



## MEMORANDUM REPORT

**DATE:** April 15, 2024

**TO:** Board of Commissioners of the Los Altos Hills County Fire District

**FROM:** Robleda – Burke Project Team,  
Ryan Cronin, Technical Analyst/Project Manager  
A. Harmon, Field Manager  
Eugenia Woods, Programs, Planning and Grants Manager

**SUBJECT:** Robleda – Burke Evacuation Route Project Final Reports

**RECOMMENDATION:**  
Receive Robleda - Burke Evacuation Route Project Final Reports

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### BACKGROUND

The Los Altos Hills County Fire District (District or LAHCFD) 2023-2027 Strategic Plan Goals & Strategies (Attachment 1), Strategic Goal 1 Prevention, Protection, Resiliency, aims to fund, develop and maintain programs to protect life, property and enhance safety to build a resilient community. Evacuation Route Hardening is an initiative of this goal. Integrated Hazardous Fuel Reduction (IHFR) programs identified in the LAHCFD Chart of Services (Attachment 2) include the Community-Focused Evacuation Route Hardening projects. These IHFR programs are based on fire science, the LAHCFD Community Wildfire Protection Plan (CWPP) Annex 4, and the expenditures allocated in the annual District budget. IHFR projects are designed to enhance community resiliency, educate District residents, and reduce community fire hazards. In accordance with Goal 1, staff identified high fire risk areas and initiated collaborative solutions with regional partners including the Santa Clara County FireSafe Council and the Santa Clara County Central Fire Protection District (County Fire or Fire Department). The projects targeted roadside hazardous vegetation reduction on major transportation corridors such as Page Mill Road - Phase I and Phase II in 2020/2021, Moody-EI Monte Roads in 2021, Altamont Road in spring 2022, Arastradero Road in fall of 2022, maintenance on Page Mill Road in 2023, Mora-Ravensbury Drive and Avenue in summer 2023, Magdalena-Summerhill Avenues in fall 2023 and the Robleda-Burke

project also in fall 2023. The fundamental goal of these evacuation route and road hardening projects is to provide greater protection for life safety and to reduce property losses in the event of wildfire by providing safer egress and ingress for evacuees and emergency responders.

Santa Clara County FireSafe Council (SCCFSC) was the project manager for the Page Mill Road, Phase I and Phase II, Moody-El Monte Roads, Altamont Road, Arastradero Road, Page Mill Road maintenance, Mora-Ravensbury and Robleda-Burke projects that were designed to remove hazardous vegetation from the roadside and thereby create multiple evacuation routes for egress and ingress in event of a wildfire or emergency incident. These LAHCFD evacuation route projects were successfully completed, resulting in greater public safety and alignment with LAHCFD's and Santa Clara County's evacuation initiatives.

The Robleda-Burke evacuation route project was selected as one of the four I-280 underpasses of the 3.3-mile stretch between Page Mill Road and El Monte Road. These critical underpasses grant access to citizens of the southwest neighborhoods of Los Altos Hills to Foothill Expressway. If I-280 interchanges at Page Mill Road and El Monte Road become congested, these evacuation routes will be critical to surviving a fast-moving wildfire.

Special attention was given to the I-280 underpass as well as other roadway intersections. Clearing brush and limbing up trees at the underpass protects the egress as well as prevents potential flame impingement to vehicles on the freeway. Brush clearing at intersections also improves visibility and safer travel.

Information about this project, and other District projects can be found on the Department website at <https://www.lahcfd.org/community-projects/>.

## **DISCUSSION**

The Santa Clara County FireSafe Council Final Report for the Robleda-Burke Evacuation Route project is Attachment 3. The District provides this Report and summary of costs for the project. The Robleda-Burke Evacuation Route project was successful in attaining the goal of reducing hazardous fuel to provide for a safer evacuation route.

The Robleda-Burke project successfully engaged the residents included in the project. This was the second evacuation route project to utilize a webinar community meeting to inform residents about the project and to address concerns. Following the community meeting, three residents met with LAHCFD staff to inspect their property and reach a consensus on the fuel reduction to be performed. Other residents were engaged through door knocking. Engaging residents early prompted them to clear additional areas of their property and have hazardous fuel removed when properties were treated.

In the areas of the project that were predominantly residential, residents become interested in our work as we move through the neighborhood. These contacts are great opportunities to promote the many programs of the fire district. Efforts were made to engage residents to be proactive in their efforts to be fire aware.

**QUANTITATIVE RESULTS and EXPENSES**

<b>Date</b>	<b>Cubic Yards</b>	<b>Distance (Miles)</b>
Monday, November 27, 2023	41	0.8
Tuesday, November 28, 2023	35	0.92
Wednesday, November 29, 2023	40	1.5
Thursday, November 30, 2023	35	1.88
<b>Total</b>	<b>151</b>	<b>5.1</b>

Robleda - Burke data

<b>Robleda-Burke Evac. Route Project Costs</b>			
<b>Contractor/Staff</b>	<b>Service</b>	<b>Completed</b>	<b>Amount</b>
SCC FireSafe Council	IHFR Project Management	Nov	\$10,142.18
SCC FireSafe Council	Project supplies		\$0.00
SCC FireSafe Council	Personnel Mileage	Nov	\$483.89
Eugenia Woods	Supplies Reimb	Nov	\$1,117.90
Bay Area Traffic Solutions	Traffic Control Plan	Oct	\$500.00
Traffic Management Inc	Project traffic control	Nov	\$13,108.73
Miabella	Fuel Reduction	Nov	\$48,000.00
Dudek	Environmental Study	Oct-Nov	\$2,382.10
Folger Graphics	Mailer; Cover Letter + ROE	Nov	\$954.61
Jackson Ricketts	Data & Planning	Nov	\$3,900.00
	Post-Treatment	Sept	\$4,600.00
<b>Total Robleda-Burke Evac. Route Project Costs</b>			<b>\$85,189.41</b>

Costs directly associated with the Robleda - Burke Evacuation Route Project.

## Successes

- Effective utilization of Unmanned Aircraft Systems (UAS) for image telemetry. JACKSONS DRONES was contracted to provide aerial photos and to identify treatment areas, and quantitatively measure hazardous fuel reduction.
- UAS observations accurately measure the area treated by the evacuation route projects. Improvements in photogrammetry and developing use of Lidar afford the ability to identify and measure pre and post treatment volume of vegetation.
- With these technologies, treatment of low, medium and high vegetation can be assessed. These technologies are promising for identifying plant species for future treatments. This information will be of great assistance when working with invasive and non-native species.
- Note that the UAS volume measurement is for vegetation. This is different than the post treatment measurement of chipped volume.
- The reported volume changes indicate successful reduction of ladder fuels. Low vegetation, grasses and weeds, were reduced and left in place. Medium fuels were reduced the most, chipped and are now measured in the low mulch post-treatment volume. Similarly, high fuels were moderately reduced and added to the mulch volume.

The Air Metrix Vegetation Assessment Report is provided as Attachment 4.

- With assistance of County Counsel, the project team completed CEQA compliance by filing a Notice of Exemption (NOE) through the Office of the Santa Clara County Clerk. By filing the NOE, LAHCFD utilized a process that notified the public of the proposed mitigation work, provided the public the opportunity to voice concerns, and if concerns were expressed, allowed for time to address, and remedy the concerns prior to commencing the project. No concerns were received, and the project commenced as planned.
- Recognition that the insurance industry is now incentivizing the high value of hazardous vegetation management programs to reduce the threat of wildfire and property losses. LAHCFD efforts strongly support the Office of the Insurance Commissioner's Initiative for the insurance industry to recognize wildfire mitigation efforts as a benefit to the insured.
- Appreciation is expressed for the dedicated support of the LAHCFD Board of Commissioners, the Santa Clara County Fire Department, the Town of Los Altos Hills, the Santa Clara County FireSafe Council, Caltrans, County Roads & Airports, and the contractor, crews and traffic control involved in the success of the project.

## Community Outreach

LAHCFD staff promoted this project, and the other programs of the District, through several outreach activities.

- The Robleda – Burke Evacuation Route project was the second project to utilize an early-notification postcard mailing. This mailing coincided with the posting of A-frame message boards strategically placed at entry points along the project route. The postcards alerted residents to the subsequent project letter and ROE request.
- Letters were mailed to all property owners along the project. They were offered the opportunity to make inquiries, and have their property participate in the vegetation management efforts.
- LAHCFD staff walked the project route, door knocking, and spoke with residents about the project, made ROE requests, and promoted other District programs.
- A virtual Community Meeting was held via a teleconference. Two residents that attended requested personalized property visits that were scheduled the next week.

During these community contacts, recognition and gratitude from the community and agencies for the public safety benefits of the project were received.

## Insights/Lessons Learned

- The new policy that the District project manager review the project and anticipated traffic control concerns with the traffic control field crew supervisor prior to the start of the project was implemented for this project. This is a best practice decided upon from the lessons learned on the Page Mill Road maintenance project. The traffic control supervisor was briefed to ensure they were aware that the work area would be mobile, to anticipate reasonable traffic volume and to be prepared for a fair number of driveways and side streets.
- Many residents expressed concern about the volume of vegetation we would be trimming. Most were concerned for their privacy and had prior bad experiences with both private and public sector vegetation management. Meeting residents individually provides the opportunity to truly connect, gain their mindshare about fire hazards and the need to balance personal wishes with public safety. Having been heard and offering a light touch on the initial project will hopefully gain greater engagement for future projects.
- As a result of the collaboration and coordination between LAHCFD and its partners, the Robleda - Burke Evacuation Route project was successful and provided a strategic and high priority public safety benefit to the community in the event of a wildfire or emergency incident. LAHCFD thanks the team, contractors, Commissioners, community members and partner agencies for their contributions to and support of this project.

## **Attachment(s):**

1. LAHCFD 2023-2027 Strategic Plan, Goal 1
2. LAHCFD Chart of Services, V11, 3/01/2022
3. Santa Clara County FireSafe Council Final Report: Mora-Ravensbury Evacuation Route project
4. Air Metrix Vegetation Assessment Report



## 2023—2027 LAHCFD Strategic Plan

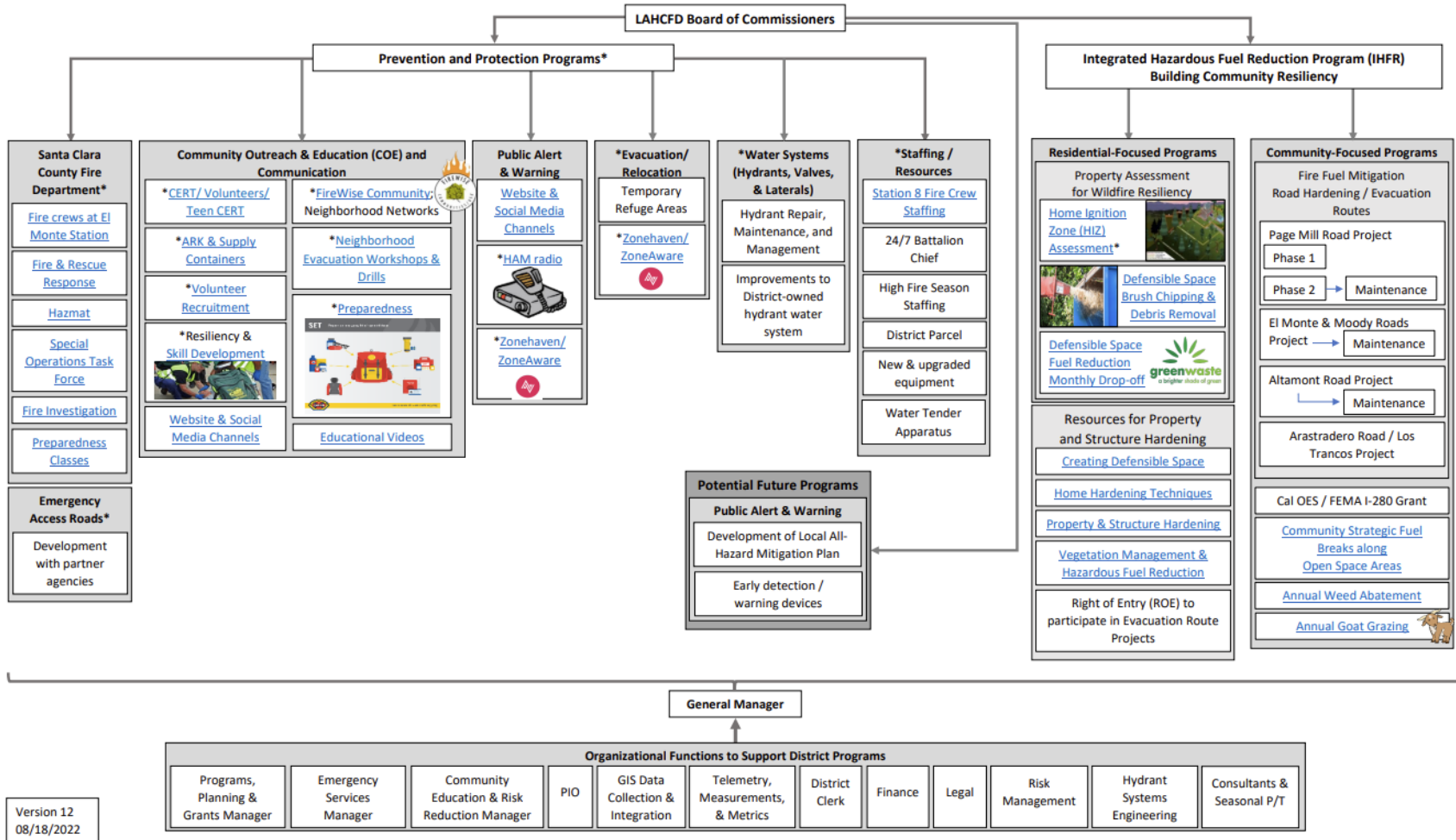
<b>Mission</b>	Protect the lives, property and environment within the District it serves f prevention, protection and emergency response services, and			
<b>Strategic Goals</b>	<b>1. Prevention, Protection, Resiliency</b>			
<b>Objectives</b>	Fund, develop and maintain programs to protect life, property and enhance safety to build a resilient community. Current Programs described in the District's Chart of Services.			
<b>Initiatives</b>	Harden Evacuation Routes and Emergency Access Roads	Support reduction of hazardous fuels by residents	Update CWPP, Annex 4	Contribute resources to support and enhance operations at SCC Central Fire
<b>Strategies</b>	Complete planning and preparations for additional evacuation routes	Continue targeted Chipping Program	Participate in County-wide regional committee on CWPP	Maintain contract for fire suppression and EMS services with County Fire
	Maintain completed evacuation routes	Provide monthly vegetation drop off		Fund additional seasonal fire crews (high risk event extra staffing)
	Implement vegetation mgmt services on emergency access roads in collaboration with Central Fire and Fire Safe Council	Continue Home Ignition Zone (HIZ) inspections and implement rebate program		Fund Station 8 to provide additional support and response
	Support and advance I280 vegetation mgmt project	Support Central Fire fuels crew work		Apply for grants in a manner consistent with Commission discussion 6/21/22 to leverage tax dollars and maximize community benefit

# ATTACHMENT 2

**LEGEND**  
 \*Indicates programs are delivered in collaboration with partner agencies  
 Underlined text indicates a clickable link

**LAHCFD Chart of Services**  
 Built on Fire Science & LAHCFD-CWPP Annex 4  
 Guided by Strategic Plan 2021 – 2022 – Resourced by FY Budget

For more information on LAHCFD Programs and how to participate, please visit: [www.LAHCFD.org](http://www.LAHCFD.org)  
 An interactive version of this chart can be viewed here: [www.lahcfd.org/governance/ForwardLookingCommunityResiliency](http://www.lahcfd.org/governance/ForwardLookingCommunityResiliency)



Version 12  
08/18/2022



# **Santa Clara County FireSafe Council**

14380 Saratoga Ave. Saratoga CA, 95070



## **ATTACHMENT 3**

# **FINAL REPORT** **Robleda-Burke Evacuation Route**

**December 20, 2023**

### **Introduction:**

Robleda Road and Burke Road in Los Altos Hills, California, provides two significant routes of egress/ingress for the southern portion of Los Altos Hills Community and for Midpeninsula Regional Open Space District users in the event of a fire. To secure the integrity of these egress/ingress routes, Los Altos Hills County Fire District and Santa Clara County FireSafe Council conducted a roadside treatment of hazardous fuels.

### **Cooperators:**

There were multiple agencies, contractors, property owners, and organizations that contributed to the project; Santa Clara County Fire Safe Council, Los Altos Hills County Fire District, Dudek, Miabella Expert Tree Service, Traffic Management Inc, the County of Santa Clara, CalTrans, and the Town of Los Altos Hills to name a few.

### **Goals For This Project:**

1. Trim woody vegetation and weed whip grasses and weeds adjacent to the road.
2. Remove dead or dying woody debris of less than 8 inches DBH.
3. Reduce ladder fuels around larger trees.
4. Remove dead, diseased, or damaged trees smaller than 8" DBH posing a hazard.
5. At street corners where vegetation is thick and blocks visibility, trim and remove to meet standards of shrubs less than 3 feet high and trees limbed up to at least 6 feet above ground. Per Los Altos Hills Municipal Code Title 10-Zoning, "shrubs and plants shall be pruned to a height not to exceed three (3') feet above the road level at its nearest point in an area bounded by the center line of intersecting roads or easements for vehicular access, public or private and a straight line joining points on such center lines eighty (80') feet distant from their intersection. All side limbs of trees in such an area shall be pruned to a height of not less than six (6') feet above the road surface."



## Santa Clara County FireSafe Council

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### Project Site:

This evacuation route project will treat six roads. They are Robleda Road, Chapin Road, Fremont Road, W. Edith Avenue, Burke Road and Old Altos Road.

1. The Robleda Road portion of this evacuation project will begin at the intersection of Elena Road (37.364907, -122.137449) and end at the intersection of Fremont Road (37.380174, -122.124167).
2. The Chapin Road portion of this evacuation route project will begin at the intersection of Robleda Road (37.372233, -122.127559) and end at the intersection of Burke Road (37.372521, -122.123477).
3. The Fremont Road portion of this evacuation route project will begin at the intersection of W. Edith Avenue (37.380451, -122.124609) and end at the intersection of Burke Road (37.375249, -122.121435).
4. The W. Edith Avenue portion of this evacuation route project will begin at the intersection of Fremont Road (37.380451, -122.124609) and end at the intersection of University Avenue (37.381296, -122.121895).
5. The Burke Road portion of this evacuation route project will begin at the intersection of Fremont Road (37.375249, -122.121435) and end at the intersection of University Avenue (37.377275, -122.118805).
6. The Old Altos Road portion of this evacuation route project will begin at the intersection of Burke Road (37.377095, -122.120003) and end at the intersection of Fremont Road (37.377128, -122.121805).

The length of the project is approximate:

1. Robleda Road is 1.5 miles linear distance, which equates to three (3) miles to treat both sides of the roadway.
2. Chapin Road is 0.3 miles linear distance, which equates to 0.6 miles to treat both sides of the roadway.
3. Fremont Road is 0.43 miles linear distance, which equates to 0.86 miles to treat both sides of the roadway.
4. W. Edith Avenue is 0.16 miles linear distance, which equates to 0.32 miles to treat both sides of the roadway.
5. Burke Road is 0.22 miles linear distance, which equates to 0.44 miles to treat both sides of the roadway.
6. Old Altos Road is 0.10 miles linear distance, which equates to 0.20 miles to treat both sides of the roadway.

\*\*A total of 5.86 miles of roadside vegetation management will be treated when accounting for both sides of the roadway.\*\*

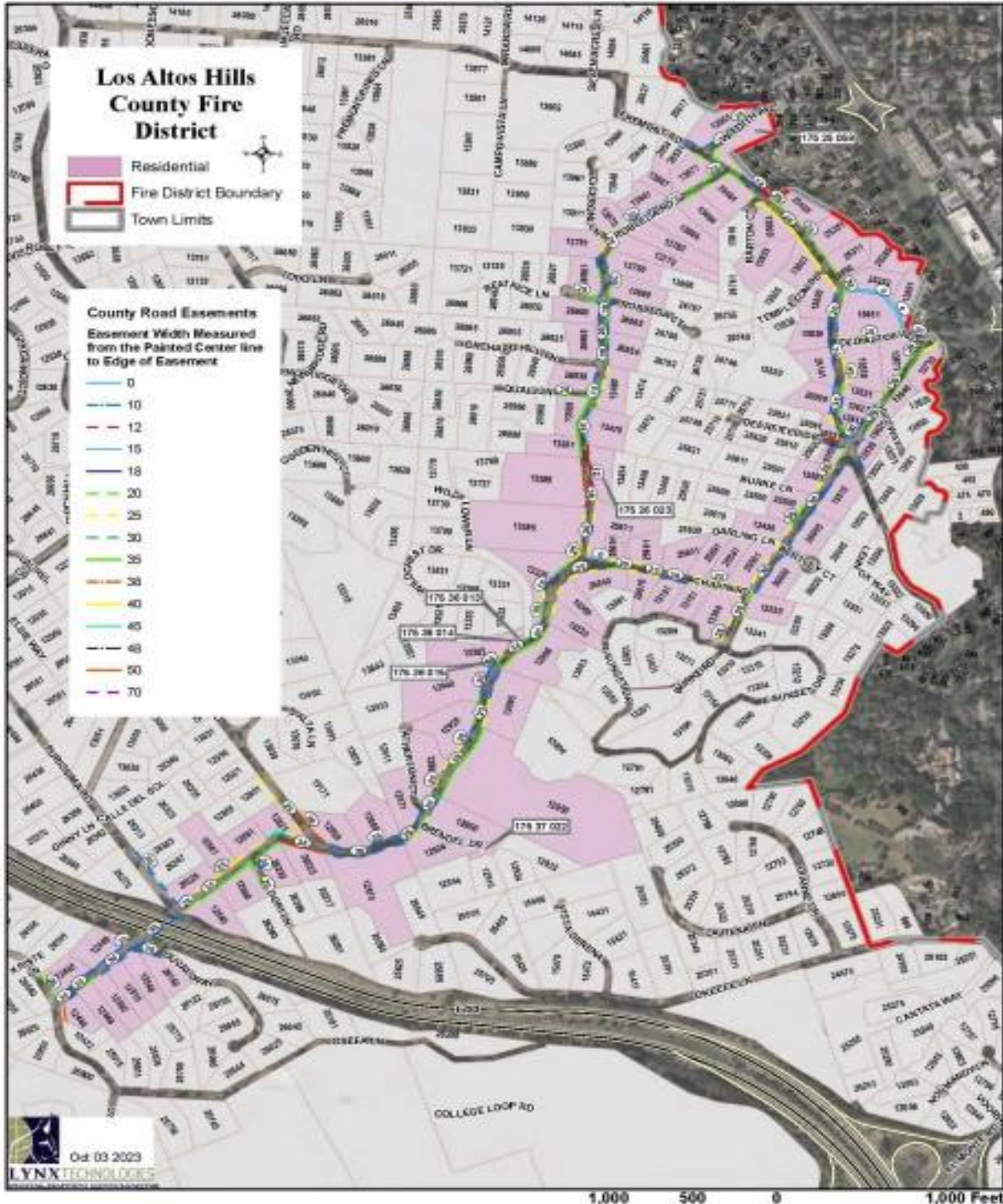


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## Mora Ravensbury Evacuation Route Project Map





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### **Permissions:**

One of the biggest challenges in these types of projects is getting permission to treat the properties. During planning of the project we conducted an extensive public outreach effort to get the permissions needed. It included mailers, newspaper articles, door-to-door visits, and a social media campaign. We were able to include 19 of the 106 parcels involved. Prior to the project, LAHCFD staff conducted a survey of the area to identify key parcels within the project scope. We always strive for 100 percent participation, but every project has a few property owners with reservations. An average participation rate is around 20% for first time maintenance projects (with the goal of 100% participation). SCCFSC's timeframe for ROE forms to be returned was 14 days with a due date of November 24, 2023. LAHCFD Staff went out to conduct door knocking 2 weeks prior to project start date.

### **Biological Precautions:**

As with all of our projects, protecting the biodiversity of the area is a high priority. A Biological Survey was conducted on November 20th, 2023, by Dudek Inc, 7 days before the project started. The biologist identified and flagged wood rats nests, active birds nests, and any habitat within the treatable area. Finally, a buffer of 25 feet was implemented along stream beds and seasonal waterways.

### **Project Duration:**

The project started on Monday November 27th, 2023 and completed on Thursday November 30th, 2023. We did not encounter any red flag days or any rain days.

### **Jurisdictions And Funders Involved:**

Santa Clara County Fire Safe Council, Los Altos Hills County Fire District, Santa Clara County, CalTrans, and Town of Los Altos Hills.

### **Contractors Selected:**

Dudek Inc, was selected for this project due to availability and competitiveness of the bid

Miabella Expert Tree Service was selected due to their availability, familiarity with evacuation route projects within SCCFSC, and for rotation of contractors selected for LAHCFD projects.

Traffic Management Inc provided a traffic control plan and provided flaggers and traffic control for project duration.



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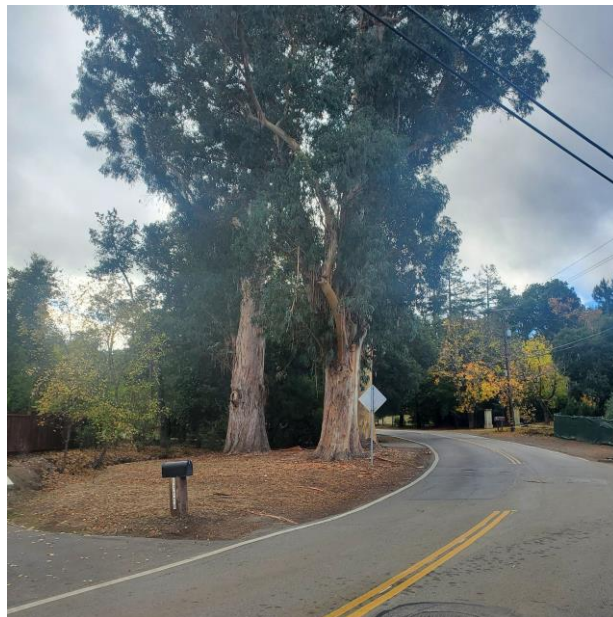
## Project Photos:





# Santa Clara County FireSafe Council

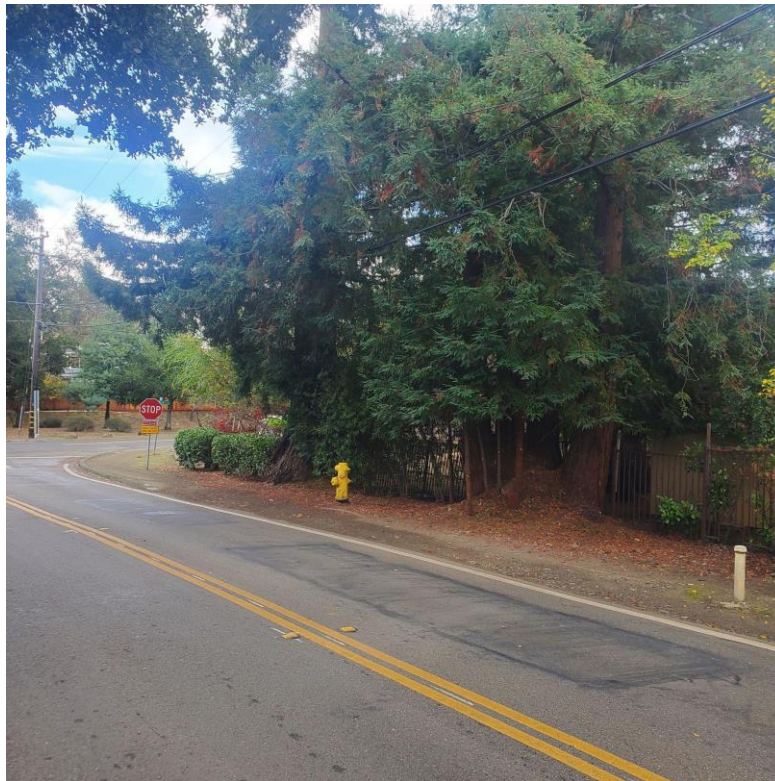
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# Santa Clara County FireSafe Council

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# Santa Clara County FireSafe Council

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## **Santa Clara County FireSafe Council**

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### **By The Numbers:**

- Area treated – 5.10 miles total area treated for both sides were treated during this project. Most of which was treated 15 to 30 feet from the edge of the road unless marked for riparian area. On ROE properties treatment extended 30-50 feet from the edge of the road if needed. The daily average was 1.28 miles per day.
- Acres treated = 12.37 acres with an average of 3.09 acres treated per day.
- No poison oak was treated during this project.
- 4 days of treatment conducted by Miabella Expert Tree Service.

We overcame many challenges to complete this critical part of growing the evacuation route and vegetation treatment system in Santa Clara County. This project also supports goals in the LAHCFD CWPP annex as well as the overall Community Wildfire Protection Plan.

We would like to acknowledge the contribution made by Miabella Expert Tree Service, Dudek Inc, and Traffic Management Inc. All entities were committed to assisting Santa Clara County Fire Safe Council with the project from start to finish.

Traffic Management Inc provided four traffic control personnel every day to make sure that the work could be done in a safe manner. Robleda, Burke, and all other treated roads are commuter roads with multiple driveways, high bike and foot traffic routes; the fourth traffic control personnel was necessary for the safety of the tree crews, SCCFSC staff, LAHCFD staff, general traffic, and bicyclists in the Los Altos Hills area. In addition, Miabella Expert Tree Service provided a translator each day to ensure maximum communication capabilities in an effort to provide complete safety coverage for the crews working and additional personnel on site. I'm happy to report, with Traffic Management Inc. traffic control coverage and the safe working practices of Miabella Expert Tree Service, we were able to finish the project with no reported injuries or incident reports. In addition to that, Los Altos Hills County Fire District granted permission for the project crew to use their parcel for a staging area.

Safety briefings were held by the safety officer, Ryan Cronin and Zaid Ortiz each morning before start of work to discuss traffic control, personal protective equipment, local emergency services, environmental hazards, and weather conditions.



## Santa Clara County FireSafe Council

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We would like to thank all the cooperators and property owners for all their support. If you have any questions or concerns please feel free to direct them to:

***Zaid Ortiz*** – Project Manager

e-mail: [zortiz@sccfiresafe.org](mailto:zortiz@sccfiresafe.org)

Phone: (408) 679-5307

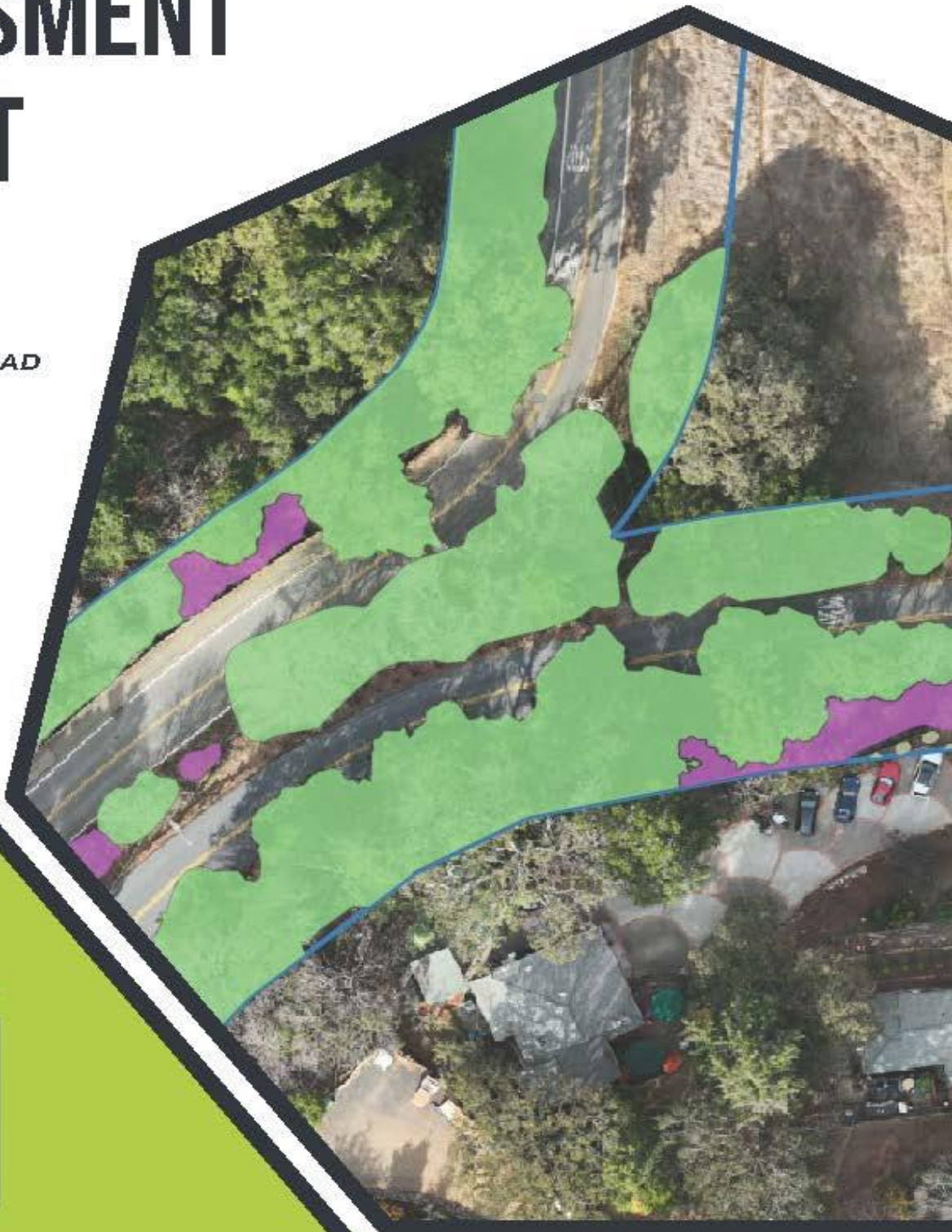
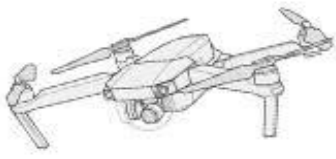
***Amanda Brenner-Cannon*** – Program

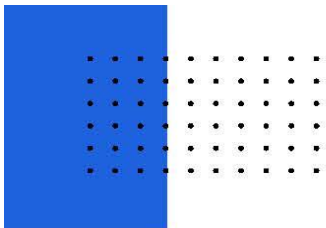
Director

e-mail: [abrennercannon@sccfiresafe.org](mailto:abrennercannon@sccfiresafe.org)

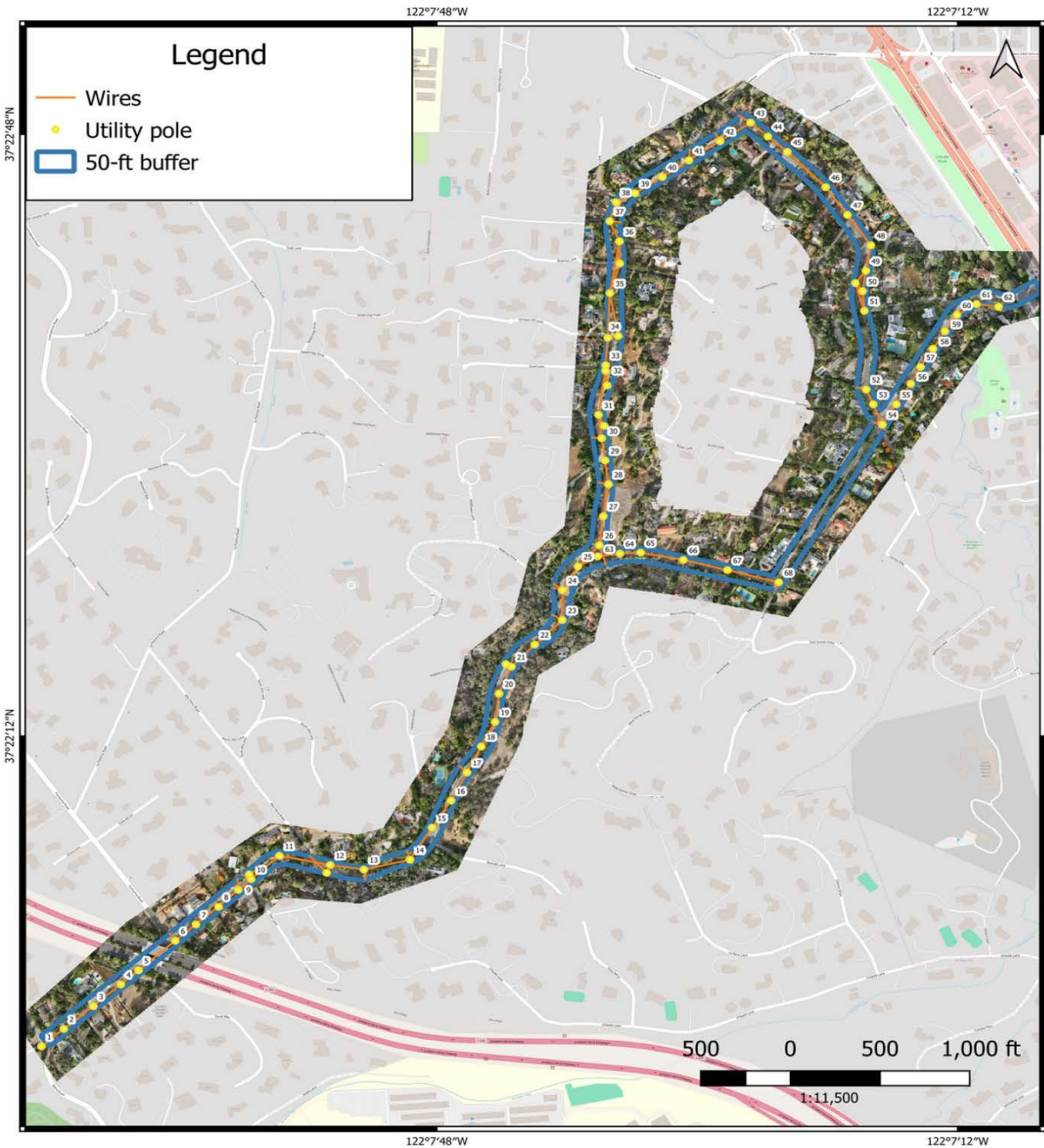
# VEGETATION ASSESSMENT REPORT

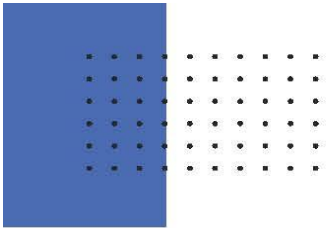
ROBLEDA ROAD  
CHAPIN ROAD  
BURKE ROAD  
WEST FREMONT ROAD





# OVERVIEW





# OVERVIEW



190 acres




5.86 mi



Nov - Dec  
2023



5,030 images



76x

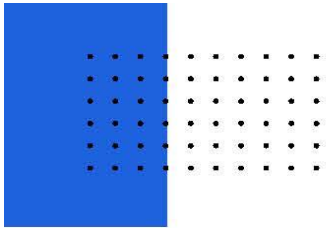
***Robleda  
road***

***Chapin  
road***

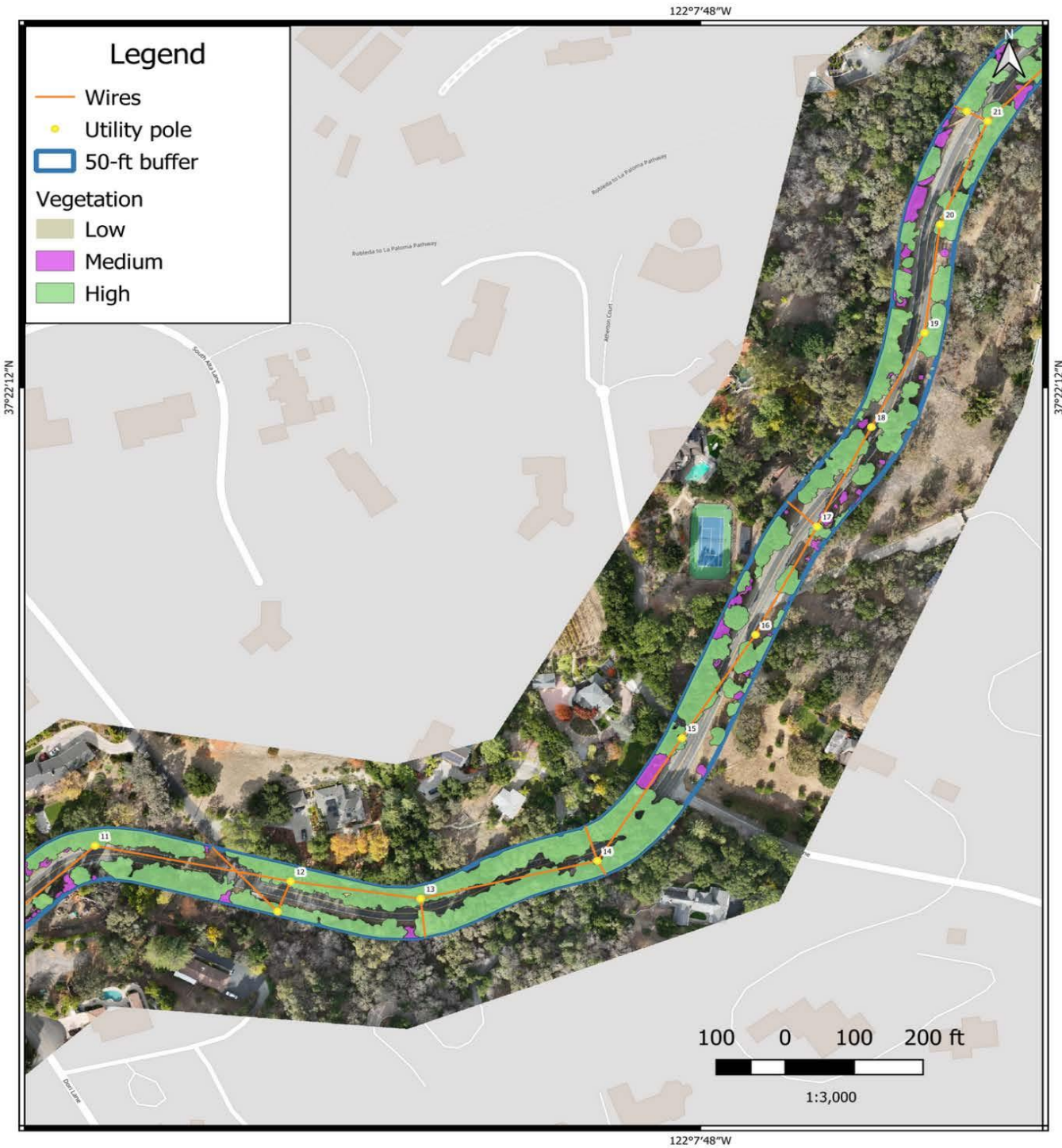
***Burke  
road***

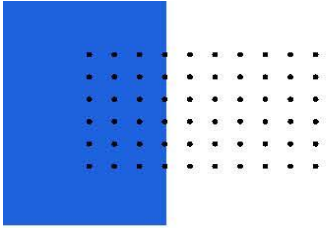
***West  
Fremont  
road***



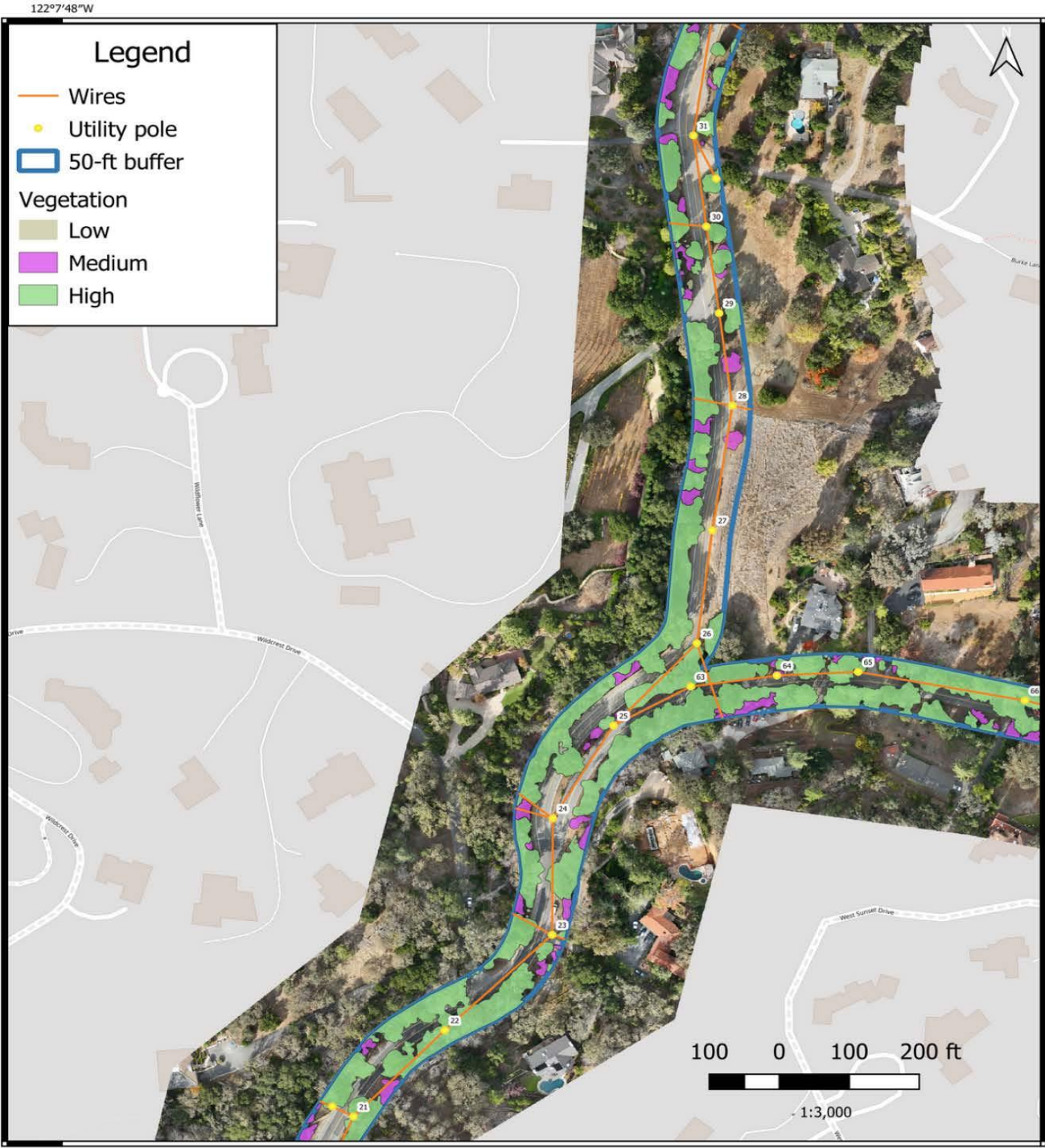


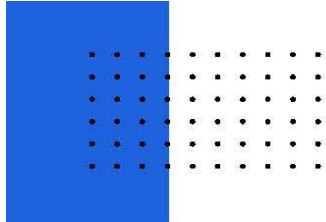
# NOVEMBER 2023 - ROBLEDA ROAD





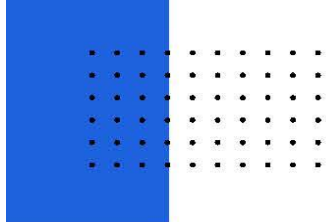
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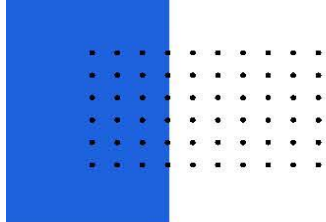
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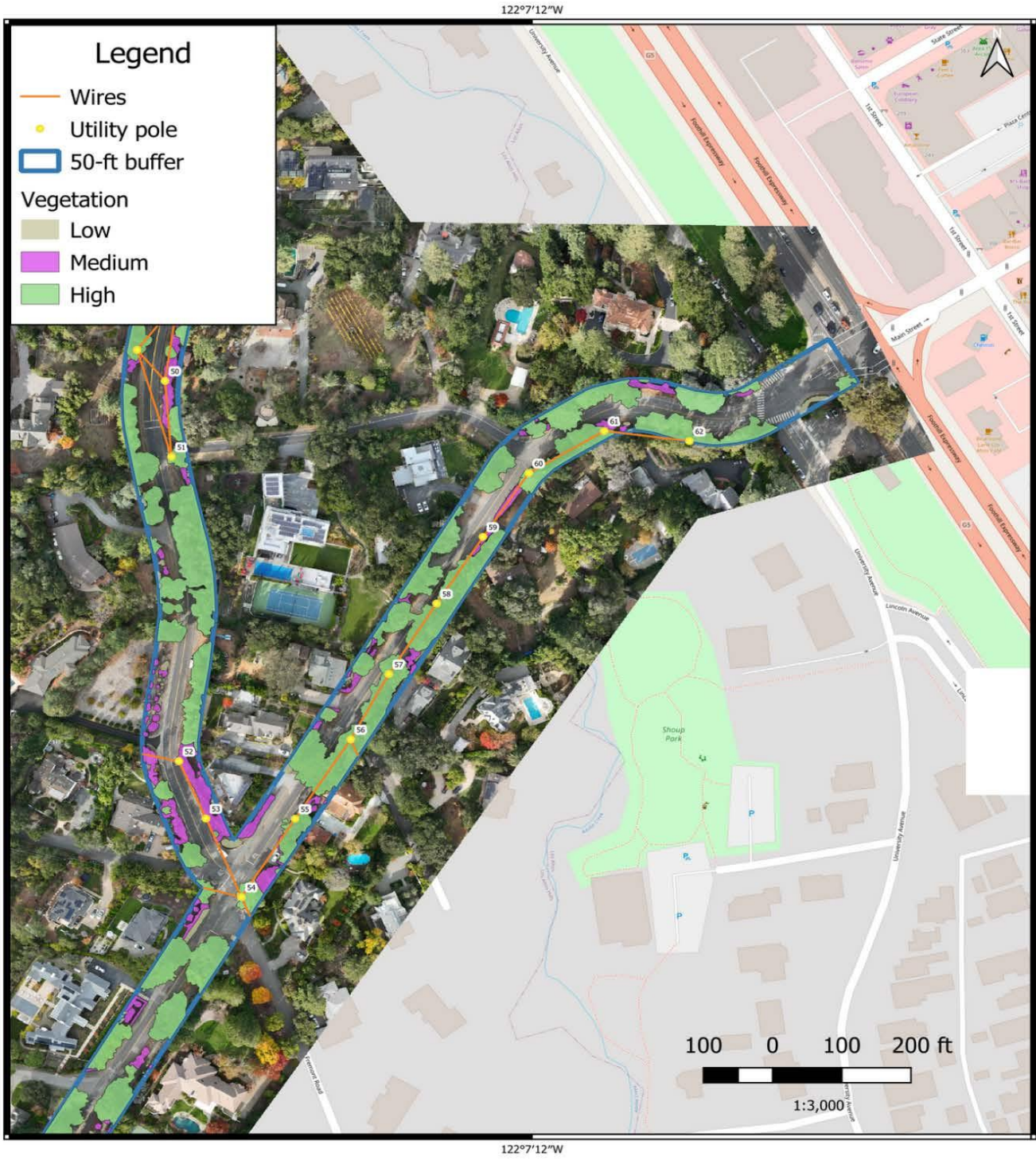


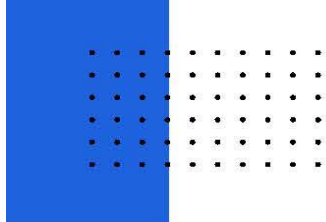
# NOVEMBER 2023 - BURKE ROAD





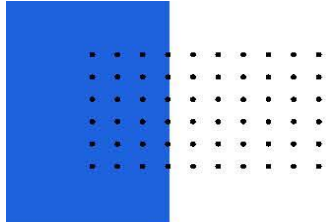
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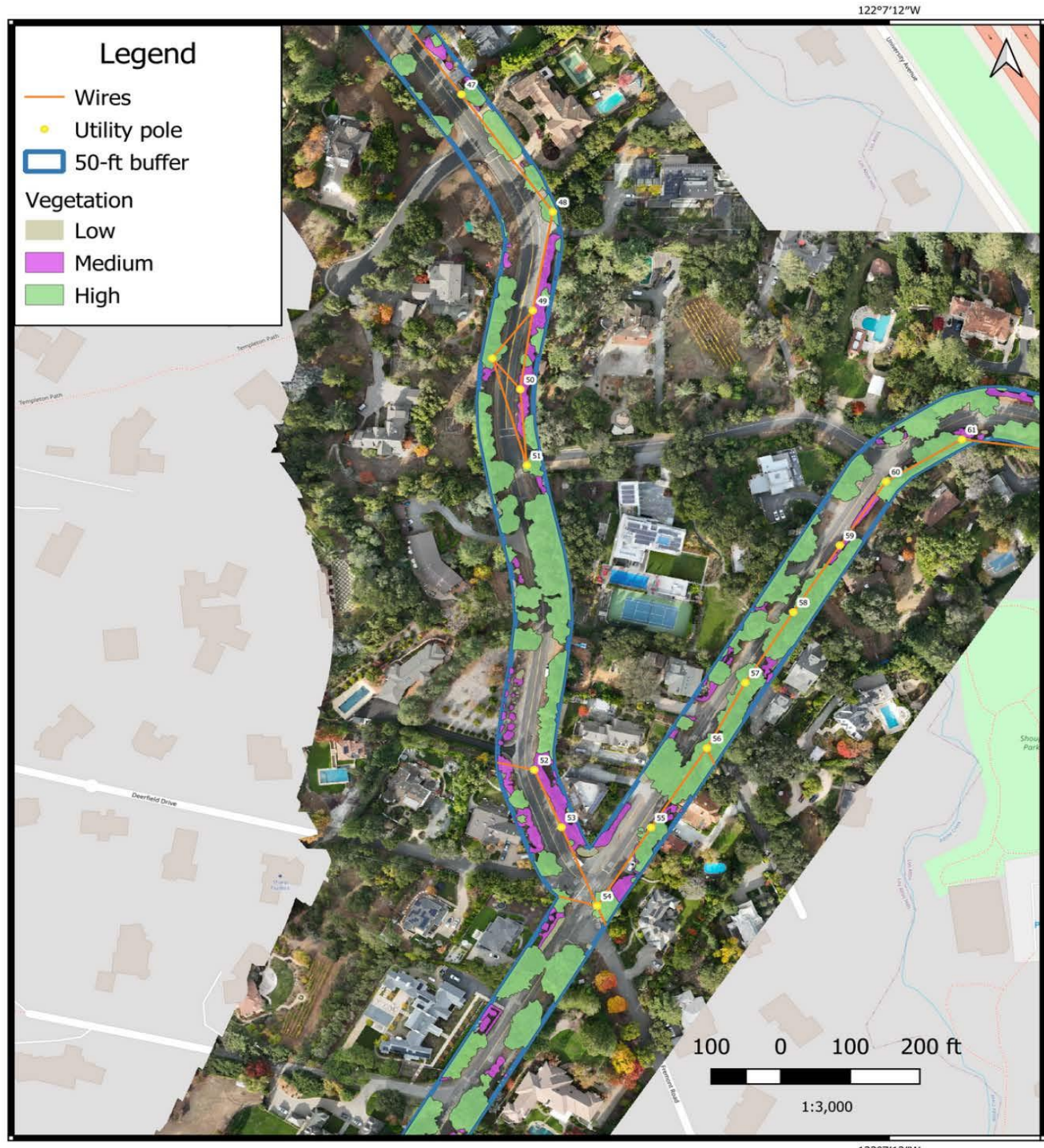


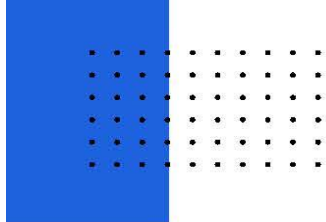
# NOVEMBER 2023 - CHAPIN ROAD





# NOVEMBER 2023 - WEST FREMONT ROAD





# NOVEMBER 2023 - WEST FREMONT ROAD



# CHANGE DETECTION


NOVEMBER

Vegetation	Area, acres	Volume, cubic yards
Low	0.11	697.14
Medium	1.54	35211.34
High	10.73	790102.29


DECEMBER

Vegetation	Area, acres	Volume, cubic yards
Low	0.11	694.67
Medium	1.52	31509.66
High	10.63	754804.67

DECREASE



0.35%




DECREASE




10.51%



DECREASE



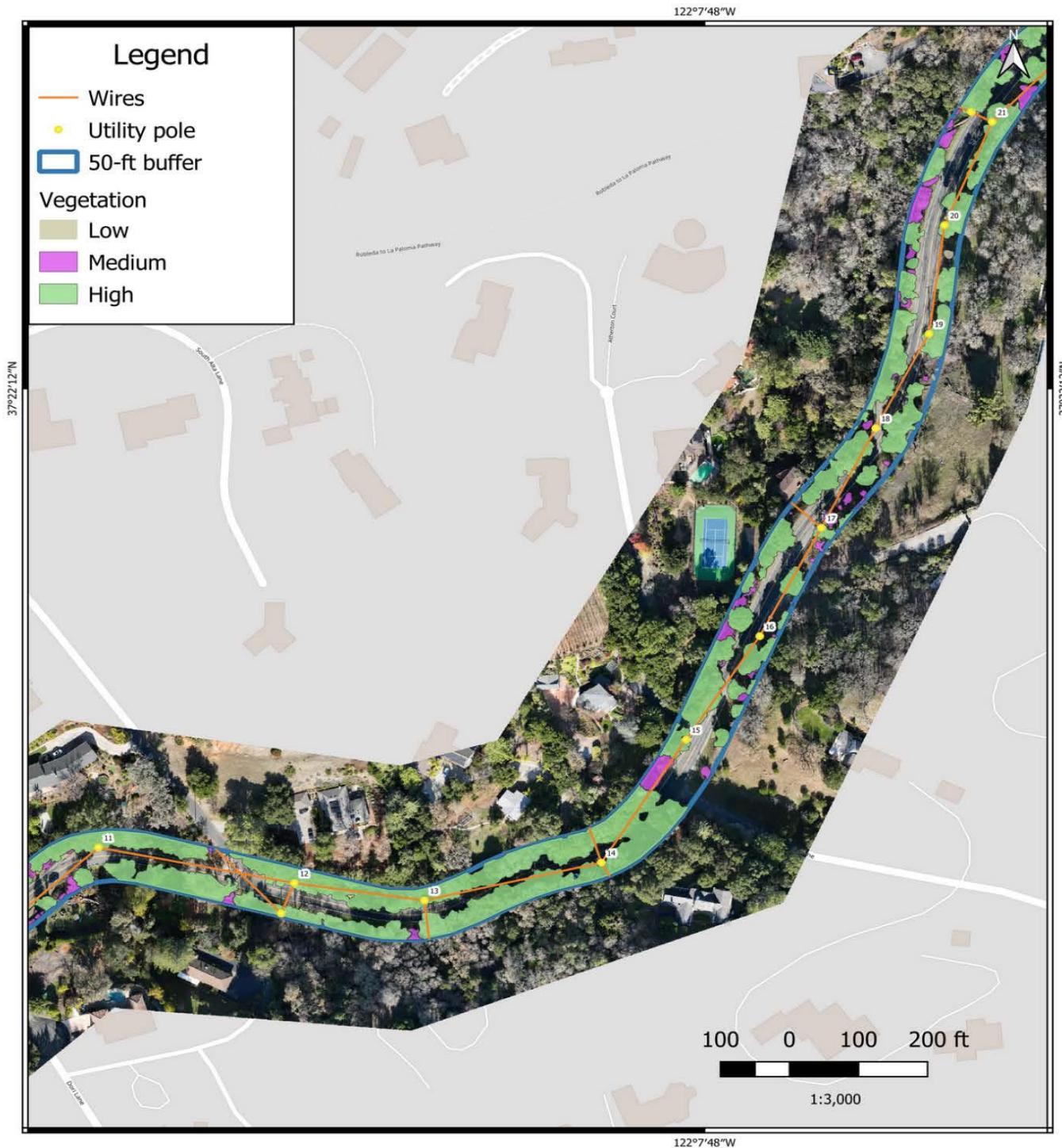
4.47%

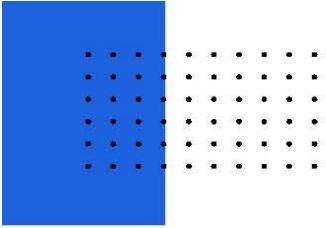




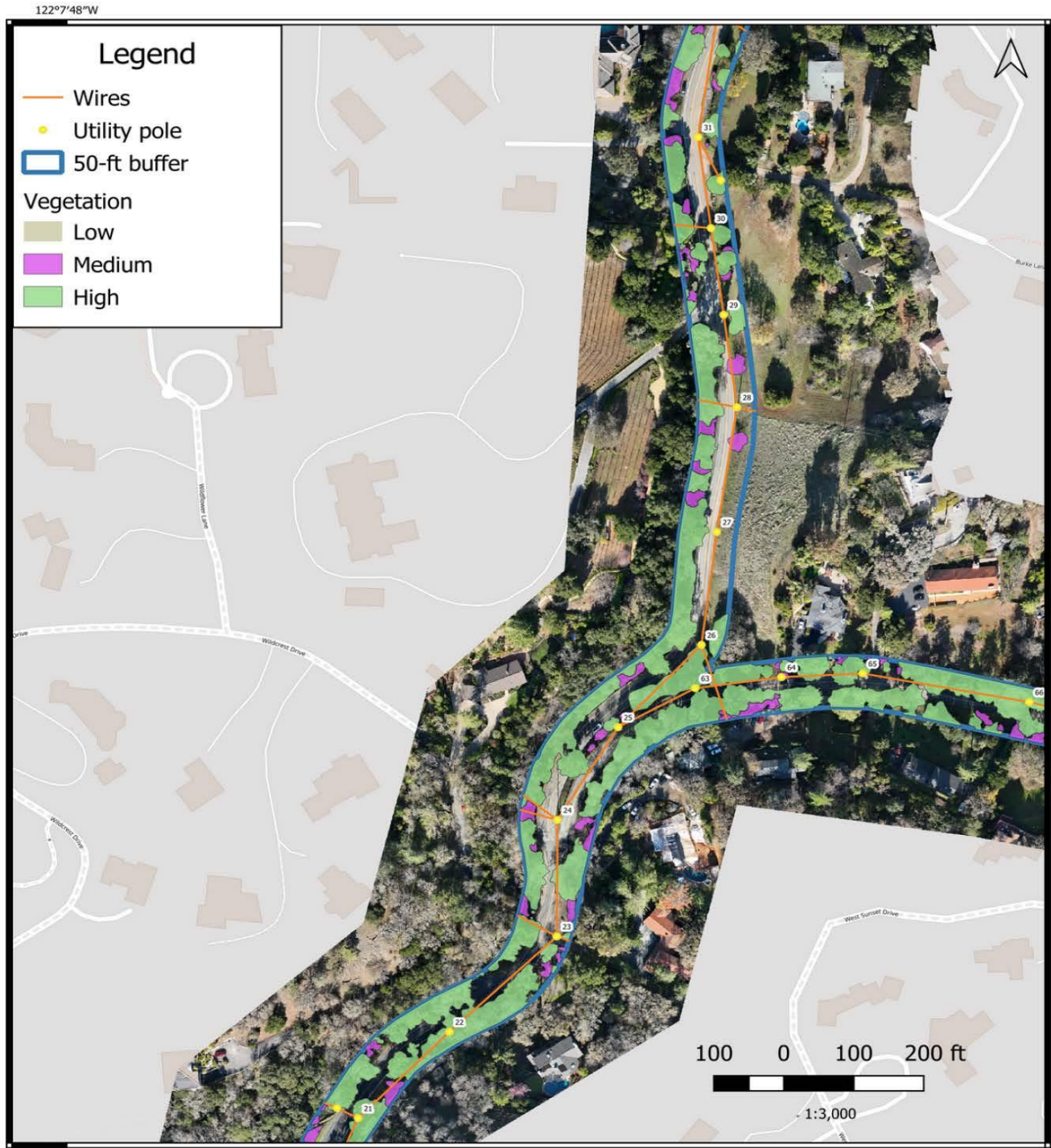


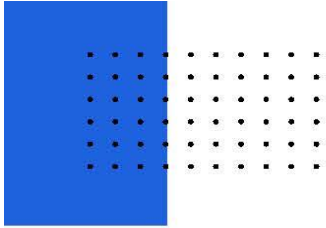
# DECEMBER 2023 - ROBLEDA ROAD



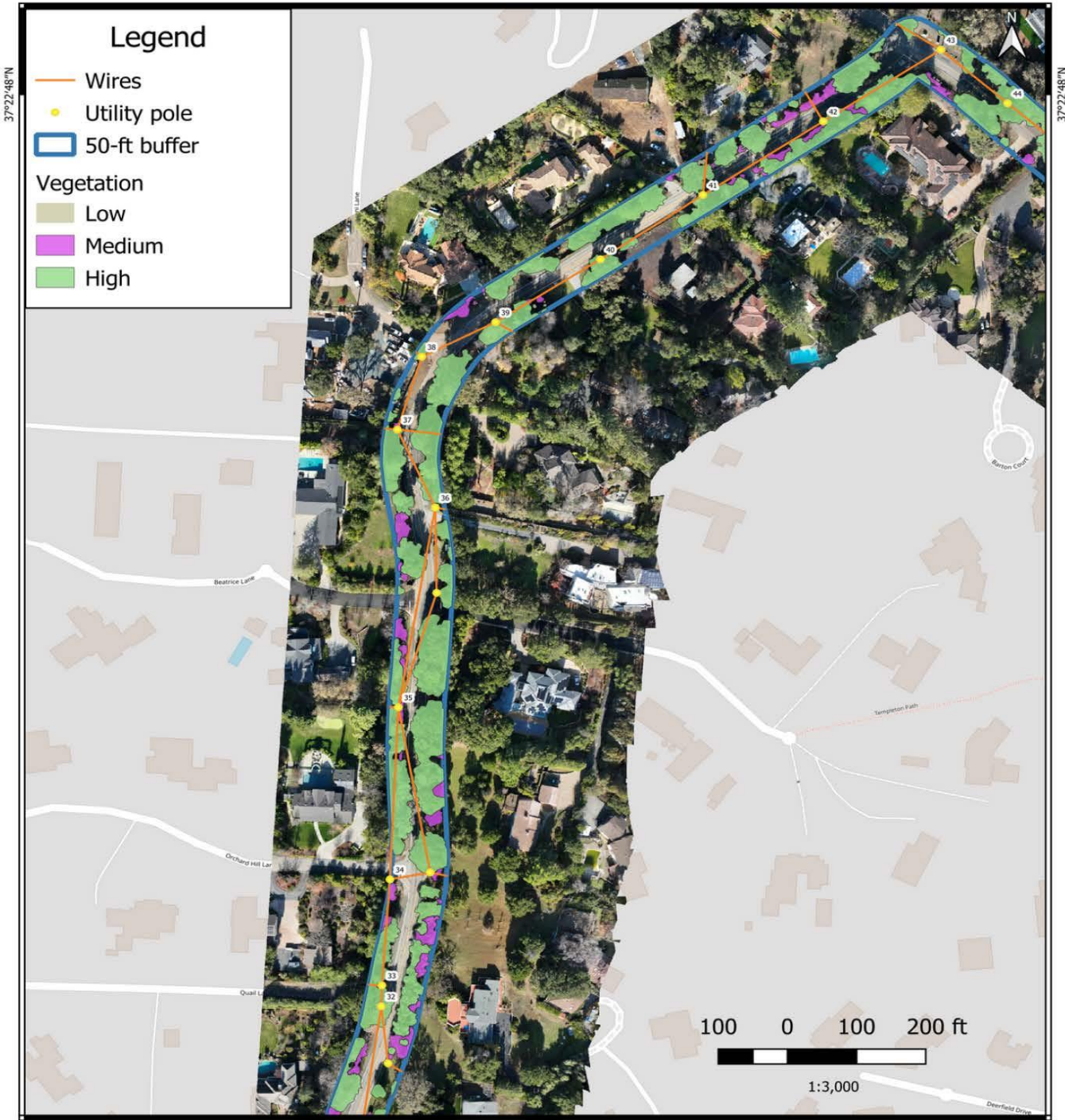


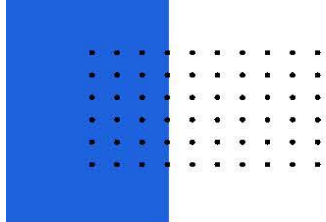
# DECEMBER 2023 - ROBLEDA ROAD





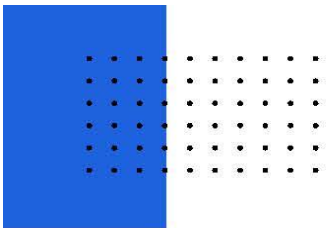
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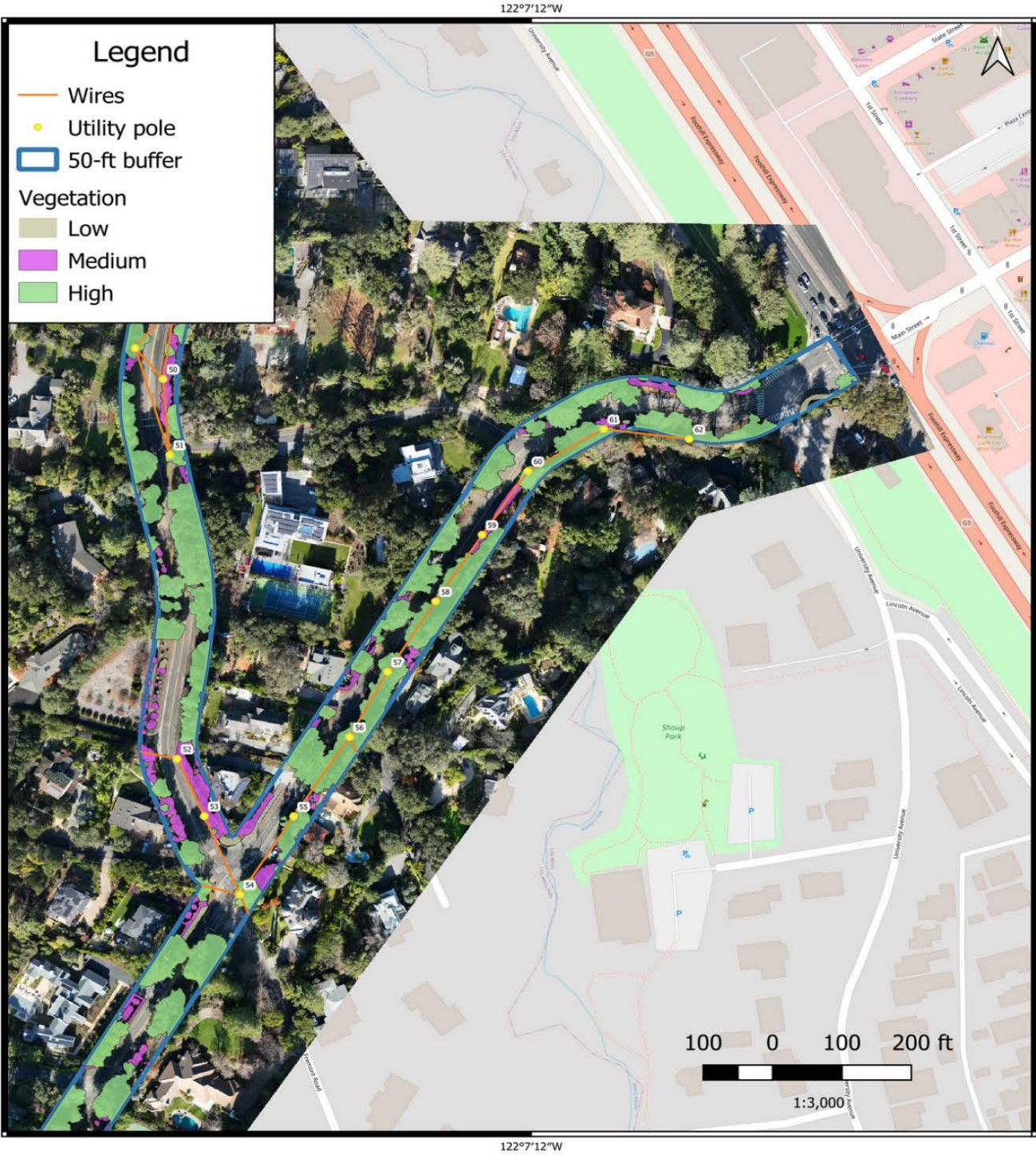


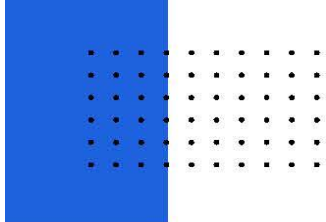
# DECEMBER 2023 - BURKE ROAD





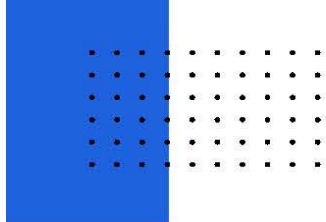
# DECEMBER 2023 - BURKE ROAD





# DECEMBER 2023 - CHAPIN ROAD





# DECEMBER 2023 - WEST FREMONT ROAD

