CITY OF SANTA ROSA PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT STAFF REPORT FOR PLANNING COMMISSION <u>AUGUST 8, 2019</u>

PROJECT TITLE

Recess Self-Storage (a Mixed-Use

Development)

ADDRESS/LOCATION

4200 & 4224 Sonoma Highway

ASSESSOR'S PARCEL NUMBER

032-010-023 and 032-010-005

APPLICATION DATE

September 4, 2018

REQUESTED ENTITLEMENTS

Recommendation to Prezone for Annexation, Tentative Map, Hillside Development Permit and Minor Conditional Use Permit

PROJECT SITE ZONING

CG (General Commercial) - Proposed

PROJECT PLANNER

Susie Murray

APPLICANT

Larry Thom, on behalf of American Recess LLC

PROPERTY OWNER

RC Amore Realtors, LLC and Mark Calleri (respectively)

FILE NUMBER

PRJ18-050

APPLICATION COMPLETION DATE

January 17, 2019

FURTHER ACTIONS REQUIRED

Prezoning for Annexation (Council) and Design Review (Design Review Board)

GENERAL PLAN DESIGNATION

Retail and Business Services

RECOMMENDATION

Approval

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Agenda Item #10.1

For Planning Commission Meeting of: August 8, 2019

CITY OF SANTA ROSA PLANNING COMMISSION

TO: CHAIR CISCO AND MEMBERS OF THE COMMISSION

FROM: SUSIE MURRAY, SENIOR PLANNER

PLANNING AND ECONOMIC DEVELOPMENT

SUBJECT: RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT)

AGENDA ACTION: FIVE RESOLUTIONS

RECOMMENDATION

It is recommended by the Planning and Economic Development Department that the Planning Commission (Commission), by five resolutions, adopt a Mitigated Negative Declaration; make a recommendation to City Council (Council) to Prezone 4200 and 4224 Sonoma Highway into the CG (General Commercial) zoning district; and approve a Tentative Map, Hillside Development Permit and minor Conditional Use Permit for Recess Self-Storage (a Mixed-Use Development), located at 4200 and 4224 Sonoma Highway.

EXECUTIVE SUMMARY

The Recess Self-Storage (a Mixed-Use Development) project (Project) is a proposal to annex a two-parcel County island located at 4200 and 4224 Sonoma Highway into the City of Santa Rosa. Once annexed, the Project proposes to subdivide 4224 Sonoma Highway into three separate parcels and to construct a self-storage facility and two multi-family housing structures. No additional development is proposed at 4200 Sonoma Highway.

The Project requires the following actions:

- Mitigated Negative Declaration (Commission);
- Prezoning for Annexation into the CG (General Commercial) zoning district (recommendation by Planning Commission and final action by Council);
- Tentative Parcel Map to subdivide a 2.68-acre lot into three separate parcels (Commission);

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- Hillside Development Permit (HDP) to develop on a slope greater than ten percent (Commission);
- Minor Conditional Use Permit (CUP) to operate a self-storage facility and multifamily housing (Commission); and
- Design Review (Design Review Board)

BACKGROUND

1. <u>Project Description</u>

The Project site is located on the south side of Sonoma Highway between Streamside Drive and Mission Boulevard and is adjacent to the Santa Rosa Creek Trail. The site is currently developed with a single-family residence and several accessory structures.



The Project proposes to subdivide the 2.68-acre parcel located at 4224 Sonoma Highway into three individual properties. Parcel 1, located in the northeast corner of the development site, will be constructed with a four-story, 124,000-square foot self-storage facility; Parcel 2, on the south side overlooking the Santa Rosa Creek Trail, will be constructed with an eight-unit multi-family housing

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structure; and Parcel 3, on the west side adjacent to the homes along Calloway Drive, will be constructed with another six-unit multi-family housing structure. The applicant has provided conceptual elevations; however, the Design Review will be conducted by the DRB.

Primary access to the site for eastbound traffic will be taken from Sonoma Highway, and westbound traffic will likely access from Streamside Drive. The site plan includes the extension of Streamside Drive to Sonoma Highway, and will provide pedestrian access from the creek trail to Sonoma Highway. The site plan also dedicates easements for a City well site that will provide an emergency water source and a sanitary sewer easement for construction of a new trunk line.

2. Surrounding Land Uses

North: Medium Density Residential (8-18 units per acre); currently developed with multi-family residential uses.

South: Low Density Residential (2-8 units per acre)/Open Space; adjacent to Santa Rosa Creek and Flat Rock Park, developed with recreational uses.

East: Retail and Business Services; currently developed with retail uses.

West: Retail and Business Services, Medium Density Residential and Low Density Residential (2-8 units per acre)/Open Space; currently developed with commercial uses and multi-family residential.

3. Existing Land Use – Project Site

The site is currently developed with an unoccupied residential structure and several accessory structures. The site is vegetated with a variety of trees, shrubs and native grasses. As evidenced by debris on the site and comments from nearby neighbors, the property is also subject to homeless activities despite property line fencing and "No Trespassing" signs.

4. Project History

On November 15, 2016, a Pre-application Meeting was held with City staff, which is designed to offer applicants an interdepartmental staff review of preliminary or conceptual design applications.

On April 24, 2018, a second Pre-application Meeting was held with City staff because the project was changed significantly.

On July 19, 2018, the DRB reviewed the Project as a concept item.

On August 13, 2018, a Neighborhood Meeting was held to introduce the proposed Project to surrounding neighbors. Two people attended.

On September 4, 2018, the Prezoning, HDP, CUP and Design Review applications were submitted to Planning and Economic Development.

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On January 17, 2019, the Tentative Parcel Map application was submitted to Planning and Economic Development.

On April 10, 2019, the Waterways Advisory Committee (WAC) reviewed the Project. WAC comments are discussed in the Committee Review and Recommendations section of this report.

On July 2, 2019, the 30-day public review period for the draft Initial Study/Mitigated Negative Declaration (IS/MND) commenced (State Clearinghouse No. 20198079002).

PRIOR CITY COUNCIL REVIEW

Not applicable.

ANALYSIS

1. General Plan

The General Plan land use designation for the Project boundary is Retail and Business Services which allows retail and service enterprises, offices and restaurants. Housing is also permitted.

LAND USE AND LIVABILITY

LUL-E	Promote livable neighborhoods. Ensure that everyday shopping is
	within walking distance of most residents.

- LUL-E-6 Allow residential or mixed-use development in the Retail and Business Services or Office designations.
- LUL-F-3 Maintain a balance of various housing types in each neighborhood and ensure that new development does not result in undue concentration of a single housing type in any one neighborhood.
- LUL-A Foster a compact rather than a scattered development pattern to reduce travel, energy, land, and material consumption while promoting greenhouse gas emission reductions citywide.
- LUL-A-2 Annex unincorporated land adjacent to city limits and within the Urban Growth Boundary, when the proposal is timely and only if adequate services are available. Ensure that lands proposed for annexation provide a rational expansion and are contiguous to existing urban development.
- LUL-G-2 Require design of mixed-use projects to focus residential uses in the upper stories or toward the back of parcels, with retail and office activities fronting the regional/arterial street.
- LUL-I-1 Provide a range of commercial services that are easily accessible and attractive, that satisfies the needs of people who live and work

in Santa Rosa and that also attracts a regional clientele.

HOUSING

- H-A Meet the housing needs of all Santa Rosa residents.
- H-C-11 Provide opportunities for higher density and affordable housing development on regional/arterial streets and for convenient access to transit.
- H-F-5 Utilize the design review checklist to expedite affordable housing developments through the Design Review process.
- H-G Develop energy efficient residential units.

TRANSPORTATION

T-K-1 Link the various citywide pedestrian paths, including street sidewalks, downtown walkways, pedestrian areas in shopping centers and work complexes, park pathways, and other creek side and open space pathways.

URBAN DESIGN

- UD-C-6 Require that buildings, sound walls, and other structures highly visible from Highway 101 or Highway 12 and adjoining neighborhoods be designed to enhance and improve scenic character.
- UD-F-2 Protect natural topographic features such as hillsides, ridgelines and mature trees and stands of trees. Minimize grading of natural contours in new development.
- UD-G-2 Locate higher density residential uses adjacent to transit facilities, shopping and employment centers, and link these areas with bicycle and pedestrian paths.
- UD-G-4 Provide through-connections for pedestrians and bicyclists in new developments. Avoid cul-de-sac streets, unless public pedestrian/bikeways interconnect them.
- UD-I-2 Encourage architectural design that reflects the undulating forms of the hillside setting, such as breaking building masses and rooflines into several smaller components.

GROWTH MANAGEMENT

GM-B-4 Direct growth to areas where services and infrastructure can be provided efficiently.

NOISE AND SAFETY

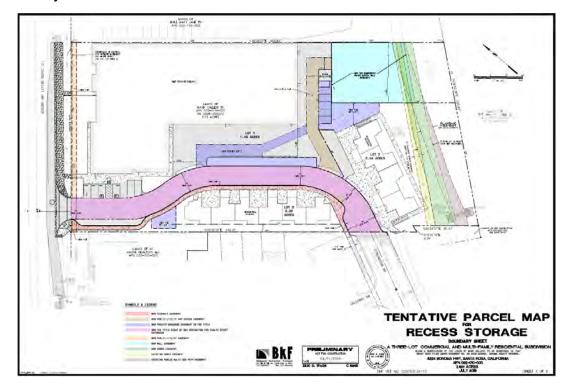
NS-B-1 Do not locate noise-sensitive uses in proximity to major noise sources.

The project furthers several goals of the General Plan. The Project site is one of two contiguous parcels that make up a County island. Because State law prohibits the creation of a new County island through annexation, both parcels will be annexed into the City. No other development is proposed at 4200 Sonoma Highway.

The development proposed at 4224 Sonoma Highway is less than one thousand feet from many commercial, retail and restaurant establishments. The site is located in a developed area where all utilities and emergency services are available.

The mixed-use development is thoughtfully designed placing the commercial use at the front of the property along the Sonoma Highway corridor and housing adjacent to an existing residential neighborhood and more housing overlooking the Santa Rosa Creek Trail making its use safer for pedestrians and cyclists. The self-storage facility will provide a buffer from traffic noise typically associated with regional/arterial streets for the residential structures behind it.

Site circulation includes a public street that will connect Streamside Drive to Sonoma Highway, parking, and a looped private driveway for the self-storage facility.



2. Tentative Map

City Code, Title 19, sets forth the regulations pertaining to Tentative Maps. Pursuant to City Code Chapter 19-24, the Planning Commission must make the following findings before approving a Tentative Map:

- 1. The proposed map is consistent with the general plan and any applicable specific plans as specified in <u>Government Code</u> Sections 65451 and 66474.5.
- 2. The proposed subdivision meets the housing needs of the City and the public service needs of the subdivision's residents are within the available fiscal and environmental resources of the City.
- 3. The design of the proposed subdivision has, to the extent feasible, provided for future passive or natural heating or cooling opportunities in the subdivision; and
- 4. The proposed subdivision would not discharge waste into the City's sewer system that would result in violation of the requirements prescribed by the California Regional Water Quality Control Board.

City Code Chapter 19-04 discusses the subdivision of property outside City limits and provides that Tentative Maps for proposed subdivisions of land outside the City boundaries may be reviewed and approved according to procedures and subject to standards contained in this title, provided such approval is, among other conditions, subject to annexation of the property prior to filing the final map. The project involves a Prezoning application, which is the first step to annexation. Once prezoned, the Sonoma Local Agency Formation Commission (LAFCO) will consider annexation of the two-parcel County island into the City. Pursuant to City Code Section 19-04.100, the Recess Self-Storage Final Map cannot be recorded, nor may any project-related improvements be constructed, prior to completion of the annexation.

The proposed map is consistent with the General Plan. The land use designation is Retail and Business Services; the project includes an application to prezone both properties into the CG zoning district consistent with the General Plan for annexation; and self-storage and multi-family housing are permitted with the approval of a CUP. Staff has reviewed the Project plans and determined that the service needs of the subdivision's residents will be met. As discussed in the General Plan section of this report, all services are available at this location and Project specific services, such as circulation and stormwater management, have been addressed during staff's review and the project conditioned appropriately.

3. Other Applicable Plans

Not applicable.

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4. Zoning

The Project applications include a request to Prezone two properties, 4200 & 4224 Sonoma Highway, to the CG (General Commercial) zoning district, which is consistent with the General Plan land use designation.

Zoning for surrounding properties:

North: R-3-18 (Multi-family Residential) and PD (Planned Development –

Multi-family Residential) zoning district

South: PD zoning district

East: CG and RR-40 (Rural Residential) zoning districts

West: PD zoning district

The following Zoning Code sections and tables are applicable to the project:

<u>Table 2-6</u> provides allowable land uses for commercial zoning districts and specifies permit requirements. Both Multi-family and Personal Storage (ministorage) facilities require a minor CUP. The Project includes a request for a CUP and all findings can be met as shown on the attached draft resolution.

Table 2-6 also provides that a business providing service in the CG zoning district may operate between 6:00 a.m. to 11:00 p.m., and require a CUP for extended hours of operation between 11:00 p.m. to 6:00 a.m. The hours proposed by the self-storage facility are from 7:00 a.m. to 9:00 p.m. and are allowed by right.

<u>Table 2-7</u> provides development standards for commercial zoning districts.

Setbacks – Determined by Design Review

Lot Coverage – 100 Percent

Maximum Height – 55 Feet

<u>Table 3-4</u> provides parking requirements. The project provides the required parking offering a total of 36 parking spaces, of which 14 will be covered and three will be in compliance with the Americans with Disabilities Act (ADA).

<u>Chapter 20-32</u> discusses development on hillsides with slopes greater than ten percent. While most of the subject site is generally flat, the eight-unit multi-family structure overlooking the creek path is placed on a slope that exceeds ten percent. As such, the Project requires a HDP. The project materials include a visual analysis and topography for the site, which indicate that the Project minimizes the alteration of topography and does not propose large areas of flat pads in the sloped area. The Project includes the removal of several trees and is conditioned to provide landscaping in compliance with both the Water Efficient Landscape Ordinance (WELO) and the City's Tree Ordinance (City Code

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Chapter 17-24). The conceptual architecture, landscape plan and renderings provided indicate that the project blends well with surrounding properties, most notably the creek path. Staff's review concluded that all required findings can be met as shown on the draft HDP resolution attached to this report.

<u>Section 20-30.040</u> discusses creek-side development. All proposed structures are respectful of the required 50-foot creek setback. The project plans were referred to the WAC and comments are discussed under the Committee Review and Recommendations section of this report.

<u>Section 20-42.180</u> discusses self-storage facilities, which are only allowed along regional streets as designed by the General Plan. The Project meets development standards specific to self-storage facilities in that it provides a required 25-foot setback from Sonoma Highway and a street that separates it from residential uses. There is no caretaker unit proposed.

5. Other Applicable City Code Sections

<u>Chapter 21-08</u> discusses public art requirements. Pursuant to Zoning Code Table 2-6, a self-storage facility falls under the heading of "Industry, Manufacturing, Processing, Wholesaling", exempting it from the requirement of public art.

<u>Chapter 17-24</u> discusses trees. As mentioned previously in the discussion of Hillside Development, the Project plans have demonstrated that all tree replacement will be done in compliance with the Tree Ordinance. The Project will remove 58 of 60 trees that are subject to this ordinance and, through the upsizing of trees, will meet mitigation requirements onsite.

6. <u>Design Guidelines</u>

All proposed structures require Design Review, which will be considered by the DRB.

7. <u>Neighborhood Comments</u>

Two neighbors attended the Neighborhood Meeting held on August 13, 2018. Both were there representing the property located at 4200 Sonoma Highway, and were in favor of being included in the annexation into Santa Rosa.

During a site visit, a Calloway Drive neighbor indicated support of "any" development at 4224 Sonoma Highway to minimize homeless activities in the area.

Staff has received one phone call regarding the project. The caller expressed several concerns, including a four-story structure at a gateway, Traffic and homelessness activities along the creek trail. The caller was encouraged to attend the meeting or deliver comments in writing.

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8. <u>Public Improvements/On-Site Improvements</u>

Improvement highlights include:

- The extension of Streamside Drive to Sonoma Highway including curb, gutter, parking and aerial fire apparatus access;
- The project has been conditioned to provide an easement for new sewer trunk line.
- While not required, the applicant has also agreed to providing an easement for a City well site that will provide an emergency water source.

Engineering Development Services has provided a comprehensive list of required improvements which are detailed in the attached Development Advisory Committee (DAC) Report, dated July 23, 2019.

FISCAL IMPACT

Approval of this action will not have a fiscal impact on the General Fund.

ENVIRONMENTAL IMPACT

The Project has been found in compliance with the California Environmental Quality Act (CEQA). An Initial Study (IS) was prepared which resulted in a Mitigated Negative Declaration (MND). The draft MND was circulated for a 30-day public comment period commencing July 2, 2019. To date, not comments have been received.

COMMITTEE REVIEW AND RECOMMENDATIONS

On April 10, 2019, the WAC reviewed the Project plans and provided the following comments:

- Provide elevations of the residential structure overlooking the creek;
- Provide details on interface between the Project and the creek;
- The building facing the Santa Rosa Creek Trail should be designed to ensure safety and provide eyes on the creek and path;
- Fencing should be transparent;
- Provide perspective of berm at back of property and how it relates to the residential units; and
- Too many trees being removed.

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The plan sets provided for the Commission include conceptual elevations for the structure overlooking the Santa Rosa Creek Trail and elevations that show the relationship of the hillside structure as it relates to the slope. The Project proposes six-foot rear yard fences for the residential units facing the creek path. The design of the fence is similar to a fence constructed on a nearby property located just east of the site along the creek path and will provide both security and transparency. Because this development is on a commercial property, the fence is in the purview of the DRB.

NOTIFICATION

- On November 8, 2018, a Notice of Application was mailed to property owners within 400 feet of the Project boundary (both properties).
- On July 1, 2019, in compliance with CEQA, two onsite signs were posted announcing the public-review period for the draft MND.
- Pursuant to Zoning Code Chapter 20-66 (amended by Council Ordinance No. CC-ORD-2019-003, dated April 9, 2019), all required public noticing was done, including the installation of two public hearing signs at the Project site, a mailed Notice of Public Hearing to property owners and occupants within 600 feet of the Project site, and a Notice of Public Hearing published in the Press Democrat.

<u>ISSUES</u>

During staff's review of the project, several issues were raised involving site circulation, fire apparatus access, parking, street lighting, fire hydrant placement and drainage. The Fire Department, Traffic Engineering, Engineering Development Services and Planning worked closely with the Project engineer to determine a workable solution to the innovate site plan.

There are no unresolved issues.

ATTACHMENTS

Attachment 1: Disclosure Form Attachment 2: Location Map

Attachment 3: Neighborhood Context Map

Attachment 4: Initial Study/Mitigated Negative Declaration, prepared by Arcadis, dated

June 2019

Attachment 5: Tentative Parcel Map, prepared by BkF Engineers, dated July 18, 2019

Attachment 6: Renderings, provided by applicant

Attachment 7: Elevations, prepared by Recess, dated October 17, 2018,

Rev. May 30, 2019

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Attachment 8: Conceptual Landscape Plan, prepared by HWA

Attachment 9: Arborist Report, prepared by Arcadis, dated May 10, 2019

Attachment 10: Biological Resource and Habitat Assessment, prepared by Arcadis,

dated March 31, 2019

Resolution 1: Mitigated Negative Declaration (with MND)
Resolution 2: Rezoning (Recommendation to Council)

Resolution 3: Tentative Parcel Map (with Development Advisory Committee (DAC)

Report and Mitigation Monitoring and Reporting Program (MMRP))

Resolution 4: Hillside Development Permit

Resolution 5: Conditional Use Permit

CONTACT

Susie Murray, Senior Planner 707-543-4348 smurray@srcity.org



City of Santa Rosa

City Hall, Council Chamber 100 Santa Rosa Ave Santa Rosa. CA

Planning Commission Regular Meeting Minutes - Draft

Thursday, August 8, 2019 4:00 PM

1. CALL TO ORDER

Chair Cisco called the meeting to order at 4:00 p.m.

2. ROLL CALL

Present 7 - Chair Patti Cisco, Vice Chair Karen Weeks, Commissioner Charles Carter, Commissioner Vicki Duggan, Commissioner Akash Kalia, Commissioner Jeff Okrepkie, and Commissioner Julian Peterson

3. APPROVAL OF MINUTES

July 25, 2019 - Draft MinutesApproved as submitted.

4. PUBLIC COMMENTS

Duane De Witt discussed the importance of urban trees.

5. PLANNING COMMISSIONERS' REPORT

Presented by Chair Cisco.

6. DEPARTMENT REPORTS

Presented by Clare Hartman, Planning Deputy Director.

7. STATEMENTS OF ABSTENTION BY COMMISSIONERS

None.

Chair Cisco re-ordered item 8.1 and 10.1 and went into a brief recess for presentation technical difficulties

8. STUDY SESSION

8.1 HOUSING ALLOCATION PLAN ORDINANCE UPDATE AND NEW COMMERCIAL LINKAGE FEE

BACKGROUND: Receive and comment on the policy implications of updating the Housing Allocation Plan Ordinance and consideration of a new Commercial Linkage Fee to increase affordable housing production.

Jessica Jones, Supervising Planner and Andy Gustavson, Senior Planner presented.

David Gouin, Director of Housing and Community Services, David Guhin, Assistant City Manager, Karen Warner of Karen Warner Associates, Clare Hartman, Planning Deputy Director, Heather Heinsworth of M Group, Andy Gustavson, Senior Planner and Raissa De La Rosa, Economic Development Manager, responded to Commissioner Inquiries.

9. CONSENT ITEMS

None.

10. PUBLIC HEARINGS

10.1* RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT) PREZONING, HILLSIDE DEVELOPMENT PERMIT, TENTATIVE
PARCEL MAP AND MINOR CONDITIONAL USE PERMIT - 4200 &
4224 SONOMA HWY - PRJ18-050

BACKGROUND: The Planning Commission will consider a Mitigated Negative Declaration, a proposal to Prezone for Annexation a two-parcel County island, located at 4200 & 4224 Sonoma Highway, into the City of Santa Rosa; and to subdivide the property at 4224 Sonoma Highway into three separate parcels, then develop the a 2.68-acre area with two multi-family housing structures and a 124,000-square foot, four-story self-storage facility. The project boundary includes 4200 and 4224 Sonoma Highway, Assessor's Parcel Nos. 032-010-005 & 032-010-023; File No. PRJ18-050.

Presented by Susie Murray, Senior Planner.

Ex Parte Disclosures: None.

Susie Murray, Senior Planner, presented and responded to

Commissioner inquiries.

An applicant representative made a presentation.

Staff and the applicant responded to Commissioner inquiries.

Chair Cisco opened the Public Hearing at 4:37 p.m.

Duane De Witt spoke in favor of the project with future land use (housing) conditions.

Chair Cisco closed the Public Hearing at 4:40 p.m.

Staff responded to Commissioner inquiries.

A motion was made by Vice Chair Weeks, seconded by Commissioner Duggan, to waive reading of the text and adopt:

RESOLUTION NO. 11972 ENTITLED: RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA ADOPTING A MITIGATED NEGATIVE DECLARATION, INCLUDING A MITIGATION MONITORING PROGRAM, FOR RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT), LOCATED AT 4200 AND 4224 SONOMA HIGHWAY; ASSESSOR'S PARCEL NUMBERS 032-010-005 AND 032-010-023; FILE NO. PRJ18-050.

The motion carried by the following vote:

Yes: 7 - Chair Cisco, Vice Chair Weeks, Commissioner Carter, Commissioner Duggan, Commissioner Kalia, Commissioner Okrepkie and Commissioner Peterson

Staff responded to Commissioner Inquiries regarding the Tentative Map Resolution.

A motion was made by Vice Chair Weeks, seconded by Commissioner Duggan, to waive reading of the text and adopt:

RESOLUTION NO. 11973 ENTITLED: RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA RECOMMENDING TO CITY COUNCIL PREZONING OF THE PROPERTIES LOCATED AT 4200 AND 4224 SONOMA HIGHWAY (ASSESSOR'S PARCEL NUMBERS 032-010-005 AND 032-010-023) TO THE CG (GENERAL COMMERCIAL) ZONING DISTRICT;

FILE NO. PRJ18-050.

The motion carried by the following vote:

Yes: 7 - Chair Cisco, Vice Chair Weeks, Commissioner Carter, Commissioner Duggan, Commissioner Kalia, Commissioner Okrepkie and Commissioner Peterson

A motion was made by Vice Chair Weeks, seconded by Commissioner Duggan, to waive reading of the text and adopt:

RESOLUTION NO 11974 ENTITLED: RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA APPROVING THE RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT) TENTATIVE MAP LOCATED AT 4224 SONOMA HIGHWAY - FILE NUMBER PRJ18-050.

The motion carried by the following vote:

Yes: 7 - Chair Cisco, Vice Chair Weeks, Commissioner Carter, Commissioner Duggan, Commissioner Kalia, Commissioner Okrepkie and Commissioner Peterson

A motion was made by Vice Chair Weeks, seconded by Commissioner Duggan, to waive reading of the text and adopt RESOLUTION NO 11975 ENTITLED:

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA MAKING FINDINGS AND DETERMINATIONS AND APPROVING A HILLSIDE DEVELOPMENT PERMIT FOR RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT), LOCATED AT 4224 SONOMA HIGHWAY; FILE NUMBER PRJ18-050.

The motion carried by the following vote:

Yes: 7 - Chair Cisco, Vice Chair Weeks, Commissioner Carter, Commissioner Duggan, Commissioner Kalia, Commissioner Okrepkie and Commissioner Peterson

A motion was made by Vice Chair Weeks, seconded by Commissioner Duggan,to waive reading of the text and adopt RESOLUTION NO 11976 ENTITLED:

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA MAKING FINDINGS AND DETERMINATIONS AND APPROVING A MINOR CONDITIONAL USE PERMIT FOR RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT) - LOCATED AT 4224 SONOMA HIGHWAY-FILE NUMBER PRJ18-050.

The motion carried by the following vote:

Yes: 7 - Chair Cisco, Vice Chair Weeks, Commissioner Carter, Commissioner Duggan, Commissioner Kalia, Commissioner Okrepkie and Commissioner Peterson

Chair Cisco recessed the meeting at 4:57 p.m.

Chair Cisco reconvened the meeting at 5:03 p.m. to hear item 8.1.

11. ADJOURNMENT

Chair Cisco adjourned the meeting at 7:43 p.m. to the next regularly scheduled Planning Commission meeting to be held on Thursday, August 22, 2019 at 4:00 p.m.

RESOLUTION NO. 11972

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA ADOPTING A MITIGATED NEGATIVE DECLARATION, INCLUDING A MITIGATION MONITORING PROGRAM, FOR RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT), LOCATED AT 4200 AND 4224 SONOMA HIGHWAY; ASSESSOR'S PARCEL NUMBERS 032-010-005 AND 032-010-023; FILE NO. PRJ18-050

WHEREAS, on September 4, 2018, Prezoning, Hillside Development Permit, Conditional Use Permit, and Design Review applications were submitted to Planning and Economic Development, followed by a Tentative Parcel Map application that was submitted on January 17, 2019, for Recess Self-Storage (a Mixed-Use Development) project, to annex two parcels into the City of Santa Rosa, subdivide the parcel located at 4224 Sonoma Highway (Assessor's Parcel No. 032-010-005) into three separate parcels, and construct a self-storage facility and two multi-family housing structures; and

WHEREAS, in accordance with the Environmental Quality Act (CEQA) a draft Initial Study was prepared for the project; and

WHEREAS, the draft Initial Study determined that, with incorporation of mitigation measures, the project would not have a significant effect on the environment and that a Mitigated Negative Declaration for the project be prepared; and

WHEREAS, the Initial Study/Draft Mitigated Negative Declaration was prepared and circulated for a 30-day public review period commencing on July 2, 2019; and

WHEREAS, as required under CEQA, the Mitigation Monitoring and Reporting Program prepared for the project identifies the timing of, and the agency or agencies responsible for, enforcement and monitoring of each mitigation measure to be implemented to reduce potentially significant impacts to less than significant levels; and

WHEREAS, the project applicant has agreed to all mitigation measures set forth in the Mitigated Negative Declaration that are required to be implemented pursuant to CEQA to reduce potentially significant impacts resulting from the project; and

WHEREAS, the Mitigated Negative Declaration and related project and environmental documents are available for review at the City of Santa Rosa Planning and Economic Development Department, during normal business hours. The custodian of the documents and other materials which constitute the record of proceedings for the proposed project is Susie Murray, Senior Planner, Planning and Economic Development, 100 Santa Rosa Avenue, Room 3, Santa Rosa, CA 95404; and

WHEREAS, the Planning Commission of the City of Santa Rosa has reviewed and considered the environmental study, the findings and determinations of the Environmental

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Resolution No.		

Coordinator, the proposed Mitigated Negative Declaration, the staff reports, oral and written, and the comments, statements, and other evidence presented by all persons, including members of the public, who appeared and addressed the Planning Commission at the public hearing held on August 8, 2019, and all comments and materials submitted prior thereto; and

WHEREAS, the Planning Commission has before it all of the necessary environmental information required by CEQA to properly analyze and evaluate any and all of the potential environmental impacts of the proposed project.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Santa Rosa, based upon the findings and the records and files herein, and the findings above made, hereby determines as follows:

- 1. That the Mitigated Negative Declaration, which consists of the Initial Study/Draft Mitigated Negative Declaration (including the Mitigation Monitoring and Reporting Program as Appendix H), attached as Exhibit A, has been completed in accordance with CEQA and the CEQA Guidelines.
- 2. That the Planning Commission has reviewed and considered the information contained within the Mitigated Negative Declaration prior to acting on the proposed Project, and the Mitigated Negative Declaration reflects the independent judgment and analysis of the City.
- 3. That the monitoring and reporting of CEQA mitigation measures in connection with the Project will be conducted in accordance with the attached Mitigation Monitoring and Reporting Program, incorporated into the Conditions of Approval for the Project.
- 4. That the proposed Recess Self-Storage (a Mixed-Use Development) project, including a request to prezone two properties located at 4200 and 4224 Sonoma Highway in the CG (General Commercial) zoning district, subdivide the 2.68-acre parcel located at 4224 Sonoma Highway into three individual lots, and construct a self-storage facility and two multi-family residential structures will not have a significant effect upon the environment if the mitigation measures listed and identified in the Mitigated Negative Declaration, attached hereto and incorporated herein, are implemented prior to development of the subject property.

REGULARLY PASSED AND ADOPTED by the Planning Commission of the City of Santa Rosa on this 8th day of 2019 by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	Resolution No
	Page 2 of 3

	APPROVED:		
		CHAIR	
ATTEST:			
	EXECUTIVE SECRETARY		

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Recess Storage Project 4224 Sonoma Highway Santa Rosa, California

Prepared for:
City of Santa Rosa
Planning and Economic Development Department
100 Santa Rosa Avenue, Room 3
Santa Rosa, CA 95404

Contact: Susie Murray, Senior Planner

Prepared by:



June 2019

Environmental Checklist

1. Project Title: Recess Storage Project

2. Lead Agency Name and Address: City of Santa Rosa

Economic and Planning Department

100 Santa Rosa Ave., Room 3

Santa Rosa, CA 95404

3. Contact Person and Phone Number: Susie Murray, Senior Planner

(707) 543-4348

smurray@srcity.org

4. Project Location: 4224 Highway 12

Santa Rosa, CA 95409

APN 032-010-005

5. Project Sponsor's Name and

Address:

American Recess Development Corporation

85 Keystone Ave Suite E

Reno, NV89503

6. General Plan Designation(s): Retail and Business Services

7. **Zoning Designation(s)**: General Commercial

8. Description of Project: The Recess Storage Project includes

foot self-storage facility and two multi-family residence structures. One structure will have six dwelling units and one structure will have eight dwelling units. Development of the project will include demolition of the existing structures, clearing and grubbing of existing vegetation, site grading, and construction of onsite improvements including the new storage facility and residences, onsite parking and driveways, and landscaping. Parking onsite will include 36 parking spaces three of which would be compliant with the Americans with Disabilities Act. A loading space will be

development of a four-story, 124,000 square

provided and a secured gate entry will be installed. The property at 4200 is currently

built out. An expanded project description is provided below.

9. Surrounding Land Uses and Setting.

The proposed project site is located at Assessor's Parcel Number (APN) 032-010-005 (4224 Highway 12) and 032-010-023 (4200 Highway 12) in the eastern portion of Santa Rosa, in unincorporated Sonoma County, California. The parcels are located southeast of Highway 12 and west of Mission Boulevard. The 2.68 acre site currently constructed with one, 2,664 square foot single family home and two out-structures that are approximately 872 square feet in size. The property located at 4200 Highway 12 is built out. Existing residential development occurs to the south and north of the project site. Commercial developments occur to the south, north and west. The Santa Rosa Creek multiuse trail occurs to the east of the site. The site is relatively flat with the exception on the northeast portion with has a slope of greater than 10 percent.

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Appendix D	Geotechnical Study
Appendix E	CAP New Development Checklist
Appendix F	Hazardous Materials Report
Appendix G	Ambient Noise Monitoring Data
Appendix H	Mitigation, Monitoring and Reporting Program

Environmental Factors Potentially Affected

following pages present a more detailed checklist and discussion of each environmental factor. Aesthetics Agriculture/Forestry Resources Air Quality Biological Resources Cultural Resources Energy Geology & Soils Greenhouse Gas Emissions Hazards & Hazardous Materials Hydrology & Water Quality Land Use & Planning Mandatory Findings of Significance Mineral Resources Noise Population & Housing Public Services Transportation Recreation Tribal Cultural Resources Utilities & Service Systems Wildfire

The proposed Project could potentially affect the environmental factor(s) checked below. The

Project Description and Background

The Recess Storage Project (Project) will construct a four-story, 124,000-square foot, self-storage facility and two multi-family residential structures; one structure will have six dwelling units and one structure will have eight dwelling units. The Project entitlements include a Prezoning to the CG (General Commercial) zoning district for Annexation to the City of Santa Rosa; a Tentative Parcel Map to subdivide an approximately 2.68-acre parcel into three separate lots; a minor Conditional Use Permit for a self-storage facility and multi-family housing; a Design Review for the construction of a commercial building greater than 10,000 square feet and attached housing; and a Hillside Development Permit for development on slopes greater than 10 percent.

The Project involves annexation of two parcels, 4200 and 4224 Sonoma Hwy., into the City of Santa Rosa (Figure 1). The property located at 4224 Sonoma Highway 12 (Sonoma Highway) is currently constructed with a 2,664-square foot single family home constructed in approximately 1948, which is currently unoccupied. There are two out-structures encompassing approximately 872 feet each. The property located at 4200 Sonoma Highway is built out and no new development is proposed as part of the Project. Both sites are currently within unincorporated Sonoma County (a two-parcel County island). Prior to Annexation, which will be facilitated by Local Agency Formation Commission (LAFCO), the two properties will be Prezoned to the CG (General Commercial) zoning district, which is consistent with the City's General Plan land use designation of Retail and Business Services.

The proposed storage facility will be located at the northern portion of the parcel, adjacent to Sonoma Highway, and the residential structures will be located on the southern and eastern sides of the Project site. Both the storage facility and residential structures will take primary access from Sonoma Highway, with a secondary access point from Streamside Drive (Figure 2)

Storage Facility: The proposed four-story storage building will have a variety of sidings (combinations of fiber cement board, Concrete Masonry Unit various complementary shades of

metal siding, and decorative metal siding) with varied roof lines. Each floor will be approximately 31,000 square feet for a total area of 124,000 square feet. The storage facility will have a 900 square foot office located on the southwestern side of the facility. A concrete driveway will be constructed at the southern portion of the property to provide access to the storage facility and the residences from Sonoma Highway from the west. The storage facility will have two elevators.

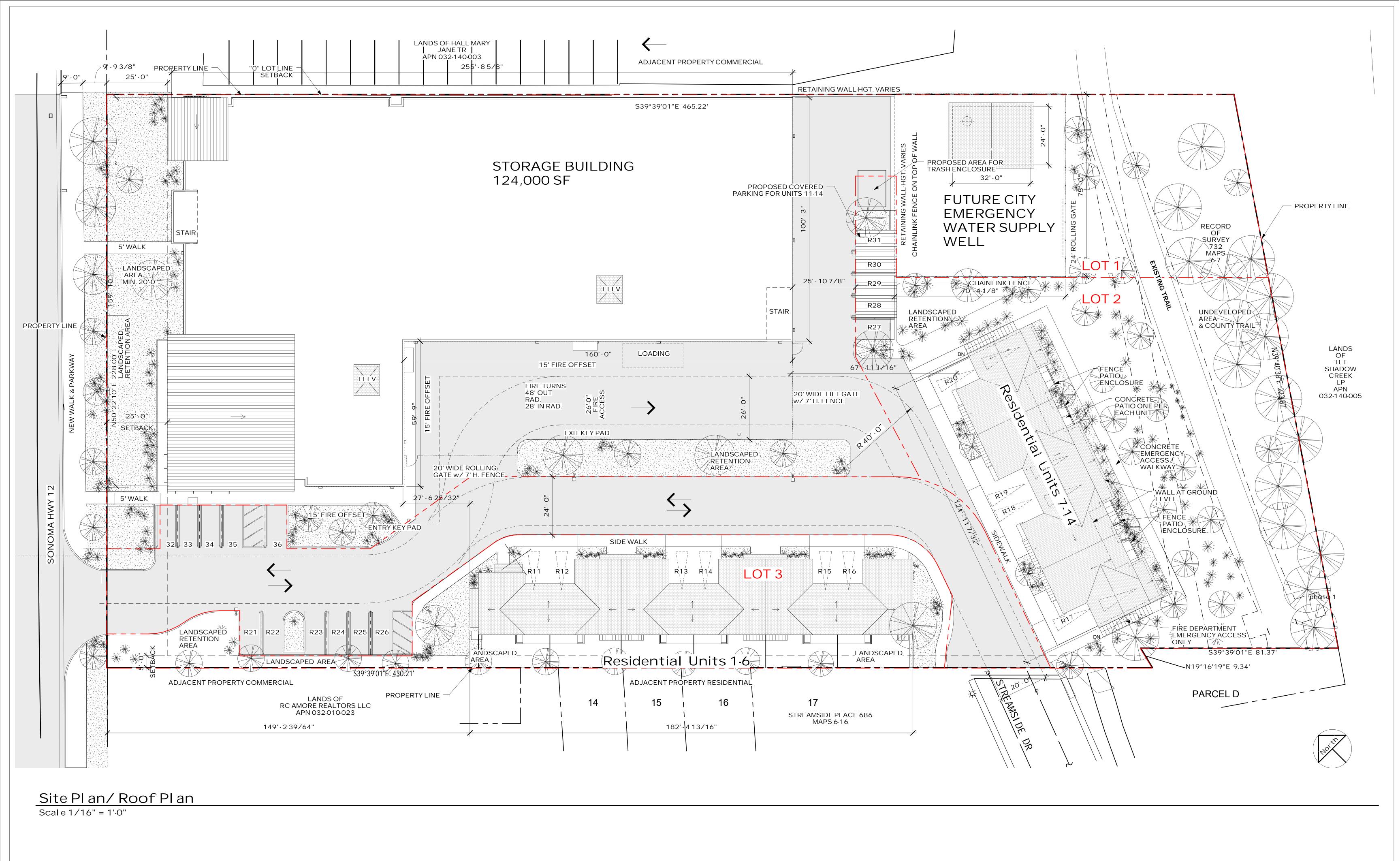
A required 25-foot landscaped area will be constructed along the western front of the property, separating the storage facility from Sonoma Highway. A new sidewalk will also be constructed between the facility and Sonoma Highway.

Multifamily Residences: The Project will construct two multi-family residential structures on two subdivided lots. The first, located on Lot 2 towards the southern property line, will have eight units and overlook the creek and multiuse path. The second, on Lot 3 adjacent to existing residential structures on Calloway Drive, will have six units. The residential structures will have a (combination of vertical and horizontal fiber cement board and metal siding, with complementary decorative reclaimed wood siding accents, and varied roof lines. The residential structure facing the creek path will comply with the Hillside development standards by following the natural topography and stepping with the existing slope. This will not only preserve but will highlight the natural features of our site and the surrounding areas. The roof line visible from the multiuse path will be also stepping down with the nature slope. Each multi-family residential structure will be two or three stories and residences will vary in size from approximately 885 square feet to 1562 square feet. Construction of the residences will include installation of utility connections including water, sewer, electricity, and natural gas.

Parking: The parking requirements are set forth in the Zoning Code Chapter 20-36, Table 3-4. The Project is required to provide 1.5 parking spaces for one-bedroom units, 2.5 parking spaces for each unit with two or more bedrooms, and five spaces for the self-storage facility. The Project is comprised of four one-bedroom residential units, ten residential units with two or more bedrooms, and one self-storage building, and complies with the Zoning Code providing a total of 36 parking spaces, 14 of which are either covered or garaged, and three of which are compliant with the Americans with Disabilities Act. A loading space will also be provided. A secured gate entry will be installed at the separation of the driveway to separate the storage facility and residences. Landscaping will further aid in providing a separation between the two land uses and to provide privacy for the residences.

Landscaping and Lighting: Site improvements include landscaping including planting of trees, shrubs, and herbaceous vegetation that will be located around the property, within the parking area for the multi-family residences, at the frontage of Sonoma Highway, and between the multi-family residence structure at Lot 2 (Figure 3a and 3b). Landscaping will include drought tolerant plants and replacement trees in compliance with the City Water Efficient Landscaping Ordinance (WELO) and will include tree replacement in compliance with the City's Tree Ordinance, City Code Chapter 17-24.

Bioretention areas will be incorporated into the site to capture the post development storm water during light rain events and encourage infiltration in accordance with the Priority 1 objectives of



DATE DESCRIPTION



DRAWN BY: CRN

DESIGNED BY: CRN

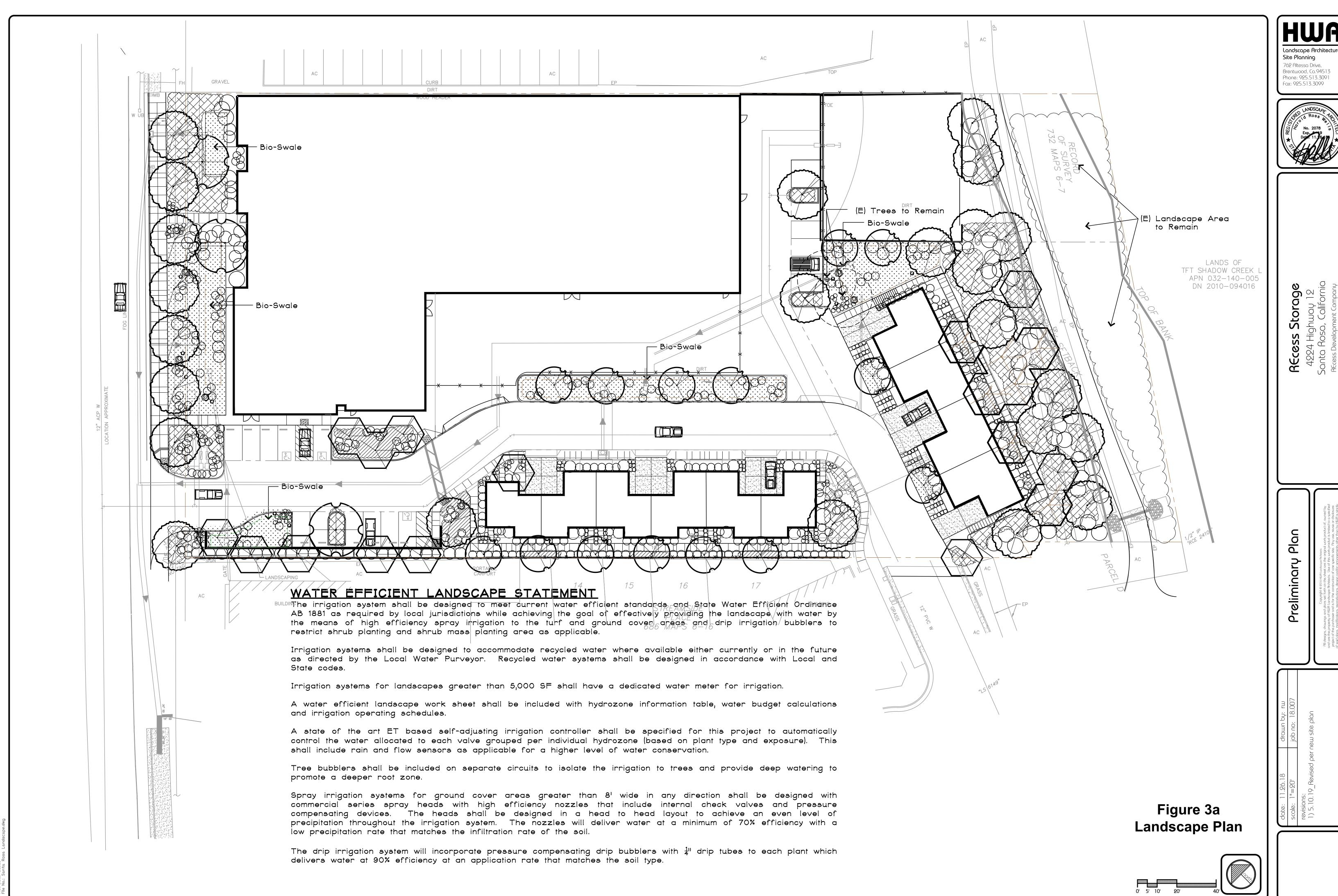
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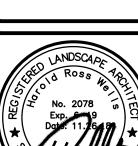
SUBMITTED BY: AR

RECESS STORAGE PROJECT 4224 SONOMA HIGHWAY Santa Rosa, CA 95409 Sonoma County APN 032-010-005

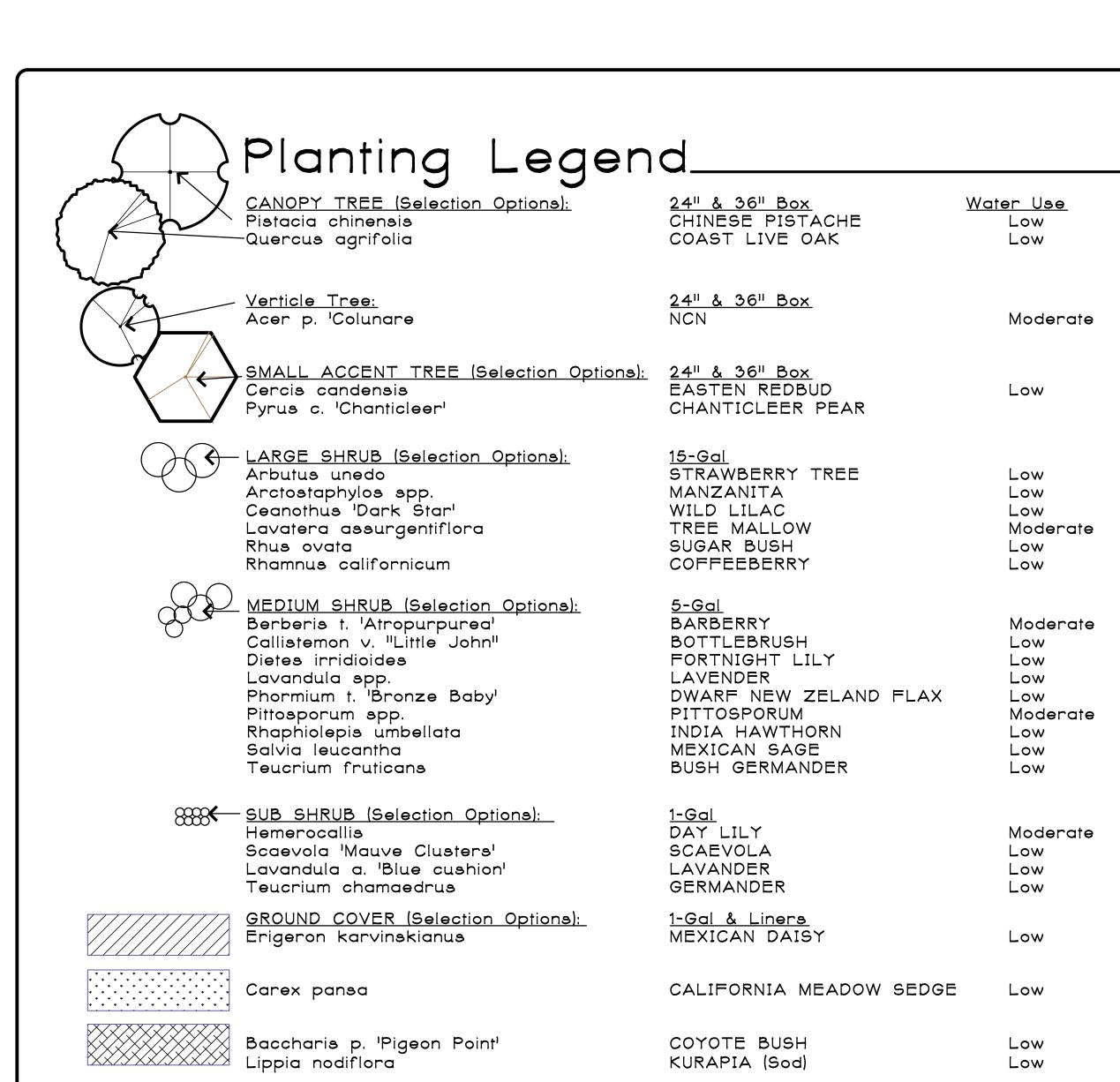


FIGURE 2
SITE PLAN









Notes

- All landscape and irrigation shall conform to the standards of the City and State wide landscape regulations and guidelines and all other Landscape related City and Regional standards.
- 2. All plant materials have been selected in accordance with:
 - + WULCOS Project "Water-Use Classification of Landscape Species" California Department of Water Resources

TREE MITIGATION MEASURES CHART

Thje sum of the diameter of all native trees = 711 inches 60 of these trees are Heritage trees 689 inches/6 inches = 114.8 inches * 2 = 230 15-gallon trees or 37 - 36" Box and 15 - 24" Box Trees

TREE REPLACEMENTS	24" Box	36" BOX
Quercus Agrifolia Pistacia chinensis Acer p. 'Columnare' Cercis candensis Pyrus c. 'Chanticleer'	0 0 6 0 15	23 3 6 6
TOTAL	21	38









Ciercis candensis







Storage ohway 12





Arbutus unedo

Callistemon v.

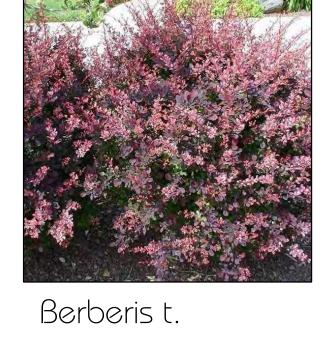
'Little John'



Quercus lobata Pistacia chinensis



assurgentiflora

















Hemerocallis



Lavndula a 'Blue cushion'

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"产生的"		1
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Salvia leucantha

Dietes iridioides





Teucrium fruticans





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d 😈		No.
	3 5 V	6

Erigeron Karvinskianus

Rhaphiolepis

umbellata



Lippia nodiflora



Carex pansa





Baccharis p. Pigeon point

Figure 3b Landscape Plan

the LID Technical Design Manual. The bioretention areas will be equipped with overflow drains to minimize inundation on paved surfaces during larger storms.

Lighting for the self-storage facility and multi-family residences will be required, as a standard condition of approval to conform with the City's lighting standards and final design review approval. Lighting for the Project is expected to include a variety of fixtures such as residential lighting, security lighting, and parking lighting.

Utilities and Infrastructure: Utilities will extend to the residential structures from the public street. Wastewater will be accommodated via the installation of new sanitary sewer lines that will connect to new 8-inch sanitary sewer main extended from Streamside Drive. Domestic, irrigation, and fire protection water services will be provided from a public water main connecting to the City's existing water system branches in Sonoma Highway and Streamside Drive.

Site Preparation: Site preparation will include demolition of all existing structures, clearing of designated vegetation, installation of tree protection for trees designated to remain, grading and installation of on- and off-site improvements. Debris from demolition will be removed from the site and deposited at an appropriate landfill. The existing well and septic system will be abandoned in accordance with permits from the Sonoma County Well and Septic Division.

Additional Improvements: Additional improvements include installation of a public road that will connect Sonoma Highway and Streamside Drive; a Fire Department turnaround and public fire hydrant. The Tentative Map also includes two easements, one for a City well to be used as an emergency water source, and the other for a Los Alamos sewer trunk-line.

Construction Schedule: Construction will occur for approximately 14 to 16 months. Construction is anticipated to begin in Summer 2020 and completed in Fall 2021. Construction will be restricted to the hours of 7:00 AM to 7:00 PM Monday through Friday and 9:00 AM to 5:00 PM on Saturdays or as allowed under Municipal Code Section 17-16.030. No construction activities are permitted on Sundays and holidays. Equipment anticipated to be used includes bulldozers, backhoes, excavators, dump trucks, cranes, as well as smaller hand-held equipment. All materials will be stored on-site during construction.

Environmental Checklist

I. Aesthetics

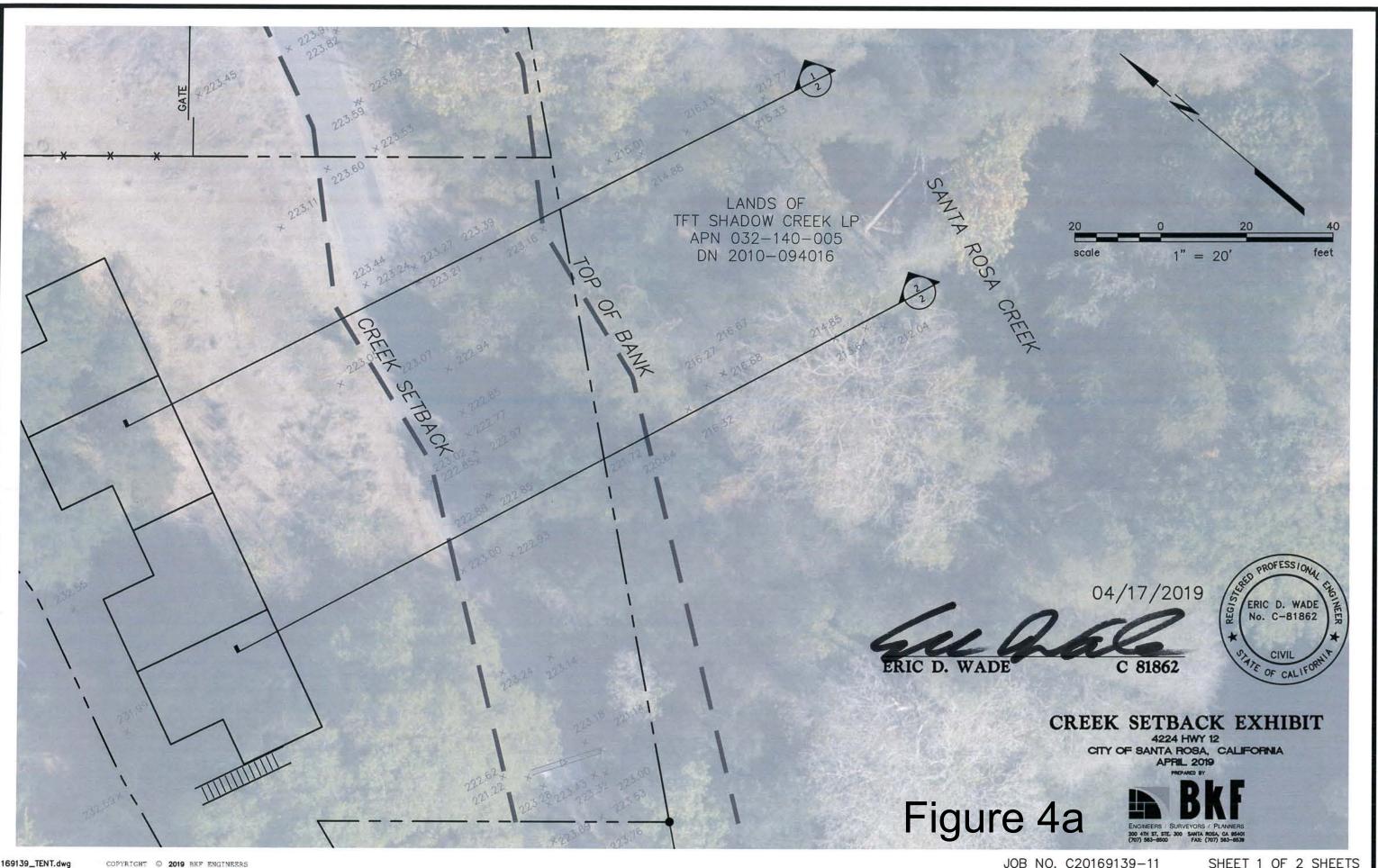
		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
Issues (and Supporting Information Sources):		Impact	Incorporation	Impact	No Impact
1.	AESTHETICS—Would the project:				
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In nonurbanized areas, substantially degrade existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulatory governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Setting

The approximately 2.68-acre Project site is located in eastern Santa Rosa, on the south side of Sonoma Highway, between Mission Boulevard and Brush Creek Road. The site is relatively flat, with a 10 percent slope change at the eastern portion of the site. The site is currently developed with a single-family home and with two outbuildings. Vegetation consists of a mix of native, nonnative, and ornamental trees and shrubs. Existing public views of the site occur from Sonoma Highway and a public multi-use path adjacent to Santa Rosa Creek on the south side of the parcel. The parcel at 4200 Sonoma Highway is currently developed and no construction will occur at this site.

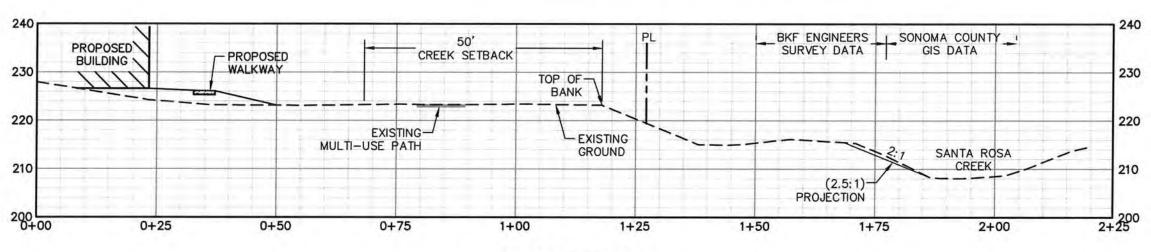
The City of Santa Rosa General Plan identifies the stretch of Sonoma Highway from Farmer's Lane to Calistoga Road as a scenic road and requires that new development maintain the visual character of the scenic roadway. This area of roadway is not included in the SR (Scenic Road) combining district regulated by the Zoning Code.

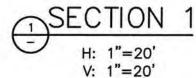
As shown in Figure 2 Site Plan, the storage structure will be setback 25 feet from the property line. The residential structure on the southwestern property line will be setback approximately 150 feet from the interior side of the sidewalk, which will not readily visible from Sonoma Highway. The Project will be setback approximately 150 feet from Santa Rosa Creek (Figure 4). All three structures will have a variety of exterior siding materials, varied roof lines, and landscaping.

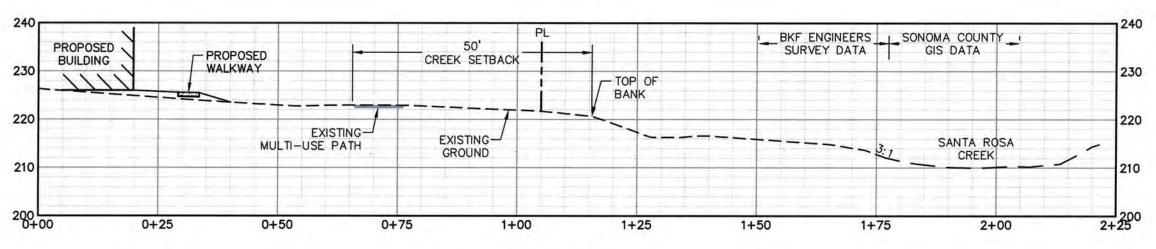


JOB NO. C20169139-11

SHEET 1 OF 2 SHEETS







SECTION 2

H: 1"=20'
V: 1"=20'

CREEK SETBACK SECTIONS

4224 HWY 12
CITY OF SANTA ROSA, CALIFORNIA
APRIL 2019
PREPARED BY

Figure 4b



The multi-family residences are designed to front onto the internal street to provide a pleasant and walkable streetscape with front doors and front yards facing the street. New plantings call for trees and shrubs to complement other neighboring developments.

The Project includes full frontage improvements along Sonoma Highway including sidewalk and landscaping (Figure 5). The site plan is designed to allow pedestrian, bicycle, and vehicular circulation throughout the Project, as well as to adjacent streets and neighborhoods. The streetscapes with sidewalks in front of each home will provide a pedestrian path. The Project will consist of native and drought tolerant plant species and hydro-zones will be utilized to make efficient use of water in compliance with the City of Santa Rosa's Water Efficient Landscape Ordinance (WELO).

The proposed Project is subject to Design Review in order to verify that the architectural style, massing, color and materials, and other proposed design elements of the new development are compatible with the existing character of the site vicinity. A standard condition of approval for the Project will address exterior lighting to appropriately design lighting features to minimize spillover onto adjacent properties and to shield light sources from view.

General Plan policy OSC-B-5 requires a Hillside Development Permit for all new development on slopes greater than 10 percent. General Plan policy OSC-B-2 requires that alteration to slopes greater than percent be minimized to the greatest extent feasible. As the Project site contains slopes that exceed 10 percent, the project is subject to the City's Hillside Development Standards and requires a Hillside Development Permit pursuant to Chapter 20-32 of the Zoning Code. The Hillside Development Standards are intended to conserve significant natural features and result in hillside development design that are sensitive to the existing terrain, views and significant natural landforms, thereby avoiding visual and environmental impacts. The Project will comply with the Hillside Development Standards by using the natural contours for the development of the multifamily residences in Lot 2 as shown in Figure 6. Because the Project will comply with the Hillside Development Standards, the Project will not conflict with the City's General Plan or the Hillside Development Permit and impacts would be less than significant.

- a) No Impact. There are no scenic vistas within the vicinity of the Project area and the Project site is not part of a scenic vista. Therefore, there will be no impacts on scenic vistas.
- b) Less than Significant Impact. The Project site is not located within or along a designated scenic corridor nor does it contain scenic resources (trees, rock outcroppings, or historic buildings) related to a scenic highway. The Project site is located on a portion of Sonoma Highway that is identified as an eligible state scenic highway but is not officially designated. According to California Department of Transportation (Caltrans), the nearest officially designated state scenic highway is a portion of Sonoma Highway from Danielli Avenue, east of Santa Rosa, to London Way near Agua Caliente. Danielli Avenue is approximately 4 miles east to the Project site (Caltrans 2007). The City's



Recess Storage Project Santa Rosa, California

Figure 5 View from Sonoma Highway

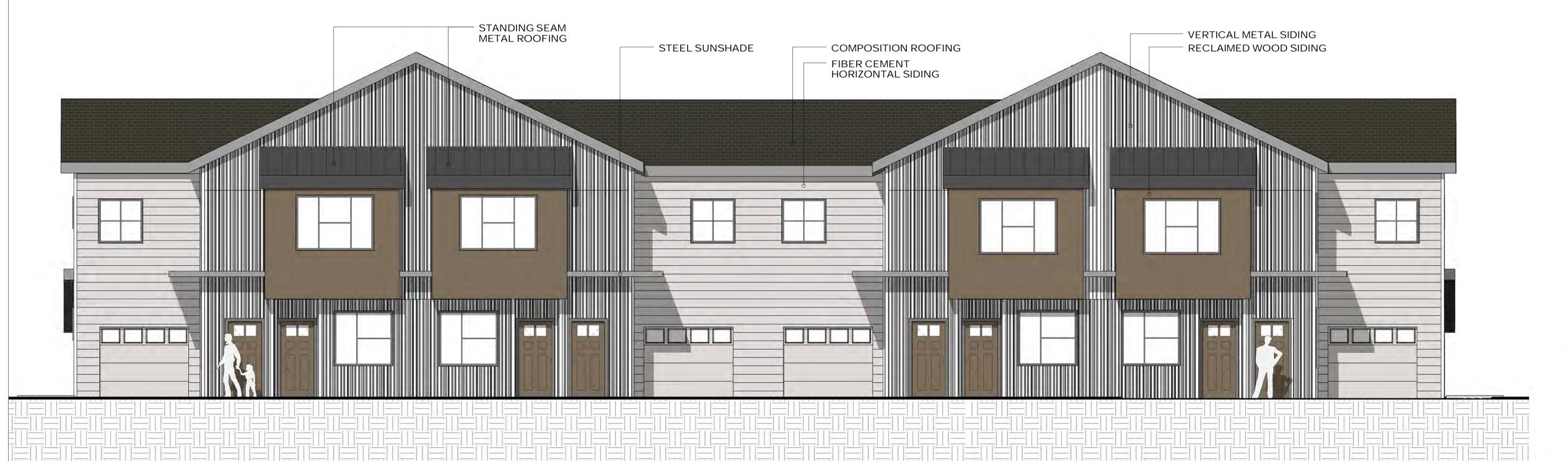


Residential Units 7-14 East Elevation

Scal e 3/16" = 1'-0"

Residential Units 7-14 North Elevation

Scal e 3/16" = 1'-0"



Residential Units 7-14 West Elevation

Scal e 3/16" = 1'-0"

DATE

17 Oct. 2018 PLANNING REVIEW

DESCRIPTION

RECESS 85 Keystone Avenue, Suite E Reno, Nevada 89503 Tel (775) 357-9206

SCALE: 3/16" = 1'-0"

DESIGNED BY: CRN

SUBMITTED BY: AR

CHECKED BY:

RECESS STORAGE -RESIDENTIAL UNITS ALONG EXISTING TRAIL

4224 Hwy 12 Santa Rosa, CA 95409 Sonoma County APN 032-010-005



Scal e 3/16" = 1'-0"

Figure 6 Hillside Elevation

Residential Units 7-14 South El evation

General Plan identifies Sonoma Highway within the Project area as a Scenic Road. Development of the Project will be consistent with the surrounding land use (residential and commercial) and will be compliant with the City's design standards. Because the Project will be consistent with the City's General Plan and design standards, impacts related to scenic roads will be less than significant.

According to the cultural and historic resources report, the existing structures on the Project site are not considered historic buildings and there are not rock outcroppings or other scenic features on site (Origer & Associates 2017).

The arborist report identified 58 heritage trees that will be removed and two oak trees that will be retained (Arcadis 2019). The landscaping plan (Figure 3b) identifies 21 24-inch box trees and 38 36-inch box trees to be planted as to meet replacement requirements onsite in compliance with the Tree Ordinance, City Code Chapter 17-24. The project is in compliance with the City's Tree Ordinance which will reduce impacts related to tree removal to less than significant. Because there are no scenic resources within the vicinity of the Project, and heritage trees will be replaced per the City's ordinance impacts will be less than significant.

c) Less than Significant Impact with Mitigation Incorporation. During construction, the site will be graded and trees will be removed and heavy equipment will be seen from public views of the Project site. However, the view of the Project site during construction will be temporary and will not result in a significant degradation of the visual character of the site or surroundings.

The site is surrounded to the southwest and northeast by existing development, including residential development and commercial uses to the east. The views of the completed Project will be consistent with the surrounding land uses. The Project site will not substantially degrade the existing visual character or quality of the site and its surroundings as it will continue the residential development called for in the City's General Plan in a manner consistent with the City's design standards and compatible with the surrounding community.

The multi-family structure on Lot 2 will be situated on a 10percent slope which could accentuate the views of the structure if design did not include the natural contours of the site. Compliance with the Hillside Development Standards requires the use of the natural contours in siting developments will be a standard condition of approval for the Project. The Project has been designed in a manner that aims to retain the natural contours and minimizing visibility of the new residences on Lot 2 to the extent feasible as shown in Figure 6. Compliance with the Hillside Development Standards as a condition of approval would reduce impacts to less than significant.

Construction of the proposed Project will remove 58 trees (Arcadis 2019). Two protected trees, Trees No 24 and No 25 will be retained and protected in place. Because of their location, construction has the potential to damage the two protected trees. Implementation of **Mitigation Measure AES-01** which includes measures to protect the

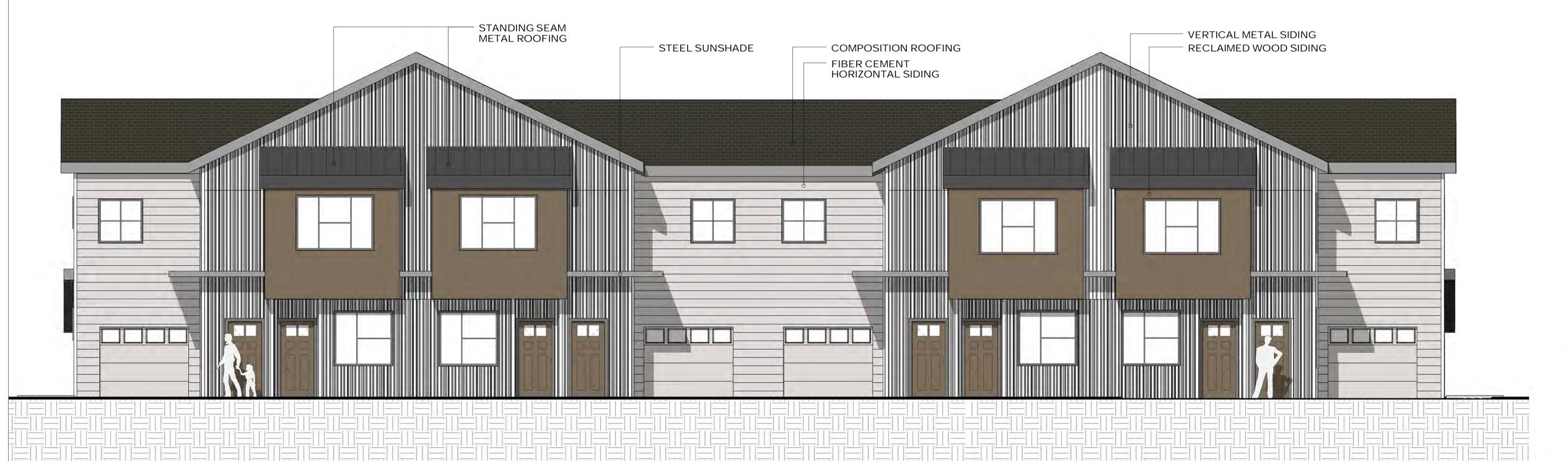


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Scal e 3/16" = 1'-0"

Residential Units 7-14 North Elevation

Scal e 3/16" = 1'-0"



Residential Units 7-14 West Elevation

Scal e 3/16" = 1'-0"

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CHECKED BY:

RECESS STORAGE -RESIDENTIAL UNITS ALONG EXISTING TRAIL

4224 Hwy 12 Santa Rosa, CA 95409 Sonoma County APN 032-010-005



Scal e 3/16" = 1'-0"

Figure 6 Hillside Elevation

Residential Units 7-14 South El evation

trees from construction activities will establish a Tree Protection Perimeter, including erection of fencing and restriction of use of the perimeter for the storage of materials or other activities during construction. Implementation of Mitigation Measures AES-01 will protect Trees No 24 and No 25 during construction

Construction and operation of the Project will temporarily reduce the visual character of the site from the Santa Rosa Creek multi-use path. During and immediately after construction, because of the removal of trees and other vegetation, views from the multiuse path of the structure on Lot 2 will be obvious and result in a temporary change in the character of the view from the path. As identified in the Landscape Plan (Figure 3), trees and vegetation that will be planted between the structure and the path to restore the views from the path. Once the trees and other vegetation has been able to mature, views of the structures will be screened, and views of the structure will become less obvious and the visual character of the site from the path will be consistent with the surrounding area. Once vegetation matures, views from the multi-use path will be similar to existing conditions and operation of the multifamily structure on Lot 2 would not permanently change the character of existing views. As shown in Figure 7 mature vegetation will screen the views from the path both from the north and south and the visual character would be restored. Because the change in visual character from the multi-use path would be temporary during construction and during the establishment of vegetation, impacts would be less than significant.

d) Less than Significant Impact. Construction of the Project will include equipment and some minor lighting that will result in a minor temporary increase in light and glare at the site during construction. Nighttime construction work is not anticipated, but some lighting may be used during the fall and winter months in the afternoon to provide for a safe work area. Lighting will be directed down and away from adjacent residences, businesses, and the creek area and light will be contained on site.

The storage facility and new homes will include lighting. The City of Santa Rosa Zoning Code (Zoning Code) Section 20-30.080 requires that lighting fixtures be shielded or recessed to reduce light bleed to adjoining properties, and that each light fixture be directed downward and away from adjoining properties and public rights-of-way, so that no on-site light fixture directly illuminates an area off the site. Exterior lighting fixtures associated with the storage facility and multi-family residential structures have been selected and will be installed in compliance with Code Section 20-30-080. Fixtures will be downcast and installed to direct light toward the site and prevent intrusion into adjacent properties, including creek habitat to the east of the site. Compliance with these requirements will not create a new source of substantial light or glare associated with the Project that will adversely affect day or nighttime views in the area. Additionally, the replacement of trees along the southside of Lot 2 will further prevent light intrusion into adjacent riparian habitat in the creek area. As a standard condition of approval, the Project lighting plan will be approved by the City prior to the issuance of grading and building permits. Installation of the lighting according to City requirements and in

compliance with Zoning Code Section 20-30-080 will reduce impacts related to increased light and glare to less than significant.

Mitigation Measures:

Mitigation Measure AES-01:

Protective measures shall be implemented to protect retained trees. In accordance with City Code Section 17-24.050(D), a "Tree Protection Perimeter" shall be established at the dripline around each tree or cluster of trees to be preserved. The Perimeter shall be enclosed by temporary protective fencing prior to initiating grading activities and shall remain for the duration of construction. No ground disturbance including the placement of utilities or sub drains shall occur within the Tree Protection Perimeter.

- Plastic tree protection fencing shall be installed at the dripline of trees within construction zone. If access within the dripline is required, it shall be done under the supervision of the project arborist.
- Tree protection fencing will be installed prior to clearing and grubbing and kept in place for the duration of construction.
- No parking or operation of equipment, storage of materials, disposal of waste or other construction activities shall occur within the driplines of protected trees.
- If any deviation from the protection measures are necessary, a certified arborist shall be consulted to ensure retained trees are protected during the entire construction process.
- Tree preservation notes shall be printed on all plan sets submitted for grading and building permits.

Less Than

II. Agricultural Resources

		Potentially	Significant with	Less Than	
lssu	es (and Supporting Information Sources):	Significant Impact	Mitigation Incorporation	Significant Impact	No Impact
2.	AGRICULTURE RESOURCES In determining whether impacts to agricultural resource refer to the California Agricultural Land Evaluation and Dept. of Conservation as an optional model to use in as whether impacts to forest resources, including timberlar refer to information compiled by the California Departm inventory of forest land, including the Forest and Range project; and forest carbon measurement methodology presources Board.	Site Assessments Site Assessing impact of Are signification of Forestry and Assessment I	ent Model (1997) points on agriculture ant environmental and Fire Protections of the Foject and the Fo	prepared by the and farmland. I I effects, lead a on regarding th prest Legacy A	e California in determining agencies may ne state's ssessment
	Would the project:				
а)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
၁)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				\boxtimes

Setting

The Project is located within an area of residential and commercial land use and will be prezoned by the City as General Commercial. The Project site was formerly a rural residential single-family home. At one time the site was a small walnut orchard, but it has not been in agricultural production for many years. The following definitions are used in this section and are derived from United States Department of Agriculture and described in 7 Code of Federal Regulations 657.5

Prime Farmland: is the farmland that has the best combination of physical and chemical features that are able to provide long-term agricultural production. This land has soil quality, growing season, and moisture supply to produce sustained high yields.

Farmland of Statewide Importance: is land that is similar to Prime Farmland but may have greater slopes or lower moisture supply.

Unique Farmland: is land that contains lesser quality soils used for sustained agricultural production. This land is usually irrigated but may include non-irrigated land.

Forest Land: "Forest land" is land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits [Public Resources Code (PRC) 12220(g)].

Timber Land: "Timberland" means land, other than land owned by the Federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others (PRC 4526).

Timberland Production Zone: "Timberland production zone" or "TPZ" means an area which has been zoned pursuant to California Government Code (CGC) Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses [CGC 51104(g)].

Discussion

- No Impact. The Project site does not include designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project site is not currently in agricultural production. Therefore, the proposed Project will not convert existing Prime Farmland, Unique Farmland, or Farmland of Importance to non-agricultural use. Therefore, the Project will have no impacts associated with the loss or conversion of agricultural lands.
- b) **No Impact**. The Project site is not zoned or designated for agriculture and is not under a Williamson Act contract. Therefore, the proposed Project will not interfere or conflict with a Williamson Act contract site.
- c) No Impact. The Project site is not zoned for or located in a forested area or areas with timber or timber production (TPZ) and will therefore not conflict with or cause rezoning of forest land or timberland.
- d) **No Impact**. The Project site is not located within forested lands and therefore the proposed Project will not result in the conversion of forested lands to non-forest use.
- e) **No Impact**. The Project involves construction of a commercial storage facility and multifamily residences on land that is currently within the County of Sonoma where it is zoned for rural residential Development. The land is designated on the City of Santa Rosa Land Use Diagram as Retail and Business Services, for which environmental impacts were considered in the scope of review for the City of Santa Rosa General Plan 2035 Environmental Impact Report (EIR), certified by Council in 2009. The project will Prezone both 4200 and 4224 into the CG (General Commercial) zoning district which is consistent with the General Plan land use designation, and will be annexed into the City.

The project site is surrounded by commercial and residential uses. There are no properties within the vicinity of the Project that are designated for agriculture production and there are limited or no agricultural opportunities within the vicinity of the proposed Project. Therefore, the Project will not result in any changes in the existing environment that will result in conversion of Farmland to non-agricultural use.

Mitigation Measures: None Required.

I acc Than

III. Air Quality

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
3.	AIR QUALITY Where available, the significance criteria established by control district may be relied upon to make the following			gement or air po	ollution
	Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

Setting

The Project site is located in the City of Santa Rosa, within the boundaries of the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional agency with regulatory authority over stationary sources in the San Francisco Bay Area Air Basin, while the California Air Resources Board (CARB) has regulatory authority over mobile sources such as construction equipment, trucks, and automobiles throughout the state. The BAAQMD has the primary responsibility to meet and maintain the state and federal ambient air quality standards in the Bay Area.

Pursuant to the Clean Air Act Amendments of 1990, the United States Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The NAAQS are classified as primary and secondary standards. Primary standards prescribe the maximum permissible concentration in the ambient air and are required to protect public health. Secondary standards specify levels of air quality required to protect public welfare, including materials, soils, vegetation, and wildlife, from any known or anticipated adverse effects. NAAQS are established for six pollutants (known as criteria pollutants): ozone (O₃), particle pollution (i.e., respirable particulate matter less than 10 microns in diameter [PM₁₀] and respirable particulate matter less than 2.5 microns in diameter [PM_{2.5}]), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). The CARB has also established its own air quality standards in the State of California, known as the California Ambient Air Quality Standards (CAAQS). The CAAQS are generally more stringent than the NAAQS and include air quality standards for all the criteria pollutants listed under

NAAQS plus sulfates (SO₄), hydrogen sulfide (H₂S), vinyl chloride, and visibility-reducing particulate matter.

The USEPA classifies the air quality within an Air Quality Control Region with regard to its attainment of Federal primary and secondary NAAQS. According to USEPA guidelines, an area with air quality better than the NAAQS for a specific pollutant is designated as being in attainment for that pollutant. Any area not meeting the NAAQS is classified as a nonattainment area. Where there is a lack of data for the USEPA to make a determination regarding attainment or nonattainment, the area is designated as unclassified and is treated as an attainment area until proven otherwise. Similarly, the CARB makes State area designations for the State criteria pollutants.

Both the State and Federal Clean Air Acts require areas to be classified as either attainment or non-attainment for each criteria pollutant, based on whether or not the state and national standards have been achieved. Therefore, areas in California have two sets of attainment/non-attainment designations: one for Federal standards and one for state standards. As summarized in Table III-1, the San Francisco Bay Area Air Basin is currently "in attainment" for the state standards for CO, NO₂, SO₂, and sulfates. The current status of the San Francisco Bay Area Air Basin for 1-hour and 8-hour ozone, 24-hour and annual PM₁₀, and annual PM_{2.5} standards is "non-attainment."

Table III-1

Air Quality Standards Attainment Status for the San Francisco Bay Area Air Basin

Pai	rameter	State	Standard	Fede	ral Standard
Ozone	1-Hour	0.09 ppm (180 µg/m³)	Non-Attainment		No Federal Standard
(O ₃)	8-Hour	0.070 ppm (137µg/m³)	Non-Attainment	0.075 ppm	Non-Attainment
Carbon Monoxide	1-Hour	20 ppm (23 mg/m³)	Attainment	35 ppm (40 mg/m³)	Attainment
(CO)	8-Hour	9.0 ppm (10 mg/m³)	Attainment	9 ppm (10 mg/m³)	Attainment
Nitrogen	1-Hour	0.18 ppm (339 µg/m³)	Attainment	0.100 ppm	Unclassified
Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	Attainment	0.053 ppm (100 μg/m³)	Attainment
	1-Hour	0.25 ppm (655 μg/m³)	Attainment	0.075 ppm (196 μg/m³)	Attainment
Sulfur Dioxide (SO ₂)	24-Hour	0.04 ppm (105 µg/m³)	Attainment	0.14 ppm (365 μg/m³)	Attainment
(- 2)	Annual No		No State Standard	0.030 ppm (80 μg/m³)	Attainment
Particulate	24-Hour	50 μg/m ³	Non-Attainment	150 μg/m³	Unclassified
Matter (PM ₁₀)	Annual Arithmetic Mean	20 μg/m³	Non-Attainment		No Federal Standard

Par	ameter	State	Standard	Federal Standard		
Particulate Matter –	24-Hour		No State Standard	35 μg/m³	Non-Attainment	
Fine (PM _{2.5})	Annual Arithmetic Mean	12 μg/m³	Non-Attainment	15 μg/m³	Attainment	
	30 Day Average	1.5 μg/m³	See Note 1	ı	No Federal Standard	
Lead (Pb)	Calendar Quarter		No State Standard	1.5 µg/m³	Attainment	
	Rolling 3-Month Average		No State Standard	0.15 μg/m ³	Attainment	
Sulfates	24-Hour	25 μg/m³	Attainment		No Federal Standard	

Notes:

1 CARB has identified lead as a 'toxic air contaminant' with no threshold level of exposure below which there are no adverse health effects determined.

ppm – parts per million μg/m³ – micrograms per cubic meter

Source: BAAQMD. "Ambient Air Quality Standards and Bay Area Attainment Status."

http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status. Accessed May

2018.

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under California Environmental Quality Act (CEQA). These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions will cause significant environmental impacts under the CEQA and were posted on BAAQMD's website and included in the Air District's updated CEQA Guidelines (BAAQMD 2017a). The significance thresholds identified by BAAQMD, as shown below in Table III-2, represent an appropriate approach and are used as a guideline in this analysis.

Table III-2
BAAQMD Significance Thresholds

	Construction- Related	Operational-Related			
Pollutant	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)		
ROG	54	54	10		
NOX	54	54	10		
PM ₁₀	82 (exhaust)	82	15		
PM _{2.5}	54 (exhaust)	54	10		

Note: The BAAQMD consider contributions of fugitive dust to be less-than-significant if best management practices (BMPs) are implemented.

Discussion

- No Impact. The Project will not conflict with or obstruct implementation of the BAAQMD Clean Air Plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of an air quality plan is to bring the area into compliance with the requirements of federal and state air quality standards. To bring the San Francisco Bay Area region into attainment, the BAAQMD developed the 2017 Bay Area Clean Air Plan (BAAQMD 2017b). BAAQMD's 2017 Clean Air Plan focuses on protecting public health and protecting the climate. Because the Project will not conflict with the applicable air quality plan, there will be no impact.
- b) Less than Significant Impact. The Project will include demolition and construction activities that will result in short-term air quality impacts from combustion emissions and fugitive dust emissions. These emissions will be reduced through implementation of Mitigation Measure AQ-01. There will also be long-term emissions associated with Project-related vehicle trips.

Construction: Trucks and construction equipment will produce short-term air emissions including ozone precursors, CO and PM₁₀ during construction. Construction-related emissions were modeled using CalEEMod, Version 2016.3.2 computer program (Appendix A). CalEEMod is a land use emissions computer model designed to provide a uniform platform to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Input parameters were based on default model settings and project-specific information where available. Three construction phases were modeled: grading, site improvement, and building construction between June 2019 and August 2020. The modeled maximum daily construction emissions are summarized in Table III-3.

Table III-3
Estimated Regional Construction Emissions (lb/day)

Project Phase	со	ROG	Nox	Sox	PM ₁₀ (exhaust)	PM _{2.5} (exhaust)
Construction	18.4	3.0	22.8	0.04	1.1	1.1
Significance Threshold	NA	54	54	NA	82	54
Exceed Significance Threshold?	No	No	No	No	No	No

Note: Ib/day = pounds per day

Based upon the quantified estimates provided in Table III-3, no exceedance of any of the criteria pollutants are anticipated and therefore Project construction will not result in significant short-term air quality impacts.

Operation: The Project will result in emissions from building operation and vehicle traffic from residences as well as the storage facility customers and workers. As shown in Table III-4, emissions associated with these pieces of equipment are below the significance thresholds for each evaluated pollutant. Therefore, the impact due to operations will be less than significant.

Table III-4
Proposed Project Operation Air Emissions

		Daily (lb / day)				Annual (ton / year)			
Project Phase	ROG	NOx	PM ₁₀	PM _{2.5}	ROG	NOx	PM ₁₀	PM _{2.5}	
Operations	10.8	3.49	2.75	1.56	0.84	0.59	0.29	0.09	
Significance Threshold	54	54	82	54	10	10	15	10	
Exceed Significance Threshold?	NO	NO	NO	NO	NO	NO	NO	NO	

The Project will have emissions less than the significance thresholds adopted by BAAQMD for evaluating impacts related to criteria pollutants. Therefore, the Project will not contribute substantially to existing or projected violations of criteria pollutant standards. Thus, the Project will not result in cumulative impacts to regional air quality.

- c) Less than Significant Impact with Mitigation Incorporation. Typical sensitive receptors include inhabitants of long-term healthcare facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, childcare centers, and athletic facilities. The area surrounding the Project is residential and commercial. Substantial amounts of dust are not expected from construction activities as fugitive dust emissions will be controlled by implementing required actions to prevent, reduce or mitigate excessive fugitive dust emissions. This includes requiring regular watering and other dust-preventive measures during clearing, grading, earth-moving, or excavation operations. Use of diesel-powered equipment has the potential to emit toxic air contaminants such as diesel particulate matter; however, given the limited exposure to emissions, the impacts will not have the potential to expose sensitive receptors to substantial pollutant concentrations. Implementation of Mitigation Measure AQ-01 will further reduce these emissions through reduced idling time and proper vehicle maintenance.
- d) Less than Significant Impact. The Project construction and operation will not generate any permanent source of new odors or subject sensitive receptors to new significant permanent odors. During construction, odors will be generated by construction equipment; these odors will be present only temporarily during construction.

 Therefore, the Project will result in less than significant impacts under this criterion.

Mitigation Measures:

Mitigation Measure AQ-01: Construction

The applicant shall implement the following air quality construction measures:

- 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- 4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to comply with applicable regulations.

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IV. Biological Resources

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
4.	BIOLOGICAL RESOURCES— Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

Setting

Information and evaluation of biological resources is derived from the Biological Resources Assessment, prepared by Arcadis, dated June 2018, for 4224 Sonoma Highway (Appendix B). The Project is an approximately 2.68 acre parcel which is currently occupied by a single family home and two outbuildings. The Project site is bordered to the north by commercial retail and to the south by single family residences and former pet grooming facility (4200 Sonoma Highway). Sonoma Highway borders the site to the west and the Santa Rosa Creek trail occurs to the east. The site is adjacent to the Santa Rosa Creek multiuse trail and Santa Rosa Creek. The site was surveyed by certified arborist Joshua Tallis (Appendix C). The survey found a total of 60 trees that are protected under the City's Tree Ordinance Chapter 17-24 including one Big Leaf Maple (Acer macrophyllum), four California Bay (Umbellularia californica), 52 Coast Live Oak (Quercus

agrifolia), one Northern California Black Walnut (*Juglans hindsii*), and two Valley Oak (*Quercus lobata*).

Vegetation at the site generally consists of ruderal herbaceous species as well as native and nonnative trees, including scattered mature oaks. Because of current and past land use, the site is dominated by non-native species including ripgut brome (Bromus diandrus), broadleaf filaree (Erodium botrys), prickly lettuce (Lactuca serriola), soft brome (Bromus hordeacious), and Himalayan blackberry (Rubus armeniacus). Adjacency to the Santa Rosa Creek trail and Santa Rosa Creek allows for the site to be used by common wildlife including blacktailed deer (Odocoileus hemonius), Virginia opossum (Didelphis marsupialis) raccoon (Procyon lotor), and birds. The mature trees on-site provide nesting for passerine species although no nests were observed during the April 20, 2018 site visit. Species observed onsite include blacktailed deer, black phoebe (Sayornis nigricans) and common crow (Corvus brachyrhyncos). Past land use includes a walnut orchard (Origer & Associates 2017). A certified arborist conducted a tree survey on June 8, 2018 and identified several trees that will be subject to the Citv's Tree Ordinance 17-24. The trees identified include Big leaf maple (Acer macrophyllum), Black elderberry (Samucus nigra), California bay (Umbellularia californica), Coast live oak (Quercus agrifolia), northern black walnut (Junglans hindsii), valley oak (Quercus lobata), and western sycamore (Plantanus racemose). Details on the arborist tree survey is provided in the Arborist Report (Appendix C).

The California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) Rare Plant List were queried for special status species with potential to occur within the vicinity of the Project area. For the purposes of this document, special status are plants or animals that are legally protected under the following:

- Plants and animals that are listed or proposed for listing as threatened or endangered under the California Endangered Species Act (CESA) (Fish and Game Code §2050 et seq.; 14 CCR §670.1 et seq.) or the Federal Endangered Species Act (FESA) (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- Plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- Plants and animals that meet the definition of endangered, rare, or threatened under the CEQA (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;
- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2018). The California Department of Fish and Wildlife recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, will qualify for State listing, and California Department of Fish and Wildlife, (CDFW) requests their inclusion in CEQA documents;
- Nesting and breeding birds protected under the Migratory Bird Treaty Act (MBTA);

- Animals that are designated as "species of special concern" by the CDFW;
- Animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515).

Table IV-1 summarizes the results of the CNDDB and CNPS database query and the detailed report is provided in Appendix B. A total of 11 species have potential to occur within the vicinity of the Project site according to the query. Because of past and current land use at the site, including a former walnut orchard and burying of refuse and debris, there is low potential for sensitive plants to occur. The Project site is not within designated critical habitat for California tiger salamander and California red-legged frog.

Table IV-1 Special Status Species Potential to Occur

Common Name	mmon Name Scientific Status Blooming Period		Preferred Habitat	Potential to Occur	Notes						
Plants	Plants										
Sonoma sunshine	Blennosperma bakeri	1B.1	February-April	Valley and foothill grassland, vernal pools	Low	Project area does not provide suitable habitat					
congested-headed hayfield tarplant	Hemizonia congesta ssp. Congesta	1B.2	April-November	Valley and foothill grassland	Low	Project area does not provide suitable habitat					
Lasthenia burkei	Burke's goldfields	1B.1	April-June	Meadows and seeps	Low	Project area does not provide suitable habitat					
Baker's navarretia	Navarretia leucocephala ssp. Bakeri	1B.1	May-July	Cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools	Low	Project area does not provide suitable habitat					
Narrow-anthered California brodiaea	Brodiaea leptandra	1B.2	May-July	Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland	Low	Because of past land use, the Project area does not provide suitable habitat					
Amphibians/Reptiles											
California tiger salamander	Ambystoma californiense	FT/ST		Vernal pools or seasonal ponds or for breeding and upland refugia including ground squirrel burrows	Low	No burrows were observed during site visit. There is no suitable habitat within migratory distance from the Project site					
California red-legged frog	Rana	FT/CSC		Stock ponds, pools, and slow-moving streams.	Low	No suitable habitat within the vicinity of the Project.					

Common Name	Scientific Name	Status	Blooming Preferred Habitat		Potential to Occur	Notes
California giant salamander	Dicamptodon ensatus	CSC		wet coastal forests near streams or seeps. Cold, clear streams with rocks or logs	moderate	No suitable habitat within the vicinity of the Project.
Western pond turtle	Emys marmorata	CSC		Slow moving streams and ponds with logs or rocks for basking	Low	There are no aquatic features within the Project boundary.
Birds						
White tailed kite	Elamus leucrus	FP		Found in lower foothills and valleys with scattered oaks and adjacent to streams.	Low	While there are scattered oaks on-site, higher quality habitat occurs offsite. No kite nests were observed during site visit.

Status:

FE - Federal Endangered FT - Federal Threatened

FPE - Federal Proposed Endangered
FPT - Federal Proposed Threatened
FC - Federal Candidate
CE - California Endangered
CT - California Threatened

CR - California Rare

CC - California Candidate

CSC - California Species of Special Concern FP – California Fully Protected

Discussion

Less than Significant Impact with Mitigation Incorporation. The CNDDB and CNPS a) databases for the U.S. Geological Survey Santa Rosa 7.5-minute quadrangle was queried for a list of State and Federal special status species with potential to occur within the Project area. The CNDDB and CNPS query returned a total of 11 species with potential to occur within the vicinity of Project as summarized in Table IV-1. Because of current and past land uses at the Project site, none of the species have the potential to occur within the work area. The Project site is not located within designated Critical Habitat for California tiger salamander. No aquatic breeding habitat for California tiger salamander occurs within migratory distance from the Project site. Santa Rosa Creek, within the vicinity of the Project area, has too high velocity to support salamander breeding. Additionally, there was no upland estivation habitat such as burrows or crevices that will provide suitable upland habitat for California tiger salamander. The Project site is within range for California red-legged frog but there is no suitable aquatic breeding habitat within vicinity of the Project site. Santa Rosa Creek does not provide suitable aquatic breeding habitat for red-legged frog. The closest known occurrence is located over three miles to the south of the Project site (CNDDB 2018).

The CNPS Rare Plant database was queried to determine the potential for special status plants to occur onsite. The CNPS database revealed that five special status plants with a rare plant ranking of 2B or higher have the potential to occur within the vicinity of the Project site. Because of past and present land use, habitat for sensitive plants does not occur at the Project site. The site is dominated by non-native herbaceous species. The past walnut orchard as well as burning of garbage and debris has likely removed native habitat that could have supported sensitive plants. The Project is not expected to impact sensitive plants.

Trees and shrubs located on the Project site provide suitable habitat for nesting birds and raptors that are protected under the MBTA. Tree removal will occur during the nonnesting season to reduce the potential to destroy migratory bird nests. Prior to vegetation removal, a preconstruction nesting survey will be conducted to ensure no active nests occur within the vegetation removal areas. **Mitigation Measures BIO-1** and **BIO-2** will require that vegetation removal occur outside the nesting season (September 1 through February 1) and that preconstruction nesting surveys will occur prior to vegetation removal. With the implementation of Measures BIO-1 and BIO-2, impacts on sensitive habitats, specifically nesting birds and raptors, will be less than significant.

- b) Less than Significant Impact. There are no aquatic resources within the Project site boundary. Santa Rosa Creek is located approximately 150 feet to the southeast of the Project site. Implementation of the Project will not have impacts on the creek. The Project will not impact Santa Rosa Creek or riparian habitat.
- c) **No Impact**. The Project area does not contain any wetlands, or waters of the U.S. The Project will have no impact on wetlands as defined by Clean Water Act Section 404.

Santa Rosa Creek is located approximately 150 feet to the southeast and outside of the work area and no impacts on the creek will occur during construction and operation of the Project. No seasonal wetlands, ponds, or vernal pools occur onsite. In October 2018, confirmation from the U.S. Army Corps of Engineers was provided by San Francisco District North Branch Chief Holly Costa via email that no permit under Clean Water Action Section 404 will be required.

- d) Less than Significant Impact. The Project occurs within a rural residential neighborhood adjacent to residential and commercial land use and adjacent to the Santa Rosa Creek trail and Santa Rosa Creek. There are no known native wildlife nursery sites within the vicinity of the Project site. The Project site does not provide a migratory corridor to suitable wildlife habitat. The open space areas associated with the Santa Rosa Creek and trail to the east of the Project site provides wildlife corridors for deer, coyote, and other small mammals. Common wildlife species such as blacktailed deer, raccoon, opossum, striped skunk, and coyote likely use the Santa Rosa Creek trail for migration to suitable wildlife habitat within the vicinity. Construction and operation of the Project will create increased noise and human presence but will not obstruct or interfere with wildlife movement along the trail or within Santa Rosa Creek. Therefore, impacts related to wildlife movement corridors will be less than significant.
- e) Less than Significant Impact. Santa Rosa City Code Chapter 17-24 designates valley oaks (*Quercus lobata*) with diameters of 6 inches or greater as heritage trees. The 2018 Arborist Report identified 60 trees that will be subjected to Ordinance 17-24 (Appendix B) of which 58 will be removed. Two existing oak trees (No 24 and 25) located on the eastern side of the property will be retained and incorporated into the landscape plans. The Project will include the planting of 55 trees onsite to offset the loss of trees in compliance with the Tree Ordinance. The Project's Landscape Plan (Figure 3a and 3b) shows the location and species of trees to be planted as replacement trees. To protect trees No 24 and No 25, Mitigation Measure BIO-3, which requires compliance with Mitigation Measure AES-01 will provide protection of trees retained, shall be implemented to protect these two heritage trees during construction. Implementation of Mitigation Measure BIO-3 will reduce the potential to conflict with local policy protecting biological resources to a level less than significant.
- f) No Impact. There are no approved Habitat Conservation Plans or Natural Community Conservation Plans within the vicinity of the Project area. Therefore, the Project will not conflict with any adopted regional or state habitat conservation plan.

Mitigation Measures:

Mitigation Measure Bio-1: Preconstruction Nesting Bird Surveys

In order to avoid impacts to nesting birds, Project activities shall occur outside of the peak avian breeding season which runs from February 1 through September 1. If Project construction is necessary during the nesting season, a qualified bird biologist shall

conduct a survey for nesting birds within three days prior to commencement of construction-related activities. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. The buffer shall be a minimum width of 200 feet (500 feet for raptors), be delineated by temporary fencing, and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction shall occur within the fenced nest zone until the young have fledged. If identified by the bird biologist, reductions in the nest buffer may be appropriate.

Mitigation Measure Bio-2: Non-nesting Season Vegetation Removal

Vegetation removal shall occur between September 1 and February 1. If vegetation removal occurs outside that time, BIO-1 shall apply.

Mitigation Measure BIO-3: Comply with Mitigation Measure AES-01

V. Cultural Resources

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
5.	CULTURAL RESOURCES— Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
b)	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?				
c)	Disturb any human remains, including those interred outside of formal cemeteries				

Setting

A Historical Resources Report was prepared by Tom Origer and Associates (Origer & Associates) in 2017. The report provides the information to analyze cultural and historical resources for the Project and serves as the basis for conclusions in this document. Information contained in this section is derived from this report which is considered confidential.

This study included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 17-0624), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No historical resources were found within the study area. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2017-101S).

A Sacred Lands File and Native American Contact List was requested from the Native American Heritage Commission. A Sacred Lands File record search was completed by the NAHC for the Area of Potential Effect (APE) with negative results (Origer & Associates 2017). A list of Native American Contacts was provided on September 19, 2017 (Origer & Associates). Tribal representatives were contacted by Origer & Associates by mail on September 8, 2017 (Origer & Associates 2017).

An intensive field survey was conducted by archeologists Julia Franco and Shane Davis on September 5, 2017. The site was surveyed by walking in a zigzag pattern within corridors measuring approximately 15 meters (49.2 feet) wide. Because the parcel at 4200 is developed, no archeological survey was conducted on this parcel (Origer & Associates 2017).

Two hand-auger holes using a 4-inch diameter barrel auger were excavated to examine subsurface soil within the APE. Auger hole 1 was excavated to a depth of 50 centimeters (1.6 feet) and auger hole 2 was excavated to a depth of 88 centimeters (2.9 feet). Both auger holes were excavated to the point of obstruction. No archeological materials were observed (Origer & Associates 2017).

The Project site is located at 4224 Sonoma Highway in Santa Rosa. A house, two sheds, and non-native vegetation were observed within the portion of the study area. Non-native vegetation consists of fruit and nut trees. The residence is a single-story house with a complex roof shape. The house sits on a concrete perimeter foundation, has a mix of stucco and horizontal lapped cladding, boxed eaves, and composition shingle roof. The windows are a mix of fixed, double hung, and sliders which all appear to be original and wood framed. County records indicate that the house dates to 1948. The property owner stated that the west portion of the house is the original construction and dates to the 1920s, and the east portion of the house is an addition that dates to the 1940s (Origer & Associates 2017).

Two outbuildings or sheds occur on the site. Shed 1 is an equipment shed or storage. It is a front-gabled building on a rectangular plan with horizontal wood cladding and corrugated metal over wood shingle roofing. Shed 2 is a drying shed reportedly utilized for the walnut operation. It is a small, gable-front building on a rectangular plan with corrugated metal cladding and roofing. A flat-roofed cinderblock and concrete addition is found at the west elevation of the shed (Origer & Associates 2017.

Significance Criteria

When a project might affect an historical resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. The importance of a resource is measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852(a)) as listed below. A resource may be important if it meets any one of the criteria below, or if it is already listed on the California Register of Historical Resources or a local register of historical resources. An important historical resource is one which:

- 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- 2. Is associated with the lives of persons important to local, California, or national history.
- 3. Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values.
- 4. Has yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, eligibility for the California Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

The OHP advocates that all historical resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

Discussion

a) Less than Significant Impact. Based on research conducted by Tom Origer and Associates, the property at 4224 Sonoma Highway appears to be a rural residential complex with agricultural outbuildings associated with walnut production (Origer & Associates 2017). While the complex is associated with the theme of Sonoma County agriculture, the orchard no longer exists at the site. The extant feature related to walnut production, the drying shed, does not reflect the theme of itself. The complex meets California Register Criterion 1; however, it does not retain sufficient integrity to be eligible for inclusion on the California Register (Origer & Associates 2017). The complex is not likely associated with any people important to the Santa Rosa area, Sonoma County, or California's past; therefore, the buildings on the property will not be eligible for inclusion on the California Register under Criterion 2. The house is unlikely to be eligible for inclusion on the California Register under Criterion 3 as it is architecturally indistinct and has been subject to modifications. According to the cultural resource report there was no evidence that the property contains archaeological remains and the buildings are not eligible for inclusion on the California Register under Criterion 4 (Origer & Associates 2017).

County records indicate that a residence was built on the parcel at 4200 Sonoma Highway in 1947. The residence was subsequently altered and repurposed into a commercial property. Alterations include additions to all four elevations. Aerial photos indicate that the original roofline of the house is visible at the center of the building, however the original building is not visible from the ground. The property at 4200 Sonoma Highway is not likely associated with events or people important to the Santa Rosa area, Sonoma County, or California's past, therefore the buildings on the property will not be eligible for inclusion on the California Register under Criteria 1 or 2 (Origer & Associates 2017). It is unlikely to be eligible for inclusion on the California Register under Criterion 3 as the building is an amalgamation of nine residential and commercial constructions and does not reflect a style of either type of architecture (Origer & Associates 2017). The building does not have the potential to yield important data and is unlikely to be eligible for inclusion on the California Register under Criterion 4 (Origer & Associates 2017).

- b) Less than Significant Impact. According to the survey and research conducted by Origer & Associates in 2017, no archaeological resources have been identified as a result of records search and survey of the undeveloped portion of the Project area. Analysis of survey data has determined that no known or suspected CRHR-eligible archaeological resources are present (Origer & Associates 2017).
- c) Less than Significant with Mitigation Incorporation. Records search and survey investigations provided no evidence of human remains and none are expected to be present, but there is some potential for ground disturbing activities to disturb currently unknown human remains. Implementation of Mitigation Measure CUL-01, which includes standard measures imposed by the City of Santa Rosa and promulgated under Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5 pertaining to the discovery of human remains shall be implemented.

Mitigation Measures

Mitigation Measure CUL-01 In the event of unintended discovery of human remains, the following standard measures imposed by the City of Santa Rosa and promulgated under Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5 pertaining to the discovery of human remains shall be implemented:

- All work in the vicinity of the discovery will be halted until a qualified archeologist can
 evaluate the find(s) under Section 106 of the National Historic Preservation Act.
- The Sonoma County Coroner shall be contacted to determine that no investigation of the circumstances, manner or cause of death is required and to make recommendations as to the treatment and disposition of the human remains.
- If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours.
- The applicant shall retain a City-approved qualified archaeologist to provide adequate inspection, recommendations and retrieval, if appropriate.
- The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American and shall contact such descendant in accordance with state law.
- The applicant shall be responsible for ensuring that human remains and associated grave goods are reburied with appropriate dignity at a place and process suitable to the most likely descendent.

VI. Energy

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
6.	Energy— Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?				
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			\boxtimes	

Setting

Most of the energy consumed in Santa Rosa is produced from traditional sources and delivered to the city through established distribution networks. Pacific Gas and Electric Company (PG&E) provides electrical services and natural gas within the Urban Growth Boundary, and gasoline and other petroleum products are sold through private retailers throughout the city (City of Santa Rosa 2009).

New buildings constructed in California must comply with the standards contained in Title 20, Public Utilities and Energy, and Title 24, Building Standards Code, of the California Code of Regulations (CCR). These efficiency standards apply to new construction of both residential and nonresidential buildings, and both 20 CCR and 24 CCR regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process.

The 2016 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential Standards include improvements for attics, walls, water heating, and lighting

In 2010, the City adopted CALGreen Tier 1 standards which applies to all new buildings and to additions and alterations of residential and non-residential buildings. The Tier 1 standards exceed the basic level of requirements of the CALGreen Building Code. This program supports the City's efforts to reduce greenhouse gases to reach the local, regional, and state targets outlined in the City's Climate Action Plan.

The City adopted a Community Climate Action Plan (CCAP) in 2012 and a Municipal Climate Action Plan (MCAP) in 2013. The CCAP examines community-wide sources of GHG emissions and outlines strategies for reducing these emissions. The MCAP addresses greenhouse gas emissions from the City's municipal operations.

The City of Santa Rosa General Plan addresses energy use and efficiency in all elements by including goals and policies for improving energy efficiency and reducing waste. The General Plan seeks to reduce The General Plan seeks to reduce energy consumption through minimizing vehicle trips and approving land use patterns that support increased density in areas where there is infrastructure to support it, increased opportunities for transit, pedestrians, and bicycles, and through green building and land development conservation strategies.

Discussion

a, b) Less than Significant Impact. Project construction will occur for approximately 14 months and will consume energy through the operation of heavy off-road equipment, trucks, and worker vehicle traffic. Electricity will be used to power tools, lighting, and electric machinery. Operation of the self-storage facility and the 14 residences will consume electricity, water, and natural gas. Electricity and natural gas will be used for lighting, heating, and appliances.

The Project will be required to comply with the applicable measures identified in the CAP *New Construction Checklist* including policies related to energy efficiency as a standard condition of approval. Details on CAP compliance for construction and operation of the Project is provided in Section VII Greenhouse Gases. Compliance with the City of Santa Rosa CAP, including but not limited to compliance with the City's CalGreen Tier 1 Standards and California Energy requirements under Title 24 and installation of real-time energy monitors will ensure the Project will not result in wasteful, inefficient, or unnecessary consumption of energy during construction and operation of the Project.

The Project must comply with California requirements under Title 20 and Title 24 will require the Project to comply with state building energy requirements. These requirements are enforced during the City's permit approval and will reduce impacts on wasteful, inefficient, or unnecessary consumption of energy during operation of the Project. Therefore, impacts related to wasteful, unnecessary energy consumption and compliance with renewable or energy efficiency plans will be less than significant.

Mitigation Measures: None required.

VII. Geology and Soils

Issues (and Supporting Information Sources):			Potentially Significant Impact	Significant with Mitigation Incorporati on	Less Than Significant Impact	No Impact
7.	GEOLOGY AND SOILS— Would the project:					
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?: (Refer to Division of Mines and Geology Special Publication 42.)				
	ii)	Strong seismic ground shaking?			\boxtimes	
	iii)	Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv)	Landslides?				
b)	Res	sult in substantial soil erosion or the loss of topsoil?				
c)	Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?					
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?					
d)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					
f)		ectly or indirectly destroy a unique paleontological source or site or unique geologic features				

Setting:

A geotechnical study was completed in August 2018 by PRA Group Consulting Engineers (Appendix D). The subject site is situated in the northern part of the San Francisco Bay Area, in the Coastal Range Geologic Province of California. The Coastal Range landscape, especially east of San Francisco, is characterized by a series of rugged, subparallel, northwest-trending mountain ranges and intervening valleys. The site is located within an alluvial fan deposit of either Late Pleistocene or Holocene age (PRA Group 2018). The geotechnical study indicates that there are no mapped landslides at the Project site.

The City of Santa Rosa is located within the San Andreas Fault system, which is 44 miles wide and extends throughout much of the North Bay region. The nearest active fault to the Project site

is the Rodgers Creek Fault Zone, located approximately 1.4 miles to the east. The Project site is not located within the Alquist-Priolo Zone.

A major seismic event on one of the active faults near the City of Santa Rosa could result in violent to moderate ground shaking. Strong ground shaking will be expected from earthquakes generated by nearby faults including the Rodgers Creek Fault (1.4 miles East), Mayacama fault (8.3 miles North), San Andreas Fault (21.3 miles Southwest), and the West Napa fault (17.4 miles Southeast) (PRA Group 2018).

According to the City of Santa Rosa's General Plan Geologic and Seismic Hazards Map, the Project is located within an area that will be subjected to very violent shaking during an earthquake along the Rodgers Fault.

The Project site is relatively flat with no significant changes in slope with the exception of an approximate 10-foot reduction in elevation at the eastern portion of the Project site. Soils at the Project site are mapped as Yolo clay loam 0 to 5 percent slopes.

Field exploration at the site occurred in June 2018 and consisted of placement of six cone penetration tests (CPT) to a maximum depth of 45 feet below ground surface. Results of the tests are including in Appendix D.

Discussion

- a,i) Less than Significant Impact. The Project site is not located within the Alquist-Priolo Earthquake Fault Zone and no active faults occur within the Project site. The nearest active fault is the Rodgers Fault located approximately 1.4 miles to the east of the Project site. Because the site is not located within a known active fault, there is low risk of ground rupture as a result of an active fault and impacts will be less than significant.
- a,ii) Less than Significant Impact. The Project area is subject to seismic ground shaking in the event of an earthquake. The level of intensity of this shaking will be determined by the magnitude and location of an earthquake; the predominant earthquake will expect to be a magnitude 6.9 at a distance of approximately 7 kilometers (California Geological Survey 1997). The City of Santa Rosa General Plan Figure 12-3 shows that the Project is located within an area that will be subjected to very violent shaking in the event of an earthquake on the Rodgers Fault. The storage facility and residential housing will be designed and constructed in accordance with the seismic requirements of the California Building Code (Title 24) in effect at time of building permit issuance. The severity of ground shaking will not be expected to result in significant structural damage, and thus impacts to Project infrastructure in the event of strong seismic ground shaking will be less than significant.
- a,iii) Less than Significant Impact. Liquefaction is associated with fine-grained, loosely packed sands and gravels behave like liquid when subjected to ground shaking. According to the geotechnical report, the site had a low to moderate potential for liquefaction (PRA Group 2018). According to the General Plan, the Project is not located in an area known for liquefaction, subsidence, or lateral spreading. The risk of the Project resulting in substantial adverse effects related to ground failure is low.

- a,iv) Less than Significant Impact. Landslides generally occur on slopes steeper than 15 percent or in areas where geologic conditions or soils are prone to instability. The geotechnical study (PRA Group 2018) did not identify any mapped landslides at the Project site. The site is not located in Landslide Complex areas shown on Figure 12-3 of the General Plan. As such, impacts related to landslides will be less than significant.
- b) Less than Significant Impact with Mitigation Incorporation. Project construction will include clearing and grubbing of existing vegetation, grading and earthmoving activities that could expose site soils to erosive forces of heavy winds, rainfall, or runoff and could result in the loss of topsoil. During construction, erosion will be controlled through implementation of best management practices (BMPs) and adherence to the Storm Water Pollution Prevention Plan (SWPPP). Section X Hydrology and Water Quality provides details on SWPPP development and implementation of BMPs.

New development projects in the City of Santa Rosa that create or replace 10,000 square feet or more of impervious area are subject to the City's Standard Urban Stormwater Mitigation Plan (SUSMP) requirements. The City of Santa Rosa requires compliance with the LID Technical Design Manual. The Project will be required to comply with the SUSMP and LID Technical Manual as standard conditions of approval.

The Project will be constructed in compliance with the City's Grading and Erosion Control Ordinance, City Code Chapter 19-64 which requires detailed erosion control methods including minimizing soil exposure during rainy season, trapping sediment, using soil capture methods, and regular inspections to ensure erosion control measures are working properly. **Mitigation Measure GEO-01** which requires compliance with the City Code Chapter 10-64 and the preparation of an erosion control plan shall be implemented to reduce impacts related to soil erosion and loss of topsoil to less than significant.

- c) Less than Significant Impact. The Project is not located in an area known for liquefaction, subsidence, or lateral spreading. The Yolo series soils are considered well-drained and do not generally occur in areas of liquefaction, subsidence or lateral spreading. The City of Santa Rosa General Plan does not identify the Project area as having potential for liquefaction, subsidence, or lateral spreading. Therefore, impacts related to damage or injury resulting from liquefaction, subsidence, or lateral spreading will be less than significant.
- d) Less than Significant Impact. Expansive soils are generally clayey soils that swell when wetted and shrink when dried. Expansive soils located beneath structures can result in cracks in foundations, walls, and ceilings. The soils found within the Project area are Yolo clay loam. The Yolo series consists of moderately deep, well drained soils that formed in material that weathered from soft, calcareous shale and sandstone; Balcom clay loams have a moderate shrink-swell potential. The storage tank and appurtenances will be designed and constructed to account for the site-specific conditions as detailed in the geotechnical report, and therefore the risk to life or property will be less than significant.

- e) **No Impact**. The Project will not include the installation of septic tanks or alternative wastewater disposal systems. Therefore, there will be no impact.
- f) Less than Significant Impact. As described in Section V Cultural Resources, two auger holes were excavated during archeological field surveys at the Project site (Origer & Associates 2017). The results of the auger holes did not reveal evidence of archeological materials. Therefore, impacts related to archeological resources will be less than significant.

Mitigation Measures:

Mitigation Measure GEO-01: Prior to issuance of a grading permit, an erosion control plan along with grading and drainage plans shall be submitted to the Building Division of the City's Department of Planning and Economic Development. All earthwork, grading, trenching, backfilling, and compaction operations shall be conducted in accordance with the City of Santa Rosa's Grading and Erosion Control Ordinance Chapter 19-64 of the Santa Rosa Municipal Code). These plans shall detail erosion control measures such as site watering, sediment capture, equipment staging and laydown pad, and other erosion control measures to be implemented during construction activity on the project site.

VIII. Greenhouse Gas Emissions

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
8.	Greenhouse Gases—Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

<u>Setting</u>

GHGs are compounds in the Earth's atmosphere which play a critical role in determining temperature near the Earth's surface. Regulated GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). GHGs are commonly quantified in the equivalent mass of CO₂, denoted CO₂e, which takes into account the global warming potential (GWP) of each individual GHG compound. Based on the 2009 GHG inventory data, prepared by the CARB, California emitted 453 million metric tons (MMT) CO₂e including emissions resulting from imported electrical power in 2009 and 405 MMT CO₂e excluding emissions related to imported electrical power.

According to CARB, the potential impacts in California due to global climate change may include loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines; sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.

In September 2006, the Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, was signed into law. AB 32 requires that the State reduce its GHG emissions to 1990 levels by 2020. CARB established the 1990 target at 427 MMT CO₂e. Under AB 32, CARB has primary responsibility for promulgating regulations, programs, and enforcement mechanisms to achieve the GHG reduction target.

Discussion

- a & b) Less Than Significant Impact. The BAAQMD May 2017 CEQA Guidelines included GHG significance thresholds as follows:
 - Compliance with Qualified Greenhouse Gas Reduction Strategy OR
 - 1,100 MT of CO₂e/yr OR
 - 4.6 MT CO₂e /SP/yr (residents + employees)

The City adopted a Climate Action Plan (CAP) on June 5, 2012 and on August 6, 2013 they adopted the Municipal Climate Action Plan. The City developed this CAP to meet the requirements of the BAAQMD's criteria for a Qualified Greenhouse Gas Reduction Strategy. The Project will be subject to the applicable CAP requirements that are included as Appendix E of the CAP and identified on the Climate Action Plan Checklist submitted with the Project applications. To ensure new development projects are compliant with the City's CAP, a CAP *New Development Checklist* was developed. This checklist must be filled out for each new project, subject to discretionary review, to allow new development to find a less than significant impact for GHG emissions during the environmental review process.

The Project will not conflict with any plan adopted for the purposes of reducing emissions of greenhouse gases. The Project will comply with the State of California Tier 1 CALGreen requirements and the City's CAP as demonstrated by the CAP Checklist New Development Checklist, included as Appendix E. All mandatory requirements of the Santa Rosa's CAP New Development Checklist shall be implemented except where the item is not applicable or where a suitable substitution is provided.

The Project incorporates 36 of the measures contained the CAP *New Development Checklist*. These include the following:

- Policy 1.1.1 Comply with CALGreen Tier 1 Standards: The Project is designed to
 comply with State Energy requirements for Title 24, City of Santa Rosa's CALGreen
 requirements and CALGreen Tier 1 Standards in effect at time of permit submission.
 Such standards have been incorporated into building placement, site development,
 building design and landscaping.
- Policy 1.1.3 After 2020, all new development will utilize zero net electricity. Building
 permit applications are anticipated to be drawn prior to 2020 and will be in compliance
 with the California Building Code.
- Policy 1.3.1 Real time Energy Monitors: The Project will include energy monitors to track energy use.
- Policy 1.4.2- Comply with the City's Tree Preservation Ordinance (Santa Rosa Code Section 17-24.020). The Project will preserve trees under the City Ordinance to the

extent feasible. Trees that are removed will be replaced in compliance with the Ordinance.

- Policy 1.4.3 Provide public and private trees in compliance with the Zoning Code: The Landscape design is in compliance with the Santa Rosa Zoning Code, Santa Rosa Design Guidelines, and Water Efficient Landscape Ordinance.
- Policy 1.5 Install new sidewalks and paving with high solar reflectivity materials: All
 proposed new sidewalks, driveways, and parking areas will be paved with hard materials
 that contain either color or other enhancements to provide enhanced reflectivity.
- Policy 2.1.3 Pre plumb for solar thermal or PV systems: The residences will be constructed to adapt to solar therma or PV systems.
- Policy 3.1.2 Supports implementation of 2018 Bicycle and Pedestrian Master: The
 Project does support alternative modes of transit through installation of sidewalks that
 encourage a walkable community and the location within walking distance of public
 transit. The Project's location provides easy and reliable access to public transportation.
- Policy 3.2.1 Provide on-site services such as ATMs or dry cleaning to site users: The
 Project includes a storage facility and residential homes, but there are no facilities to
 house an ATM or dry cleaning. These facilities are within walking distance of the Project.
- Policy 3.2.2 Improve non-vehicular network to promote walking, biking: The Project is
 designed to promote walking and biking throughout the subdivision. There is a multi-use
 path to the east of the Project site. There are bus stops located on Mission Boulevard to
 the north of the Project site that provide access to travel eastbound and westbound.
- Policy 3.2.3 Support mixed use, higher density development near services: The Project includes a commercial storage facility and residential housing and is in compliance with this policy.
- **Policy 3.3.1** Provide affordable housing near transit: The Project does not provide affordable housing. The site is located less than ¼ mile from Mission Boulevard where there are bus stops and access to transit.
- **Policy 3.5.1** Unbundle parking from property cost: The project is in compliance with the Parking Ordinance, Zoning Code Table 3-4.
- Policy 3.6.1 Install calming features to improve ped/bike experience: The connection to the new sidewalk and Sonoma Highway are designed to improve the pedestrian and bicycle experience. Additionally, the Santa Rosa Creek and trail occur to the east of the site.
- Policy 4.1.1 Implement the Bicycle & Pedestrian Master Plan: The Project includes construction of bike lanes and sidewalks along Sonoma Highway supporting the City's Bicycle & Pedestrian Master Plan 2018 Update.

- Policy 4.1.2 Install bicycle parking consistent with regulations: Zoning Code Chapter 20-36 requires bicycle parking for commercial and attached housing. The Project provides garages that will be available to house bicycles and will make bicycle parking available for self-storage facility staff in the office or elsewhere.
- Policy 4.1.3 Provide bicycle safety training to residents and employees: The selfstorage facility will provide information pertaining to bicycle safety training to staff.
- Policy 4.2.2 Provide safe spaces to wait for bus arrival: There are bus stops within ¼ miles of the site (at Mission Boulevard) with sidewalks to serve waiting patrons and residents.
- **Policy 4.3.2** Provide parking for car sharing operations: The project is in compliance with the City's parking requirements.
- Policy 4.3.3 Consider expanding employee programs promoting transit use. Employees will be encouraged to use public transit
- Policy 4.3.4 Provide awards for employee use of alternative commute options: This
 policy does not apply to residential subdivisions or to small employers. There are no large
 employers at the Project.
- Policy 4.3.5 Require new employers of 50+ provide subsidized transit passes: Not applicable.
- Policy 4.3.7 –Provide space for additional park and ride lots: The Project is within walking distance to bus stops and public transportation.
- Policy 4.5.1 Install facilities for residents that promote telecommuting: All residences
 will have internet access available. Storage facility staff will need to be onsite
- Policy 5.1.2 Install electric vehicle charging equipment: Units with garages will have electric charging equipment in the garages that can be used to charge vehicles.
- **Policy 5.2.1** Provide alternative fuels at new re-fueling stations: The Project is not a refueling station Project, therefore, this policy does not apply.
- Policy 6.1.3 Increase diversion of construction waste: The contractor will divert all
 possible construction waste and prepare a Construction Waste Management Plan for
 recycling and disposal of construction wastes. The Project will comply with all
 Construction Waste Management requirements.
- Policy 7.1.1 Reduce potable water for outdoor landscaping: The Project will be compliant with the City of Santa Rosa's Water Efficient Landscape Ordinance.

- Policy 7.1.3 Install Real time water meters: The City provides the water meters. The
 City of Santa Rosa has data logging equipment that can collect real time data from Cityissued water meters.
- Policy 7.3.2 Install dual plumbing in areas of future recycled water: Dual plumbing is not
 proposed because there is no current opportunity to use recycled water for residential
 purposes.
- Policy 8.1.3 Establish community gardens and urban farms: The Project is a commercial storage facility and multi- family residential development.
- **Policy 9.1.2** Provide outdoor outlets for charging lawn equipment: The Project will have outdoor outlets to allow for accessible charging locations.
- Policy 9.1.3 Install low water use landscapes: Project will be compliant with the City of Santa Rosa's Water Efficient Landscape Ordinance.
- Policy 9.2.1 Minimize construction equipment idling time to 5 minutes or less: The
 developer will condition contractor agreements to limit construction equipment idling time
 to 5 minutes or less, consistent with the City's Standard Measures for Air Quality. This
 direction will be included under the heading of General Notes on plan sets submitted for
 building or grading permits.
- Policy 9.2.2 Maintain construction equipment per manufacturer's specifications: The
 developer will condition contractor agreements to require that all equipment used at the
 site be maintained in accordance with the manufacturer's instructions. This direction will
 be included under the heading of General Notes on plan sets submitted for building or
 grading permits.
- Policy 9.2.3 Limit Green House Gas (GHG) construction equipment by using electrified
 equipment or alternate fuel: The developer will include provisions in contractor
 agreements encouraging the use of electrified equipment or equipment using alternative
 fuels.

IX. Hazards and Hazardous Materials

Issı	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
9.	HAZARDS AND HAZARDOUS MATERIALS Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				

Setting:

Regulations governing the use, management, handling, transportation and disposal of hazardous waste and materials are administered by Federal, State and local governmental agencies. The California Department of Toxic Substances Control (DTSC) defines a hazardous material as: "a substance or combination of substances that, because of its quantity, concentration or physical, chemical, or infectious characteristics, may either: 1) cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or 2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of, or otherwise managed.

DTSC, California Environmental Protection Agency, and California Water Resources Control Board (SWRCB) maintain databases of sites that are subject to mandatory or voluntary clean up, contain hazardous, or are permitted to use hazardous waste.

A search of the Project site and vicinity using the DTSC EnviroStor database and the SWRCB GeoTracker database was conducted in April 2018 to identify any known spills or cleanup sites in close proximity to the Project site. There were no hazardous materials spills, cleanup or permitted users identified at the Project site or within one mile of the site (EnviroStor 2018; Geotracker 2018).

A hazardous materials report was prepared by Terracon Consultants in 2018 (Terracon 2018; Appendix F). A hazardous materials survey was conducted at the 4224 Sonoma Highway property and included the interior, exterior, and roofing materials associated with the main house and two out structures (Terracon 2018). The buildings were testing for asbestos containing materials (ACM) and lead-containing paint. The structures were visually inspected using methods presented in the federal Asbestos Hazard Emergency Response Act (AHERA) regulations (40 CFR, Part 763) as a guideline. Bulk samples were collected and analyzed (Terracon 2018). ACM was identified in four samples and one sample that was not tested was assumed to be ACM (Terracon 2018). Eight samples were reported to have laboratory detection limits for lead (Terracon 2018).

Discussion

a, b) Less than Significant Impact with Mitigation Incorporation. In the short term, construction and demolition activities will require the use of certain materials such as fuels, oils, solvents, and glues that in large quantities could pose a potential hazard to the public or environment if improperly used or inadvertently released. Inadvertent release or foreseeable upset of large quantities of these materials into the environment could adversely impact soil, surface waters, or groundwater quality. The contractor will be required to follow manufacturer's recommendations on transportation of, use, storage, and disposal of chemical products used in construction. This direction will be included under the heading of General Notes on plan sets submitted for building or grading permits. In the event that construction requires the storage of potentially hazardous materials, a declaration form will be filed with the Fire Marshall's office and a hazardous materials storage materials permit will be obtained. If the storage of hazardous materials occurs at the site, a Hazardous Materials Inventory Statement will be submitted to the City of Santa Rosa Fire Department for review.

The Hazardous Materials Report identified the potential for ACM and lead-containing paint. Asbestos was detected in four building materials collected and one building material was not sample but assumed to be ACM (Terracon 2018). If not properly handled during demolition, ACM could expose workers to asbestos. Implementation of **Mitigation Measure HAZ-01** which will require the use of a licensed asbestos abatement contractor and training for workers onsite during removal of ACM will reduce impacts to less than significant.

Lead was detected above laboratory detection limits in eight materials tested (Terracon 2018). Demolition of existing structures has the potential to expose workers to lead-containing paint. Implementation of **Mitigation Measure HAZ-02** which will require

implementation of the OSHA Lead in Construction Standard during demolition will reduce impacts to less than significant.

Local, state and federal regulations for the storage and use of hazardous materials will prevent the storage of hazardous materials at the storage facility and residences. The storage facility and residences will not allow the storage of potentially hazardous materials in their respective lease agreements.

- c) **No Impact.** There are no schools within ¼ miles of the Project area. The closest schools are Douglas Whited Elementary School located at 4995 Sonoma Highway approximately 1.1 miles to the east and Herbert Slater Middle School located at 3500 Sonoma Avenue, approximately 1.2 miles to the south of the Project area. Because there are no schools located within ¼ mile of the Project, there will be no impact related to the emission of hazards, hazardous emissions, handling of hazardous or acutely hazardous emissions.
- d) **No Impact.** The Project is located in a residential neighborhood where hazardous materials sites will be unlikely. Regulatory databases, provided by numerous federal, state, and local agencies, included the State Water Resources Control Board's (SWRCB) Geotracker database for leaking underground storage tanks, and the State of California's Cortese list maintained by the DTSC. The Cortese list is a compilation of information from various sources listing potential and confirmed hazardous waste and hazardous substances sites in California. Review of the regulatory databases did not identify any potential hazardous materials site within vicinity of the Project site. The Project site is not listed on the Cortese list pursuant 65962.5 and there are no listed sites within 5 miles of the Project in either the SWRCB or DSTC databases.
- e) **No Impact**. The Project is not located within two miles of an airport or airstrip. The Sonoma County Airport is located approximately 12 miles to the north of the Project area.
- f) No Impact. Construction of the new multi-family residences will include access to emergency vehicles via Sonoma Highway and Streamside Drive. The Project site is located on Sonoma Highway and has emergency access onto the site. Site development will not interfere with any adopted emergency plan or evacuation plan. The site development plan includes emergency access to the site including onsite access to accommodate emergency vehicles with adequate roadway width and turning radii.

The City has adopted a Local Hazard Mitigation Plan (October 2016) that identifies the City's capabilities, resources, information, strategies for risk reduction, and critical facilities to reduce vulnerability during disasters (City of Santa Rosa 2016). The Project's components do not conflict or interfere with the measures identified in the plan.

g) Less than Significant Impact with Mitigation Incorporation. The risk of wildfire exists within the Project area and within the vicinity owing to the climate and vegetation communities in Santa Rosa and Sonoma County. Construction of the Project will use machinery and fuels that could increase the likelihood of fire if used improperly. The Project site is located in a low-Fire Hazard area according to California Department of

Forestry and Fire Protection (Cal Fire 2008). All vegetation within the immediate work area will be removed and all fuels used onsite will be used and stored to manufacturers recommendations reducing the risk of these fuels unintentionally starting a fire.

Mitigation Measure HAZ-03 will require the preparation of a site safety plan that will outline protocols that will be followed in the event of an unintended fire is started during construction. Because vegetation will be limited and fuels will be safely used and stored on site, and a site safety plan will be developed, the risk of loss, injury or death involving wildland fires will be less than significant.

Mitigation Measures:

HAZ-01 Asbestos Containing Material: Demolition of the existing structures shall be done by a licensed and certified asbestos abatement contractor. All workers shall be properly trained for asbestos removal work.

HAZ-02 Lead Containing Paint: Demolition of the existing structures shall be done following OSHA Lead in Construction Standard. The OSHA specified method of compliance includes respiratory protection, protective clothing and equipment, housekeeping, hygiene facilities, medical surveillance, and training, among other requirements.

HAZ-03 Site Safety Plan: A Site Safety Plan will be prepared that will outline protocols that will be followed in the event of an unintended fire during construction. The plan will include, but not limited to maps and directions to local hospitals, evacuation routes, and methods to reduce the potential for fire at the site.

X. Hydrology and Water Quality

Issu	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
	HYDROLOGY AND WATER QUALITY— Would the project:				
a)	Violate any water quality standards or waste discharge requirement or otherwise degrade surface or groundwater quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion of siltation on- or off-site?				
	i) result in a substantial erosion or siltation on- or off-site;				
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite				
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv) impede or redirect flood flows?			\boxtimes	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

<u>Setting</u>

The City of Santa Rosa is located within the Santa Rosa Creek watershed. The headwaters of Santa Rosa Creek is in the Mayacamas Mountains and ultimately drains to the Laguna de Santa Rosa and then to the Russian River. There are no ponds, streams, or other water features within the Project site.

Currently, the site is mostly vegetated and stormwater is typically absorbed and naturally retained onsite. The site is generally flat with a 10 percent slope reduction at the eastern end of the site. Santa Rosa Creek occurs approximately 150 feet to the east of the Project site. There are no

surface waters or other aquatic features on site. The property at 4200 Sonoma Highway is fully developed and no construction will occur on this parcel.

Because the site will include disturbance to greater than one acre, the Project is subject to the Construction General Permit for Stormwater during Construction (2009-0009-DWQ). The Construction General Permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of site-specific best management practices (BMPs) to capture construction-related sediment from leaving the site.

Development projects in the City of Santa Rosa that create 10,000 square feet or more of impervious surface area are subject to the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements. The City requires compliance with the Low Impact Development (LID) Technical Design Manual into site design. LID requirements include draining impervious surfaces to landscaped areas and using bioretention features to capture runoff and encourage infiltration on site. Compliance with the LID Manual is a standard condition of approval.

Discussion

a) Less than Significant with Mitigation Incorporation. The project will involve clearing, grubbing, excavation and grading of the 2.68-acre site located at 4224 Sonoma Highway. Construction of the storage facility and the multi-family residential structures will introduce impervious surfaces. Construction and operation of the Project has the potential to result in increased stormwater runoff that could degrade water quality. Stormwater runoff could contain sediment as well as oils, grease, and concrete that if not managed, could be discharged into surface waters.

To reduce the potential for construction activities to impact water quality, **Mitigation Measure HYDRO-01** which requires the preparation of a SWPPP shall be implemented. Because the Project is greater than one acre in size, a Notice of Intent will be submitted to the North Coast Regional Water Quality Control Board for compliance under the Construction General Permit (Order 2009-0009 DWQ) and a SWPPP will be prepared. The SWPPP will identify site-specific BMPs including but not limited to straw wattles, silt fencing, and graveled entrances. Implementation of Mitigation Measures HYDRO-01 will reduce water quality impacts during construction to less than significant.

During operation, stormwater runoff could degrade water quality Development of the site will include permanent stormwater quality features. Stormwater will be directed to a series of landscaped bioretention areas that capture and infiltrate stormwater in the designed storm event. The permanent stormwater features will be designed to the City's LID Technical Design Manual as a standard condition of approval. Compliance with the LID Manual will reduce potential stormwater discharges during operation and impacts on water quality to less than significant. Therefore, impacts.

b, e) Less than Significant Impact. Project construction will include excavation that is not expected to reach groundwater levels that will necessitate dewatering activities. The existing on-site well will be abandoned in accordance with permit from the County of

Sonoma. Groundwater will not be used for dust control or otherwise on the Project during construction and will not be used during operations. Since groundwater will not be used during construction or operation, there will be no extraction or depletion of groundwater supplies will occur as a result of the Project.

- c i-iv) Less than Significant Impact. The Project will alter the existing drainage patterns onsite and result in an increase of impervious surface; however, the Project will not result in an alteration of a stream or river or result in flooding. The site is relatively flat with a 10 percent rise at the eastern portion of the site. Drainage patterns currently direct flows to the west. The Project will implement the City's LID Technical Manual as a standard condition of approval and install permanent stormwater quality BMPs including bioretention areas that will capture stormwater and discourage substantial erosion and sedimentation off-site. Installation of the bioretention areas will satisfy volume, capture and stormwater treatment requirements and therefore the potential for offsite erosion and sedimentation impacts will be less than significant.
- d) Less than Significant Impact. The Project site is not located in a 100-year flood zone and the Project does not involve placement of structures within the 100-year flood zone and will not impede or redirect flood flows within the 100-year flood zone. The Federal Emergency Management Agency (FEMA) Floodplain maps show the site located within an Area of Minimal Flood Hazard Zone X (FEMA 2019). City of Santa Rosa General Plan Figure 12-4 does not show the site as occurring within either the 100 foot or 500-foot flood zone. The Project will have no impacts relating to impeding or redirecting floodflows, and there will be no impact related to placing housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map.

The Project site is located at an approximate elevation of 225.5 NAVD88 and not located within an inundation zone for a levee or dam and will therefore not expose people or structures to flooding as a result of failure of a levee or dam. The Project site is not located in a 100-year flood zone, and there will be no structures or homes placed within a 100-year flood zone. The City's General Plan does not show the Project site as being within the 100-year or 500-year flood zone. Therefore, there will be no impact related to exposing people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

The Project is not located within the tsunami zone according to the Sonoma County Tsunami Inundation Maps (California Emergency Management Agency, 2009). If a tsunami were to occur along the Sonoma coast, the Project site is significantly inland that no impacts will occur as a result of a tsunami.

Seiches occur in a closed body of water such as a large lake or reservoir. The closest large water body is Lake Ralphine, approximately ½ mile to the southeast of the Project site. Because of the distance from Lake Ralphine, there is low probability of impacts on the Project site in the event of a seiche. Similarly, the dam at Lake Ralphine is located on

the southwestern side of the lake. There is a 40 foot rise in elevation along the western bank of the lake that will direct flood flows to the east and away from the Project site. In the event of dam failure, flows will be downgradient from the Project site and the risk of loss, injury, or death at the Project site is low. The City's General Plan Figure 12-4 does not show the Project area as being within a dam inundation zone.

There are no hillsides or mountainous areas adjacent to the Project site that will be subject to mudflows.

Mitigation Measures:

Mitigation Measure Hydro -01: A Notice of Intent and fees will be submitted to the Regional Water Quality Control Board's Stormwater Multiple Application and Reporting Tracking System for authorization under the Construction General Permit (Order 2009-0009-DWQ). The applicant shall prepare and implement a SWPPP prior to construction. The SWPPP shall address erosion and sediment controls, proper storage of fuels, identification of site-specific BMPs, and use and cleanup of hazardous materials. During construction a monitoring report shall be conducted weekly during dry conditions and three times a day during storms that produce more than 0.50 inch of precipitation.

XI. Land Use and Planning

Issues (and Supporting Information Sources):		Potentially Significant Impact	Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
11.	LAND USE AND LAND USE PLANNING— Would the project:				
a)	Physically divide an established community?				\boxtimes
b)	Cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

Setting:

The Project is located is located in the City of Santa Rosa, Sonoma County along Sonoma Highway. The site is currently occupied by a single-family home and with various outbuildings. Historical land use at the site includes walnut orchard but the site has not been in production for many years. No evidence of an orchard currently exists on site. The City of Santa Rosa General Plan identifies this property as Retail and Commercial Services. The zoning designation for the site is RR B6 20 and Land Use is designated as RR 20, meaning the density allows one dwelling unit for every 20 acres of land. Properties to the south include residential homes with General Plan Designations of Medium Density Residential (8-18 units per acre). Properties to the north are designated as Retail and Commercial Services. Property to the east is designated as Low Density Residential (2-8 units per acre).

The site is being annexed into the City of Santa Rosa through Sonoma County LAFCO. LAFCO's were created by state law in 1963 to encourage the orderly formation of local government agencies, to preserve agricultural and open space land, and to discourage urban sprawl. Sonoma LAFCO has jurisdiction over changes in local government organization occurring within Sonoma County. Prezoning is one of the applications for the Project. The site will be prezoned to be consistent with the General Plan land use designation. The General Plan land use designation is Retail & Business Services, and the site will be pre-zoned to General Commercial. The General Commercial zoning district is applied to areas appropriate for a range of retail and service land uses that primarily serve residents and businesses throughout the City, including shops, personal and business services, and restaurants. Residential uses may also be accommodated as part of mixed-use projects, and independent residential developments. The CG zoning district is consistent with the Retail and Business Services land use classification of the General Plan.

<u>Discussion</u>

a) **No Impact**. The Project involves the demolition of an existing single-family home and construction of a four story storage facility plus office and two multi-family residential

structures comprised of 14 residential units which each include covered parking for one car. Construction and operation of the Project occur in an area that includes residential and commercial land uses similar to those proposed by the Project. The Project is consistent with the land use within the vicinity of the Project and will not physically divide an established community and there will be no impact.

b) Less than Significant Impact. The subject parcels (4200 & 4224 Sonoma Highway) will be prezoned into the CG (General Commercial) zoning district, which is consistent with the City's General Plan land use designation of Retail & Business Services. Once prezoned, both properties will be annexed into the City of Santa Rosa city limits by the LAFCO. Therefore, the Project will be consistent with LUL-A-2 (Annex unincorporated land adjacent to city limits and within the Urban Growth Boundary).

The Project is not located in a Special Purpose Zoning District.

The Project location is not located in the Coastal Zone and there are no specific plans that apply to the Project area.

The Project site is not located within a habitat conservation plan or priority conservation area, and all tree removal will be incompliance with the City's Tree Ordinance, City Code Chapter 17-24.

The project supports General Plan Policy OSC-B-2, which requires that alteration to slopes greater than 10 percent be minimized to the extent practicable and OSC-B-5, which requires a Hillside Development Permit for all new development and land subdivision on slopes greater than 10 percent. As described in Section I Aesthetics, the project is consistent with Hillside Development Standards (Section 20-32.020 B), and has demonstrated compliance for stormwater retention requirements for construction and operation, and is conditioned as such as a standard condition of approval. Because the Project will comply with the City of Santa Rosa ordinances and standard conditions approval, impacts will be less than significant.

Mitigation Measures: None required.

XII. Mineral Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
12.	MINERAL RESOURCES—Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

Setting

According to the City of Santa Rosa General Plan and the California Department of Conservation, there are no mineral resources within the vicinity of the Project. There are no active mines within the vicinity of the Project (California Department of Conservation 2019).

Discussion

a,b) No Impact. The Project area does not contain known mineral resources of value and is not an oil or gas-producing resource areas according to the California Department of Conservation California Geologic Survey (2019). The Project involves construction of a self-storage facility and multi-family residences and will not result in the loss of availability of known mineral resources, including mineral resources designated as locally important. Therefore, there will be no impacts on a known mineral resource that will be of value to the region or and residents of the state; and there will be no loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, there will be no impact on mineral resources.

Mitigation Measures: None required.

XIII. Noise

Issı	Issues (and Supporting Information Sources):		Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
13.	NOISE—Would the project:				
a)	Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?				
b)	Generation of excessive groundbourne vibration or groundborne noise levels?				
c)	For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?				

Setting

General Noise Information

The General Plan defines noise as any sound that is undesirable because it interferes with speech and hearing or is intense enough to damage hearing or is otherwise annoying. Noise is simply, unwanted sound (City of Santa Rosa 2009). Certain frequencies are given more "weight" during assessment because human hearing is not equally sensitive to all frequencies of sound. The A-weighted decibel (dBA) scale corresponds to the sensitivity range for human hearing. Noise levels capable of being heard by humans are measured in dBA. A noise level change of 3 dBA or less is barely perceptible to average human hearing. However, a 5 dBA change in noise level is clearly noticeable. A 10-dBA change is perceived as a doubling or halving of noise loudness, while a 20 dBA change is considered a "dramatic change" in loudness. Table XII-1 provides typical instantaneous noise levels of common activities in dBA.

Table XII-1

Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Concert
Jet Fly-over at 1,000 feet	100	
Gas Lawn Mower at 3 feet	90	
Diesel Truck at 50 feet, at 50 miles per hour (mph)	80	Food Blender or Garbage Disposal at 3 feet
Noisy Urban Area,	70	Vacuum Cleaner at 10 feet

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Daytime Gas Lawn Mower at 100 feet		
Commercial Area	60	Normal Speech at 2 feet
Heavy Traffic at 300 feet	60	Normal Speech at 3 feet
Quiet Urban Daytime	50	Large Business Office, Dishwasher in Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room
Quiet Gizaii	.0	(Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night
	10	Broadcast/Recording Studio (background level)
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation 1998

An individual's sound exposure is a value based on a measurement of the noise that the individual experiences over a specified time interval. A sound level is a measurement of noise that occurs during a specified period of time. However, noise impact evaluations under CEQA are based on the project-related increases to the existing community noise levels.

A community noise environment varies continuously over time with respect to the contributing sources. Within a community, ambient noise levels gradually change throughout a typical day, and the changes can often be correlated to the increase and decrease of transportation noise or to the daytime/nighttime operation of stationary mechanical equipment.

In addition to sound, construction activities also have the potential to create ground vibrations, depending on the kind of equipment and operations involved, and the distances between the construction activities and the nearest sensitive receptors. The effects of groundborne vibrations generated from construction activities are typically imperceptible to most people located outside the immediate proximity of the construction activities. However, high-magnitude vibrations can result in damage to nearby structures within the immediate vicinity of the source.

Existing Ambient Noise Level

The Project will be located within a commercial and residential neighborhood in Santa Rosa, California. The Project is located adjacent to a single-family residential community, a hardware and lumber store, and Sonoma Highway. The current ambient noise environment is predominately associated with noise from Sonoma Highway and the adjacent hardware and lumber store. The Santa Rosa General Plan shows an acceptable noise exposure level of 60-65 Ldn dBA for residential communities, and 70-75 Ldn dBA for commercial and industrial use.

Arcadis measured ambient noise at the Project site on May 29 through May 31, 2018 (Appendix G). The study consisted of two (2) Quest SoundPro sound level meters placed within the property boundaries that collected sound data for a continuous 48 hours with slow integrating intervals of one minute. Each meter was calibrated directly prior to use and are certified to be in compliance with American National Standards Institute specifications. One meter was placed at the northeastern property boundary adjacent to the lumber and hardware store, and one meter was placed at the southwestern property boundary adjacent to the residential community. The results were of the ambient noise measurements were analyzed by noise and acoustical specialist Chris Hulik and are shown in **Table XII-2**.

Table XII-2

Results of Ambient Noise Survey

Monitoring Location	Date	24-Hr Leq dBA	Ldn dBA
Northeastern	May 29-30	48.7	55.1
	May 30-31	48.8	55.2
Southwestern	May 29-30	45.7	52.1
	May 30-31	42.7	49.1

Discussion

a) Less than Significant Impact: Construction during the Project is intended to last for approximately 14 to 16 months, with work planned on Monday through Friday from 7:00AM to 7:00PM, Saturdays from 8:00AM to 5:00PM per City requirements. No work will occur on Sundays and holidays. While temporary, the construction phases may present a significant noise impact at the adjacent residential neighborhood. Table XII-3 shows sound levels associated with typical construction equipment.

Table XII-3

Typical Construction Equipment Noise Levels

Equipment	Noise Level (dBA) at 50 feet
Backhoe	80
Concrete mixer	85
Pump truck	82
Crane, Mobile	85
Dozer	85
Excavator	85
Generator	82
Grader	85
Man lift	85
Loader	80
Paver	85
Roller	85
Scraper	85
Trucks	80-84

Construction has the potential to increase noise levels above ambient levels identified during the noise measurements taken in 2018. Construction is transient in nature, with equipment type and usage percentages varying from day to day. The increase could be significant in that it could potentially, and temporarily, raise the ambient sound level at the adjacent residential neighborhood by 5 Ldn dBA. Standard conditions of approval to reduce this impact will require that the Project conform to the daytime construction hours, provide a mechanism to address any complaints regarding construction noise, require construction equipment to have properly maintained sound-control devices and muffled exhaust systems, and require that any stationary equipment comply with the Santa Rosa noise regulations. Compliance with the City's standard conditions of approval for noise would reduce construction related noise impacts to less than significant.

Operation of the Project is not expected to increase noise levels above ambient levels. Pursuant to Figure 12-2 of the General Plan, the Project will be located within the 65-70 dBA noise contour, which is within acceptable levels established by the General Plan for the proposed self-storage facility and multi-family residential use. The City's Noise Ordinance identifies a conditionally acceptable exposure level up to 70 dB. Therefore, the proposed project will be sited in a noise environment that is consistent with the acceptable noise levels for commercial businesses and multi-family residential use under both the General Plan and the Noise Ordinance. The new self-storage facility and multi-

family residences will be consistent with the established standards and potential impacts will be less than significant.

b) Less than Significant Impact.

Construction Impacts: The construction of the Project will include the use of heavy equipment that will generate ground-borne vibrations. Possible sources of vibration may include pile driving, jackhammers, excavators, dump trucks, backhoes, and other grading and earth moving equipment.

According to the Federal Transit Administration (FTA) guidelines, a vibration level of 65 VdB is the threshold of perceptibility for humans. For a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (FTA 1995). The vibration calculations are based on the FTA published vibration levels provided in Table XII-4.

Table XII-4

Vibration Source Levels for Typical Construction Equipment

Equipment	Vibration Level (VdB) at 25 feet
Large bulldozer	87
Caisson drilling	87
Loaded trucks	86
Jackhammer	79
Small bulldozer	58

Residential areas adjacent to the Project will be exposed to vibration during Project construction. Table XII-5 provides the approximate vibration velocity level of typical construction equipment in dB (VdB). Construction equipment will be operated within 25 feet of the closest residence's property lines, although the actual residences are removed at least 25 feet from the area where heavy equipment will be used. For a large bulldozer, the vibration level at 50 feet is approximately 44 VdB, which is less than the FTA 80 VdB threshold for infrequent events at residences and buildings where people normally sleep (FTA 2011). For loaded trucks at 50 feet, the vibration level is approximately 43 VdB, which also is under the threshold (FTA 2011).

Table XII-5

Vibration Source Levels for Typical Construction Equipment

Equipment	Vibration Level (VdB) at 25 feet	Vibration Level (VdB) at 50 feet
Large bulldozer	87	44
Caisson drilling	87	44
Loaded trucks	86	43
Small bulldozer	58	29

Source: FTA 2011

No Impact. The Project is not located within an airport land use plan, nor is it within two miles of a public airport or public use airport. The Sonoma County Airport is 13 miles north of the Project site. Therefore, construction of the Project will not expose workers and operation will not expose residents or customers to excessive noise levels attributable to a public airport or public use airport, and there will be no impact.

Mitigation Measures: None required.

XIV. Population and Housing

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
14.	POPULATION AND HOUSING— Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

<u>Setting</u>

According to General Plan Figure 2-1, the Project site is located within the City of Santa Rosa Urban Growth Boundary (UGB). According to the 2010 census, the population in the City of Santa Rosa was 167,834. Accordingly, to the U.S. Census Bureau, the population estimate for the City in July 2017 in the City of Santa Rosa was 175,269. This represents a 4.4 percent increase in population since the 2010 Census was published. The City's General Plan estimates that population within the City's UGB will be 237,000 by 2035 as shown in Table 2-2 in the General Plan.

According to U.S Census Bureau, Santa Rosa's housing supply increased approximately 18 percent from 2000 to 2013. The General Plan Table 2-2 identifies 71,070 housing units in 2007 and an additional 25,225 will be constructed at buildout by 2035. The Project supports the identified housing need in the General Plan.

Discussion:

a) Less than Significant Impact. The Project site is currently contains a single-family home but is currently unoccupied. The parcel at 4200 Sonoma Highway does not contain any dwellings and no construction will occur on this parcel. The Project will involve construction of two multi-family structures containing 14 separate dwelling units. The Project will increase the number of residential dwellings but is not expected to increase the population beyond unplanned levels identified in the General Plan. As described above, the General Plan identifies the need for additional dwellings to meet the projected population increase. Additionally, because of the loss of dwellings during the Tubbs Fire, the need for additional residential dwellings has increased since the General Plan was published in 2009.

The workforce necessary to construct the new facilities is anticipated to be derived from the regional area and workers will commute to the Project site on a daily basis. However, because of the current strain on the construction workforce in the area resulting from the post-Tubbs Fire rebuild, workers could be derived from outside of the region. Workers could temporarily relocate to the Santa Rosa area during construction of the Project. However, because of the small size and short duration of the Project, it is not expected that workers will result in an substantial increase beyond planned population estimates identified in the General Plan. Minimal new personnel will be hired to operate the new storage facility. Therefore, neither construction nor operation of the Project will result in any population growth in the area requiring the construction of housing.

No Impact. The Project involves demolition of a single-family home and construction of two multi-family structures with 14 new residential dwellings. The existing single-family home is unoccupied. Therefore, implementation of the Project will not displace existing housing or people and will not necessitate construction of replacement housing elsewhere. Therefore, the Project will have no impacts on population and housing with regards to displacing people or housing.

Mitigation Measures: None required.

XV. Public Services

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	
15.	PUE	BLIC SERVICES— Would the project:				
a)	asso alter physicons envi acce perfe	ult in substantial adverse physical impacts ociated with the provision of new or physically red governmental facilities, need for new or sically altered governmental facilities, the struction of which could cause significant ironmental impacts, in order to maintain eptable service ratios, response times, or other ormance objectives for any of the following public rices:				
	i)	Fire protection?			\boxtimes	
	ii)	Police protection?			\boxtimes	
	iii)	Schools?			\boxtimes	
	iv)	Parks?			\boxtimes	
	v)	Other public facilities?			\boxtimes	

Setting

Fire protection to the Project site is provided by Santa Rosa Fire Department Stations No. 1 through No. 11. The closest fire station is Santa Rosa Fire Department, Rincon Valley Area Fire Station No. 6, located approximately one mile from the Project site.

Police protection is provided by the City of Santa Rosa Police Department, Beat 1 through Beat 9. The Project site is served by Beat 6 which includes the southeast portion of Santa Rosa and is bordered by Santa Rosa Creek to the north. The police department is located at 965 Sonoma Avenue, approximately 2.7 miles from the Project site.

The Project site is located within Rincon Valley Union Elementary School District and Santa Rosa City High School District. Douglas Whited Elementary School, Brush Creek Montessori School, Madrone Elementary School, Sequoia Elementary School, Rincon Valley Middle School, Herbert Slater Middle School, Village Elementary School, Spring Creek Elementary School, Merryhill Preschool, Montgomery High School and Maria Carrillo High School are located within three miles of the Project site. Douglas Whited Elementary School is a public elementary school located approximately 1 mile from the Project site; Brush Creek Montessori School is a private Preschool through sixth grade school located approximately 1.5 miles from the Project site; and Madrone Elementary School is a public elementary school located approximately 1 mile from the Project site; Sequoia Elementary School is a public elementary school located approximately 1.8 miles from the Project site; Rincon Valley Middle School and Santa Rosa Accelerated Charter School are public middle schools located approximately 2 miles from the Project site; Herbert Slater Middle School is a public middle school located approximately 1.2 miles from the Project

site; Village Elementary School is a public elementary school located approximately 1.5 miles from the Project site; Spring Creek Elementary School is a public elementary school located approximately 1.5 miles from the Project site; Merryhill Preschool is a private pre-school located approximately 1.8 miles from the Project site; and Montgomery High School is a public high school located approximately 2 miles from the Project site.

Parks within the vicinity of the Project area include Howarth Memorial Park, Spring Lake Regional Park, Brush Creek Park, Rinconada Park, and Trailhead Park (The Santa Rosa Creek Trail). These parks are owned by the City of Santa Rosa and Sonoma County.

Discussion

a.i-v) Less Than Significant Impact. The Project site is within the UGB (General Plan Figure 2-1) and is well served by existing public services. The Project is estimated to introduce up to 47 new residents housed within the proposed 14 residential dwelling units based on 2.64 persons per household (US Census Bureau 2018). It is expected that with new residential units will result in a slight increase in the need for services from Fire and Police Departments, schools, and parks will occur. However, the increase will be a minimal change that was anticipated in the General Plan 2035 EIR, certified by the Council in 2009, and will not trigger the need for an expansion of services, an increase in staffing, or otherwise affect required service ratios.

General Plan policy PSF-E-1 sets a 5-minute travel time for emergency response within the city. The Project is located within the response radii of one fire station (General Plan Figure 6-3) located at 205 Calistoga Road. There is also a fire station located at 1775 Yulupa Avenue, which is shortly outside of the 5-minute response radii. The Project's addition of vehicle trips to the adjacent grid street network is not expected to cause a reduction in travel speeds that will result in significant delays for emergency vehicles. A 5-minute response time is expected to be achieved due to the redundancy of approach access, the ability of emergency response vehicles to override traffic controls with lights, sirens, and signal preemption, and to travel in opposing travel lanes in congested conditions.

The Project is not expected to result in substantial adverse impacts on other public facilities including schools and parks. Although the introduction of additional residential units may bring more school children to the area, such changes have been previously anticipated under the maximum number of residential units planned for General Plan build out (City of Santa Rosa 2009). The small number of new students will not result in a significant impact at nearby schools. Nearby schools will not experience significant impacts to school enrollment as a result of the Project. Therefore, the Project will have a less than significant impact to area schools.

The Project will not generate a substantial increase in demands that warrant the expansion or construction of new public facilities such as parks. As a standard condition of Project approval, the applicant shall pay all development impact fees applicable to residential development, including, but not limited to Capital Facilities fees, Park fees,

and School impact fees. These funds are expected to be sufficient to offset any cumulative increase in demands to fire and police protection services and ensure that impacts due to increased demand for public services generated by the Project are less than significant.

<u>Mitigation Measures</u>: None required.

XVI. Recreation

Issu	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
16.	RECREATION—Would the project:				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?				
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				

Setting

The City of Santa Rosa operates a number of parks and recreational facilities. Of these, Howarth Memorial Park, Spring Lake Park, Brush Creek Park, Rinconada Park, are located in the vicinity of the Project. In addition, portion of a multiuse trail, the Santa Rosa Creek Trail runs along Santa Rosa Creek to the south of the Project site.

Howarth Memorial Park is located at 630 Summerfield Road, and is an 138-acre community park which provides a beautiful lake for fishing and boating, a softball field, tennis courts, picnic areas, unique playground structures, miles of hiking and jogging trails, and an amusement area featuring a miniature train ride, carousel, animal farm and pony ride. Spring Lake Park is located at 393 Violetti Road, and is a popular park featuring trails, a campground, picnic areas, a natural history center, and a summer swimming lagoon. Bush Creek Park, located at 1180 Brush Creek Road, features barbecues, basketball courts, picnic areas, and a playground. Rinconada Park is located 1 at 4459 Yukon Drive; it has barbecues, picnic areas, and a playground. Trailhead Park (The Santa Rosa Creek Trail) runs behind the property between Farmers Lane and Quigg Drive.

Discussion

a,b) Less than Significant Impact. It is anticipated that construction of the Project will use workers derived from the local area and will therefore not result in increased use or deterioration of existing recreational facilities or require the construction of new facilities. However, because of the current post-Tubbs Fire rebuilding effort and strain on local contractors, workers could be derived from outside the region and require the temporary relocation of workers for the Project. If workers were to temporarily relocate to the area to work on the Project, use of parks and recreational facilities will occur. The number of workers will not be expected to be greater than 30 workers and use of parks will not be expected to require expansion of or construction of new recreational facilities. Use of recreational facilities by temporary workers will also not be expected to result in the deterioration of existing recreational facilities.

The Project involves construction of 14 new residences, and it will be expected that occupants will use recreational facilities within the City. Use of the facilities will increase overall recreational use but will not be expected to result in the deterioration or expansion Project and will minimally contribute to the need for overall park and recreational demand. The closest parks are Trailhead Park (The Santa Rosa Creek Trail) and Howarth Park, both within one mile of the Project site.

Development at the Project site will include 14 residential units which will not create a significant increase in use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities will occur or be accelerated. The Project's payment of the City's park in-lieu fees will offset the Project's demand for increased recreational facilities. Construction and operation of the Project will not result in a significant increase in the local population, and thus will not result in increased use of local parks and recreational facilities. The Project does not involve construction of recreation facilities or require the expansion of recreational facilities. Therefore, there will be a less than significant impact on recreational resources.

<u>Mitigation Measures</u>: None required.

XVII. Transportation and Traffic

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
17.	TRANSPORTATION AND TRAFFIC— Would the project:				
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b)	E Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?				
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d)	Result in inadequate emergency access?			\boxtimes	

Discussion

a) Less Than Significant Impact: The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2012. The project as currently proposed includes 14 multi-family dwelling units and a 124,000 square foot self-storage facility. The trip generation potential of the planned project was developed using the published standard rates for a Mini-Warehouse (LU #151) for the self-storage facility and Multifamily Housing (LU #220) and is shown in Table XVI-1.

Table XVI-2
Trip Generation Summary

Land Use	Units	Da	ily	AM Peak Hour			PM Peak Hour				
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Self Storage Facility (Mini-Warehouse)	124 ksf	1.51	187	0.10	12	7	5	0.17	21	10	11
Multifamily Housing	14 du	7.32	102	0.46	6	1	5	0.56	8	5	3
Total			289		18	8	10		29	15	14

Note: ksf = 1,000 square feet; du = dwelling unit

Under the policies detailed in the *City of Santa Rosa Standard Guidance for the*Preparation of Traffic Impact Analysis a traffic study is required if a project generates 50

or more peak hour trips. As shown in the table above, the trip generation is well below the 50-trip threshold, so under the City's policies it is reasonable to assume that the project will have a less-than-significant impact on traffic operation due to the low trip generation.

Because the volume of traffic generated during construction will be nominal during peak periods due to the off-peak scheduling of construction work, the project is similarly expected to have a less-than-significant impact on traffic during the construction phase.

There are sidewalks proposed along site's frontage on State Route (SR) 12. Though sidewalk is discontinuous on the south side of SR 12 where the project site is located, the existing 8-foot shoulder accommodates both pedestrian and bicycle traffic and provides separation between motorized vehicles and active modes.

The Santa Rosa Bicycle and Pedestrian Master Plan 2018 indicates that a Class II bike lane is planned for SR 12 along the site's frontage. While the bike lane does not exist, the 8-foot shoulders currently provide space for cyclists to ride outside the higher-speed vehicle travel lanes. The frontage improvements planned for the project will retain the 8-foot shoulders and not preclude any planned bicycle-related improvements. Based on the site plan prepared by BKF, the existing easement for the multi-use trail along the creek will be retained with the project.

The closest public transit stop is approximately 1,200 feet from the site at the intersection of SR 12/Mission Boulevard; this is within the quarter-mile walking distance typically considered as acceptable for transit access. There are four bus stops, two on each side of SR 12 at Mission Boulevard with pedestrian facilities (sidewalk, pedestrian signal, crosswalks) at the intersection to connect the stops. Sonoma County Transit Routes 30/30X and 34 run Monday through Friday from 5:50 a.m. to 9:00 p.m. and from 7:25 a.m. to 8:12 p.m. on weekends with approximately one-hour headways. These routes provide connections to the Santa Rosa Transit Mall, Glen Ellen, Kenwood, and Sonoma Valley.

Santa Rosa City Bus Route 4/4b also serves these bus stops Monday through Friday from 6:00 a.m. to 8:20 p.m., until 7:50 p.m. on Saturdays, and from 10:00 a.m. to 4:50 p.m. on Sundays, with 30-minute headways on weekdays and one-hour headways on the weekend. This route provides connections to the Santa Rosa Transit Mall, Rincon Valley, and Calistoga Road. Though sidewalks connecting to these stops are discontinuous, the availability of paved shoulders adequately accommodates pedestrian travel and provides an adequate connection to transit services.

b) Less than Significant Impact: CEQA Guidelines § 15064.3, subdivision (b) indicates that land use projects will have a significant impact if the project resulted in vehicle miles traveled (VMT) exceeding an applicable threshold of significance. It further notes that if existing models or methods are not available to estimate the vehicle miles traveled for the project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively.

The City has not yet adopted a policy regarding vehicle miles traveled (VMT) so the project's contribution was estimated for informational purposes. Using the expected daily trips generated for 14 multi-family dwelling units (du) as determined above using the standard trip generation rate, and average distance traveled per daily trip in the project's location as available from the Sonoma County Transportation Authority (SCTA) 2010 Comprehensive Transportation Plan (CTP), the estimated VMT for the residential component of the project will be 478.38 vehicle miles traveled. Assuming the self-storage facility will have two employees, and using the SCTA's CTP average VMT per employee, the self-storage facility will be expected to generate a VMT of 22.7 miles. There are no metrics available to estimate travel miles for customers of the self-storage facility. The calculated VMT of the proposed site uses of residences and the self-storage facility employment are shown in Table XVI-2.

Table XVI-2
VMT Summary

Unit	Number of	Calculated Daily VMT		
	Units	mi/unit	Total	
Self-Storage Facility Employee	2	11.34	22.7 miles	
Residential Daily Trips (14 du)	102	4.69	478.4 miles	
Total			501.1 miles	

As noted above, because the City of Santa Rosa has not yet established a criterion against which the project's VMT can be measured, the significance cannot be measured quantitatively. However, given the site's convenient access to regional transit routes as well as pedestrian and bicycle facilities coupled with the proximity of shopping opportunities and restaurants, it is reasonable to assume that the site will have a less-than-significant impact in terms of vehicle miles traveled.

c) Less than Significant Impact: The project must be designed to meet applicable Federal, State and City codes and regulations, and as such, will not be expected to introduce any new hazards in terms of its design. Consideration was also given to sight distance at the new public road on SR 12. At this location the highway is median-divided, limiting access and egress at the site to right-turns in and out only. Sight lines to the west along SR 12, as well as in both directions along the new public road, were evaluated based on criteria contained in the Highway Design Manual, Caltrans. SR 12 has two 12-foot travel lanes and an 8-foot shoulder along the project's frontage. From 15 feet back from the existing edge line, drivers exiting the site will have a clear line of sight for more than 600 feet; this is adequate for an approach speed exceeding 60 mph, which is substantially higher than the 45-mph posted speed limit. Based on the site plan, and

assuming the new road will have similar design speed of 25 mph as the existing Streamside Drive, sight lines along the new project road will be adequate; to limit decreasing anticipated sight lines, any new signage or landscaping to be located near the intersection should be placed outside of the vision triangle of a driver waiting on the minor street. The project will therefore have a less-than-significant impact on safety based on the application of appropriate design standards and availability of adequate sight lines.

designed in accordance with the California Fire Code with applicable Santa Rosa City Code amendments. The site roadways will facilitate access to within 150 feet of building exteriors, provide two separate points of access to the site, have 20-foot inside and 40-foot outside turning radius, and allow access for a 26-foot wide aerial fire apparatus to the storage building. The new public street is proposed to be 26 feet wide, with a 24-foot wide section where the 26-foot wide aerial fire apparatus access road leaves the public street. This results in a less-than-significant impact relative to emergency access.

Mitigation Measures: None required.

XVIII. Tribal Cultural Resources

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less I nan Significant with Mitigation Incorporation	Less Than Significant Impact	<u>No</u> Impact
18. Tribal Cultural Resources— Would the project:				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Setting

A Historical Resources Report was prepared by Tom Origer and Associates (Origer & Associates) in 2017. The report provides the information to analyze cultural and historical resources for the Project and serves as the basis for conclusions in this document. Information contained in this section is derived from this report which is considered confidential.

This study included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 17-0624), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No historical resources were found within the study area. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2017-101S).

A Sacred Lands File and Native American Contact List was requested from the Native American Heritage Commission. A Sacred Lands File record search was completed by the NAHC for the Area of Potential Effect (APE) with negative results (Origer & Associates 2017). A list of Native American Contacts was provided on September 19, 2017 (Origer & Associates). Tribal representatives were contacted by Origer & Associates by mail on September 8, 2017 (Origer & Associates 2017). Tribal representatives contacted included Federated Indians of Graton Rancheria, Kashia Band of Pomo Indians of the Stewarts Point Rancheria, Lytton Band of Pomo Indians, Middletown Rancheria of Pomo Indians, and Mishewal-Wappo Tribe of Alexander Valley (Origer & Associates 2017).

On September 18, 2018, the City of Santa Rosa referred Project plans to Lytton Rancheria and Graton Rancheria in compliance with AB 52. Mitigation measures set forth in the Cultural

Resources discussion above as well as the Tribal measure below have been developed in response to the direct input from tribes.

Discussion:

a, b) Less than Significant Impact with Mitigation Incorporation: The NWIC and Sacred Lands file search did not reveal any known historical resources eligible for listing on the California Register of Historical Resources or in any local register. Survey of the site, including two auger holes did not reveal archeological materials (Origer & Associates 2017). The details on the existing structures is provided in Section V Cultural Resources. Accidental discovery could result in potentially significant impact to tribal cultural resources, if not properly mitigated. In order to mitigate potential impacts resulting from the inadvertent discovery of tribal cultural resources, Mitigation Measure TRI-01 shall be implemented. Mitigation Measure TRI-01 identifies procedures to be followed in the event of an unintended discovery, and reduces

Mitigation Measure:

Mitigation Measure TRI-01: If a potentially significant tribal cultural resource is encountered, all ground disturbing activities shall halt until the archeologist or Tribal representative can assess the resource. The archeologist or Tribal representative shall be granted stop work authority and shall be provided sufficient time to evaluate the resource and make treatment recommendations. Should a significant tribal cultural resource be identified, the archeologist or Tribal representative or shall prepare a resource mitigation plan and monitoring program to be carried out during all construction activities.

XIX. Utilities and Service Systems

Issu	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
	UTILITIES AND SERVICE SYSTEMS—Would the project:	mpaet	<u> </u>		- To Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant effects?				
b)	Have sufficient water supplies available to serve project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
c)	Result in a determination by the waste water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state and local management and reduction statutes and regulations related to solid waste?				

Discussion

a-e) Less than Significant Impact. The Project entails demolition of existing facilities, and construction and operation of a new storage facility and two multi-family structures with14 new residences. Within the City of Santa Rosa, wastewater is collected and treated at the Laguna Treatment Plant. According to the City's General Plan, wastewater treatment is generally sufficient to meet anticipated housing development needs through 2035 (City of Santa Rosa 2009). The addition of the storage facility and residences to the City's wastewater system would not increase wastewater such that new facilities will be required to be constructed or expanded. Additional wastewater can be accommodated by the Laguna Treatment Plant.

Stormwater

The new storm water infrastructure will be installed as part of the approved Project will include measures to capture increased storm water resulting from development and increased impervious surfaces. As described in Section X Hydrology and Water Quality, the Project will be required to implement LID Manual measures, including bioretention basins and features that will capture and redirect storm water to landscaped areas.

Bioretention basins will be designed to capture the additional storm water to reduce the overall volume of storm water entering the City's system. The Project will be required to comply with the City's Stormwater Ordinance set forth in Municipal Code Chapter 17-12 which established standard requirements and controls over the City's stormwater drainage system. All new development is required to adhere to the Ordinance.

Potable Water

The majority of the City's potable water supply is provided by the Sonoma County Water Agency's (SCWA) system. The SCWA maintains an aqueduct system that delivers water from the Russian River to the City. The SCWA also maintains three groundwater wells that provide water on an as-needed basin during periods of drought or when water supplies from the Russian River are constrained (SCWA, 2016). The City's 2015 Urban Water Management Plan (UWMP) estimates that water demand for the City will be approximately 28,243 acre feet by 2035.

The Project will require new potable water connections to the City's existing water supply system which is sufficient to accommodate the minimal water requirements of the storage facility as well as the 14 new residences. The Project will comply with the City's WELO and include drought tolerant landscaping. The City's General Plan indicates that water supply is not expected to be a constraint (City of Santa Rosa 2009) indicating there is sufficient supply for this anticipated development. The General Plan indicates that the total existing water supply available to the City is approximately 31,810 acre feet per year and that the highest water use to date was in 2001 when 24,300 acre feet were used. The minor amount of potable water required for 14 new residences will not increase the potable water needs beyond what is anticipated by the 2035 General Plan or beyond the capacity of the City's existing water supplies. Compliance with the CALGreen Tier 1 and WELO requirements will reduce the developments potable water needs.

Solid Waste

The Project involves demolition of a single-family home and two outbuildings as well as clearing, grubbing, and grading to support construction of the self-storage facility and multi-family residential structures. During construction, the Project will result in materials being deposited at the local landfill, most likely one of the Central Landfill located on Mecham Road in Petaluma. Solid waste is then transferred to the Redwood Landfill in Marin County or other regional landfills with capacity and authorization to accept construction debris. Demolition and site preparation includes removal of concrete, painted surfaces, universal waste, asphalt, and reservoir structures. All asbestos containing materials and lead containing paint materials will be properly contained and disposed at an appropriate landfill with authorization to accept lead and asbestos containing materials. All solid waste materials will be waste profiled and sent to an appropriate disposal facility Site preparation includes grubbing and grading and trench installation of subsurface piping will require excavation and off-hauling of excess soil. Approximately 500 cubic yards of materials expected to be removed from the site include vegetation and soil, and concrete. The Project will divert non-hazardous solid waste that

is recyclable or reusable to the extent feasible. It is anticipated that much of this material removed from the Project site can be recycled or repurposed and will therefore not significantly reduce capacity of local landfill. Vegetation and soil may be used at local landfills as daily cover and will therefore not result in decrease in capacity at the local landfill. Because the amount of material is expected to be negligible, will be waste profiled in order to determine an appropriate waste facility, and much of the material is anticipated to be used for alternative daily cover, materials deposited at local landfills will not significantly reduce the capacity of such landfills and impacts related to local landfill capacity is considered less than significant.

The Project includes 14 multi-family residences that will contribute to the generation of solid waste within the City of Santa Rosa. The amount of solid waste is considered minor and consistent with the service needs anticipated in the City's General Plan.

Because the Project will not exceed local capacity and will be in compliance with City requirements, the Project will not conflict with local or state management reduction statutes and impact will be less than significant.

Mitigation Measures: None Required.

XX. Wildfire

Issu	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
20.	Wildfire— Would the project:				
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including down slope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes				

Setting

The City of Santa Rosa is located within an area susceptible to wildland fires with expansive areas of chaparral, woodland, grassland, and scrub vegetation communities as well as steep slopes, and climatic conditions. The Project is located with the City's Urban Growth Boundary (UGB). Figure 12-5 from the 2035 General Plan places the Project site outside of the Very High Fire Hazard Severity Zone and the Wildland-Urban Interface Zone. The surrounding land uses are generally commercial and residential with Santa Rosa Creek and riparian habitat to the east. The project site is categorized as a Non-VHFHZ by CAL FIRE and surrounded by land designated as Non-VHFHZ on all sides. However, the Project is located approximately 0.25 mile from Lake Ralphine and open space areas adjacent to Annadel State Park and to the north, less than 0.50 mile from Brush Creek Road that are designated as Wildland-Urban Interface Zone in the General Plan. According to Figure 12-15 from the General Plan, the Project site is located less than 2 miles from Chanate Road and areas that are designated as Very High Fire Hazard Severity Zone.

In October 2017, the Tubbs Fire (Central LNU Complex) burned approximately 36,807 acres in the northern and eastern portions of the City. Residents were exposed to direct effects of the wildfire, such as the loss of a structure, and to the secondary effects of the wildfire, such as smoke and air pollution. Smoke generated by wildfire consists of visible and invisible emissions that contain particulate matter (soot, tar, water vapor, and minerals) and gases (carbon monoxide, carbon dioxide, nitrogen oxides). Public health impacts associated with wildfire include difficulty in breathing, odor, and reduction in visibility.

Discussion

- a) Less than Significant Impact. The project site is categorized as a Non-VHFHZ by CAL FIRE, located approximately 0.25 mile from land designated as and located over 1.2 miles from areas designated as having a Very High Fire Hazard Severity Zone. The Project site is located within the UGB and will be included in the City's Emergency Operation Plan. Therefore, in the event of a wildfire the proposed project is not expected to substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts will be less than significant
- b-d) Less than Significant Impact. The project site is relatively flat, with a 10 percent slope decrease at the eastern edge of the parcel. As identified in Section VII Geology and Soils, there are no mapped landslides at the Project site. The proposed structures will require a building permit and built in compliance with the California Building Code in affect at the time of Building Permit submittal. The project will install new infrastructure, including utilities and power lines, and will not exacerbate the fire risk.

There are no other factors, such as steep slopes, prevailing winds that will exacerbate fire risk or expose project occupants to the uncontrolled spread of a wildfire, pollutant concentrations from a wildfire, post-fire slope instability, or post-fire flooding. Therefore, impacts will be less than significant.

<u>Mitigation Measures</u>: None required.

XXI. Mandatory Findings of Significance

Issu	nes (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
21.	MANDATORY FINDINGS OF SIGNIFICANCE—Would the project:				
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
b)	Have impacts that would be individually limited, but cumulatively considerable?: ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
c)	Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?				

Discussion

- a) Less than Significant Impact. The Project will not degrade the quality of the environment or substantially reduce the habitat for listed fish or wildlife species. The Project is located within the City's UGB and impacts associated with Project development have been anticipated in the City's 2035 General Plan. Fifty-eight trees will be removed in compliance with the City's Tree Ordinance as required by Mitigation Measures AES-01 and AES-02. The Project will have a less than significant effect on the environment as described in Section IV. Biological Resources. The Project will not eliminate examples of the major periods of California history or prehistory and impacts on historical resources will be less than significant as described in Section V. Cultural Resources. The Project's impacts will not substantially degrade the environment and will not, when considered with other projects, result in substantial cumulative impacts.
- b) Less than Significant Impact. The Project is consistent with the City's General Plan and land use designation and is consistent with the surrounding land uses with the intent of the UGB through the development of the parcel at 4224 Sonoma Highway. The Project will comply with the City's standard conditions of approval. The analysis provided above identifies less than significant impacts or less than significant impacts with mitigation incorporation. The Project's impacts do not increase the severity of impacts analyzed in the City's General Plan EIR (City of Santa Rosa 2009b). Therefore, the Project's cumulative impacts will be less than significant.

c)	Less than Significant Impact. The Project will conditions of approval which will ensure that the environmental effects on human beings directly the Project will be less than significant. Please impact discussions.	ne Project will not result in substantial y or indirectly. All impacts resulting from
On the	e basis of this initial study:	
	I find that the proposed project COULD NOT environment, and a NEGATIVE DECLARAT	
	I find that although the proposed project cou environment, there will not be a significant e project have been made by or agreed to by t NEGATIVE DECLARATION will be prepared	ffect in this case because revisions in the he project proponent. A MITIGATED
	I find that the proposed project MAY have a an ENVIRONMENTAL IMPACT REPORT is	
	I find that the proposed project MAY have a "potentially significant unless mitigated" impaeffect 1) has been adequately analyzed in a legal standards, and 2) has been addressed earlier analysis as described on attached share REPORT is required, but it must analyze on	act on the environment, but at least one n earlier document pursuant to applicable by mitigation measures based on the eets. An ENVIRONMENTAL IMPACT
	I find that although the proposed project coulenvironment, because all potentially significated adequately in an earlier EIR or NEGATIVE Estandards, and (b) have been avoided or mit NEGATIVE DECLARATION, including revisiting imposed upon the proposed project, no furth required.	ant effects (a) have been analyzed DECLARATION pursuant to applicable igated pursuant to that earlier EIR or ons or mitigation measures that are
Signat	ure	Date
Susie	Murray, Senior Planner	The City of Santa Rosa
Printed	d Name	For

A. Report Preparers

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- Bryan Chen, Senior Environmental Engineer
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W-Trans

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B. References

Arcadis, U.S., Inc (Arcadis). 2018. Biological Resource and Habitat Assessment 4224 Highway 12, Santa Rosa, Sonoma County, California. Revised March 31, 2019.

Arcadis. 2019. Certified Arborist Report: 4224 Highway 12, Santa Rosa, CA. May 10, 2019.

Bay Area Air Quality Management District (BAAQMD). 2017a. California Environmental Quality Act Air Quality Guidelines. May.

BAAQMD. 2017b. Final Clean Air Plan 2017. April.

BKF. Initial Storm Water LID Submittal for Recess Storage. July 2018.

California Department of Conservation. Division of Land Resource Protection. Conservation Program Support. Williamson Act Contract Land. 2016. [online resource] Accessed at: www.conservation.ca.gov/dlrp/lca. Accessed on 6/1/2018

California Department of Conservation. Division of Land Resource Protection. Farmland Mapping and Monitoring Program. 2016. [online resource] Accessed at www.conservation.ca.gov/dlrp/fmmp. Accessed on 6/1/2018

California Department of Fish and Wildlife. 2018. California Natural Diversity Database (CNDDB), RareFind5, California Department of Fish and Wildlife Sacramento. Accessed June 2018.

California Native Plant Society Rare Plant Program, 2018. Inventory of Rare and Endangered Plants of California. Online addition. Website http://www.rareplants.cnps.org. Accessed June 2018.

California Department of Toxic Substances Control (DTSC), 2018 Hazardous Waste and Substances Site List (Cortese List),

http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm, accessed June 2018.

California State Water Resources Control Board. 2018. Geotracker Database. https://geotracker.waterboards.ca.gov/. Accessed May 2018.

City of Santa Rosa Design Guidelines, September, 2005 (updated in 2010, 2011).

City of Santa Rosa. November 2009. Santa Rosa General Plan 2035.

City of Santa Rosa. 2012. Climate Action Plan. Adopted June 5, 2012.

City of Santa Rosa. 2017. Storm Water Low Impact Development Technical Design Manual.

- City of Santa Rosa, Facilities, (Fire, Police, Schools, Parks). Available online at https://srcity.org/Facilities, (accessed July 2018).
- City of Santa Rosa. 2009. City of Santa Rosa 2035 General Plan/Final EIR. Available online at https://srcity.org/392/General-Plan, (accessed May 2018).
- City of Santa Rosa. 2015. 2015 Urban Water Management Plan. City of Santa Rosa in conjunction with West Yost Associates and Maddaus Water Management. June 2016.
- City of Santa Rosa, 2017. City of Santa Rosa Zoning Code. Available online at https://gcode.us/codes/santarosa/, (accessed May 2018).
- California Department of Transportation (Caltrans), California Scenic Highway Program, 2007. Available online at:

 http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/sonoma.htm, (accessed May 2018).
- PRA Group, Inc. 2018. Geotechnical Study Proposed Self Storage Facility 4224 Highway 12 APN: 032-010-005 Santa Rosa, California. August 9, 2018.
- Terracon Consultants Inc. 2018. Hazardous Materials Survey Report. December 7, 2018.
- Tom Origer & Associates. 2017. Historical Resources Study for the Annexation Prezoning of the Property at 4224 Highway 12 Santa Rosa, Sonoma County, California. September 21, 2017.
- United States Census Bureau (US Census Bureau), Quick facts, Santa Rosa city, California; California. Available online at:

 https://www.census.gov/quickfacts/fact/table/ca,santarosacitycalifornia/PST045217,

United States Department of Agriculture. 2018. Web Soil Survey. Natural Resources Conservation Service. Accessed at

https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

(accessed June 2018).

- U.S. Fish and Wildlife Service. National Wetlands Inventory. 2018. Website: https://www.fws.gov/wetlands/Data/Mapper.html. Accessed June 2018.
- U.S Fish and Wildlife Service. 2018. Information for Planning and Consultation (iPaC) Species List for the Santa Rosa U.S.G.S. 7.5 Minute Quadrangle. Accessed June 2018.

APPENDIX A

CalEEMod Data Sheets

CalEEMod Version: CalEEMod.2016.3.2

Page 1 of 1

Date: 5/10/2019 4:54 PM

Santa Rosa Recess Storage - Sonoma-San Francisco County, Annual

Santa Rosa Recess Storage Sonoma-San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.90	1000sqft	0.02	900.00	0
Unrefrigerated Warehouse-No Rail	124.00	1000sqft	2.16	124,000.00	0
Condo/Townhouse	14.00	Dwelling Unit	0.50	32,400.00	40

(lb/MWhr)

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	75
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Ele	ectric Company			
CO2 Intensity	641.35	CH4 Intensity	0.029	N2O Intensity	0.006

(lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - site info

(lb/MWhr)

Construction Phase - site info

Trips and VMT - site info

Grading - site info

Vehicle Trips - ITE trip generation rates for mini-storage (151) were used. For a conservative analysis, assumed all primary trips, 100% commercial non-Construction Off-road Equipment Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	21870	12150
tblAreaCoating	Area_Residential_Interior	65610	36450
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	14,000.00	32,400.00
tblLandUse	LotAcreage	2.85	2.16
tblLandUse	LotAcreage	0.88	0.50
tblTripsAndVMT	WorkerTripNumber	62.00	57.00
tblVehicleTrips	ST_TR	1.68	1.51
tblVehicleTrips	SU_TR	1.68	1.51
tblVehicleTrips	WD_TR	1.68	1.51

2.0 Emissions Summary

2.1 Overall Construction

<u>Unmitigated Construction</u>

Maximum	0.2476	1.8756	1.5186	2.9700e- 003	0.0699	0.0944	0.1643	0.0234	0.0903	0.1136	0.0000	258.0608	258.0608	0.0424	0.0000	259.1201
2020	0.0781	0.5980	0.5177	1.0500e- 003	0.0174	0.0285	0.0459	4.7300e- 003	0.0273	0.0320	0.0000	90.1208	90.1208	0.0139	0.0000	90.4684
2019	0.2476	1.8756	1.5186	2.9700e- 003	0.0699	0.0944	0.1643	0.0234	0.0903	0.1136	0.0000	258.0608	258.0608	0.0424	0.0000	259.1201
Year					tons	s/yr							MT	/yr		
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tons	s/yr							MT	Г/уг		
2019	0.2476	1.8756	1.5186	2.9700e- 003	0.0577	0.0944	0.1521	0.0177	0.0903	0.1079	0.0000	258.0606	258.0606	0.0424	0.0000	259.1199
2020	0.0781	0.5980	0.5177	1.0500e- 003	0.0174	0.0285	0.0459	4.7300e- 003	0.0273	0.0320	0.0000	90.1208	90.1208	0.0139	0.0000	90.4683
Maximum	0.2476	1.8756	1.5186	2.9700e- 003	0.0577	0.0944	0.1521	0.0177	0.0903	0.1079	0.0000	258.0606	258.0606	0.0424	0.0000	259.1199
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	13.90	0.00	5.77	20.30	0.00	3.91	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Sta	art Date	End	d Date	Maximu	m Unmitiga	ated ROG +	NOX (tons	quarter)	Maxir	num Mitigat	ed ROG + N	OX (tons/qu	uarter)		_
1	5-	8-2019	8-7	'-2019			0.8180					0.8180				
2	8-	8-2019	11-	7-2019			0.8217					0.8217				
3	11	-8-2019	2-7	-2020			0.7954					0.7954				
4	2-	8-2020	5-7	-2020			0.3692					0.3692				
			Hi	ghest			0.8217					0.8217				

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	/yr							MT	/yr		
Area	0.7277	1.9600e- 003	0.1499	9.0000e- 005		6.9400e- 003	6.9400e- 003		6.9400e- 003	6.9400e- 003	0.6383	0.4342	1.0725	1.2000e- 003	4.0000e- 005	1.1149
Energy	3.8100e- 003	0.0339	0.0235	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003	0.0000	190.2903	190.2903	7.6200e- 003	2.1200e- 003	191.1123

Mobile	0.1081	0.5532	1.2727	3.5900e- 003	0.2774	4.8200e- 003	0.2822	0.0747	4.5500e- 003	0.0792	0.0000	329.7519	329.7519	0.0149	0.0000	330.1247
Waste					***************************************	0.0000	0.0000		0.0000	0.0000	25.1384	0.0000	25.1384	1.4856	0.0000	62.2793
Water						0.0000	0.0000		0.0000	0.0000	9.4374	47.5109	56.9483	0.9715	0.0233	88.1877
Total	0.8396	0.5890	1.4461	3.8900e-	0.2774	0.0144	0.2918	0.0747	0.0141	0.0888	35.2141	567.9874	603.2014	2.4808	0.0255	672.8189
				003												

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Area	0.7277	1.9600e- 003	0.1499	9.0000e- 005		6.9400e- 003	6.9400e- 003		6.9400e- 003	6.9400e- 003	0.6383	0.4342	1.0725	1.2000e- 003	4.0000e- 005	1.1149
Energy	3.8100e- 003	0.0339	0.0235	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003	0.0000	190.2903	190.2903	7.6200e- 003	2.1200e- 003	191.1123
Mobile	0.1081	0.5532	1.2727	3.5900e- 003	0.2774	4.8200e- 003	0.2822	0.0747	4.5500e- 003	0.0792	0.0000	329.7519	329.7519	0.0149	0.0000	330.1247
Waste						0.0000	0.0000		0.0000	0.0000	25.1384	0.0000	25.1384	1.4856	0.0000	62.2793
Water						0.0000	0.0000		0.0000	0.0000	9.4374	47.5109	56.9483	0.9715	0.0233	88.1877
Total	0.8396	0.5890	1.4461	3.8900e- 003	0.2774	0.0144	0.2918	0.0747	0.0141	0.0888	35.2141	567.9874	603.2014	2.4808	0.0255	672.8189

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days Num Days	Phase Description
Number					Week	

1	Site Preparation	' 	5/8/2019	5/10/2019	5	3	
2	Grading	Grading	5/11/2019	5/20/2019	5	6	
3				3/23/2020	5	220	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	57.00	22.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6300e- 003	0.0323	0.0179	4.0000e- 005		1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281
Total	2.6300e- 003	0.0323	0.0179	4.0000e- 005	2.3900e- 003	1.2800e- 003	3.6700e- 003	2.6000e- 004	1.1800e- 003	1.4400e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e- 005	5.0000e- 005	4.7000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0895	0.0895	0.0000	0.0000	0.0896
Total	6.0000e- 005	5.0000e- 005	4.7000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0895	0.0895	0.0000	0.0000	0.0896

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					1.0700e- 003	0.0000	1.0700e- 003	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6300e- 003	0.0323	0.0179	4.0000e- 005		1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281
Total	2.6300e- 003	0.0323	0.0179	4.0000e- 005	1.0700e- 003	1.2800e- 003	2.3500e- 003	1.2000e- 004	1.1800e- 003	1.3000e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e- 005	5.0000e- 005	4.7000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0895	0.0895	0.0000	0.0000	0.0896
Total	6.0000e- 005	5.0000e- 005	4.7000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0895	0.0895	0.0000	0.0000	0.0896

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e- 003	0.0682	0.0305	6.0000e- 005		3.2200e- 003	3.2200e- 003		2.9600e- 003	2.9600e- 003	0.0000	5.5554	5.5554	1.7600e- 003	0.0000	5.5993
Total	6.0900e- 003	0.0682	0.0305	6.0000e- 005	0.0197	3.2200e- 003	0.0229	0.0101	2.9600e- 003	0.0131	0.0000	5.5554	5.5554	1.7600e- 003	0.0000	5.5993

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e- 004	1.2000e- 004	1.1700e- 003	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2238	0.2238	1.0000e- 005	0.0000	0.2240
Total	1.6000e- 004	1.2000e- 004	1.1700e- 003	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2238	0.2238	1.0000e- 005	0.0000	0.2240

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	/yr							MT	/yr		
Fugitive Dust					8.8500e- 003	0.0000	8.8500e- 003	4.5500e- 003	0.0000	4.5500e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

I'''	Off-Road	6.0900e-	0.0682	0.0305	6.0000e-		3.2200e-	3.2200e-		2.9600e-	2.9600e-	0.0000	5.5554	5.5554	1.7600e-	0.0000	5.5993
		003			005		003	003		003	003				003		
-	T-4-1	0.0000															
	Total	6.0900e-	0.0682	0.0305	6.0000e-	8.8500e-	3.2200e-	0.0121	4.5500e-	2.9600e-	7.5100e-	0.0000	5.5554	5.5554	1.7600e-	0.0000	5.5993
	lotai	6.0900e- 003	0.0682	0.0305	6.0000e- 005	8.8500e- 003	3.2200e- 003	0.0121	4.5500e- 003	2.9600e- 003	7.5100e- 003	0.0000	5.5554	5.5554	1.7600e- 003	0.0000	5.5993

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e- 004	1.2000e- 004	1.1700e- 003	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2238	0.2238	1.0000e- 005	0.0000	0.2240
Total	1.6000e- 004	1.2000e- 004	1.1700e- 003	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2238	0.2238	1.0000e- 005	0.0000	0.2240

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.2059	1.5223	1.2280	2.0100e- 003		0.0878	0.0878		0.0841	0.0841	0.0000	168.8522	168.8522	0.0351	0.0000	169.7304
Total	0.2059	1.5223	1.2280	2.0100e- 003		0.0878	0.0878		0.0841	0.0841	0.0000	168.8522	168.8522	0.0351	0.0000	169.7304

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e- 003	0.2346	0.0622	4.8000e- 004	0.0115	1.8300e- 003	0.0133	3.3200e- 003	1.7500e- 003	5.0700e- 003	0.0000	45.8086	45.8086	3.0400e- 003	0.0000	45.8846
Worker	0.0238	0.0180	0.1785	3.8000e- 004	0.0360	3.0000e- 004	0.0363	9.5900e- 003	2.8000e- 004	9.8700e- 003	0.0000	34.2293	34.2293	1.3900e- 003	0.0000	34.2640
Total	0.0327	0.2526	0.2407	8.6000e- 004	0.0475	2.1300e- 003	0.0496	0.0129	2.0300e- 003	0.0149	0.0000	80.0379	80.0379	4.4300e- 003	0.0000	80.1487

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.2059	1.5223	1.2280	2.0100e- 003		0.0878	0.0878		0.0841	0.0841	0.0000	168.8520	168.8520	0.0351	0.0000	169.7302
Total	0.2059	1.5223	1.2280	2.0100e- 003		0.0878	0.0878		0.0841	0.0841	0.0000	168.8520	168.8520	0.0351	0.0000	169.7302

Mitigated Construction Off-Site

ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
				PM10	PM10	Total	PM2.5	PM2.5	Total						

Category					tons	s/yr							MT	-/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9000e- 003	0.2346	0.0622	4.8000e- 004	0.0115	1.8300e- 003	0.0133	3.3200e- 003	1.7500e- 003	5.0700e- 003	0.0000	45.8086	45.8086	3.0400e- 003	0.0000	45.8846
Worker	0.0238	0.0180	0.1785	3.8000e- 004	0.0360	3.0000e- 004	0.0363	9.5900e- 003	2.8000e- 004	9.8700e- 003	0.0000	34.2293	34.2293	1.3900e- 003	0.0000	34.2640
Total	0.0327	0.2526	0.2407	8.6000e- 004	0.0475	2.1300e- 003	0.0496	0.0129	2.0300e- 003	0.0149	0.0000	80.0379	80.0379	4.4300e- 003	0.0000	80.1487

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0675	0.5143	0.4395	7.4000e- 004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2551	61.2551	0.0124	0.0000	61.5659
Total	0.0675	0.5143	0.4395	7.4000e- 004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2551	61.2551	0.0124	0.0000	61.5659

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5500e- 003	0.0779	0.0197	1.7000e- 004	4.2100e- 003	4.1000e- 004	4.6200e- 003	1.2200e- 003	4.0000e- 004	1.6100e- 003	0.0000	16.7091	16.7091	1.0200e- 003	0.0000	16.7347

	Worker	8.0200e-	5.8300e-	0.0586	1.3000e-	0.0132	1.1000e-	0.0133	3.5100e-	1.0000e-	3.6100e-	0.0000	12.1566	12.1566	4.5000e-	0.0000	12.1678
		003	003		004		004		003	004	003				004		
I	Total	0.0106	0.0837	0.0782	3.0000e-	0.0174	5.2000e-	0.0179	4.7300e-	5.0000e-	5.2200e-	0.0000	28.8657	28.8657	1.4700e-	0.0000	28.9025
					004		004		003	004	003				003		
ı																	

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.0675	0.5143	0.4395	7.4000e- 004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2550	61.2550	0.0124	0.0000	61.5658
Total	0.0675	0.5143	0.4395	7.4000e- 004		0.0280	0.0280		0.0268	0.0268	0.0000	61.2550	61.2550	0.0124	0.0000	61.5658

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5500e- 003	0.0779	0.0197	1.7000e- 004	4.2100e- 003	4.1000e- 004	4.6200e- 003	1.2200e- 003	4.0000e- 004	1.6100e- 003	0.0000	16.7091	16.7091	1.0200e- 003	0.0000	16.7347
Worker	8.0200e- 003	5.8300e- 003	0.0586	1.3000e- 004	0.0132	1.1000e- 004	0.0133	3.5100e- 003	1.0000e- 004	3.6100e- 003	0.0000	12.1566	12.1566	4.5000e- 004	0.0000	12.1678
Total	0.0106	0.0837	0.0782	3.0000e- 004	0.0174	5.2000e- 004	0.0179	4.7300e- 003	5.0000e- 004	5.2200e- 003	0.0000	28.8657	28.8657	1.4700e- 003	0.0000	28.9025

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Mitigated	0.1081	0.5532	1.2727	3.5900e- 003	0.2774	4.8200e- 003	0.2822	0.0747	4.5500e- 003	0.0792	0.0000	329.7519	329.7519	0.0149	0.0000	330.1247
Unmitigated	0.1081	0.5532	1.2727	3.5900e- 003	0.2774	4.8200e- 003	0.2822	0.0747	4.5500e- 003	0.0792	0.0000	329.7519	329.7519	0.0149	0.0000	330.1247

4.2 Trip Summary Information

	Aver	age Daily Trip	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	9.93	2.21	0.95	18,024	18,024
Condo/Townhouse	81.34	79.38	67.76	182,736	182,736
Unrefrigerated Warehouse-No Rail	187.24	187.24	187.24	546,649	546,649
Total	278.51	268.83	255.95	747,409	747,409

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.568926	0.041373	0.172015	0.112977	0.030659	0.007080	0.028564	0.025868	0.003029	0.001930	0.005517	0.000872	0.001190
	İ												

Condo/Townhouse 0.56	926 0.041373	0.172015	0.112977	0.030659	0.007080	0.028564	0.025868	0.003029	0.001930	0.005517	0.000872	0.001190
Unrefrigerated Warehouse-No 0.56	926 0.041373	0.172015	0.112977	0.030659	0.007080	0.028564	0.025868	0.003029	0.001930	0.005517	0.000872	0.001190

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	152.5549	152.5549	6.9000e- 003	1.4300e- 003	153.1526
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	152.5549	152.5549	6.9000e- 003	1.4300e- 003	153.1526
NaturalGas Mitigated	3.8100e- 003	0.0339	0.0235	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003	0.0000	37.7354	37.7354	7.2000e- 004	6.9000e- 004	37.9597
NaturalGas Unmitigated	3.8100e- 003	0.0339	0.0235	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003	0.0000	37.7354	37.7354	7.2000e- 004	6.9000e- 004	37.9597

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					tons	s/yr							MT	Г/уг		
Condo/Townhouse	262122	1.4100e- 003	0.0121	5.1400e- 003	8.0000e- 005		9.8000e- 004	9.8000e- 004		9.8000e- 004	9.8000e- 004	0.0000	13.9878	13.9878	2.7000e- 004	2.6000e- 004	14.0710
General Office Building	14733	8.0000e- 005	7.2000e- 004	6.1000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.7862	0.7862	2.0000e- 005	1.0000e- 005	0.7909

Unrefrigerated	430280	2.3200e-	0.0211	0.0177	1.3000e-	1.6000e-	1.6000e-	 1.6000e-	1.6000e-	0.0000	22.9614	22.9614	4.4000e-	4.2000e-	23.0978
Warehouse-No		003			004	003	003	003	003				004	004	
Total		3.8100e-	0.0339	0.0235	2 4000-	0.0000-	0.0000-	0.0000	0.0000-	0.0000	07.7054	07.7054	7.0000	0.0000	07.0507
i Otai		3.61000-	0.0339	0.0235	2.1000e-	2.6300e-	2.6300e-	2.6300e-	2.6300e-	0.0000	37.7354	37.7354	7.3000e-	6.9000e-	37.9597
Total		003	0.0339	0.0235	004	2.6300e- 003	2.6300e- 003	2.6300e- 003	2.6300e- 003	0.0000	37.7354	37.7354	7.3000e- 004	6.9000e- 004	37.9597

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	√yr		
Condo/Townhouse	262122	1.4100e- 003	0.0121	5.1400e- 003	8.0000e- 005		9.8000e- 004	9.8000e- 004		9.8000e- 004	9.8000e- 004	0.0000	13.9878	13.9878	2.7000e- 004	2.6000e- 004	14.0710
General Office Building	14733	8.0000e- 005	7.2000e- 004	6.1000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.7862	0.7862	2.0000e- 005	1.0000e- 005	0.7909
Unrefrigerated Warehouse-No	430280	2.3200e- 003	0.0211	0.0177	1.3000e- 004		1.6000e- 003	1.6000e- 003		1.6000e- 003	1.6000e- 003	0.0000	22.9614	22.9614	4.4000e- 004	4.2000e- 004	23.0978
Total		3.8100e- 003	0.0339	0.0235	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003	0.0000	37.7354	37.7354	7.3000e- 004	6.9000e- 004	37.9597

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M [*]	T/yr	
Condo/Townhouse	70636	20.5488	9.3000e- 004	1.9000e- 004	20.6293
General Office Building	16047	4.6683	2.1000e- 004	4.0000e- 005	4.6866
Unrefrigerated Warehouse-No	437720	127.3378	5.7600e- 003	1.1900e- 003	127.8367
Total		152.5549	6.9000e- 003	1.4200e- 003	153.1526

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Γ/yr	
Condo/Townhouse	70636	20.5488	9.3000e- 004	1.9000e- 004	20.6293
General Office Building	16047	4.6683	2.1000e- 004	4.0000e- 005	4.6866
Unrefrigerated Warehouse-No	437720	127.3378	5.7600e- 003	1.1900e- 003	127.8367
Total		152.5549	6.9000e- 003	1.4200e- 003	153.1526

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	/yr							MT	/yr		
Mitigated	0.7277	1.9600e- 003	0.1499	9.0000e- 005		6.9400e- 003	6.9400e- 003		6.9400e- 003	6.9400e- 003	0.6383	0.4342	1.0725	1.2000e- 003	4.0000e- 005	1.1149
Unmitigated	0.7277	1.9600e- 003	0.1499	9.0000e- 005		6.9400e- 003	6.9400e- 003		6.9400e- 003	6.9400e- 003	0.6383	0.4342	1.0725	1.2000e- 003	4.0000e- 005	1.1149

6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					tons	/yr							MT	/yr		
Architectural Coating	0.0778					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6143					0.0000	0.0000	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0323	7.4000e- 004	0.0445	9.0000e- 005		6.3600e- 003	6.3600e- 003		6.3600e- 003	6.3600e- 003	0.6383	0.2622	0.9004	1.0300e- 003	4.0000e- 005	0.9385
Landscaping	3.2800e- 003	1.2200e- 003	0.1055	1.0000e- 005		5.8000e- 004	5.8000e- 004		5.8000e- 004	5.8000e- 004	0.0000	0.1720	0.1720	1.7000e- 004	0.0000	0.1763
Total	0.7277	1.9600e- 003	0.1499	1.0000e- 004		6.9400e- 003	6.9400e- 003		6.9400e- 003	6.9400e- 003	0.6383	0.4342	1.0725	1.2000e- 003	4.0000e- 005	1.1149

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					tons	/yr							MT	/yr		
Architectural Coating	0.0778					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0323	7.4000e- 004	0.0445	9.0000e- 005		6.3600e- 003	6.3600e- 003		6.3600e- 003	6.3600e- 003	0.6383	0.2622	0.9004	1.0300e- 003	4.0000e- 005	0.9385
Landscaping	3.2800e- 003	1.2200e- 003	0.1055	1.0000e- 005		5.8000e- 004	5.8000e- 004		5.8000e- 004	5.8000e- 004	0.0000	0.1720	0.1720	1.7000e- 004	0.0000	0.1763
Total	0.7277	1.9600e- 003	0.1499	1.0000e- 004		6.9400e- 003	6.9400e- 003		6.9400e- 003	6.9400e- 003	0.6383	0.4342	1.0725	1.2000e- 003	4.0000e- 005	1.1149

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated	56.9483	0.9715	0.0233	88.1877
Ommagatoa	56.9483	0.9715	0.0233	88.1877

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M	Г/уг	
Condo/Townhouse	0.912156 / 0.575055	2.3108	0.0298	7.2000e- 004	3.2709
General Office Building	0.15996 / 0.0980402	0.4024	5.2300e- 003	1.3000e- 004	0.5707
Unrefrigerated Warehouse-No	28.675 / 0	54.2352	0.9364	0.0225	84.3461
Total		56.9483	0.9715	0.0233	88.1877

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e			
Land Use	Mgal	MT/yr						
Condo/Townhouse	0.912156 / 0.575055	2.3108	0.0298	7.2000e- 004	3.2709			
General Office Building	0.15996 / 0.0980402	0.4024	5.2300e- 003	1.3000e- 004	0.5707			
Unrefrigerated Warehouse-No	28.675 / 0	54.2352	0.9364	0.0225	84.3461			
Total		56.9483	0.9715	0.0233	88.1877			

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	25.1384	1.4856	0.0000	62.2793
_	25.1384	1.4856	0.0000	62.2793

8.2 Waste by Land Use <u>Unmitigated</u>

Waste	Total CO2	CH4	N2O	CO2e
	10101 002	0117	1120	0020
Disposed				

Land Use	tons	MT/yr						
Condo/Townhouse	6.44	1.3073	0.0773	0.0000	3.2387			
General Office Building	0.84	0.1705	0.0101	0.0000	0.4224			
Unrefrigerated Warehouse-No	116.56	23.6606	1.3983	0.0000	58.6182			
Total		25.1384	1.4856	0.0000	62.2793			

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Г/уг	
Condo/Townhouse	6.44	1.3073	0.0773	0.0000	3.2387
General Office Building	0.84	0.1705	0.0101	0.0000	0.4224
Unrefrigerated Warehouse-No	116.56	23.6606	1.3983	0.0000	58.6182
Total		25.1384	1.4856	0.0000	62.2793

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Equipment Type	INGILIDO	1 louis/ Duy	1 louis/ i cui	TIOIOC T OWCI	Loud I doloi	i dei Type
					4	

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
User Defined Equipment					

Number

11.0 Vegetation

Equipment Type

APPENDIX B

Biological Resources Assessment 4224 Highway 12

MEMO



To:

Conies:

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Arcadis U.S., Inc.

100 Smith Ranch Road

From:

Lee Miles, Wildlife Biologist

Date:

Arcadis Project No.:

March 31, 2019

RV009362.0003

Subject:

Revised Biological Resource and Habitat Assessment 4224 Highway 12, Santa Rosa, Sonoma County, California

This memorandum summarizes the biological resources and habitat assessment for the proposed Santa Rosa Recess Project located at 4224 Highway 12, Santa Rosa, Sonoma County, California (Figure 1). The purpose of the analysis is to provide a description of the existing biological resources at the proposed Project site and to identify any potentially significant impacts that could occur to sensitive biological resources from the construction and operation of the proposed storage facility and residential development.

Potential biological resources include common plant and wildlife species and special status plants and animals designated by U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS), and waters of the U.S. and State regulated by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW.

This evaluation of biological resources in the Project area is based on technical research; field surveys; aerial photograph interpretation; and database review of special-status plants and wildlife, vegetation communities, wildlife habitat, and jurisdictional waters of the U.S. and waters of the State that occur in the Project vicinity.

PROPOSED PROJECT

American Recess Development Company (ARDC) proposed to construct a 124,000 square foot storage facility and up to 18 single-family homes on approximately 2.68 acres at 4224 Highway 12 in unincorporated Sonoma County. The proposed storage facility will be four stories with each floor comprising approximately 31,000 square feet for a total area of 124,000 square feet. The storage facility will have a 900 square foot office located on the southwestern side of the facility. Up to 18 residential homes will be constructed. Residences will vary in size from approximately 854 square feet to 1,407 square feet. Each home will be two or three-stories, include a covered parking area for one car, and a yard area. Seventeen guest parking spaces will be provided throughout the site and some spaces may be in tandem with the covered spaces for the unit. Construction of the residences would include installation of utility connections including water, sewer, electricity, and natural gas.

METHODS

Desktop Analysis and Site Reconnaissance

Arcadis wildlife biologist Lee Miles conducted a reconnaissance-level site visit on April 20, 2018. Prior to conducting the site visit, a desktop analysis was conducted. The California Natural Diversity Database (CNDDB) was queried for the Santa Rosa U.S. Geological Survey 7.5-minute quadrangle for special status species with known occurrences within the vicinity of the Project site. The USFWS's Information for Planning and Consultation (IPac) was queried for the Project parcel to obtain an unofficial USFWS species list. And the CNPS Rare Plant Inventory was queried for the Santa Rosa quadrangle for rare plants with potential to occur within the vicinity of the Project. The National Wetlands Inventory (NWI) was queried to understand the potential for wetlands or waters of the U.S. to occur on the Project site. The results of the queries are provided as attachments to this memorandum.

For the purposes of this document, special status are plants or animals that are legally protected under the following:

- Plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 et seq.; 14 CCR §670.1 et seq.) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- Plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- Plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;
- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2001).
 The California Department of Fish and Wildlife recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in CEQA documents;
- Nesting and breeding birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CDGC) 3501;
- Animals that are designated as "species of special concern" by the CDFW (2014);
- Animal species that are "fully protected" in CDFCs 3511, 4700, 5050, and 5515).

MEMO

Table 1 summarizes the results of the CNDDB and CNPS database query. A total of 11 species have potential to occur within the vicinity of the Project site according to the query. Because of past and current land use at the site, including a former walnut orchard and burning of refuse and debris, there is low potential for sensitive plants to occur. The Project site is not within designated critical habitat for California tiger salamander and California red-legged frog.

Table 1 Special Status Species Potential to Occur

Name	Status	Blooming Period	Preferred Habitat	Potential to Occur	
Blennosperma bakeri	1B.1	February- April	Valley and foothill grassland, vernal pools	Low	Project area does not provide suitable habitat
Hemizonia congesta ssp. Congesta	1B.2	April- November	Valley and foothill grassland	Low	Project area does not provide suitable habitat
Burke's goldfields	1B.1	April-June	Meadows and seeps	Low	Project area does not provide suitable habitat
Navarretia leucocephala ssp. Bakeri	1B.1	May-July	Cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools	Low	Because of past land use, the Project area does not provide suitable habitat
Brodiaea leptandra	1B.2	May-July	Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland	Low	Because of past land use, the Project area does not provide suitable habitat. Known habitat for this species occurs over 0.25 miles to the southeast near
Arctostaphylos stanfordiana ssp. decumbens	1B.1	February- April	Chaparral and cismontane woodland	Low	Project area does not provide suitable habitat. Known from only 10 occurrences in Napa and Sonoma County.
	Hemizonia congesta ssp. Congesta Burke's goldfields Navarretia leucocephala ssp. Bakeri Brodiaea leptandra Arctostaphylos stanfordiana ssp.	bakeri 1B.1 Hemizonia congesta ssp. Congesta 1B.2 Burke's goldfields 1B.1 Navarretia leucocephala ssp. Bakeri 1B.1 Brodiaea leptandra 1B.2 Arctostaphylos stanfordiana ssp. decumbens 1B.1	bakeri1B.1AprilHemizonia congesta ssp. Congesta1B.2April-NovemberBurke's goldfields1B.1April-JuneNavarretia leucocephala ssp. Bakeri1B.1May-JulyBrodiaea leptandra1B.1May-JulyBrodiaea leptandra1B.2February-AprilArctostaphylos stanfordiana ssp. decumbens1B.1	bakeri1B.1Aprilgrassland, vernal poolsHemizonia congesta ssp. Congesta1B.2April-NovemberValley and foothill grasslandBurke's goldfields1B.1Meadows and seepsNavarretia leucocephala ssp. BakeriMay-JulyCismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal poolsBrodiaea leptandra1B.1Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grasslandArctostaphylos stanfordiana ssp. decumbens1B.1Chaparral and cismontane woodland	bakeri1B.1Aprilgrassland, vernal poolsHemizonia congesta ssp. Congesta1B.2LowBurke's goldfields1B.1April-June Meadows and seepsLowMay-JulyCismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal poolsLowNavarretia leucocephala ssp. Bakeri1B.1Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grasslandLowBrodiaea leptandra1B.2February- AprilLowArctostaphylos stanfordiana ssp. decumbensLowChaparral and cismontane woodland

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California tiger salamander	Ambystoma californiense	FT/ST	Vernal pools or seasonal ponds or for breeding and upland refugia including ground squirrel burrows	Low	No upland aestivation habitat was observed during site visit. There is no suitable aquatic habitat within migratory distance from the Project site
California red-legged frog	Rana draytonii	FT/CSC	Stock ponds, pools, and slow-moving streams.	Low	No upland aestivation habitat was observed during site visit. There is no suitable aquatic habitat within migratory distance from the Project site
California giant salamander	Dicamptodon ensatus	csc	wet coastal forests near streams or seeps. Cold, clear streams with rocks or logs	Low	No suitable habitat within the vicinity of the Project.
Western pond turtle	Emys marmorata	CSC	Slow moving streams and ponds with logs or rocks for basking	Low	There are no aquatic features within the Project boundary. Closest known occurrence is approximately 0.25 miles to the south.
Birds			<u>.</u>		·
White tailed kite	Elamus leucrus	FP	Found in lower foothills and valleys with scattered oaks and adjacent to streams.	Low	While there are scattered oaks onsite, higher quality habitat occurs offsite. No kite nests were observed during site visit.

Status:

FE - Federal Endangered FT - Federal Threatened FPE - Federal Proposed Endangered FPT - Federal Proposed Threatened FC - Federal Candidate CE - California Endangered CT - California Threatened

CR – California Rare
CC – California Candidate Species
CSC - California Species of Special Concern
FP – California Fully Protected

Project Site Survey

Ms. Miles surveyed the Project site on foot with special focus on identification of habitat that could support special status plants or wildlife. Both the Project parcel and adjacent areas were surveyed including the Santa Rosa Creek Trail located to the east of the Project site. No protocol-level or focused surveys for plants or wildlife were conducted. An arborist survey was conducted and is provided under separate cover.

RESULTS

Soils

Soils at the Project site are mapped as Yolo clay loam, 0 to 5 percent slopes. This soil is well-drained and generally found at elevations from 0 to 360 above sea level. Mean annual precipitation is 28 to 41 inches and Yolo clay loam is typically found within alluvial fans.

Topography and Hydrology

The parcel is generally flat with a 10-foot elevational drop at the northeastern portion of the site. The site was previously used as a walnut orchard and has been subjected to human-derived disturbance with may have altered the topography. There was no evidence of surface hydrology, ponding or vernal pools.

Plant Communities and Habitats

The habitat at the site is dominated by non-native grasses and herbaceous vegetation resulting from past disturbance and use as an orchard. Species observed included ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian ryegrass (*Festuca perennis*), slender wild oat (Avena barbata), Mediterranean barley (*Hordeum marinum*), broadleaf filaree (*Erodium botrys*), prickly lettuce (*Lactuca serriola*), bristly ox-tongue (*Helminthotheca echioides*), Himalayan blackberry (*Rubus armeniacus*). and birdfoot trefoil (*Lotus corniculatus*). Several native trees occur on site including western sycamore (*Plantanus racemose*), Coast live oak (*Quercus agrifolia*), and valley oak (*Quercus lobata*). Species expected to occur within these habitats are those adapted to ruderal vegetation communities and humaninduced habitat disturbance including blacktailed deer (*Odocoileus hemonius*), Virginia opossum (*Didelphis marsupialis*) raccoon (*Procyon lotor*), and birds and raptors. The mature trees on site provide suitable nesting for birds and raptors although no nests were observed during the April 20, 2018 survey. Species observed onsite include blacktailed deer, black phoebe (*Sayornis nigricans*) and common crow (*Corvus brachyrhyncos*).

Waters of the U.S./Waters of the State

The NWI database did not indicate the potential for wetlands or potential waters of the U.S./waters of the State to occur within the Project boundary (Figure 2). The reconnaissance site visit determined that the Project parcel does not contain any waters of the U.S. or waters of the State. No surface water features were observed. The nearest surface water is Santa Rosa Creek located approximately 200 feet to the east and beyond the boundaries of the Project.

Special Status Species

Because of the past land use at the site, including the former walnut orchard, no formal rare plant surveys were conducted. Because of access issues, the adjacent parcel was surveyed from the perimeter of the parcel. However, this parcel has been developed with existing businesses and the site provides no habitat for plants or animals. The reconnaissance site visit did not reveal the presence of habitats or conditions to support sensitive plants. Currently, the site was dominated by ruderal and non-native herbaceous vegetation. Sensitive plant species identified in Table 1 have low potential to occur and have specific habitat requirements such as meadows, seeps, or vernal pools which are not present within the Project boundary. At the time of the April 20, 2018 survey, evidence of refuse and debris burning was observed on-site providing further likelihood that the site does not provide suitable habitat for special status plants.

Special Status Wildlife

California tiger salamander

California tiger salamanders (*Ambystoma californiense*) occur in grasslands and open oak woodlands that provide suitable aestivation and breeding habitats. California tiger salamanders spend the majority of their lives underground. They typically only emerge from their subterranean refugia for a few nights each year during the rainy season to migrate to breeding ponds. In Sonoma County, California tiger salamander emerge during the first heavy, warm rains of the year, typically in late November and early December. California tiger salamander typically will migrate to their breeding pools after dark during rainfall. During the spring, summer, and fall months, most known populations of the California tiger salamander throughout this species range in California predominately use California ground squirrel (*Spermophilus beechyi*) burrows. Where ground squirrel burrows are scarce, salamanders will use burrows or holes of other small burrowing mammals or crevices or cracks in upland habitat. Stock ponds, seasonal wetlands, and deep vernal pools typically provide most of the breeding habitat used by California tiger salamander. In such locations, California tiger salamander attach their eggs to rooted, emergent vegetation, and other stable objects in the water. California tiger salamanders have been known to breed in slow moving streams where there is sufficient material for eggs to adhere.

The Project site does not occur within designated critical habitat for California tiger. Aquatic habitat provided by Santa Rosa Creek does not provide suitable breeding habitat for California tiger salamander because flows with Santa Rosa Creek in the vicinity of the Project site are too high for sustainable breeding to occur. The Project site does not provide suitable upland aestivation habitat for California tiger salamander. No burrows, holes, crevices or other subterranean habitat was observed during the April 2018 site visit.

California red-legged frog

The California red-legged frog (*Rana draytonii*) is federally listed as threatened (Federal Register, 1996), and is a California species of special concern. The USFWS issued a revised critical habitat designation for the California red-legged frog on March 17, 2010. The Project area does not fall within critical habitat for California red-legged frog.

Historically, the California red-legged frog occurred in coastal mountains from Marin County southward to northern Baja California, and along the floor and foothills of the Central Valley from about Shasta County southward to Kern County (Jennings et al., 1992). Currently, this subspecies generally only occurs in the coastal portions of its historical range; it has been apparently extirpated from the valley and foothills and

from most of Southern California south of Ventura County. California red-legged frogs are usually confined to aquatic habitats such as creeks, streams, and ponds, and occur primarily in areas having pools approximately 3 feet deep, with adjacent dense emergent or riparian vegetation. Adult frogs move seasonally between their egg-laying sites and foraging habitat, but they typically do not move large distances from their aquatic habitat. California red-legged frogs breed from November to March. Egg masses are attached to emergent vegetation and hatch within approximately 14 days. Metamorphosis generally occurs between July and September.

No suitable aquatic or upland aestivation habitat occurs within the Project boundary. Santa Rosa Creek, located approximately 200 feet to the west, may provide suitable aquatic habitat but there are no known occurrences of California red-legged frogs within the vicinity of this reach (CNDDB 2018).

Western Pond Turtle

The Western pond turtle (*Emys marmorata*) is a California species of special concern. Historically, this turtle had a relatively continuous distribution in most Pacific slope drainages from Klickitat County, Washington, along the Columbia River to Arroyo Santo Domingo, northern Baja California, and Mexico. The known elevational range of the western pond turtle extends from near sea level to about 4,690 feet above sea level. In California, western pond turtles were historically present in most Pacific slope drainages between the Oregon and Mexican borders (Jennings and Hayes, 1994).

Western pond turtle is an aquatic turtle that is found in ponds, lakes, and slow-water streams. Pond turtles are uncommon in high-gradient streams, likely because their local distribution may be limited by water temperatures, current velocity, or food resources. Western pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks (Jennings and Hayes 1994). Habitat quality seems to vary with the availability of aerial and aquatic basking sites; however, western pond turtles often reach higher densities where many aerial and aquatic basking sites are available. Hatchlings require shallow water habitat with relatively dense submergent or short emergent vegetation in which to forage. Western pond turtles also require an upland oviposition site in the vicinity of the aquatic site. Suitable oviposition sites must have the proper thermal and hydraulic environment for incubation of the eggs. The thin-shelled eggs of these turtles are suited to development in a dry nest; in an excessively moist nest (irrigated areas), eggs have a high probability of failing. Nests are typically located on a slope that is unshaded to ensure that substrate temperatures would be high enough to incubate the eggs.

Western pond turtles leave the aquatic site to reproduce, aestivate, and overwinter. Western pond turtles may overwinter on land or in water or may remain active in water during the winter season (Jennings and Hayes 1994). Mating, which has been rarely observed, typically occurs in late April or early May, but may occur year-round. Females migrate from the aquatic site to an upland location and deposit from 1 to 13 eggs in a shallow excavation. Females may lay more than one clutch per year, usually during May and June, although some individuals may deposit eggs as early as late April and as late as early August (Jennings and Hayes, 1994).

No suitable aquatic habitat occurs on site and western pond turtle is not expected to occur within the Project boundary. Santa Rosa Creek may provide low-quality pond turtle habitat occurs approximately 200 feet to the west of the Project site. The flow within this reach of the Creek likely provides limited pond

turtle habitat. The nearest known occurrence of Western pond turtle occurs to the southwest of the Project site at the confluence of Santa Rosa Creek and Brush Creek (CNDDB 2018).

Nesting Birds and Raptors

The Project site native and non-native trees and shrubs that may provide suitable nesting habitat for passerine species and small raptors. No nests or nesting behavior was observed during the April 20, 2018 site visit. Larger raptors, such as red-tailed hawk (*Buteo jamacaicens*), may use the Project site for foraging but are unlikely to nest within the Project boundary because more suitable habitat occurs in the open space areas outside of the Project boundary.

CONCLUSIONS

Based on information from the CNDDB, CNPS, NWI, iPac databases and the April 20, 2018 site visit, there is low potential for special status species to occur on the Project site. The site does not provide suitable habitat for CTS, CRLF, or Western pond turtle as described in this memorandum. Therefore, impacts on special status species are not anticipated to be less than significant and no mitigation measures are proposed.

The site does not provide suitable habitat for rare plants and no impacts on sensitive plants are anticipated. The native and non-native trees, shrubs, and herbaceous vegetation does provide potential suitable nesting habitat for birds and raptors. While no nests were observed during the April 20, 2018 site visit, the potential for nesting birds is high. Without mitigation to reduce the potential for impacts on nesting and breeding birds protected under MBTA and CFGC 3503 could be significant. However, the following mitigation measures are recommended to reduce potential impacts on nesting and breeding birds to less than significant.

Mitigation Measure 1: Preconstruction Nesting Bird Surveys

In order to avoid impacts to nesting birds, Project activities shall occur outside of the peak avian breeding season which runs from February 1 through September 1. If Project construction is necessary during the bird breeding season, a qualified biologist with experience in conducting bird breeding surveys shall conduct weekly bird surveys for nesting birds, within three days prior to the work in the area, and ensure no nesting birds in the Project area would be impacted by the Project. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. The buffer shall be a minimum width of 200 feet (500 feet for raptors), be delineated by temporary fencing, and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction shall occur within the fenced nest zone until the young have fledged. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors and if buffer reduction is necessary, coordination with CDFW will occur.

Mitigation Measure 2: Non-nesting Season Vegetation Removal

Vegetation removal would occur outside of the typical nesting season for birds and raptors within the Project vicinity generally September 1 to February 1. Prior to vegetation removal, Mitigation Measure 1 would be implemented. If nests are observed during the survey, no vegetation removal shall occur until young have fledged.

REFERENCES

California Department of Fish and Wildlife. 2018. California Natural Diversity Database (CNDDB), RareFind5, California Department of Fish and Wildlife Sacramento. Santa Rosa U.S. Geological Survey 7.5-minute quadrangle. Accessed June 2018.

California Native Plant Society Rare Plant Program, 2018. Inventory of Rare and Endangered Plants of California. Online addition. Website http://www.rareplants.cnps.org. Accessed June 2018.

California Native Plant Society. Inventory of Rare Plants.

Jennings, M.R. and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish and Game. Rancho Cordova.

Natural Resources Conservation Service. 2018. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed June 2018.

Stebbins, R.C. 1972. California amphibians and reptiles. University of California Press, Berkeley, CA.

U.S. Department of Agriculture. 2018. Web Soil Survey. Natural Resources Conservation Service. Accessed at https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

U.S. Fish and Wildlife Service. National Wetlands Inventory. 2018. Website: https://www.fws.gov/wetlands/Data/Mapper.html. Accessed June 2018.

U.S Fish and Wildlife Service. 2018. Information for Planning and Consultation (iPaC) Species List for the Santa Rosa U.S.G.S. 7.5 Minute Quadrangle. Accessed June 2018.

REPORT PREPARERS

Lee Miles, AICP is a terrestrial biologist and certified planner with over 18 years of environmental compliance experience in California specializing in linear projects, pipelines, and infrastructure. She has conducted biological surveys for California tiger salamander, California red-legged frog, Foothill yellowlegged frog, San Joaquin kit fox, salt marsh harvest mouse, and nesting birds and raptors. She has conducted wetland delineations in a variety of habitats throughout Northern and Central California. She leads Arcadis's California Environmental Permitting team and her experience also includes developing and managing the preparation of California Environmental Quality Act (CEQA) documents for including initial studies, mitigated negative declarations, Environmental Impact Reports, Mitigation, Monitoring and Reporting Plans, and addendums and CEQA Plus documents. Ms. Miles has extensive experience obtaining regulatory authorizations from U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW). She provides expertise with Clean Water Act Section 404, 401, Endangered Species Act Section 7, 9 and 10, and California Fish and Game Code 1602, 2081, 2080.1 (b)(c). She has prepared Biological Assessments for California red-legged frog, California tiger salamander, San Joaquin kit fox, salt marsh harvest mouse, San Francisco garter snake, Alameda whipsnake, and migratory salmonids.

4224 Highway 12 Santa Rosa, CA



March 23, 2018

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

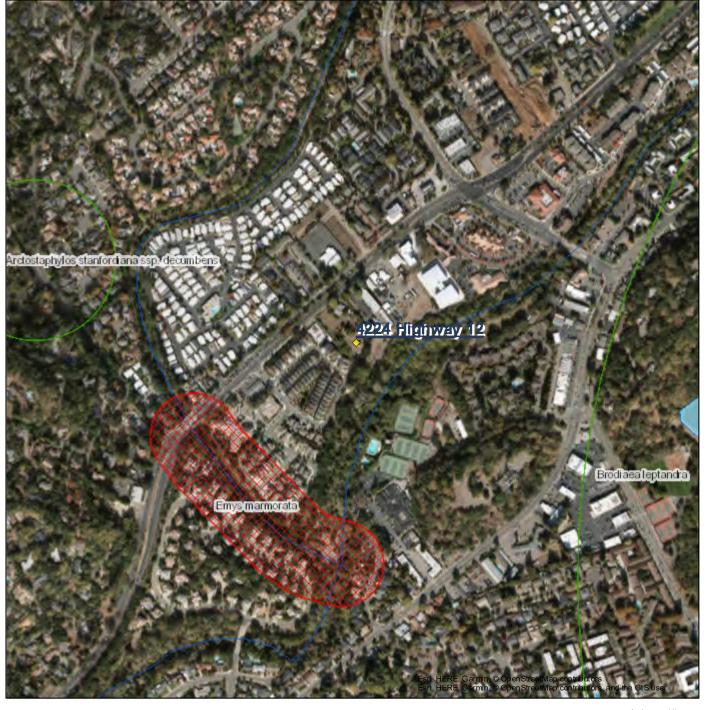
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

4224 Hwy 12 Bios Map

Database (CNDDB) Commercial [ds85] Plant (80m) Plant (specific) Plant (non-specific) Plant (circular) Animal (80m) Animal (specific) Animal (non-specific) Animal (circular) Terrestrial Comm. (80m) Terrestrial Comm. (specific) Terrestrial Comm. (nonspecific) Terrestrial Comm. (circular) Aquatic Comm. (80m) Aquatic Comm. (specific) Aquatic Comm. (nonspecific) Aquatic Comm. (circular) Multiple (80m) Multiple (specific) Multiple (non-specific) Multiple (circular) Sensitive EO's (Commercial only) 1:9,028 0.3 mi 0.075 0.4 km

August 12, 2018

California Natural Diversity





Summary Table Report

California Department of Fish and Wildlife





Query Criteria: Quad IS (Santa Rosa (3812246))

	1	1		I I									a I			
				Elev.		L	lem	ent C	cc. F	lanks	<u> </u>	Population	n Status		Presence	•
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ambystoma californiense California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	85 120	1177 S:28	4	6	8	3	1	6	0	28	27	1	0
Amorpha californica var. napensis Napa false indigo	G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	700 700	69 S:1	0	0	0	0	0	1	0	1	1	0	0
Amsinckia lunaris bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		86 S:1	0	0	0	0	0	1	1	0	1	0	0
Andrena blennospermatis Blennosperma vernal pool andrenid bee	G2 S2	None None		90 90	15 S:1	0	0	0	0	0	1	1	0	1	0	0
Arctostaphylos stanfordiana ssp. decumbens Rincon Ridge manzanita	G3T1 S1	None None	Rare Plant Rank - 1B.1	300 800	12 S:4	0	0	1	1	1	1	2	2	3	0	1
Astragalus claranus Clara Hunt's milk-vetch	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	770 770	6 S:1	0	1	0	0	0	0	0	1	1	0	0
Balsamorhiza macrolepis big-scale balsamroot	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	890 1,230	50 S:2	2	0	0	0	0	0	2	0	2	0	0
Blennosperma bakeri Sonoma sunshine	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	90 105	25 S:6		4	1	0	1	0	1	5	5	1	0
Bombus caliginosus obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	150 150	181 S:1	0	0	0	0	0	1	1	0	1	0	0
Bombus occidentalis western bumble bee	G2G3 S1	None None	USFS_S-Sensitive XERCES_IM-Imperiled	100 100	282 S:1	0	0	0	0	0	1	1	0	1	0	0
Brodiaea leptandra narrow-anthered brodiaea	G3? S3?	None None	Rare Plant Rank - 1B.2		39 S:2		0	0	0	0	2	2	0	2	0	0
Ceanothus confusus Rincon Ridge ceanothus	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	510 800	33 S:2		0	1	0	0	1	1	1	2	0	0



Summary Table Report

California Department of Fish and Wildlife



California Natural Diversity Database

				Elev.		E	Elem	ent C	Occ. F	Rank	6	Population	on Status		Presence	•
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	С	D	х	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ceanothus divergens Calistoga ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	800 800	23 S:1	0	0	0	0	0	1	1	0	1	0	0
Ceanothus purpureus holly-leaved ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2	475 475	43 S:1	0	0	0	0	0	1	1	0	1	0	0
Ceanothus sonomensis Sonoma ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2	475 475	30 S:1	0	0	0	0	0	1	1	0	1	0	0
Coturnicops noveboracensis yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	283 283	45 S:1	0	0	0	0	0	1	1	0	1	0	0
Dicamptodon ensatus California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	350 350	232 S:1	0	0	0	0	0	1	0	1	1	0	0
Elanus leucurus white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	120 120	175 S:1	0	1	0	0	0	0	0	1	1	0	0
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	150 475	1343 S:9	1	1	6	1	0	0	3	6	9	0	0
Fritillaria liliacea fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	150 800	82 S:6	0	2	1	0	2	1	3	3	4	2	0
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	G5T2 S2	None None	Rare Plant Rank - 1B.2	442 442	52 S:1	0	0	0	0	0	1	0	1	1	0	0
Lasthenia burkei Burke's goldfields	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	100 442	34 S:4	0	3	0	0	0	1	0	4	4	0	0
Layia septentrionalis Colusa layia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		57 S:1	0	0	0	0	0	1	0	1	1	0	0



Summary Table Report

California Department of Fish and Wildlife



California Natural Diversity Database

				Elev.		Е	Eleme	ent C	cc. F	Rank	5	Population	on Status		Presence	
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	С	D	х	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Leptosiphon jepsonii Jepson's leptosiphon	G3 S3	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	180 450	39 S:2	0	0	0	0	0	2	1	1	2	0	0
Limnanthes vinculans Sebastopol meadowfoam	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	80 105	45 S:8	1	2	0	2	0	3	3	5	8	0	0
Linderiella occidentalis California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	100 776	434 S:3	0	1	0	0	0	2	2	1	3	0	0
Navarretia leucocephala ssp. bakeri Baker's navarretia	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	740 740	58 S:1	1	0	0	0	0	0	0	1	1	0	0
Rana boylii foothill yellow-legged frog	G3 S3	None Candidate Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	750 750	2054 S:1	1	0	0	0	0	0	1	0	1	0	0
Rana draytonii California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	770 770	1497 S:1	0	1	0	0	0	0	0	1	1	0	0
Trifolium amoenum two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	160 160	26 S:1	0	0	0	0	0	1	1	0	1	0	0
Trifolium buckwestiorum Santa Cruz clover	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_USDA-US Dept of Agriculture		50 S:1	0	0	0	0	0	1	0	1	1	0	0
Trifolium hydrophilum saline clover	G2 S2	None None	Rare Plant Rank - 1B.2	100 100	49 S:2	0	0	0	0	2	0	2	0	0	1	1
Triquetrella californica coastal triquetrella	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	328 328	13 S:1	0	0	0	0	0	1	0	1	1	0	O
Valley Needlegrass Grassland Valley Needlegrass Grassland	G3 S3.1	None None		835 835	45 S:1	0	0	0	0	0	1	1	0	1	0	0

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat Broadleafed upland forest (openings),
Amorpha californica var. napensis	Napa false indigo	Fabaceae	perennial deciduous shrub	1B.2	None	None	Apr-Jul	Chaparral, Cismontane woodland Coastal bluff scrub, Cismontane woodland, Valley and foothill
Amsinckia lunaris Arctostaphylos	bent-flowered fiddleneck	Boraginaceae	annual herb	1B.2	None	None	Mar-Jun	grassland
stanfordiana ssp. decumbens	Rincon Ridge manzanita	Ericaceae	perennial evergreen shrub	18.1	None	None	Feb-Apr(May)	Chaparral (rhyolitic), Cismontane woodland Chaparral (openings), Cismontane woodland, Valley and foothill
Astragalus claranus	Clara Hunt's milk-vetch	Fabaceae	annual herb	1B.1	СТ	FE	Mar-May	grassland Chaparral, Cismontane woodland, Valley and
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	1B.2	None	None	Mar-Jun	foothill grassland Valley and foothill grassland (mesic), Vernal
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	1B.1	CE	FE	Mar-May	pools Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane
								LOWER IIIOIItalic
			perennial bulbiferous					coniferous forest, Valley
Brodiaea leptandra	narrow-anthered brodiae	a Themidaceae	herb	1B.2	None	None	May-Jul	and foothill grassland Coastal prairie, Coastal scrub, Meadows and
			herb perennial bulbiferous					and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast
Brodiaea leptandra Calochortus uniflorus	narrow-anthered brodiae	a Themidaceae Liliaceae	herb		None 2 None	None	May-Jul Apr-Jun	and foothill grassland Coastal prairie, Coastal scrub, Meadows and
			herb perennial bulbiferous herb					and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest Closed-cone coniferous
Calochortus uniflorus	pink star-tulip	Liliaceae	perennial bulbiferous herb perennial evergreen shrub	4.:	2 None	None	Apr-Jun	and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest Closed-cone coniferous forest, Chaparral, Cismontane woodland
Calochortus uniflorus Ceanothus confusus	pink star-tulip Rincon Ridge ceanothus	Liliaceae Rhamnaceae	perennial bulbiferous herb perennial evergreen shrub perennial evergreen	4.: 1B.1	2 None None	None	Apr-Jun Feb-Jun	and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest Closed-cone coniferous forest, Chaparral, Cismontane woodland Chaparral (serpentinite or volcanic, rocky) Cismontane woodland,
Calochortus uniflorus Ceanothus confusus	pink star-tulip Rincon Ridge ceanothus	Liliaceae Rhamnaceae	perennial bulbiferous herb perennial evergreen shrub perennial evergreen shrub	4.: 1B.1	2 None None	None	Apr-Jun Feb-Jun	and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest Closed-cone coniferous forest, Chaparral, Cismontane woodland Chaparral (serpentinite or volcanic, rocky) Cismontane woodland, Coastal prairie, Coastal
Calochortus uniflorus Ceanothus confusus Ceanothus divergens Fritillaria liliacea	pink star-tulip Rincon Ridge ceanothus Calistoga ceanothus	Liliaceae Rhamnaceae Rhamnaceae Liliaceae	perennial bulbiferous herb perennial evergreen shrub perennial evergreen shrub perennial bulbiferous	4.7 1B.1 1B.2	2 None None None	None None None	Apr-Jun Feb-Jun Feb-Apr	and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest Closed-cone coniferous forest, Chaparral, Cismontane woodland Chaparral (serpentinite or volcanic, rocky) Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland Valley and foothill grassland
Calochortus uniflorus Ceanothus confusus Ceanothus divergens Fritillaria liliacea Hemizonia congesta ssp.	pink star-tulip Rincon Ridge ceanothus Calistoga ceanothus fragrant fritillary	Liliaceae Rhamnaceae Rhamnaceae Liliaceae	perennial bulbiferous herb perennial evergreen shrub perennial evergreen shrub perennial bulbiferous herb	1B.1 1B.2 1B.2	2 None None None None	None None None	Apr-Jun Feb-Jun Feb-Apr	and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest Closed-cone coniferous forest, Chaparral, Cismontane woodland Chaparral (serpentinite or volcanic, rocky) Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland Valley and foothill
Calochortus uniflorus Ceanothus confusus Ceanothus divergens Fritillaria liliacea Hemizonia congesta ssp. congesta	pink star-tulip Rincon Ridge ceanothus Calistoga ceanothus fragrant fritillary congested-headed hayfie	Liliaceae Rhamnaceae Rhamnaceae Liliaceae	perennial bulbiferous herb perennial evergreen shrub perennial evergreen shrub perennial bulbiferous herb annual herb	1B.1 1B.2 1B.2 1B.2	2 None None None None	None None None None	Apr-Jun Feb-Jun Feb-Apr Feb-Apr Apr-Nov	and foothill grassland Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest Closed-cone coniferous forest, Chaparral, Cismontane woodland Chaparral (serpentinite or volcanic, rocky) Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland Valley and foothill grassland Meadows and seeps (mesic), Vernal pools Chaparral, Cismontane

Limnanthes vinculans Navarretia leucocephala	Sebastopol meadowfoam	Limnanthaceae	annual herb	1B.1	CE	FE	Apr-May	Valley and foothill grassland, Vernal pools Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill
ssp. bakeri Navarretia leucocephala	Baker's navarretia	Polemoniaceae	annual herb	1B.1	None	None	Apr-Jul	grassland, Vernal pools Vernal pools (volcanic ash
ssp. plieantha	many-flowered navarretia	Polemoniaceae	annual herb	1B.2	CE	FE	May-Jun	flow) Cismontane woodland, North Coast coniferous forest, Valley and foothill
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	4.2	2 None	None	Feb-May	grassland, Vernal pools
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	1B.1	None	FE	Apr-Jun	Coastal bluff scrub, Valley and foothill grassland (sometimes serpentinite)
Trifolium buckwestiorum	Santa Cruz clover	Fabaceae	annual herb	1B.1	None	None	Apr-Oct	Broadleafed upland forest, Cismontane woodland, Coastal prairie Marshes and swamps, Valley and foothill
, ,	saline clover	Fabaceae	annual herb	1B.2	None	None	Apr-Jun	grassland (mesic, alkaline), Vernal pools Coastal bluff scrub,
Triquetrella californica	coastal triquetrella	Pottiaceae	moss	1B.2	None	None		Coastal scrub

Meadows and seeps,

IPaC

U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

Santa Rosa Recess Project

LOCATION

Sonoma County, California



DESCRIPTION

Development of storage facility and residences.

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600

(916) 414-6713

NOT FOR CONSULTATION

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Log in to IPaC.
- 2. Go to your My Projects list.
- 3. Click PROJECT HOME for this project.
- 4. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME STATUS

Northern Spotted Owl Strix occidentalis caurina

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/1123

Threatened

Reptiles

NAME STATUS

Green Sea Turtle Chelonia mydas

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6199

Threatened

Amphibians

NAME STATUS

California Red-legged Frog Rana draytonii

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/2891

Threatened

California Tiger Salamander Ambystoma californiense

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/2076

Endangered

Insects

NAME STATUS

San Bruno Elfin Butterfly Callophrys mossii bayensis

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/3394

Endangered

Crustaceans

NAME STATUS

California Freshwater Shrimp Syncaris pacifica

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/7903

Endangered

Flowering Plants

NAME

Burke's Goldfields Lasthenia burkei

Endangered

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/4338

Clara Hunt's Milk-vetch Astragalus clarianus

Endangered

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/3300

Sebastopol Meadowfoam Limnanthes vinculans

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/404

Endangered

Showy Indian Clover Trifolium amoenum

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6459

Endangered

Sonoma Sunshine Blennosperma bakeri

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/1260

Endangered

White Sedge Carex albida

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/3063

Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

IPaC: Resources 8/16/2018

• Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/ birds-of-conservation-concern.php

- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/ conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of</u> Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area. JT FOR CI

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird Selasphorus sasin

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9637

Breeds Feb 1 to Jul 15

Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1626

Breeds Mar 15 to Aug 31

Breeds Jan 1 to Aug 31

Burrowing Owl Athene cunicularia

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737

California Thrasher Toxostoma redivivum

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

Common Yellowthroat Geothlypis trichas sinuosa

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084

Breeds May 20 to Jul 31

Golden Eagle Aquila chrysaetos

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1680

Breeds Jan 1 to Aug 31

Nuttall's Woodpecker Picoides nuttallii

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410

Breeds Apr 1 to Jul 20

Oak Titmouse Baeolophus inornatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9656

Breeds Mar 15 to Jul 15

Rufous Hummingbird selasphorus rufus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/8002

Breeds elsewhere

Song Sparrow Melospiza melodia

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 20 to Sep 5

Spotted Towhee Pipilo maculatus clementae

This is a Bird of Conservation Concern (BCC) only in particular Bird

Conservation Regions (BCRs) in the continental USA

https://ecos.fws.gov/ecp/species/4243

Breeds Mar 15 to Aug 10

Breeds Apr 15 to Jul 20

Tricolored Blackbird Agelaius tricolor

This is a Bird of Conservation Concern (BCC) throughout its range in

the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/3910

Wrentit Chamaea fasciata

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (1)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

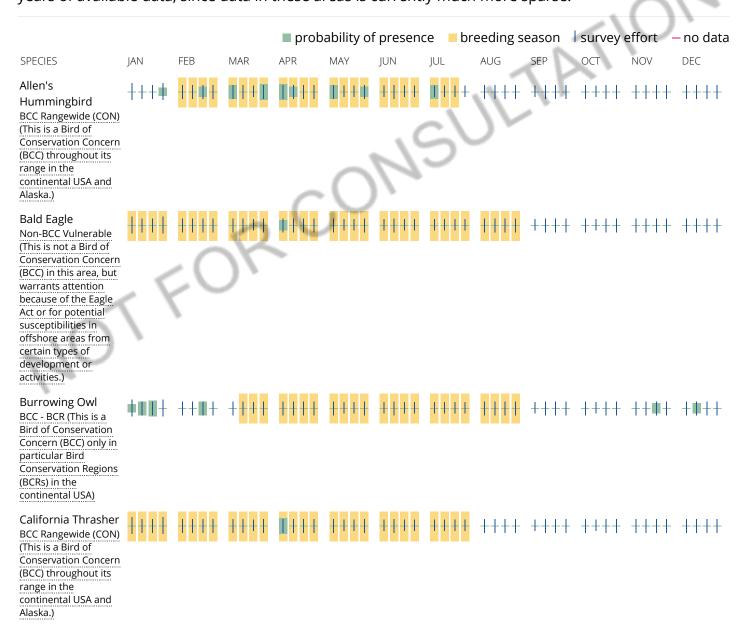
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

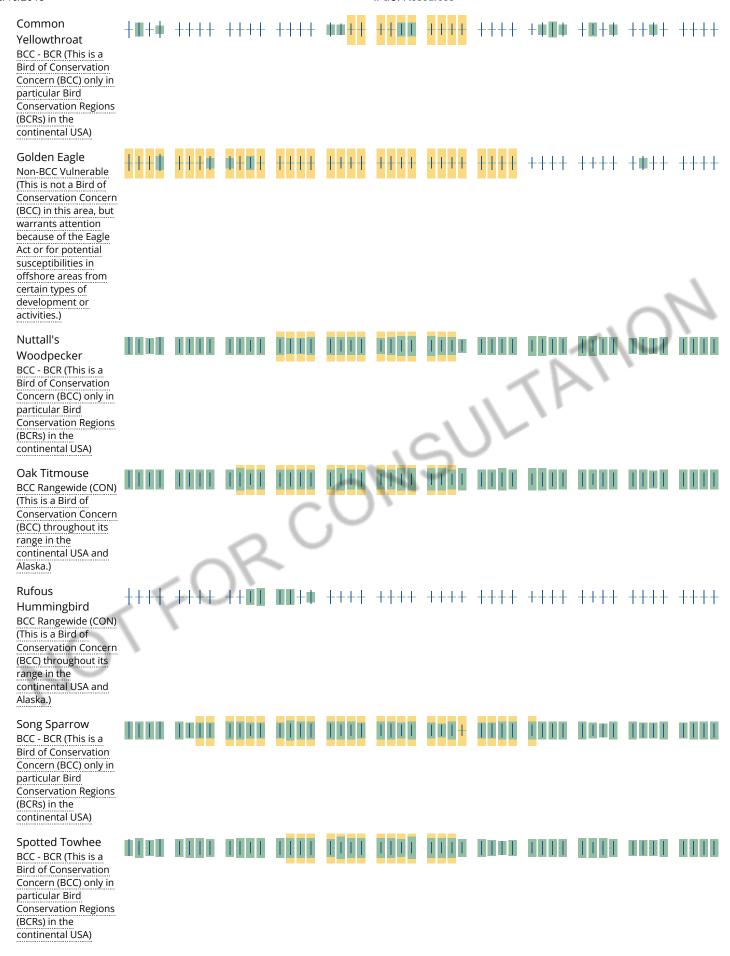
No Data (-)

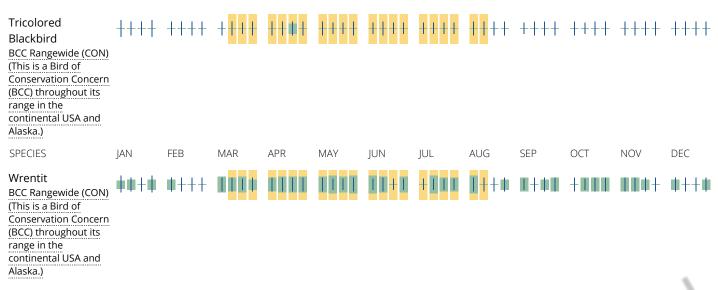
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network</u> (AKN). The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>E-bird Explore Data Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential

impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers</u> <u>District</u>.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this

inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

OT FOR CONSULTATIO

APPENDIX C

Arborist Report

MEMO



Arcadis U.S., Inc.

California 94520 Tel 925 274 1100

Fax 925 726 0121

Suite 400 Concord

2300 Clayton Road

To:

Copies:

Susie Murray

Lee Miles

Larry Thom

From

Joshua Tallis

Date:

Arcadis Project No.:

May 10, 2019 (updated)

RV009362.0003

Subject:

Certified Arborist Report: 4224 Highway 12, Santa Rosa, Ca

A certified arborist tree survey was completed at 4224 Highway 12, Santa Rosa, California on June 8th, 2018 by ISA Certified Arborist Joshua Tallis (#WE-11583A). This report and associated attachments documents the findings of this survey.

Site Description

The site at 4224 Highway 12, Santa Rosa, California contains a single-family home and several outbuildings on a flat weedy lot. The southeast end of the parcel contains a fence which separates the disturbed northwestern portion ("onsite") from a southeast facing slope with dense native vegetation ("offsite"; Attachment 1), however both areas are located on the parcel. Further southeast the parcel contains a public pedestrian walkway which is mowed on either side and does not contain trees. This survey does not include trees east of the pedestrian walkway.

Methodology

- 1. Identify each tree species.
- 2. Mark the general location of each tree species subject to permitting on a site map.
- 3. Measure each trunk circumference at 4.5 feet above surrounding grade using a diameter at breast height (dbh) tape.
- 4. Evaluate the health and structure of each tree.

Summary of Findings

On June 8th, 2018 Joshua Tallis conducted a survey of 60 trees that are classified as protected or heritage trees and could require permits to remove or disturb under the City of Santa Rosa Tree Ordinance, Chapter 17-24. These trees included one Big Leaf Maple (*Acer macrophyllum*), four California Bay (*Umbellularia californica*), 52 Coast Live Oak (*Quercus agrifolia*), one Northern California Black Walnut (*Juglans hindsii*), and two Valley Oak (*Quercus lobata*). Only native trees greater than four inches diameter at breast height were recorded (Tables 1-5).

Tree species that are exempt from permit requirements under Santa Rosa's tree removal and preservation ordinance were not assessed but locations were documented on Attachment 1. The exempt species observed included Ligustrums, Monterey pine (*Pinus radiata*), Black Elderberry (*Sambucus nigra*; generally a shrub), Western Sycamore (*Platanus racemosa*), and fruit and nut trees (excluding northern California black walnut).

Proposed Impacts to Native Trees

It is proposed that all but two (Table 1 Trees #24 and #25) native trees at 4224 Highway 12 will be removed and will require replacement.

Replacement Requirements

All approved native trees removed for development must be replaced at the following calculations based on the Santa Rose City code Chapter 17-24 and verbal communications with Santa Rosa City Planner Susie Murray.

For every 6-inches dbh of native tree removed there must be two 15-gallon native trees of the same genus planted elsewhere on the site. For heritage trees removed a heritage tree species must be replaced. Based on the species observed at the site it is recommended that all native trees removed be replaced with coast live oak (*Quercus agrifolia*) because it is the predominant tree species growing throughout the site and is expected to have the best survival rate. The diameter of protected tree species with multiple trunks are calculated as the sum of the trunk diameters at breast height.

In addition:

- For every three 15-gallon replacement container tree there can alternatively be one 24-inch box container; or,
- For every five 15-gallon replacement container tree there can alternatively be one 36-inch box container.

To determine the total number of native replacement trees the sum calculated is shown on Table 5 and as calculated below:

The sum of the diameters of all native trees to be removed = 689 inches

689 inches/6 inches = 114.8 inches * 2 = 230 15-gallon trees

Associated documents

Table 1: Arborist Report Tree Findings

Table 2. Tree Quantity by Species

Certified Arborist Report: 4224 Highway 12, Santa Rosa, Ca

Table 3. Tree Quantity by Size

Table 4. Heritage Trees

Table 5. Total Diameter of Native Trees

Attachment 1: Tree Location Map

Table 1 Arborist Report Tree Findings 4424 CA-12, Santa Rosa, CA 95409



Revised May 10, 2019

Tree #	Species	Trunk Diameter (In.)	General Condition	Structural Integrity	Recommendations
2	Coast Live Oak/ Quercus agrifolia	5"	Excellent	Excellent	To be removed for construction
3	Coast Live Oak/ Quercus agrifolia	7"	Excellent	Good	To be removed for construction
4	Valley Oak/ Quercus lobata	5"	Excellent	Good. Light competition causes tree to lean.	To be removed for construction
5	Coast Live Oak/ Quercus agrifolia	8.5"	Good	Good. Light competition causes tree to lean.	To be removed for construction
6	Coast Live Oak/ Quercus agrifolia	12"	Good	Good	To be removed for construction
7	Coast Live Oak/ Quercus agrifolia	7.5"	Good	Good	To be removed for construction
8	Coast Live Oak/ Quercus agrifolia	16"	Excellent	Good. Relatively straight trunk.	To be removed for construction
9	Coast Live Oak/ Quercus agrifolia	7.5"	Good	Poor. Leaning due to light competition.	To be removed for construction
10	Coast Live Oak/ Quercus agrifolia	10.5"	Good	Poor. Leaning due to light competition.	To be removed for construction
11	Coast Live Oak/ Quercus agrifolia	9"	Good	Good. Leaning due to light competition.	To be removed for construction
12	Coast Live Oak/ Quercus agrifolia	10"	Good	Good. Leaning due to light competition.	To be removed for construction
13	Big Leaf Maple/ Acer macrophyllum	7"	Poor	Poor. Cracked trunk and leaning due to light competition.	To be removed for construction
14	Coast Live Oak/ Quercus agrifolia	15"	Excellent	Excellent	To be removed for construction
15	Coast Live Oak/ Quercus agrifolia	11"	Good/ Excellent	Excellent	To be removed for construction
16	Coast Live Oak/ Quercus agrifolia	30"	Good/ Excellent	Excellent	To be removed for construction
17	Coast Live Oak/ Quercus agrifolia	9"/11"/12"	Good	Poor	To be removed for construction
18	Coast Live Oak/ Quercus agrifolia	14"	Good	Good/Poor. Light deprived.	To be removed for construction
19	Coast Live Oak/ Quercus agrifolia	5"/5"/5"/5"/5	Good	Good	To be removed for construction
20	Coast Live Oak/ Quercus agrifolia	8"	Good/Poor.	Good. Light deprived.	To be removed for construction
21	Coast Live Oak/ Quercus agrifolia	12"/16"/9"/1 4"	Good	Good	To be removed for construction
23	Coast Live Oak/ Quercus agrifolia	5"	Good	Poor. Leaning.	To be removed for construction
24	Coast Live Oak/ Quercus agrifolia	10"	Good	Good	To be maintain and protected during construction
25	Coast Live Oak/ Quercus agrifolia	12"	Good	Good/Poor. Has some injury.	To be maintain and protected during construction

Table 1 Arborist Report Tree Findings 4424 CA-12, Santa Rosa, CA 95409



Revised May 10, 2019

Tree #	Species	Trunk Diameter (In.)	General Condition	Structural Integrity	Recommendations
26	Coast Live Oak/ Quercus agrifolia	7"	Good	Good	To be removed for construction
27	Coast Live Oak/ Quercus agrifolia	25"	Good	Good	To be removed for construction
28	Coast Live Oak/ Quercus agrifolia	10"	Good	Good	To be removed for construction
29	Coast Live Oak/ Quercus agrifolia	5"	Good	Poor	To be removed for construction
30	Coast Live Oak/ Quercus agrifolia	9"	Good	Good	To be removed for construction
31	Coast Live Oak/ Quercus agrifolia	14"/5"/5"	Good	Good/Poor. One trunk injured and oozing.	To be removed for construction
32	Coast Live Oak/ Quercus agrifolia	5"	Good	Good	To be removed for construction
34	California Bay/ Umbellularia californica	8"	Good	Good	To be removed for construction
35	California Bay/ Umbellularia californica	10"	Good	Good	To be removed for construction
36	California Bay/ Umbellularia californica	7"/7"/7"/5"/ 10"/7"	Good	Good	To be removed for construction
37	California Bay/ Umbellularia californica	4"	Good	Good	To be removed for construction
38	Coast Live Oak/ Quercus agrifolia	5"	Good	Good	To be removed for construction
39	Coast Live Oak/ Quercus agrifolia	11"	Good	Good	To be removed for construction
43	Coast Live Oak/ Quercus agrifolia	4.5"	Good	Good	To be removed for construction
44	Coast Live Oak/ Quercus agrifolia	4.5"	Good	Good	To be removed for construction
45	Valley Oak/ Quercus lobata	4"	Good	Good	To be removed for construction
46	Coast Live Oak/ Quercus agrifolia	10"	Good	Good	To be removed for construction
48	Coast Live Oak/ Quercus agrifolia	10"	Good/poor	Multi-stem close together.	To be removed for construction
49	Coast Live Oak/ Quercus agrifolia	6"/6"/6"	Good	Good	To be removed for construction
51	Coast Live Oak/ Quercus agrifolia	4"/0"/5"/5"/5	Good	Good	To be removed for construction
52	Coast Live Oak/ Quercus agrifolia	5"/6"/6"	Good	Good	To be removed for construction
53	Coast Live Oak/ Quercus agrifolia	5"	Good	Good	To be removed for construction

Table 1 Arborist Report Tree Findings 4424 CA-12, Santa Rosa, CA 95409



Revised May 10, 2019

Tree #	Species	Trunk Diameter (In.)	General Condition	Structural Integrity	Recommendations
54	Coast Live Oak/ Quercus agrifolia	8"	Good	Good	To be removed for construction
55	Coast Live Oak/ Quercus agrifolia	4"	Good	Good	To be removed for construction
57	Coast Live Oak/ Quercus agrifolia	10"	Poor	Poor. Tree is fallen but alive. Portions have been cut off. Tree should be removed.	To be removed for construction
58	Northern California Black Walnut/ <i>Juglans hindsii</i>	5"	Good	Good	To be removed for construction
59	Coast Live Oak/ Quercus agrifolia	6"	Excellent	Good	To be removed for construction
60	Coast Live Oak/ Quercus agrifolia	4"	Excellent	Good	To be removed for construction
61	Coast Live Oak/ Quercus agrifolia	5"	Good	Good	To be removed for construction
62	Coast Live Oak/ Quercus agrifolia	4"	Good	Good	To be removed for construction
63	Coast Live Oak/ Quercus agrifolia	7"/11"	Good	Good	To be removed for construction
64	Coast Live Oak/ Quercus agrifolia	14"	Good	Good	To be removed for construction
65	Coast Live Oak/ Quercus agrifolia	20"	Good	Good, but can't access tree well to assess health.	To be removed for construction
66	Coast Live Oak/ Quercus agrifolia	8"	Good	Good/Poor. Leaning due to light competition.	To be removed for construction
67	Coast Live Oak/ Quercus agrifolia	7"	Good	Good	To be removed for construction
68	Coast Live Oak/ Quercus agrifolia	9"/11"	Good	Good	To be removed for construction
69	Coast Live Oak/ Quercus agrifolia	6"/3"	Good	Good	To be removed for construction



Current as of May 10, 2019

Table 2. Tree Overtity by Creeies	
Table 2. Tree Quantity by Species	Overstitus
Species Pig Loof Manla / Agar magraphy // Lym	Quantity
Big Leaf Maple/ Acer macrophyllum	1
California Bay/ Umbellularia californica	4
Coast Live Oak/ Quercus agrifolia	52
Northern California Black Walnut/ Juglans hindsii	1
Valley Oak/ Quercus lobata	2
Total	60
Table 3. Tree Quantity by Size*	
DBH	Quantity
4 to <6"	16
6 to <12"	25
12 to <18"	7
18+"	12
Total	60
*Multi-trunk trees based on sum of trunk diameters	
Table 4. Heritage Trees	
Species	Diameter at Breast Height
Coast Live Oak/ Quercus agrifolia	
	30
Coast Live Oak/ Quercus agrifolia	30 25
Ü	• • • • • • • • • • • • • • • • • • • •
Coast Live Oak/ Quercus agrifolia	25
Coast Live Oak/ Quercus agrifolia	25
Coast Live Oak/ Quercus agrifolia Coast Live Oak/ Quercus agrifolia Table 5. Total Diameter of Native Trees	25
Coast Live Oak/ Quercus agrifolia Coast Live Oak/ Quercus agrifolia	25 20
Coast Live Oak/ Quercus agrifolia Coast Live Oak/ Quercus agrifolia Table 5. Total Diameter of Native Trees	25 20 Sum of Diameters at
Coast Live Oak/ Quercus agrifolia Coast Live Oak/ Quercus agrifolia Table 5. Total Diameter of Native Trees Species Single Trunk Trees	25 20 Sum of Diameters at Breast Height (Inches)
Coast Live Oak/ Quercus agrifolia Coast Live Oak/ Quercus agrifolia Table 5. Total Diameter of Native Trees Species	25 20 Sum of Diameters at Breast Height (Inches) 367
Coast Live Oak/ Quercus agrifolia Coast Live Oak/ Quercus agrifolia Table 5. Total Diameter of Native Trees Species Single Trunk Trees Multi-Trunk Trees (all trunk diameters)	25 20 Sum of Diameters at Breast Height (Inches) 367 269

6/27/2018 Google Maps

Google Maps 4224 California 12, Santa Rosa, CA



Imagery ©2018 Google, Map data ©2018 Google 50 ft L

APPENDIX D

Geotechnical Study

GEOTECHNICAL STUDY
PROPOSED SELF STORAGE FACILITY
4224 HIGHWAY 12
APN: 032-010-005
SANTA ROSA, CALIFORNIA
for
AMERICAN RECESS
PROJECT NO. GA-114/G407-01
AUGUST 9, 2018



No. GA-114/G407-01 August 9, 2018

Mr. Larry Thom American Recess 85 Keystone Avenue, Suite E Reno, Nevada 89503

Subject:

GEOTECHNICAL STUDY

Proposed Self Storage Facility

4224 Highway 12 APN: 032-010-005 Santa Rosa, California

Dear Mr. Thom:

As requested, we have performed a Geotechnical Study for the planned self storage facility at the subject site in Santa Rosa, California. We understand that the proposed project will consist of constructing three new structures including a four-story, self-storage building with a total 124,000 square feet of floor space, and two additional buildings for residential purposes at the approximately 2.68 acre site. The accompanying report presents the results of our exploration, our conclusions and recommendations. In our opinion, the site is suitable for the proposed improvements provided the recommendations in this report are incorporated into the design and followed during construction.

The recommendations submitted here are subject to our review of Site Grading Plans, Foundation Plans, and observation and testing of the grading operations, in addition to the observations of foundation excavations. We reserve the right to submit supplemental recommendations during construction or site development based on changed field conditions.

If you have questions, please contact this office at your convenience.

Very truly yours,

PRA Group, Inc.

Joseph J. Ambrosino

Associate

Daniel J. Rhoades, P.E. Exp

Principal

G.E.-716, Exp. 06/30/19 jja/data/prag/g40701.GS

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INTRODUCTION

Purpose

The purpose of this study was to evaluate the soil and geologic characteristics relevant to the design of the proposed structures and related improvements. General foundation engineering design and Geotechnical recommendations are provided based on the physical characteristics of the subsurface materials and the Geotechnical limitations created by the site's surface features.

Site Location and Description

The site, which consists of one parcel of land, is located at the southeast side of Highway 12, approximately 1,000 feet southwest of Mission Boulevard, in Santa Rosa, California (see Figure 1, Site Location Map). It is bordered on the northeast by a hardware store, on the southeast by a foot trail and open space, and on the southwest by a commercial building advertizing for pet grooming and a single family home subdivision. Streamside Drive is currently stubbed out at the northeast corner of that subdivision for a future extension into the subject site. A creek is located within the open space area along the southeast side of the site. The generally rectangularly shaped property currently includes one single family house and three out buildings (two sheds and a kiln immediately adjacent to the southeastern-most shed). A groundwater well was observed just off the southern corner of the kiln

A driveway provides access to the northeast side of the residence. A gate is also located where the property fronts Sonoma Highway. Several landscape trees are scattered across the site along with an abandoned vehicle and multiple areas of scattered piles of debris.

The northwestern 3/4's of the site has a slight slope toward the northwest while the remaining portion of the site slopes toward the southeast. Separating these two

areas is a moderate, eastward facing, approximately 5 to 10-foot tall downslope. We could not confirm if the slope was a fill slope or a natural slope undercut by an overflow of the creek located approximately 200 feet to the east. The surface conditions varied across the site, including areas of thick bushes, ivy, gravel, soil and dried grass.

Proposed Development

We understand that the new development will consist of three new structures including a four-story, self-storage building, which includes the facilities office, with a total 124,000 square feet of floor space, and two additional buildings for residential purposes at the approximately 2.68 acre site. An emergency water supply well for the City of Santa Rosa is planned near the eastern corner of the site. There will be six residential units in one building and five in the second building with each unit having a single parking space. Parking stalls and landscaping are also planned. Access to the site would be from Highway 12 and Streamside Drive (see Figure 2).

Please contact our office if the conditions of the project change. We may need to revise our recommendations if changes occur in the configuration of the proposed development, the type of construction, or the proposed loads.

Scope

The scope of work for the proposed development, as described in our Proposal dated April 16, 2018, included the following: researching soil and Geotechnical data, advancing six exploratory CPT probes (four were actually planned), sampling and laboratory testing (Plasticity Index testing), analyzing the soil data compiled during the exploration, and reporting our findings and recommendations. This study did not include assessments for toxic substances or soil or groundwater contamination.

SITE SETTING

General Geologic Setting

The subject site is situated in the northern part of the San Francisco Bay Area, in the Coastal Range Geologic Province of California. The Coastal Range landscape, especially east of San Francisco, is characterized by a series of rugged, subparallel, northwest-trending mountain ranges and intervening valleys. The site is located within an alluvial fan deposit of either Late Pleistocene or Holocene age (McLaughlin et al, 2008 & Sowers, et al, 1998). Predominantly gravel, sand, and silt are deposited upon gently sloping, relatively undissected alluvial surfaces (see Figure 3, Area Geology Map). The site was regionally mapped as within an area with alluvial thickness that ranged from 0 to 50 feet in thickness (Huffman and Armstrong, 1980). Underlying this fan deposit is volcanic bedrock of Tertiary age.

There were no landslides mapped at the site area. The site is regionally mapped within, "Areas of greatest relative stability due to the low slope inclination," (Huffman and Armstrong, 1980, Plate 2B). The site is relatively flat for the majority of the lot, except for the rear-most portion that represents a terrace deposit that slopes down to a drainage channel.

Seismic Considerations

The subject site lies within the northern portion of the San Francisco Bay Area, a region of high seismic activity. The probability is very high for a major earthquake to occur in the Bay Area within the economic lifetime of the proposed structures. Several active and potentially active faults occur in the region. Geologic references indicate that no fault trace designated active or potentially active passes through the subject property (McLaughlin et al, 2008). According to the California Geologic Survey (CGS), the nearest fault designated as active is the Rodgers Creek Fault, capable of a moment magnitude of 7.3 earthquake, approximately 1.4 miles

southwest of the site. Other active or potentially active Bay Area faults that could also cause ground shaking at the site, and their respective moment magnitude earthquake include:

Fault	Distance, miles	Moment Magnitude
Maacama (south)	8.3	7.4
West Napa	17.4	6.6
San Andreas	21.3	8.0
Collayomi	22.3	6.6
Hunting Creek - Berryessa	23.1	7.0
Green Valley - Concord	26.0	6.9
Hayward	31.5	7.3

Rather rough quantitative measurement of the dynamic characteristics of an earthquake can be estimated for the proposed structures. This estimate is based upon the attenuation method advanced by Boore, Joyner and Fumal (1997). A maximum moment magnitude on the Rodgers Creek fault would result in an estimated random peak acceleration value at the site of approximately 0.46g. This peak value represents a single moment acceleration. Ploessel and Slosson (1974) indicate that the repeatable high ground acceleration value would be approximately 65 percent of the peak ground acceleration value.

The local building codes and current California Building Code (CBC) recommendations reflect the design parameters for mitigation of earthquake conditions. The appropriate code should be utilized for minimum design standards based upon the particular features of the structures and the recommended minimum seismic load factors.

The project site will be susceptible to ground shaking and potential ground failure during a major earthquake on the faults listed above; also, ground shaking may occur during an earthquake on other nearby faults. Ground rupture tends to occur along lines of previous fault rupture or tectonic creep. Because no known faults (active or otherwise) cross the site, this hazard is low. The seismic risk to a structure depends on the distance from the epicenter; the characteristics of the earthquake; the geologic, groundwater, and soil conditions underlying the structure and its vicinity; and the nature of the construction.

The U. S. Geological Survey estimated that the probability of a magnitude 6.7 or greater earthquake in the Bay Area in the time period 2014 to 2043 is 72 percent. In that same time period, the probability of a 6.7 magnitude or greater earthquake is 33% on the Rodgers Creek-Hayward fault, 22% on the San Andreas fault, and 16% on the Huntington Creek-Green Valley-Concord fault.

SITE EXPLORATION AND LABORATORY TESTING

Site Exploration

Field exploration of the site was conducted on June 19, 2018, and consisted of a site reconnaissance and the advancement of six exploratory Cone Penetration Test probes (CPT) to a maximum depth of approximately 45' feet below existing grade. Please see Figure 2, Site Plan with CPT Probe Locations, for their approximate locations.

The CPT probes were advanced with a 30-ton CPT truck rig (C15) provided by California Push Technologies, Inc. Logs describing the material encountered in the probes are created by the CPT app as the probes are advanced and are presented in Appendix A.

Laboratory Testing

Laboratory testing was conducted on two bulk samples obtained with hand sampling equipment at a depth of approximately 1' below grade adjacent to CPT-4 and CPT-5 to obtain the Plasticity Indices and classification of the soil. The Plasticity Index was determined to be 12 and 14, respectively, which indicate a low expansive soil.

SUBSURFACE CONDITIONS

Subsurface Soil

Appendix A includes a colorized summary of each probe log with some of the sounding data presented graphically, followed by a complete table of sounding data recorded. The strengths of the materials encountered in the CPT probes are indicated by standard penetration blow counts corrected for energy ratio and overburden pressure [SPT (N1)60], and by shear strength [Su(qc)] in tons per square foot (tsf).

In general, all six CPT probes encountered alternating layers of loose to very dense sand and soft to very stiff silty clay and sand/silt mixtures. The stiffness and densities of these soils generally increased with depth. All six probes were terminated under drilling refusal conditions which would represent the underlying volcanic bedrock of the region.

For a complete description of the subsurface conditions encountered in the CPT probes, please refer to Appendix A.

Groundwater

Groundwater was encountered at approximately 21' in CPT-1, CPT-2, CPT-4 and CPT-6 at the time of our subsurface exploration. Groundwater levels would be expected to fluctuate due to variations in rainfall and future site conditions.

Liquefaction Potential

Liquefaction occurs when loose, saturated, granular deposits or low plasticity cohesive deposits lose strength in response to increased pore pressure during cyclic seismic loading. A regional assessment of liquefaction susceptibility for the central San Francisco Bay region prepared by the U.S. Geological Survey (Witter et al., 2006) determined a moderate potential for liquefaction at the site area, which Witter et. al., had mapped as Holocene age alluvium, where groundwater levels are between 10 and 30 feet below grade. A separate study by Sowers et. al., (1998) mapped the site area as having a low to moderate susceptibility for liquefaction (See Figure 3A, Liquefaction Susceptibility Map). The moderate susceptibility was assigned where groundwater level was within 10 feet of the ground surface, and low to very low elsewhere.

DISCUSSION

Based upon the site geology and the materials disclosed in the exploratory CPT probes, our site reconnaissance, laboratory testing and analysis, our findings indicate that the upper soil layers at the site are underlain by low expansive silty sand with a low shrink/swell potential which would be expected to have a low potential to adversely affect on building foundations. An existing east-facing downslope is located at the eastern end of the site, over which is the five unit residential building planned for construction (referred to as, "Residential Type 2). It is unknown if this slope is natural or a graded slope constructed by a previous owner. Another concern is a transition that occurs between two geologic units at the east end of the site. This transition may occur under or adjacent to the planned five unit residential building and could lead to differential foundation movement if the soil is not properly mitigated. Other areas of cut/fill transition areas may also occur under the planned buildings. Based on this, we have recommended grading mitigation measures to reduce the potential for adverse effects on the planned structures. Based on the soil conditions at the site, we recommend that the

proposed structures be supported on conventional footings with concrete slab-ongrade floors.

Mitigation of the existing slope near the rear of the property and the differential soil conditions will require both subexcavation of the pad and reconstruction of the entire slope. Within the area of the building, we anticipate the keyway to have a minimum width of 20 feet. Recommendations for keying and benching are provided later in this report.

The planned demolition of the foundations that support the existing buildings is anticipated to leave voids where the concrete footings are removed. Similarly, where large trees are located, the removal of the root balls will create moderately large voids with multiple roots still in the ground. After removal of all loose soil and tree roots, these excavations will require backfilling with properly compacted fill placed in accordance with the grading recommendations presented in this report.

CONCLUSIONS

The following conclusions are based on the results of our study for the proposed development.

It is our opinion, based on an analysis of the data and information obtained from the site exploration, laboratory testing, and Geotechnical evaluation of our experience and knowledge of the soil conditions in this area, the site is geotechnically suitable for the proposed development provided the recommendations contained herein are incorporated into the project designs and adhered to during construction. The principal adverse Geotechnical factors affecting the development of the site are the potentially strong shaking due to earthquakes, anticipated soil types within the limits of the footprints of the planned structures, especially the rear residential building and the presence of a potentially undocumented fill slope near the eastern end of the site. The recommendations presented herein are intended to reduce the risks

associated with these factors and to minimize their effects. The following conclusions are based on the results of our study of the subject site.

- It is our opinion, that the proposed storage facility is feasible from a Geotechnical engineering standpoint provided the recommendations contained herein are followed.
- Seismically induced ground shaking with minor structural damage may occur within the economic life of the development.
- It is our opinion, that a low liquefaction hazard exists at the subject site. This
 opinion is based on soil types encountered in our CPT probes.
- Our laboratory testing and observations indicate that the near surface, silty sandy soil is characterized as low in expansion potential.
- 5. Due to the presence of variable soil conditions across the pads, we recommend that the building pads plus 5' beyond the footprint of the structures be subexcavated a minimum of 3', the exposed upper foot of the subgrade be scarified a minimum of 1', moisture conditioned and recompacted per the grading recommendations presented later in this report. All footings must be underlain by a minimum of 12" of compacted soil.
- 6. Due to the Geotechnical conditions encountered at the site and the findings of this report, it is our opinion, that the proposed structures be supported on a conventional spread footing foundation with concrete slab-on-grade floors. Use of this foundation system is contingent on the grading and foundation recommendations presented in this report.

RECOMMENDATIONS

Geotechnical Hazards

Risk of Geotechnical hazards will always exist due to uncertainties of geologic conditions and the unpredictability of seismic activity in the Bay Area. However, in our opinion, based on available data, there are no indications of Geotechnical hazards that would preclude use of the site for the proposed development. The proposed structures should be designed to meet current California Building Code (CBC) requirements to limit potential damage from ground shaking.

Seismic Criteria

The California Building Code standards requires the Geotechnical Engineer to provide supplemental seismic data for consideration by the Design Engineer. Determination of these seismic parameters required the use of seismic programs provided by the United States Geologic Survey (USGS) and the determination of the site soil classification. These values are calculated using the referenced USGS "Earthquake Hazards Program, Seismic Design Values for Buildings," website. This data is useful for engineers determining how a structure will react to ground motions from an earthquake.

<u>Value</u>
D
1.403g
0.6
1.00
1.403g
0.935g

Grading

Final grading plans were not provided as part of this study, however a review of the preliminary site plan indicates that in order to develop this site, moderate to major cuts and fills are anticipated with a considerable amount of earthwork anticipated for remediation of the existing slope near the back of the site, including construction of a drained keyway and subexcavation of the soil within the building pad area for the five unit structure planned over the slope. We also recommend that the remaining building pad areas be subexcavated a minimum of 3 feet, moisture conditioned to a minimum 3 percent over optimum moisture content and recompacted to a minimum 90 percent relative compaction in order to create uniform building pads. Grading should be in general conformance with the recommendations presented below and in the attached Recommended Grading Specifications (see Appendix B).

After stripping areas to be graded, the exposed subgrade should be scarified to a depth of approximately 12-inches, moisture-conditioned as directed by the Geotechnical Engineer and then recompacted to a minimum of 90 percent relative compaction in accordance with ASTM D1557 test methods. Following subgrade recompaction, fill placement as required to achieve final pad grade elevation will be placed at a minimum 90 percent relative compaction.

For compaction specifications, the upper 12 inches of subgrade in the street sections must be moisture conditioned to 2 percent over the optimum moisture content and compacted to a minimum of 95 percent relative compaction in accordance with ASTM D6938. All other areas of fill must be placed at a minimum of 3 percent over the optimum moisture content and a minimum of 90 percent relative compaction for the low to moderate fill soils.

If any trees are removed due to planned fill placement, the root ball area must be sub-excavated a minimum of 2 feet beneath the root ball to remove all loose soil and roots in an excess of 1 inch in diameter. If this area is located within a foundation area, it must be treated as a transitional lot, as described above, subexcavated a minimum of two feet, moisture conditioned to a minimum of 3 percent over optimum moisture content and recompacted to a minimum 90 percent relative compaction in order to create a uniform building pad.

On-site soil generated by site grading may be used as fill provided that the soil is free of deleterious and organic materials and that it has been approved for use as fill by our Geotechnical Engineer or the engineer's representative. Samples of any proposed import fill planned for use on this project must be granular, having a maximum PI of 15, with particle size not exceeding 1-inch and submitted to our Geotechnical Engineer or the engineer's representative for approval and appropriate testing no less than 4 working days before the expected delivery to the jobsite. A representative sample of the fill should be tested to determine the above properties, and a compaction curve, in order to be approved by the Geotechnical Engineer or the engineer's representative prior to importing to the project.

All grading must be observed by a representative of our firm. It is especially important that our representative be present during removal of trees and the stripping and scarification process to observe whether undesirable materials or below grade structures are encountered.

Keyway Construction

A drained keyway will be required to reconstruct the existing slope that runs north to south near the rear of the site. Due to lack of adequate elevation differences, the subdrain within the keyway may have to be placed at an elevation that is higher than the bottom of the keyway. The keyway must extend a minimum depth of 3 feet into competent, approved non-yielding soil and be sloped at a minimum gradient of 5 percent into the hillside for the recommended minimum 20-foot width of the keyway.

Due to the potential presence of weak colluvial soils at the surface, keyway depths would be anticipated to be greater than 5 to 7 feet.

Compacted fill placed within the keyways must be compacted to at least 95 percent relative compaction at a minimum moisture content of 3 to 5 percent over optimum based on ASTM D1557 test methods. Compacted fill placed above the keyways or in benched areas must be compacted to at least 90 percent of the maximum dry density. The gradient of the exposed outboard surface of the fill slope is not to exceed a slope gradient of 3:1 (horizontal:vertical).

Subdrains will be required to provide drainage for the keyways and should be installed at the heel of the inboard keyway wall. We do not anticipate the development to include any fill slopes exceeding 30 feet in vertical height, however, if such slopes are planned, bench excavations and subdrains must be installed at a minimum of 20-foot intervals in vertical height as construction of the fill progresses up the slope. The subdrains should consist of a perforated 6-inch diameter ABS SDR 35 or equivalent pipe installed on a bed of and surrounded by CalTrans Class II permeable drain rock. Pipe perforations must be placed downward. Drainage of the system will be accomplished with unperforated pipe extending from the subdrain pipe to an acceptable outlet system to be approved by the Geotechnical Engineer. All subdrain and drain pipe must be placed to fall at least 1 percent toward the outlet side for adequate flow to final discharge. Cleanouts for the subdrain system are also required at least every 200 feet.

Generally, sliver fills less than 5 feet in depth which lie on a slope of 5:1 (horizontal to vertical) or greater will not require the construction of a full keyway. In such cases, benching-in as the fill is brought up should be sufficient. This will involve excavating a minimum 18-inch deep keyway at the toe of the fill and will require benching-in approximately every 18 inches of height. The keyway and benches should be sloped a minimum 5 percent into the hillside and extend a minimum of

12 feet in width. Compaction requirements remain the same, however, a drainage system may be omitted. The Geotechnical Engineer may modify these recommendations based upon field conditions encountered during grading.

Foundations

As stated, we understand that the new development will consist of constructing three new structures including a four-story, self-storage building, which includes the facilities office, with a total 124,000 square feet of floor space, and two additional buildings for residential purposes. An emergency water supply well for the City of Santa Rosa is planned near the eastern corner of the site. Structural loads for this type of construction are expected to be light to moderate depending on building spans.

Based upon the nature of the proposed structures and the results of this Geotechnical Study and this report, the buildings can be supported on a foundation system consisting of conventional continuous strip foundations interconnected with isolated interior column footings, with a minimum 5" thick concrete slab-on-grade floor system. Geotechnical design criteria should be implemented at the discretion of the Structural Engineer based upon his review and designed in conformance with current industry standards and the Geotechnical recommendations of this report. If a foundation system other than that recommended is desired, this office should be called for supplemental recommendations. Such recommendations would be presented as an addendum to this report. Footings should be designed according to the criteria in Table I. Additional recommendations for a continuous footing foundation are discussed below.

Spread Footing Foundation Recommendations

TABLE I SPREAD FOOTING FOUNDATION DESIGN CRITERIA

Wall Footings (Continuous)-One Story

Width Minimum 18 inches Embedment* Minimum 18 inches

> -Two Story & Greater

Width Minimum 36 inches Embedment* Minimum 24 inches

Column Footings (Isolated)

Width Minimum 36 inches Embedment* Minimum 24 inches

Allowable Bearing Capacity** 2500 pounds per square foot

Coefficient of Sliding Friction 0.40

An equivalent fluid weight of 350 pcf can be used to evaluate the passive resistance that can be developed on the foundation elements. The upper one foot of soil should be excluded from passive pressure computations unless it is confined by pavement or a concrete slab.

The reinforcement of the footings and the design criteria for stiffening elements should be designed by a Structural Engineer. The interior load-bearing footings should be connected to the exterior footings to provide a more rigid foundation system to resist seismic loads and to reduce the potential for differential settlement between the interior and exterior foundations. Differential settlement is currently anticipated at a maximum of 1 inch over a 40-foot span for exterior continuous footings and the interior spread footings.

^{*} Footing embedment depth is measured from the lowest adjacent interior soil pad grade to the bottom of the footing.

^{**} The allowable bearing capacity is for dead plus live loads. The bearing capacity may be increased by 1/3 for wind or seismic loads.

The excavations for footings must be cleaned of loose material and debris prior to placement of concrete. All footing excavations must be observed by a representative of our firm to confirm the minimum depth of the footings, the suitability of the foundation and to observe the competence of the material in the excavations.

Should you desire to use a foundation system different from that recommended, this office should be contacted for supplemental recommendations. Such recommendations will be forwarded by an addendum to this report, and may include a structural slab, pier and grade beams or comparable foundation system.

Concrete Slabs-on-Grade Floor

We recommend that the minimum slab-grade floor thickness be 5 inches and reinforced with the minimum of No. 4 reinforcing bars spaced at 16 inches oncenter, or with an alternate reinforcement system as required by the project Structural Engineer. In general, the reinforcement should be supported by concrete dobies to attain its greatest efficiency in minimizing the cracking of the slab. The slab should be tied to the exterior foundation or placed as a cap slab tied into the foundation system to prevent displacement between the slab and the foundation supports.

If moisture vapor transmission through the slab is objectionable, we recommend that at a minimum, a vapor retarder membrane of 10 mil minimum thickness be placed on the rock and overlain by 2 inches of clean sand to assist in the proper curing of the slab. The membrane should be placed in accordance with the manufacturer's specifications. Any punctures or damage to the membrane that may

occur must be repaired in accordance with the manufacturer's specifications. If a vapor barrier is desired, a membrane of 20 mil minimum thickness (such as Stego, or equivalent) is required. Some moisture transmission should be expected where a membrane vapor barrier is not utilized.

Recommendations presented in the American Concrete Institute should be complied with for all concrete placement and curing operations. Improper curing techniques and/or excessive slump (water-cement ratio) could cause excessive shrinkage, cracking, or curling.

Concrete Driveways

The driveway should be a minimum thickness of five inches and be underlain by a 4-inch thick cushion of "pea gravel" or Class II Aggregate Base Rock placed upon a 12-inch deep section of moisture conditioned subgrade. Extending the edge of the slab 6 to 8-inches into the ground would assist in preventing moisture variation at the outer edge of the slab and help prevent soil and slab movement. Reinforcement of the concrete slabs shall be as directed by the Project Structural Engineer. Crack control joints should be utilized as designated by the Structural Engineer.

Miscellaneous Flatwork

Exterior flatwork should be designed as follows:

- It is recommended that the exterior slab-on-grade flatwork be a minimum thickness of 4-inches and be structurally independent of the foundation to provide freedom of movement due to soil volume changes.
- Reinforcement of the concrete and construction of crack control joints shall be as directed by the Project Structural Engineer.

 Ponding of storm or irrigation water adjacent to the exterior slabs should be prevented by use of area drains or liberal surface drainage to a suitable controlled discharge point.

Retaining Walls

We anticipate that the planned improvements may require the construction of retaining walls at the site. The proposed design should be reviewed by our firm to confirm that the retaining wall configuration is compatible with the assumed parameters. Table II presents our design criteria recommendations for any retaining walls and applies to walls up to 6 feet in height. Design pressures are based on the soil strength and potential expansion pressure and are expressed as equivalent fluid pressures. Walls greater than 6 feet will be considered on a case by case basis.

TABLE II
RETAINING WALL DESIGN CRITERIA

Gradient of Backfill	Equivalent Fluid Weight (pcf)	Passive Resistance* (pcf)	Coefficient of Friction
Level	45	350	0.4
3:1 to Level	55	350	0.4
Steeper than	65	350	0.4
3:1			
(Maximum 2:1)			

^{*}Commences a minimum of 1 foot below lowest adjacent grade.

Structural retaining walls should be supported upon footings in conformance with the *Foundations* section of this report. Where uniform subsoil conditions are not present, supplemental recommendations will be provided. The retaining wall design should be performed by the project Structural Engineer.

All retaining walls should be free draining with a 4-inch diameter perforated pipe (SDR 35 or equivalent) placed upon 1-inch of CalTrans Class 2 permeable drain rock at the base of the wall and a minimum of 6 inches below any cold joint or where potential seepage through the wall would be objectionable. The trench and pipe should be sloped a minimum of 1 percent and discharged into a suitable outlet. A 12-inch wide minimum section of CalTrans permeable material should then be backfilled to within 1 foot of the surface then capped with compacted soil up to the finish surface. Where surface drainage is toward the walls, a surface interceptor discharge concrete lined swale is required. Discharge of the retaining wall drainage at the site can be provided by a gravity flow system due to the adequate elevation change across the property.

Any wall that is incorporated into the foundation of a building or restrained at the top should be designed with a 100-psf uniform lateral surcharge load in addition to the lateral earth pressures given above. Parking, storage, basements or other surcharge loads must also be considered.

To reduce the potential for moisture transmission through the retaining wall, where the retaining wall is used as part of a building or where moisture transmission would be objectionable, it is recommended that the appropriate face be hot-mopped in accordance with the manufacturer's specifications and an impermeable membrane be placed over the hot-mopped surface to protect the surface from damage during

drain rock placement. It is important that the surface drainage controls also be installed to reduce the potential for moisture transmission. Where a retaining wall forms part of the building, deflection calculations or allowance for wall movement must be included in the final planning for the structure.

Utility Trenches

Utility trenches that parallel the sides of the buildings should be placed so that they do not extend below a line sloped down and away at a slope of 2H:1V (horizontal to vertical) from the bottom outside edge of the perimeter foundations (i.e., the base of the grade beam systems or the base of exterior footings for the reinforced mat system).

All trenches should be backfilled with native materials compacted uniformly to the relative compaction specified in Appendix B. If local building codes require use of sand as the trench backfill, all utility trenches entering the building must be provided with an impervious seal of either cohesive soil or lean concrete where the trench passes under the building perimeter. The impervious plug must extend 4 feet into, and out of, the building perimeter. Jetting of trench backfill is not recommended as it may result in an unsatisfactory degree of compaction.

Drainage

Surface water must not be allowed to pond adjacent to building foundations. To preclude drainage problems, we recommend roof stormwater control for the proposed facilities. It will be necessary to direct all water collected from roof downspouts into closed conduits that lead to acceptable discharge points away from the structures.

A positive slope gradient of 5 percent down and away from the building perimeter should be applied to the finished subgrade (inclusive of topsoil). This slope should extend no less than 5 feet away from the outside building perimeter. Drop inlet facilities with drainage swales should be provided to remove runoff from around the structures where concrete walks or asphalt pavements do not abut the foundations and non drainage recessed planter areas are located.

Plants should not be placed immediately adjacent to the structures. If vegetation must be planted adjacent to the buildings, plants that require very little moisture should be used. Sprinkler heads should not be placed where they could saturate foundation soil.

Pavements

We recommend selecting the pavement section after earthwork construction for the subject project has been completed and samples of the subgrade soil can be analyzed for R-value. For planning purposes, with the silty sandy soils present, it is recommended that a preliminary section consisting of 4-inch asphaltic concrete underlain by 12-inches of CalTrans Class 2 Aggregate Base be considered. This preliminary section is based on assumed use and not an actual wheel load analysis or traffic study.

This preliminary pavement section is subject to modification based on the results of R-value tests performed on the subgrade soils after grading is completed.

To perform to its greatest efficiency, the pavement section requires the following construction criteria:

- a. Remove organic and deleterious materials from all pavement subgrade. Areas of existing asphaltic concrete section that are disturbed from existing tree roots may require additional subexcavation and recompaction, and even the placement of subgrade stabilization geo-fabric in order to provide a stable subgrade.
- b. Moisture-condition the upper 12 inches of subgrade soil and compact it to a minimum relative compaction of 95 percent and to a moisture content of 2 to 4 percent over the optimum moisture content. All pavement subgrade should be stable with no "pumping" at the time the base rock is placed.
- c. Use only good quality materials of the type and minimum thickness specified.
 All base rock should meet the Standard Specifications of the State of California for Class 2 baserock and should be angular in shape.
- d. Compact the baserock uniformly to a minimum relative compaction of 95 percent.
- e. Place the asphalt concrete only during periods of fair weather when the free air temperature is within the prescribed limits as set forth by the Asphalt Concrete Institute.
- f. Compact all trench backfill under the pavement to reduce fill settlement and minimize pavement damage that may result from such settlement. Mechanical compaction is recommended because material placed by jetting or ponding will probably not attain satisfactory densities.

g. Provide adequate drainage or V-ditch systems to prevent surface water from migrating into the subgrade pavement soil from behind curb-and-gutter sections. For areas where pavement abuts landscaping, we recommend extending the concrete curb to the bottom of the base rock layer to form a cut-off wall to prevent water from migrating into the base rock.

Construction During Fall and Winter Seasons

Wet weather may raise the moisture content of the soil well above optimum conditions and earthwork construction may be difficult or impossible. Supplemental recommendations will be provided by our Geotechnical Engineer or the Engineer's representative in the field, if appropriate.

Miscellaneous

Our exploratory probes did not encounter any other buried items such as leaching fields, wells, storage tanks, etc., however, such items are anticipated at the site. Where such items are encountered during grading or during excavations of foundations, our firm must be notified immediately to provide recommendations for proper procedures. Also, this study did not include investigations for toxic substances or groundwater contamination of any type. If such conditions are encountered during site development, additional studies will be required.

Plan Review

Before submitting design drawings and construction documents to the appropriate local agency for approval, copies of the documents must be reviewed by our firm to ensure that the recommendations in this report have been effectively incorporated.

Construction Observations

A representative of this firm must be present during grading and foundation excavation to observe that the work performed is in conformance with the specifications and recommendations provided in this report. We will also perform testing as necessary to evaluate the quality of the materials and their relative compaction. Records will be maintained of our site visits and test results. At the completion of site grading and foundation excavation, we will submit a summary of our observation and test results along with any necessary supplemental recommendations.

To assure that our personnel are at the site when needed, we require that you notify us at least 2 working days before the task begins.

LIMITATIONS

This report has been prepared for the exclusive use of American Recess, and its consultants for specific application to the proposed development. If changes occur in the nature, design location, or configuration of the proposed development, the conclusions and recommendations contained here shall not be considered valid. Changes must be reviewed by our firm.

The analysis, opinions, conclusions and recommendations submitted in this report are based in part on the referenced materials, site visit and evaluation, and subsurface exploration. The nature and extent of variation among exploratory borings may not become evident until construction. If variations appear, it will be necessary to re-evaluate or revise recommendations made in this report.

The recommendations in this report are contingent on conducting an adequate testing and monitoring program during construction of the proposed development. Unless the construction monitoring and testing program is provided by or coordinated with our firm, PRA Group, Inc. will not be held responsible for compliance with design recommendations presented in this report and other supplemental reports submitted as part of this report.

Our services have been provided in accordance with generally accepted Geotechnical engineering practices. No warranties are made, express or implied, as to the professional opinions or advice provided. Recommendations contained in this report are valid for a period of 2 years; after 2 years they must be reviewed by this firm to determine whether or not they still apply.

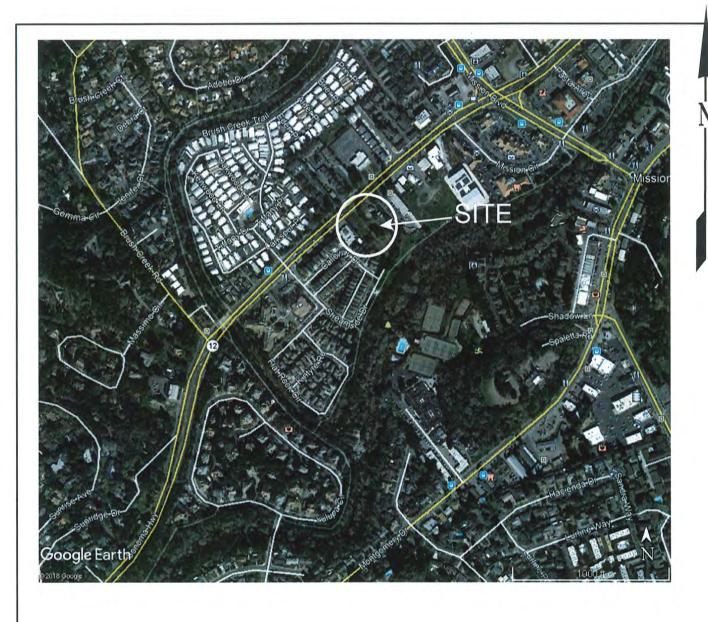
REFERENCES

- ASCE, 2015, Minimum Design Loads for Buildings and Other Structures: ASCE Standard ASCE/SEI 7-05.
- Boore, D. M., Joyner, W. B., and Fumal, T. E., 1997, Equations for Estimating Horizontal Response Spectra and Peak Accelerations From Western North American Earthquakes: A Summary of Recent Work: Seismological Research Letters, vol. 68, num 1, Pa. 128-153.
- California Department of Conservation, Division of Mines and Geology, February 1998, Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada.
- CalTrans, 2012, Fault Database
- Graymer, R. W., Jones, D. L., Brabb, E. E., 1994, Preliminary Geologic Map Emphasizing Bedrock Formations in Contra Costa County, California: A Digital Database: U. S. G. S. Open File Report 94-622.
- Huffman, M. E., and Armstrong, C. F., 1980, Geology for Planning in Sonoma County: California Division of Mines and Geology Special Report 120.
- Ploessel, M.R. and Slosson, J.E., 1974, Repeatable High Ground Accelerations From Earthquakes - Important Design Criteria: California Geology, September.
- McLaughlin, R. J., Langenheim, V. E., Sarna-Wojcicki, A. M., Fieck, R. J., McPhee, D. K., Roberts, C. W., McCabe, C. A., and Wan, Elmira, 2008, Geologic and Geophysical Framework of the Santa Rosa 7.5' Quadrangle, Sonoma County, California: USGS Open File Report 2008-1009.
- Sowers, J. M., Noller, J. S., and Lettis, W. R., 1998, Maps Showing Quaternary Geology and Liquefaction Susceptibility, Napa, California, 1:100,000 Quadrangle: A Digital Database: U. S. G. S. Open File Report 98-460.
- U. S. Geological Survey, 2003, Seismic Design for Buildings (interactive web site).
- Witter, C. M., Knudsen, K. L., Sowers, J. M., Wentworth, C. M., Koehler, R. D., and Randolph, C. E., 2006, Maps of Quaternary Deposits and Liquefaction

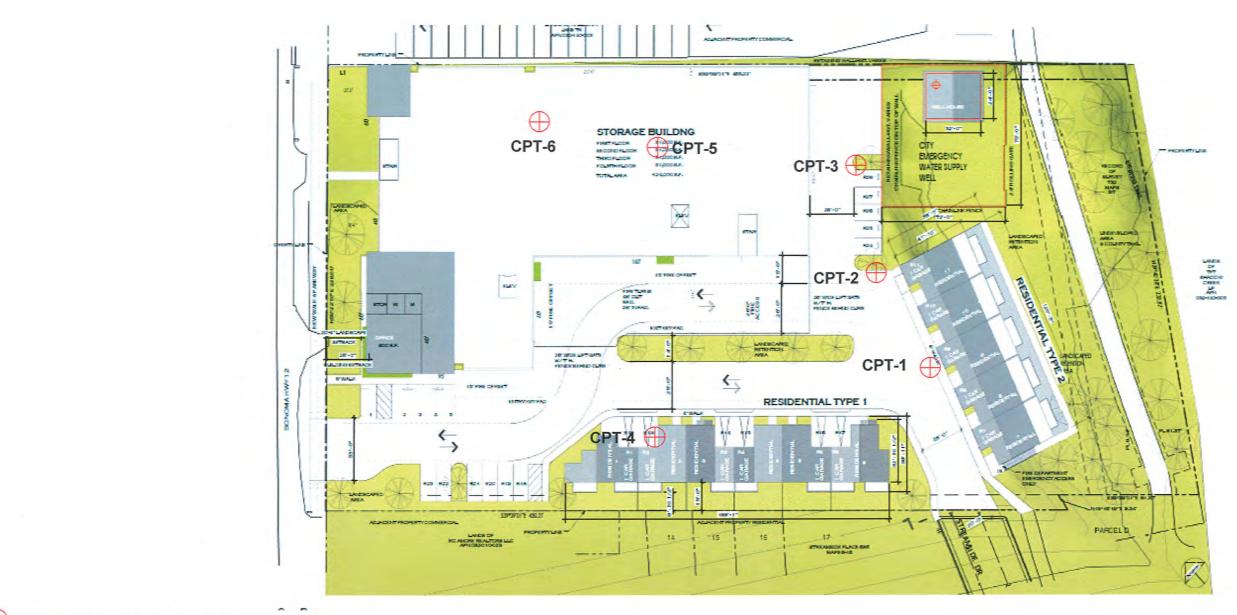
Susceptibility in the Central San Francisco Bay Region, California: U. S. G. S. Open File Report 2006-1037

Working Group on Northern California Earthquake Potential, 2015, Uniform Californian Earthquake Rupture Forecast: USGS, Southern California Earthquake Center, and California Geologic Survey.

FIGURES



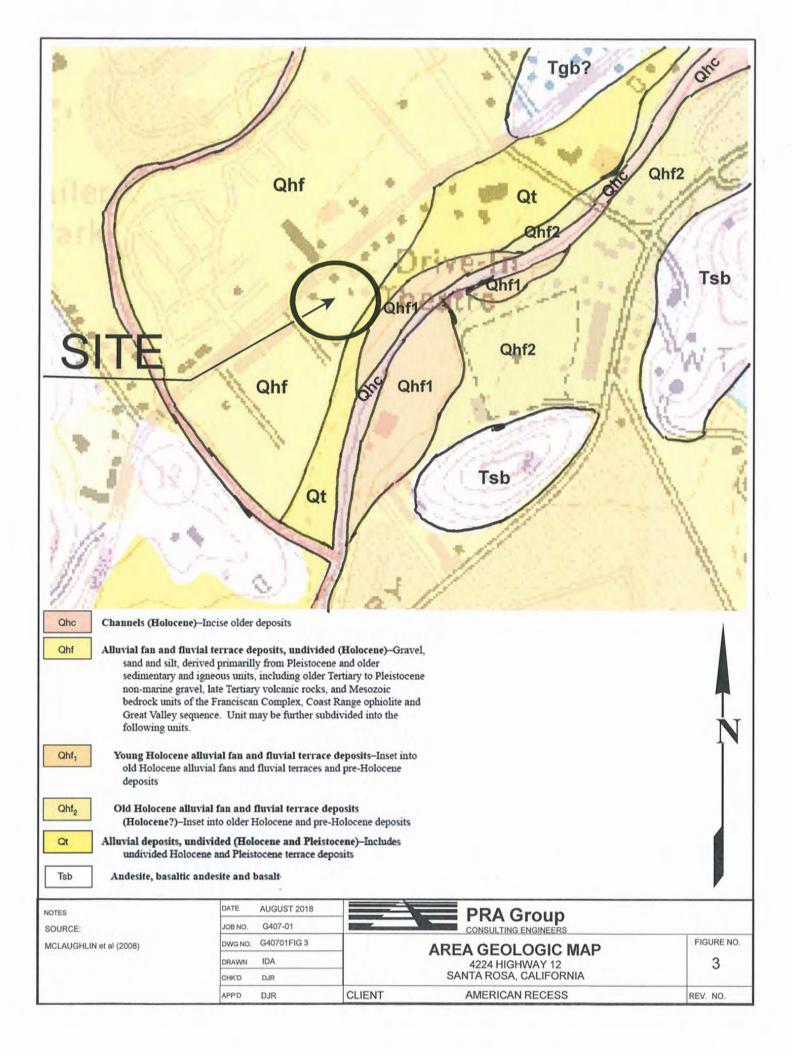
SCALE: As shown.	DATE AUGUST 2018	PRA GROUP, INC.	
	JOB NO. G407-01	Consultants in the Applied Earth Sciences	
	DWG NO. G40701.FIG1	SITE LOCATION MAP	FIGURE NO.
	DRAWN	4224 HIGHWAY 12	1
	CHK'D JJA	SANTA ROSA, CA	
	ARRID DJR	CLIENT AMERICAN RECESS	REV. NO.

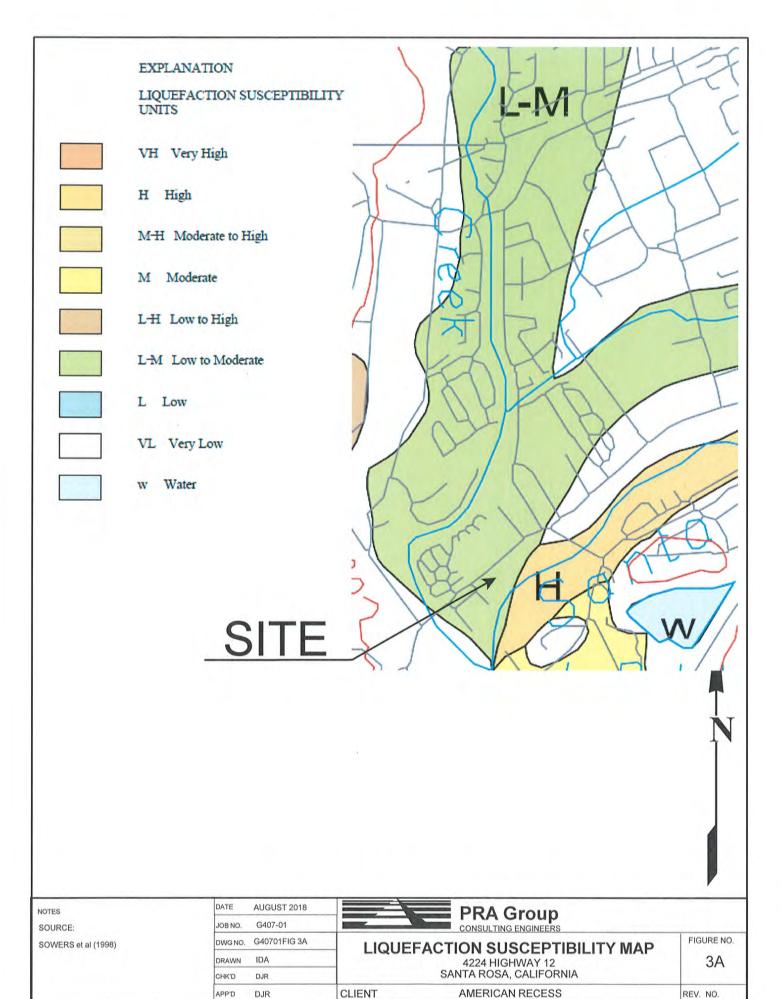


Indicates approximate location of CPT probe.

CPT-6

NOTES	DATE AUGUST 2018	PRA GROUP, INC. Geotechnical, Environmental & Materials Testing	FIGURE NO.
	JOB NO. G407-01 DWG NO. G407-01.FIG2 DRAWN JJA	SITE PLAN WITH CPT PROBE LOCATIONS PROPOSED SELF STORAGE FACILITY SANTA ROSA, CALIFORNIA	2
	CHK'D APP'D DJR	CLIENT AMERICAN RECESS	REV. NO.





APPENDIX A

CPT SUBSURFACE EXPLORATION PRESENTATION OF SITE INVESTIGATION RESULTS DATED JUNE 19, 2018

PRESENTATION OF SITE INVESTIGATION RESULTS

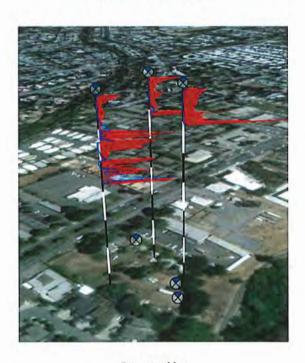
Self Storage and Residential Complex

Prepared for:

Purcell Rhoades and Associates

CPT Inc. Job No: 18-56099

Project Start Date: 19-Jun-2018 Project End Date: 19-Jun-2018 Report Date: 22-Jun-2018



Prepared by:

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Introduction

The enclosed report presents the results of the site investigation program conducted by CPT Inc. for Purcell Rhoades and Associates at 4224 Sonoma Hwy, Santa Rosa, CA. The program consisted of six cone penetration tests (CPT).

Project Information

Project		
Client	Purcell Rhoades and Associates	
Project	Self Storage and Residential Complex	
CPT Inc. project number	18-56099	

An aerial overview from Google Earth including the CPT locations is presented below.



Rig Description	Deployment System	Test Type
CPT track rig (GPT2)	20 ton rig cylinder	CPT



Coordinates				
Test Type	Collection Method	EPSG Reference		
СРТ	Consumer grade GPS	32610		

Cone Penetration Test (CPT	
Depth reference	Depths are referenced to the existing ground surface at the time of each test.
Tip and sleeve data offset	0.1 meter This has been accounted for in the CPT data files.
Additional plots	Expanded range plots, advanced CPT plots with Ic (PKR 2009), Su (Nkt), Phi and N160 and Soil Behavior Type (SBT) scatter plots are included in the data release package.

Cone Description	Cone Number	Cross Sectional Area (cm²)	Sleeve Area (cm²)	Tip Capacity (bar)	Sleeve Capacity (bar)	Pore Pressure Capacity (psi)	
443:T1500F15U500	443	15	225	1500	15	500	

CPT Calculated Parameters					
Additional information	The Normalized Soil Behavior Type Chart based on Qtn (SBT Qtn) (Robertson, 2009) was used to classify the soil for this project. A detailed set of calculated CPT parameters have been generated and are provided in Excel format files in the release folder. The CPT parameter calculations are based on values of corrected tip resistance (qt) sleeve friction (fs), and pore pressure (u2).				
	Soils were classified as either drained or undrained based on the Qto Normalized Soil Behavior Type Chart (Robertson, 2009). Calculations for both drained and undrained parameters were included for materials that classified as silt mixtures (zone 4).				



Limitations

This report has been prepared for the exclusive use of Purcell Rhoades and Associates (Client) for the project titled "Self Storage and Residential Complex". The report's contents may not be relied upon by any other party without the express written permission of CPT Inc. CPT Inc. has provided site investigation services, prepared the factual data reporting, and provided geotechnical parameter calculations consistent with current best practices. No other warranty, expressed or implied, is made.

The information presented in the report document and the accompanying data set pertain to the specific project, site conditions and objectives described to CPT Inc. by the Client. In order to properly understand the factual data, assumptions and calculations, reference must be made to the documents provided and their accompanying data sets, in their entirety.



The cone penetration tests (CPTu) are conducted using an integrated electronic piezocone penetrometer and data acquisition system manufactured by Adara Systems Ltd. of Richmond, British Columbia, Canada.

CPT Inc.'s piezocone penetrometers are compression type designs in which the tip and friction sleeve load cells are independent and have separate load capacities. The piezocones use strain gauged load cells for tip and sleeve friction and a strain gauged diaphragm type transducer for recording pore pressure. The piezocones also have a platinum resistive temperature device (RTD) for monitoring the temperature of the sensors, an accelerometer type dual axis inclinometer and a geophone sensor for recording seismic signals. All signals are amplified down hole within the cone body and the analog signals are sent to the surface through a shielded cable.

The penetrometers are manufactured with various tip, friction and pore pressure capacities in both 10 cm² and 15 cm² tip base area configurations in order to maximize signal resolution for various soil conditions. The specific piezocone used for each test is described in the CPT summary table presented in the first appendix. The 15 cm² penetrometers do not require friction reducers as they have a diameter larger than the deployment rods. The 10 cm² piezocones use a friction reducer consisting of a rod adapter extension behind the main cone body with an enlarged cross sectional area (typically 44 mm diameter over a length of 32 mm with tapered leading and trailing edges) located at a distance of 585 mm above the cone tip.

The penetrometers are designed with equal end area friction sleeves, a net end area ratio of 0.8 and cone tips with a 60 degree apex angle.

All piezocones can record pore pressure at various locations. Unless otherwise noted, the pore pressure filter is located directly behind the cone tip in the "u₂" position (ASTM Type 2). The filter is 6 mm thick, made of porous plastic (polyethylene) having an average pore size of 125 microns (90-160 microns). The function of the filter is to allow rapid movements of extremely small volumes of water needed to activate the pressure transducer while preventing soil ingress or blockage.

The piezocone penetrometers are manufactured with dimensions, tolerances and sensor characteristics that are in general accordance with the current ASTM D5778 standard. Our calibration criteria also meet or exceed those of the current ASTM D5778 standard. An illustration of the piezocone penetrometer is presented in Figure CPTu.



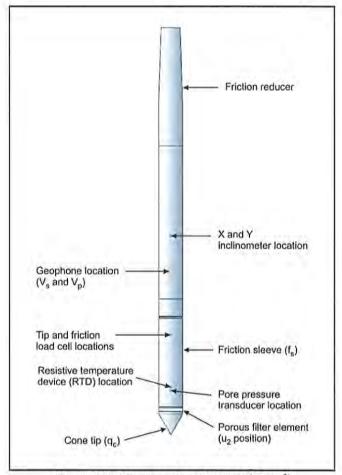


Figure CPTu. Piezocone Penetrometer (15 cm²)

The data acquisition systems consist of a Windows based computer and a signal conditioner and power supply interface box with a 16 bit (or greater) analog to digital (A/D) converter. The data is recorded at fixed depth increments using a depth wheel attached to the push cylinders or by using a spring loaded rubber depth wheel that is held against the cone rods. The typical recording intervals are either 2.5 cm or 5.0 cm depending on project requirements; custom recording intervals are possible. The system displays the CPTu data in real time and records the following parameters to a storage media during penetration:

- Depth
- Uncorrected tip resistance (q_c)
- Sleeve friction (f_s)
- Dynamic pore pressure (u)
- Additional sensors such as resistivity, passive gamma, ultra violet induced fluorescence, if applicable

All testing is performed in accordance to CPT Inc.'s CPT operating procedures which are in general accordance with the current ASTM D5778 standard.



Prior to the start of a CPTu sounding a suitable cone is selected, the cone and data acquisition system are powered on, the pore pressure system is saturated with either glycerin or silicone oil and the baseline readings are recorded with the cone hanging freely in a vertical position.

The CPTu is conducted at a steady rate of 2 cm/s, within acceptable tolerances. Typically one meter length rods with an outer diameter of 1.5 inches are added to advance the cone to the sounding termination depth. After cone retraction final baselines are recorded.

Additional information pertaining to CPT Inc.'s cone penetration testing procedures:

- · Each filter is saturated in silicone oil or glycerin under vacuum pressure prior to use
- Recorded baselines are checked with an independent multi-meter
- Baseline readings are compared to previous readings
- Soundings are terminated at the client's target depth or at a depth where an obstruction is encountered, excessive rod flex occurs, excessive inclination occurs, equipment damage is likely to take place, or a dangerous working environment arises
- Differences between initial and final baselines are calculated to ensure zero load offsets have not
 occurred and to ensure compliance with ASTM standards

The interpretation of the piezocone data and associated calculated parameters for this report are based on the corrected tip resistance (q_t) , sleeve friction (f_s) and pore water pressure (u). The interpretation of soil type is based on the correlations developed by Robertson (1990) and Robertson (2009). It should be noted that it is not always possible to accurately identify a soil type based on these parameters. In these situations, experience, judgment and an assessment of other parameters may be used to infer soil behavior type.

The recorded tip resistance (q_c) is the total force acting on the piezocone tip divided by its base area. The tip resistance is corrected for pore pressure effects and termed corrected tip resistance (q_t) according to the following expression presented in Robertson et al, 1986:

$$q_t = q_c + (1-a) \cdot u_2$$

where: q_t is the corrected tip resistance q_c is the recorded tip resistance u_2 is the recorded dynamic pore pressure behind the tip (u_2 position) a is the Net Area Ratio for the piezocone (0.8 for CPT Inc. probes)

The sleeve friction (f_s) is the frictional force on the sleeve divided by its surface area. As all CPT Inc. piezocones have equal end area friction sleeves, pore pressure corrections to the sleeve data are not required.

The dynamic pore pressure (u) is a measure of the pore pressures generated during cone penetration. To record equilibrium pore pressure, the penetration must be stopped to allow the dynamic pore pressures to stabilize. The rate at which this occurs is predominantly a function of the permeability of the soil and the diameter of the cone.



The friction ratio (Rf) is a calculated parameter. It is defined as the ratio of sleeve friction to the tip resistance expressed as a percentage. Generally, saturated cohesive soils have low tip resistance, high friction ratios and generate large excess pore water pressures. Cohesionless soils have higher tip resistances, lower friction ratios and do not generate significant excess pore water pressure.

A summary of the CPTu soundings along with test details and individual plots are provided in the appendices. A set of files with calculated geotechnical parameters were generated for each sounding based on published correlations and are provided in Excel format in the data release folder. Information regarding the methods used is also included in the data release folder.

For additional information on CPTu interpretations and calculated geotechnical parameters, refer to Robertson et al. (1986), Lunne et al. (1997), Robertson (2009), Mayne (2013, 2014) and Mayne and Peuchen (2012).



The cone penetration test is halted at specific depths to carry out pore pressure dissipation (PPD) tests, shown in Figure PPD-1. For each dissipation test the cone and rods are decoupled from the rig and the data acquisition system measures and records the variation of the pore pressure (u) with time (t).

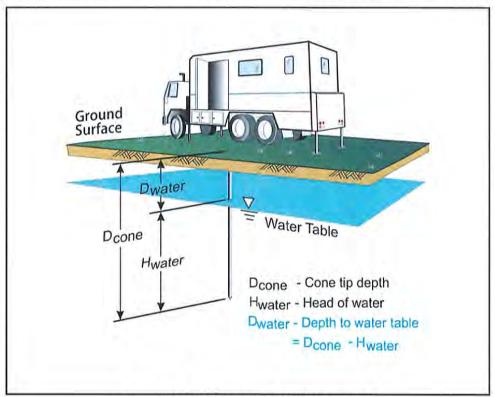


Figure PPD-1. Pore pressure dissipation test setup

Pore pressure dissipation data can be interpreted to provide estimates of ground water conditions, permeability, consolidation characteristics and soil behavior.

The typical shapes of dissipation curves shown in Figure PPD-2 are very useful in assessing soil type, drainage, in situ pore pressure and soil properties. A flat curve that stabilizes quickly is typical of a freely draining sand. Undrained soils such as clays will typically show positive excess pore pressure and have long dissipation times. Dilative soils will often exhibit dynamic pore pressures below equilibrium that then rise over time. Overconsolidated fine-grained soils will often exhibit an initial dilatory response where there is an initial rise in pore pressure before reaching a peak and dissipating.



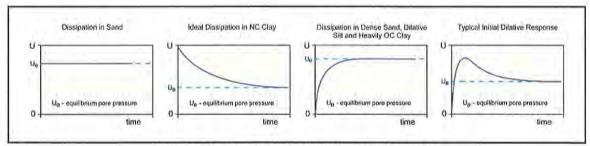


Figure PPD-2. Pore pressure dissipation curve examples

In order to interpret the equilibrium pore pressure (u_{eq}) and the apparent phreatic surface, the pore pressure should be monitored until such time as there is no variation in pore pressure with time as shown for each curve of Figure PPD-2.

In fine grained deposits the point at which 100% of the excess pore pressure has dissipated is known as t_{100} . In some cases this can take an excessive amount of time and it may be impractical to take the dissipation to t_{100} . A theoretical analysis of pore pressure dissipations by Teh and Houlsby (1991) showed that a single curve relating degree of dissipation versus theoretical time factor (T*) may be used to calculate the coefficient of consolidation (c_h) at various degrees of dissipation resulting in the expression for c_h shown below.

$$c_h = \frac{T^* \cdot a^2 \cdot \sqrt{I_r}}{f}$$

Where:

T* is the dimensionless time factor (Table Time Factor)

a is the radius of the cone
 l, is the rigidity index

t is the time at the degree of consolidation

Table Time Factor. T* versus degree of dissipation (Teh and Houlsby, 1991)

Degree of Dissipation (%)	20	30	40	50	60	70	80
T* (u₂)	0.038	0.078	0.142	0.245	0.439	0.804	1.60

The coefficient of consolidation is typically analyzed using the time (t_{50}) corresponding to a degree of dissipation of 50% (u_{50}). In order to determine t_{50} , dissipation tests must be taken to a pressure less than u_{50} . The u_{50} value is half way between the initial maximum pore pressure and the equilibrium pore pressure value, known as u_{100} . To estimate u_{50} , both the initial maximum pore pressure and u_{100} must be known or estimated. Other degrees of dissipations may be considered, particularly for extremely long dissipations.

At any specific degree of dissipation the equilibrium pore pressure (u at t_{100}) must be estimated at the depth of interest. The equilibrium value may be determined from one or more sources such as measuring the value directly (u_{100}), estimating it from other dissipations in the same profile, estimating the phreatic surface and assuming hydrostatic conditions, from nearby soundings, from client provided information, from site observations and/or past experience, or from other site instrumentation.



For calculations of c_h (Teh and Houlsby, 1991), t_{50} values are estimated from the corresponding pore pressure dissipation curve and a rigidity index (I_r) is assumed. For curves having an initial dilatory response in which an initial rise in pore pressure occurs before reaching a peak, the relative time from the peak value is used in determining t_{50} . In cases where the time to peak is excessive, t_{50} values are not calculated.

Due to possible inherent uncertainties in estimating I_r, the equilibrium pore pressure and the effect of an initial dilatory response on calculating t₅₀, other methods should be applied to confirm the results for c_h.

Additional published methods for estimating the coefficient of consolidation from a piezocone test are described in Burns and Mayne (1998, 2002), Jones and Van Zyl (1981), Robertson et al. (1992) and Sully et al. (1999).

A summary of the pore pressure dissipation tests and dissipation plots are presented in the relevant appendix.



ASTM D5778-12, 2012, "Standard Test Method for Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils", ASTM, West Conshohocken, US.

Burns, S.E. and Mayne, P.W., 1998, "Monotonic and dilatory pore pressure decay during piezocone tests", Canadian Geotechnical Journal 26 (4): 1063-1073.

Burns, S.E. and Mayne, P.W., 2002, "Analytical cavity expansion-critical state model cone dissipation in fine-grained soils", Soils & Foundations, Vol. 42(2): 131-137.

Jones, G.A. and Van Zyl, D.J.A., 1981, "The piezometer probe: a useful investigation tool", Proceedings, 10th International Conference on Soil Mechanics and Foundation Engineering, Vol. 3, Stockholm: 489-495.

Lunne, T., Robertson, P.K. and Powell, J. J. M., 1997, "Cone Penetration Testing in Geotechnical Practice", Blackie Academic and Professional.

Mayne, P.W., 2013, "Evaluating yield stress of soils from laboratory consolidation and in-situ cone penetration tests", Sound Geotechnical Research to Practice (Holtz Volume) GSP 230, ASCE, Reston/VA: 406-420.

Mayne, P.W., 2014, "Interpretation of geotechnical parameters from seismic piezocone tests", CPT'14 Keynote Address, Las Vegas, NV, May 2014.

Mayne, P.W. and Peuchen, J., 2012, "Unit weight trends with cone resistance in soft to firm clays", Geotechnical and Geophysical Site Characterization 4, Vol. 1 (Proc. ISC-4, Pernambuco), CRC Press, London: 903-910.

Robertson, P.K., 1990, "Soil Classification Using the Cone Penetration Test", Canadian Geotechnical Journal, Volume 27: 151-158.

Robertson, P.K., 2009, "Interpretation of cone penetration tests – a unified approach", Canadian Geotechnical Journal, Volume 46: 1337-1355.

Robertson, P.K., Campanella, R.G., Gillespie, D. and Greig, J., 1986, "Use of Piezometer Cone Data", Proceedings of InSitu 86, ASCE Specialty Conference, Blacksburg, Virginia.

Robertson, P.K., Sully, J.P., Woeller, D.J., Lunne, T., Powell, J.J.M. and Gillespie, D.G., 1992, "Estimating coefficient of consolidation from piezocone tests", Canadian Geotechnical Journal, 29(4): 551-557.

Sully, J.P., Robertson, P.K., Campanella, R.G. and Woeller, D.J., 1999, "An approach to evaluation of field CPTU dissipation data in overconsolidated fine-grained soils", Canadian Geotechnical Journal, 36(2): 369-381.

Teh, C.I., and Houlsby, G.T., 1991, "An analytical study of the cone penetration test in clay", Geotechnique, 41(1): 17-34.



The appendices listed below are included in the report:

- Cone Penetration Test Summary and Standard Cone Penetration Test Plots
- Expanded Range Cone Penetration Test Plots
- Advanced Cone Penetration Test Plots
- Soil Behavior Type (SBT) Scatter Plots
- Pore Pressure Dissipation Summary and Pore Pressure Dissipation Plots



Cone Penetration Test Summary and Standard Cone Penetration Test Plots





Job No:

18-56099

Client:

Purcell Rhoades and Associates

Project:

Self Storage and Residential Complex

Start Date:

19-Jun-2018

End Date:

19-Jun-2018

CONE PENETRATION TEST SUMMARY								
Sounding ID	File Name	Date	Cone	Assumed Phreatic Surface ¹ (ft)	Final Depth (ft)	Northing ² (m)	Easting (m)	Refer to Notation Number
CPT-01	18-56099_CP01	19-Jun-2018	443:T1500F15U500	21.2	24.11	4256467	528202	3
CPT-02	18-56099_CP02	19-Jun-2018	443:T1500F15U500	21.2	35.93	4256482	528203	3
CPT-03	18-56099_CP03	19-Jun-2018	443:T1500F15U500		18.21	4256497	528211	4
CPT-04	18-56099_CP04	19-Jun-2018	443:T1500F15U500	21.2	45.36	4256494	528160	-
CPT-05	18-56099_CP05	19-Jun-2018	443:T1500F15U500		19.52	4256523	528193	4
CPT-06	18-56099_CP06	19-Jun-2018	443:T1500F15U500	21.2	23.62	4256541	528181	3

^{1.} The assumed phreatic surface was based on pore pressure dissipation tests, unless otherwise noted. Hydrostatic conditions were assumed for the calculated parameters.

^{2.} Coordinates were acquired using consumer grade GPS equipment in datum: WGS 1984 / UTM Zone 10 North.

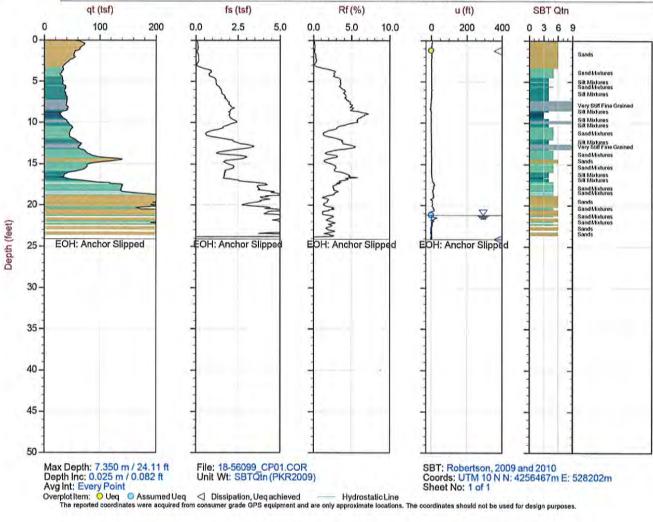
^{3.} The assumed phreatic surface was based on the adjacent sounding CPT-04.

^{4.} No phreatic surface detected.



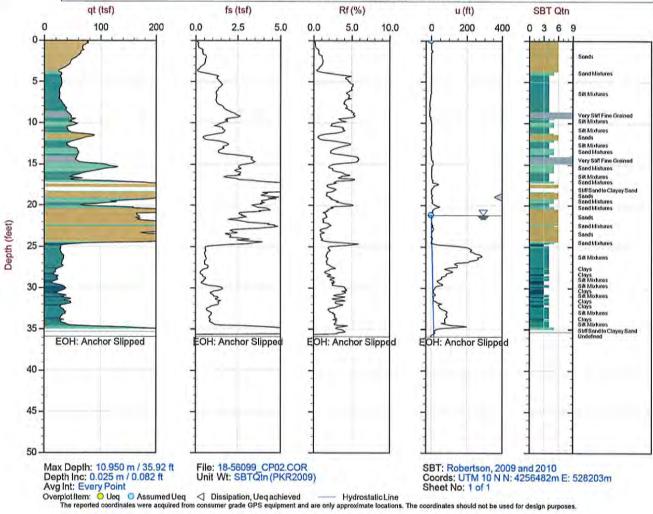


Job No: 18-56099 Date: 2018-06-19 09:57 Site: Self Storage and Residential Complex Sounding: CPT-01 Cone: 443:T1500F15U500



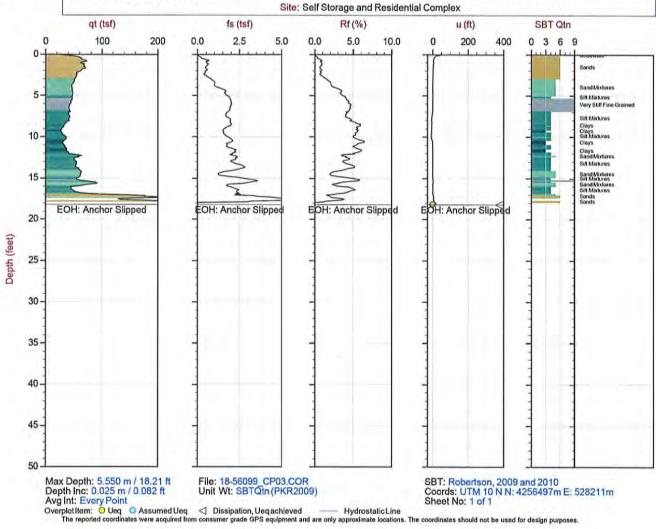


Job No: 18-56099 Date: 2018-06-19 10:44 Site: Self Storage and Residential Complex Sounding: CPT-02 Cone: 443:T1500F15U500





Job No: 18-56099 Date: 2018-06-19 11:26 Sounding: CPT-03 Cone: 443:T1500F15U500

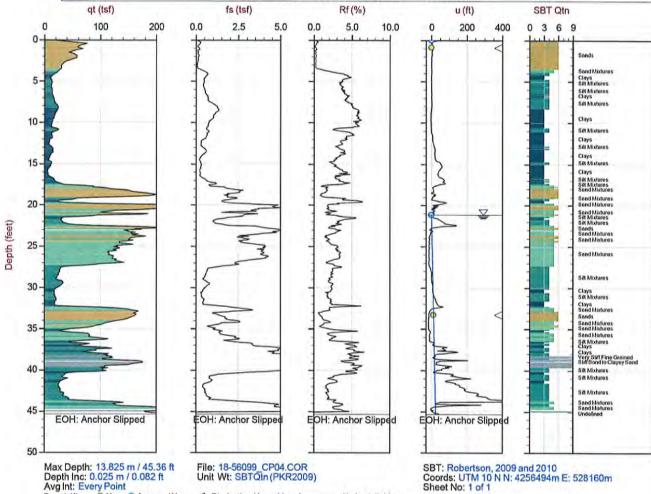




Job No: 18-56099 Date: 2018-06-19 12:16

Site: Self Storage and Residential Complex

Sounding: CPT-04 Cone: 443:T1500F15U500



Max Depth: 13.825 m / 45.36 ft Depth Inc: 0.025 m / 0.082 ft Unit Wt: SBTQIn(PKR2009)

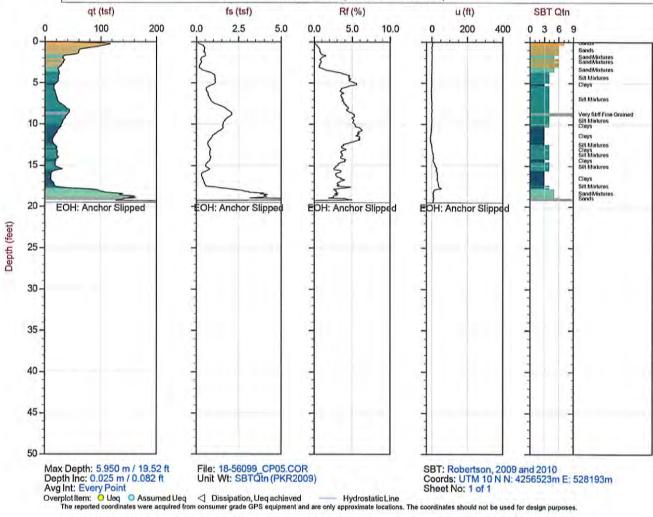
Avg Int: Every Point OverplotItem: ○ Ueq ○ Assumed Ueq The reported coordinates were acquired from consumer grade GPS equipment and are only approximate locations. The coordinates should not be used for design purposes.



Job No: 18-56099 Date: 2018-06-19 13:12

Site: Self Storage and Residential Complex

Sounding: CPT-05 Cone: 443:T1500F15U500

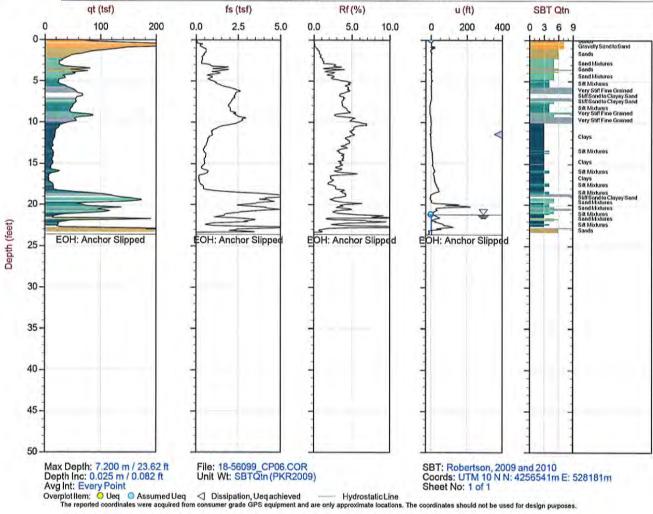




Job No: 18-56099 Date: 2018-06-19 13:44

Site: Self Storage and Residential Complex

Sounding: CPT-06 Cone: 443:T1500F15U500

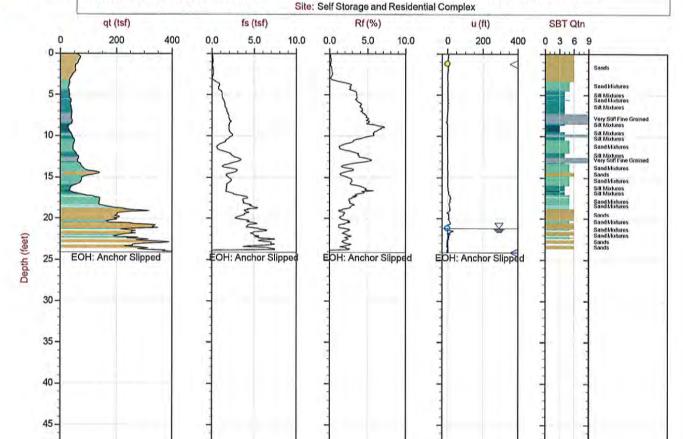


Cone Penetration Test Plots with Expanded Range





Job No: 18-56099 Date: 2018-06-19 09:57 Sounding: CPT-01 Cone: 443:T1500F15U500

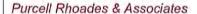


SBT: Robertson, 2009 and 2010 Coords: UTM 10 N N: 4256467m E: 528202m Sheet No: 1 of 1

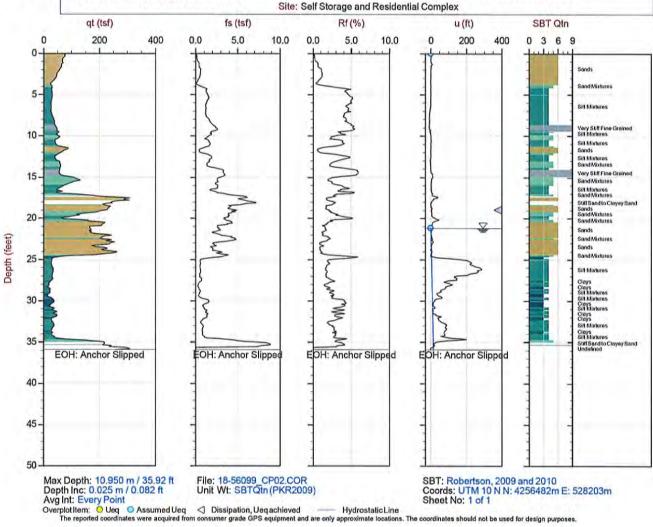
Max Depth: 7.350 m / 24.11 ft
Depth Inc: 0.025 m / 0.082 ft
Unit Wt: SBTQin(PKR2009)

Avg Int: Every Point
OverplotItem: O Ueq O Assumed Ueq
The reported coordinates were acquired from consumer grade GPS equipment and are only approximate locations. The coordinates should not be used for design purposes.





Job No: 18-56099 Date: 2018-06-19 10:44 Sounding: CPT-02 Cone: 443:T1500F15U500



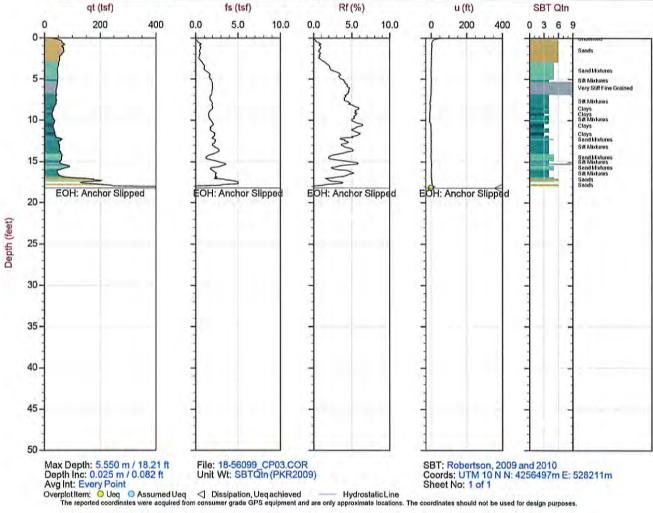




Job No: 18-56099 Date: 2018-06-19 11:26

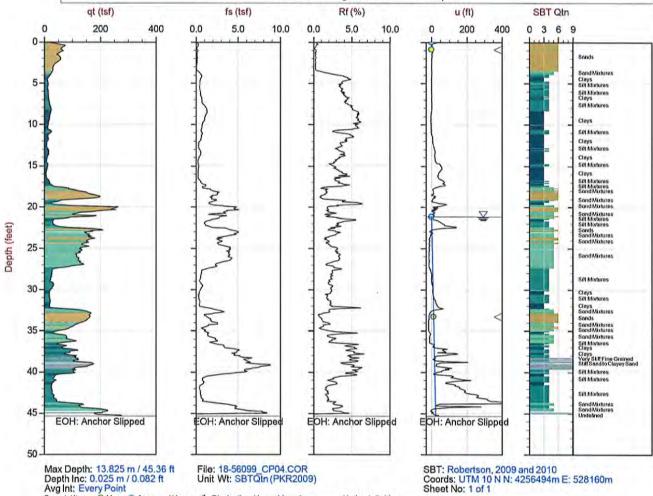
Site: Self Storage and Residential Complex

Sounding: CPT-03 Cone: 443:T1500F15U500





Job No: 18-56099 Date: 2018-06-19 12:16 Site: Self Storage and Residential Complex Sounding: CPT-04 Cone: 443:T1500F15U500

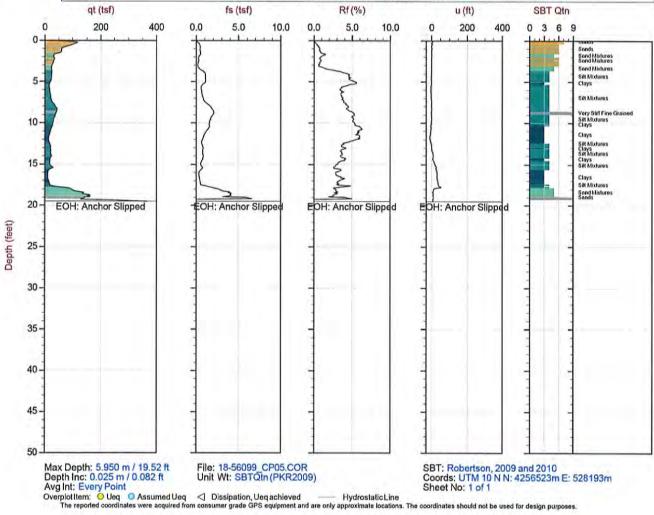


Max Depth: 13.825 m / 45.36 ft File: 18-56099 CP04.COR Depth Inc: 0.025 m / 0.082 ft Unit Wt: SBTQtn(PKR2009) Sheet No: 1 of 1

OverplotItem: ○ Ueq ○ Assumed Ueq ○ Dissipation, Ueq achieved Hydrostatic Line The reported coordinates were acquired from consumer grade GPS equipment and are only approximate localions. The coordinates should not be used for design purposes.



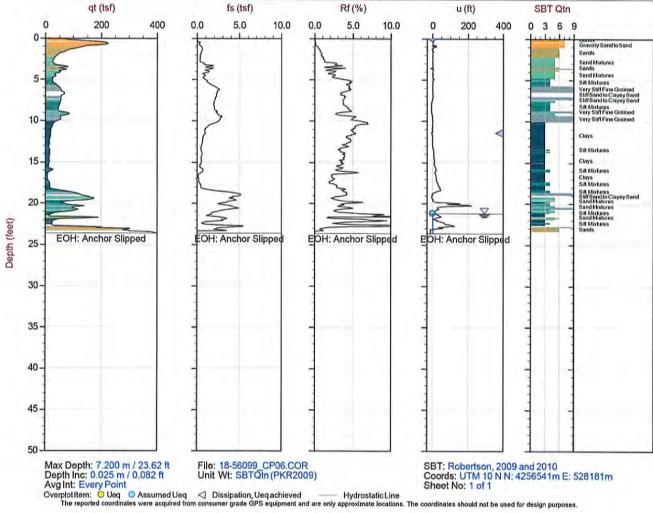
Job No: 18-56099 Date: 2018-06-19 13:12 Site: Self Storage and Residential Complex Sounding: CPT-05 Cone: 443:T1500F15U500





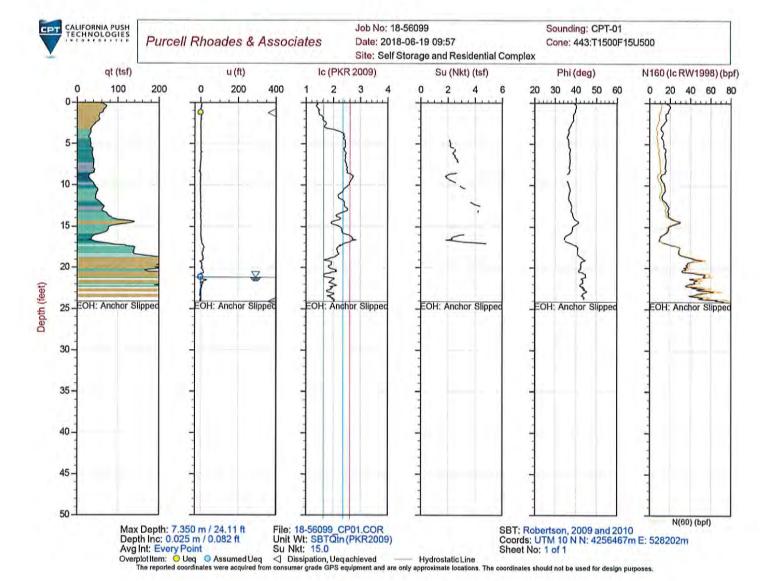
Job No: 18-56099 Date: 2018-06-19 13:44 Site: Self Storage and Residential Complex

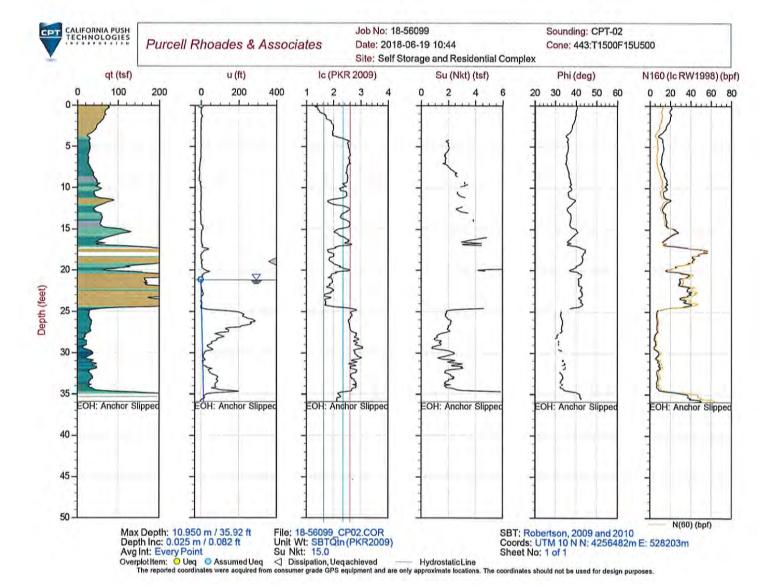
Sounding: CPT-06 Cone: 443:T1500F15U500

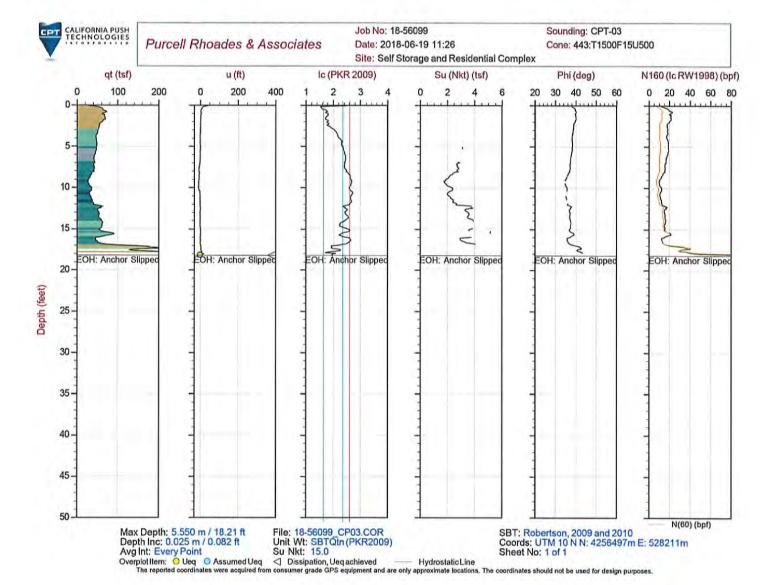


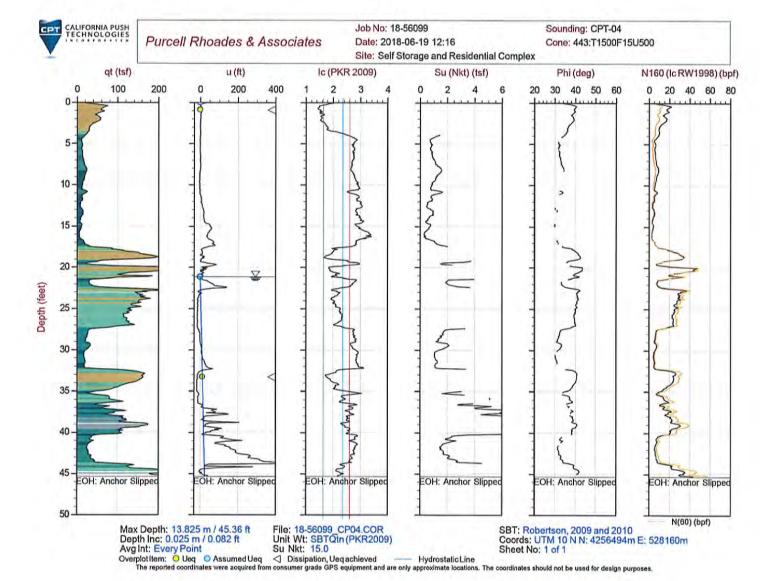
Advanced Cone Penetration Test Plots

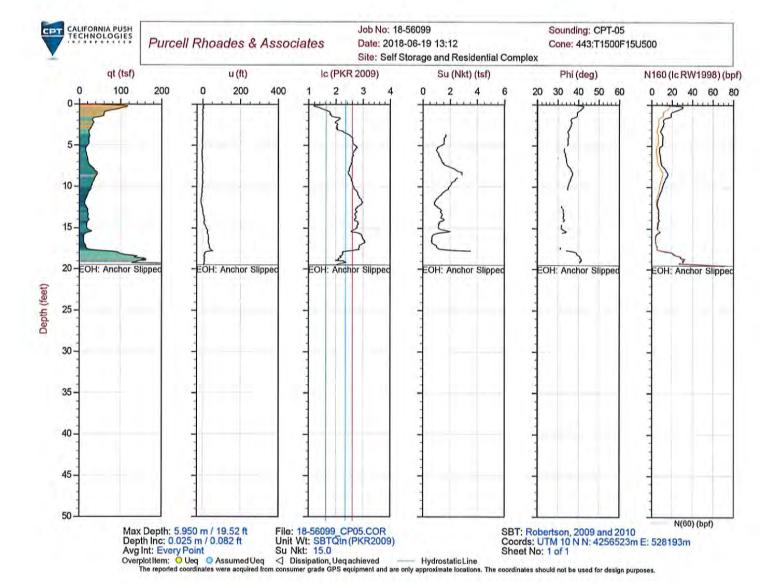










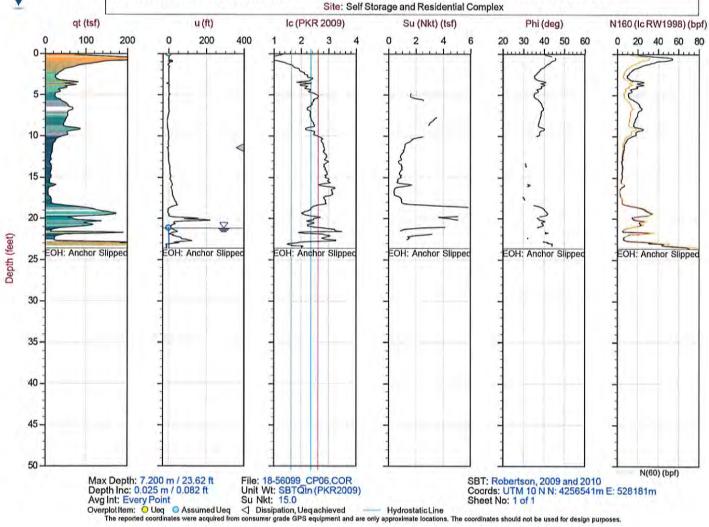






Job No: 18-56099 Date: 2018-06-19 13:44

Sounding: CPT-06 Cone: 443:T1500F15U500



Soil Behavior Type (SBT) Scatter Plots



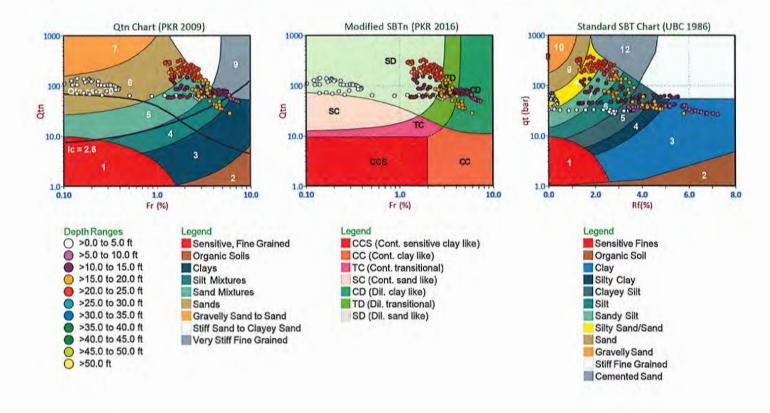


Job No: 18-56099

Date: 2018-06-19 09:57

Site: Self Storage and Residential Complex

Sounding: CPT-01 Cone: 443:T1500F15U500

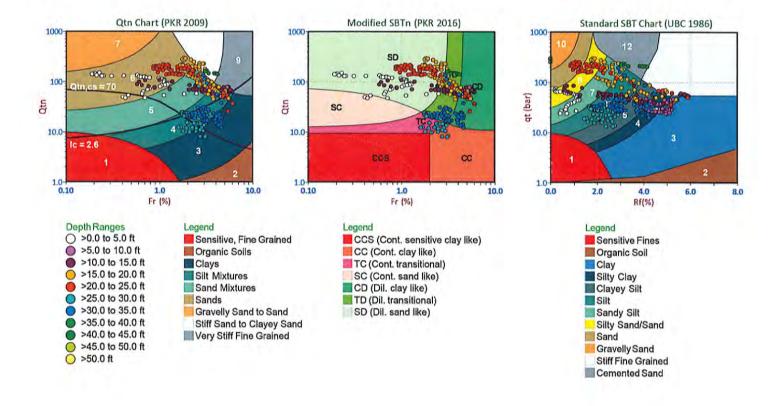




Job No: 18-56099 Date: 2018-06-19 10:44

Site: Self Storage and Residential Complex

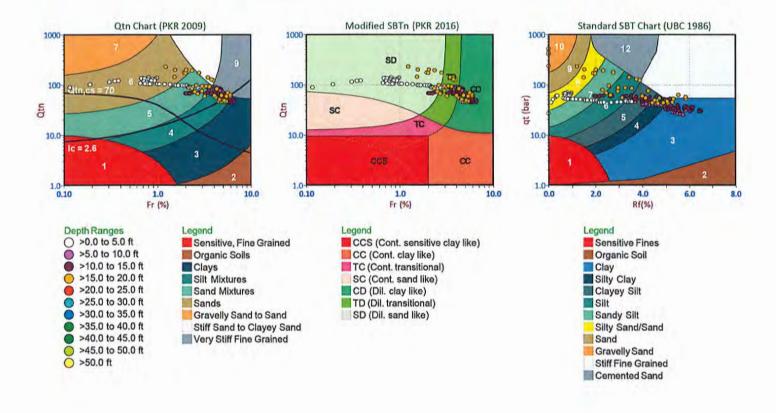
Sounding: CPT-02 Cone: 443:T1500F15U500





Job No: 18-56099 Date: 2018-06-19 11:26 Sounding: CPT-03 Cone: 443:T1500F15U500

Site: Self Storage and Residential Complex

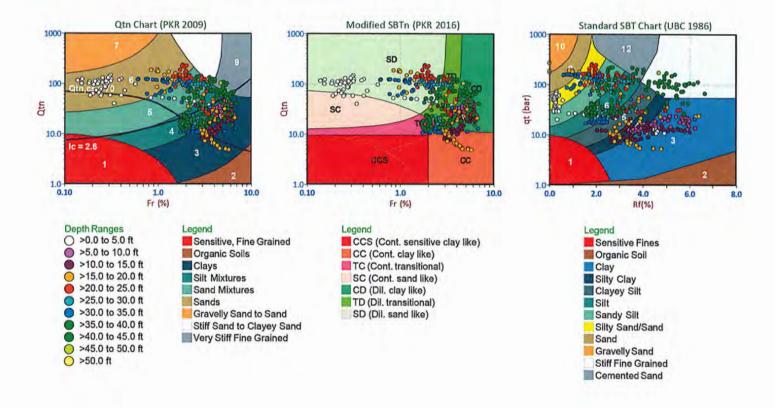




Job No: 18-56099 Date: 2018-06-19 12:16

Site: Self Storage and Residential Complex

Sounding: CPT-04 Cone: 443:T1500F15U500

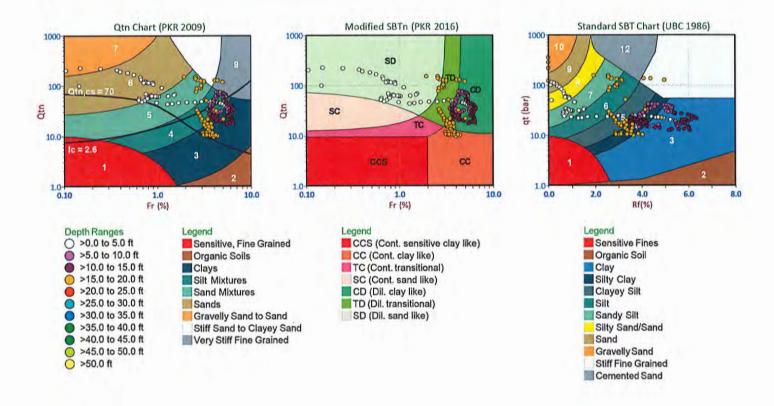




Job No: 18-56099 Date: 2018-06-19 13:12

Site: Self Storage and Residential Complex

Sounding: CPT-05 Cone: 443:T1500F15U500

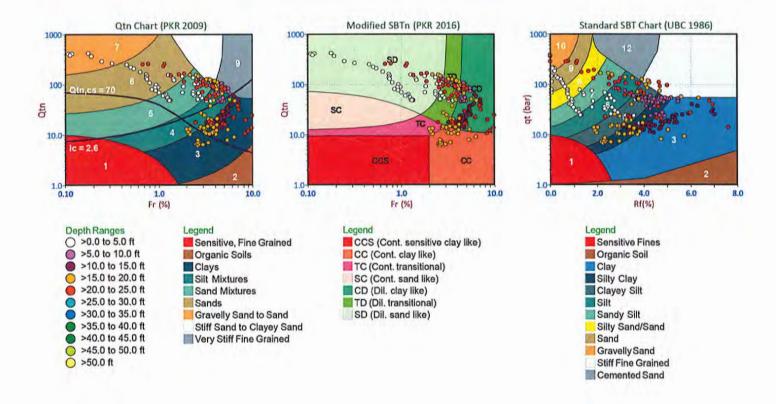




Job No: 18-56099 Date: 2018-06-19 13:44

Site: Self Storage and Residential Complex

Sounding: CPT-06 Cone: 443:T1500F15U500



Pore Pressure Dissipation Summary and Pore Pressure Dissipation Plots





Job No:

18-56099

Client:

Purcell Rhoades and Associates

Project:

Self Storage and Residential Complex

Start Date:

19-Jun-2018

End Date:

19-Jun-2018

Sounding ID	File Name	Cone Area (cm²)	Duration (s)	Test Depth (ft)	Estimated Equilibrium Pore Pressure U _{eq} (ft)	Calculated Phreatic Surface (ft)
CPT-01	18-56099_CP01	15	175	1.23	0.0	-
CPT-01	18-56099_CP01	15	155	24.11	Not achieved	
CPT-02	18-56099_CP02	15	100	18.95	Not achieved	
CPT-03	18-56099_CP03	15	115	18.21	0.0	
CPT-04	18-56099_CP04	15	125	0.90	0.0	11.00
CPT-04	18-56099_CP04	15	335	33.30	12.1	21.2
CPT-06	18-56099_CP06	15	210	11.40	Not achieved	



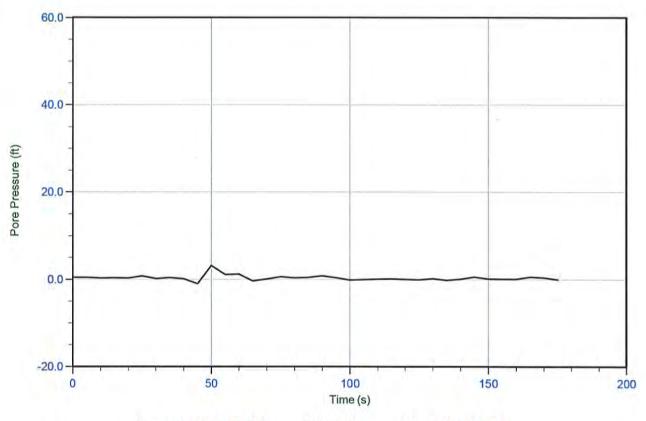
Job No: 18-56099

Date: 06/19/2018 09:57

Site: Self Storage and Residential Complex

Sounding: CPT-01

Cone: 443:T1500F15U500 Area=15 cm²



Trace Summary:

Filename: 18-56099_CP01.PPF

Depth: 0.375 m / 1.230 ft

Duration: 175.0 s

U Min: -1.0 ft

U Max: 3.2 ft

t WT: 0.375 m / 1.230 ft

Ueq: 0.0 ft



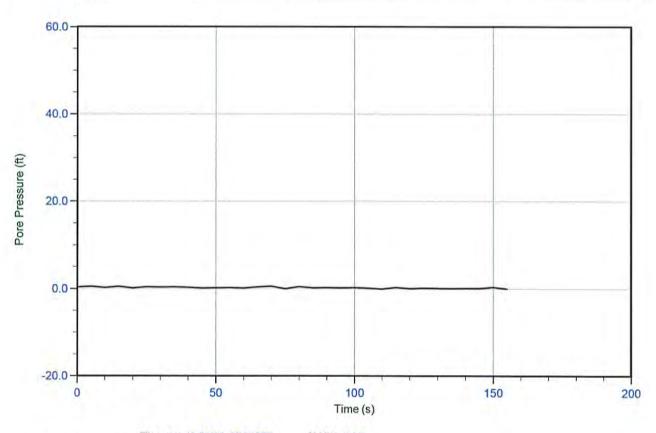
Job No: 18-56099

Date: 06/19/2018 09:57

Site: Self Storage and Residential Complex

Sounding: CPT-01

Cone: 443:T1500F15U500 Area=15 cm²



Trace Summary:

Filename: 18-56099_CP01.PPF

Depth: 7.350 m / 24,114 ft Duration: 155.0 s

U Min: -0.1 ft

U Max: 0.6 ft



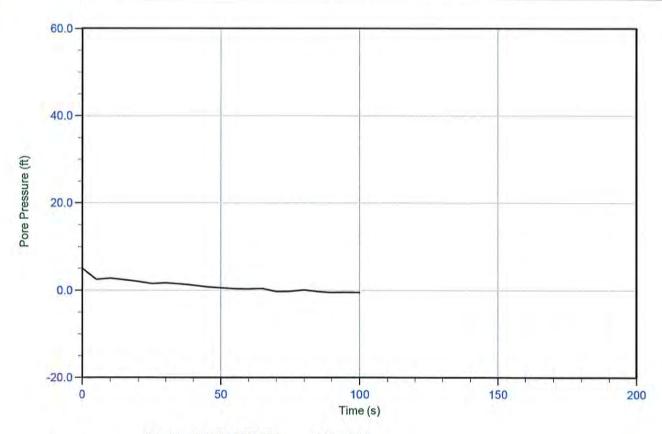
Job No: 18-56099

Date: 06/19/2018 10:44

Site: Self Storage and Residential Complex

Sounding: CPT-02

Cone: 443:T1500F15U500 Area=15 cm²



Trace Summary:

Filename: 18-56099_CP02.PPF Depth: 5.775 m / 18.947 ft

Duration: 100.0 s

U Min: -0.5 ft

U Max: 5.0 ft



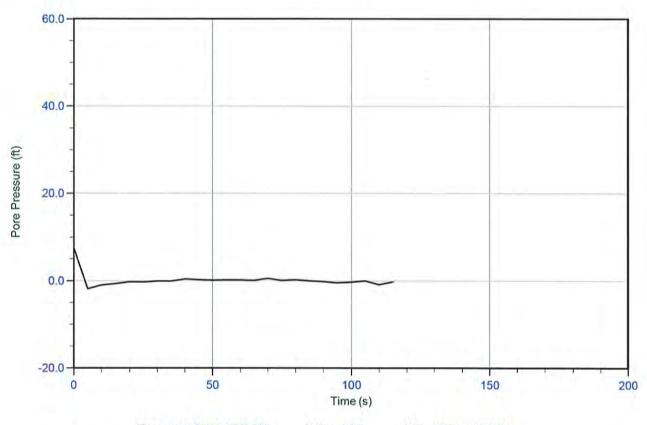
Job No: 18-56099

Date: 06/19/2018 11:26

Site: Self Storage and Residential Complex

Sounding: CPT-03

Cone: 443:T1500F15U500 Area=15 cm²



Trace Summary:

Filename: 18-56099_CP03.PPF Depth: 5.550 m / 18.208 ft

Duration: 115.0 s

U Min: -1.8 ft

U Max: 7.4 ft

WT: 5.550 m / 18,208 ft

Ueq: 0.0 ft



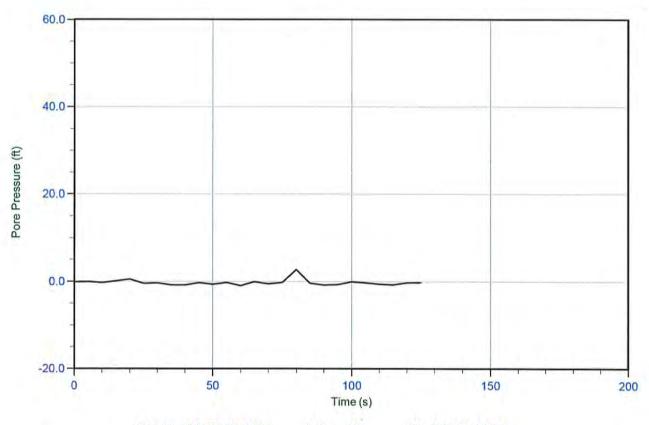
Job No: 18-56099

Date: 06/19/2018 12:16

Site: Self Storage and Residential Complex

Sounding: CPT-04

Cone: 443:T1500F15U500 Area=15 cm²



Trace Summary:

Filename: 18-56099_CP04.PPF Depth: 0.275 m / 0.902 ft

Duration: 125.0 s

U Min: -1.0 ft

U Max: 2.7 ft

WT: 0.275 m / 0.902 ft

Ueq: 0.0 ft



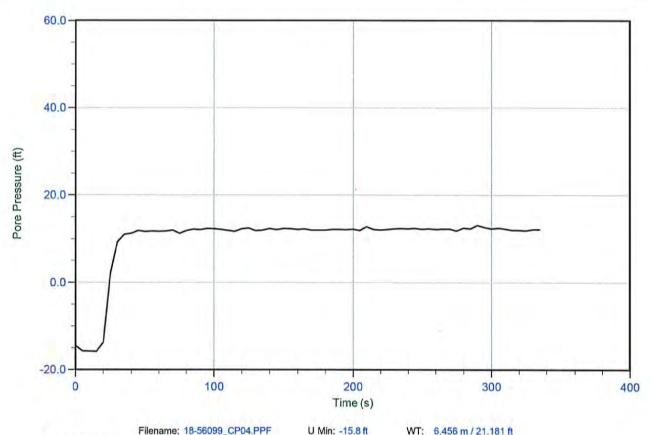
Job No: 18-56099

Date: 06/19/2018 12:16

Site: Self Storage and Residential Complex

Sounding: CPT-04

Cone: 443:T1500F15U500 Area=15 cm²



Trace Summary:

Filename: 18-56099_CP04.PPF Depth: 10.150 m / 33.300 ft

Duration: 335.0 s

U Max: 13.1 ft

WT: 6,456 m / 21,181 ft

Ueq: 12.1 ft



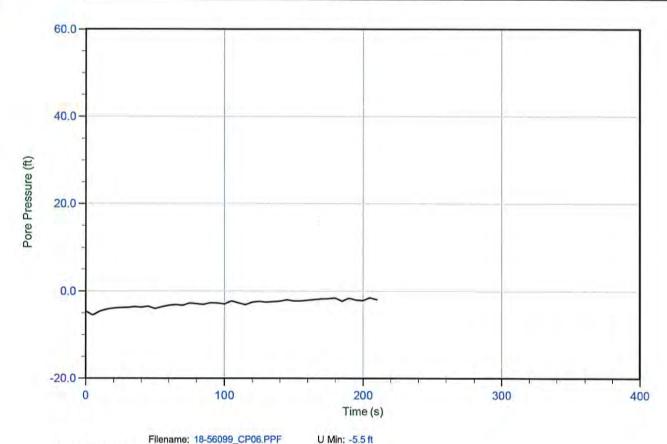
Job No: 18-56099

Date: 06/19/2018 13:44

Site: Self Storage and Residential Complex

Sounding: CPT-06

Cone: 443:T1500F15U500 Area=15 cm²



Trace Summary:

Filename: 18-56099_CP06.PPF

Depth: 3.475 m / 11.401 ft

Duration: 210.0 s

U Max: -1.5 ft

APPENDIX E

CAP New Development Checklist

APPENDIX E: CAP NEW DEVELOPMENT CHECKLIST

To ensure new development projects are compliant with the City's Climate Action Plan, the following checklist has been developed. This checklist should be filled out for each new project, subject to discretionary review, to allow new development to find a less than significant impact for greenhouse gas emissions in the environmental review process.

		Compliance			
#	Description	Complies	Does Not Comply	N/A	See Discussion
1.1.1	Comply with CALGreen Tier 1 standards*	х			
1.1.3	After 2020, all new development will utilize zero net electricity*			х	
1.3.1	Install real-time energy monitors to track energy use*	х			
1.4.2	Comply with the City's tree preservation ordinance*	x			
1.4.3	Provide public & private trees in compliance with the Zoning Code*	x			
1.5	Install new sidewalks and paving with high solar reflectivity materials*	х			
2.1.3	Pre-wire and pre-plumb for solar thermal or PV systems	х			
3.1.2	Support implementation of station plans and corridor plans	х			
3.2.1	Provide on-site services such as ATMs or dry cleaning to site users			x	
3.2.2	Improve non-vehicular network to promote walking, biking	х			
3.2.3	Support mixed-use, higher-density development near services	х			
3.3.1	Provide affordable housing near transit	х			
3.5.1	Unbundle parking from property cost	х			
3.6.1	Install calming features to improve ped/bike experience	х			
4.1.1	Implement the Bicycle and Pedestrian Master Plan	x			
4.1.2	Install bicycle parking consistent with regulations*	х			
4.1.3	Provide bicycle safety training to residents, employees, motorists	x			
4.2.2	Provide safe spaces to wait for bus arrival	х			

NEW DEVELOPMENT CHECKLIST

			Compliance			
#	Description	Complies	Does Not Comply	N/A	See Discussion	
4.3.2	Work with large employers to provide rideshare programs			х		
4.3.3	Consider expanding employee programs promoting transit use			х		
4.3.4	Provide awards for employee use of alternative commute options			х		
4.3.5	Encourage new employers of 50+ to provide subsidized transit passes*			х		
4.3.7	Provide space for additional park-and-ride lots			х		
4.5.1	Include facilities for employees that promote telecommuting			х		
5.1.2	Install electric vehicle charging equipment	х				
5.2.1	Provide alternative fuels at new refueling stations*			х		
6.1.3	Increase diversion of construction waste*	x				
7.1.1	Reduce potable water use for outdoor landscaping*	х				
7.1.3	Use water meters which track real-time water use*	x				
7.3.2	Meet on-site meter separation requirements in locations with current or future recycled water capabilities*			x		
8.1.3	Establish community gardens and urban farms			х		
9.1.2	Provide outdoor electrical outlets for charging lawn equipment	х				
9.1.3	Install low water use landscapes*	х				
9.2.1	Minimize construction equipment idling time to 5 minutes or less*	х				
9.2.2	Maintain construction equipment per manufacturer's specs*	x				
9.2.3	Limit GHG construction equipment emissions by using electrified equipment or alternative fuels*	x				

^{*}To be in compliance with the CAP, all measures denoted with an asterisk are required in all new development projects unless otherwise specified. If a project cannot meet one or more of the mandatory requirements, substitutions may be made from other measures listed at the discretion of the Community Development Director.

DISCUSSION (PLEASE LIST POLICY #)

APPENDIX F

Hazardous Materials Report

Hazardous Materials Survey Report

4224 Highway 12 / Sonoma Highway Santa Rosa, California

December 7, 2018
Terracon Project No. R1187D02

Prepared for:

Larry Thom
American Recess
85 Keystone Avenue, Suite E
Reno, NV 89503

Prepared by:

Terracon Consultants, Inc. 1466 66th Street Emeryville, California 94608 510-547-7771

Report Prepared by:	at the same of the	Annabelle Call
	Industrial Hygienist, CAC # 12-4856	
Report Reviewed by:	Project Manager CAC #92-0772, CDPH #2228	Karin Schroeter

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3.	METHODS AND SAMPLING STRATEGY	.2
4.	ASBESTOS RESULTS	.3
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6.	CONCLUSIONS AND RECOMMENDATIONS	.8
7.	REGULATORY REQUIREMENTS	.8
8.	LIMITATIONS	10

APPENDICES

- 1. Laboratory Results and Chain of Custody Asbestos
- $\hbox{\bf 2.} \ \ Laboratory \ Results \ and \ Chain \ of \ Custody-Lead \\$
- 3. Inspector Certificates

Hazardous Materials Survey Report

4224 Highway 12/Sonoma Highway Santa Rosa, California

1. Executive Summary

The following is a report of the hazardous materials survey conducted by William Frieszell, Certified Asbestos Consultants (CAC) and California Department of Public Health (CDPH) Lead Inspector/Assessor and Karin Schroeter, CAC and CDPH Lead Inspector/Assessor with Terracon Consultants, Inc. (Terracon). The survey was performed November 30, 2018 at the residence and outbuildings located at 4224 Highway 12/Sonoma Highway in Santa Rosa, California.

The survey area included the interior, exterior, and roofing materials associated with the main house and attached garage, detached garage and storage building.

A total of forty-one (41) suspected asbestos containing materials (ACMs) were identified throughout the interior and exterior of the structures. Four (4) of the materials sampled were determined to be positive for asbestos content. One (1) of the materials that was identified was assumed to contain asbestos and therefore was not sampled.

Thirteen (13) materials were sampled for potential lead content. Eight (8) of the sampled materials were reported above laboratory detection limits for lead.

2. Scope of Work

The scope of the survey was as follows:

- Inspect the subject buildings for the presence of suspect ACMs and lead-containing paint.
- Collect samples of suspect ACMs following a National Emissions Standards for Hazardous Air Pollutants (NESHAPS) protocol for sample collection for a renovation survey.
- Asbestos bulk samples will be analyzed using polarized light microscopy (PLM) in accordance with the EPA's July 1993 method for the determination of asbestos in bulk building materials - EPA 600/R-93/116.
- Collect bulk samples of primary painted surfaces and other materials suspected to be lead containing. Bulk samples will be analyzed at an accredited laboratory by Flame Atomic Absorption (AA) for Total Lead reported in parts per million (ppm).
- Submit written report including analytical results, regulatory requirements and conclusions.

3. Methods and Sampling Strategy

Visual Inspection

Accessible building materials on the interior and exterior of the structures were visually inspected using the methods presented in the federal Asbestos Hazard Emergency Response Act (AHERA) regulations (40 CFR, Part 763) as a guideline. AHERA was originally only applicable to schools; however State and Federal Occupational Safety and Health Administration (OSHA) and Asbestos School Hazard Abatement Reauthorization Act (ASHARA) have adopted the AHERA sampling methodology for all buildings subject to demolition or renovation.

Bulk Sampling of Asbestos

Bulk samples were collected of homogeneous suspect ACM on the subject property. A homogeneous material is defined as a surfacing material, thermal system insulation, or miscellaneous material that is uniform in color, texture and age of construction. Examples of homogeneous materials include:

- Pipe-insulation produced by the same manufacturer and installed during the same time period;
- Resilient flooring of identical color and pattern;
- · Troweled on surfacing materials located in contiguous areas.

The buildings were visually inspected for the presence of suspect materials. As materials were identified, bulk samples were obtained with the aid of a coring device or other hand tool and placed into individual sampling bags. Each sample was given a discrete identification number and recorded on field notes as well as chain-of-custody forms. Refer to accompanying tables and appendices for details on material sample locations and results.

Bulk Sample Analysis - Asbestos

Bulk samples were analyzed by EMLab P&K (EMLab) in Phoenix, Arizona. EMLab is accredited under the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program (NVLAP).

When None Detected (ND) appears in this report, it should be interpreted as meaning no asbestos was observed in the sample material above the reliable limit of detection for the PLM method.

Note that under EPA assessment criteria, if a single sample of a homogeneous material test positive for asbestos, all areas of that homogeneous material are considered to be asbestos containing.

Bulk Sampling of Lead

Paint chip and samples of other building materials were collected using a hand scraper or chisel and were placed into individual plastic sampling containers. Each sample was provided a discrete sample number, which was recorded on a chain-of-custody form. The samples were transported under chain-of-custody procedures to QuanTEM Laboratories in Oklahoma City, Oklahoma. Please refer to Table III for details on sample locations and sample results. All paint, putty and ceramic tile glazing samples were analyzed for lead content using the Flame Atomic Absorption spectroscopy in accordance to EPA Method SW846-7420.

4. Asbestos Results

During the survey, forty-one (41) suspect homogeneous materials were identified at the subject property. Four (4) of these materials were reported positive for asbestos content. One (1) of these materials was assumed to contain asbestos and was not sampled. Each of these materials are located in the main residential structure. Asbestos materials were not identified in any of the remaining buildings. These materials are listed in Table I below.

TABLE I ASBESTOS-CONTAINING MATERIALS

Material Description	Material Location	Asbestos Type
Drywall and Joint Compound – Walls and Ceilings - Residence	Main House, Interior – Southeastern Bedroom Area at Western Wall Main House, Interior – Southeastern Bathroom Area at Southern Wall Main House, Interior – Northwestern Living Room Area at Northern Corner Note: Material is located throughout the Main House	Off-White Joint Compound: 2% CH White Drywall with Brown Paper: ND Brown Tape: ND Point Count Composite Result: 0.25% CH
Ceramic Wall Tile System – 4" Pink Tile with Grout and Mortar	Main House, Interior – Southeastern Bathroom Area at Southern Wall Main House, Interior – Southeastern Bathroom Area at Western Wall	Pink Ceramic Tile: ND White Grout: ND
Ceramic Floor Tile System – 4" Pink Tile with Grout and Mortar	Main House, Interior – Southeastern Bathroom Area at Southwestern Entry Way Main House, Interior – Southeastern Bathroom Area at Southwestern Entry way	<1% CH
Attic Exhaust Flue Insulation - Grey	Main House, Interior – Western Corridor Closet Area at Attic Access Hatch	Gray Insulation: 15-75% CH & <1% CR
Transite Flues	Not Sampled Note: Material is located in the attic space roof	ASSUMED

NA = Not Applicable, CH = Chrysotile, CR = Crocidolite

Thirty-six (36) suspect materials were sampled and found to be negative for asbestos content. The non-asbestos containing materials are listed in Table II below.

TABLE II NON-ASBESTOS CONTAINING MATERIALS

Material Description Material Locations			
Wiateriai Description			
	Main House, Interior - Southeastern Laundry Room Area at		
	Southern Wall		
Wall Vapor Barrier Material - Black	Main House, Interior - Southwestern Bedroom Area at		
1	Southern Wall		
	Main House, Exterior - Eastern Wing of Building at		
	Southwestern Corner Main House, Interior - Southeastern Laundry Room Area at		
Wainscot Adhesive - Tan on Faux Blue Ceramic	Southeastern Corner		
Tile	Main House, Interior - Southeastern Laundry Room Area at		
THE	Southeastern Corner		
	Main House, Interior - Central Kitchen Area at Southeastern		
Shoot Flooring System Poigo with Plus Flower	Corner Entry Way		
Sheet Flooring System - Beige with Blue Flower Pattern and Yellow Mastic	Main House, Interior - Central Kitchen Area at Western		
Fattern and Tenow Mastic	Entry Way		
	Main House, Interior - Central Kitchen Area at Southeastern		
	Corner Entry Way		
	Main House, Interior - Central Kitchen Area at Western		
Vapor Barrier under Subfloor - Black	Entry Way		
	Main House, Interior - Western Corridor Area at Northern		
	Side		
	Main House, Interior - Central Kitchen Area at Southeastern		
	Corner Entry Way		
Cove Base Adhesive - Brown on 4" Beige Cove	Main House, Interior - Central Kitchen Area at Western		
	Entry Way		
	Main House, Interior - Northeastern Den Area at Eastern		
	Window		
Interior Window Glazing Putty - White	Main House, Interior - Northwestern Living Room Area at		
interior window Giazing Futty - write	Northern Window		
	Main House, Interior - Southwestern Bedroom Area at		
	Southern Window		
	Main House, Interior - Western Bathroom Area at Eastern		
Ceramic Floor Tile System - Multi Tan Mosaic	Entry Way		
Tile with Grout and Mortar	Main House, Interior - Western Bathroom Area at Eastern		
	Entry Way		
	Main House, Interior - Western Bathroom Area at		
Ceramic Counter Tile System - 4" Beige Tile	Northeastern Countertop		
with Grout and Mortar	Main House, Interior - Western Bathroom Area at		
	Northeastern Countertop		
	Main House, Interior - Central Kitchen Area at		
Ceramic Counter Tile System - 4" Beige Tile	Northwestern Countertop		
with Grout and Mortar	Main House, Interior - Central Kitchen Area at Northeastern		
	Countertop		

Material Description	Material Locations
Ceramic Counter Tile System - 4" Blue Mosaic Tile with Grout and Mortar	Main House, Interior - Central Kitchen Area at Northwestern Countertop Main House, Interior - Central Kitchen Area at Northeastern Countertop
Ceramic Wall Tile System - 6" Blue Floral Pattern with Grout and Mastic	Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
Wood Burning Stove Base - Brick and Mortar	Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
Stove Rope Gasketing - Black	Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
Stone Fireplace Grouting Material - Grey	Main House, Interior - Northwestern Living Room Area at Western Fireplace Main House, Interior - Northwestern Living Room Area at Western Fireplace
Fireplace Base Material with Mortar	Main House, Interior - Northwestern Living Room Area at Western Fireplace Main House, Interior - Northwestern Living Room Area at Western Fireplace
Wire Insulation Material - Cloth	Main House, Interior - Southwestern Bedroom Area at Western Electrical Outlet Main House, Interior - Southwestern Bedroom Area at Western Electrical Outlet
Attic System Insulation - Saw Dust Material	Main House, Interior - Eastern Hallway Area at Attic Access Hatch Main House, Interior - Eastern Hallway Area at Attic Access Hatch Main House, Interior - Western Corridor Closet Area at Attic Access Hatch
Exterior Window Glazing Putty - White	Main House, Exterior - Eastern Wing of Building at Western Window Assembly Main House, Exterior - Eastern Wing of Building at Eastern Window Assembly
Building Concrete Materials	Main House, Exterior - Southern Side of Building at Entry Way Area Main House, Exterior - Northeastern Corner of Building at Slab Main House, Exterior - Southwestern Corner of Building at Porch Area Slab
Fire Pit/Barbecue Brick System - Red with Mortar	Main House, Exterior - Southern Side of Building at Built- in Barbecue Pit Main House, Exterior - Southern Side of Building at Built- in Barbecue Pit

Material Description	Material Locations
Porch Area Stucco Wall System - Grey	Main House, Exterior - Southwestern Porch Area at Northwestern Side Wall Main House, Exterior - Southwestern Porch Area at Eastern Side Wall Main House, Exterior - Southwestern Porch Area at Western Side Overhood
Button Board Material under Stucco - White	Western Side Overhang Main House, Exterior - Southwestern Porch Area at Northwestern Side Wall Main House, Exterior - Southwestern Porch Area at Northwestern Side Wall
Main Roofing Field System - Multiple Layer Composite Shingle with Felt	Main House, Roof Level - Western Wing Main Roofing Field Area at Southern Side Main House, Roof Level - Eastern Wing Main Roofing Field Area at Eastern Side Main House, Roof Level - Central Wing Main Roofing Field Area at Northern Side
Roofing Field System - Thick Asphaltic Shingle	Main House, Exterior - Southern Pumphouse Structure at Western Side Garage Building, Roof Level - Main Roofing Field Area at Northern Side (under Metal) Garage Building, Roof Level - Main Roofing Field Area at Western Side (under Metal)
Window Glazing Putty - White	Garage Building, Exterior - Western Side of Building at Northwestern Window Bank Garage Building, Exterior - Western Side of Building at Central Window Bank
Unfinished Drywall System	Garage Building, Interior - Northwestern Office Room Area at Western Wall Garage Building, Interior - Northwestern Office Room Area at Northern Wall
Moisture Barrier Paper - Black	Garage Building, Interior - Northwestern Office Room Area at Southern Wall Garage Building, Interior - Northwestern Office Room Area at Eastern Wall
Building Concrete Materials	Garage Building, Interior - Northwestern Office Room Area at Northern Entry Way Garage Building, Interior - Northern Main Garage Area at Northern Entry Way
Roof Penetration Mastic - Black	Main House, Roof Level - Central Wing Main Roofing Field Area at Northern Stove Flue Main House, Roof Level - Central Wing Main Roofing Field Area at Northern Stove Flue Main House, Roof Level - Western Wing Main Roofing Field Area at Central Penetration
Kiln Wall System - Grey CMU Block with Mortar	Kiln/Barn Building, Interior - Central Corridor Area at Northwestern Corner Kiln/Barn Building, Interior - Central Corridor Area at Southwestern Corner
Kiln Wall Moisture Barrier - Black	Kiln/Barn Building, Interior - Central Corridor Area at Southwestern Corner Kiln/Barn Building, Interior - Central Corridor Area at Southwestern Corner

Material Description	Material Locations
	Kiln/Barn Building, Interior - Western Kiln Chamber Area
Acoustical Wall Tile System - 1' White Nailed	at Western Wall
on System	Kiln/Barn Building, Interior - Western Kiln Chamber Area
	at Eastern Wall
	Kiln/Barn Building, Interior - Central Corridor Area at
Cloth Heat Barrier Material - White	Eastern Wall North
Cloth fleat Barrier Wateriar - Willie	Kiln/Barn Building, Interior - Central Corridor Area at
	Eastern Wall South
	Kiln/Barn Building, Interior - Central Corridor Area at
Puilding Congrete Meterial	Southern Side Ceiling
Building Concrete Material	Kiln/Barn Building, Exterior - Northern Side of Building at
	Central Walk Way
	Kiln/Barn Building, Interior - Central Corridor Area at
Asphaltia Patahina Matarial Dlask	Northern Side Ceiling
Asphaltic Patching Material - Black	Kiln/Barn Building, Interior - Central Corridor Area Ceiling
	at Approximate Center

5. Lead Results

Samples of thirteen (13) suspect lead containing materials were collected and analyzed for potential lead content. Eight (8) of the samples were reported above laboratory detection limits for lead. Table III below summarizes the sampling locations and results for the materials.

TABLE III LEAD IN PAINT, PUTTY AND CERAMIC SAMPLE RESULTS

Sample Number	Material Description and Location	Results mg/kg (ppm)
Pb-01	Pink 4" Ceramic Wall Tile System Main House Interior Southeastern Bathroom	4,790
Pb-02	Pink 4" Ceramic Floor Tile System Main House Interior Southeastern Bathroom	<49.8
Pb-03	Tan Mosaic Ceramic Floor Tile System Main House Interior Western Bed Room	<49.8
Pb-04	Beige 4" Ceramic Counter Tile System Main House Interior Western Bathroom	102
Pb-05	Blue 4" Ceramic Counter Tile System Main House Interior Central Kitchen	1,340
Pb-06	Blue Floral Pattern 6" Ceramic Wall Tile System Main House Interior Central Kitchen	<49.9
Pb-07	Metallic Wood Stove Liner Main House Interior Central Kitchen Area	<49.0

Sample Number	Material Description and Location	Results mg/kg (ppm)
Pb-08	White Putty Interior Window Glazing Main House Interior Northeastern Bedroom	99.3
Pb-09	White Putty Exterior Window Glazing Main House Eastern Wing	<49.9
Pb-10	Red Paint on Concrete Porch Slab Main House Exterior Southwestern Porch	117
Pb-11	White Paint on Wood Exterior Wall System Main House Exterior Southern Side	10,300
Pb-12	White Paint on Wood Exterior Wall System Garage Building Exterior Western Side	16,900
Pb-12	White Putty Exterior Window Glazing Garage Building Exterior Western Side	168

Mg/kg= Milligram per kilogram, ppm = parts per million

6. Conclusions and Recommendations

Based upon the scope of the work, Terracon concludes the following:

- Asbestos was detected in four (4) of the building materials. Additionally, one (1) material is assumed to contain asbestos. These materials should be removed by a licensed and registered asbestos abatement contractor if materials disturbed will exceed 100 square feet. All workers shall be properly trained for asbestos removal work.
- Lead was detected above the laboratory detection limit in eight (8) of the materials tested within the survey area. All removal work impacting lead containing materials must be done following the OSHA Lead in Construction Standard.

7. Regulatory Requirements

Asbestos

Asbestos-containing materials are present in the building in concentrations greater than one tenth of one percent (0.1%). Impacting materials containing greater than 0.1% asbestos either through repair, maintenance, or demolition activities triggers numerous regulations enforced by such agencies as OSHA (worker protection) and EPA (environmental exposure, transportation and disposal).

Listed below are the regulations that apply if the materials are removed:

• If more than 100 square feet of materials that contain greater than 0.1% asbestos will be removed, they must be abated by a Cal-OSHA registered asbestos abatement contractor. Regulation: Cal-OSHA 8 CCR 1529 (R).

- ACMs that are classified by OSHA as other/miscellaneous materials have been confirmed to be present. Removal of these materials is considered a Class II activity according to Cal-OSHA regulations. Work practices and engineering controls for Class II work are specified in Cal-OSHA 8 CCR 1529 (g) (7-8).

Lead

Painted surfaces observed during the survey were intact and / or pealing. Impacting lead or lead-containing paint either through repair, maintenance, renovation or demolition activities triggers numerous regulations enforced by such agencies as OSHA (worker protection), EPA (environmental exposure, transportation and disposal), and Department of Public Health (DPH).

Listed below are the lead paint regulations that apply if the paint is removed:

- There are presently no federal, state or local regulations limiting the concentration of lead in public (non-school) sector buildings, however several regulations established for the private sector as well as for government subsidized housing are used industry wide as guidelines for assessing exposure to lead. The Consumer Product Safety Commission (CPSC) has set a maximum limit of 90 ppm in paint used for residential purposes. The Department of Housing and Urban Development (HUD) requires abatement of lead hazards involving paint in concentrations exceeding 5,000 ppm.
- Disposal of all lead-containing paint and bulk materials is regulated at concentrations at, or exceeding, 1,000 ppm as stated in 40 Code of Federal Regulations (CFR) Part 263 Land Disposal Regulations and Title 22, Division 4 Environmental Health of the California Administrative Code. Lead containing materials that exceed 50 ppm must be additionally analyzed to determine possible waste disposal restrictions with respect to lead. However, lead related work at any lead concentration is regulated under the OSHA statutes.
- Federal OSHA as well as California OSHA regulates all worker exposure during construction activities that impact lead-containing paint. California OSHA enforces the Lead in Construction Standard in Title 8 CCR 1532.1. The scope covers construction work where employees may be exposed to lead during such activities as demolition, removal, surface preparation for re-painting, renovation, clean-up and routine maintenance. The OSHA specified method of compliance includes respiratory protection, protective clothing and equipment, housekeeping, hygiene facilities, medical surveillance, and training, among other requirements.

8. Limitations

RGA Environmental Inc. (RGA) warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of ACMs, lead containing materials, mercury and PCBs identified in this report. Also, note that this is a survey report and not an abatement specification. This document is not appropriate for competitive bidding or for use as an asbestos or lead abatement specification.



Appendix 1:

Laboratory Results and Chain of Custody - Asbestos



Report for:

William Frieszell, Ms. Karin Schroeter Terracon Consultants, Inc. - Emeryville 1466 66th Street Emeryville, CA 94608

Regarding: Project: R1187D02; 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California

EML ID: 2052737

Approved by:

Dates of Analysis:

Asbestos PLM: 12-03-2018 to 12-05-2018

Approved Signatory Renee Luna-Trepczynski

Rena Luna-Frapezynski

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Total Samples Submitted: 90
Total Samples Analyzed: 90
Total Samples with Layer Asbestos Content > 1%: 6

Location: 1A, Wall Vapor Barrier Material; Black Main House, Interior; Southeastern

Laundry Room Area At Southern Wall

Lab ID-Version‡: 9694024-1

	•
Sample Layers	Asbestos Content
Black Vapor Barrier	ND
Composite Non-Asbestos Content:	75% Cellulose
Sample Composite Homogeneity:	Good

Location: 1B, Wall Vapor Barrier Material;Black Main House, Interior;Southwestern Bedroom Area At Southern Wall

Lab ID-Version‡: 9694025-1

Sample Layers	Asbestos Content
Brown/Black Vapor Barrier	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: 1C, Wall Vapor Barrier Material; Black Main House, Exterior; Eastern Wing Of Building At Southwestern Corner

Lab ID-Version‡: 9694026-1

0	•
Sample Layers	Asbestos Content
Black Vapor Barrier	ND
Composite Non-Asbestos Content:	75% Cellulose
Sample Composite Homogeneity:	Good

Location: 2A, Interior Wall System; Drywall And Joint Compound Main House, Interior; Southeastern Bedroom Area At Western Wall

Lab ID-Version 1: 9694027-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Yellow Paint	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 2B, Interior Wall System; Drywall And Joint Compound Main House, Interior;

Southeastern Bathroom Area At Southern Wall

Lab ID-Version;: 9694028-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Multilayered Paint	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: 2C, Interior Wall System; Drywall And Joint Compound Main House, Interior; Northwestern Living Room Area At Northeastern Corner

Lab ID-Version 1: 9694029-1

Sample Layers	Asbestos Content
Off-White Compound with Multilayered Paint	2% Chrysotile
Brown Tape	ND
Off-White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: 3A, Ceramic Wall Tile System;4" Pink Tile With Grout And Mortar Main House, Interior;Southeastern Bathroom Area At Southern Wall

Lab ID-Version‡: 9694030-1

Sample Layers	Asbestos Content
Pink Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Off-White Compound with Multilayered Paint	2% Chrysotile
Sample Composite Homogeneity: Poor	

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EMLab P&K

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville Date of Sampling: 11-30-2018 C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 3B, Ceramic Wall Tile System;4" Pink Tile With Grout And Mortar Main House, Interior;Southeastern Bathroom Area At Western Wall

Lab ID-Version‡: 9694031-1

Sample Layers	Asbestos Content
White Grout	ND
Gray Mortar	ND
Gray Cementitious Material	< 1% Chrysotile
Sample Composite Homogeneity: Poor	

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Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell, Ms. Karin Schroeter
Re: R1187D02; 4224 Highway 12, Pre-Demolition
Date of Sampling: 11-30-2018
Date of Receipt: 12-03-2018
Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 4A, Ceramic Floor Tile System;4" Pink Tile With Grout And Mortar Main House, Interior;Southeastern Bathroom Area At Southwestern Entry Way

Lab ID-Version 1: 9694032-1

Sample Layers	Asbestos Content
Pink Ceramic Tile	ND
White Grout	ND
Gray Mortar & Cementitious Material	< 1% Chrysotile
Sample Composite Homogeneity: Poor	

Location: 4B, Ceramic Floor Tile System;4" Pink Tile With Grout And Mortar Main House, Interior;Southeastern Bathroom Area At Southwestern Entry Way

Lab ID-Version 1: 9694033-1

Sample Layers	Asbestos Content
Pink Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Poor	

Location: 5A, Sheet Flooring System; Square Pattern Under Carpet Main House, Interior; Southeastern Laundry Room Area At Western Entry Way

Lab ID-Version :: 9694034-1

Sample Layers	Asbestos Content
Yellow Sheet Flooring with Fibrous Backing and White Paint	ND
Gray Foam	ND
Composite Non-Asbestos Content:	
	< 1% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

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EMLab P&K

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville Date of Sampling: 11-30-2018 C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 5B, Sheet Flooring System; Square Pattern Under Carpet Main House, Interior; Southeastern Laundry Room Area At Eastern Side

Lab ID-Version‡: 9694035-1

	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
Yellow Sheet Flooring with Fibrous Backing and White Paint	ND
Gray Foam	ND
Composite Non-Asbestos Content:	40% Cellulose
-	< 1% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

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 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Aerotech Laboratories, Inc

Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 6A, Wainscot Adhesive; Tan On Faux Blue Ceramic Tile Main House, Interior; Southeastern Laundry Room Area At Southeastern Corner

Southeastern Lauriery 1100m in the intersection con-	Data 15 Version 4. 909 1050 1
Sample Layers	Asbestos Content
Tan Mastic	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 6B, Wainscot Adhesive; Tan On Faux Blue Ceramic Tile Main House, Interior;

Southeastern Laundry Room Area At Southeastern Corner

Lab ID-Version 1: 9694037-1

Lab ID-Version †: 9694036-1

Sample Layers	Asbestos Content
Tan Mastic	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 7A, Sheet Flooring System; Beige With Blue Flower Pattern And Yellow Mastic Main House, Interior; Central Kitchen Area At Southeastern Corner Entry Way

Lab ID-Version‡: 9694038-1

Sample Layers	Asbestos Content
Beige Sheet Flooring	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 7B, Sheet Flooring System; Beige With Blue Flower Pattern And Yellow Mastic Main House, Interior; Central Kitchen Area At Western Entry Way

Lab ID-Version‡: 9694039-1

Sample Layers	Asbestos Content
Beige Sheet Flooring	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Moderate

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Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell, Ms. Karin Schroeter
Re: R1187D02; 4224 Highway 12, Pre-Demolition
Da

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 8A, Vapor Barrier Under Subfloor; Black Main House, Interior; Central Kitchen Area At Southeastern Corner Entry Way

Lab ID-Version 1: 9694040-1

Sample Layers	Asbestos Content
Brown/Black Vapor Barrier	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: 8B, Vapor Barrier Under Subfloor;Black Main House, Interior;Central Kitchen Area At Western Entry Way

Lab ID-Version‡: 9694041-1

Sample Layers	Asbestos Content
Brown/Black Vapor Barrier	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: 8C, Vapor Barrier Under Subfloor;Black Main House, Interior;Western Corridor Area At Northern Side

Lab ID-Version‡: 9694042-1

Sample Layers	Asbestos Content
Brown/Black Vapor Barrier	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: 9A, Cove Base Adhesive; Brown On 4" Beige Cove Main House, Interior; Central Kitchen Area At Southeastern Corner Entry Way

Lab ID-Version‡: 9694043-1

Sample Layers	Asbestos Content
Beige Baseboard	ND
Cream Mastic	ND
Sample Composite Homogeneity: Moderate	

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Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 9B, Cove Base Adhesive; Brown On 4" Beige Cove Main House, Interior; Central Kitchen Area At Western Entry Way

Lab ID-Version‡: 9694044-1

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Dark Brown Mastic	ND
Composite Non-Asbestos Content:	75% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 10A, Interior Window Glazing Putty; White Main House, Interior;

Northeastern Den Area At Eastern Window

Lab ID-Version :: 9694045-1

Sample Layers	Asbestos Content
Off-White Window Glazing with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 10B, Interior Window Glazing Putty; White Main House, Interior;

Northwestern Living Room Area At Northern Window

Lab ID-Version 1: 9694046-1

Sample Layers	Asbestos Content
White Window Glazing with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 10C, Interior Window Glazing Putty; White Main House, Interior; Southwestern Bedroom Area At Southern Window

Lab ID-Version‡: 9694047-1

Sample Layers	Asbestos Content
White Window Glazing with White Paint	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 11A, Ceramic Floor Tile System; Multi Tan Mosaic Tile With Grout And Mortar Main House, Interior; Western Bathroom Area At Eastern Entry Way

Lab ID-Version 1: 9694048-1

Sample Layers	Asbestos Content
Tan Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Poor	

Location: 11B, Ceramic Floor Tile System; Multi Tan Mosaic Tile With Grout And Mortar Main House, Interior; Western Bathroom Area At Eastern Entry Way

Lab ID-Version‡: 9694049-1

Sample Layers	Asbestos Content
Tan Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Poor	

Location: 12A, Ceramic Counter Tile System;4" Beige Tile With Grout And Mortar Main House, Interior; Western Bathroom Area At Northeastern Countertop

Lab ID-Version‡: 9694050-1

Sample Layers	Asbestos Content
Beige Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Poor	

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EMLab P&K

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell, Ms. Karin Schroeter
Re: R1187D02; 4224 Highway 12, Pre-Demolition
Date of Sampling: 11-30-2018
Date of Receipt: 12-03-2018
Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 12B, Ceramic Counter Tile System; 4" Beige Tile With Grout And Mortar Main House, Interior; Western Bathroom Area At Northeastern Countertop

Lab ID-Version‡: 9694051-1

Sample Layers	Asbestos Content
Beige Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Poor	

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Client: Terracon Consultants, Inc. - Emeryville
Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 13A, Ceramic Counter Tile System;4" Blue Mosaic Tile With Grout And Mortar Main House, Interior; Central Kitchen Area At Northwestern Countertop

Lab ID-Version 1: 9694052-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Poor	

Location: 13B, Ceramic Counter Tile System;4" Blue Mosaic Tile With Grout And Mortar Main House, Interior; Central Kitchen Area At Northeastern Countertop

Lab ID-Version‡: 9694053-1

Sample Layers	Asbestos Content
Beige Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

Location: 14A, Cermaic Counter Tile System;4" Blue Mosaic Tile With Grout And Mortar Main House, Interior; Central Kitchen Area At Northwestern Coutertop

Lab ID-Version 1: 9694054-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
White Grout	ND
Tan Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 14B, Cermaic Counter Tile System;4" Blue Mosaic Tile With Grout And Mortar Main House, Interior; Central Kitchen Area At Northeastern Coutertop

Lab ID-Version 1: 9694055-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
White Grout	ND
Tan Mastic	ND
Sample Composite Homogeneity: Poor	

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Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 15A, Ceramic Wall Tile System;6" Blue Floral Pattern With Grout And Mastic Mian House, Interior;Central Kitchen Area At Northeastern Wood Burning Stove

Lab ID-Version :: 9694056-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
White Grout	ND
Brown Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 15B, Ceramic Wall Tile System;6" Blue Floral Pattern With Grout And Mastic Mian House, Interior; Central Kitchen Area At Northeastern Wood Burning Stove

Lab ID-Version‡: 9694057-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
White Grout	ND
Brown Mastic	ND
Sample Composite Homogeneity:	Poor

Location: 16A, Wood Burning Stove Base; Brick And Mortar Main House, Interior; Central Kitchen Area At Northeastern Wood Burning Stove

Lab ID-Version‡: 9694058-1

Sample Layers	Asbestos Content
Red Brick	ND
Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

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EMLab P&K

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Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 16B, Wood Burning Stove Base; Brick And Mortar Main House, Interior; Central Kitchen Area At Northeastern Wood Burning Stove

Lab ID-Version‡: 9694059-1

Sample Layers	Asbestos Content
Red Brick	ND
Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

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Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 17A, Stove Rope Gasketing; Black Main House, Interior; Central Kitchen Area

At Northeastern Wood Burning Stove

Lab ID-Version 1: 9694060-1

Sample Layers	Asbestos Content
White Gasket	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 17B, Stove Rope Gasketing; Black Main House, Interior; Central Kitchen Area At Northeastern Wood Burning Stove

Lab ID-Version :: 9694061-1

Sample Layers	Asbestos Content
White Gasket	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 18A, Stone Fireplace Grouting Material; Grey Main House, Interior; Northwestern Living Room Area At Western Fireplace

Lab ID-Version‡: 9694062-1

Sample Layers	Asbestos Content
Gray Grout	ND
Light Brown Non-Fibrous Material	ND
Sample Composite Homogeneity:	Moderate

Location: 18B, Stone Fireplace Grouting Material; Grey Main House, Interior; Northwestern Living Room Area At Western Fireplace

Lab ID-Version‡: 9694063-1

Sample Layers	Asbestos Content
Gray Grout	ND
Sample Composite Homogeneity:	Good

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Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 19A, Fireplace Base Material With Mortar Main House, Interior;

Northwestern Living Room Area At Western Fireplace

Sample Layers	Asbestos Content
Gray Non-Fibrous Material	ND
Light Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

Location: 19B, Fireplace Base Material With Mortar Main House, Interior; Northwestern Living Room Area At Western Fireplace

Lab ID-Version‡: 9694065-1

Lab ID-Version‡: 9694064-1

Sample Layers	Asbestos Content
Gray Non-Fibrous Material	ND
Light Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

Location: 20A, Wire Insulation Material; Cloth Main House, Interior; Southwestern Bedroom Area At Western Electrical Outlet

Lab ID-Version‡: 9694066-1

Sample Layers	Asbestos Content
Black Wiring Insulation	ND
Composite Non-Asbestos Content:	80% Cotton
Sample Composite Homogeneity:	Good

Location: 20B, Wire Insulation Material; Cloth Main House, Interior; Southwestern Bedroom Area At Western Electrical Outlet

Lab ID-Version‡: 9694067-1

Sample Layers	Asbestos Content
Black Wiring Insulation	ND
Composite Non-Asbestos Content:	80% Cotton
Sample Composite Homogeneity:	Good

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Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 21A, Attic System Insulation; Saw Dust Material Main House, Interior; Eastern

Hallway Area At Attic Access Hatch

Lab ID-Version 1: 9694068-1

	•
Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	99% Cellulose
Sample Composite Homogeneity:	Good

Location: 21B, Attic System Insulation; Saw Dust Material Main House, Interior; Eastern Hallway Area At Attic Access Hatch

Lab ID-Version‡: 9694069-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	99% Cellulose
Sample Composite Homogeneity:	Good

Location: 21C, Attic System Insulation; Saw Dust Material Main House, Interior; Western Corridor Closet Area At Attic Access Hatch

Lab ID-Version 1: 9694070-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	99% Cellulose
Sample Composite Homogeneity:	Good

Location: 22A, Attic Exhaust Flue Insulation; Grey Main House, Interior; Western Corridor Closet Area At Attic Access Hatch

Lab ID-Version‡: 9694071-1

Sample Layers	Asbestos Content
Gray Insulation	15% Chrysotile < 1% Crocidolite
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

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Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 22B, Attic Exhaust Flue Insulation; Grey Main House, Interior; Western Corridor Closet Area At Attic Access Hatch

Lab ID-Version 1: 9694072-1

Sample Layers	Asbestos Content
Gray Insulation	75% Chrysotile < 1% Crocidolite
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

Location: 23A, Exterior Window Glazing Putty; White Main House, Exterior; Eastern Wing Of Building At Western Window Assembly

Lab ID-Version 1: 9694073-1

Sample Layers	Asbestos Content
White Window Glazing with White Paint	ND
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

Location: 23B, Exterior Window Glazing Putty; White Main House, Exterior; Eastern Wing Of Building At Eastern Window Assembly

Lab ID-Version :: 9694074-1

Sample Layers	Asbestos Content
White Window Glazing with White Paint	ND
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

Location: 24A, Building Concrete Materials Main House, Exterior; Southern Side Of Building At Entry Way Area

Lab ID-Version‡: 9694075-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 24B, Building Concrete Materials Main House, Exterior; Northeastern Corner Of Building At Slab

Lab ID-Version‡: 9694076-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 24C, Building Concrete Materials Main House, Exterior; Southwestern Corner Of Building At Porch Area Slab

Lab ID-Version‡: 9694077-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 25A, Fire Pit/Barbeque Brick System; Red With Mortar Main House, Exterior; Southern Side Of Building At Built-In Barbeque Pit

Lab ID-Version‡: 9694078-1

Sample Layers	Asbestos Content
Red Brick	ND
Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

Location: 25B, Fire Pit/Barbeque Brick System; Red With Mortar Main House, Exterior; Southern Side Of Building At Built-In Barbeque Pit

Lab ID-Version‡: 9694079-1

Sample Layers	Asbestos Content
Red Brick	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Moderate

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Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 26A, Porch Area Stucco Wall System; Grey Main House, Exterior; Southwestern Porch Area At Northwestern Side Wall

Lab ID-Version 1: 9694080-1

Sample Layers	Asbestos Content
Gray Stucco	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content: 3% Cellulose	
Sample Composite Homogeneity:	Moderate

Location: 26B, Porch Area Stucco Wall System; Grey Main House, Exterior;

Southwestern Porch Area At Eastern Side Wall

Lab ID-Version‡: 9694081-1

Sample Layers	Asbestos Content
Gray Stucco with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 26C, Porch Area Stucco Wall System; Grey Main House, Exterior;

Southwestern Porch Area At Western Side Overhang

Lab ID-Version‡: 9694082-1

Sample Layers	Asbestos Content
Gray Stucco with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 27A, Button Board Material Under Stucco; White Main House, Exterior; Southwestern Porch Area At Northwestern Side Wall

Lab ID-Version1: 9694083-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

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EMLab P&K

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Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 27B, Button Board Material Under Stucco; White Main House, Exterior; Southwestern Porch Area At Northwestern Side Wall

Lab ID-Version‡: 9694084-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 28A, Main Roofing Field System; Multiple Layer Composite Shingle With Felt Main House, Roof Level; Western Wing Main Roofing Field Area At Southern Side

Lab ID-Version 1: 9694085-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Shingle with Black Pebbles	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	
	7% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 28B, Main Roofing Field System; Multiple Layer Composite Shingle With Felt Main House, Roof Level; Eastern Wing Main Roofing Field Area At Eastern Side

Lab ID-Version :: 9694086-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Shingle with Black Pebbles	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	20% Cellulose
	7% Glass Fibers
Sample Composite Homogeneity:	Poor

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Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 28C, Main Roofing Field System; Multiple Layer Composite Shingle With Felt Main House, Roof Level; Central Wing Main Roofing Field Area At Northern Side

Lab ID-Version‡: 9694087-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Gray Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	
	5% Glass Fibers
Sample Composite Homogeneity:	Poor

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Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 29A, Roofing Field System; Thick Aspahltic Shingle Main House, Exterior;

Southern Pumphouse Structure At Western Side Lab ID-Version :: 9694088-1

Sample Layers	Asbestos Content
Black Roofing Shingle with White Pebbles	ND
Black Roofing Tar and Felt with Multicolored Pebbles	ND
Black Roofing Tar and Felt with Multicolored Pebbles	ND
Composite Non-Asbestos Content:	
	5% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 29B, Roofing Field System; Thick Aspahltic Shingle Garage Building, Roof Level; Main Roofing Field Area At Northern Side (Under Metal)

Lab ID-Version 1: 9694089-1

Sample Layers	Asbestos Content
Black Roofing Tar and Felt with Multicolored Pebbles	ND
Black Roofing Tar and Felt with Multicolored Pebbles	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content: 20% Cellulose	
Sample Composite Homogeneity:	Moderate

Location: 29C, Roofing Field System; Thick Aspahltic Shingle Garage Building, Roof Level; Main Roofing Field Area At Western Side (Under Metal)

Lab ID-Version 1: 9694090-1

Sample Layers	Asbestos Content
Black Roofing Shingle with White Pebbles	ND
Black Roofing Tar and Felt with Multicolored Pebbles	ND
Black Roofing Tar and Felt with Multicolored Pebbles	ND
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Poor

Location: 30A, Window Glazing Putty; White Garage Building, Exterior; Western Side Of **Building At Northwestern Window Bank**

Lab ID-Version 1: 9694091-1

Sample Layers	Asbestos Content
White Window Glazing with White Paint	ND
Sample Composite Homogeneity:	Good

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Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 30B, Window Glazing Putty; White Garage Building, Exterior; Western Side Of

Building At Central Window Bank

Lab ID-Version 1: 9694092-1

Sample Layers	Asbestos Content
White Window Glazing with White Paint	ND
Sample Composite Homogeneity:	Good

Location: 31A, Unfinished Drywall System Garage Building, Interior; Northwestern Office Room Area At Western Wall

Lab ID-Version :: 9694093-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 31B, Unfinished Drywall System Garage Building, Interior; Northwestern Office Room Area At Northern Wall

Lab ID-Version‡: 9694094-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 32A, Moisture Barrier Paper;Black Garage Building, Interior;Northwestern Office Room Area At Southern Wall

Lab ID-Version‡: 9694095-1

Sample Layers	Asbestos Content
Brown/Black Vapor Barrier	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: 32B, Moisture Barrier Paper;Black Garage Building, Interior;Northwestern Office Room Area At Eastern Wall

Lab ID-Version :: 9694096-1

Sample Layers	Asbestos Content
Brown/Black Vapor Barrier	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 33A, Building Concrete Materials Garage Building, Interior; Northwestern Office Room Area At Northern Entry Way

Lab ID-Version ‡: 9694097-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 33B, Building Concrete Materials Garage Building, Interior; Northern Main Garage Area At Northern Entry Way

Lab ID-Version‡: 9694098-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 34A, Roof Penetration Mastic;Black Main House, Roof Level;Central Wing Main Roofing Field Area At Northern Stove Flue

Lab ID-Version‡: 9694099-1

Sample Layers	Asbestos Content
Black Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

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Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 34B, Roof Penetration Mastic; Black Main House, Roof Level; Central Wing

Main Roofing Field Area At Northern Stove Flue

Lab ID-Version 1: 9694100-1

Sample Layers	Asbestos Content
Black Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: 34C, Roof Penetration Mastic;Black Main House, Roof Level;Western Wing Main Roofing Field Area At Central Penetration

Lab ID-Version ‡: 9694101-1

Sample Layers	Asbestos Content
Black Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: 36A, Kiln Wall System; Grey CMU Block With Mortar Kiln/Barn Building, Interior; Central Corridor Area At Northwestern Corner

Lab ID-Version 1: 9694102-1

Sample Layers	Asbestos Content
Gray Block	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Moderate

Location: 36B, Kiln Wall System; Grey CMU Block With Mortar Kiln/Barn Building, Interior; Central Corridor Area At Southwestern Corner

Lab ID-Version‡: 9694103-1

Sample Layers	Asbestos Content
Gray Block	ND
Gray Mortar	ND
Sample Composite Homogeneity: Moderate	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter I Re: R1187D02; 4224 Highway 12, Pre-Demolition I

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 37A, Kiln Wall Moisture Barrier; Black Kiln/Barn Building, Interior; Central

Corridor Area At Southwestern Corner

Sample Layers	Asbestos Content
Black Vapor Barrier	ND
Composite Non-Asbestos Content:	85% Cellulose
Sample Composite Homogeneity:	Good

Location: 37B, Kiln Wall Moisture Barrier; Black Kiln/Barn Building, Interior; Central Corridor Area At Southwestern Corner

Lab ID-Version ‡: 9694105-1

Lab ID-Version :: 9694104-1

Sample Layers	Asbestos Content
Black Vapor Barrier	ND
Composite Non-Asbestos Content:	85% Cellulose
Sample Composite Homogeneity:	Good

Location: 38A, Acoustical Wall Tile System;1" White Nailed On System Kiln/Barn Building, Interior; Western Kiln Chamber Area At Western Wall

Lab ID-Version 1: 9694106-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 38B, Acoustical Wall Tile System;1" White Nailed On System Kiln/Barn Building, Interior; Western Kiln Chamber Area At Eastern Wall

Lab ID-Version‡: 9694107-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Client: Terracon Consultants, Inc. - Emeryville Da C/O: William Frieszell, Ms. Karin Schroeter Da Re: R1187D02; 4224 Highway 12, Pre-Demolition Da

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 39A, Cloth H; White Kiln/Barn Building, Interior; Central Corridor Area At

Eastern Wall North

Sample Layers	Asbestos Content
White Woven Material	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 39B, Cloth H; White Kiln/Barn Building, Interior; Central Corridor Area At Eastern Wall South

Lab ID-Version‡: 9694109-1

Sample Layers	Asbestos Content
White Woven Material	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 40A, Building Concrete Material Kiln/Barn Building, Interior; Central Corridor Area Southern Side Ceiling

Lab ID-Version :: 9694110-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 40B, Building Concrete Material Kiln/Barn Building, Exterior; Northern Side Of Building At Central Walk Way

Lab ID-Version‡: 9694111-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

EMLab P&K

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell, Ms. Karin Schroeter
Re: R1187D02; 4224 Highway 12, Pre-Demolition
Date of Date

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-05-2018

Survey, Santa Rosa, California

ASBESTOS PLM REPORT

Location: 41A, Asphaltic Patching Material;Black Kiln/Barn Building, Interior;Central Corridor Area At Northern Side Ceiling

Lab ID-Version :: 9694112-1

Sample Layers	Asbestos Content				
Dark Brown Fibrous Material	ND				
Light Gray Non-Fibrous Material	ND				
Composite Non-Asbestos Content: 30% Cellulose					
Sample Composite Homogeneity:	Moderate				

Location: 41B, Asphaltic Patching Material;Black Kiln/Barn Building, Interior;Central Corridor Area Ceiling At Approximate Center

Lab ID-Version 1: 9694763-1

Sample Layers	Asbestos Content				
Dark Brown Fibrous Material	ND				
Light Gray Non-Fibrous Material	ND				
Composite Non-Asbestos Content: 30% Cellulose					
Sample Composite Homogeneity: Moderate					

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Terracon 1466 66th Street, Emeryville, California

002052737

ACM BULK SAMPLE DATA SHEET

* PLM	Analysis
	4 4 4 4 PM 1 The

Page 1 of 9

•	PM - W. Frieszell yushicszell@dorroom.com	✓.	PM - K. Schro Knou@rgazny.com	 Ken@reachy.com
	PM - T. Kattchee		PM - S. Steiner steff@rgaenv.com	PM - W. Frieszell wadijeszelkijiszaczan.com

Stop Analysis at First Positive	•	
X Analyze All Samples		
Point Count Analysis (400-point)		

Project Name/Address 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California						· <u>-</u>		
Terracon Project Number		R1187D02 Sampled By W. Frieszell/ K. Schroeter Sampling Date Novemb		November 30, 2	018			
Laboratory	EMLab	X Oth	er I	Turn Around Time	48 Hes	X.	Other (Specify)	
			<u></u>		<u>. </u>		····	· · · ·

*** FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

Sample ID Sample Location & Material Location Quantity: 1	creatif at	Well Vener Parrier Material - Black
1 A Main House, Interior - Southeastern Laundry Room Area at Southern Wall 1 C Main House, Exterior - Eastern Wing of Building at Southwestern Corner		Material Description: Viali Vapoli Darriel Material - Diack
B Main House, Interior - Southwestern Bedroom Area at Southern Wall		Sample Location & material Location
C Main House, Exterior - Eastern Wing of Building at Southwestern Corner		Main House, Interior - Southeastern Laundry Robin Area at Southern Wall
Material Location: Material Description: Interior Wall System - Drywell and Joint Compound		Main House, Interior - Southwestern Bedroom Area at Southern wan
Main House, Interior - Southeastern Bathroom Area at Southern Wall Main House, Interior - Southeastern Bathroom Area at Southern Wall	<u> </u>	Main House, Exterior - Eastern Wing of Building at Southwestern Corner
Sample ID Sample Location & Material Location Quantity: 2	Material Locations	
Sample ID Sample Location & Material Location Quantity: 2	HM# 2	Material Description: Interior Wall System - Drywall and Joint Compound
Main House, Interior - Southeastern Bathroom Area at Southern Wall	Sample ID	Sample Location & Material Location Quantity:
Main House, Interior - Northwestern Living Room Area at Northeastern Corner	2 A	Main House, Interior - Southeastern Bedroom Area at Western Wall
Main House, Interior - Northwestern Living Room Area at Northeastern Corner	2 B	Main House, Interior - Southeastern Bathroom Area at Southern Wall
Material Description: Ceramic Walf Tile System - 4" Plnk Tile with Grout and Mortar Sample D Sample Locations Quantity: 3	2 C	Main House, Interior - Northwestern Living Room Area at Northeastern Corner
Sample ID Sample Locations Quantity: 3 A Main House, Interior - Southeastern Bathroom Area at Southern Wall 3 B Main House, Interior - Southeastern Bathroom Area at Western Wall C Material Location: HM# 4 Material Description: Ceramic Floor Tile System - 4" Pink Tile with Grout and Mortar Sample ID Sample Location & Material Location Quantity: 4 A Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way 4 B Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way C Material Location: HM# 5 Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location Quantity: 5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Material Location:	Material Location:	
Sample ID Sample Locations Quantity: 3 A Main House, Interior - Southeastern Bathroom Area at Southern Wall 3 B Main House, Interior - Southeastern Bathroom Area at Western Wall C Material Location: HM# 4 Material Description: Ceramic Floor Tile System - 4" Pink Tile with Grout and Mortar Sample ID Sample Location & Material Location Quantity: 4 A Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way 4 B Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way C Material Location: HM# 5 Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location Quantity: 5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Material Location:	HM# 3	Material Description: Ceramic Wall Tile System - 4" Plnk Tile with Grout and Mortar
Main House, Interior - Southeastern Bathroom Area at Southern Wall Main House, Interior - Southeastern Bathroom Area at Western Wall C		Sample Locations Quantity:
Material Location: Material Description: Ceramic Floor Tile System - 4" Pink Tile with Grout and Mortar Sample ID Sample Location & Material Location Quantity: Material Location: Quantity: Material Description: Southeastern Bathroom Area at Southwestern Entry Way Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way Material Location: Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location Quantity: Main House, Interior - Southeastern Laundry Room Area at Western Entry Way Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Multitrial Location: Multitria		Main House, Interior - Southeastern Bathroom Area at Southern Wall
Material Location: HM# 4 Material Description: Ceramic Floor Tile System - 4" Pink Tile with Grout and Mortar Sample ID Sample Location & Material Location Quantity: 4 A Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way C Material Location: HM# 5 Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location Quantity: 5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Mutterial Location:	3 B	Main House, Interior - Southeastern Bathroom Area at Western Wall
Material Description: Ceramic Floor Tile System - 4" Pink Tile with Grout and Mortar Sample ID Sample Location & Material Location Quantity:	C	
Sample ID: Sample Location & Material Location Quantity: 4	Material Location:	
Sample ID: Sample Location & Material Location Quantity: 4	HM# 4	Material Description: Ceramic Floor Tile System - 4" Pink Tile with Grout and Mortar
4 A Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way C Material Location: HiM# 5 Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location 5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way 5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Multiple Location:		Sample Location & Material Location Quantity:
Material Location: Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location 5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way 5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Multerial Location:		Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way
Material Location: HM# 5 Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location Quantity: 5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way 5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Manterial Location:	4 B	Main House, Interior - Southeastern Bathroom Area at Southwestern Entry Way
HM# 5 Material Description: Sheet Flooring System - Square Pattern under Carpet Sample ID Sample Location & Material Location 5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way 5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Multerial Location:	£	
5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way 5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Mutarial Location:	Material Location:	
5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way 5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Mutarial Location:	LIMATE 5	Material Constitution: Sheet Flooring System - Square Pattern under Carpet
5 A Main House, Interior - Southeastern Laundry Room Area at Western Entry Way 5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Mutarial Location:		Sample Location & Material Location Quantity:
5 B Main House, Interior - Southeastern Laundry Room Area at Eastern Side C Muterial Location:		Main House Interior - Southeastern Laundry Room Area at Western Entry Way
C Multirial Location:		Main House Interior - Southeastern Laundry Room Area at Eastern Side
		TYPHINI TIOUSO, INICITOR - COGGIOGOSTA SEGUENTA
	Muterial Locations	

·	NAME:	SIGNATURE;	COMPANY:	DATE:
Relinquished By:	Willtam Frieszell	Will Friend	Terracon Consultants	November 36, 2018
Received By:	FP/ 0x 1005	Kiriff 72	<u> </u>	12/3//8
Relinquished By:				1 (-
Received By:				·

IESTACON 1466 66th Street, Emeryville, California ACM BULK SAMPLE DATA SHEET * PLM Analysis Stop Analysis at First Positive Page 2 of 9 PM - K. Schroel PM - W. Frieszell Kenggggggnv.com wmfrieszpij@gerzneen.com <u>Қагілі@гиненгу.сова</u>г X Analyze All Samples PM - S. Steiner PM - W. Frieszell Point Count Analysis (400-point) PM - T, Kattchce prafriesreligitionscon com gteff@rguenv.com Tedd/firesenv.com

Project Name/Address	4224 Highway	12, Pre-Demolit	ion Survey, Santa Rosa, Californ	ia		<u>.</u>
Terracon Project Number	R1187D02	R1187D02 Sampled By W. Frieszell/ K. Schroeter		Sampling Date		November 30, 2018
Laboratory EMLab	X Oth	er	Turn Around Time	48 Hrs	Х	Other (Specify)

*** FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

НМ#	6	-	Material Description: Wainscot Adhesive - Tan on Faux Blue Ceramic Tile
Sample	e ID	.]	Sample Location & Material Location Quantity: 25.sf
· .	6	Ã	Main House, Interior - Southeastern Laundry Room Area at Southeastern Corner
	6	В	Main House, Interior - Southeastern Laundry Room Area at Southeastern Corner
		c	
Material	Lucati	mi	
НИ#	7		Material Description: Sheet Flooring System - Beige with Blue Flower Pattern and Yellow Mastic
Sampl	e ID		Sample Location & Material Location Quantity:
1	7	Α	Main House, Interior - Central Kitchen Area at Southeastern Corner Entry Way
	7	В	Main House, Interior - Central Kitchen Area at Western Entry Way
		C	
Material	Locat	on:	
HM#	8	- :	Material Description: Vapor Barrier under Subfloor - Black
Sampl	le ID	—	Sample Locations Quantity:
	8	A	Main House, Interior - Central Kitchen Area at Southeastern Corner Entry Way
	- 8	В	Main House, Interior - Central Kitchen Area at Western Entry Way
	- 8	C	Main House, Interior - Western Corridor Area at Northern Side
Material	Larat	ion:	
НМ#	ð	*	Material Description: Cove Base Adhesive - Brown on 4" Belge Cove
Samp	le ID	. į:	Sample Location & Material Location Quantity:
	9	٨	Turbus Wiles
l	9	В	Main House, Interior - Central Kitchen Area at Western Entry Way
		C	
Materia	Loca	iun!	
НМ#	10		Material Description: Interior Window Glazing Putty - White
Samp	le ID	- 7	Sample Location & Material Location Quantity:
	10	A	Main House, Interior - Northeastern Den Area at Eastern Window
	10	В	Main House, Interior - Northwestern Living Room Area at Northern Window
	10	Ċ	Main House, Interior - Southwestern Bedroom Area at Southern Window
Materia	il Loca	Ilon:	
<u> </u>	•		

	NAME:	SIGNATURE:	COMPANY:	DATE:
Relinquished By:	William Frieszell	Will- Friend	Terracon Consultants	Navember 30, 2018
Received By:	Fed by 1005	Koniksk		12-13/18
Relinquished By:	7.00 7.00	1		
Received By:				

	ICI I aLUI I	
140	6 66th Street, Emeryville, Califor	nı

PM - W. Frieszoli winfrieszellimernicus.com

PM - T, Kattchee

Teddi@irgacny.com



002052737

ACM BULK SAMPLE DATA SHEET

* PLM Analysis Step Analysis at First Positive	Page 3 of 9
X Analyze All Samples	

Point Count Analysis (400-point)

PM - K. Sch Karla@ggoony.com	Конствивачкон-
PM - S. Steiner stoff@rsaenv.com	PM - W. Pricazes wmfriessell@terracom.ya

Project Name/	Address	4224 Hig	hway 1	2, Pre-De	melit	ion Survey, Santa Rosa, Californ	ia			
Terracon Project Number		R1187002 Sampled By		Ву	W. Frieszell/ K. Schroeter	Sampling Date November 30, 28		2018		
Laboratory	EMLab	' -	Other		Ī	Tum Around Time	48 l-lus	Х	Other (Specify)	
ŧ	L,		<u> </u>	_						

***FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

HM#	11		Material Description: Ceramic Floor Tile System - Multi Tan Mosaic Tile with Grout and Mortar
Sample	e ID		Sample Location & Material Location Quantity:
	11 .	٨	Main House, Interior - Western Bathroom Area at Eastern Entry Way
	11	в	Main House, Interior - Western Bathroom Area at Eastern Entry Way
		c l	· · · · · · · · · · · · · · · · · · ·
Material :	Location	B;	
HM#	12	1	Material Description: Ceramic Counter Tile System - 4" Beige Tile with Grout and Mortar
Şampl	e ID		Sample Location & Material Location Quantity:
·		Α	Main House, Interior - Western Bathroom Area at Northeastern Countertop
	12	B	Main House, Interior - Western Bathroom Area at Northeastern Countertop
•		0	
Material	Locatio	oa:	
HM#	13		Material Description: Ceramic Counter Tile System - 4" Beige Tile with Grout and Mortar
Sampi			Sample Locations Quantity:
our.ip/	13	Α	Main House, Interior - Central Kitchen Area at Northwestern Countertop
	13	В	Main House, Interior - Central Kitchen Area at Northeastern Countertop
<u>.</u>		С	
Material	Location	OB: .	
нм#	14		Material Description: Ceramic Counter Tile System - 4" Blue Mosaic Tile with Grout and Mortar
Samp		 .	Sample Location & Material Location Quantity:
<u></u>		Α	Main House, Interior - Central Kitchen Area at Northwestern Countertop
	14	В	Main House, Interior - Central Kitchen Area at Northeastern Countertop
	<u> </u>	С	
Materia	il Locali	0114	
НИ#	15	···-	Material Description: Ceramic Wall Tile System - 6" Blue Floral Pattern with Grout and Mastic
Samp			Sample Location & Material Location Quantity:
<i></i> _	15		Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
	15	В	Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
		С	
Materia	ei Locati	ien:	

	NAME:	SIGNATURE:	COMPANY:	ĐATE:
Relinquished By:	William Frieszoll	Will- Frank	Terracon Consultants	November 30, 2018
Received By:	Fedex 1005	Konthill	<u>.</u>	12 3/16
Relinquished By:				<u>'</u>
Received By:				

ICFFACON 1466 66th Street, Emeryville, California ACM BULK SAMPLE DATA SHEET Page 4 of 9,, * PLM Analysis Stop Analysts et First Positive 002052737 PM - W. Frieszell PM - K. Schroeter <u>wantriesse lighteenseem.com</u> Karju@rgaenv.col X Analyzo All Samples PM - W. Frieszell gibhicszell@arma.on.com Point Count Analysis (400-point) PM - T. Kattchee PM - S. Steiner steff@grgacny.com <u>Тефф@гудсиу.com</u>

1	Project Name/Addre	93	4224 I-	4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California							<u></u>
	Terracon Project Number		R1187D02		Samp	Sampled By W. Frieszell / K. Schroeter		Sampling Date		November 30, 2018	
	Laboratory EMLab			X Oil	icr		Turn Around Time	48 Hrs	Х	Other (Specify)	
		• • • • • • • • • • • • • • • • • • • •				,			•		

***FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

HM# 1	6	Material Description: Wood Burning Stove Base - Brick and Mortar
Sample I	D	Sample Location & Material Location Quantity
16		Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
16	5 B	Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
	C	
Material Loc	ation:	
HM# 1	7	Material Description: Stove Rope Gasketing - Black
Sample I		Sample Location 8 Material Location Quantity:
1		Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
1	7 B	Main House, Interior - Central Kitchen Area at Northeastern Wood Burning Stove
Material Lo	catten:	<u> </u>
HM# 1	8	Material Description: Stone Fireplace Grouting Material - Grey
Sample :		Sample Locations Quantity:
	8 A	Main House, Interior - Northwestern Living Room Area at Western Fireplace
1	8 B	Main House, Interior - Northwestern Living Room Area at Western Fireplace
Material Le	cation:	
HM# :	19	Meterial Description: Fireplace Base Material with Mortar
Sample	ID:	Sample Location & Material Location Quantity
	9 A	Main House, Interior - Northwestern Living Room Area at Western Fireplace
1	9 B	Main House, Interior - Northwestern Living Room Area at Western Fireplace
	Ç	
Material La	cation;	······································
HM#	20	Material Description: Wire Insulation Material - Cloth
Sample	lD .	Sample Location & Material Location Quantity:
	0 A	Main House, Interior - Southwestern Bedroom Area at Western Electrical Outlet
. 2	20 B	Main House, Interior - Southwestern Bedroom Area at Western Electrical Outlet
	· C	
Material L	oention:	
		OYONA TUDZ. CYMIPANY. DATE:

•		NAME:	SIGNATURE:	COMPANY:	DATE:
1	Rolinquished By:	William Frieszell	11/1/1 2 1	Terracon Consultants	November 30, 2018
	Received By:	FEDUX 1005	Khritist		12/3//8
	Relinquished By:	7. 3. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.			1 /
	Received By:				

TEFFACON 1466 66th Street, Emeryville, California



ACM BULK SAMPLE DATA SHEET

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·		
PM - W. Frieszelf		PM - K. Schroeter
winderestiff@scrapeu.com	} *	Karin@igaeny.com

PM - K. Schroeter PM - K. Fugeno-Kerin@rgaenv.com Keri@rgaenv.com

* PLM Analysis

Step Analysis at First Positive

Muguenv.com

X Analyze All Samples

Page 5 of 9

PM - T. Kattchec Teddf@lrgacnv.com

PM - S. Steiner steff@reneav.com PM - W. Frieszell worldoszell@temperm.com Point Count Analysis (400-point)

Project Name/	Address	4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California						
Terracon Project Number		R1187D02 Sampled By		W. Frieszell/K. Schroeter	Sampling Date		November 30, 2018	
Laboratory	EMLab	X Oth	T .	Tum Around Time	48 His	Х	Other (Specify)	

*** FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

НМ#	. 21		Material Description: Attic System Insulation - Saw Dust Material
Sampl	e ID		Sample Location & Material Location Quantity:
	21	A	Main House, Interior - Eastern Hallway Area at Attic Access Hatch
•	21	В	Main House, Interior - Eastern Hallway Area at Attic Access Hatch
•	21	c	Main House, Interior - Western Corridor Closet Area at Attic Access Hatch
Material	Locatio	on:	
HM#	22		Material Description: Attic Exhaust Flue Insulation - Grey
Sampl	le ID		Sample Location & Material Location Quantity:
	22	A	Main House, Interior - Western Corridor Closet Area at Attic Access Hatch
	22	В	Main House, Interior - Western Corridor Closet Area at Attic Access Hatch
]·		С	
Majoriel	Lacati	lon:	
HM#	23	٠.	Material Description: Exterior Window Glazing Putty - White
Samp	le ID		Sample Locations
	23	Α	Main House, Exterior - Eastern Wing of Building at Western Window Assembly
	23	В	Main House, Exterior - Eastern Wing of Building at Eastern Window Assembly
ì		С	
Materia	i Locat	lon:	
НМ#	24		Material Description: Building Concrete Materials
Samp	le ID	· ·	Sample Location & Meterial Location Quantity:
	24	Α	Main House, Exterior - Southern Side of Building at Entry Way Area
	24	В	Main House, Exterior - Northeastern Corner of Building at Slab
	24	С	Main House, Exterior - Southwestern Corner of Building at Porch Area Slab
Materia	il Locat	lion:	
HM#	25		Material Description: Fire Pit/Barbecue Brick System - Red with Mortar
Samp	le ID		Sample Location & Material Location Quantity:
	25	٨	Main House, Exterior - Southern Side of Building at Built-in Barbecue Pit
	25	В	Main House, Exterior - Southern Side of Building at Built-in Barbecue Pit
		С	
Moterin	ni f.pest	tion:	
			COMPANIE DITT.

•	NAME:	SIGNATURE:	COMPANY:	DATE:
Relinquished By:	William Frieszell	Will to Friend	Terracon Consultants	November 30, 2018
Received By:	Tedex 1005	KGvf-FFL-		12/3/18
Relinquished By:				- 1
Received By:				

TESSEDN 1466 66th Street, Emeryville, California



ACM BULK SAMPLE DATA SHEET

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* PLM Analysis
/___ Stop Analysis at First Positive

Page 6 of 9

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∕	PM - W. Frieszell
٠ I	<u> </u>

PM - K. Schroeter Karin@rgoenv.com

Кенадгдаену,сопі

X Analyze All Samples

PM - T, Katichec Tede@agaenv.com PM - S. Steiner steft@ggaenv.com PM - W. Friesocil

ymfrieszelt@buracon.com

Point Count Analysis (400-point)

Project Name/Address 4224 Highway 12, Pre-Demelition Survey, Santa Rosa, California									
Terracon Project Number		umber	R1187D02 Sampled By		W. Frieszell/ K. Schroeter	Sampling Date		November 30, 20	018
	Laboratory EMLab X Oth		r ,	Turn Around Time	48 Hrs	x o	Other (Specify)		

*** FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

НИ#	28	Material Description: Porch Area Stucco Wall System - Grey
Sampl	le ID	Sample Location & Material Location Quantity:
	26 A	Main House, Exterior - Southwestern Porch Area at Northwestern Side Wall
	26 B	Main House, Exterior - Southwestern Porch Area at Eastern Side Wall
	26 C	Main House, Exterior - Southwestern Porch Area at Western Side Overhang
Materiat	Locationt	
HM#	~27	Material Description: Button Board Material under Stucco - White
Sampl	le ID	Sample Location & Material Location Quantity:
	27 A	Main House, Exterior - Southwestern Porch Area at Northwestern Side Wall
	27 B	Main House, Exterior - Southwestern Porch Area at Northwestern Side Wall
·	С	
Material	I Location:	
HM#	28	Material Description: Main Roofing Field System - Multiple Layer Composite Shingle with Felt
Samp	ie ID	Sample Locations Quantity:
	28 A	Main House, Roof Level - Western Wing Main Roofing Field Area at Southern Side
	28 B	Main House, Roof Level - Eastern Wing Main Roofing Field Area at Eastern Side
	28 C	Main House, Roof Level - Central Wing Main Roofing Field Area at Northern Side
Materia	l Location:	
ни#	29	Material Description: Roofing Field System - Thick Asphaltic Shingle
Samp	le ID	Sample Location & Material Location Quantity:
	29 A	Main House, Exterior - Southern Pumphouse Structure at Western Side
_	29 B	Garage Building, Roof Level - Main Roofing Field Area at Northern Side (under Metal)
	29 C	Garage Building, Roof Level - Main Roofing Field Area at Western Side (under Metal)
Materia	il Locaflon:	
HM#	30	Material Description: Window Glazing Putty - White
Samp	ie ID	Sample Location & Meterial Location Quantity:
	30 A	
	30 B	Garage Building, Exterior - Western Side of Building at Central Window Bank
	C	
Moterla	el Location:	
	::::-	

	NAME:	SIGNATURE:	COMPANY;	<u>DATE≀</u>
Relinquished By:	William Frieszell	William English	Terracon Consultants	November 36, 2018
Received By:	FECULX 1005	Known 25-	-	12/8/18
Relinquished By:				
Received By:				

TESSECON 1466 66th Street, Emeryville, California



002052737

ACM BULK SAMPLE DATA SHEET

Page_7_of _9_

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	la la	
TD	51	

PLM Analysis Stop Analysis at First Positivo

x	Analyze All Samples	

Point Count Analysis (400-point)

			 ·
PM - W. Frieszell wmfrieszell@kuszon.com	√	PM - K. Schroeter <u>Karin/@rgamer.com</u>	PM - K. Pilgrim Kent@rgacm, com
PM - T. Kattchee Tedd@resenv.com		PM - S. Steiner steffigirgaenv.com	PM - W. Frieszell yentiticszellűttermena.com

Project Name/Address 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California						
Terracon Project Number	R1187D02 Sampled By	W. Prieszell/ K. Schroeter	Sampling D	late November 30, 2018		
Laboratory EMLab	X Other	Turn Around Time	48 Hrs	X Other (Specify)		

***FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

HM# 31	Material Description: Unfinished Drywall System
Sample ID	Sample Location & Material Location Quantity:
31 A	Garage Building, Interior - Northwestern Office Room Area at Western Wall
31 B	Garage Building, Interior - Northwestern Office Room Area at Northern Wall
C	
Material Location:	
HM# 32	Material Description: Moisture Barrier Paper - Black
Sample ID	Sample Location & Material Location Quantity:
32 A	Garage Building, Interior - Northwestern Office Room Area at Southern Wall
32 B	Garage Building, Interior - Northwestern Office Room Area at Eastern Wall
C	
Material Location:	
HM# 33	Material Description: Building Concrete Materials
Sample ID	Sample Locations Quantity:
33 A	Garage Building, Interior - Northwestern Office Room Area at Northern Entry Way
33 B	Garage Building, Interior - Northern Main Garage Area at Northern Entry Way
С	
Material Location:	
HM# 34	Material Description: Roof Penetration Mastic - Black
Sample ID	Semple Location & Material Location Quantity:
34 A	Main House, Roof Level - Central Wing Main Roofing Field Area at Northern Stove Fluc
34 B	Main House, Roof Level - Central Wing Main Roofing Field Area at Northern Stove Flue
C	
Material Location:	
HM# 35	Material Description: Transite Flues
Sample ID	Sample Location & Material Location Quantity: 20 If
A	
n n	*****INACCESSIBLE - ASSUMED*****
C	
Material Location	Multiple Flues Abandoned in Attic Space
	NABARI SIGNATURE: COMPANY: DATE:

· · · · · · · · · · · · · · · · · · ·	NAME:	SIGNATURE:	COMPANY:	DATE:
Relinquished By:	William Frieszell	Willen Fried	Terracon Consultants	November 30, 2018
Received By:	FROLK 1005	Karfield		12/3//8
Relinquished By:				/ /
Received By:				

Terracon 1466 66th Street, Emeryville, California

PM - W. Prieszell

PM - T. Kattchee

Tedd@rgaenv.com

winfrieszell@lemuami Cotii



PM - K. Pilgrbu

Kenfgirgaenv.com

PM - W. Frieszell

wmtriesxull@ggrapen.com

002052737

ACM BULK SAMPLE DATA SHEET

* PLM Analysis Stop Analysis at First Positivo	Page_8_of_9_
X Anatyze Ali Samples	
Point Count Analysis (400-point)	

Project Name/Address 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California										
Terracon Project Number		R1187D	X02		Sampled	Ву	W. Frieszell / K. Schroeter	Sampling	Date	November 30, 2018
Laboratory	EMLab	•	Х	Other	.]		Turn Around Time	48 Hrs	х	Other (Specify)

****<u>FAX OR E-MAIL REPORT TO</u>: SEE ABOVE PROJECT MANAGER (PM) ***

PM - K, Sehrocter

Kurin@reaeuv.gom

steff@irgacniv.com

PM - S. Steiner

HM#	36		Material Description: Kiln Wall System - Grey CMU Block with Mortar
Sampl	le ID		Sample Location & Material Location Quantity:
	36	A	Kiln/Barn Building, Interior - Central Corridor Area at Northwestern Corner
	36	В	Kiln/Barn Building, Interior - Central Corridor Area at Southwestern Corner
		ċ	
Митетія	Location	n:	
НМ#	37		Material Description: Kiln Wall Moisture Barrier - Black
Sampie ID			Sample Location & Material Location Quantity:
		٨	Klin/Barn Building, Interior - Central Corridor Area at Southwestern Corner
	37	В	Kiln/Barn Building, Interior - Central Corridor Area at Southwestern Corner
		Ċ	
Meterial	I Locatio	10:	
НМ#	38	7.7	Material Description: Acoustical Wall Tile System - 1' White Nailed On System
Samp	le ID	· ·	Sample Locations Quantity:
	<u> </u>	Ą	Kiln/Barn Building, Interior - Western Kiln Chamber Area at Western Wall
	38	В	Kiln/Barn Building, Interior - Western Kiln Chamber Area at Eastern Wall
		$\overline{\mathfrak{c}}$	
Materia	d Locath	on;	
HM# 39 Material Description: Cloth Heat Barrier Material - White			Material Description: Cloth Heat Barrier Material - White
Samp	le ID		Sample Location & Material Location Quantity:
	. 39	A	Kiln/Barn Building, Interior - Central Corridor Area at Eastern Wall North
	39	В	Kiln/Barn Building, Interior - Central Corridor Area at Eastern Wall South
		C	
Materia	il Locati	on:	
НМ#	40		Material Description: Building Concrete Material
Samp	ie ID		Sample Location & Material Location Quantity:
	40	A	Kiln/Barn Building, Interior - Central Corridor Area at Southern Side Ceiling
	40	В	Kiln/Barn Building, Exterior - Northern Side of Building at Central Walk Way
		С	
Materia	al Locati	lou;	
			f

•	NAME:	SIGNATURE:	COMPANY:	DATE:
Relinquished By:	William Frieszell	Wille Ening	Terracen Consultants	November 30, 2018
Received By:	FECREX 1005	KOOFL		12/3/18
Relinquished By:	, () () ()			' /
Received By;				<u> </u>

IIESTACON 1466 66th Street, Emeryville, California ACM BULK SAMPLE DATA SHEET 002052737 Page 9 of 9 PLM Analysis Stop Analysis at First Positive PM - K. Schreeter ---PM - R. Pagant PM - W. Frieszell <u>Кел@ателену.co</u>щ <u>vgafrieszellőkterregon com</u> Karlu@rgaeny.com X Analyze All Samples PM - W. Frieszell PM - S. Steiner PM - T, Kettchee Point Count Analysis (400-point) synel/rieszell@#emacons.com, <u>इत्तिविक्षणकार एक</u>ा Tedd@ngasny.com 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California Project Name/Address November 30, 2018 W. Frieszell/ K. Schroeter Sampling Date RI187D02 Sampled By Terracon Project Number 48 Hrs Х Other (Specify) Tum Around Time X Other EMLab Laboratory

***FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM) ***

HM# 41	Material Description: Asphaltic Patching Material - Black				
Sample ID	Sample Location & Material Location Quantity:				
41 A	Kiln/Barn Building, Interior - Central Corridor Area at Northern Side Ceiling				
41 B	Kiln/Barn Building, Interior - Central Corridor Area Ceiling at Approximate Center				
C					
Material Location:	· · · · · · · · · · · · · · · · · · ·				
HM#	Material Description:				
Sample ID	Sample Location & Material Location Quantity:				
٨					
В					
C	·				
Material Location:					
HM#	Material Description:				
Sample ID	Sample Locations Quantity:				
A					
В	· · · · · · · · · · · · · · · · · · ·				
C					
Material Location:					
HM#	Material Description:				
Sample ID	Sample Location & Material Location Quantity:				
A					
В					
C					
Material Location:					
HM#	Material Description:				
Sample ID	Sample Location & Material Location Quantity:				
٨					
В					
С					
Material Location;					
	NAME: SIGNATURE: COMPANY: DATE:				

	NAME:	SIGNATURE:	COMPANY:	DATE:
Relinquished By:	William Frieszell	Wille Ening	Terracon Consultants	Novembor 30, 2018
Received By:				
Relinquished By:				<u> </u>
Received By:				



Report for:

William Frieszell, Ms. Karin Schroeter Terracon Consultants, Inc. - Emeryville 1466 66th Street Emeryville, CA 94608

Regarding: Project: R1187D02; 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California

EML ID: 2052737

Approved by:

Dates of Analysis:

Asbestos-EPA 400 point count: 12-07-2018

Approved Signatory Renee Luna-Trepczynski

Rena Lina-Francezynski

Service SOPs: Asbestos-EPA 400 point count (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1262)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

1501 West Knudsen Drive, Phoenix, AZ 85027 (800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville C/O: William Frieszell, Ms. Karin Schroeter Re: R1187D02; 4224 Highway 12, Pre-Demolition

Date of Sampling: 11-30-2018 Date of Receipt: 12-03-2018 Date of Report: 12-07-2018

Survey, Santa Rosa, California

ASBESTOS POINT COUNT REPORT

Location:	2A			
	Interior Wall System; Drywall And Joint Compound Main House,			
	Interior;Souther	eastern Bedroom Area A	t Western Wall	
Total Points Counted:	400			
Lab ID-Version‡:	9708680-1			
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)	
White Drywall / Joint Compound Composite	Chrysotile 1 0.25			
Layer Totals:		1	0.25	

Location:	3B			
	Ceramic Wall Tile System;4" Pink Tile With Grout And Mortar Main			
	House, Interior; Southeastern Bathroom Area At Western Wall			
Total Points Counted:	400			
Lab ID-Version‡:	9708681-1			
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)	
Gray Cementitious Material	Chrysotile 0 < 0.25			
Layer Totals:		0	NA	

Comments: No asbestos was detected and no points were counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Aerotech Laboratories, Inc

EMLab ID: 2052737, Page 2 of 2



Appendix 2:

Laboratory Results and Chain of Custody - Lead



Environmental Chemistry Analysis Report

QuanTEM Set ID: 302556

12/04/18

Date Received: Received By:

Taylor Hooper

Date Sampled:

Time Sampled: **Analyst:**

CR

Date of Report:

12/05/18

AIHA ID: 101352

Client: Terracon Consultants, Inc.

1466 66th Street

Emeryville, CA 94608

Acct. No.: C018

Project: 4224 Highway 12, Pre-Demolition Survey

Location: Santa Rosa, California

Project No.: R1187D02

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
12		111441111	T ut utilicités	Tresures		CINCS	Timity Zea	
001	Pb-01	Bulk	Lead	4,790	50	ppm	12/05/18 10:54	P EPA 7000B (1)
002	Pb-02	Bulk	Lead	<49.8	49.8	mg/kg	12/05/18 10:54	B EPA 7000B (1)
003	Pb-03	Bulk	Lead	<49.8	49.8	mg/kg	12/05/18 10:54	B EPA 7000B (1)
004	Pb-04	Bulk	Lead	102	49.4	mg/kg	12/05/18 10:54	B EPA 7000B (1)
005	Pb-05	Bulk	Lead	1,340	49.6	mg/kg	12/05/18 10:54	B EPA 7000B (1)
006	Pb-06	Bulk	Lead	<49.9	49.9	mg/kg	12/05/18 10:54	B EPA 7000B (1)
007	Pb-07	Paint	Lead	<49.0	49	ppm	12/05/18 10:54	P EPA 7000B (1)
008	Pb-08	Paint	Lead	99.3	49.3	ppm	12/05/18 10:54	P EPA 7000B (1)
009	Pb-09	Paint	Lead	<49.9	49.9	ppm	12/05/18 10:54	P EPA 7000B (1)
010	Pb-10	Bulk	Lead	117	49.8	mg/kg	12/05/18 10:54	B EPA 7000B (1)
011	Pb-11	Paint	Lead	10,300	48.8	ppm	12/05/18 10:54	P EPA 7000B (1)
012	Pb-12	Paint	Lead	16,900	49.4	ppm	12/05/18 10:54	P EPA 7000B (1)
013	Pb-13	Paint	Lead	168	49.3	ppm	12/05/18 10:54	P EPA 7000B (1)

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified



Environmental Chemistry Analysis Report

QuanTEM Set ID: 302556

Date Received:

12/04/18

Received By:

Taylor Hooper

Date Sampled:

Time Sampled:

CR

Date of Report:

Analyst:

12/05/18

AIHA ID: 101352

Client: Terracon Consultants, Inc.

1466 66th Street

Emeryville, CA 94608

Acct. No.: C018

Project: 4224 Highway 12, Pre-Demolition Survey

Location: Santa Rosa, California

Project No.: R1187D02

QuanTEM

ID **Client ID** Matrix

Parameter

Results

Reporting Limits

Units

Date/Time

Analyzed

Method

Authorized Signature:

Cherry Rossen, Technical Manager

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

Supplemental Report QAQC Results

QA ID: 16880 **Date:** 12/5/2018 **Lab Number:** 302556

Test: Lead Matrix: Bulk Approved By: Cherry Rossen

Date Approved: 12/5/2018

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.2	5.5
FCV	4.5	4.8	5.5
ICV	0.9	1.1	1.1
RLVS	0.08	0.19	0.24

Duplicate Data:

Sample Number	Result	Duplicate	% RPD
302556-005	5.413	5.321	1.7

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-B1	0.000	2.401	2.842	118.4	2.536	105.6	11.3

Authorized Signature:

Cherry Rossen, Technical Manager

Supplemental Report QAQC Results

Test: Lead Matrix: Paint Approved By: Cherry Rossen

Date Approved: 12/5/2018

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.2	5.5
FCV	4.5	4.8	5.5
ICV	0.9	1.1	1.1
RLVS	0.05	0.12	0.15

Duplicate Data:

Sample Number	Result	Duplicate	% RPD
302560-002	1.334	1.393	4.4

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-P1	0.000	1.962	2.347	119.6	2.275	115.9	3.1
302560-002	1.334	2.000	3.162	91.4			

Authorized Signature:

Cherry Rossen, Technical Manager

302556

I LAGO 66th Street, Emeryville, California

			 <u>`</u>
PM - S, Steiner Steff@rgaenv.com Fax: 510 899.7051	✓	PM - K. Schroeter <u>Karin@rgaenv.com</u> Fax: 510.899.7063	PM - K. Pilgrim <u>Ken@rgaenv.com</u> Fax: 510.899,7053
PM - T. Kattchee <u>Tedd@rgaenv.com</u> Fax: 510.899.7070	√	PM - W. Frieszell wmfrieszell@terracon. com	 PM - M. Bryant marlin.bryant@rgaenv.com Fax: 510.899.7062

LEAD PAINT SAMPLE DATA SHEET

* Lead Analysis __Flame AA (EPA 7420) __TTLC

Page 1 of 2

Project Name/Address 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California								
Terracon Project Number R1187D02 Samp.			ampled By W. Frieszeil/K. Schroeter Sampling Date November 30, 20					810
Laboratory QuanTEM X Other			Turn Around Time	48 Hrs	Х	Other (Specify)		

Sample ID	Paint Desc			Condition (I/F/P)				
DI AI	Paint Color;	Pink	Substrate:	4" Ceramic	Component:	Wall Tile System		
Pb-01	Bldg;	Main House	Unit:	Interior	Room:	Southeastern Bathroom	Ĭ	
Pb-02	Paint Color:	Pink	Substrate:	4" Ceramic	Component:	Floor Tile System	F	
, PB-02	Bldg;	Main House	Unit:	Interior	Room:	Southeastern Bathroom	I	
Pb-03	Paint Color:	Tan	Substrate:	Mosaic Ceramic	Component:	Floor Tile System	I	
P6-03	Bldg:	Main House	Unit:	Interior	Room;	Western Bathroom	ī	
Pb-04	Paint Color:	Beige	Substrate:	4" Ceramic	Component:	Counter Tile System	Ĭ	
10-04	Bldg:	Main House	Unit:	Interior	Room:	Western Bathroom		
Pb-05	Paint Color:	Blue	Substrate:	4" Ceramic	Component:	Counter Tile System	_	
F6-03	Bldg:	Main House	Unit:	Interior	Room:	Central Kitchen	I	
Pb-06	Paint Color:	Blue Floral Pattern	Substrate:	6" Ceramic	Component:	Wall Tile System	•	
PB-06	Bldg:	Main House	Unit:	Interior	Room:	Central Kitchen	I	
Ph 07	Paint Color:	None	Substrate:	Metallic	Сотролепt:	Wood Stove Liner		
Pb-07	Bldg:	Main House	Unit:	Interior	Room:	Central Kitchen Area	I	

	NAME:	SIGNATURE:	COMPANY;	DATE:
Relinquished By:	William Frieszell	Will Friend	erracon Consultants	November 30, 2018
Received By:	Egylor Hope	med Brown		124-18 8:50
Relinquished By:		0000		
Received By:				

IECCON 1466 66th Street, Emeryville, California

PM - S. Steiner Steff@rgaenv.com Fax: 510 899.7051	√	PM - K, Schroeter Karin@rgaenv.com Fax: 510.899.7063	PM - K. Pilgrim Ken@rgaenv.com Fax: 510.899.7053
PM - T. Kattchee Tedd@rgaenv.com Fax: 510.899.7070	✓	PM - W. Frieszell wmfrieszell@terracon. com	PM - M. Bryant marlin.bryant@rgaenv.com Fax: 510.899.7062

LEAD PAINT SAMPLE DATA SHEET

* Lead Analysis __Flame AA (EPA 7420) __TTLC

Page 2 of 2

Project Name/Address 4224 Highway 12, Pre-Demolition Survey, Santa Rosa, California								····		
Terracon Project Number		R1187E	R1187D02 Sampled By		led By	W. Frieszell/ K. Schroeter	Sampling Date		November 30, 2	8102
Laboratory QuanTEM		хс	ther		Turn Around Time	48 Hrs	Х	Other (Specify)		

Sample ID	Paint Desc	ription and S	ample Loca	tion			Condition (I/F/P)	
	Paint Color:	White	Substrate:	Putty	Component:	Interior Window Glazing	I	
Pb-08	Bldg;	Main House	Unit:	Interior	Room:	Northeastern Bedroom		
	Paint Color:	White	Substrate:	Putty	Component:	Exterior Window Glazing	I	
Рь-09	Bldg:	Main House	Unit: Exterior		Room:	Eastern Wing	1	
	Paint Color:	Paint Color: Red		Concrete	Component:	Porch Slab	I	
Pb-10	Bldg:	Main House	Unit;	Exterior	Room:	Southwestern Porch	L	
	Paint Color:	White	Substrate:	Wood	Component:	Exterior Wall System	P	
Pb-11	Bldg:	Main House	Unit:	Exterior	Room;	Southern Side	1	
	Paint Color:	White	Substrate:	Wood	Сотропелт:	Exterior Wall System	Р	
Pb-12	Bldg:	Garage Building	Unit:	Exterior	Room:	Western Side	1	
	Paint Color;	White	Substrate:	Putty	Component:	Exterior Window Glazing	I	
Pb-13	Bldg:	Garage Building	Unit:	Exterior	Room:	Western Side		
	Paint Color:		Substrate:		Component:			
	Bldg:		Unit:		Room:			

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- I	٧,	4	ľV	Ш	Ľ,	1

SIGNATURE:

COMPANY:

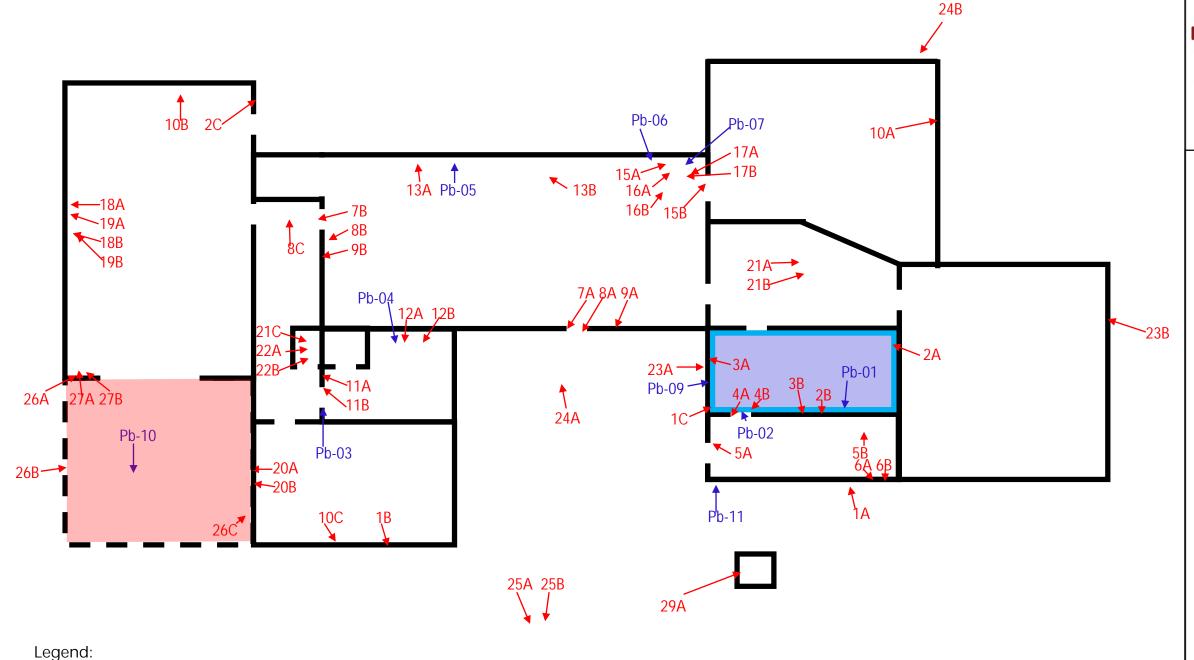
DATE:

Relinquished By:	William Frieszell	Will Friend Terracon Consultants	November 30, 2018
Received By:			
Relinquished By:			
Received By:			



Appendix 3:

Material and Sample Location Drawing



- Asbestos containing Gray Cementitious Material (<0.25% CH) associated ceramic wall tile system and drywall system (2% CH)
- Asbestos containing Gray Mortar and Gray Cementitious Material (<1%CH) associated with the ceramic floor tile system
- Lead containing 4" pink ceramic wall tile (4,790 ppm)
- Lead containing red paint (117 ppm) on concrete porch.

The following materials are not depicted:

- Asbestos containing interior wall and ceiling drywall systems
- Asbestos containing insulation associated with the attic exhaust flues (multiple)
- Assumed asbestos containing Transite flues abandoned in the attic space
- Lead containing white interior window putty (99.3 ppm)
- Lead containing white paint (10,300 ppm) at the exterior walls of residence
- Lead containing beige 4" ceramic tile (102 ppm) at the counter in the western bathroom
- Lead containing blue 4" ceramic tile (1,340 ppm) at the counter in the central kitchen

Not to Scale



Pre-Demolition

Limited Hazardous Materials Survey

4224 Highway 12 Santa Rosa, California

Date Drafted By

November 2018 WMF

Project Number Checked By

R1187D02 KMS

Sheet Name

Main House- Sample and Material Location Diagram

Sheet Number

Figure 1

33A 31B 32B² 30A-Pb-12 30B -Pb-13

Legend:

Asbestos was not detected in the sampled materials.

Lead containing white exterior paint (16,900 ppm).

The following materials are not depicted:

• Lead containing white exterior window glazing putty (168 ppm).



Pre-Demolition

Limited Hazardous Materials Survey

4224 Highway 12 Santa Rosa, California

<u>Drafted By</u>
WMF
Checked By
KMS

Sheet Name

Garage Building – Sample and Material Location Diagram

Sheet Number Figure 2

Not to Scale

36A 39A 41A 39A 41B 36B 37A 37B

Asbestos was not detected in the sampled materials.

Lead was not detected in the sampled materials above the laboratory detection limit.



Pre-Demolition

Limited Hazardous Materials Survey

4224 Highway 12 Santa Rosa, California

<u>Date</u>	<u>Drafted By</u>
November 2018	WMF
Project Number	Checked By
R1187D02	KMS

Sheet Name

Kiln/Barn Building - Sample Location Diagram

Sheet Number Figure 3

Not to Scale



Asbestos was not detected in the sampled materials. Lead was not detected in the sampled materials above the laboratory detection limit.



Pre-Demolition

Limited Hazardous Materials Survey

4224 Highway 12 Santa Rosa, California

<u>Date</u>	<u>Drafted By</u>
November 2018	WMF
Project Number	Checked By
R1187D02	KMS

Sheet Name

Roof Levels - Sample Location Diagram

Sheet Number

Figure 4

Not to Scale



Appendix 4:

Site Inspector Certificate

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

Karin M. Schroeter



Name

Certification No. 192-0772

Expires on 01/15/19

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7 180 at Seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate



Expiration

Inspector/Assessor

04/08/2019



Karin M. Schroeter

ID# 2228

State of California Division of Occupational Safety and Health Certified Asbestos Consultant



Name.

Certification No. 12-4853

Expires on 02/15/19

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 at 500 or the Business and Professions Code.

State of California Department of Public Health

Construction Certificate



Certificate

Expiration Date

Inpsector/Assessor

12/11/2018

William M. Frieszell

ID# 23815

APPENDIX G

Ambient Noise Monitor Data

	A	В	С	D	Е	F	G	Н	I	J	K	L	М
	S006_BIJ090032_04062018_101022:												
1	Calibration History												
2													
3	Date	Action		Model	iai Num:	. Due L	Jate						
	24/2018 4:26:34 PM Calibration		114.0										
5													
	S006_BIJ090032_04062018_101022:												
	Information Panel												
7													-
8	Description Value												
9	Name	0032 04062018 101022											
	Start Time	5/29/2018 14:25:14											
	Stop Time	5/31/2018 15:18:30											
	Device Name	BIJ090032											
	Model Type	SoundPro DL											
	Device Firmware Rev	R.13H											
	Comments												
16	0000 DI 1000000 04000040 404000. O	Data Danal											
	S006_BIJ090032_04062018_101022: S	ummary Data Panei											
18	LIOSCRIPTION	weter/ Sensor	value										
19	Description												
20 21	Leq Exchange Rate	1	48.2 dB 3 dB										
	Weighting	1	<u>зив</u> А										
	Response	1	FAST										
24	Bandwidth	1	OFF										-
	Exchange Rate	2	5 dB										
	Weighting	2	C										
	Response	2	FAST										
28													
	S006_BIJ090032_04062018_101022:												
29	Statistics Table												
30													
31	dB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%	
32 33 34 35	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	25.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
34	26.00		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
35	27.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

	A	В	С	D	Е	F	G	Н	I	J	K	L	М
36	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
37	29.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
38	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
39	31.00	0.01	0.01	0.02	0.04	0.05	0.07	0.09	0.11	0.12	0.13	0.66	
40	32.00	0.14	0.16	0.17	0.18	0.20	0.21	0.23	0.25	0.27	0.28	2.10	
41	33.00	0.29	0.12	0.26	0.25	0.26	0.26	0.26	0.25	0.25	0.25	2.45	
42	34.00	0.24	0.23	0.23	0.22	0.21	0.22	0.22	0.24	0.26	0.29	2.35	
43	35.00	0.33	0.37	0.41	0.44	0.46	0.48	0.49	0.51	0.51	0.52	4.51	
44	36.00	0.51	0.33	0.42	0.40	0.38	0.37	0.36	0.34	0.33	0.31	3.76	
45	37.00	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.32	3.10	
46	38.00	0.33	0.33	0.34	0.35	0.36	0.38	0.39	0.40	0.42	0.44	3.75	
47	39.00	0.46	0.32	0.42	0.42	0.43	0.43	0.43	0.44	0.44	0.44	4.22	
48	40.00	0.45	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.54	4.88	
49	41.00	0.55	0.56	0.57	0.59	0.60	0.62	0.64	0.67	0.70	0.74	6.23	
50	42.00	0.77	0.61	0.66	0.72	0.73	0.73	0.74	0.75	0.77	0.76	7.26	
51	43.00	0.77	0.77	0.78	0.80	0.81	0.81	0.82	0.83	0.85	0.86	8.10	
52	44.00	0.88	0.89	0.91	0.93	0.95	0.97	1.00	1.02	1.04	1.07	9.66	
53	45.00	1.11	0.98	0.80	0.97	0.96	0.95	0.94	0.92	0.89	0.87	9.40	
54	46.00	0.85	0.83	0.82	0.79	0.77	0.76	0.75	0.74	0.72	0.70	7.73	
55	47.00	0.68	0.67	0.65	0.64	0.63	0.62	0.61	0.60	0.60	0.59	6.28	
56	48.00	0.59	0.57	0.35	0.47	0.46	0.44	0.42	0.40	0.39	0.36	4.45	
57	49.00	0.35	0.34	0.32	0.31	0.30	0.29	0.28	0.27	0.25	0.25	2.96	
58	50.00	0.24	0.23	0.22	0.21	0.21	0.20	0.19	0.19	0.19	0.18	2.06	
59	51.00	0.17	0.17	0.10	0.14	0.13	0.12	0.12	0.11	0.11	0.10	1.27	
60	52.00	0.10	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07	0.06	0.78	
61	53.00	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.55	
62	54.00	0.05	0.05	0.03	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.38	
63	55.00	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.25	
64	56.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.19	
65	57.00	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.14	
66	58.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.09	
67	59.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07	
68	60.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.06	
69	61.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	
70	62.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
71	63.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
72	64.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
73	65.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
74	66.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
75	67.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
76	68.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
77	69.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	

	A	В	С	D	Е	F	G	Н	ı	J	K	L	М
78	70.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
79	71.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
80	72.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
81	73.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
82	74.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
83	75.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
84	76.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
85	77.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
86	78.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
87	79.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
88	80.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
89	81.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
90	82.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
91	83.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
92	84.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
93	85.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
94	86.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
95	87.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
96	88.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
97	89.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
98	90.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
99	91.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100	92.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
101	93.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
102	94.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
103	95.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
104	96.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
105	0000 511000000 04000040 404000 0												
	S006_BIJ090032_04062018_101022: St	atistics Chart											
107													
108	dB	%											
109	0.00	0.00											
110	1.00	0.00											
111	2.00	0.00											
112	3.00	0.00											
113	4.00	0.00											
114	5.00	0.00											
115	6.00	0.00											
116	7.00	0.00											
117	8.00	0.00											
118	9.00	0.00											
119	10.00	0.00											

	А	В	С	D	Е	F	G	Н	1	J	K	L	М
120	11.00	0.00											
121	12.00	0.00											
122	13.00	0.00											
123	14.00	0.00											
124	15.00	0.00											
125	16.00	0.00											
126	17.00	0.00											
127	18.00	0.00											
128		0.00											
129	20.00	0.00											
130		0.00											
131	22.00	0.00											
132	23.00	0.00											
133	24.00	0.00											
134	25.00	0.00											
135	26.00	0.00											
136		0.00											
137	28.00	0.00											
138	29.00	0.00											
139	30.00	0.01											
140	31.00	0.66											
141	32.00	2.10											
142	33.00	2.45											
143	34.00	2.35											
144	35.00	4.51											
145	36.00	3.76											
146	37.00	3.10											
147	38.00	3.75											
148	39.00	4.22											
149		4.88											
150	41.00	6.23 7.26											
151 152	42.00 43.00	8.10											
153		9.66					-						
154 155	45.00 46.00	9.40 7.73											
155	47.00	6.28					-						
156 157	47.00	4.45					-						
157	49.00	2.96											
150	50.00	2.96											
158 159 160	51.00	1.27											
161	52.00	0.78											
101	52.00	0.76						l	<u> </u>			1	

	А	В	С	D	Е	F	G	Н	l 1	J	K	L	М
162	53.00	0.55											
163	54.00	0.38											
164	55.00	0.25											
165	56.00	0.19											
166	57.00	0.14											
167	58.00	0.09											
168		0.07											
169	60.00	0.06											
170		0.04											
171	62.00	0.04											
172		0.03											
173		0.03											
174	65.00	0.02											
175		0.02											
176		0.02											
177	68.00	0.02											
178		0.02											
179		0.01											
180		0.01											
181	72.00	0.01											
182	73.00	0.01											
183		0.00											
184	75.00	0.00											
185		0.00											
186		0.00											
187	78.00	0.00											
188		0.00											
189	80.00	0.00											
190	81.00	0.00											
191	82.00	0.00											
192	83.00	0.00											
193		0.00											
194	85.00	0.00											
195		0.00											
196 197	87.00	0.00											
197	88.00	0.00					-						
198 199	89.00	0.00											
199	90.00	0.00				-	-						
200	91.00	0.00											
201	92.00	0.00				-	-						
200 201 202 203	93.00	0.00											
203	94.00	0.00		1									

	A	В	С	D	Е	F	G	Н		J	K	L	М
204	95.00	0.00											
205	96.00	0.00											
206													
	S006_BIJ090032_04062018_101022: Ex	xceedance Table											
208		00/	40/	00/	00/	40/	=0/	00/	=0/	00/	00/		
209		0%	1%	2%	3%	4%	5%	6%	7%	8%	9%		
210	0%		55.10	52.90	51.60	50.90	50.40	49.90	49.50	49.20	48.90		
211	10%	48.60	48.40	48.20	47.90	47.80	47.60	47.40	47.30	47.10	47.00		
212	20%	46.80	46.70	46.50	46.40	46.30	46.20	46.00	45.90	45.80	45.70		
213	30%	45.60	45.50	45.40	45.30	45.20	45.00	44.90	44.80	44.80	44.70		
214	40%	44.60	44.50	44.40	44.20	44.10	44.00	43.90	43.80	43.70	43.60		
215	50%	43.40	43.30	43.20	43.10	42.90	42.80	42.70	42.50	42.40	42.30		
216	60%	42.10	42.00	41.80	41.70	41.60	41.40	41.20	41.10	40.90	40.70		
217	70%	40.50	40.30	40.10	39.90	39.60	39.40	39.20	38.90	38.70	38.40		
218	80%	38.20	37.90	37.50	37.20	36.90	36.60	36.30	36.10	35.80	35.60		
219	90%	35.40	35.20	35.00	34.60	34.20	33.80	33.40	32.90	32.60	32.10		
220	100%	24.70	_										
221													

S048_BIR010005_04062018_101310: Calibration His	story										
Date	Action	Level	Cal. Model	Serial	Cert. Due						
5/22/2018 4:26:49 PM	Calibration	114.0									
S048_BIR010005_04062018_101310: Information Pa	inel										
Description	Value										
Name	S048_BIR010005_04062018_101310										
Start Time	5/29/2018 13:56:51										
Stop Time	5/31/2018 15:08:53										
Device Name	BIR010005										
Model Type	SoundPro DL										
Device Firmware Rev	R.13H										
Comments											
S048_BIR010005_04062018_101310: Summary Data	Panel										
	Meter/ Sensor	Value									
Description	Weter/ Serisor										
Leq	1	51.7 dB									
Exchange Rate	1	3 dB									
Weighting	1	A									
Response	1	SLOW									
Bandwidth	I 2	OFF									
Exchange Rate Weighting	2 2	3 dB A									
Response	2	SLOW									
S048_BIR010005_04062018_101310: Statistics Table	e										
dB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03
31.00		0.03					0.05		0.07	0.07	
32.00	0.08	0.09					0.10		0.11	0.12	
33.00	0.14	0.05	0.12	0.14	0.14	0.14	0.17	0.16	0.18	0.19	
34.00	0.20	0.21	0.22	0.23	0.23	0.23	0.24	0.23	0.23	0.23	
35.00		0.23					0.24		0.22	0.24	
36.00		0.17	0.21		0.20		0.19		0.19	0.17	
37.00		0.17			0.16		0.16	0.16	0.17	0.15	
38.00		0.15				0.17	0.17	0.19	0.18	0.19	
39.00		0.14					0.19		0.19	0.19	
40.00		0.19					0.21	0.21	0.21	0.22	
41.00		0.22				0.24	0.24	0.25	0.25	0.27	
42.00		0.22					0.26		0.27	0.28	
43.00	0.28	0.28					0.29		0.31	0.31	
44.00	0.31	0.33				0.37	0.37	0.39	0.40	0.43	
45.00		0.40				0.41	0.42		0.42	0.42	
46.00 47.00		0.42 0.48					0.44	0.45	0.46 0.58	0.47	
47.00					0.52 0.58		0.53 0.58	0.56 0.58		0.60	
48.00	0.02	0.03	0.38	0.57	0.58	0.59	0.56	0.58	0.06	0.59	<u>ა./ I</u>

49.00	0.60	0.59	0.59	0.58	0.60	0.60	0.61	0.63	0.62	0.61 6.03
50.00	0.63	0.65	0.65	0.67	0.71	0.71	0.73	0.76	0.77	0.81 7.08
51.00	0.86	0.90	0.55	0.77	0.76	0.76	0.77	0.77	0.78	0.78 7.68
52.00	0.79	0.78	0.79	0.78	0.76	0.77	0.77	0.77	0.77	0.76 7.74
53.00	0.76	0.75	0.75	0.74	0.73	0.73	0.71	0.71	0.71	0.73 7.31
54.00	0.74	0.75	0.46	0.63	0.59	0.56	0.54	0.52	0.50	0.48 5.77
55.00	0.47	0.44	0.42	0.41	0.39	0.40	0.37	0.36	0.34	0.33 3.93
56.00	0.33	0.31	0.30	0.29	0.29	0.27	0.26	0.25	0.25	0.24 2.78
57.00	0.23	0.23	0.14	0.19	0.18	0.17	0.16	0.15	0.15	0.14 1.74
58.00	0.13	0.12	0.11	0.10	0.10	0.09	0.09	0.09	0.08	0.08 0.97
59.00	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05 0.58
60.00	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03 0.32
61.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01 0.18
62.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01 0.12
63.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01 0.07
64.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00 0.05
65.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.03
66.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.02
67.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.01
68.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.01
69.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
70.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
71.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
72.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
73.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
73.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
74.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
75.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
77.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
77.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
78.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
80.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
81.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
82.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
83.00	0.00	0.00	0.00	0.00	0.00					
84.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	
85.00		0.00		0.00	0.00		0.00	0.00	0.00	
86.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
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15.00	0.00				
16.00	0.00				
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31.00	0.53				
32.00	0.98				
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33.00	1.44				
34.00	2.24				
35.00	2.34				
36.00	1.96				
37.00	1.65				
38.00	1.69				
39.00	1.85				
40.00	2.00				
41.00	2.36				
42.00	2.58				
43.00	2.89				
44.00	3.62				
45.00	4.07				
46.00	4.35				
47.00	5.26				
48.00	5.71				
49.00	6.03				
50.00	7.08				
51.00	7.68				
52.00	7.74				
53.00	7.31				
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	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%	0%	59.50	58.20	57.40	56.90	56.50	56.10	55.80	55.50	55.30
0% 10%	0% 55.00	59.50 54.80	58.20 54.60	57.40 54.40	56.90 54.30	56.50 54.10	56.10 53.90	55.80 53.80	55.50 53.70	55.30 53.50
0% 10% 20%	0% 55.00 53.40	59.50 54.80 53.20	58.20 54.60 53.10	57.40 54.40 53.00	56.90 54.30 52.80	56.50 54.10 52.70	56.10 53.90 52.60	55.80 53.80 52.40	55.50 53.70 52.30	55.30 53.50 52.20
0% 10% 20% 30%	0% 55.00 53.40 52.10	59.50 54.80 53.20 51.90	58.20 54.60 53.10 51.80	57.40 54.40 53.00 51.70	56.90 54.30 52.80 51.50	56.50 54.10 52.70 51.40	56.10 53.90 52.60 51.30	55.80 53.80 52.40 51.20	55.50 53.70 52.30 51.00	55.30 53.50 52.20 50.90
0% 10% 20% 30% 40%	0% 55.00 53.40 52.10 50.80	59.50 54.80 53.20 51.90 50.60	58.20 54.60 53.10 51.80 50.50	57.40 54.40 53.00 51.70 50.40	56.90 54.30 52.80 51.50 50.20	56.50 54.10 52.70 51.40 50.10	56.10 53.90 52.60 51.30 49.90	55.80 53.80 52.40 51.20 49.80	55.50 53.70 52.30 51.00 49.60	55.30 53.50 52.20 50.90 49.40
0% 10% 20% 30% 40% 50%	0% 55.00 53.40 52.10 50.80 49.30	59.50 54.80 53.20 51.90 50.60 49.10	58.20 54.60 53.10 51.80 50.50 48.90	57.40 54.40 53.00 51.70 50.40 48.80	56.90 54.30 52.80 51.50 50.20 48.60	56.50 54.10 52.70 51.40 50.10 48.40	56.10 53.90 52.60 51.30 49.90 48.20	55.80 53.80 52.40 51.20 49.80 48.00	55.50 53.70 52.30 51.00 49.60 47.90	55.30 53.50 52.20 50.90 49.40 47.70
0% 10% 20% 30% 40% 50%	0% 55.00 53.40 52.10 50.80 49.30 47.50	59.50 54.80 53.20 51.90 50.60 49.10 47.30	58.20 54.60 53.10 51.80 50.50 48.90 47.10	57.40 54.40 53.00 51.70 50.40 48.80 46.90	56.90 54.30 52.80 51.50 50.20 48.60 46.70	56.50 54.10 52.70 51.40 50.10 48.40 46.50	56.10 53.90 52.60 51.30 49.90 48.20 46.30	55.80 53.80 52.40 51.20 49.80 48.00 46.00	55.50 53.70 52.30 51.00 49.60 47.90 45.80	55.30 53.50 52.20 50.90 49.40 47.70 45.60
0% 10% 20% 30% 40% 50% 60%	0% 55.00 53.40 52.10 50.80 49.30 47.50 45.30	59.50 54.80 53.20 51.90 50.60 49.10 47.30 45.00	58.20 54.60 53.10 51.80 50.50 48.90 47.10 44.80	57.40 54.40 53.00 51.70 50.40 48.80 46.90 44.60	56.90 54.30 52.80 51.50 50.20 48.60 46.70 44.30	56.50 54.10 52.70 51.40 50.10 48.40 46.50 44.00	56.10 53.90 52.60 51.30 49.90 48.20 46.30 43.70	55.80 53.80 52.40 51.20 49.80 48.00 46.00 43.30	55.50 53.70 52.30 51.00 49.60 47.90 45.80 43.00	55.30 53.50 52.20 50.90 49.40 47.70 45.60 42.60
0% 10% 20% 30% 40% 50% 60% 70%	0% 55.00 53.40 52.10 50.80 49.30 47.50 45.30	59.50 54.80 53.20 51.90 50.60 49.10 47.30 45.00 41.80	58.20 54.60 53.10 51.80 50.50 48.90 47.10 44.80 41.40	57.40 54.40 53.00 51.70 50.40 48.80 46.90 44.60 41.00	56.90 54.30 52.80 51.50 50.20 48.60 46.70 44.30 40.50	56.50 54.10 52.70 51.40 50.10 48.40 46.50 44.00 40.00	56.10 53.90 52.60 51.30 49.90 48.20 46.30 43.70 39.50	55.80 53.80 52.40 51.20 49.80 48.00 46.00 43.30 38.90	55.50 53.70 52.30 51.00 49.60 47.90 45.80 43.00 38.40	55.30 53.50 52.20 50.90 49.40 47.70 45.60 42.60 37.70
0% 10% 20% 30% 40% 50% 60% 70% 80%	0% 55.00 53.40 52.10 50.80 49.30 47.50 45.30 42.20 37.10	59.50 54.80 53.20 51.90 50.60 49.10 47.30 45.00	58.20 54.60 53.10 51.80 50.50 48.90 47.10 44.80	57.40 54.40 53.00 51.70 50.40 48.80 46.90 44.60	56.90 54.30 52.80 51.50 50.20 48.60 46.70 44.30	56.50 54.10 52.70 51.40 50.10 48.40 46.50 44.00	56.10 53.90 52.60 51.30 49.90 48.20 46.30 43.70 39.50	55.80 53.80 52.40 51.20 49.80 48.00 46.00 43.30 38.90	55.50 53.70 52.30 51.00 49.60 47.90 45.80 43.00 38.40	55.30 53.50 52.20 50.90 49.40 47.70 45.60 42.60 37.70
0% 10% 20% 30% 40% 50% 60% 70%	0% 55.00 53.40 52.10 50.80 49.30 47.50 45.30 42.20 37.10	59.50 54.80 53.20 51.90 50.60 49.10 47.30 45.00 41.80	58.20 54.60 53.10 51.80 50.50 48.90 47.10 44.80 41.40	57.40 54.40 53.00 51.70 50.40 48.80 46.90 44.60 41.00	56.90 54.30 52.80 51.50 50.20 48.60 46.70 44.30 40.50	56.50 54.10 52.70 51.40 50.10 48.40 46.50 44.00 40.00	56.10 53.90 52.60 51.30 49.90 48.20 46.30 43.70 39.50	55.80 53.80 52.40 51.20 49.80 48.00 46.00 43.30 38.90	55.50 53.70 52.30 51.00 49.60 47.90 45.80 43.00 38.40	55.30 53.50 52.20 50.90 49.40 47.70 45.60 42.60 37.70

APPENDIX H

Mitigation, Monitoring and Reporting Program

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Aesthetics				
AES-01	Protective measures shall be implemented to protect retained trees. In accordance with 17-24.050(D), a "Tree Protection Perimeter" shall be established at the dripline around each tree or cluster of trees to be preserved. The Perimeter shall be enclosed by temporary protective fencing prior to initiating grading activities and shall remain for the duration of construction. No ground disturbance including the placement of utilities or sub drains shall occur within the Tree Protection Perimeter. Plastic tree protection fencing shall be installed at the dripline of trees within construction zone. If access within the dripline is required, fencing shall be placed at the grading limit. Tree protection fencing will be installed prior to clearing and grubbing and kept in place for the duration of construction. No parking or operation of equipment, storage of materials, disposal of waste or other construction activities shall occur within the driplines of protected trees. Any deviation from the protection measures are necessary, a certified arborist shall be consulted to ensure retained trees are protected during construction. Tree preservation notes shall be included on all plans.	Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Air Quality				
AQ-01	The applicant shall implement the following air quality construction measures: 1.All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2.All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3.All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4.All vehicle speeds on unpaved roads shall be limited to 15 mph. 5.All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6.Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7.All construction equipment shall be minimaled and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8.Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to comply with applicable regulations.		Contractor and City of Santa Rosa Planning and Economic Development Department	During construction

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Biological Resources			-	
BIO-01	In order to avoid impacts to nesting birds, Project activities shall occur outside of the peak avian breeding season which runs from February 1 through September 1. If Project construction activies are necessary during the nesting season, a qualified bird biologist shall conduct a survey for nesting birds within three days prior to commencement of construction-related activities. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. The buffer shall be a minimum width of 200 feet (500 feet for raptors), and be delineated by temporary fencing, and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction shall occur within the fenced nesting zone until the young have fledged. If identified by the bird biologist, reductions in the nest buffer may be appropriate.	Incorporate into Project design and construction documents	Planning & Economic Development	Before and during construction
BIO-02	Vegetation removal shall occur between September 1 and February 1. I vegetation removal occurs outside that time, BIO-1 shall apply.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction
BIO-03	Comply with AES-01		Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Cultural Resources		T	To	
CUL-01	In the event human remains are discovered, the following standard measures imposed by the City of Santa Rosa and promulgated under Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5 pertaining to the discovery of human remains shall be implemented: - All work in the vicinity of the discovery will be halted until a qualified archeologist can evaluate the find(s) under Section 106 of the National Historic Preservation Act. - The Sonoma County Coroner shall be contacted to determine that no investigation of the circumstances, manner or cause of death is required and to make recommendations as to the treatment and disposition of the human remains.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction
	- If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours.			
	 The applicant shall retain a City-approved qualified archaeologist to provide adequate inspection, recommendations and retrieval, if appropriate. 			
	 The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American, and shall contact such descendant in accordance with state law. 			
	- The applicant shall be responsible for ensuring that human remains and associated grave goods are reburied with appropriate dignity at a place and process suitable to the most likely descendent.			

	Mitigation Measure	Implementing Procedure	Responsibility	Timing			
Geology and Soils							
GEO-01	Prior to issuance of a grading permit, an erosion control plan along with grading and drainage plans shall be submitted to the Building Division of the City's Department of Planning and Economic Development. All earthwork, grading, trenching, backfilling, and compaction operations shall be conducted in accordance with the City of Santa Rosa's Grading and Erosion Control Ordinance Chapter 19-64 of the Santa Rosa Municipal Code). These plans shall detail erosion control measures such as site watering, sediment capture, equipment staging and laydown pad, and other erosion control measures to be implemented during construction activity on the project site	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction			
Hazards and Hazard	dous Materials		•	-			
HAZ-01	Asbestos Containing Material: Demolition of the existing structures shall be done by a licensed and certified asbestos abatement contractor. All workers shall be properly trained for asbestos removal work.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction			
HAZ-02	Lead Containing Paint: Demolition of the existing structures shall be done following OSHA Lead in Construction Standard. The OSHA specified method of compliance includes respiratory protection, protective clothing and equipment, housekeeping, hygiene facilities, medical surveillance, and training, among other requirements.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction			
HAZ-03	A Site Safety Plan will be prepared that will outline protocols that will be followed in the event of an unintended fire during construction. The plan will include, but not limited to maps and directions to local hospitals, evacuation routes, and methods to reduce the potential for fire at the site.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction			

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Hydrology and Water Quality				
HYD-01	A Notice of Intent and fees will be submitted to the Regional Water Quality Control Board's Stormwater Multiple Application and Reporting Tracking System for authorization under the Construction General Permit (Order 2009-0009-DWQ). The applicant shall prepare and implement a SWPPP prior to construction. The SWPPP shall address erosion and sediment controls, proper storage of fuels, identification of site-specific BMPs, and use and cleanup of hazardous materials. During construction a monitoring report shall be conducted weekly during dry conditions and three times a day during storms that produce more than 0.50 inch of precipitation.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction
Tribal Cultural Resources				
TRI-01	If a potentially significant tribal cultural resource is encountered, all ground disturbing activities shall halt until the archeologist or Tribal representative can assess the resource. The archeologist or Tribal representative shall be granted stop work authority and shall be provided sufficient time to evaluate the resource and make treatment recommendations. Should a significant tribal cultural resource be identified, the archeologist or Tribal representative shall prepare a resource mitigation plan and monitoring program to be carried out during all construction activities.		Contractor and City of Santa Rosa Planning and Economic Development Department	During Construction

RESOLUTION NO. 11973

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA RECOMMENDING TO CITY COUNCIL PREZONING OF THE PROPERITES LOCATED AT 4200 AND 4224 SONOMA HIGHWAY (ASSESSOR'S PARCEL NUMBERS 032-010-005 AND 032-010-023) TO THE CG (GENERAL COMMERCIAL) ZONING DISTRICT; FILE NO. PRJ18-050

WHEREAS, on August 8, 2019, the Planning Commission of the City of Santa Rosa held a duly noticed public hearing to determine the appropriate boundary and appropriate and proper prezoning designations which should be placed on the annexation area at which time all those wishing to be heard were allowed to speak on the proposed annexation boundary and prezoning designation; and

WHEREAS, the Planning Commission has received, reviewed and given due consideration to the records and reports herein, and the oral and other evidence received at the public hearing, from the public, the applicant, and City staff; and

WHEREAS, the General Plan land use designation for the subject site is Retail and Business Services, which designation was reviewed as part of the Santa Rosa General Plan 2035 Environment Impact Report (EIR), adopted by City Council Resolution No. 27509, dated November 3, 2009, in compliance with the California Environmental Quality Act (CEQA), and the proposed Prezoning to the CG (General Commercial) zoning district is consistent with the Retail and Business Services land use designation.

NOW, THEREFORE, BE IT RESOLVED, that based on the evidence presented and the records and files herein, and pursuant to City Code Sections 20-64.060 (Prezoning) and 20-64-050 (Findings), the Planning Commission of the City of Santa Rosa finds and determines:

- A. The proposed amendment is consistent with the goals and policies of all elements of the General Plan, and any applicable specific plan in that the CG (General Commercial) zoning district is an implementing zoning district for Retail and Business Services land use designation. General Plan Policy LUL-A-2 encourages annexation of unincorporated land adjacent to city limits and within the Urban Growth Boundary, when the proposal is timely and only if adequate services are available. City staff has determined the proposed Prezoning and subsequent annexation of the subject site, a two-parcel County island, is a logical extension of the City limits and services.
- B. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or welfare of the City in that Prezoning to the CG (General Commercial) zoning district is consistent with the General Plan land use designation of Retail and Business Services, which allows both commercial and multi-family residential uses. This land use was considered in the General Plan 2035, which was adopted by Council in 2009.

- C. The project has been reviewed in compliance with the California Environmental Quality Act (CEQA). An Initial Study was conducted for the Recess Self-Storage (a Mixed-Use Development) project, including the Prezoning for the subject properties, that resulted in a Mitigated Negative Declaration, which was then circulated for a 30-day public comment period commencing on July 2, 2019, and adopted by the Planning Commission on August 8, 2019.
- D. The proposed amendment is internally consistent with other applicable provisions of the Zoning Code in that the CG (General Commercial) zoning district implements the Retail and Business Services land use designation of the General Plan, and any new development on the subject properties would be required to be in compliance with any standards listed in the Zoning Code.
- E. The site is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the requested zoning designations and anticipated land uses/developments.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Santa Rosa, based on the evidence presented and the above findings, recommends to the City Council the approval and adoption of the prezoning of property described as Assessor's Parcel Numbers 032-010-005 and 032-010-023 to the CG (General Commercial) zoning district.

REGULARLY PASSED AND ADOPTED by the Planning Commission of the City of Santa Rosa on the 8th day of August 2019, by the following vote:

AYES: ()		
NOES: ()		
ABSTAIN: ()		
ABSENT: ()		
APPROVED:		
	Chair	
ATTEST:		
	Executive Secretary	

RESOLUTION NO. 11974

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA APPROVING THE RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT) TENTATIVE MAP LOCATED AT 4224 SONOMA HIGHWAY - FILE NUMBER PRJ18-050

WHEREAS, an application has been submitted by American Recess, LLC. requesting approval of a tentative map of Recess Self-Storage (a mixed-use development), more particularly described as Assessor's Parcel Number 032-010-023, dated January 17, 2019, and on file in the Office of Planning and Economic Development; and

WHEREAS, the Planning Commission heard the evidence and reviewed the proposed findings, if any, submitted by the applicant.

NOW BE IT RESOLVED, the Planning Commission does hereby determine that said subdivision of one lot and no more is in compliance with the requirements of the Subdivision Ordinance of the City of Santa Rosa, (Title 19, City Code), and the Subdivision Map Act (Government Code Section 66410, et seq.) based upon the following findings:

- A. That the proposed map is consistent with the General Plan and any applicable specific plans as specified in Government Code Sections 65451 and 66473.5 in that the subject site is in an area designated by the General Plan Land Use Diagram as Retail and Business Services, which allows both commercial/light industrial and residential uses. The project is not within a specific plan area.
- B. That the proposed subdivision meets the housing needs of the City and that the public service needs of the subdivision's residents are within the available fiscal and environmental resources of the City. City staff has reviewed the project plans and determined that there is adequate water and sewer capacity; the site will be developed in compliance with the City's Standard Urban Stormwater Mitigation Plan (SUSMP); and the General Plan land use designation of Retail and Business Services anticipates costs associated with commercial/light industrial and residential development in this area.
- C. That the design of the proposed subdivision has, to the extent feasible, provided for future passive or natural heating or cooling opportunities in the subdivision. Residential structures have been designed with sufficient windows to allow the inflow of sunlight for natural heating, and larger tree species will be planted throughout the subdivision providing shade or cooling opportunities.
- D. That the proposed subdivision would not discharge waste into the City's sewer system that would result in violation of the requirements prescribed by the California Regional Water Quality Control Board.
- E. The proposed project has been reviewed in compliance with the California Environmental

Resolution No	
	Page 1 of 3

Quality Act (CEQA). An Initial Study (IS) was prepared which resulted in a Mitigated Negative Declaration (MND). The draft MND was circulated for a 30-day public comment period commencing July 2, 2019.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission finds and determines said tentative map would not be approved but for the applicability and validity of each and every one of the below conditions and that if any one or more of the below conditions are determined invalid, this tentative map would not have been approved without requiring other valid conditions for achieving the purposes and intent of such approval.

BE IT FURTHER RESOLVED that the Planning Commission approves and adopts the mitigation measures set forth in the Mitigation Monitoring and Reporting Program, Appendix H of the Mitigated Negative Declaration, dated June 2019, and directs staff, as therein identified, to implement and complete the program.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Santa Rosa approves the Recess Self-Storage (a Mixed-Use Development), Tentative Map (sheets 1 through 6) dated July 18, 2019, AutoTURN Exhibit dated July 15, 2019, and the Creek Set Back Exhibit stamped received April 17, 2019, and on file in the Department of Community Development, subject to the following conditions:

- Compliance with the Development Advisory Committee Report dated July 23, 2019, 1. attached hereto and incorporated herein.
- 2. Compliance with the Mitigation Monitoring and Reporting Program, adopted by the Planning Commission as Appendix H to the Mitigated Negative Declaration, on Resolution No. 11972 attached hereto and incorporated herein.
- 3. That the developer shall enter into an agreement with the City which provides that the developer, his heirs, successors, and assigns shall defend, indemnify, and hold the City, its officers, employees, and agents harmless from any and all claims, suits, and actions brought by any person and arising from, or in connection with, the design, layout, or construction of any portion of this subdivision, or any grading done, or any public or private improvements constructed within, or under, or in connection with this subdivision, whether on-site or off-site.
- 4. The approval of this project shall be subject to the latest adopted ordinances, resolutions, policies and fees adopted by the City Council at the time of the building permit review and approval.
- 5. The developer shall provide on-site allocated units in compliance with the Housing Allocation Plan (City Code Chapter 21-02) or shall, in lieu of providing affordable units on site, pay applicable fees at the time of building permit issuance, unless otherwise allowed by City Code.
- That, prior to the approval of any final map, the properties located at 4200 and 4224 6.

Resolution No	
	Page 2 of 3

Sonoma Highway, Assessor's Parcel Nos. 032-010-005 & 032-010-023, shall be annexed into the City of Santa Rosa, pursuant to City Code Chapter 19-04, and shall conform in all respects to the prezoning recommendation(s) contained in Planning Commission Resolution Number 11973.

7. Sewer connections for this development, or any part thereof, will be allowed only in accordance with the requirements of the California Regional Water Quality Control Board, North Coast Region, in effect at the time, or thereafter, that the building permit(s) for this development, or any part thereof, are issued.

REGULARLY PASSED AND ADOPTED by the Planning Commission of the City of Santa Rosa on the 8th day of August 2019, by the following vote:

AYES:				
NOES:				
ABSTAIN:				
ABSENT:				
	APPR	OVED:		
			CHAIR	
ATTEST:				
EXECUTIVE SECRETA	ARY	•		
Exhibit A: DAC Report				
Exhibit B: MMRP				

Resolution No.

DEVELOPMENT ADVISORY COMMITTEE REPORT July 23, 2019

SANTA ROSA RECESS SELF-STORAGE (A Mixed Use Development)

Project Description

Prezone for annexation a two-parcel County island, located at 4200 & 4224 Sonoma Highway, and subdivide the 2.68-acre property at 4224 Sonoma Highway into three separate parcels to construct a 124,000-square foot, four-story self-storage facility adjacent to Sonoma Highway, an eight-unit multi-family housing structure overlooking the Santa Rosa Creek Trail, and a six-unit multi-family housing structure adjacent to the existing residential uses to the west.

LOCATION	. 4200 & 4224 Sonoma Highway
APN	. 032-010-023 & 032-010-005 (respectively)
GENERAL PLAN LAND USE	. Retail & Business Services
ZONE CLASSIFICATION EXISTINGPROPOSED	. County . CG (General Commercial)
OWNER/APPLICANTADDRESS	·
ENGINEER/SURVEYORADDRESS	
REPRESENTATIVEADDRESS	
FILE NUMBER	PRJ18-050
CASE PLANNER	Susie Murray

PROJECT ENGINEER Jesus McKeag AM 3

Background

On November 15, 2016, a Pre-application Meeting was held with City staff, which is designed to offer applicants an interdepartmental staff review of preliminary or conceptual design applications.

The Project was changed significantly. On April 24, 2018, a second Pre-application Meeting was held with City staff.

On July 19, 2018, the DRB reviewed the Project as a concept item.

On August 13, 2018, a Neighborhood Meeting was held to introduce the proposed Project to surrounding neighbors. Two people attended.

On September 4, 2018, the Prezoning, HDP, CUP and Design Review applications were submitted to Planning and Economic Development.

On January 17, 2019, the Tentative Parcel Map application was submitted to Planning and Economic Development.

On April 10, 2019, the Waterways Advisory Committee (WAC) reviewed the Project. WAC comments are discussed in the Committee Review and Recommendations section of this report.

On July 2, 2019, the 30-day public review period for the draft Initial Study/Mitigated Negative Declaration (IS/MND) commenced (State Clearinghouse No. 20198079002).

Conditions of Approval

The following summary constitutes the recommended conditions of approval from City departments on the subject application/development-based on the Tentative Map (TM) sheets 1 through 6 dated 7/18/19, AutoTURN Exhibit dated 7/15/19, and the Creek Set Back Exhibit stamped received 4/17/19:

- 1. Developer's engineer shall obtain the current City Design and Construction Standards and the Engineering Division of the Planning & Economic Development Department's Standard Conditions of Approval dated August 27, 2008 and comply with all requirements therein unless specifically waived or altered by written variance by the City Engineer.
- 2. Developer's engineer shall comply with all requirements of the City Storm Water Low Impact Development Technical Design Manual in effect at the time this application was deemed complete.
- 3. Submit landscape and irrigation plans in conformance with the Water Efficient Landscape Ordinance adopted by the Santa Rosa City Council, Ordinance 4051, on December 1, 2015.

Planning Conditions

- 4. The project is contingent upon the annexation of both properties, 4200 and 4224 Sonoma Highway, into the City of Santa Rosa. Pursuant to City Code Section 19-04.100, annexation must be complete prior to recordation of the final map or commencement of site improvements.
- 5. The applicant has requested the following Growth Management Allotments:

RESERVE "A"		14	
RESERVE "B"			
	2019	2020	2021

- 6. If the Self-Storage Facility would like to extend the hours or operation into 11:00 p.m. to 6:00 a.m., a Conditional Use Permit will be required pursuant to Zoning Code Table 2-6.
- 7. The Project will comply with Noise Ordinance, City Code Chapter 17-16.
- 8. Compliance with City Graffiti Abatement Program Standards for Graffiti Removal (City Code 10-17.080).
- 9. Plan sets submitted for grading/building permits shall clearly depict existing trees to be removed and protected, and include tree protective measures for trees designated to remain.
- 10. The following note shall be printed under the heading of "General Notes" on all plan sets submitted for grading/building permits: Hours of construction shall be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturdays. No noise generating construction activities shall occur on Sundays or holidays.
- 11. During periods of construction, a sign shall be installed that provides a contact name and number for all construction-related inquiries and/or complaints.
- 12. In the event the U.S. Postmaster requires gang mailboxes, they shall be located in the same general area as fire hydrants to maximize available street parking.
- 13. Parking along the west side of the Self-Storage Facility shall be designed exclusively for Self-Storage Facility customers.
- 14. Parking along the south side of the Self-Storage Facility shall be designated exclusively for residential customers.

Building Division Conditions

- 15. Obtain a demolition permit for the structures to be removed.
- 16. Provide a geotechnical investigation and soils report with the building permit applications. The investigation shall include subsurface exploration and the report shall include grading, drainage, paving and foundation design recommendations.
- 17. Obtain building permits for the proposed project.

Engineering Conditions

PUBLIC EASEMENT DEDICATION

- 18. The following public easements and rights of way shall be dedicated on the face of the map:
 - a. Sufficient right of way for the construction of a Public roadway as shown on the TM;
 - b. Right of way shall be dedicated so that a Caltrans Standard A88A curb ramp and the 4-foot sidewalk landing are contained within 6 inches of the right-of-way for the curb returns at the intersection of Streamside Dr with HWY 12
 - c. A sidewalk easement per City Standard 200 E and 230 B along the frontage of Lot 3
 - Sidewalk easement shall continue behind driveways to contain sidewalk per City Standard 231
 - d. An emergency vehicle access easement (EVA) to the satisfaction of the City Engineer in consultation with the Fire Department during Plan Check
 - e. A public utility easement (PUE) along the full frontage of Lots 1 through 3.
 - The standard dimension of a PUE along any newly dedicated and/or improved roadway is 13-feet behind the property line as shown in City Standards 230 A though C and E or 7-feet behind the property line as shown in City Standard 230 G. All proposed reductions or eliminations of any PUE along either frontage shall be requested as a variance from the applicable standard during the review period for the Parcel Map or before and shall be accompanied by written approval from the following companies;
 - i. AT&T
 - ii. PG&E
 - iii. Comcast

- iv. Integra Telecom
- v. Any other franchise agreement beneficiary not identified here, but with rights to PUEs during the coordination period and prior to the grant of PUE offered by the applicant and accepted by the City Engineer

All coordination efforts between the developer and all affected franchise agreement utilities companies shall be the responsibility of the developer. The City shall not be held liable for any time delays or costs resulting from these efforts even though the City holds ultimate authority for approval of the dedications and Improvement Plans. The developer agrees to this by pursuing approval of this project.

- f. A City Emergency Water Supply Well Easement over the area in the easterly most corner of the subdivision boundary generally conforming to Sheet 4 of the Tentative Map and to the satisfaction of the City Engineer in consultation with the Director the Water during Plan Check.
- g. a Public Sewer Easement over the new alignment of the Los Alamos trunk sewer generally conforming to Sheet 4 of the Tentative Map and to the satisfaction of the City Engineer in consultation with the Director the Water during Plan Check.

PRIVATE EASEMENT DEDICATION AND MAINTENANCE AGREEMENTS

- 19. The following private easements and rights of way shall be dedicated on the face of the map:
 - a. An Access Easement over lot 1 in favor of lot 2 at the driveway that leads to the City Emergency Water Supply Well to the satisfaction of the City Engineer during Plan Check
 - this will require a maintenance agreement between lots 1 and 2 for the shared portion of the driveway to be executed during plan check
 - b. If any parking on lots 1 and 3 is for the benefit of offsite persons or properties, a Parking Easement shall be dedicated in favor of the beneficiary to the satisfaction of the City Engineer in consultation with the Director the Water during Plan Check.

MAPPING

20. This is a three-unit Subdivision creating two residential lots containing a total of 14 multi-family residential units (eight units on Lot 2 and six units on Lot 3) and one commercial lot to house a Storage Facility. If a Homeowners Association (HOA) is required, the documents creating the HOA and the Covenants, Conditions and Restrictions (CC&Rs) governing the HOA shall be required to be submitted with the First plan check for review by the City Attorney. The approved CC&Rs shall be recorded contemporaneously with the Final Map.

- 21. A Parcel Map as defined by the applicable provisions of the State of California Subdivision Map Act shall be required for this 3-unit subdivision. Parcel maps shall comply with all currently adopted ordinances, resolutions, and policies of the City of Santa Rosa and the State Subdivision Map Act.
- 22. All costs associated with map, plan, easement, plat, legal description, and/or support document preparation shall be the sole responsibility of the developer.
- 23. The Parcel Map shall be annotated on the information sheet as follows: "Water and sewer demand fees and processing fees are based on the number and type of units to be built on each lot. Water and sewer demand, processing and meter installation fees must be paid prior to the issuance of a Building Permit for the respective lot."

PUBLIC STREET IMPROVEMENTS

- 24. All public and private improvements, both on-site and off-site; all rights-of-way and easement acquisitions, be they on-site or off-site; and all removal, relocation, or undergrounding of existing public utilities and any coordination thereof required or necessitated as a result of the review and approval of the project and the cost thereof shall be the obligation of the developer unless express written provision to the contrary is agreed to by the City. The full installation of all such required improvements to the satisfaction of the City Engineer shall be completed prior to the acceptance of the improvements by the City.
- 25. Civil improvement plans shall be prepared by a Registered Civil Engineer licensed to practice in the State of California for approval by the City Engineer.
- 26. A Caltrans Encroachment Permit shall be obtained prior to beginning any work in the State Highway Right-of-Way.
- 27. Streamside Drive shall be dedicated and improved from the current dead end at the southwesterly subdivision boundary to HWY 12 at the northwesterly subdivision boundary as follows:
 - a. A City Standard 241 curb and gutter shall be installed on both sides along the entire street frontage from existing Streamside Dr to HWY 12.
 - b. The curb-to-curb width shall transition per City Standard from the existing width of Streamside Dr to 26-feet through reversing curves similar to City Standard 213 on the Southbound side while maintaining the existing curb alignment in the northbound direction.
 - c. The curb-to-curb width shall transition per City Standard from 26-feet to 24-feet through a slight bend in the roadway alignment towards the west
 - d. The curb-to-curb width shall be a minimum of 24-feet at all points.
 - e. The 26-foot shall be maintained to conform back of the curb returns at the intersection of new Streamside Dr with HWY 12.

- f. The minimum centerline radius shall be 90-feet. Variance pending.
- g. Private parking along Lot 1 is subject to a Variance and shall be to the satisfaction of the City Engineer in consultation with the City Traffic Engineer during Plan Check.
- h. Private parking along Lot 3 shall be similar to the City Standard 213 Parking Bay.
- i. Striping shall delimit the edge of the traveled roadway from the private parking located along both frontages of the segment of new Streamside Dr at its intersection with HWY 12 to the satisfaction of the City Engineer in consultation with the City Traffic Engineer during Plan Check.
- j. Two Caltrans Standard A88A 35-feet radius curb ramps shall be installed at the intersection of Streamside Dr with HWY 12.
- k. A contiguous 5-foot sidewalk shall be installed along the Streamside Dr frontage of Lot 3.
- I. Sidewalk shall transition through minimum 10-feet radii per City Standard 231 behind driveways.
- 28. Any broken curb, gutter and/or sidewalk along the HWY 12 frontage of this project shall be replaced per current City standards.
- 29. The minimum and maximum cross-slope for all streets shall be 2% and 5% respectively, except the transition region between the two full tilt 2% sections of Streamside Dr. This transition shall be finalized to minimize the less than 2% cross slope to the satisfaction of the City Engineer during plan check. Minimum gutter slope for all streets shall be 0.5%.
- 30. Existing streets being cut by new services will require edge grinding per City Standard 209, trenching per Standard 215, and an A.C. overlay.
- 31. No parking shall be allowed on either side of the street from the terminus of existing Streamside Dr along the frontages of lots 2 and 3 and shall be posted or striped for no parking on both sides to the satisfaction of the City Engineer in consultation with the City Traffic Engineer during Plan Check.
- 32. Private parking on lots 1 and 3 shall be clearly marked as private and the edge of roadway shall be marked to the satisfaction of the City Engineer in consultation with the City Traffic Engineer during Plan Check.
- 33. End of public sidewalk on westerly frontage of Streamside Dr shall be marked at the end of the sidewalk easement to the satisfaction of the City Engineer in consultation with the City Traffic Engineer during Plan Check.
- 34. Private walkway on the easterly frontage of Streamside Dr shall not continue to the Streamside Dr roadway.
- 35. Public sidewalk along the frontage of lot 2 shall end behind the driveway access to the center 2 units on lot 2 and shall be marked at the end of the

sidewalk easement to the satisfaction of the City Engineer in consultation with the City Traffic Engineer during Plan Check.

- 36. Improvements to Streamside Dr shall include;
 - a. the installation of 2 City Standard 250 A drive approaches on lot 1
 - b. the installation of rolled curb in front of driveways along lot 3
 - i. rolled curb shall transition to standard curb in between driveways
 - ii. the details for the rolled curb and the transition to standard curb shall be finalized to the satisfaction of the City Engineer in consultation with the City Traffic Engineer during Plan Check.
 - c. the installation of 2 City Standard 250 B drive approaches along lot 2.
- 37. Installation of street lights and the street lighting pattern will be determined during plan check phase of the improvement plans as approved by the City Engineer
 - a. Decorative luminaire Street lighting if required along Streamside Dr shall be installed per City Standard 615D for Street Lights.
 - b. City Standard 611 cobra style street lights if required along HWY 12 are to be installed along the frontage to current spacing requirements, using LEOTEK LED fixtures. Street light spacing, wattages, and locations will be determined during the improvement plan review process.
 - c. Electrical boxes for new and/or relocated street lights and signals shall be provided with grounded vandal resistant inserts, McCain Tamper Resistant Inserts or City approved equal, in street light pull boxes at locations as directed by the City. Catalog cuts shall be provided with the first plan check submittal for review and approval by the City Engineer. The street light improvement plans shall include the following note; "The contractor may use their own locks during construction for ease of access, however once the conductors in the pull box are live the contractor shall coordinate with the City Inspector to have the City lock installed. Electrical pull boxes in planter strips shall be provided with a 2-foot concrete apron around box."
- 38. With the exception of existing overhead electrical main feeder lines, all existing wire-distributed utility facilities which are on the proposed or existing rights-of-way, roadways, walkways, easements, etc. within the subject development or along roadways required to be improved in conjunction with the subject subdivision may be required to be removed and undergrounded prior to the construction of proposed improvements and all poles along the frontage(s) shall be removed. All existing overhead service drops which emanate from the existing poles and overhead facilities required to be removed and undergrounded, and which serve existing structures on both sides of the street within the boundaries of the road improvements of the subject development shall be undergrounded to the main service switch or service entrance to such structures. Where existing overhead electrical main feeder lines are left

overhead, conduit shall be placed in the ground to provide for future undergrounding of the lines.

Improvement Variance ENGV19-001 was approved with the following condition:

Vacant conduit systems shall be installed across the entire lot frontages of 4224 Highway 12. Conduit shall be provided for all existing overhead electrical utilities, including main feeder lines. Conduit sizing and separation shall be governed by the individual service providers.

- 39. New services (electrical, telephone, cable or conduit) to new structures shall be underground.
- 40. Developer shall coordinate, and where necessary, pay for the relocation of any power poles or other existing public utilities, as necessary.
- 41. The height of signs, vegetation or other obstructions near street intersections shall maintain clear line of sight for all vehicles approaching the intersection to the satisfaction of the City Traffic Engineer during review of (Building Permit, Encroachment Permit, Improvement Plans).
- 42. Vegetation over 3-feet in height shall be planted no closer than 40-feet from stop bar of stop sign controlled intersections.

PRIVATE DRIVEWAY IMPROVEMENTS

- 43. Turn around capability on all driveways shall be provided with clear backup of 46-feet from garage face to opposing face of curb.
- 44. All driveways serving more than one unit shall be built to City minor street structural standards.

STORM DRAINAGE

- 45. Drainage facilities and drainage easements shall be provided to the satisfaction of the City Engineer or the Chief Engineer of the Sonoma County Water Agency at the developer's expense.
- 46. Drainage facilities shall be designed per the Flood Control Design Criteria manual of the Sonoma County Water Agency. If flows exceed street capacity, flows shall be conducted via an underground drainage system (with minimum 15" diameter and maximum 72" diameter pipe sizes) to the nearest approved downstream facility possessing adequate capacity to accept the runoff, per the City's design requirements. Such runoff systems shall be placed within public street right-of-way wherever possible.
- 47. Any off-site storm water runoff shall be conveyed across the project site in a separate bypass storm drain system, or shall be fully treated. Collection points along the boundary of the project shall convey storm water to the bypass system to separate treated and untreated storm water. All storm water systems

- shall be sized to convey the storm water per Sonoma County Water Agency standards.
- 48. Provide storm drain and easements for any lot to lot drainage. Lots shall be drained in a manner so as not to adversely affect the adjacent lot. No lot-to-lot overland drainage is permitted (the exception is for lots draining to a common driveway). Lot drainage and private storm drain facilities shall be approved by the Chief Building Official or designated representative. Private drainage inlets and lines shall be required and shall be privately owned and maintained.
- 49. All drainage flows from offsite shall be intercepted at the property line and conveyed through a private system to discharge into the public right of way.
- 50. Concentrated drainage flows shall not be permitted to cross sidewalks, or slope areas subject to erosion problems.
- 51. An adequate drainage system shall be required to drain rear yards and patio areas. Private underground storm drain systems and drainage easements are required for any lot-to-lot drainage.
- 52. All storm drain pipe within the public right of way or easement shall be to City Standards and a minimum diameter of 15-inches.
- 53. Where public storm drains must traverse private property, inlets necessary to drain the private property are permitted to connect to the public storm drain. These inlets and connecting pipes shall be clearly delineated as private on the improvement plans.
- 54. An accessible structure shall be provided to connect private storm drains to the public storm drains (i.e., no blind connections) except as otherwise approved by the City Engineer. Structures shall be installed on the private side of the property line to distinguish the public system from the private system. Public and private storm drain facilities shall be clearly identified on the improvement plans. For residential land uses only, no structure is necessary for sump pump connections to public storm drain systems. Accessible structures are required for sump pump connections from nonresidential land uses.

STORM WATER COMPLIANCE (SUSMP)

55. The developer's engineer shall comply with all requirements of the latest edition of the City Standard Urban Storm Water Mitigation Plan Guidelines. Final Public Improvement Plans shall incorporate all SUSMP Best Management Practices (BMPs) and shall be accompanied by a Final Storm Water Mitigation Plan which shall address the storm water quality and quantity. Final Public Improvement Plans shall be accompanied by a maintenance agreement or comparable document to assure continuous maintenance in perpetuity of the SUSMP BMPs, and shall include a maintenance schedule.

- 56. Perpetual maintenance of SUSMP BMPs shall be the responsibility of one or more of the following as approved by the City of Santa Rosa:
 - a. The individual homeowners fronting or owning these BMPs. Individual owners shall be responsible for performing and documenting an annual inspection of the BMPs on their respective properties. The annual reports shall be retained by the private property owner for a period of the latest five years, and shall be made available to the City upon request.
 - b. A Homeowner's Association or Property Owners Association. If perpetual maintenance of these BMPs is through a Homeowner's Association or Property Owner's Association, the documents creating the Association and the Covenants, Conditions and Restrictions governing the Association shall be submitted to the City Attorney's Office and the Department of Community Development for review.
 - c. A special tax district for public BMP facilities.
 - d. An alternate means acceptable to the City of Santa Rosa.

After the SUSMP BMP improvements have been constructed, the developers Civil Engineer is to prepare and sign a written certification that they were constructed and installed as required or per the manufacturer's recommendation. Written certification of SUSMP BMPs is to be received by the City prior to acceptance of subdivision improvements.

- 57. A Final Storm Water Mitigation Plan (SWMP) using Best Management Practices (BMP) is to be included with the Improvement Plans and Final Map submitted for the First Plan Check. Private improvements required by the Final SWMP are to be contained on the individual properties and are maintained by the property owners. All SWMP details and improvements are to be included in the Subdivision Improvement Plans. The maintenance schedule and the Final SUSMP are to be included as part of the CC&Rs recorded with the Final Map. The information sheet of the Final Map shall note the maintenance schedule required by the Final SUSMP is to be followed by the property owner and all logs are to be made available for review by the City on an annual basis.
- 58. Use of vortex separators for water treatment is not allowed in Santa Rosa. Inline filters used for water treatment are limited to those tested by independent testing laboratories and approved by the California Regional Water Quality Control Board. The filter separator currently approved for use in Sonoma County is limited to the Hydro International, www.hydro-international.biz, "Up-Flo Filter". Filter systems other than the approved "Up-Flo Filter" will require full testing data from an independent testing laboratory be submitted for review and approval by the California Regional Water Control Board prior to approval of subdivision improvement plans.

Water Department Conditions

WATER AND WASTEWATER

- 59. Water and sewer systems and appurtenances thereto shall be designed to serve the project in accordance with the City of Santa Rosa Design and Construction Standards and shall be constructed to the satisfaction of the City Engineer.
- 60. All underground improvements including sewer lines, water lines, storm drains and public utility facilities, shall be installed, tested, and approved prior to the paving of any project streets.
- 61. This project is subject to the latest fees in effect at the time of connection or Building Permit issuance.
- 62. Fees for inspection of publicly maintained water and/or sewer facilities constructed with this project must be paid prior to scheduling of work as prescribed in City Specifications.
- 63. For purposes of leak detection and maintenance access, no reinforced concrete may be designed over publicly maintained water or sewer facilities. Un-reinforced concrete will be allowed under special circumstances such as crosswalks. Water system valves must be located outside of the concrete area.
- 64. Extend an 8-inch public sanitary sewer main connecting to the existing 8-inch main in Streamside Dr and ending at a mainline cleanout near the northerly driveway curb cut for lot 1.
- 65. Lot 3 shall be served by a 6-inch private lateral.
- 66. Lot 2 shall connect to the 8-inch public sewer main per City Standard 515.
- 67. The onsite sewer design for Lot 1 shall be finalized during the plan check phase of Public Improvement Plans and the lateral connection shown on the Improvement Plans.
- 68. Any existing sewer lateral that will not be used must be abandoned at the main per City Sewer System Design Standards Section XII, Abandonment of Sewer Mains and Services and City Standard 507 under an encroachment permit.
- 69. Extend a 12-inch public water main from the existing blow off in Streamside Dr and connecting to the existing 12-inch main in HWY 12.
- 70. The size of the water connection to the future well site shall be determined during plan check phase of public improvement plans to the satisfaction of the City Engineer in consultation with the Director of the Water Department. In the case that a water service or main connection is required, reimbursement may be possible and must be pursued directly with the Water Department. Contact Water Engineering Services at (707) 543-4200.

- 71. Public water mains must be sized to meet criteria per Section VII of the Water System Design Standards. Water mains shall be located parallel to street centerlines unless conflicts with other underground utilities cannot be avoided.
- 72. Connection to the existing main will require a shut down for a tie-in inspection. Call Water Engineering Services for fees and scheduling. Advance notice is required.
- 73. Water services and meters must be provided per Section X of the Water System Design Standards and shall be sized to meet domestic, irrigation and fire protection uses. Any services placed in driveway areas shall have meters with traffic rated boxes.
- 74. Backflow prevention devices shall be designed and installed in accordance with current City Standards, State Health Code Title 17, and as required by the Director of Utilities.
- 75. The service for the City Emergency Water Supply Well site shall stub out at the edge of the City Emergency Water Supply Well Easement per City Standards.
- 76. Design of hydrant locations shall be per City Standard 857, meet the Fire Code requirements and must be approved by the Fire Department for logistics and by Santa Rosa Water Department for maintainability.
- 77. Any existing water service that will not be used must be abandoned at the main per City Water System Design Standards Section XVIII, Abandonment of Water Mains and Services and City Standard 507 under an encroachment permit. The existing meter must be collected by the City Meter Shop.
- 78. If a well exists on the property, one of the following conditions apply:
 - a. Retention of wells must comply with City and County codes. An approved backflow prevention device must be installed on any connection to the City water system.
 - b. Abandonment of wells requires a permit from the Sonoma County Permit and Resource Management Department.
 - c. Wells may not serve more than one parcel, and any lines from existing wells that cross lot lines must be severed
- 79. Any existing septic systems shall be removed under supervision of project Soils Engineer. Obtain Permits from the Sonoma County Permit and Resources Management Department. Obtain a City Building permit if an existing structure is being converted from a connection to the septic system to the public sewer system.
- 80. Where bio swales are required, meter boxes, cleanouts, fire hydrants, etc. must be located without conflict with the swales. Locations of infrastructure will be reviewed during plan check. No bio swales or SUSMP BMP LID improvements shall cross public sewer, water, or storm drain utilities.
- 81. A fire flow test will be completed at the time of the tie in of the project to the City system. The hydrant which will most likely produce the least flow will be tested.

In the case of a project that has multiple dead end systems such as cul-desacs, a fire flow test will be completed at the hydrant on each separate cul-desac or dead end system. The fire flow must meet the requirement for the project before the project is accepted. The City will perform the fire flow test. The fee to have the test performed must be paid to the Santa Rosa Water Department prior to the test being performed.

- 82. Fire hydrant placement shall be provided in accordance with Fire Department requirements to coincide with fire tactics and equipment and shall be identified via a reflectorized blue marker located in the center of the adjoining access drive or street. Fire hydrant type and installation shall comply with City Water Standard 857. For specific fire hydrant locations and flow requirements see Section XII of the Water System Design Standards.
- 83. Water Engineering provides mapping of private onsite water mains and fire hydrants for the Fire Department and processes the fee collection and meter installation for the fireline. Provide two copies of the approved onsite plans showing private firelines and private fire hydrant locations to the Utilities Engineering Division prior to requesting meter sets and commencing service. Refer to section XI.A of the Water System Design Standards for submittal of plans for private fire systems.
- 84. Provide a separate irrigation service. See Section X. O. of the Water System Design Standards.

Fire Department Conditions

- 85. CA Fire Code requires fire apparatus access roads ("Fire Lanes") to within 150 feet hose-pull distance of all first-floor exterior walls.
- 86. This project will have to make provisions for turning around fire apparatus on site.
- 87. Aerial apparatus access is required for buildings over 30 feet tall at the eave or parapet or 3-stories or more. Aerial access shall be provided along one entire side of the building: 26 feet unobstructed width, paved, at least 15 feet but not more than 30 feet from the face of building.
- 88. Fire flow and location of fire hydrants, fire protection appurtenances shall be in strict accordance with California Fire Code Chapter 5, Appendix B, and Appendix C as adopted by the City of Santa Rosa.
- 89. A Phase 1 Environmental Site Assessment shall be submitted at the Fire Department, including the review fee, and approved. Grading, demolition or construction permits shall not be issued until the Fire Department has reviewed and approved the Phase 1 study.

- 90. Buildings shall be protected by an automatic fire sprinkler system. Buildings 3or more stories in height shall be provided with standpipe systems in accordance with Santa Rosa City Code.
- 91. Fire department connections (FDC's) shall be located within 100 feet of a fire hydrant. At this time FDC's on backflow prevention devices serving multiple buildings are not approved locations, each building shall be provided with its own FDC, unless specifically approved by the Fire Code Official.
- 92. Required Fire Department access roads shall be signed "No Parking Fire Lane" per current Fire Department standards.
- 93. Traffic calming measures on public or private property are not approved as a part of this review. (i.e. speed humps, speed tables or other traffic calming measures)
- 94. Provide a Fire Department key box (Knoxbox) to all fire protection equipment and systems.
- 95. Twelve inch illuminated building address characters shall be provide per Fire Dept. standards. An illuminated address directory monument sign shall be provided at the entry from Hwy 12.
- 96. Storage or use of any hazardous materials (such as pool chemicals) at the site will require a Hazardous Materials Inventory Statement to be submitted to the Fire Dept. for review. Materials in excess of the permit amounts will require a Hazardous Materials Management Plan to be submitted to the Fire Dept. for review and approval and may require payment of Hazardous Material Use or Hazardous Waste Generator fees.
- 97. Access roads and water supplies for fire protection shall be installed and made serviceable prior to storage or construction of any combustible materials.

Recreation and Parks Conditions

- 98. Street trees will be required and planted by the developer. Selection will be made from the city's approved master plan list and inspected by the Parks Division. Planting shall be done in accordance with the city *Standards and Specifications for Planting Parkway Trees*. Copies of the master street tree list and the standards are available at the Parks Division Office (707) 543-3770. This declaration shall be added to the General Notes of the improvement plans.
- 99. Parks acquisition and/or park development fees shall be paid at the time of building permit issuance. The fee amount shall be determined by the resolution in effect at the time.
- 100. All landscaping shall be privately maintained and irrigated. Property owners and/or homeowners' association shall be responsible for the irrigation and

maintenance of the street trees and maintenance of the planter strips in front of and along side of their lots.

The Development Advisory Committee is an administrative committee designed to inform the Planning Commission of technical aspects of various matters which the Commission is to consider. The report of the Committee in no way constitutes approval or denial of the item under decision. Final approval or denial rests with the Planning Commission and/or City Council and may or may not be subject to terms of this report. A second of the s

	<u>Recommendation</u>	
App	roval with conditions as set forth in this r	eport
Con	tinuance	
Den	ial – Reasons:	
Fina	l action referred to the Planning Commis	ssion
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CLARE HARTMAN

Deputy Director - Planning

Planning and Economic Development

- 13	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Aesthetics		The second secon	anne Tarent margines anne ann an 1977 ann an Airmean agus ann an Airmean ann an Airmean ann an Airmean Airme	The second secon
AES-01	Protective measures shall be implemented to protect retained trees. In accordance with 17-24.050(D), a "Tree Protection Perimeter" shall be established at the dripline around each tree or cluster of trees to be preserved. The Perimeter shall be enclosed by temporary protective fencing prior to initiating grading activities and shall remain for the duration of construction. No ground disturbance including the placement of utilities or sub drains shall occur within the Tree Protection Perimeter. Plastic tree protection fencing shall be installed at the dripline of trees within construction zone. If access within the dripline is required, fencing shall be placed at the grading limit. Tree protection fencing will be installed prior to clearing and grubbing and kept in place for the duration of construction. No parking or operation of equipment, storage of materials, disposal of waste or other construction activities shall occur within the driplines of protected trees. Any deviation from the protection measures are necessary, a certified arborist shall be consulted to ensure retained trees are protected during construction. Tree preservation notes shall be included on all plans.	Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction

	Mitigation Measure	Implementing Procedure	Responsibility	Timing -
Air Quality		The second of th	The second secon	
AQ-01	The applicant shall implement the following air quality construction measures: 1.All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2.All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3.All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4.All vehicle speeds on unpaved roads shall be limited to 15 mph. 5.All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6.Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7.All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8.Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to comply with applicable regulations.		Contractor and City of Santa Rosa Planning and Economic Development Department	During construction

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Biological Resources				
BIO-01	In order to avoid impacts to nesting birds, Project activities shall occur outside of the peak avian breeding season which runs from February 1 through September 1. If Project construction activies are necessary during the nesting season, a qualified bird biologist shall conduct a survey for nesting birds within three days prior to commencement of construction-related activities. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. The buffer shall be a minimum width of 200 feet (500 feet for raptors), and be delineated by temporary fencing, and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction shall occur within the fenced nesting zone until the young have fledged. If identified by the bird biologist, reductions in the nest buffer may be appropriate.	Incorporate into Project design and construction documents	Planning & Economic Development	Before and during construction
BIO-02	Vegetation removal shall occur between September 1 and February 1. I vegetation removal occurs outside that time, BIO-1 shall apply.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction
BIO-03	Comply with AES-01		Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction

Mitigation, Monitoring and Reporting Program Recess Storage Project Santa Rosa, California

- 19 (19 (19 (19 (19 (19 (19 (19 (19 (19	Mitigation Measure	Implementing Procedure	Responsibility	Timing *
Cultural Resources				
CUL-01	In the event human remains are discovered, the following standard measures imposed by the City of Santa Rosa and promulgated under Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5 pertaining to the discovery of human remains shall be implemented: - All work in the vicinity of the discovery will be halted until a qualified archeologist can evaluate the find(s) under Section 106 of the National Historic Preservation Act. - The Sonoma County Coroner shall be contacted to determine that no investigation of the circumstances, manner or cause of death is required and to make recommendations as to the treatment and disposition of the human remains. - If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. - The applicant shall retain a City-approved qualified archaeologist to provide adequate inspection, recommendations and retrieval, if appropriate. - The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American, and shall contact such descendant in accordance with state law. - The applicant shall be responsible for ensuring that human remains and associated grave goods are reburied with appropriate dignity at a place and process suitable to the most likely descendent.		Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Geology and Soils			and a service and the service response control of the service and the service	and the second s
GEO-01	Prior to issuance of a grading permit, an erosion control plan along with grading and drainage plans shall be submitted to the Building Division of the City's Department of Planning and Economic Development. All earthwork, grading, trenching, backfilling, and compaction operations shall be conducted in accordance with the City of Santa Rosa's Grading and Erosion Control Ordinance Chapter 19-64 of the Santa Rosa Municipal Code). These plans shall detail erosion control measures such as site watering, sediment capture, equipment staging and laydown pad, and other erosion control measures to be implemented during construction activity on the project site	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before and during construction
Hazards and Hazardo	us Materials	•		
HAZ-01	Asbestos Containing Material: Demolition of the existing structures shall be done by a licensed and certified asbestos abatement contractor. All workers shall be properly trained for asbestos removal work.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction
HAZ-02	Lead Containing Paint: Demolition of the existing structures shall be done following OSHA Lead in Construction Standard. The OSHA specified method of compliance includes respiratory protection, protective clothing and equipment, housekeeping, hygiene facilities, medical surveillance, and training, among other requirements.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction
HAZ-03	A Site Safety Plan will be prepared that will outline protocols that will be followed in the event of an unintended fire during construction. The plan will include, but not limited to maps and directions to local hospitals, evacuation routes, and methods to reduce the potential for fire at the site.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction

	Mitigation Measure	Implementing Procedure	Responsibility	Timing
Hydrology and Water Quality				
	A Notice of Intent and fees will be submitted to the Regional Water Quality Control Board's Stormwater Multiple Application and Reporting Tracking System for authorization under the Construction General Permit (Order 2009-0009-DWQ). The applicant shall prepare and implement a SWPPP prior to construction. The SWPPP shall address erosion and sediment controls, proper storage of fuels, identification of site-specific BMPs, and use and cleanup of hazardous materials. During construction a monitoring report shall be conducted weekly during dry conditions and three times a day during storms that produce more than 0.50 inch of precipitation.	Incorporate into Project design and construction documents	Contractor and City of Santa Rosa Planning and Economic Development Department	Before Construction
Tribal Cultural Resources			···	
	If a potentially significant tribal cultural resource is encountered, all ground disturbing activities shall halt until the archeologist or Tribal representative can assess the resource. The archeologist or Tribal representative shall be granted stop work authority and shall be provided sufficient time to evaluate the resource and make treatment recommendations. Should a significant tribal cultural resource be identified, the archeologist or Tribal representative shall prepare a resource mitigation plan and monitoring program to be carried out during all construction activities.		Contractor and City of Santa Rosa Planning and Economic Development Department	During Construction

RESOLUTION NO. 11975

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA MAKING FINDINGS AND DETERMINATIONS AND APPROVING A HILLSIDE DEVELOPMENT PERMIT FOR RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT), LOCATED AT 4224 SONOMA HIGHWAY; FILE NUMBER PRJ18-050

WHEREAS, an application was submitted requesting the approval of a Hillside Development Permit for Recess Self-Storage (a mixed-use development), to be located at 4224 Sonoma Highway, also identified as Sonoma County Assessor's Parcel No. 032-010-005; and

WHEREAS, the Planning Commission held a duly noticed public hearing on the application at which all those wishing to be heard were allowed to speak or present written comments and other materials; and

WHEREAS, the Planning Commission has considered the application, the staff reports, oral and written, the General Plan and zoning on the subject property, the testimony, written comments, and other materials presented at the public hearing; and

WHEREAS, the Planning Commission has considered the approved and adopted Mitigated Negative Declaration for this use and project; and

- Site planning minimizes the visual prominence of the hillside development by taking advantage of existing site features for screening including tree clusters, depressions in topography, setback hillside plateau arrears, and other natural features in that the eight-unit multi-family housing structure has been designed to step with the slope of the hillside. The landscape plans also provide trees in the area between the trail and housing structure that will provide a visual buffer once established; and
- Site development minimizes alteration of topography, drainage patterns, and vegetation on land with slopes of ten percent or more in that the project site is generally flat with a small area with a slope greater than ten percent and the project has been designed in compliance with the City's Standard Urban Stormwater Mitigation Plan (SUSMP) requirements; and
- Site development does not alter slopes of 25 percent or more except in compliance with Section 20-32.020.B (Applicability-Limitation on hillside development) in that there are no slopes that exceed 25 percent on the subject site; and
- Project grading respects natural features and visually blends with adjacent properties in that the eight-unit multi-family structure proposed on the southern property line, adjacent to the Santa Rosa Creek Trail, has been designed to step with the sloped topography and will plant replacement trees in compliance with City Code Chapter 17-24 to buffer the view of the residential structure from the creek trail once established; and

- Building pad location, design, and construction avoids large areas of flat pads and building forms will be stepped to conform to site topography in that the eight-unit multi-family housing structure has been designed to step with slope. All other structures on the property are located in areas that are generally flat; and
- The proposed project complies with the City's Design Guidelines in that the multifamily residential structure proposed on the sloped area of the project site has been designed specifically for hillsides as opposed to recontouring the hillside to accommodate a flat land building design; and
- The proposed project complies with the requirements of this Article and all other applicable provision of this Zoning Code;
- The proposed project is consistent the General Plan in that the site is located in an area designed as Retail and Business Services on the General Plan Land Use Diagram. The proposed zoning for the site is CG (General Commercial) which implements that land use designation. Housing is permitted in CG zoning district and, therefore, the proposed hillside development may be approved through the Hillside Development review process. Pursuant to General Plan Policy UD-A-11, the multi-family residential structure located in the sloped area of the site is designed to step with the slope of the property; and
- The establishment, maintenance, or operation of the use will not under the circumstances of the particular case be detrimental to the public health, safety, or general welfare in that the project site plan has been thoughtfully designed to place new multi-family housing structures adjacent to existing residential uses and overlooking the Santa Rosa Creek Trail, and commercial uses next to existing commercial uses. The project will also extend Streamside Drive to connect to Sonoma Highway improving area circulation; and
- The proposed Project has been found exempt from the provisions of the California Surface Mining and Reclamation Act of 1975 because all proposed excavation and earthmoving activities can be identified as a necessary and integral part of a construction project; and
- The Project has been found in compliance with the California Environmental Quality Act (CEQA). An Initial Study (IS) was prepared that resulted in a Mitigated Negative Declaration (MND). The draft MND was circulated for a 30-day public comment period commencing July 2, 2019.

This entitlement would not be granted but for the applicability and validity of each and every one of the below conditions and if any one or more of the below conditions is invalid, this entitlement would not have been granted without requiring other valid conditions for achieving the purposes and intent of such approval. The approval of the project is contingent upon compliance with all the conditions listed below. Use shall not commence until all conditions of approval have been complied with. Additional permits and fees are/may be required. It is the responsibility of the applicant to pursue and demonstrate compliance.

Resolution No.	
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1. Comply with all conditions pursuant to Planning Commission Resolution No. 11974.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission finds and determines this entitlement to use would not be granted but for the applicability and validity of each and every one of the above conditions and that if any one or more of the above said conditions are invalid, this entitlement to use would not have been granted without requiring other valid conditions for achieving the purposes and intent of such approval.

REGULARLY PASSED AND ADOPTED by the Planning Commission of the City of Santa Rosa on this 8th day of August 2019, by the following vote:

AYES:		
NOES:		
ABSTAIN:		
ABSENT:		
	APPROVED:	
	CHAIR	
ATTEST:	EXECUTIVE SECRETARY	

RESOLUTION NO. 11976

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ROSA MAKING FINDINGS AND DETERMINATIONS AND APPROVING A MINOR CONDITIONAL USE PERMIT FOR RECESS SELF-STORAGE (A MIXED-USE DEVELOPMENT) - LOCATED AT 4224 SONOMA HIGHWAY- FILE NUMBER PRJ18-050

WHEREAS, an application was submitted requesting the approval of a minor Conditional Use Permit for Recess Self-Storage (a mixed-use development) to operate Self-Storage facility and Multi-Family Residential uses, to be located at 4224 Sonoma Highway, also identified as Sonoma County Assessor's Parcel Number 032-010-005;

WHEREAS, the Planning Commission held a duly noticed public hearing on the application at which all those wishing to be heard were allowed to speak or present written comments and other materials; and

WHEREAS, the Planning Commission has considered the application, the staff reports, oral and written, the General Plan and zoning on the subject property, the testimony, written comments, and other materials presented at the public hearing; and

WHEREAS, the Planning Commission has considered the approved and adopted Mitigated Negative Declaration for this use and project; and

NOW, THEREFORE, BE IT RESOLVED, that after consideration of the reports, documents, testimony, and other materials presented, and pursuant to City Code Section 20-52.050 (Conditional Use Permit), the Planning Commission of the City of Santa Rosa finds and determines:

- A. The proposed self-storage and multi-family residential uses are allowed within the CG (General Commercial) zoning district and comply with all other applicable provisions of this Zoning Code and the City Code; and
- B. The proposed uses are consistent with the General Plan land use designation of Retail and Business Services. The CG (General Commercial) zoning district implements the Retail and Business Services land use designation and both a self-storage facility and multi-family housing are permitted through the approval of a minor Conditional Use Permit in the CG zoning district. The proposed uses are not within a specific plan area; and
- C. The design, location, size, and operating characteristics of the proposed activity would be compatible with the existing and future land uses in the vicinity. The subject site is surrounded by commercial and multi-family residential uses to the east, north and west, and by the Santa Rosa Creek and Santa Rosa Creek Trail to the south. The site plan has been thoughtfully designed placing residential uses adjacent to existing residential uses on the west side of the property and overlooking the Santa Rosa Creek Trail on the south side, and the new self-storage facility next to existing commercial uses to the east. The

Resolution No.	
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- site plan includes parking in compliance with Zoning Code Table 3-4 and the project will extend Streamside Drive to connect to Sonoma Highway, which will improve the area circulation; and
- The site is physically suitable for the type, density, and intensity of use being proposed, D. including access, utilities, and the absence of physical constraints in that the project plans have been reviewed by City staff and appropriately conditioned; and
- Granting the permit would not constitute a nuisance or be injurious or detrimental to the E. public interest, health, safety, convenience, or welfare, or materially injurious to persons, property, or improvements in the vicinity and zoning district in which the property is located in that the area is designated for commercial uses, the property is surrounded on to the north, east, and west by similar residential and commercial uses; the project plans have been reviewed by City staff and conditioned appropriately including, but not limited to, compliance with Americans with Disabilities Act and Fire and Building Codes, and
- The proposed project has been reviewed in compliance with the California F. Environmental Quality Act (CEQA). An Initial Study was prepared which resulted in a Mitigated Negative Declaration, which was circulated for a 30-day public comment period commencing July 2, 2019.

BE IT FURTHER RESOLVED, that this Conditional Use Permit is subject to all applicable provisions of the Zoning Code, including Section 20-54.100 (Permit Revocation or Modification).

BE IT FURTHER RESOLVED that a Conditional Use Permit for Recess Self-Storage (a mixed-use development) to operate a Self-Storage Facility and Multi-Family Residential uses, to be located at 4224 Sonoma Highway, is approved subject to each of the following conditions:

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

- 1. Compliance with Planning Commission Resolution No. 11974.
- 2. This Conditional Use Permit shall be valid for a two-year period. If construction has not begun or if an approved use has not commenced within two (2) years from date of approval, this approval shall automatically expire and shall be invalid unless an application for extension is filed prior to expiration.
- 3. If implemented within the initial approval period in accordance with all conditions of approval, this Conditional Use Permit shall be valid for the duration of use.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission finds and determines this entitlement to use would not be granted but for the applicability and validity of each and every one of the above conditions and that if any one or more of the above said conditions are invalid, this entitlement to use would not have been granted without requiring other valid conditions for achieving the purposes and intent of such approval.

Resolution No	
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REGULARLY PASSED AND ADOPTED by the Planning Commission of the City of Santa Rosa on the 8 th day of August 2019, by the following vote:
AYES:
NOES:
ABSTAIN:
ABSENT:
APPROVED:
CHAIR
ATTEST: EXECUTIVE SECRETARY