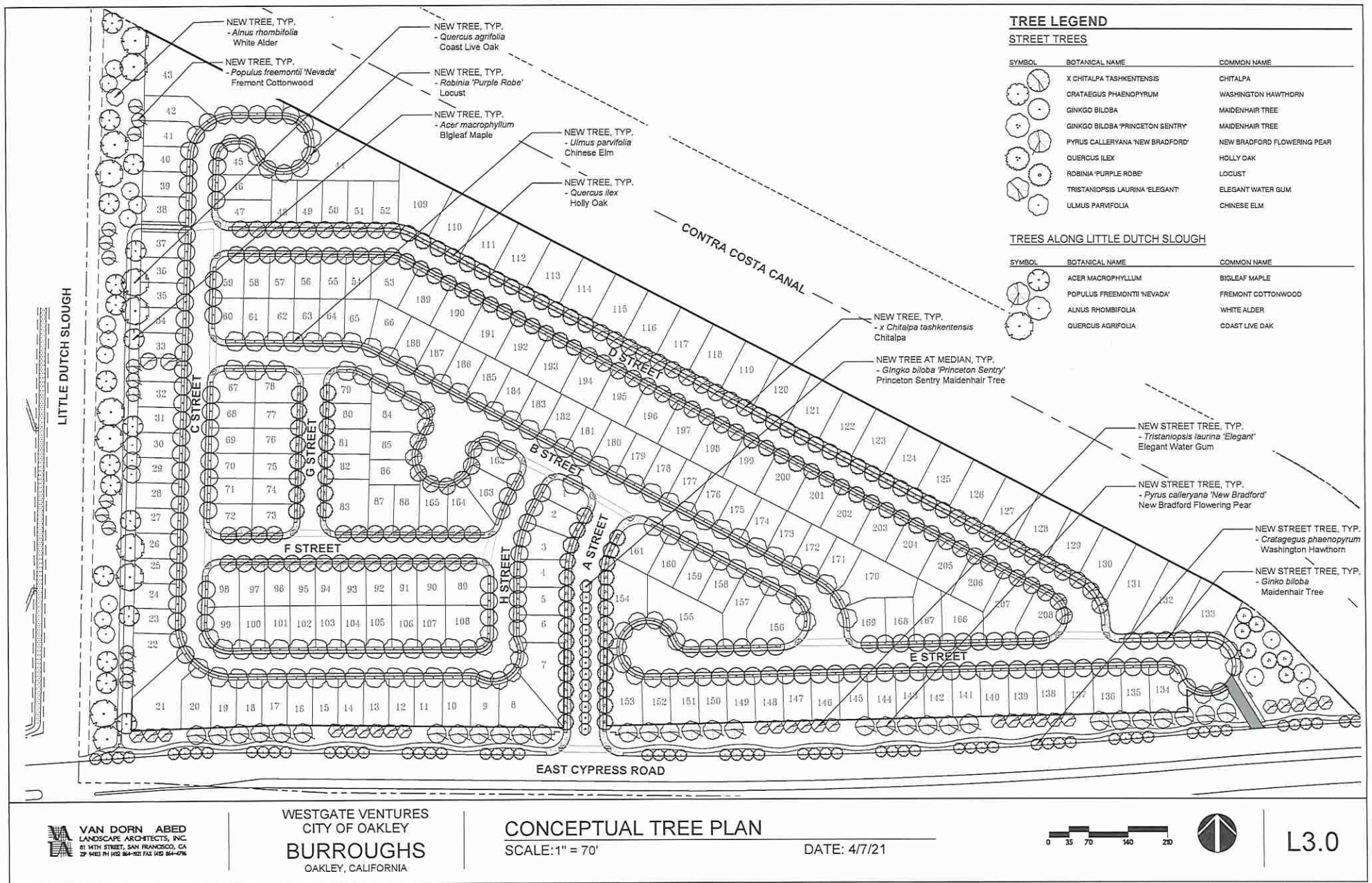


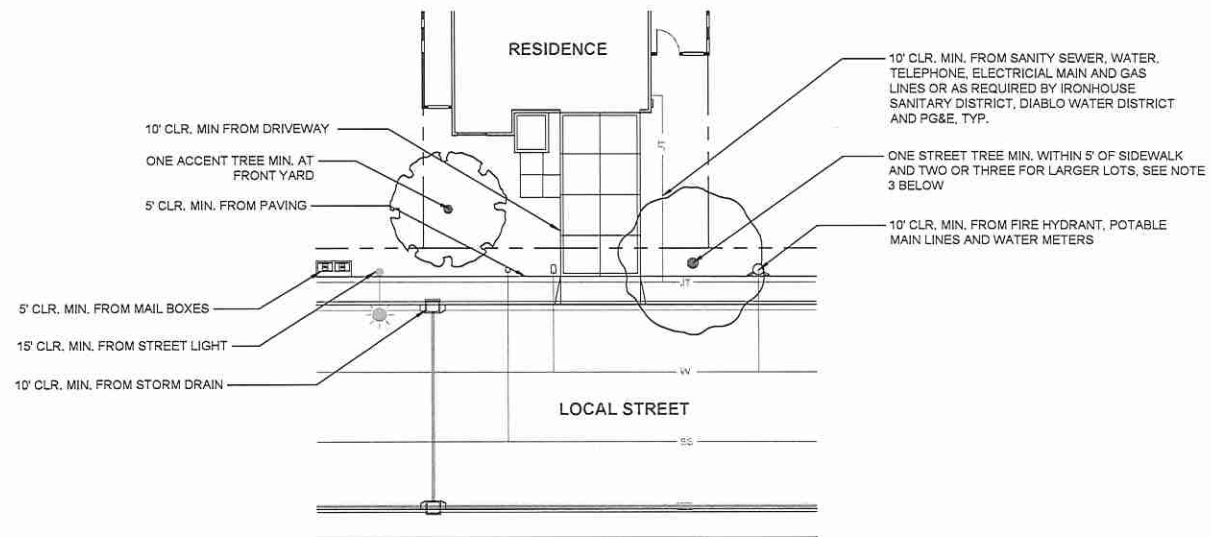
SHRUBS



VINES

GROUNDCOVER





NOTES:

1. CLEARANCE SHOWN ARE FOR TREES
2. KEEP TREES 15' CLEAR FROM STOP SIGNS OR CURB RADIUS AND REFER TO PG&E FOR PLANTING REQUIREMENT NEAR OVERHEAD LINES
3. LOT FRONTAGE SIZE, DRIVEWAY LOCATIONS, AND UTILITY LOCATIONS SHALL BE DESIGNED TO ALLOW FOR MAXIMUM STREET TREE PLANTING

TREE PALETTE

STREET TREES

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	X CHITALPA TASHKENTENSIS	CHITALPA	24" BOX	L	30'H X 30'W
	CRATAEGUS PHAENOPYRUM	WASHINGTON HAWTHORN	24" BOX	M	30'H X 20'W
	GINKGO BILOBA	MAIDENHAIR TREE	24" BOX	M	35'-50'H X 25'-40'W
	GINKGO BILOBA 'PRINCETON SENTRY'	MAIDENHAIR TREE	24" BOX	M	45'H X 20'W
	PYRUS CALLERYANA 'NEW BRADFORD'	NEW BRADFORD FLOWERING PEAR	24" BOX	M	30'H X 35'W
	QUERCUS ILEX	HOLLY OAK	24" BOX	L	30'-60'H X 30'-60'W
	ROBINIA 'PURPLE ROBE'	LOCUST	24" BOX	L	40'H X 30'W
	TRISTANOPSIS LAURINA 'ELEGANT'	ELEGANT WATER GUM	24" BOX	M	30'H X 30'W
	ULMUS PARVIFOLIA	CHINESE ELM	24" BOX	M	45'H X 35'W

TREES ALONG LITTLE DUTCH SLOUGH

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	ACER MACROPHYLLUM	BIGLEAF MAPLE	24" BOX	H	40'-75'H X 40'-75'W
	POPULUS FREEMONTII 'NEVADA'	FREMONT COTTONWOOD	24" BOX	M	40'-60'H X 30'-50'W
	ALNUS RHOMBIFOLIA	WHITE ALDER	24" BOX	H	50'-60'H X 40'-70'W
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX	L	20'-70'H X 25'-80'W

MEDIUM ACCENT TREES (FRONT YARDS)

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	CARPINUS BETULUS 'FASTIGIATA'	EUROPEAN HORNBEAM	15 GAL	M	30'H X 25'W
	CERCIS CANADENSIS	EASTERN REDBUD	15 GAL	M	25'-35'H X 25'-35'W
	CRATAEGUS PHAENOPYRUM	WASHINGTON HAWTHORN	15 GAL	M	30'H X 20'W
	GINKGO BILOBA 'PRINCETON SENTRY'	MAIDENHAIR TREE	15 GAL	M	45'H X 20'W
	LAURUS NOBILIS 'SARATOGA'	SWEET BAY	15 GAL	L	30'H X 20'W
	LYONOTAMNUS FLORIBUNDUS	IRONWOOD	15 GAL	L	30'H X 20'W
	ROBINIA 'PURPLE ROBE'	LOCUST	15 GAL	L	40'H X 30'W
	PISTACIA CHINENSIS	CHINESE PISTACHE	15 GAL	L	35'H X 30'W

SMALL ACCENT TREES (FRONT YARDS)

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	ACER PALMATUM 'SANGO KAKU'	CORAL BARK MAPLE	15 GAL	M	25'H X 20'W
	GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	15 GAL	L	25'H X 20'W
	LAGERSTROEMIA 'MUSKOGEE'	GRAPE MYRTLE	15 GAL	L	25'H X 15'W
	MAGNOLIA X SOULANGIANA	SAUCEUR MAGNOLIA	15 GAL	M	25'H X 25'W
	PRUNUS YEDOENSIS 'AKEBONO'	FLOWERING CHERRY	15 GAL	M	25'H X 25'W
	RHUS LANCEA	AFRICAN SUMAC	15 GAL	L	20'H X 20'W

PLANTING DESIGN INTENT STATEMENT

The projects shrub and ground cover planting design utilizes all low water use drought tolerant plant materials for maximum water conservation. The trees consist of a mix of primarily low and medium water use species. Some high water use native riparian trees species are utilized along the West side of the project for mitigation compliance. Shade tolerant low water use plants will be utilized on the North facing sides of the project. The plants have been selected utilizing the Model Water Efficient Landscape Ordinance WUCOLS Plant Lists. A minimum of 3" of bark mulch will be placed in all shrub and groundcover areas.

WATER USE DESIGN INTENT STATEMENT

The irrigation system will comply with the State of California's Model Water Efficient Landscape Ordinance as adopted by the City of Oakley. System will be a fully automatic, low gallon system with matched precipitation rate emitters on each circuit. The low, medium and high water use hydrozones will be on separate valve circuits. All new trees will have separate drip or bubbler circuits. The remote control valves will have integral pressure regulators to prevent fluctuations and ensure constant application rates to minimize over or under watering. The electronic irrigation controller will be weather based and make automatic adjustments based on current climate along with multiple programs and application cycles/start times. A rain switch will be installed to prevent irrigation during rainy periods. A flow sensor and master valve will be connected to the controller to allow automatic shut off of any valve circuit or main line in the event of a pipe break to prevent water waste.

PLANT PALETTE

SHRUBS

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	LAVATERA ASSURGENTIFLORA	MALLOW	5 GAL	L	10'H X 10'W
	MANDINA DOMESTICA	HEAVENLY BAMBOO	5 GAL	L	6'H X 4'W
	RITTOFORUM TOBIRA 'VARIAGATA'	VARIAGATED TOBIRA	5 GAL	L	3'H X 5'W
	PRUNUS CAROLINIANA 'BRIGHT 'N' TIGHT'	CAROLINA LAUREL	5 GAL	L	8'H X 7'W
	RHAPROLEPIS INDICA 'SPRINGTIME'	INDIAN HAWTHORN	5 GAL	L	5'H X 5'W
	XYLOSMA CONGESTUM	SHINY XYLOSMA	5 GAL	L	10'H X 10'W
	ASPIDISTRA ELATOR	CAST IRON PLANT	1 GAL	L	3'H X 2'W
	CEANOTHUS SPECIES	LIAC	1 GAL	L	4'H X 8'W
	DIETES BICOLOR	FORTNIGHT LILY	1 GAL	L	3'H X 3'W
	ERYNIMUM SOWELS MAUVE	BOWELS MAUVE WALLFLOWER	5 GAL	L	3'H X 4'W
	EURYOPS SPECIES	DASY	5 GAL	L	4'H X 4'W
	FESTUCA MAIREI	ATLAS FESCUE	1 GAL	L	3'H X 2'W
	GARRYA SPECIES	SILK TASSEL	5 GAL	L	4'H X 4'W
	GREVILLEA 'NOELI'	GREVILLEA	5 GAL	L	4'H X 5'W
	LAVANDULA ANGLUSTIFOLIA	ENGLISH LAVENDER	1 GAL	L	2'H X 3'W
	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	L	3'H X 2'W
	LOMITALUM 'SHANG-WHITE'	EMERALD SNOW FRINGE	5 GAL	L	4'H X 2'W
	NADINA SPECIES	BAMBOO	1 GAL	L	3'H X 3'W
	PHORADENDRUM HYBRIDS	FLAX	5 GAL	L	4'H X 2'W
	RHAPROLEPIS SPECIES	HAWTHORN	5 GAL	L	4'H X 4'W
	ROSMARINUS OFFICINALIS 'TUSCAN BLUE'	ROSEMARY	5 GAL	L	6'H X 2'W
	SALVIA SPECIES	SAGE	5 GAL	L	3.5'H X 3'W
	WESTRINGIA FRUTICOSA 'MORNING LIGHT'	COASTAL ROSEMARY	5 GAL	L	3.5'H X 3.5'W
	CALLISTEMON 'LITTLE JOHN'	BOTTLE BRUSH	1 GAL	L	3'H X 2'W
	CEANOTHUS SPECIES	LIAC	1 GAL	L	2'H X 8'W
	FESTUCA OVINA GLAUCA	BLUE FESCUE	1 GAL	L	1'H X 1'W
	LANTANA 'DWARF YELLOW'	DWARF LANTANA	1 GAL	L	2'H X 2'W
	PHORADENDRUM HYBRIDS 'TONEY TIGER'	FLAX	1 GAL	L	2'H X 2'W
	SANTOLINA VIRENS	GREEN LAVENDER COTTON	1 GAL	L	2.5'H X 2.5'W

VINES

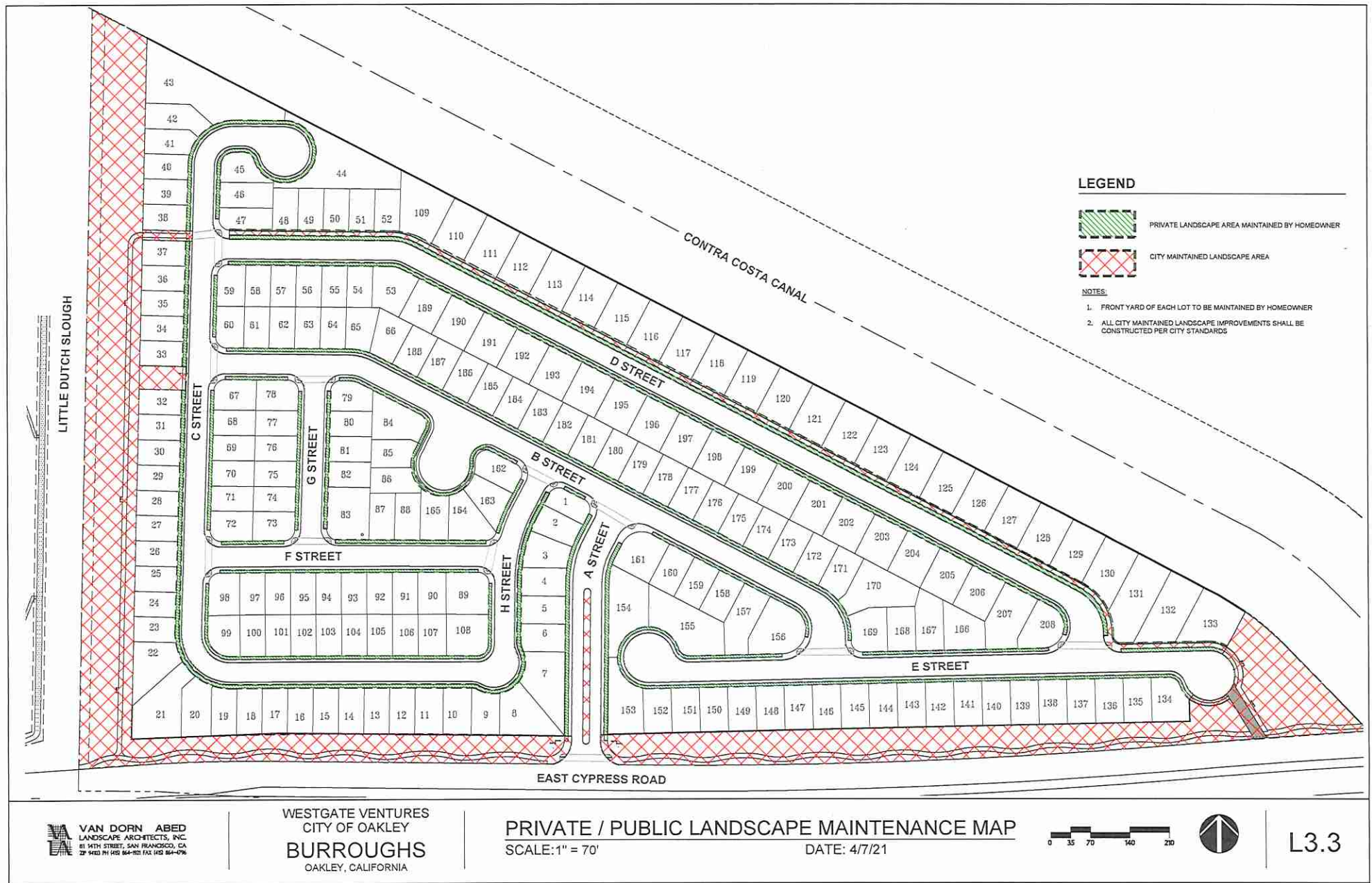
SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	GELSEMIUM SEMPERENS	YELLOW JASMINE	1 GAL	L	15'H X 5'W
	MACFADYENA LINGUIS-CATI	CATS CLAW VINE	1 GAL	L	25'H X 25'W

GROUND COVER

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	ARCTOSTAPHYLOS SPECIES	CARPET MANZANITA	1 GAL	L	1'H X 5'W
	ECHVEVERIA SPECIES	ECHVEVERIA	4" POT	L	6'H X 6'W
	ERODUM REICHAARDII	ALPINE GERANIUM	4" POT	L	3'H X 12'W
	CEANOTHUS SPECIES	CALIFORNIA LIAC	1 GAL	VL	1'H X 10'W
	CORPOSSMA KROB 'VARIAGATA'	CREeping CORPOSSMA	1 GAL	L	1'H X 5'W
	MYOPORUM PARVIFOLIUM	MYOPORUM	1 GAL	L	1'H X 7'W
	SEDUM SPECIES	STONECROP	4" POT	L	1'H X 2'W

SHRUBS ALONG LITTLE DUTCH SLOUGH

SYMBOL	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	MATURE HEIGHT & SPREAD
	ACHILLEA MILLEFOOLIUM	YARROW	1 GAL	L	2.5'H X 2.5'W
	ARCTOSTAPHYLOS 'JOHN DOURLY'	JOHN DOURLY MANZANITA	1 GAL	L	2'H X 5'W
	ARCTOSTAPHYLOS 'HOWARD MCMINN'	HOWARD MCMINN MANZANITA	1 GAL	L	7'H X 9'W
	CEANOTHUS GRISEUS VAR. 'YANKEE POINT'	YANKEE POINT CEANOTHUS	1 GAL	L	2.5'H X 9'W
	GALVESIA SPECIOSA	ISLAND BUSH SNAPDRAGON	5 GAL	L	3'H X 9'W
	IRIS DOUGLASSIANA	DOUGLAS IRIS	1 GAL	L	1.5'H X 2.5'W
	LIMNOLM CALIFORNICUM	WESTERN MARSH ROSEMARY	1 GAL	L	2'H X 2'W
	MAHONIA REPENS	CREeping OREGON GRAPE	1 GAL	L	1.5'H X 2.5'W
	MIMULUS CARDINALIS	SCARLET MONKEY FLOWER	1 GAL	L	2'H X 2'W
	MUHLBERGIA RIGENS	DEER GRASS	5 GAL	L	4.5'H X 5'W
	OENOTHERA CALIFORNICA	CALIFORNIA EVENING PRIMROSE	5 GAL	L	1.5'H X 8'W
	RHAMNUS CALIFORNICA	ITALIAN BUCKTHORN	5 GAL	L	7'H X 6'W
	ROSA CALIFORNICA	CALIFORNIA WILD ROSE	5 GAL	L	9'H X 9'W
	SALVIA CLEVELANDII	CLEVELAND SAGE	5 GAL	L	4'H X 7'W
	SEDYRINCHUM BELLUM	BLUE EYED GRASS	1 GAL	L	1.5'H X 2.5'W
	ZAUSCHNERIA CALIFORNICA	CALIFORNIA FUCHSIA	1 GAL	L	1'H X 2.5'W



HYDROZONE DESIGN INTENT STATEMENT:

ON-SITE AREAS:

OVERALL TOTAL: 238.959 SF

- THE IRRIGATION SYSTEM WILL COMPLY WITH THE STATE OF CALIFORNIA'S MODEL WATER EFFICIENT LANDSCAPE ORDINANCE AS ADOPTED BY THE CITY OF OAKLEY.
- THE IRRIGATION SYSTEM WILL BE A FULLY AUTOMATIC, LOW GALLON SYSTEM WITH MATCHED PRECIPITATION RATE EMITTERS ON EACH CIRCUIT.
- THE REMOTE CONTROL VALVES WILL HAVE INTEGRAL PRESSURE REGULATORS TO PREVENT FLUCTUATIONS AND ENSURE CONSTANT APPLICATION RATES TO MINIMIZE OVER OR UNDER WATERING.
- THE ELECTRONIC IRRIGATION CONTROLLER WILL BE WEATHER-BASED AND MAKE AUTOMATIC ADJUSTMENTS BASED ON CURRENT CLIMATE ALONG WITH MULTIPLE PROGRAMS AND APPLICATION CYCLES/START TIMES.
- A RAIN SWITCH WILL BE INSTALLED TO PREVENT IRRIGATION DURING RAINY PERIODS.
- A FLOW SENSOR AND MASTER VALVE WILL BE CONNECTED TO THE CONTROLLER TO ALLOW AUTOMATIC SHUT OFF OF ANY VALVE CIRCUIT OR MAIN LINE IN THE EVENT OF A PIPE BRAKE TO PREVENT WATER WASTE.
- HYDROZONE 1: CONSISTS OF ALL LOW WATER USE SHRUB AND GROUND COVER PLANT SPECIES.
- HYDROZONE 2: CONSISTS OF A MIX OF LOW AND MEDIUM WATER USE TREE SPECIES. HYDROZONE 2 IS CLASSIFIED AS MEDIUM WATER USE.
- HYDROZONE 3: CONSISTS OF HIGH WATER USE TREE SPECIES (INSTALLED PER MITIGATION REQUIREMENTS).
- THE LOW, MEDIUM AND HIGH WATER USE HYDROZONES WILL BE ON SEPARATE VALVE CIRCUITS.

Project Name: Burroughs, Oaklay CA

Reference Evapotranspiration (ET₀): 45.3[illegible][illegible]

$\alpha = \text{HCF} / (\text{Annual Gallons} \cdot \text{liters}) = 0.00162 / (0.27 \text{ TAF} + 0.3) = 0.00162 / 0.57$
where 0.57 is a conversion factor that converts acre-inches per year per year to gallons per year, 1.8 is the total land area in square feet, 2.6 is the total special land area in acres, 0.27 TAF is 0.55 for residential areas and 0.65 for non-residential areas.

ETAF used MAWA calculation: 0.55

Average ITAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.65 or below for non-residential areas.

ETAF Calculations

ETAF Calculations		
Regular Landscape Areas		
Total ETAF x Area		88,905
Total Area		238,059
Average ETAF		0.37

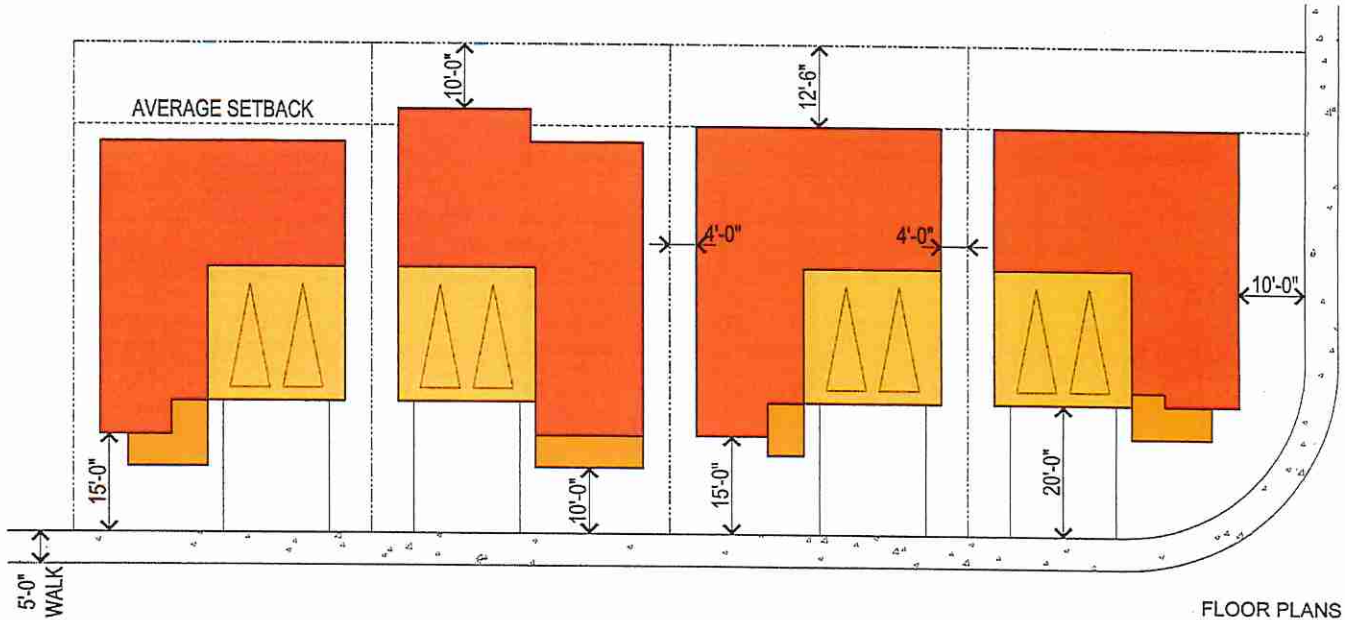
All Landscape Areas

Total ETAF x Area		88.90
Total Area		218.05
Average ETAF		0.31



TYPICAL STREETCAPE

ZONING REQUIREMENTS	
LOT SIZE	45' x 75'
SETBACKS	
Front Yard	
Living	15'
Porch	10'
Garage	20' Front Load
Rear Yard	
Minimum	10'
Average	12'-6"
Side Yard (Interior Lot)	
Minimum	4'
Side Yard (Corner Lot)	
Min. Interior	4'
Min. Streetside	10'
BLDG. HEIGHT	
Stories	2
Max. Height	35'



Burroughs Property
Oakley, CA
October 20, 2020

FLOOR PLANS

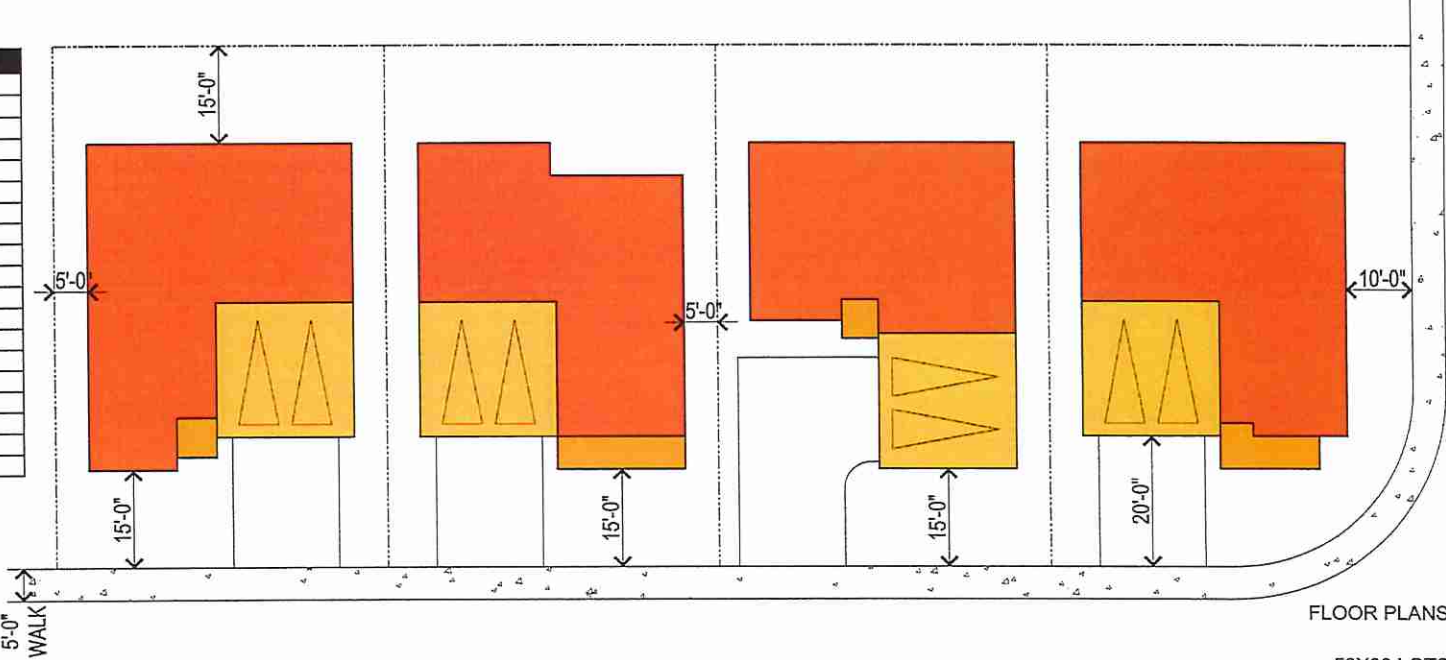
45X75 LOTS





TYPICAL STREETCAPE

ZONING REQUIREMENTS	
LOT SIZE	50' x 80'
SETBACKS	
Front Yard	
Living	15'
Porch	15'
Garage	20' Front Load
	15' Side Load
Rear Yard	
Minimum	15'
Side Yard (Interior Lot)	
Minimum	5'
Side Yard (Corner Lot)	
Min. Interior	5'
Min. Streetside	10'
BLDG. HEIGHT	
Stories	2
Max. Height	35'



FLOOR PLANS

Burroughs Property
Oakley, CA
October 20, 2020

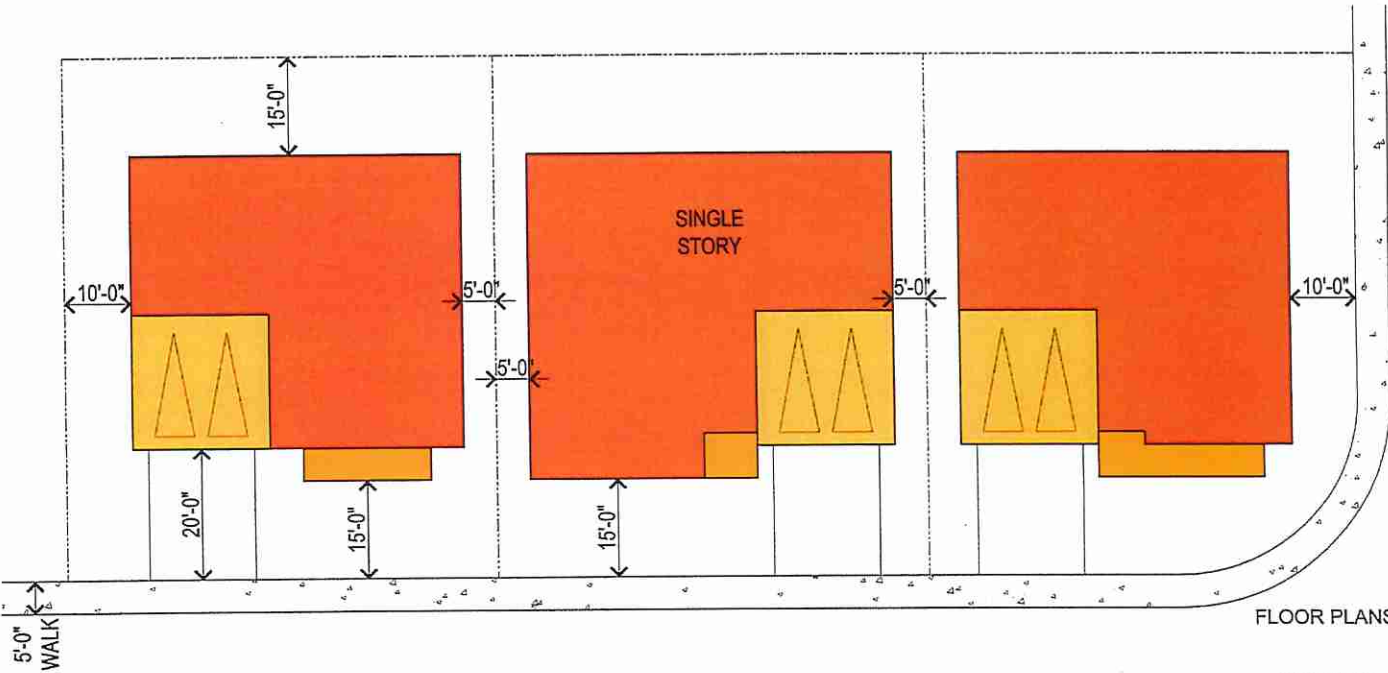
50X80 LOTS





TYPICAL STREETCAPE

ZONING REQUIREMENTS	
LOT SIZE	65' x 80'
SETBACKS	
Front Yard	
Living	15'
Porch	15'
Garage	20' Front Load 15' Side Load
Rear Yard	
Minimum	15'
Side Yard (Interior Lot) - 1 Story	
Minimum	5'/5'
Side Yard (Interior Lot) - 2 Story	
Minimum	5'/10'
Side Yard (Corner Lot)	
Min. Interior	5'
Min. Streetside	10'
BLDG. HEIGHT	
Stories	2
Max. Height	35'

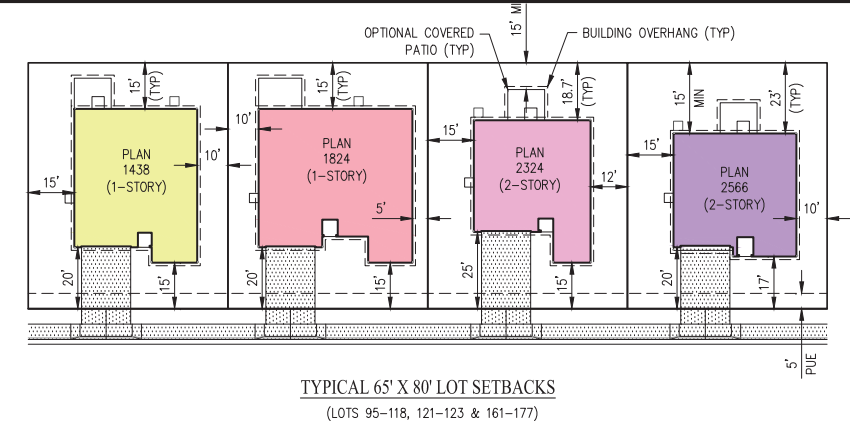
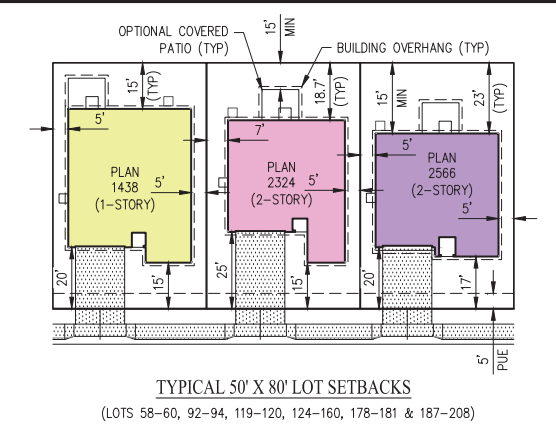
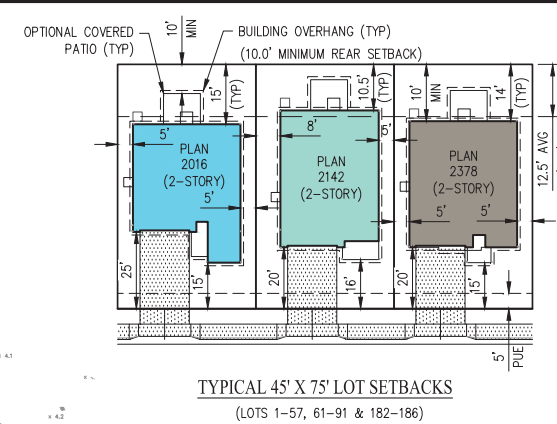


FLOOR PLANS

Burroughs Property
Oakley, CA
October 20, 2020

65X80 LOTS





MINIMUM SETBACKS				
	45'X75' LOTS	50'X80' LOTS	65'X80' LOTS (1-STORY)	65'X80' LOTS (2-STORY)
FRONT (LIVING/PORCH)	15'/10'	15'/15'	15'/15'	15'/15'
GARAGE	20'	20'	20'	20'
SIDE	4'	5'	5'/5'	5'/10'
SIDE (CORNER)	10'	10'	10'	10'
REAR	10'	15'	15'	15'

UNIT MIX SUMMARY					
PLAN	ELEVATION TYPE			UNIT COUNT	% MIX
	A	B	D		
PLAN 2016	13	10	11	34	17.8%
PLAN 2142	11	11	9	31	16.2%
PLAN 2378	9	12	10	31	16.2%
PLAN 1438	10	6	8	24	12.6%
PLAN 1824	7	8	7	22	11.5%
PLAN 2324	6	9	9	24	12.6%
PLAN 2566	8	8	9	25	13.1%
TOTAL	64	64	63	191	100%
PERCENT	33.5%	33.5%	33.0%	---	100%

ELEVATION TYPES:
A - SPANISH ECLECTIC
B - CRAFTSMAN
D - FRENCH COTTAGE

LEGEND:
(M) MODEL HOME
(P) MODEL PARKING

DEVELOPMENT PLAN THE LANDING & THE MEADOW AT CYPRESS RANCH

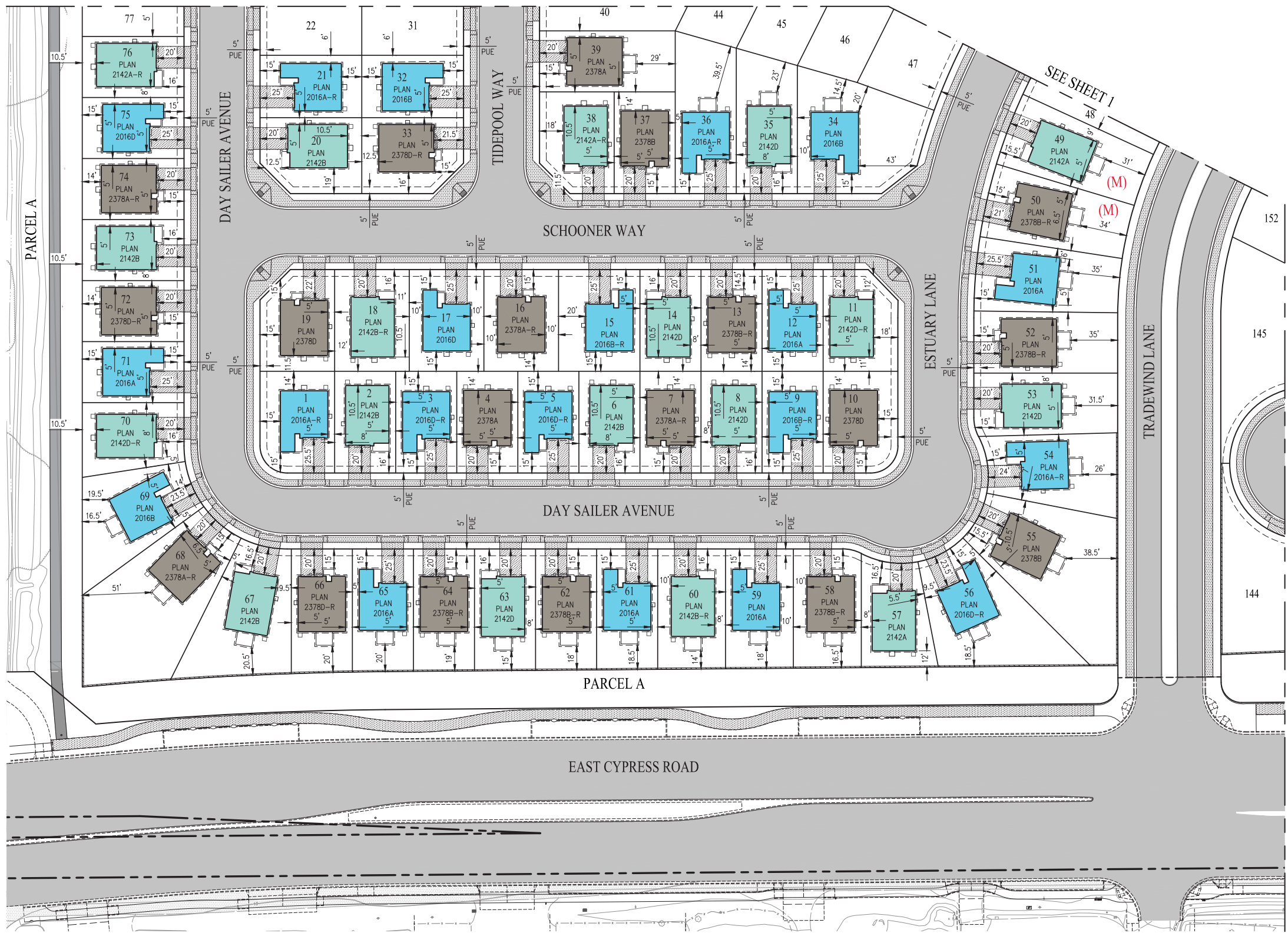
CITY OF OAKLEY CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1" = 40' DATE: APRIL 7, 2025

CIVIL ENGINEERS SURVEYORS PLANNERS

SAN RAMON (925) 866-0322
ROSEVILLE (916) 788-4456
WWW.CBANG.COM

SHEET NO.
1
OF 3 SHEETS

SEE SHEET 1



SEE SHEET 1

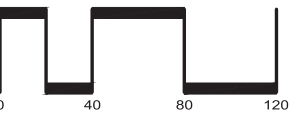
SEE SHEET 2

DEVELOPMENT PLAN

THE LANDING & THE MEADOW

AT CYPRESS RANCH

CITY OF OAKLEY CONTRA COSTA COUNTY CALIFORNIA
SCALE: 1" = 40' DATE: APRIL 7, 2025



SAN RAMON (925) 866-0322
ROSEVILLE (916) 788-4456
WWW.CBANDG.COM

CIVIL ENGINEERS SURVEYORS PLANNERS

SHEET NO.
3
OF 3 SHEETS



2016 'B' Craftsman

2124 'A' Spanish Eclectic

2378 'D' French Cottage

Street Scene



KB Home North Bay
4830 Business Center Drive Suite 150
Fairfield, CA 94534
(707) 389-7500
CITY OF OAKLEY

THE LANDING AT CYPRESS RANCH
45/50' WIDE LOTS

ELEVATION LEGEND

- 1 CONCRETE 'S' TILE ROOFING
- 2 CONCRETE FLAT TILE ROOFING
- 3 WOOD FASCIA BOARD / FASCIA GUTTER
- 4 STUCCO FINISH
- 5 STUCCO OVER FOAM TRIM
- 6 STUCCO OVER FOAM CORBELS
- 7 STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
- 8 PRE-FAB WINDOW SYSTEM
- 9 COMPOSITE ENTRY DOOR
- 10 METAL ROLL-UP GARAGE DOOR
- 11 DECORATIVE FOAM SHUTTERS
- 12 STUCCO OVER SHAPED FOAM TRIM
- 13 ILLUMINATED ADDRESS SIGN
- 14 CEMENTITIOUS FIBER LAP SIDING
- 15 OPTIONAL COACH LIGHT
- 16 WOOD CORBELS
- 17 DECORATIVE FOAM VENTS
- 18 DECORATIVE CLAY PIPES
- 19 DECORATIVE BOARD & BATTEN
- 20 TAPERED COLUMNS (STUCCO OVER WOOD FRAMING)
- 21 BRICK VENEER
- 22 STONE VENEER



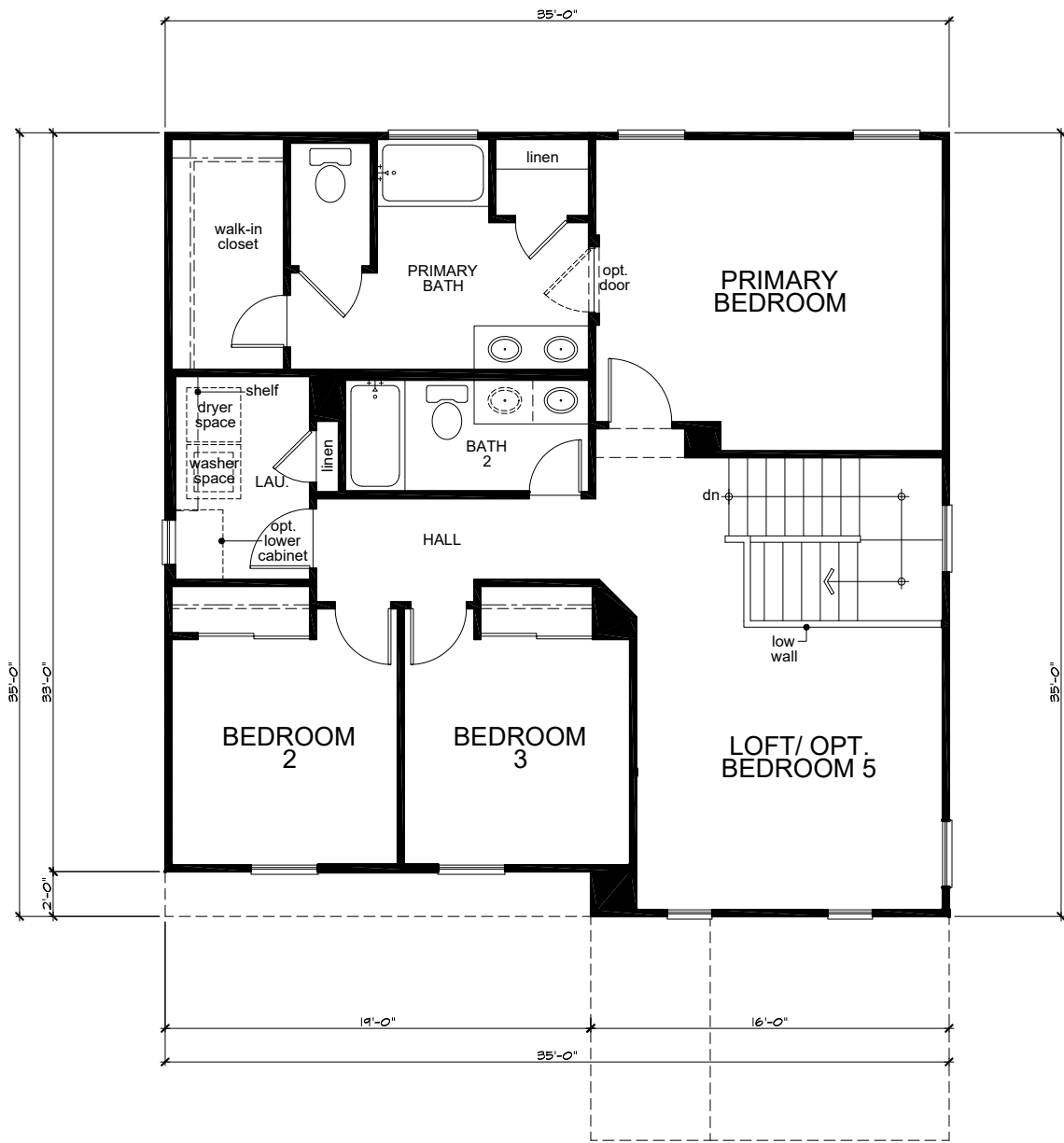
Elevation 'A' Spanish Eclectic



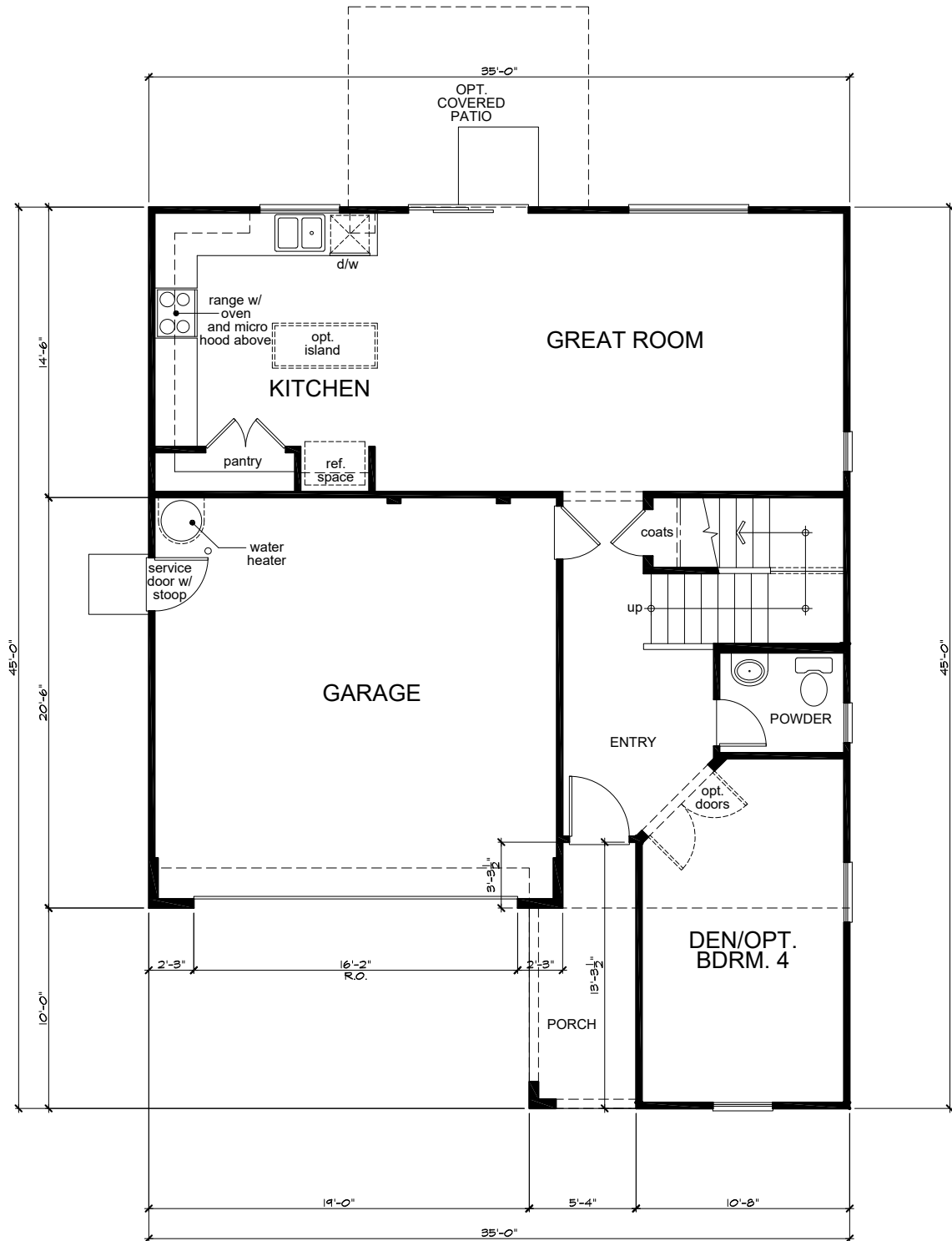
Elevation 'B' Craftsman



Elevation 'D' Prairie

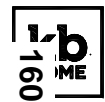


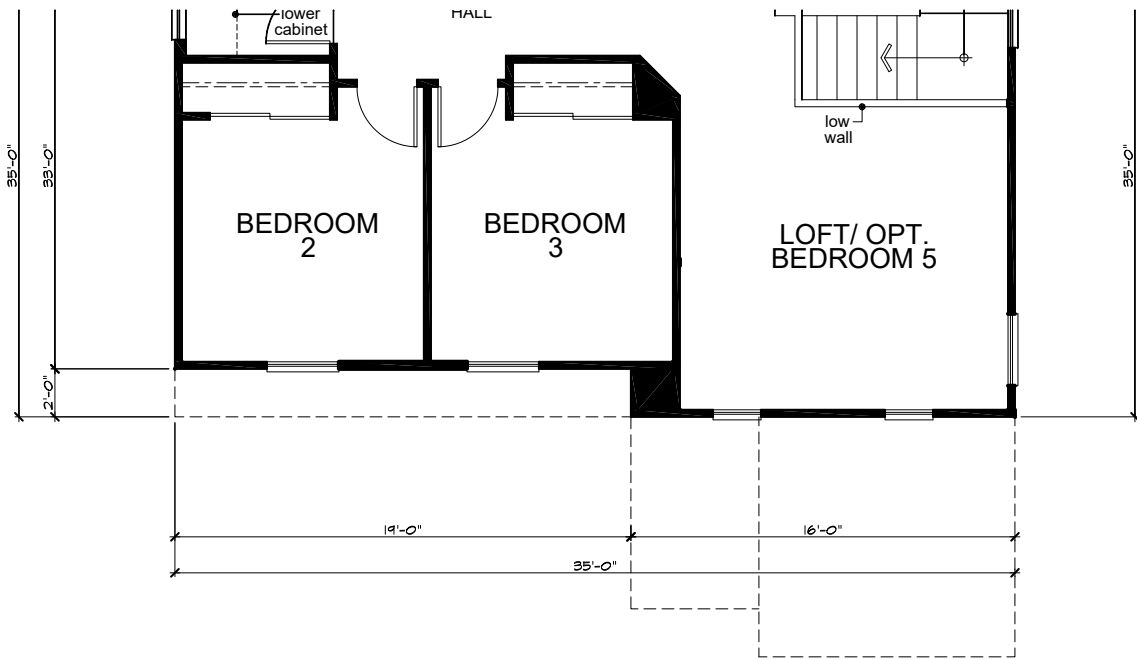
Second Floor Plan 'A'



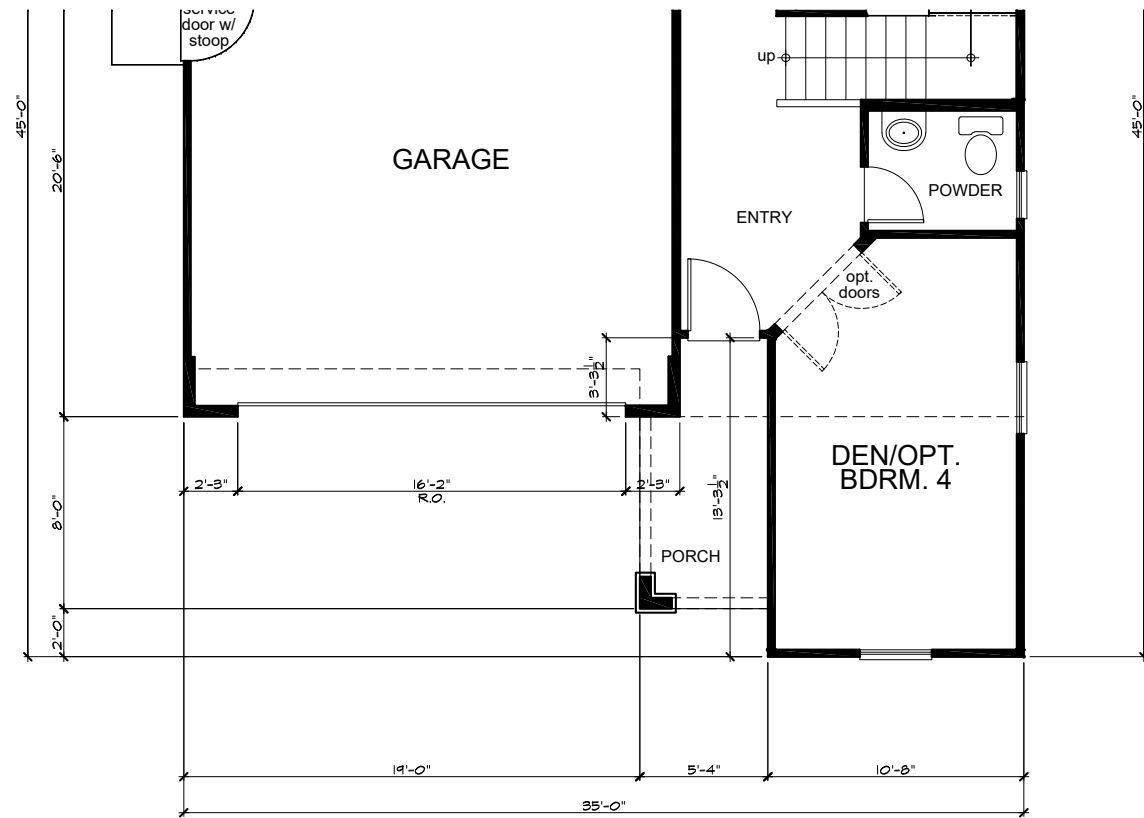
First Floor Plan 'A'

SQUARE FOOTAGE				
PLAN 235.2016				
	'A'	'B'	'D'	
FIRST FLOOR AREA	901	901	901	SQ. FT.
SECOND FLOOR AREA	1115	1115	1115	SQ. FT.
TOTAL AREA	2016	2016	2016	SQ. FT.
GARAGE AREA	419	419	419	SQ. FT.
PORCH AREA	65	65	55	SQ. FT.
OPTIONS:				
COVERED PATIO	120	120	120	SQ. FT.

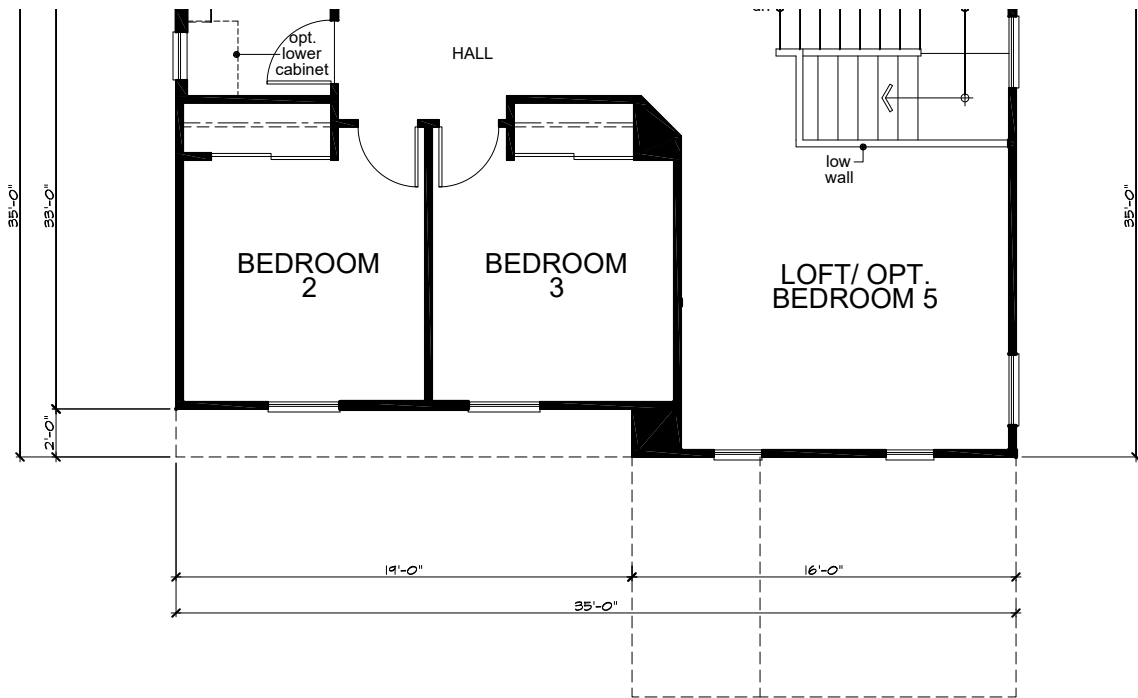




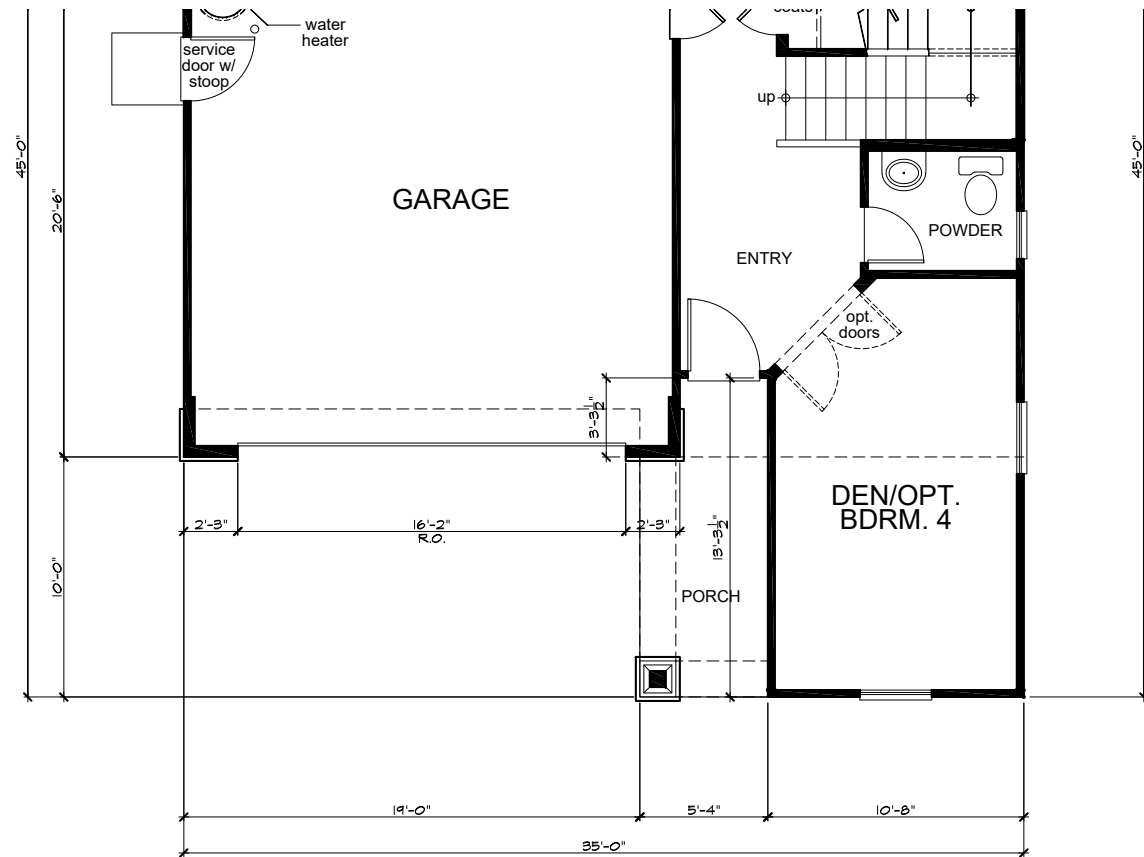
Second Floor Plan 'D'



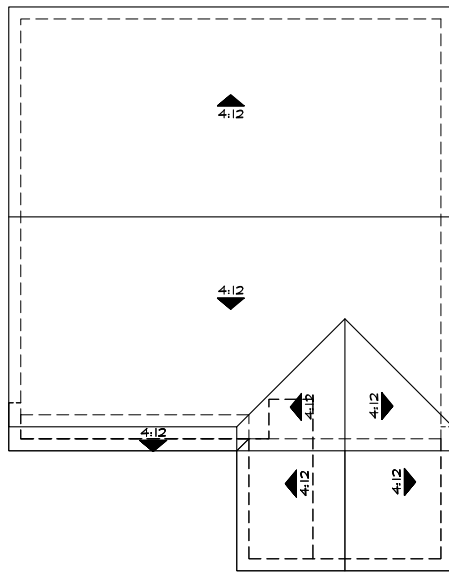
First Floor Plan 'D'



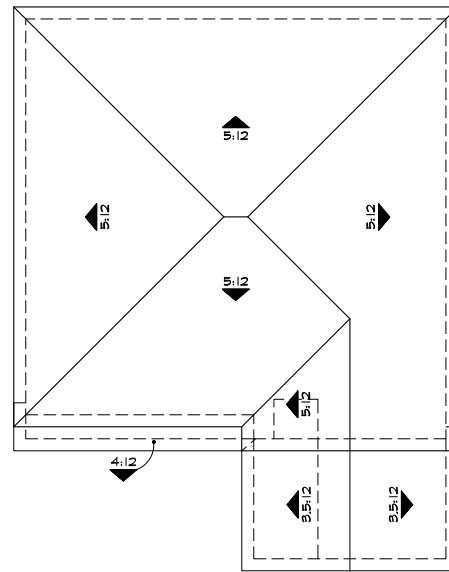
Second Floor Plan 'B'



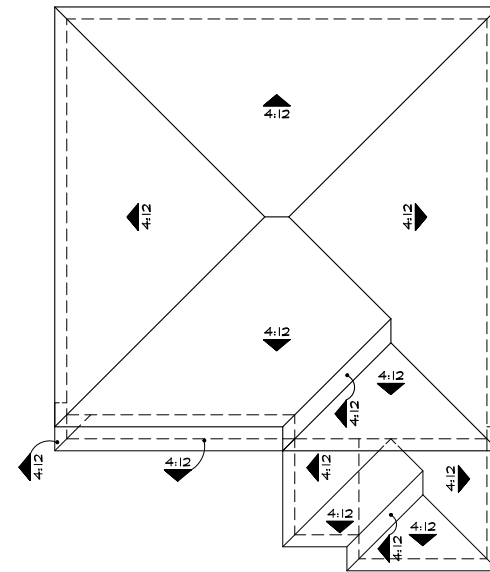
First Floor Plan 'B'



'A'



'B'



'D'

Roof Plans

THE LANDING AT CYPRESS RANCH
45'/50' WIDE LOTS



Left Elevation 'A'



Front Elevation 'A' - Spanish Eclectic



Right Elevation 'A'



Rear Elevation 'A'



Left Elevation 'B'



Front Elevation 'B' - Craftsman



Right Elevation 'B'



Rear Elevation 'B'



Left Elevation 'D'



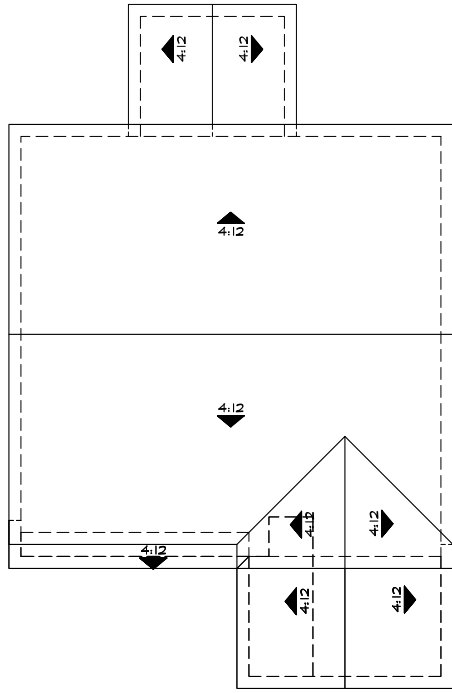
Front Elevation 'D' - Prairie



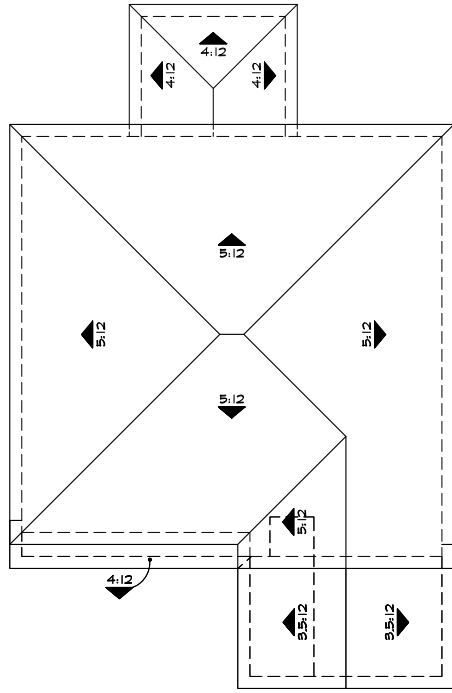
Right Elevation 'D'



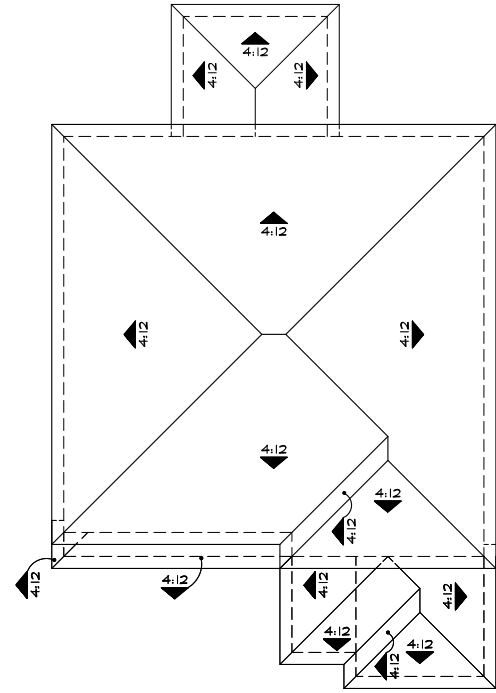
Rear Elevation 'D'



'A'

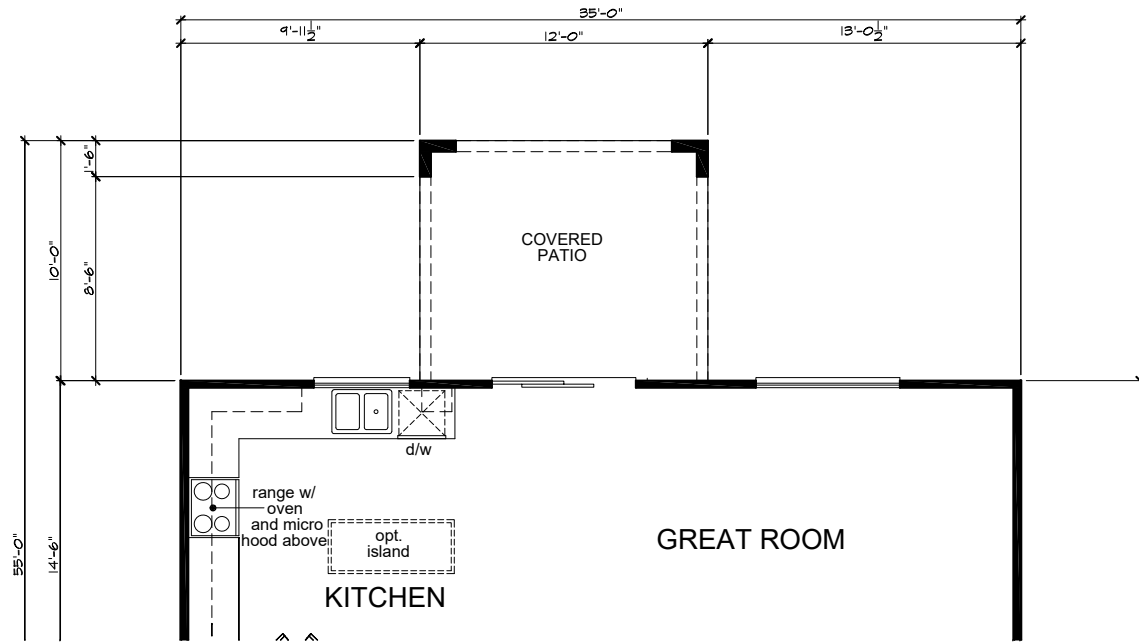


'B'



'D'

Roof Plans
at Covered Patio



Partial Floor Plan
at Covered Patio

THE LANDING AT CYPRESS RANCH
45/50' WIDE LOTS



Partial Right Elevation 'A'



Rear Elevation 'A'



Partial Left Elevation 'A'

Elevations
at Covered Patio

THE LANDING AT CYPRESS RANCH
45'/50' WIDE LOTS

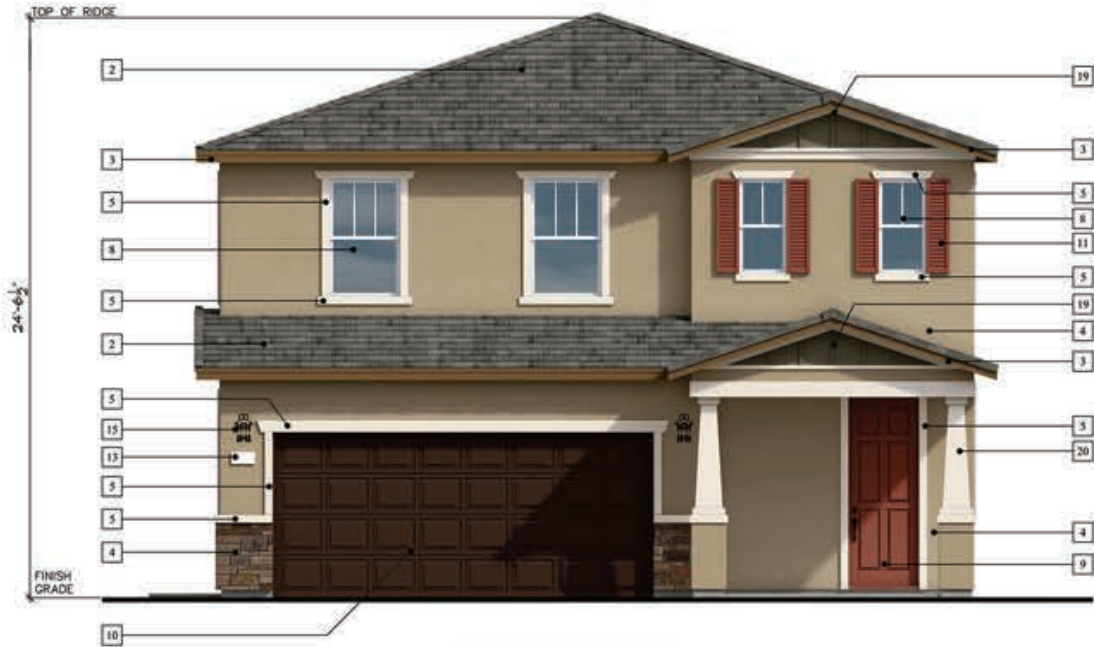


ELEVATION LEGEND

- 1 CONCRETE 'S' TILE ROOFING
- 2 CONCRETE FLAT TILE ROOFING
- 3 WOOD FASCIA BOARD / FASCIA GUTTER
- 4 STUCCO FINISH
- 5 STUCCO OVER FOAM TRIM
- 6 STUCCO OVER FOAM CORBELS
- 7 STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
- 8 PRE-FAB WINDOW SYSTEM
- 9 COMPOSITE ENTRY DOOR
- 10 METAL ROLL-UP GARAGE DOOR
- 11 DECORATIVE FOAM SHUTTERS
- 12 STUCCO OVER SHAPED FOAM TRIM
- 13 ILLUMINATED ADDRESS SIGN
- 14 CEMENTITIOUS FIBER LAP SIDING
- 15 OPTIONAL COACH LIGHT
- 16 WOOD CORBELS
- 17 DECORATIVE FOAM VENTS
- 18 DECORATIVE CLAY PIPES
- 19 DECORATIVE BOARD & BATTEN
- 20 TAPERED COLUMNS (STUCCO OVER WOOD FRAMING)
- 21 BRICK VENEER
- 22 STONE VENEER



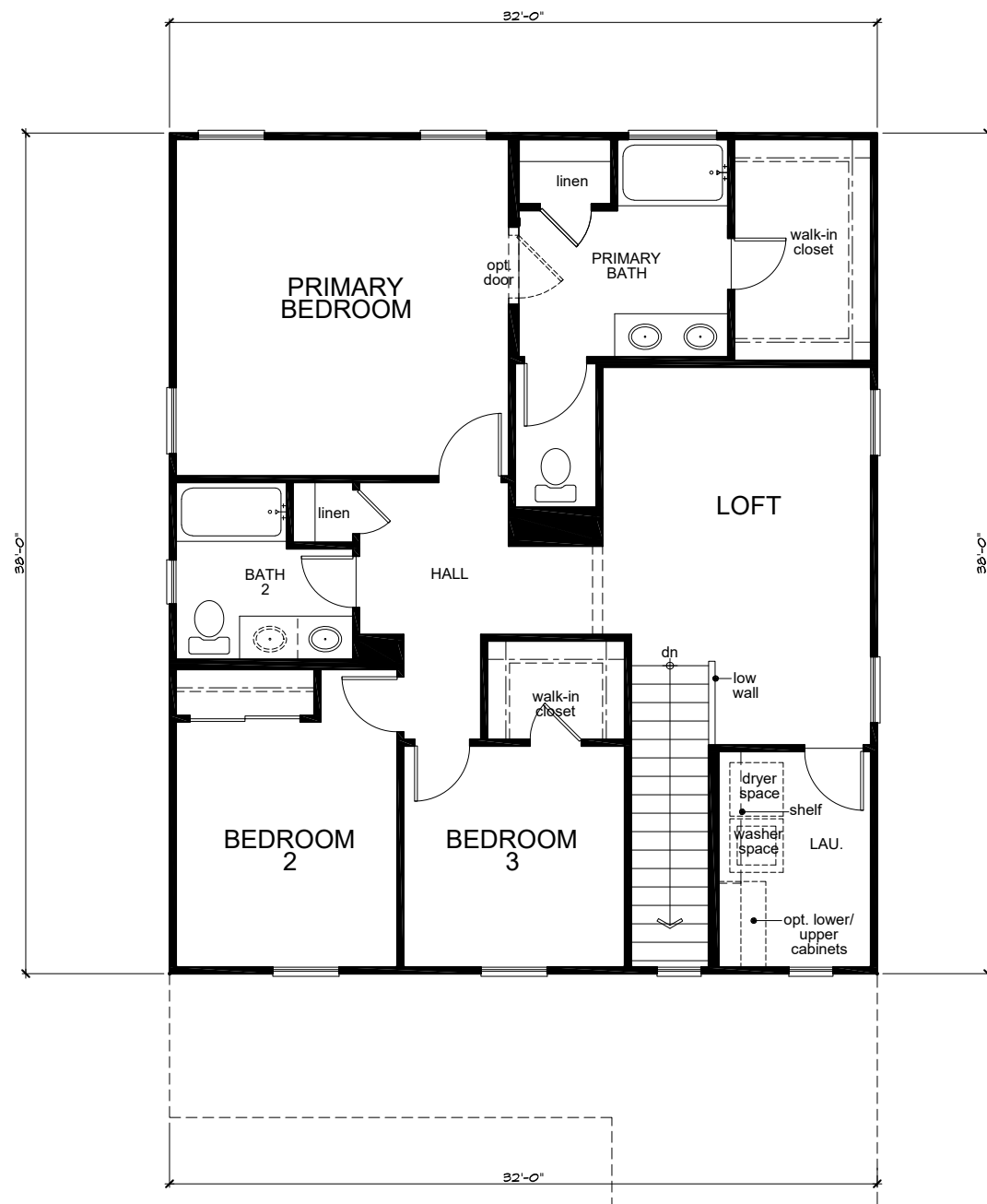
Elevation 'A' Spanish Eclectic



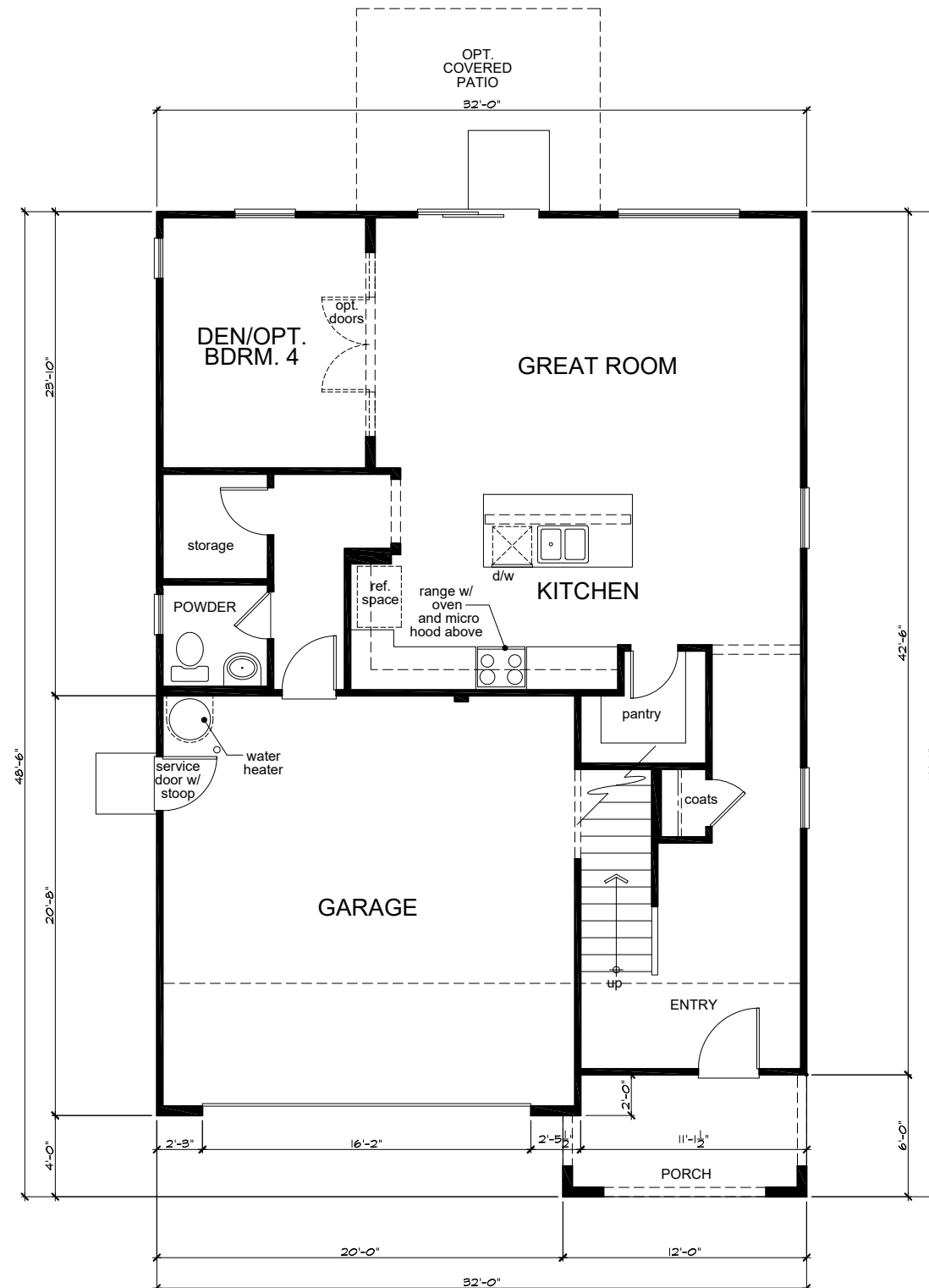
Elevation 'B' Craftsman



Elevation 'D' Prairie



Second Floor Plan 'A'



First Floor Plan 'A'

SQUARE FOOTAGE				
PLAN 232.2142				
	'A'	'B'	'D'	
FIRST FLOOR AREA	954	954	954	SQ. FT.
SECOND FLOOR AREA	1183	1141	1204	SQ. FT.
TOTAL AREA	2142	2150	2163	SQ. FT.
GARAGE AREA	443	443	443	SQ. FT.
PORCH AREA	70	70	61	SQ. FT.
OPTIONS:				
COVERED PATIO	120	120	120	SQ. FT.



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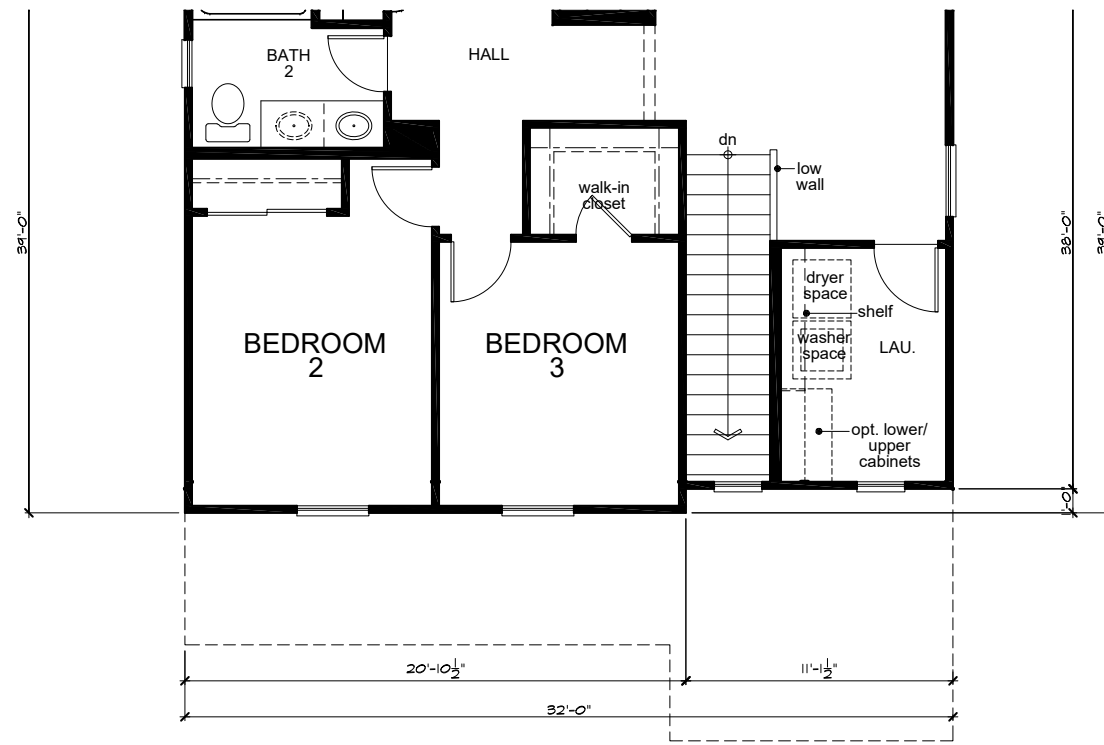
CITY OF OAKLEY

THE LANDING AT CYPRESS RANCH

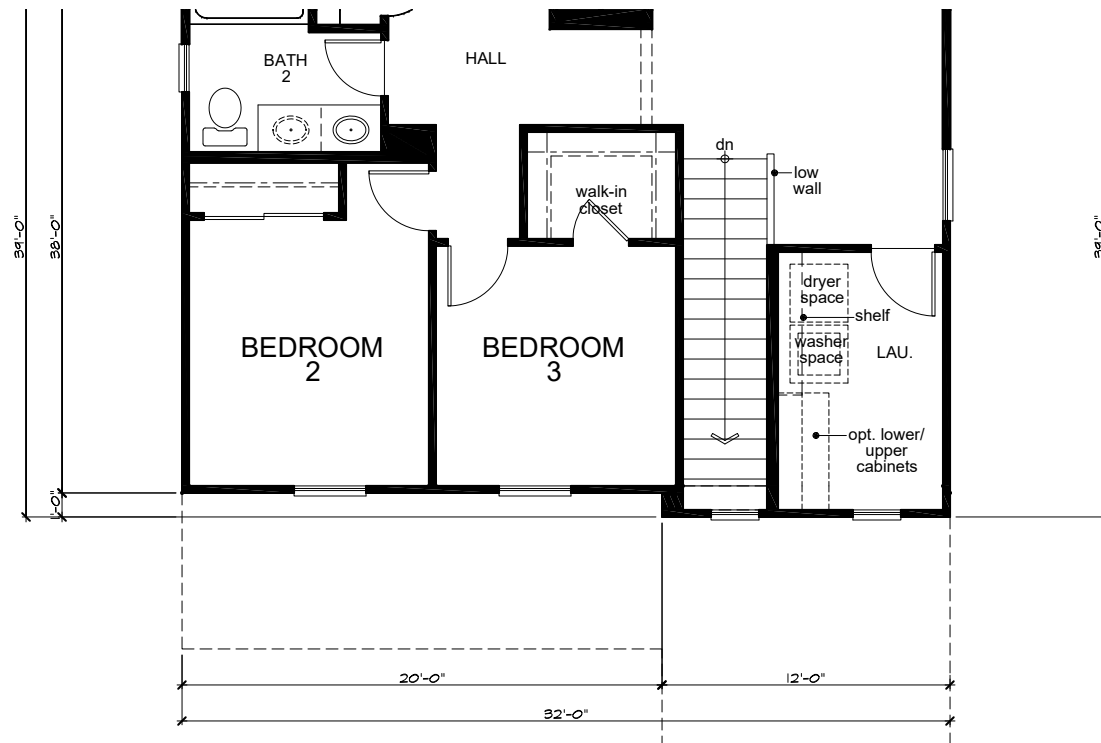
45'/50' WIDE LOTS

PLAN No. : 232.2142
JOB No. : 3025-999424
STORY: 2-STORY
March 28, 2025

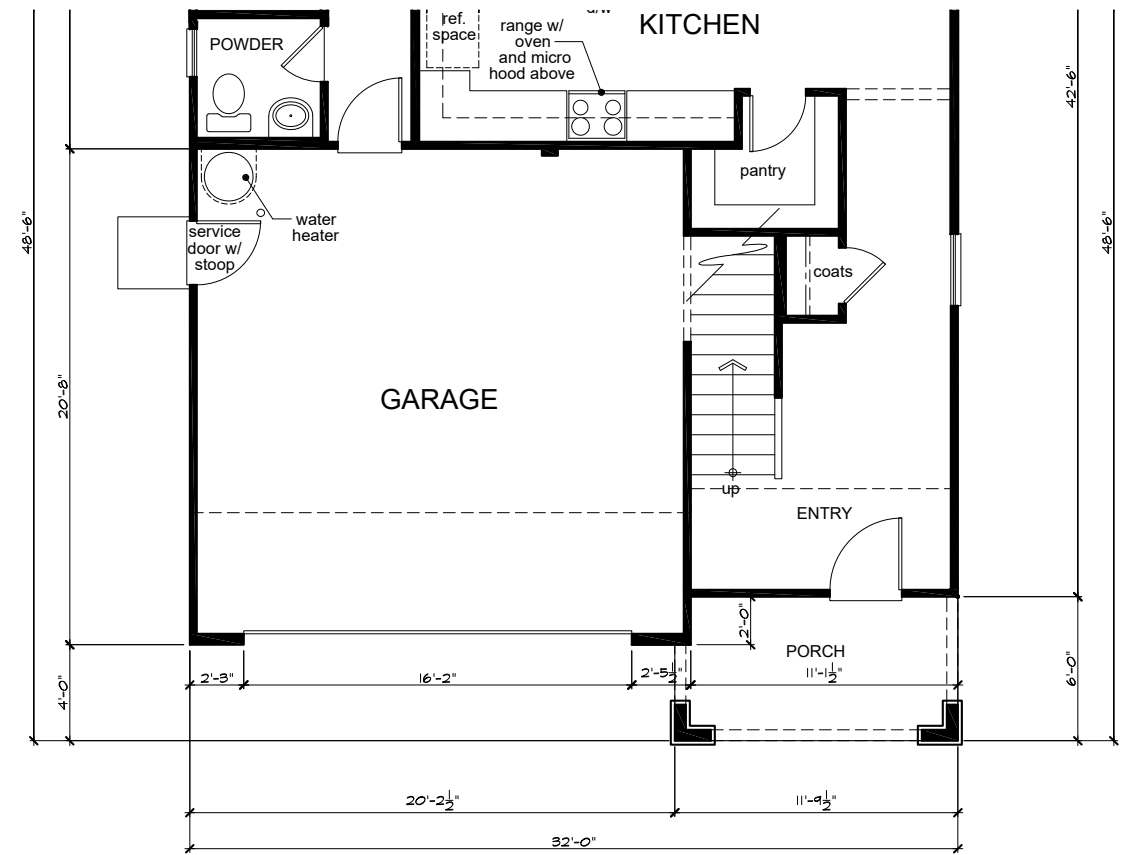
A1-2.2



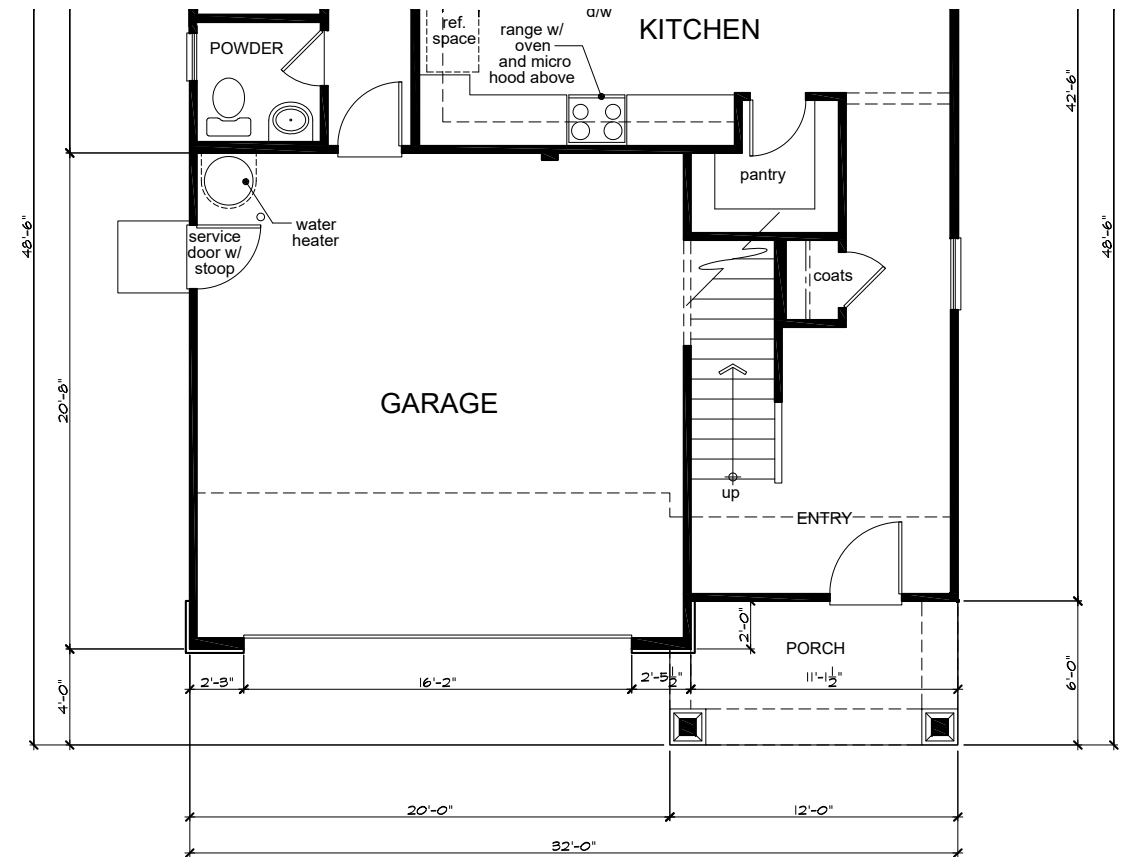
Second Floor Plan 'D'



Second Floor Plan 'B'

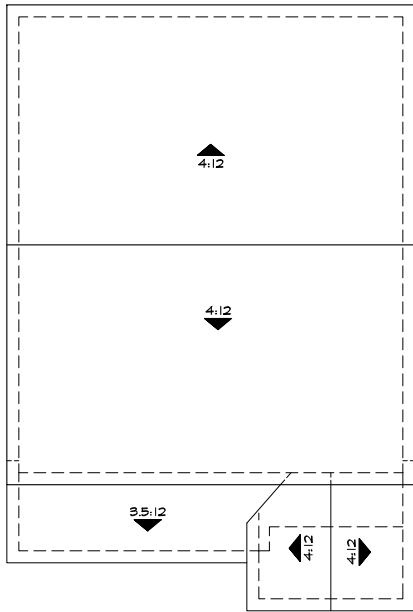


First Floor Plan 'D'

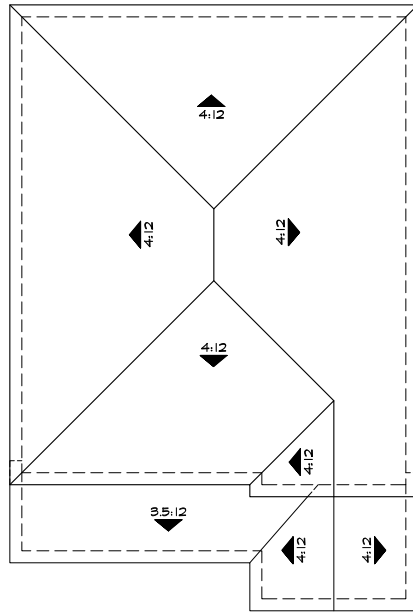


First Floor Plan 'B'

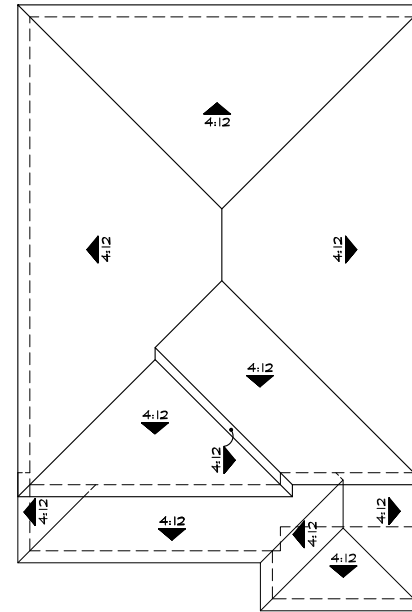




'A'



'B'



'D'

Roof Plans

THE LANDING AT CYPRESS RANCH
45'/50' WIDE LOTS



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CITY OF OAKLEY

PLAN No. : 232.2142
JOB No. : 3025-999424
STORY: 2-STORY
March 28, 2025



Left Elevation 'A'



Front Elevation 'A' - Spanish Eclectic



Right Elevation 'A'



Rear Elevation 'A'



Left Elevation 'B'



Front Elevation 'B' - Craftsman



Right Elevation 'B'



Rear Elevation 'B'



Left Elevation 'D'



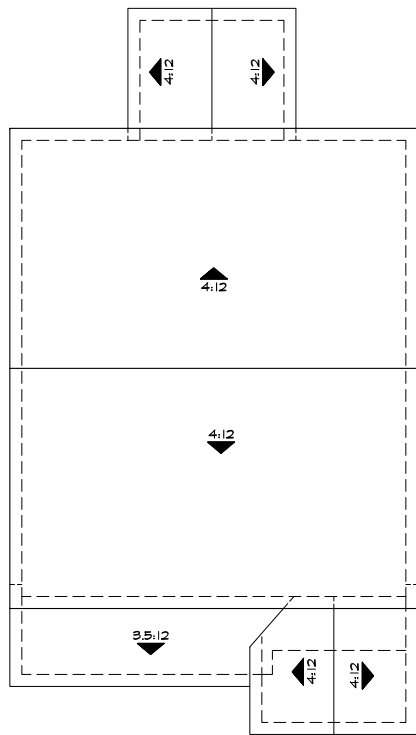
Front Elevation 'D' - Prairie



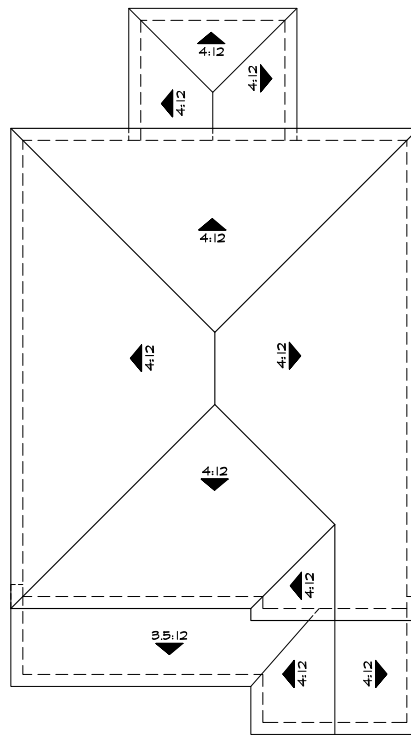
Right Elevation 'D'



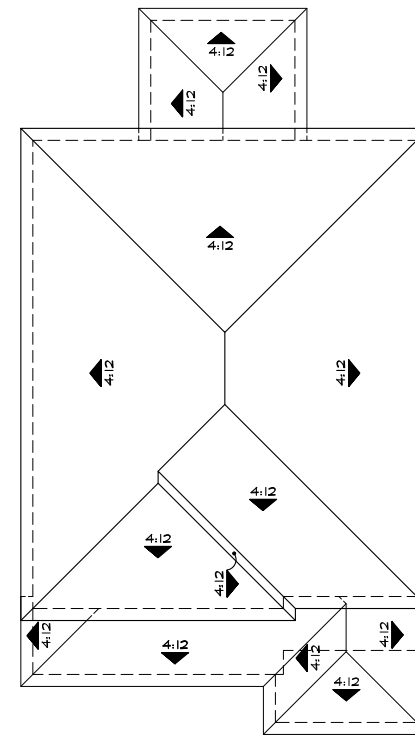
Rear Elevation 'D'



'A'

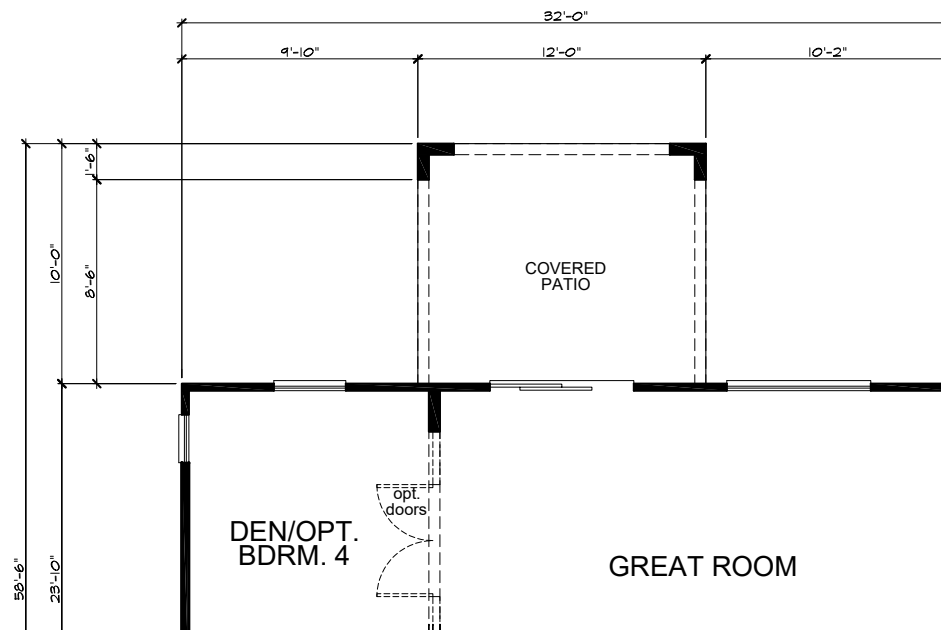


'B'



'D'

Roof Plans
at Covered Patio



Partial Floor Plan
at Covered Patio



Partial Right Elevation 'A'



Rear Elevation 'A'



Partial Left Elevation 'A'

Elevations
at Covered Patio

THE LANDING AT CYPRESS RANCH
45'/50' WIDE LOTS



Partial Right Elevation 'D'



Rear Elevation 'D'



Partial Left Elevation 'D'



Partial Right Elevation 'B'



Rear Elevation 'B'

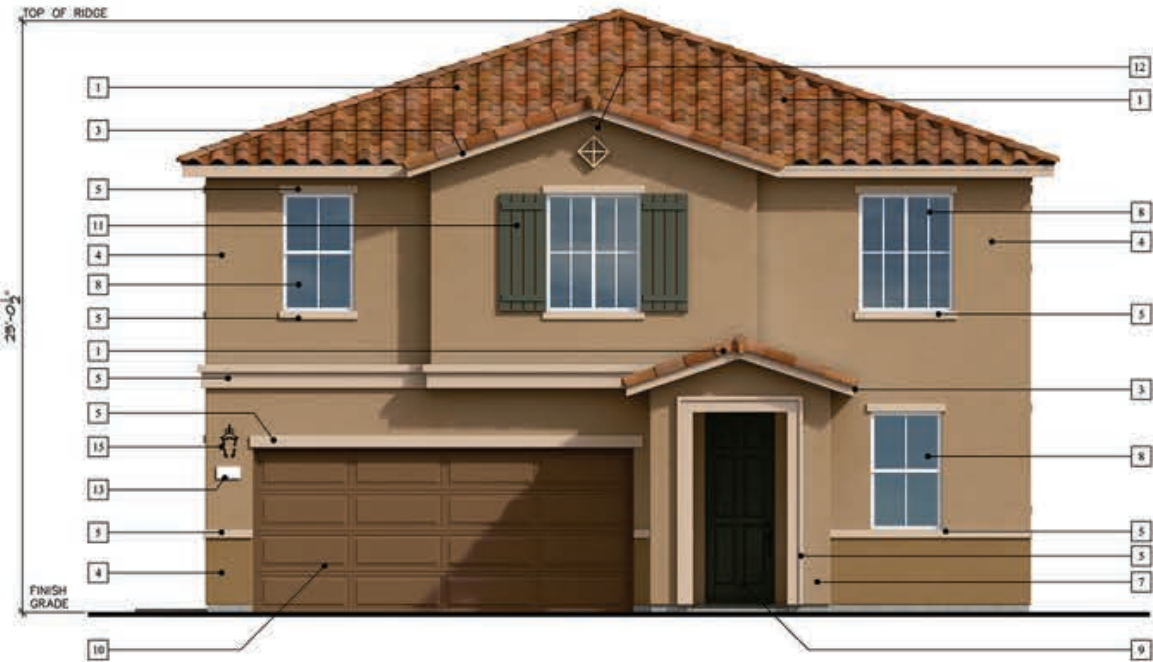


Partial Left Elevation 'B'

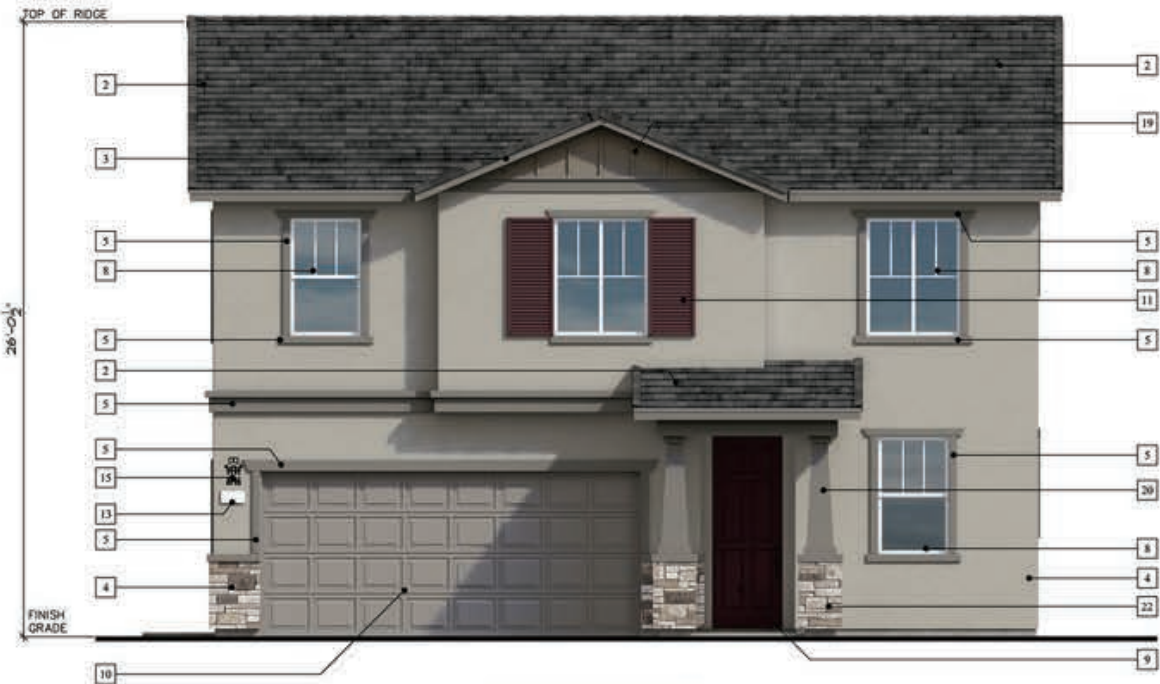
Elevations
at Covered Patio

ELEVATION LEGEND

- 1 CONCRETE 'S' TILE ROOFING
- 2 CONCRETE FLAT TILE ROOFING
- 3 WOOD FASCIA BOARD / FASCIA GUTTER
- 4 STUCCO FINISH
- 5 STUCCO OVER FOAM TRIM
- 6 STUCCO OVER FOAM CORBELS
- 7 STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
- 8 PRE-FAB WINDOW SYSTEM
- 9 COMPOSITE ENTRY DOOR
- 10 METAL ROLL-UP GARAGE DOOR
- 11 DECORATIVE FOAM SHUTTERS
- 12 STUCCO OVER SHAPED FOAM TRIM
- 13 ILLUMINATED ADDRESS SIGN
- 14 CEMENTITIOUS FIBER LAP SIDING
- 15 OPTIONAL COACH LIGHT
- 16 WOOD CORBELS
- 17 DECORATIVE FOAM VENTS
- 18 DECORATIVE CLAY PIPES
- 19 DECORATIVE BOARD & BATTEN
- 20 TAPERED COLUMNS (STUCCO OVER WOOD FRAMING)
- 21 BRICK VENEER
- 22 STONE VENEER



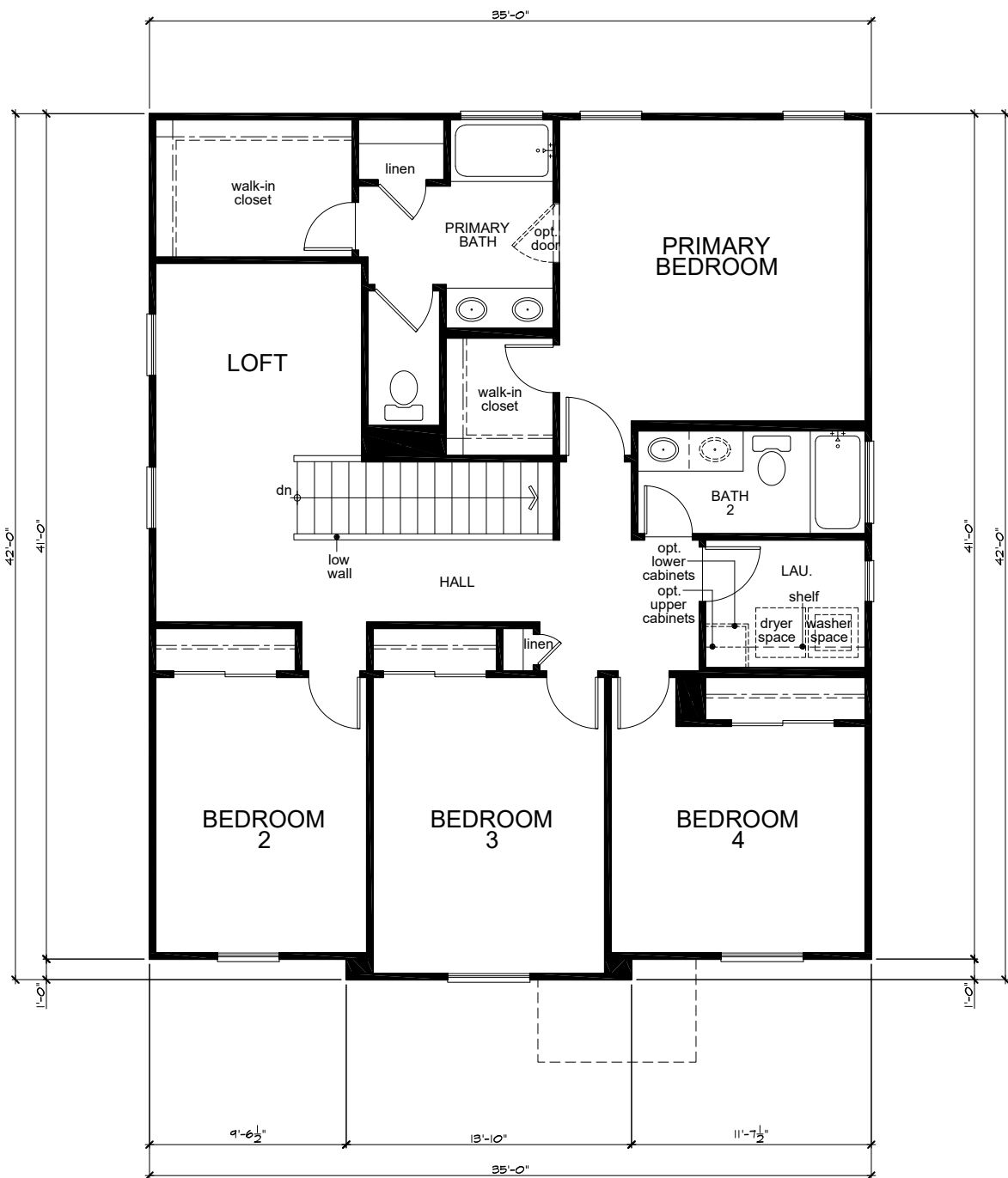
Elevation 'A' Spanish Eclectic



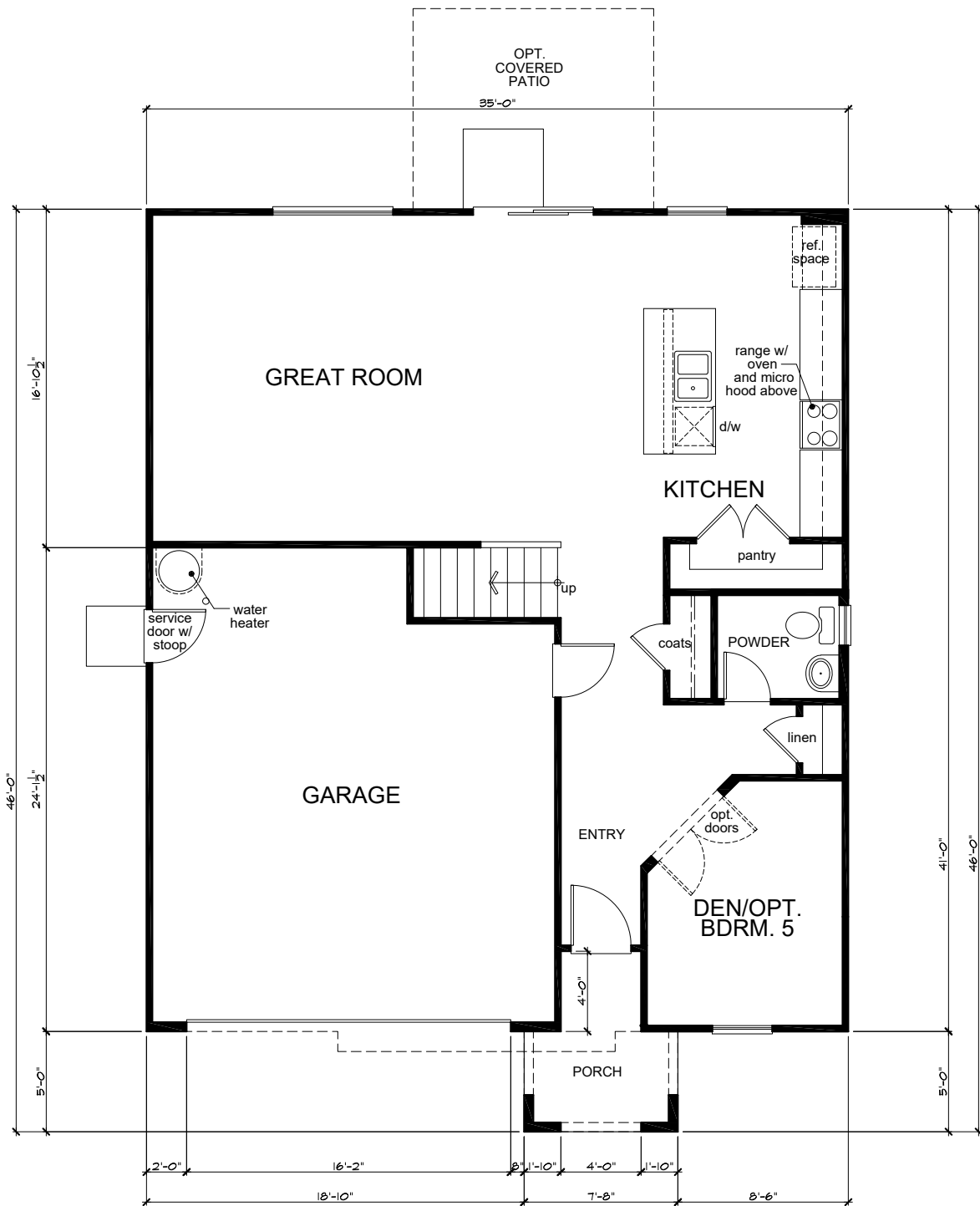
Elevation 'B' Craftsman



Elevation 'D' Prairie

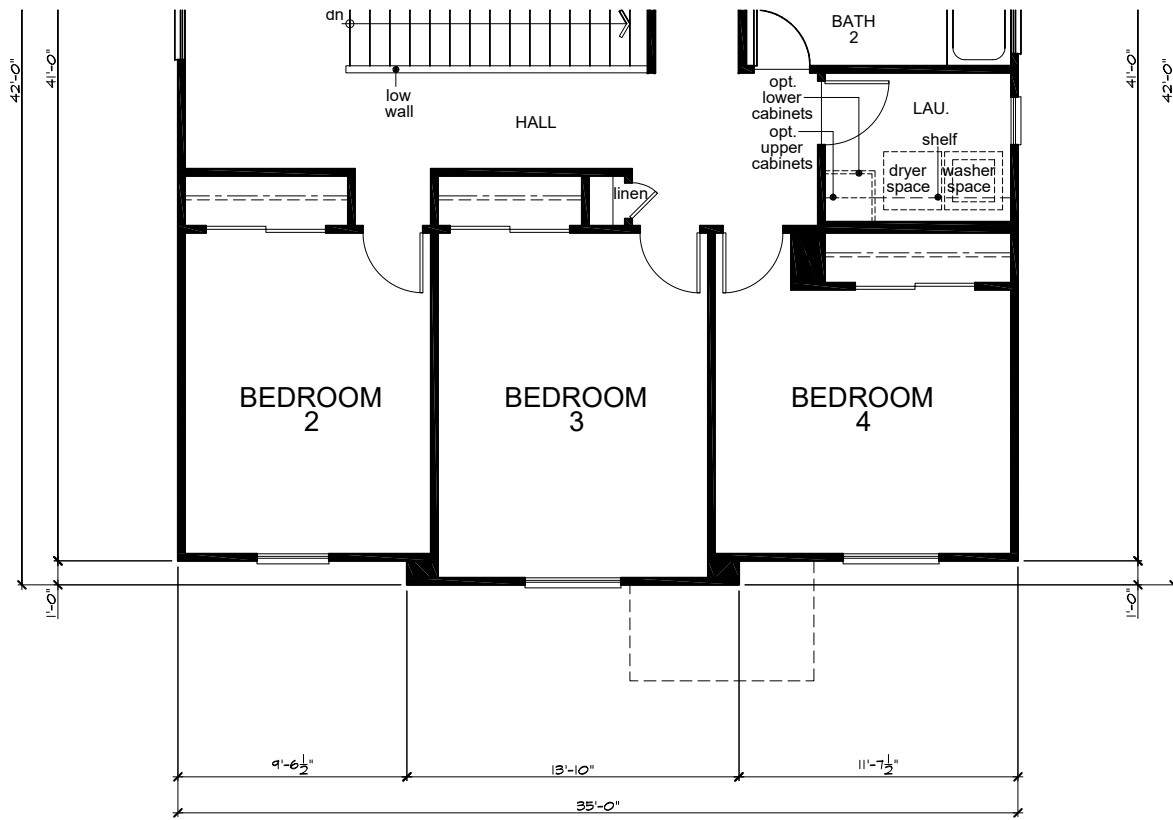


Second Floor Plan 'A'

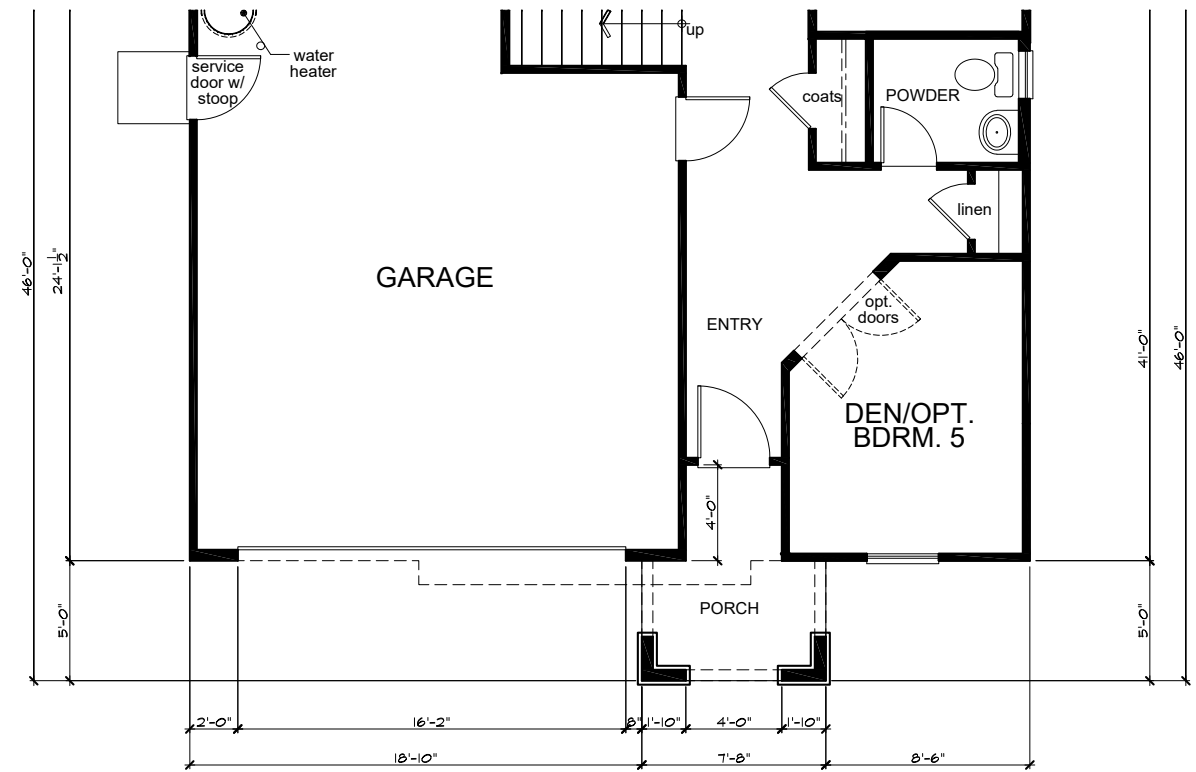


First Floor Plan 'A'

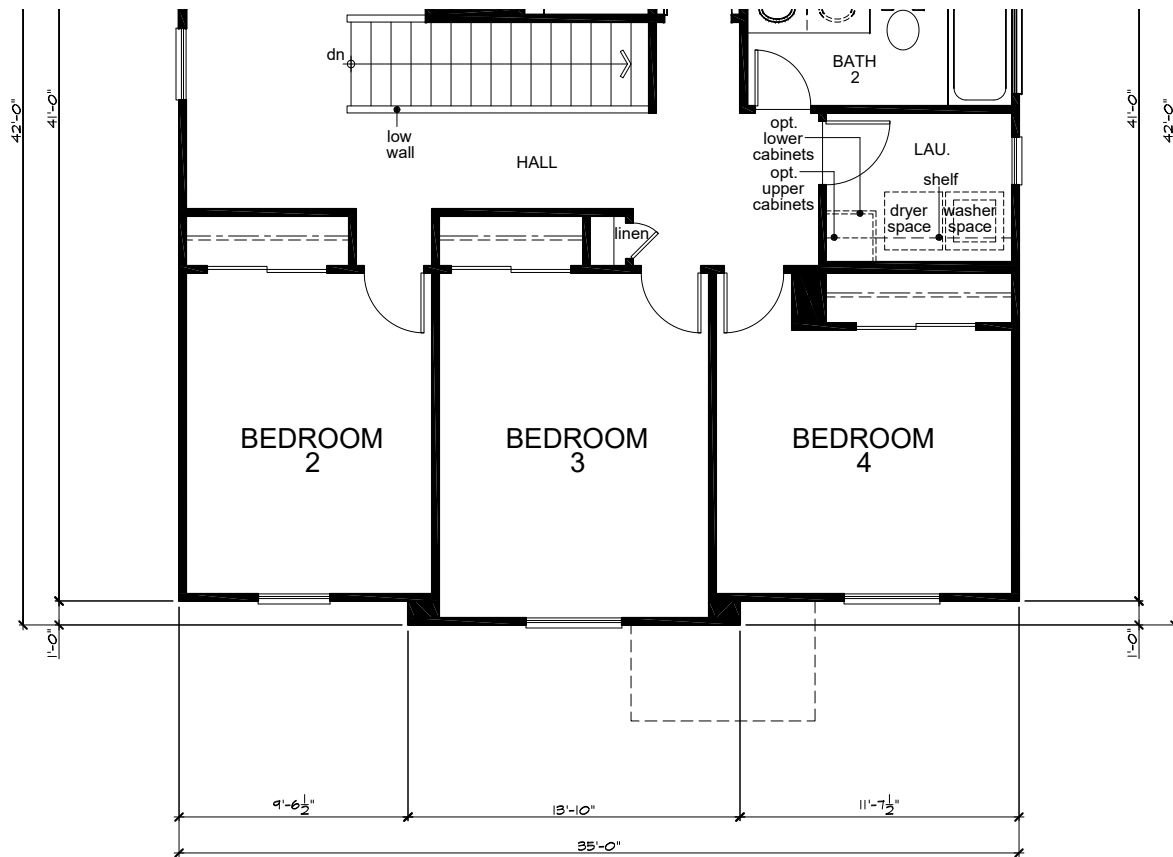
SQUARE FOOTAGE				
PLAN 235.2378				
	'A'	'B'	'D'	
FIRST FLOOR AREA	954	954	954	SQ. FT.
SECOND FLOOR AREA	1424	1424	1424	SQ. FT.
TOTAL AREA	2378	2378	2378	SQ. FT.
GARAGE AREA	465	465	465	SQ. FT.
PORCH AREA	54	54	54	SQ. FT.
OPTIONS:				
COVERED PATIO	120	120	120	SQ. FT.



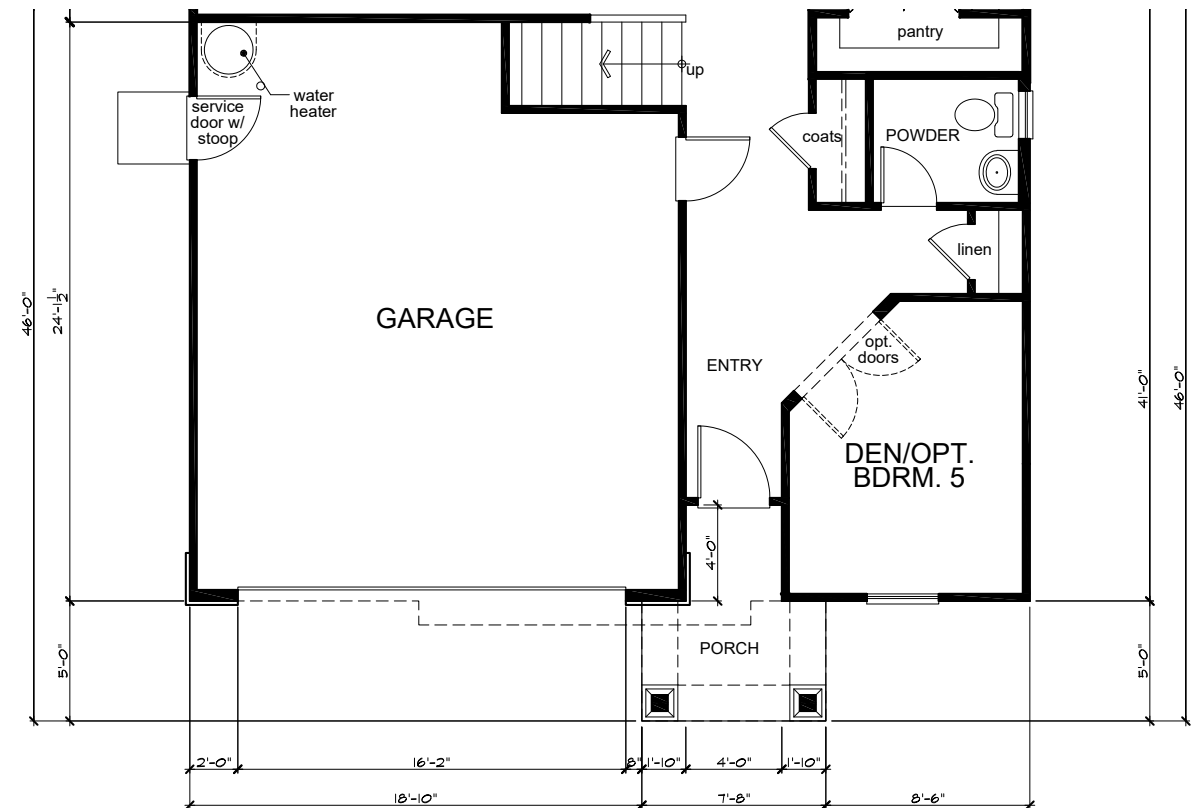
Second Floor Plan 'D'



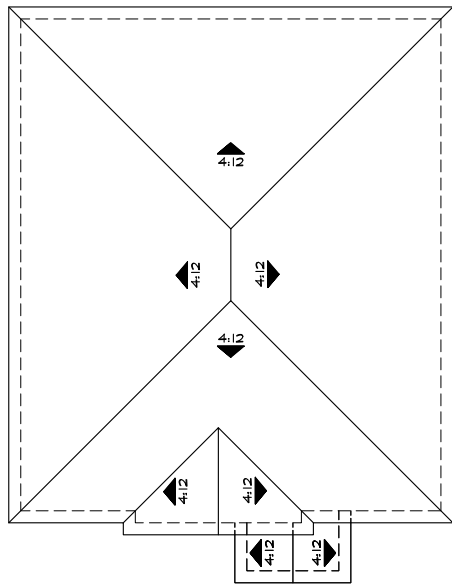
First Floor Plan 'D'



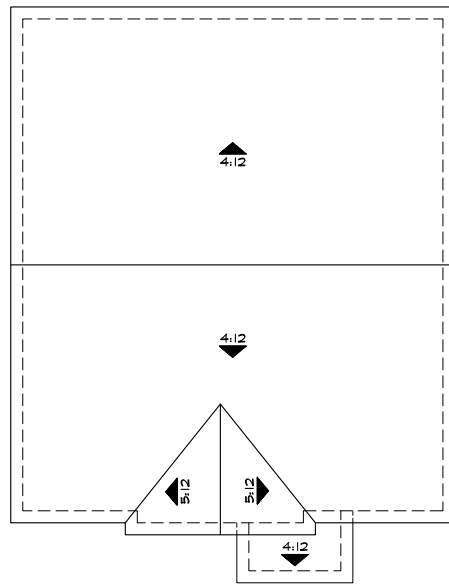
Second Floor Plan 'B'



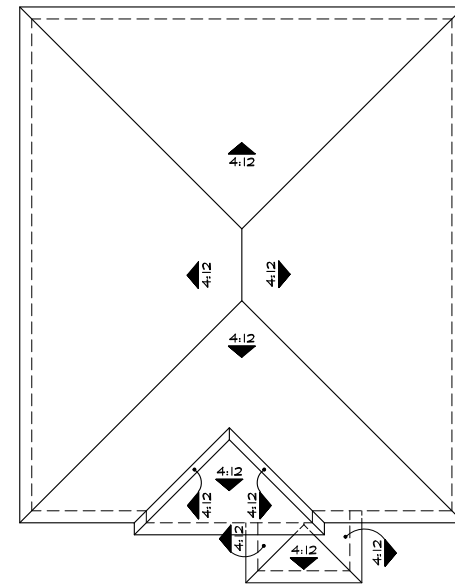
First Floor Plan 'B'



'A'



'B'



'D'

Roof Plans

THE LANDING AT CYPRESS RANCH
45'/50' WIDE LOTS



Left Elevation 'A'



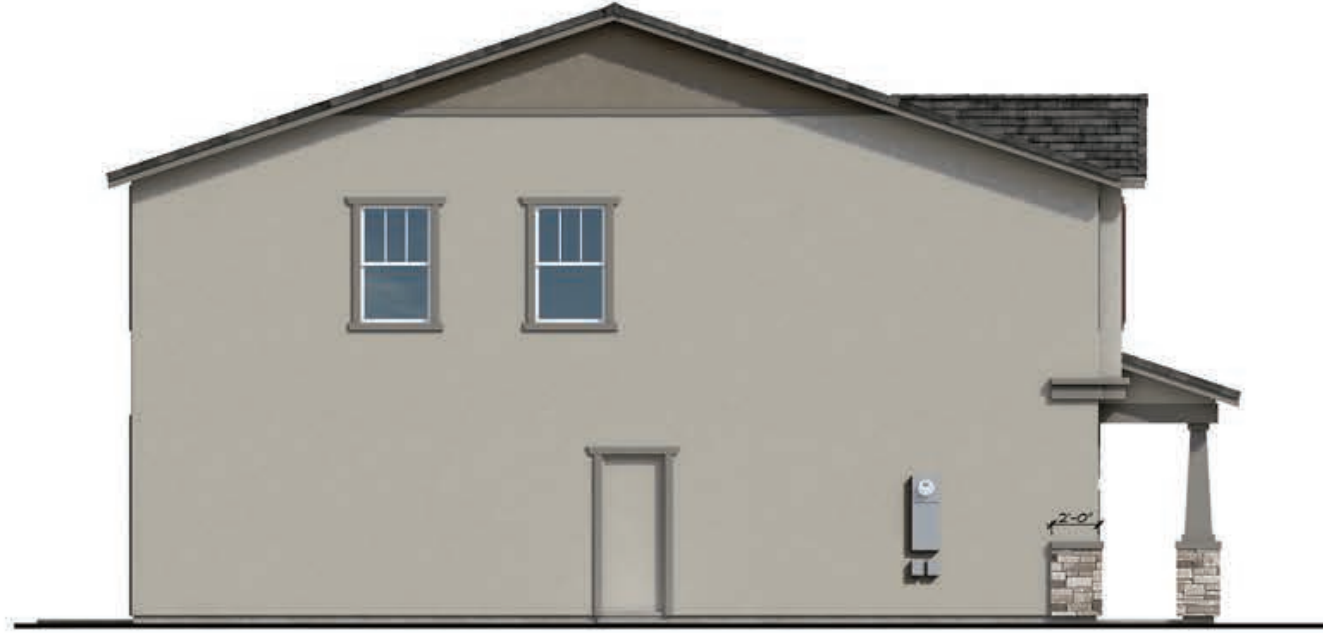
Front Elevation 'A' - Spanish Eclectic



Right Elevation 'A'



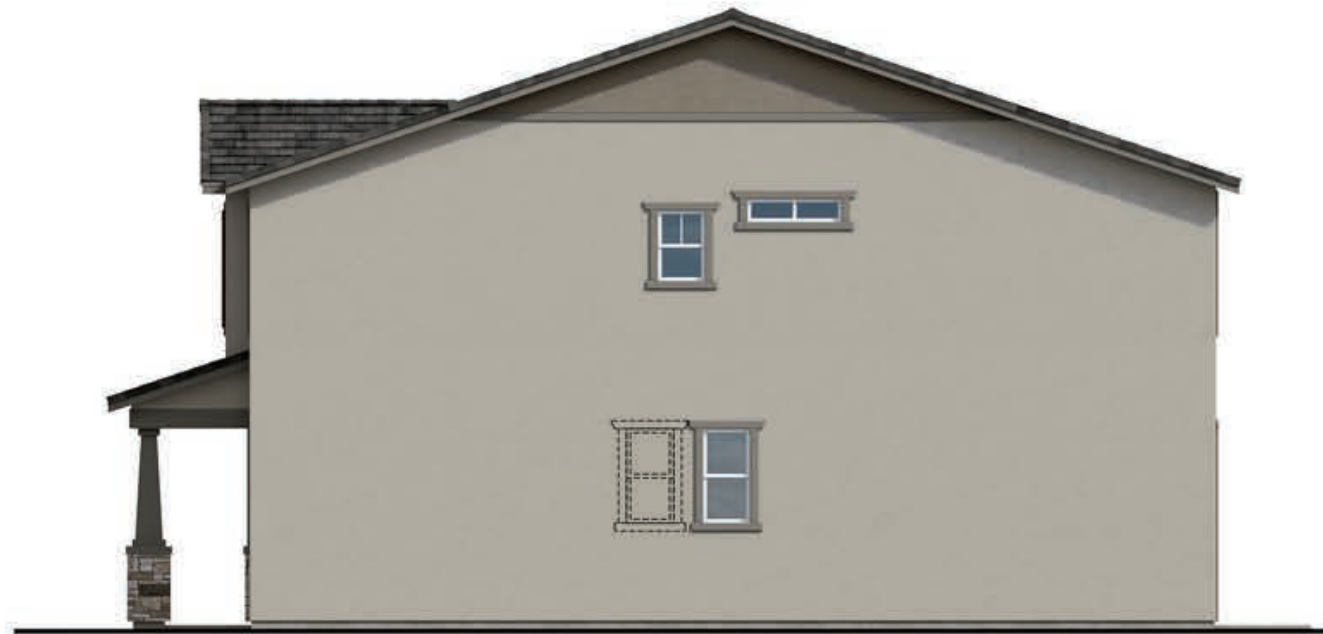
Rear Elevation 'A'



Left Elevation 'B'



Front Elevation 'B' - Craftsman



Right Elevation 'B'



Rear Elevation 'B'



Left Elevation 'D'



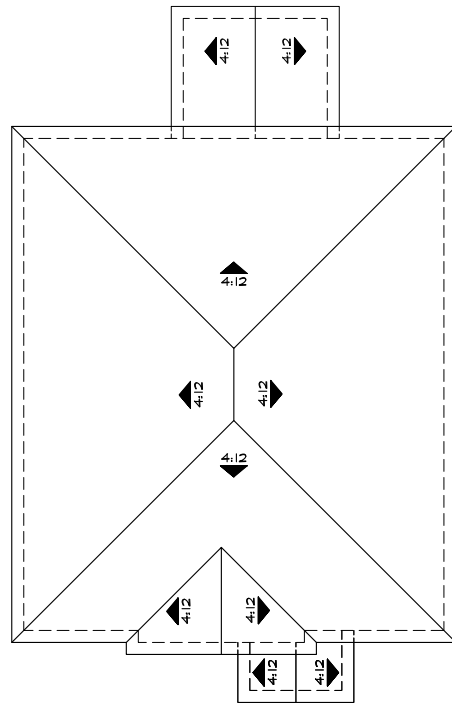
Front Elevation 'D' - Pairie



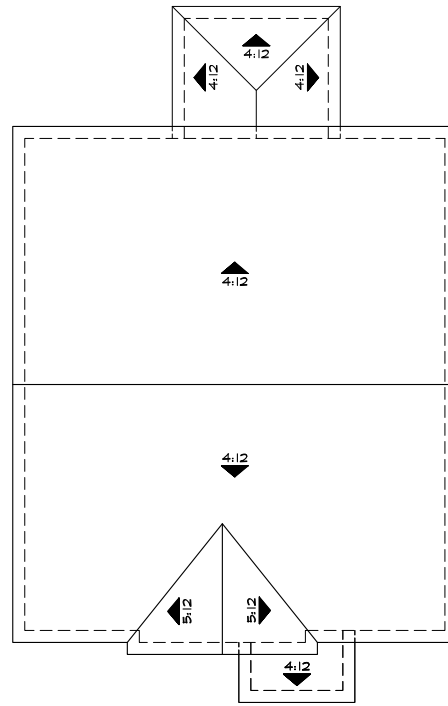
Right Elevation 'D'



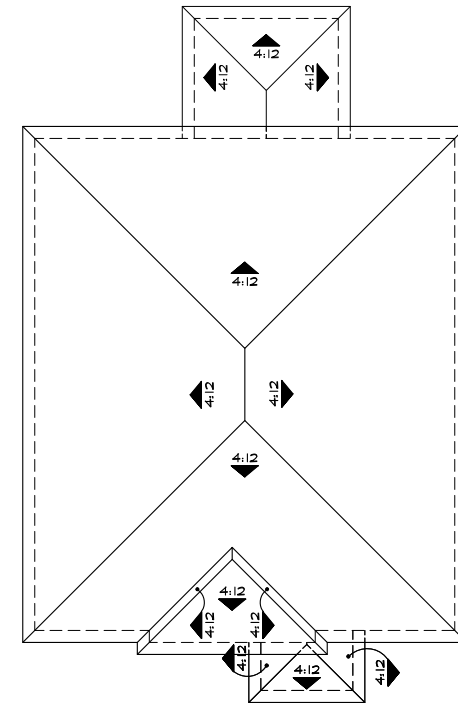
Rear Elevation 'D'



'A'

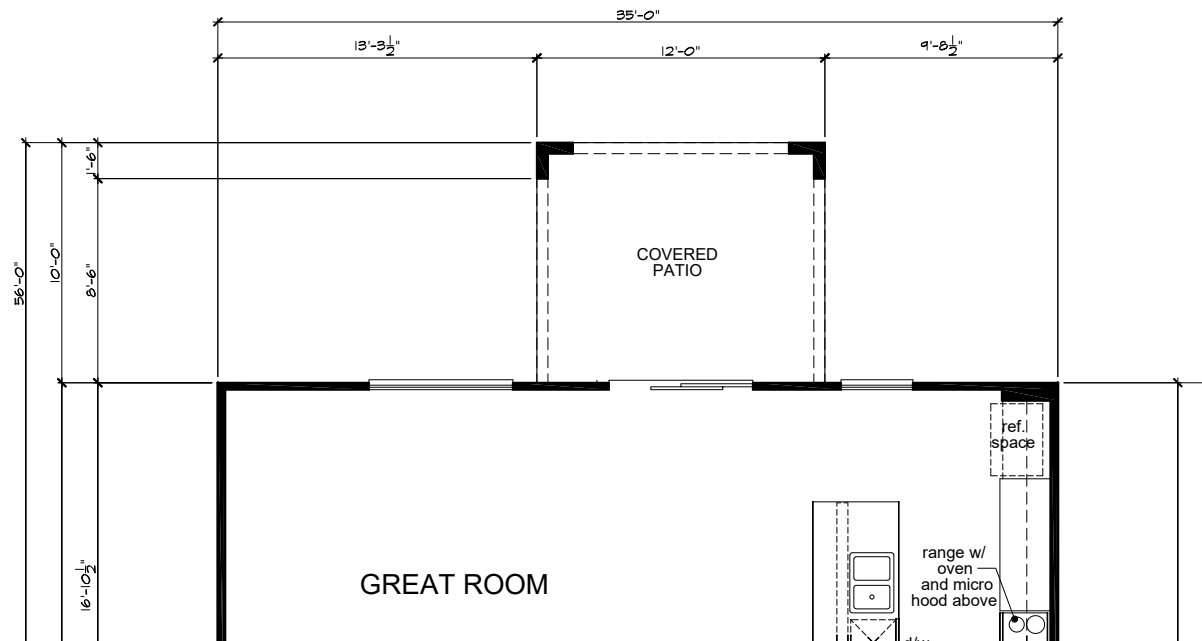


'B'



'D'

Roof Plans
at Covered Patio



Partial Floor Plan
at Covered Patio

THE LANDING AT CYPRESS RANCH
45'/50' WIDE LOTS



Partial Right Elevation 'A'



Rear Elevation 'A'



Partial Left Elevation 'A'

Elevations
at Covered Patio

THE LANDING AT CYPRESS RANCH
45'/50' WIDE LOTS



Partial Right Elevation 'D'



Rear Elevation 'D'



Partial Left Elevation 'D'



Partial Right Elevation 'B'



Rear Elevation 'B'



Partial Left Elevation 'B'

Elevations
at Covered Patio



2324 'D' French Cottage

2566 'B' Craftsman

1824 'A' Spanish Eclectic

Street Scene

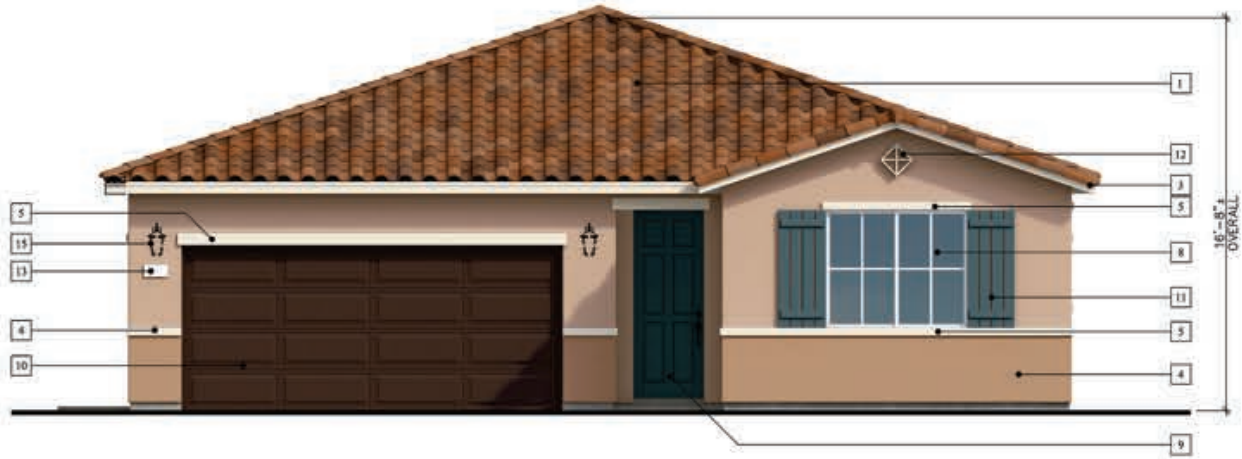


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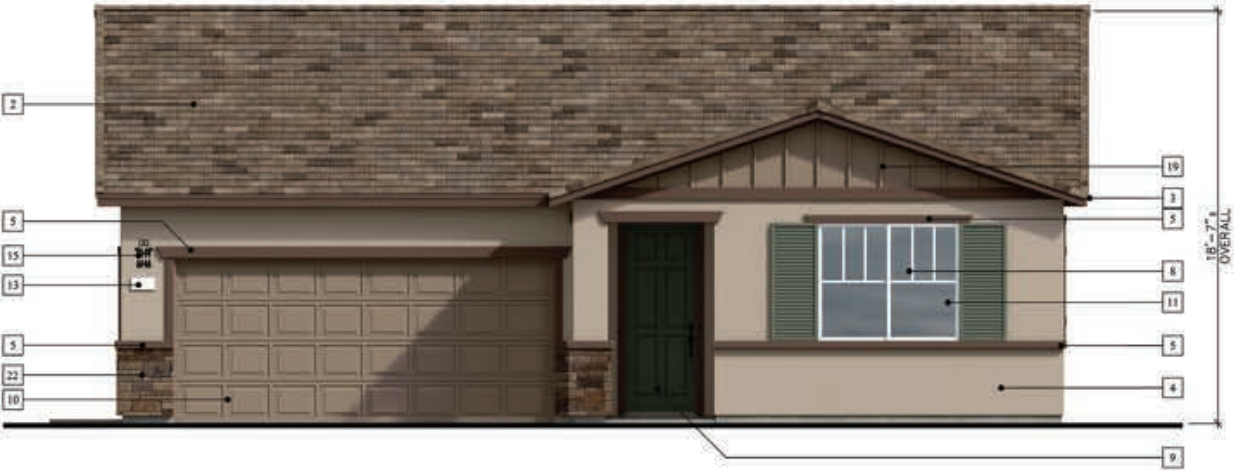
THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS

ELEVATION LEGEND

- 1 CONCRETE 'S' TILE ROOFING
- 2 CONCRETE FLAT TILE ROOFING
- 3 WOOD FASCIA BOARD / FASCIA GUTTER
- 4 STUCCO FINISH
- 5 STUCCO OVER FOAM TRIM
- 6 STUCCO OVER FOAM CORBELS
- 7 STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
- 8 PRE-FAB WINDOW SYSTEM
- 9 COMPOSITE ENTRY DOOR
- 10 METAL ROLL-UP GARAGE DOOR
- 11 DECORATIVE FOAM SHUTTERS
- 12 STUCCO OVER SHAPED FOAM TRIM
- 13 ILLUMINATED ADDRESS SIGN
- 14 CEMENTITIOUS FIBER LAP SIDING
- 15 OPTIONAL COACH LIGHT
- 16 WOOD CORBELS
- 17 DECORATIVE FOAM VENTS
- 18 DECORATIVE CLAY PIPES
- 19 DECORATIVE BOARD & BATTEN
- 20 TAPERED COLUMNS (STUCCO OVER WOOD FRAMING)
- 21 BRICK VENEER
- 22 STONE VENEER



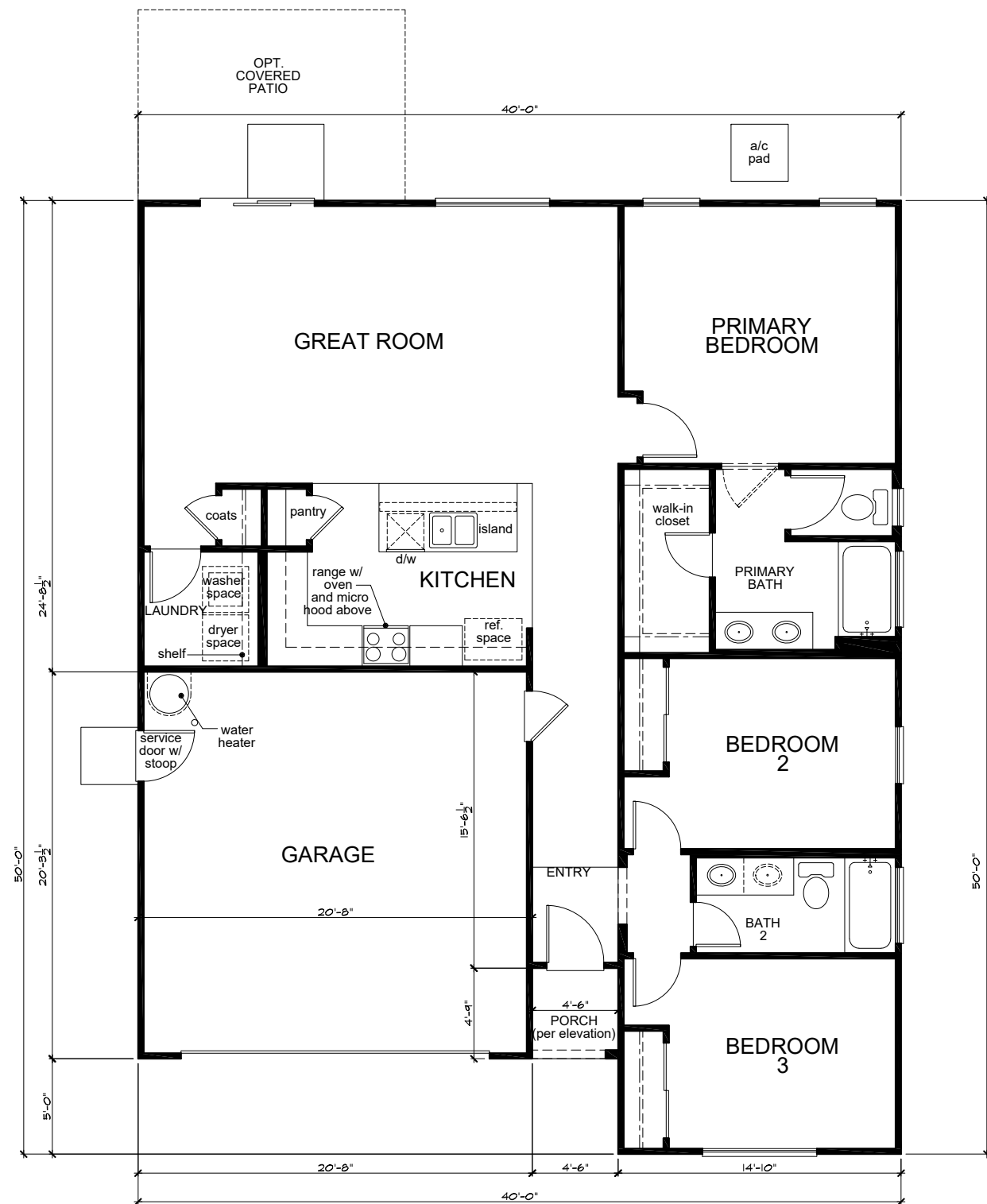
Elevation 'A' - Spanish Eclectic



Elevation 'B' - Craftsman



Elevation 'D' - Prairie



SQUARE FOOTAGE			
PLAN 140.1438			
FIRST FLOOR AREA		1438	SQ. FT.
TOTAL AREA		1438	SQ. FT.
GARAGE AREA		415	SQ. FT.
PORCH AREA			
	ELEVATION "A"	21	SQ. FT.
	ELEVATION "B"	51	SQ. FT.
	ELEVATION "D"	34	SQ. FT.
PATIO OPTS.			

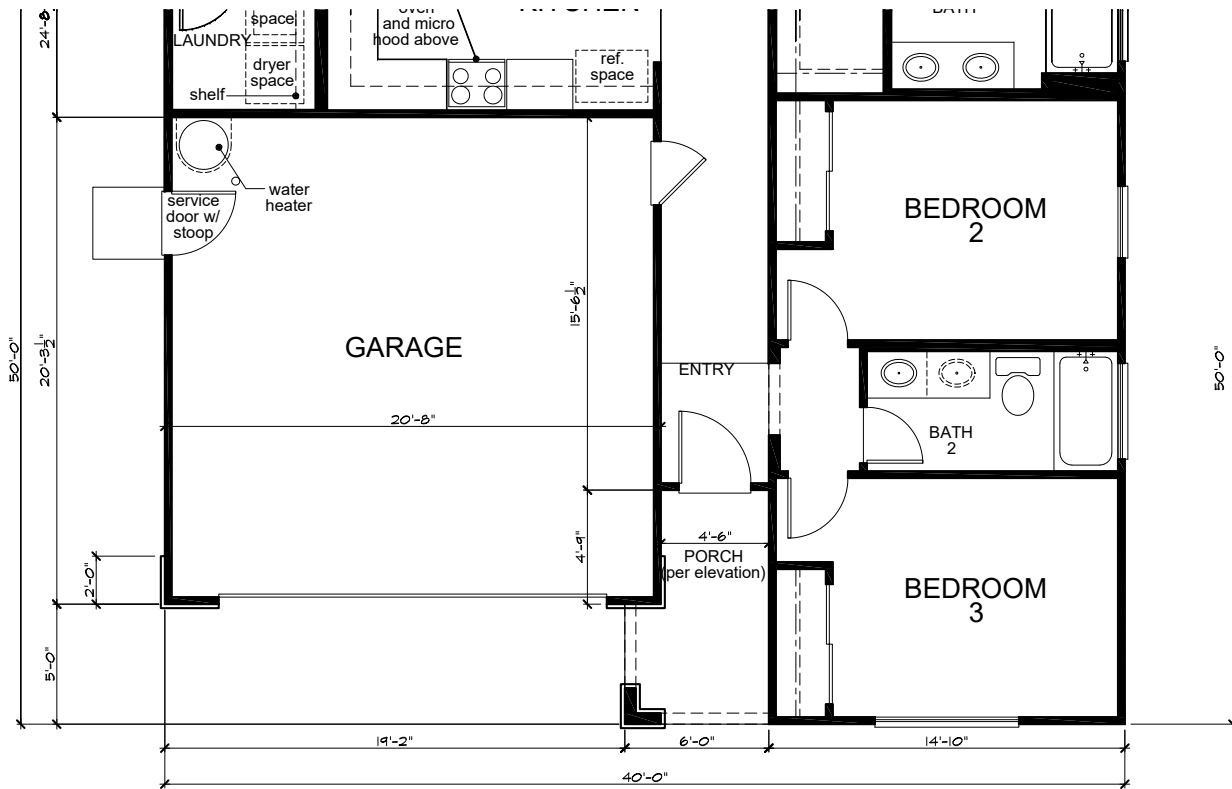
Floor Plan 'A'



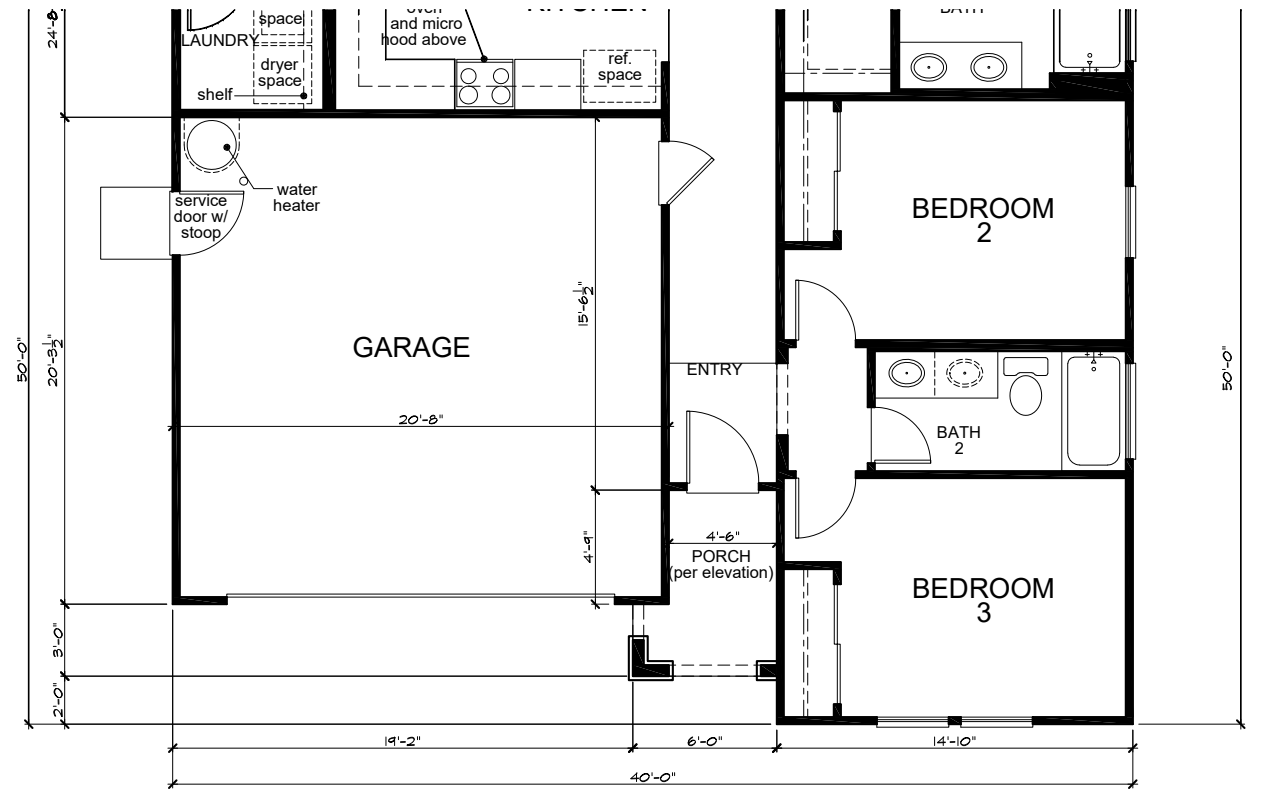
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CITY OF OAKLEY

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS

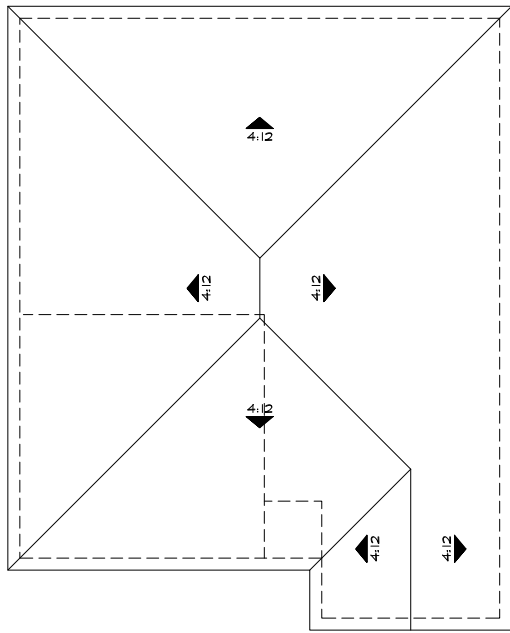
PLAN No. : 140.1438
JOB No. : 3025-999424
STORY: 1-STORY
March 28, 2025



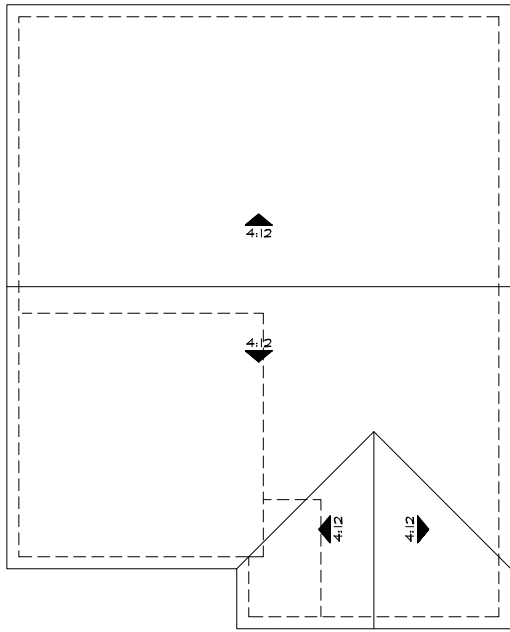
Floor Plan 'B'



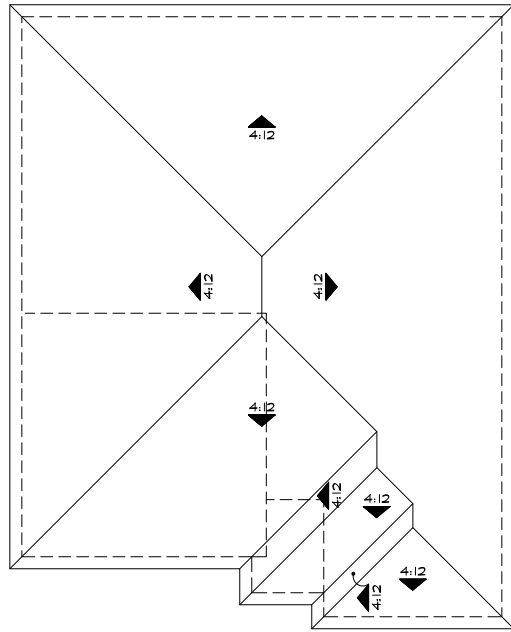
Floor Plan 'D'



'A'



'B'



'D'

Roof Plans

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



Left Elevation 'A'



Front Elevation 'A' - Spanish Eclectic



Right Elevation 'A'



Rear Elevation 'A'



Left Elevation 'B'



Front Elevation 'B' - Craftsman



Right Elevation 'B'



Rear Elevation 'B'



Left Elevation 'D'



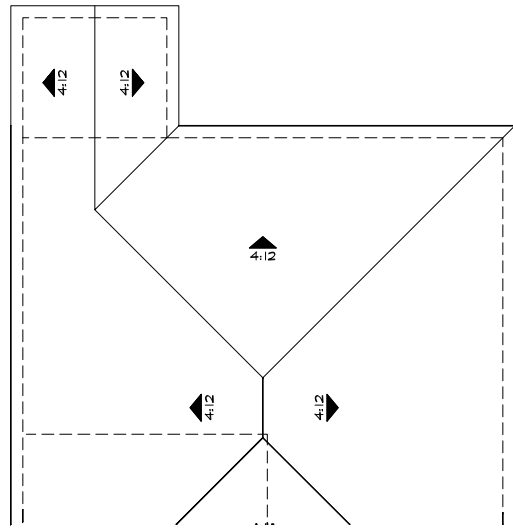
Front Elevation 'D' - Prairie



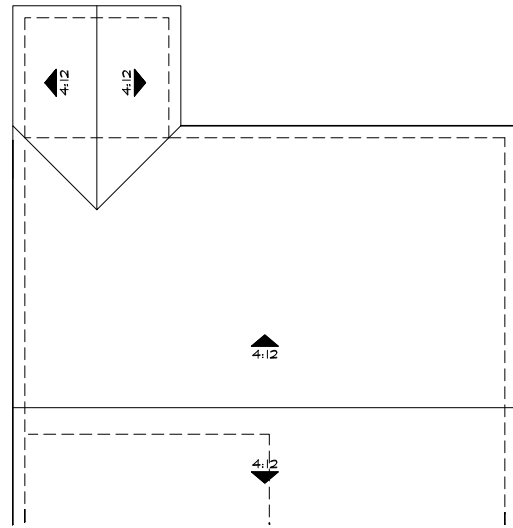
Right Elevation 'D'



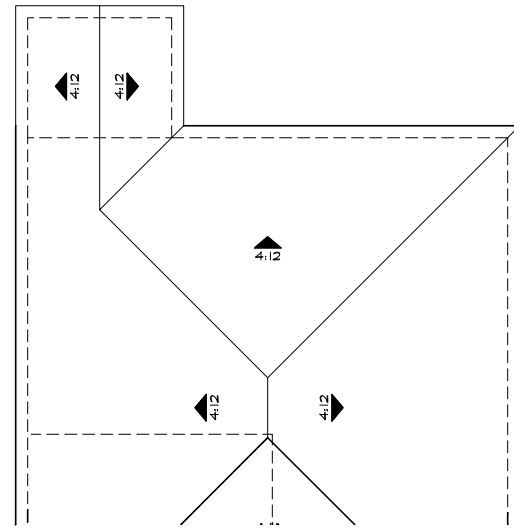
Rear Elevation 'D'



'A'

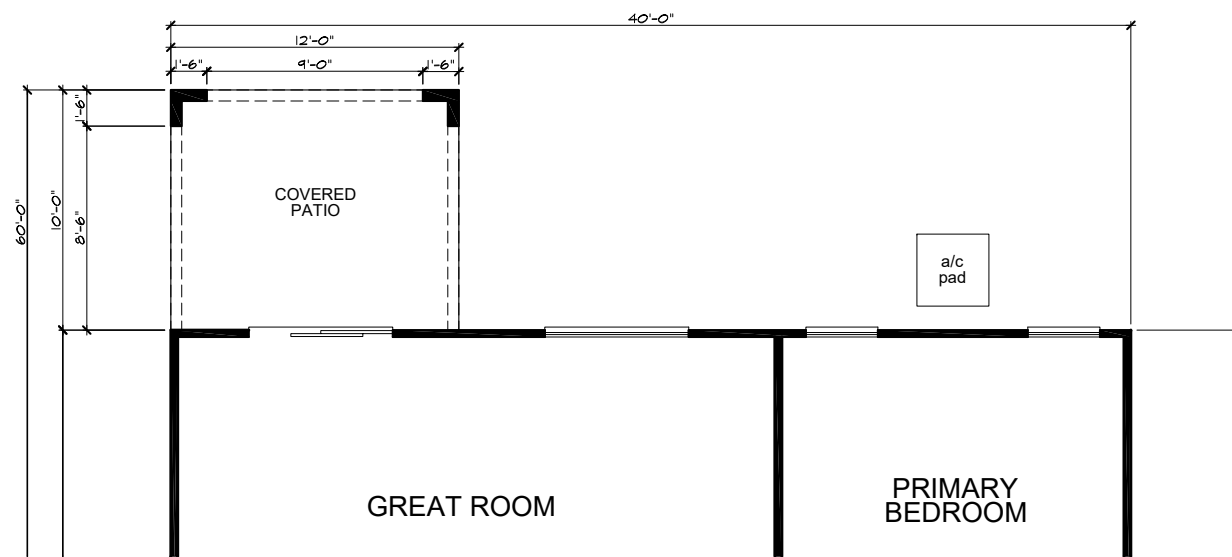


'B'



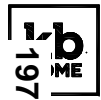
'D'

Roof Plans
at Covered Patio



Partial Floor Plan
at Covered Patio

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



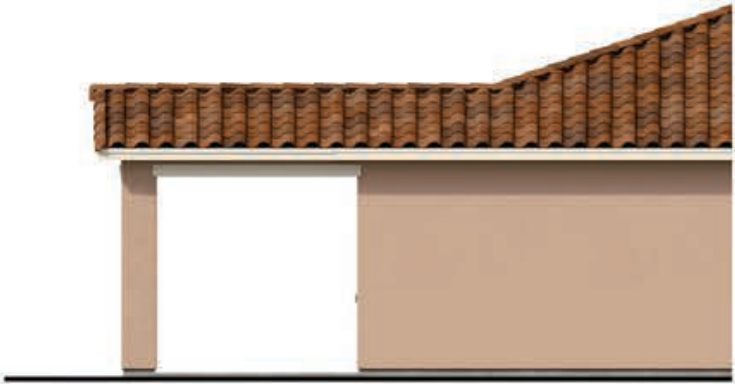
KB Home North Bay
4830 Business Center Drive Suite 150
Fairfield, CA 94534
(707) 389-7500
CITY OF OAKLEY

PLAN No. : 140.1438
JOB No. : 3025-999424
STORY: 1-STORY
March 28, 2025

A2-1.8



Rear Elevation 'A'



Partial Left Elevation 'A'

Elevations at Covered Patio



Rear Elevation 'D'



Partial Left Elevation 'D'



Rear Elevation 'B'

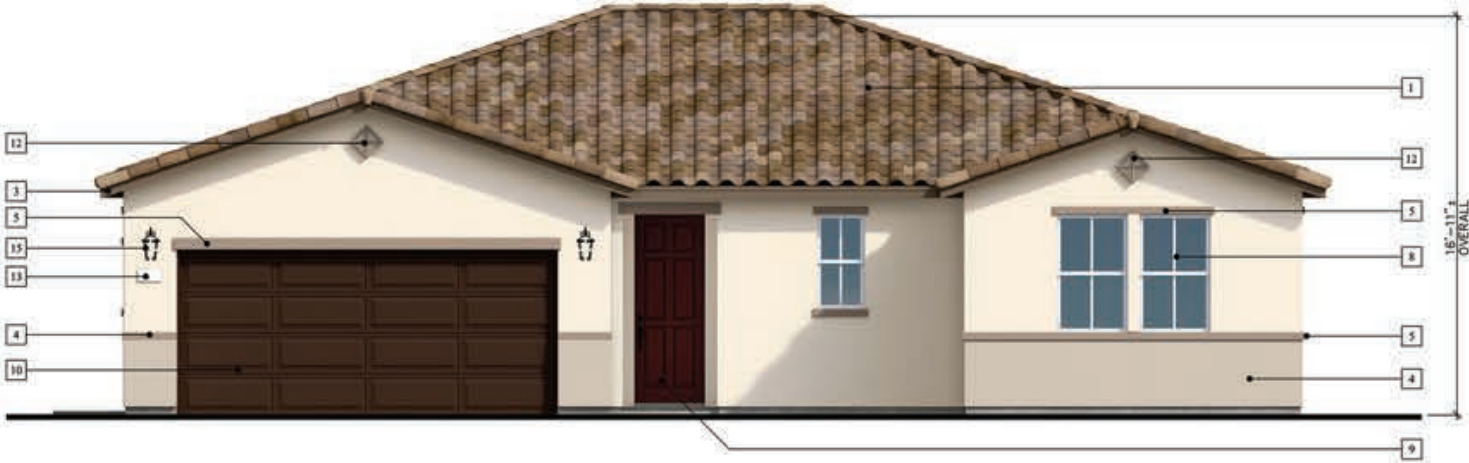


Partial Left Elevation 'B'

Elevations at Covered Patio

ELEVATION LEGEND

- 1 CONCRETE 'S' TILE ROOFING
- 2 CONCRETE FLAT TILE ROOFING
- 3 WOOD FASCIA BOARD / FASCIA GUTTER
- 4 STUCCO FINISH
- 5 STUCCO OVER FOAM TRIM
- 6 STUCCO OVER FOAM CORBELS
- 7 STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
- 8 PRE-FAB WINDOW SYSTEM
- 9 COMPOSITE ENTRY DOOR
- 10 METAL ROLL-UP GARAGE DOOR
- 11 DECORATIVE FOAM SHUTTERS
- 12 STUCCO OVER SHAPED FOAM TRIM
- 13 ILLUMINATED ADDRESS SIGN
- 14 CEMENTITIOUS FIBER LAP SIDING
- 15 OPTIONAL COACH LIGHT
- 16 WOOD CORBELS
- 17 DECORATIVE FOAM VENTS
- 18 DECORATIVE CLAY PIPES
- 19 DECORATIVE BOARD & BATTEN
- 20 TAPERED COLUMNS (STUCCO OVER WOOD FRAMING)
- 21 BRICK VENEER
- 22 STONE VENEER



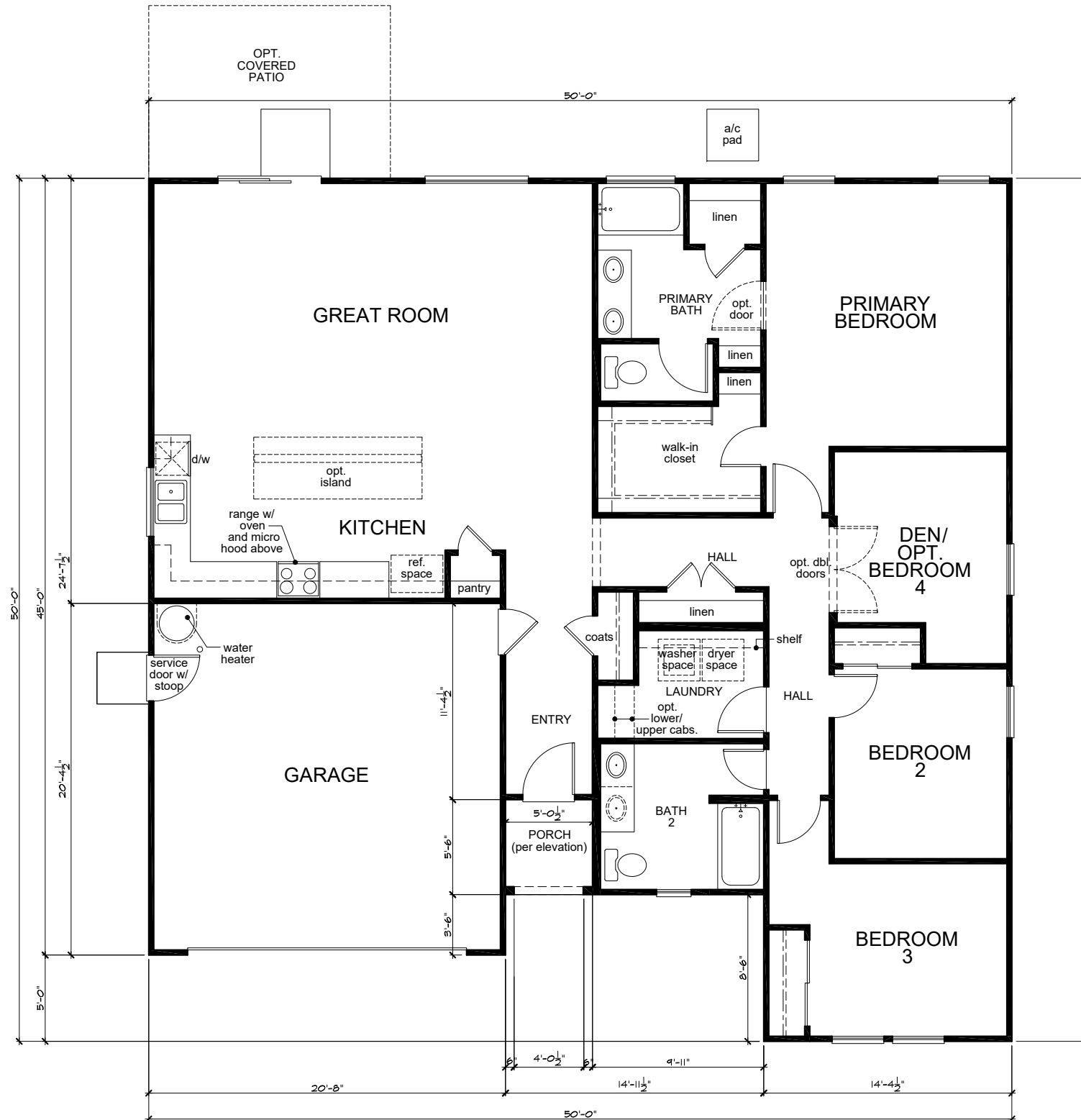
Elevation 'A' - Spanish Eclectic



Elevation 'B' - Craftsman

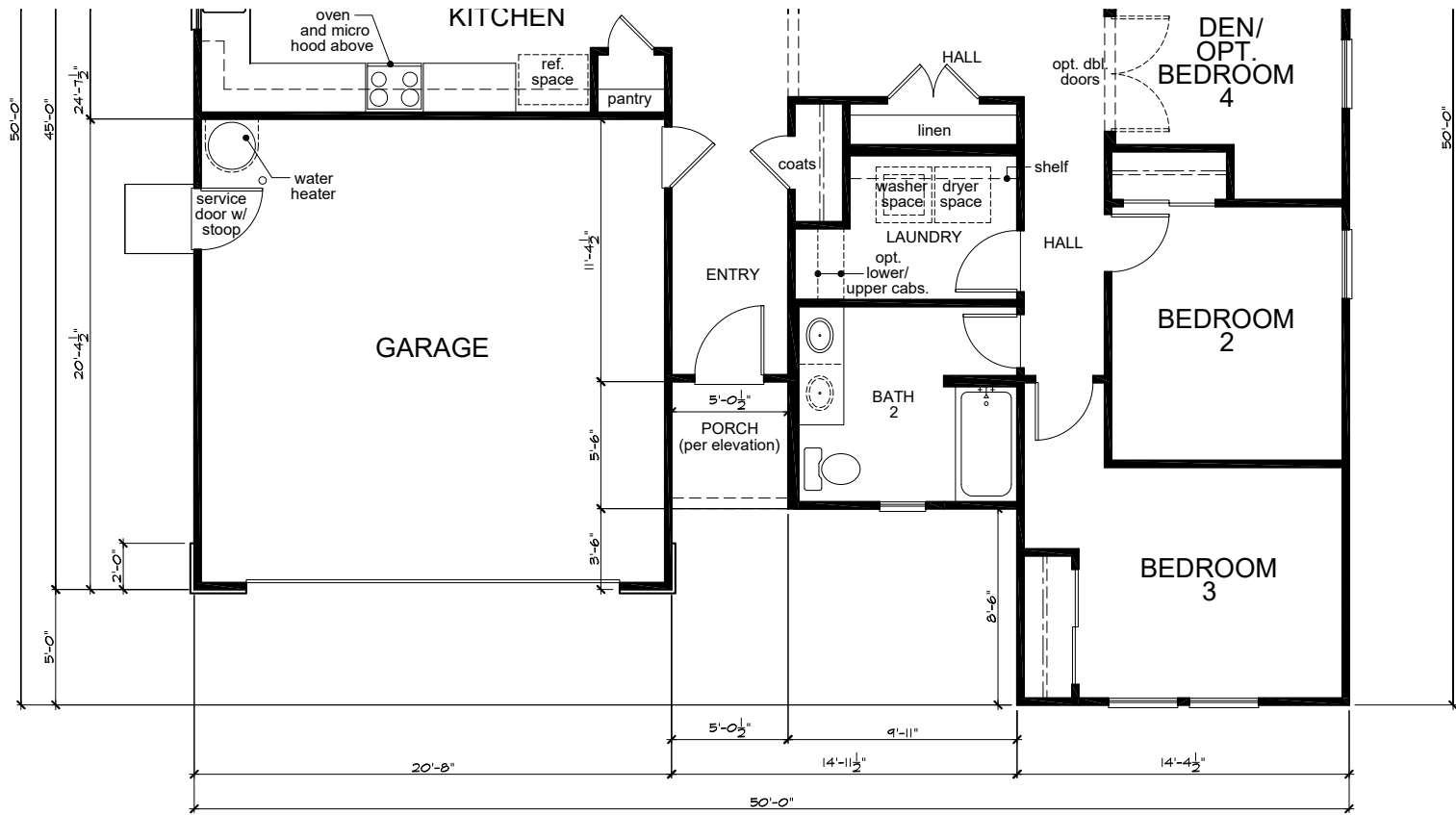


Elevation 'D' - Prairie

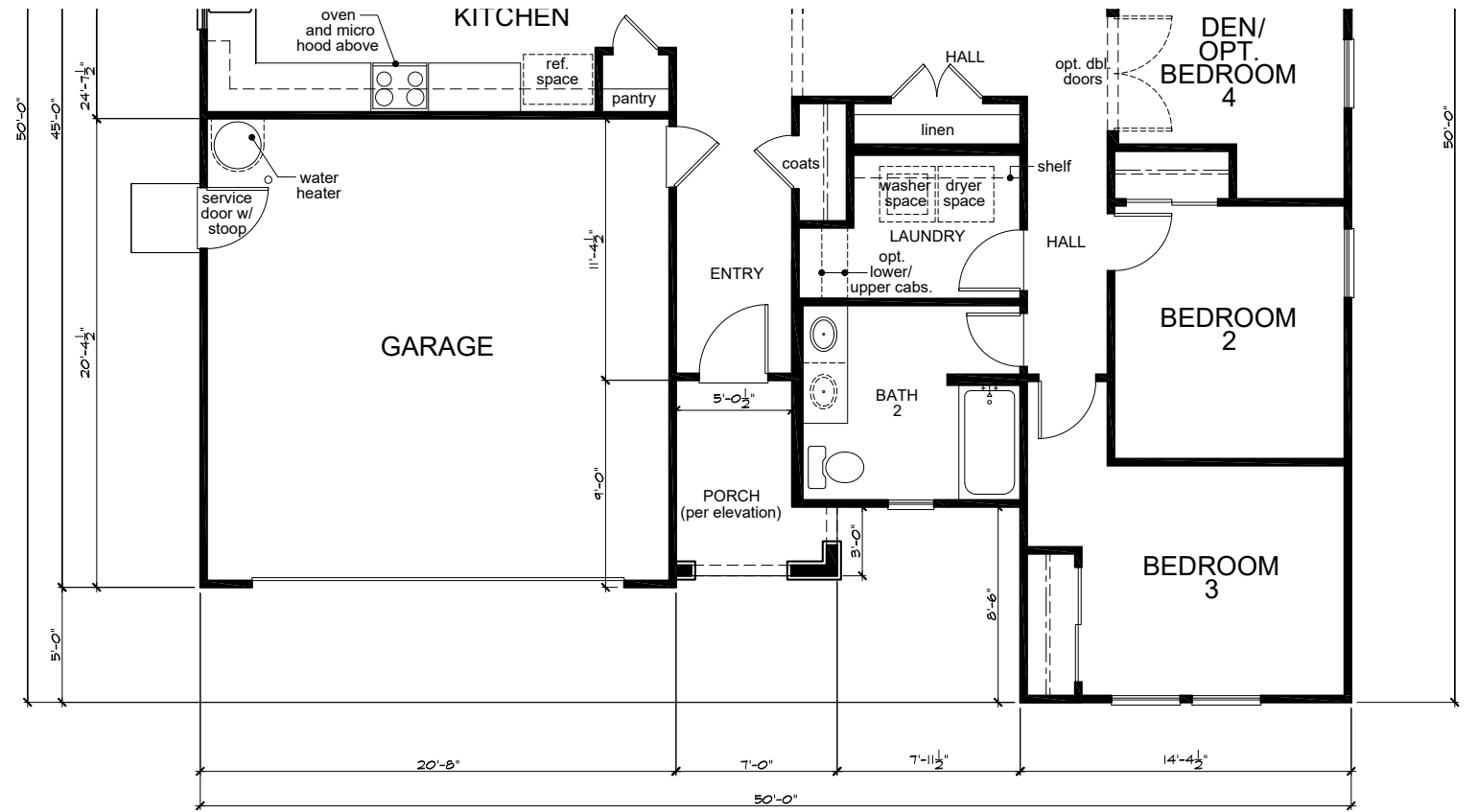


Floor Plan 'A'

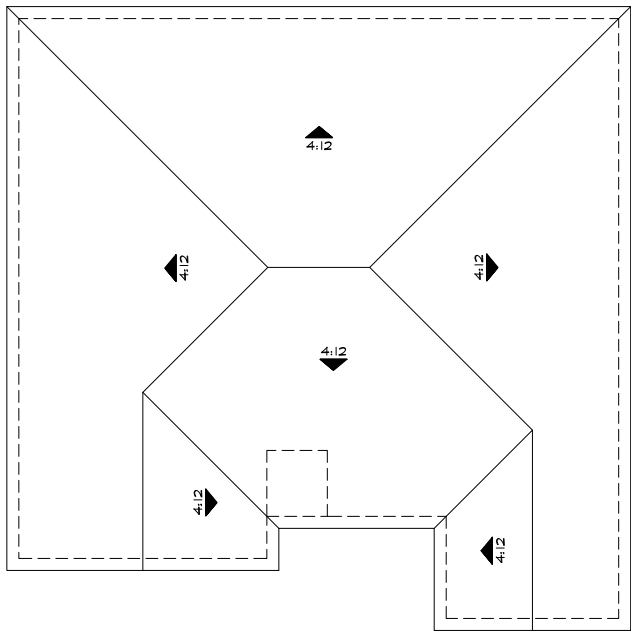
SQUARE FOOTAGE				
PLAN 150.1824				
	'A'	'B'	'D'	
FLOOR AREA	1824	1824	1824	SQ. FT.
TOTAL AREA	1824	1824	1824	SQ. FT.
GARAGE AREA	418	418	418	SQ. FT.
PORCH AREA	28	28	##	SQ. FT.
OPTIONS:				
COVERED PATIO	140	140	140	SQ. FT.



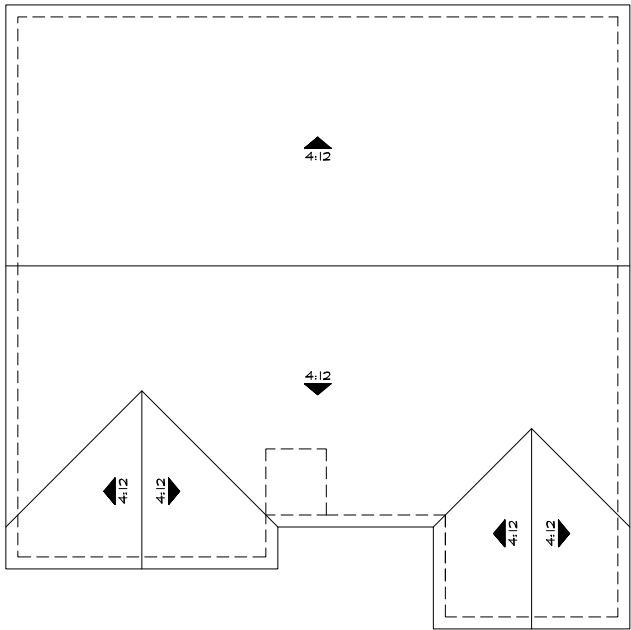
Floor Plan 'B'



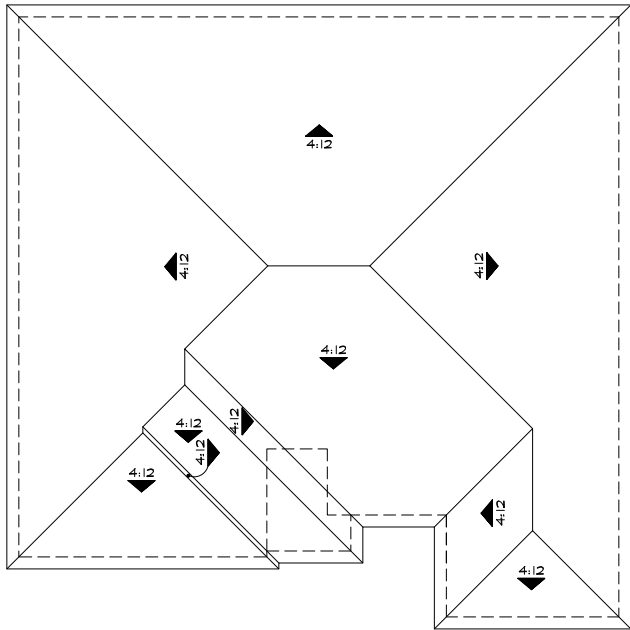
Floor Plan 'D'



'A'



'B'



'D'

Roof Plans

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



Left Elevation 'A'



Front Elevation 'A' - Spanish Eclectic



Right Elevation 'A'



Rear Elevation 'A'



Left Elevation 'B'



Front Elevation 'B' - Craftsman



Right Elevation 'B'



Rear Elevation 'B'



Left Elevation 'D'



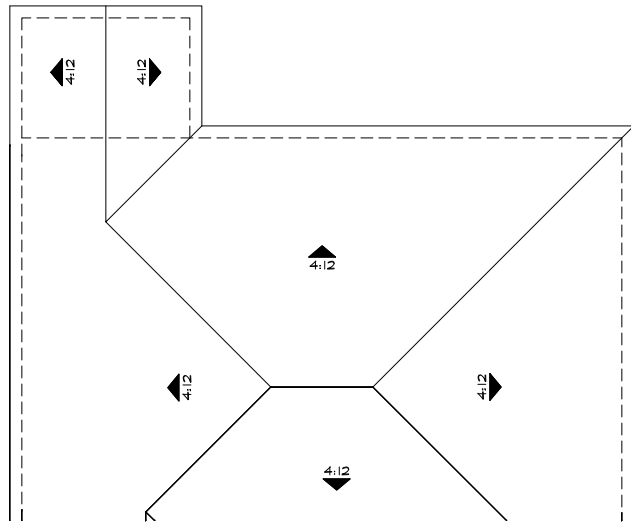
Front Elevation 'D' - Prairie



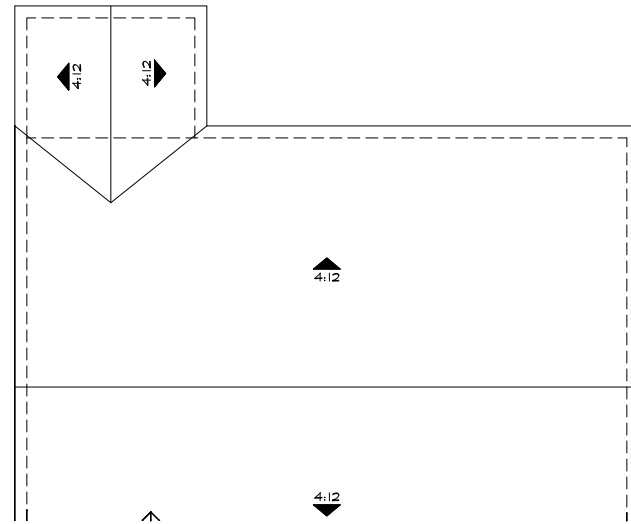
Right Elevation 'D'



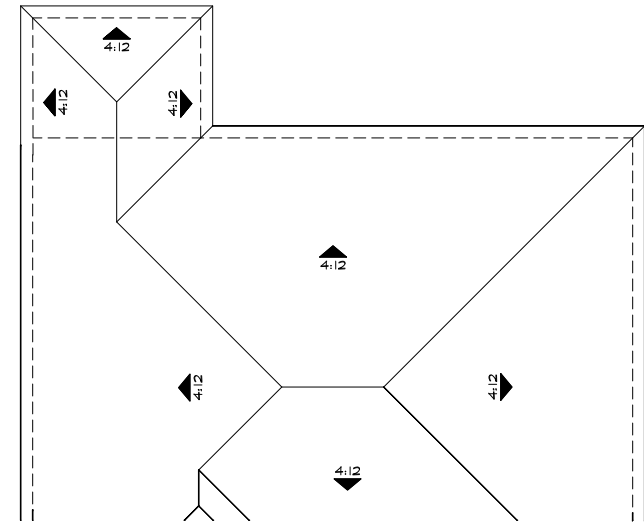
Rear Elevation 'D'



'A'

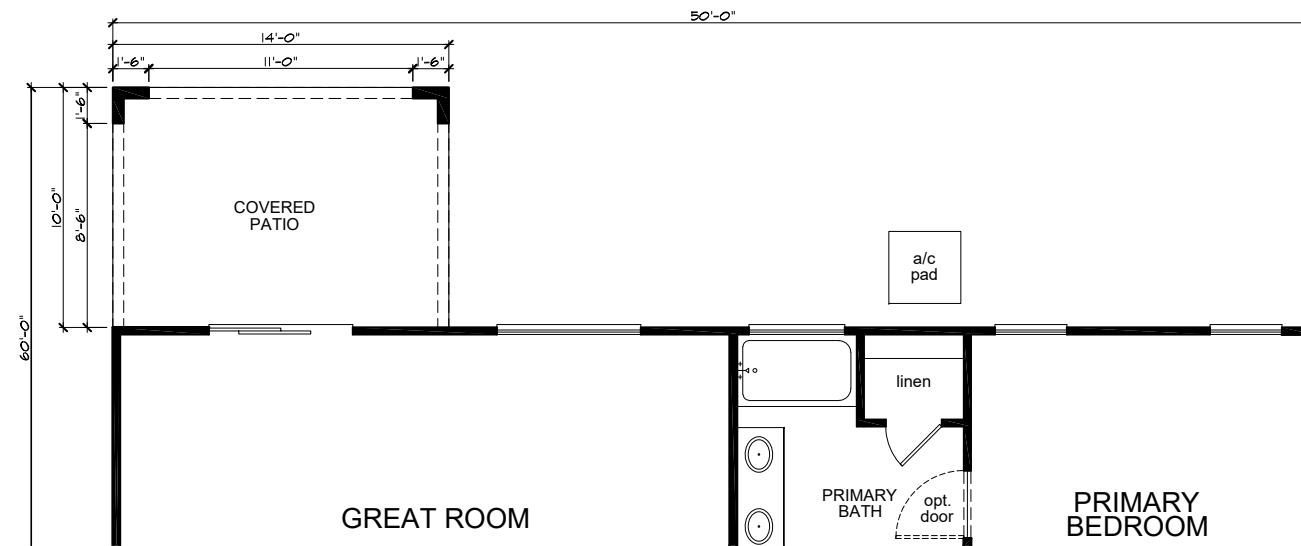


'B'



'D'

Roof Plans
at Covered Patio



Partial Floor Plan
at Covered Patio

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



Rear Elevation 'A'



Partial Left Elevation 'A'

Elevations at Covered Patio



Rear Elevation 'D'



Partial Left Elevation 'D'



Rear Elevation 'B'

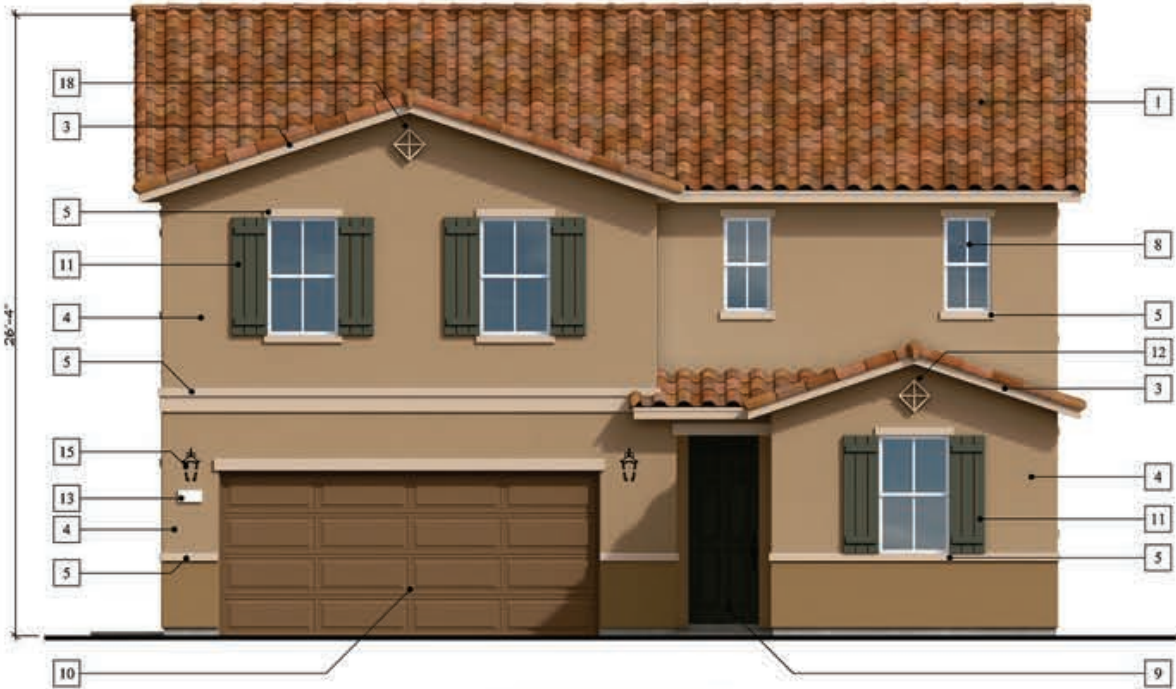


Partial Left Elevation 'B'

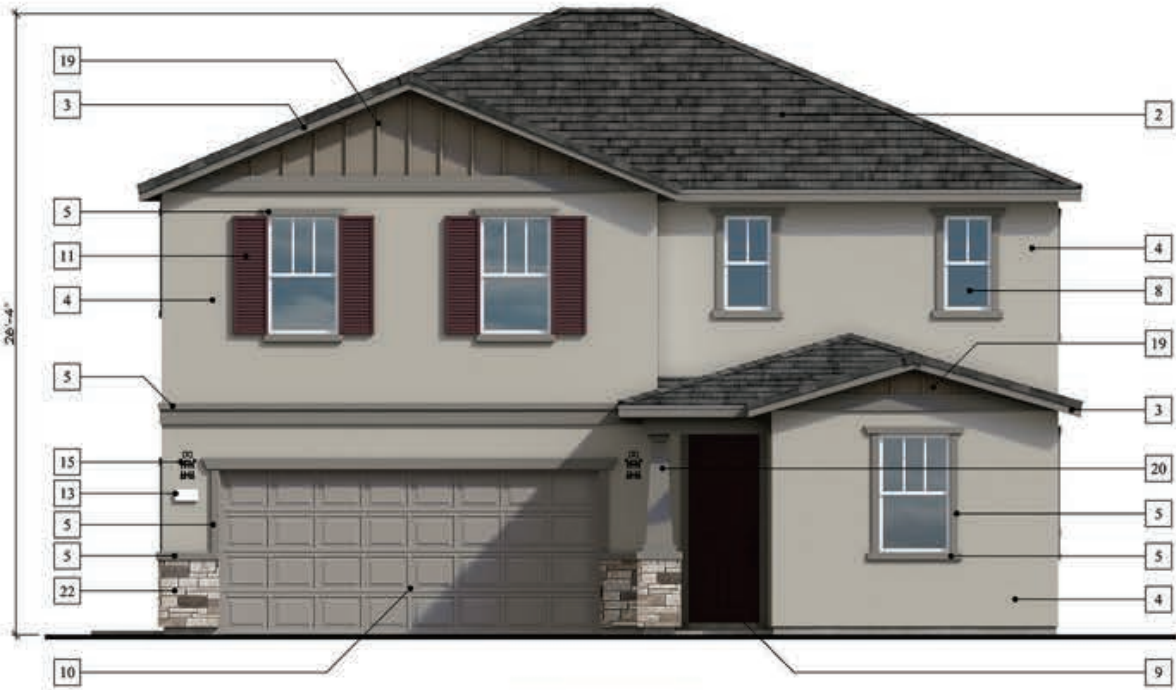
Elevations at Covered Patio

ELEVATION LEGEND

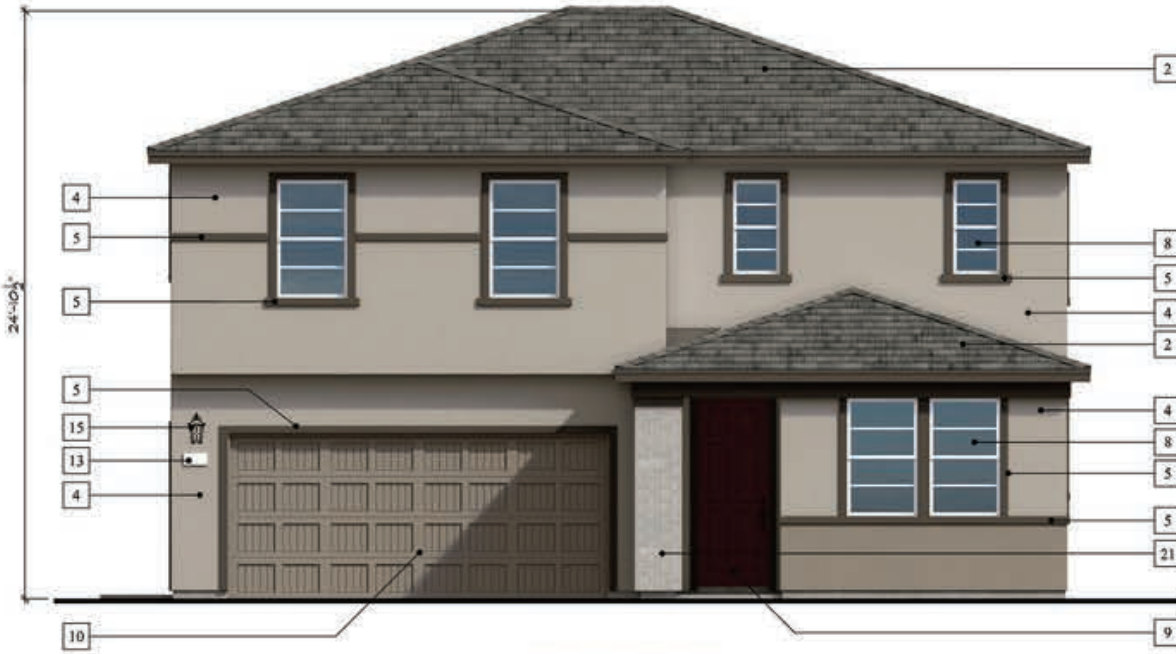
- 1 CONCRETE 'S' TILE ROOFING
- 2 CONCRETE FLAT TILE ROOFING
- 3 WOOD FASCIA BOARD / FASCIA GUTTER
- 4 STUCCO FINISH
- 5 STUCCO OVER FOAM TRIM
- 6 STUCCO OVER FOAM CORBELS
- 7 STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
- 8 PRE-FAB WINDOW SYSTEM
- 9 COMPOSITE ENTRY DOOR
- 10 METAL ROLL-UP GARAGE DOOR
- 11 DECORATIVE FOAM SHUTTERS
- 12 STUCCO OVER SHAPED FOAM TRIM
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- 15 OPTIONAL COACH LIGHT
- 16 WOOD CORBELS
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- 18 DECORATIVE CLAY PIPES
- 19 DECORATIVE BOARD & BATTEN
- 20 TAPERED COLUMNS (STUCCO OVER WOOD FRAMING)
- 21 BRICK VENEER
- 22 STONE VENEER



Elevation 'A' - Spanish Eclectic



Elevation 'B' - Craftsman

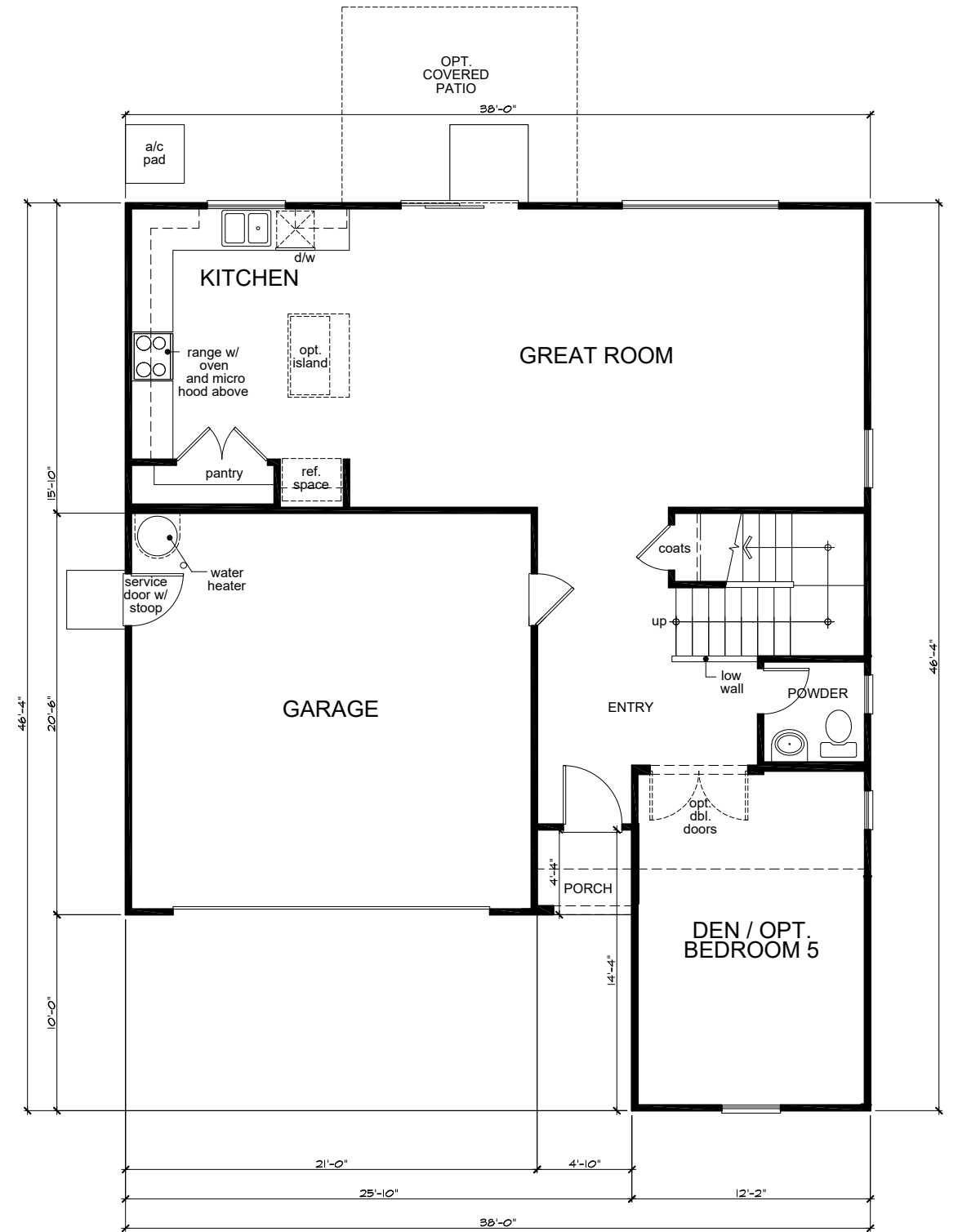


Elevation 'D' - Prairie

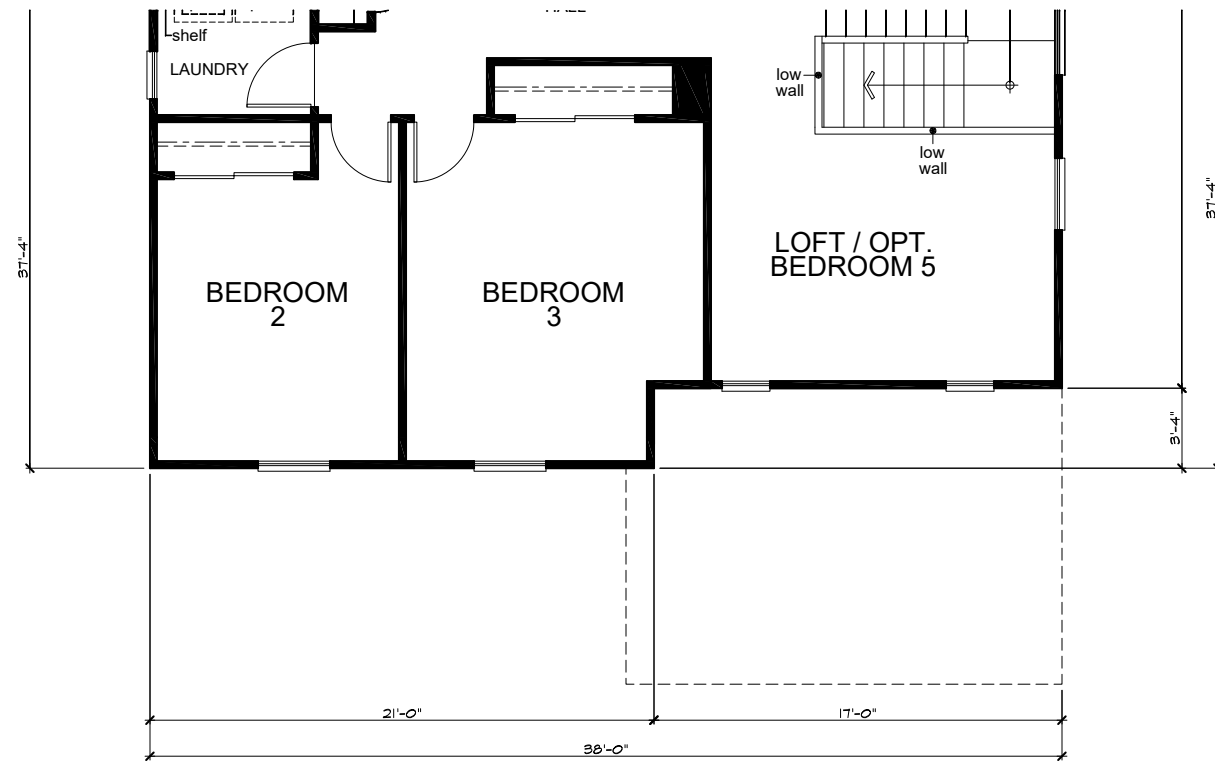


Second Floor Plan 'A'

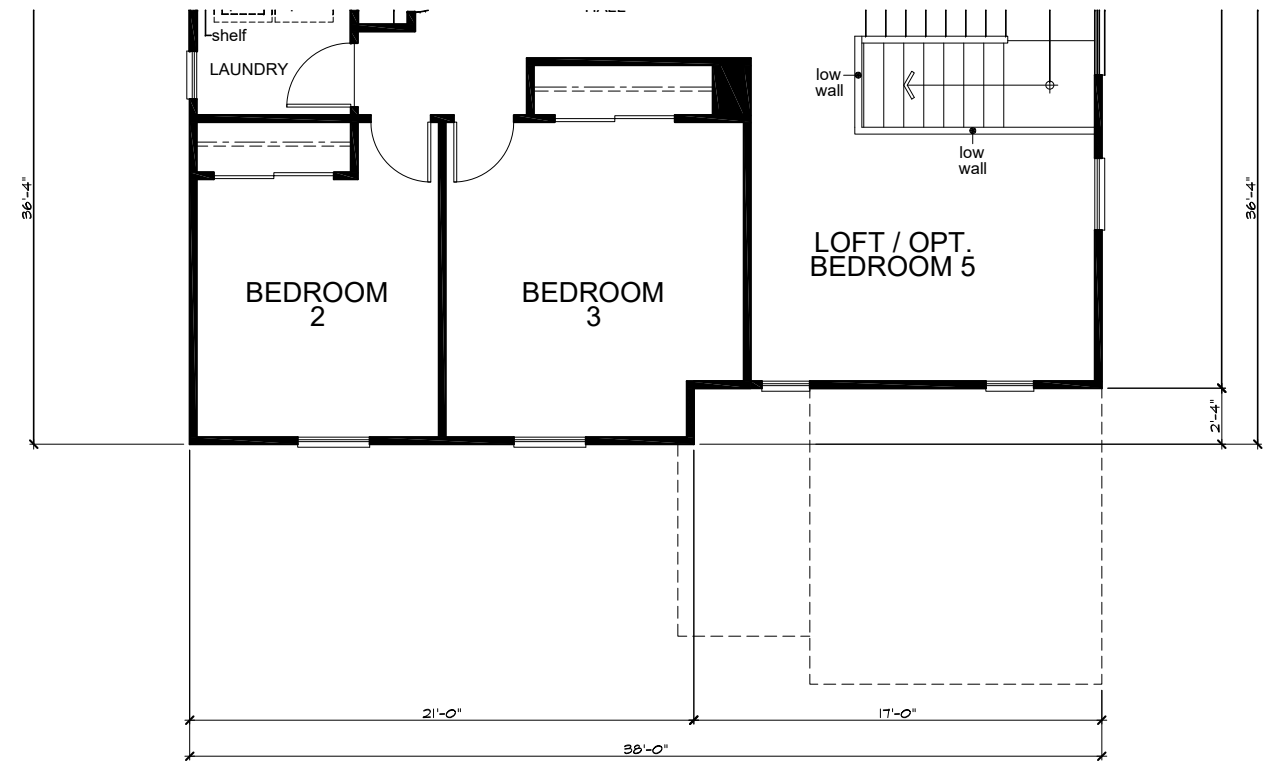
SQUARE FOOTAGE				
PLAN 238.2324				
	'A'	'B'	'D'	
FIRST FLOOR PLAN AREA	1056	1056	1056	SQ. FT.
SECOND FLOOR PLAN AREA	1268	1268	####	SQ. FT.
TOTAL AREA	2324	2324	1056	SQ. FT.
GARAGE AREA	426	426	426	SQ. FT.
PORCH AREA	21	65	##	SQ. FT.
PATIO				
COVERED PATIO	120	120	120	SQ. FT.



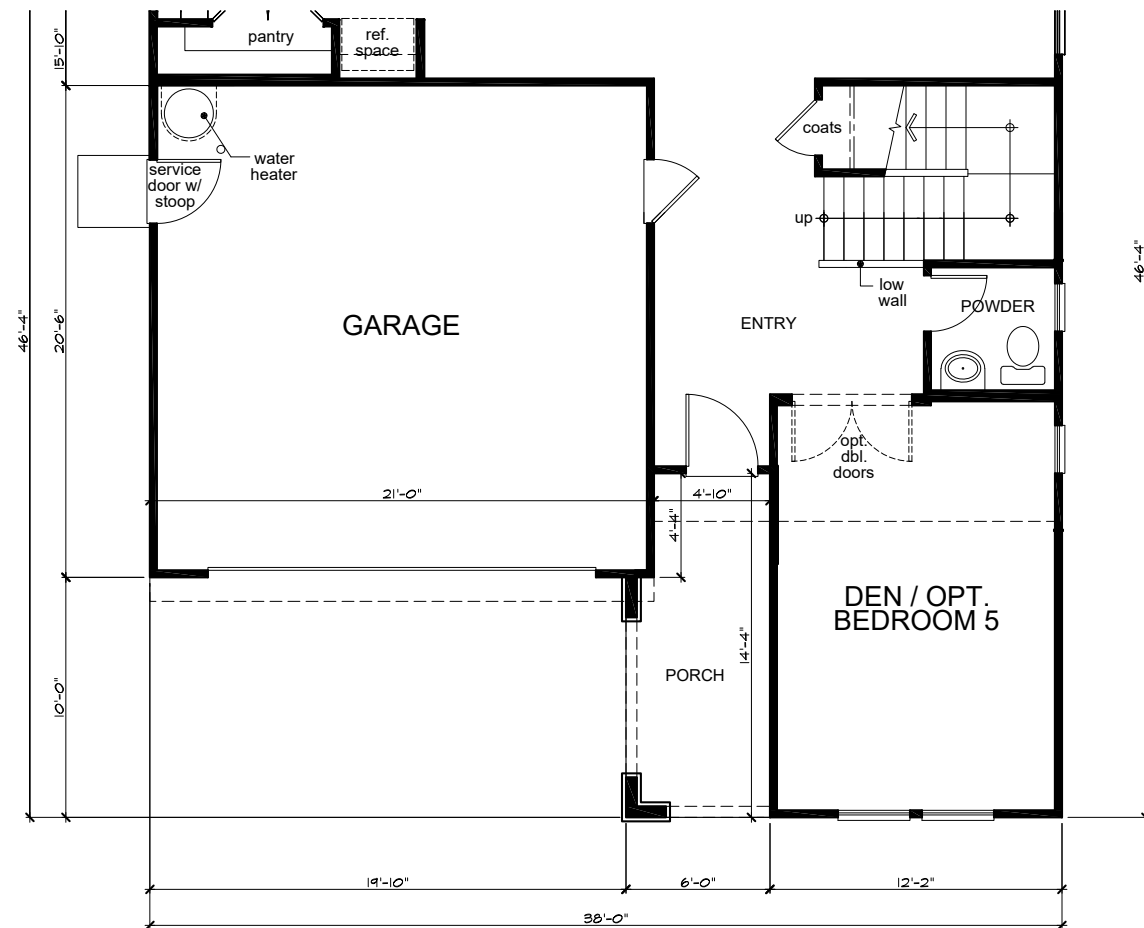
First Floor Plan 'A'



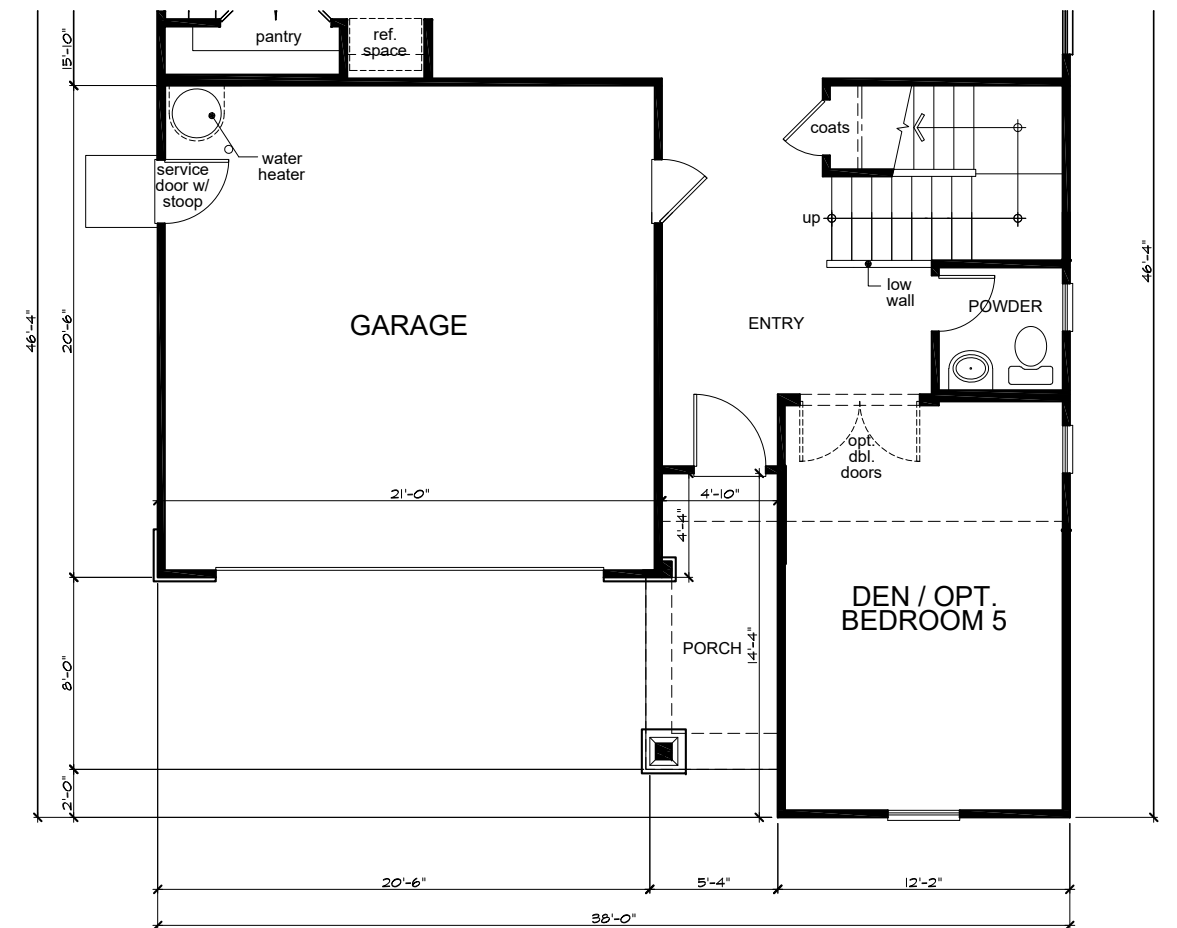
Second Floor Plan 'D'



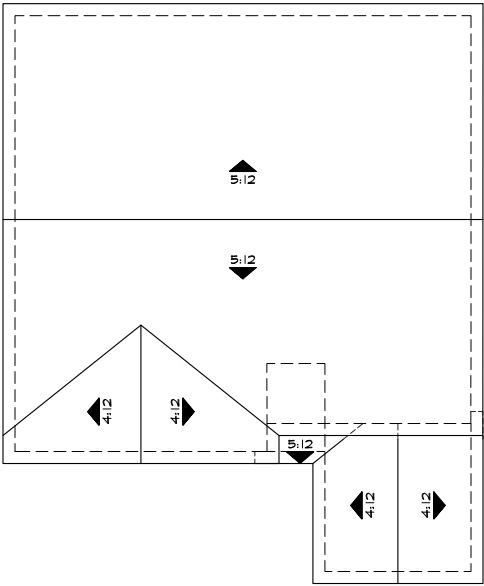
Second Floor Plan 'B'



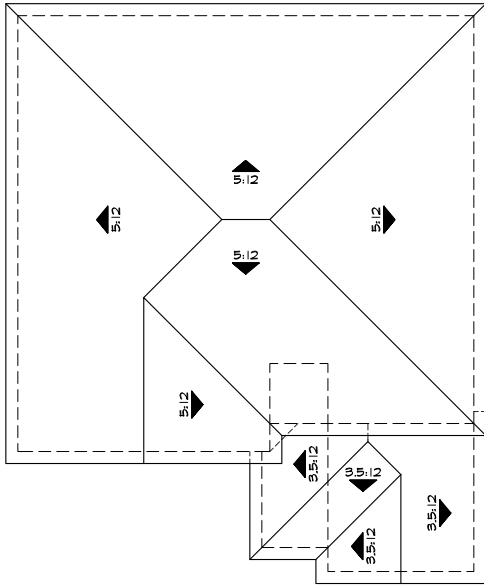
First Floor Plan 'D'



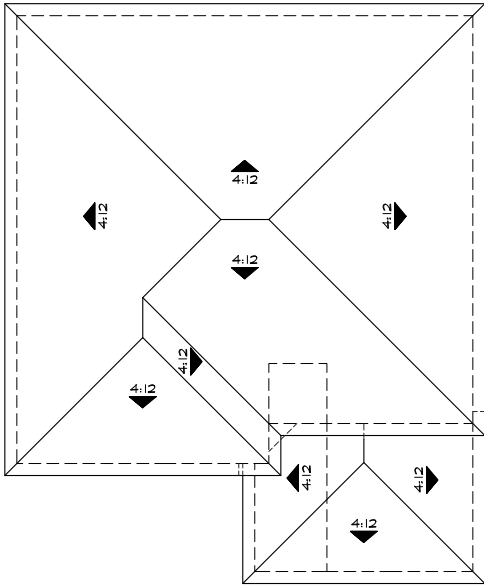
First Floor Plan 'B'



'A'



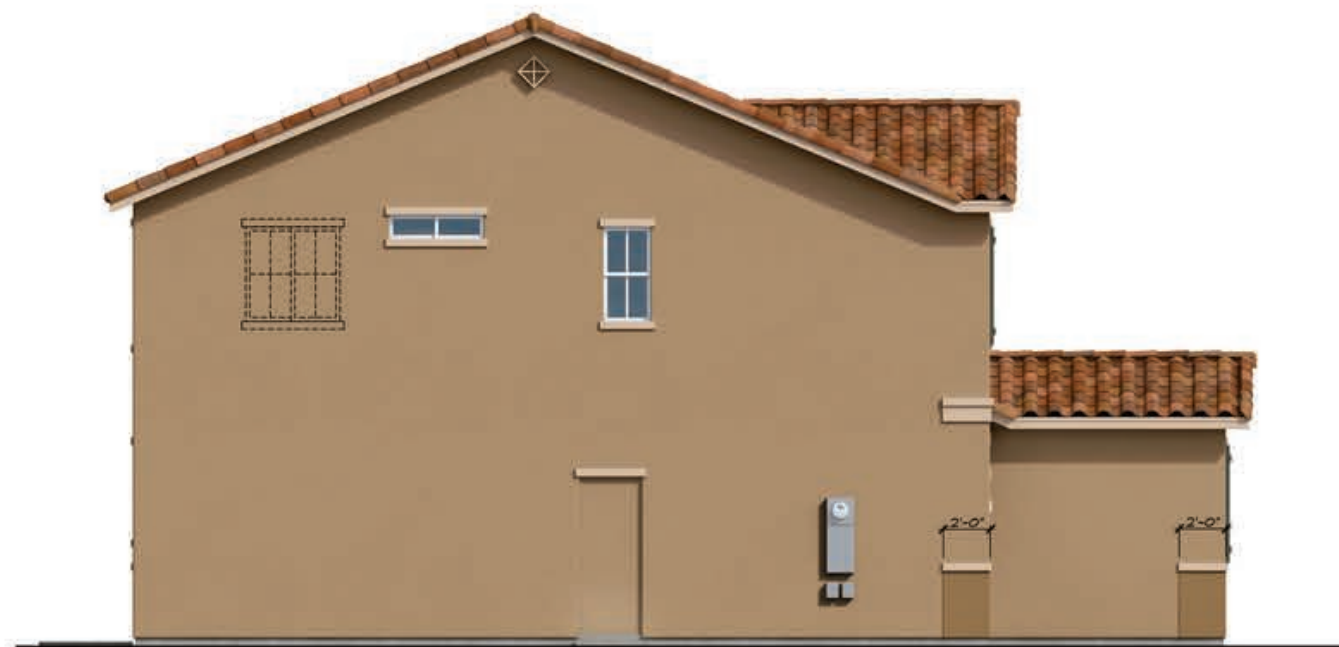
'B'



'D'

Roof Plans

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



Left Elevation 'A'



Front Elevation 'A' - Spanish Eclectic



Right Elevation 'A'



Rear Elevation 'A'



Left Elevation 'B'



Front Elevation 'B' - Craftsman



Right Elevation 'B'



Rear Elevation 'B'



Left Elevation 'D'



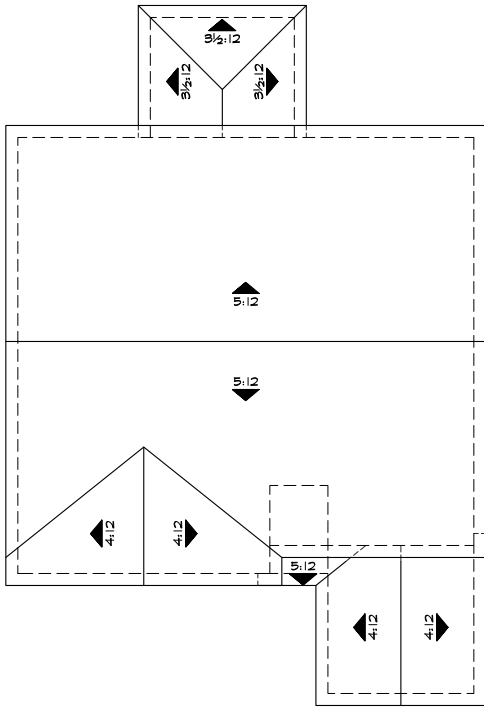
Front Elevation 'D' - Prairie



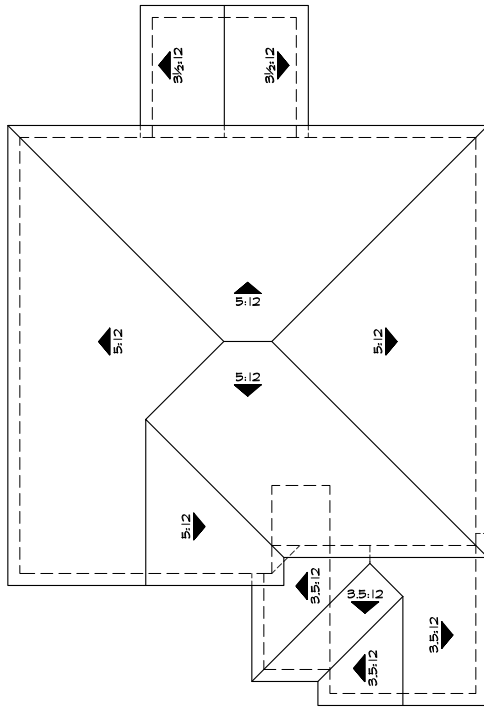
Right Elevation 'D'



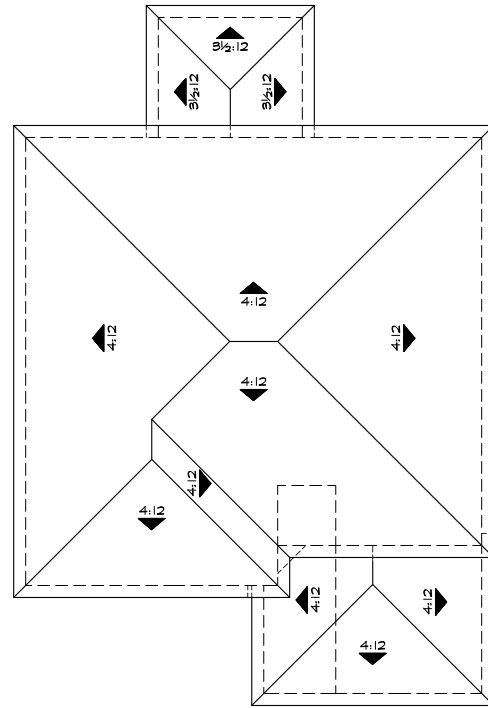
Rear Elevation 'D'



'A'

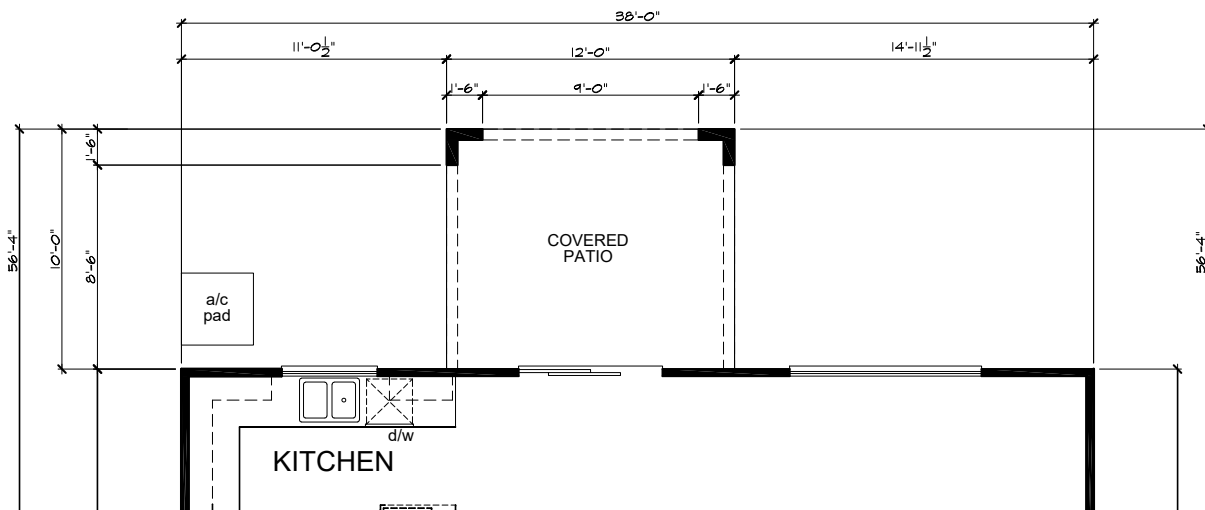


'B'



'D'

Roof Plans
at Covered Patio



Partial Floor Plan
at Covered Patio

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



KB Home North Bay
4830 Business Center Drive Suite 150
Fairfield, CA 94534
(707) 389-7500
CITY OF OAKLEY

PLAN No. : 238.2324
JOB No. : 3025-999424
STORY: 2STORY
March 28, 2025



Partial Right Elevation 'A'



Rear Elevation 'A'

Elevations
at Covered Patio



Partial Left Elevation 'A'



Partial Right Elevation 'D'



Rear Elevation 'D'



Partial Left Elevation 'D'



Partial Right Elevation 'B'



Rear Elevation 'B'

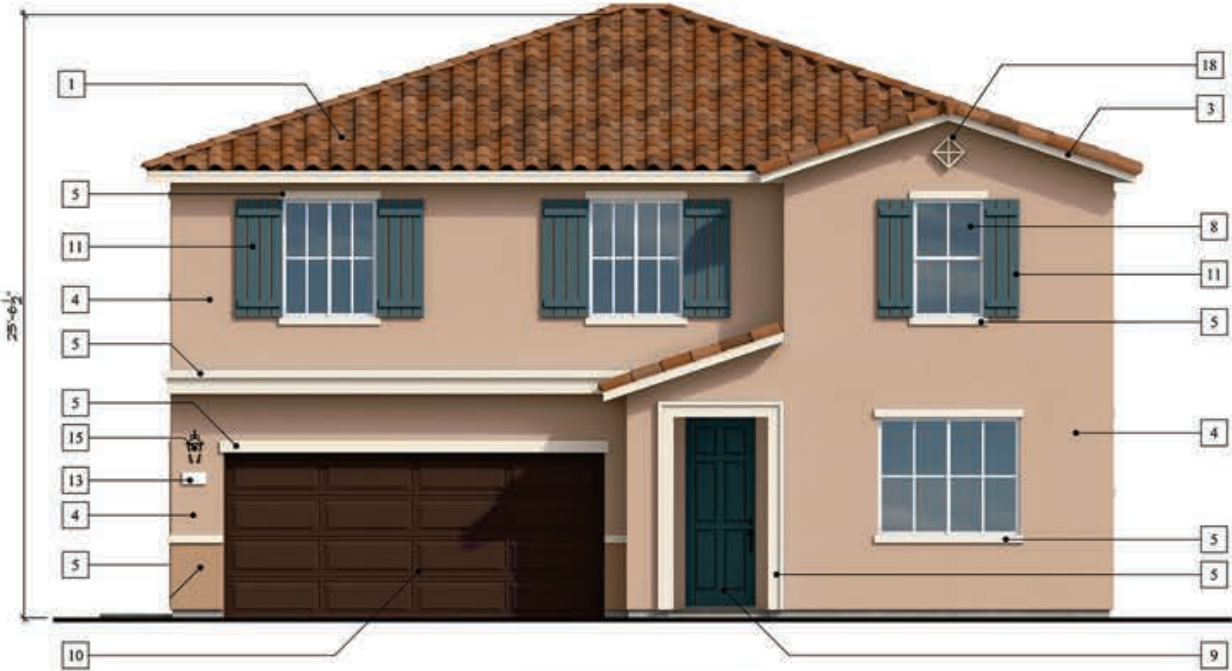


Partial Left Elevation 'B'

Elevations
at Covered Patio

ELEVATION LEGEND

- 1 CONCRETE 'S' TILE ROOFING
- 2 CONCRETE FLAT TILE ROOFING
- 3 WOOD FASCIA BOARD / FASCIA GUTTER
- 4 STUCCO FINISH
- 5 STUCCO OVER FOAM TRIM
- 6 STUCCO OVER FOAM CORBELS
- 7 STUCCO COLUMNS (STUCCO OVER WOOD FRAMING)
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- 17 DECORATIVE FOAM VENTS
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- 19 DECORATIVE BOARD & BATTEN
- 20 TAPERED COLUMNS (STUCCO OVER WOOD FRAMING)
- 21 BRICK VENEER
- 22 STONE VENEER



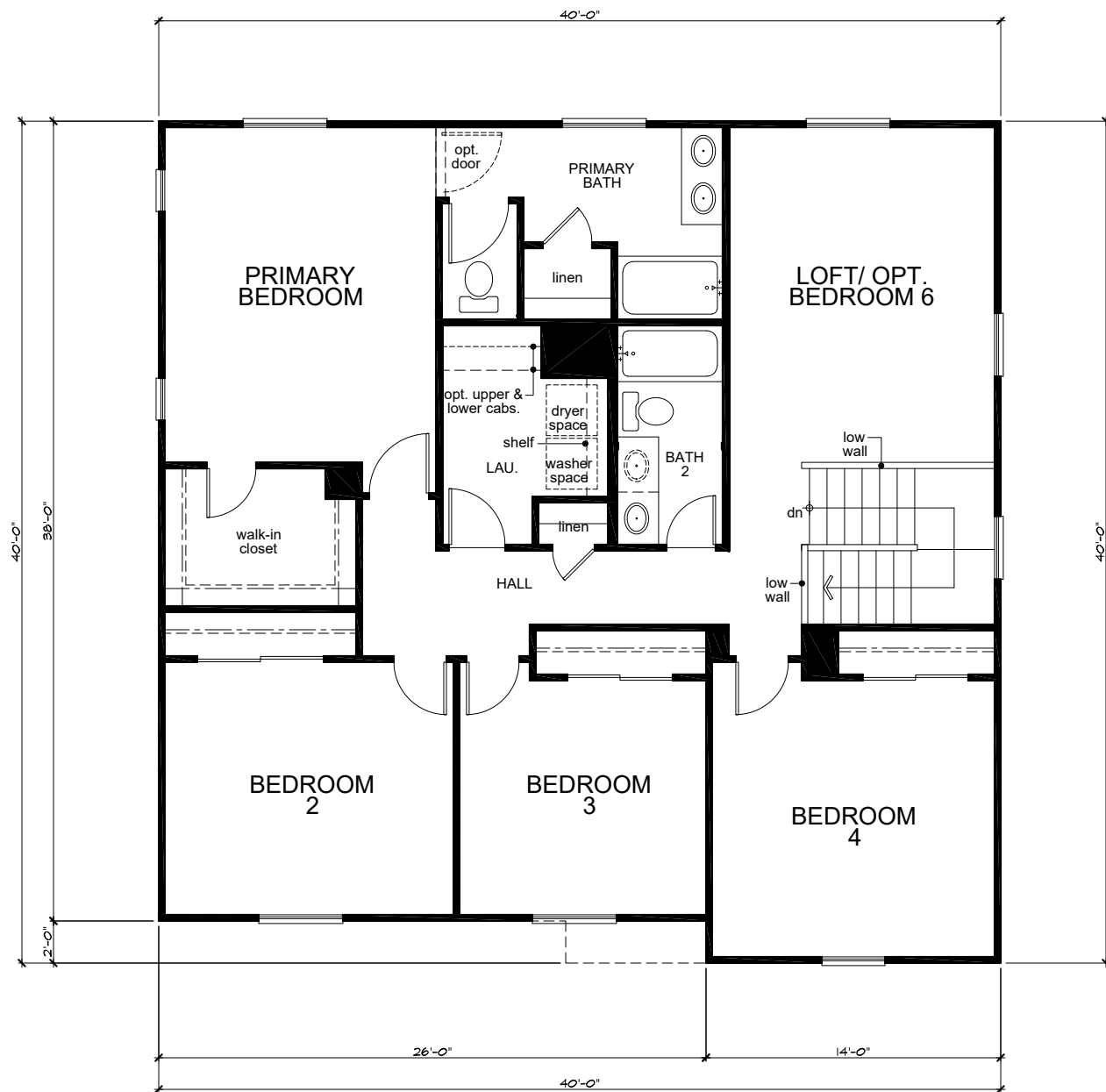
Elevation 'A' - Spanish Eclectic



Elevation 'B' - Craftsman

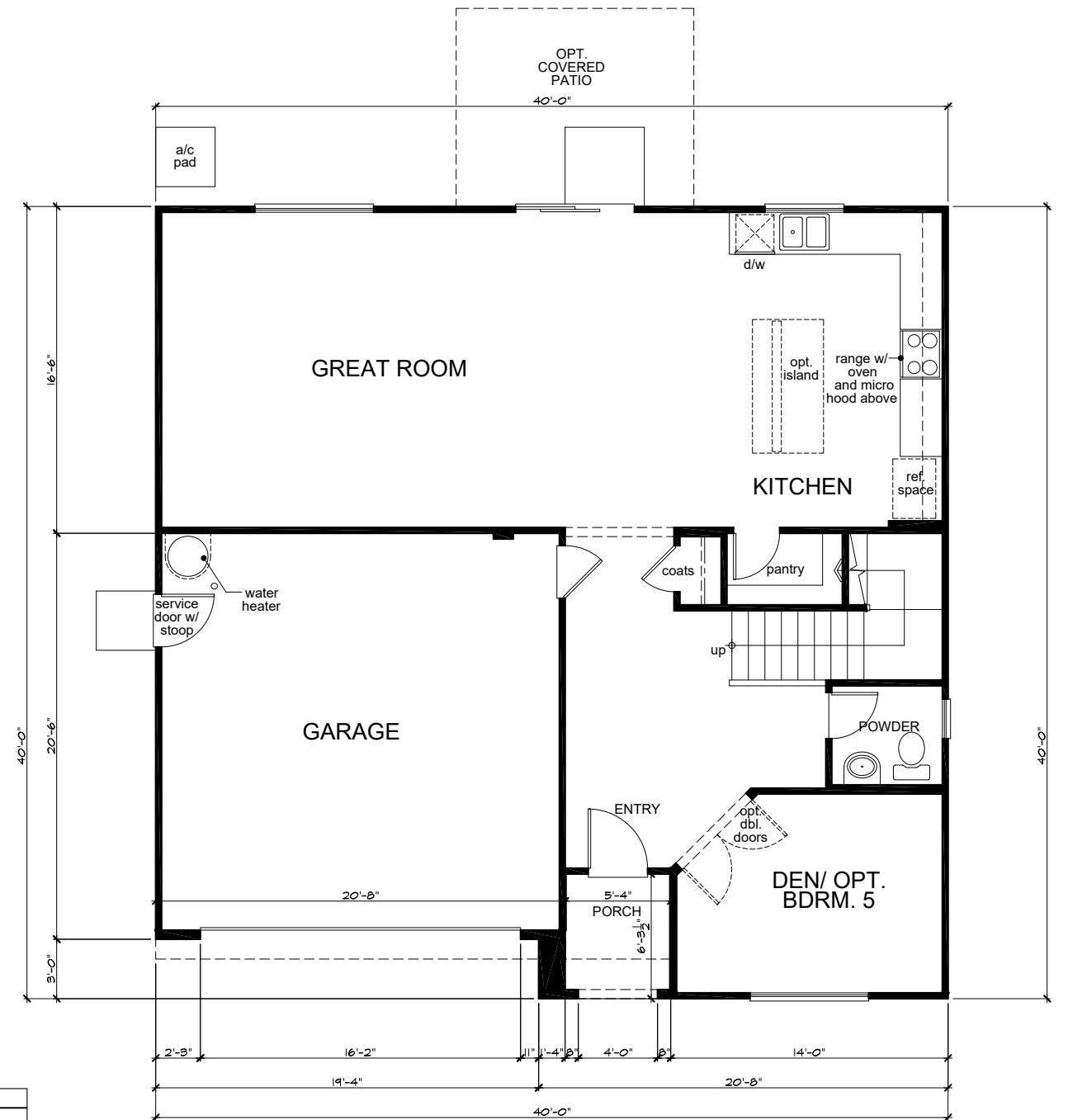


Elevation 'D' - Prairie

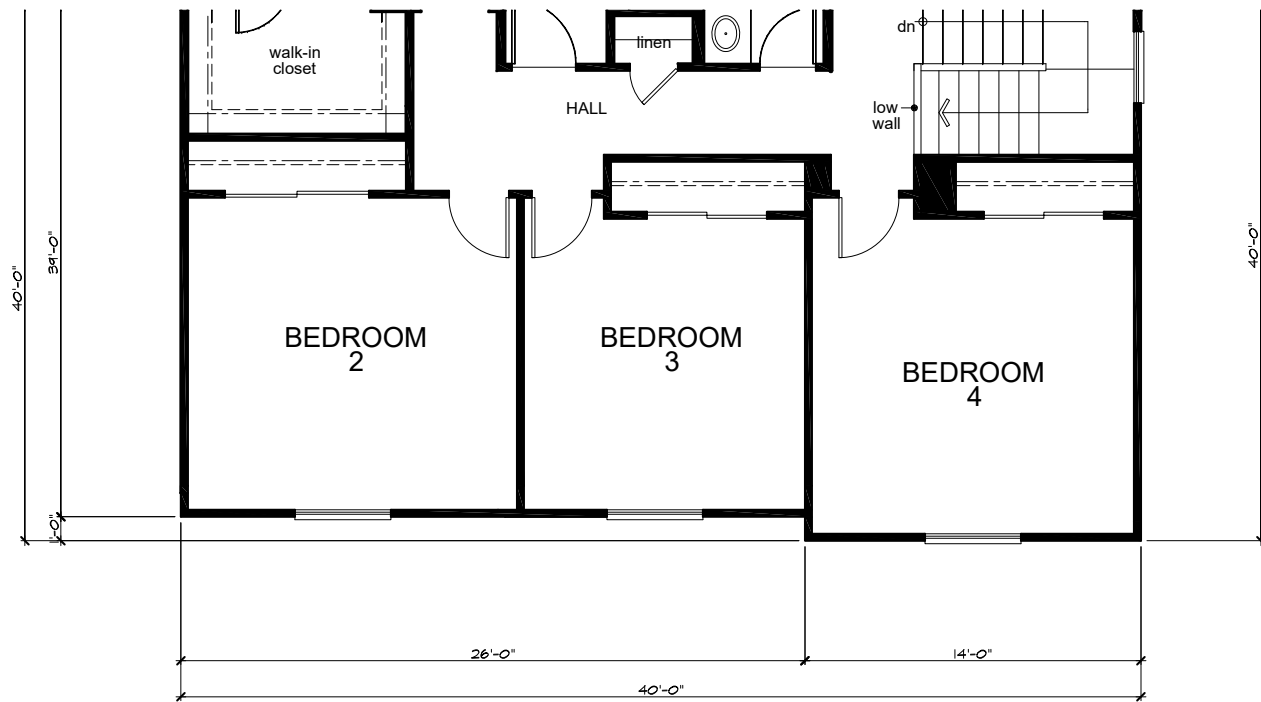


Second Floor Plan 'A'

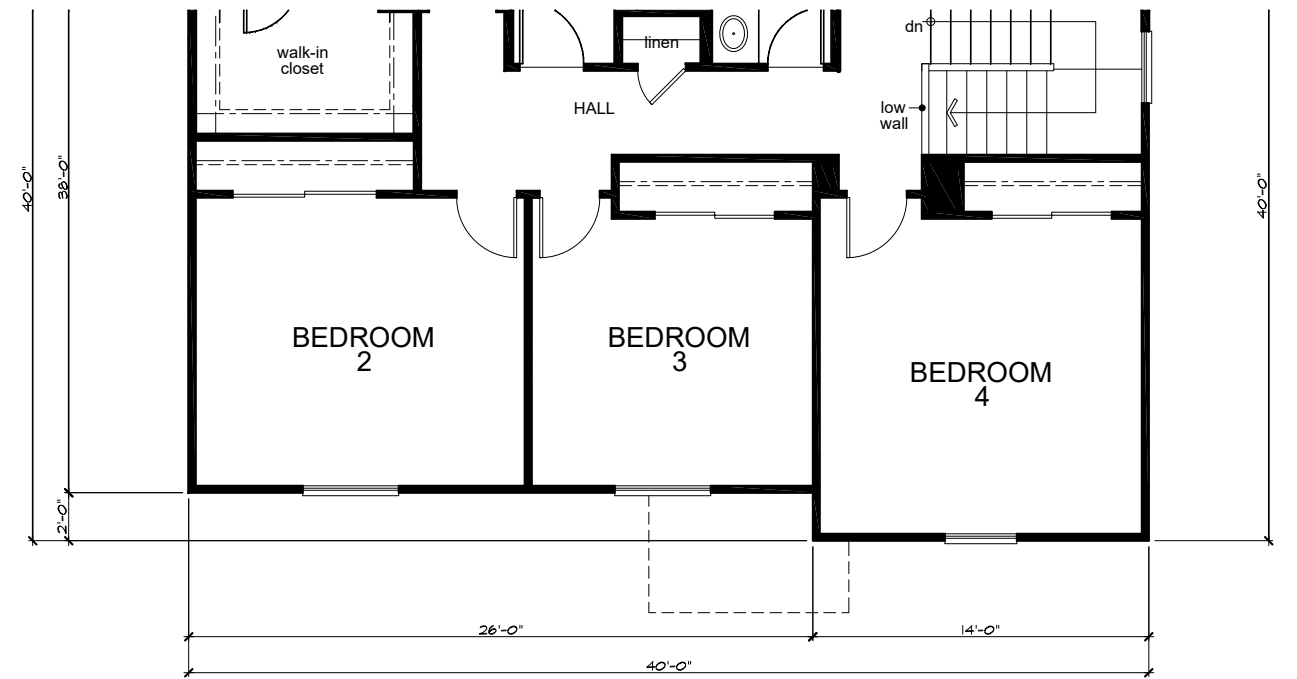
SQUARE FOOTAGE				
PLAN 240.2566				
	A'	B'	D'	
1st FLOOR AREA	1086	1086	1086	SQ. FT.
2nd FLOOR AREA	1480	1480	1506	SQ. FT.
TOTAL AREA	2566	2566	2592	SQ. FT.
GARAGE AREA	419	419	419	SQ. FT.
PORCH AREA	34	63	73	SQ. FT.
OPTIONS:				
COVERED PATIO	120	120	120	SQ. FT.



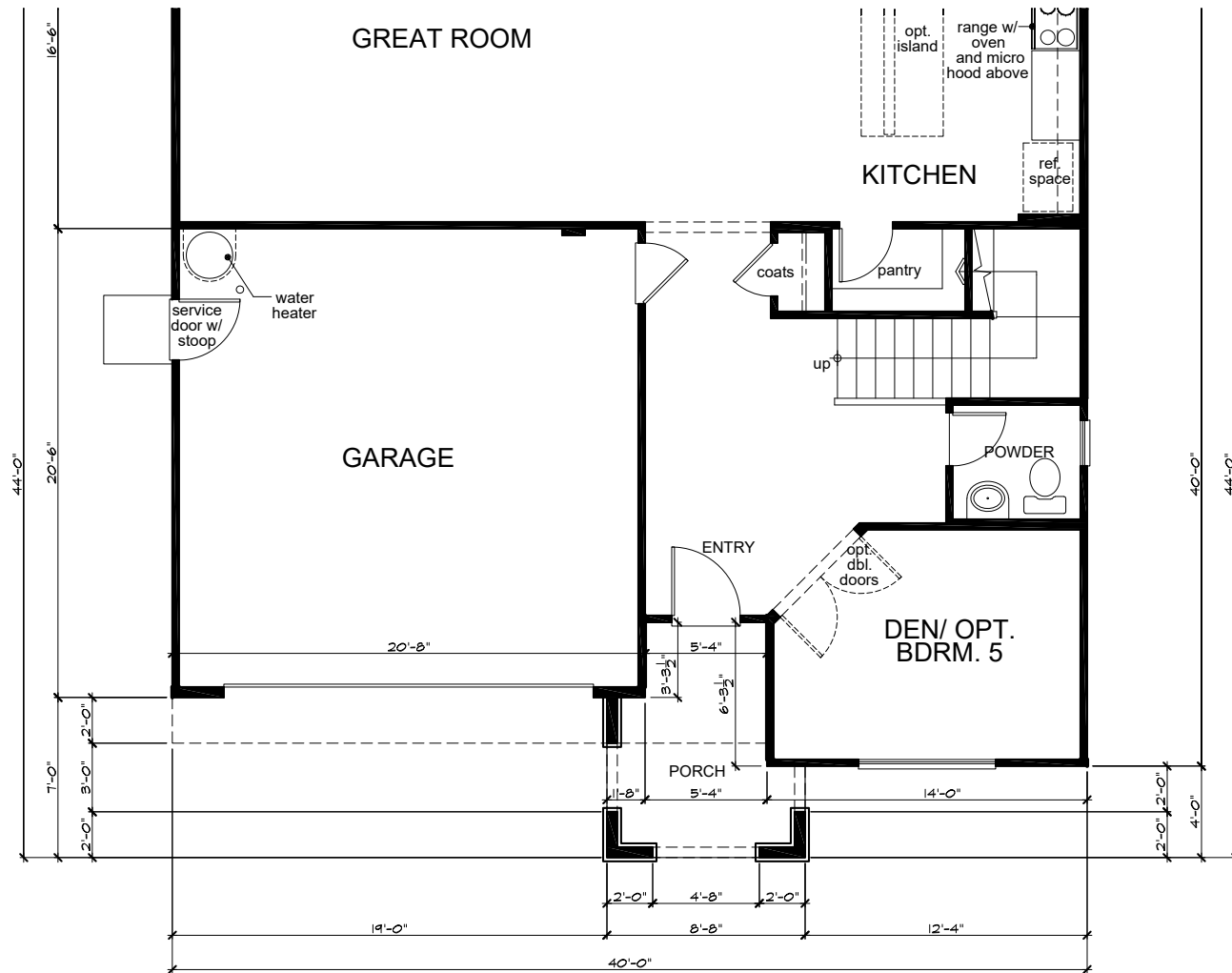
First Floor Plan 'A'



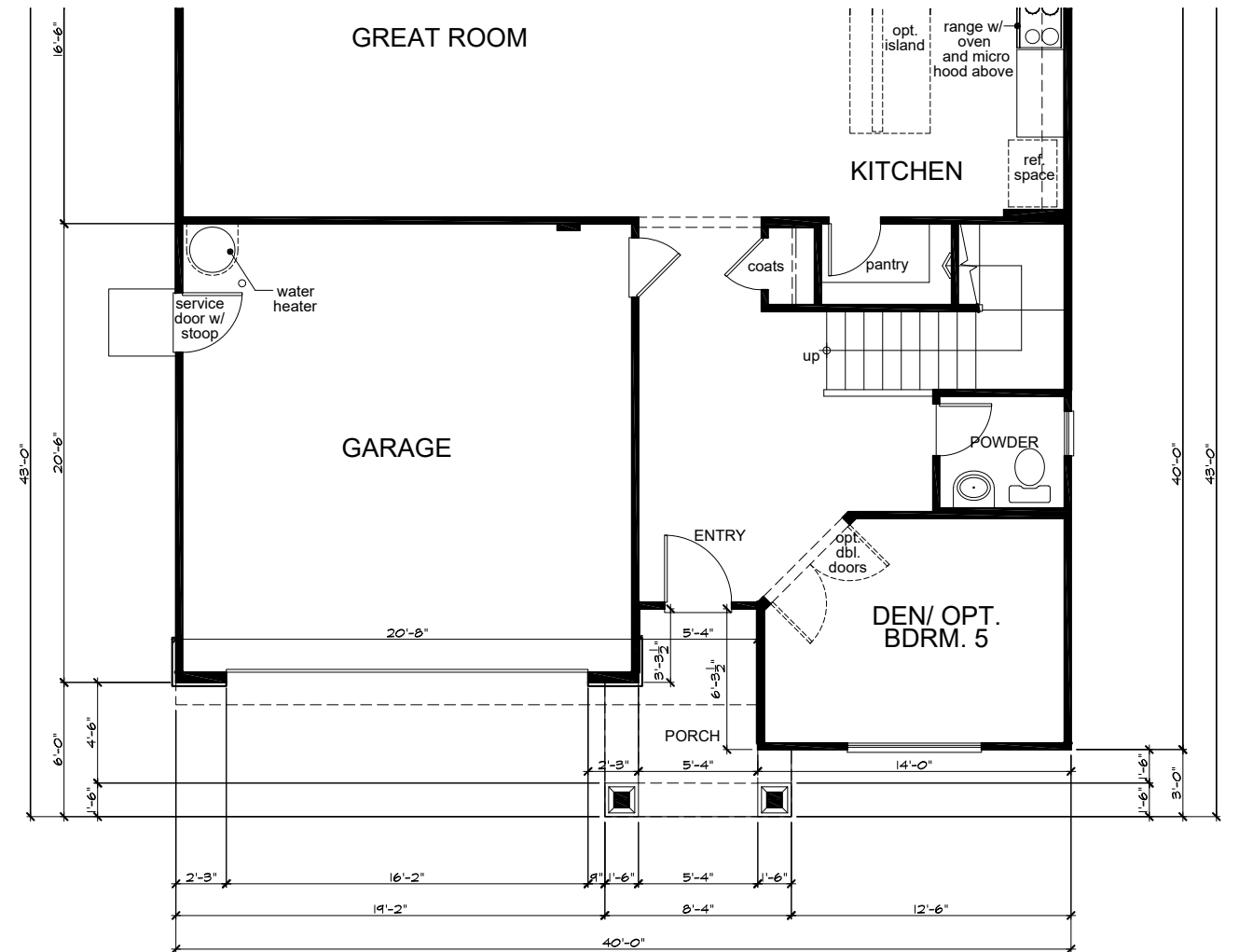
Second Floor Plan 'D'



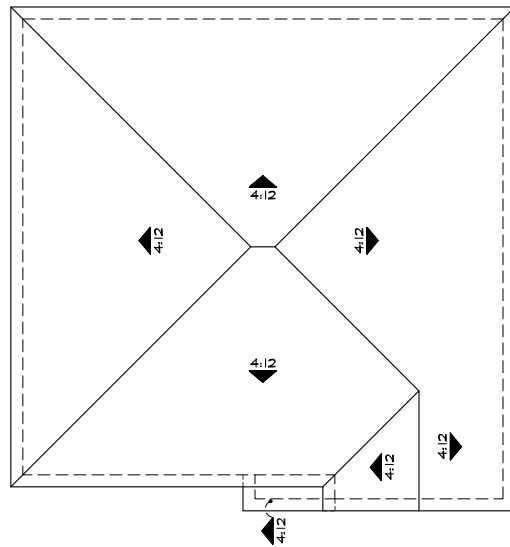
Second Floor Plan 'B'



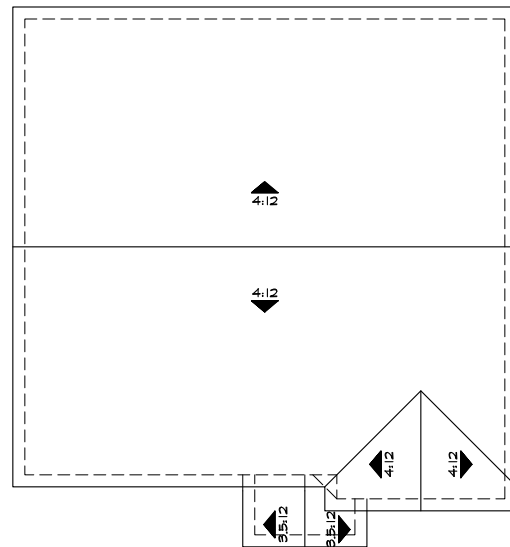
First Floor Plan 'D'



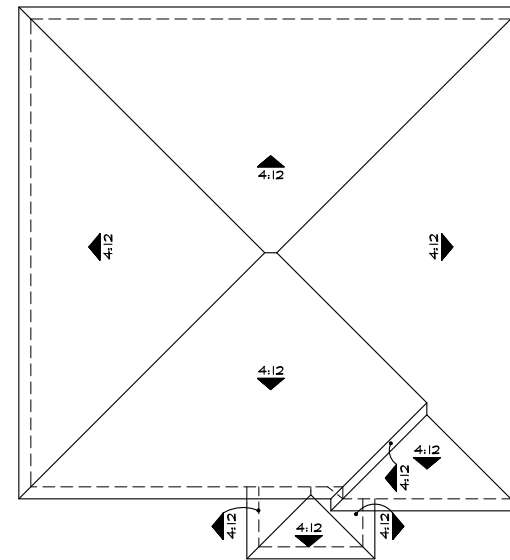
First Floor Plan 'B'



'A'



'B'



'D'

Roof Plans

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



Left Elevation 'A'



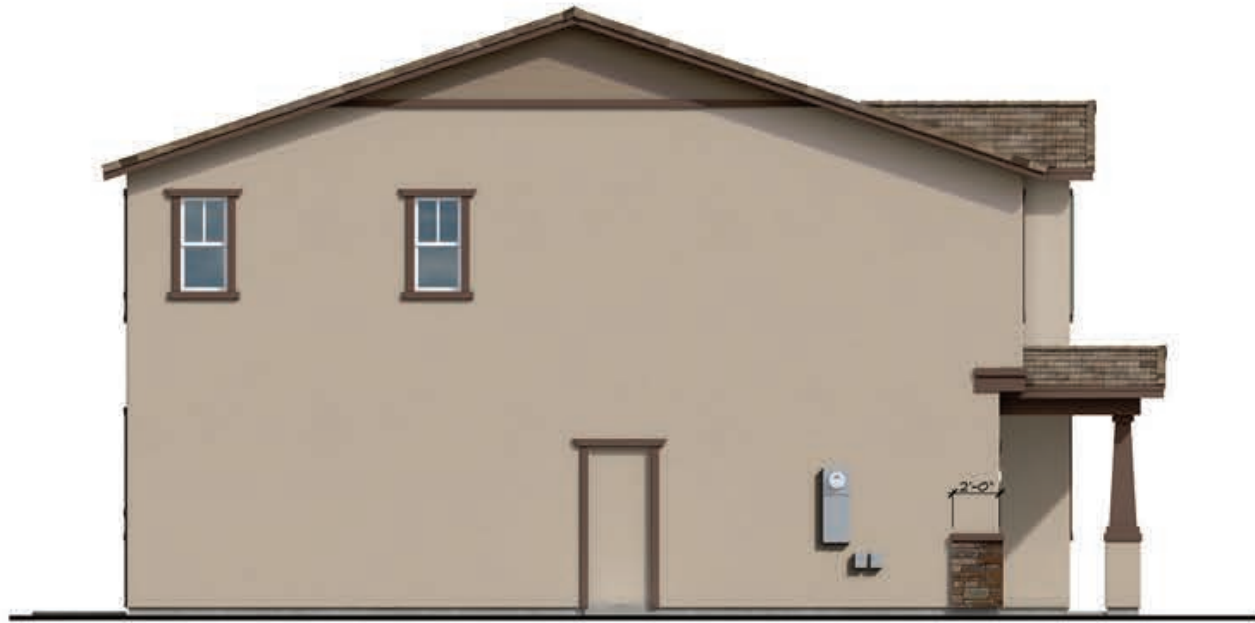
Front Elevation 'A' - Spanish Eclectic



Right Elevation 'A'



Rear Elevation 'A'



Left Elevation 'B'



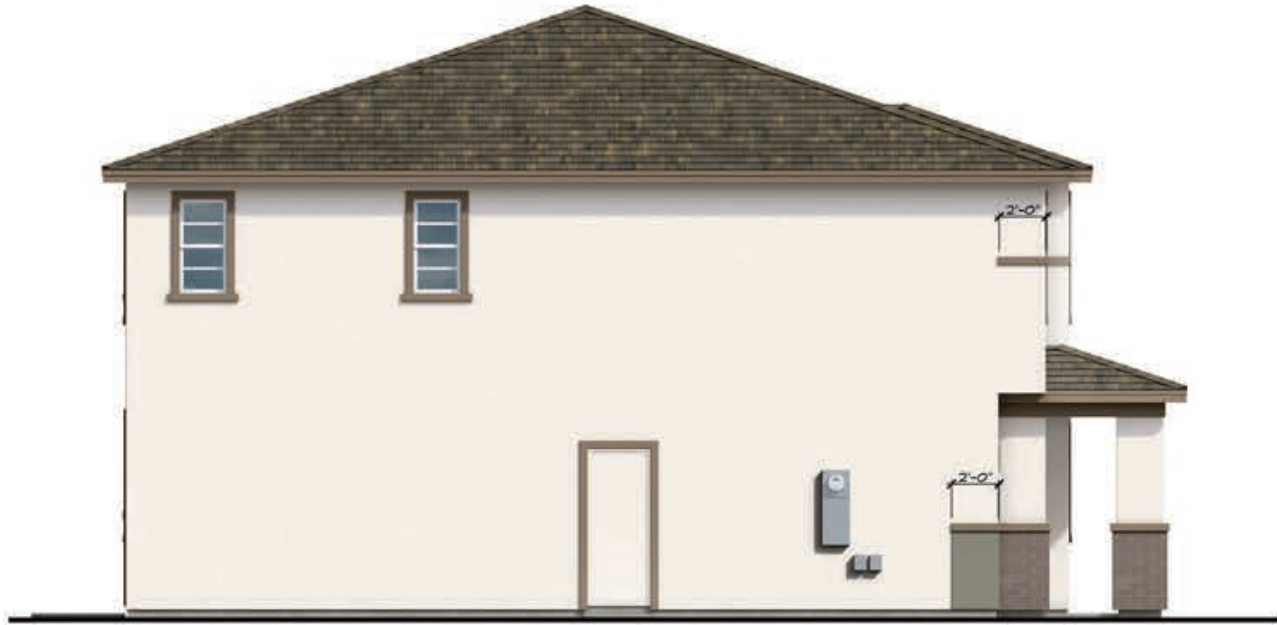
Front Elevation 'B' - Craftsman



Right Elevation 'B'



Rear Elevation 'B'



Left Elevation 'D'



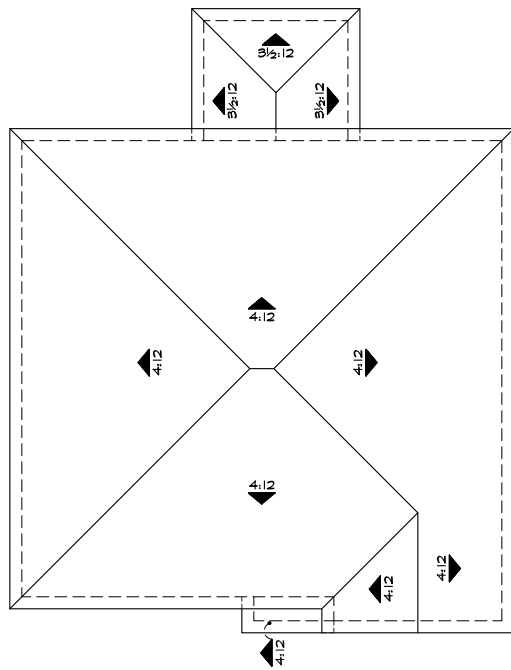
Front Elevation 'D' - Prairie



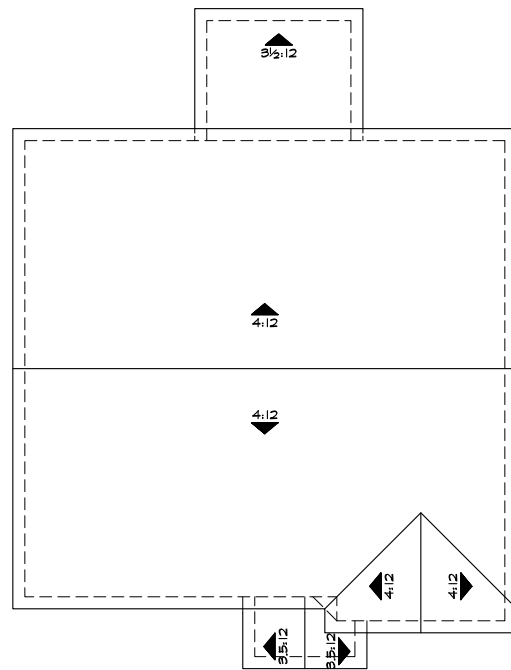
Right Elevation 'D'



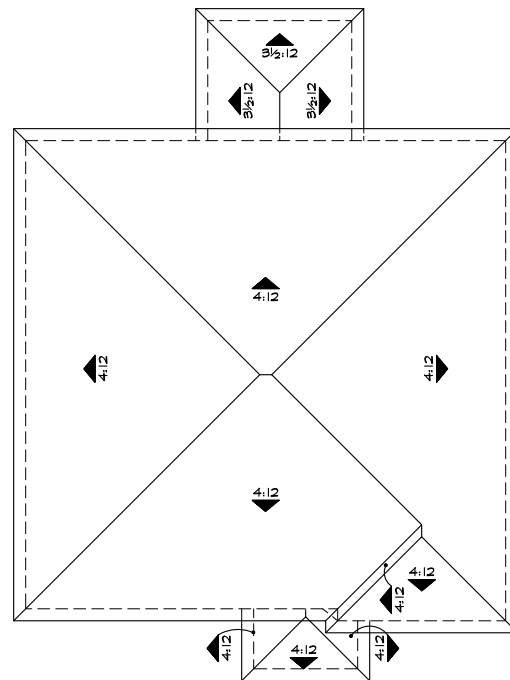
Rear Elevation 'D'



'A'

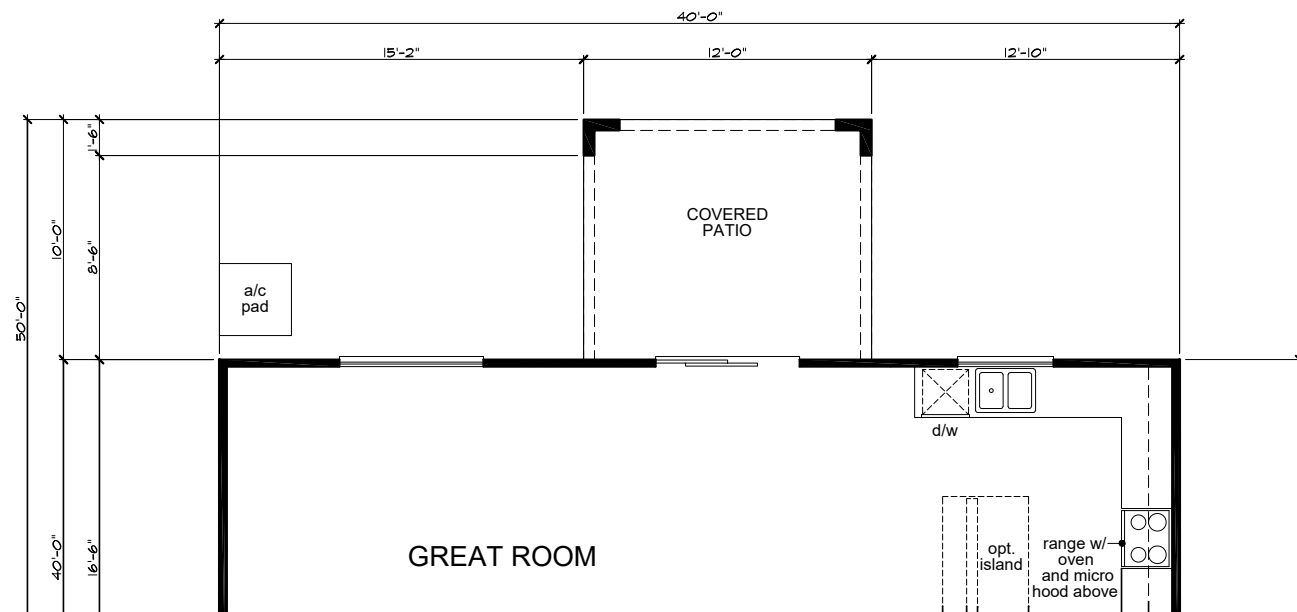


'B'



'D'

Roof Plans
at Covered Patio



Partial Floor Plan
at Covered Patio

THE MEADOW AT CYPRESS RANCH
50'/60' WIDE LOTS



KB Home North Bay
4830 Business Center Drive Suite 150
Fairfield, CA 94534
(707) 389-7500

CITY OF OAKLEY

PLAN No. : 240.2566
JOB No. : 3025-999424
STORY: 1-STORY
March 28, 2025

A2-4.8



Partial Right Elevation 'A'



Rear Elevation 'A'

Elevations
at Covered Patio



Partial Left Elevation 'A'



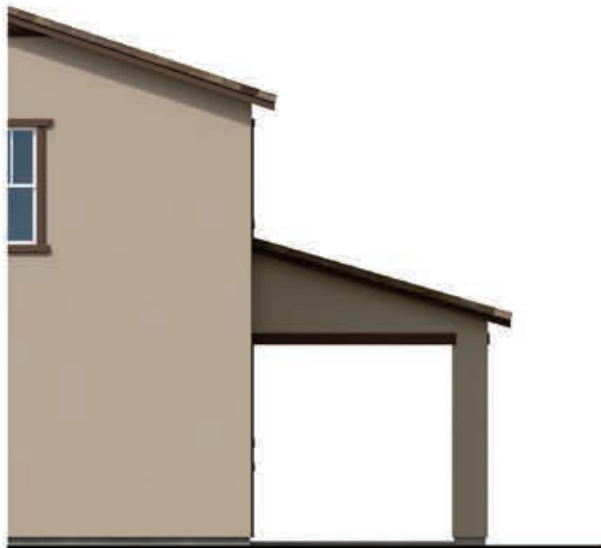
Partial Right Elevation 'D'



Rear Elevation 'D'



Partial Left Elevation 'D'



Partial Right Elevation 'B'

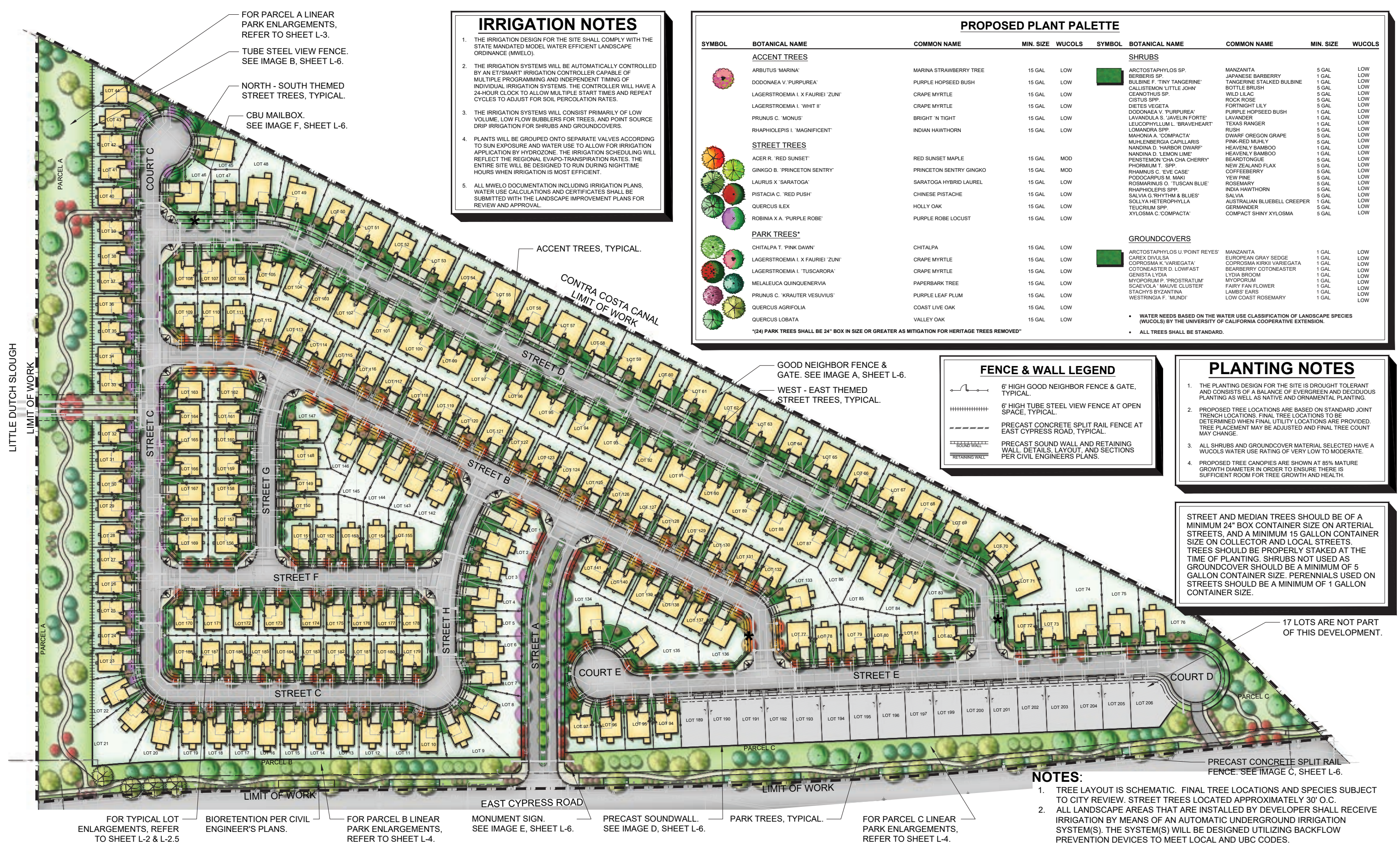


Rear Elevation 'B'



Partial Left Elevation 'B'

Elevations
at Covered Patio



KB HOME - NORTH BAY
4830 BUSINESS CENTER
DRIVE, SUITE 150,
FAIRFIELD, CA 94534
(707) 389-7500

BURROUGHS PROPERTY
OAKLEY, CALIFORNIA

OVERALL SITE PLAN
CONCEPTUAL LANDSCAPE PLAN
NOVEMBER 26, 2024

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558
tel: 707.224.2299
www.vandertoolen.com

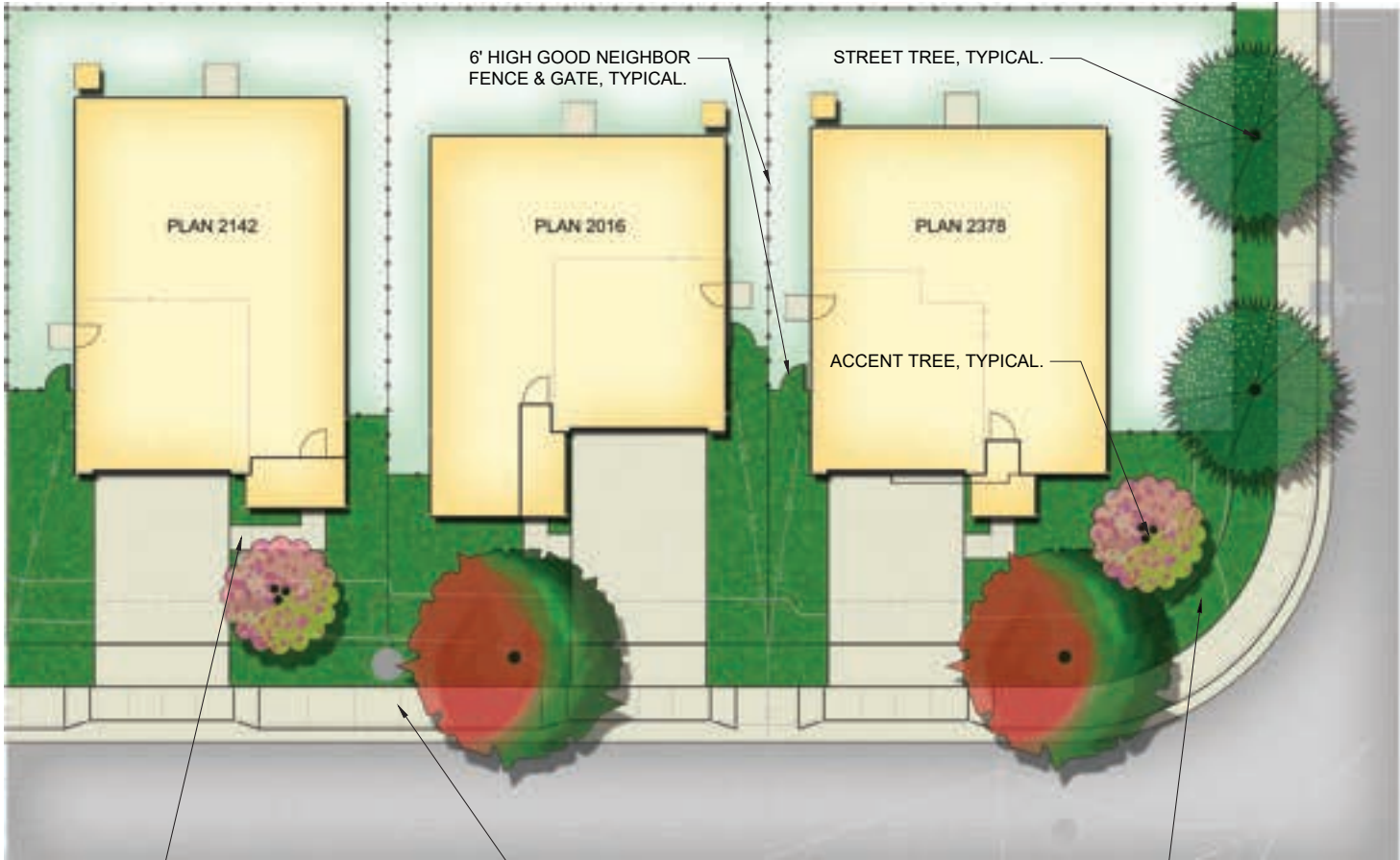


0' 35' 70' 140'
SCALE: 1" = 70'-0"



L-1

Project No. 04524

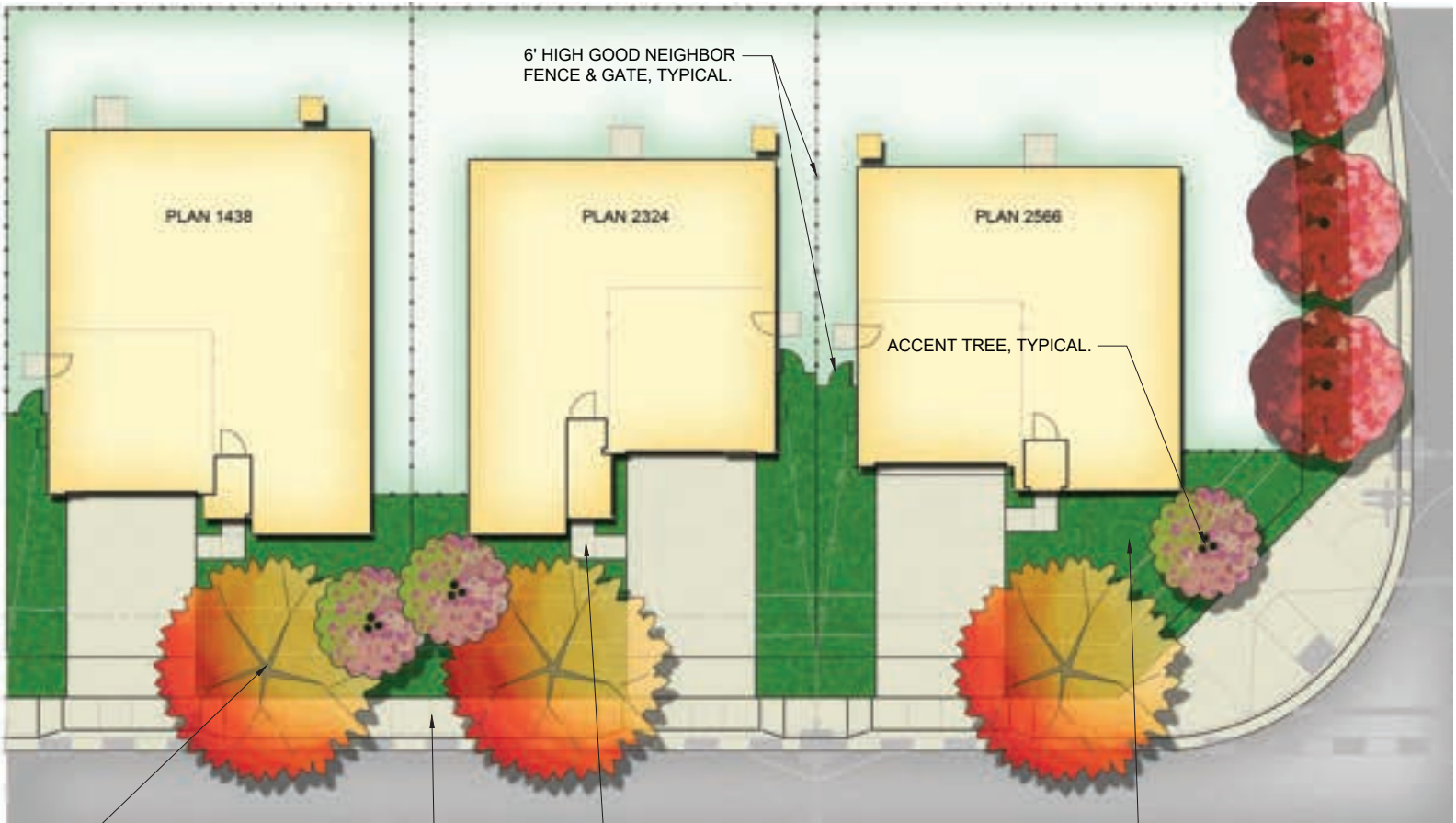


CONCRETE WALK ENTRY, TYPICAL.

CONCRETE SIDEWALK PER CIVIL ENGINEER'S PLANS.

PLANTING AREA, TYPICAL.

STREET TREE, TYPICAL.



CONCRETE SIDEWALK PER CIVIL ENGINEER'S PLANS.

CONCRETE WALK ENTRY, TYPICAL.

PLANTING AREA, TYPICAL.

IRRIGATION NOTES

1. THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWEO).
2. THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/SMART IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
3. THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.
4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
5. ALL MWEO DOCUMENTATION INCLUDING IRRIGATION PLANS, WATER USE CALCULATIONS AND CERTIFICATES SHALL BE SUBMITTED WITH THE LANDSCAPE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL.

PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

STREET AND MEDIAN TREES SHOULD BE OF A MINIMUM 24" BOX CONTAINER SIZE ON ARTERIAL STREETS, AND A MINIMUM 15 GALLON CONTAINER SIZE ON COLLECTOR AND LOCAL STREETS. TREES SHOULD BE PROPERLY STAKED AT THE TIME OF PLANTING. SHRUBS NOT USED AS GROUNDCOVER SHOULD BE A MINIMUM OF 5 GALLON CONTAINER SIZE. PERENNIALS USED ON STREETS SHOULD BE A MINIMUM OF 1 GALLON CONTAINER SIZE.

NOTES:

1. TREE LAYOUT IS SCHEMATIC. FINAL TREE LOCATIONS AND SPECIES SUBJECT TO CITY REVIEW. STREET TREES LOCATED APPROXIMATELY 30' O.C.
2. ALL LANDSCAPE AREAS THAT ARE INSTALLED BY DEVELOPER SHALL RECEIVE IRRIGATION BY MEANS OF AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM(S). THE SYSTEM(S) WILL BE DESIGNED UTILIZING BACKFLOW PREVENTION DEVICES TO MEET LOCAL AND UBC CODES.

PROPOSED PLANT PALETTE

SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WUCOLS	SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WUCOLS
ACCENT TREES					SHRUBS				
	ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	15 GAL	LOW		ARCTOSTAPHYLOS SP.	MANZANITA	5 GAL	LOW
	DODONAEA V. 'PURPUREA'	PURPLE HOPSEED BUSH	15 GAL	LOW		BERBERIS SP.	JAPANESE BARBERRY	1 GAL	LOW
	LAGERSTROEMIA I. X FAURIEI 'ZUNI'	GRAPE MYRTLE	15 GAL	LOW		BULBINE F. 'TINY TANGERINE'	TANGERINE STALKED BULBINE	1 GAL	LOW
	LAGERSTROEMIA I. 'WHIT II'	GRAPE MYRTLE	15 GAL	LOW		CALLISTEMON 'LITTLE JOHN'	BOTTLE BRUSH	5 GAL	LOW
	PRUNUS C. 'MONUS'	BRIGHT 'N TIGHT	15 GAL	LOW		CEANOTHUS SP.	WILD LILAC	5 GAL	LOW
RHAPHIOLEPIS I. 'MAGNIFICENT'	INDIAN HAWTHORN	15 GAL	LOW	CISTUS SPP.	ROCK ROSE	5 GAL	LOW		
STREET TREES					SHRUBS				
	ACER R. 'RED SUNSET'	RED SUNSET MAPLE	15 GAL	MOD		DIETES VEGETA	FORTNIGHT LILY	5 GAL	LOW
	GINKGO B. 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO	15 GAL	MOD		DODONAEA V. 'PURPUREA'	PURPLE HOPSEED BUSH	1 GAL	LOW
	LAURUS X 'SARATOGA'	SARATOGA HYBRID LAUREL	15 GAL	LOW		LAVANDULA S. 'JAVELIN FORTE'	LAVANDER	1 GAL	LOW
	PISTACIA C. 'RED PUSH'	CHINESE PISTACHE	15 GAL	LOW		LEUCOPHYLLUM L. 'BRAVEHEART'	TEXAS RANGER	1 GAL	LOW
	QUERCUS ILEX	HOLLY OAK	15 GAL	LOW		LOMANDRA SPP.	RUSH	5 GAL	LOW
ROBINIA X A. 'PURPLE ROBE'	PURPLE ROBE LOCUST	15 GAL	LOW	MAHONIA A. 'COMPACTA'	DWARF OREGON GRAPE	5 GAL	LOW		
PARK TREES*					SHRUBS				
	CHITALPA T. 'PINK DAWN'	CHITALPA	15 GAL	LOW		MUHLENBERGIA CAPILLARIS	PINK-RED MUHLY	5 GAL	LOW
	LAGERSTROEMIA I. X FAURIEI 'ZUNI'	GRAPE MYRTLE	15 GAL	LOW		NANDINA D. 'HARBOR DWARF'	HEAVENLY BAMBOO	1 GAL	LOW
	LAGERSTROEMIA I. 'TUSCARORA'	GRAPE MYRTLE	15 GAL	LOW		NANDINA D. 'LEMON LIME'	HEAVENLY BAMBOO	1 GAL	LOW
	MELALEUCA QUINQUENERVIA	PAPERBARK TREE	15 GAL	LOW		PENSTEMON 'CHA CHA CHERRY'	BEARDTONGUE	5 GAL	LOW
	PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM	15 GAL	LOW		PHORMIUM T. SPP.	NEW ZEALAND FLAX	5 GAL	LOW
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	RHAMNUS C. 'EVE CASE'	COFFEEBERRY	5 GAL	LOW		
QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	PODOCARPUS M. MAKI	YEW PINE	5 GAL	LOW		
* (24) PARK TREES SHALL BE 24" BOX IN SIZE OR GREATER AS MITIGATION FOR HERITAGE TREES REMOVED*					SHRUBS				
	CHITALPA T. 'PINK DAWN'	CHITALPA	15 GAL	LOW		ROSMARINUS O. 'TUSCAN BLUE'	ROSEMARY	5 GAL	LOW
	LAGERSTROEMIA I. X FAURIEI 'ZUNI'	GRAPE MYRTLE	15 GAL	LOW		RHAPHIOLEPIS SPP.	INDIA HAWTHORN	5 GAL	LOW
	LAGERSTROEMIA I. 'TUSCARORA'	GRAPE MYRTLE	15 GAL	LOW		SALVIA G. 'RHYTHM & BLUES'	SALVIA	5 GAL	LOW
	MELALEUCA QUINQUENERVIA	PAPERBARK TREE	15 GAL	LOW		SOLYIA HETEROPHYLLA	AUSTRALIAN BLUEBELL CREEPER	1 GAL	LOW
	PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM	15 GAL	LOW		TEUCORIUM SPP.	GERMANDER	5 GAL	LOW
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	XYLOSMA C. 'COMPACTA'	COMPACT SHINY XYLOSMA	5 GAL	LOW		
QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	GROUNDCOVERS					
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	LAGERSTROEMIA I. X FAURIEI 'ZUNI'	GRAPE MYRTLE	15 GAL	LOW		CAREX DIVULSA	EUROPEAN GRAY SEDGE	1 GAL	LOW
	LAGERSTROEMIA I. 'TUSCARORA'	GRAPE MYRTLE	15 GAL	LOW		COPROSMA K. 'VARIEGATA'	COPROSMA KIRKII VARIEGATA	1 GAL	LOW
	MELALEUCA QUINQUENERVIA	PAPERBARK TREE	15 GAL	LOW		COTONEASTER D. LOWFAST	BEARBERRY COTONEASTER	1 GAL	LOW
	PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM	15 GAL	LOW		GENISTA LYDIA	LYDIA BROOM	1 GAL	LOW
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	MYOPORUM P. 'PROSTRATUM'	MYOPORUM	1 GAL	LOW		
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					STACHYS BYZANTINA				
					WESTRINGIA F. 'MUNDI'				
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- ALL TREES SHALL BE STANDARD.

kb
HOME

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TYPICAL LOT ENLARGEMENTS
CONCEPTUAL LANDSCAPE PLAN
NOVEMBER 26, 2024

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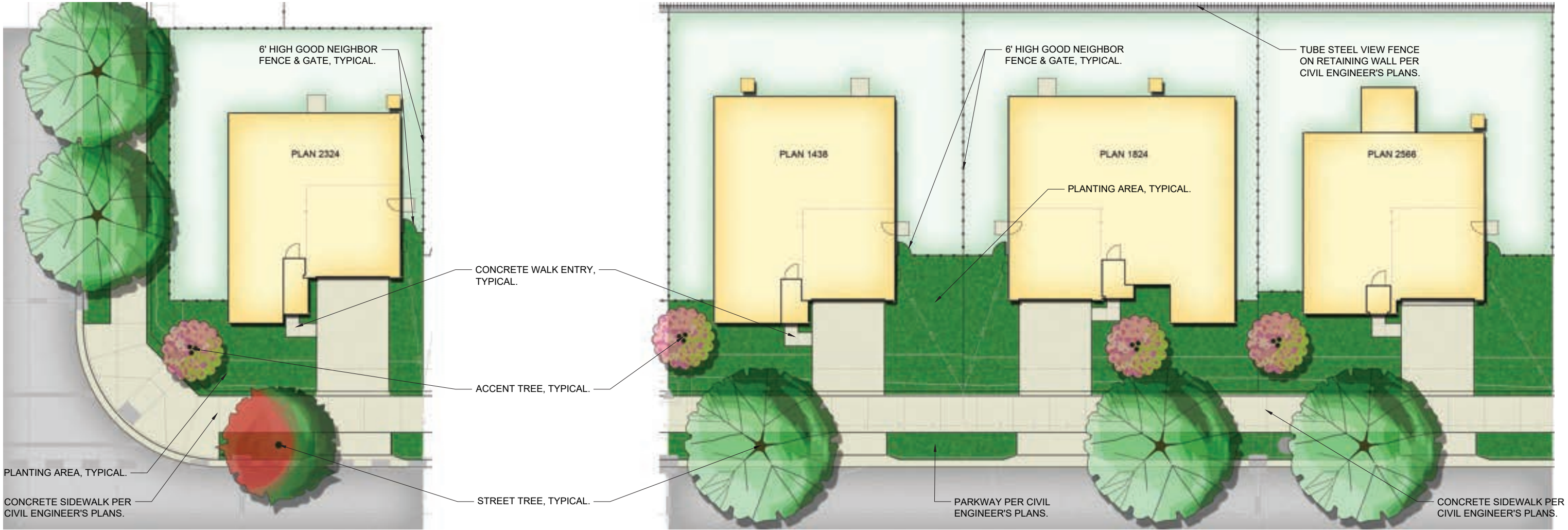


0' 5' 10' 20'
SCALE: 1" = 10'-0"



L-2

Project No. 04524



IRRIGATION NOTES

- 1. THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWEO).
- 2. THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/SMART IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
- 3. THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.
- 4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
- 5. ALL MWEO DOCUMENTATION INCLUDING IRRIGATION PLANS, WATER USE CALCULATIONS AND CERTIFICATES SHALL BE SUBMITTED WITH THE LANDSCAPE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL.

PLANTING NOTES

- 1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
- 2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
- 3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
- 4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

STREET AND MEDIAN TREES SHOULD BE OF A MINIMUM 24" BOX CONTAINER SIZE ON ARTERIAL STREETS, AND A MINIMUM 15 GALLON CONTAINER SIZE ON COLLECTOR AND LOCAL STREETS. TREES SHOULD BE PROPERLY STAKED AT THE TIME OF PLANTING. SHRUBS NOT USED AS GROUNDCOVER SHOULD BE A MINIMUM OF 5 GALLON CONTAINER SIZE. PERENNIALS USED ON STREETS SHOULD BE A MINIMUM OF 1 GALLON CONTAINER SIZE.

PROPOSED PLANT PALETTE

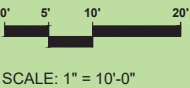
SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WUCOLS	SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WUCOLS	
ACCENT TREES					SHRUBS					
	ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	15 GAL	LOW		ARCTOSTAPHYLOS SP.	MANZANITA	5 GAL	LOW	
	DODONAEA V. 'PURPUREA'	PURPLE HOPSEED BUSH	15 GAL	LOW		BERBERIS SP.	JAPANESE BARBERRY	1 GAL	LOW	
	LAGERSTROEMIA I. X FAURIEI 'ZUNI'	GRAPE MYRTLE	15 GAL	LOW		BULBINE F. 'TINY TANGERINE'	TANGERINE STALKED BULBINE	1 GAL	LOW	
	LAGERSTROEMIA I. 'WHIT II'	GRAPE MYRTLE	15 GAL	LOW		CALLISTEMON 'LITTLE JOHN'	BOTTLE BRUSH	5 GAL	LOW	
	PRUNUS C. 'MONUS'	BRIGHT 'N TIGHT	15 GAL	LOW		CEANOTHUS SP.	WILD LILAC	5 GAL	LOW	
	RHAPHIOLEPIS I. 'MAGNIFICENT'	INDIAN HAWTHORN	15 GAL	LOW		CISTUS SPP.	ROCK ROSE	5 GAL	LOW	
	ACER R. 'RED SUNSET'	RED SUNSET MAPLE	15 GAL	MOD		DIETES VEGETA	FORTNIGHT LILY	5 GAL	LOW	
	GINKGO B. 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO	15 GAL	MOD		DODONAEA V. 'PURPUREA'	PURPLE HOPSEED BUSH	1 GAL	LOW	
	LAURUS X 'SARATOGA'	SARATOGA HYBRID LAUREL	15 GAL	LOW		LAVANDULA S. 'JAVELIN FORTE'	LAVANDER	1 GAL	LOW	
	PISTACIA C. 'RED PUSH'	CHINESE PISTACHE	15 GAL	LOW		LEUCOPHYLLUM L. 'BRAVEHEART'	TEXAS RANGER	1 GAL	LOW	
	QUERCUS ILEX	HOLLY OAK	15 GAL	LOW		LOMANDRA SPP.	RUSH	5 GAL	LOW	
	ROBINIA X A. 'PURPLE ROBE'	PURPLE ROBE LOCUST	15 GAL	LOW		MAHONIA A. 'COMPACTA'	DWARF OREGON GRAPE	5 GAL	LOW	
	PARK TREES*					MUHLENBERGIA CAPILLARIS	PINK-RED MUHLY	5 GAL	LOW	
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24" PARK TREES SHALL BE 24" BOX IN SIZE OR GREATER AS MITIGATION FOR HERITAGE TREES REMOVED					GROUNDCOVERS					
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						STACHYS BYZANTINA	LAMBS' EARS	1 GAL	LOW	
						WESTRINGIA F. 'MUNDI'	LOW COAST ROSEMARY	1 GAL	LOW	
					• WATER NEEDS BASED ON THE WATER USE CLASSIFICATION OF LANDSCAPE SPECIES (WUCOLS) BY THE UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION.					
					• ALL TREES SHALL BE STANDARD.					

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BURROUGHS PROPERTY
OAKLEY, CALIFORNIA

TYPICAL LOT WITH PARKWAY ENLARGEMENTS
CONCEPTUAL LANDSCAPE PLAN
NOVEMBER 26, 2024

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558
tel: 707.224.2299
www.vandertoolen.com



L-2.5
Project No. 04524



FENCE & WALL LEGEND

	6' HIGH GOOD NEIGHBOR FENCE & GATE, TYPICAL.
	6' HIGH TUBE STEEL VIEW FENCE AT OPEN SPACE, TYPICAL.
	PRECAST CONCRETE SPLIT RAIL FENCE AT EAST CYPRESS ROAD, TYPICAL.
	PRECAST SOUND WALL AND RETAINING WALL, DETAILS, LAYOUT, AND SECTIONS PER CIVIL ENGINEERS PLANS.

PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
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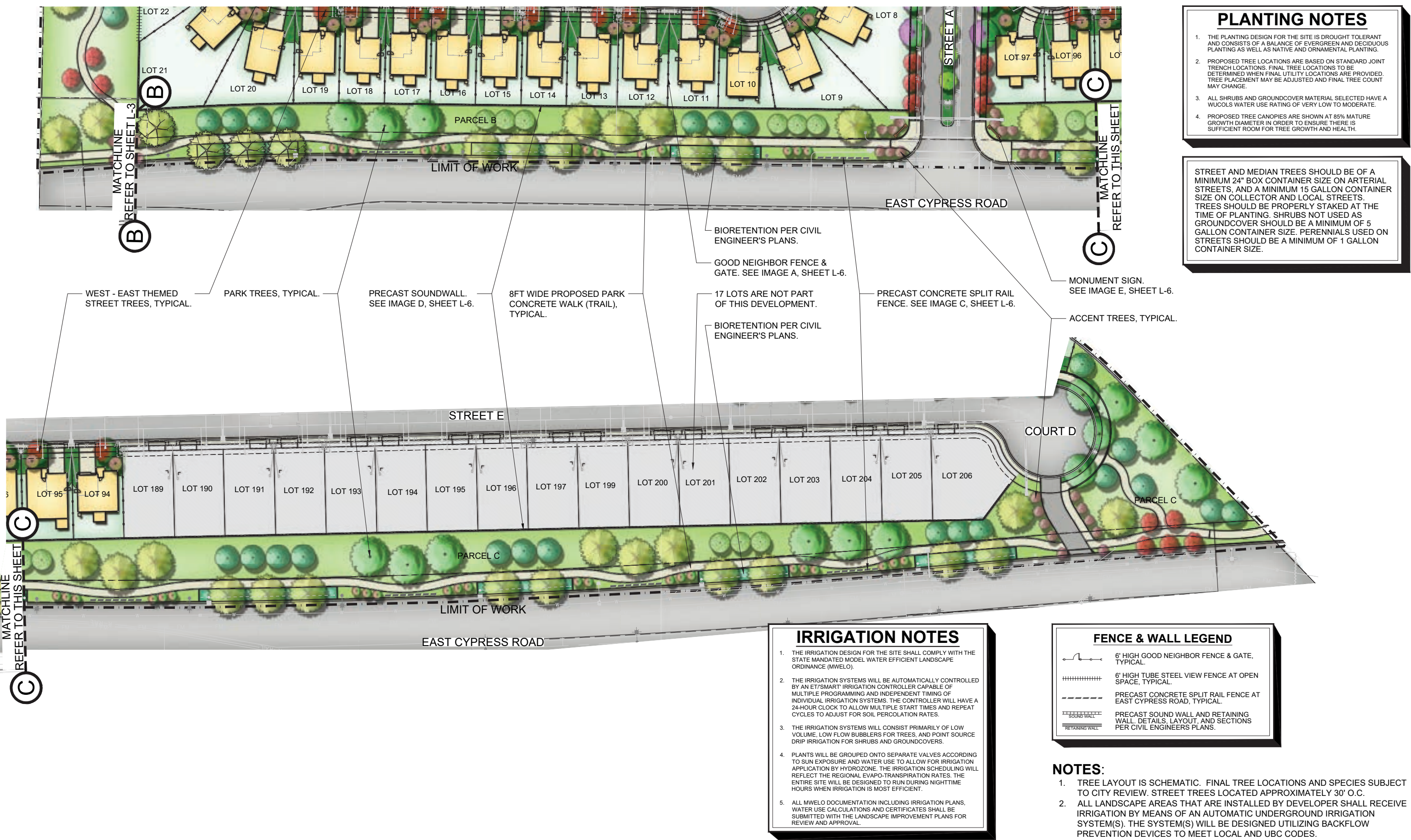
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NOTES:

1. TREE LAYOUT IS SCHEMATIC. FINAL TREE LOCATIONS AND SPECIES SUBJECT TO CITY REVIEW. STREET TREES LOCATED APPROXIMATELY 30' O.C.
2. ALL LANDSCAPE AREAS THAT ARE INSTALLED BY DEVELOPER SHALL RECEIVE IRRIGATION BY MEANS OF AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM(S). THE SYSTEM(S) WILL BE DESIGNED UTILIZING BACKFLOW PREVENTION DEVICES TO MEET LOCAL AND UBC CODES.



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PARCEL B & C - PERIMETER PARK
CONCEPTUAL LANDSCAPE PLAN
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0' 20' 40' 80'
SCALE: 1" = 40'-0"
NORTH

L-4
Project No. 04524

ACCENT TREES



ARBUTUS 'MARINA'



DODONAEA V. 'PURPUREA'



LAGERSTROEMIA L. X FAURIEI 'ZUNI'



LAGERSTROEMIA L. 'WHIT II'



PRUNUS C. 'MONUS'



RHAPHIOLEPIS L. 'MAGNIFICENT'

SHRUBS & ORNAMENTAL GRASSES



ARCTOSTAPHYLOS SP.



BULBINE F. 'TINY TANGERINE'



CALLISTEMON 'LITTLE JOHN'



LAVANDULA S. 'JAVELIN FORTE'



LEUCOPHYLLUM L. 'BRAVEHEART'



LOMANDRA SPP.



MAHONIA A. 'COMPACTA'



MUHLENBERGIA CAPILLARIS



NANDINA D. 'LEMON LIME'



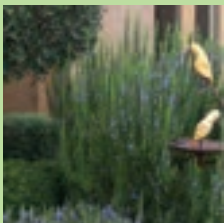
PENSTEMON 'CHA CHA CHERRY'



PHORMIUM T. SPP.



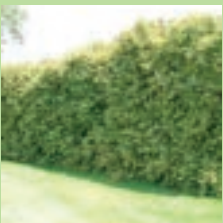
RHAPHIOLEPIS SPP.



ROSMARINUS O. 'TUSCAN BLUE'



SALVIA G. 'RHYTHM & BLUES'



XYLOSMA C. 'COMPACTA'

GROUNDCOVERS



ARCTOSTAPHYLOS U. 'POINT REYES'



COPROSMA K. 'VARIEGATA'



COTONEASTER D. 'LOWFAST'



GENISTA LYDIA



MYOPORUM P. 'PROSTRATUM'

STREET TREES



ACER R. 'RED SUNSET'



GINKGO B. 'PRINCETON SENTRY'



LAURUS X 'SARATOGA'



PISTACIA C. 'RED PUSH'



QUERCUS ILEX

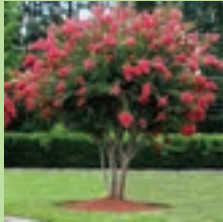


ROBINIA X A. 'PURPLE ROBE'

PARK TREES



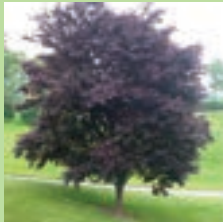
CHITALPA T. 'PINK DAWN'



LAGERSTROEMIA L. 'TUSCARORA'



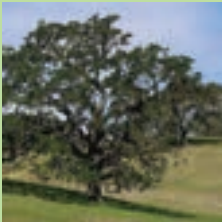
MELALEUCA QUINQUENERVIA



PRUNUS C. 'KRAUTER VESUVIUS'



QUERCUS AGRIFOLIA



QUERCUS LOBATA

PLANTING NOTES

- 1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
- 2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
- 3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
- 4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

STREET AND MEDIAN TREES SHOULD BE OF A MINIMUM 24" BOX CONTAINER SIZE ON ARTERIAL STREETS, AND A MINIMUM 15 GALLON CONTAINER SIZE ON COLLECTOR AND LOCAL STREETS. TREES SHOULD BE PROPERLY STAKED AT THE TIME OF PLANTING. SHRUBS NOT USED AS GROUNDCOVER SHOULD BE A MINIMUM OF 5 GALLON CONTAINER SIZE. PERENNIALS USED ON STREETS SHOULD BE A MINIMUM OF 1 GALLON CONTAINER SIZE.

PROPOSED PLANT PALETTE

SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WUCOLS	SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	WUCOLS
ACCENT TREES					SHRUBS				
	ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	15 GAL	LOW		ARCTOSTAPHYLOS SP.	MANZANITA	5 GAL	LOW
	DODONAEA V. 'PURPUREA'	PURPLE HOPSEED BUSH	15 GAL	LOW		BERBERIS SP.	JAPANESE BARBERRY	1 GAL	LOW
	LAGERSTROEMIA L. X FAURIEI 'ZUNI'	CRAPE MYRTLE	15 GAL	LOW		BULBINE F. 'TINY TANGERINE'	TANGERINE STALKED BULBINE	1 GAL	LOW
	LAGERSTROEMIA L. 'WHIT II'	CRAPE MYRTLE	15 GAL	LOW		CALLISTEMON 'LITTLE JOHN'	BOTTLE BRUSH	5 GAL	LOW
	PRUNUS C. 'MONUS'	BRIGHT 'N TIGHT	15 GAL	LOW		CEANOTHUS SP.	WILD LILAC	5 GAL	LOW
	RHAPHIOLEPIS L. 'MAGNIFICENT'	INDIAN HAWTHORN	15 GAL	LOW		DIETES VEGETA	ROCK ROSE	5 GAL	LOW
						DODONAEA V. 'PURPUREA'	FORTNIGHT LILY	5 GAL	LOW
						LAVANDULA S. 'JAVELIN FORTE'	PURPLE HOPSEED BUSH	1 GAL	LOW
						LEUCOPHYLLUM L. 'BRAVEHEART'	LAVANDER	1 GAL	LOW
						LOMANDRA SPP.	TEXAS RANGER	1 GAL	LOW
STREET TREES						RUSH	OREGON GRAPE	5 GAL	LOW
	ACER R. 'RED SUNSET'	RED SUNSET MAPLE	15 GAL	MOD		MAHONIA A. 'COMPACTA'	DWARF OREGON GRAPE	5 GAL	LOW
	GINKGO B. 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO	15 GAL	MOD		MUHLENBERGIA CAPILLARIS	PINK-RED MUHLY	5 GAL	LOW
	LAURUS X 'SARATOGA'	SARATOGA HYBRID LAUREL	15 GAL	LOW		NANDINA D. 'HARBOR DWARF'	HEAVENLY BAMBOO	1 GAL	LOW
	PISTACIA C. 'RED PUSH'	CHINESE PISTACHE	15 GAL	LOW		NANDINA D. 'LEMON LIME'	HEAVENLY BAMBOO	1 GAL	LOW
	QUERCUS ILEX	HOLLY OAK	15 GAL	LOW		PENSTEMON 'CHA CHA CHERRY'	BEARDTONGUE	5 GAL	LOW
	ROBINIA X A. 'PURPLE ROBE'	PURPLE ROBE LOCUST	15 GAL	LOW		PHORMIUM T. SPP.	NEW ZEALAND FLAX	5 GAL	LOW
						RHAMNUS C. 'EVE CASE'	COFFEEBERRY	5 GAL	LOW
						PODOCARPUS M. MAKI	YEW PINE	5 GAL	LOW
						ROSMARINUS O. 'TUSCAN BLUE'	ROSEMARY	5 GAL	LOW
PARK TREES*						RHAPHIOLEPIS SPP.	INDIA HAWTHORN	5 GAL	LOW
	CHITALPA T. 'PINK DAWN'	CHITALPA	15 GAL	LOW		SALVIA	SALVIA	1 GAL	LOW
	LAGERSTROEMIA L. X FAURIEI 'ZUNI'	CRAPE MYRTLE	15 GAL	LOW		SALVIA G. 'RHYTHM & BLUES'	AUSTRALIAN BLUEBELL CREEPER	1 GAL	LOW
	LAGERSTROEMIA L. 'TUSCARORA'	CRAPE MYRTLE	15 GAL	LOW		STACHYS BYZANTINA	GERMANDER	1 GAL	LOW
	MELALEUCA QUINQUENERVIA	PAPERBARK TREE	15 GAL	LOW		TEUCRIUM SPP.	COMPACT SHINY XYLOSMA	5 GAL	LOW
	PRUNUS C. 'KRAUTER VESUVIUS'	PURPLE LEAF PLUM	15 GAL	LOW	GROUNDCOVERS				
	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW		ARCTOSTAPHYLOS U. 'POINT REYES'	MANZANITA	1 GAL	LOW
	QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW		CAREX DIVULSA	EUROPEAN GRAY SEDGE	1 GAL	LOW
						COPROSMA K. 'VARIEGATA'	COPROSMA KIRKII VARIEGATA	1 GAL	LOW
						COTONEASTER D. 'LOWFAST'	BEARBERRY COTONEASTER	1 GAL	LOW
						GENISTA LYDIA	LYDIA BROOM	1 GAL	LOW
*(24) PARK TREES SHALL BE 24" BOX IN SIZE OR GREATER AS MITIGATION FOR HERITAGE TREES REMOVED"						MYOPORUM P. 'PROSTRATUM'	MYOPORUM	1 GAL	LOW
	CHITALPA T. 'PINK DAWN'	CHITALPA	15 GAL	LOW		SCAEVOLA 'MAUIE CLUSTER'	FAIRY FAN FLOWER	1 GAL	LOW
	LAGERSTROEMIA L. X FAURIEI 'ZUNI'	CRAPE MYRTLE	15 GAL	LOW		LAMBS' EARS	LAMBS' EARS	1 GAL	LOW
	LAGERSTROEMIA L. 'TUSCARORA'	CRAPE MYRTLE	15 GAL	LOW		WESTRINGIA F. 'MUNDI'	LOW COAST ROSEMARY	1 GAL	LOW
	MELALEUCA QUINQUENERVIA	PAPERBARK TREE	15 GAL	LOW					

- WATER NEEDS BASED ON THE WATER USE CLASSIFICATION OF LANDSCAPE SPECIES (WUCOLS) BY THE UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION.
- ALL TREES SHALL BE STANDARD.



KB HOME - NORTH BAY
4830 BUSINESS CENTER
DRIVE, SUITE 150,
FAIRFIELD, CA 94534
(707) 389-7500

BURROUGHS PROPERTY
OAKLEY, CALIFORNIA

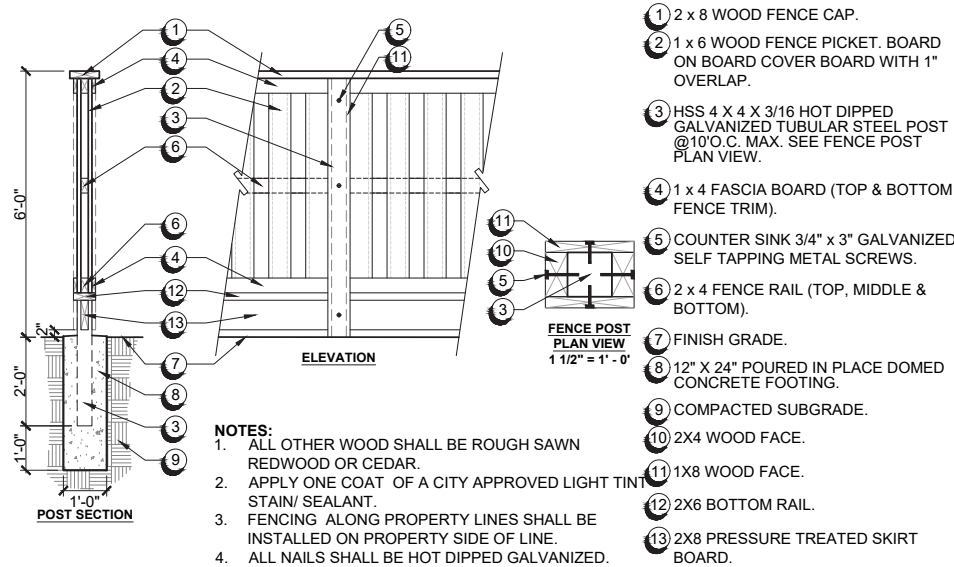
PLANT IMAGERY
CONCEPTUAL LANDSCAPE PLAN
NOVEMBER 26, 2024

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558
tel: 707.224.2299
www.vandertoolen.com



L-5

Project No. 04524



A **GOOD NEIGHBOR FENCE W/ STEEL POST**
 SCALE: 1/2" = 1'-0"



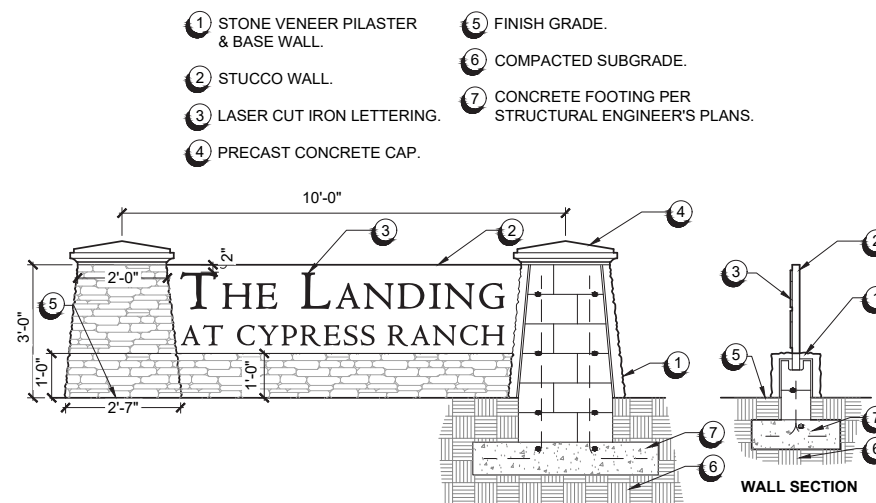
B **TUBE STEEL VIEW FENCE**
 SCALE: N.T.S.



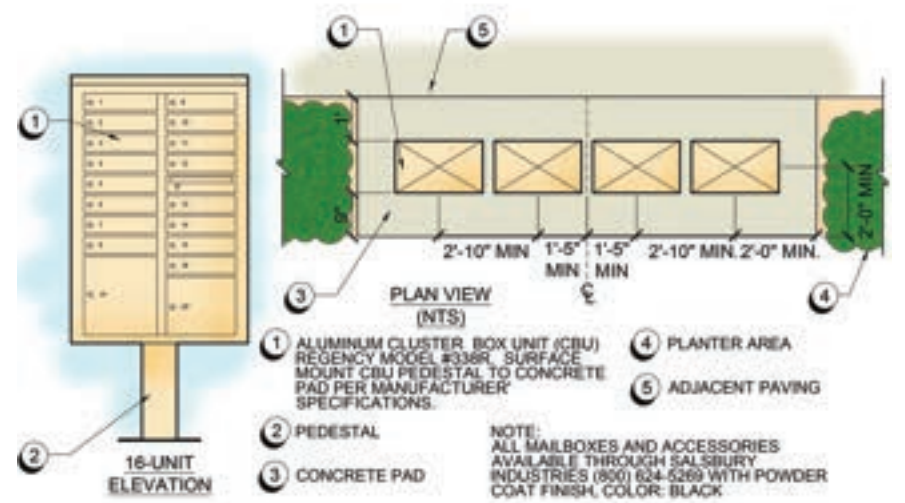
C **PRECAST CONCRETE SPLIT RAIL FENCE**
 SCALE: N.T.S.



D **PRECAST SOUNDWALL**
 SCALE: N.T.S.



E **MONUMENT SIGN**
 SCALE: 1/2" = 1'-0"



F **CBU MAILBOX**
 SCALE: N.T.S.



G **PLANTING MATERIAL**
 SCALE: N.T.S.



H **TURF AREA**
 SCALE: N.T.S.



I **TRAIL**
 SCALE: N.T.S.

East Cypress

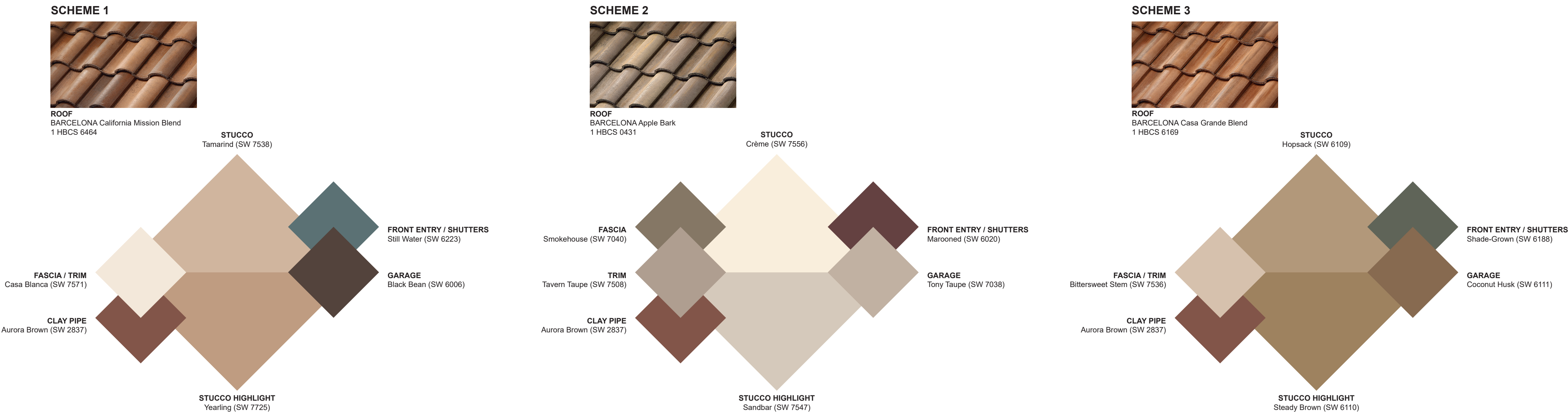
North Bay Division

Project # 3025999424

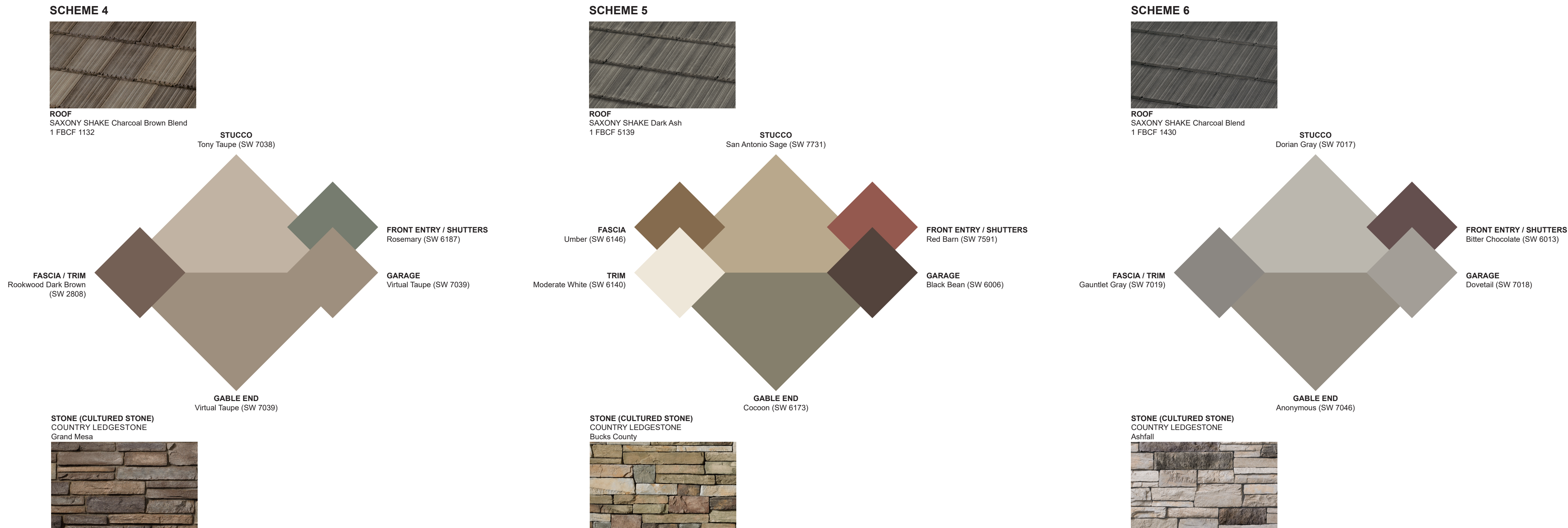
Rev. March 28, 2025



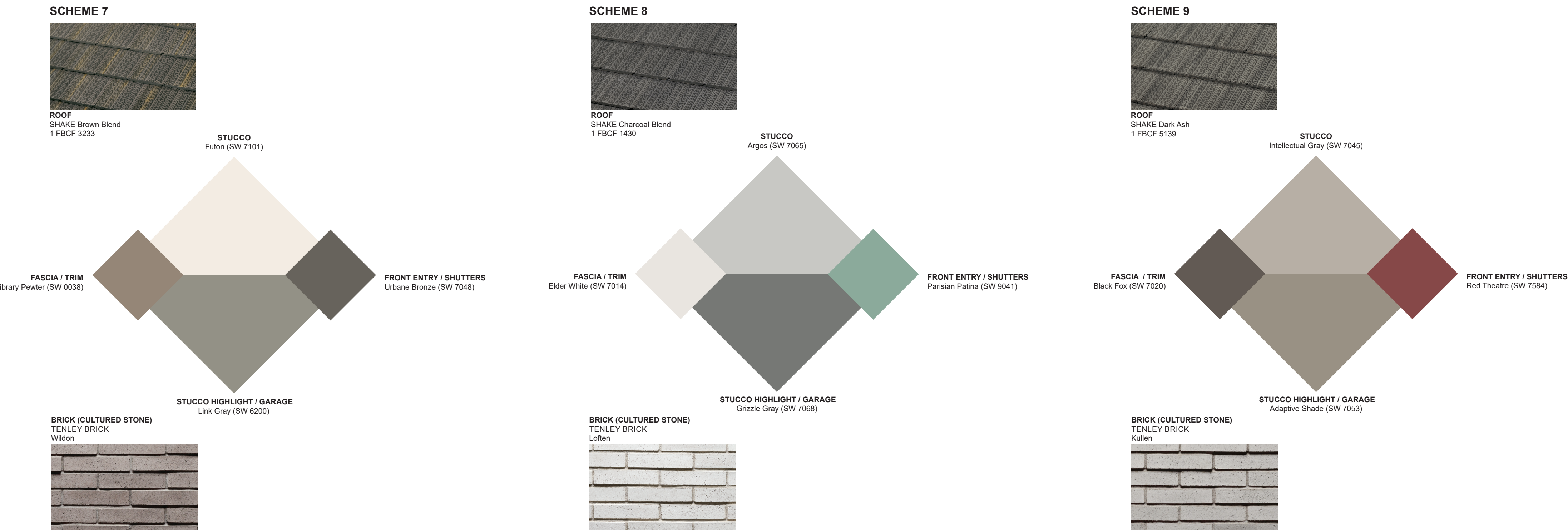
SPANISH ECLECTIC ‘A’ ELEVATIONS



CRAFTSMAN ‘B’ ELEVATIONS



PRAIRIE ‘D’ ELEVATIONS



KB Home reserves the right to modify or discontinue any products, colors or styles at any time without prior notice. Displays of options, colors, textures, brick, stone, tile, shutters, roofing materials, siding, surfaces, stain and material combinations viewed on a sample color board may differ from the appearances of the options on homes when viewed in person. Please visit a KB Home model home community to view actual colors textures, materials, and combinations.

SPANISH ECLECTIC 'A' ELEVATIONS				
MATERIAL	MFR	SCHEME 1	SCHEME 2	SCHEME 3
STUCCO	SHERWIN-WILLIAMS	Tamarind (SW 7538)	Crème (SW 7556)	Hopsack (SW 6109)
STUCCO HIGHLIGHT	SHERWIN-WILLIAMS	Yearling (SW 7725)	Sandbar (SW 7547)	Steady Brown (SW 6110)
FASCIA	SHERWIN-WILLIAMS	Casa Blanca (SW 7571)	Smokehouse (SW 7040)	Bittersweet Stem (SW 7536)
TRIM	SHERWIN-WILLIAMS	Casa Blanca (SW 7571)	Tavern Taupe (SW 7508)	Bittersweet Stem (SW 7536)
FRONT ENTRY / SHUTTERS	SHERWIN-WILLIAMS	Still Water (SW 6223)	Marooned (SW 6020)	Shade-Grown (SW 6188)
CLAY PIPE	SHERWIN-WILLIAMS	Aurora Brown (SW 2837)	Aurora Brown (SW 2837)	Aurora Brown (SW 2837)
GARAGE	SHERWIN-WILLIAMS	Black Bean (SW 6006)	Tony Taupe (SW 7038)	Coconut Husk (SW 6111)
ROOF	BORAL ROOFING	1 HBCS 6464	1 HBCS 0431	1 HBCS 6169
	BARCELONA	California Mission Blend	Apple Bark	Casa Grande Blend

CRAFTSMAN 'B' ELEVATIONS				
MATERIAL	MFR	SCHEME 4	SCHEME 5	SCHEME 6
STUCCO	SHERWIN-WILLIAMS	Tony Taupe (SW 7038)	San Antonio Sage (SW 7731)	Dorian Gray (SW 7017)
GABLE END	SHERWIN-WILLIAMS	Virtual Taupe (SW 7039)	Cocoon (SW 6173)	Anonymous (SW 7046)
FASCIA	SHERWIN-WILLIAMS	Rookwood Dark Brown (SW 2808)	Umber (SW 6146)	Gauntlet Gray (SW 7019)
TRIM	SHERWIN-WILLIAMS	Rookwood Dark Brown (SW 2808)	Moderate White (SW 6140)	Gauntlet Gray (SW 7019)
FRONT ENTRY / SHUTTERS	SHERWIN-WILLIAMS	Rosemary (SW 6187)	Red Barn (SW 7591)	Bitter Chocolate (SW 6013)
GARAGE	SHERWIN-WILLIAMS	Virtual Taupe (SW 7039)	Black Bean (SW 6006)	Dovetail (SW 7018)
ROOF	BORAL ROOFING	1 FBCF 1132	1 FBCF 5139	1 FBCF 1430
	SAXONY SHAKE	Charcoal Brown Blend	Dark Ash	Charcoal Blend
STONE	CULTURED STONE	COUNTRY LEDGESTONE Grand Mesa	COUNTRY LEDGESTONE Bucks County	COUNTRY LEDGESTONE Ashfall

PRAIRIE 'D' ELEVATIONS				
MATERIAL	MFR	SCHEME 7	SCHEME 8	SCHEME 9
STUCCO	SHERWIN-WILLIAMS	Futon (SW 7101)	Argos (SW 7065)	Intellectual Gray (SW 7045)
STUCCO HIGHLIGHT / GARAGE	SHERWIN-WILLIAMS	Link Gray (SW 6200)	Grizzle Gray (SW 7068)	Adaptive Shade (SW 7053)
FASCIA / TRIM	SHERWIN-WILLIAMS	Library Pewter (SW 0038)	Elder White (SW 7014)	Black Fox (SW 7020)
FRONT ENTRY / SHUTTERS	SHERWIN-WILLIAMS	Urbane Bronze (SW 7048)	Parisian Patina (SW 9041)	Red Theatre (SW 7584)
ROOF	BORAL ROOFING	1 FBCF 3233	1 FBCF 1430	1 FBCF 5139
	SHAKE	Brown Blend	Charcoal Blend	Dark Ash
BRICK	CULTURED STONE	TENLEY BRICK Wildon	TENLEY BRICK Loften	TENLEY BRICK Kullen

**PLANNING COMMISSION
RESOLUTION NO. -25**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF OAKLEY
MAKING FINDINGS AND APPROVING THE PROJECT KNOWN AS “CYPRESS
RANCH (FORMERLY BURROUGHS) SUBDIVISION 9557 DESIGN REVIEW AND
FINAL DEVELOPMENT PLAN (DR 25-01, FDP 25-01)”, LOCATED NORTHEAST OF
THE INTERSECTION OF EAST CYPRESS ROAD AND KNIGHTSEN AVENUE (APN:
032-081-025 & 032-081-026)**

FINDINGS

WHEREAS, on January 6, 2025, KB Home North Bay (“Applicant”) filed an application requesting Design Review and Final Development Plan approval for the project titled, “Cypress Ranch (Formerly Burroughs) Subdivision 9557 Design Review (DR 25-01, FDP 25-01)” This application consists of a request for Design Review (DR 25-01) approval of floor plans and elevations, colors and materials, front yard landscaping, and a Final Development Plan for 191 single-family detached homes located in the Cypress Ranch, formerly Burroughs (TM 9557) subdivision. The proposed homes include two single-story plans and five two-story plans ranging from 1,438 sf. to 2,566 sf. of livable area (“Project”). The site is zoned P-1 (Planned Unit Development) District and is located northeast of the intersection of East Cypress and Knightsen Avenue. APNs: 032-081-025 & 032-081-026; and

WHEREAS, the Applicant’s Plans include house floorplans and architectural elevations, color and material schemes, conceptual front yard landscaping, and the final development plan (“Plans”); and

WHEREAS, on April 8, 2025 the project application was deemed complete per Government Code section 65920 et. seq; and

WHEREAS, the project site is designated Single Family Residential, Low/Medium Density (RLM) on the Oakley 2020 General Plan Land Use Map, and zoned P-1 (Planned Unit Development) District; and

WHEREAS, the proposal for house designs and other design elements of the subdivision falls within the scope of the original subdivision’s California Environmental Quality Act (CEQA) analyses.

- Subdivision 9557 was analyzed through an Initial Study, and a Mitigated Negative Declaration (State Clearinghouse #2021040251) was prepared and dated April 9, 2021. The City Council adopted the Mitigated Negative Declaration with adoption of Resolution No. 58-21 for the Tentative Map Approval, and adoption of Ordinance 04-21 for a Rezone to P-1 District; and

WHEREAS, on or before April 25, 2025, the Notice of Public Hearing for the project was posted at Oakley City Hall located at 3231 Main Street, outside the gym at Delta

Vista Middle School located at 4901 Frank Hengel Way, outside the library at Freedom High School located at 1050 Neroly Road, and at the project site. The notice was also mailed out to all owners of property within a 500-foot radius of the project's boundaries, interested agencies, and to parties requesting such notice; and

WHEREAS, on May 6, 2025, the Planning Commission opened the public hearing and received a report from City Staff, oral and written testimony from the Applicant and public, and deliberated on the project. At the conclusion of its deliberations, the Planning Commission took a vote and adopted this resolution to approve the project, as conditioned and revised by the Planning Commission during its deliberations; and

WHEREAS, if any term, provision, or portion of these Findings or the application of these Findings to a particular situation is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of these Findings, or their application to other actions related to the Project, shall continue in full force and effect unless amended or modified by the City; and

WHEREAS, these Findings are based on the City's General Plan, the City's Zoning and Subdivision Ordinances, Vesting Tentative Map 9557, the project's P-1 District, and the information submitted to the Planning Commission at its May 6, 2025 meeting, both written and oral, including oral information provided by the Applicant, as reflected in the minutes of such meetings, together with the documents contained in the file for the Project (hereafter the "Record").

A. Regarding the application requesting Design Review and Final Development Plan approval for "Cypress Ranch (Formerly Burroughs) Subdivision 9557 Design Review (DR 25-01)", the Planning Commission finds that:

1. The proposed Design Review plans are substantially consistent with the applicable General Plan designation of Single Family Residential, Low/Medium Density (RLM) and the project's approved Vesting Tentative Map 9557; and
2. The proposed Residential Siting and Lot Design is consistent with the City of Oakley Residential Design Guidelines in that the Applicant has plotted the homes to provide substantial variation in the setbacks from front and rear property lines. The plan also includes a minimum of 20 percent single-story homes, consistent with requirements in the guidelines. Several of the home designs feature front porches that extend into the front yard setback, enhancing architectural variety and contributing to a more engaging streetscape; and
3. The Architectural Character of the proposed single-family homes is consistent with the applicable City of Oakley Residential Design Guidelines in that each plan offers three distinct and regionally appropriate styles—Spanish (characterized by S-tile roofing and accent tiles), Craftsman (featuring board and batten gables with stone veneer), and Prairie (defined

by low-hipped roofs and brick veneer). Exterior materials wrap appropriately around building corners, and the two-story elevations incorporate horizontal banding, projecting first-floor elements, and articulated façades to reduce visual mass. Several models include prominent entry porches that enhance the streetscape. Roof forms and tile types vary by style, and each elevation uses a limited palette of muted, earth-tone colors with no more than three cladding materials, as encouraged by the guidelines. Façade and upper-story windows include divided-lite patterns to further reinforce architectural character; and

B. Regarding the application requesting Final Development Plan approval for “Cypress Ranch (Formerly Burroughs) Subdivision 9557 FDP 25-01, the Planning Commission finds that:

1. The applicant intends to start construction within two years. The amended Final Development Plan is substantially consistent with the original approval as well as the City’s General Plan. The proposed development is found to be in harmony with surrounding development, as it’s visually compatible and environmental impacts have been analyzed, and mitigation has been required through the CEQA process. The proposed Final Development Plan justifies the deviations from the typical residential development standards in the Oakley Municipal Code as this large-scale development requires flexibility to avoid a monotonous appearance.

C. The Project complies with Measure J Growth Management requirements.

BE IT FURTHER RESOLVED THAT, on the basis of the above Findings and the Record, the Planning Commission approves the Applicant’s request for approval of the project titled, “Cypress Ranch (Formerly Burroughs) Subdivision 9557 Design Review and Final Development Plan (DR 25-01, FDP 25-01)” subject to the following Conditions of Approval:

Conditions of Approval

Applicant shall comply with the requirements of the Oakley Municipal Code. Any exceptions must be stipulated in these Conditions of Approval. Conditions of Approval are based on the plans date stamped received by the Planning Division on April 8, 2025 and made a part of the Planning Commission’s meeting packet for May 6, 2025, as well as additional information acquired since that time and made a part of the project file.

THE FOLLOWING CONDITIONS OF APPROVAL SHALL BE SATISFIED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT UNLESS OTHERWISE NOTED (BOLD CONDITIONS ADDED OR AMENDED AT PUBLIC HEARING):

Planning Department Conditions

General:

1. This Design Review is approved, as shown on the plans, date stamped by the Planning Department on April 8, 2025, and as conditioned herein.
2. This Design Review shall be effectuated within a period of two years from the adoption date of this resolution through issuance of a building permit related to the homes approved with this project. An extension of time may be granted by the Planning Commission upon written request by the applicant filed with the Planning Division within the effective period of this original approval.
3. All construction drawings and plot plans submitted for plan check shall be in substantial compliance with the plans presented to and approved by the Planning Commission on May 6, 2025, and as conditioned herein.
4. All conditions of approval shall be satisfied by the owner/developer. All costs associated with compliance with the conditions shall be at the owner/developer's expense.
5. Noise generating construction activities, including such things as power generators, shall be limited to the hours of 7:30 a.m. to 5:30 p.m. Monday through Friday, and shall be prohibited on City, State and Federal Holidays. The restrictions on allowed working days and times may be modified on prior written approval by the Community Development Director.
6. Should archaeological materials be uncovered during grading, trenching or other on- site excavation(s), earthwork within 30 yards of these materials shall be stopped until a professional archaeologist who is certified by the Society of Professional Archaeology (SOPA) has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), if deemed necessary.
7. The Applicant shall indemnify, defend, and hold harmless the City of Oakley, the City Approving Authorities, and the officers, agents, and employees of the City from any and all claims, damages and liability (including, but not limited to, damages, attorney fees, expenses of litigation, costs of court).
8. Any model home complex shall have a copy of the City of Oakley's General Plan Land Use Map posted within the sales office or included with the informational material provided to prospective home buyers.

Development Regulations:

9. Project is zoned P-1 District and shall adhere to the setbacks shown on the Final Development Plan.

Referenced Resolution and Conditions of Approval:

10. All Conditions of Approval of City Council Resolution No. 58-21, approving the project's Vesting Tentative Map 9557, shall remain effective unless explicitly superseded either by a specific condition of approval or obvious design by this Resolution. The Community Development Director shall have final say in any disputes regarding whether a specific condition remains in effect.

Architectural Details:

11. The Applicant shall submit plans that show exterior lighting that are specific to each of the three architectural styles, subject to the approval of the Community Development Director.
12. All plan/elevation combinations that show any materials other than stucco on a column or front facade, where the side elevation is not visible on the plans, shall have that material wrap all sides of the column or around the front facade to the next change in plane. Where wraps are completely visible on the plans, they should continue to either the change in plane, or to the fence line or point where the second story begins, as shown on the approved plans.
13. The Applicant shall submit plans that show additional brick veneer on the Prairie Elevation of Plan 2016, subject to the approval of the Community Development Director.
14. All trim and shutters, etc. shall be painted on all sides in the applicable color. Exceptions may be made for stucco over foam trim where a clean line may not be attainable where the trim meets the house, subject to the review and approval of the Community Development Director.
15. The Applicant shall submit plans that show that the exterior of street facing fences shall receive two (2) coats semi-transparent stain and sealer.
16. Plot plans shall be submitted with as close as possible to an equal number of architectural types for each plan. In the event any specific architectural type is being proposed too often, or excluded from the mix, Staff may postpone issuing building permits until it can be shown that a more even mix of all types, subject to the total numbers represented by each plan, will exist at build out without over concentration or exclusion in any specific area.

Landscaping:

17. A landscaping and irrigation plan for all front yard, right-of-way, parks, open space, and trail landscaping shall conform to the Oakley Water Efficient Landscape Ordinance ("WELO"), and the Guidelines for Implementation of the City of Oakley Water Efficient Landscape Ordinance and shall be installed prior to final occupancy. The plan shall be prepared by a licensed landscape architect and shall be certified to be in compliance with the City's Water Conservation Ordinance by including the following signed statement on the

cover sheet or same sheet as the WELO calculations in a visible text box: "These plans are certified to conform to the Oakley Water Efficiency Landscape Ordinance."

18. California native drought tolerant plants shall be used as much as possible. All trees shall be a mix of 15-gallon and 24-inch box; all shrubs shall be a minimum five-gallon size, except as otherwise noted.
19. All landscaped areas not covered by shrubs or groundcover shall be covered with bark or acceptable alternative as reviewed and approved by the Community Development Director. On slopes greater than 3 to 1, the Applicant shall use an alternative to bark per the review and approval of the Community Development Director. Areas covered with bark shall use a weed barrier.
20. The Applicant shall maintain all private landscaping until occupancy.

Subdivision Disclosures:

21. The Applicant shall draft a statement to be recorded at the County Recorder's Office for each parcel to notify future owners of the parcels that second driveways to access side yards opposite the garage shall not be permitted, and if installed, may be subject to code enforcement action by the City of Oakley. The specific language shall be submitted to the Planning Division for review and approval prior to recording with the County Recorder.

Energy Efficiency:

22. Air conditioning condenser units shall be located to take advantage of natural shade. Condensers should not be placed on the west or south elevation of a home, unless shade is provided. The location of the condenser shall be added to all plot plans for review and approval of the Community Development Director.
23. Design and site units so as to take advantage of natural heating and cooling, sun and wind exposure, and solar energy opportunities.

Waste Management Plan:

24. The Applicant shall submit a Waste Management Plan that complies with the City of Oakley Construction and Demolition Debris Recycling Ordinance.

Building Division Conditions

25. Plans shall meet the currently adopted Uniform Codes as well as the newest T-24 Energy requirements from the State of California Energy Commission. To confirm the most recent adopted codes please contact the Building Division at (925) 625-7005.

26. Prior to requesting a Certificate of Occupancy from the Building Division, all Conditions of Approval required for occupancy must be completed. When the Public Works Division and the Planning Division place Conditions of Approval on the project, those divisions will sign off on the project prior to the request for a Building division final inspection. Similarly, if the Health Department and/or Fire Department reviewed and approved the original plans, those departments must sign off on the project prior to the request for a final inspection by the Building Division.

Advisory Notes

The following Advisory Notes are provided to the Applicant as a courtesy but are not a part of the conditions of approval. Advisory Notes are provided for the purpose of informing the Applicant of additional ordinance requirements that must be met in order to proceed with development.

- A. The Applicant/owner should be aware of the expiration dates and renewing requirements prior to requesting building or grading permits.
- B. The project will require a grading permit pursuant to the Ordinance Code.
- C. Applicant shall comply with the requirements of Ironhouse Sanitary District.
- D. The Applicant shall comply with the requirements of the Diablo Water District.
- E. Comply with the requirements of the East Contra Costa Fire Protection District.
- F. The applicant shall comply with the requirements of Contra Costa Environmental Health if subject to applicable permits.
- G. Comply with the requirements of the Building Inspection Division. Building permits are required prior to the construction of most structures.
- H. This project may be subject to the requirements of the Department of Fish and Game. It is the Applicant's responsibility to notify the Department of Fish and Game, P.O. Box 47, Yountville, California 94599, of any proposed construction within this development that may affect any fish and wildlife resources, per the Fish and Game Code.
- I. This project may be subject to the requirements of the Army Corps of Engineers. It is the Applicant's responsibility to notify the appropriate district of the Corps of Engineers to determine if a permit is required, and if it can be obtained.
- J. The Applicant shall obtain an encroachment permit for construction within existing City rights of way.

PASSED AND ADOPTED by the Planning Commission of the City of Oakley at a meeting held on the May 6, 2025, by the following vote:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

APPROVED:

ATTEST:

Diego Verduzco, Chair Date

Kim Snodgrass, City Clerk Date

DATE: May 6, 2025
TO: Joshua McMurray, City Manager
FROM: Ken Strelo, Community Development Director
SUBJECT: Adopt a Resolution Appointing a Planning Commissioner Representative and Alternate to the TRANSPLAN Committee for a Two-Year Term

Approved and
Forwarded to the
Planning Commission

Summary and Background

The TRANSPLAN Committee coordinates the regional transportation interests of East Contra Costa County communities, including the Cities of Antioch, Brentwood, Oakley and Pittsburg, and Contra Costa County, and unincorporated communities of Bethel Island, Byron, Discovery Bay and Knightsen. Elected officials and Planning Commissioners sit on the committee. On January 17, 2023, the Planning Commission adopted Resolution 3-23 appointing Commissioners Price and Verduzco as the Representative and Alternate, respectively. Those appointments were for a two-year term. Since the term has officially expired, the Planning Commission is required to re-appoint a representative and alternate for a new two-year term to serve on the TRANSPLAN Committee.

Appointments to the TRANSPLAN Committee are for two years. Each participating city appoints one City Councilmember and one Planning Commissioner to the Committee. The appointees (TRANSPLAN Member) must remain a local elected official or Planning Commissioner to serve on the TRANSPLAN Committee. The TRANSPLAN Administrative Procedures allows for alternate representatives to be appointed as both the City Council and Planning Commissioner representatives. It would be appropriate for the Planning Commissioner to appoint an alternate representative if for any reason the TRANSPLAN Member is no longer a Planning Commissioner so that their alternate may serve in their place until a successor is named and qualified.

TRANSPLAN Committee meetings are currently held in-person the second Thursday of each month beginning at 6:30 p.m. in the Board Room of the Tri-Delta Transit building, 801 Wilbur Avenue in Antioch, CA.

Planning Commissioner Terms

The Planning Commission may want to consider the remaining terms of the existing Planning Commissioners before appointing a representative and alternate. The Planning Commissioners' remaining terms are as follows:



- Diego Verduzco, Chair. Term Expires: October 11, 2025
- Leonard Price, Vice Chair. Term Expires: October 11, 2025
- Oleksii Chuiko, Commissioner. Term Expires: October 11, 2025
- Kerry Harvey, Commissioner. Term Expires: February 27, 2029
- Yared Oliveros, Commissioner. Term Expires: February 27, 2029

Consistency with Oakley Strategic Plan 27+

Engagement with community partners, such as serving as a TRANSPLAN Member, is consistent with the Community and Collaborative Partnership Goal in the Oakley Strategic Plan 27+.

Fiscal Impact

There is no fiscal impact to the City's General Fund.

Staff Recommendation

Staff recommends the Planning Commission adopt a Resolution appointing a Planning Commissioner Representative and Alternate to the TRANSPLAN Committee for a two-year term.

Attachments

1. Proposed Resolution



**PLANNING COMMISSION
RESOLUTION NO. -25**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF OAKLEY
APPOINTING A PLANNING COMMISSIONER REPRESENTATIVE AND
ALTERNATE TO THE TRANSPLAN COMMITTEE FOR A TWO-YEAR TERM**

WHEREAS, the TRANSPLAN Committee coordinates the regional transportation interests of East Contra Costa County communities, including the Cities of Antioch, Brentwood, Oakley and Pittsburg, and Contra Costa County, and unincorporated communities of Bethel Island, Byron, Discovery Bay and Knightsen; and

WHEREAS, each participating city appoints one City Councilmember and one Planning Commissioner to the TRANSPLAN Committee; and

WHEREAS, the TRANSPLAN Administrative Procedures allow for alternates to be appointed for both the City Council and Planning Commissioner representatives; and

WHEREAS, the term for the appointed Planning Commissioner Representative and Alternate shall be for two years.

NOW, THEREFORE, BE IT RESOLVED THAT, that the Planning Commission of the City of Oakley hereby appoints the following Planning Commissioners to serve a two-year term on the TRANSPLAN Committee as Oakley's Planning Commissioner Representative and Alternate:

- Representative:
- Alternate:

PASSED AND ADOPTED by the City Council of the City of Oakley at a meeting held on this 6th day of May 2025 by the following vote:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

APPROVED:

Diego Verduzco, Chair

Date

ATTEST:

Kim Snodgrass, City Clerk

Date