

**ANNOTATED
AGENDA
CITY OF ANTIOCH PLANNING COMMISSION
ANTIOCH COUNCIL CHAMBERS
THIRD & "H" STREETS**

WEDNESDAY, SEPTEMBER 21, 2016

6:30 P.M.

**NO PUBLIC HEARINGS WILL BEGIN AFTER 10:00 P.M.
UNLESS THERE IS A VOTE OF THE PLANNING COMMISSION
TO HEAR THE MATTER**

APPEAL

All items that can be appealed under 9-5.2509 of the Antioch Municipal Code must be appealed within five (5) working days of the date of the decision. The final appeal date of decisions made at this meeting is 5:00 p.m. on **WEDNESDAY, SEPTEMBER 28, 2016**.

If you wish to speak, either during "public comments" or during an agenda item, fill out a Speaker Request Form and place in the Speaker Card Tray. This will enable us to call upon you to speak. Each speaker is limited to not more than 3 minutes. During public hearings, each side is entitled to one "main presenter" who may have not more than 10 minutes. These time limits may be modified depending on the number of speakers, number of items on the agenda or circumstances. No one may speak more than once on an agenda item or during "public comments". Groups who are here regarding an item may identify themselves by raising their hands at the appropriate time to show support for one of their speakers.

ROLL CALL

6:30 P.M.

Commissioners	Motts, Chair
	Zacharatos, Vice Chair
	Parsons (absent)
	Mason
	Hinojosa
	Husary (absent)
	Conley

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

CONSENT CALENDAR

All matters listed under Consent Calendar are considered routine and are recommended for approval by the staff. There will be one motion approving the items listed. There will be no separate discussion of these items unless members of the Commission, staff or the public request specific items to be removed from the Consent Calendar for separate action.

1. APPROVAL OF MINUTES: None

* * * END OF CONSENT CALENDAR * * *

NEW PUBLIC HEARING

2. 371-RA-55 Snyder Lot Merger – Merger of four existing Assessor's Parcels into one parcel located at 326 Nash Avenue (APNs 065-102-005,019,032,033).

RESOLUTION NO. 2016-17

CONTINUED PUBLIC HEARING

STAFF REPORT

3. PD-16-02, UP-16-06, AR-16-03 – Vineyard Self-Storage – Reid Hamilton, Hamilton Solar, requests approval of a Mitigated Negative Declaration, a rezone to Planned Development District (PD), a Use Permit, and Design Review for the development and operation of a 1,390 square foot office building, 100,943 square foot of self-storage space, and approximately 70,600 square foot of outdoor boat and RV storage space on approximately 6.68 acres. The proposed project also includes off-site sewer improvements.

RESOLUTION NOS. 2016-18, -19, -20

NEW ITEM

STAFF REPORT

4. General Plan and Downtown Specific Plan Updates – Staff will provide an update on the status of the General Plan and Downtown Specific Plan processes and will solicit any additional information. No action will be taken.

DIRECTION GIVEN

ORAL COMMUNICATIONS

STAFF REPORT

WRITTEN COMMUNICATIONS

COMMITTEE REPORTS

ADJOURNMENT (8:47 pm)

Notice of Availability of Reports

This agenda is a summary of the discussion items and actions proposed to be taken by the

Planning Commission. For almost every agenda item, materials have been prepared by the City staff for the Planning Commission's consideration. These materials include staff reports which explain in detail the item before the Commission and the reason for the recommendation. The materials may also include resolutions or ordinances which are proposed to be adopted. Other materials, such as maps and diagrams, may also be included. All of these materials are available at the Community Development Department located on the 2nd floor of City Hall, 3rd and H Streets, Antioch, California, 94509, between the hours of 8:00 a.m. and 11:30 a.m. or by appointment only between 1:00 p.m. and 5:00 p.m. Monday through Friday for inspection and copying (for a fee). Copies are also made available at the Antioch Public Library for inspection. Questions on these materials may be directed to the staff member who prepared them, or to the Community Development Department, who will refer you to the appropriate person.

Notice of Opportunity to Address the Planning Commission

The public has the opportunity to address the Planning Commission on each agenda item. You may be requested to complete a yellow Speaker Request form. Comments regarding matters not on this Agenda may be addressed during the "Public Comment" section on the agenda.

Accessibility

The meetings are accessible to those with disabilities. Auxiliary aids will be made available for persons with hearing or vision disabilities upon request in advance at (925) 779-7009 or TDD (925) 779-7081.

**STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF SEPTEMBER 21, 2016**

Prepared by: Harold Jirousky, Associate Engineer

Reviewed by: Lynne Filson, Assistant City Engineer

Approved by: Ron Bernal, Assistant City manager/Public Works Director/
City Engineer

Subject: Merger of four contiguous parcels into one parcel. Located at 326 Nash Avenue APN 065-102-005, 019, 032, and 033(PW371-RA-55).

RECOMMENDATION

It is recommended that the Planning Commission take the following action:

1. Adopt the resolution approving the lot merger of four contiguous parcels into one parcel located at 326 Nash Avenue (PW 371-RA-55).

BACKGROUND

It is recommended that the Planning Commission approve the lot merger of four contiguous parcels into one parcel located at 326 Nash Avenue. Under the City Ordinance the Planning Commission is delegated authority to approve, conditionally approve or disprove the merger of contiguous parcels under common ownership. The owner of these parcels, Kathleen Snyder, has applied for the merger of these contiguous parcels as shown on Attachment "B".

ATTACHMENTS

A: Vicinity
B: Lot Merger Plat

**CITY OF ANTIOCH PLANNING COMMISSION
RESOLUTION NO. 2016-****

WHEREAS, the City of Antioch received a request from **Kathleen Snyder**, for a lot merger of four parcels located at 326 Nash Avenue; and

WHEREAS, the Planning Commission on September 21, 2016 duly held a public hearing, received and considered evidence, both oral and documentary; and

WHEREAS, the Planning Commission finds that the owner of the four contiguous parcels are in agreement to create one parcel; and

WHEREAS, the Planning Commission specifically finds that the merger will not result in a violation of the City of Antioch Municipal Code, and that the merger will be consistent with the purposes and intent of Title 9, Chapter 4 of said code and the Subdivision Map Act.

NOW THEREFORE BE IT RESOLVED that the Planning Commission hereby approves a merger of four contiguous parcels located at the 326 Nash Avenue (PW 371-RA-55), and does hereby direct the City Engineer to record a certificate evidencing said merger, subject to the following conditions:

STANDARD CONDITIONS

1. That the City of Antioch Municipal Code be complied with.
2. That the Merger is subject to the time lines established in the State of California Subdivision Map Act.
3. That City Staff inspect the site for compliance of conditions prior to final inspection approval.

PROJECT SPECIFIC CONDITIONS

4. That a certificate of merger be submitted to the City Engineer for review and approval.

5. * * * * * * * * *

I HEREBY CERTIFY that the foregoing resolution was passed and adopted by the Planning Commission of the City of Antioch at a regular meeting thereof, held on the 21nd day of September, 2016.

AYES:
NOES:
ABSTAIN:
ABSENT:

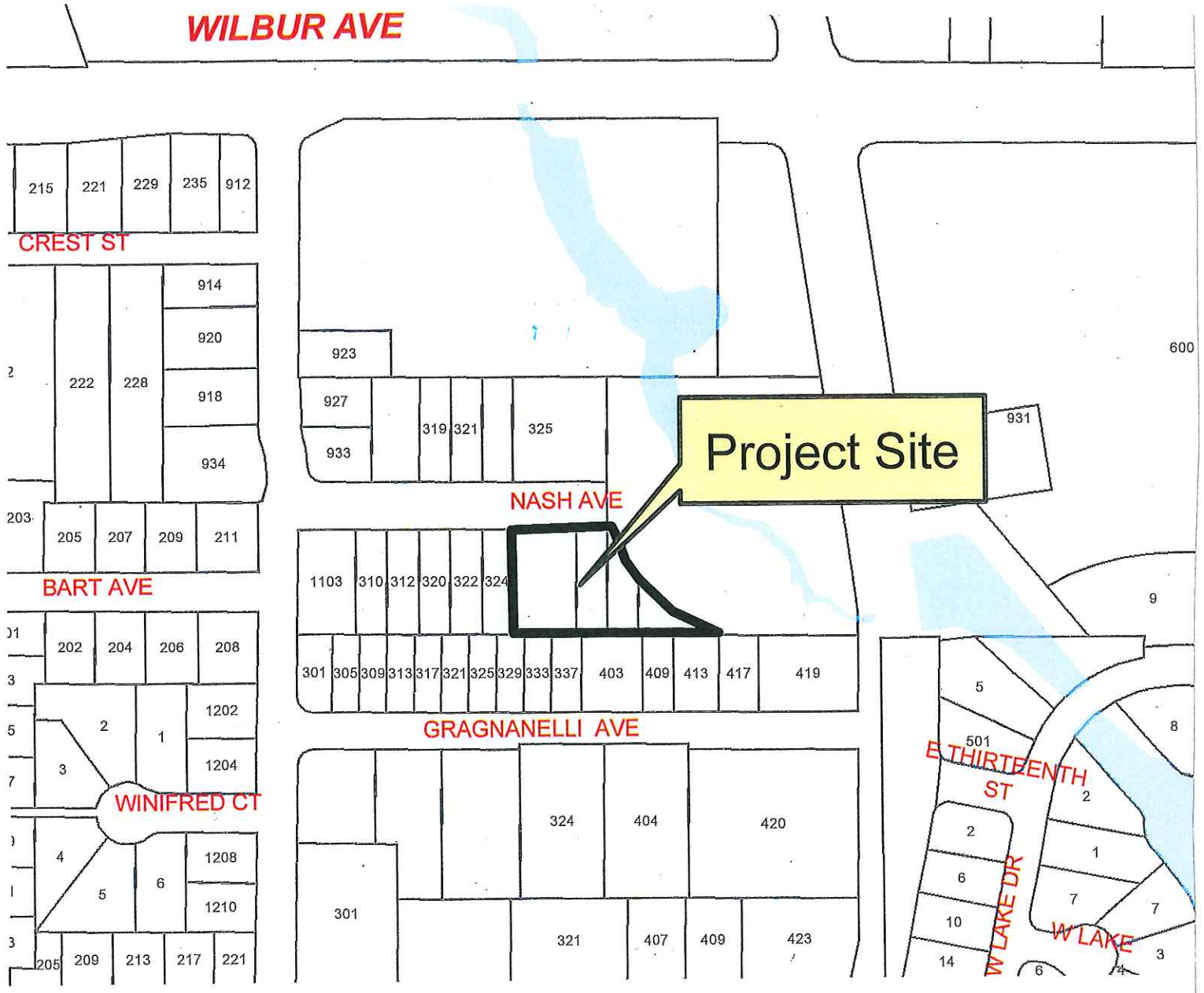
FORREST EBBS, SECRETARY TO
THE PLANNING COMMISSION

ATTACHMENT “A”

PUBLIC HEARING NOTICE

September 2, 2016

Page 3



VICINITY MAP

A1

ATTACHMENT “B”

RIVERVIEW TERRACE
M.B. B, PAGE 43

PREPARED FOR:
KATHLEEN SNYDER
P.O. BOX 3992
WALNUT CREEK, CA 94598
(916)316-2076



SCALE: 1"=60'

NASH AVENUE
(60' WIDE)

T.P.D.B.

N'LY LINE M.B. B, 43

N73°30'01"E (R)

40.00 40.00 40.00 40.00
RIVERVIEW TERRACE
M.B. B, PAGE 43

4	5	6	7
A.P.N. 065-102-015	A.P.N. 065-102-015	A.P.N. 065-102-013	A.P.N. 065-102-004
40.00	40.00	40.00	40.00

APN 065-102-005

OLD LOT LINE

OLD LOT LINE

APN 065-102-019

OLD LOT LINE

APN 065-102-033

OLD LOT LINE

OLD LOT LINE

OLD LOT LINE

OLD LOT LINE

OLD LOT LINE

OLD LOT LINE

NEW PARCEL "A"

R=200.00
L=194.95
Δ=55°50'52"

S17°39'09"W (R)

N'LY LINE OF 334 M 47
N89°27'53"E 363.50 (T)

SW CORNER
LOT 8

SUBDIVISION 7199
334 MAP 47

GRANGNELLI AVENUE

LEGEND:

- ① 6.0' EASEMENT FOR INGRESS & EGRESS
PER INSTR. NO. 2010-0194134, D.R.

BASIS OF BEARINGS

N89°27'53"E 382.50 (M-M)

CITY ENGINEER CERTIFICATE:

THE MERGER OR CONDITIONAL MERGER OF THE
PARCELS SHOWN ON THIS PLAT, WAS APPROVED
BY RESOLUTION NO. OF THE PLANNING
COMMISSION OF THE CITY OF ANTIOCH AT THEIR
REGULAR MEETING HELD ON 2016.



PLAT TO ACCOMPANY LEGAL DESCRIPTIONS
EXHIBIT "A"

PARCEL MERGER



110 'L' STREET
SUITE 3
ANTIOCH, CA 94509
(925) 757-9035

SCALE: 1"= 60'	FILE NAME: 647-PlatMap
DATE: JULY 2016	SHEET: 1 OF 1

**STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF SEPTEMBER 21, 2016**

Prepared by: Kevin Valente, Contract Planner

Reviewed by: Forrest Ebbs, Community Development Director

Date: September 21, 2016

Subject: PD-16-02, UP-16-06, AR-16-03, – Vineyard Self-Storage Facility

RECOMMENDATION

It is recommended that the Planning Commission take the following actions:

1. Approve the resolution recommending approval of the Vineyard Self-Storage Facility Initial Study / Mitigated Negative Declaration and Mitigation Monitoring and Report Program for the Project.
2. Approve the resolution recommending approval of an ordinance rezoning the project site from Planned Business Center (PBC) to Planned Development District (PD-16-02).
3. Approve the resolution recommending approval of a use permit (UP-16-06) and design review (AR-16-03), subject to conditions of approval.

REQUEST

The applicant, Steve Hamilton from Hamilton Solar, requests approval of an Initial Study / Mitigated Negative Declaration, a rezone to Planned Development District (PD), a Use Permit, and Design Review approval of a self-storage and boat and RV storage facility located directly northwest of the intersection of East 18th Street and Vineyard Drive (APNs 051-052-074, -075, -076, and -077) (Attachment D). Each request is described in detail below:

1. Mitigated Negative Declaration: The Planning Commission must recommend approval of the Initial Study/Mitigated Negative Declaration to City Council prior to taking action on the other resolutions for the project.
2. Rezoning to Planned Development District (PD-16-02): The proposed rezone would create a Planned Development District for a self-storage and boat and RV storage facility. The PD District will effectively become the Zoning Code for the project area.

3. Use permit (UP-16-06): The proposed use permit would be for the construction of a 1,390 square foot (sf) office building, 100,943 sf of self-storage space, and approximately 70,600 sf of outdoor boat and RV storage space. The Zoning Ordinance requires that a use permit be approved prior to the construction of any phase of an approved PD district.
4. Design review (AR-16-03): Design review of the project's architecture, design and landscaping.

BACKGROUND

The project site is located within the Eastern Waterfront Employment Focus Area of the City of Antioch General Plan. In 2001 the City of Antioch adopted the East Eighteenth Street Specific Plan and an associated Initial Study / Mitigated Negative Declaration to guide future development of the Eastern Waterfront Employment Focus Area.

The proposed property is comprised of four separate parcels. The parcels are titled in the same name(s), are in the same jurisdictional boundary (city limits), and are contiguous. The proposed project would require approval of a lot merger of four parcels into one from the City of Antioch Engineering Division. The site currently consists of undeveloped vacant land with ruderal vegetation. The site is split into multiple terraced levels that reflect previous agricultural uses of the site.

ENVIRONMENTAL

In accordance with CEQA, a Mitigated Negative Declaration was prepared and determined all significant environmental impacts would be mitigated to a less-than-significant level with incorporation of mitigation (see Attachment E).

Comment Letters

The Mitigated Negative Declaration was released for public review on August 19, 2016. Staff received two comment letters during the 20-day public review period.

Glen Wilson and Sam Reiter Comment Letter

The first comment letter received was from Glen Wilson and Sam Reiter, property owners of 1771 Vineyard Drive (see Attachment F). Glen and Sam expressed concerns with the sanitary sewer alignment which will be constructed as part of the proposed project and the affect of the adopted Deferred Improvement Agreement on the surrounding property owners. In addition, the comment letter expressed concerns with traffic and circulation, land use, and aesthetics.

The previously adopted Deferred Improvement Agreement includes all properties along Vineyard Drive and requires the construction of sanitary sewer line and the paving of Vineyard Drive. Therefore, staff has included COA D.1 to require the applicant to satisfy the terms of the Deferred Improvement Agreement entered into September 6,

1989 with the City of Antioch (Resolution No. 89/271, dated September 12, 1989), subject to review and approval by the City Engineer.

According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, trip rates for Mini Warehouses are 2.5 weekday trips per storage unit, and 0.02 for AM and PM peak hour trips per storage unit. Therefore, based on the ITE Manual, and as discussed on page 24 in the Air Quality section of the Mitigated Negative Declaration prepared for the proposed project, the project would be anticipated to generate a total of 287 Average Daily Trips (ADT), 23 AM peak hour trips, and 23 PM peak hour trips.

As discussed on page 49 in the Land Use and Planning section of the Mitigated Negative Declaration prepared for the proposed project, in 2001 the City of Antioch adopted the East Eighteenth Street Specific Plan to guide future development of the Eastern Waterfront Employment Focus Area, which designated the project site Office and Light Industry (O/LI). The East Eighteenth Street Specific Plan determined the uses allowed in O/LI are consistent with the Citywide Light Manufacturing Zoning District (M-1). Self-storage and RV/boat storage are conditionally permitted uses within the M-1 district of the Antioch Zoning Code. Therefore, the proposed project's uses would be conditionally permitted with approval of a use permit.

As described in more detail below, the project is subject to the Citywide Design Guidelines and the design of the proposed project was peer reviewed by an outside architect, SDG Architects, Inc. to review compliance with the Guidelines. With the implementation of COA L.1 and L.2, staff is in agreement with the peer review conducted by SDG Architects and has determined the project is consistent with the City of Antioch Design Guidelines related to self-storage facilities:

Karen Whitestone Comment Letter

The second comment letter received was from Karen Whitestone, a Conservation Analyst from the East Bay California Native Plant Society (see Attachment G). Karen Whitestone states "the proposed project was determined to be exempt from CEQA and having no value for endangered, rare, or threatened species". However, the proposed project was not determined to be exempt from CEQA and a Mitigated Negative Declaration was prepared.

According to the Biological Resources section of the Mitigated Negative Declaration, a *Biological Resources Assessment* (BRA) was prepared for the proposed project by Rincon Consultants that included a site survey and review of results from a California Natural Diversity Database (CNDDB) five-mile radius search of special-status species. As discussed on page 28 in the Biological Resources section of the Mitigated Negative Declaration, 45 special-status wildlife species are known to have occurred or have the potential to occur within the vicinity of the project site. However, special-status wildlife species were not detected during the BRA site survey or determined in the BRA to have a high likelihood of inhabiting the site due to the dominance of non-native grasses, the soil type of the site, the partially-disturbed status of the site, and the absence of water features and trees on the site. While the project site may not provide optimal habitat for

any of the 45 identified special-status species, the BRA determined that burrowing owl (*Athene cunicularia*) and nesting birds which include Swainson's Hawk (*Buteo swainsoni*) and all migratory birds protected under the Federal Migratory Bird Treaty Act (MBTA), have a moderate potential of occurring on the site.

Therefore, because of the moderate potential for special-status and federally-protected nesting birds to be found on-site, Mitigation Measures IV-1 and IV-2, requiring pre-construction surveys conducted by a qualified wildlife biologist, have been included. Implementation of Mitigation Measures IV-1 and IV-2 would reduce the impact to special-status and federally-protected nesting birds to a less-than-significant level.

ANALYSIS

Issue #1: Project Overview

The proposed project would include the construction and operation of a 1,390 sf office building, six structures totaling 100,943 sf of self-storage space, and approximately 70,600 sf of outdoor boat and RV storage space (see Attachment H). The square footage of each self-storage building is as follows:

- Building A – 36,522 sf;
- Building B – 17,300 sf;
- Building C – 5,363 sf;
- Building D – 9,788 sf;
- Building E – 12,902 sf; and
- Building F – 19,068 sf.

The office and main storage building (identified as “Building A”), which would be located adjacent to East 18th Street, would be two-stories tall and serviced by a freight elevator with an internal mast. Four of the self-storage facility buildings would be single-story structures, and one would be a split-level structure intended to maximize usable space on the existing terraced landscape that would be constructed on an existing slope. The number of self-storage units has not been finalized, but would be based on a final configuration and unit mix, not to exceed 999 units. The outdoor boat and RV storage would accommodate 95 to 100 parking stalls on the northern end of the property; however, a reconfiguration of the space based on the size and ratio of boats to RVs could result in a maximum of 150 boat and RV parking stalls.

The perimeter of the property would be enclosed by eight-foot tall fencing and access to the site would be through a private motorized gate on Vineyard Drive. Designated parking spaces would be provided outside the manager's office and main two-story storage building. Drive-up parking would be provided for the remaining five storage buildings. The proposed project would include a 30 kw solar photovoltaic array, consisting of 114 south-facing solar panels with a 2.4-degree tilt connected to one 24 kW inverter to be installed on the split-level storage building, designated as “Building B”.

Issue #2: Project Architecture

The project is subject to the Citywide Design Guidelines and the design of the proposed project was peer reviewed by an outside architect, SDG Architects, Inc. to review compliance with the Guidelines (see Attachment I).

Materials

SDG Architects reviewed the proposed building materials, which includes Metal Siding, Hardie Reveal Panel, Glazing, and Plaster, and determined the materials are generally appropriate for the proposed Self Storage Facility and generally conform to the City of Antioch Commercial Design Guidelines. The proposed Metal siding fits well within the context of the neighboring industrial buildings and the Hardie panel reveal product on areas of the building fits well within the overall vocabulary of the building elevation and provides a nice contrast with the metal siding and plaster finishes. The applicant's use of stucco on the elevations is minimal. And as such, provides a subtle sense of articulation and variety within the overall elevation style. This understated use of stucco serves to compliment the building and provide another level of interest.

Elevation Comments

Overall the elevation style and level of articulation are compatible with the Commercial Design Guidelines and will serve to enhance that area of the City. However, based on SDG Architects recommendation staff has included a condition of approval (COA L.1), which would require breaking up the long red horizontal element on the south elevation, second floor of Building A. COA L.1 is intended to provide a sense of visual interest and reduce the long horizontality of that portion of the elevation, which would be subject to the approval of the Community Development Director.

Colors

SDG Architects found the following colors and associated materials proposed for the project are generally appropriate and generally conform to the City of Antioch Design Guidelines Section 3.2.13:

- Ash Gray – Metal Siding
- Iron Gray – Hardie Reveal Panels
- Iceberg 9205 – Stucco
- Patriot Red – Roll up Doors
- Traditional Red – Hardie Panel Reveal Accent

Furthermore, SDG Architects determined that the color palate works well to provide a muted composition while providing a strong accent in key locations. The articulation and massing of the building provide shadows and break lines that further enhance the building.

Site Layout

SDG Architects found the siting of the main and secondary buildings to generally conform to section 3-2.13 of the Commercial Design Guidelines and work well with the overall design. The elevation along East 18th Street provides visual interest and uses articulation to break down the massing of an otherwise large building.

In addition, staff has included a condition of approval (COA L.2), which would require the west and north perimeter fencing to be located on the west and north property lines. COA L.2 is intended to restrict public access to the drainage easements on the west and north site boundary while providing private access for the property owner to maintain the easements.

Summary

Staff is in agreement with the peer review conducted by SDG Architects and has determined the project is consistent with the following City of Antioch Design Guidelines related to self-storage facilities:

- 3.2.13. Self-Service Storage Facilities (P. 3-48):
 - B.2: The unit doors shall be screened from the view of the public right-of-way through the use of landscaping material or architectural design features.
 - C.1: Buildings shall be stylistically consistent on all sides and well articulated.

As a result, staff is satisfied with the overall proposed design of the Vineyard Self-Storage Facility with the implementation of COAs L.1 and L.2.

Issue #3: Infrastructure and Off-Site Improvements

The developer is required to provide all infrastructure necessary to serve the site. This includes utility tie-ins such as water, streets, sanitary sewer and storm drainage systems.

The project would connect to the existing water and storm drain systems in the Vineyard Drive right-of-way. In addition, the proposed stormwater system would include a bio-retention facility on the eastern edge of the site that would filter and release the majority of all on-site runoff. Any additional stormwater would flow through existing stormwater lines located in Vineyard Drive.

The East Eighteenth Street Specific Plan requires the construction of a new sewer line within Vineyard Drive right-of-way, which would connect with the existing stubbed sewer line within the future Sakurai Street alignment. The City of Antioch Engineering Division provided an alternate alignment for the sewer line known as Alternate "A" (see Attachment J). The final sewer alignment for the proposed project has not yet been determined; therefore, both alignments are analyzed as a part of the proposed project. The East Eighteenth Street Specific Plan Initial Study / Mitigated Negative Declaration included the sewer line within the Vineyard Drive right-of-way; thus, the potential

environmental impacts that could occur from the construction of the Specific Plan sewer line alignment have been previously analyzed.

Issue #4: Zoning and Planned Development Standards

The subject property is located within the Eastern Waterfront Employment Focus Area of the General Plan. The project site is currently zoned Planned Business Center (PBC), which does not allow for self-storage usage. However, in 2001 the City of Antioch adopted the East Eighteenth Street Specific Plan to guide future development of the Eastern Waterfront Employment Focus Area, which designated the site Office and Light Industry (O/LI). The East Eighteenth Street Specific Plan determined the uses allowed in O/LI are consistent with the Citywide Light Manufacturing Zoning District (M-1). Self-storage and RV/boat storage are conditionally permitted uses within the M-1 district of the Antioch Zoning Code. Therefore, the proposed project's uses would be conditionally permitted with approval of a use permit.

In addition, consistent with the requirements of the East Eighteenth Street Specific Plan, the proposed project includes a request for a Planned Development (PD) Rezone. PD districts encourage the use of flexible development standards designed to appropriately integrate a project into its natural and/or man-made setting and the City of Antioch uses the PD process to implement the various Specific Plans adopted by the City. Furthermore, the Antioch Zoning Ordinance requires that a use permit be approved prior to the construction of any phase of an approved PD district.

The PD zone as proposed by the applicant would permit the following types of uses by right:

- Mini-storage
- Boat, RV – storage facility

The applicant's requested PD District standards and regulations are as follows:

Proposed PD-District Development Standards

Standard	Standard M-1 Zoning	Proposed PD Zoning
Minimum Lot Size	40,000 sq. ft.	20,000 s.f.
Minimum Lot Width	Interior lot: 100 feet Corner lot: 100 feet	Interior lot: 100 feet Corner lot: 100 feet
Minimum Front Yard Setbacks	30 feet	30 feet
Minimum Side Yard Setbacks	Interior: 0 feet Street Side: <ul style="list-style-type: none">• <u>Arterial street</u> - minimum 30 foot setback with 30 foot landscaping on all frontages.• <u>Collector street</u> - minimum 25 foot setback with 25 foot landscaping.• <u>Local street</u> - minimum 20 foot	Interior: 0 feet Street Side: <ul style="list-style-type: none">• <u>Arterial street</u> - minimum 30 foot setback with 30 foot landscaping on all frontages.• <u>Collector street</u> - minimum 25 foot setback with 25 foot landscaping.• <u>Local street</u> - minimum 20 foot

Standard	Standard M-1 Zoning	Proposed PD Zoning
	setback with 20 foot landscaping	setback with 20 foot landscaping
Minimum Rear Yard Setbacks	0 feet	0 feet
Maximum Building Height	45 feet	30 feet
Maximum Lot Coverage	50%	35%
Parking	By use, per requirements of Section 9-5.1703.1	11 spaces
Signs Maximum sign area	The maximum allowable sign area shall be as follows 1) Two square feet for each lineal foot of building frontage; and 2) Not to exceed 200 square feet.	The maximum allowable sign area shall be as follows 1) Two square feet for each lineal foot of building frontage; and 2) Not to exceed 200 square feet.
Signs permitted	The following signs shall be permitted: 1) Wall signs; 2) Ground signs; and 3) Symbols. An additional 25 square feet shall be permitted above the maximum allowable area when reviewed and approved by the Design Review Board.	The following signs shall be permitted: 1) Wall signs; 2) Ground signs; and 3) Symbols. An additional 25 square feet shall be permitted above the maximum allowable area when reviewed and approved by the Design Review Board.

ATTACHMENTS

- A: Resolution Recommending Approval of the Mitigated Negative Declaration for the Vineyard Self-Storage Project (Exhibit A – MMRP)
- B: Resolution Recommending Approval of the Ordinance to Rezone 6.68 Acres (APNs 051-052-074, -075, -076, And -077) Planned Business District (PBC) To Planned Development District (PD-16-02) (Exhibit A – Ordinance) (Exhibit B – Legal Description)
- C: Resolution Recommending Approval of a Use Permit (UP-16-06) and Design Review (AR-16-03) for Vineyard Self-Storage Project.
- D: Vicinity Map
- E: Vineyard Self-Storage Facility Project Initial Study / Mitigated Negative Declaration
- F: September 7, 2016 letter from Glen Wilson and Sam Reiter
- G: September 7, 2016 letter from Karen Whitestone
- H: Vineyard Self-Storage Facility Project Plans (dated April 20, 2016)
- I: Design Review – Peer Review Summary prepared by SDG Architects, Inc.
- J: Alternate “A” Sanitary Sewer Installation Plan and Profile

ATTACHMENT “A”

ATTACHMENT “A”

PLANNING COMMISSION RESOLUTION NO. 2016-**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH RECOMMENDING THAT THE CITY COUNCIL ADOPT THE MITIGATED NEGATIVE DECLARATION FOR THE VINEYARD SELF-STORAGE PROJECT AS ADEQUATE FOR ADDRESSING THE ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

WHEREAS, the City received an application from Reid Hamilton, Hamilton Solar, for approval of an Initial Study / Mitigated Negative Declaration, a rezone to Planned Development District, a Use Permit, and Design Review for the development and operation of a 1,390 square foot office building, 100,943 square foot of self-storage space, and approximately 70,600 square foot of outdoor boat and RV storage space on 6.68 acres (PD-16-02, UP-16-06, AR-16-03). The project site is located directly northwest of the intersection of East 18th Street and Vineyard Drive (APNs 051-052-074, -075, -076, and -077); and

WHEREAS, the City prepared an Initial Study and Mitigated Negative Declaration, to evaluate the potential environmental impacts of the Project in conformance with Section 15063 of Title 14 of the California Code of Regulations (the “CEQA Guidelines”); and

WHEREAS, a draft Initial Study and Mitigated Negative Declaration (“IS/MND”) was circulated for a 20-day review period, with the public review period commencing on August 18, 2016 and ending on September 21, 2016; and

WHEREAS, the Planning Commission has reviewed the IS/MND for this Project and the comments received during the comment period;

WHEREAS, the Planning Commission gave notice of public hearing as required by law;

WHEREAS, on September 21, 2016, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary and recommended adoption to the City Council of the Final IS/MND and Mitigation Monitoring and Reporting Program (MMRP); and

WHEREAS, the custodian of the Final IS/MND is the Community Development Department and the Final IS/MND is available for public review on the second floor of City Hall in the Community Development Department, Monday - Friday 8:00 am - 11:30 am and the MMRP is attached as Exhibit A to this Resolution.

NOW, THEREFORE, BE IT RESOLVED AND DETERMINED, as follows:

1. The foregoing recitals are true and correct.
2. The Planning Commission of the City of Antioch hereby FINDS, on the basis of the whole record before it (including the Initial Study and all comments received) that:
 - a. The City of Antioch exercised overall control and direction over the CEQA review for the Project, including the preparation of the Final Initial Study and Mitigated Negative Declaration, and independently reviewed the Final IS/MND and MMRP; and
 - b. There is no substantial evidence that the Project will have a significant effect on the environment once mitigation measures have been followed and assuming approval of the Zoning Ordinance amendment; and
 - c. The Final IS/MND and MMRP reflect the City's independent judgment and analysis.
3. The Planning Commission hereby RECOMMENDS that City Council of the City of Antioch APPROVE AND ADOPT the Initial Study / Mitigated Negative Declaration and Mitigation Monitoring and Report Program for the Project.

* * * * *

I HEREBY CERTIFY that the foregoing resolution was adopted by the Planning Commission of the City of Antioch at a regular meeting thereof held on the 21st day of September, 2016, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

FORREST EBBS

Secretary to the Planning Commission

ATTACHMENT “A”

EXHIBIT A

Vineyard Self-Storage Project Mitigation Monitoring and Reporting Program

September 2016

The California Environmental Quality Act (CEQA) and CEQA Guidelines require Lead Agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. The Mitigation Monitoring and Reporting Program (MMRP) ensures that mitigation measures imposed by the City are completed at the appropriate time in the development process.

The mitigation measures identified in the Initial Study/Mitigated Negative Declaration for the Vineyard Self-Storage Project are listed in the MMRP along with the party responsible for monitoring implementation of the mitigation measure, the milestones for implementation and monitoring, and a sign-off that the mitigation measure has been implemented.

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MITIGATION MONITORING AND REPORTING PROGRAM VINEYARD SELF-STORAGE PROJECT

Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off
<p><i>III-1. Prior to issuance of a grading permit, the project applicant shall show on the grading plans via notation that the contractor shall ensure that all diesel-powered equipment larger than 200 horsepower (i.e., rubber tired dozers, scrapers, and trenchers) and diesel-powered graders shall achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction as required by CARB. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.</i></p>	<p>Prior to issuance of a grading permit</p>	<p>City of Antioch Community Development Department</p>	
<p><i>IV-1. A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys of the permanent and temporary impact areas for burrowing owls and signs of burrowing owls and submit survey results to the City of Antioch Community Development Department for review. Surveys shall be conducted not fewer than 30 days prior to ground-disturbing activities (i.e. vegetation clearance, grading, tilling). The survey methodology shall be consistent with the methods outlined in the 2012 CDFW Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects seven to 20 meters apart, adjusting for vegetation height and density as needed, and noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. If owls or signs of owls are not observed, further mitigation is not required.</i></p> <p><i>If burrowing owls are detected on-site, ground-disturbing activities, such as vegetation clearance or grading, shall be prohibited within a buffer of no fewer than 100 meters (330 feet) from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs further than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer</i></p>	<p>Prior to any grading activities</p>	<p>California Department of Fishing and Wildlife</p> <p>City of Antioch Community Development Department</p>	

MITIGATION MONITORING AND REPORTING PROGRAM VINEYARD SELF-STORAGE PROJECT

Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off
<p>may be established in consultation with CDFW.</p> <p>If avoidance of active burrows is not feasible during the non-breeding season, then, before breeding behavior is exhibited and after the burrow is confirmed empty by site surveillance and/or scoping, a qualified biologist shall implement a passive relocation program in accordance with the CDFW 2012 Staff Report on Burrowing Owl.</p> <p>If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW's 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Burrowing Owl Exclusion and Mitigation Plan shall include all necessary measures to minimize impacts to burrowing owls during passive relocation, including all necessary monitoring of owls and burrows during passive relocation efforts. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of off-site Burrowing Owl Passive Relocation Compensatory Mitigation.</p>			
<p>IV-2. Prior to any ground disturbance related to covered activities that occurs during the nesting season (March 15 – September 15), a qualified biologist will conduct a preconstruction survey no more than one month prior to construction to establish whether nests of Swainson's hawk or birds covered by the California Fish and Game Code and the Migratory Bird Treaty Act are occupied within 1,000 feet of the project site. If potentially occupied nests within 1,000 feet are off the project site, then their occupancy will be determined by observation from public roads or by observations of applicable bird activity (e.g., foraging) near the project site. If nests are occupied, minimization measures and construction monitoring are required (see below). A written summary of the survey results shall be submitted to the City of Antioch Community Development Department.</p>	<p>Prior to any ground disturbance related to covered activities that occurs during the nesting season (March 15 – Sept 15), no more than one month prior to construction</p>	<p>California Department of Fish and Wildlife</p> <p>United States Fish and Wildlife Services</p> <p>City of Antioch Community Development Department</p>	

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MITIGATION MONITORING AND REPORTING PROGRAM VINEYARD SELF-STORAGE PROJECT

Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off
<p>During the nesting season (March 15 – September 15), covered activities within 1,000 feet of occupied Swainson's hawk nests or nests under construction will be prohibited to prevent nest abandonment. If active nests of migratory birds (nests with eggs or chicks) are located, the qualified biologist shall establish an appropriate avoidance buffer ranging from 50-feet to 300-feet depending on the species and based on the species biology and the current and anticipated disturbance levels occurring in vicinity of the nest. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, and limited activities) indicate that a smaller buffer could be used, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size.</p> <p>If young fledge prior to September 15, covered activities can proceed normally. If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the City of Antioch Planning Division for a waiver of this avoidance measure. Any waiver must also be approved by USFWS and CDFW. While the nest is occupied, activities outside the buffer can take place.</p>			
<p>IV-3. Prior to approval of a grading permit and subject to Community Development Department approval, the improvement/grading plans shall show the construction area for Alternate "A" sewer line alignment would not occur within the dripline of the existing mature indigenous tree.</p> <p>Or,</p> <p>If construction within the dripline of the existing mature indigenous tree cannot be avoided, then the applicant shall, in accordance with Section § 9-5.1205(F)(2) of the Antioch Municipal Code, obtain a bond for the protected tree prior to grading activities. On-going inspections by the City of Antioch shall occur during the course of the grading to assure adherence to approved plans. Should the tree die "during the course of property development" as defined by the Antioch Municipal Code,</p>	<p>Prior to approval of a grading permit</p>	<p>City of Antioch Community Development Department</p>	

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MITIGATION MONITORING AND REPORTING PROGRAM VINEYARD SELF-STORAGE PROJECT

Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off
<p>the bond shall be forfeited to the City and used for tree replacement. A percentage of the bond would be retained in either case to assure tree survival for up to five years after the issuance of a certificate of occupancy. Tree replacement to tree loss ratio shall be 2:1 with a 48-inch box and subject to City of Antioch Community Development Department approval.</p>			
<p>V-1. In the event of the accidental discovery or recognition of any human remains, further excavation or disturbance of the find or any nearby area reasonably suspected to overlie adjacent human remains shall not occur until compliance with the provisions of CEQA Guidelines Section 15064.5(e)(1) and (2) has occurred. The Guidelines specify that in the event of the discovery of human remains other than in a dedicated cemetery, no further excavation at the site or any nearby area suspected to contain human remains shall occur until the County Coroner has been notified to determine if an investigation into the cause of death is required. If the coroner determines that the remains are Native American, then, within 24 hours, the Coroner must notify the Native American Heritage Commission, which in turn will notify the most likely descendants who may recommend treatment of the remains and any grave goods. If the Native American Heritage Commission is unable to identify a most likely descendant or most likely descendant fails to make a recommendation within 24 hours after notification by the Native American Heritage Commission, or the landowner or his authorized agent rejects the recommendation by the most likely descendant and mediation by the Native American Heritage Commission fails to provide a measure acceptable to the landowner, then the landowner or his authorized representative shall rebury the human remains and grave goods with appropriate dignity at a location on the property not subject to further disturbances. Should human remains be encountered, a copy of the resulting County Coroner report noting any written consultation with the Native American Heritage Commission shall be submitted as proof of compliance to the City's Community Development Department.</p>	<p>During ground disturbance activities</p>	<p>City of Antioch Community Development Department</p> <p>Contra Costa County Coroner</p>	

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MITIGATION MONITORING AND REPORTING PROGRAM VINEYARD SELF-STORAGE PROJECT

Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off
V-2. If any prehistoric or historic artifacts, or other indications of cultural deposits, such as historic privy pits or trash deposits, are found once ground disturbing activities are underway, all work within the vicinity of the find(s) shall cease and the find(s) shall be immediately evaluated by a qualified archaeologist. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment to allow for implementation of avoidance measures or appropriate mitigation shall be made available (CEQA Guidelines Section 15064.5). Work may continue on other parts of the project site while historical or unique archaeological resource mitigation takes place (Public Resources Code Sections 21083 and 21087).	During ground disturbance activity	City of Antioch Community Development Department	
V-3. The applicant shall retain the services of a professional paleontologist to educate the construction crew that will be conducting grading and excavation at the project site. The education shall consist of an introduction to the geology of the project site and the kinds of fossils that may be encountered, as well as what to do in case of a discovery. Should any vertebrate fossils (e.g., teeth, bones), an unusually large or dense accumulation of intact invertebrates, or well-preserved plant material (e.g., leaves) be unearthed by the construction crew, then ground-disturbing activity shall be diverted to another part of the project site and the paleontologist shall be called on-site to assess the find and, if significant, recover the find in a timely matter. Finds determined significant by the paleontologist shall then be conserved and deposited with a recognized repository, such as the University Of California Museum Of Paleontology. The alternative mitigation would be to leave the significant finds in place, determine the extent of significant deposit, and avoid further disturbance of the significant deposit. Proof of the construction crew awareness training shall be submitted to the City's Community Development Department in the form of a copy of training materials and the completed training attendance roster.	Prior to any ground disturbance activities	City of Antioch Community Development Department	
VI-1. Prior to final project design, the project applicant shall submit, for the review and approval by the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project.	Prior to final project design	City of Antioch City Engineer	

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MITIGATION MONITORING AND REPORTING PROGRAM VINEYARD SELF-STORAGE PROJECT				
Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off	
<p>Measures shall include, but are not limited to, the following:</p> <p>Hydro-seeding:</p> <ul style="list-style-type: none"> • Placement of erosion control measures within drainage ways and ahead of drop inlets; • The temporary lining (during construction activities) of drop inlets with "filter fabric" (a specific type of geotextile fabric); • The placement of straw wattles along slope contours; • Directing subcontractors to a single designation "wash-out" location (as opposed to allowing them to wash-out in any location they desire); • The use of siltation fences; and <p>The use of sediment basins and dust palliatives.</p>				
<p>VIII-1. Prior to any ground disturbance activities, the applicant shall hire a qualified geotechnical engineer to identify the location of any domestic water wells. If wells are not identified within the site, further mitigation is not required. However, if wells are identified within the site, prior to any ground disturbance activities within 50 feet of any well, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Contra Costa Environmental Health Department, and properly abandon the on-site well, pursuant to review and approval by the City Engineer and the Contra Costa Environmental Health Department.</p>	Prior to any ground disturbance activities	City of Antioch City Engineer Contra Costa Environmental Health Department		
<p>VIII-2. Prior to any ground disturbance activities, the applicant shall hire a qualified geotechnical engineer to identify the location of any septic tanks. If septic tanks are not identified within the site, further mitigation is not required. However, if septic tanks are identified within the site, prior to any ground disturbance activities within 50 feet of a septic tank, the geotechnical engineer shall properly abandon the on-site septic systems, pursuant to review and approval by the City Engineer and the Contra Costa County Environmental Health Department.</p>	Prior to any ground disturbance activities	City of Antioch City Engineer Contra Costa County Environmental Health Department		
<p>XII-1 Noise-generating activities at the construction site shall be restricted to the hours specified in Section 5-17.04 of the City's Municipal Code, as follows: 7:00 AM to 6:00 PM, Monday through</p>	During construction activities	City of Antioch Building Division		

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MITIGATION MONITORING AND REPORTING PROGRAM VINEYARD SELF-STORAGE PROJECT				
	Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off
XII-2	<p>Friday, and 9:00 AM to 5:00 PM on weekends and holidays.</p> <p>Prior to the initiation of grading or construction activities, and subject to the review and approval of the City Engineer, the following notes shall be included on the improvement plans:</p> <ul style="list-style-type: none">• Equip all equipment driven by internal combustion engines with intake and exhaust mufflers that are in good condition and appropriate to the equipment. Unnecessary idling of internal combustion engines should be strictly prohibited;• Stationary noise-generating equipment, such as air compressors or portable power generators, must be located as far as is feasible from sensitive receptors; and• Utilize “quiet” air compressors and other stationary noise sources where technology exists.	Prior to the initiation of grading or construction activities	City of Antioch City Engineer	

ATTACHMENT “B”

ATTACHMENT “B”

CITY OF ANTIOCH PLANNING COMMISSION RESOLUTION NO. 2016-**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH RECOMMENDING APPROVAL OF AN ORDINANCE TO REZONE 6.68 ACRES (APNs 051-052-074, -075, -076, and -077) PLANNED BUSINESS DISTRICT (PBC) TO PLANNED DEVELOPMENT DISTRICT (PD-16-02)

WHEREAS, the City received an application from Reid Hamilton, Hamilton Solar, for approval of an Initial Study / Mitigated Negative Declaration, a rezone to Planned Development District, a Use Permit, and Design Review for the development and operation of a 1,390 square foot office building, 100,943 square foot of self-storage space, and approximately 70,600 square foot of outdoor boat and RV storage space on 6.68 acres (PD-16-02, UP-16-06, AR-16-03). The project site is located directly northwest of the intersection of East 18th Street and Vineyard Drive (APNs 051-052-074, -075, -076, and -077); and

WHEREAS, an Initial Study / Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program was prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15162, and considered by the Planning Commission on September 21, 2016; and,

WHEREAS, the Planning Commission recommended adoption of the Initial Study / Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program to the City Council; and,

WHEREAS, the Planning Commission duly gave notice of public hearing as required by law; and

WHEREAS, on September 21, 2016, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary; and,

WHEREAS, in consideration of the rezone, the granting of such rezone will not adversely affect the comprehensive General Plan.

NOW THEREFORE BE IT RESOLVED, that the Planning Commission makes the following findings required for approval of the proposed zone change:

1. That the public necessity requires the proposed zone change. The subject property is zoned Planned Business District (PBC). The proposed project is required to rezone the subject property to a Planned Development District and adopt development standards.
2. That the subject property is suitable to the use permitted in the proposed zone change. The subject property is relatively flat, undeveloped land adjacent to existing commercial development and is suitable for a self-storage facility.

3. That said permitted use is not detrimental to the surrounding property. The project is consistent with the adjacent commercial development to the west, east, and south and the project will construct infrastructure and improvements that will benefit surrounding properties.
4. That the proposed zone change is in conformance with the Antioch General Plan and East Eighteenth Street Specific Plan. The project conforms to the requirements of the East Eighteenth Street Specific Plan for Office / Light Industry (O/LI) development.

BE IT FURTHER RESOLVED that the Planning Commission does hereby recommend to the City Council APPROVAL of the draft Ordinance (Exhibit A) to rezone the 6.68-acre project site located directly northwest of the intersection of East 18th Street and Vineyard Drive (APNs 051-052-074, -075, -076, and -077).

* * * * *

I HEREBY CERTIFY that the foregoing recommendation was passed and adopted by the Planning Commission of the City of Antioch, at a regular meeting thereof, held on the 21st day of September, 2016 by following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

FORREST EBBS
Secretary to the Planning Commission

ATTACHMENT “B”

EXHIBIT A

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ANTIOCH TO REZONE TO PLANNED DEVELOPMENT DISTRICT (PD-16-02) FOR THE VINEYARD SELF-STORAGE PROJECT (APNs 051-052-074, -075, -076, and -077)

The City Council of the City of Antioch does ordain as follows:

SECTION 1:

The City Council determined on _____ that, pursuant to Section 15164 of the Guidelines of the California Environmental Quality Act, that the appropriate environmental document for the project is an Initial Study, Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

SECTION 2:

At its regular meeting of September 21, 2016, the Planning Commission recommended that the City Council adopt the Ordinance to rezone the subject property to Planned Development District (PD-16-02) for the Vineyard Self-Storage Project.

SECTION 3:

The real property described in Exhibit A, attached hereto, is hereby rezoned to Planned Development District (PD-16-02) for the Vineyard Self-Storage Project.

SECTION 4:

The development standards, as defined below, for the subject property (**APNs 051-052-074, -075, -076, and -077**), known as the Vineyard Self-Storage Project, are herein incorporated into this ordinance, and are binding upon said property.

Development Standards for the Proposed Vineyard Self-Storage Planned Development District (PD-16-02)

Standard	Standard M-1 Zoning	Proposed PD Zoning
Minimum Lot Size	40,000 sq. ft.	20,000 s.f.
Minimum Lot Width	Interior lot: 100 feet Corner lot: 100 feet	Interior lot: 100 feet Corner lot: 100 feet
Minimum Front Yard Setbacks	30 feet	30 feet
Minimum Side Yard Setbacks	Interior: 0 feet Street Side: <ul style="list-style-type: none">• <u>Arterial street</u> - minimum 30 foot setback with 30 foot landscaping on all frontages.	Interior: 0 feet Street Side: <ul style="list-style-type: none">• <u>Arterial street</u> - minimum 30 foot setback with 30 foot landscaping on all frontages.

Standard	Standard M-1 Zoning	Proposed PD Zoning
	<ul style="list-style-type: none"> • <u>Collector street</u> - minimum 25 foot setback with 25 foot landscaping. • <u>Local street</u> - minimum 20 foot setback with 20 foot landscaping 	<ul style="list-style-type: none"> • <u>Collector street</u> - minimum 25 foot setback with 25 foot landscaping. • <u>Local street</u> - minimum 20 foot setback with 20 foot landscaping
Minimum Rear Yard Setbacks	0 feet	0 feet
Maximum Building Height	45 feet	30 feet
Maximum Lot Coverage	50%	35%
Parking	By use, per requirements of Section 9-5.1703.1	11 spaces
Signs Maximum sign area	The maximum allowable sign area shall be as follows 3) Two square feet for each lineal foot of building frontage; and 4) Not to exceed 200 square feet.	The maximum allowable sign area shall be as follows 3) Two square feet for each lineal foot of building frontage; and 4) Not to exceed 200 square feet.
Signs permitted	The following signs shall be permitted: 4) Wall signs; 5) Ground signs; and 6) Symbols. An additional 25 square feet shall be permitted above the maximum allowable area when reviewed and approved by the Design Review Board.	The following signs shall be permitted: 4) Wall signs; 5) Ground signs; and 6) Symbols. An additional 25 square feet shall be permitted above the maximum allowable area when reviewed and approved by the Design Review Board.

SECTION 5:

The City Council finds that the public necessity requires the proposed zone change that the subject property is suitable to the use permitted in the proposed zone change that said permitted use is not detrimental to the surrounding property, and that the proposed zone change is in conformance with the Antioch General Plan.

SECTION 6:

This ordinance shall take effect and be enforced thirty (30) days from and after the date of its adoption and shall be published once within fifteen (15) days upon passage and adoption in a newspaper of general circulation printed and published in the City of Antioch.

* * * * *

I HEREBY CERTIFY that the foregoing ordinance was introduced and adopted at a regular meeting of the City Council of the City of Antioch, held on the ____ of _____ and passed and adopted at a regular meeting thereof, held on the ____ day of _____, by the following vote:

AYES:

NOES:

ABSENT:

Mayor of the City of Antioch

ATTEST:

City Clerk of the City of Antioch

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ATTACHMENT “B”

EXHIBIT B

PARCEL 1

LEGAL DESCRIPTION

The land referred to is situated in the County of Contra Costa, City of Antioch, State of California, and is described as follows:

Parcels A, B, C and D, Parcel Map MS 357-1-90, filed May 7, 1991, in Book 152 of Parcel Maps, Pages 24 and 25, Contra Costa County Records.

DRAFT



Bellecci & Associates, Inc.

Civil Engineering • Land Surveying

Boundary Closure

Parcel Name: BOUNDARY -PARCEL 1

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 6,000.7017'

East: 2,406.7440'

Segment# 1: Line

Course: N89° 48' 48"W

Length: 113.11'

North: 6,001.0702'

East: 2,293.6346'

Segment# 2: Curve

Length: 47.70'

Radius: 3,956.24'

Delta: 0°41'27"

Tangent: 23.85'

Chord: 47.70'

Course: N89° 28' 05"W

Course In: N0° 11' 12"E

Course Out: S0° 52' 39"W

RP North: 9,957.2892'

East: 2,306.5238'

End North: 6,001.5132'

East: 2,245.9353'

Segment# 3: Line

Course: N89° 07' 21"W

Length: 138.00'

North: 6,003.6266'

East: 2,107.9515'

Segment# 4: Line

Course: N1° 03' 37"E

Length: 737.10'

North: 6,740.6004'

East: 2,121.5910'

Segment# 5: Line

Course: N42° 58' 37"E

Length: 476.75'

North: 7,089.4041'

East: 2,446.5934'

Segment# 6: Line

Course: S1° 03' 37"W

Length: 1,069.25'

North: 6,020.3371'

East: 2,426.8077'



Bellecci & Associates, inc.

Civil Engineering • Land Surveying

Segment# 7: Curve

Length: 31.11'

Delta: $89^{\circ}07'35''$

Chord: 28.07'

Course In: $N88^{\circ}56'23''W$

RP North: 6,020.7072'

End North: 6,000.7073'

Radius: 20.00'

Tangent: 19.70'

Course: $S45^{\circ}37'24''W$

Course Out: $S0^{\circ}11'12''W$

East: 2,406.8111'

East: 2,406.7460'

Perimeter: 2,613.02'

Error Closure: 0.0060

Error North : 0.00565

Area: 6.68Acre

Course: $N19^{\circ}01'17''E$

East: 0.00195

Precision 1: 435,503.33



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Civil Engineering • Land Surveying

Parcel Closures

Parcel Name: PARCEL A

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 6,280.0053'

East: 2,113.0648'

Segment# 1: Line

Course: S88° 56' 23"E

Length: 318.49'

North: 6,274.1118'

East: 2,431.5002'

Segment# 2: Line

Course: S1° 03' 37"W

Length: 253.82'

North: 6,020.3353'

East: 2,426.8035'

Segment# 3: Curve

Length: 31.11'

Radius: 20.00'

Delta: 89°07'35"

Tangent: 19.70'

Chord: 28.07'

Course: S45° 37' 24"W

Course In: N88° 56' 23"W

Course Out: S0° 11' 12"W

RP North: 6,020.7054'

East: 2,406.8069'

End North: 6,000.7055'

East: 2,406.7417'

Segment# 4: Line

Course: N89° 48' 48"W

Length: 113.11'

North: 6,001.0740'

East: 2,293.6323'

Segment# 5: Curve

Length: 47.70'

Radius: 3,956.24'

Delta: 0°41'27"

Tangent: 23.85'

Chord: 47.70'

Course: N89° 28' 05"W

Course In: N0° 11' 12"E

Course Out: S0° 52' 39"W

RP North: 9,957.2930'

East: 2,306.5215'

End North: 6,001.5170'

East: 2,245.9330'

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Segment# 6: Line

Course: N89° 07' 21"W

North: 6,003.6304'

Length: 138.00'

East: 2,107.9492'

Segment# 7: Line

Course: N1° 03' 37"E

North: 6,280.0131'

Length: 276.43'

East: 2,113.0644'

Perimeter: 1,178.67'

Error Closure: 0.0078

Error North : 0.00780

Area: 2.01Acre

Course: N2° 52' 05"W

East: -0.00039

Precision 1: 151,110.26

Parcel Name: PARCEL B

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 6,274.1118'

East: 2,431.5026'

Segment# 1: Line

Course: N88° 56' 23"W

North: 6,280.0052'

Length: 318.49'

East: 2,113.0671'

Segment# 2: Line

Course: N1° 03' 37"E

North: 6,459.9744'

Length: 180.00'

East: 2,116.3979'

Segment# 3: Line

Course: S88° 56' 23"E

North: 6,454.0810'

Length: 318.49'

East: 2,434.8334'

Segment# 4: Line

Course: S1° 03' 37"W

North: 6,274.1118'

Length: 180.00'

East: 2,431.5026'

B11



Bellecci & Associates, inc.

Civil Engineering • Land Surveying

Perimeter: 996.98'

Error Closure: 0.0000

Error North : 0.00000

Area: 1.32Acre

Course: N90° 00' 00"W

East: 0.00000

Precision 1: 996,980,000.00

Parcel Name: PARCEL C

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 6,454.0763'

East: 2,434.8333'

Segment# 1: Line

Course: N88° 56' 23"W

North: 6,459.9697'

Length: 318.49'

East: 2,116.3978'

Segment# 2: Line

Course: N1° 03' 37"E

North: 6,689.9303'

Length: 230.00'

East: 2,120.6538'

Segment# 3: Line

Course: S88° 56' 23"E

North: 6,684.0369'

Length: 318.49'

East: 2,439.0893'

Segment# 4: Line

Course: S1° 03' 37"W

North: 6,454.0763'

Length: 230.00'

East: 2,434.8333'

Perimeter: 1,096.98'

Error Closure: 0.0000

Error North : 0.00000

Area: 1.68Acre

Course: N90° 00' 00"W

East: 0.00000

Precision 1: 1,096,980,000.00

B12



Bellecci & Associates, inc.

Civil Engineering • Land Surveying

Parcel Name: PARCEL D

Description:

Process segment order counterclockwise: False

Enable mapcheck across chord: False

North: 6,684.0369' East: 2,439.0893'

Segment# 1: Line

Course: N88° 56' 23"W Length: 318.49'

North: 6,689.9303' East: 2,120.6538'

Segment# 2: Line

Course: N1° 03' 37"E Length: 50.67'

North: 6,740.5916' East: 2,121.5914'

Segment# 3: Line

Course: N42° 58' 37"E Length: 476.75'

North: 7,089.3953' East: 2,446.5938'

Segment# 4: Line

Course: S1° 03' 37"W Length: 405.43'

North: 6,684.0347' East: 2,439.0916'

Perimeter: 1,251.35'

Area: 1.67Acre

Error Closure: 0.0032

Course: S47° 29' 34"E

Error North : -0.00214

East: 0.00234

Precision 1: 391,043.75

B13

ATTACHMENT “C”

ATTACHMENT “C”

PLANNING COMMISSION RESOLUTION NO. 2016-**

RESOLUTION OF THE CITY OF ANTIOCH PLANNING COMMISSION RECOMMENDING APPROVAL OF A USE PERMIT (UP-16-06) AND DESIGN REVIEW (AR-16-03) FOR VINEYARD SELF-STORAGE PROJECT

WHEREAS, the City received an application from Reid Hamilton, Hamilton Solar, for approval of an Initial Study / Mitigated Negative Declaration, a rezone to Planned Development District, a Use Permit, and Design Review for the development and operation of a 1,390 square foot office building, 100,943 square foot of self-storage space, and approximately 70,600 square foot of outdoor boat and RV storage space on 6.68 acres (PD-16-02, UP-16-06, AR-16-03). The project site is located directly northwest of the intersection of East 18th Street and Vineyard Drive (APNs 051-052-074, -075, -076, and -077); and

WHEREAS, an Initial Study / Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program was prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15162, and considered by the Planning Commission on September 21, 2016; and,

WHEREAS, the Planning Commission recommended adoption of the Initial Study / Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program to the City Council; and,

WHEREAS, on September 21, 2016, the Planning Commission recommended approval of a rezone to Planned Development District (PD-16-02) to the City Council; and,

WHEREAS, the Planning Commission duly gave notice of public hearing as required by law; and,

WHEREAS, on September 21, 2016, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary.

NOW THEREFORE BE IT RESOLVED, that the Planning Commission does hereby make the following findings for approval of a use permit:

1. The granting of such use permit will not be detrimental to the public health or welfare or injurious to the property or improvements in such zone or vicinity because the project has been designed to comply with the City of Antioch Municipal Code requirements.

2. The use applied at the location indicated is properly one for which a use permit is authorized because the City of Antioch Zoning Ordinance requires a use permit for all Planned Development District (PD) applications.
3. That the site for the proposed use is adequate in size and shape to accommodate such use, and all yards, fences, parking, loading, landscaping, and other features required, to other uses in the neighborhood. The site plan complies with the Planned Development standards established for the project's Planned Development District.
4. That the site abuts streets adequate in width and pavement type to carry the kind of traffic generated by the proposed use. The project site will construct street improvements, which are designed to meet City standards for adequate width and pavement.
5. That the granting of such use permit will not adversely affect the comprehensive General Plan or the East Eighteenth Street Specific Plan because the proposed uses and design are consistent with the East Eighteenth Street Specific Plan. The East Eighteenth Street Specific Plan designation for the project site is Office / Light Industry (O/LI), which conditionally allows for the type of use being developed by the project.
6. The Conditions of approval protect the public safety, health and general welfare of the users of the project and surrounding area. In addition, the conditions ensure the project is consistent with City standards.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Antioch does hereby recommend APPROVAL of a use permit (UP-16-06) and design review (AR-16-03) for the development and operation of a 1,390 square foot office building, 100,943 square foot of self-storage space, and approximately 70,600 square foot of outdoor boat and RV storage space on a 6.68-acre project site located directly northwest of the intersection of East 18th Street and Vineyard Drive (APNs 051-052-074, -075, -076, and -077) subject to the following conditions:

A. GENERAL CONDITIONS

1. That all proposed lots and improvements shall comply with the City of Antioch Municipal Code and City Standards or as approved by the City Engineer.
2. That the developer shall obtain an encroachment permit for all work to be done within the public rights-of-way or easements, and that peak commute-hour traffic shall not be impeded by construction related activity.

B. MAP CONDITIONS

1. That prior to issuance of a building permit the developer shall perform a lot merger of Parcels "A", "B", "C" and "D" (MS 1-90), abandon the 10'-wide sanitary sewer easement (OR 91-84131) on Parcel "C", and dedicate access rights along East 18th Street to the City. No future driveway access shall be allowed directly to the project site from East 18th Street.
2. That all required easements or rights-of-way for improvements shall be obtained by the developer at no cost to the City of Antioch. Advance permission shall be obtained from all pertinent property owners and easement holders, if applicable, for any work done within such property or easements.
3. That all existing easements shall be identified on the site plan and that all plans that encroach into existing easements shall be submitted to the easement holder for review and approval, and that advance written permission shall be obtained from any property or easement holders for any work done within such property or easements.
4. That the developer shall install and maintain lighting and landscaping within the project area at no cost to the City.
5. That the property owner agrees to participate in Streetlight and Landscape District 2A Zone 3 and to accept a level of annual assessments sufficient to maintain the public streetlights and landscaping adjacent to the project area at no cost to the City.

C. CONSTRUCTION CONDITIONS

1. The use of construction equipment shall be as outlined in the Antioch Municipal Code. Requests for alternative days/time may be submitted in writing to the City Engineer for consideration.
2. That use of construction equipment is restricted to weekdays between the hours 7:00 A.M. and 6:00 P.M., or as approved in writing by the City Manager.
3. That the project shall be in compliance with and supply all the necessary documentation for AMC 6-3.2: Construction and Demolition Debris Recycling.
4. That standard dust control methods and designs shall be used to stabilize the dust generated by construction activities. The developer shall post

dust control signage with a contact number of the developer, City staff, and the air quality control board.

5. That the site shall be kept clean of all debris (boxes, junk, garbage, etc.) at all times.

D. SITE AND PROJECT DESIGN

1. That the applicant shall satisfy the terms of the Deferred Improvement Agreement entered into September 6, 1989 with the City of Antioch (Resolution No. 89/271, dated September 12, 1989), including but not limited to dedication of street right-of-way (Vineyard Drive), participation in future sewer main assessment district, and frontage improvements including paving, sewer main, sewer manholes and sewer laterals within the existing right-of-way or sanitary sewer easement as approved by the City Engineer.
2. That the heritage oak tree located within the existing easement shall be protected during construction and that the sanitary sewer line shall be designed and constructed to avoid and preserve the tree, or that the tree shall be properly mitigated if removal is required.
3. That provision for mail delivery shall be reviewed and approved by staff prior to final approval. The developer shall install mail box facilities as required by the City Engineer.
4. That the parking spaces and drive aisle at the north end of the project (on Parcel "D") be relocated to not encroach on the 12'-wide drainage easement.
5. That perimeter fencing along the west and north sides of the project shall be relocated to the property line.
6. That all broken and damaged sidewalk, curb and gutter shall be repaired or replaced per City Standards and as approved by the City Engineer. Curb ramp at the northeast corner of Vineyard Drive and East 18th Street shall be replaced to the current ADA standards.
7. That all access driveways be constructed to ADA and City Standards, subject to review and approval by the City Engineer, and that existing driveway curb cuts not a part of this development shall be removed and replaced with City Standard sidewalk, curb and gutter.
8. That all parking lot dimensions and striping meets minimum City Standards and Municipal Code requirements.

9. That a lighting plan be submitted for staff review and approval prior to the issuance of any building permits for this project. Lighting shall not spill over onto adjacent properties.
10. That all buildings, parking and access shall meet ADA/Title 24 requirements as determined by the Chief Building Official.
11. That prior to the approval of the grading plan(s), the City Engineer shall determine if it is necessary to engage soils and structural engineers, as well as any other professionals, deemed necessary to review and verify the adequacy of the building plans submitted for this project. If deemed necessary by the City Engineer, this condition may include field inspections by such professionals to verify implementation of the plans. Costs for these services shall be borne by the developer.
12. That wall and fence locations and elevations shall be included on the grading plan.
13. That all public road right-of-way be located 10 feet behind the face-of-curb.
14. That red curb shall be repainted along East 18th Street.
15. That entry gates shall be located 40' from the property line in order to allow for vehicle storage, or as approved by the City Engineer.
16. That a truck-turning template shall be shown on the site plan confirming that trucks can successfully ingress, egress the site from Vineyard Drive, and safely maneuver through the site, as approved by the City Engineer.
17. That sight distance triangles shall be maintained per 9-5.1101, Site Obstructions at Intersections of the Antioch Municipal Code or as approved by the City Engineer.
18. That the developer or property owner shall maintain all undeveloped areas within this project in an attractive manner, which shall also ensure fire safety.

E. UTILITIES

1. That the developer shall install all infrastructure to serve the site. Infrastructure for access to the site (sewer, water, storm, joint trench, and surface improvements) shall be completed prior to issuance of building permits.

2. That all onsite utilities shall be privately maintained and connected to public facilities in accordance with City Standards, or as approved by the City Engineer.
3. That all existing and proposed public utilities (e.g. transformers) shall be placed underground (subsurface installation) in accordance with the Antioch Municipal Code, unless otherwise approved in writing by the City Engineer.
4. That reduced backflow prevention devices shall be installed on all City water meter services.
5. That reduced pressure backflows, water meters, and double detector check backflows shall be enclosed within an easement granted to the City at no cost to the City.
6. That a double detector check backflow shall be installed for fire lines to the buildings and that reduced pressure backflows shall be installed for domestic water and irrigation per the City's standards.
7. That underground utilities shall be designed to flow approximately parallel to the centerline of the street, or as approved by the City Engineer.
8. That all sewage shall flow by gravity to the intersecting street sewer main or as approved by the City Engineer.
9. That all proposed drainage facilities, including open ditches, shall be constructed of Portland Concrete Cement or as approved by the City Engineer.
10. That the developer shall comply with all conditions stipulated in Contra Costa County Flood Control District letter dated June 16, 2016, and submit hydrology and hydraulic analyses with a storm water control plan to the City for review and approval, and submit same to the Contra Costa County Flood Control District for review at no cost to the City if directed by the City Engineer.
11. That the developer shall provide adequate water pressure and volume to serve this development. This will include a minimum residual pressure of 20 psi with all losses included at the highest point of water service and a minimum static pressure of 50 psi or as approved by the City Engineer. See Fire Requirements G.3.c. for additional water flow conditions.
12. That the structures shall contain downspouts that direct water away from the foundations as approved by the City Engineer.

F. LANDSCAPING

1. That all landscaping (including C.3 basins) shall be approved by the Planning Commission and maintained and managed by the developer or property owner. Landscape improvements shall be installed prior to issuance of the certificate of occupancy.
2. That based on drought conditions, the City Engineer has the authority to delay some or all of the landscape Conditions of Approval.

G. FIRE REQUIREMENTS

1. That all weather access roads and a water supply shall be provided prior to commencing any combustible construction, as required by the Fire Chief.
2. That street and drive aisle widths shall be subject to approval by the Contra Costa County Fire Protection District and the City Engineer.
3. That the developer shall comply with the following conditions provided by the Contra Costa County Fire Protection District:
 - a. Access roadways of less than 28-feet unobstructed width shall have NO PARKING – FIRE LANE signs posted or curbs painted red with the words NO PARKING – FIRE LANE clearly marked, per 22500.1 CVC.
 - b. The cul-de-sacs or turnarounds shall have an outside turning radius of a minimum of a 45' or as approved by the City Engineer. Should the sidewalk be included in the turning radius, it shall be clear of street lights, fire hydrants and other obstructions.
 - c. The developer shall provide an adequate reliable water supply for fire protection with a minimum fire flow of 1750 GPM. Required flow shall be delivered from not more than one hydrant flowing simultaneously for the duration of 120 minutes while maintaining 20-pounds residual pressure in the main. (508.1), (B105) CFC
 - d. The developer shall provide hydrants of the East Bay type, which shall be maintained by the City. Approximate hydrant locations will be determined by the Fire District and approved by the City Engineer.

- e. Emergency apparatus access roadways and hydrants shall be installed, in service, and inspected by the Fire District prior to construction or combustible storage on site. (501.4) CFC. Gravel roads are not considered all-weather roadways for emergency apparatus access. The first lift of asphalt concrete paving shall be installed as the minimum sub base materials and capable of supporting the designated gross vehicle weight specified above.
- f. Premises identification shall be provided. Such numbers shall contrast with their background and be a minimum of four inches high with ½-inch stroke or larger as required to be readily visible from the street. (505.1) CFC, (501.2) CBC
- g. Plan review and inspection fees shall be submitted at the time of plan review submittal. Checks may be made payable to Contra Costa County Fire Protection District (CCCFPD).
- h. Submit plans to: Contra Costa County Fire Protection District, 2010 Geary Road, Pleasant Hill, CA 94523.

H. FEES

1. That the developer shall pay all City fees which have been established by the City Council and as required by the Antioch Municipal Code.
2. That the developer shall pay all pass-through fees. Fees include but are not limited to:
 - East Contra Costa Regional Fee and Financing Authority (ECCRFFA) Fee in effect at the time of building permit issuance.
 - Contra Costa County Fire Protection District Fire Development Fee in effect at the time of building permit issuance. (See G.3.g.)
 - Contra Costa County Flood Control District Fee.
 - School Impact Fees.
 - Delta Diablo Sewer Fees.
 - Contra Costa Water District Fees.

I. GRADING

1. That the grading operation shall take place at a time, and in a manner, so as not to allow erosion and sedimentation. The slopes shall be landscaped and reseeded as soon as possible after the grading operation ceases. Erosion measures shall be implemented during all construction phases in accordance with an approved erosion and sedimentation control plan.

2. That all lots and slopes shall drain to approved drainage facilities as approved by the City Engineer.
3. That any existing wells or septic systems on the property shall be properly abandoned under permit from the Contra Costa County Environmental Health Department.
4. That the grading for slopes shall be contoured to provide as natural an appearance as possible as required by the City Engineer.
5. That all grading shall be accomplished in a manner that precludes surface water drainage across any property line.
6. That all lots shall be graded to drain positively from the rear to the street or as approved by the City Engineer.
7. Asphalt paving shall have a minimum slope of 2%, concrete paving shall have a minimum slope of 0.75%, and asphalt paving for identified accessible parking stalls and access routes may have a minimum slope of 1.5% and a maximum 2% slope, or as approved by the City Engineer.
8. That swales adjacent to structures shall have a minimum of a one percent (1%) slope or as directed by the City Engineer.
9. That all off-site grading is subject to the coordination and approval of the affected property owners and the City Engineer. The developer shall submit written authorization to “access, enter, or grade” adjacent properties prior to performing any work.
10. That the grading plan for this development shall be approved by the City Engineer.
11. That all elevations shown on the improvement plans shall be on the USGS 1929 sea level datum or as approved by the City Engineer.
12. That retaining walls shall not be constructed in City right-of-way or other City maintained parcels unless approved by the City Engineer.
13. That all retaining walls shall be of masonry construction.
14. That all retaining walls shall be reduced in height to the maximum extent practicable and the walls shall meet the height requirements in the front yard setback and sight distance triangles as required by the City Engineer.

15. That the back-to-back or side-to-side grading transitions from lot to lot shall have a maximum slope of 2:1, and shall be accommodated entirely on the lower lot or as approved by the City Engineer.
16. That all property lines shall be located at the top of slope.

J. CONSERVATION/NPDES

1. That water conservation measures, including low volume toilets, and the use of drought tolerant landscaping, shall be used.
2. That the Project shall meet or exceed Tier 1 of the CALGreen Building Code.
3. That the project shall comply with all Federal, State, and City regulations for the National Pollution Discharge Elimination System (NPDES) (AMC§6-9). (Note: Per State Regulations, NPDES Requirements are those in affect at the time of the Final Discretionary Approval.) Under NPDES regulations, the project is subject to provision C.3: New development and redevelopment regulations for storm water treatment. Provision C.3 requires that the project include storm water treatment and source control measures, as well run-off flow controls, so that post-project runoff does not exceed estimated pre-project runoff. C.3 regulations require the submittal of a Storm Water Control Plan (SWCP) that demonstrates how compliance will be achieved. The SWCP shall be submitted simultaneously with the project plans. For the treatment and flow-controls identified in the approved SWCP, a separate Operation and Maintenance Plan (O&M) shall be submitted and approved before the Building Department will issue Certificate of Occupancy permits. Both the approved SWCP and O&M plans shall be included in the project CC&Rs. Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall execute any agreements identified in the Storm Water Control Plan that pertain to the transfer of ownership and/or long-term maintenance of storm water treatment or hydrograph modification BMPs. Already stated in COAs below, 5.c and 5.h.w.
4. That the following corrections shall be made to the Storm Water Control Plan prepared for the project, dated April 2016. A revised Storm Water Control Plan shall be submitted with the first lot merger and improvement plan submittal:
 - a. The site has Type A soils; however, the IMP sizing calculator was run for Type C soils. Re-run the calculator for Type A. Minimum sizing will increase which will affect the site plan. Resubmit revised plan.

- b. In addition to the hard copy, submit electronic copies of the SWCP and XML output file from the IMP sizing calculator.
 - c. An O&M plan needs to be submitted and approved before a certificate of occupancy will be granted.
 - d. A maintenance agreement needs to be recorded to the property.
- 5. That the following requirements of the federally mandated NPDES program (National Pollutant Discharge Elimination System) shall be complied with as appropriate, or as required by the City Engineer:
 - a. Prior to issuance of permits for building, site improvements, or landscaping, the developer shall submit a permit application consistent with the developer's approved Storm Water Control Plan, and include drawings and specifications necessary for construction of site design features, measures to limit directly connected impervious area, pervious pavements, self-retaining areas, treatment BMPs, permanent source control BMPs, and other features that control storm water flow and potential storm water pollutants.
 - b. The Storm Water Control Plan shall be certified by a registered civil engineer, and by a registered architect or landscape architect as applicable. Professionals certifying the Storm Water Control Plan shall be registered in the State of California and submit verification of training, on design of treatment measures for water quality, not more than three years prior to the signature date by an organization with storm water treatment measure design expertise (e.g., a university, American Society of Civil Engineers, American Society of Landscape Architects, American Public Works Association, or the California Water Environment Association), and verify understanding of groundwater protection principles applicable to the project site (see Provision C.3.i of Regional Water Quality Control Board Order R2 2003 0022).
 - c. Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall submit, for review and approval by the City, a final Storm Water BMP Operation and Maintenance Plan in accordance with City of Antioch guidelines. This O&M plan shall incorporate City comments on the draft O&M plan and any revisions resulting from changes made during construction. The O&M plan shall be incorporated into the CC&Rs for the Project.
 - d. Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall execute and record any agreements identified in the Storm Water Control Plan which pertain to the transfer

of ownership and/or long-term maintenance of storm water treatment or hydrograph modification BMPs.

- e. Prevent site drainage from draining across sidewalks and driveways in a concentrated manner.
- f. Collect and convey all storm water entering, and/or originating from, the site to an adequate downstream drainage facility without diversion of the watershed. Submit hydrologic and hydraulic calculations with the Improvement Plans to Engineering Services for review and approval.
- g. Prior to issuance of the grading permit, submit proof of filing of a Notice of Intent (NOI) by providing the unique Waste Discharge Identification Number (WDID#) issued from the Regional Water Quality Control Board.
- h. Submit a copy of the Storm Water Pollution Prevention Plan (SWPPP) for review to the Engineering Department prior to issuance of a building and/or grading permit. The general contractor and all subcontractors and suppliers of materials and equipment shall implement these BMP's. Construction site cleanup and control of construction debris shall also be addressed in this program. Failure to comply with the approved construction BMP may result in the issuance of correction notices, citations, or a project stop work order.
- i. Install appropriate clean water devices at all private storm drain locations immediately prior to entering the public storm drain system. Implement Best Management Practices (BMP's) at all times.
- j. Install "No Dumping, Drains to River" decal buttons on all catch basins.
- k. If sidewalks are pressure washed, debris shall be trapped and collected to prevent entry into the storm drain system. No cleaning agent may be discharged into the storm drain. If any cleaning agent or degreaser is used, wash water shall be collected and discharged to the sanitary sewer, subject to the approval of the sanitary sewer District.
- l. Include erosion control/storm water quality measures in the final grading plan that specifically address measures to prevent soil, dirt, and debris from entering the storm drain system. Such measures may include, but are not limited to, hydro seeding, gravel bags and siltation fences and are subject to review and approval of the City Engineer. If no grading plan is required, necessary erosion control/storm water quality measures shall be shown on the site plan submitted for an on-

site permit, subject to review and approval of the City Engineer. The developer shall be responsible for ensuring that all contractors and subcontractors are aware of and implement such measures.

- m. Sweep or vacuum the parking lot(s) a minimum of once a month and prevent the accumulation of litter and debris on the site. Corners and hard to reach areas shall be swept manually.
 - n. Ensure that the area surrounding the project such as the streets stay free and clear of construction debris such as silt, dirt, dust, and tracked mud coming in from or in any way related to project construction. Areas that are exposed for extended periods shall be watered regularly to reduce wind erosion. Paved areas and access roads shall be swept on a regular basis. All trucks shall be covered.
 - o. Clean all on-site storm drain facilities a minimum of twice a year, once immediately prior to October 15 and once in January. Additional cleaning may be required if found necessary by City Inspectors and/or City Engineer.
6. Than all impervious surfaces to be constructed as part of the project, including off-site roadways are subject to C.3 requirements per State Regulations.

K. FINAL IS/MND AND MITIGATION MONITORING AND REPORTING PROGRAM

- 1. The applicant shall comply with all mitigation measures identified in the Mitigation Monitoring and Reporting Program.

L. ARCHITECTURE AND DESIGN

- 1. Break up the long red horizontal element on the south elevation, second floor of Building A to provide a sense of visual interest and reduce the long horizontality of that portion of the elevation, subject to the approval of the Community Development Director.
- 2. West and north perimeter fencing shall be on property lines and provide access to maintain the drainage easements on the west and north site boundary.

* * * * *

I HEREBY CERTIFY that the foregoing recommendation was passed and adopted by the Planning Commission of the City of Antioch, at a regular meeting thereof, held on the 21st day of September, 2016 by following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

FORREST EBBS
Secretary to the Planning Commission

ATTACHMENT “D”

Attachment D
Project Vicinity Map



ATTACHMENT “E”

**CITY OF ANTIOCH
COMMUNITY DEVELOPMENT DEPARTMENT**



**Vineyard Self-Storage
INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION**

August 2016



1501 SPORTS DRIVE, SUITE A, • SACRAMENTO • CA • 95834
OFFICE 916.372.6100 • FAX 916.419.610

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- A. Air Quality and GHG Modeling Results
- B. Road Construction Emissions Modeling Results
- C. Alternate “A” Sanitary Sewer Installation Plan and Profile

INITIAL STUDY

August 2016

A. BACKGROUND

1. Project Title: Vineyard Self-Storage
2. Lead Agency Name and Address: City of Antioch
Community Development Department
P.O. Box 5007
Antioch, CA 94531
3. Contact Person and Phone Number: Alexis Morris
Senior Planner
(925) 779-7035
4. Project Location: Directly northwest of the intersection
of East 18th Street and Vineyard Drive
Assessor Parcel Numbers (APNs) 051-052-074, -075, -076, and -077
Antioch, CA
5. Project Sponsor's Name and Address: Larry Thom, General Manager
Hamilton Solar
85 Keystone Avenue, Suite E
Reno, Nevada 89503
(775) 813-6887
6. Existing General Plan Designation: Business Park (BP)
8. Existing Specific Plan Designation: East 18th Street Specific Plan
Office and Light Industry (O/LI)
9. Existing Zoning Designation: Planned Business Center (PBC)
10. Proposed Zoning Designation: Planned Development (PD)
11. Project Description Summary:

The proposed project would include the construction and operation of one 1,390-square-foot (sf) office building, six self-storage buildings totaling 100,943 sf, and approximately 70,600 sf of outdoor boat and RV storage on a 6.68-acre site located in the City of Antioch, CA. Access to the site would be provided from Vineyard Drive. The proposed project also includes off-site sewer improvements.

B. SOURCES

All the technical reports and modeling results used for the purposes of this analysis are available upon request at the City of Antioch Community Development Department, Planning Division located at Third & “H” Streets in Antioch, California, Monday through Friday between 8:00 – 11:30 am. The following documents are referenced information sources utilized by this analysis:

1. Bay Area Air Quality Management District. *Air Quality Plans*. Available at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/Plans.aspx>. Accessed July 2016.
2. Bay Area Air Quality Management District. *Air Quality Standards and Attainment Status*. Available at: <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status>. Accessed July 2016.
3. Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2010.
4. Bellecci & Associates. *Stormwater Control Plan for Vineyard Self Storage*. April, 2016.
5. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
6. California Department of Conservation. *Contra Costa County Important Farmland Map*. July, 2011.
7. California Department of Resources Recycling and Recovery (CalRecycle). *Solid Waste Information System*. www.calrecycle.ca.gov/SWFacilities/. Accessed July, 2016.
8. California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Accessed July, 2016.
9. Caltrans. *California Scenic Highway Mapping System*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed on July 26, 2016.
10. Caltrans. *Transportation and Construction Vibration Guidance Manual*. September 2013.
11. City of Antioch. *City of Antioch, California Code of Ordinances*. Current through September 22, 2015.
12. City of Antioch. *East 18th Street Specific Plan*. September 2001.
13. City of Antioch. *General Plan*. November 24, 2003.
14. City of Antioch. *General Plan Update EIR*. July 2003.
15. Contra Costa Transportation Authority. *2011 Contra Costa Congestion Management Program*. Adopted November 16, 2011.
16. Delta Diablo. *Proposed Tuscany Meadows Subdivision Letter Addressed to Nick Pappani, Vice President Raney Planning and Management*. October 3, 2013.
17. Institute of Transportation Engineers. *Trip Generation Handbook – 9th Edition*. September 2012.
18. Krazan & Associates. *Phase I Environmental Site Assessment*. September 2003.
19. *Personal Communication with Alexis Morris, Senior Planner, City of Antioch Community Development Department*. August 16, 2016.

20. Rincon Consultants, Inc. *East 18th Street and Vineyard Drive Project Biological Resources Assessment*. March, 2016.
21. Rincon Consultants, Inc. *East 18th Street and Vineyard Drive Project Phase I Cultural Resources Study*. March, 2016.
22. Sacramento Metropolitan Air Quality Management District. *Road Construction Emissions Model (Version 8.1.0)*. Updated May, 09, 2016.
23. United States Department of Agriculture. *Web Soil Survey*. Accessed July, 2016.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant Impact” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation & Circulation | <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

D. DETERMINATION

On the basis of this initial study:

- ☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Alexis Morris, Senior Planner
Printed Name

Date

City of Antioch
For

E. BACKGROUND AND INTRODUCTION

This Initial Study identifies and analyzes the potential environmental impacts of the Vineyard Self-Storage Project (proposed project). The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines. Where the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures are prescribed.

The mitigation measures prescribed for environmental effects described in this Initial Study will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the project through project conditions of approval. The City will adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with approval of the project.

The project site is located within the Eastern Waterfront Employment Focus Area of the City of Antioch General Plan. In 2001 the City of Antioch adopted the East 18th Street Specific Plan and an associated Initial Study/Mitigated Negative Declaration (IS/MND) to guide future development of the Eastern Waterfront Employment Focus Area.

An Environmental Impact Report (EIR) was prepared for the 2003 General Plan Update (GPU), which included the Eastern Waterfront Employment Focus Area as one of the 10 designated Focus Areas in the General Plan. The GPU EIR is a program EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 *et seq.*). The Antioch GPU EIR analyzed full implementation of the Antioch GPU and identified measures to mitigate the significant adverse impacts associated with the General Plan.

Per Section 15152 of the CEQA Guidelines, a project which is consistent with the General Plan and zoning of the City may tier from the analysis contained in the General Plan EIR, incorporating by reference the general discussions from the broader EIR. The proposed project would be consistent with the City Council-adopted 2001 East 18th Street Specific Plan and the Eastern Waterfront Employment Focus Area land use designations. Because the proposed project is consistent with the Antioch General Plan land use designations for the project site, this Initial Study will tier from the Antioch GPU EIR, where appropriate. Applicable mitigation measures identified in the GPU EIR will be required to be implemented as part of the project. In some cases, project-specific mitigation measures for potentially significant impacts that were not identified in the GPU EIR will also be required to be implemented as part of the proposed project.

F. PROJECT DESCRIPTION

The following sections will provide a detailed description of the location, setting, and components of the proposed project.

Project Location

The proposed project site is located at the northwest corner of the East 18th Street and Vineyard Drive intersection in the City of Antioch, Contra Costa County, California (see Figure 1). The 6.68-acre site includes APNs 051-052-074, -075, -076, and -077.

Project Setting and Surrounding Land Uses

The proposed project is surrounded by a storage facility to the west, a construction business to the south, a gymnastics studio to the east, and agricultural land to the north (see Figure 2). The site currently consists of undeveloped vacant land with ruderal vegetation. The site is split into multiple terraced levels that reflect previous agricultural uses of the site. Access to the site would be provided by Vineyard Drive.

Project Components

The proposed property is comprised of four separate parcels. The parcels are titled in the same name(s), are in the same jurisdictional boundary (city limits), and are contiguous. The proposed project would require approval of a lot merger of four parcels into one from the City of Antioch.

The proposed project would include the construction and operation of a 1,390 sf office building, six structures totaling 100,943 sf of self-storage space, and approximately 70,600 sf of outdoor boat and RV storage space (see Figure 3). The square footage of each self-storage building is as follows:

- Building A – 36,522 sf;
- Building B – 17,300 sf;
- Building C – 5,363 sf;
- Building D – 9,788 sf;
- Building E – 12,902 sf; and
- Building F – 19,068 sf.

The office and main storage building (identified as “Building A” in Figure 3), which would be located adjacent to East 18th Street, would be two-stories tall and serviced by a freight elevator with an internal mast. Four of the self-storage facility buildings would be single-story structures, and one would be a split-level structure intended to maximize usable space on the existing terraced landscape that would be constructed on an existing slope. The number of self-storage units has not been finalized, but would be based on a final configuration and unit mix, not to exceed 999 units. The outdoor boat and RV storage would accommodate 95 to 100 parking stalls on the northern end of the property; however, a reconfiguration of the space based on the size and ratio of boats to RVs could result in a maximum of 150 boat and RV parking stalls.

Figure 1
Regional Project Location

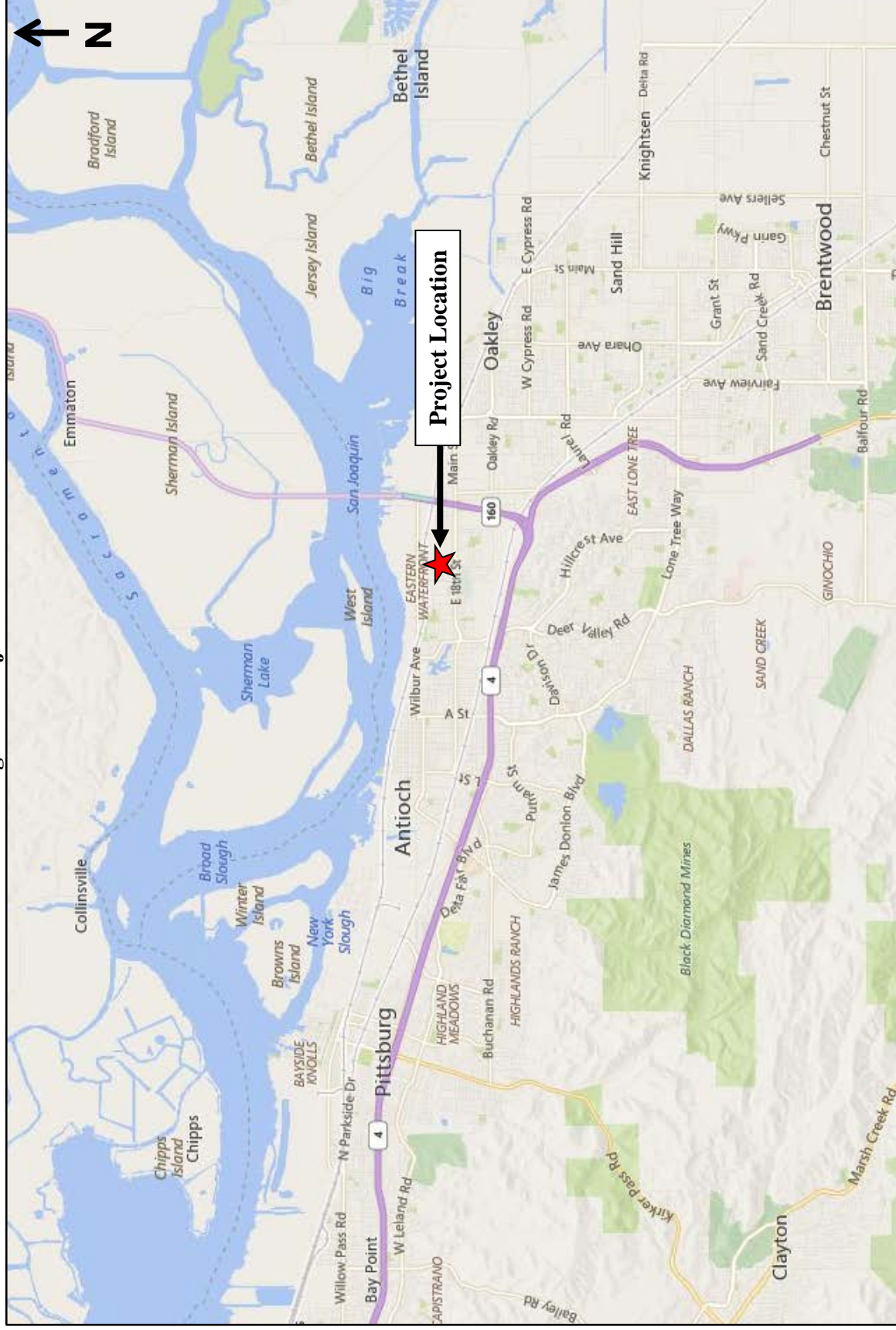
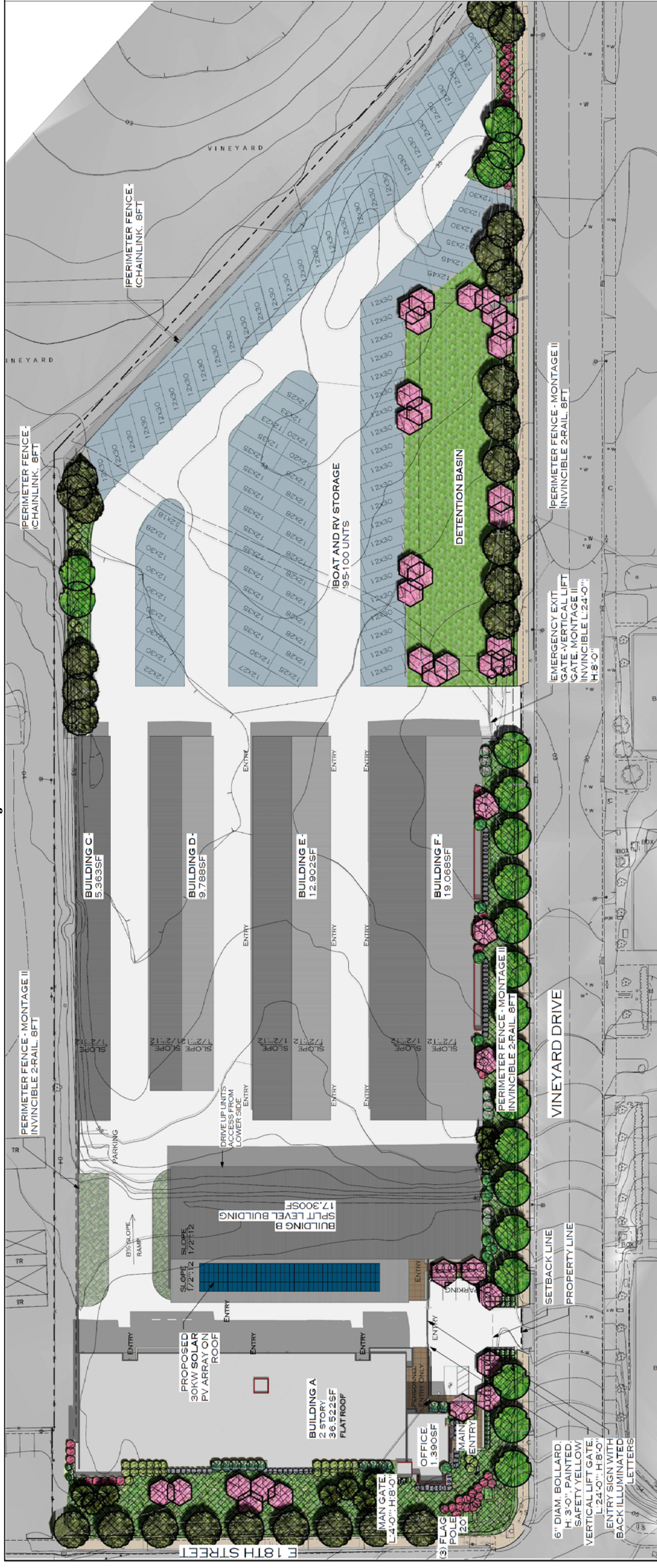


Figure 2
Project Vicinity Map



E10

Figure 3 Project Site Plan



The perimeter of the property would be enclosed by eight-foot tall fencing and access to the site would be through a private motorized gate. Designated parking spaces would be provided outside the manager's office and main two-story storage building. Drive-up parking would be provided for the remaining five storage buildings.

The proposed project would include a 30 kW solar photovoltaic array, consisting of 114 south-facing solar panels with a 2.4-degree tilt connected to one 24 kW inverter to be installed on the split-level storage building, designated as "Building B" in Figure 3. The proposed water line would connect to the existing water line in Vineyard Drive. In addition, the proposed stormwater system would include a bio-retention facility on the eastern edge of the site that would filter and release the majority of all on-site runoff. Any additional stormwater would flow through existing stormwater lines located in Vineyard Drive.

The East 18th Street Specific Plan requires the construction of a new sewer line within Vineyard Drive right-of-way, which would connect with the existing stubbed sewer line within the future Sakurai Street alignment (see Figure 4). The City of Antioch Engineering Division provided an alternate alignment for the sewer line known as Alternate "A" (see Appendix C). The final sewer alignment for the proposed project has not yet been determined; therefore, both alignments are discussed throughout this IS/MND. The East 18th Street Specific Plan IS/MND included the sewer line within the Vineyard Drive right-of-way; thus, the potential environmental impacts that could occur from the construction of the Specific Plan sewer line alignment have been previously analyzed. This IS/MND includes the applicable mitigation from the Specific Plan IS/MND and analyzes the potential environmental impacts that could occur from the Alternate "A" sewer line construction.

The project site is currently zoned Planned Business Center (PBC), which does not allow for self-storage usage. However, in 2001 the City of Antioch adopted the East 18th Street Specific Plan to guide future development of the Eastern Waterfront Employment Focus Area, which designated the site Office and Light Industry (O/LI). The East 18th Street Specific Plan determined the uses allowed in O/LI are consistent with the Citywide Light Manufacturing Zoning District (M-1). Self-storage and RV/boat storage are conditionally permitted uses within the M-1 district of the Antioch Zoning Code.¹ Therefore, the proposed project's uses would be conditionally permitted with approval of a Conditional Use Permit (CUP).²

Additionally, consistent with the requirements of the East 18th Street Specific Plan, the proposed project includes a request for a Planned Development (PD) Rezone. PD districts encourage the use of flexible development standards designed to appropriately integrate a project into its natural and/or man-made setting and the City of Antioch uses the PD process to implement the various Specific Plans adopted by the City.

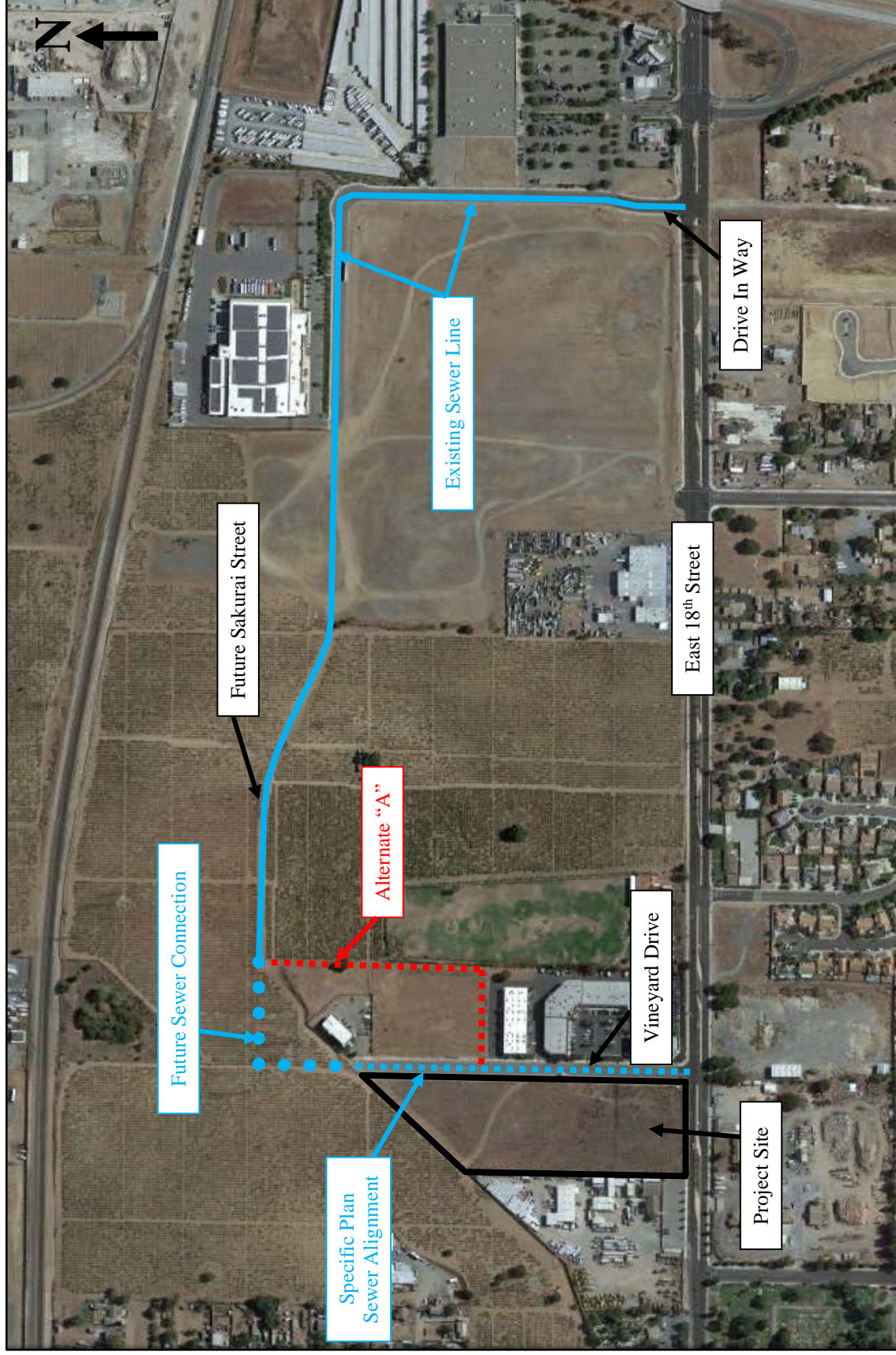
The discretionary entitlements, for the proposed project include the following:

- Rezone from Planned Business Center (PBC) to Planned Development District (PD);

¹ City of Antioch. *East 18th Street Specific Plan* [pg. 19]. September 2001.

² City of Antioch. *City of Antioch, California Code of Ordinances Table of Land Use Regulations* § 9-5.3803. Current through September 22, 2015.

Figure 4
Off-Site Sewer Line Alternatives



E13

- Conditional Use Permit to allow self-storage and RV/boat storage uses;
- Design Review; and
- Lot Merger.

G. ENVIRONMENTAL CHECKLIST

The following Checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended, as appropriate, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I. AESTHETICS. <i>Would the project:</i>		Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

- a,b. The GPU EIR determined views of Mt. Diablo, the ridgelines south of State Route (SR) 4, and the San Joaquin River as scenic vistas within the City of Antioch. Views of the City's three scenic vistas are either blocked by existing developments or are located too far away to be seen from the site. Furthermore, according to the California Scenic Highway Mapping System, the nearest State Scenic Highway, Interstate 680 (I-680), is located approximately 17 miles southwest of the site, and SR 160 is an Eligible State Scenic Highway – Not Officially Designated, which is located approximately 0.75 mile east of the project site.³ Both I-680 and SR 160 do not have views of the project site. Therefore, the project site is not located within the vicinity of any scenic vistas, as described by the GPU EIR, or a State Scenic Highway. As a result, construction of the proposed project including the off-site sewer improvement would not have an adverse effect on any scenic vista and impacts related to such would be *less than significant*.
- c. The project site is currently vacant with ruderal vegetation and is surrounded by existing commercial development. Construction of the proposed project would change the site's existing visual character from ruderal vegetation to 102,333 sf of office, self-storage, and RV/boat storage facilities. Construction of such would be consistent with surrounding land uses and would improve the existing visual character of the site by developing vacant land that is dominated by ruderal vegetation. According to Section 9-5.2607 of the Antioch Municipal Code, the project is subject to Design Review by the City of Antioch. The purpose of the Design Review process is to promote the orderly development of the City, encourage high quality site design and planning, protect the stability of land values and investments, and ensure consistency with the Citywide Design Guidelines.

The Alternate "A" alignment for the sewer improvement consists of disturbed ruderal lands within an existing 10-foot easement; however, an existing mature indigenous tree, as

³ California Department of Transportation. *California Scenic Highway Mapping System*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed on July 26, 2016.

defined by the Antioch Municipal Code, is located adjacent to the easement. If the Alternate “A” sewer line alignment is chosen for the off-site sewer improvements, the applicant shall, in accordance with Section § 9-5.1205(F)(2) of the Antioch Municipal Code, obtain a bond for the protected prior to grading activities, as discussed in further detail in Section IV of this IS/MND.

Because the proposed project would be consistent with surrounding uses and be subject to the City of Antioch’s Municipal Code and Design Review process, impacts related to degrading the existing visual character of the site and its surroundings would be *less-than-significant*.

- d. The project site is surrounded on three sides by existing commercial developments that generate light and glare. The property to the north of the site is used for agricultural purposes and, therefore, is not sensitive to, or a producer of, light and glare. The nearest sensitive receptors to light and glare would be the existing residences located approximately 500 feet to the northwest of the site.

The project site is currently vacant and does not produce light or glare. While construction and operation of the proposed project would generate both light and glare on-site, all components of the proposed project would be subject to Design Review by the City of Antioch that would ensure light and glare do not obstruct day or nighttime views in the area. Due to the consistency of the proposed project with surrounding commercial development, the site’s approximate distance of 500 feet from the nearest sensitive receptor, and the added assurance of the Design Review process, implementation of the project including the off-site sewer improvement would result in a *less-than-significant* impact with respect to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

II. AGRICULTURE AND FOREST RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
e. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

- a, e. The proposed project site consists of ruderal vegetation and is surrounded by existing commercial development. While the project site was historically used for agricultural purposes, the site has not been in agricultural production since at least 1989⁴ and is currently designated as “Urban and Built-Up Land” on the Contra Costa County Important Farmland map.⁵ Furthermore, the site is not zoned or designated in the GPU Eastern Waterfront Employment Focus Area or East 18th Street Specific Plan for agriculture uses. The off-site sewer improvements would be located within an existing 10-foot sewer easement. As such, development of the proposed project, including the off-site sewer improvement, would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. Therefore, the proposed project’s impact related to such would be *less than significant*.
- b. The project area is not under any Williamson Act contract and the area is not designated or zoned for agricultural uses. In addition, the project area is surrounded by commercial development. Because buildout of the proposed project, including the off-site sewer improvement, would not conflict with existing zoning for agricultural use or a Williamson Act contract, *no impact* would occur.

⁴ Krazan & Associates. *Phase I Environmental Site Assessment*. September 2003.

⁵ California Department of Conservation. *Contra Costa County Important Farmland Map*. July, 2011.

- c, d. The project area is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project, including the off-site sewer improvement, would have ***no impact*** with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

III. AIR QUALITY.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

- a-c. The City of Antioch is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB area is currently designated as a nonattainment area for the State and federal ozone, State and federal fine particulate matter 2.5 microns in diameter (PM_{2.5}), and State respirable particulate matter 10 microns in diameter (PM₁₀) ambient air quality standards (AAQS). The SFBAAB is designated attainment or unclassified for all other AAQS. It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (USEPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM_{2.5} federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM_{2.5} AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).

The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the USEPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2010 Clean Air Plan (CAP), adopted on September 15, 2010. The 2010 CAP was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM₁₀ standard is not required, the BAAQMD has prioritized measures to reduce PM in

developing the control strategy for the 2010 CAP. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures (TCMs) to be implemented in the region to attain the State and federal standards within the SFBAAB. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. The BAAQMD's established significance thresholds associated with development projects for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM₁₀, and PM_{2.5}, expressed in pounds per day (lbs/day) and tons per year (tons/yr), are listed in Table 1. Thus, by exceeding the BAAQMD's mass emission thresholds for operational emissions of ROG, NO_x, or PM₁₀, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

Table 1			
BAAQMD Thresholds of Significance			
Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust)	82	82	15
PM _{2.5} (exhaust)	54	54	10
<i>Source: BAAQMD, CEQA Guidelines, May 2010.</i>			

It should be noted that a series of recent court cases have called into question the BAAQMD resolutions adopting and revising their 2010 significance thresholds, asserting that the adoption of such would be considered a project under CEQA, necessitating environmental review. None of the courts have indicated whether the thresholds were valid on their merits or that the thresholds lack evidentiary support. Nonetheless, BAAQMD has withdrawn their revised quantitative significance thresholds for the time being. However, because the BAAQMD's thresholds of significance are supported by substantial evidence and remain the best available option, the City, as lead agency, has chosen to use the BAAQMD's thresholds of significance for evaluation of the proposed project.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2013.2.2 - a Statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, trip generation rates based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, vehicle mix, trip length, average speed, etc. Where project-specific information is available, such information should be applied in the model. As such, the proposed project's modeling assumed the following:

- Construction would commence in February 2017 and be completed by September 2017;
- An average daily trip rate of 2.5 trips per 1,000 sf of storage space was assumed in accordance with the Institute of Transportation Engineers Trip Generation Manual;
- Compliance with the current California Building Energy Efficiency Standards Code;
- The proposed project would include a 30 kW roof mounted solar photovoltaic system, which is anticipated to be capable of providing 100 percent of the proposed project's electricity demand;
- A total of 6.3 acres would be disturbed during grading;
- The boat and recreational vehicle storage area would be gravel; and
- The project site is located 0.1-mile away from the East 18th Street and Wilson Street bus stop.

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is provided below as well. All CalEEMod results are included in Appendix A.

The BAAQMD recommends the use of the Roadway Construction Emissions Model (RoadMod), prepared by the Sacramento Metropolitan Air Quality Management District (SMAQMD), for proposed linear projects such as roadway construction, or pipeline installation. Following BAAQMD's recommendation the RoadMod was used to estimate the additional construction emissions that would occur due to the off-site sewer improvements. To provide a conservative analysis, the area of site disturbance was assumed to occur across a five-foot-wide and 1,749-foot-long area. The off-site improvement was assumed to require the use of two tractor/loader/backhoes and one trencher. The results of the RoadMod are included in Appendix B.

Construction Emissions

According to the CalEEMod and RoadMod results, the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 2. As shown in the table, the proposed project's construction emissions would be below the applicable thresholds of significance for ROG, PM₁₀ (exhaust and fugitive), and PM_{2.5} (exhaust and fugitive). However, the proposed project would exceed the threshold of significance for NO_x emissions.

Table 2 Maximum Unmitigated Construction Emissions (lbs/day)			
Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	24.45	54	NO
NO _x	62.77	54	YES
PM ₁₀ (exhaust)	3.22	82	NO
PM ₁₀ (fugitive)	18.24	None	N/A
PM _{2.5} (exhaust)	2.96	54	NO
PM _{2.5} (fugitive)	10.81	None	N/A
<i>Source: CalEEMod, July 2016 (see Appendix A). RoadMod, August 2016</i>			

Although thresholds of significance for mass emissions of fugitive dust PM₁₀ and PM_{2.5} have not been identified by the City or BAAQMD, the proposed project's estimated fugitive dust emissions have been included for informational purposes. All projects under the jurisdiction of the BAAQMD are required to implement all of the BAAQMD's Basic Construction Mitigation Measures, which include the following:

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 visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The contact person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The proposed project's required implementation of the BAAQMD's Basic Construction Mitigation Measures listed above, to the extent that the measures are feasible for the proposed project's construction activities, would help to further minimize any construction-related emissions.

Because the proposed project would be above the applicable threshold of significance for construction emissions of NO_x, the proposed project would be considered to result in a significant air quality impact during construction.

Operational Emissions

According to the CalEEMod results, the proposed project would result in maximum operational criteria air pollutant emissions as shown in Table 3. As shown in the table, the proposed project's operational emissions would be below the applicable operational thresholds of significance. Therefore, the proposed project would not be considered to result in a significant air quality impact during operations.

Table 3					
Unmitigated Maximum Operational Emissions					
Pollutant	Proposed Project Emissions		Threshold of Significance		Exceeds Threshold?
	lbs/day	tons/yr	lbs/day	tons/yr	
ROG	5.25	0.95	54	10	NO
NO _x	2.13	0.37	54	10	NO
PM ₁₀ (exhaust)	0.031	0.0056	82	15	NO
PM ₁₀ (fugitive)	1.25	0.22	None	None	N/A
PM _{2.5} (exhaust)	0.03	0.0053	54	10	NO
PM _{2.5} (fugitive)	0.33	0.059	None	None	N/A
<i>Source: CalEEMod, July 2016 (see Appendix A).</i>					

Cumulative Emissions

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis, and, by nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 1 above represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If a project exceeds the significance thresholds presented in Table 1, the proposed project's emissions would be cumulatively considerable, resulting in significant adverse cumulative air quality impacts to the region's existing air quality conditions. Because the proposed project would result in emissions above the applicable threshold of significance for construction related emissions of NO_x, the project would be expected to result in a cumulatively considerable contribution to the region's existing air quality conditions.

Conclusion

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2010 CAP. According to BAAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Because the proposed project, including the off-site sewer improvement, would result in short-term construction emissions of NO_x, an Ozone precursor, above the applicable thresholds of significance, the project would be considered to conflict with or obstruct implementation of regional air quality plans. Therefore, the proposed project could contribute to the region's nonattainment status of ozone thus contributing to the violation an air quality standard, and a ***potentially significant*** impact associated with construction-related emissions of NO_x would result.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the construction-related emissions of NO_x from the unmitigated maximum daily level of 62.77 lbs/day during construction to the mitigated maximum daily level of 50.24 lbs/day, which would be below the BAAQMD's threshold of significance of 54 lbs/day. Thus implementation of the following mitigation measure would reduce the above impact to a *less than significant* level.

III-1 Prior to issuance of a grading permit, the project applicant shall show on the grading plans via notation that the contractor shall ensure that all diesel-powered equipment larger than 200 horsepower (i.e., rubber tired dozers, scrapers, and trenchers) and diesel-powered graders shall achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction as required by CARB. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

- d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The proposed project would not involve the creation of new housing and, thus, would not be considered a sensitive receptor. The nearest existing sensitive receptors would be the single-family residences located approximately 500 feet to the northwest of the site.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and TAC emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, the BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

According to the Contra Costa Transportation Authority Congestion Management Program (CCTACMP), any land development application generating less than a maximum of 100 peak hour trips is not required to prepare a study of its traffic impacts on the CCTACMP network.⁶ Furthermore, City of Antioch General Plan Policy 7.3.2h requires traffic impact studies for all new development that would generate 50 peak hour trips or more at any intersection in the Circulation Element. Because the proposed project would generate less than 50 peak hour trips, a traffic impact study is not required to be prepared.

According to the ITE Manual, 9th Edition, trip rates for Mini Warehouses are 2.5 weekday trips per storage unit, and 0.02 for AM and PM peak hour trips per storage unit. Based on such, the proposed project would be anticipated to generate a total of 287 Average Daily Trips (ADT), 23 AM peak hour trips, and 23 PM peak hour trips. The General Plan EIR estimated that in 2020 the nearby arterial street of Hillcrest Avenue would experience 20,700 daily vehicle trips, while East 18th Street, the major arterial that borders the southern portion of the project site, would experience 6,900 daily trips. Because the proposed project would only add 287 total daily trips, the proposed project would not increase traffic volumes to above 44,000 vehicles per hour at any intersections or above 24,000 vehicles per hour where air mixing is substantially limited.

⁶ Contra Costa Transportation Authority. *2011 Contra Costa Congestion Management Program* [page 62]. Adopted November 16, 2011.

Based on the above, a substantial increase in levels of CO at surrounding intersections would not occur. Therefore, the proposed project would not be expected to result in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, gasoline stations, freeways and high traffic roads, distribution centers, and rail yards. The CARB also identifies diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant heavy diesel semi-truck traffic (such as distribution centers) are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

With regards to TAC emissions, BAAQMD recommends that any project siting a new source or receptor take into consideration impacts associated with TACs located within a 1,000-foot zone. According to the BAAQMD screening tool for stationary TAC sources, three permitted sources of TAC emissions exist within 1,000 feet of the project site. However, the proposed project involves the construction and operation of a self-storage facility, which would not be considered a sensitive receptor. Therefore, the proposed project would not involve siting a new sensitive receptor within any recommended setback distance of any existing source of TACs. In addition, a self-storage facility would not itself be considered a major source of TACs, and therefore would not expose nearby sensitive receptors to TAC emissions.

The CARB handbook identifies significant sources of DPM as land uses accommodating 100 or more heavy diesel trucks per day, and the CARB handbook specifically recognizes that distribution centers may pose a significant hazard as such facilities involved 100 or more heavy duty truck trips per day. Although the self-storage facility would involve increased vehicle traffic in the area, the project would not be expected to attract 100 or more heavy duty trucks to the area per day, and would not be considered a distribution center. As such, the proposed project would not generate a substantial amount of DPM associated with project operations.

Short-term, construction-related activities could result in the generation of DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project, particularly so for the proposed project, as the construction activities would likely occur over a less than a year (based on applicant information). All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-

road diesel vehicles and equipment, including DPM. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. In addition, construction activity would be limited to daytime hours by the City of Antioch's Municipal Code Section 5-17.04.

Because construction equipment on-site would not operate for any periods of time longer than allowed by the City's Municipal Code and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. Health risks associated with TACs are a function of the concentration of emissions, the proximity of receptors to the emissions, and the duration of exposure, where the higher the concentration, closer the receptor is to the emission, and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. Due to the temporary nature of construction, the relatively short duration of potential exposure to associated emissions, and because the nearest sensitive receptor would be approximately 500 feet away, sensitive receptors in the area would not be exposed to pollutants for a permanent or substantially extended period of time.

Considering the short-term nature of construction activities, and the regulated and intermittent nature of the operation of construction equipment, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. For the aforementioned reasons, project construction would not be expected to expose sensitive receptors to substantial pollutant concentrations.

Conclusion

Based on the above, the proposed project, including the off-site sewer improvement, would not cause or be exposed to substantial pollutant concentrations, including localized CO or TACs, and impacts related to such would be *less than significant*.

- e. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses and is not located in the vicinity of any such existing or planned land uses.

Construction activities often include diesel fueled equipment and heavy-duty trucks, which can create odors associated with diesel fumes, which could be found to be objectionable. However, as discussed above, construction activities would be temporary, and operation of construction equipment would be regulated and intermittent. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors. Accordingly, substantial objectionable odors would not be expected to occur during construction activities or affect a substantial number of people.

It should be noted that BAAQMD regulates objectionable odors through Regulation 7, Odorous Substances, which does not become applicable until the Air Pollution Control Officer (APCO) receives odor complaints from ten or more complainants within a 90-day period. Once effective, Regulation 7 places general limitation on odorous substances and specific emission limitations on certain odorous compounds, which remain effective until such time that citizen complaints have been received by the APCO for one year. The limits of Regulation 7 become applicable again when the APCO receives odor complaints from five or more complainants within a 90-day period. Thus, although not anticipated, if odor complaints are made after the proposed project is developed, the BAAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

For the aforementioned reasons, construction and operation of the proposed project, including the off-site sewer improvement, would not create objectionable odors, nor would the project site be affected by any existing sources of substantial objectionable odors, and a *less-than-significant* impact related to objectionable odors would result.

IV. BIOLOGICAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
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?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

Discussion

- a,d. A *Biological Resources Assessment* (BRA) has been prepared for the proposed project by Rincon Consultants that included a site survey and review of results from a California Natural Diversity Database (CNDDDB) five-mile radius search of special-status species. The following sections are based on the aforementioned BRA.

The 6.68-acre project site consists of non-native annual grasses and ruderal vegetation. According to CNDDDB search conducted as part of the BRA, 81 special-status plant species are known to occur or have occurred within the vicinity of the project site. However, the site's soil type (Delhi sand), partially-disturbed nature, and dominance of non-native grasses preclude the site from supporting any of the aforementioned special-status plant species. Additionally, none of the 81 special-status plant species were identified during the

BRA site survey and were determined in the BRA not to have any potential of occurring on the project site.

According to the BRA, 45 special-status wildlife species are known to have occurred or have the potential to occur within the vicinity of the project site. However, special-status wildlife species were not detected during the BRA site survey or determined in the BRA to have a high likelihood of inhabiting the site due to the dominance of non-native grasses, the soil type of the site, the partially-disturbed status of the site, and the absence of water features and trees on the site. While the project site may not provide optimal habitat for any of the 45 identified special-status species, the BRA determined that burrowing owl (*Athene cunicularia*) and nesting birds which include Swainson's Hawk (*Buteo swainsoni*) and all migratory birds protected under the Federal Migratory Bird Treaty Act (MBTA), have a moderate potential of occurring on the site.

The CNDDDB includes 38 records of burrowing owl within five miles of the project site, and the species is known to occur in the region and the vicinity of the project site. All previously recorded occurrences of burrowing owl within five miles of the project were documented in areas containing both suitable vegetation communities with open areas, and abundant ground squirrel burrows. Although the project site consists of non-native annual grassland, the site is heavily overgrown with annual non-native forbs including mustard and other tall cover. The site does not include any open areas or sign of California ground squirrel or other burrows. The lack of suitable habitat and burrows on the site is indicative of a low potential for the species to occur. However, because of the abundance of occurrences within the vicinity of the project, some potential exists for burrowing owls to become present on the project site prior to project construction.

The CNDDDB shows four occurrences, from 2006 to 2012, of Swainson's hawk nests within five miles of the project site; however, the project site lacks any suitable nesting habitat features to support the species. Although the grasslands could serve as foraging habitat, the site would be considered marginal for foraging given the abundance of high quality agricultural lands in the vicinity of the project. Marginal quality nesting habitat is present within one-half mile of the project site and, therefore, Swainson's hawk could occur on the project site at the time of construction.

Occupied or unoccupied bird nests were not observed on the project site during the BRA site survey; however, a song sparrow showing site fidelity (indicating possible breeding behavior) was observed. The MBTA makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of any and all nests that are occupied by migratory birds during the nesting season. The non-native annual grassland habitat has potential to support ground nesting birds protected by the federal MBTA. Protected migratory bird nests have the potential to be disturbed if the nests are present on-site during the construction of the proposed project.

Because of the potential for special-status and federally-protected nesting birds to be found on-site, development of the proposed project, including the off-site sewer improvement, could have an adverse effect, either directly or through habitat modifications, on an

established resident or migratory wildlife corridor or on a species identified as a special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). Therefore, a ***potentially significant*** impact could result.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Proposed Project and Alternate “A” Off-Site Sewer Improvement

IV-1. *A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys of the permanent and temporary impact areas for burrowing owls and signs of burrowing owls and submit survey results to the City of Antioch Community Development Department for review. Surveys shall be conducted not fewer than 30 days prior to ground-disturbing activities (i.e. vegetation clearance, grading, tilling). The survey methodology shall be consistent with the methods outlined in the 2012 CDFW Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects seven to 20 meters apart, adjusting for vegetation height and density as needed, and noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. If owls or signs of owls are not observed, further mitigation is not required.*

If burrowing owls are detected on-site, ground-disturbing activities, such as vegetation clearance or grading, shall be prohibited within a buffer of no fewer than 100 meters (330 feet) from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs further than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.

If avoidance of active burrows is not feasible during the non-breeding season, then, before breeding behavior is exhibited and after the burrow is confirmed empty by site surveillance and/or scoping, a qualified biologist shall implement a passive relocation program in accordance with the CDFW 2012 Staff Report on Burrowing Owl.

If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and Mitigation Land Management Plan in accordance with CDFW's 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Burrowing Owl Exclusion and Mitigation Plan

shall include all necessary measures to minimize impacts to burrowing owls during passive relocation, including all necessary monitoring of owls and burrows during passive relocation efforts. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of off-site Burrowing Owl Passive Relocation Compensatory Mitigation.

- IV-2. *Prior to any ground disturbance related to covered activities that occurs during the nesting season (March 15 – September 15), a qualified biologist will conduct a preconstruction survey no more than one month prior to construction to establish whether nests of Swainson's hawk or birds covered by the California Fish and Game Code and the Migratory Bird Treaty Act are occupied within 1,000 feet of the project site. If potentially occupied nests within 1,000 feet are off the project site, then their occupancy will be determined by observation from public roads or by observations of applicable bird activity (e.g., foraging) near the project site. If nests are occupied, minimization measures and construction monitoring are required (see below). A written summary of the survey results shall be submitted to the City of Antioch Community Development Department.*

During the nesting season (March 15 – September 15), covered activities within 1,000 feet of occupied Swainson's hawk nests or nests under construction will be prohibited to prevent nest abandonment. If active nests of migratory birds (nests with eggs or chicks) are located, the qualified biologist shall establish an appropriate avoidance buffer ranging from 50-feet to 300-feet depending on the species and based on the species biology and the current and anticipated disturbance levels occurring in vicinity of the nest. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be used, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size.

If young fledge prior to September 15, covered activities can proceed normally. If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the City of Antioch Planning Division for a waiver of this avoidance measure. Any waiver must also be approved by USFWS and CDFW. While the nest is occupied, activities outside the buffer can take place.

- b,c. The project site consists of annual non-native grasses and ruderal vegetation. According to the BRA, jurisdictional waters, streambeds, and sensitive plant communities do not exist on or near the site. Therefore, the project site does not contain riparian habitat or other sensitive natural communities, including wetlands. As a result, the proposed project, including the off-site sewer improvement, would have **no impact** on riparian habitat or other sensitive natural communities.

- e. The project site does not include trees; therefore, the site is not subject to the City of Antioch's Tree Preservation Ordinance. However, an existing mature indigenous tree, as defined by the Antioch Municipal Code, is located adjacent to the Alternate "A" sewer line easement. If the Alternate "A" sewer line alignment is chosen for the off-site sewer improvements, the existing tree shall be avoided during construction activities or the applicant would be required to obtain a tree removal permit from the Antioch Department of Parks, Leisure and Community Services per Title 9, Chapter 5, Article 12 of the Antioch Municipal Code.

As a result, the proposed project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

Proposed Project

None.

Alternate "A" Off-Site Sewer Improvement

- IV-3. *Prior to approval of a grading permit and subject to Community Development Department approval, the improvement/grading plans shall show the construction area for Alternate "A" sewer line alignment would not occur within the dripline of the existing mature indigenous tree.*

Or,

If construction within the dripline of the existing mature indigenous tree cannot be avoided, then the applicant shall, in accordance with Section § 9-5.1205(F)(2) of the Antioch Municipal Code, obtain a bond for the protected tree prior to grading activities. On-going inspections by the City of Antioch shall occur during the course of the grading to assure adherence to approved plans. Should the tree die "during the course of property development" as defined by the Antioch Municipal Code, the bond shall be forfeited to the City and used for tree replacement. A percentage of the bond would be retained in either case to assure tree survival for up to five years after the issuance of a certificate of occupancy. Tree replacement to tree loss ratio shall be 2:1 with a 48-inch box and subject to City of Antioch Community Development Department approval.

- f. In July 2007 the East Contra Costa County (ECCC) Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) was adopted by Contra Costa County, other

member cities, the USFWS, and the CDFW. The City of Antioch, however, declined to participate in the HCP/NCCP. Therefore, the project site is not located in an area with an approved HCP/NCCP, or local, regional, or State habitat conservation plan. As a result, ***no impact*** would occur.

V. CULTURAL RESOURCES. <i>Would the project:</i>		Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
c.	Directly or indirectly destroy a unique paleontological resource on site or unique geologic features?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
d.	Disturb any human remains, including those interred outside of formal cemeteries.	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
e.	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

- a-d. The 6.68-acre project site and the off-site sewer improvement lands are currently vacant with ruderal vegetation and do not contain any buildings or structures. According to a field survey and records search of the California Historical Resources Information System conducted as part of the *East 18th Street and Vineyard Drive Project Phase I Cultural Resources Study* (Cultural Resources Study) prepared by Rincon Consultants for the project site, the project site does not contain any known historical or cultural resources. However, cultural resources are known to be located within one-half mile of the site and development of the proposed project, including the off-site sewer improvement, could uncover unanticipated cultural resources or human remains. As a result, a ***potentially significant*** impact could occur related to the destruction or adverse change to historical, archeological, paleontological, or geological resources or human remains.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Proposed Project and Alternate "A" Off-Site Sewer Improvement

- V-1. *In the event of the accidental discovery or recognition of any human remains, further excavation or disturbance of the find or any nearby area reasonably suspected to overlie adjacent human remains shall not occur until compliance with the provisions of CEQA Guidelines Section 15064.5(e)(1) and (2) has occurred. The Guidelines specify that in the event of the discovery of human remains other than in a dedicated cemetery, no further excavation at the site or any nearby area suspected to contain human remains shall occur until the County Coroner has been notified to determine if an investigation into the cause of death is required. If the*

coroner determines that the remains are Native American, then, within 24 hours, the Coroner must notify the Native American Heritage Commission, which in turn will notify the most likely descendants who may recommend treatment of the remains and any grave goods. If the Native American Heritage Commission is unable to identify a most likely descendant or most likely descendant fails to make a recommendation within 24 hours after notification by the Native American Heritage Commission, or the landowner or his authorized agent rejects the recommendation by the most likely descendant and mediation by the Native American Heritage Commission fails to provide a measure acceptable to the landowner, then the landowner or his authorized representative shall rebury the human remains and grave goods with appropriate dignity at a location on the property not subject to further disturbances. Should human remains be encountered, a copy of the resulting County Coroner report noting any written consultation with the Native American Heritage Commission shall be submitted as proof of compliance to the City's Community Development Department.

- V-2. *If any prehistoric or historic artifacts, or other indications of cultural deposits, such as historic privy pits or trash deposits, are found once ground disturbing activities are underway, all work within the vicinity of the find(s) shall cease and the find(s) shall be immediately evaluated by a qualified archaeologist. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment to allow for implementation of avoidance measures or appropriate mitigation shall be made available (CEQA Guidelines Section 15064.5). Work may continue on other parts of the project site while historical or unique archaeological resource mitigation takes place (Public Resources Code Sections 21083 and 21087).*
- V-3. *The applicant shall retain the services of a professional paleontologist to educate the construction crew that will be conducting grading and excavation at the project site. The education shall consist of an introduction to the geology of the project site and the kinds of fossils that may be encountered, as well as what to do in case of a discovery. Should any vertebrate fossils (e.g., teeth, bones), an unusually large or dense accumulation of intact invertebrates, or well-preserved plant material (e.g., leaves) be unearthed by the construction crew, then ground-disturbing activity shall be diverted to another part of the project site and the paleontologist shall be called on-site to assess the find and, if significant, recover the find in a timely matter. Finds determined significant by the paleontologist shall then be conserved and deposited with a recognized repository, such as the University of California Museum of Paleontology. The alternative mitigation would be to leave the significant finds in place, determine the extent of significant deposit, and avoid further disturbance of the significant deposit. Proof of the construction crew awareness training*

shall be submitted to the City's Community Development Department in the form of a copy of training materials and the completed training attendance roster.

- e. Tribal cultural resources are generally defined by Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. On May 31st, 2016, in compliance with Assembly Bill (AB) 52, the City of Antioch distributed project notification letters to the Ohlone Indian Tribe, the Indian Canyon Mutsun Band of Costanoan, Amah Mutsun Tribal Band of Mission San Juan Bautista, and the Wilton Rancheria. Per AB 52, once receiving the project notification letter, the Native American tribe has 30 days to request consultation. The City of Antioch did not receive a request for consultation within the 30 days. Due to the required implementation of Mitigation Measures V-1 through V-3 and the City's compliance with AB 52, the project would result in a ***less-than-significant*** impact to tribal cultural resources.

VI. GEOLOGY AND SOILS.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Expose people or structures to 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 based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
e. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

Discussion

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aiv. According to the Association of Bay Area Governments (ABAG) Resilience Program's interactive hazards map, the site is not located within a designated Alquist-Priolo Earthquake Fault Zone and active or potentially active faults do not occur at the site. The nearest known active fault to the site is the Greenville Fault, which is located approximately six miles southwest of the site. Furthermore, the project site is flat and not surrounded by any hillsides that could be subject to landslides. Due to the site's proximity to the nearest active fault, the potential exists for the proposed self-storage buildings to be subject to seismic ground shaking. However, the proposed buildings would be properly engineered in accordance with the California Building Code, which include engineering standards appropriate for the seismic area in which the project is located. Conformance with the design standards is enforced through building plan review and approval by the City of Antioch Building Division prior to the issuance of building permits. Proper engineering of the proposed project would ensure that seismic-related effects would not cause adverse impacts. Therefore, a *less-than-significant* impact would occur related to seismic surface rupture, ground shaking, and landslides.

aiii, c,

- d. Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, and fine-grained sands. Empirical evidence indicates that loose to medium-dense gravels, silty sands, and low- to moderate-plasticity silts and clays may be susceptible to liquefaction. In addition, sensitive high-plasticity soils may be susceptible to significant strength loss (cyclic softening) as a result of significant cyclic loading.

Expansive soils can cause foundations to rise each wet season and fall each dry season. Movements may vary under different parts of a building or street, resulting in cracking of foundations and street surfaces, distortion of various structural portions of a building, and warping of doors and windows such that they do not function properly.

According to the ABAG interactive hazards map, the project site is in an area where historic occurrences of liquefaction, or local geologic, geotechnical, or groundwater conditions indicate a moderate potential for liquefaction. Additionally, the United States Department of Agriculture (USDA) interactive Web Soil Survey map indicates that the site is comprised of Delhi sand.⁷ Delhi sand is characterized by sand or loamy sand and, according to the City of Antioch General Plan EIR, has a moderate potential for liquefaction and a low potential for expansion due to the soil's low shrink-swell potential.

The City of Antioch Municipal Code Section 9-4.513 and the City of Antioch General Plan Policy 11.3.2-i require the preparation of site-specific geology and soils reports for all new developments, and require that the findings and recommendations of these studies be incorporated into project development. Compliance with such is verified by the City of Antioch Building Division as part of the building permit process. Because a geology and soils report is required and verified by the City, any impacts related to exposing people or structures to potential risk of loss, injury, or death by the project's location on an unstable geologic or soil unit would be *less than significant*.

- b. All municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide National Pollutant Discharge Elimination System (NPDES) permit. The City of Antioch has adopted the County C.3 Stormwater Standards that require all new developments that alter one or more acres of land to minimize impacts related to erosion. Given that the proposed project site consists of approximately 6.68 acres, the proposed project would be subject to the requirements of the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB), including the C.3 Standards, which are included in the City's NPDES General Permit. Furthermore, Section 8-13.01 of the City of Antioch Municipal Code requires stormwater control measures be implemented during the construction phases of development.

The proposed project site consists primarily of ruderal vegetation; however, topsoil would be exposed during the grading of the site. After grading and prior to overlaying the ground

⁷ United States Department of Agriculture. *Web Soil Survey*. Accessed July, 2016.

surface with impervious surfaces and structures, the potential exists for wind and water to erode portions of the exposed topsoil. Therefore, the construction-related impacts associated with the potential for soil erosion and the loss of topsoil on the project site could be ***potentially significant***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

Proposed Project and Alternate “A” Off-Site Sewer Improvement

VI-1. *Prior to final project design, the project applicant shall submit, for the review and approval by the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Measures shall include, but are not limited to, the following:*

- *Hydro-seeding;*
- *Placement of erosion control measures within drainage ways and ahead of drop inlets;*
- *The temporary lining (during construction activities) of drop inlets with “filter fabric” (a specific type of geotextile fabric);*
- *The placement of straw wattles along slope contours;*
- *Directing subcontractors to a single designation “wash-out” location (as opposed to allowing them to wash-out in any location they desire);*
- *The use of siltation fences; and*
- *The use of sediment basins and dust palliatives.*

- e. As discussed previously, the proposed project includes off-site sewer improvements and would connect with the existing City sanitary sewer lines located in the East 18th Street right-of-way. The construction or operation of septic tanks or other alternative wastewater disposal systems are not included as part of the proposed project. Therefore, ***no impact*** regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

VII. GREENHOUSE GAS EMISSIONS.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
a, b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.				

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr).

The proposed project is located within the jurisdictional boundaries of the BAAQMD. The BAAQMD threshold of significance for project-level operational GHG emissions is 1,100 MTCO₂e/yr or 4.6 MTCO₂e/yr per service populations (population + employees). BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. If a project would generate GHG emissions above the threshold level, the project would be considered to generate significant GHG emissions and conflict with applicable GHG regulations. The City of Antioch, as lead agency, has chosen to use the BAAQMD thresholds of significance for the analysis within this IS/MND, as the thresholds are supported by substantial evidence.

The proposed project's GHG emissions were quantified using CalEEMod using the same assumptions as presented in the Air Quality section of this IS/MND, and compared to the 1,100 MTCO₂e/yr threshold of significance. The proposed project's required compliance with the current California Building Energy Efficiency Standards Code was assumed in the

modeling as well as the proposed solar energy production to meet 100 percent of the project's operational energy needs. In addition, the CO₂ intensity factor within the model was adjusted to reflect the Pacific Gas & Electric Company's anticipated progress towards statewide renewable portfolio standard goals. All CalEEMod results are included in the Appendix.

According to the CalEEMod results, the proposed project would result in unmitigated operational GHG emissions of 353.74 MTCO_{2e}/yr, which is well below the 1,100 MTCO_{2e}/yr threshold of significance. Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD has adopted a threshold of significance for construction-related GHG emissions. However, even if the proposed project's total construction GHG emissions of 242.07 MTCO_{2e}/yr are included with the annual operational GHG emissions, the resultant total GHG emissions of 595.81 MTCO_{2e}/yr would still be well below the 1,100 MTCO_{2e}/yr threshold of significance. Therefore, the proposed project would not be expected to result in a significant impact related to GHG emissions.

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; and impacts would be considered *less than significant*.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
h. Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

- a. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would be a commercial self-storage establishment and would not be industrial in nature. Self-storage facilities do not typically involve the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Construction activities would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. However, the project contractor would be required to comply with all California Health and Safety Codes and local ordinances regulating the handling, storage, and transportation of hazardous and toxic materials, as overseen by the California EPA and

California Department of Toxic Substance Control. As such, impacts related to the routine transport, use, or disposal of hazardous materials would be *less-than-significant*.

- b. A *Phase I Environmental Site Assessment* (Phase I ESA) was performed for the site by Krazan & Associates, Inc. in September of 2003. The Phase I ESA included a survey of the site and a review of historical documentation, aerial photography, regulatory agency files, and current environmental sites radius reports.

According to the Phase I ESA, the proposed project site contains one pad-mounted Pacific Gas and Electric (PG&E) transformer. Transformers could be considered a health concern if they utilized Polychlorinated Biphenyls (PCBs). PCBs were used in electrical transformers as a fire retardant; however, a number of adverse health effects are associated with PCBs. Transformers containing PCBs were manufactured between 1929 and 1977. Since the early 1980s, PG&E has initiated a policy of installing PCB-free equipment. According to the site survey conducted by Krazan & Associates, the installation date of the transformer could not be located and, thus, it is unknown whether the transformer contains PCB fluids. The site survey did not find evidence of PBC fluid leakage on the ground surface or transformer casing. As a result, the project site is not expected to be affected by any PCBs associated with the transformers. It should be noted that PG&E is the owner of the aforementioned transformer and is responsible in the case that the transformer requires removal or testing for PCB fluids; however, the transformer is not proposed to be removed as part of the proposed project.

In addition, the Phase I ESA review of historic aerial photography indicated a previous residence was present on the site. As such, the potential exists for a septic system and/or domestic water well to be discovered during construction activities. State and local guidelines require any septic system or water well found during construction to be properly abandoned/closed or destroyed. Therefore, a *potentially significant* impact related to a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Proposed Project and Alternate "A" Off-Site Sewer Improvement

- VIII-1. *Prior to any ground disturbance activities, the applicant shall hire a qualified geotechnical engineer to identify the location of any domestic water wells. If wells are not identified within the site, further mitigation is not required. However, if wells are identified within the site, prior to any ground disturbance activities within 50 feet of any well, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Contra Costa Environmental Health Department, and properly*

abandon the on-site well, pursuant to review and approval by the City Engineer and the Contra Costa Environmental Health Department.

VIII-2. *Prior to any ground disturbance activities, the applicant shall hire a qualified geotechnical engineer to identify the location of any septic tanks. If septic tanks are not identified within the site, further mitigation is not required. However, if septic tanks are identified within the site, prior to any ground disturbance activities within 50 feet of a septic tank, the geotechnical engineer shall properly abandon the on-site septic systems, pursuant to review and approval by the City Engineer and the San Joaquin County Environmental Health Department.*

- c. The proposed project site is not located within one-quarter mile of an existing or proposed school. The nearest existing school to the site, Cornerstone Christian School, is located approximately 0.6 mile west of the site. Furthermore, hazardous materials would not be emitted as part of the construction or operation of the proposed site. Therefore, the project would have a ***less-than-significant*** impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d. The project site is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.⁸ Therefore, the project would not create a significant hazard to the public or the environment, and ***no impact*** associated with such would occur.
- e, f. The project site is not located within the vicinity of a public airport or private airstrip as the nearest airstrip to the site is the Funny Farm airstrip in Byron, located approximately 7.6 miles southeast of the site. As such, the project site is not located within two miles of any public airports or private airstrips, and does not fall within an airport land use plan area. Therefore, ***no impact*** would occur.
- g. In 1996, the City of Antioch approved an Emergency Plan that addresses response to disasters, including but not limited to earthquakes, floods, fires, hazardous spills or leaks, major industrial accidents, major transportation accidents, major storms, airplane crashes, environmental response, civil unrest, and national security emergencies. The plan outlines the general authority, organization, and response actions for City of Antioch staff when disasters happen. Implementation of the proposed project would not result in any modifications to the existing roadway system and therefore, would not interfere with an emergency evacuation or response plan. As a result, a ***less-than-significant*** impact would occur.
- h. The proposed project site consists of ruderal vegetation and is surrounded by existing commercial development on three sides and an agricultural field on the remaining side. Dry, potentially-flammable, vegetation currently exists on the site; however, the existing

⁸ California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Accessed July, 2016.

vegetation would be removed as part of the proposed project. Due to the nature of self-storage facilities, the project would not be expected to attract many people for any extended period of time. According to the City of Antioch General Plan EIR, the areas of the City most susceptible to wildland fire hazards exist within the southern, unincorporated portions of the General Plan Study area.⁹ Much of the threat is due to open grasslands abutting residential developments. Because the proposed project would not involve the presence of many individuals for any extended period of time or the development of structures near areas of high-susceptibility to wildland fires, the project would have a *less than significant* impact with respect to exposing people or structures to the risk of loss, injury or death involving wildland fires.

⁹ City of Antioch. *General Plan Update EIR* [page 4.6-9]. July 2003

IX. HYDROLOGY AND WATER QUALITY. <i>Would the project:</i>		Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
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 which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
e.	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?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
f.	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
g.	Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
h.	Place within a 100-year floodplain structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
i.	Expose 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.	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
j.	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

- a-f. A *Stormwater Control Plan* (SWCP) was prepared for the proposed project by Bellecci & Associates in April, 2016, per City of Antioch Municipal Code Section 6-9.05.

All municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as

part of the renewal of the Countywide NPDES permit. The City of Antioch has adopted the County C.3 Stormwater Standards, which require new development and redevelopment projects that create or alter 10,000 or more square feet of impervious area to contain and treat all stormwater runoff from the project site. Given that the proposed project would create approximately 172,672 sf of impervious area, the proposed project would be subject to the requirements of the SWRCB and the RWQCB, including the C.3 Standards, which are included in the City's NPDES General Permit.

The SWCP prepared for the proposed project conforms with the most recent Contra Costa Clean Water Program Stormwater C.3 Guidebook and verifies that the proposed project complies with all City stormwater requirements. In compliance with the C.3 Guidebook, the proposed project would include a bio-retention facility on the eastern edge of the site, which would be sized to exceed the minimum volume requirement necessary to adequately treat all runoff from the proposed impervious surfaces. Runoff would gravity flow to the bio-retention area where the stormwater would be able to infiltrate the soil in a similar manner to what currently occurs on the project site. In the event of a large storm that produces stormwater runoff in-excess of the bio-retention facilities' capacity, all excess runoff would flow through the existing stormwater line located in Vineyard Drive. Because the proposed bio-retention facility would be designed with adequate capacity to capture and treat runoff from proposed impervious surfaces, the proposed project would not alter the existing drainage pattern of the site. In addition to reducing runoff and allowing for groundwater recharge, the bio-retention area would treat incoming runoff by filtering stormwater through permeable soil layers. The process of stormwater moving through the soil layers would remove pollutants from the stormwater before further subsurface infiltration or discharge to City infrastructure. As a result, the proposed project would not lead to the degradation of water quality or the violation of water quality standards due to operational stormwater runoff.

Additionally, during the early stages of construction activities, topsoil would be exposed due to grading of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment, urban pollutants, and/or residual pesticides into stormwater runoff, which would adversely affect water quality. The SWCP includes a Construction Plan C.3 Checklist with Best Management Practices to mitigate the impacts of topsoil erosion and pollutant discharge.

Therefore, the project would not substantially deplete groundwater supplies, interfere with the recharge of groundwater, violate water quality standards, substantially degrade water quality, directly alter or lead to the alteration of existing drainage features leading to erosion, flooding or siltation, nor would the project contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. As a result, the project would have a *less-than-significant* impact.

- g-i. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map number 06013C0144G, the project site is located within Zone X. FEMA defines Zone X as an area not within a 100-year or 500-year floodplain. The Contra Loma Dam is the

closest dam to the project site, located just over two miles south. The Citywide inundation map for the failure of Contra Loma Dam and Dike No. 2 (Figure 4.7-3 of the GPU EIR) indicates that the project site is located outside of the areas that would be impacted by dam failure. It should be noted that, according to the GPU EIR, dam failure would be an unlikely event.¹⁰ As a result, the project would not place structures within the 100-year floodplain, nor expose 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. Therefore, a ***less-than-significant*** flooding impact would result.

- j. The project area is located over 50 miles from the Pacific Ocean and tsunamis typically affect coastlines and areas up to one-quarter mile inland. Therefore, due to the project site's distance from the coast, potential impacts related to a tsunami are minimal. Additionally, the project site is not susceptible to impacts resulting from a seiche because of the site's distance from any enclosed bodies of water. The nearest enclosed body of water to the project site is the Contra Loma Reservoir, which is located just over two miles south of the project site. Because steep slopes are not located in close proximity to the site, mudflows would not pose an issue. Therefore, a ***less-than-significant*** impact would occur related to inundation by seiche, tsunami, or mudflow.

¹⁰ City of Antioch. *General Plan Update EIR* [pg. 4.7-4]. July 2003.

X. LAND USE AND PLANNING. <i>Would the project:</i>		Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b.	Conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating on environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c.	Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

Discussion

- a. The 6.68-acre project site is vacant undeveloped land surrounded by an existing agricultural field and commercial developments. The General Plan Eastern Waterfront Employment Focus Area, East 18th Street Specific Plan, and City Zoning designate the project site for development. Given that the site has already been planned for development and the site is surrounded by existing commercial and agricultural uses, the project would have a ***less-than-significant*** impact related to the physical division of an established community.
- b. According to the Antioch General Plan, the 6.68-acre project site is designated Business Park within the City of Antioch's Eastern Waterfront Employment Focus Area.¹¹ The purpose of the "Focus Areas" is to provide policy direction specific to each area, including appropriate land use types and development intensity, based upon analysis of the particular opportunities and constraints affecting each area. The Antioch General Plan designates 10 different Focus Areas. Self-storage facilities, such as that proposed for the project are an allowable use under the Business Park designation of the Eastern Waterfront Employment Focus Area.

The project site is currently zoned Planned Business Center (PBC), which does not allow for self-storage usage. However, in 2001 the City of Antioch adopted the East 18th Street Specific Plan to guide future development of the Eastern Waterfront Employment Focus Area, which designated the site Office and Light Industry (O/LI). The East 18th Street Specific Plan determined the uses allowed in O/LI are consistent with the Citywide Light Manufacturing Zoning District (M-1). Self-storage and RV/boat storage are conditionally permitted uses within the M-1 district of the Antioch Zoning Code.¹² Therefore, the proposed project's uses would be conditionally permitted with approval of a Conditional Use Permit (CUP).¹³

¹¹ City of Antioch. *City of Antioch General Plan*. November 23, 2003

¹² City of Antioch. *East 18th Street Specific Plan* [pg. 19]. September 2001.

¹³ City of Antioch. *City of Antioch, California Code of Ordinances Table of Land Use Regulations* § 9-5.3803. Current through September 22, 2015.

Additionally, consistent with the requirements of the East 18th Street Specific Plan, the proposed project includes a request for a Planned Development (PD) Rezone. PD districts encourage the use of flexible development standards designed to appropriately integrate a project into its natural and/or man-made setting and the City of Antioch uses the PD process to implement the various Specific Plans adopted by the City. In addition, approval of the CUP is required prior to final map recordation for all projects within a PD District.

Upon obtaining approval of the rezone and CUP from the City, the proposed project would be consistent with all applicable land use plans, policies, and regulations of agencies with jurisdiction over the project, which would result in a *less-than-significant* impact.

- c. In July 2007 the East Contra Costa County (ECCC) Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) was adopted by Contra Costa County, other member cities, the USFWS, and the CDFW. The City of Antioch, however, declined to participate in the HCP/NCCP. Therefore, the project site is not located in an area with an approved HCP/NCCP, or local, regional, or State habitat conservation plan. As a result, *no impact* would occur.

XI. MINERAL RESOURCES. <i>Would the project:</i>		Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

Discussion

- a,b. According to the City of Antioch's GPU EIR, areas identified in the General Plan for new development do not contain known mineral resources that would be of value to the region or residents of the State.¹⁴ Therefore, ***no impact*** to mineral resources would occur as a result of development of the project.

¹⁴ City of Antioch. *General Plan Update EIR* [pg. 5-9]. July 2003.

XII. NOISE.

Would the project result in:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

Discussion

- a,c. The City of Antioch GPU EIR establishes a noise level limit of 70 dBA for residential neighborhoods. The site is immediately surrounded by existing commercial developments on three sides and an agricultural field on the remaining side. The nearest sensitive residential receptors to the project site are located approximately 500 feet to the northwest of the site, behind the agricultural field. The existing noise environment in the project vicinity is defined primarily by vehicle noise from traffic along East 18th Street. As discussed in the Transportation/Traffic section of this IS/MND, the proposed project is not anticipated to generate excessive traffic or significantly impact the transportation and circulation system in the area. Additionally, the operation of self-storage facilities is not typically associated with high levels of noise production, and any operational noise produced by the self-storage facility would not be expected to significantly impact the nearby neighborhoods by generating noise in excess of 70 dBA. Therefore, the proposed project would result in a ***less-than-significant*** impact regarding exposure of persons to or generation of noise levels in excess of standards established in the local general plan.
- b. Groundborne vibration would not be generated as part of the daily operation of the proposed self-storage facility. However, groundborne vibrations would be generated during construction of the proposed project. For structural damage, the California Department of Transportation (Caltrans) uses a vibration limit of 0.5 inches/second, peak

particle velocity (in/sec, PPV), for buildings structurally sound and designed to modern engineering standards; 0.2 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern; and a conservative limit of 0.08 in/sec PPV for historic buildings or buildings that are documented to be structurally weakened.¹⁵ All surrounding structures are assumed to be structurally sound, but damage would be a concern so the 0.2 in/sec PPV is used as a threshold of significance for structural damage for this analysis. The threshold of 0.2 in/sec PPV is also used by Caltrans as the threshold for human annoyance caused by vibration. Therefore, activities creating vibrations exceeding 0.2 in/sec PPV would impact sensitive receptors in nearby residences. Table 4 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet.

Table 4	
Vibration Source Levels for Construction Equipment	
Equipment	PPV at 25 ft (in/sec)
Vibratory Roller	0.210
Large Bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
<i>Source: Caltrans, Transportation and Construction Vibration: Guidance Manual. September 2013.</i>	

Project construction activities, such as drilling, the use of jackhammers, and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate groundborne vibration in the immediate vicinity. As shown in Table 4, jackhammers typically generate vibration levels of 0.035 in/sec PPV, drilling typically generates vibration levels of 0.09 in/sec PPV, and the strongest source of vibration, vibratory rollers, generates vibration levels of 0.21 in/sec PPV, all at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. It is important to note that groundborne vibrations dissipate with distance. The closest residential structures to the project site are at least 500 feet away. Therefore, the PPV experienced at any of the residences would be significantly reduced from the PPV's reported in Table 4. Consequently, vibration generated by construction activities associated with the proposed project are not expected to be perceptible at any nearby residence or result in structural damage to such residences. Therefore, the project would not involve the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels resulting in a *less-than-significant* impact.

- d. During construction of the proposed project, noise from construction activities would add to the noise environment in the immediate project vicinity. According to the Antioch GPU EIR, activities involved in construction would generate maximum noise levels ranging from 68 to 90 dB at a distance of 50 feet. The GPU EIR includes mitigation measures ensuring that short-term construction noise from GP buildout would not result in adverse noise impacts to nearby sensitive receptors. While the nearest sensitive receptors to the

¹⁵ Caltrans. *Transportation and Construction Vibration Guidance Manual*. September 2013.

project site are located approximately 500 feet to the northwest, if project construction operations do not comply with GPU EIR mitigation measures, a remote potential exists for construction noise to have a ***potentially significant*** short-term impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Proposed Project and Alternate “A” Off-Site Sewer Improvement

XII-1 Noise-generating activities at the construction site shall be restricted to the hours specified in Section 5-17.04 of the City’s Municipal Code, as follows: 7:00 AM to 6:00 PM, Monday through Friday, and 9:00 AM to 5:00 PM on weekends and holidays.

XII-2 Prior to the initiation of grading or construction activities, and subject to the review and approval of the City Engineer, the following notes shall be included on the improvement plans:

- *Equip all equipment driven by internal combustion engines with intake and exhaust mufflers that are in good condition and appropriate to the equipment. Unnecessary idling of internal combustion engines should be strictly prohibited;*
- *Stationary noise-generating equipment, such as air compressors or portable power generators, must be located as far as is feasible from sensitive receptors; and*
- *Utilize “quiet” air compressors and other stationary noise sources where technology exists.*

e,f. The project site is not located within the vicinity of a public airport or private airstrip as the nearest airstrip to the site is the Funny Farm airstrip, located approximately 7.6 miles southeast of the site. Therefore, the proposed project would not expose people residing or working in the project area to excessive air traffic noise levels, and ***no impact*** would occur.

XIII. POPULATION AND HOUSING.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

Discussion

- a. The 6.68-acre project site is currently vacant and is surrounded by existing commercial developments on three sides. The proposed project would include the construction and operation of 102,333 sf of office and self-storage space; as such, the project would not directly induce population growth in the area. While the project would require connections to nearby water and sanitary sewer lines, these improvements would not constitute extension of major infrastructure. The water and sanitary sewer line improvements would only have capacity to serve the proposed project. Because the project does not include new home construction, or the extension of major infrastructure that could indirectly induce population growth, the project would have ***no impact*** related to inducing substantial population growth.
- b,c. The project site is vacant and surrounded by existing commercial and agricultural land uses. Given the undeveloped condition of the project site and the commercial land uses that surround the site, the project would have ***no impact*** related to the displacement of substantial numbers of existing housing or people.

XIV. PUBLIC SERVICES.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	✖	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	✖	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✖
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✖
e. Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✖

Discussion

- a. Fire protection services to the project area are provided by the Contra Costa County Fire Protection District (CCCFPD). The CCCFPD is an “all-hazards” organization providing fire suppression, paramedic emergency medical services (EMS), technical rescue, water rescue, and fire prevention/investigation services to more than 600,000 residents across a 304 square mile coverage area. The CCCFPD operates 25 fire stations and responds to approximately 45,000 incidents annually. CCCFPD’s Station #88 (4288 Folsom Drive) is located approximately 1.5 miles south of the project site and is the closest fire station to the site. Station #88 currently provides fire protection service to the proposed project site and the surrounding commercial developments.

The proposed project would be required to pay applicable fire protection fees per the City’s Master Fee Schedule and the proposed self-storage facility would be constructed in accordance with the fire protection requirements of the 2013 California Fire Code. The CCCFPD and the City’s Building Inspection Services Division would review the project building plans to ensure compliance with all code requirements. Therefore, the proposed project would have a **less-than-significant** impact related to the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts.

- b. Police protection in the area is provided by the Antioch Police Department (APD). According to the Antioch Police Chief’s City Council presentation given on July 26, 2016, the APD has 102 authorized sworn positions and 95 positions are currently filled.¹⁶ The Antioch Police Station is located approximately three miles away from the project site. The operation of the proposed self-storage facility has the potential to increase demand for police protection services, though, given the relatively small number of people who would access the facility each day, the increase would be expected to be minimal. As a result, the project would have a **less-than-significant** impact related to the need for new or physically

¹⁶ Personal Communication with Alexis Morris, Senior Planner, City of Antioch Community Development Department. August 16, 2016.

altered police protection facilities, the construction of which could cause significant environmental impacts.

- c-e. Development of the proposed self-storage facility would not induce significant population growth, as the project would not include the construction of housing or the creation of a substantial number of new jobs. As such, the proposed project would not introduce new residents to the area that would use local schools, parks, or other public facilities. Thus, the proposed project would result in ***no impact*** regarding any substantial increase in demand for public facilities such as parks, schools, and government facilities.

XV. RECREATION.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗

Discussion

- a,b. The proposed project would be a self-storage facility and would not include park facilities. Because the project would not directly or indirectly increase population growth, the project would not increase the use of any existing recreational facilities or the demand for new, or the expansion of existing recreational facilities. Therefore, ***no impact*** to park facilities would occur.

XVI. TRANSPORTATION AND CIRCULATION.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✗
d. Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
f. Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

a,b,f. The proposed project includes the development of a self-storage facility at the corner of East 18th Street and Vineyard Drive.

Roadway Traffic

The Institute of Traffic Engineer's (ITE) *Trip Generation Handbook*¹⁷ was used to estimate automotive trip generation rates for the proposed project. Based on a maximum configuration of 999 self-storage units and 150 RV/boat storage spaces, the proposed project could create a total of 287 Average Daily Trips (ADT), with 23 trips occurring during the AM peak hour and 23 trips occurring during the PM peak hour, which is below the CCTACMP standard (100 peak hour trips) and City of Antioch General Plan Policy 7.3.2h (50 peak hour trips) requiring the preparation of a traffic impact study. Therefore, the proposed project does not require the preparation of a traffic impact study.

¹⁷ Institute of Transportation Engineers. *Trip Generation Handbook – 9th Edition*. September 2012.

The City of Antioch General Plan establishes a Level of Service (LOS) standard of “High D” for all arterial roadways during peak periods. Nearby arterial roadways that would provide access to the site include East 18th Street and Hillcrest Avenue. The GPU EIR identified the arterial roadway segments nearest the project site as LOS C or “Low D” in the year 2000 and that traffic along Hillcrest Avenue south of East 18th Street could increase to a potential LOS of “High D.” While the GPU EIR estimates that traffic levels on nearby roadway segments could reach established LOS standards, the analysis takes into consideration the buildout of vacant sites per the sites’ land use designations. Because the proposed project would be consistent with land use designations in the East 18th Street Specific Plan and the Eastern Waterfront Employment Focus Area, the increase in traffic due to buildout of the project site has already been anticipated by the City. Therefore, development of the project would not be expected to cause roadway segments to exceed the LOS “High D” standard.

Alternative Transportation

Due to the nature of storage facilities, development of the proposed project would not be expected to generate any alternative transportation traffic. Nonetheless, lines 383, 391, and 393 of the Tri Delta Transit bus system include service along the segment of East 18th Street adjacent to the project site. The nearest Tri Delta Transit bus stop is located 0.1 mile away on the corner of East 18th Street and Wilson Street. The proposed project would not include alterations to the surrounding circulation system or current transit options available to the area. Therefore, the proposed project would not conflict with alternative transportation routes or policies resulting in a *less-than-significant* impact.

Conclusion

Overall, the proposed project’s increase in traffic to the nearby transportation and circulation network would not be considered substantial in relation to the existing traffic load or capacity of the street and public transportation system, and would not exceed any LOS standard. Therefore, impacts would be considered *less than significant*.

- c. The proposed project is not located near an airport, and does not include any improvements to airports or a change in air traffic patterns. The nearest airstrip to the site is the Funny Farm airstrip, located approximately 7.6 miles southeast of the site. Therefore, because the proposed project would not result in a change in air traffic patterns, including either an increase in air traffic levels or a change in location that results in substantial safety risks, *no impact* would occur.
- d, e. The proposed project does not include changes to existing roadways or the introduction of an incompatible use or any design features that would be considered hazardous. The proposed project would provide one entrance point and one emergency exit point on Vineyard Drive, which would provide sufficient emergency access to the site. As such, the project would not substantially increase hazards due to design features or incompatible uses, and emergency access to the site would be adequate; therefore, the project would result in a *less-than-significant* impact.

XVII. UTILITIES AND SERVICE SYSTEMS. <i>Would the project:</i>	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

- a, b, e. The City maintains and owns the local sewage collection system and is responsible for the collection and conveyance of wastewater to the Delta Diablo Wastewater Treatment Plant (WWTP). Delta Diablo owns and operates the regional interceptors and wastewater treatment plant. The project site is located within the Delta Diablo service area. As proposed, the City of Antioch is responsible for the wastewater collection system from the project site to the designated Delta Diablo regional wastewater conveyance facility. The regional conveyance facilities transport wastewater to the WWTP located at 2500 Pittsburg-Antioch Highway, Antioch. After secondary treatment, the effluent is either discharged through a deep-water outfall to New York Slough or further processed through the Recycled Water Facility. The WWTP NPDES Permit allows an average dry weather flow of 16.5 mgd. An EIR for the expansion of the wastewater treatment plant capacity to an average dry weather flow of 22.7 mgd was completed in April 1988. During the most recent reporting period, 2012, the average dry weather flow influent to the treatment plant

was 12.7 mgd. In 2000 and 2005, the average dry weather flow influent to the treatment plant was 13.5 mgd and 14.2 mgd, respectively.¹⁸

As discussed previously, the East 18th Street Specific Plan requires the construction of a new sewer line within Vineyard Drive right-of-way, which would connect with the existing stubbed sewer line within the future Sakurai Street alignment (see Figure 4 above). The City of Antioch Engineering Division provided an alternate alignment for the sewer line known as Alternate “A” (see Appendix C). The final sewer alignment for the proposed project has not yet been determined.

In addition, the project applicant would be required to pay sewer connection fees, which are utilized toward needed sewer system improvements. The proposed project would generate wastewater from the single restroom facility located in the manager’s office. The inclusion of a single restroom facility would involve a minor increase in demand for wastewater treatment series and, as such, would not be expected to cause an exceedance of the WWTP’s capacity. In addition, the proposed project would be consistent with the General Plan land use designation. Thus, any increase in wastewater treatment demands would have been anticipated by the City and included in the GPU EIR analysis. As such, the wastewater generated by the project would result in a ***less-than-significant*** impact related to wastewater treatment requirements of the applicable RWQCB and the capacity of existing water and wastewater treatment facilities.

- c. The project site is currently undeveloped vacant land with ruderal vegetation. Completion of the proposed project would increase site runoff due to the introduction of impervious surfaces to the site. As previously mentioned in the Hydrology and Water Quality section of this IS/MND, the required SWCP for the proposed project conforms with the most recent Contra Costa Clean Water Program Stormwater C.3 Guidebook and verifies that the proposed project complies with all City stormwater requirements. In compliance with the C.3 Guidebook, the proposed project would include a bio-retention facility on the eastern edge of the site, which would be sized to exceed the minimum volume requirement necessary to adequately treat all runoff from the proposed impervious surfaces. In the event of a large storm that produces stormwater runoff in-excess of the bio-retention facilities’ capacity, all excess runoff would flow through an existing City stormwater line located in Vineyard Drive. Because the proposed bio-retention facility would be designed with adequate capacity to capture and treat runoff from proposed impervious surfaces, the proposed project would not generate runoff in excess of the City’s existing stormwater system’s capacity. Therefore, the proposed project would have a ***less-than-significant*** impact with respect to requiring or resulting in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- d. Principal sources of raw water supply to the City of Antioch are the Sacramento/San Joaquin Rivers Delta and the Contra Costa Canal, which are stored in the Antioch Municipal Reservoir. According to 2015 projections included in the City of Antioch *2010 Urban*

¹⁸ Delta Diablo. *Proposed Tuscany Meadows Subdivision Letter Addressed to Nick Pappani, Vice President Raney Planning and Management*. October 3, 2013.

Water Management Plan, the City has a total water supply of 31,095 acre-feet per year (AFY) and a total water demand of 22,678 AFY. A surplus of 8,417 AFY was calculated for the 2015 year. Commercial land uses are projected to have a gross water demand of 3.41 AFY/acre. If the 6.68-acre site were to be developed as a commercial self-storage facility, the projected water demand would be approximately 22.78 AFY (3.41 AFY/acre x 6.68 acres), which is significantly less than the City's estimated water surplus. It should also be noted that the proposed project would be expected to use less water than the estimated 22.78 AFY because water use would be limited to the breakroom and restroom in the Manager's Office and for landscaping purposes.

In addition, the proposed project would be consistent with the site's designations of O/LI and Business Park. As such, the water demand associated with the buildout of the site has already been anticipated and accounted for as part of the GPU EIR analysis. Therefore, the project would have a ***less-than-significant*** impact related to water supply.

- f, g. Republic Services provides solid waste collection, disposal, recycling, and yard waste services to the City, including the project site. Solid waste and recyclables from the City are taken to the Contra Costa Transfer and Recovery Station in Martinez. Solid waste is transferred from the Transfer and Recovery Station to the Keller Canyon Landfill in Pittsburg. The Keller Canyon Landfill site is 1,399 acres, 244 of which comprise the actual current disposal acreage. The landfill is permitted to accept 3,500 tons of waste per day and has a total estimated permitted capacity of approximately 75 million cubic yards, with only approximately 12 million cubic yards (16 percent of total capacity) used to date.¹⁹ Due to the substantial amount of available capacity remaining at Keller Canyon Landfill, sufficient capacity would be available to accommodate the project's solid waste disposal needs. Therefore, a ***less-than-significant*** impact related to solid waste would occur as a result of the proposed project.

¹⁹ California Department of Resources Recycling and Recovery (CalRecycle). *Solid Waste Information System*. Available at: www.calrecycle.ca.gov/SWFacilities/. Accessed July, 2016.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to 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?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Does the project have impacts that are 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)?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

- a. As described throughout this IS/MND, implementation of the proposed project would have the potential to adversely impact the environment by reducing available habitat for sensitive natural communities and migratory birds, as well as the potential release of hazardous material. The proposed project would implement and comply with applicable City of Antioch General Plan and Municipal Code policies, as discussed throughout this IS/MND. With implementation of the mitigation measures required by this IS/MND, compliance with General Plan policies, Municipal Code sections, and application of standard Best Management Practices during construction, development of the proposed project would not result in any of the following: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, a *less than significant* would occur.
- b. The proposed project includes construction of a 1,390 sf office building, 100,943 sf of self-storage space, and 70,600 sf of outdoor boat and RV storage. The proposed project is consistent with the General Plan land use designation for the project site and, as such, the proposed project was included in the cumulative analysis of City buildout in the General Plan. Applicable policies from the 2003 GPU and the East 18th Street Specific Plan would be implemented as part of the proposed project, as well as the project-specific mitigation measures included in this IS/MND, to reduce the project's contribution to potentially

cumulative impacts. The potential impacts of the proposed project would be individually limited and would not be cumulatively considerable. As demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level with implementation of project-specific mitigation measures and compliance with applicable General Plan policies. When viewed in conjunction with other closely related past, present or reasonably foreseeable future projects, development of the proposed project would not contribute to cumulative impacts in the City of Antioch and the project's cumulative impact would be ***less than significant***.

- c. As described in this IS/MND, implementation of the proposed project could result in temporary impacts related to noise and the release of hazardous materials during the construction period. However, the proposed project would be required to implement the project-specific mitigation measures within this IS/MND, as well as applicable policies of the City of Antioch General Plan, to reduce any potential direct or indirect impacts that could occur to human beings or various resources and, as demonstrated in this IS/MND, with implementation of the identified mitigation measures, all impacts would be reduced to less-than-significant levels. Therefore, overall, the project's impact would be ***less than significant***.

APPENDIX A

AIR QUALITY AND GHG MODELING RESULTS

APPENDIX B

ROAD CONSTRUCTION EMISSIONS MODELING RESULTS

Vineyard Self-Storage
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	102.33	1000sqft	2.35	102,333.00	0
Other Non-Asphalt Surfaces	1.65	Acre	1.65	71,874.00	0
Parking Lot	11.00	Space	0.10	4,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2017

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MW/hr)	419.59	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on PG&E's anticipated progress towards statewide RPS goals

Land Use - Applicant Information

Construction Phase - Applicant Information

Grading - Applicant Information

Vehicle Trips - Based on IS/MND Traffic section

Energy Use - *

Mobile Land Use Mitigation -

Energy Mitigation -

Architectural Coating -

E70

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	95.00
tblConstructionPhase	NumDays	230.00	95.00
tblConstructionPhase	NumDays	8.00	10.00
tblConstructionPhase	NumDays	18.00	15.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	12/11/2017	8/14/2017
tblConstructionPhase	PhaseEndDate	3/7/2017	3/20/2017
tblConstructionPhase	PhaseEndDate	2/10/2017	2/14/2017
tblConstructionPhase	PhaseStartDate	8/1/2017	4/4/2017
tblConstructionPhase	PhaseStartDate	2/15/2017	2/28/2017
tblConstructionPhase	PhaseStartDate	1/28/2017	2/1/2017
tblGrading	AcresOfGrading	5.00	6.26
tblLandUse	LandUseSquareFeet	102,330.00	102,333.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	419.59
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleTrips	ST_TR	2.59	2.50
tblVehicleTrips	SU_TR	2.59	2.50
tblVehicleTrips	WD_TR	2.59	2.50

2.0 Emissions Summary

E71

2.1 Overall Construction

Unmitigated 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/yr										MT/yr					
2017	1.1576	2.0691	1.7762	2.7200e-003	0.1743	0.1265	0.3007	0.0802	0.1186	0.1988	0.0000	236.2260	236.2260	0.0450	0.0000	237.1710
Total	1.1576	2.0691	1.7762	2.7200e-003	0.1743	0.1265	0.3007	0.0802	0.1186	0.1988	0.0000	236.2260	236.2260	0.0450	0.0000	237.1710

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/yr										MT/yr					
2017	1.1576	2.0691	1.7762	2.7200e-003	0.1743	0.1265	0.3007	0.0802	0.1186	0.1988	0.0000	236.2258	236.2258	0.0450	0.0000	237.1708
Total	1.1576	2.0691	1.7762	2.7200e-003	0.1743	0.1265	0.3007	0.0802	0.1186	0.1988	0.0000	236.2258	236.2258	0.0450	0.0000	237.1708

E72

[illegible]

2.2 Overall Operational Unmitigated Operational

Category	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
	tons/yr										MT/yr					
Area	0.7886	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003
Energy	2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	95.6529	95.6529	5.6200e-003	1.4500e-003	96.2198
Mobile	0.1670	0.4393	1.8397	3.9500e-003	0.2779	5.7900e-003	0.2837	0.0746	5.3300e-003	0.0799	0.0000	304.5805	304.5805	0.0124	0.0000	304.8416
Waste						0.0000	0.0000		0.0000	0.0000	19.5257	0.0000	19.5257	1.1539	0.0000	43.7584
Water						0.0000	0.0000		0.0000	0.0000	7.5074	24.3699	31.8773	0.7728	0.0186	53.8577
Total	0.9576	0.4577	1.8562	4.0600e-003	0.2779	7.1800e-003	0.2851	0.0746	6.7200e-003	0.0813	27.0331	424.6053	451.6385	1.9448	0.0200	498.6795

E73

2.2 Overall Operational

Mitigated Operational

Category	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
	tons/yr										MT/yr					
Area	0.7886	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003
Energy	1.4200e-003	0.0129	0.0109	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	14.0672	14.0672	2.7000e-004	2.6000e-004	14.1528
Mobile	0.1551	0.3599	1.5714	3.1400e-003	0.2189	4.6500e-003	0.2235	0.0587	4.2700e-003	0.0630	0.0000	241.7682	241.7682	0.0101	0.0000	241.9796
Waste						0.0000	0.0000		0.0000	0.0000	19.5257	0.0000	19.5257	1.1539	0.0000	43.7584
Water						0.0000	0.0000		0.0000	0.0000	7.5074	24.3699	31.8773	0.7726	0.0185	53.8457
Total	0.9451	0.3728	1.5833	3.2200e-003	0.2189	5.6300e-003	0.2245	0.0587	5.2500e-003	0.0640	27.0331	280.2073	307.2404	1.9369	0.0188	353.7386

	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
Percent Reduction	1.31	18.54	14.70	20.69	21.24	21.59	21.25	21.24	21.88	21.28	0.00	34.01	31.97	0.40	6.10	29.06

3.0 Construction Detail

Construction Phase

E74

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/16/2017	1/27/2017	5	10	
2	Site Preparation	Site Preparation	2/1/2017	2/14/2017	5	10	
3	Paving	Paving	2/28/2017	3/20/2017	5	15	
4	Building Construction	Building Construction	3/21/2017	7/31/2017	5	95	
5	Architectural Coating	Architectural Coating	4/4/2017	8/14/2017	5	95	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 6.26

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 261,509; Non-Residential Outdoor: 87,170 (Architectural Coating – sqft)

OffRoad Equipment

E75

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Grading	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	29.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2017

Unmitigated Construction On-Site

Category	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
tons/yr																
Fugitive Dust	0.0173	0.1799	0.1269	1.5000e-004	0.0334	0.0000	0.0334	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1799	0.1269	1.5000e-004	0.0334	0.0000	0.0334	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.1799	0.1269	1.5000e-004	0.0334	0.0102	0.0436	0.0169	9.3800e-003	0.0263	0.0000	13.8058	13.8058	4.2300e-003	0.0000	13.8947

Unmitigated Construction Off-Site

Category	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
tons/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
Earthwork	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
Water	2.5000e-004	3.7000e-004	3.5500e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5939	0.5939	3.0000e-005	0.0000	0.5945
Total	2.5000e-004	3.7000e-004	3.5500e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5939	0.5939	3.0000e-005	0.0000	0.5945

3.2 Grading - 2017**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															
Fugitive Dust	0.0173	0.1799	0.1269	1.5000e-004	0.0334	0.0000	0.0334	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1799	0.1269	1.5000e-004	0.0334	0.0000	0.0334	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.1799	0.1269	1.5000e-004	0.0334	0.0102	0.0436	0.0169	9.3800e-003	0.0263	0.0000	13.8058	13.8058	4.2300e-003	0.0000	13.8947

Mitigated 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															
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
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.5939	0.5939	3.0000e-005	0.0000	0.5945

E78

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

Category	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
tons/yr																
Fugitive Dust	0.0242	0.2588	0.1970	2.0000e-004	0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004	0.0903	0.0138	0.0138	0.0127	0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	0.0242	0.2588	0.1970	2.0000e-004	0.0903	0.0138	0.1041	0.0497	0.0127	0.0623	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745

Unmitigated Construction Off-Site

Category	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
tons/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
Total	3.0000e-004	4.4000e-004	4.2600e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.2000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7127	0.7127	4.0000e-005	0.0000	0.7134

E79

3.3 Site Preparation - 2017

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															
Fugitive Dust	0.0242	0.2588	0.1970	2.0000e-004	0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004	0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0242	0.2588	0.1970	2.0000e-004	0.0903	0.0138	0.1041	0.0497	0.0127	0.0623	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745

Mitigated 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															
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
Total	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

E80

3.4 Paving - 2017**Unmitigated Construction On-Site**

Category	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
	tons/yr															
Off-Road	0.0124	0.1260	0.0936	1.4000e-004		7.5400e-003	7.5400e-003		6.9500e-003	6.9500e-003	0.0000	12.7493	12.7493	3.8000e-003	0.0000	12.8291
Paving	1.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0126	0.1260	0.0936	1.4000e-004		7.5400e-003	7.5400e-003		6.9500e-003	6.9500e-003	0.0000	12.7493	12.7493	3.8000e-003	0.0000	12.8291

Unmitigated Construction Off-Site

Category	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
	tons/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
	5.0000e-004	7.4000e-004	7.1000e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.1878	1.1878	6.0000e-005	0.0000	1.1891
Total	5.0000e-004	7.4000e-004	7.1000e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.1878	1.1878	6.0000e-005	0.0000	1.1891

E81

3.4 Paving - 2017**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	0.0124	0.1260	0.0936	1.4000e-004		7.5400e-003	7.5400e-003		6.9500e-003	6.9500e-003	0.0000	12.7493	12.7493	3.8000e-003	0.0000	12.8291
Paving	1.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0126	0.1260	0.0936	1.4000e-004		7.5400e-003	7.5400e-003		6.9500e-003	6.9500e-003	0.0000	12.7493	12.7493	3.8000e-003	0.0000	12.8291

Mitigated 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
Total	5.0000e-004	7.4000e-004	7.1000e-003	2.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.1878	1.1878	6.0000e-005	0.0000	1.1891

E82

3.5 Building Construction - 2017**Unmitigated Construction On-Site**

Category	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
tons/yr																
Off-Road	0.1474	1.2543	0.8611	1.2700e-003		0.0846	0.0846	0.0795	0.0795	0.0795	0.0000	113.7526	113.7526	0.0280	0.0000	114.3405
Total	0.1474	1.2543	0.8611	1.2700e-003		0.0846	0.0846	0.0795		0.0795	0.0000	113.7526	113.7526	0.0280	0.0000	114.3405

Unmitigated Construction Off-Site

Category	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
tons/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	0.0159	0.1237	0.1915	3.3000e-004	8.8700e-003	1.7800e-003	0.0107	2.5400e-003	1.6400e-003	4.1800e-003	0.0000	29.2870	29.2870	2.3000e-004	0.0000	29.2917
Total	0.0120	0.0175	0.1687	3.8000e-004	0.0323	2.6000e-004	0.0326	8.6000e-003	2.4000e-004	8.8300e-003	0.0000	28.2095	28.2095	1.4800e-003	0.0000	28.2405
Total	0.0279	0.1412	0.3602	7.1000e-004	0.0412	2.0400e-003	0.0432	0.0111	1.8800e-003	0.0130	0.0000	57.4964	57.4964	1.7100e-003	0.0000	57.5322

E83

3.5 Building Construction - 2017**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															
Off-Road	0.1474	1.2543	0.8611	1.2700e-003		0.0846	0.0846	0.0795	0.0795	0.0795	0.0000	113.7524	113.7524	0.0280	0.0000	114.3404
Total	0.1474	1.2543	0.8611	1.2700e-003		0.0846	0.0846	0.0795	0.0795	0.0795	0.0000	113.7524	113.7524	0.0280	0.0000	114.3404

Mitigated 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															
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	0.0159	0.1237	0.1915	3.3000e-004	8.8700e-003	1.7800e-003	0.0107	2.5400e-003	1.6400e-003	4.1800e-003	0.0000	29.2870	29.2870	2.3000e-004	0.0000	29.2917
Total	0.0120	0.0175	0.1687	3.8000e-004	0.0323	2.6000e-004	0.0326	8.6000e-003	2.4000e-004	8.8300e-003	0.0000	28.2095	28.2095	1.4800e-003	0.0000	28.2405
Total	0.0279	0.1412	0.3602	7.1000e-004	0.0412	2.0400e-003	0.0432	0.0111	1.8800e-003	0.0130	0.0000	57.4964	57.4964	1.7100e-003	0.0000	57.5322

E84

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

Category	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
tons/yr																
Archit. Coating	0.9091					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1038	0.0887	1.4000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	12.1280	12.1280	1.2800e-003	0.0000	12.1548
Total	0.9249	0.1038	0.0887	1.4000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	12.1280	12.1280	1.2800e-003	0.0000	12.1548

Unmitigated Construction Off-Site

Category	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
tons/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
Total	2.4000e-003	3.5000e-003	0.0337	8.0000e-005	6.4600e-003	5.0000e-005	6.5100e-003	1.7200e-003	5.0000e-005	1.7700e-003	0.0000	5.6419	5.6419	3.0000e-004	0.0000	5.6481

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3.6 Architectural Coating - 2017

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															
Archit. Coating	0.9091					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1038	0.0887	1.4000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	12.1279	12.1279	1.2800e-003	0.0000	12.1548
Total	0.9249	0.1038	0.0887	1.4000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	12.1279	12.1279	1.2800e-003	0.0000	12.1548

Mitigated 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															
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
Total	2.4000e-003	3.5000e-003	0.0337	8.0000e-005	6.4600e-003	5.0000e-005	6.5100e-003	1.7200e-003	5.0000e-005	1.7700e-003	0.0000	5.6419	5.6419	3.0000e-004	0.0000	5.6481

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Category	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
	tons/yr										MT/yr					
Mitigated	0.1551	0.3599	1.5714	3.1400e-003	0.2189	4.6500e-003	0.2235	0.0587	4.2700e-003	0.0630	0.0000	241.7682	241.7682	0.0101	0.0000	241.9796
Unmitigated	0.1670	0.4393	1.8397	3.9500e-003	0.2779	5.7900e-003	0.2837	0.0746	5.3300e-003	0.0799	0.0000	304.5805	304.5805	0.0124	0.0000	304.8416

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate				Unmitigated		Mitigated	
	Weekday	Saturday	Sunday		Annual VMT		Annual VMT	
Other Non-Asphalt Surfaces	0.00	0.00	0.00					
Parking Lot	0.00	0.00	0.00					
Unrefrigerated Warehouse-No Rail	255.83	255.83	255.83		746,884		588,253	
Total	255.83	255.83	255.83		746,884		588,253	

4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %			
	H-W or C-W	H-S or C-C	H-O or C-NW		H-W or C-W	H-S or C-C	H-O or C-NW		Primary	Diverted	Pass-by	
Other Non-Asphalt Surfaces	9.50	7.30	7.30		0.00	0.00	0.00		0	0	0	
Parking Lot	9.50	7.30	7.30		0.00	0.00	0.00		0	0	0	
Unrefrigerated Warehouse-No	9.50	7.30	7.30		59.00	0.00	41.00		92	5	3	

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546114	0.062902	0.174648	0.122995	0.034055	0.004856	0.015640	0.024397	0.002087	0.003279	0.006673	0.000688	0.001667

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

Category	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
tons/yr																
MT/yr																
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	75.7207	75.7207	5.2300e-003	1.0800e-003	76.1663
NaturalGas Mitigated	1.4200e-003	0.0129	0.0109	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	14.0672	14.0672	2.7000e-004	2.6000e-004	14.1528
NaturalGas Unmitigated	2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	19.9322	19.9322	3.8000e-004	3.7000e-004	20.0535

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	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/yr															
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	373515	2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	19.9322	19.9322	3.8000e-004	3.7000e-004	20.0535
Total		2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	19.9322	19.9322	3.8000e-004	3.7000e-004	20.0535

Mitigated

Land Use	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/yr															
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Rail	263610	1.4200e-003	0.0129	0.0109	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	14.0672	14.0672	2.7000e-004	2.6000e-004	14.1528
Total		1.4200e-003	0.0129	0.0109	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	14.0672	14.0672	2.7000e-004	2.6000e-004	14.1528

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	3872	0.7369	5.0000e-005	1.0000e-005	0.7413
Unrefrigerated Warehouse-No Pail	393982	74.9838	5.1800e-003	1.0700e-003	75.4250
Total		75.7207	5.2300e-003	1.0800e-003	76.1663

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Pail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	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					
Mitigated	0.7886	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003
Unmitigated	0.7886	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0909					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003
Total	0.7886	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003

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6.2 Area by SubCategory

Mitigated

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0909					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003
Total	0.7886	1.0000e-005	1.0800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e-003	2.0500e-003	1.0000e-005	0.0000	2.1700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	31.8773	0.7726	0.0185	53.8457
Unmitigated	31.8773	0.7728	0.0186	53.8577

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Pail	23.6638 / 0	31.8773	0.7728	0.0186	53.8577
Total		31.8773	0.7728	0.0186	53.8577

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Pail	23.6638 / 0	31.8773	0.7726	0.0185	53.8457
Total		31.8773	0.7726	0.0185	53.8457

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.5257	1.1539	0.0000	43.7584
Unmitigated	19.5257	1.1539	0.0000	43.7584

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unimproved Warehouse/No	96.19	19.5257	1.1539	0.0000	43.7584
		19.5257	1.1539	0.0000	43.7584

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Pail	96.19	19.5257	1.1539	0.0000	43.7584
Total		19.5257	1.1539	0.0000	43.7584

9.0 Operational Offroad

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

Vineyard Self-Storage
Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	102.33	1000sqft	2.35	102,333.00	0
Other Non-Asphalt Surfaces	1.65	Acre	1.65	71,874.00	0
Parking Lot	11.00	Space	0.10	4,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2017

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MW/hr)	419.59	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on PG&E's anticipated progress towards statewide RPS goals

Land Use - Applicant Information

Construction Phase - Applicant Information

Grading - Applicant Information

Vehicle Trips - Based on IS/MND Traffic section

Energy Use - *

Mobile Land Use Mitigation -

Energy Mitigation -

Architectural Coating -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	95.00
tblConstructionPhase	NumDays	230.00	95.00
tblConstructionPhase	NumDays	8.00	10.00
tblConstructionPhase	NumDays	18.00	15.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	12/11/2017	8/14/2017
tblConstructionPhase	PhaseEndDate	3/7/2017	3/20/2017
tblConstructionPhase	PhaseEndDate	2/10/2017	2/14/2017
tblConstructionPhase	PhaseStartDate	8/1/2017	4/4/2017
tblConstructionPhase	PhaseStartDate	2/15/2017	2/28/2017
tblConstructionPhase	PhaseStartDate	1/28/2017	2/1/2017
tblGrading	AcresOfGrading	5.00	6.26
tblLandUse	LandUseSquareFeet	102,330.00	102,333.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	419.59
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleTrips	ST_TR	2.59	2.50
tblVehicleTrips	SU_TR	2.59	2.50
tblVehicleTrips	WD_TR	2.59	2.50

2.0 Emissions Summary

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2.2 Overall Operational

Unmitigated Operational

Category	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
	lb/day															
Area	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Energy	0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245
Mobile	0.9399	2.2634	9.9573	0.0230	1.5862	0.0318	1.6180	0.4243	0.0293	0.4536		1,950.217 ₃	1,950.217 ₃	0.0754		1,951.799 ₈
Total	5.2725	2.3638	10.0535	0.0236	1.5862	0.0395	1.6257	0.4243	0.0369	0.4613		2,070.634₂	2,070.634₂	0.0777	2.2100e-003	2,072.950₈

Mitigated Operational

Category	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
	lb/day															
Area	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Energy	7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840
Mobile	0.8729	1.8552	8.3170	0.0183	1.2493	0.0255	1.2748	0.3342	0.0235	0.3577		1,547.570 ₄	1,547.570 ₄	0.0610		1,548.851 ₉
Total	5.2021	1.9261	8.3884	0.0187	1.2493	0.0309	1.2802	0.3342	0.0289	0.3631		1,632.562₄	1,632.562₄	0.0627	1.5600e-003	1,634.362₅

	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
Percent Reduction	1.33	18.52	16.56	20.85	21.24	21.66	21.25	21.24	21.80	21.28	0.00	21.16	21.16	19.30	29.41	21.16

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/16/2017	1/27/2017	5	10	
2	Site Preparation	Site Preparation	2/1/2017	2/14/2017	5	10	
3	Paving	Paving	2/28/2017	3/20/2017	5	15	
4	Building Construction	Building Construction	3/21/2017	7/31/2017	5	95	
5	Architectural Coating	Architectural Coating	4/4/2017	8/14/2017	5	95	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 6.26

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 261,509; Non-Residential Outdoor: 87,170 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Grading	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	29.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2017

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	lb/day										lb/day					
Fugitive Dust	...	...	...	...	6.6860	0.0000	6.6860	3.3819	0.0000	3.3819	...	...	0.0000	...	...	0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297	...	2.0388	2.0388	1.8757	1.8757	1.8757	...	3,043.6667	3,043.6667	0.9326	...	3,063.2507
Total	3.4555	35.9825	25.3812	0.0297	6.6860	2.0388	8.7248	3.3819	1.8757	5.2576	...	3,043.6667	3,043.6667	0.9326	...	3,063.2507

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	lb/day										lb/day					
...	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	...	...	0.0000	0.0000	...	0.0000
...	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385	...	140.6558	140.6558	6.8500e-003	...	140.7996
Total	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385	...	140.6558	140.6558	6.8500e-003	...	140.7996

E103

3.2 Grading - 2017**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	lb/day															
Fugitive Dust	..	..	..	..	6.6860	0.0000	6.6860	3.3819	0.0000	3.3819	..	..	0.0000	..	..	0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297	..	2.0388	2.0388	..	1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326	..	3,063.2507
Total	3.4555	35.9825	25.3812	0.0297	6.6860	2.0388	8.7248	3.3819	1.8757	5.2576	0.0000	3,043.6667	3,043.6667	0.9326	..	3,063.2507

Mitigated 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	lb/day															
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
Worker	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
..	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385	..	140.6558	140.6558	6.8500e-003	..	140.7996
Total	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385	..	140.6558	140.6558	6.8500e-003	..	140.7996

E104

3.3 Site Preparation - 2017

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	lb/day															
Fugitive Dust	..	..	..	..	18.0663	0.0000	18.0663	9.9307	0.0000	9.9307	..	..	0.0000	..	..	0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391	..	2.7542	2.7542	..	2.5339	2.5339	..	4,003.085 ₉	4,003.085 ₉	1.2265	..	4,028.843 ₂
Total	4.8382	51.7535	39.3970	0.0391	18.0663	2.7542	20.8205	9.9307	2.5339	12.4646	..	4,003.085₉	4,003.085₉	1.2265	..	4,028.843₂

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	lb/day															
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
Worker	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
Total	0.0652	0.0783	0.9133	2.0900e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462	..	168.7869	168.7869	8.2200e-003	..	168.9595

E105

3.3 Site Preparation - 2017

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	lb/day															
Fugitive Dust	..	..	..	..	18.0663	0.0000	18.0663	9.9307	0.0000	9.9307	..	..	0.0000	..	..	0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391	..	2.7542	2.7542	..	2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265	..	4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	18.0663	2.7542	20.8205	9.9307	2.5339	12.4646	0.0000	4,003.0859	4,003.0859	1.2265	..	4,028.8432

Mitigated 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	lb/day															
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
Worker	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
Total	0.0652	0.0783	0.9133	2.0900e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462	..	168.7869	168.7869	8.2200e-003	..	168.9595
Total	0.0652	0.0783	0.9133	2.0900e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462	..	168.7869	168.7869	8.2200e-003	..	168.9595

E106

3.4 Paving - 2017**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	lb/day															
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269	0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0175					0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total	1.6729	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269		0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609

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	lb/day															
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
Worker	0.0725	0.0870	1.0148	2.3200e-003	0.1886	1.4400e-003	0.1901	0.0500	1.3300e-003	0.0514		187.5410	187.5410	9.1300e-003		187.7328
Total	0.0725	0.0870	1.0148	2.3200e-003	0.1886	1.4400e-003	0.1901	0.0500	1.3300e-003	0.0514		187.5410	187.5410	9.1300e-003		187.7328

E107

3.4 Paving - 2017**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	lb/day															
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269	0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0175					0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total	1.6729	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269		0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609

Mitigated 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	lb/day															
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
Worker	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
Total	0.0725	0.0870	1.0148	2.3200e-003	0.1886	1.4400e-003	0.1901	0.0500	1.3300e-003	0.0514		187.5410	187.5410	9.1300e-003		187.7328

E108

3.5 Building Construction - 2017

Unmitigated Construction On-Site

Category	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
lb/day																
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

Unmitigated Construction Off-Site

Category	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
lb/day																
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
Worker	0.2981	2.5192	3.1059	6.9100e-003	0.1928	0.0373	0.2301	0.0551	0.0343	0.0894		681.8462	681.8462	5.2100e-003		681.9556
Total	0.2717	0.3261	3.8053	8.7000e-003	0.7073	5.4200e-003	0.7127	0.1876	4.9900e-003	0.1926		703.2789	703.2789	0.0342		703.9980
Total	0.5699	2.8454	6.9112	0.0156	0.9001	0.0428	0.9428	0.2426	0.0393	0.2820		1,385.1250	1,385.1250	0.0395		1,385.9536

E109

3.5 Building Construction - 2017

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	lb/day															
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490

Mitigated 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	lb/day															
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
Worker	0.2981	2.5192	3.1059	6.9100e-003	0.1928	0.0373	0.2301	0.0551	0.0343	0.0894		681.8462	681.8462	5.2100e-003		681.9556
	0.2717	0.3261	3.8053	8.7000e-003	0.7073	5.4200e-003	0.7127	0.1876	4.9900e-003	0.1926		703.2789	703.2789	0.0342		703.9980
Total	0.5699	2.8454	6.9112	0.0156	0.9001	0.0428	0.9428	0.2426	0.0393	0.2820		1,385.1250	1,385.1250	0.0395		1,385.9536

E110

3.6 Architectural Coating - 2017

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	lb/day															
Archit. Coating	19.1384					0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733	0.1733	0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	19.4707	2.1850	1.8681	2.9700e-003		0.1733	0.1733	0.1733	0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

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	lb/day															
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
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996

E111

3.6 Architectural Coating - 2017

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	lb/day															
Archit. Coating	19.1384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	19.4707	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

Mitigated 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	lb/day															
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
Worker	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996
Total	0.0543	0.0652	0.7611	1.7400e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		140.6558	140.6558	6.8500e-003		140.7996

E112

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Category	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
	lb/day										lb/day					
Mitigated	0.8729	1.8552	8.3170	0.0183	1.2493	0.0255	1.2748	0.3342	0.0235	0.3577	1,547,570	4	1,547,570	0.0610		1,548,851
Unmitigated	0.9399	2.2634	9.9573	0.0230	1.5862	0.0318	1.6180	0.4243	0.0293	0.4536	1,950,217	3	1,950,217	0.0754		1,951,799
																8

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	255.83	255.83	255.83	746,884	588,253
Total	255.83	255.83	255.83	746,884	588,253

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546114	0.062902	0.174648	0.122995	0.034055	0.004856	0.015640	0.024397	0.002087	0.003279	0.006673	0.000688	0.001667

5.0 Energy Detail

5.0 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

Category	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
lb/day																
NaturalGas Mitigated	7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840
NaturalGas Unmitigated	0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245

E114

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	lb/day															
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Pail	1023.33	0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245
Total		0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245

Mitigated

	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	lb/day															
Parking Lot	0	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
Unrefrigerated Warehouse-No Pail	0.722219	7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840
Other Non-Asphalt Surfaces	0	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
Total		7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840

6.0 Area Detail

6.1 Mitigation Measures Area

	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	lb/day										lb/day					
Mitigated	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Unmitigated	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266

6.2 Area by SubCategory

Unmitigated

	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
SubCategory	lb/day										lb/day					
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Product	3.8222					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1500e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Total	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266

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6.2 Area by SubCategory

Mitigated

	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
SubCategory	lb/day										lb/day					
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8222					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1500e-003	1.1000e-004	0.0120	0.0000	4.0000e-005	4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Total	4.3215	1.1000e-004	0.0120	0.0000	4.0000e-005	4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Vineyard Self-Storage
Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	102.33	1000sqft	2.35	102,333.00	0
Other Non-Asphalt Surfaces	1.65	Acre	1.65	71,874.00	0
Parking Lot	11.00	Space	0.10	4,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2017

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MW/hr)	419.59	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on PG&E's anticipated progress towards statewide RPS goals

Land Use - Applicant Information

Construction Phase - Applicant Information

Grading - Applicant Information

Vehicle Trips - Based on IS/MND Traffic section

Energy Use - *

Mobile Land Use Mitigation -

Energy Mitigation -

Architectural Coating -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	95.00
tblConstructionPhase	NumDays	230.00	95.00
tblConstructionPhase	NumDays	8.00	10.00
tblConstructionPhase	NumDays	18.00	15.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	12/11/2017	8/14/2017
tblConstructionPhase	PhaseEndDate	3/7/2017	3/20/2017
tblConstructionPhase	PhaseEndDate	2/10/2017	2/14/2017
tblConstructionPhase	PhaseStartDate	8/1/2017	4/4/2017
tblConstructionPhase	PhaseStartDate	2/15/2017	2/28/2017
tblConstructionPhase	PhaseStartDate	1/28/2017	2/1/2017
tblGrading	AcresOfGrading	5.00	6.26
tblLandUse	LandUseSquareFeet	102,330.00	102,333.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	419.59
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleTrips	ST_TR	2.59	2.50
tblVehicleTrips	SU_TR	2.59	2.50
tblVehicleTrips	WD_TR	2.59	2.50

2.0 Emissions Summary

E120

2.2 Overall Operational

Unmitigated Operational

Category	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
lb/day																
Area	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Energy	0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245
Mobile	0.9875	2.5160	10.9793	0.0216	1.5862	0.0320	1.6181	0.4243	0.0294	0.4537		1,833.4664	1,833.4664	0.0754		1,835.0501
Total	5.3200	2.6165	11.0755	0.0222	1.5862	0.0396	1.6258	0.4243	0.0371	0.4614		1,953.8833	1,953.8833	0.0778	2.2100e-003	1,956.2011

Mitigated Operational

Category	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
lb/day																
Area	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Energy	7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840
Mobile	0.9210	2.0600	9.4850	0.0172	1.2493	0.0256	1.2749	0.3342	0.0236	0.3578		1,455.2003	1,455.2003	0.0611		1,456.4831
Total	5.2502	2.1309	9.5564	0.0176	1.2493	0.0311	1.2804	0.3342	0.0290	0.3632		1,540.1924	1,540.1924	0.0628	1.5600e-003	1,541.9937

E122

	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
Percent Reduction	1.31	18.56	13.72	20.82	21.24	21.59	21.25	21.24	21.73	21.28	0.00	21.17	21.17	19.30	29.41	21.17

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/16/2017	1/27/2017	5	10	
2	Site Preparation	Site Preparation	2/1/2017	2/14/2017	5	10	
3	Paving	Paving	2/28/2017	3/20/2017	5	15	
4	Building Construction	Building Construction	3/21/2017	7/31/2017	5	95	
5	Architectural Coating	Architectural Coating	4/4/2017	8/14/2017	5	95	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 6.26

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 261,509; Non-Residential Outdoor: 87,170 (Architectural Coating – sqft)

OffRoad Equipment

E123

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Grading	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	75.00	29.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2017

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	lb/day										lb/day					
Fugitive Dust	...	...	...	...	6.6860	0.0000	6.6860	3.3819	0.0000	3.3819	...	...	0.0000	...	...	0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297	...	2.0388	2.0388	1.8757	1.8757	1.8757	...	3,043.666 ₇	3,043.666 ₇	0.9326	...	3,063.250 ₇
Total	3.4555	35.9825	25.3812	0.0297	6.6860	2.0388	8.7248	3.3819	1.8757	5.2576	...	3,043.666 ₇	3,043.666 ₇	0.9326	...	3,063.250 ₇

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	lb/day										lb/day					
Fugitive Dust	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
Off-Road	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
Total	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385	...	129.7647	129.7647	6.8500e-003	...	129.9085
	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385	...	129.7647	129.7647	6.8500e-003	...	129.9085

E125

3.2 Grading - 2017**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	lb/day															
Fugitive Dust	..	..	..	..	6.6860	0.0000	6.6860	3.3819	0.0000	3.3819	..	..	0.0000	..	..	0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297	..	2.0388	2.0388	..	1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326	..	3,063.2507
Total	3.4555	35.9825	25.3812	0.0297	6.6860	2.0388	8.7248	3.3819	1.8757	5.2576	0.0000	3,043.6667	3,043.6667	0.9326	..	3,063.2507

Mitigated 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	lb/day															
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
Worker	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
Total	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385	..	129.7647	129.7647	6.8500e-003	..	129.9085

E126

3.3 Site Preparation - 2017

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	lb/day															
Fugitive Dust	..	..	..	..	18.0663	0.0000	18.0663	9.9307	0.0000	9.9307	..	..	0.0000	..	..	0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391	..	2.7542	2.7542	..	2.5339	2.5339	..	4,003.0859	4,003.0859	1.2265	..	4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	18.0663	2.7542	20.8205	9.9307	2.5339	12.4646	..	4,003.0859	4,003.0859	1.2265	..	4,028.8432

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	lb/day															
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
Worker	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
..	0.0650	0.0969	0.8848	1.9300e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462	..	155.7176	155.7176	8.2200e-003	..	155.8902
Total	0.0650	0.0969	0.8848	1.9300e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462	..	155.7176	155.7176	8.2200e-003	..	155.8902

E127

3.3 Site Preparation - 2017

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	lb/day															
Fugitive Dust	..	..	..	..	18.0663	0.0000	18.0663	9.9307	0.0000	9.9307	..	..	0.0000	..	..	0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391	..	2.7542	2.7542	..	2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265	..	4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	18.0663	2.7542	20.8205	9.9307	2.5339	12.4646	0.0000	4,003.0859	4,003.0859	1.2265	..	4,028.8432

Mitigated 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	lb/day															
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
Worker	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
Total	0.0650	0.0969	0.8848	1.9300e-003	0.1698	1.3000e-003	0.1711	0.0450	1.2000e-003	0.0462	..	155.7176	155.7176	8.2200e-003	..	155.8902

E128

3.4 Paving - 2017**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	lb/day															
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269	0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0175					0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total	1.6729	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269	0.9269	0.9269		1,873.8264	1,873.8264	0.5588		1,885.5609

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	lb/day															
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
Worker	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
	0.0722	0.1076	0.9831	2.1400e-003	0.1886	1.4400e-003	0.1901	0.0500	1.3300e-003	0.0514		173.0196	173.0196	9.1300e-003		173.2113
Total	0.0722	0.1076	0.9831	2.1400e-003	0.1886	1.4400e-003	0.1901	0.0500	1.3300e-003	0.0514		173.0196	173.0196	9.1300e-003		173.2113

E129

3.4 Paving - 2017**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	lb/day															
Off-Road	1.6554	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269	0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609
Paving	0.0175					0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total	1.6729	16.8035	12.4837	0.0186		1.0056	1.0056	0.9269	0.9269	0.9269	0.0000	1,873.8264	1,873.8264	0.5588		1,885.5609

Mitigated 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	lb/day															
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
Worker	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
	0.0722	0.1076	0.9831	2.1400e-003	0.1886	1.4400e-003	0.1901	0.0500	1.3300e-003	0.0514		173.0196	173.0196	9.1300e-003		173.2113
Total	0.0722	0.1076	0.9831	2.1400e-003	0.1886	1.4400e-003	0.1901	0.0500	1.3300e-003	0.0514		173.0196	173.0196	9.1300e-003		173.2113

E130

3.5 Building Construction - 2017

Unmitigated Construction On-Site

Category	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
lb/day																
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812	1.6730	1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812	1.6730	1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

Unmitigated Construction Off-Site

Category	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
lb/day																
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
Worker	0.3754	2.6367	4.9282	6.8800e-003	0.1928	0.0377	0.2305	0.0551	0.0347	0.0897		676.6156	676.6156	5.3500e-003		676.7279
	0.2707	0.4036	3.6866	8.0300e-003	0.7073	5.4200e-003	0.7127	0.1876	4.9900e-003	0.1926		648.8233	648.8233	0.0342		649.5424
Total	0.6462	3.0403	8.6148	0.0149	0.9001	0.0431	0.9432	0.2426	0.0397	0.2823		1,325.4389	1,325.4389	0.0396		1,326.2703

E131

3.5 Building Construction - 2017

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	lb/day															
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490

Mitigated 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	lb/day															
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
Worker	0.3754	2.6367	4.9282	6.8800e-003	0.1928	0.0377	0.2305	0.0551	0.0347	0.0897		676.6156	676.6156	5.3500e-003		676.7279
	0.2707	0.4036	3.6866	8.0300e-003	0.7073	5.4200e-003	0.7127	0.1876	4.9900e-003	0.1926		648.8233	648.8233	0.0342		649.5424
Total	0.6462	3.0403	8.6148	0.0149	0.9001	0.0431	0.9432	0.2426	0.0397	0.2823		1,325.4389	1,325.4389	0.0396		1,326.2703

E132

3.6 Architectural Coating - 2017

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	lb/day															
Archit. Coating	19.1384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	19.4707	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

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	lb/day															
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
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085

E133

3.6 Architectural Coating - 2017

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	lb/day															
Archit. Coating	19.1384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	19.4707	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

Mitigated 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	lb/day															
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
Worker	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085
Total	0.0542	0.0807	0.7373	1.6100e-003	0.1415	1.0800e-003	0.1425	0.0375	1.0000e-003	0.0385		129.7647	129.7647	6.8500e-003		129.9085

E134

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Category	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
	lb/day										lb/day					
Mitigated	0.9210	2.0600	9.4850	0.0172	1.2493	0.0256	1.2749	0.3342	0.0236	0.3578		1,455,200 3	1,455,200 3	0.0611		1,456,483 1
Unmitigated	0.9875	2.5160	10.9793	0.0216	1.5862	0.0320	1.6181	0.4243	0.0294	0.4537		1,833,466 4	1,833,466 4	0.0754		1,835,050 1

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	255.83	255.83	255.83	746,884	588,253
Total	255.83	255.83	255.83	746,884	588,253

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546114	0.062902	0.174648	0.122995	0.034055	0.004856	0.015640	0.024397	0.002087	0.003279	0.006673	0.000688	0.001667

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

Category	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
lb/day																
NaturalGas Mitigated	7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840
NaturalGas Unmitigated	0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas s 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	lb/day															
Other Non-Asphalt Surfaces	0	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
Parking Lot	0	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
Unrefrigerated Warehouse-No Pail	1023.33	0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245
Total		0.0110	0.1003	0.0843	6.0000e-004		7.6200e-003	7.6200e-003		7.6200e-003	7.6200e-003		120.3918	120.3918	2.3100e-003	2.2100e-003	121.1245

Mitigated

	NaturalGas s 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	lb/day															
Parking Lot	0	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
Unrefrigerated Warehouse-No Pail	0.722219	7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840
Other Non-Asphalt Surfaces	0	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
Total		7.7900e-003	0.0708	0.0595	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003		84.9669	84.9669	1.6300e-003	1.5600e-003	85.4840

6.0 Area Detail

6.1 Mitigation Measures Area

Category	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
lb/day																
Mitigated	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Unmitigated	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266

6.2 Area by SubCategory

Unmitigated

SubCategory	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
lb/day																
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8222					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1500e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Total	4.3215	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266

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6.2 Area by SubCategory

Mitigated

	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
SubCategory	lb/day										lb/day					
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8222					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1500e-003	1.1000e-004	0.0120	0.0000	4.0000e-005	4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266
Total	4.3215	1.1000e-004	0.0120	0.0000	4.0000e-005	4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0252	0.0252	7.0000e-005		0.0266

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Vineyard Self-Storage
Bay Area AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

E140

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	2	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	11	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

E141

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated m/yr					
Air Compressors	1.57800E+002	1.03790E+001	8.87300E+002	1.40000E+004	8.23000E+003	8.23000E+003	0.00000E+000	1.21280E+001	1.21280E+001	1.28000E+003	0.00000E+000	1.21548E+001
Cement and Mortar Mixers	6.60000E+004	4.15000E+003	3.47000E+003	1.00000E+005	1.70000E+004	1.70000E+004	0.00000E+000	5.15560E+001	5.15560E+001	5.00000E+005	0.00000E+000	5.16680E+001
Cranes	2.69300E+002	3.19740E+001	1.14560E+001	2.30000E+004	1.42500E+002	1.31100E+002	0.00000E+000	2.17647E+001	2.17647E+001	6.67000E+003	0.00000E+000	2.19047E+001
Excavators	1.81000E+003	2.00800E+002	1.71100E+002	3.00000E+005	9.90000E+004	9.10000E+004	0.00000E+000	2.45512E+000	2.45512E+000	7.50000E+004	0.00000E+000	2.47092E+000
Forklifts	3.00600E+002	2.60260E+001	1.78000E+001	2.20000E+004	2.14700E+002	1.97500E+002	0.00000E+000	2.01997E+001	2.01997E+001	6.19000E+003	0.00000E+000	2.03296E+001
Generator Sets	2.70800E+002	2.12050E+001	1.79240E+001	3.10000E+004	1.42700E+002	1.42700E+002	0.00000E+000	2.68474E+001	2.68474E+001	2.17000E+003	0.00000E+000	2.68930E+001
Graders	4.76000E+003	4.82100E+002	2.41900E+002	3.00000E+005	2.71000E+003	2.49000E+003	0.00000E+000	2.89211E+000	2.89211E+000	8.90000E+004	0.00000E+000	2.91072E+000
Pavers	2.70000E+003	3.02300E+002	2.12700E+002	3.00000E+005	1.49000E+003	1.37000E+003	0.00000E+000	3.14349E+000	3.14349E+000	9.60000E+004	0.00000E+000	3.16372E+000
Paving Equipment	3.18000E+003	3.61800E+002	2.85400E+002	5.00000E+005	1.81000E+003	1.66000E+003	0.00000E+000	4.18797E+000	4.18797E+000	1.28000E+003	0.00000E+000	4.21492E+000
Rollers	3.50000E+003	3.26400E+002	2.24000E+002	3.00000E+005	2.36000E+003	2.18000E+003	0.00000E+000	2.73683E+000	2.73683E+000	8.40000E+004	0.00000E+000	2.75444E+000
Rubber Tired Dozers	2.38100E+002	2.63850E+001	1.98810E+001	1.80000E+004	1.22600E+002	1.12800E+002	0.00000E+000	1.65109E+001	1.65109E+001	5.06000E+003	0.00000E+000	1.66172E+001
Tractors/Loaders/Backhoes	5.29600E+002	5.08900E+001	4.00220E+001	5.20000E+004	3.82700E+002	3.52100E+002	0.00000E+000	4.82712E+001	4.82712E+001	1.47900E+002	0.00000E+000	4.85818E+001
Welders	2.37900E+002	8.26800E+002	9.08500E+002	1.20000E+004	6.07000E+003	6.07000E+003	0.00000E+000	8.94048E+000	8.94048E+000	1.94000E+003	0.00000E+000	8.98112E+000

E142

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Mitigated tons/yr													Mitigated mt/yr			
Air Compressors	1.57800E-002	1.03790E-001	8.87300E-002	1.40000E-004	8.23000E-003	8.23000E-003	0.00000E+000	1.21279E+001	1.21279E+001	1.28000E-003	0.00000E+000	1.21548E+001				
Cement and Mortar Mixers	6.60000E-004	4.15000E-003	3.47000E-003	1.00000E-005	1.70000E-004	1.70000E-004	0.00000E+000	5.15560E-001	5.15560E-001	5.00000E-005	0.00000E+000	5.16680E-001				
Cranes	2.69300E-002	3.19740E-001	1.14560E-001	2.30000E-004	1.42500E-002	1.31100E-002	0.00000E+000	2.17647E+001	2.17647E+001	6.67000E-003	0.00000E+000	2.19047E+001				
Excavators	1.81000E-003	2.00800E-002	1.71100E-002	3.00000E-005	9.90000E-004	9.10000E-004	0.00000E+000	2.45512E+000	2.45512E+000	7.50000E-004	0.00000E+000	2.47092E+000				
Forklifts	3.00600E-002	2.60260E-001	1.78000E-001	2.20000E-004	2.14700E-002	1.97500E-002	0.00000E+000	2.01996E+001	2.01996E+001	6.19000E-003	0.00000E+000	2.03296E+001				
Generator Sets	2.70800E-002	2.12050E-001	1.79240E-001	3.10000E-004	1.42700E-002	1.42700E-002	0.00000E+000	2.68473E+001	2.68473E+001	2.17000E-003	0.00000E+000	2.68930E+001				
Graders	4.76000E-003	4.82100E-002	2.41900E-002	3.00000E-005	2.71000E-003	2.49000E-003	0.00000E+000	2.89211E+000	2.89211E+000	8.90000E-004	0.00000E+000	2.91072E+000				
Pavers	2.70000E-003	3.02300E-002	2.12700E-002	3.00000E-005	1.49000E-003	1.37000E-003	0.00000E+000	3.14349E+000	3.14349E+000	9.60000E-004	0.00000E+000	3.16371E+000				
Paving Equipment	3.18000E-003	3.61800E-002	2.85400E-002	5.00000E-005	1.81000E-003	1.66000E-003	0.00000E+000	4.18797E+000	4.18797E+000	1.28000E-003	0.00000E+000	4.21492E+000				
Rollers	3.50000E-003	3.26400E-002	2.24000E-002	3.00000E-005	2.36000E-003	2.18000E-003	0.00000E+000	2.73683E+000	2.73683E+000	8.40000E-004	0.00000E+000	2.75444E+000				
Rubber Tired Dozers	2.38100E-002	2.63850E-001	1.98810E-001	1.80000E-004	1.22600E-002	1.12800E-002	0.00000E+000	1.65109E+001	1.65109E+001	5.06000E-003	0.00000E+000	1.66171E+001				
Tractors/Loaders/Balckhoes	5.29600E-002	5.08900E-001	4.00220E-001	5.20000E-004	3.82700E-002	3.52100E-002	0.00000E+000	4.82712E+001	4.82712E+001	1.47900E-002	0.00000E+000	4.85818E+001				
Welders	2.37900E-002	8.26800E-002	9.08500E-002	1.20000E-004	6.07000E-003	6.07000E-003	0.00000E+000	8.94047E+000	8.94047E+000	1.94000E-003	0.00000E+000	8.98110E+000				

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64908E-006	1.64908E-006	0.00000E+000	0.00000E+000	8.22718E-007
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.18920E-007	9.18920E-007	0.00000E+000	0.00000E+000	9.13045E-007
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.90116E-007	9.90116E-007	0.00000E+000	0.00000E+000	9.83786E-007
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11743E-006	1.11743E-006	0.00000E+000	0.00000E+000	1.11553E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.16084E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21132E-006	1.21132E-006	0.00000E+000	0.00000E+000	1.20358E-006
Tractors/Loaders/Bulldozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24298E-006	1.24298E-006	0.00000E+000	0.00000E+000	1.23503E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11851E-006	1.11851E-006	0.00000E+000	0.00000E+000	2.22689E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

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No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)		
No	Clean Paved Road	% PM Reduction	0.00		

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.04	0.01	0.04	0.01	0.00	0.00
Grading	Fugitive Dust	0.03	0.02	0.03	0.02	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.09	0.05	0.09	0.05	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

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Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	7.15	18.09	14.58	20.51	19.69	19.89	0.00	20.62	20.62	18.99	0.00	20.62
Natural Gas	29.35	29.44	29.45	27.27	29.50	29.50	0.00	29.42	29.42	28.95	29.73	29.42
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.02
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.09	0.31		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.21	0.10		
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.21			

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No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
No	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
No	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
No	Transit Improvements	Transit Improvements Subtotal	0.00			
No	Transit Improvements	Land Use and Site Enhancement Subtotal	0.21			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00			2.00
No	Commute	Provide Ride Sharing Program				
No	Commute	Commute Subtotal	0.00			

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No	School Trip	Implement School Bus Program	0.00	
		Total VMT Reduction	0.21	

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	30.00	100.00

Appliance Type	Land Use Subtype	% Improvement
Coffee Maker		30.00

m1

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DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Initiate Recycling and Composting Services	
Percent Reduction in Waste Disposed	

APPENDIX B

ROAD CONSTRUCTION EMISSIONS MODELING RESULTS

Orange highlighted cells show s overlapped project phases, maximum daily emissions shown below have been adjusted to account for phase overlap. The maximum pounds per day in row 11 is summed over overlapping phases, but the maximum tons per phase in row 34 is not summed over overlapping phases.

Road Construction Emissions Model, Version 8.1.0

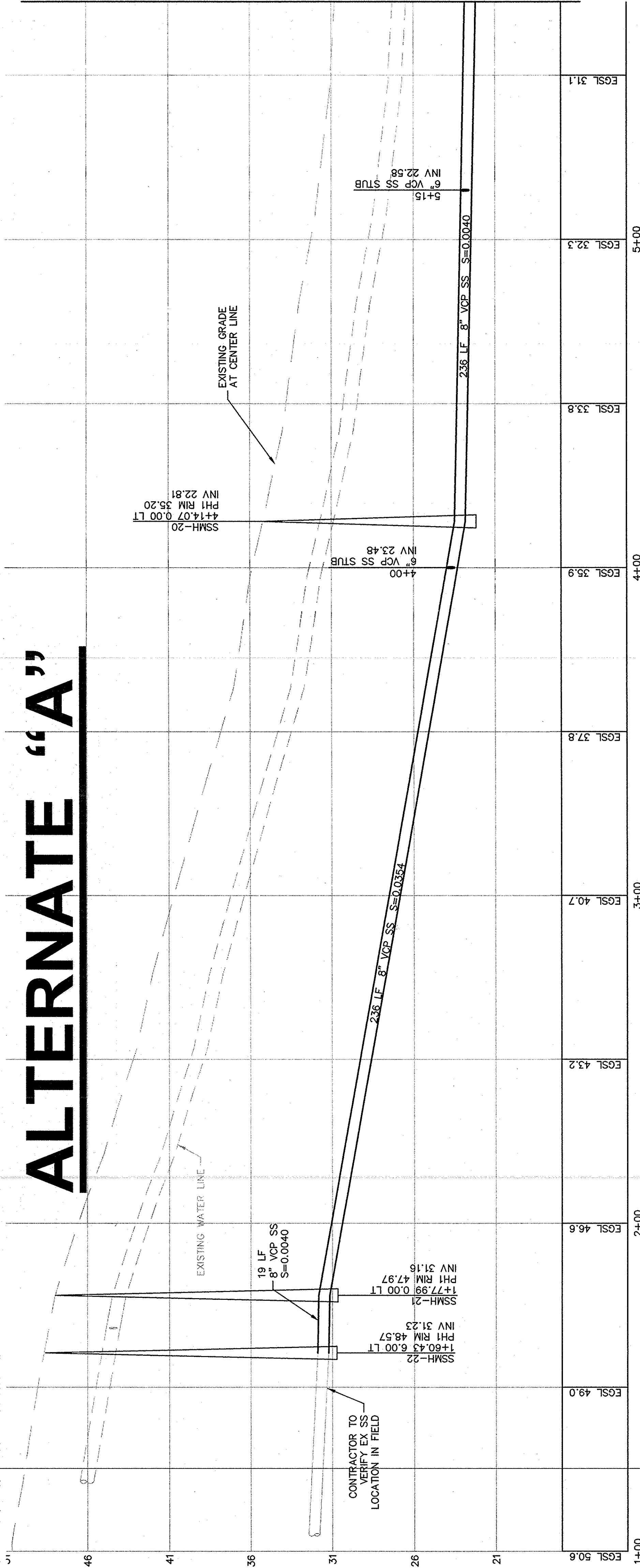
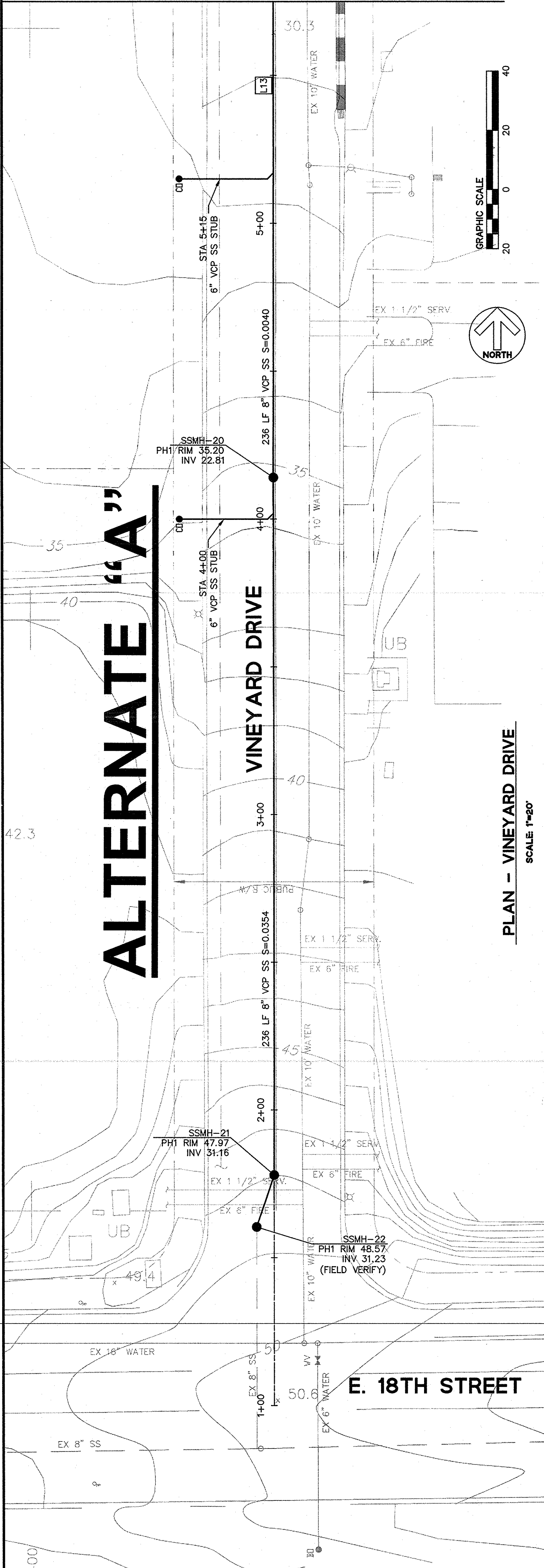
Daily Emission Estimates for -> Viewed Self Storage															
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM 10 (lbs/day)	Exhaust PM 10 (lbs/day)	Fugitive Dust PM 10 (lbs/day)	Total PM 2.5 (lbs/day)	Exhaust PM 2.5 (lbs/day)	Fugitive Dust PM 2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)	
Grubbing/Land Clearing	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
Grading/Excavation	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
Drainage/Utilities/Sub-Grade	1.18	7.67	8.74	4.46	0.46	4.00	1.26	0.42	0.83	0.01	1,001.66	0.31	0.01	1,011.88	0.00
Paving	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
Maximum (pounds/day)	1.18	7.67	8.74	4.46	0.46	4.00	1.26	0.42	0.83	0.01	1,001.66	0.31	0.01	1,011.88	0.00
Total (tons/construction project)	0.01	0.04	0.04	0.02	0.00	0.02	0.01	0.00	0.00	0.00	4.85	0.00	0.00	4.90	0.00
Notes:															
Project Start Year -> 2017															
Project Length (months) -> 0															
Total Project Area (acres) -> 0															
Maximum Area Disturbed/Day (acres) -> 0															
Water Truck Used? -> No															
Total Material Imported/Exported Volume (yd/day)				Daily VMT (miles/day)											
Soil				Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck							
Grubbing/Land Clearing				0	0	0	0	0							
Grading/Excavation				0	0	0	0	0							
Drainage/Utilities/Sub-Grade				0	0	0	0	0							
Paving				0	0	0	0	0							
PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.															
Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.															
CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1.25 and 289 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.															
Total Emission Estimates by Phase for -> Viewed Self Storage															
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM 10 (tons/phase)	Exhaust PM 10 (tons/phase)	Fugitive Dust PM 10 (tons/phase)	Total PM 2.5 (tons/phase)	Exhaust PM 2.5 (tons/phase)	Fugitive Dust PM 2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)	
Grubbing/Land Clearing	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
Grading/Excavation	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
Drainage/Utilities/Sub-Grade	0.01	0.04	0.04	0.02	0.00	0.02	0.01	0.00	0.00	0.00	4.85	0.00	0.00	4.44	0.00
Paving	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
Maximum (tons/phase)	0.01	0.04	0.04	0.02	0.00	0.02	0.01	0.00	0.00	0.00	4.85	0.00	0.00	4.44	0.00
Total (tons/construction project)	0.01	0.04	0.04	0.02	0.00	0.02	0.01	0.00	0.00	0.00	4.85	0.00	0.00	4.44	0.00
PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.															
Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.															
CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1.25 and 289 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.															
The CO2e emissions are reported as metric tons per phase.															

APPENDIX C

ALTERNATE “A” SANITARY SEWER INSTALLATION PLAN AND PROFILE

MATCHLINE STA 5+75 SEE SHEET PP-02

MATCHLINE STA 5+75 SEE SHEET PP-02




CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	DESC.
C1	750.00'	25'09"35"	329.34'	OL
C2	774.00'	25'09'35"	339.88'	FC
C3	726.00'	25'09'35"	318.80'	FC
C4	50.00'	98'16"39"	85.76'	FC
C5	726.00'	25'09'35"	318.80'	FC
C6	774.00'	25'09'35"	339.88'	FC
C7	500.00'	25'09'35"	329.34'	OL
C8	750.00'	13'34"22"	118.44'	OL
C9	500.00'	13'34"22"	118.44'	OL
C10	54.00'	90'01'36"	84.85'	OL
C11	50.00'	90'01'36"	78.56'	FC
C12	88.00'	37'32'34"	71.25'	FC
C13	30.00'	23'45'29"	12.44'	FC
C14	30.00'	23'45'29"	12.44'	FC
C15	476.00'	13'28'30"	111.95'	FC
C16	500.00'	08'18'56"	72.57'	OL
C17	476.00'	08'18'56"	69.08'	FC
C18	524.00'	08'18'56"	76.05'	FC
C19	54.00'	98'16'39"	92.62'	OL
C20	88.00'	14'24'37"	223.92'	FC
C21	30.00'	23'45'29"	12.44'	FC
C22	30.00'	23'45'29"	12.44'	FC

LINE		TABLE		DESC.
LINE	BEARING	LENGTH	FL.	
L1	N64°50'25" W	209.91'	CL	
L2	N64°50'25" W	209.91'	FC	
L3	N64°50'25" W	209.91'	FC	
L4	N90°00'00" E	224.67' 0.65'	FC	
L5	N90°00'00" E	112.75' 0.19'	FC	
L6	N90°00'00" E	125.19' 0.15'	CL	
L7	N00°00'36" E	150.00'	CL	
L8	N00°00'36" E	775.06'	FC	
L9	N00°00'36" E	755.05'	FC	
L10	N00°00'36" E	160.73'	FC	
L11	N00°02'17" E	298.32'	FC	
L13	N00°02'17" E	118.06'	CL	
L14	N90°00'00" E	744.00'	FC	
L15	N90°00'00" E	767.72'	CL	
L16	N90°00'00" E	719.58'	FC	
L7	N08°16'39" W	160.72'	CL	
L18	N08°16'39" W	113.18'	FC	
L19	N08°16'39" W	137.60'	FC	

NOTE: FC DATA SHOWN FOR REREFERENCE ONLY. NOT IN CONTRACT.

REVIEWED FOR COMPLIANCE WITH TITLE 9,
CHAPTER 4 OF THE ANTIOCH MUNICIPAL CODE

BY:  CITY ENGINEER

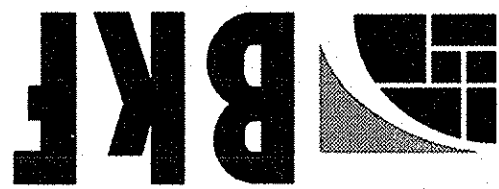
DATE: 1/24/07

NOTE:
PHASE 1 (PH1) SEWER RIMS INDICATE THE EXISTING
CONDITION. RAISE OR LOWER TO PHASE 2 (PH2) RIM
ELEVATIONS AS SHOWN.

PROFILE - VINEYARD DRIVE

SCALE: H: 1"= 20', V: 1"=4'

**BID SET
01/10/2007**



BKF
ENGINEERS / SURVEYORS / PLANNERS

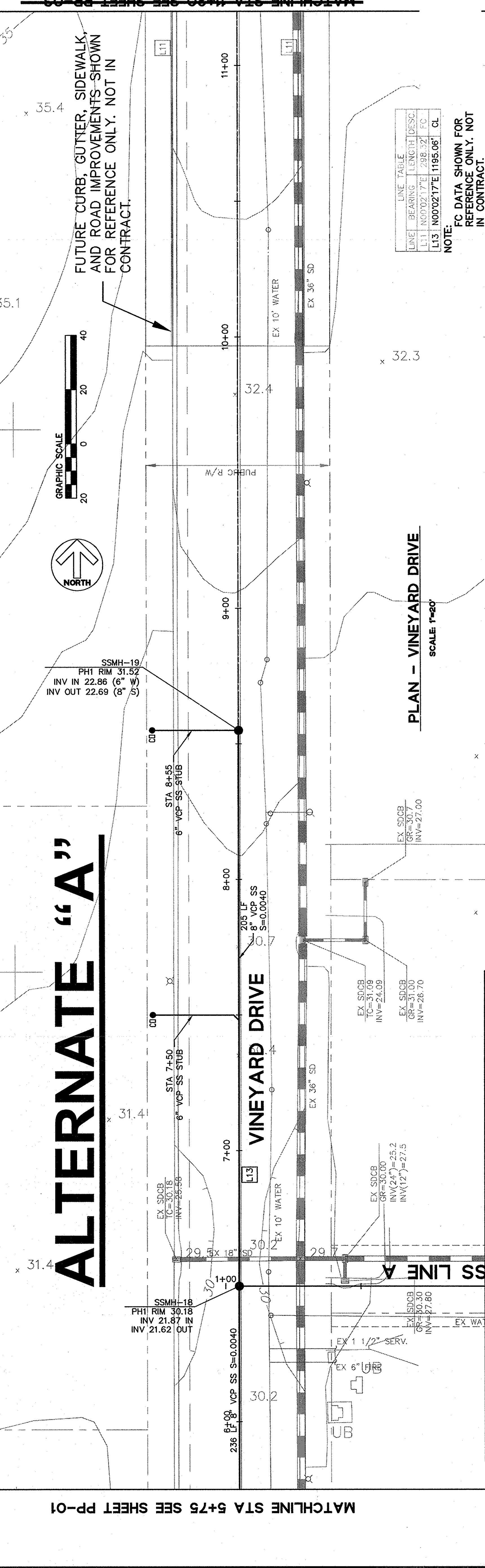
2737 N. MAIN STREET, STE 200
WALNUT CREEK, CA 94597
PH: (925) 940-2200
FAX: (925) 940-2299

CITY OF ANTIOCH
CONTRA COSTA COUNTY

**SANITARY SEWER INSTALLATION
WITHIN FUTURE SAKURAI STREET
VINEYARD DRIVE PLAN AND PROFILE**

Revisions	No.
Date: 01/10/2007	Scale: AS SHOWN
Drawn: KW	Design: AH/KW
Approved: JDL	Job No: 20035145
Drawing Number: PP-02	

MATCHLINE STA 5+75 SEE SHEET PP-01

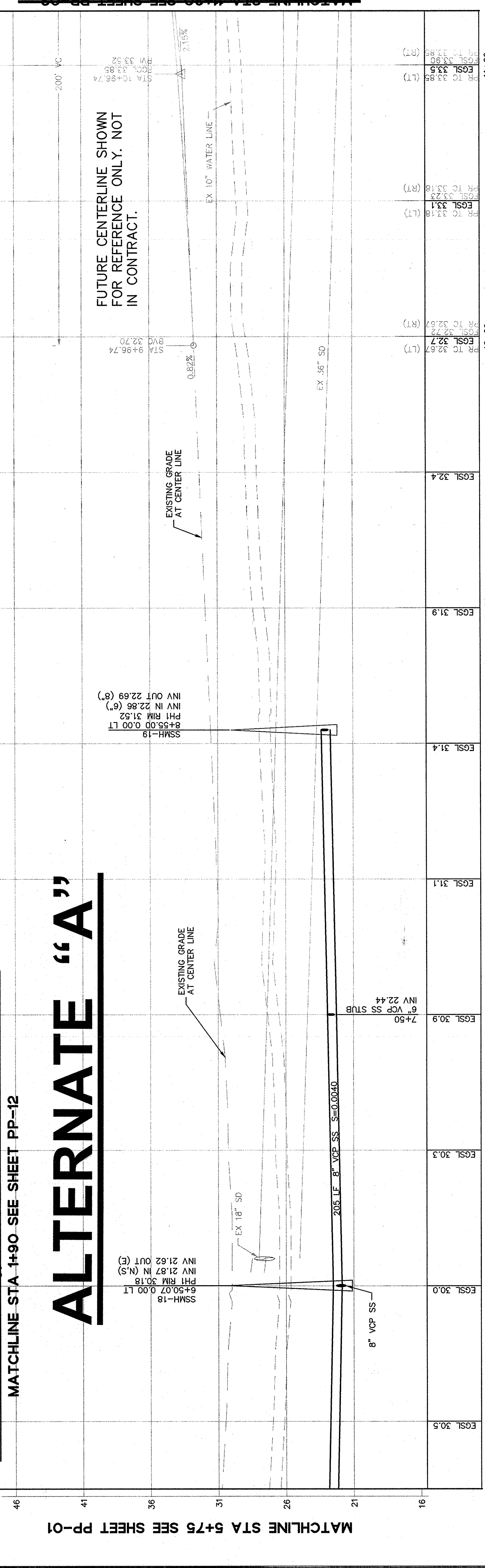


LINE TABLE


LINE	BEARING	LENGTH	DESC.
L11	N000217°E	298.32'	FC
L13	N000217°E	1195.06'	CL

NOTE:
FC DATA SHOWN FOR
REFERENCE ONLY. NOT
IN CONTRACT.

MATCHLINE STA 11+20 SEE SHEET PP-03



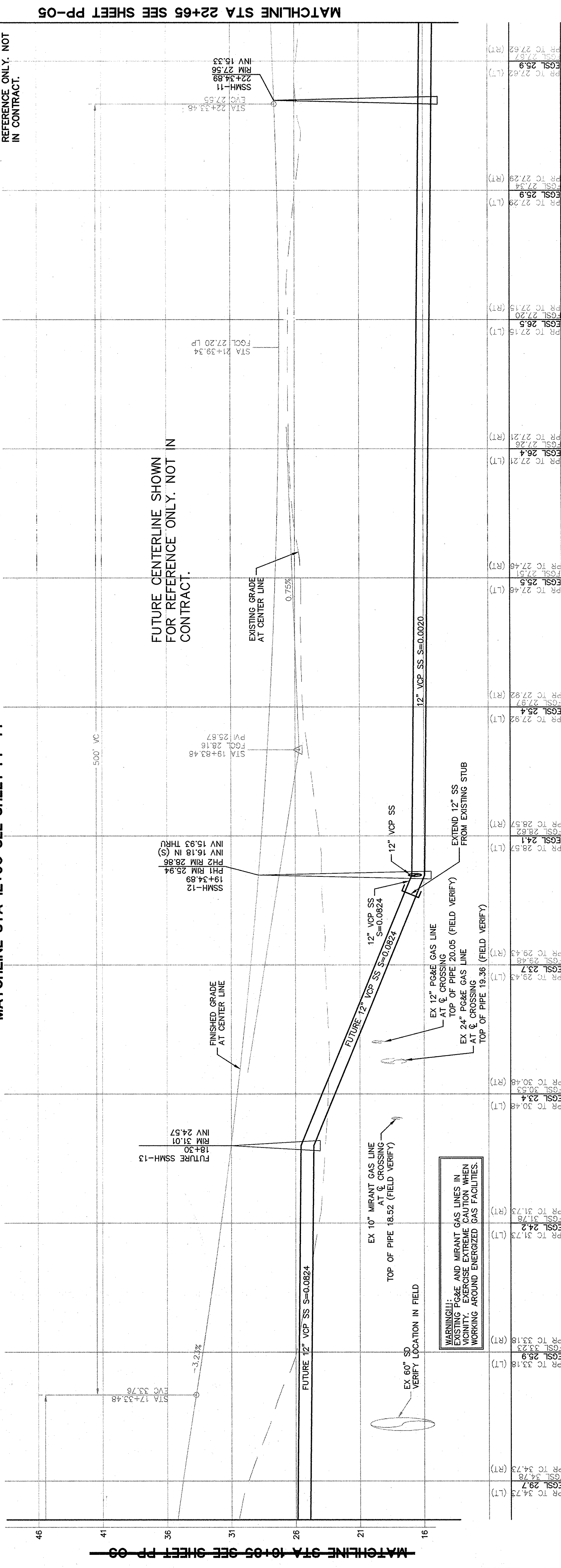
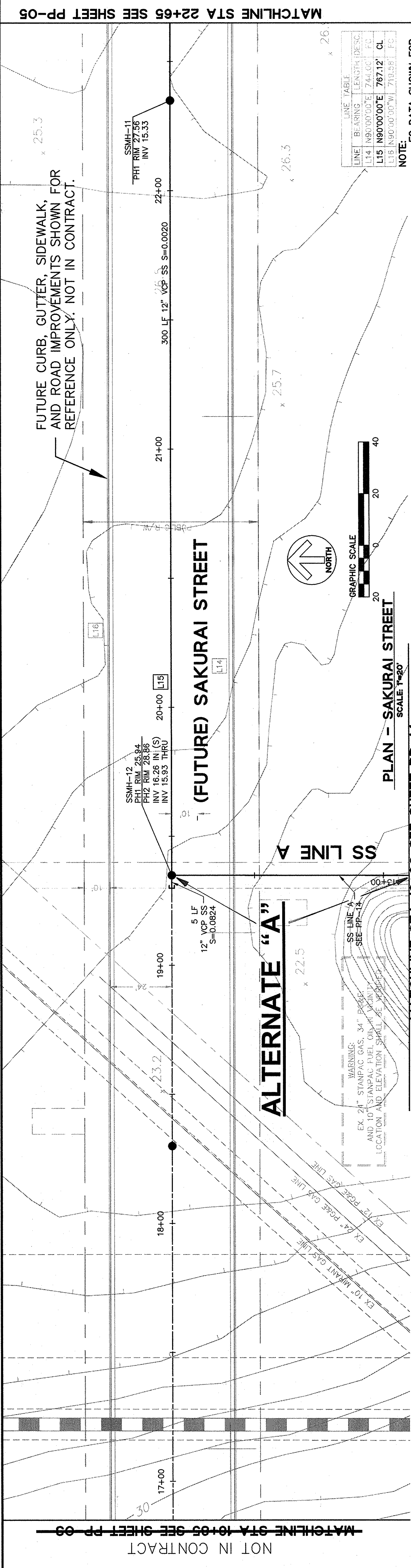
BID SET
01/10/2007

REVIEWED FOR COMPLIANCE WITH TITLE 9,
CHAPTER 4 OF THE ANTIOCH MUNICIPAL CODE
BY:  CITY ENGINEER
DATE: 1/24/07

NOTE:
PHASE 1 (PH1) SEWER RIMS INDICATE THE EXISTING
CONDITION. RAISE OR LOWER TO PHASE 2 (PH2) RIM
ELEVATIONS AS SHOWN.

PROFESSIONAL SEAL
J. J. JENSEN
CIVIL
EXP. 06/30/08

PROFESSIONAL SEAL
J. J. JENSEN
CIVIL
EXP. 06/30/08



PROFILE - SAKURAI STREET

SCALE: H: 1"= 20', V: 1"=4'

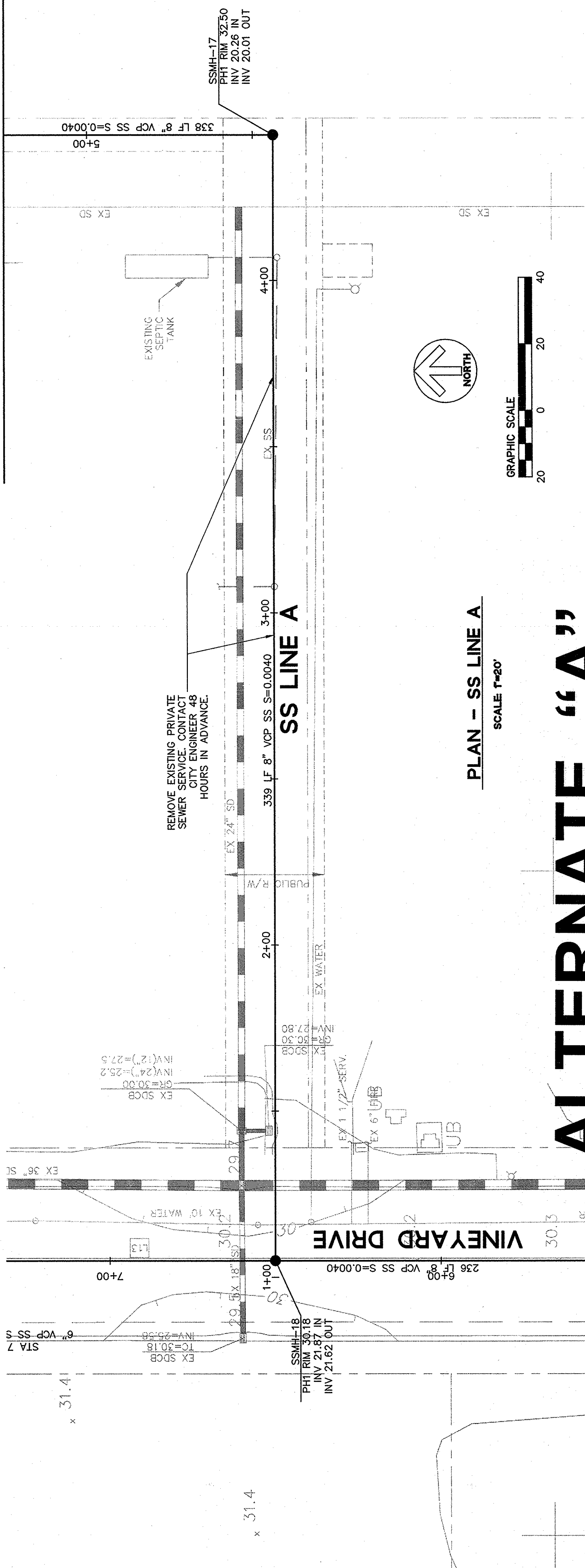
NOTE: PHASE 1 (PH1) SEWER RIMS INDICATE THE EXISTING CONDITION. RAISE OR LOWER TO PHASE 2 (PH2) RIM ELEVATIONS AS SHOWN.

REVIEWED FOR COMPLIANCE WITH TITLE 9,
CHAPTER 4 OF THE ANTIOCH MUNICIPAL CODE

BY: [Signature] 1/24/07

**BID SET
01/10/2007**

MATCHLINE SS LINE A, STA 5+25 SEE SHEET PP-13

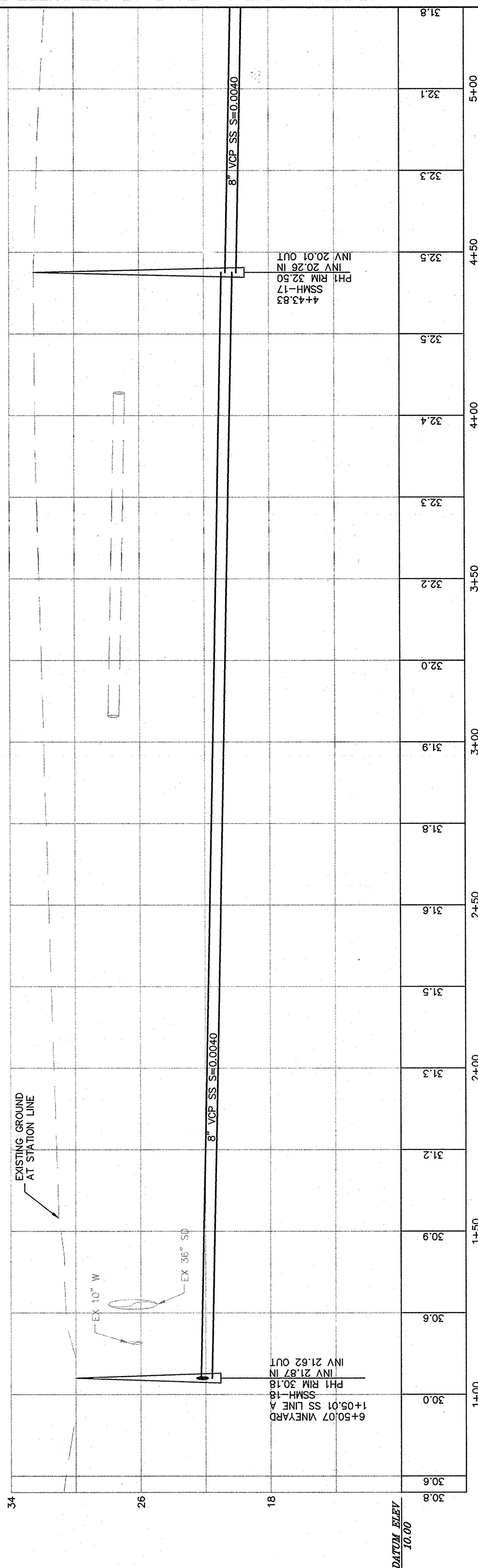


PLAN - SS LINE A

SCALE 1"=20'

ALTERNATE "A"

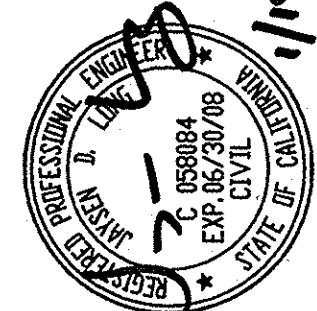
MATCHLINE SS LINE A, STA 5+25 SEE SHEET PP-13



PROFILE - SS LINE A

SCALE: H: 1"= 20' V: 1"= 4'

NOTE: PHASE 1 (PH1) SEWER RIMS INDICATE THE EXISTING CONDITION. RAISE OR LOWER TO PHASE 2 (PH2) RIM ELEVATIONS AS SHOWN.



REVIEWED FOR COMPLIANCE WITH TITLE 9.

BY: [Signature] CITY ENGINEER

**BID SET
01/10/2007**



REVIEWED FOR COMPLIANCE WITH TITLE 9
CHAPTER 4 OF THE ANTIOCH MUNICIPAL CODE
BY: *[Signature]* 1/24/07
CITY ENGINEER DATE

NOTE:
PHASE 1 (PH1) SEWER RIMS INDICATE THE EXISTING
CONDITION. RAISE OR LOWER TO PHASE 2 (PH2) RIM
ELEVATIONS AS SHOWN.

BID SET
01/10/2007

PP-13
Drawing Number:

Date: 01/10/2007
Scale: AS SHOWN
Design: AH/KW
Drawn: KW/AM
Job No: 20035145

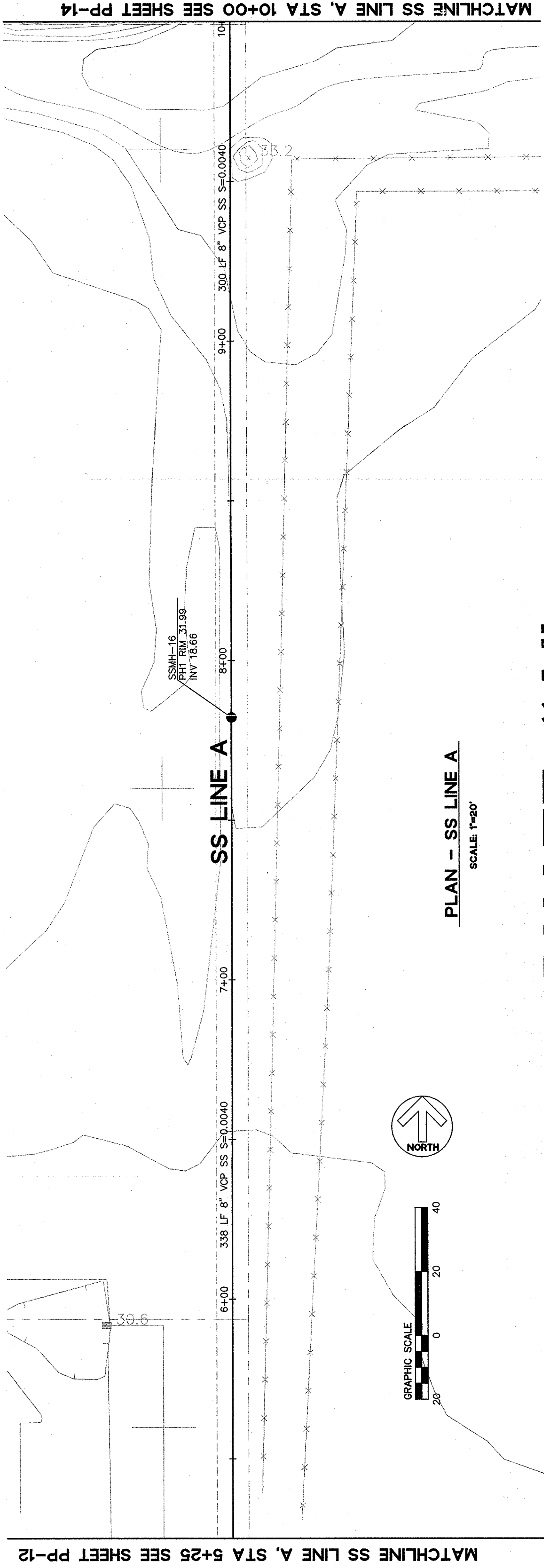
Revisions	No.

CITY OF ANTIOCH
CONTRA COSTA COUNTY
CALIFORNIA
**SANITARY SEWER INSTALLATION
SS LINE A PLAN AND PROFILE
WITHIN FUTURE SAKURAI STREET**

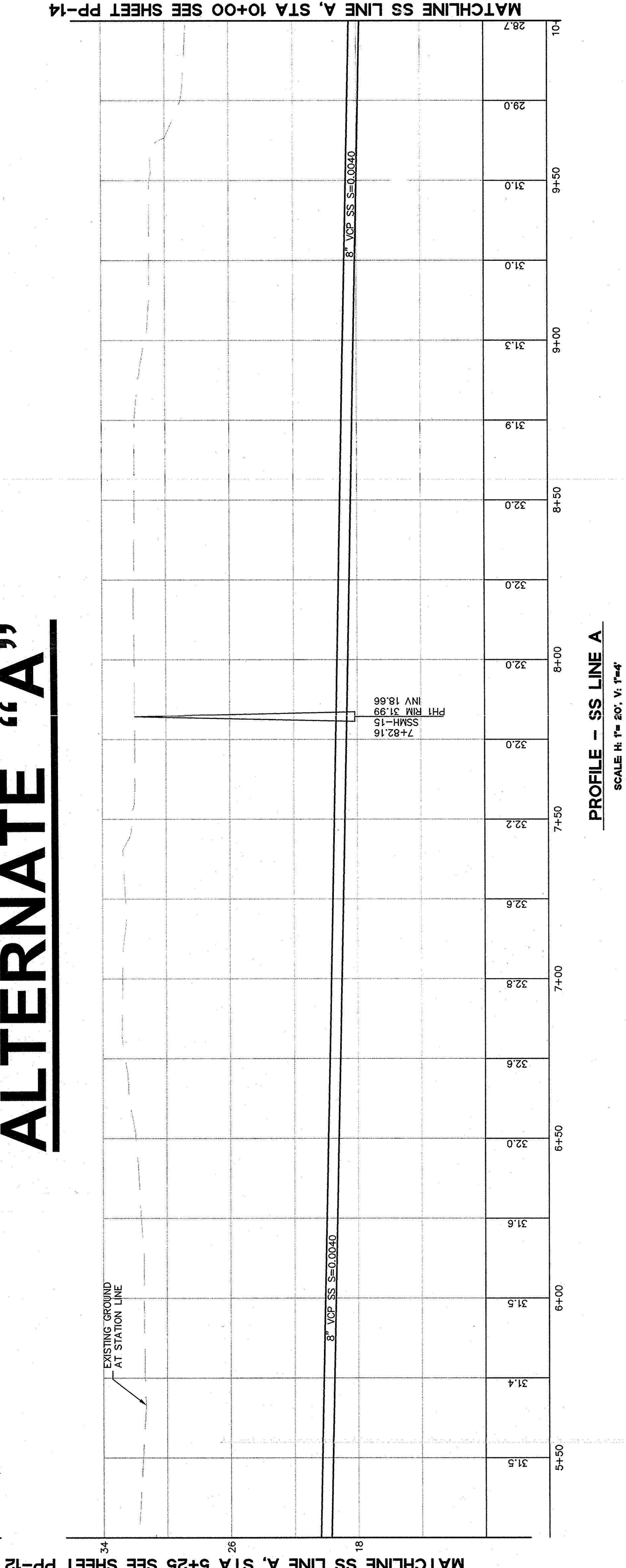



2737 N. MAIN STREET, STE 200
WALNUT CREEK, CA 94597
PH: (925) 940-2200
FAX: (925) 940-2299

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ALTERNATE "A"





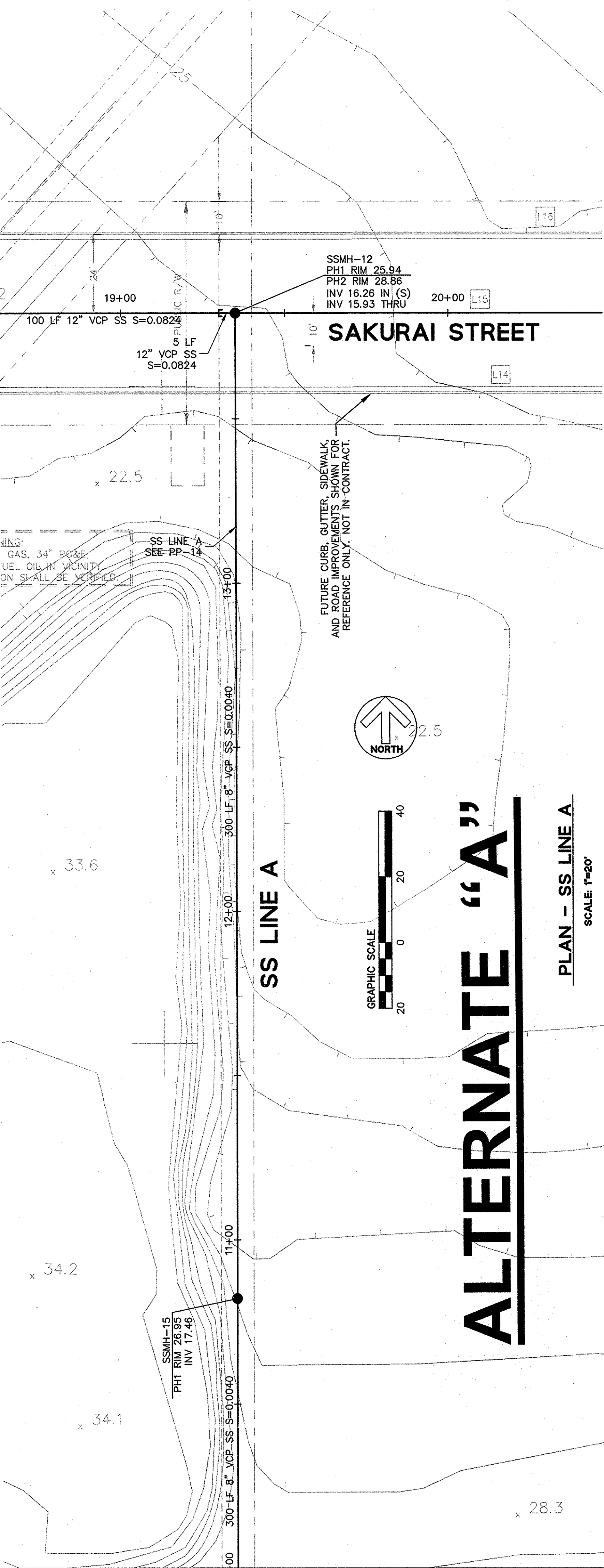
BKF
ENGINEERS | SURVEYORS | PLANNERS

2737 N. MAIN STREET, STE 200
WALNUT CREEK, CA 94597
PH: (925) 940-2200
FAX: (925) 940-2299

SANITARY SEWER INSTALLATION
WITHIN FUTURE SAKURAI STREET
SS LINE A PLAN AND PROFILE

CITY OF ANTIOCH
CONTRA COSTA COUNTY
CALIFORNIA

Job No: 20035145	Date: 01/10/2007
Approved: JDL	Drawing Number: PP-14
Drawn: KM/AM	Scale: AS SHOWN
Design: AH/KW	
Revisions	



ATTACHMENT “F”

VINEYARD BUSINESS CENTER

RECEIVED

SEP 08 2016

CITY OF ANTIOCH
COMMUNITY DEVELOPMENT

September 7, 2016

City of Antioch
Alexis Morris
P.O. Box 5007
Antioch, CA 94509

Dear Alexis,

We have reviewed the Vineyard Self Storage Mitigated Negative Declaration. We have some concerns that are not addressed in the report. Sam Reiter and I are owners of a property at 1771 Vineyard Drive which is directly across the street from the proposed development. We feel that more information is needed before the City should allow a development of a self-storage and outside vehicle storage lot at the Vineyard Drive and 18th Street location.

The report is sectioned in categories. The following notes for various sections contain our questions and concerns.

UTILITIES AND SERVICE SYSTEMS:

There is notation of an offsite sewer improvement. There are two concepts that the City has considered. The Specific Plan Sewer Alignment which runs north for the length of Vineyard Drive and The Alternative A which would cross over property to the East and then travel to the North to make its connection.

1. There needs to be clarification of the Alternative A route. It is shown on page 4 to run to the North of 1771 Vineyard Drive. The other drawn plan appears to show it to the South of 1771 Vineyard Drive. Which is correct?
2. Which plan does the City favor and why?
3. The report states that the developer would be responsible for a sewer hookup. We believe that all of the Vineyard Drive parcels are tied to a Deferred Improvement Agreement. I would request the report address how the cost of the sewer will be paid for and if it is assessed to the property owners. If it is an assessment, it should be assessed equally to all owners by the amount of acreage which is customary and documented. Should you need supporting documentation we can provide it.
4. The Deferred Improvement Agreement additionally states that approximately 50,000 sq.ft. of 1" overlay street paving shall be installed. Is this still potentially a requirement? All issues within the Differed Improvement Agreement need to be addressed.

TRANSPORTATION AND CIRCULATION:

The report states that traffic will not be impacted due to the amount of visits of storage customers. The report estimated 287 trips a day and 23 trips in peak hours. That would be both entering and exiting, therefore doubling the amount of traffic. The amount of stated traffic at peak hours seems low.

F1

1. Vineyard Drive and 18th Street are not signalized. The traffic at that intersection could be substantial at times. Further review would be needed to verify that there is no impact on vehicles waiting to turn onto 18th Street.
2. There will be storage of recreational vehicles and boats at the property. There is no mention of restricting street parking to keep these vehicles from parking on the street when they are not able to access the storage yard.

LAND USE:

The area is referred to as the Eastern Waterfront Employment Area. The business of Self Storage and Vehicle Storage does not create jobs.

1. We thought that was the intent of the City in this area. Has the City changed their opinion?

AESTHETICS:

The development of Self-Storage and Vehicle Storage is not eye appealing.

1. The other developed properties on Vineyard Drive have a business atmosphere. The Self-Storage and Vehicle Storage business is not consistent with what was intended for the property and the area's Planned Business Center zoning.

We hope that the City of Antioch will look after the currently developed land owners when considering this project. The sewer is a big problem and that is the most concerning issue. Your consideration will be appreciated.

Sincerely,



Glen Wilson and Sam Reiter

ATTACHMENT “G”

September 7, 2016

City of Antioch Community Development Department
PO Box 5007 Antioch CA

Attention: Cindy Gnos, Contract Planner
Raney Planning & Management, Inc.
916-799-0431

Submitted by email to: cindygnos@raneymanagement.com

Regarding: Public Hearing Discussion 09/07/16 on Antioch Developments: Vineyard Self Storage; and, Delta Courtyard

Dear Ms. Gnos, and the City of Antioch Planning Commission:

The following are the comments of the East Bay California Native Plant Society (EBCNPS) in regard to the Public Hearing Discussion of two separate project proposals on 09/07/16, both located in Antioch, CA: Vineyard Self Storage; and, Delta Courtyard. The California Native Plant Society (CNPS) is a non-profit organization of more than 10,000 laypersons and professional botanists organized into 34 chapters throughout California. Our local East Bay chapter covers Alameda and Contra Costa Counties, inclusive of approximately 1000 members. The mission of CNPS is to increase the understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation. Pursuant to the mission of protecting California's native flora and vegetation, EBCNPS submits the following comments.

Our organization recognizes high biodiversity throughout the East Bay, and we have published several reference publications for use by public agencies and available to the public. These are widely accepted and used by other public agencies in Alameda and Contra Costa Counties. EBCNPS recommends exploration and utilization of the above resources while performing biodiversity assessments and preparing environmental review documentation, even at the level of CEQA exemption qualifying evaluations.

- A Guidebook to the Botanical Priority Protection Areas in the East Bay
<http://ebcnps.org/publications/guidebook-to-botanical-priority-protection-areas/>
- Rare, Unusual and Significant Plants of Alameda and Contra Counties
<http://ebcnps.org/native-plants/database-of-rare-unusual-and-significant-plants-of-alameda-and-contra-costa-counties/>

Other resources we recommend to use as standard protocol for field assessments:

- Department of Fish and Wildlife, especially the California Natural Diversity Database
<http://www.wildlife.ca.gov/Data/CNDDB>

- Manual of California Vegetation, 2nd ed <http://vegetation.cnps.org/>

The land under consideration for both proposed project sites, contain habitats officially considered in the staff report as “significantly disturbed.” We agree that these sites may have suffered degradation from years of other uses. However, populations of rare and locally rare plants may be harbored where sandy habitat or other rare plant habitat occurs at these locations. CEQA Guidelines section 15332, Class 32 in-fill exemption, part (c) conditions are discussed in the environmental review sections of both projects’ staff reports. The requirements for this CEQA exemption include evaluation of project site as having “no value for endangered, rare, or threatened species.” However, in both the staff reports describing how these projects meet this qualification for CEQA exemption, there is no discussion of any surveys for rare and locally rare plants on either of the project sites. Presence of significant disturbance is not itself exclusionary of the resiliency of rare and locally rare plants on these sandy soil habitats which require specialized plant adaptations for survival, contributing to the rarity of their existence today. Reference in the staff report for both projects that a “portion of the site is grassland” without listing species (including CNPS rarity rankings), habitats, or vegetation alliances (including type of grassland), demonstrates an insufficient level of preliminary evaluation which should not be used to make a decision whether CEQA process is required on these project sites. EBCNPS encourage professional level botanical surveys and biological reports to ascertain whether rare plants still exist at these degraded sites.

A complete list of all rare and locally rare plants possibly occurring in the area should be assembled and surveyed for by a professional. Many native, rare and locally rare plants requiring protection by CEQA, may occur on either of these project sites, due to their historic existence as contiguous with sandy soils habitats. This minimum threshold of evaluation and surveys should be required even for proposed projects in areas currently zoned for development, or otherwise under consideration for in-fill exemptions. Also, note that the Delta Courtyard proposed project is very close proximity to Antioch Dunes Wildlife Refuge. We recommend plants and insects federally protected at this refuge should also be surveyed for at the Wilbur Avenue properties of the Delta Courtyard proposed project. Please reference EBCNPS and CNPS resource publications for more guidance.

Additionally, East Bay California Native Plant Society supports creation of a Habitat Conservation Plan for the City of Antioch, as soon as possible in order to afford greater protections for rare and locally rare plants and their habitat within the City.

I am available by phone or email at conservation@ebcnps.org for any questions. Thank you for your consideration of our comments.

Sincerely,

Karen Whitestone
Conservation Analyst
East Bay California Native Plant Society

ATTACHMENT “H”

Vicinity Map



E 18th Street & Vineyard Drive
Antioch, California 94509

Project Contacts

Developer
American Recess
8995 Terabyte Drive, Suite A
Reno, NV 89521
Tel 775-747-6000
Fax 775-853-7309
Email shamil.ton@hamiltonsol.arusa.com
Contact Steve Hamilton
Preliminary Design Team: Architecture
American Recess
8995 Terabyte Drive, Suite A
Reno, NV 89521
Tel 775-747-6000
Fax 775-853-7309
Email cneveras@hamiltonsol.arusa.com
Contact Cristina Neveras
Civil engineer
Bellucci & Associates
2290 Diamond Blvd., Ste. 100
Concord, CA 94520
Tel 925-685-4569
Fax 925-685-4838
Email frank@bellucci.com
Contact Frank Bellucci, PE PLS
Landscape Architect
HWA Landscape Architects
762 Al tesssa Drive
Brentwood, CA 94513
Tel 925-513-3091
Fax 925-513-3099
Email ross@hwalandarch.net
Contact H. Ross Wells
Electrical Engineer
Construction Design Services
PO Box 34051
Reno, NV 89533
Tel 775-826-4001
Email mpecorino@cdsnv.com
Contact Mike Pecorino
Environmental / CEQA Consultant
Rincon Consultants, Inc
180 Grand Avenue, Suite 400
Oakland, CA, 94612
Tel 805-547-0900 ext 117
Email cboggs@rinconconsultants.com
Contact Colby J. Boggs

Sheet Index

AR 0.1 Cover Sheet - Abbreviations, Project Contacts, Vicinity Map
AR 0.2 1/6 Preliminary Site Plan
AR 0.2 2/6 Existing Conditions
AR 0.2 3/6 Preliminary Grading and Utility Exhibit
AR 0.2 4/6 Cross Section
AR 0.2 5/6 Cross Section
AR 0.2 6/6 Preliminary Grading and Utility Exhibit
AR 0.3 Site Plan / Overall Roof Plan
AR 0.4 Site Lighting Plan
AR 1.0 Building A Lower Level Floor Plan
AR 1.1 Building A Upper Level Floor Plan
AR 1.2 Building B Floor Plan
AR 1.3 Buildings C and D Floor Plans
AR 1.4 Building E and F Floor Plans
AR 1.4 Sign Detail
AR 2.0 Building Elevations
AR 3.0 Building Elevations
AR 3.1 Building Elevations
AR 3.2 Building Elevations
AR 3.3 Landscape Plan
AR 4.0 Material Board
AR 5.0 Material Board
AR 5.1 Material Board
AR 5.2 Material Board
AR 5.3 Material Board

Proposed Comercial Project for Vineyard Self Storage

E 18th Street & Vineyard Drive
Antioch, California 94509
Contra Costa County
APN 051-052-074, 051-052-075, 051-052-076, 051-052-077

Project Scope

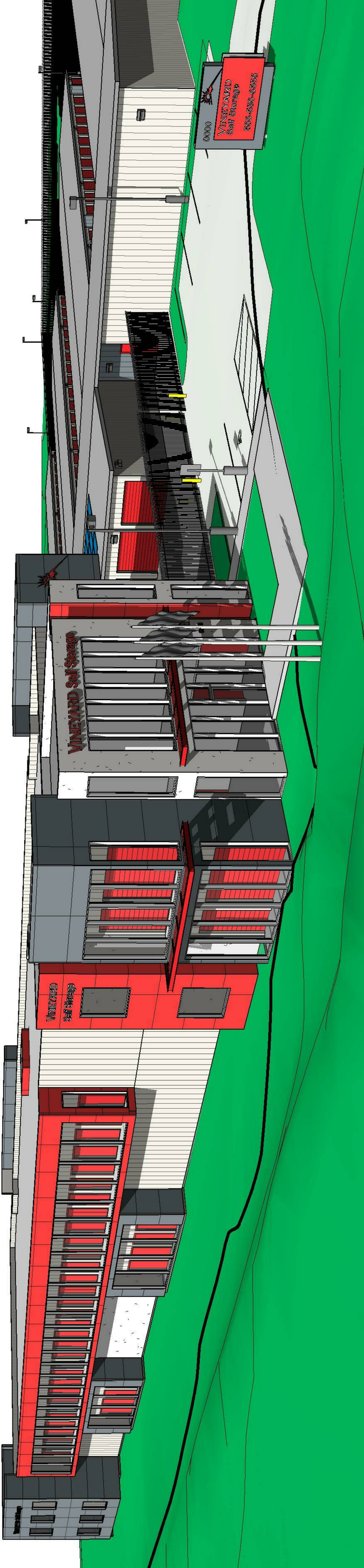
THE PROJECT ENTAILS THE CONSTRUCTION OF A 1,390SF OFFICE BUILDING, AN 100,943 SF SELF STORAGE FACILITY THAT WILL RUN ALONG E 18TH STREET AND VINEYARD DRIVE, AND APPROXIMATELY 70,600 SF OF BOAT AND RV STORAGE (95,100 UNITS) ON THE NORTHERN END OF THE PROPERTY ALONG VINEYARD COURT. THE POWER CONSUMPTION WILL BE OFFSET BY A 30 KW ROOF MOUNTED SOLAR PHOTOVOLTAIC ARRAY. THE INSTALLATION CONSISTS OF 114 SOLAR PANELS INSTALLED ON THE SOUTH FACING ROOF ON BUILDING B, WITH A 2.4 DEGREE TILT, CONNECTED TO (1) 24KW INVERTER. RELATED ELECTRICAL SWITCHGEAR WILL BE INSTALLED AS REQUIRED BY APPLICABLE CODES AND BY THE ELECTRICAL UTILITY COMPANY. THE SYSTEM WILL BE INTERCONNECTED TO AND WILL BE OPERATED IN PARALLEL WITH THE LOCAL UTILITIES.

THE PROPOSED PROPERTY IS COMPRISED OF 4 SEPARATE PARCELS: APN 051-052-074, 051-052-075, 051-052-076 AND 051-052-077. THE PARCELS ARE TITLED IN THE SAME NAME(S), ARE IN THE SAME JURISDICTIONAL BOUNDARY (CITY LIMITS), AND ARE CONTIGUOUS, AS PART OF THIS APPLICATION, AMERICAN RECESS IS REQUESTING CITY OF ANTIOCH A LOT MERGER.

THE CURRENT ZONING FOR THE PROPERTY IS PLANNED BUSINESS CENTER, AS PART OF THIS APPLICATION, AMERICAN RECESS IS REQUESTING A REZONING FOR THE PARCELS TO A PD ZONE TO ACCOMMODATE THE NEW CONSTRUCTION.

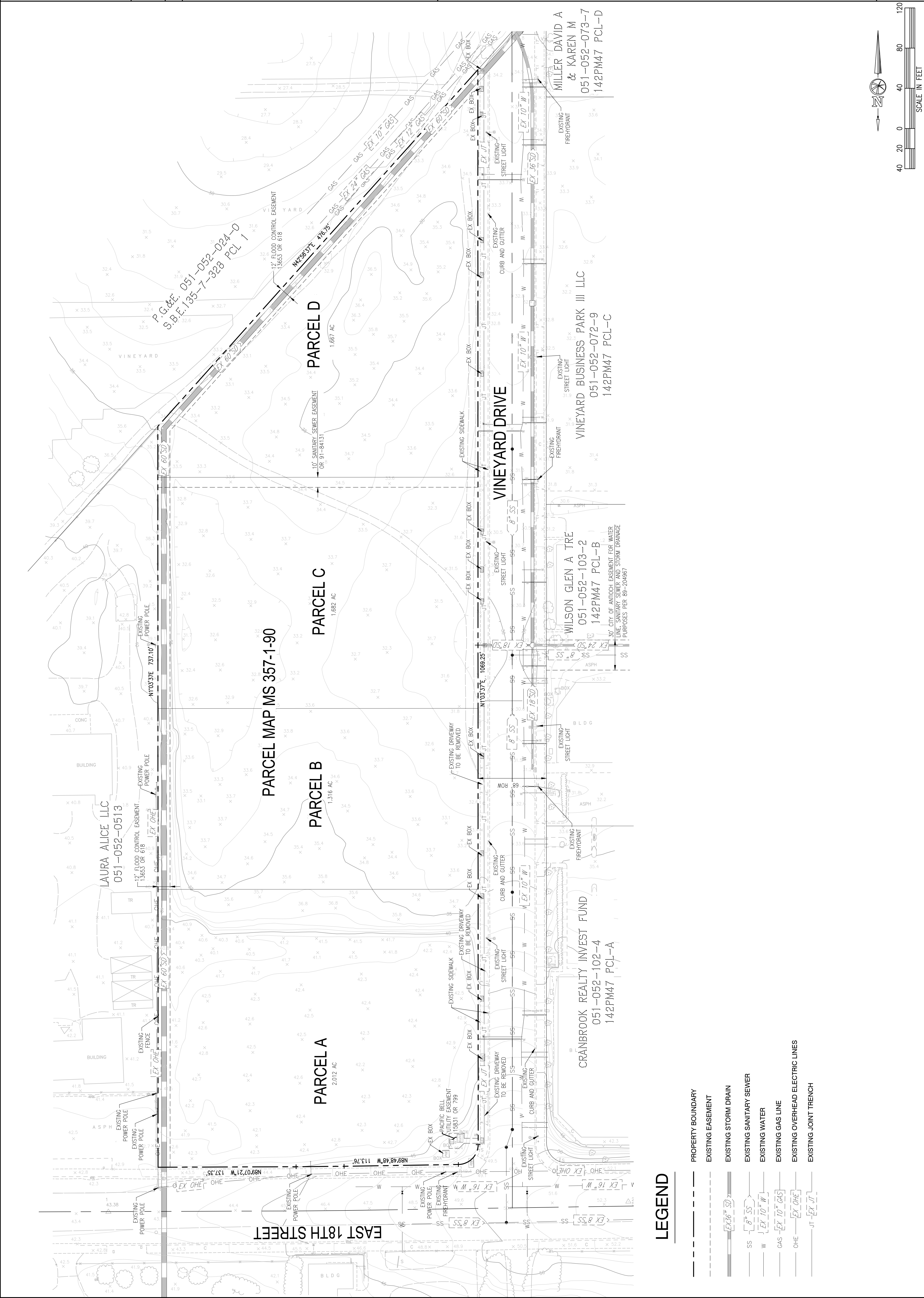
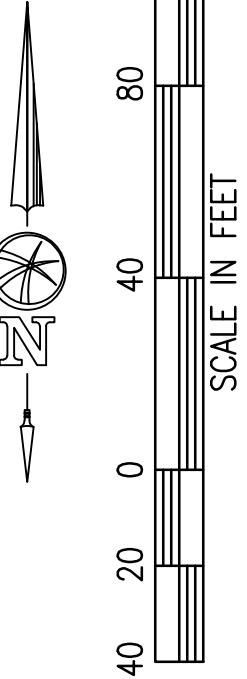
Parcel Data

Parcel Description	Parcel Summary
E 18th Street & Vineyard Drive Antioch, California 94509 Contra Costa County APN 051-052-074, 051-052-075, 051-052-076, 051-052-077	Total Gross Parcel Area 273,104.52SF / 6.26Ac Total Net Parcel Area 1,390SF Floor Area Building A Office 17,221SF Floor Area Building A Storage Lower Level 19,301SF Total Floor Area Building A 37,912SF Total Floor Area Building B 17,300SF Total Floor Area Building C 5,363SF Total Floor Area Building D 12,085SF Total Floor Area Building E 19,068SF Total Floor Area Building F 19,068SF
Existing Zoning Designation General Plan - Business Park zoning: Planned Business Center	Total Building Area 102,333SF FAR (Floor Area Ratio) 0.37
Proposed Zoning Designation PD - for Self Storage and RV Parking Facility	Percent Lot Area Coverage 28.5% Percent Net Lot Area Coverage 30.4% Percent Net Lot Area Landscaping Coverage 24%



H1 ISSUED FOR	20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW	 AMERICAN RECESS 85 Keystone Avenue, Suite E Reno, Nevada 89503 Tel (775) 747-6000	DRAWN BY: CRN DESIGNED BY: CRN CHECKED BY: SUBMITTED BY: AR	SCALE: As indicated	VINEYARD Self Storage E 18th Street & Vineyard Drive Antioch, California 94509 Contra Costa County APN 051-052-074, 051-052-075, 051-052-076, 051-052-077	Project Contacts Sheet Index Project Scope Parcel Data, Parking Requirements 3D Rendering, Vicinity Map	DWG #
	DATE	DESCRIPTION						

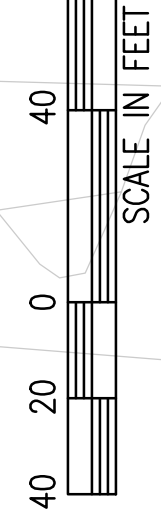
AR 0.1



LEGEND

- PROPERTY BOUNDARY
- EXISTING EASEMENT
- EXISTING STORM DRAIN
- EXISTING SANITARY SEWER
- EXISTING WATER
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC LINES
- EXISTING JOINT TRENCH

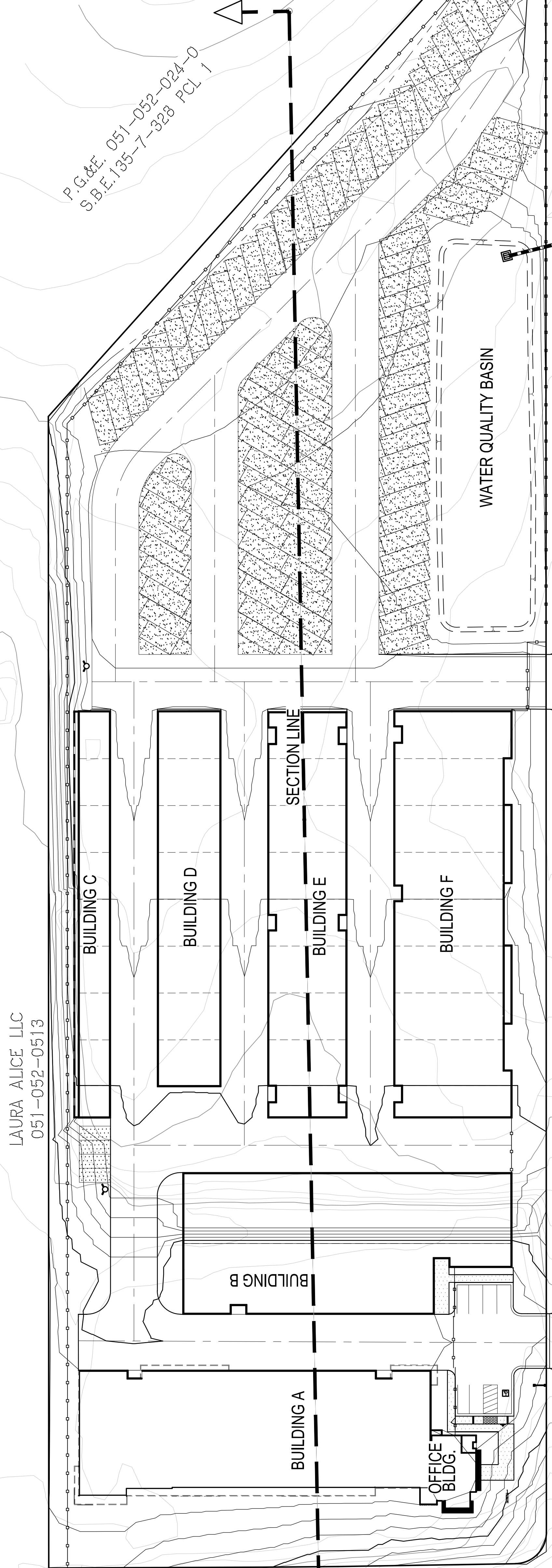
VINEYARD DRIVE



SHEET 4
OF 6
JOB NO. 16009

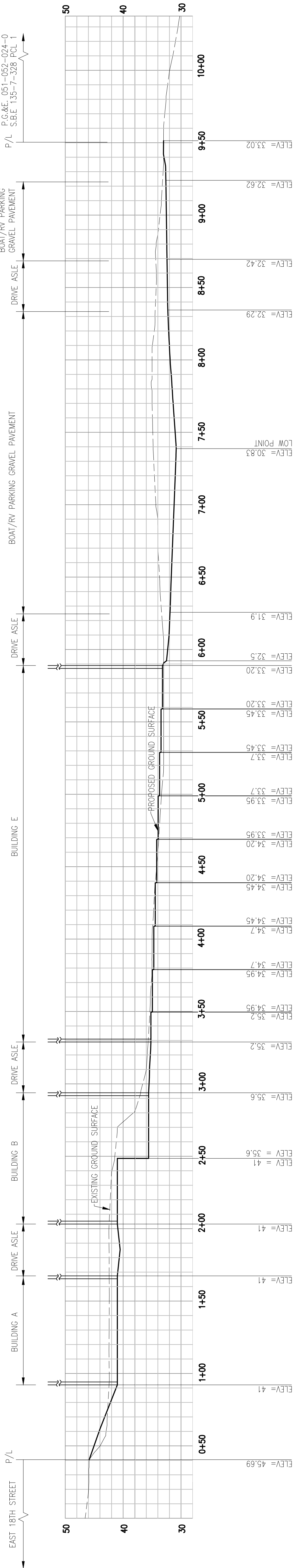
VINEYARD DRIVE
CITY OF ANTIOCH
CONTRA COSTA COUNTY
CALIFORNIA

LAURA ALICE LLC
051-052-0513



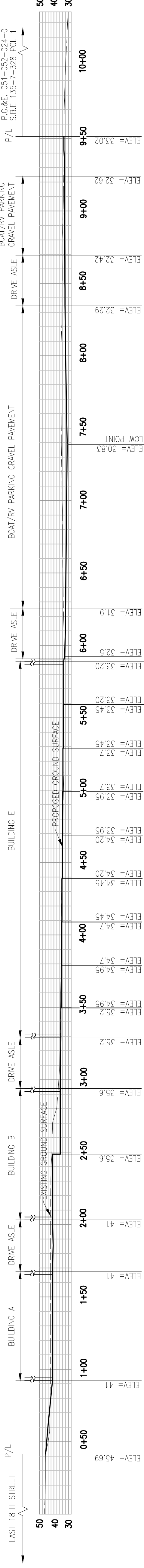
ENGINEERED CROSS SECTION

HORIZONTAL SCALE : 1" = 40'
VERTICAL SCALE : 1" = 4'



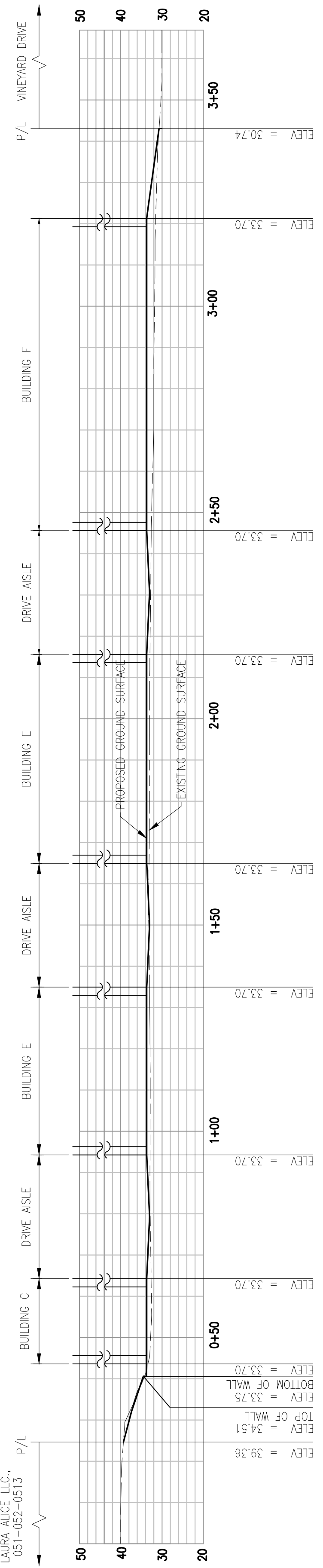
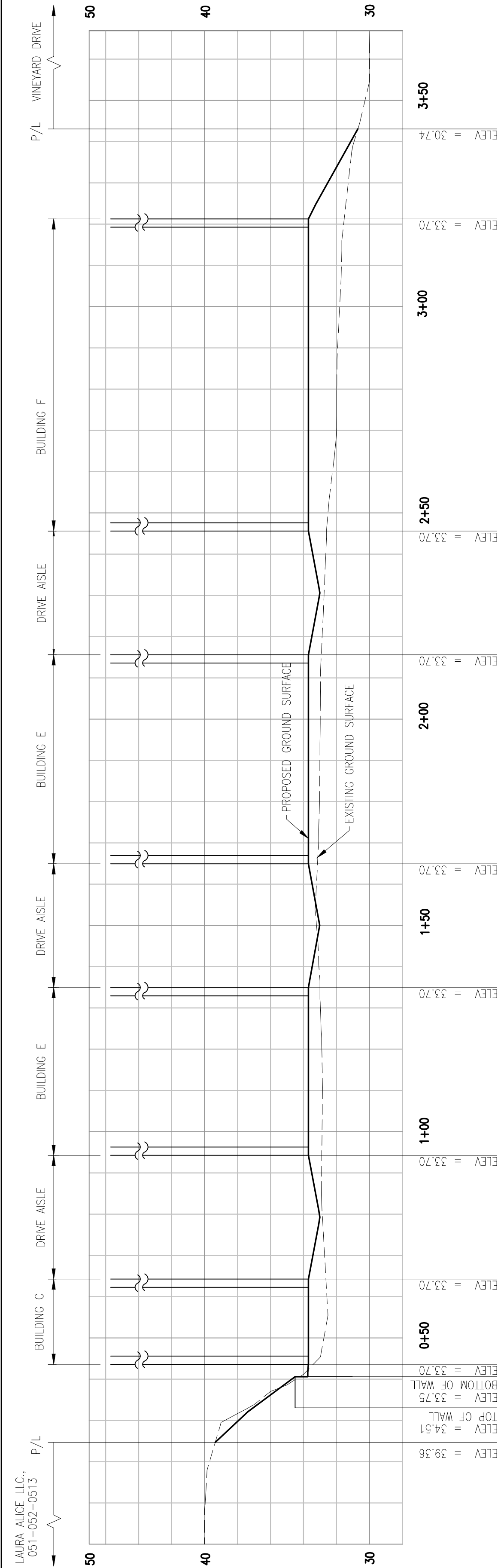
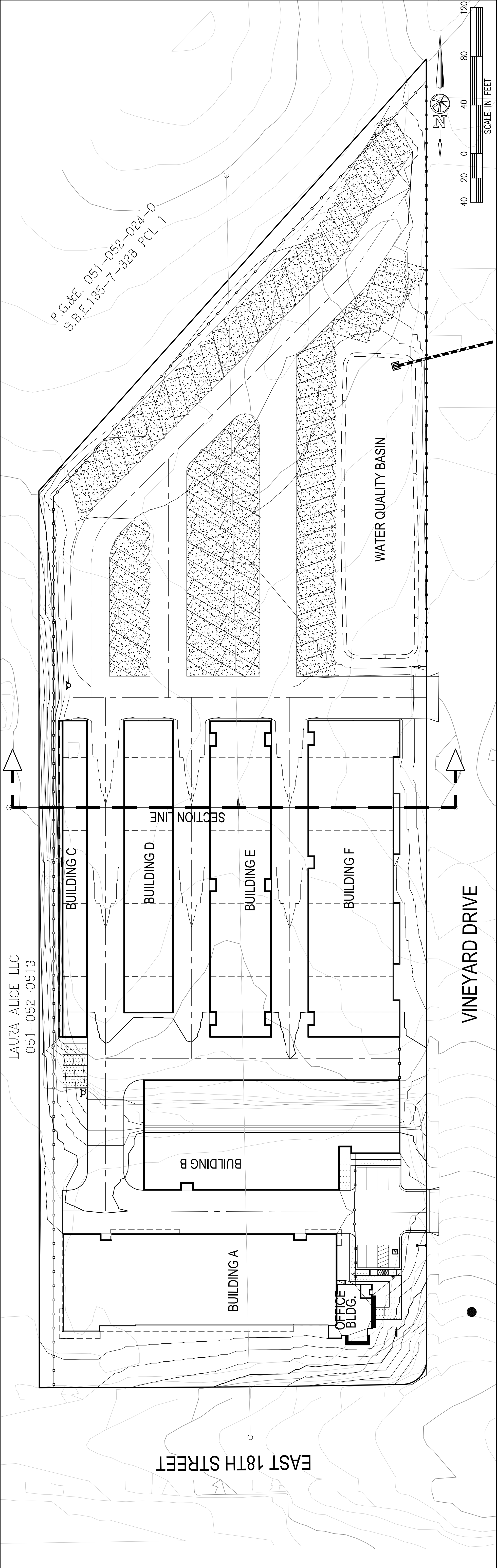
TRUE CROSS SECTION

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VERTICAL SCALE : 1" = 40'

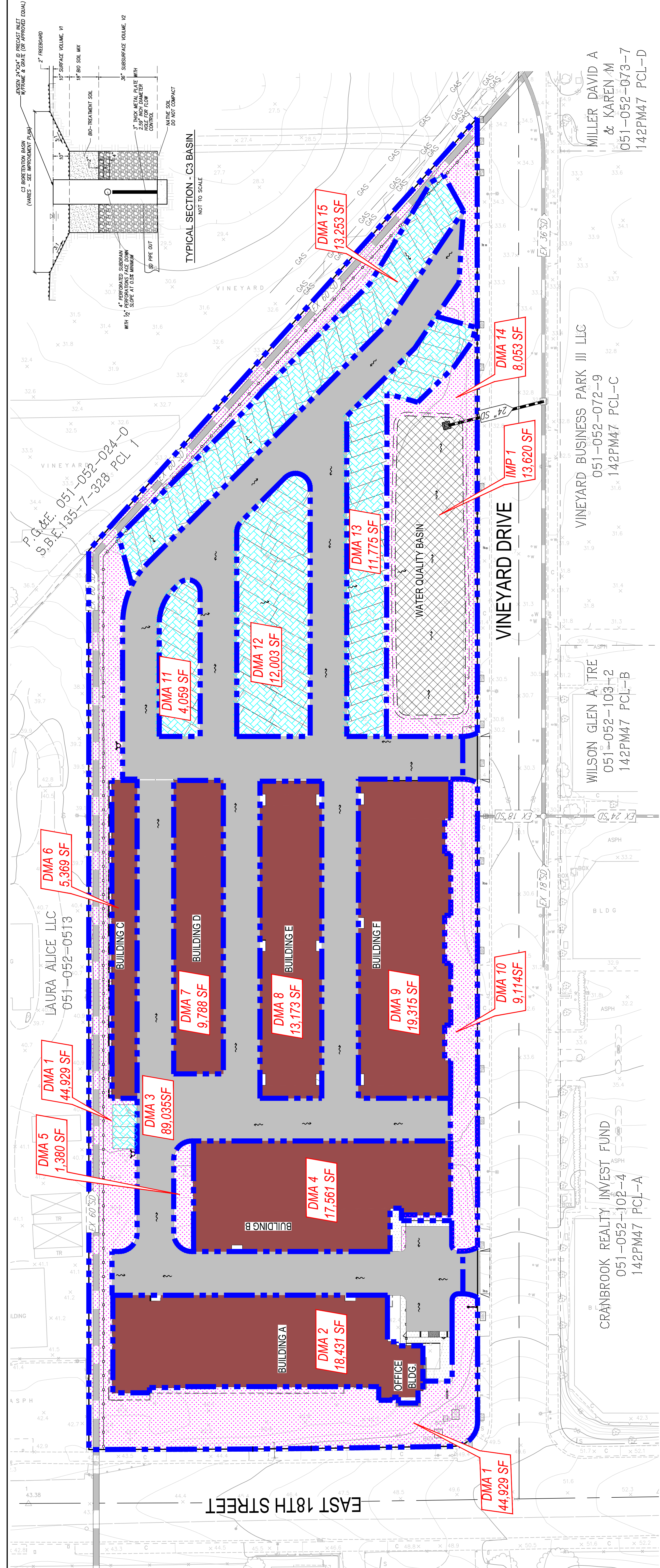
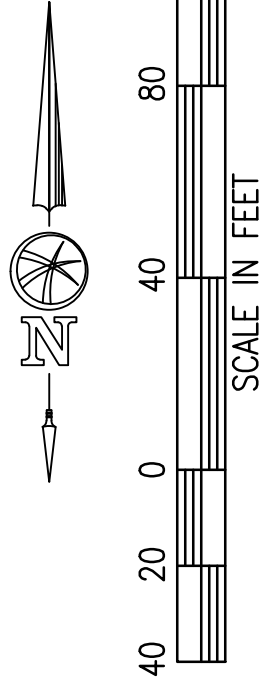


Bellecci & Associates, Inc.
CivilEngineering • LandSurveying
2290 Diamond Boulevard, Suite 100
Concord, CA 94520
Phone (925) 685-4569 Fax (925) 685-4838

BY	DATE	REVISIONS



REVISIONS	DATE	BY



LEGEND

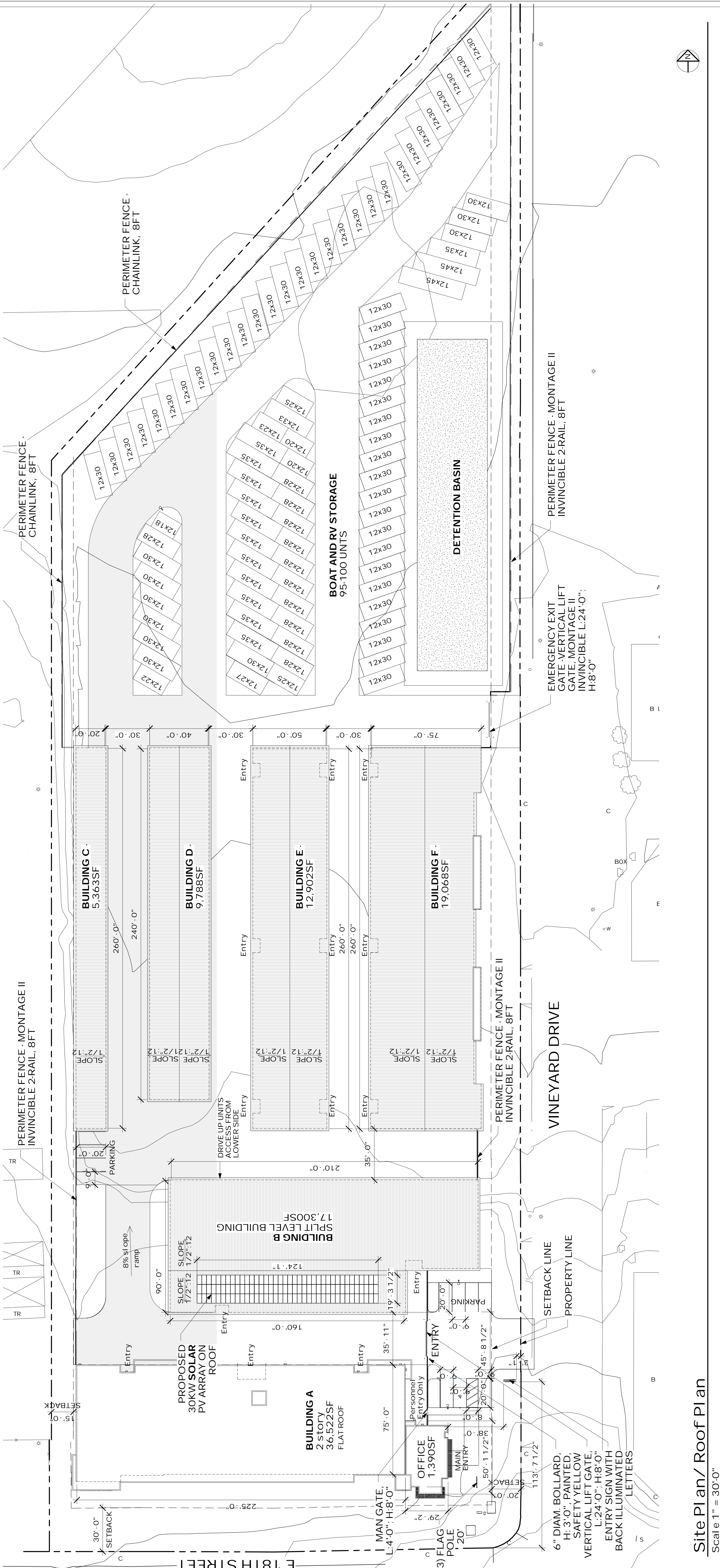
- PROPERTY BOUNDARY
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW DIRECTION
- ROOF
- ASPHALT PAVEMENT
- GRAVEL PARKING
- WATER QUALITY BASIN
- LANDSCAPING AREA
- DRAINAGE MANAGEMENT AREA BOUNDARY
- INTEGRATED MANAGEMENT PRACTICE - BIORETENTION AREA

DMA 14
9,772 SF

IMP 1
11,895 SF

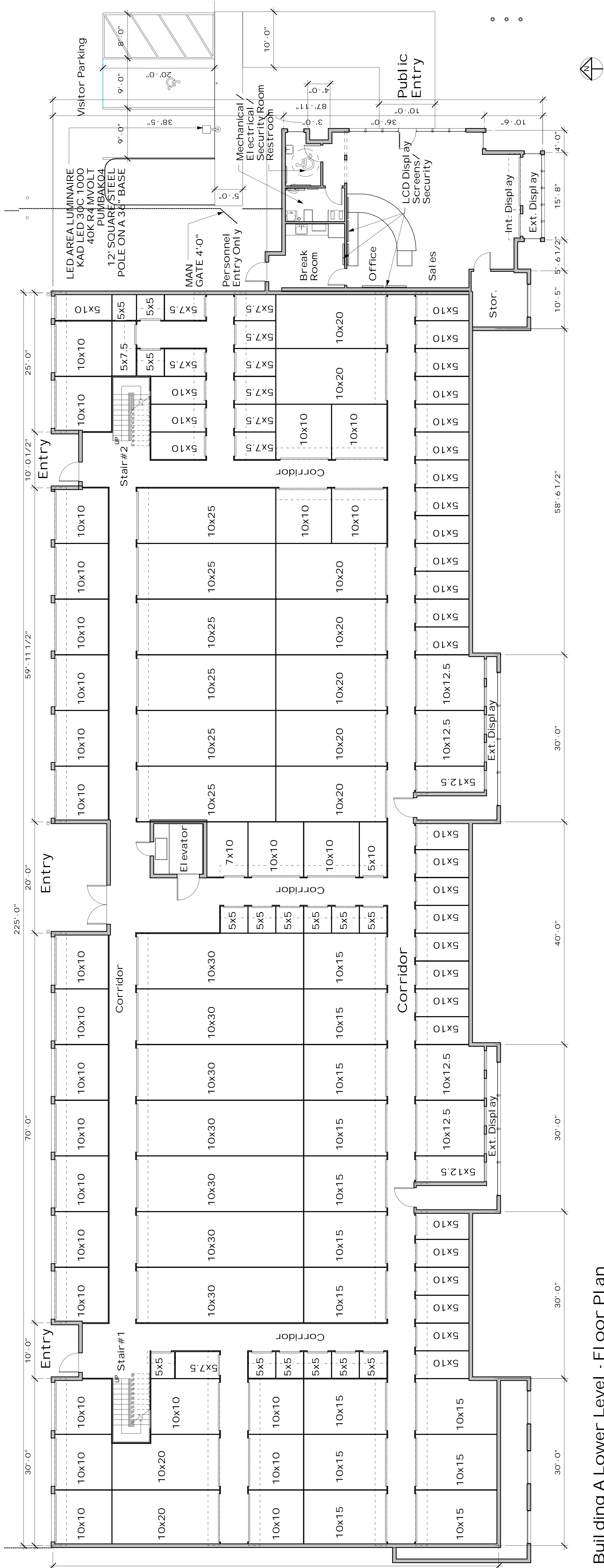
SUMMARY OF SWCP FACILITIES																				
DMA	SURFACE TYPE			TOTAL IMPERVIOUS AREA (SF)	TOTAL PERVIOUS AREA (SF)	TOTAL AREA (SF)	DRAINS TO IMP	IMP TYP	REQUIRED IMP SIZE (SF)	PROPOSED IMP SIZE (SF)	V1 REQUIRED (CF)	V1 PROVIDED (CF)	D1 REQUIRED (IN)	D1 PROVIDED (IN)	V2 REQUIRED (CF)	V2 PROVIDED (CF)	D2 REQUIRED (IN)	D2 PROVIDED (IN)	MAXIMUM UNDERDRAIN FLOW (GFS)	ORIFICE DIAMETER (IN)
	ROOF (SF)	ASPHALT/ CONCRETE (SF)	LANDSCAPE/ POROUS PAVEMENT (SF)																	
1	0	0	44,929	0	44,132	44,132	N/A	SELF RETAINING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	18,431	0	0	18,431	0	18,431	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
3	0	89,035	0	88,028	0	88,028	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
4	17,561	0	0	17,561	0	17,561	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
5	0	0	1,380	0	1,380	1,380	N/A	SELF RETAINING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	5,369	0	0	5,369	0	5,369	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
7	9,788	0	0	9,788	0	9,788	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
8	13,173	0	0	13,173	0	13,173	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
9	19,315	0	0	19,315	0	19,315	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
10	0	0	9,114	0	9,114	9,114	N/A	SELF RETAINING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	0	0	4,059	0	4,059	4,059	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
12	0	0	12,003	0	12,003	12,003	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
13	0	0	11,775	0	11,775	11,775	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
14	0	0	8,053	0	8,053	8,053	IMP 1	SELF RETAINING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	0	0	13,253	0	13,253	13,253	IMP 1	BIO RETENTION AREA	13,407	13,620	11,173	11,305	10	10	14,748	16,344	33	36	0.16	2.59
TOTAL	83,637	89,035	104,566	172,672	104,566	277,238														

H8 FOR RECORD	20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW		 AMERICAN RECESS	85 Keystone Avenue, Suite E Reno, Nevada 89503 Tel (775) 747-6000	DRAWN BY: CRN DESIGNED BY: CRN CHECKED BY: SUBMITTED BY: AR	SCALE: 1" = 30'-0"	VINEYARD Self Storage E 18th Street & Vineyard Drive Antioch, California 94509 Contra Costa County APN 051-052-074, 051-052-075, 051-052-076, 051-052-077	Site Plan/ Roof Plan	DWG #	AR 0.3		
	DATE	DESCRIPTION											



Site Plan/ Roof Plan

Scale 1" = 30'-0"



Building A Lower Level - Floor Plan

Scale $1/8" = 1'-0"$

20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW	
DATE	DESCRIPTION	



AMERICAN
RECESS

85 Keystone Avenue, Suite E
Reno, Nevada 89503
Tel (775) 747-6000

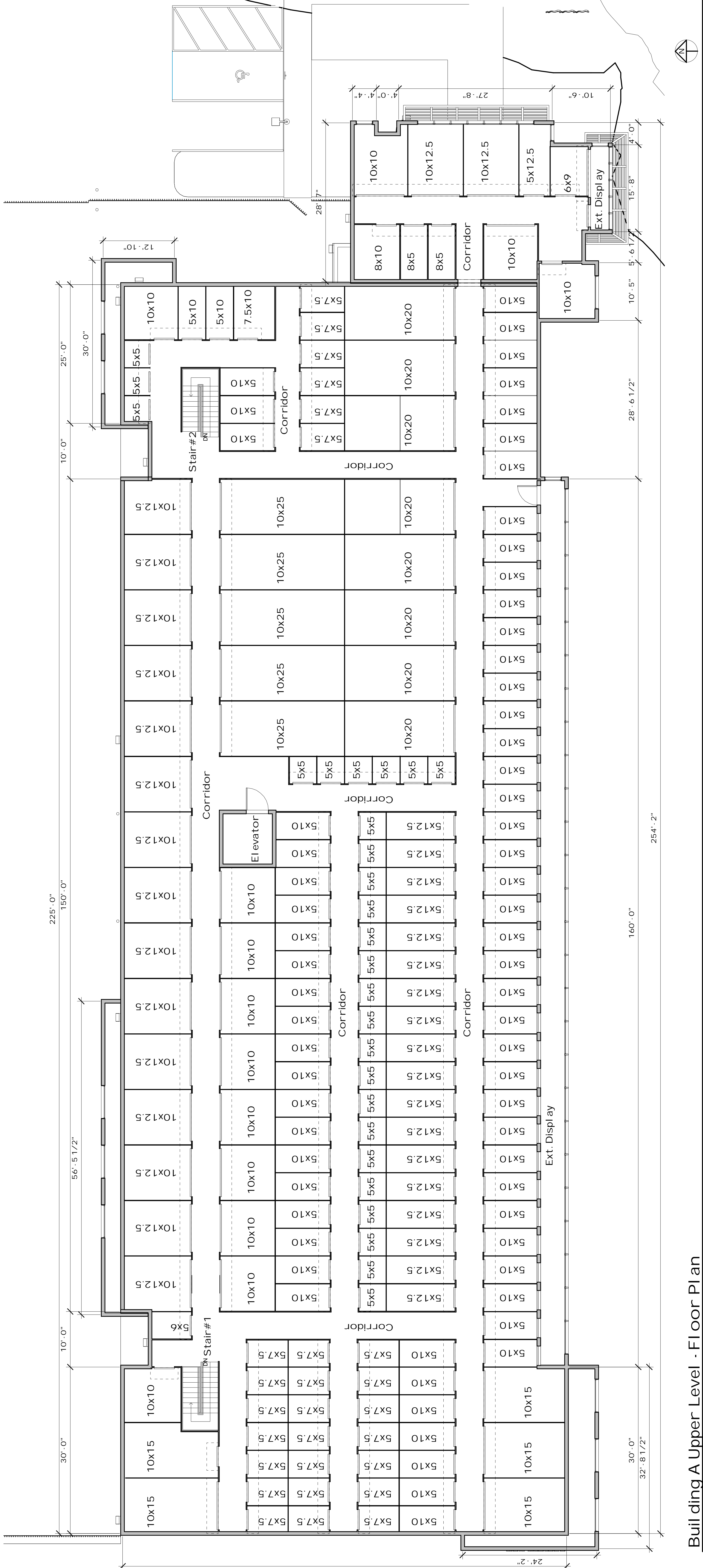
DRAWN BY:	CRN	SCALE: 1/8" = 1'-0"
DESIGNED BY:	CRN	
CHECKED BY:		
SUBMITTED BY:	AR	

VINEYARD Self Storage

E 18th Street & Vineyard Drive
Antioch, California 94509
Contra Costa County
APN 051-052-074, 051-052-075, 051-052-076, 051-052-077

SHEET CONTENT	
Building A Upper Level - Floor Plan	

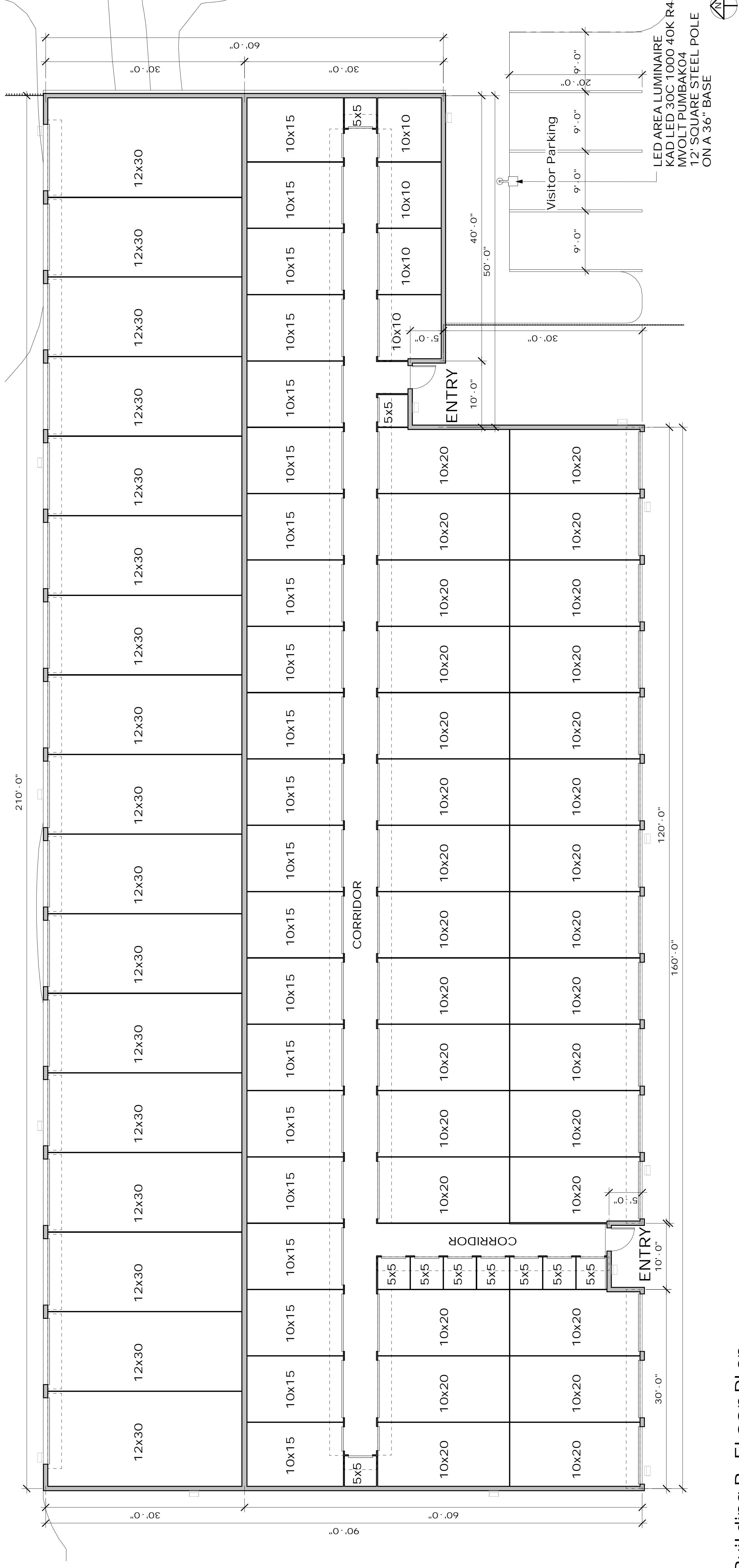
DWG #	AR 1.1



Building A Upper Level - Floor Plan

Scale 1/8" = 1'-0"

ISSUED FOR 112	20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW	 <div>85 Keystone Avenue, Suite E Reno, Nevada 89503 Tel (775) 747-6000</div>	DRAWN BY: CRN DESIGNED BY: CRN CHECKED BY: SUBMITTED BY: AR	SCALE: 1/8" = 1'-0"	VINEYARD Self Storage E 18th Street & Vineyard Drive Antioch, California 94509 Contra Costa County APN 051-052-074, 051-052-075, 051-052-076, 051-052-077	SHEET CONTENT Building B - Floor Plan	DWG #	AR 1.2
	DATE	DESCRIPTION							



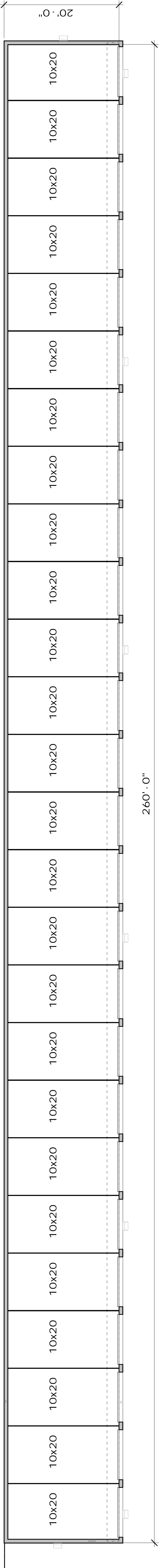
Building B - Floor Plan

Scale 1/8" = 1'-0"

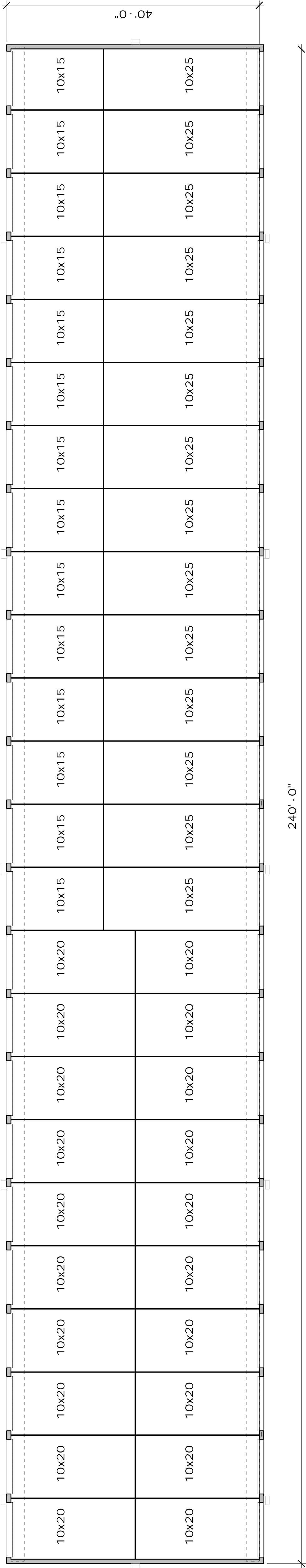
113 TO FOR DATE	20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW	 AMERICAN RECESS 85 Keystone Avenue, Suite E Reno, Nevada 89503 Tel (775) 747-6000	DRAWN BY: CRN	SCALE: 1/8" = 1'-0"	VINEYARD Self Storage E 18th Street & Vineyard Drive Antioch, California 94509 Contra Costa County APN 051-052-074, 051-052-075, 051-052-076, 051-052-077	SHEET CONTENT Building C and D - Floor Plan	DWG #	AR 1.3
				DESIGNED BY: CRN					
				CHECKED BY:					
				SUBMITTED BY: AR					
	DATE	DESCRIPTION							

Buill dings C and D- Floor Plans

Scale 1/8" = 1'-0"

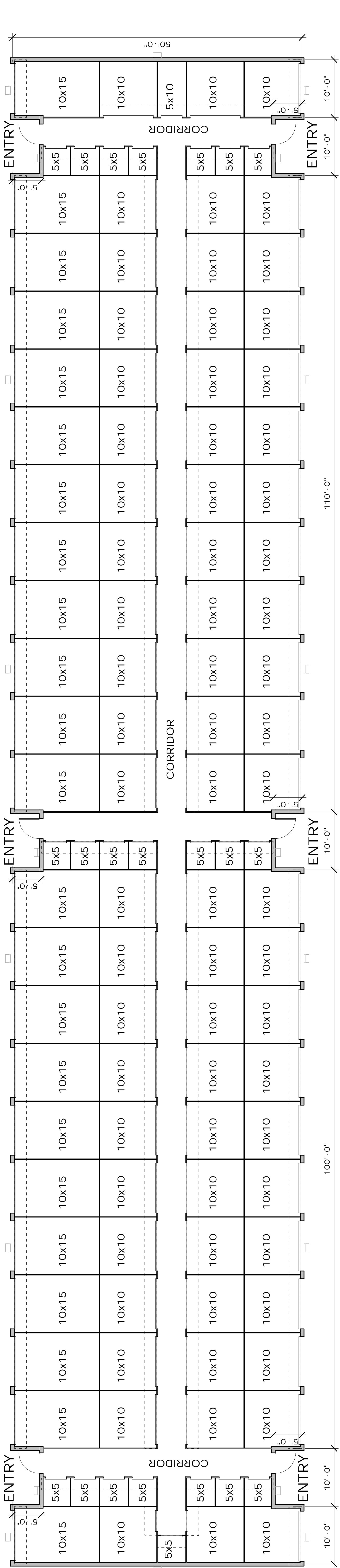


BUILDING C

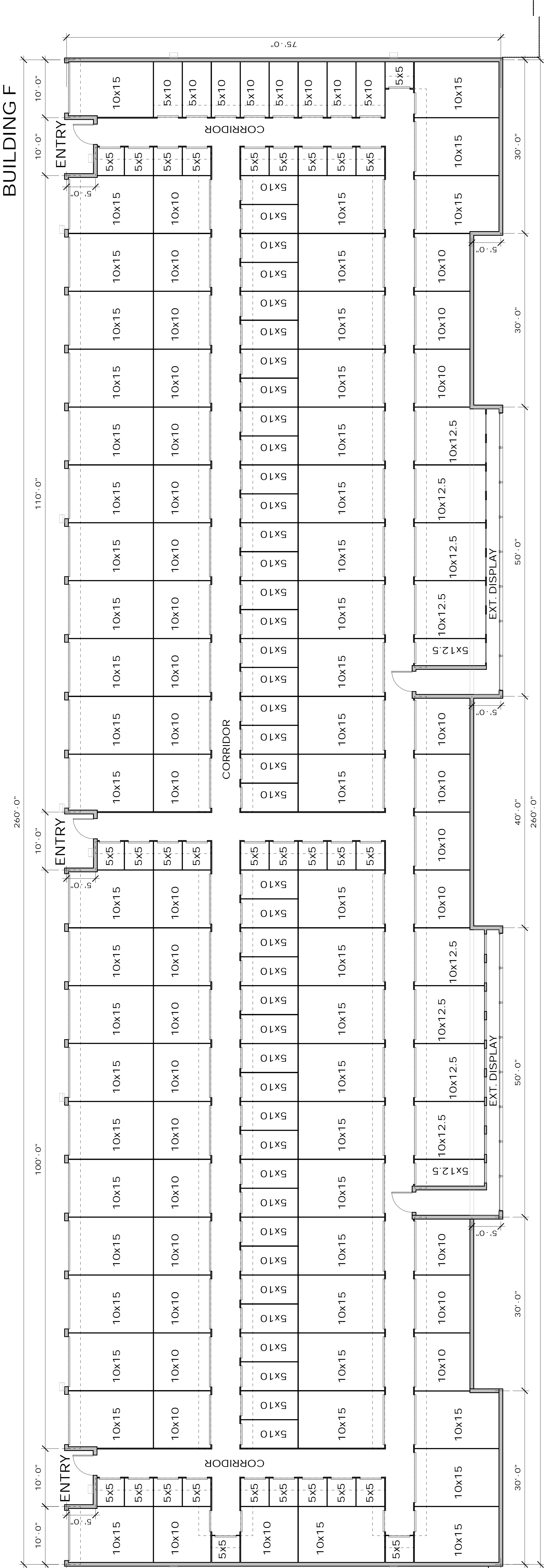


BUILDING D





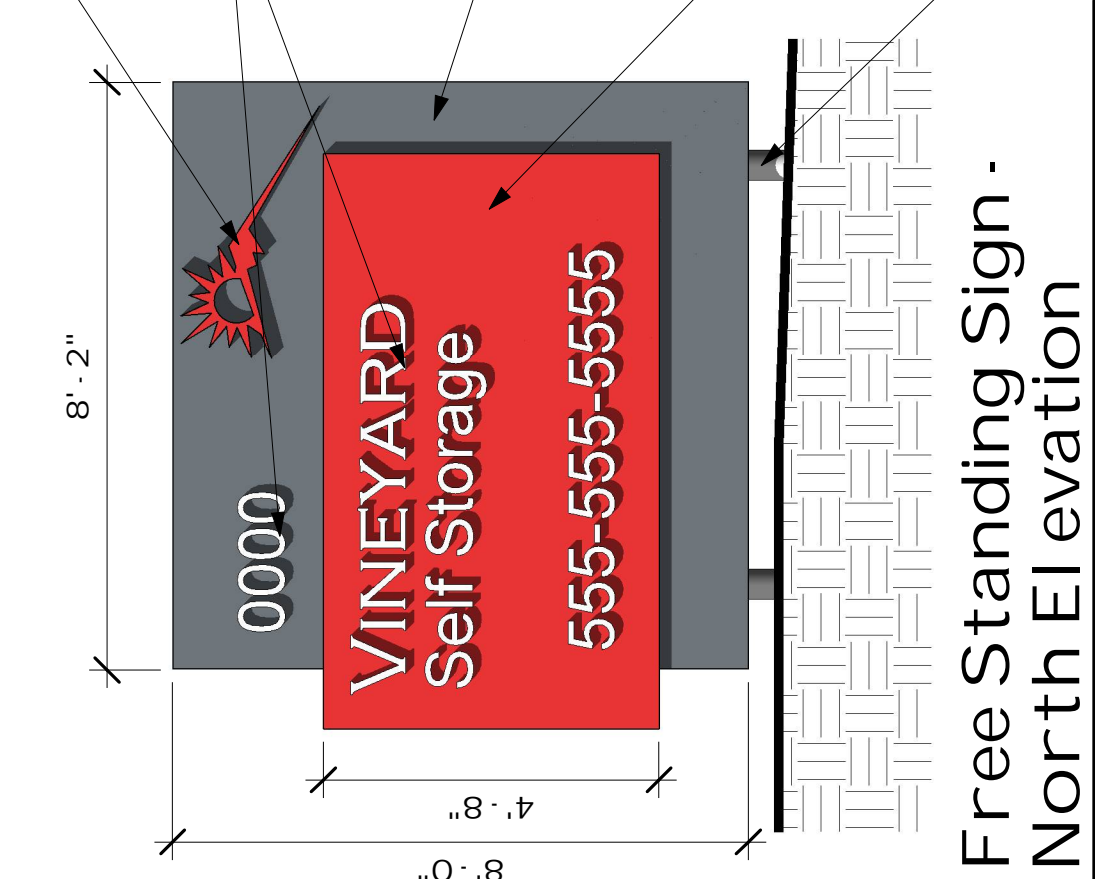
BUILDING E



Buil dings E and F- Floor Plans

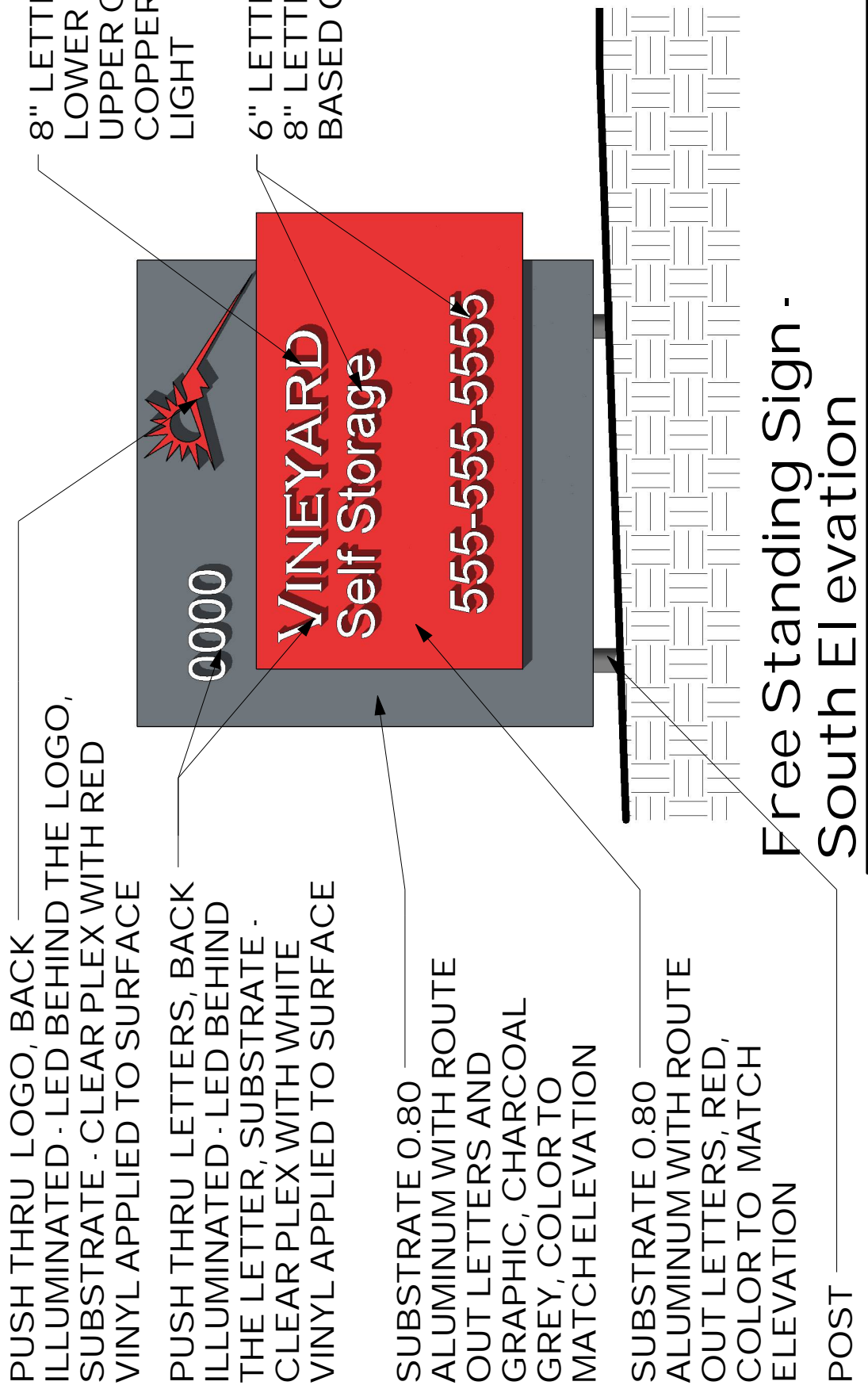
Scale 1/8" = 1'-0"

114 ISSUED FOR	20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW	 AMERICAN RECESS 85 Keystone Avenue, Suite E Reno, Nevada 89503 Tel (775) 747-6000	DRAWN BY: CRN DESIGNED BY: CRN CHECKED BY: SUBMITTED BY: AR	SCALE: 1/8" = 1'-0"	VINEYARD Self Storage E 18th Street & Vineyard Drive Antioch, California 94509 Contra Costa County APN 051-052-074, 051-052-075, 051-052-076, 051-052-077	SHEET CONTENT Building E and F - Floor Plan	DWG #	AR 1.4
	DATE	DESCRIPTION							



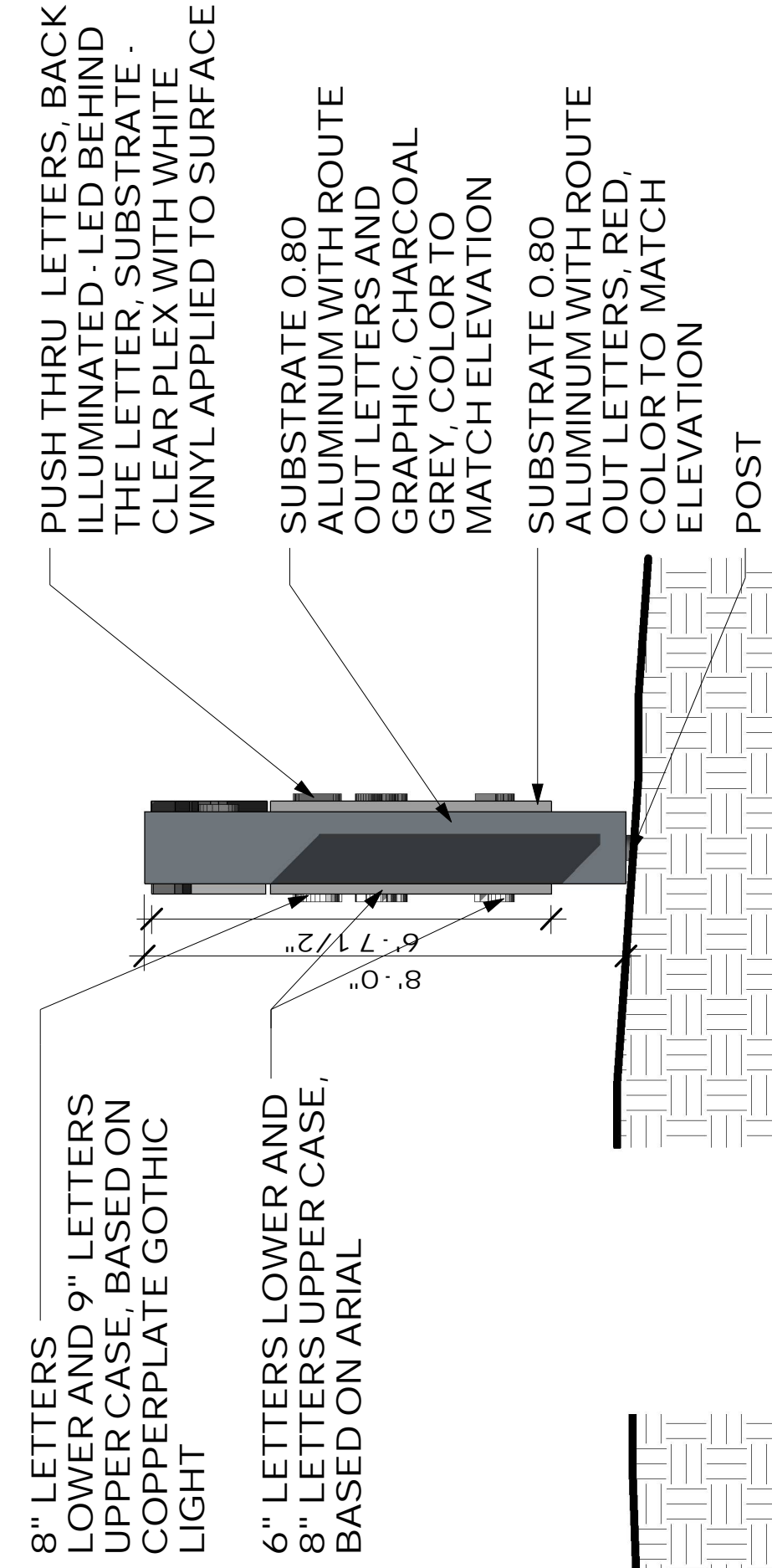
Free Standing Sign - North Elevation

Scale 3/8" = 1'-0"



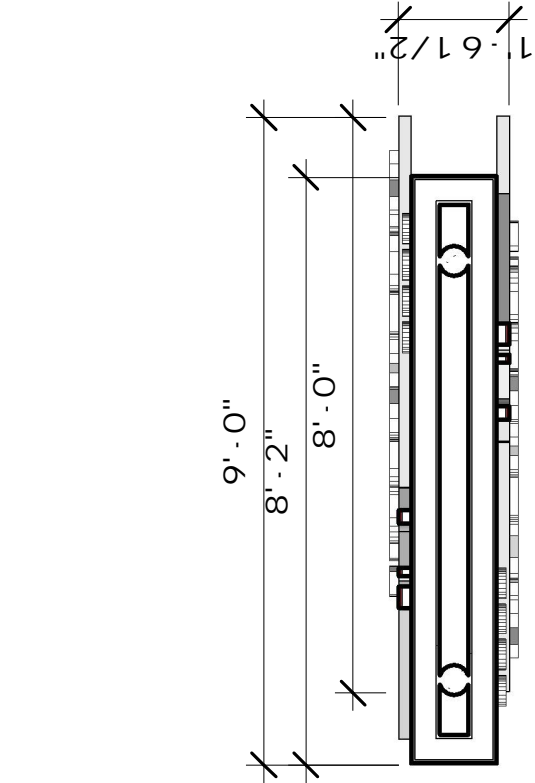
Free Standing Sign - South Elevation

Scale 3/8" = 1'-0"



Free Standing Sign - Side Elevation

Scale 3/8" = 1'-0"



Free Standing Sign - Floor Plan

Scale 3/8" = 1'-0"

- INDIVIDUALLY MOUNTED LOGO, WHITE PLEX FACE WITH PATRIOT RED VINYL APPLIED TO FIRST SURFACE, BLACK BORDER, GLASS LD MODIFIED ACRYLIC FACE, ILLUMINATED WITH 1 ROW OF SLOAN SHORT WHITE LEDS
- PROJECTED MOUNT
- LOGO GRAPHIC TO BE DETERMINED
- ALOCATED MAX AREA 47SF

Detail Wal I Sign #1

Signs Table

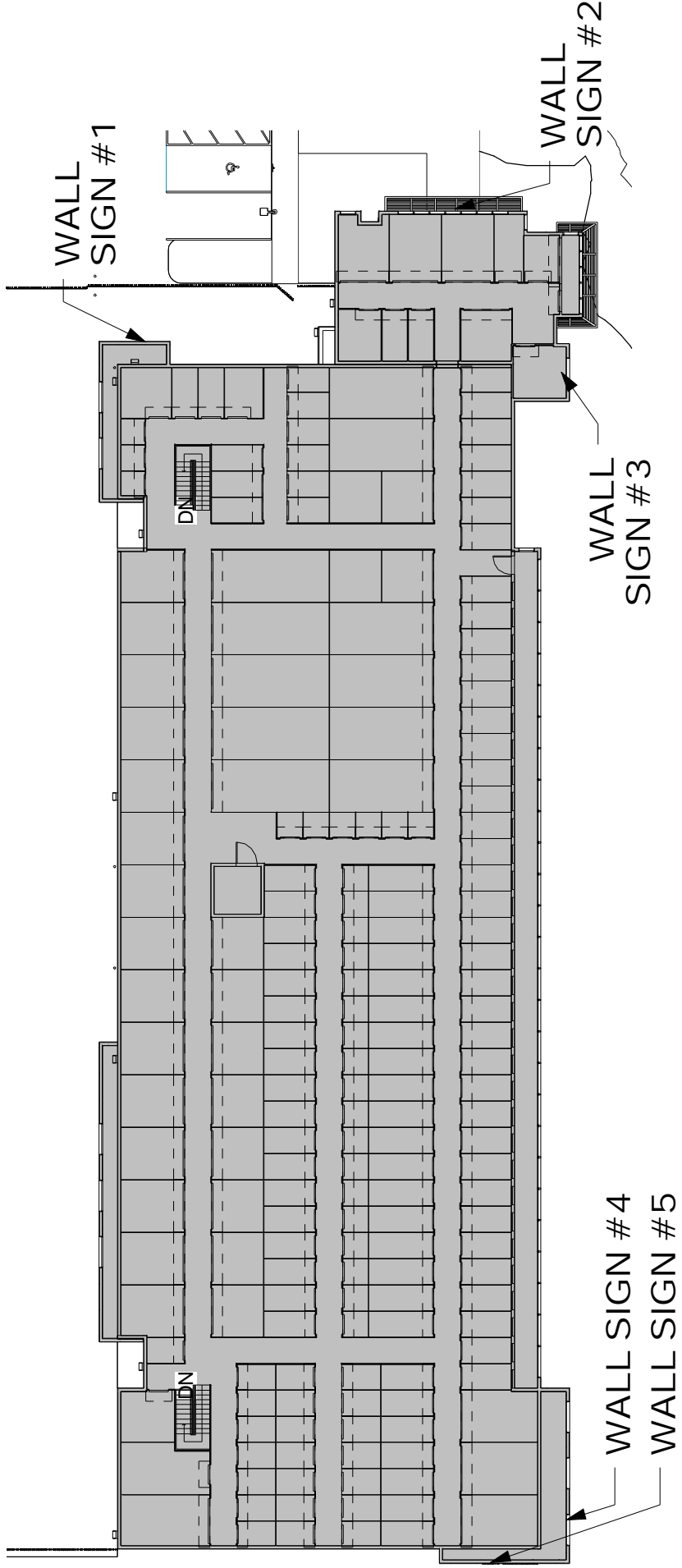
SIGN #1 - Wall I Mounted Graphic Logo	47SF
SIGN #2 - Wall I Mounted Letters	46SF
SIGN #3 - Wall I Mounted	26SF
SIGN #4 - Wall I Mounted Letters and Graphic Logo	46SF
SIGN #5 - Wall I Mounted Letters and Graphic Logo	110SF

Total Wall I Mounted Signs

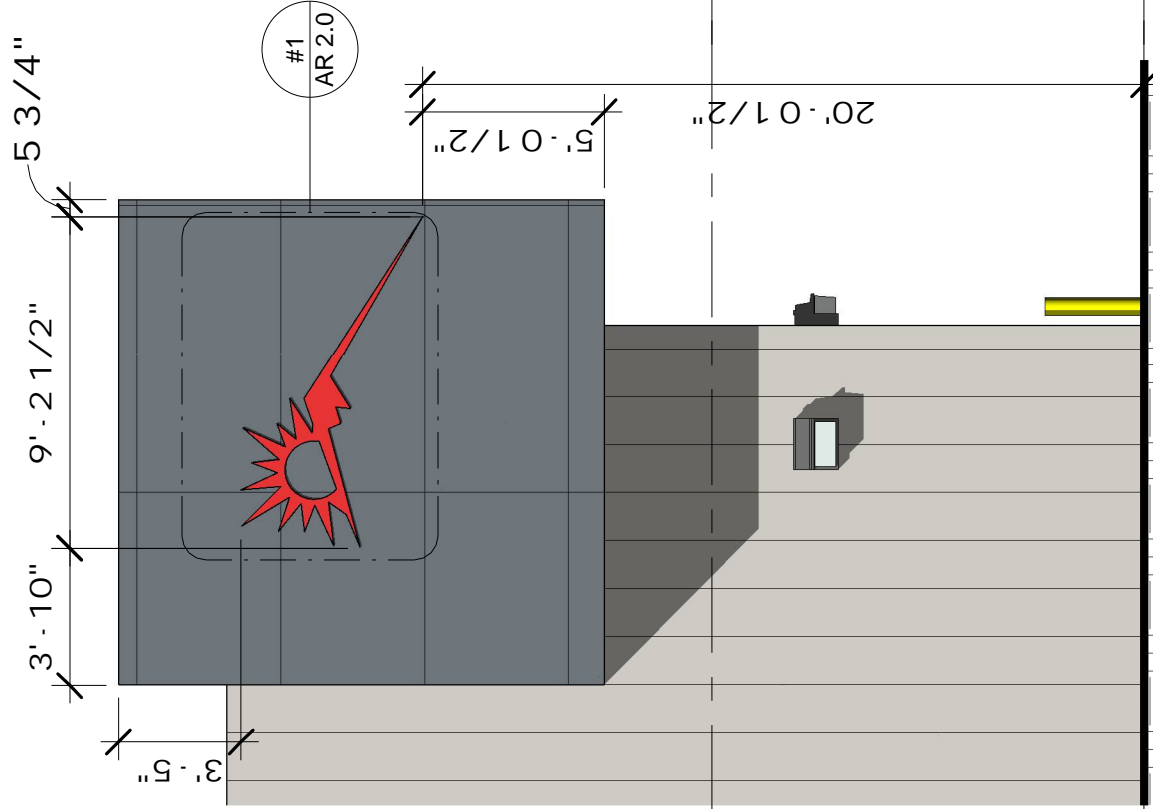
275SF

Free Standing Sign with signage both sides

70SF Each Side

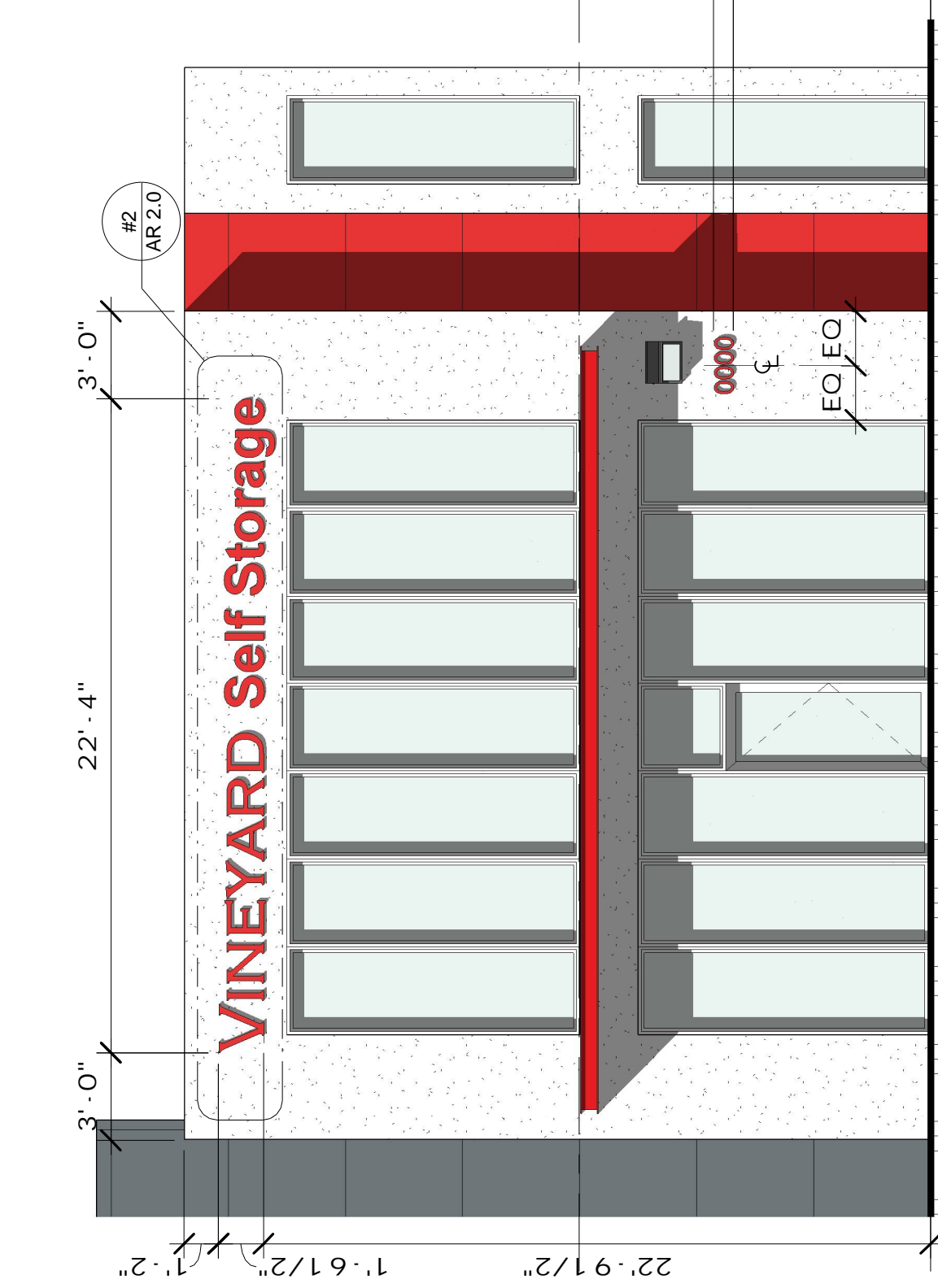


Wall Signs Location



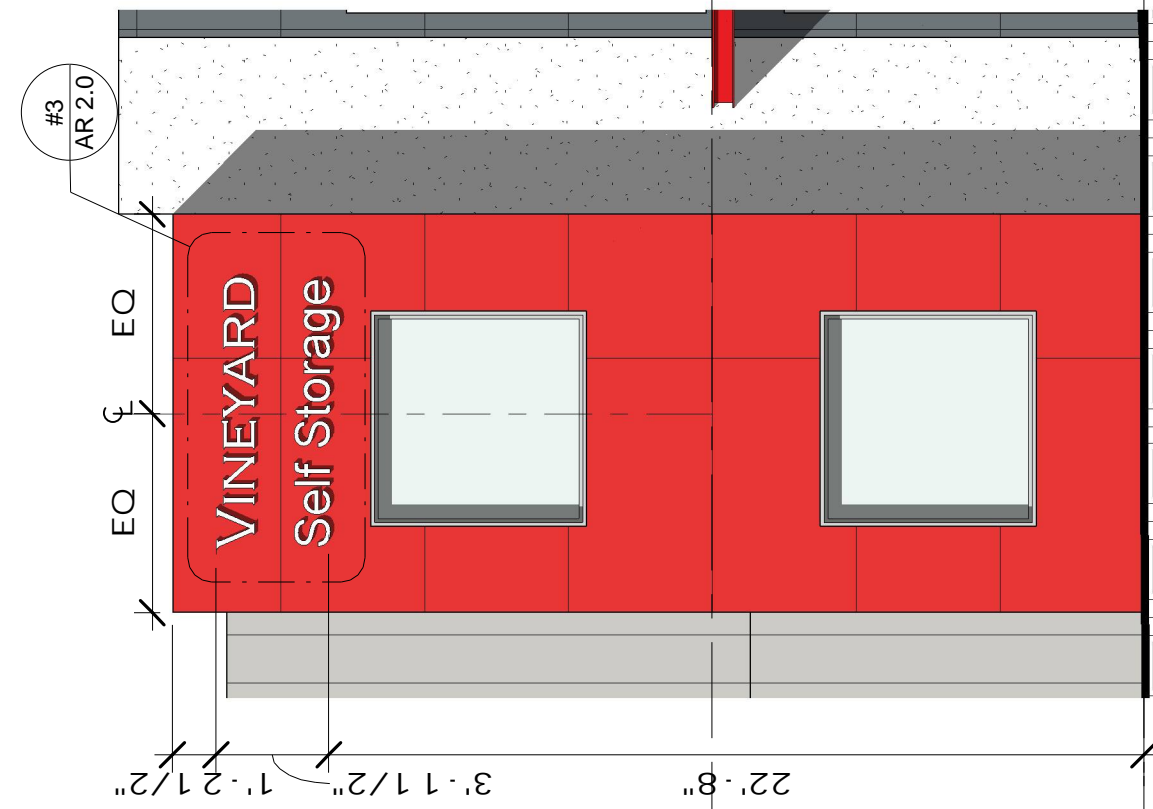
Wall Sign #1

Scale 3/16" = 1'-0"



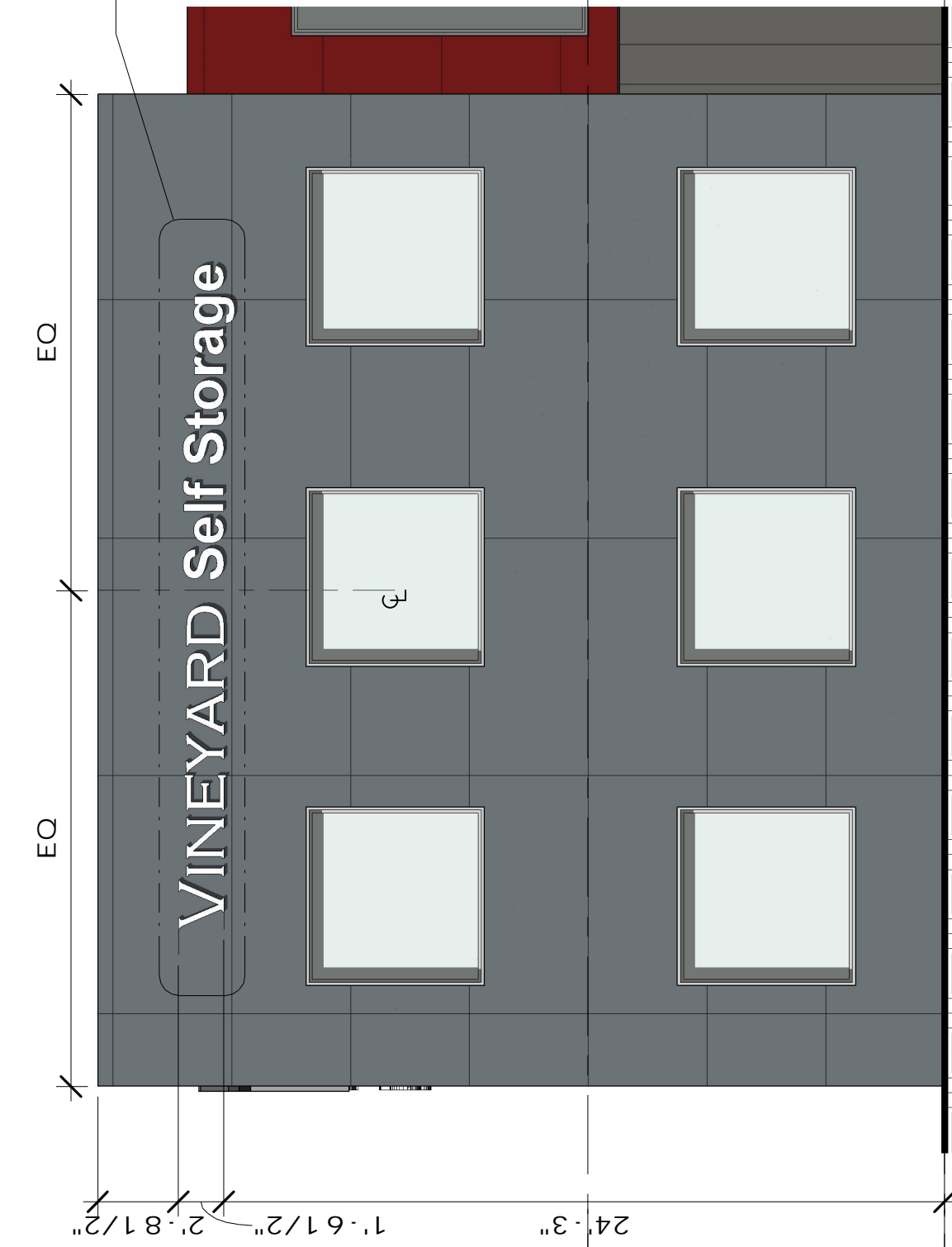
Wall Sign #2

Scale 3/16" = 1'-0"



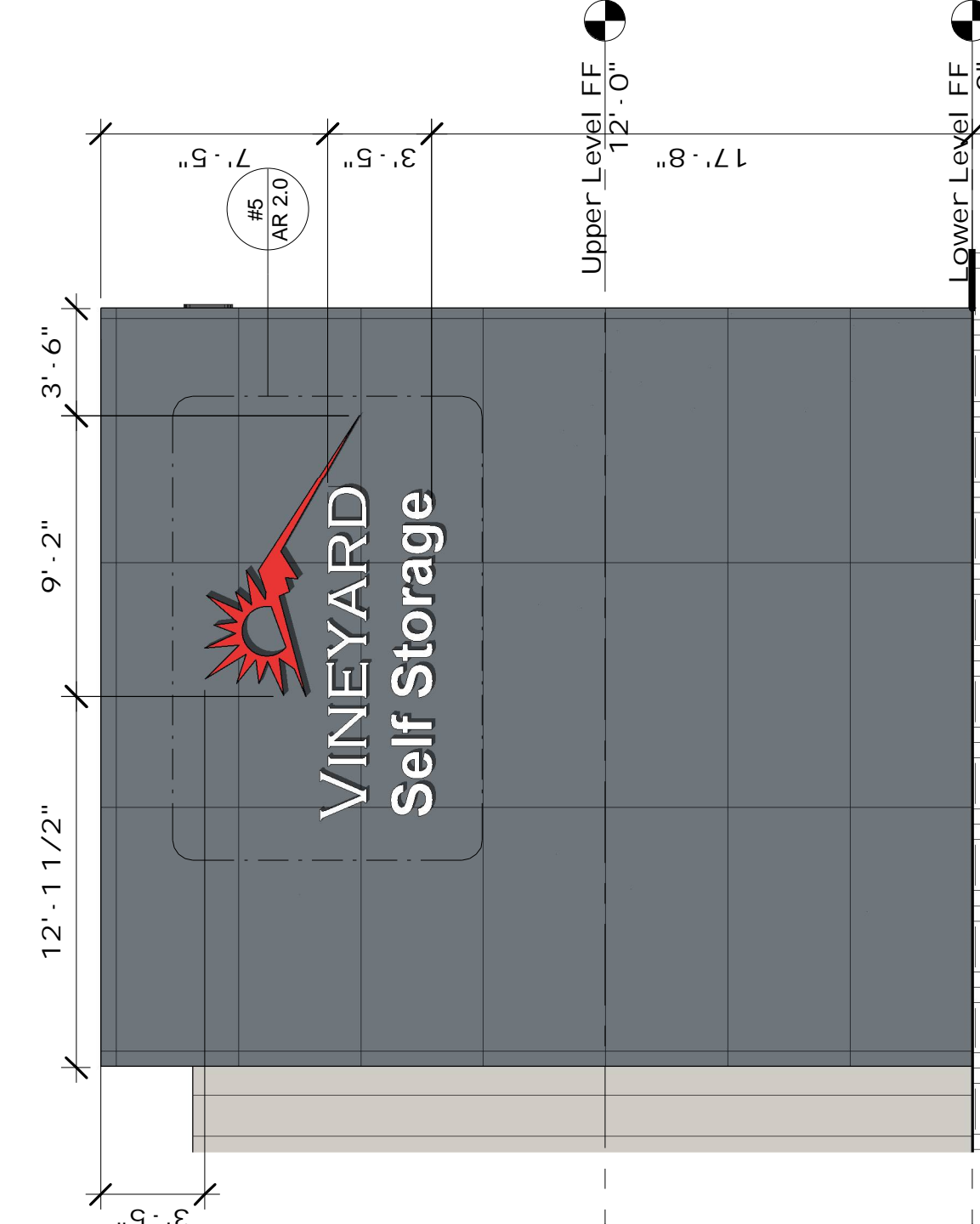
Wall Sign #3

Scale 3/16" = 1'-0"



Wall Sign #4

Scale 3/16" = 1'-0"



Wall Sign #5

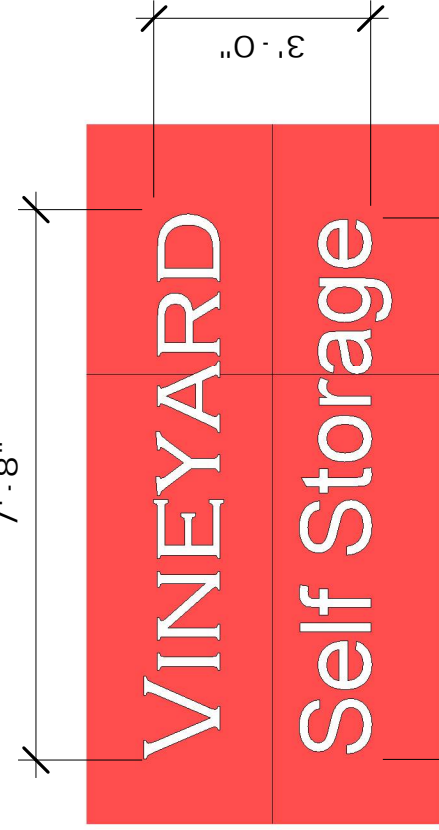
Scale 3/16" = 1'-0"



Detail Wall Sign #2

- 1'-6 1/2" UPPER CASE AND 1'-3 1/4" LOWER CASE BASED ON COPPERPLATE GOTHIC LIGHT
- 1'-4 " UPPER CASE AND 1'-0" LOWER CASE BASED ON ARIAL

Detail Wall Sign #4



Detail Wall Sign #3

Scale 3/8" = 1'-0"

- INDIVIDUALLY MOUNTED WHITE OR PATRIOT RED CHANNEL LETTER SET, LED ILLUMINATED, WHITE ACRYLIC FACE WITH VINYL OVERLAY
- PROJECTED MOUNT
- TEXT TO BE DETERMINED

20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW
DATE	DESCRIPTION

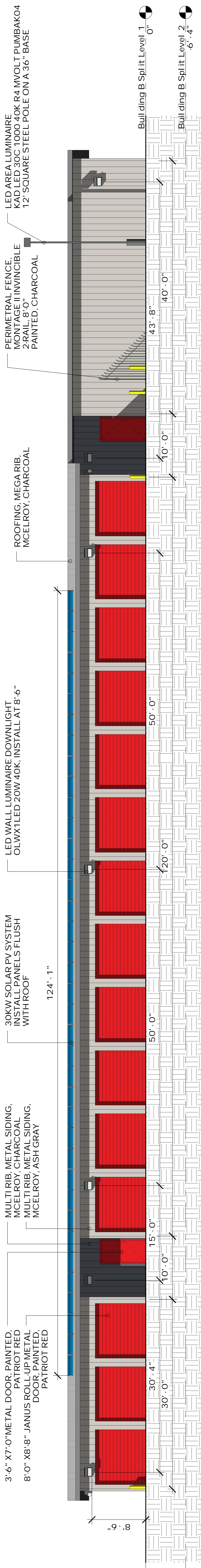
SCALE:
As indicated

VINEYARD Self Storage

E 18th Street & Vineyard Drive
Antioch, California 94509
Contra Costa County
APN 051-052-074, 051-052-075, 051-052-076, 051-052-077

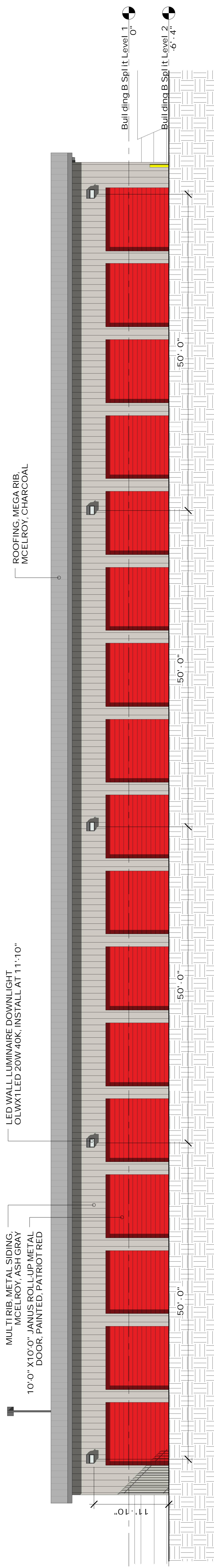
SHEET CONTENT
Signs Designs and Detail s

DWG #



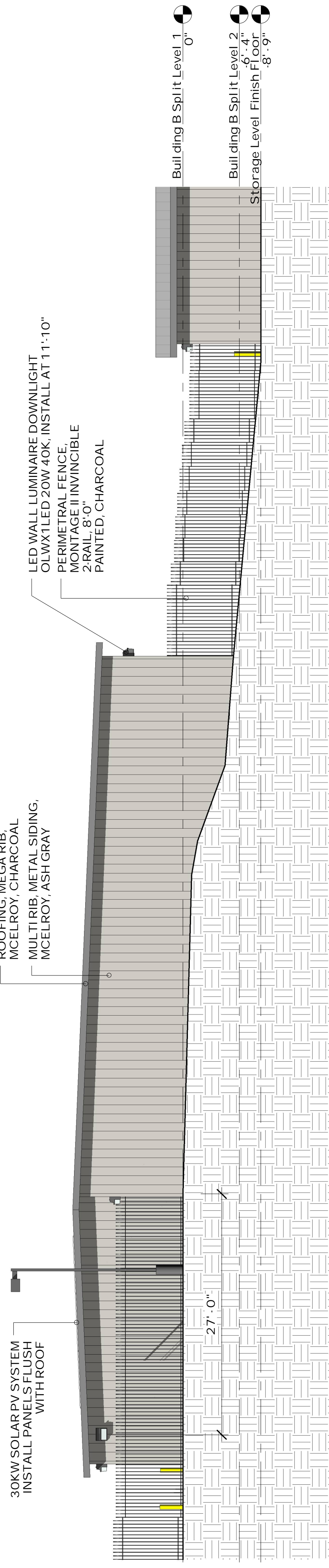
Building B South Elevation

Scale $1/8" = 1'-0"$



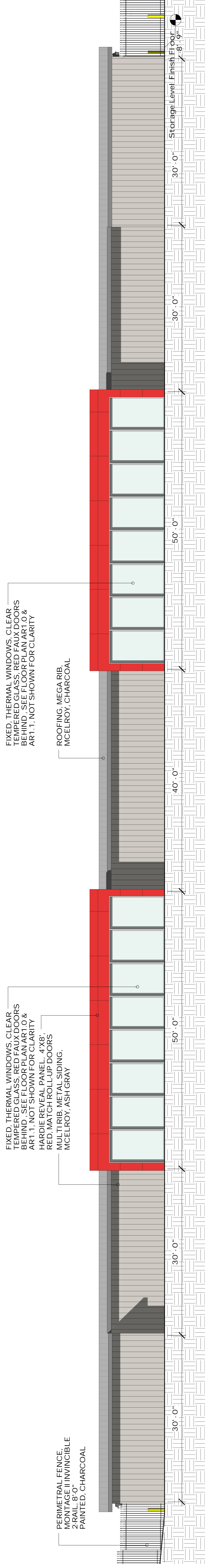
Building B North Elevation

Scale $1/8" = 1'-0"$



Building B East Evaluation

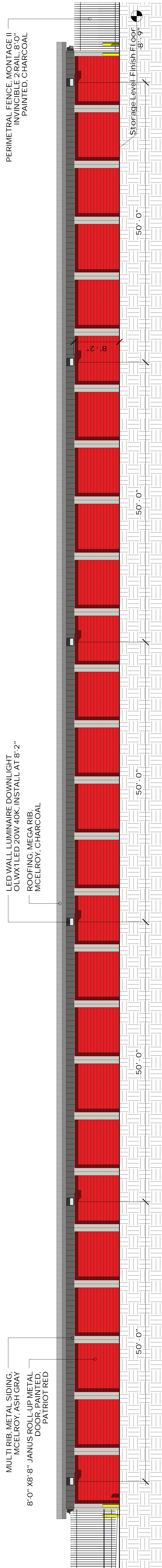
Scale $1/8" = 1'-0"$



Building F East Elevation

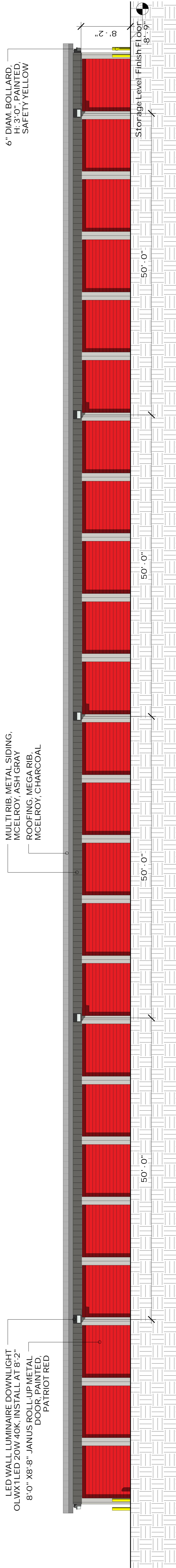
Scale $1/8" = 1'-0"$

[illegible]



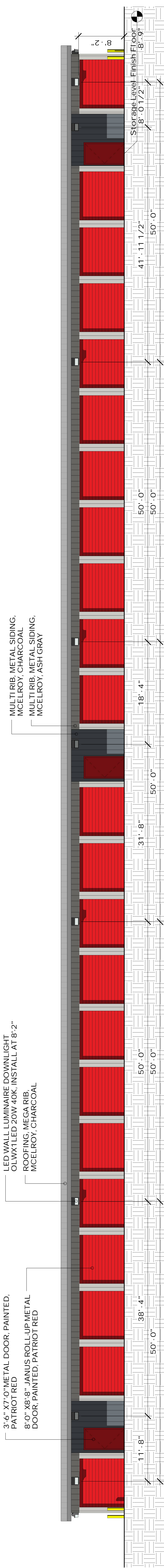
Building C East Elevation

Scale $1/8" = 1'-0"$



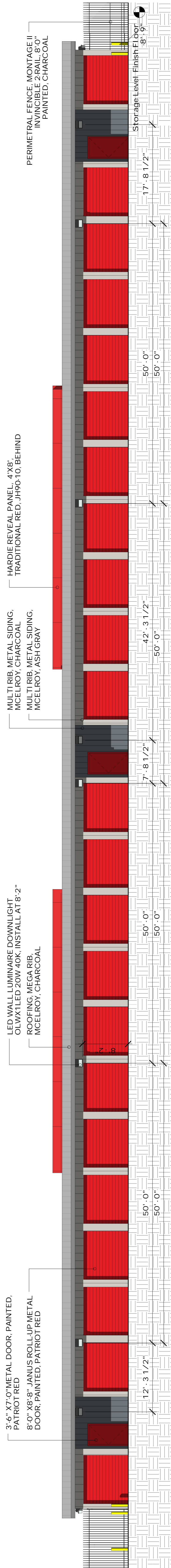
Building D East and West Elevations

Scale 1/8" = 1'-0"



Building East and West Elevations

Scale $1/8" = 1'-0"$



Building F West Elevation

Scale $1/8" = 1'-0"$

 <p>AMERICAN RECESS</p> <p>85 Keystone Avenue, Suite E Reno, Nevada 89503 Tel (775) 747-6000</p>	<p>20 Apr. 16</p>		<p>COMMUNITY DEVELOPMENT REVIEW</p>		<p>SCALE: 1/8" = 1'-0"</p>	<p>DRAWN BY: CRN DESIGNED BY: CRN CHECKED BY: SUBMITTED BY: AR</p>	<p>VINEYARD Self Storage E 18th Street & Vineyard Drive Antioch, California 94509 Contra Costa County APN 051-052-074, 051-052-075, 051-052-076, 051-052-077</p>	<p>SHEET CONTENT</p>	<p>DWG #</p>
	<p>DATE</p>		<p>DESCRIPTION</p>						



Quercus ilex



Pistacia chinensis



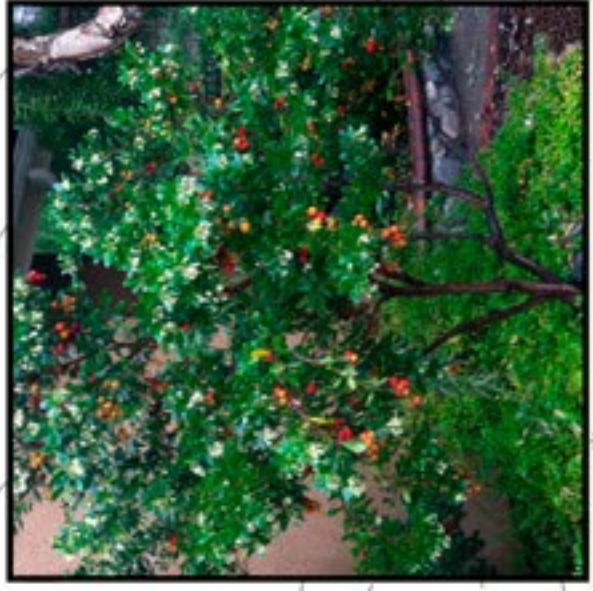
Pinus canariensis



Arbutus marina



Cercis canadensis



Arbutus unedo



Rhaphiolepis y. 'Minor'



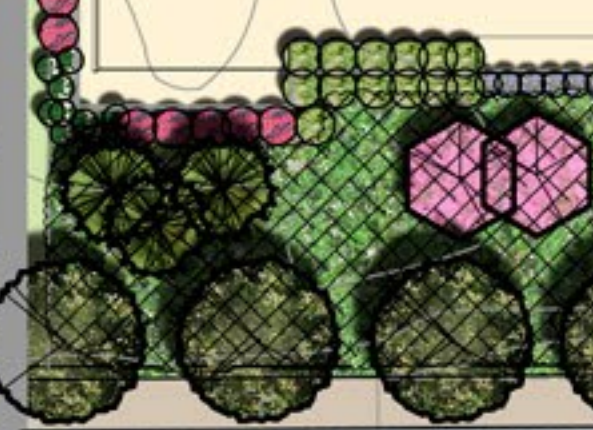
Pittosporum t. 'Variegata'



Lavandula angustifolia



Lavatera assurgentiflora



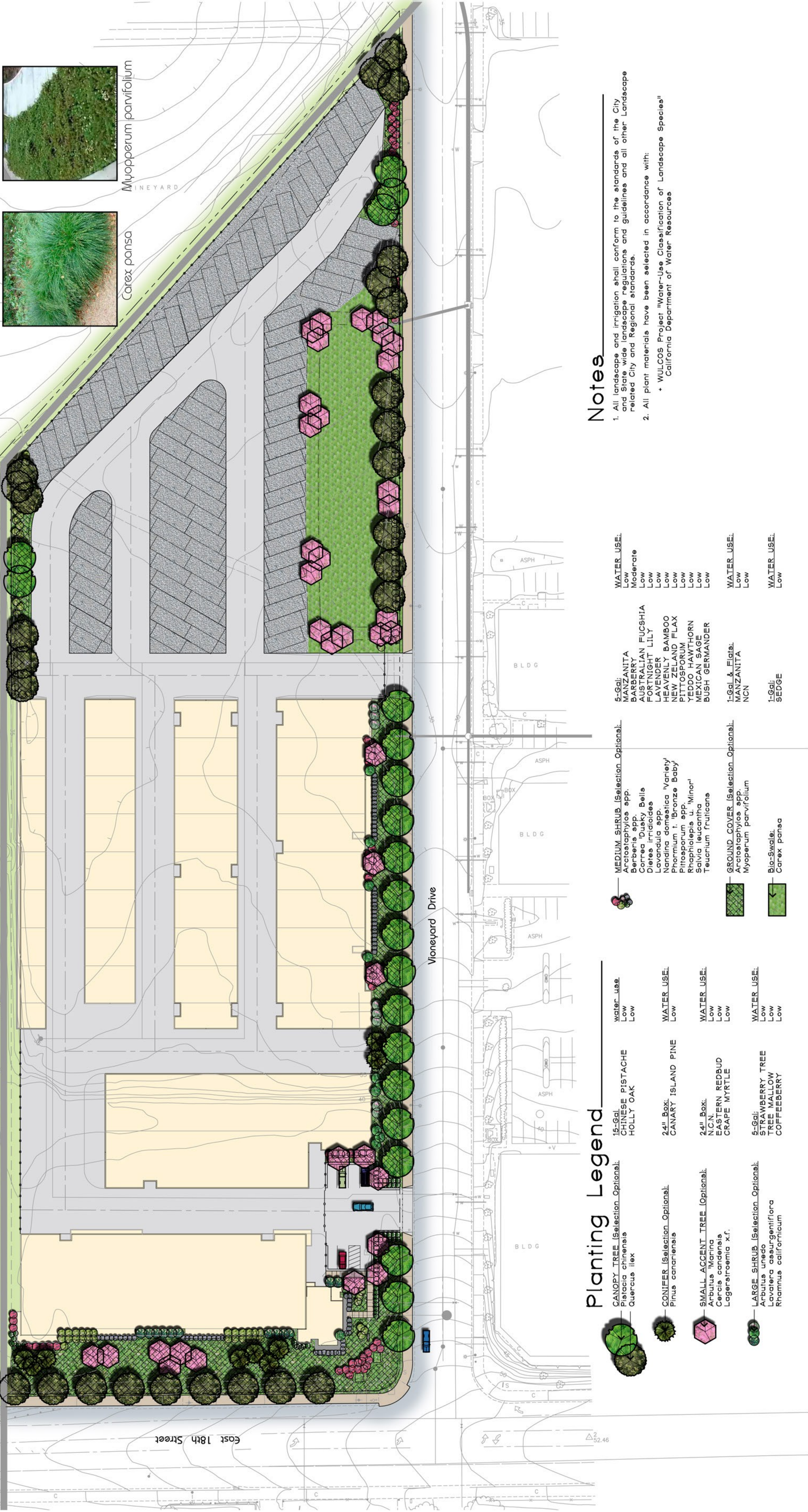
Myoporum parvifolium



Carex pansa



Myoporum parvifolium



Planting Legend



CANOPY TREE (Selection Optional):
Pistacia chinensis
Quercus ilex

WATER USE:
Low
Low

15'-Gal.
CHINESE PISTACHE
HOLLY OAK



MEDIUM SHRUB (Selection Optional):
Arctostaphylos spp.
Berberis spp.
Correa 'Dusky Bells'
Dielsia iridoides
Lavandula spp.
Nandina domestica 'Variety'
Phormium t. 'Bronze Baby'
Pittosporum spp.
Rhaphiolepis y. 'Minor'
Salvia leucantha
Teucrium fruticans

WATER USE:
Low
Moderate
Low
Low
Low
Low
Low
Low
Low
Low

5-Gal.
MANZANITA
BARBERRY
AUSTRALIAN FUCHSIA
FORTNIGHT LILY
LAVENDER
HEAVENLY BAMBOO
NEW ZEALAND FLAX
PITTOSPORUM
TEDDO HAWTHORN
MEXICAN SAGE
BUSH GERMANDER

WATER USE:
Low
Low
Low
Low
Low
Low
Low
Low
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low



SMALL ACCENT TREE (Optional):
Arbutus 'Marina'
Cercis canadensis
Lagerstroemia x.f.

WATER USE:
Low
Low
Low

24" Box:
CANARY ISLAND PINE



GROUND COVER (Selection Optional):
Arctostaphylos spp.
Myoporum parvifolium

WATER USE:
Low
Low
Low

1-Gal. & Flats:
MANZANITA
NCN

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low



LARGE SHRUB (Selection Optional):
Arbutus unedo
Lavatera assurgentiflora
Rhamnus californicum

WATER USE:
Low
Low
Low

5-Gal.
STRAWBERRY TREE
TREE MALLOW
COFFEEBERRY



Bio-Swale:
Carex pansa

WATER USE:
Low
Low

1-Gal.
SEDGE

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

WATER USE:
Low
Low

Notes

1. 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



1



2



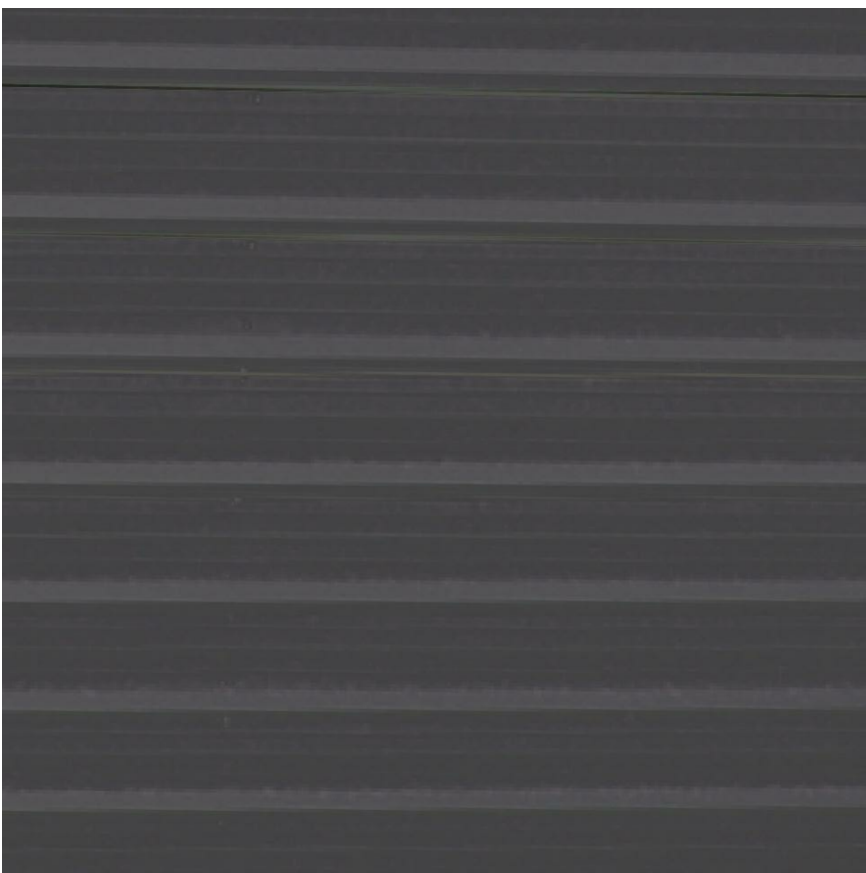
3



4



5



6



8



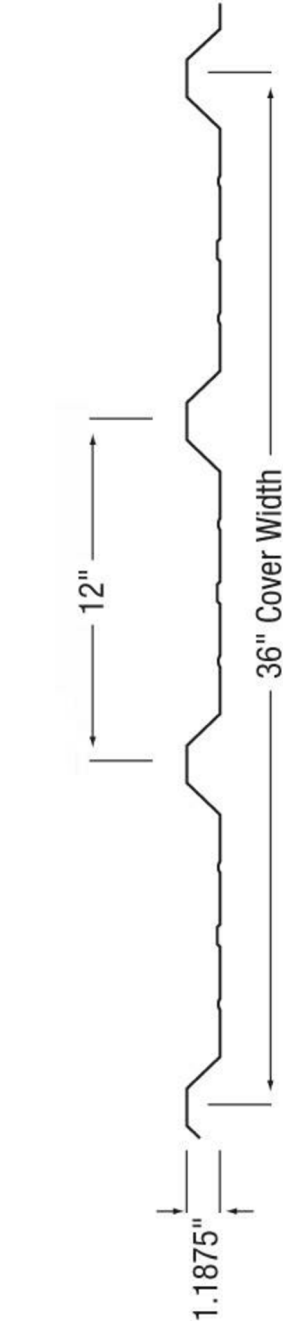
9



10



7



11



8. SUN CONTROL CANOPY,
ALUMINUM, PATRIOT RED, MATCH
ROLL-UP DOORS

1. FIBER CEMENT PANEL - HARDE
REVEAL PANEL, 4'X8',
IRON GREY, JH90-30

2. FIBER CEMENT PANEL
HARDE REVEAL PANEL,
IRON GREY, JH90-10

3. MEDALLION LOK, METAL
SIDING, MCELROY, ASH
GRAY

7. EXTERIOR STUCCO,
OMEGAFLEX, FINE, 9205
ICEBERG

10. 3'-6" X7'-0" METAL
DOOR, PAINTED,
PATRIOT RED

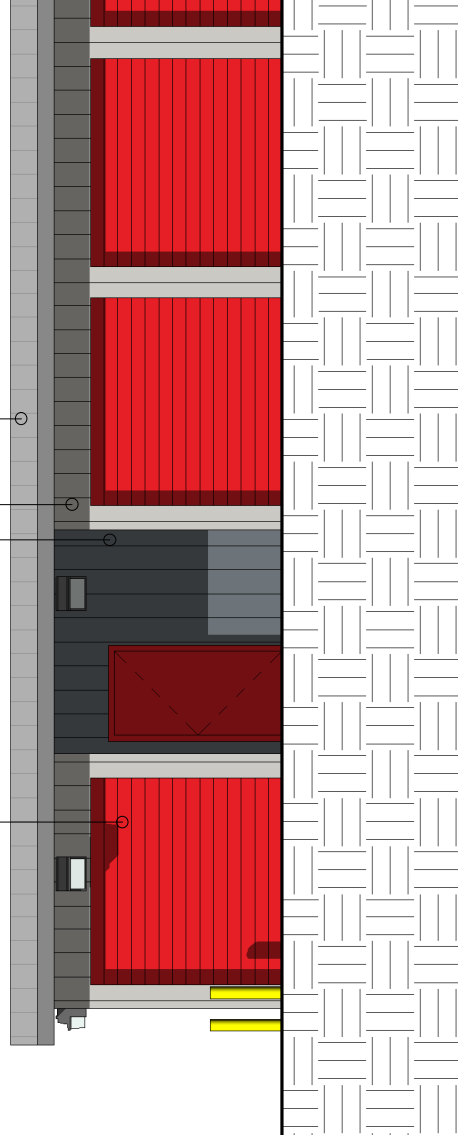
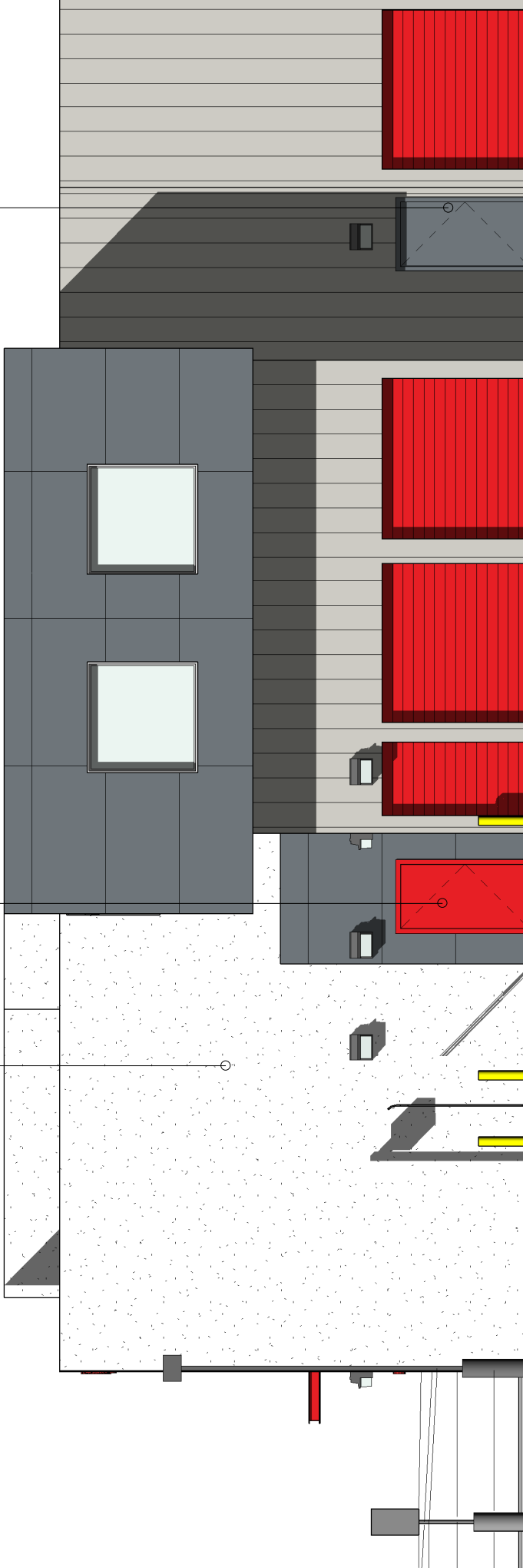
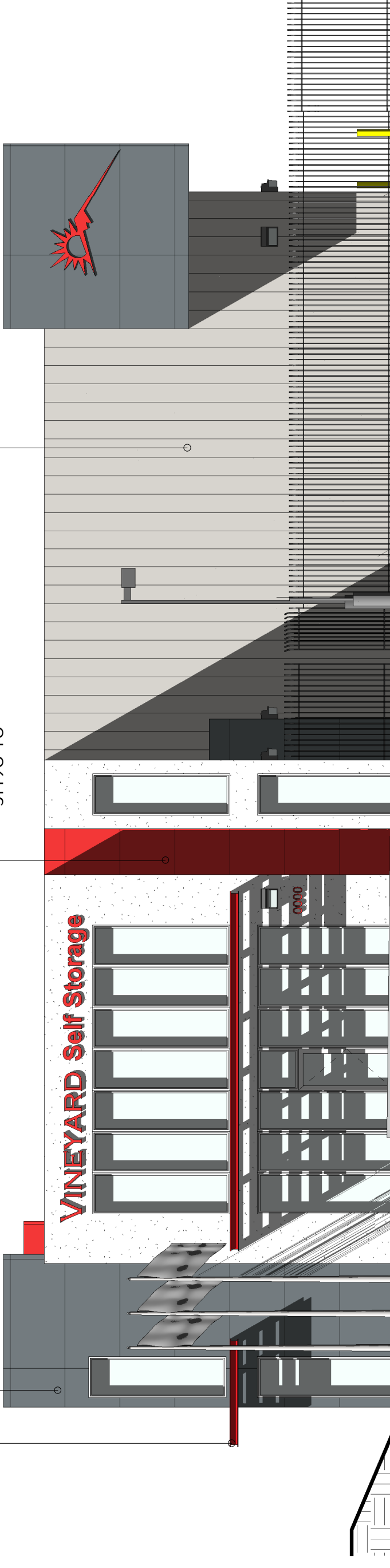
9. 8'-0" X8'-8" JANUS
ROLL-UP METAL DOOR,
PAINTED, PATRIOT RED

11. 3'-6" X7'-0" METAL DOOR,
PAINTED, CHARCOAL

5. MULTI RIB, METAL SIDING,
MCELROY, CHARCOAL

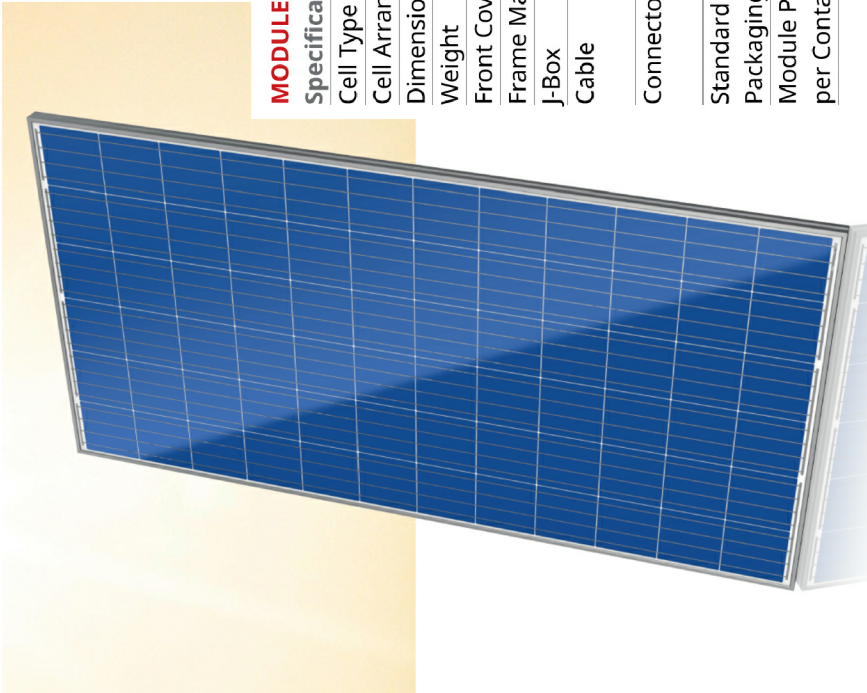
4. MULTI RIB, METAL SIDING,
MCELROY, ASH GRAY

6. ROOFING, MEGA RIB,
MCELROY, CHARCOAL



DATE	DESCRIPTION
20 Apr. 16	COMMUNITY DEVELOPMENT REVIEW

1



1. SOLAR PV MODULES
CANADIAN SOLAR, CS6X-
315P, OR EQUAL



OLWX1 LED
LED Wall Luminaire

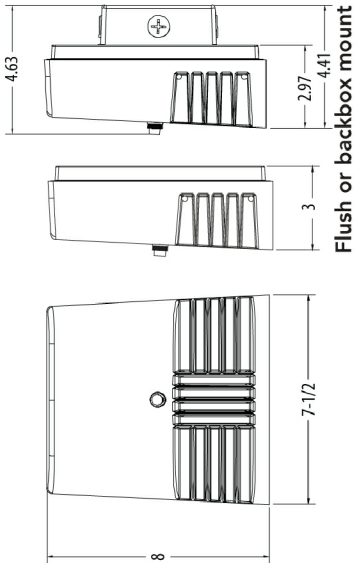


MODULE / MECHANICAL DATA

Specification	Data
Cell Type	Poly-crystalline, 6 inch
Cell Arrangement	72 (6×12)
Dimensions	1954×982×40 mm (76.9×38.7×1.57 in)
Weight	22 kg (48.5 lbs)
Front Cover	3.2 mm tempered glass
Frame Material	Anodized aluminium alloy
J-Box	IP67, 3 diodes
Cable	4 mm ² (IEC) or 4 mm ² & 12 AWG 1000V (UL), 1150 mm (45.3 in)
Connectors	Friends PV2a (IEC), Friends PV2b (IEC / UL)
Standard	26 pieces, 620 kg (1366.9 lbs)
Packaging	(quantity & weight per pallet)
Module Pieces per Container	624 pieces (40' HQ)

Specifications

Width:	7-1/2" (19 cm)
Height:	8" (20.3 cm)
Depth:	3" (7.62 cm)
Weight:	5 lbs (2.27 kg)

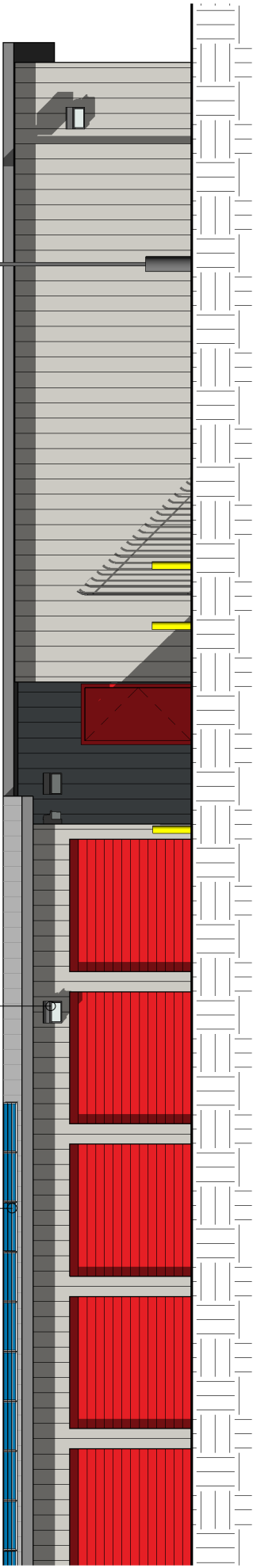


3. LED AREA LUMINAIRE

KAD LED 30C 1000 40K R4 MVOLT
PUMBAK04,12' SQUARE STEEL
POLE ON A 36" BASE

2. LED WALL LUMINAIRE DOWNLIGHT

OLWX1LED 20W 40K, INSTALL AT 8'-6"



ISSUED FOR:

20 Apr. 16 COMM. DEV. REVIEW

DATE DESCRIPTION



8995 Terabyte Drive Suite A
Reno, Nevada 89521
Tel (775) 747-6000

VINEYARD Self Storage

E 18th Street & Vineyard Drive
Antioch, California 94509

DWG #

AR 5.1

3

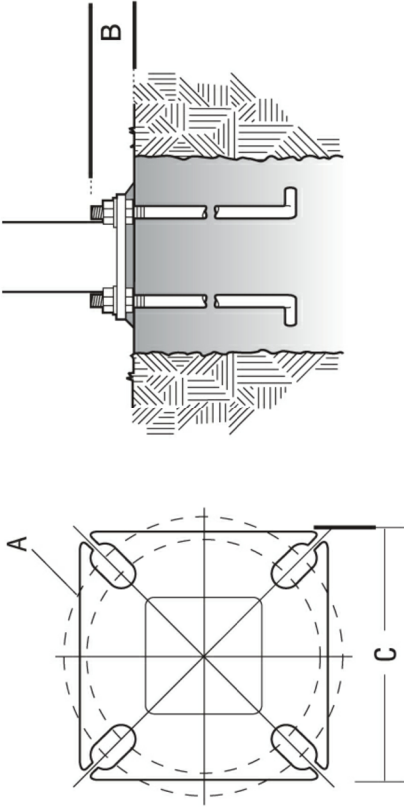
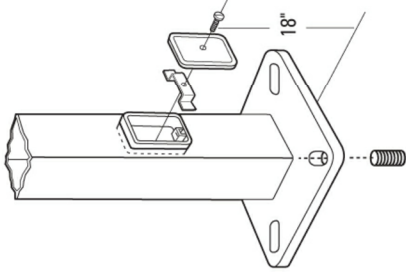
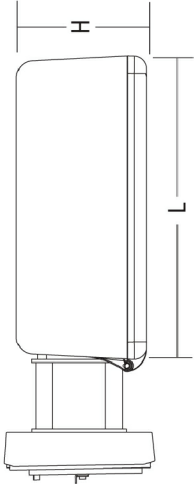


KAD LED
LED Area Luminaire



Specifications

EPA:	1.2 ft ² (0.11 m ²)
Length:	17-1/2" (44.5 cm)
Width:	17-1/2" (44.5 cm)
Height:	7-1/8" (18.1 cm)
Weight (max):	36 lbs. (16.4 kg)



1

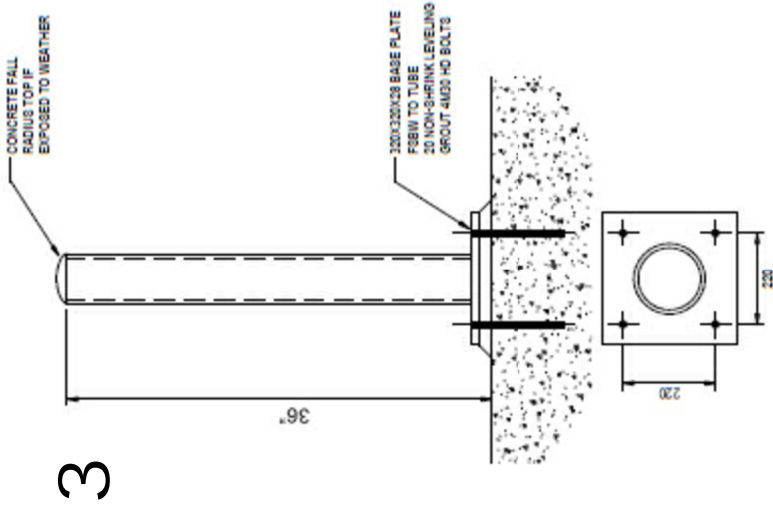
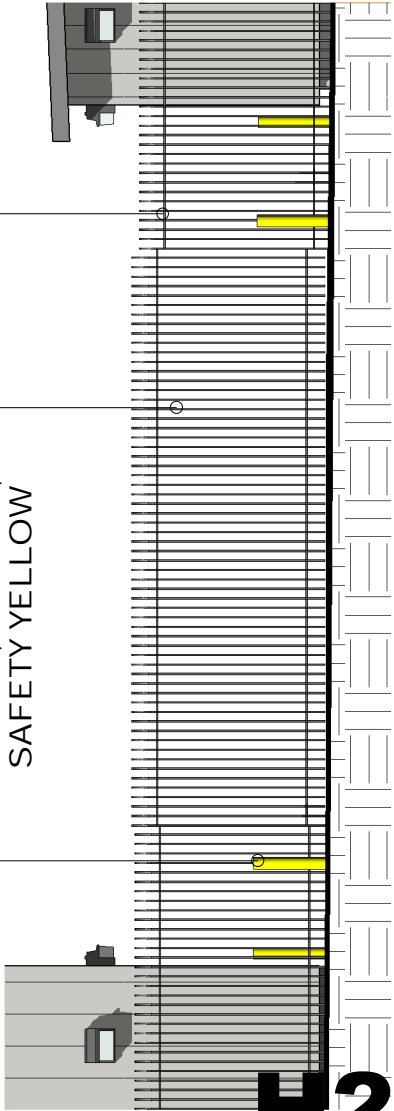


2



- 2. VERTICAL LIFT GATE,
L:24'-0"; H:8'-0"
- 1. PERIMETRAL FENCE - MONTAGE II
INVINCIBLE 2-RAIL, 8 FT

- 3. 6" DIAM. BOLLARD,
H: 3'-0", PAINTED,
SAFETY YELLOW



ISSUED
FOR:

DATE	DESCRIPTION
20 Apr. 16	COMM. DEV. REVIEW



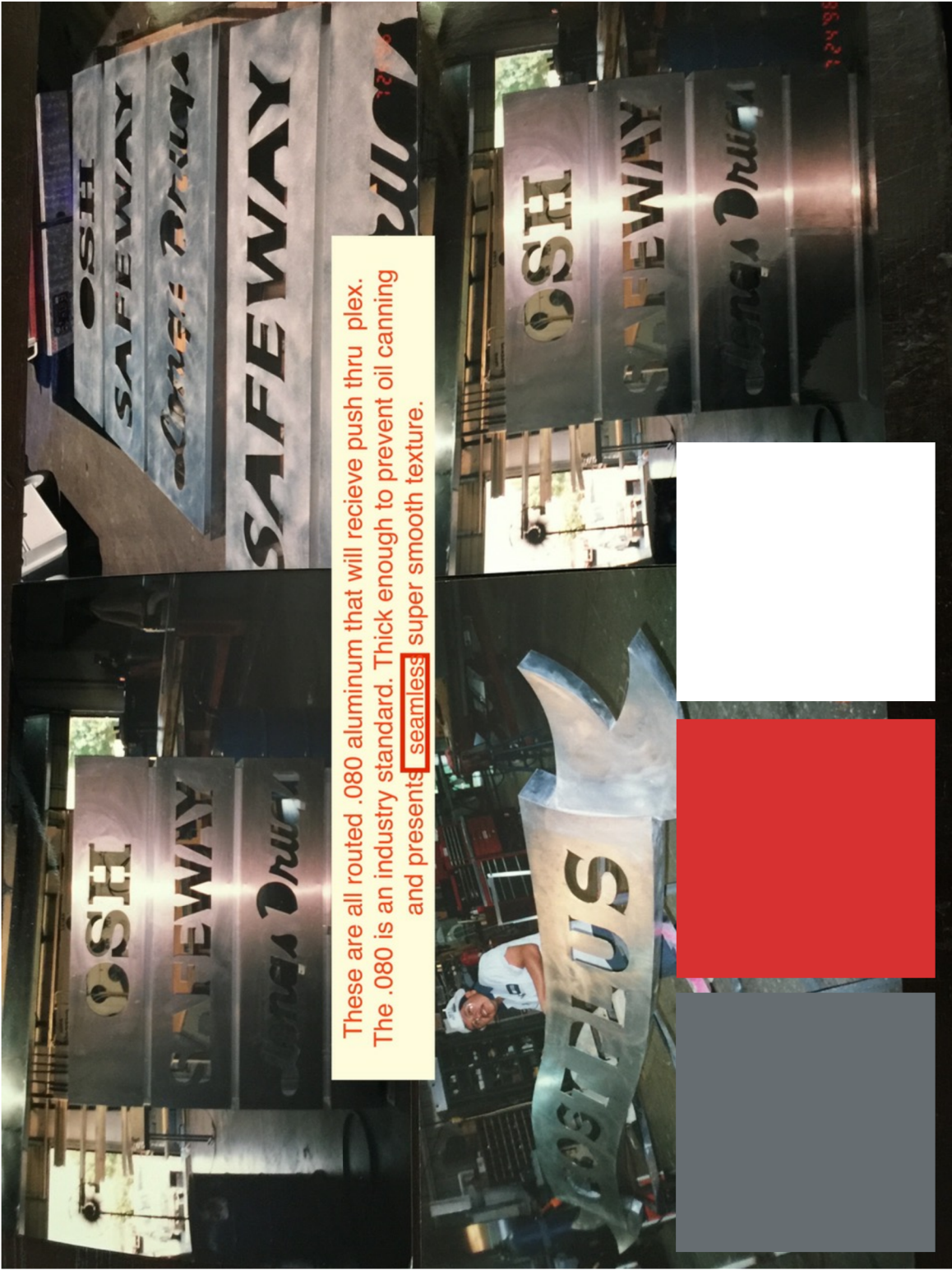
8995 Terabyte Drive Suite A
Reno, Nevada 89521
Tel (775) 747-6000

VINEYARD Self Storage

E 18th Street & Vineyard Drive
Antioch, California 94509

DWG #

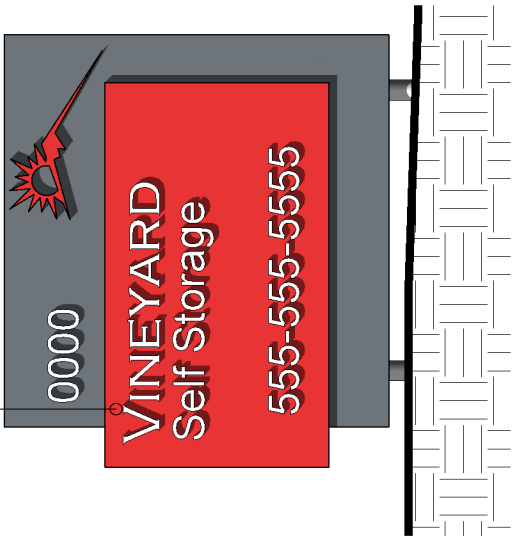
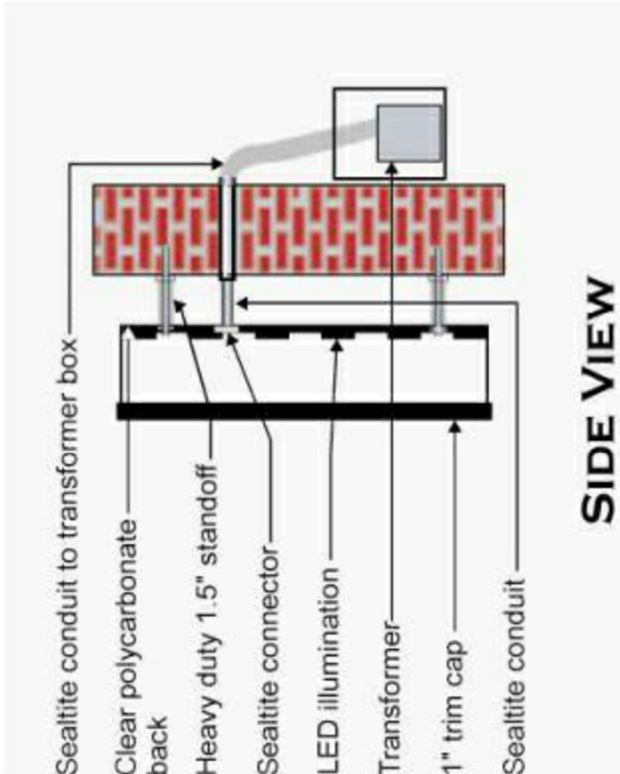
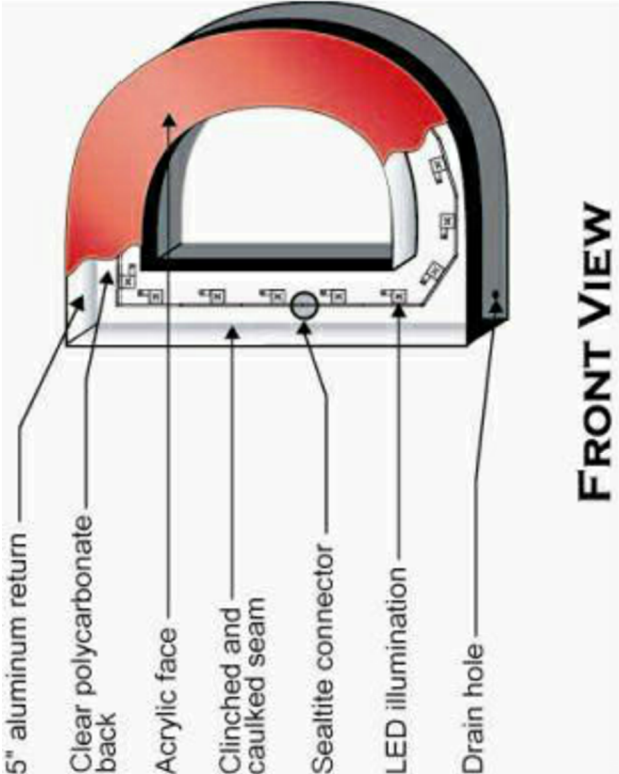
AR 5.2



1

VINEYARD Self Storage

2. INDIVIDUALLY MOUNTED WHITE OR PATRIOT RED CHANNEL LETTER SET
1. ROUTED ALUMINUM SIGN "PUSH THRU" SIGN FACES



H24

ISSUED FOR:

20 Apr. 16	COMM. DEV. REVIEW
DATE	DESCRIPTION



8995 Terabyte Drive Suite A
Reno, Nevada 89521
Tel (775) 747-6000

VINEYARD Self Storage
E 18th Street & Vineyard Drive
Antioch, California 94509

DWG #

AR 5.3

ATTACHMENT “I”

Design Review – Peer Review Summary

Project: **Vineyard Self Storage**
E 18th Street & Vineyard Drive
Antioch, CA 94509

Project Description: Proposed Self Storage facility

Reviewed By: Lance Crannell AIA LEED AP
Principal, SDG Architects, Inc.

Date: Aug. 4, 2016

Materials:

We have reviewed the proposed materials and have found that they generally are appropriate for the proposed Self Storage Facility and generally conform to the City of Antioch Commercial Design Guidelines. Those materials include Metal Siding, Hardie Reveal Panel, Glazing, and Plaster.

Metal Siding:

We believe generally that the proposed Metal Siding is an appropriate product for the proposed design. The Metal siding fits well within the context of the neighboring industrial buildings.

Hardie Reveal Panels:

The applicant has proposed to include the Hardie panel reveal product on areas of the building. This material fits well within the overall vocabulary of the building elevation and provided a nice contrast with the metal siding and plaster finishes.

Stucco Material:

The applicant's use of stucco on the elevations is minimal. And as such, provides a subtle sense of articulation and variety within the overall elevation style. This understated use of stucco serves to compliment the building and provide another level of interest.

Elevation Comments

Overall the elevation style and level of articulation are compatible with the Commercial Design Guidelines and will serve to enhance that area of the City.

Building A – South Elevation

I recommend breaking up the long red horizontal element on the second floor to provide a sense of visual interest and reduce the long horizontality of that portion of the elevation. See Fig. 1-1



Fig. 1-1

Colors:

We have reviewed the proposed colors and have found that they are generally appropriate for the proposed project and generally conform to the City of Antioch Design Guidelines Section 3.2.13. Those colors (and associated material) include:

Ash Gray – Metal Siding

Iron Gray – Hardie Reveal Panels

Traditional Red – Hardie Panel Reveal Accent

Iceberg 9205 – Stucco

Patriot Red – Roll up Doors

I feel that the palette the applicant has selected works well to provide a muted composition while providing a strong accent in key locations. The articulation and massing of the building provide shadows and break lines that further enhance the building.

Site Layout:

The siting of the main and secondary buildings generally conform to section 3-2.13 of the Commercial Design Guidelines. The elevation along East 18th streets provides visual interest and uses articulation to break down the massing of an otherwise large building. I generally feel that the proposed locations of the buildings work well with the overall design.

ATTACHMENT “J”



REVIEWED FOR COMPLIANCE WITH TITLE 9
CHAPTER 4 OF THE ANTIOCH MUNICIPAL CODE
BY: *[Signature]* DATE: 1/24/07
CITY ENGINEER

NOTE:
PHASE 1 (PH1) SEWER RIMS INDICATE THE EXISTING
CONDITION. RAISE OR LOWER TO PHASE 2 (PH2) RIM
ELEVATIONS AS SHOWN.

BID SET
01/10/2007

PP-13
Drawing Number:

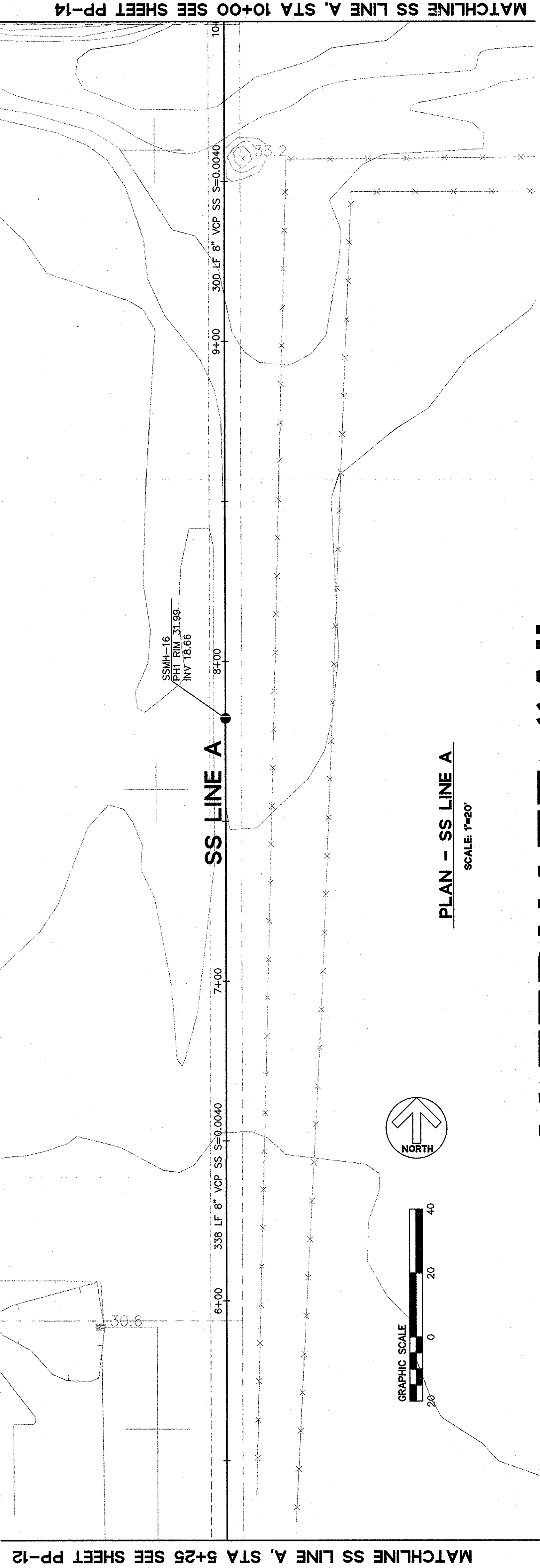
Date: 01/10/2007
Scale: AS SHOWN
Design: AH/KW
Drawn: KW/AM
Approved: JDL
Job No: 20035145

Revisions	No.

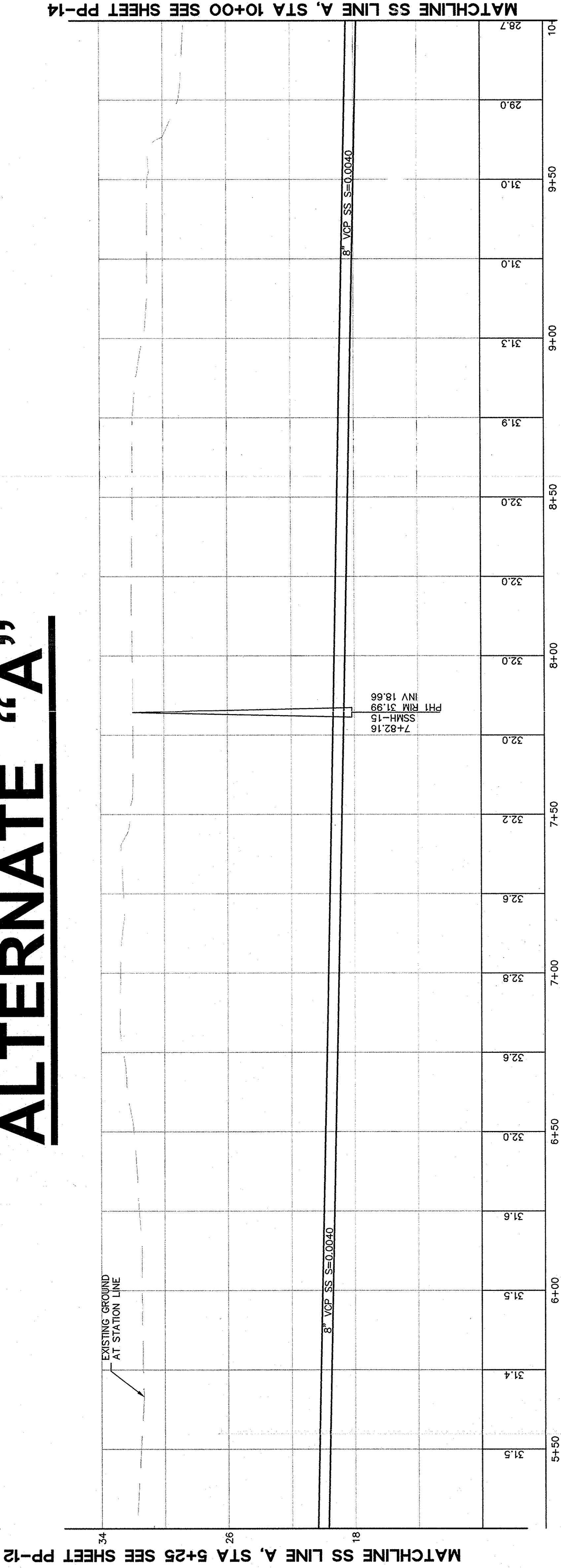
CITY OF ANTIOCH
CONTRA COSTA COUNTY
CALIFORNIA
**SANITARY SEWER INSTALLATION
SS LINE A PLAN AND PROFILE
WITHIN FUTURE SAKURAI STREET**


BKF
ENGINEERS / SURVEYORS / PLANNERS
2737 N. MAIN STREET, STE 200
WALNUT CREEK, CA 94597
PH: (925) 940-2200
FAX: (925) 940-2299

© BKF ENGINEERS



ALTERNATE "A"





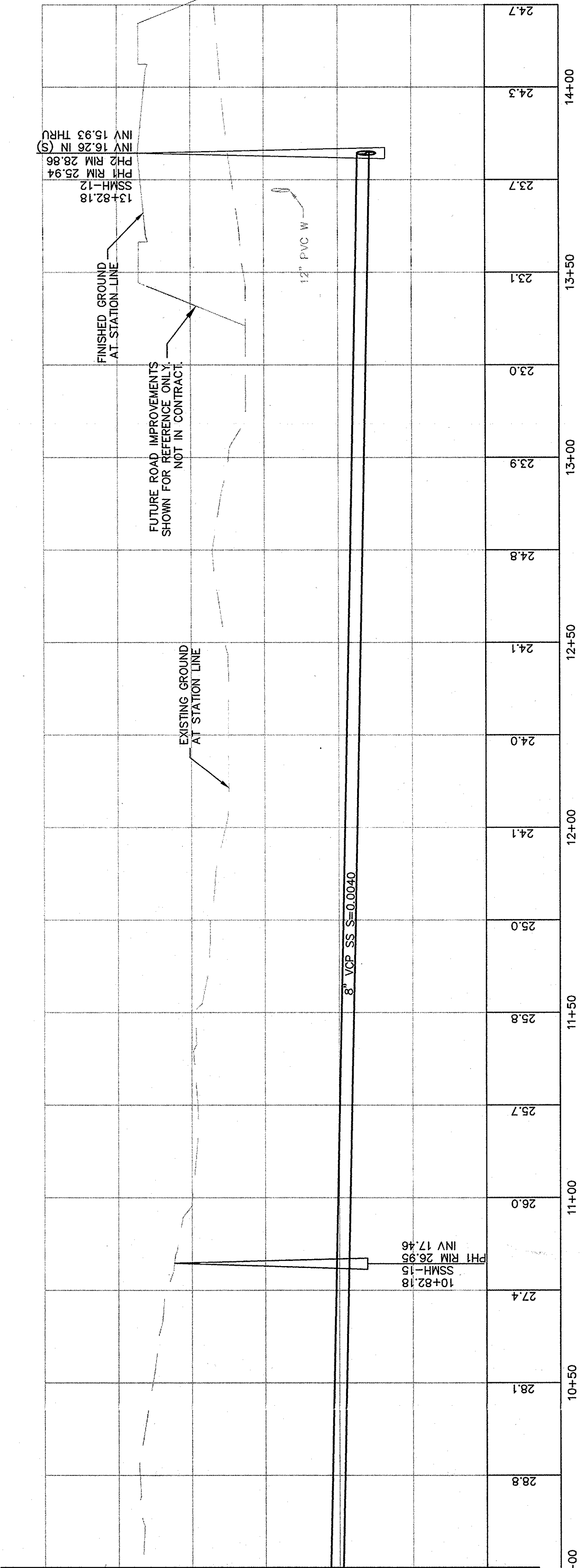
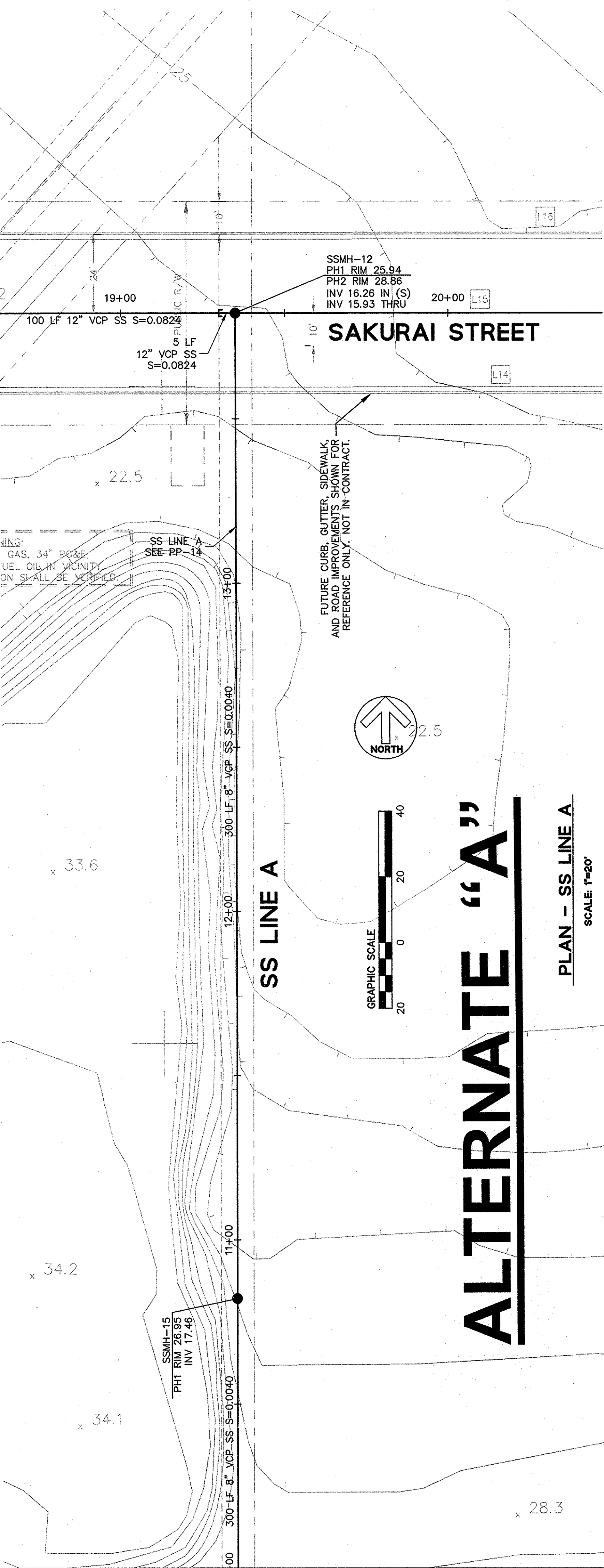
BKF
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2737 N. MAIN STREET, STE 200
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PH: (925) 940-2200
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SANITARY SEWER INSTALLATION
WITHIN FUTURE SAKURAI STREET
SS LINE A PLAN AND PROFILE

CITY OF ANTIOCH
CONTRA COSTA COUNTY
CALIFORNIA

Job No: 20035145	Date: 01/10/2007
Approved: JDL	Drawing Number: PP-14
Drawn: KM/AM	Scale: AS SHOWN
Design: AH/KW	Exp: 06/30/08
Revisions	



**STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF SEPTEMBER 21, 2016**

Prepared by: Forrest Ebbs, Community Development Director *FE*

Date: September 15, 2016

Subject: General Plan and Downtown Specific Plan Updates

RECOMMENDATION

It is recommended that the Planning Commission receive an update on the status of the General Plan Land Use Element Update and Downtown Specific Plan project, receive any remaining public comment, and provide direction to staff.

GENERAL PLAN UPDATE

On May 18, 2016, the Planning Commission continued its discussion of the Sand Creek Focus Area and provided staff with the following direction:

1. Use both a density standard and a minimum/average lot size standard.
2. Identify the Sand Creek Buffer area on the map as Open Space;
3. Identify ridgelines on the map with appropriate development restrictions;
4. Provide a development schedule with minimum lot sizes and an average required lot size;
5. Develop specific standards for senior housing.

Density and Minimum/Average Lot Size

Staff has provided a Table that describes the various land use districts and the proposed maximum densities for these areas.

Recall that the following criteria will be used in evaluating density:

1. The gross density of the area will be evaluated. The only exclusions will be protected biological features. The current map already designated Sand Creek and protected ridgelines/hillsides as open space, so no units will be derived from those areas.
2. The gross density calculations will yield a maximum unit count for the entire parcel or development site. The location of these units will be at the discretion of the developer, with review and approval by the Planning Commission.
3. Within the developed areas of the site, the individual home sites must meet the minimum lot size for the Land Use Designation. In addition, the neighborhoods must also meet the average lot size. The average lot size standard will ensure that the entire project is not built at or near the minimum lot size, while allowing for a diversity of lot sizes.

Sand Creek Focus Area Land Use Designations		Maximum Residential Density (dwelling units per acre)	Minimum Lot Size (square feet)	Average Lot Size (square feet)
VLD	Very Low Density Residential	2	8,000	12,000
VLD-H	Very Low Density Residential – Hillside	1	12,000	16,000
LDR	Low Density Residential	4	5,000	7,000
LDR-H	Low Density Residential – Hillside	2	7,000	9,000
MDR	Medium Density Residential	8	4,000	5,000
MDR-H	Medium Density Residential – Hillside	4	5,000	6,000
MU	Mixed Use	16 (max. 50% of site)	-	-
MED	Medical District	-	-	-
OS	Open Space	-	-	-
SNR	Senior Housing throughout SCFA	see above, plus Density Bonus	4,000	-

Senior Housing

The current General Plan Land Use Element allows for senior housing throughout the Sand Creek Focus Area. Staff recommends that the same policy be used with the new language. To further clarify this preference, staff has proposed a simple allowance for Senior Housing that will incentivize and accommodate future senior projects. In short, the minimum and average lot size standards of each Land Use Designation district will not apply to senior housing projects. Instead, there will be a simple minimum lot size of 4,000 square feet for senior projects. The project would be subject to the gross density standards and resulting maximum unit count of the underlying Land Use Designation district, but would be eligible for a Density Bonus under current City and State regulations. This bonus might increase densities by as much as 35%. This combination should facilitate senior housing throughout the area.

Kit Fox Habitat

The Kit Fox Habitat area in the western part of the Focus Area is identified as Open Space. This is consistent with the current Land Use plan and staff does not recommend modification of this important line as its origin is in the East Contra Costa County Habitat Conservation Plan.

Ridgeline/Hilltop Protection

The Planning Commission expressed a desire for preservation of hilltops and ridgelines to maintain the basic skyline of the southern range of hills. This direction was based, in part, on the Commission's concession to allow for land form grading of the lower hills as long as the resulting appearance was natural and complementary. Staff approached this direction by evaluating multiple sources for comparable ridgeline protection. In the end, staff used a percentage approach, whereby the upper 25% of the hills were preserved and designated as Open Space.

Using the base elevation of the hill form and the highest elevation, all areas located within the upper 25% of this area were identified as the ridgeline. For example, if a hill had a base elevation of 0' and a maximum height of 100', all areas above 75' elevation would be considered the hilltop/ridgeline. If the protected areas seem too large or small, the Planning Commission may ask for a different percentage, by which to evaluate these hills. Further, language can be used to allow for minor modification to these areas if the intent of the restriction is met.

Sand Creek Buffer

The revised map shows the alignment of Sand Creek and also reflects a 125' buffer from the centerline. This buffer area is identified as Open Space and would not be available for development. Project-specific studies might require additional protected areas, but the Open Space area on the map would not be available for development beyond trail systems, necessary road crossings, and similar features. Staff recommends that additional drainage basins be precluded from the Open Space designation, except when supporting the on-site park development.

Next Steps

Staff intends to continue to refine the maps and text, with the goal of returning to the Planning Commission in early November with a full text and final maps for the Sand Creek Focus Area and other impacted sections of the Land Use Element.

DOWNTOWN SPECIFIC PLAN UPDATE

On August 23, 2016, staff presented an Administrative Draft of the Downtown Specific Plan to the City Council. No additional direction was provided and staff is now moving into the Environmental Review phase of the project under CEQA. Staff has provided the Administrative Draft for the Planning Commission's reference. A link to the document and other information is also available at:

<http://www.ci.antioch.ca.us/Community/downtown-plan/downtown-specific-plan-page.pdf>

Staff also recommends that the Planning Commission open public comment and consider any last comments regarding affected parcels within the Downtown Specific Plan Area. Staff was recently made aware of a potential conflict with a major parcel within the CR-D (Commercial-Regional District), located at the intersection of 6th Street and Auto Center Drive. Whereas the Administrative Draft identifies the area for regional commercial uses that would produce employment and/or sales tax, the property owner, Tri Delta Transit, may intend to use the property for a park and ride lot and bus terminal. Under today's standards, a commercial parking lot could be considered and approved with a Use Permit. Under the proposed language, commercial parking lots would not be an allowed use. Representatives of Tri Delta Transit have been informed of this Planning Commission meeting and their opportunity to provide direct comment regarding this conflict. Absent compelling testimony, staff finds no reason to change course to accommodate a use that does not meet the broader objectives for this district.

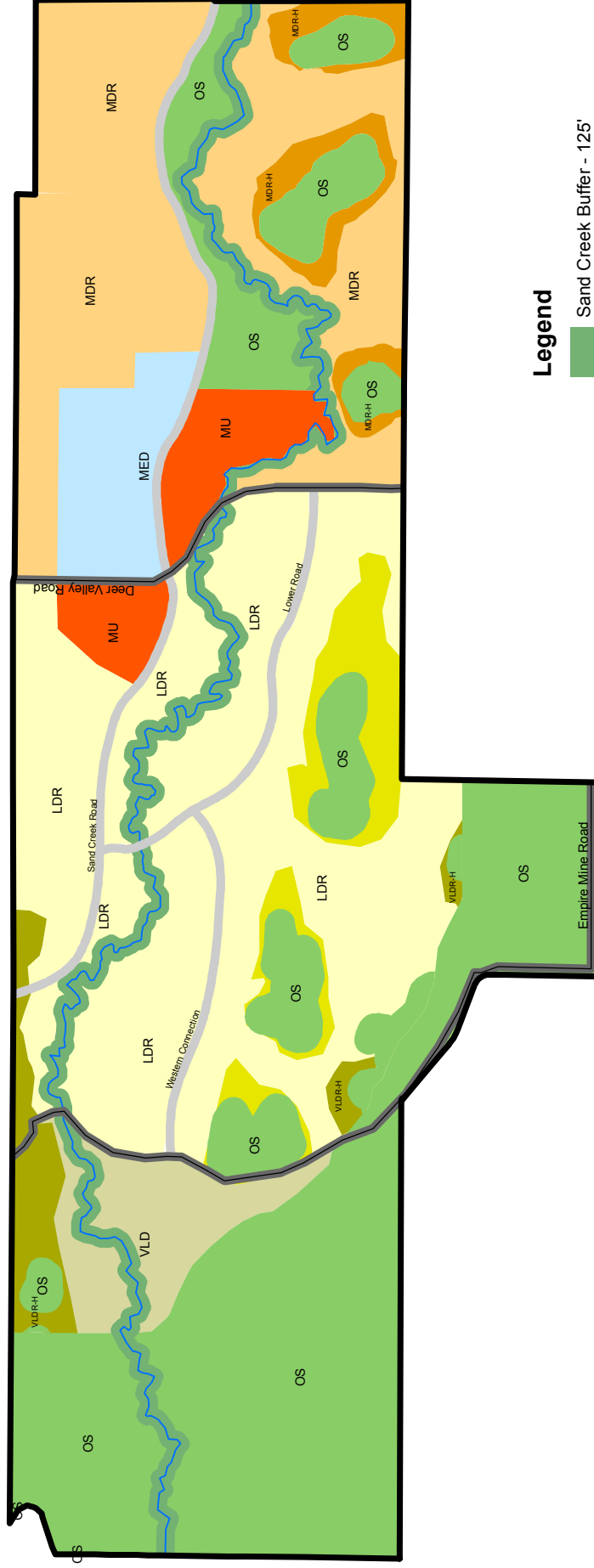
Finally, staff will be interviewing consultants for the Environmental Review of the Downtown Specific Plan shortly and would like to invite one or two Planning Commissioners to participate in the interview process. This selection can occur at the meeting.

ATTACHMENT

- A. Sand Creek Focus Area Land Use Map [DRAFT]
- B. Sand Creek Focus Area Land Use Map with parcels [DRAFT]
- C. Administrative Draft of Downtown Specific Plan (August 23, 2016 CC Version)

ATTACHMENT “A”

A1



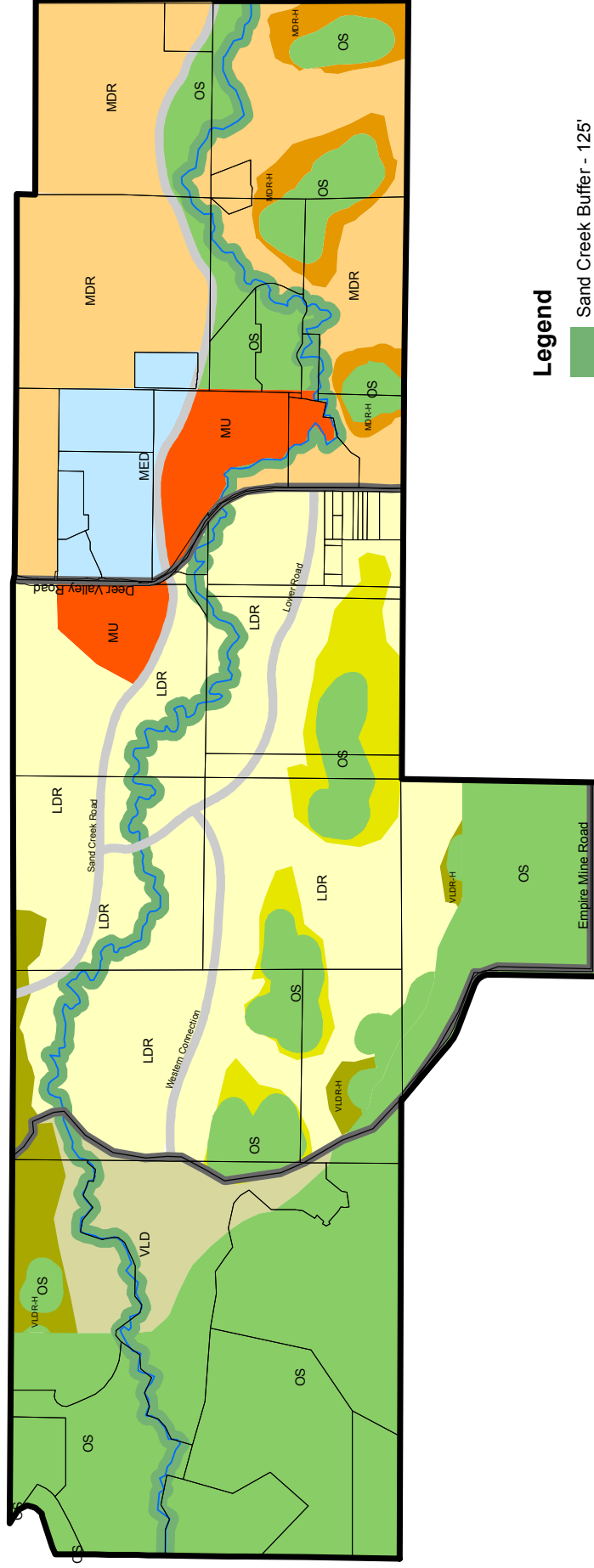
Legend

- Sand Creek Buffer - 125'
- OS
- VLDR-H
- LDR-H
- MDR-H
- MDR
- VLD
- LDR
- MU
- MED



ATTACHMENT “B”

B1



Legend

- Sand Creek Buffer - 125'
- OS
- VLDR-H
- LDR-H
- MDR-H
- MDR
- VLD
- LDR
- MU
- MED



ATTACHMENT “C”

Downtown Specific Plan

City of Antioch



Table of Contents

1.0 Vision, Guiding Policies, and Context

2.0 Land Use

3.0 Streetscape and Design Guidelines

4.0 Circulation and Access

5.0 Environmental Quality

6.0 Public Facilities, Services, and Infrastructure

7.0 Implementation

Appendix A – Design Guidelines

Appendix B – Opportunities and Constraints Report

1.0 Vision, Guiding Principles, and Context

Planning Area

City of Antioch

The City of Antioch is located in eastern Contra Costa County and occupies 29.1 square miles. The City of Antioch is adjacent to the City of Oakley to the east, the City of Brentwood to the south and east, unincorporated Contra Costa County to the south, the City of Pittsburg to the west, and the southern shore of the San Joaquin River to the north.

The City is bisected by State Route 4, which runs east and west parallel to the San Joaquin River. This freeway provides access to the East Bay and Oakland, San Francisco, State Route 680 and San Jose, and Interstate 80. In addition, State Route 160 forms the eastern boundary of the City and provides access to the California Delta and, ultimately, the City of Sacramento.

[INSERT REGIONAL MAP]

Downtown Antioch

The Planning Area boundaries of Downtown Antioch, for the purposes of this Specific Plan, are generally the San Joaquin River to the north, Fulton Shipyard Road to the east, Tenth Street to the south, and Auto Center Drive to the west. This area is approximately 1.5 miles wide and 0.5 mile deep, with a total area of 0.75 square miles. The Planning Area boundaries generally reflect the traditional grid that was developed during the 19th and early 20th centuries.

[INSERT DOWNTOWN ANTIOCH SPECIFIC PLAN MAP]

History

Originally settled in 1848, Antioch is one of the oldest cities in California. Then known as Marsh's Landing, the area was a notable shipping point for the regional cattle industry. In 1850, Smith's Landing was established to the west of Marsh's Landing, and the town's name was eventually changed to Antioch, after the biblical city.

Following the discovery of coal in 1859, the City of Antioch grew as an important mining and shipping community. This industrial identity continued into the twentieth century with the establishment of steel mills, canneries, and a power plant, all located along the important railroad and river connections. Following World War II, Downtown Antioch's traditional grid rapidly stretched southward to provide housing in support of the growing industrial sector. With the eventual loss of these industries and the construction of State Route 4 as a freeway, the City of Antioch ultimately transitioned into a bedroom community serving the larger cities of the East Bay. The City of Antioch is now committed to reclaiming its role as a complete full-service community with a lively downtown as its centerpiece.

1.2. Vision, Guiding Principles, Goals and Policies

Vision ~ *Downtown Antioch will be a wonderful place in which to live, work, shop, dine and play. The community will take pride in Downtown as the historic heart of Antioch. Downtown's unique waterfront setting, its historic and culturally rich character, buildings, streetscapes and open spaces will make it a successful, lively, fun and walkable special place that attracts residents and visitors of all ages.*

This chapter discusses elements that help make up a successful Downtown. It begins with the above Vision Statement that forms the basis for the Guiding Principles, Goals, Policies and implementation measures included in the Specific Plan and Design Guidelines. The Vision, Guiding Principles, Goals and Policies of the Downtown Specific Plan have evolved through the Plan process as a result of public input at study sessions and public hearings, stakeholder interviews, analysis and findings contained in the Existing Conditions: Opportunities and Constraints report, good ideas from other Cities, input from the Planning Commission and Economic Development Commission at study sessions, and direction from the City Council at public hearings. The sum of this input, establishes an overall direction for the Downtown that is reflected throughout this Specific Plan.

Guiding Principles for a Successful Downtown

While the downtown of every city is different, there are basic building blocks that can make it attractive, welcoming and successful. People are first and foremost. Without people willing to spend time there, a downtown lacks life and ambience. The presence of people enlivens a downtown, promote safety, and contribute to the activity level that can make it an inviting, clean place with a unique Community Character.

Unique Identity

The heart of a community is its downtown, which is a public place that has good accessibility. Its sense of place is defined by the special, memorable qualities there. A downtown's physical setting and characteristics generally define its identity. The buildings, streets, civic and open spaces reflect its history, the pride it creates, and the care it receives. Attractive streets and sidewalks, and the presence of well preserved historic buildings along with new development establish downtown character. Activities and events also contribute to downtown character. Downtown should be a pleasant, interesting, active place with a variety of fun destinations for visitors of all ages.

Variety of Uses

A healthy downtown has a diversity of uses that attract people to spend time there. Downtown success hinges on it being a place to live, work, shop and play. Housing is a vital factor in a downtown being safe and active 24/7. Residents and visitors can attract a variety of retail, dining and entertainment uses to a downtown.

Walkability, Accessibility and Parking

A walkable and accessible downtown allows people to take their time to window shop, go in and out of stores, socialize and exercise. Narrow tree lined streets with adequate sidewalk widths, good lighting and signage, and interesting building facades and shop windows, make for an enjoyable opportunity to stroll. A parking supply that is adequate to serve a downtown, but does not overwhelm it with lots of pavement, will support accessibility to a downtown. Mixed use development can help ensure adequate, but not excessive parking. This is important because most visitors will drive downtown and need to park there in the foreseeable future. An attractive walking environment will get people out of their cars, and keep them moving around downtown on foot for longer periods of time.

Attractive, Well Designed Environment

The pattern of an attractive, walkable streetscape with a mix of vibrant shops, restaurants, and housing in well maintained historic buildings and high quality new development and open spaces, has made for memorable, successful downtowns in a number of cities. People are drawn to unique, pleasant, attractive downtowns that promote safety and stability in a well maintained environment.

Goals and Policies

The Downtown Specific Plan is a twenty year plan, and a “living document.” It can change over time as needed to adapt to changes in the economy, market factors, technology, the needs and desires of the community. Over the next ten to twenty years, this Plan seeks to achieve the following Goals and Policies:

Goal 1.2.1. Downtown Antioch’s Unique Character

Preserve Downtown Antioch’s special character by insisting on high quality design, landscaping, and protection of health and the environment. New development will complement the eclectic architecture and historic richness of our Downtown, and provide a pleasing and safe experience.

Policy 1.2.1.1. To promote the long-term sustainability of Antioch, this plan recognizes the value of Downtown as a unique place with a rich character. Downtown’s riverfront, historic and architectural resources and streetscape contribute to an eclectic mix that attracts residents, business and visitors. By preserving and enhancing that character through a commitment to high quality design, this plan lays the groundwork for the long term vitality of Downtown as the historic heart of Antioch.

Policy 1.2.1.2. Fostering a unique sense of place will help establish the identity of Downtown Antioch in the region, by developing a mixed-use, pedestrian-oriented district, linked to the assets of the San Joaquin Riverfront and Waldie Plaza.

Policy 1.2.1.3. Noise and vibration from train traffic in Downtown can be significant, especially in areas abutting the tracks. This Plan provides that noise and vibration be evaluated as part of the environmental review of any new development abutting the

railroad tracks. Proper site planning, the location of buildings and/or sound barriers, and use of building techniques and elements that control noise and vibration intrusion will help lead to successful high quality development along the Downtown rail corridor.

Goal 1.2.2. Preserve and Enhance Public Spaces

Maintain and enhance Downtown public features such as parks, streetscapes and open spaces. Provide access to and re-connect Downtown to the San Joaquin River. Enhance Waldie Plaza as a venue for public events and enjoyment of the River. Encourage development and events that activate public spaces.

Policy 1.2.2.1. The City is responsible for improvements to public spaces that attract private investment. Public spaces in the Downtown includes streets, alleyways, sidewalks, lighting, landscaping and street furniture such as benches, bike racks, newsracks and fountains, as well as the River, promenade Waldie Plaza, City Hall, Community and Senior Centers. The Downtown streetscape provides an existing asset consisting of a well designed and coordinated grid pattern including decorative sidewalks, crosswalks, street lights, landscape planters, street trees, street furniture and street name signs. By preserving and enhancing the streetscape and public places, and providing greater opportunities for community gathering and outdoor dining, the City can help foster the unique quality of Downtown.

Policy 1.2.2.2. The improvement of Waldie Plaza as a public gathering and event space, with attractive shops and seating in which people can view the River, shop, dine, and attend events, will add ambiance and enliven Downtown to attract visitors, and build on the beauty of our Riverfront.

Policy 1.2.2.3. Maintaining and expanding the number and variety of events at the Downtown Nick Rodriguez Community Center, Senior Citizens Center, and Waldie Plaza can help attract greater numbers of visitors and residents to Downtown.

Goal 1.2.3. Economic Vitality

Establish Downtown as a preferred place to live, work and visit. Ensure the future economic stability of Downtown by providing an active daytime workforce in shops, restaurants, offices and studios, and by promoting tourism and the provision of high quality businesses and jobs.

Policy 1.2.3.1. According to downtown revitalization expert Christopher Leinberger: "Critical mass is created when there is enough activity to occupy a visitor for four to six hours" (The Shape of Downtown, Urban Land magazine (ULI), December, 2004). To attract, retain and enhance the restaurants, shops and entertainment assets of Downtown in the face of existing challenges, successful dining and retail must be attracted to rebuild Antioch's historic Downtown core as a preferred destination.

Policy 1.2.3.2. A sense of place has emerged as an important factor in shopping environments across the nation. Downtown Antioch must capitalize on this desire for

attractive environments in which people will spend their time and money while enjoying themselves.

Policy 1.2.3.3. Position Downtown to succeed by utilizing assets such as City land holdings to help leverage and facilitate new residential, commercial and mixed use development.

Policy 1.2.3.4. Foster building designs that meet current retail operational design requirements, and focus on high wage, high quality jobs as an important factor in economic viability for Downtown. Bringing back first class dining, shopping and housing uses that appeal to entrepreneurial endeavors is crucial to helping Downtown's economic base become sustainable in the long term. By identifying priority retail markets and attracting establishments that meet special Downtown niches, as well as everyday community shopping needs, the City can promote and strengthen retail diversification.

Policy 1.2.3.5. The Land Uses allowed by this Plan can help bolster the balance of housing, retail, office, and institutional uses in the Downtown. Such a balance can increase the daytime population so that it supports Downtown businesses by expanding opportunities for visitor serving and office uses to locate Downtown.

Policy 1.2.3.6. Providing development clarity to encourage investment, incorporating flexible development standards that respond to changing market conditions, Downtown land use and parcel patterns, and streamlining permitting in the Downtown, including more administrative permits, can promote a "business friendly" environment, and reduce the burden on business owners, developers and City staff.

Policy 1.2.3.7. Tourism-related establishments can help support Downtown's continued development by distinguishing Antioch as an active and friendly to all ages destination in the heart of the Delta. Highlighting Downtown as the historic center of activity in Antioch, and establishing new businesses and activities can create a regional draw in Downtown. The enhancement of linkages to regional assets such as the San Joaquin River, Prewitt Water Park, Lone Tree Golf Course, County Fairgrounds, Hillcrest eBart Station and future ferry terminal, can bring Downtown into greater focus as a unique shopping, dining and entertainment center.

Policy 1.2.3.8. Continue to promote more activities and attractions in Downtown, including more restaurants, entertainment venues, art, cultural, and special events.

Policy 1.2.3.9. This Plan facilitates opportunities to support entrepreneurial efforts for artisans and crafts persons to produce and/or sell their products in ground floor or above spaces in the Downtown. Their wares could be showcased in conjunction with events in Waldie Plaza, at the El Campanile Theater, and/or other Downtown festivals.

Policy 1.2.3.10. Although ground floor retail uses make the most sense for long term economic development and pedestrian ambiance in the Downtown core, in the near-term, this Plan allows office uses that can increase occupancies, pedestrian traffic, and patrons for Downtown businesses.

Goal 1.2.4. Housing Renaissance
Facilitate the provision of high quality, market rate and affordable housing to support the creation of a Downtown Core that is active throughout the day and evening, and to support Downtown businesses. Encourage efficient use of Downtown's land resources by promoting infill development.

Policy 1.2.4.1. The City has an important role in promoting Downtown housing by establishing policy, helping facilitate projects and, in some cases, by leveraging development.

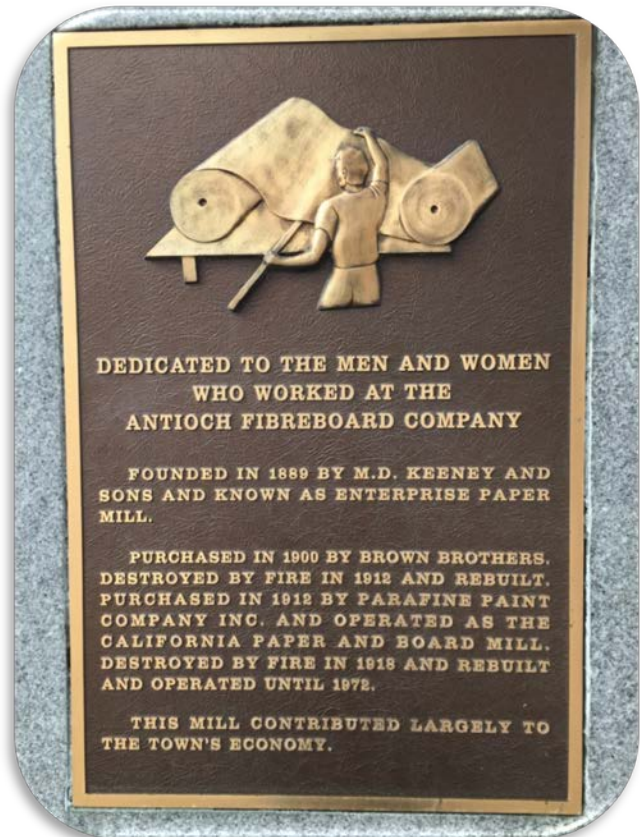
Policy 1.2.4.2. Providing high quality market rate and affordable housing in Downtown is a crucial step toward revitalization that can result in a lively Downtown that can sustain around-the-clock activity. The policies and actions in this Plan are intended to stimulate the production of mixed use and residential development to create housing opportunities for new and existing Antioch residents and workers, while being harmonious and compatible with good examples of the existing urban fabric, building strong neighborhoods and strengthening the local economy.

Policy 1.2.4.3. Achieving residential development in Downtown can be complex and expensive due to multiple factors, including small parcel sizes, multiple ownerships, the difficulty of land assembly, high land costs, physical and environmental constraints and infrastructure costs. The administrative permitting process, development and design standards provided within this Plan are intended to reduce or eliminate regulatory obstacles to development.

Policy 1.2.4.4. The Plan provides flexibility in design to encourage the construction of housing, while raising the bar on quality and creativity for materials and architecture that are harmonious and compatible with good examples of the existing Downtown built environment.

Goal 1.2.5. Mobility

Create an integrated multi-modal transportation system that effectively serves the Downtown area. Improve all modes of access to and within Downtown, and provide opportunities for residents, workers, and visitors to walk, bike, drive or access transit (including Amtrak, buses, future ferry service, and links to the Hillcrest eBart station), Downtown.



Policy 1.2.5.1. A wide range of circulation modes serve Downtown, including cars and trucks, several bus routes, Amtrak, the nearby Hillcrest EBart Station, bike and multi-use trails, and pedestrian sidewalks. Downtown ferry service is planned for the future. While most people will continue to arrive Downtown by car, this Plan encourages people to use alternative modes of transportation, rather than cars, to get to and around Downtown.

Policy 1.2.5.2. Downtown sidewalks and plazas will continue to be accessible to disabled persons, and accessibility will be improved where appropriate.

Policy 1.2.5.3. This Plan calls for the City to explore and implement feasible vehicular access and aesthetic improvements to the three main roadways into Downtown (A Street, L Street, and Auto Center Drive), and to work with schools, parents and bicycle clubs on the best ways to improve bike access into and around Downtown and schools between Highway 4 and Downtown.

Policy 1.2.5.4. With the expected opening of the Hillcrest eBart Station in 2018, commuters and visitors may begin to travel between the Station and Downtown. If that travel pattern materializes, there is the opportunity for the City to study it, and provide feasible means to improve it, if appropriate.

Policy 1.2.5.5. Downtown traffic is one indicator of economic health. As traffic increases due to the revitalization of Downtown, congestion issues may arise. Increasing roadway capacity to Downtown would be expensive, disruptive, and could harm existing good examples of community character, landscaping and architecture. Rather than widen streets, this Plan encourages the City to consider relaxing traffic level of service (LOS) thresholds into and in Downtown, if needed, to preserve the street environment, and prioritize pedestrian, bike and transit access.

Policy 1.2.5.6. The existing network of bicycle lanes and multi-use trails in and around Downtown is fragmented. This Plan encourages the City to explore the means to improve such access.

Goal 1.2.6. “Park Once” Management Strategy

Manage the existing ample supply of Downtown parking available in public and private lots, and on streets, in balance with parking demand to accommodate visitor, resident and employee parking needs.

Policy 1.2.6.1. Providing access to and around Downtown through various transportation options can help avoid traffic congestion, and enhance pedestrian ambience Downtown. However, most people visiting Downtown now and in the foreseeable future, will continue to arrive by car to visit, work, shop, dine or enjoy the Riverfront and Waldie Plaza. While this Plan encourages alternatives to the car, planning for, and provision of adequate parking is important for the success of Downtown.

Policy 1.2.6.2. While the “Existing Conditions: Opportunities and Constraints” report (February 2015) found that in Downtown, parking may not be a problem currently, that

could change depending on future circumstances. Overall, there is currently more than sufficient parking capacity between public and private parking lots and on-street parking to accommodate typical demand, with numerous available spaces during weekday and weekend peak times. Parking is an important component that the City will need to monitor in the future to ensure an adequate, safe supply, as Downtown attracts more visitors, residents and businesses.

Policy 1.2.6.3. Where possible, reducing parking requirements in areas that have no opportunity to provide parking can encourage new business, transit use and reduce reliance on the private automobile

Goal 1.2.7. Sustainable Infrastructure

Safeguard public health, safety and prosperity by providing and maintaining standards and facilities that enable the community to live and work in balance with the natural environment. Continue to ensure that public services facilitate new development in Downtown.

Policy 1.2.7.1. The California Government Code requires a specific plan to include text and diagrams that specify: “The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.”

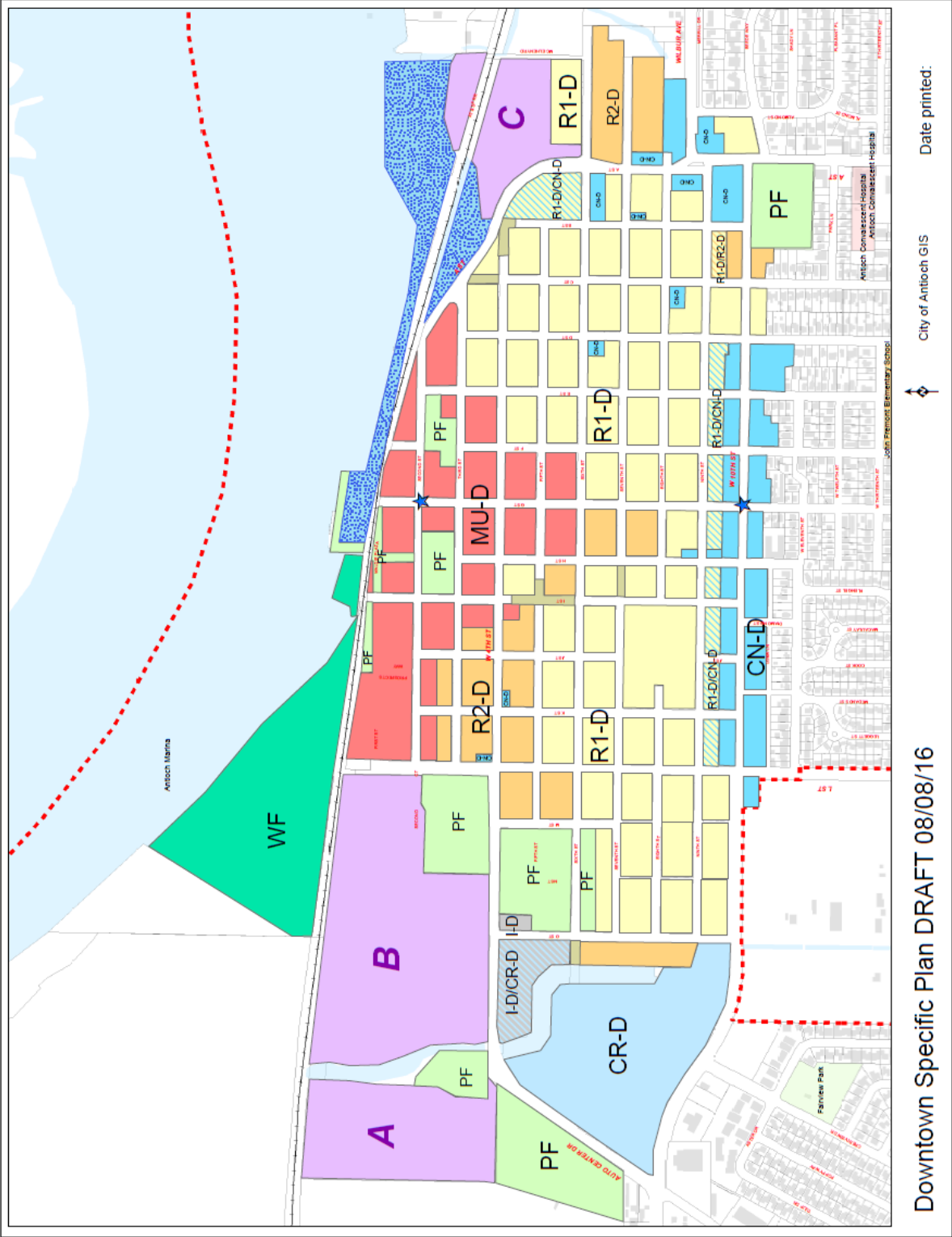
Policy 1.2.7.2. The availability of adequate sanitary sewer, electrical, water, natural gas and cellular services within the Downtown are a critical factor in the accommodation of new residential and non-residential development, and in attracting new uses within existing buildings. The “Existing Conditions: Opportunities and Constraints” report (February 2015) reviewed the major utility systems in the Downtown. Those findings for existing infrastructure and any future needs are reported in this Plan.

Policy 1.2.7.3. Promote green leadership in Antioch by expanding Downtown as a green and healthy community with sustainable building and landscape design, sustainable water use and irrigation practices, and reduced energy use. Encourage outdoor and active living with more opportunities for healthy choices including walking and biking, readily available access to transit, housing in close proximity to shopping, dining and workplaces, and access to parks, play spaces and open space for children and families to enjoy.

- 1.2. Planning Context
- 1.3. Relationship to Existing Plans
- 1.4. Planning Process and Public Participation
- 1.5. Related Documents
- 1.6. Plan Organization

2.0 Land Use

2.1 Land Use Diagram



2.2 Districts, Land Use, and Development Standards

The Downtown Area contains a variety of districts with unique histories, building form, land use compositions and influences. These districts are identified so that specific approaches to their use/re-use and revitalization can be employed.

Rivertown Mixed Use Historic District (MU-D)

Introduction

This district contains the early twentieth century buildings that constitute the oldest surviving development in the City of Antioch and its most significant historic resources. The basic form of the Rivertown Historic District is a traditional grid-form commercial downtown with a mix of historic one and two-story buildings, contemporary infill buildings, linear parks, and surface parking lots. The functional center of the district is 2nd Street, between A Street and L Street, which serves as a linear commercial spine running from east to west. Prominent land uses on 2nd Street include Antioch City Hall, El Campanil Theatre, the Nick Rodriguez Community Center, and a number of small restaurants and businesses. The intersection of 2nd Street and G Street is the traditional center of the Rivertown Historic District and greater Downtown Antioch. Residential uses are currently infrequent over commercial uses, but are closely present in nearby neighborhoods. The commercial prominence continues on G Street to 5th Street, where it transitions into a mixed residential neighborhood.

Major Issues

- Historic Buildings
- Parking Facilities
- Commercial Mix
- Vacant Lots

The purpose of the Rivertown Mixed Use Historic District is to encourage an ultimate mix of retail, restaurant, public and entertainment uses that serves as a local and regional attraction. The physical form of the Rivertown Mixed Use Historic District lends itself to a comfortable and enjoyable pedestrian experience.



Goals, Objectives, Policies, and Programs

GOAL: An attractive, walkable environment that preserves and celebrates the history and architecture of the community and the district, serves as a cultural and celebratory centerpiece for the City, encourages new investment in both existing buildings and new construction, and offers a high-quality unique experience to residence and visitors alike.

Objective: A reduction in storefront vacancies and an increase in visitor-serving uses.

Policy: Though the City ultimately envisions predominantly retail, restaurant, and unique visitor-serving land uses, the interim use of ground-floor space for office or other similar uses should be accommodated to reduce the vacancy rate and improve the overall appearance of the District.

Policy: The City does not support the ongoing holding of chronically-vacant and under-maintained buildings.

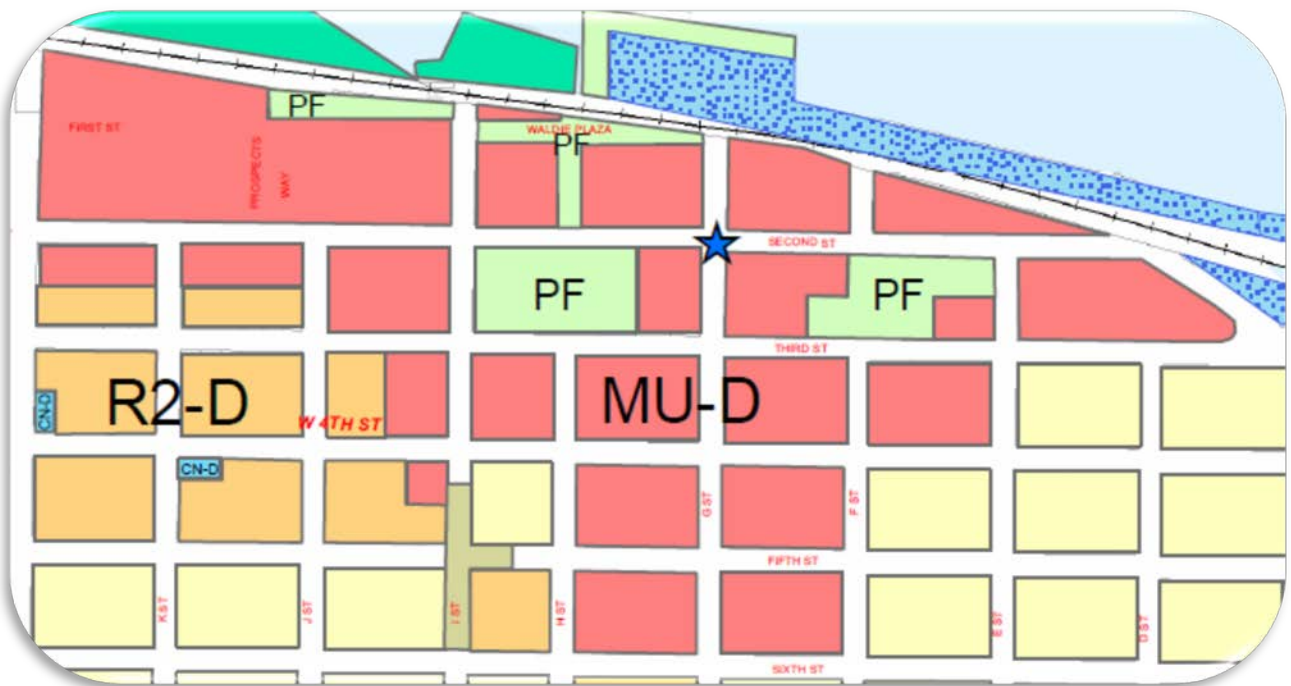
Policy: The City encourages programs to allow the use of vacant storefronts for temporary displays by business, community, or historical organizations.

Program: The City will continue to monitor and update the land use and development standards table to ensure that positive contributing land uses are not excluded.

Program: The City will explore a program to offer short-term incentives for new business to locate in the Rivertown Mixed Use Historic District. These programs may include a business license fee deferral program where new businesses in the District are allowed to defer City business license fees for the first six months of operation with repayment over the following year.

Program: The City will strictly enforce building and public nuisance codes for chronically-vacant and under-maintained buildings.

Program: The City will pursue modification of the development impact fee program to eliminate credit for existing floor area for chronically-vacant or abandoned buildings as a means to encourage the reuse or sale of such properties.



Objective: Improved visual and physical access to the San Joaquin River from public and private locations.

Policy: The City supports the continued use and conversion of riverfront property, including City-owned parking lots, to public-accessible walkways and observation areas.

Policy: The City encourages the expansion and clarification of public access at the Riverview Lodge Restaurant property at the terminus of I Street.

Policy: The City supports new private development projects that provide strong physical or visual connection to the San Joaquin River through balconies, roof-decks, walkways, etc.

Policy: The City discourages the expansion of heavy rail service except for commuter or passenger lines.

Program: The City will pursue the completion and improvement of a continuous walkway along historic 1st Street from E Street to L Street.

Objective: An increase in annual festivals and large community events occurring in the Rivertown Mixed Use Historic District.

Policy: The City supports the use of public streets, parking lots, and parks for annual festivals and large community events and will provide logistical support, as feasible.

Policy: The City recognizes that its financial contribution to these events occurs entirely through its support of the Antioch Community Foundation. As such, event applicants are expected to pay ordinary application and processing fees.

Program: The City will create a streamlined application process administered by a single City Department, advertised on the City website, and supported by City staff.

Objective: A continuous high-quality pedestrian experience connecting parking facilities, the inner commercial blocks, and the riverfront.

Policy: The City supports the use of pedestrian-oriented signage, including A-frame signs and displays, when located on private property. As an alternative, the City may support a comprehensive program to allow limited use of public property or right-of-way for signs or displays if such a program did not detract from the overall aesthetic of the District.

Policy: The City supports the use of public property, where feasible, for outdoor dining areas.

Policy: New development and remodels should maximize pedestrian access through visible storefronts and other features that engage pedestrians. Solid, unadorned walls are prohibited.

Program: The City will work with local business, community, or historical organizations to develop a cohesive directional signage program.

Program: The City will prioritize street tree plantings and replacements, sidewalk improvements, and pedestrian infrastructure maintenance on the areas of highest pedestrian use.

Program: In the absence of flowing water in the Waldie Plaza water feature, the City will explore alternative decorative uses or treatment of the feature.

Program: The City will study current trash service methods to identify and deter unsightly and messy trash collection on public sidewalks. Specifically, the City will explore construction of centralized consolidated trash enclosures to simplify collection and eliminate sidewalk impacts.

Objective: The preservation and restoration of historic resources throughout the Rivertown Historic District and Downtown Antioch

Policy: The City encourages the preservation and restoration of all qualifying historic resources.

Policy: Alterations to qualifying historic resources must comply with the United States Secretary of the Interior's Standards for the Treatment of Historic Properties.

Policy: New buildings shall reflect the historic character and traditional architecture of the Rivertown Historic District.

Program: The City shall prepare and adopt an ordinance specifically addressing the Citywide treatment of historic properties.

Neighborhood Commercial District (CN-D)

Introduction

This district includes the commercial areas along 10th Street, 6th Street, A Street, and other isolated commercial sites. These commercial sites are closely tied to the adjacent residential neighborhoods and have the potential to provide neighborhood-serving uses. Currently, the land use composition of these commercial areas includes automotive sales and repair uses, a former movie theater currently used as a church, and few retail and restaurant uses. In addition, there are several remnant single-family residences interspersed within these commercial corridors.

Major Issues

- Land Use Compatibility
- Physical Appearance of Buildings
- Lack of Neighborhood Serving Uses
- Vacant Lots

The purpose of the Neighborhood Commercial District is to reclaim these commercial districts as neighborhood-serving uses that directly complement and add value to the adjacent residential neighborhoods.



Goals, Objectives, Policies, and Programs

GOAL: An attractive, walkable, neighborhood-serving commercial district that complements and adds value to the adjacent residential neighborhoods.

Objective: An attractive commercial district that evokes community pride, creates a sense of place, and is enjoyable to its tenants and patrons.

Policy: The City supports streetscape improvements, including private or non-profit sponsorship of banner programs, seasonal decorations, and similar enhancements.

Policy: The City supports the permanent improvement of sidewalks, medians, crosswalks and roadway surfaces to improve circulation and pedestrian safety along 10th Street and other neighborhood commercial corridors.

Policy: The City supports the use of pedestrian-oriented signage, including A-frame signs and displays, when located on private property. As an alternative, the City may support a comprehensive program to allow limited use of public property or right-of-way for signs or displays if such a program did not detract from the overall aesthetic of the District.

Policy: The City supports the use of public property, where feasible, for outdoor dining areas..



Policy: New development and remodels should maximize pedestrian access through visible storefronts and other features that engage pedestrians. Solid, unadorned walls are prohibited.

Policy: The City discourages the installation of parking lots at the front of lots, especially on 10th Street. As an alternative, parking lots should be installed behind buildings and adjacent to

alleys.

Policy: The City supports the interconnection, where feasible, of adjoining commercial parking lots to improve vehicle movement, limit driveway cuts, and reduce road traffic.

Objective: A mix of commercial uses that provide convenience and add value to adjacent residential neighborhoods.

Policy: The City encourages neighborhood-serving uses including restaurants, certain retail uses, entertainment venues, personal services, coffee shops, and local small businesses.

Policy: The City discourages any use or operational conditional that detracts from the quality of life of adjacent residential neighborhoods.

Policy: The City supports the imposition of Conditions of Approval for approved land uses that limit or eliminate their operational impacts on adjacent residential neighborhoods. The City recognizes that some land uses may not necessarily be accommodated at every site, even if the land use is conditionally permitted in the district.

Policy: The City supports the conversion or redevelopment of single-family residences into commercial uses only when an aggregate land area of 10,000 square feet can be created. The conversion of existing single-family residences on 5,000 square-foot lots into stand-alone commercial uses is generally discouraged.

Objective: A dynamic and engaged business district that cooperatively works with business owners to promote and improve the business climate throughout Downtown Antioch.

Policy: The City supports the creation of a Downtown Business Association, or similar organization, which is solely dedicated to the promotion and improvement of Downtown Antioch.

Program: The City will participate in a supportive role with any such association upon its formation.

Objective: A gradual phase-out of automotive service and sales uses that are visually incompatible, noisy, potentially hazardous, and do not necessarily provide a neighborhood-serving use.

Policy: The City supports the continuance of automotive uses as legal non-conforming uses, but does not support their expansion.

Program: The City will strictly enforce Use Permits and similar related ordinances governing current automotive uses.

Policy: The City supports the relocation of automotive uses to more appropriate areas.

Program: The City will examine opportunities in industrial or heavy commercial areas to provide adequate lands for automotive uses.

Objective: A reduction in storefront vacancies and increase use of chronically-vacant or abandoned buildings.

Policy: The City does not support the ongoing holding of chronically-vacant and under-maintained buildings.

Policy: The City encourages programs to allow the use of vacant storefronts for temporary displays by business, community, or historical organizations.

Program: The City will pursue modification of the development impact fee program to eliminate credit for existing floor area for chronically-vacant or abandoned buildings as a means to encourage the reuse or sale of such properties.

Program: The City will prioritize enforcement using the 'broken window' concept to address minor vandalism, graffiti, and similar quality of life and perception issues.



Downtown Residential District (R1/R2-D)

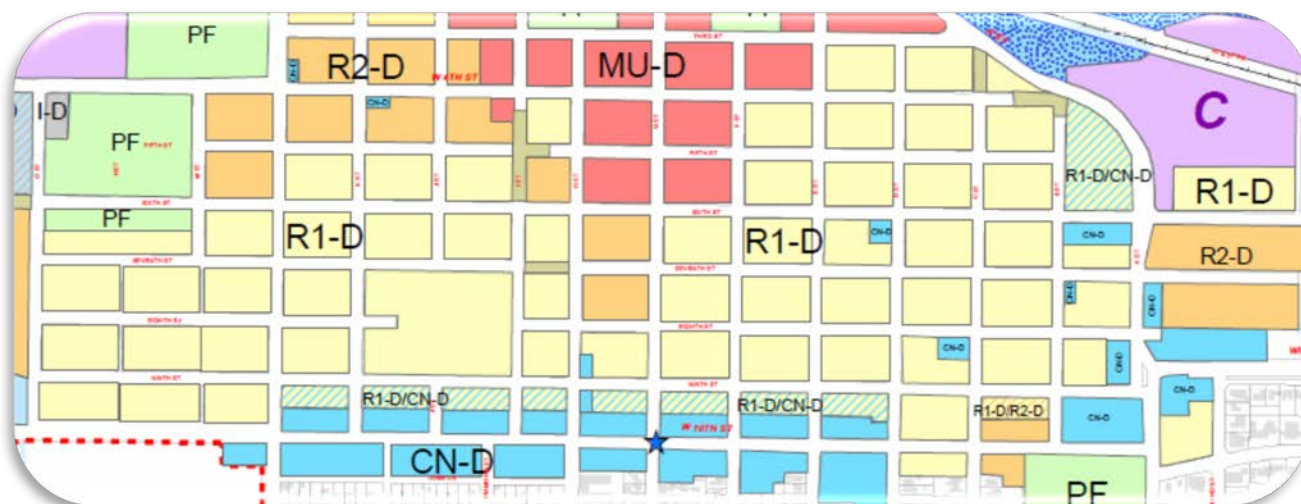
Introduction

This district includes the traditional residential neighborhoods that surround Downtown Antioch and once served as the City's primary residential area. The residential neighborhood is very eclectic and demonstrates complex and modest architectural styles from the late 19th and early 20th century, as well as more contemporary residential buildings. The neighborhood is very walkable and offers direct access to the commercial areas of Downtown Antioch and Tenth Street, as well as the Marina and waterfront. The neighborhood is laid out in a traditional grid arrangement and contains interspersed institutional and cultural buildings, churches, lodges, and Proserville Park. Though most of the neighborhood consists of single-family dwellings, there are also several areas where apartment buildings and higher density housing is available.

Major Issues

- Preservation of Historic Residential Buildings/Neighborhood Character
- Physical Appearance of Buildings/Property Maintenance
- Areas of Limited Street Lighting
- Cut-Through Traffic
- Lack of Neighborhood Serving Uses
- Compatibility with single-family neighborhoods
- Parking availability
- Bulk and mass of buildings
- Vacant Lots

The purpose of the Downtown Residential District is to promote policies that will enable further investment into these neighborhoods, strengthen property maintenance, enhance market competitiveness of these neighborhoods, create a viable residential adjunct to Downtown Antioch, and to improve the quality of life for its residents. The Downtown Residential District contains both Low Density (R1) and a Medium Density (R2) designations, which are applied based on existing development, adjacency to commercial areas, and potential for



redevelopment. Specific land uses and development standards are applied to each of these designations in Table 2-1 and Table 2-2.

Goals, Objectives, Policies, and Programs

GOAL: A traditional, walkable, neighborhood that offers a residential product that is unique to the City and attractive to reinvestment.

Objective: Maintenance of the traditional single-family visual character of the neighborhood, while encouraging reinvestment.

Policy: New residential buildings, regardless of density, should reflect a traditional single-family architectural style, including scale, minimized visibility of parking (including garages), traditional porches, etc.

Program: The City will develop Design Guidelines specifically for the Downtown Residential District to address the existing traditional neighborhood and housing styles.

Program: The City will pursue a formal inventory of street lighting and develop strategies to improve under-lit public areas.

Policy: All modifications to existing buildings within the Downtown Specific Plan boundaries are subject to Design Review. Administrative design review may be used for minor projects, at the discretion of the Community Development Director.

Objective: An improvement in the value of residential properties to encourage owner-occupancy rates more similar to those elsewhere in the City of Antioch.

Policy: The City supports residential development standards that are unique to the Downtown Residential District and complement its traditional development patterns.

Policy: The City encourages re-investment in existing residential buildings through remodels and additions and recognizes that older homes may lack certain modern conveniences expected by many potential owners and that flexible standards to accommodate these elements may be necessary to allow for improvement of these buildings.

Policy: The City is committed to the preservation of qualifying historic structures and acknowledges that much of the value in Downtown Residential District is largely derived from the continued presence of these buildings. The City will not permit the demolition or inappropriate modification of eligible historic structures.

Program: The City will develop a contemporary historic preservation ordinance that reflects best practices, encourages preservation and restoration, and is consistent with applicable State and federal law. Until such ordinance is adopted, the City will apply the Secretary of the Interior's Standards for the Treatment of Historic Properties for all modifications to any structures constructed prior to 1950.



Objective: A reduction in the number of under-maintained or substandard residential properties in this district that may serve as a deterrent to investment in the residential neighborhood or patronage of the commercial districts.

Policy: The City supports the re-establishment of the residential rental inspection program for this neighborhood, on a priority basis, even if infeasible for the remainder of the City.

Policy: Community Development Block Grant (CDBG) funding sources should be prioritized for high-visibility, high-impact purposes in this neighborhood, as available.

Policy: The City supports the formation of an independent residential neighborhood association for the purposes of neighborhood watch, crime reduction, promotion, and coordination of activities to benefit the City.

Policy: The City promotes the abandonment, transfer, or sale of existing City-owned vacant right-of-way parcels, wherever feasible. Similarly, the City encourages other entities owning similar undeveloped parcels to make them available for development to further eliminate blight.

Program: The City shall make an inventory of existing vacant parcels and develop a strategy for their development, which must include the potential for abandonment, transfer, or sale.

Policy: The City allows the construction of residential units within the NP Zoning District on individual lots as small as 33' wide and 100' deep (3,300 square feet), subject to a Use Permit from the Planning Commission.

Policy: The City supports the enforcement of all housing and building codes to the fullest extent permitted by law.

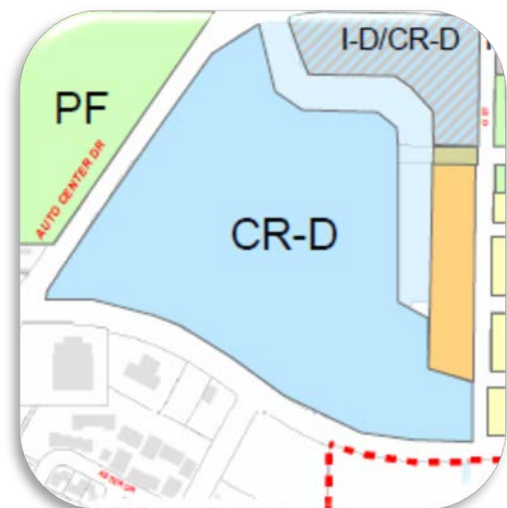
Commercial - Regional District (CR-D)

Introduction

The Commercial-Regional District is limited to the existing commercial properties adjacent to Auto Center Drive, between 10th Street and 4th Street. This area currently contains a large commercial recreation (miniature golf, etc.) facility, automotive service uses, a large hotel, boating service/sales uses, a veterinary hospital, and other retail uses. The area once served as a gateway to Antioch as 10th Street served as a primary thoroughway. Today, the area largely remains undeveloped, especially, the parcels along 6th Street. Since Auto Center Drive and 10th Street are both very prominent entries to Downtown Antioch, it is important that these areas contain complementary land uses that make a positive impression.

Major Issues

- Vacant Lots
- Underutilized properties
- Transitional automotive uses
- Antioch Creek corridor



- Mix of land uses

The purpose of the Commercial-Regional District is to create a district that will enable development and/or redevelopment or re-occupancy of this area to capture the traffic and visibility from Auto Center Drive and 10th Street and to generate sales or occupancy taxes or high employment.



Goals, Objectives, Policies, and Programs

GOAL: A thriving regional commercial district that complements the adjacent neighborhoods and presents a positive entry feature to Downtown Antioch.

Objective: Strong commercial businesses that will contribute to the local economy directly through sales tax, user taxes, or employment

Policy: New development must demonstrate direct financial benefit to the City and community through sales tax, user taxes, or employment.

Policy: Uses that do not provide direct financial benefit to the City or Community are strongly discouraged and should not be approved. Examples of unacceptable, under-

performing uses include personal storage facilities, warehousing, parking lots, and vehicle storage.

Policy: New uses should include automotive sales, retail commercial uses, large office users, light industrial parks, commercial recreation, or similar uses.

Policy: Land uses that are not specifically described in the land use table may be considered if they otherwise achieve the policies of the Downtown Specific Plan.

Objective: New development that is visually attractive and presents a positive image as a gateway to Downtown Antioch.

Policy: New development should provide enhanced landscaping along Auto Center Drive, 10th Street, and W. 6th Street.

Program: For development of any site over 10,000 square feet along W. 6th Street, a comprehensive street and site design must be submitted to demonstrate a comprehensive design of landscape, building setbacks for all sites along W. 6th Street.

Policy: Parcels should not be subdivided to below 20,000 square feet to avoid awkward sites, flag lots, and similar undesirable elements.

Policy: Direct vehicle access from Auto Center Drive is discouraged and should be minimized. A maximum of one vehicle access may be permitted for each parcel along Auto Center Drive. Should further subdivision occur, the new lots must take access from W. 6th Street or 10th Street.

Policy: New buildings should demonstrate a high-quality, campus-like appearance.

Policy: If parking lots are located along Auto Center Drive, they must be separated from the public right-of-way by a landscaping border of at least 15’.

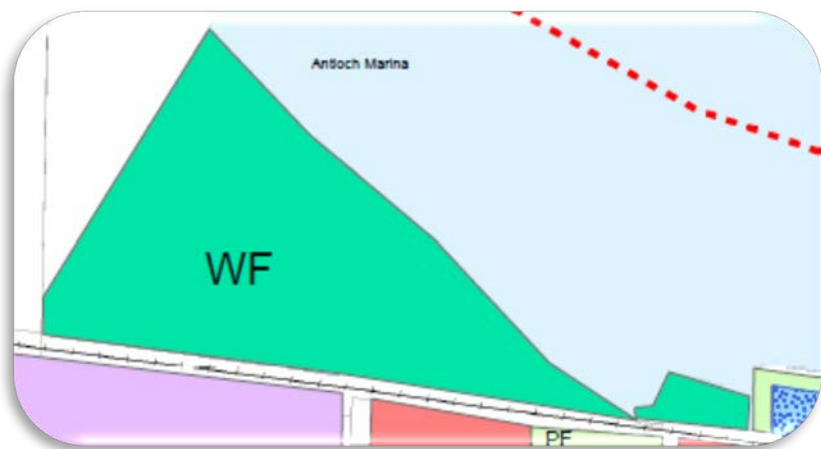
Waterfront (WF)

Introduction

The Waterfront District contains the Antioch Marina, the adjacent parking lot, the Riverview Lodge property, and the surrounding undeveloped riparian areas. The site includes the City of Antioch’s Marina office as well as supporting commercial uses, including the prominent restaurant site. This District serves as a local and regional attraction and is integral to the future success of Downtown Antioch because it brings residents and other visitors to the heart of Downtown Antioch.

Major Issues

- Commercial businesses
- Parking lot patrol
- Railroad tracks
- Wayfinding and signage
- Underutilized properties



The purpose of the Waterfront District is to create a district that capitalizes on the City of Antioch’s unique waterfront access and promotes the recreational opportunities associated with direct use of the San Joaquin River through the Marina facility.

Goals, Objectives, Policies, and Programs

GOAL: A popular, safe and attractive waterfront recreational facility that serves the community and offers and attraction to visitors.

Objective: A diverse array of commercial uses that complement the waterfront and are attractive to the general population.

Policy: The City supports the continued use of the restaurant building at the Antioch Marina for a high-quality restaurant that will attract visitors beyond the immediate area.

Policy: Other uses of the adjacent building should be relevant to, or dependent on, the waterfront, such as bait and tackle shops, marine supply shops, or similar uses that relate to the waterfront or marine recreation. Other uses that are not reliant on or relevant to the waterfront are discouraged.

Policy: The City encourages additional commercial activities or business opportunities that will attract additional visitors. This may include construction of new buildings.

Program: The City will investigate the feasibility of additional building pads within the Marina area.

Policy: The Riverview Lodge building should remain as a restaurant use. The City is supportive of renovation or reconstruction of the building to ensure that it remains a viable attraction.

Objective: Open public access to the waterfront for boating, fishing, observation, or other waterfront-dependent activities.

Policy: The City supports retention of the fishing piers for general public use and for organized derbies or similar activities.

Policy: The City encourages use of the waterfront facilities for visiting historic ships and similar attractions.



Objective: A safe and clean environment that preserves the natural and scenic resources of the waterfront.

Policy: The City discourages use of the Marina parking lot for purposes other than accessing the waterfront.

Policy: The City promotes exclusive use of the developed path system to ensure that adjacent natural areas are preserved.

Program: The City will conduct a general site security and access study to examine ways to discourage behavior or trespass that is detrimental to the visitor experience or the natural environment.

Opportunity Sites

Introduction

Within the boundaries of the Downtown Antioch Specific Plan, there are three large parcels whose redevelopment would have a major impact on the Downtown Antioch. Because of the unique potential for these properties and the significance of their redevelopment, they have been identified as Opportunity Sites. In lieu of traditional prescriptive land use and development standards, they are governed by a series of general policies that guide their future reuse. In addition, each of these sites would be required to submit a comprehensive redevelopment plan prior to any new development on the site. The comprehensive plan would provide a big picture of the land uses and development schedule for the site.

As two of these sites currently have active businesses, there are also unique provisions for retention of these uses and even replacement with similar land uses to ensure that the buildings do not become vacant, which may lead to further complications.

Opportunity Site A

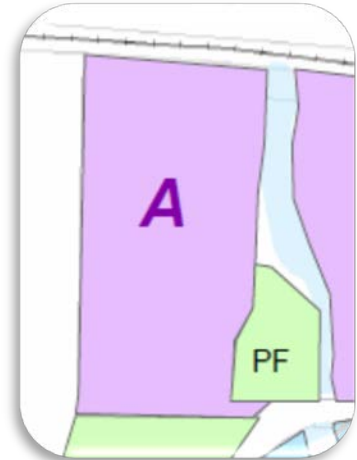
This site most recently contains Bond Manufacturing, which operates a light manufacturing facility on the 17-acre site. Due to the quality of its existing industrial buildings and infrastructure on the site, it is envisioned to house additional industrial users before any eventual redevelopment. However, if proposed for redevelopment, the site would offer a very unique opportunity due to its size. The site is limited by access, with only one modest entry from Auto Center Drive/W. 4th Street, so its development potential is limited. Further, it is isolated from adjacent development by Antioch Creek, the Dow Wetlands property, and the historic Antioch History Museum building. The following policies apply to Opportunity Site A.

1. The property may be continued to be used for industrial purposes indefinitely, consistent with the zoning regulations currently assigned to the M-1 Light Industrial District, as may be amended.



access available.

2. Both the development standards and land uses regulations of the M-1 Light Industrial District shall apply. Should the M-1 Light Industrial District be eliminated, the site shall be subject to the comparable provisions of a replacement light industrial district.
3. Future redevelopment of the site should be comprehensive in nature. To that effect, a comprehensive development plan is required for any land use or redevelopment that is not consistent with the M-1 Light Industrial District regulations. Such a comprehensive development plan shall be subject to review and approval through the Planned Development (PD) process through the Planning Commission and City Council.
4. Future redevelopment should contribute to the vitality of Downtown Antioch and may include residential uses, such as a large apartment or condominium complex offering river and wetlands views. Ownership units are encouraged.
5. Any future redevelopment must be sensitive to the adjacent wetlands and appropriate for the limited roadway

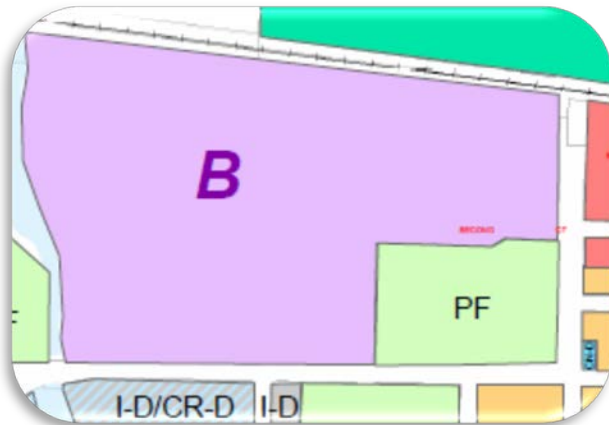


Opportunity Site B

This 37-acre site contains a series of industrial buildings that are currently being used for RV storage and other miscellaneous uses. This is the site of a former major manufacturing facility and the smoke stack still stands. The site is directly adjacent to the Antioch Police Department and maintains frontages on W. 4th Street, L Street, N Street, O Street, and W. 2nd Street. The following policies apply to Opportunity Site B.

1. The property may be continued to be used for industrial purposes indefinitely, consistent with the all zoning regulations currently assigned to the M-1 Light Industrial District. This district is described as follows:

This district allows light industrial uses and excludes those heavy industrial uses with potentially hazardous or negative effects.....Uses include the fabrication, assembly, processing, treatment, or packaging of finished parts or products from previously prepared materials typically within an enclosed building.



2. Both the development standards and land uses regulations of the M-1 Light Industrial District shall apply, in general. Should the M-1 Light Industrial District be eliminated, the site shall be subject to the comparable provisions of a replacement light industrial district.
3. Future redevelopment of the site should be comprehensive in nature. To that effect, a comprehensive development plan is required for any land use or redevelopment that is not consistent with the M-1 Light Industrial District regulations. Such a comprehensive development plan shall be subject to review and approval through the Planned Development (PD) process through the Planning Commission and City Council.
4. Minor improvements and modifications to the site for continued industrial purposes, provided that said actions do not result in the demolition and replacement of more than 10,000 square feet or construction of 10,000 square feet or more of new building area. Any such larger projects are subject to the requirement for a comprehensive development plan.
5. Future redevelopment should contribute to the vitality of Downtown Antioch and may include the following:
 - a. A mixed use village, containing a variety of residential and commercial/service uses.
 - b. A large residential complex offering river views, Marina access, and high-quality on-site amenities.
 - c. A large office complex providing employment at a rate comparable to business parks.
6. To improve circulation, a connection between 2nd St. and O St. should be explored.

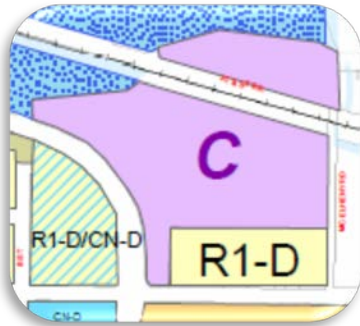


Opportunity Site C

This 10.5-acre site is the home of the former Hickmott Cannery and is currently vacant. The site is bisected by railroad tracks and access is to 6th Street and McElheny Road. Due to the historic

use of the site for industrial purposes, there may be issues related to soils contamination that would need to be fully addressed prior to development. These issues may even dictate the level of development appropriate for the site. This site, has nearly unobstructed views of the San Joaquin River and is ideal for a major anchor project. The following policies apply to Opportunity Site C.

1. The property is not currently in use and any new development or land use requires a comprehensive development plan.
2. The reuse of the property should provide a strong anchor to the east side of Downtown Antioch.
3. Future redevelopment should contribute to the vitality of Downtown Antioch and may include the following:
 - a. A mixed use village, containing a variety of residential and commercial/service uses.
 - b. A large residential complex offering river views, Downtown access, and high-quality on-site amenities.
 - c. A large office complex providing employment at a rate comparable to business parks.
 - d. A large open space or park complex.
4. The existing houses on E. 6th Street must be incorporated into any future development plan.
5. With redevelopment of the site, McElheny Road should be examined for its potential to provide a pedestrian/cycle connection to the waterfront on Fulton Shipyard Road.
6. Direct linkages to the existing enhanced sidewalk on A Street should be provided throughout the project.
7. The project should capitalize on the views of the waterfront and the San Joaquin River.
8. New development should include historical monuments or interpretation of the site's history as a cannery.
9. Architectural styles may reflect the industrial traditions of the site.



Blending Land Use Designation

The Land Use Map contains multiple instances of blended land use designations, where two land use designations are shown for a single parcel. These parcels are identified with hashmarks denoting the two applicable land use designations. In these cases, it is the intent of the Downtown Specific Plan to allow for the continuation of the existing land uses under a corresponding land use designation, while also recognizing that the site may ultimately be redeveloped for a different purpose.

For example, the R1-D/CN-D blending district combines the Downtown Neighborhood-Low Density District with the Neighborhood Commercial District. This blending allows for the continuation of the current low-density, single-family residential uses under the R1-D



District, but would allow for the entire site to be redeveloped as a neighborhood commercial site under the CN-D District designation. In order to be redeveloped for neighborhood commercial purposes, the site would have to meet all of the development standards for the CN-D District, including the 10,000 square-foot minimum lot size and all parking requirements. As most residential lots are 5,000 square feet in size, conversion to commercial use would require the accumulation of multiple sites. This would deliver more reasonable, comprehensive conversions and well-functioning commercial sites and would avoid the piece-meal conversion of individual 5,000 square-foot lots to commercial use, which is not generally beneficial to a community. In some instances, the lots might be combined with adjacent commercial sites to the rear, such as along 10th Street.

In short, the blending land use designation approach allows for the continuation of existing land uses in a neighborhood, but allows for a large-scale conversion to a different land use in the future. This approach also avoids many of the pitfalls associated with traditional legal nonconforming designations, which have become deterrents to lenders in a more conservative banking environment. This blending approach will hopefully allow for increased lending and investment in these communities, while providing responsible and detailed direction.

TABLE 2-1 Allowed Uses and Permit Requirements		A		Allowed Use				
		UP		Use Permit Required				
		MUP		Minor Use Permit Required				
		—		Use Not Allowed				
LAND USE	MU-D	CN-D	CR-D	PERMIT REQUIRED BY DISTRICT			Specific Use Regulation	
				R1-D	R2-D	I-D		WF	PF
AGRICULTURE AND OPEN SPACE								
Production of Crops	—	—	—	—	—	MUP	—	—
RESIDENTIAL USES								
Accessory uses (Residential)	A	A	—	A	A	—	—	—
Caretaker quarters	UP	UP	—	—	—	MUP	UP	—
Home occupations	A	A	—	A	A	—	—	9-5.901
Live/work projects	MUP	MUP	—	—	—	MUP	—	—
Mobile home/RV park	—	—	—	—	—	—	UP	—
Multi-family dwellings (3 or more units)	A	UP	—	—	A	—	—	—
Emergency shelters	—	—	—	—	—	UP	—	9-5.3839
Second dwelling units	A	A	—	A	A	—	—	9-5.3805
Single family dwellings	A	A	—	A	A	—	—	—
Transitional and Supportive Housing	—	—	—	—	UP	UP	—	—
Two family dwellings (Duplex)	A	A	—	MUP	MUP	—	—	—
RETAIL TRADE								
Accessory retail uses	A	A	A	—	—	A	—	—
Adult entertainment business	—	—	—	—	—	—	—	9-5.3808
Alcoholic beverage sales, off-site	UP	UP	UP	—	—	—	UP	—
Alcoholic beverage sales, on-site	UP	UP	UP	—	—	—	UP	—
Animal sales and grooming	—	MUP	MUP	—	—	—	—	—
Animal keeping	—	—	—	—	—	—	—	—
Art, antique, collectible, and gift stores	A	A	A	—	—	—	—	—
Auto parts sales	A	A	A	—	—	MUP	—	—
Auto sales and rental	—	—	UP	—	—	UP	—	—
Building material stores	A	A	A	—	—	A	—	—
Construction/heavy equipment sales and rental	—	—	UP	—	—	MUP	—	—
Convenience stores	UP	UP	UP	—	—	UP	—	—
Drive-in and drive-through sales and services	—	UP	UP	—	—	—	—	—
Firearms sales	UP	—	UP	—	—	UP	—	—
Furniture, furnishings & appliance stores	A	A	A	—	—	MUP	—	—
Gas stations	—	—	UP	—	—	UP	UP	9-5.3815
General retail sales	A	A	A	—	—	—	—	—
Grocery stores	A	A	A	—	—	—	—	—
Mobile home and RV sales	—	—	—	—	—	UP	—	—
Night clubs, bars, and cardrooms	UP	—	—	—	—	—	—	—

TABLE 2-1 Allowed Uses and Permit Requirements		A		Allowed Use								
		UP		Use Permit Required								
		MUP		Minor Use Permit Required								
		—		Use Not Allowed								
LAND USE		PERMIT REQUIRED BY DISTRICT										Specific Use Regulation
		MU-D	CN-D	CR-D	R1-D	R2-D	I-D	WF	PF			
Plant nurseries and garden supply stores		—	A	A	—	—	A	—	—	—		
Restaurants		A	A	A	—	—	MUP	UP	—	—		
Tobacco and paraphernalia business		—	—	—	—	—	UP	—	—	—		
Warehouse retail		—	—	—	—	—	MUP	—	—	—		

SERVICES – BUSINESS, FINANCIAL, PROFESSIONAL											
Automated teller machines (ATMs)	A	A	A	—	—	—	A	A	A	A	—
Banks and financial services	A	A	A	—	—	—	A	—	—	—	—
Business support services	A	A	A	—	—	—	A	—	—	—	—
Medical - Clinics, offices, and laboratories	A	A	A	—	—	—	A	—	—	—	—
Medical - Extended care	—	—	A	—	—	—	—	—	—	—	—
Medical – Hospitals	—	—	—	—	—	—	—	—	—	—	—
Offices	A	A	A	—	—	—	A	A	A	A	—
Professional Services	A	A	A	—	—	—	A	—	—	—	—

SERVICES											
Audio & video rental	A	A	A	—	—	—	—	—	—	—	—
Auto repair and maintenance	—	—	UP	—	—	—	UP	—	—	—	—
Boat repair and maintenance	—	—	UP	—	—	—	UP	UP	—	—	—
Car wash	—	—	UP	—	—	—	UP	—	—	—	—
Residential care facility (6 or fewer)	A	A	—	—	A	A	—	—	—	—	—
Residential care facility (7 or more)	—	—	—	—	MUP	MUP	—	—	—	—	9-5.3840
Small Family day care home (up to 8)	A	A	—	—	A	A	—	—	—	—	9-5.3817
Large family day care home (9 to 14)	—	—	—	—	MUP	MUP	—	—	—	—	9-5.3818
Day care center	MUP	MUP	UP	UP	UP	UP	—	—	UP	—	—
Computer gaming and internet access business	—	—	—	—	—	—	UP	—	—	—	—
Contractor storage yard	—	—	—	—	—	—	MUP	—	UP	—	—
Food locker/distribution	UP	—	—	—	—	—	UP	—	—	—	—
Hotels and motels	UP	—	MUP	—	—	—	—	—	—	—	—
Mortuaries & funeral homes	MUP	—	MUP	—	—	—	A	—	—	—	—
Personal services	A	A	A	—	—	—	A	—	—	—	—
Pharmacies	A	A	A	—	—	—	—	—	—	—	—
Research and development	A	A	A	—	—	—	A	—	—	—	—
Storage – indoor	—	—	A	—	—	—	UP	—	—	—	—
Upholstering shops	—	—	—	—	—	—	A	—	—	—	—
Veterinary clinics, outpatient treatment only	MUP	MUP	MUP	—	—	—	A	—	—	—	—
Veterinary clinics, animal hospitals, kennels	—	—	UP	—	—	—	MUP	—	—	—	—

TABLE 2-1 Allowed Uses and Permit Requirements		A		Allowed Use					
		UP		Use Permit Required					
		MUP		Minor Use Permit Required					
		---		Use Not Allowed					
LAND USE	MU-D	CN-D	PERMIT REQUIRED BY DISTRICT					Specific Use Regulation	
			CR-D	R1-D	R2-D	I-D	WF		PF
INDUSTRIAL, MANUFACTURING & PROCESSING, WHOLESALING									
Accessory uses – industrial	—	—	—	—	—	—	A	—	—
Auto dismantling	—	—	—	—	—	—	UP	—	—
Chemical manufacturing and processing	—	—	—	—	—	—	—	—	—
Electronics, equipment, and appliance	—	—	—	—	—	—	UP	—	—
Food and beverage product manufacturing	—	—	UP	—	—	—	UP	—	—
Furniture/fixtures manufacturing, cabinet shops	—	—	UP	—	—	—	UP	—	—
Handcraft industries, small-scale manufacturing	MUP	MUP	MUP	—	—	—	A	—	—
Laundries and dry cleaning plants	—	—	—	—	—	—	MUP	—	—
Lumberyards	—	—	—	—	—	—	MUP	—	—
Metal products fabrication, machine/welding	—	—	—	—	—	—	A	—	—
Milling	—	—	—	—	—	—	—	—	—
Paper and allied product manufacturing	—	—	—	—	—	—	—	—	—
Petroleum/coal product storage and processing	—	—	—	—	—	—	—	—	—
Plastics manufacturing	—	—	—	—	—	—	—	—	—
Printing and publishing	—	—	—	—	—	—	—	—	—
Product assembly and packaging	—	—	—	—	—	—	—	—	—
Quarry materials storage and processing	—	—	—	—	—	—	—	—	—
Railyard/aircraft manufacturing and repair	—	—	—	—	—	—	UP	—	—
Recycling - Reverse vending machines	—	MUP	MUP	—	—	—	MUP	—	9-5.3811
Recycling - Small collection facility	—	—	UP	—	—	—	MUP	—	9-5.3812
Recycling - Large collection facility	—	—	—	—	—	—	UP	—	9-5.3813
Recycling - Heavy collection facility	—	—	—	—	—	—	UP	—	9-5.3814
Warehouses, wholesaling and distribution	—	—	—	—	—	—	A	—	—

TRANSPORTATION, COMMUNICATIONS & INFRASTRUCTURE USES													
Broadcast studios	UP	UP	UP	—	—	A	UP	UP	UP				
Ferry Terminal	UP	—	—	—	—	—	UP	UP	—				
Marina	UP	—	—	—	—	—	UP	UP	—				
Parking facilities/vehicle storage	—	—	—	—	—	UP	—	—	UP				
Telecommunications facilities	UP	UP	UP	UP	UP	UP	UP	UP	UP				
Truck and freight terminals	—	—	—	—	—	UP	—	—	—				
Utility Facility	UP	UP	UP	UP	UP	UP	UP	UP	UP				

TABLE 2-1 Allowed Uses and Permit Requirements		A	Allowed Use									Specific Use Regulation
		UP	Use Permit Required									
		MUP	Minor Use Permit Required									
		—	Use Not Allowed									
LAND USE	|		—	—	—	—	—	—	—	—	Specific Use Regulation	
	MU-D	CN-D	CR-D	R1-D	R2-D	I-D	WF	PF				
RECREATION, EDUCATION, & PUBLIC ASSEMBLY USES												
Assembly - Major (over 30) (churches, schools,	UP	UP	UP	UP	UP	UP	UP	—	UP	UP	Includes	
Assembly - Minor (30 or fewer)	A	A	A	MUP	MUP	MUP	MUP	—	UP	UP		
Cemetery	—	—	—	—	—	—	—	—	UP	UP		
City offices	A	A	—	—	—	—	—	UP	UP	UP		
Clubs, lodges, & membership halls	UP	UP	UP	UP	UP	UP	UP	—	—	—		
Community centers	A	A	A	A	A	A	A	A	A	A		
Indoor sports facilities	MUP	MUP	MUP	—	—	—	MUP	—	—	—		
Fairgrounds	—	—	—	—	—	—	—	—	—	—		
Health/fitness facilities	MUP	MUP	MUP	—	—	—	MUP	—	—	—		
Indoor amusement/entertainment facilities	MUP	MUP	MUP	—	—	—	MUP	—	—	—	Bingo: 9-5:3844	
Indoor sports facility	MUP	MUP	MUP	—	—	—	MUP	—	—	—		
Libraries, museums, galleries (public)	A	A	A	A	A	A	A	—	A	A		
Outdoor recreation facilities	A	A	A	—	—	—	MUP	A	—	—		
Parks and playgrounds	A	A	A	A	A	A	A	A	A	A		
Public safety facilities	A	A	A	A	A	A	A	A	A	A		
Theaters and auditoriums	A	A	A	—	—	—	—	A	A	A		

TABLE 2-2 Development Standards										Notes
		MU-D	CN-D	CR-D	R1-D	R2-D	I-D	WF	PF	
MINIMUM LOT SIZE										
Area		5,000 sq.	10,000 sq.	1 acre	3,300 sq.	5,000 sq.	1 acre	-	-	Minimum area, width, and depth required for new parcels
Width		50 ft.	100 ft.	200 ft.	50 ft.	50 ft.	200 ft.	-	-	
Depth		100 ft.	100 ft.	500 ft.	100 ft.	100 ft.	500 ft.	-	-	
MINIMUM SETBACKS										
Front		0 ft. min. (10 ft.)	0 ft.	30 ft.	15'	15'	5 ft.	By Use Permit		Minimum and, where noted, maximum setbacks required. Exceptions are per AMC 9-5.601
Sides (each)		0 ft. min.	0 ft.	15 ft.	5'	5'	5 ft.			
Street side		0 ft. min. (10 ft.)	0 ft.	15 ft.	5'	5'	5 ft.			
Rear		0 ft.	0 ft. (20' to	20 ft.	15'	15'	5 ft.			
OTHER STANDARDS										
Maximum height limit		4 stories/45	3 stories/35	3 stories/50	2 stories/30	2 stories/30	60 ft.	By Use Permit		
Maximum residential density		28 dwellings per acre	16 dwellings per acre	-	13 dwellings per acre	16 dwellings per acre	-			
Minimum land area per unit		1,500 square feet	2,750 square feet	-	3,300 square feet	2,750 square feet	-			
Site coverage		1	0.75	0.5	0.6	0.6	0.5			
Parking		No requirement	0-5,000 sq. ft.=no requirement; 5,001+ sq. ft.=1/1,000 square feet	Per AMC 9-5.1703.1	1 covered space per residential unit; visible carports are prohibited		Per AMC 9-5.1703.1			

3.0 Streetscape and Design Guidelines

Introduction and Background

A place like Downtown Antioch is used and experienced based on the quality and character of the public realm. In the Downtown, the public realm is shaped by the San Joaquin River, buildings, streetscape, Waldie Plaza, City Hall, and the spaces in between, all of which contribute to the identity of our historic Downtown. This chapter provides Downtown policies that will guide new development and renovation of the existing built environment. It enhances the public and private realm through continuation of the existing high quality Downtown streetscape design, and by using Antioch's existing highly regarded Design Guidelines to further reinforce and shape the identity of the Downtown.

The City's Downtown decorative streetscape standards are to be maintained, and extended to any new streetscape improvements in the Downtown Core. The Citywide Design Guidelines adopted by the City of Antioch are hereby incorporated by reference into this Downtown Specific Plan, to serve as the Design Guidelines for the Downtown Specific Plan Area. In the case of any conflict between the Design Guidelines and the Specific Plan, the Plan shall prevail. In those cases where the interpretation and/or application of the Design Guidelines within the Downtown Specific Plan Area are unclear, the Planning Commission shall have the authority to determine the appropriate interpretation.

The Downtown Specific Plan that focuses on the revitalization of historic Rivertown provides opportunities to make Downtown Antioch a vibrant place with a strong quality of life. The design of the streetscape, new private development and the renovation of existing buildings will play a particularly important role in creating a distinct, high-quality image and ambience for the Downtown while promoting a desirable quality of life in a place that will attract people to live, work and play. Application of the Design Guidelines in the Downtown will enhance the design of streetscapes and commercial and residential development projects.

The Downtown is made up of public spaces, pedestrian oriented streets, bicycle and pedestrian paths, and connections that comprise the public realm. The Plan proposes to maintain and enhance the public realm by preserving the existing Downtown core area public streetscape that consists of decorative sidewalks, streetlights, street signs, street trees, landscape planters, benches and other street furniture. A continued emphasis on walkability and pedestrian orientation will maximize accessibility to and within Downtown and enhance the area as an attractive place to spend time. Key elements proposed include Waldie Plaza improvements, diversity in building design, and various opportunities for community engagement, from existing amenities such as benches that encourage casual encounters, to outdoor dining that create a positive ambience.

Purpose and Goals

The purpose of this Chapter of the Downtown Specific Plan is to establish guidelines that will reinforce a common identity for Rivertown, clarify expectations about desired design quality, challenge stakeholders to think outside the box and provide a method to help ensure objectivity, consistency, and predictability during the design review process. The Design Guidelines encourage design freedom and innovative design, while emphasizing basic design principles, community needs, and sensitivity to surrounding context. The Design Guidelines provide good examples of appropriate design solutions. The Guidelines contain both quantitative and mandatory development standards and may be interpreted with some flexibility in the application to specific projects.

Specifically, the Design Guidelines attempt to achieve the following goals based on those outlined in the General Plan and Downtown Specific Plan:

- Preserve and enhance Downtown Antioch's unique historic identity;
- Create opportunities to attract residential, commercial and other Downtown projects that will stimulate the economy and create an exciting live-work-play environment;
- Define standards and provide guidance for the design of new development and renovations that will encourage exceeding the desired design quality;
- Encourage architectural and landscaping criteria that stimulate walking, facilitate bicycling and reduce dependence on the automobile, while accommodating it's continued use;
- Protect and maintain the quality and unique heritage and historical characteristics of the Downtown and ensure compatible design and historic preservation standards for new projects and renovations;
- Guide the revitalization of existing developed areas blending seamlessly the quality of newer and older portions of the Downtown;
- Communicate a clear public vision for the community.

The interpretation and implementation of the Design Guidelines will be based on these goals.

Applicability

The provisions of the Design Guidelines are applicable to any new buildings, additions, exterior alterations, landscaping, and any modification to an approved landscaping plan or parking lot design, with the exception of single-family residences within an existing subdivision. These Guidelines do not affect any existing buildings that are not proposed for new construction, exterior alterations, landscaping, or changes in the parking lot layout.

4.0 Circulation and Access

4.1 Introduction

The potential for long term economic development and conservation efforts within the Downtown is directly affected by the diversity, capacity, features, amenities, and physical condition of the Antioch transportation network. In addition to local policies and programs, the Downtown transportation network is also influenced by regional policies and external conditions. The land uses established in this Plan are supported by a balanced transportation network that includes vehicular, transit, bicycle and pedestrian modes. Downtown benefits from existing and improving multi-modal transportation access, and is currently served by Tri-Delta Transit bus routes and an Amtrak station. An eBART station is under construction a short distance from Downtown Antioch on Hillcrest Avenue and Highway 4, and there are plans for a potential future Downtown ferry terminal. The existing Downtown traditional grid street pattern provides good access to vehicles and pedestrians. In addition to the street network and transit, there are existing bike and pedestrian paths and wide sidewalks, particularly in the Downtown Core.

In the past, alternative transportation has typically been subordinate to roadway and intersection planning. However, newer policies and practices are aimed at strengthening the connection between development and alternative transportation. For the Downtown Specific Plan it is expected that pedestrian, bicycle, and transit improvements will be given high priority. The construction of parking lots and roadway improvements will have to be carefully balanced with the installation of new bicycle lanes, pedestrian paths, and transit connections. Future improvements may be needed in all of these areas to attract investment to Downtown Antioch. The challenge will be to allocate the limited resources available in a way that will most effectively facilitate implementation of the community's goals for the area.

In general, the roadways and intersections serving the Downtown have sufficient excess capacity to accommodate increases in automobile traffic from approved and pending projects, including some degree of future additional development. However, should the traffic generating potential of future development exceed the levels assumed in prior analyses, additional roadway enhancements may be necessary.

It is important to highlight that many progressive communities have found that Downtown congestion can actually be an indicator of a healthy economy, rather than a hindrance to traffic access. Further increasing the capacity of roads in the Downtown could disrupt the urban fabric and diminish the attractiveness of living, visiting or doing business Downtown. As a result, some communities have relaxed their level of service (LOS) thresholds in downtown areas to LOS E or even LOS F in favor of preserving the street environment, mature street trees, and prioritizing pedestrian, bicycle, and public transit travel modes.

This Plan calls for the consideration of both aesthetic and pedestrian/bicycle improvements to the A Street, L Street and Auto Center Drive Corridors, in order to improve their function as principal entrances to the Downtown. This could also include adjustments to traffic signal operations to

improve traffic, pedestrian and bicycle access. Also, this Plan calls for consideration of possible street name changes to A and L Streets, in order to potentially better correlate those important corridors with their role as principal accessways to the Downtown.

General Plan Circulation and Growth Management Elements

Chapters 7.0 (Circulation) and 3.0 (Growth Management) of the Antioch General Plan establish the goals and policies affecting vehicular, pedestrian and bicycle circulation, as well as the sequencing of improvements and related services within the City and Downtown. The DOWNTOWN SPECIFIC PLAN relies upon and includes by reference all goals and policies of the General Plan, and the Circulation and Growth Management Elements in particular.

4.2 Existing Street Network

The roadway system that currently serves the Downtown and surrounding portions of the City are shown in **Figure 4-1**. For the most part, the Downtown street system is a traditional grid pattern, as found in many historic downtowns. A total of five General Plan designated Arterial roads directly connect the Downtown with other portions of Antioch, and to regional Highways 4 and 160. These arterials that serve as gateways to the Downtown are (from west to east): (1) Auto Center Drive; (2) 10th Street; (3) L Street; (4) A Street; and (5) Wilbur Avenue. 9th Street inside the Downtown is designated in the General Plan as part of an Arterial (one way) Couplet with 10th Street between A and L Streets.

In addition, the Downtown contains a number of roadways designated as Major Collectors in the General Plan. These are: L Street from 4th Street to its northern terminus at Marina Park; 2nd and 4th Streets are labeled as a Major Collector (one way) Couplet, for 2nd Street from L Street east to E Street, and for 4th Street from L Street east to C Street; G Street from 4th Street north throughout and beyond the Downtown; and E Street from 2nd Street to 9th Street.

Future Street Improvements

The existing Downtown grid street network is efficient and effective at moving vehicles into, out of, and through the area. Therefore, any street improvements envisioned through this Plan are relatively minor. As conditions change in the future, and more development occurs, it may be determined appropriate that one or both of the Downtown one-way couplets described in the General Plan, or other alternatives as appropriate, be studied further as to whether implementation would benefit access. If benefits would accrue, the City would then proceed to develop related funding and implementation plans.

Some Downtown intersections have 4 way stop signs, while others have 2 way stop signs. The City will explore whether development of a “Downtown 4 way stop warrant” criteria would help standardize and streamline any future evaluation of implementation of 4 way stop intersections.

Goals, Objectives, Policies, and Programs

GOAL: A street network within and to Downtown Antioch that offers ease of connectivity and access.

Objective: A decrease in unnecessary delays while maintaining a pedestrian-friendly environment.

Policy: In Downtown Antioch, the City of Antioch prioritizes pedestrians, cyclists, and quality of life for its residents over simple increases in traffic efficiency.

Program: The City of Antioch will pursue a study to determine whether two way stop sign intersections should be converted to four way stop intersections.

Internal Circulation

General Plan Circulation Element Figure 7.1 (Circulation) designates Ninth and Tenth Streets between A and L Streets as an Arterial (one-way) Couplet, and Second and Fourth Streets between A and L Streets as a Major Collector (one-way) Couplet that are intended to serve as one way traffic loops on those streets, in order to move traffic more efficiently through the Downtown.

Program: The City of Antioch will re-evaluate the benefits of converting Ninth and Tenth Streets to an Arterial Couplet and A and L Streets as Major one-way Couplets and the potential impacts on existing residents, quality of life , and pedestrians and cyclists.

L Street and A Street both provide very important connections to Downtown and offer a first impression for many visitors. They are also denoted on Highway 4 as the primary connectors to Downtown and the Marina. Although residents identify L Street as a connection to Downtown and the Marina, first-time visitors may not make the same connection.

Program: The City of Antioch will consider changing street names for L and/or A Streets to more distinctive names that reflect the importance of these roadways, and their link to the history and character of Antioch and the Downtown.

Program: The City of Antioch will study the potential benefits and costs of aesthetic or other enhancements to “A and/or L Streets between Highway 4 and the Downtown, to determine the feasibility of making them more inviting corridors for bringing visitors directly Downtown.

4.3. Pedestrian and Bicycle Connections

The Downtown has a generally pleasant and varied streetscape. In the Downtown Core, pedestrian amenities including wide decorative sidewalks, street trees, historic street lamps, planters and street furniture make the area attractive to walkers. That rich existing character helps provide a sense of place and supports retail shopping activity. Existing and future bicycle and pedestrian paths are shown on Figures 4-2 and 4-3.

The City of Antioch adopted TRANSPLAN's East Contra Costa Bikeway Plan in 2001. In that Plan, Figure 1: Existing Eastern Contra Costa County Class I, II and III Bicycle Facilities – Area 1, that includes Antioch, shows no bike facilities in or very near Downtown. In the 2001 Plan's Figure 3: Ultimate Eastern Contra Costa County Class I, II and III Bicycle Facilities – Area 1, 10th Street from A Street to L Street is shown as a Class II route, connecting with Class II routes on Wilbur Avenue to the east, and the Pittsburg/Antioch Highway to the west. The route on 10th Street intersects with a Class II route shown on L Street, starting at 4th Street and running south to James Donlon Blvd.

In 2009, the CCTA adopted a Countywide Bicycle and Pedestrian Plan, which incorporated Antioch's local projects and programs, and was subsequently adopted by the City in 2009. An Antioch Community Development Department staff member served on the Countywide Bicycle and Pedestrian Advisory Committee that helped develop that Plan. The Antioch projects and programs in that Plan serve as the foundation for improving the safety and attractiveness of bicycling and walking in the City. The plan recommends links to the Countywide Bikeway Network along with various regional improvements and local projects, including both on-street and off-street bikeways and pedestrian facilities in the City. Furthermore, the Plan provides guidance and strategies for planning and funding of local and regional projects. Specifically, Figure D-1 in Appendix D to that Plan shows bicycle routes or lanes on:

- 4th Street from G to L Street – Existing Class II
- G Street from 4th to 10th Street and continuing south - Existing Class II
- L Street from 4th to 10th Street and beyond – Proposed Class II
- L Street from 4th Street to the Marina – Proposed Class III
- 9th Street between A and L Streets – Existing Class III
- 10th Street between A and L Streets – Existing Class II
- Wilbur Avenue connects to Downtown at A Street and running east – Existing and Proposed Class II
- Somersville Road heading east and turning into 4th Street connects to Downtown – Existing Class II

Current Conditions

While pedestrian access (including sidewalks, curb ramps, crosswalks, and other improvements) is generally available throughout the Downtown, the area is in need of curb ramps at a number of intersections. Consistent with Section 7.4.2 of the Antioch General Plan, as future development proceeds in the Downtown, walkway, bicycle lane, lighting, and other circulation and access conditions will be evaluated, and appropriate public improvements will be considered as part of new developments, if a nexus would exist.

Despite the array of the eight existing and proposed bicycle facilities shown above and in the 2009 CCTA Countywide Bicycle and Pedestrian Plan, Downtown actually has:

- One existing Class II striped bicycle lane on L Street from 4th to 10th Streets.
- An existing Class III Shared Route bicycle route (routes that share the roadway and provide signage to alert bicyclists and motorists that a bicycle route exists) on 9th Street.
- An existing Class III route on “F” Street from 5th Street heading south.
- Wilbur Avenue has westbound bike lanes that connect to Downtown, going as far west as A Street.

The current on-street bicycle network within the Downtown is not thorough or connected, and therefore it does not facilitate bike usage.

Transportation infrastructure in undeveloped areas typically must be extended or expanded to serve new development. The Downtown has a well connected street, transit and pedestrian system, and there are few constraints to new Downtown development related to providing new transportation infrastructure, with the exception of bicycle paths as discussed above.

Future Bicycle Improvements

While L Street has the sole Class II bike lane in Downtown for a six block stretch, there are gaps outside that area. As of the time of writing this Plan, the City is preparing to look at the needs of L Street for a “Path to Transit” project that could include street beautification from Highway 4 to the Marina. As development occurs in Downtown areas that lack bicycle facilities, lane extensions and improvements will be considered along key streets, as shown in Figure 4-3, if a nexus for providing the improvements as a condition of approval for development would exist. In the Downtown, those include:

- L Street: A connection from L Street along West 2nd Street to the Amtrak station should be done as soon as possible, as a future on-street bicycle route.
- Auto Center Drive/4th Street Corridor: The costs/benefits of a connection along entire corridor up to L Street should be studied.
- The Rivertown to Southeast Antioch bike lane: The feasibility of this proposed bicycle facility as called for in the General Plan should be analyzed.
- 9th Street: Has a few disparately spaced bike route signs on it, and it should be determined whether additional signs would be beneficial.
- G Street: Bike route from 6th Street south.

Objectives and Implementation Measures

Objective CA-B: Improve pedestrian access to and within the Downtown, and maintain a street and sidewalk system that enables walkability to major destinations, shopping, employment, housing and transit.

Implementation CA-5: Close gaps in the sidewalk ramp network to ensure continuous pedestrian access to and within the Downtown. Currently, not all intersections have full four corner ramp access.

Implementation CA-6: Ensure that sidewalks, crosswalks, ramps and other pedestrian streetscape features are ADA compliant.

Objective CA-C: Improve bicycle access to and within the Downtown that is safe and inviting for bicyclists.

Implementation CA-7: Fill in gaps in existing bicycle facilities and provide proposed new bicycle routes or trails as follows that connect key destinations, housing, shopping, employment and transit:

- L Street: Has striped bike lanes only between 10th and 4th Streets. The connection from L Street along West 2nd Street to the Amtrak station should be done as soon as possible, as a future on-street bicycle route.
- Auto Center Drive/4th Street Corridor: The costs/benefits of a connection along the entire corridor up to L Street should be studied.
- The Rivertown to Southeast Antioch bike lane: The feasibility of this proposed bicycle facility as called for in the General Plan should be analyzed.
- 9th Street: Has a few disparately spaced bike route signs on it, and it should be determined whether additional signage would be beneficial.
- G Street: Bike route from 6th Street south.

Implementation CA-8: Require bicycle racks or storage in all new multi-family residential developments, multi-tenant retail, office and mixed use developments, and government, transit and institutional uses.

Implementation CA-9: Provide bicycle parking in a well distributed pattern as an amenity to facilitate bicycle usage, including in existing City parking lots.

4.4. Transit

The Downtown is currently served by three Tri-Delta Transit bus routes and an Amtrak station located at the northern waterfront. Tri-Delta bus route 387 runs weekdays from the Tri-Delta bus terminal in Antioch, through Downtown, to the Pittsburg Bart station. Route 388 runs weekdays from the current Hillcrest Park & Ride lot (that will become the Hillcrest EBART Station in 2018), fairly directly to and through Downtown, to the Pittsburg Bart Station. Route 392 runs weekends and holidays from the current Hillcrest Park & Ride lot (that will become the Hillcrest EBART Station in 2018), on a circuitous path to, and then through Downtown, to the Pittsburg/Bay Point Bart Station. The Amtrak station is unstaffed, and is located on the San Joaquin Oakland Amtrak route that stretches from Bakersfield to Stockton and beyond to Sacramento or the East Bay Area with connections to San Francisco. The current transit network serving the Downtown and surrounding areas is shown in Figure 4-4.

The extension of eBART service to Antioch at the Hillcrest Station that is currently under construction is scheduled in 2018. This station will introduce regional rail rapid transit service comprising approximately 10 miles of new track between the existing Pittsburg/Bay Point BART Station and the City of Antioch, connecting to the BART system, serving the San Francisco Bay Area. The location of the new e-Bart station is shown in Figure 4-5, along with the proposed eBART rail line extension shown in Figure 4-6.

Once the eBART station opens at Hillcrest, commuters and visitors may begin to travel between the station and Downtown. Tri-Delta bus route 388 provides fairly direct service between the station and Downtown on weekdays. Route 392 provides less than direct access on weekends. If that travel pattern emerges, and route 388 and/or 392 are not adequate to serve it, there is the opportunity for the City and Tri-Delta Transit to study it, and provide feasible means to improve the connecting access, if appropriate.

The opportunity exists for a future ferry terminal to be located at the northerly extension of “I” Street at the Urban Waterfront west of Waldie Plaza and the Downtown Mixed Use Core. As located in the Land Use Diagram (Figure 3-13) and the Waldie Plaza Concept Plan (Figure 3-15), the terminal would provide an alternative mode of transportation to Oakland and San Francisco.

Objectives and Implementation Measures

Objective CA-D: Establish Downtown as a multi-modal transit destination and a connector for bus, Amtrak, eBART and ferry service.

Implementation CA-10: Improve the accessibility of, educate the public about, facilitate the use of, and enhance linkages between the existing and future Downtown multi-modal transit resources, and local and regional sites.

Implementation CA-11: Encourage comfortable, safe and convenient amenities be provided at the Amtrak, eBART and Ferry stations, including seating, bicycle racks and/or lockers, informational and directional signage, and shelter from sun and rain.

Implementation CA-12: Work with Tri-Delta Transit and Bart to promote regional transit service to and from Downtown.

Because of the pedestrian friendly, retail and nearby residential nature of Downtown, and the existing adequate supply of parking, many trips can be accomplished on foot, reducing the need for additional parking. The mix of uses Downtown promotes internal trips and enables people to park once to visit multiple destinations, further reducing parking need. For example, people can park once, have lunch, browse shops, walk along the River, and then return to their cars without having to move them. The three Tri-Delta Transit bus routes serving Downtown can also bring people there with no need for parking. Nearby residents can walk or bike Downtown from their homes without need to park Downtown at all. However, access by car will continue to be important for many people, including those accessing the Amtrak or future Ferry Stations, visiting from central or south Antioch, or from other towns.

Providing adequate parking is important for retail success, special events, and to reduce vehicle miles spent looking for parking. A broadly based parking strategy that minimizes the need for constructing excessive parking, meets community and business owner desires for convenient access to the Downtown, and provides commuter access to the Amtrak and future Ferry Stations is a key component of this Plan. Transportation Demand Management (TDM) is a combination of measures, services, incentives, and facilities that can help reduce the number of vehicle trips by encouraging the use of transit, bicycling, and walking. TDM can also assist with parking management and may help reduce the number of parked cars within the Downtown.

The existing two hour commercial-related parking time restrictions are driven by the need to provide parking turnover near shop frontages, increasing customer convenience and the perception that convenient parking is available. Time restrictions also help manage parking behavior by shifting employee, and other long-term parking to peripheral areas. This two hour limit must be balanced with the pedestrian friendly “park once” strategy where people can park and spend time dining, shopping, taking in a show at the El Campanile and viewing the River.

The parking and TDM objectives and implementation measures below are aimed at managing parking and transportation demand, both to reduce traffic congestion, and to improve the quality of the pedestrian and bicycle environment. Parking policies focus on a shared parking and flexible approach. Public parking options focus on on-street parking with key public parking lots that serve Downtown. Parking standards for cars, motorcycles, and bicycles are included in Chapter 3: Streetscape, Building Design, and Development Standards. TDM measures consider a range of approaches appropriate for development in Downtown.

Objectives and Implementation Measures

Objective CA-E: Recognize that the historic character and layout of most commercial sites in the Downtown Core of Antioch are pedestrian oriented, do not and can not provide on-site parking. Acknowledge the importance of preserving this historic character, and that pedestrian and other modes of transportation are available. Accept that the existing on-street and off-street parking supply is adequate for current conditions in the Downtown Core, and should be regularly evaluated for changing conditions and needs. Recognize that parking should not be a limiting factor on the use and development of commercial sites in the Downtown Core that cannot accommodate on-site parking, without significantly limiting the use of such sites. Balance parking need and provision with the desire to maintain Downtown ambiance, and promote transit, walking, and bicycling.

Implementation CA-13: Regularly review on-street and off-street parking availability, requirements and restrictions (no parking, time limit parking) with downtown merchants and residents to determine if updated parking facilities, requirements or restrictions would better serve current and future parking needs.

Implementation CA-14: Do not require the provision of on-site parking in the Downtown Core for changes of use to or rehabilitation of existing commercial buildings, or for development of new commercial buildings on sites that are of such size and configuration that they could not accommodate on-site parking without severely limiting the use or development of such sites, when compared to larger commercially designated sites.

Implementation CA-15: Allow credit for on-street parking spaces directly adjacent to a property for visitors or retail uses, where appropriate. This should be on a one-to-one basis.

Implementation CA-16: Allow “unbundled parking” within residential development projects. Unbundled parking separates the cost of parking from the housing, meaning that residents with no vehicles would realize a cost savings by not leasing or owning a parking space. Correspondingly, residents wishing to lease or purchase more than one space could pay “market price” to do so.

Implementation CA-17: Encourage underground, or tuck-under parking in new development, to maximize occupied uses and open space at the ground level.

Implementation CA-18: Maintain on-street parking where it exists to enhance access to stores and services and to provide a buffer between pedestrians and traffic.

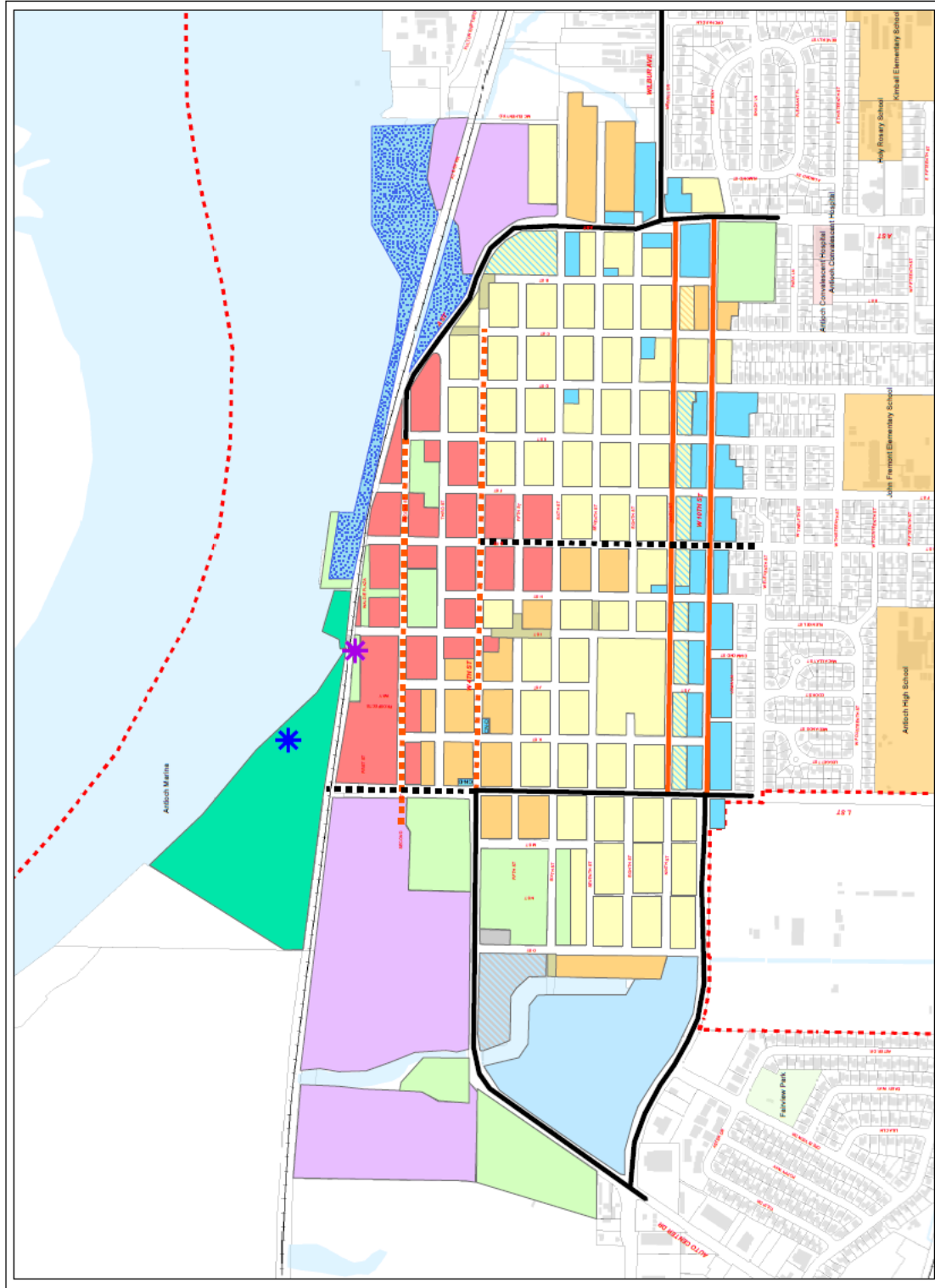
Implementation CA-19: Work with Tri-Delta Transit and Bart to publicize and incentivize the use of transit to and from Downtown, and for special events. This may include coordination to provide extra service on special event days.

Implementation CA-20: Design new mixed-use developments to enable parking to be shared efficiently between various uses.

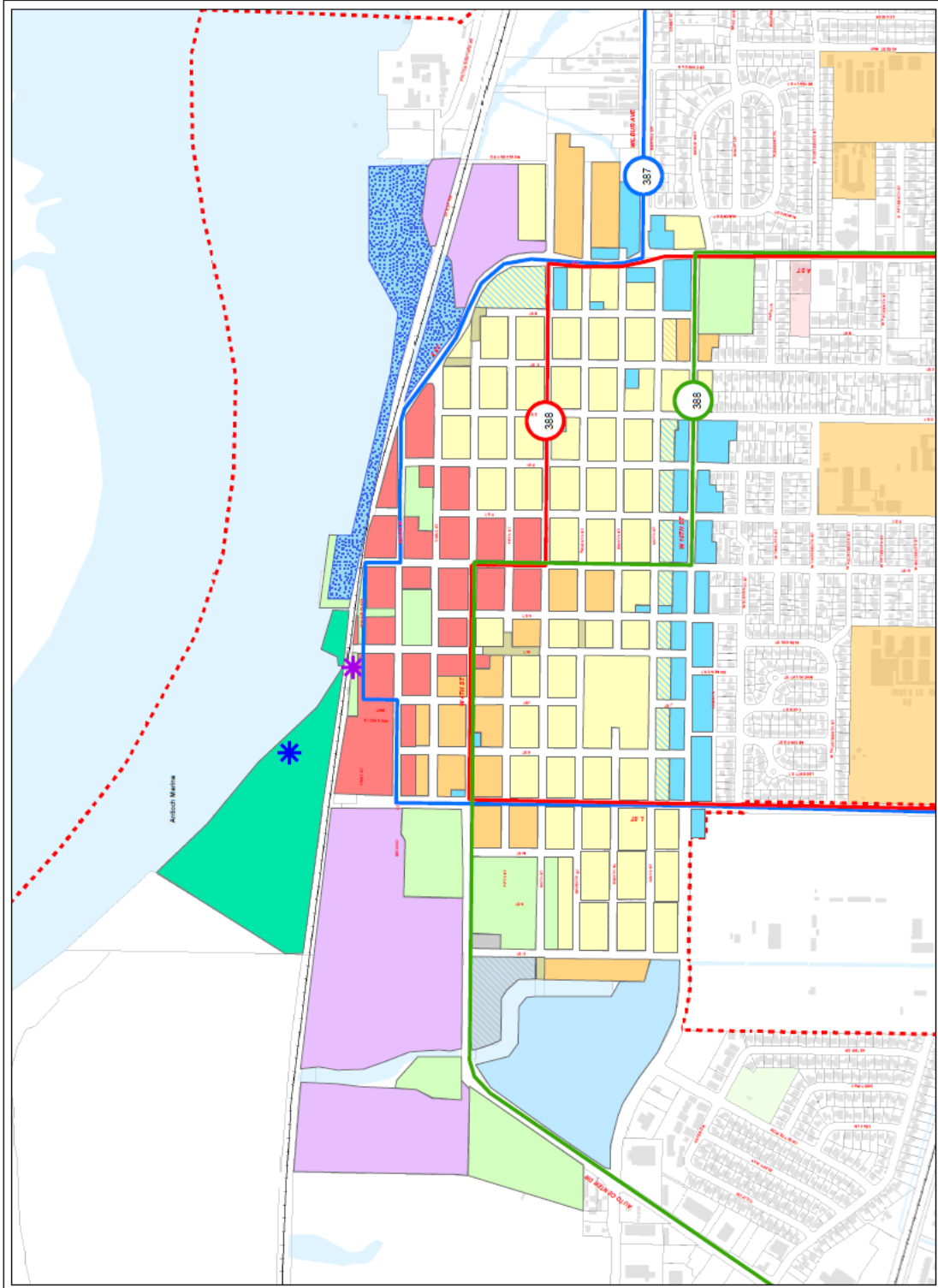
Objective CA-F: Reduce transportation demand by promoting alternative modes of transportation and ridesharing.

Implementation CA-21: As development occurs within the Downtown, consider transportation demand management strategies as part of the approval process, which can include:

- Promote alternative modes of transportation:
 - Work with Tri-Delta Transit and Bart to promote regional transit service. Refer proposed development projects to Tri-Delta Transit, and require the provision of bus bay turnouts and bus stops where appropriate.
- Promote bicycling to work:
 - Ensure buildings contain bicycle parking facilities, showers, and clothes locker facilities.



Downtown Specific Plan - Circulation



Downtown Specific Plan - Transit

City of Antioch GIS

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5.0 Environmental Quality

A high level of environmental quality is a key factor in the Downtown Specific Plan Area for ensuring the maintenance and improvement of the health and safety of all residents, employees, and visitors in the Downtown, as well as protecting the ecological web and natural habitats. This Plan establishes goals and policies which, based on General Plan policies and other local, State, and federal regulations, help mitigate any potentially negative impacts of development or activity that might adversely affect the public health and safety. This chapter of the Plan addresses noise, air quality, and biological resources.

The Existing Conditions: Opportunities & Constraints report prepared in preparation for the Downtown Specific Plan and General Plan Update in February 2015, evaluated the potential constraints that noise, air quality and biological resources may pose to the various opportunities for revitalization of Antioch's Downtown Area. Included in that report are descriptions of the fundamentals of noise, air quality and biological resources, a summary of applicable regulatory criteria, and the results of monitoring surveys that were prepared for the City. This chapter relies on, and incorporates by reference the information in the Existing Conditions: Opportunities & Constraints report related to noise, air quality, biological resources and land use compatibility with respect to local policies, and to identify potential constraints and solutions.

5.1 Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. Noise exposure that is excessive can cause negative physical and psychological effects, in addition to interfering with speech, concentration and performance. These responses are especially adverse for noise-sensitive receptors, including schools, religious institutions, hospitals, convalescent homes, and residences. Antioch's General Plan Section 11.6 Noise Objective and Policies, and Section 2.6 Noise Constraints of the Existing Conditions: Opportunities and Constraints Report (incorporated herein by reference) identify how sound levels are measured, such as in decibels (dB), typically through an "A-weighted" scale, which emulates human hearing (all sound levels in the Antioch General Plan are A-weighted (dBA), unless specified otherwise - see Figure 11.1 in the General Plan, and Table 5.1.1 below).

Existing Noise Environment

The most significant sources of noise in the Downtown Area are generated when trains pass through, and train horns sound along the Burlington Northern Santa Fe (BNSF) Railroad line that runs east-west through Downtown along the waterfront and from automobile/truck traffic on Downtown streets.

An outdoor noise monitoring survey was conducted for the Existing Conditions: Opportunities & Constraints Report in 2014 to quantify existing noise throughout the Downtown. The survey found that there is the potential for noise impacts on new development from the BNSF Railroad. Therefore, at the time of new development being proposed in the Downtown, an up to date noise analysis would be required, if appropriate, to evaluate the potential for any noise impacts per CEQA, and the necessity of requiring any mitigation measures for noise attenuation.

Objectives and Implementation Measures

Objective EQ-A: Ensure that the Downtown is a pleasant place to live and work by protecting residents, workers and visitors from noise that affects comfort and health, while accommodating a mix of land uses in the area. Rail transportation-related noise is the most dominant source of noise within the Downtown. Through the General Plan and this Plan, the City is working to ensure maximum attenuation of noise effects along the Downtown rail corridor.

Implementation EQ-1: Require that new residential and other noise sensitive land uses within 200 feet of the rail line incorporate adequate noise attenuation into the design and site planning of the project, if needed, in order to achieve compliance with Chapter 11, Environmental Hazards, Section 11.6.1 Noise Objective and Section 11.6.2 Noise Policies of the General Plan, and CEQA. Conversion of existing buildings with non-residential or non-noise sensitive uses, to residential or noise sensitive uses are to comply with the General Plan noise objective and policies, to the extent possible, given the limitations of the original building siting and design.

Implementation EQ-2: Explore the potential benefits and costs of a railroad Quiet Zone, while still ensuring that safety is maintained at grade crossings.

5.2 Hazardous Materials, Flooding, and Air Quality

The Downtown Specific Plan, similar to other urban infill plans, must address the public health risks associated with hazardous materials and toxic air contaminants, as well as the risk of flooding. This section describes these hazards and includes policies designed to reduce the potential risks associated with Plan buildout.

Hazardous Materials

Hazardous materials are substances with physical or chemical properties that pose an existing or potential future hazard to human health or the environment when improperly

handled, disposed, or otherwise managed. Hazardous materials and wastes are extensively regulated by Federal, State, regional, and local agencies. The California Department of Toxic Substances Control has identified the former Hickmott Cannery site at the intersection of 6th and A Streets, Downtown, as a contaminated site. This location may face challenges associated with previous uses on the site, which has resulted in contamination that must be cleaned up before new uses can be developed. Section 11.7 Hazardous Material Objective and Policies of the General Plan is incorporated by reference into this Specific Plan related to this matter. Project-specific investigations will be necessary for projects on or adjacent to this or other Downtown sites that may contain contamination; to ensure that potential health risks are fully addressed per the Contra Costa County Hazardous Waste Management Plan and CEQA.

Flooding

Portions of the Downtown are located within the 100 year flood zone (areas subject to inundation by the one percent annual chance flood event), or are prone to flooding during times of heavy rain. Per General Plan Section 11.4, Flood Protection Objective and Policies (incorporated by reference into this Specific Plan), a 100 year flood hazard zone runs adjacent to the San Joaquin River. In the vicinity of B Street, the 100 year flood hazard zone extends from the San Joaquin River south across the BNSF Railroad, and then spans East Antioch Creek. This flood zone is approximately 1,600 feet wide, just south of the Railroad. Prior to any new development in areas prone to flooding, potential impacts, and any necessary mitigation measures would need to be determined through the CEQA process.

Air Quality

Toxic air contaminants (TACs) are air pollutants that may cause or increase mortality or serious illness, or that may pose a present or potential hazard to human health, and are linked to both short-term (acute) or long-term (chronic and/or carcinogenic) adverse human health effects. A challenge for the Plan is to ensure adequate buffers and/or mitigation measures between sensitive receptors and existing and potential sources of TACs. A significant, common source of TACs is onroad motor vehicles, such as trucks and cars (mobile sources). In Downtown Antioch, another significant source of TACs and airborne carcinogens is the BNSF Rail line.

Potential health effects related to air quality from railroad traffic along the BNSF rail line in Antioch was evaluated in the Existing Conditions: Opportunities & Constraints Report. The evaluation found that there is the potential for air quality impacts on new development within 200 feet of the BNSF Railroad. Therefore, at the time of new

Downtown development proposals, a project level TAC and Greenhouse Gas analysis would be required, if appropriate per CEQA, to evaluate the potential for any air quality impacts, and the necessity of requiring any mitigation measures for air filtering or other measures.

Objectives and Implementation Measures

Objective EQ-B: Ensure that the exposure of new development in the Downtown to hazards is minimized.

Implementation EQ-4: Due to the presence of the BNSF Railroad in the Downtown, and the related potential for toxic air contaminants, the potential for localized flooding, and the possibility of limited areas of soil contamination, development within the Downtown will require careful assessment to ensure that potential air quality, flood and soil contamination environmental and/or health risks are fully addressed.

Implementation EQ-5: For proposed development within 200 feet of the BNSF Railroad line, air quality risk analysis and risk reduction strategies (including for airborne carcinogens), if needed, would have to be considered for any project during environmental review on a case-by-case basis. Mitigation, including but not limited to, installation of indoor air quality equipment, such as mechanical high-efficiency particulate air filtration systems (HEPA filters), or equivalent mechanisms to minimize health risks for future residents, may be appropriate, if so determined by an air quality analysis.

Implementation EQ-6: Require new large commercial projects to prepare a loading plan aimed to minimize truck idling and reduce diesel particulate emissions related to truck loading.

Implementation EQ-7: Require standard temporary construction air quality mitigation measures for all proposed projects, as applicable.

Implementation EQ-8: Ensure new projects within the 100 year flood zone, or areas prone to flooding are designed to reduce flood risk, per General Plan Section 11.4, Flood Protection Objective and Policies, and CEQA. Strategies include site planning to minimize flood risk and applying flood safe standards to new construction.

Implementation EQ-9: Require remediation and clean up of any contaminated sites prior to development in the Downtown, in accordance with federal, State, County, General Plan Section 11.7 Hazardous Material Objective and Policies, and CEQA standards.

5.3 Biological Resources

With its proximity to the San Joaquin River, and other sensitive natural habitat areas, Downtown Antioch is part of a regional biological resource environment in which continuing urbanization, including infill development, may continue to affect the range, population and overall health of a number of special status plants and animals. Although the Downtown is mostly urbanized, containing primarily developed residential, commercial, and public uses, there are a few vacant sites. New development and reuse of previously urbanized properties in the Downtown may impact biological resources, depending on the location and scale of improvements, and the manner in which improvements are planned.

Biological Resource Habitats

As detailed in Section 2.8, Biological Resources, of the Existing Conditions: Opportunities and Constraints Report, and Section 10.4 biological Resources Objective and Policies of the General Plan (both of which are incorporated herein by reference), the Downtown is directly adjacent to 3 biologically sensitive areas: (1) San Joaquin River; (2) Antioch Dunes National Wildlife Refuge; and (3) Dow Wetland Preserve. These resources support a diversity of plant, animal and bird species surrounding the Downtown. In general, developed areas are considered to contain low biological sensitivity. Areas mapped as Non-native Grassland and Ruderal as well as Undeveloped Areas adjacent to highly sensitive habitats, are considered to be of moderate sensitivity. A high level of sensitivity is associated with other habitat types, including Open Water, Riparian, Seasonal Wetland, Tidal Wetland and Creek habitats. Most Downtown sites available for new or revitalized development are located within areas of low to moderate sensitivity. However, site-specific conditions within these properties will need to be further evaluated as part of the environmental and development review process, prior to approval of any development.

Special Status Resources

Figure 5.3.2 identifies the known occurrence and range of several special status animals identified in the California Natural Diversity Database (CNDDDB) which may be present within or directly adjoining portions of the Downtown Area, including the California tiger salamander, Delta smelt, Lange's metalmark butterfly, longfin smelt, salt-

marsh harvest mouse, steelhead – Central Valley DPS, western pond turtle and western red bat. Figure 5.3.3 identifies those listed CNDDDB bird species likely to be nesting and/or foraging within the Downtown Area, including the song sparrow. Shoreline areas are known to contain a higher number of special-status species including fish, plants and terrestrial wildlife due to the interface of multiple habitat types. Riparian and wetlands habitat types are also biologically diverse with numerous special-status species occurrences. Butterfly, bat and avian species are mobile and are therefore generally identified on the CNDDDB maps rather than specific locations. Specific habitat types must be present for their occurrence. While not identified on the map, special-status fish species such as steelhead may utilize portions of the two creek channels. A number of CNDDDB listed special status plants are known to occur within or adjoining the Downtown Area, and are shown in Figure 5.3.4. The Dune and Shoreline areas are known to contain a higher number of special-status plant species due to the interface of multiple habitat types. These special-status plants are normally associated with non-disturbed native habitat types.

Biological Constraints

Figure 5.3.5 provides an overall summary of biological constraints which affect future development and use of properties within and adjoining the Downtown Area. The classifications of Low, Medium and High levels of potential constraints are based on the following factors:

- Low – Assumes existing development is present.
 - Minimal or no biological sensitivity.
 - Primary biological concerns include potential presence of bat species in buildings and nesting avian species in vegetation.
 - Assumes that no resource agency permitting would be required.
- Medium – Assumes no development but may include managed (disked) lands or areas which have experienced minor grading in the past.
 - Includes moderately sensitive habitat.
 - Biological concerns would include potential for special-status plants and wildlife species typical of grassland communities including burrowing owls, California tiger salamander, Lange's metalmark butterfly, and various avian species.
 - Resource agency permits may be needed depending on presence/absence of listed plant and wildlife species.
 - Species mitigation may be required.

- High – Assumes presence of native habitat or areas which have experienced little or no disturbance. Would also include shoreline areas and those areas adjacent to creeks or containing wetlands.
 - Includes highly sensitive biological habitats.
 - Biological concerns would include high probability for occurrence of federally and state listed plants and wildlife species typical associated with dune, creek, wetland and shoreline communities.
 - Resource agency permits would be needed for activities in these areas.
 - Habitat and species mitigation would be required.

Several key Downtown sites may either contain or directly adjoin areas of High constraint sensitivity, indicating the need for further analysis and documentation of avoidance or mitigation of the specific potential constraints, per CEQA, prior to any development activity.

Objectives and Implementation Measures

Objective EQ-C: Protect and improve the quality of biological resources and habitat areas.

Implementation EQ-10: Where feasible, allow public access in the form of open space or a multi-use trail along the, and incorporate interpretive signage for educational purposes in public access areas along the River.

Implementation EQ-11: Encourage new development to face the River and to promote public access to the River front.

Implementation EQ-12: Require that proposed development sites that may include habitat that supports special-status species with a moderate or greater potential to exist in the Downtown, inventory sensitive resources, and develop adequate measures to avoid or mitigate any impacts. The inventory must be conducted by an independent, qualified biologist, and follow guidelines established for federally-listed species. If special-status species are identified, an avoidance strategy must be pursued where feasible.

Implementation EQ-13: Comply with all applicable Federal, State, CEQA and City regulations and policies for biological resource protection, prior to any new development activity.

5.4 Seismic Hazards Identification and Mitigation

Eastern Contra Costa County, as well as the San Francisco Bay Area as a whole, is located in one of the most seismically-active regions in the United States. Although no known active faults are located within Antioch, per General Plan Section 11.3 Geology and Seismicity Objective and Policies (incorporated herein by reference), major earthquakes have occurred near Antioch in the past, and can be expected to happen again in the near future. There is at least a 70 percent probability of at least one magnitude 6.7 or greater earthquake to occur on one of the major faults within the Bay Area before 2030. The Hayward Fault, in the Berkeley Hills, is approximately 30 miles west of Downtown. This fault is considered the highest risk for major damage in the Bay Area, as it is overdue for a major earthquake, and this fault is capable of producing quakes of up to about magnitude 7. Buildings constructed since the 1970's in California have incorporated seismic safety design and construction factors of various levels aimed at protecting life safety and structures. Buildings constructed prior to the 1970's pose potential seismic hazards in the event of a strong earthquake.

Buildings at Risk Due to Earthquakes

The City of Antioch has identified 57 properties located north of State Route 4 which contain structures that are potentially unsafe during major seismic events. All except one of these properties is situated within the Downtown (see Figure 5.4.1, Sub-Area 1, below). The buildings on these properties are reported to have been built with unreinforced masonry structural walls. Per the General Plan, unreinforced masonry buildings (URMs) constructed of brick or concrete block pose the most severe hazards. Under strong intensity ground shaking, many of these structures may be expected to collapse or require demolition, as has occurred in strong earthquakes in downtowns with URMs in Santa Cruz, Napa Valley, and Whittier. The City has sent letters to the owners of all 57 properties noted above, to notify the owners that their buildings are potentially unsafe in a seismic event. Many of these identified structures do not comply with State Law requiring seismic risk placard noticing. These properties represent both an opportunity to structurally improve or replace the existing structures with earthquake safe buildings, and are a constraint to private investment (and safety risk), due to the additional cost associated with seismically improving a property as opposed to simple reuse of the existing structure.

Low lying portions of the Downtown adjacent to the San Joaquin River could be affected by a seismically generated tsunami. However, projected wave height and tsunami run-up is expected to be small in the interior portions of the Delta. Some coastal inundation and damage could occur in Antioch if a tsunami coincided with very high tides or an

extreme storm. Per the United States Geological Service, and as shown on General Plan EIR Figure 4.5.4, some areas of Downtown adjacent to the River have a very high to low potential for liquefaction in the event of a significant earthquake. New construction or significant remodels in the high risk areas will be subject to seismic analysis as part of the City's building plan review process.

Objectives and Implementation Measures

Objective EQ-D: Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from seismic groundshaking and other seismic events.

Implementation EQ-14: Comply with the Geology and Seismicity Policies in the General plan.

Implementation EQ-15: Explore the potential adoption by the City of a Seismic Hazards Identification and Mitigation Program for URM's in Antioch, similar to the program adopted by the City of El Cerrito in 2009.

Implementation EQ-16: Require that all URM's identified by the City post seismic hazard risk signs on the exterior of their building, as required by State law.

Implementation EQ-17: Provide information to and explore the establishment of incentives for property owners to rehabilitate hazardous URM buildings (such as reductions in permit fees, and expedited plan checking), using updated construction techniques to mitigate seismic hazardous posed by their buildings.

5.5 Cultural and Historic Resources

Downtown Antioch's historic buildings contribute largely to its community character and identity. Section 10.9 Cultural Resources Objective and Policies of the General Plan (incorporated herein by reference), states that prehistoric cultural resources in the San Francisco Bay Area tend to be located near sources of fresh water, and along the bay or Delta shore. Prehistoric and historical archaeological sites and fossil sites have been recorded in Antioch. The Downtown waterfront is a distinctive on- and off-shore cultural and historic resource containing shipwrecks mapped offshore, and many of the City's most historic buildings. Fifty-six Antioch buildings and four monuments to vanished sites are listed on national, state, and local registers of historic properties and landmarks.

The Directory of Properties in the Historic Property Data File (HPD), maintained by the State Office of Historic Preservation, is a master list of all resources that have been evaluated for potential eligibility for State and national registers of historic places. The HPD listing for Antioch, as of February 2001, forms Appendix B of the General Plan. The Antioch Historical Society maintains a separate list of City landmarks. Downtown historic resources are also listed in the General Plan EIR.

Objectives and Implementation Measures

Objective EQ-E: Preserve archaeological, paleontological, and historic resources within the Downtown for the ambiance, cultural benefit, and education of future generations.

Implementation EQ-18: Comply with Section 10.9.2 Cultural Policies of the Antioch General Plan.

Implementation EQ-19: Prior to approval of any planning permit approval or permit for construction, alteration or demolition, an in-depth study/assessment shall be prepared to determine if the site and/or building is a significant cultural and/or historic resource (as defined by CEQA). The study shall be prepared by an archeologist and/or architectural historian or professional that is knowledgeable of cultural and/or historic resources and local, state and federal cultural/historic preservation regulations.

Implementation EQ-20: Development and construction involving alterations, additions, or exterior modifications shall meet the Secretary of the Interior's Standards. The improvements shall also be designed to consider the Antioch Design Guidelines.

6.0 Public Facilities, Services, and Infrastructure

This Plan anticipates that the Downtown will experience future residential and commercial growth and development. A complete network of public facilities, services, and infrastructure will be necessary to support existing and new residents and businesses. This chapter describes the major utility systems serving the Downtown, and the additional facilities, services and infrastructure that will be required under future potential buildout of this Plan, and includes policies to ensure a high quality environment in the Downtown.

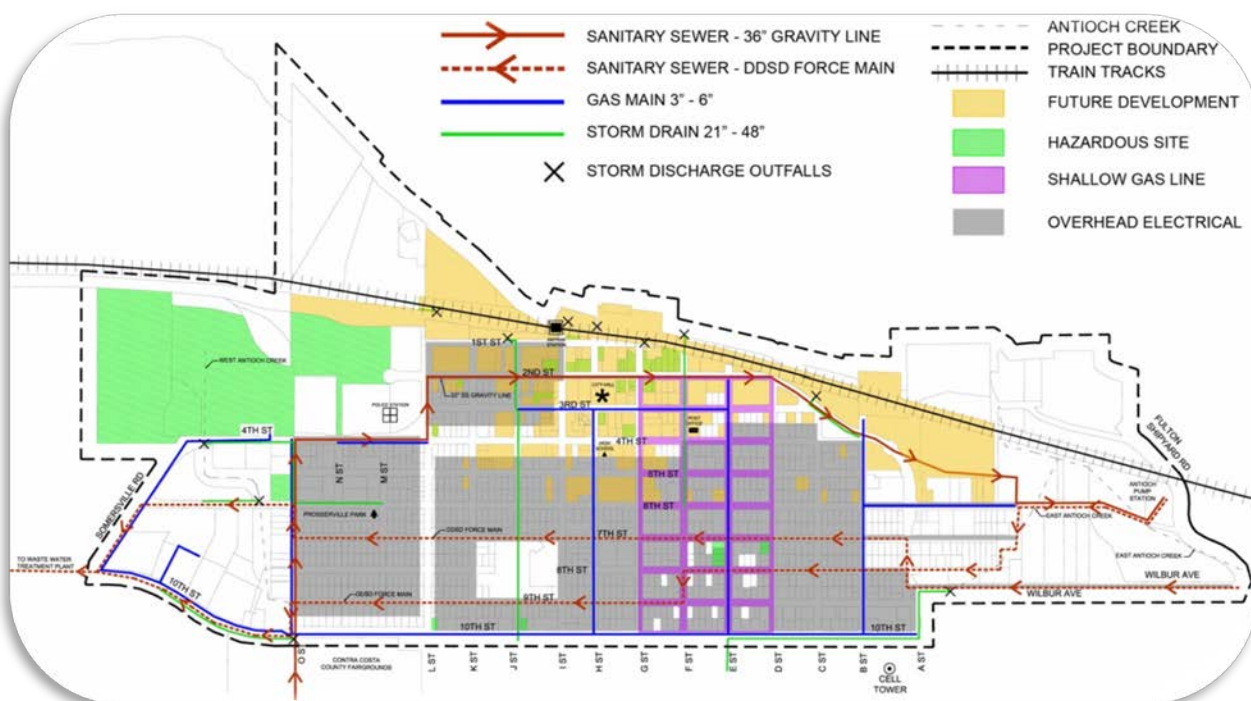
6.1 Sanitary Sewer Service

Antioch's Sanitary Sewer system consists of gravity sewer systems, manholes, cleanouts and other access structures. In addition to the City owned and operated wastewater systems, there are several other sewer conveyance facilities that are owned and operated by Delta Diablo Sanitation District (DDSD). The Downtown includes several gravity lines flowing northerly towards the San Joaquin River, and then flowing easterly towards the Antioch Pump Station (APS). This area also includes two force mains flowing westerly from the APS to the Waste Water Treatment Plan (WWTP) located west of Antioch, which is owned and operated by DDSD.

Utility System Constraints

Figure 6.1.1 shows utility constraints in the Downtown, including for sewers, as described more fully in Chapter 2.7.2. of the O & C Report.

Figure 6.1.1 Summary of Utility Constraints within Downtown



Following are the key constraint issues identified for Sanitary Sewer Facilities within the Downtown Area:

- The City's Sewer Master Plan indicates that most of the main line pipes were built prior to 1960. Pipes of that vintage may have cement mortar joints. After 1960 sewer pipe joints were primarily rubber compression, with improved leakage protection. The Master Plan identifies leakage from aged pipes combined with the high groundwater table as a possible cause of infiltration and inflow problems. However, the City lacks current information and soils samples regarding sewage leaks due to pipe joints. Consequently, soil sampling within the Downtown may be considered at the time of major new development to help determine if there are any potential leak issues that might need to be addressed.
- The Sewer Master Plan also identifies a few segments of the 33-inch sewer main along West Second Street between I Street and J Street, and along the A Street extension between A Street and D Street, as having negative slopes. Negative pipe slope has the potential to create a pressure system in gravity pipes that can reduce system capacity that may need to be improved at the time of major future development and/or significant land use intensification.
- The sewer system has been computer modeled using HYDRA. The Master Plan calls for using unit flow factors to forecast population and land use demands. That methodology will be used to evaluate sewer capacity needs associated with future major development and land use intensification proposals.
- DDSD has identified potential capacity restrictions in the trunk line from the Wilbur overpass to the Antioch Pump Station located east of Downtown, resulting in: (a) The occurrence of diversions to storage at APS Equivalent Storage Basins (ESB) during peak dry weather flow (PDWF); (b) Overflow at APS ESB during peak wet weather flows (PWWF); and (c) Surge in the collection system. To address the above limitations, DDSD's Master Plan identifies a phased construction process consisting of the following:
 - Eliminating the Bridgehead gravity lines to APS and connecting FM-1 & FM-2 to AFM-102 via a 24-inch force main. APS operating only on AFM-101 with existing pumps.
 - Upgrade pumps at APS to have capacity equivalent PDWF and optimize use of existing storage at ESB.

6.2 Electrical Service

Existing Conditions

Downtown has streets with overhead power lines and streets that are underground, as shown on the PG&E record maps (and summarized in Figure 6.1.1). The City has previously undergrounded electrical lines on L Street between Tenth and Fourth Streets, Fourth Street, and portions of Third Street, Second Street and First Street. With the exception of L Street, the following streets still have overhead electrical between O and A Streets: Fifth; Sixth; Seventh; Eighth; and Ninth Streets.

Electrical System Constraints

1. As shown on the Utility Constraint Map, there remains an island of overhead power lines in the Downtown bounded by L Street, I Street, First Street, and Third Street. This island of overhead power lines could be funded as a potential underground utility district, under PG&E Rule 20A.
2. The City receives a Rule 20A allocation of \$212,000 per year. The PG&E procedure to process and design a Rule 20A undergrounding project requires approximately 5 years. The City's Rule 20A funds are estimated to reach nearly \$1,000,000 in 2020. The City also has the option of borrowing 5 years into the future, so there could be significant Rule 20A funding available for a Downtown undergrounding project by 2020.

6.3 Water Service

Existing Conditions

The City owns and operates the water system in Downtown. Water is supplied to the City from via the San Joaquin River through an inlet at the Roger's Point boat ramp. The water system is divided into Zones 1 and 2. The Downtown is primarily in Zone 1. Zone 2 is the area west of O Street towards Auto Center Drive and the Pittsburg Antioch Highway. Within Zone 1 the pipelines range from 2" diameter to 24" diameter. 24" ductile iron waterlines lie within D Street, and there is a 16" ductile iron waterline in Fourth Street near the Police Station. A 12" cast iron pipe loop system encompasses K, Second, A, and Ninth Streets, with portions of Ninth Street being asbestos cement pipe.

Water System Constraints

Future development within the Downtown could be constrained by available fire flows and pressures in the City water system. The City estimates that pressure readings for Downtown range from 40 psi around Tenth Street to 48 psi around First Street. The City does not have current flow readings. Therefore, at the time that future major development or land use intensification is proposed, analysis of water system capacity

in that vicinity, with localized fire flow and pressure readings would be needed to confirm fire flow and pressure readings at existing fire hydrants.

6.4 Gas Service

Existing Conditions

As shown in Figure 6.1.1, PG&E gas line service for Zone 3, from Somersville Road to Marie Avenue (West to East) and from the San Joaquin River shoreline to Tenth Street (North to South), is via gas mains that vary from 2" through 6" within the Downtown. Gas laterals varying in size from ¼" to 1" serve residential units, and some laterals larger than 1" serve commercial and industrial establishments. The majority of the gas main pipes consist of welded steel pipe with some smaller segments of plastic pipe.

A 6" gas main is located along Tenth Street from A Street to E Street, which reduces to a 4" pipe beyond E Street to Somersville Road, and ties back into an existing 6" gas main. There are two 6" gas mains along Somersville road within the Downtown. The 4"- 6" gas main along Tenth Street has several 2"- 6" laterals feeding the Downtown. An existing 6" gas main is located along B Street up to Fourth Street. An existing 3" line runs along F Street from West Tenth to Second Street. A 4" gas main on H Street runs to Third Street and on O Street up to Fourth Street. Several other smaller 2" gas mains are located along other streets.

Gas Line Constraints

1. In October 2014, it was learned from PG&E that there are shallow and old gas lines in the Downtown. The shallow gas lines shown in Figure 6.1.1 are less than 24" deep in the areas between G Street and D Street, and Second Street and Tenth Street. City staff has encountered some shallow gas lines in the Downtown during various roadway reconstruction and concrete replacement activities.
2. Any development and/or major expansion or renovation of existing buildings within the vicinity of these shallow lines must address the potential risks associated with rupture and/or leakage, prior to approval of building improvements. Such an effort will draw from information from PG&E regarding their on-going program to replace old gas lines, and examination of the process to increase the priority level for funding of such efforts within the Downtown.

6. 5 Cellular Service

Existing Conditions

Per the leased cell tower record drawing for Antioch, dated October 2014, the closest cell tower to the Downtown is at the City Park on Tenth and A Streets. This is the only cell tower north of Highway 4.

Cellular Service Constraints

Cell phone reception in the Downtown is reportedly poor for all carriers, based on Downtown stakeholder input from late 2014. This is in part based on Downtown's location at the edge of the wide San Joaquin River. This limitation, if it continues, could be a disincentive for businesses and residents considering locating within the Downtown. Improvement of service may come with pressure on cell providers from new residents or businesses. Better service could require placement of one or more cell antennas within the area.

6.6 Storm Drainage

Existing Conditions

The City's storm drainage conveyance system is designed to capture, direct, and convey peak storm flows away from buildings, thereby protecting life and property from flood hazards. The mean annual precipitation in Downtown is 13 inches. The drainage flow is primarily from south to north.

As shown in Figure 6.1.1, there are 12 different storm drain systems present, and each system ultimately discharges into the San Joaquin River. Storm drain pipe size varies anywhere from 6" to 72". There are seven different discharge locations into the San Joaquin River, one into the East Antioch Creek, and three into the West Antioch Creek.

Storm Drainage System Constraints

Future development and reuse of existing buildings within the Downtown Area will be affected by the following storm drain system issues:

1. FEMA's Flood Insurance rate map identifies the majority of the area surrounded by West Antioch Creek between L Street and Somersville Road north of West Tenth Street, as designated Flood Zones where base flood elevations will need to be analyzed.
2. At times of heavy rains and high tides, storm drains may overflow onto some industrial parcels. Interviews conducted as part of the public outreach process included reports of flooding on several sites within the Downtown (including developed properties). Additional hydrology/hydraulics information will be requested

from at the time of development to analyze storm drain capacity and provide any needed improvements.

6.7 Emergency Services

Antioch Emergency Response Plan

As more fully described in Chapter 11.8, Disaster Response, of the General Plan, and in Chapter 4.5, Geologic and Seismic Hazards, of the General Plan Update EIR (and as incorporated herein by reference), the City's approved 1996 Emergency Plan addresses response to disasters, including but not limited to earthquakes, floods, fires, hazardous spills or leaks, major industrial accidents, major transportation accidents, major storms, airplane crashes, environmental response, civil unrest, and national security emergencies. The plan outlines the general authority, organization, and response actions for City staff in case of disaster. Emergency Operations Centers are maintained by the City at the Police Station and the Water Treatment Plant. The objectives of the plan are to reduce life, injury, and property losses through effective management of emergency forces.

Objective and Implementation Measures

Objective PF-A: Continue to successfully provide, maintain and operate infrastructure, public utilities and emergency preparedness that protects life and property, and maintains the quality of life and sustainability of the Downtown.

Implementation PF-1: Continue efforts to safeguard the quality and availability of water supplies.

Implementation PF-2: Actively pursue and secure additional water sources and supplies for the City to meet the community's future water needs.

Implementation PF-3: Implement needed infrastructure improvements at the time of development and/or if and when other funding sources become available.

Implementation PF-4: To reduce water consumption, require new development to install all standard water conservation fixtures, irrigation and landscaping, and also that they include the use of rainwater harvesting systems, bioswales and rain gardens in planting areas and curb extensions.

Implementation PF-5: To the extent possible, extend recycled water infrastructure to

serve new development areas, require new development to be plumbed to receive recycled water for landscape irrigation, and require that all new and retrofitted water connections to the potable system use recycled water to the greatest extent feasible for irrigation, provided adequate recycled water can be reliably delivered to the user.

Implementation PF-6: Support local utility providers in the undergrounding of utilities. Work with PG&E and other public agencies to underground existing overhead utility

lines to the extent feasible.

Implementation PF-7: Refer to the Fire Protection Objective and Policies in Chapter 8.10 of the General Plan.

Implementation PF-8: Refer to the Police Services Objective and Policies in Chapter 8.11 of the General Plan.

Implementation PF-9: Refer to the Disaster Response Objective and Policies in Chapter 11.8 of the General Plan

6.8 Public Facilities

Public facilities in the Downtown include City Hall, the Police Station, Animal Services, City Corporation Yard, Waldie Plaza, the Marina and Barbara Price Marina Park, Prosserville Park, the Contra Costa County Fairgrounds, the Antioch Unified School District Administration Building, Nick Rodriguez Community Center, and the Senior Center. These facilities provide important services to the community, including administrative and public safety, recreation, and entertainment. Some serve as public meeting places and venues where citizens can communicate face to face with their elected and appointed officials, and City staff.

Objective and Implementation Measures

Objective PF-B: Continue to provide, and enhance as necessary, high quality public facilities that facilitate daily operations and services provided by the City to its citizens.

Implementation PF-10: Maintain City Hall in the Downtown as the focal point for citizens to obtain information and City services, and participate in public meetings of the City Council, Boards and Commissions.

Implementation PF-11: Maintain the Nick Rodriguez Community Center and the Senior Center to provide ongoing social, civic and recreational activities for the public.

Implementation PF-12: Refer to the School Facilities Objective and Policies in Chapter 8.8 of the General Plan.

Implementation PF-13: Refer to the Parks and Recreation Objective and Policies in Chapter 8.9 of the General Plan.

7.0 Implementation

- **General Plan and Zoning Ordinance Amendments**
- **Implementation Program and Phasing**
- **Infrastructure Financing Strategies**



2.0 rivertown design guidelines

2.1 introduction

The purpose of this chapter is to present design guidelines for both new development and redevelopment of older structures within the city's traditional commercial district in Rivertown. Rivertown is bounded by the San Joaquin River on the north, L Street to the west, 10th Street to the south, and "A" Street to the east. These guidelines are intended to reestablish the commercial core of Rivertown as the heart of Antioch by promoting active street life and high standards in architectural design and construction.

The Antioch area was first a portion of a "Rancho", a land grant given to citizens of Mexico after it gained independence from Spain in 1821. Land from one of these ranchos was purchased for the establishment of Smith's Landing, now the Rivertown area,

that was renamed Antioch on July 4, 1851, after the biblical city. The waterfront location and facilities served Antioch well with the establishment of the Empire railroad in 1878 and two steamship lines from San Francisco landing daily at the wharves. In the 1900's Antioch expanded around the Rivertown "heart" of the city and became a manufacturing center for diversified industries. Today it is experiencing dynamic growth as housing is developed for the increasing population of the Bay Area.

Antioch is home to a variety of historical resources ranging from landmark commercial buildings to Victorian, Craftsman, and modern style homes to churches, schools, and civic buildings. The Rivertown waterfront is still a distinctive resource containing numerous shipwrecks mapped offshore and many of the City's most historic buildings. Fifty-six Antioch buildings, four monuments and vanished sites are listed on national, state, local registers of historic properties and landmarks adding to the overall historical context of this dynamic waterfront city.



Figure 2.1.1 Rivertown

2.2 design objectives

2.2.1 Promote Contextual Architectural Practices



Figure 2.2.1 A Rivertown building with good design components

In order to create an inviting ambiance and preserve Rivertown's historic integrity, new infill development and renovation to existing structures must be respectful of the existing architectural context. Designs that are compatible and respectful of historic buildings in the area are encouraged. Some designs may use historic ornaments in new "revival" interpretations of older styles. These may be appropriate as long as the result is visually compatible with its surroundings and the design is distinguishable as new.

2.2.2 Preserve the Original Facades/Storefronts

Historically, building modifications were made as needs changed. Many of these alterations were sympathetic to the original character of the structure and may have taken on historic significance themselves. Others were unsympathetic changes that eroded the

historic integrity of the facade. Although, changes to structures will, and need to, occur over time, the guidelines in this chapter will ensure that these changes do not damage the existing historic building fabric and that the results of building renovation enhance the overall design integrity of the buildings and therefore the community.



Figure 2.2.2 A successful blend of historic architecture and modern commerce

2.2.3. Use Traditional Facade Components

Repetition of traditional facade components creates patterns and alignments that visually link buildings within a block, while allowing individual identity of each building. These elements are familiar to pedestrians and help establish a sense of scale. The use of traditional facade components, such as display windows,



bulkheads, arches, cornice/parapets, and balconies, are required.



Figure 2.2.3 Traditional facade components such as display windows add visual interest to the pedestrian experience

2.2.4 Develop a Steady Rhythm of Facade Widths

The historical commercial lot width has led to buildings of relatively uniform width that create a familiar rhythm. This pattern, which is particularly apparent on Second and G Streets, helps tie the street together visually and provides the pedestrian with a standard measurement of his/her progress. New or renovated buildings shall reinforce the existing facade rhythm of Rivertown streets by using widths corresponding to existing widths.

2.2.5 Create a Comfortable Scale of Structures



Figure 2.2.4 A steady rhythm of facade widths creates a uniform and pleasant streetfront

Rivertown buildings shall convey a scale appropriate for pedestrian activity. For the most part, this means two- to three-story development at the back of the sidewalk. These characteristics create a friendly atmosphere that respects the historic scale of the district while enhancing its marketability as a special commercial and residential area.

2.2.6 Distinguish between Upper and Lower Floors



Figure 2.2.5 The upper floor facades exhibit more solid space than the ground floor facades

The ground floor facade of commercial buildings shall be predominantly transparent (clear windows), with a high ratio of void (windows) to solid (wall). This transparency helps to define the first floor as more open to the public. Upper floor facades typically have more solid space than the ground floor. Uniform storefront heights establish a line that helps to create a sense of scale for pedestrians. New Rivertown buildings should include the block's existing height elements and ratio of void to solid.

2.2.7. Support Pedestrian-Oriented Activity at the Sidewalk

Commercial outlets shall strive to provide visual interest to pedestrians through the goods and activities that are visible in ground floor windows.



Figure 2.2.6 Pedestrian activity is encouraged on Rivertown sidewalks by providing interest along the street front

This is not only a significant characteristic of historic commercial buildings, but also promotes the area as a lively, pedestrian-oriented commercial district. Therefore, window placement shall enhance pedestrian visibility of goods and activities, and they shall be kept free of advertising and non-product related clutter (e.g. backs of display cases, etc.). An abundance of clear, transparent glass also instills a sense of safety for pedestrians since they sense that employees and patrons are monitoring the sidewalk. In contrast, storefronts with blank or solid opaque walls degrade the quality of the pedestrian experience.

2.2.8. Highlight the Importance of the River to Rivertown

The San Joaquin River is an integral part of Rivertown's character, but some sites and

buildings do not take advantage of access to and views of the river. Where possible, new development and renovated buildings shall promote physical and visual connections with the river.



Figure 2.2.7 New development and renovated buildings shall promote physical and visual connection with the San Joaquin River



2.3 site planning

New infill buildings shall reinforce the pedestrian-orientation of Rivertown by providing storefronts next to the sidewalk and locating parking areas away from the street. The long term goal is to institute shared parking by providing conveniently located parking garages.

2.3.1 Building Placement

A. The ground floor of any new building shall be located near or along the front property line, particularly on Second and G Streets. The front building facade shall be placed parallel to the street.



Figure 2.3.1 The Ground Floor of any new building shall be located near or along the front property line

B. Wherever possible, minimizing side yard setbacks between buildings or utilizing a zero setback from the side property line(s) is encouraged to create continuous pedestrian activity along public sidewalks.

C. Additional setbacks shall be provided at public plaza areas.



Figure 2.3.2 Front building setbacks shall accommodate active public uses such as outdoor dining

D. Buildings adjacent to or within view of the San Joaquin River shall be oriented to provide physical and/or visual connections to the river.



Figure 2.3.3 Restaurants situated along a riverfront offer an opportunity for unique atmosphere and dining experience

E. Buildings, particularly along Second and G Streets, shall use indentations to create small,

conspicuous plazas for people to sit and congregate outside of pedestrian traffic.

F. Front building setbacks, where appropriate, shall accommodate active public uses such as outdoor dining and therefore shall use hardscape and limited landscaping. Landscaping could include potted plants or flower boxes on low rail barriers surrounding outdoor dining areas.

G. When possible, pedestrian paseos shall be created in the middle of the block that extend from the street to rear parking lots, activity areas, or alleys.

H. Buildings shall be situated to face a plaza, paseo, or other public space.

I. Loading and storage facilities shall be located at the rear or side of buildings and screened from public view.

2.3.2 Street Orientation

A. Storefronts and major building entries shall be oriented to key commercial streets as well as courtyards, plazas, and the waterfront. Minor side or rear entries may also be desirable on corner lots, courtyards, and plazas.



Figure 2.3.4 Mid-block paseos connect the street with parking, activities, or alleys

B. Buildings located on corners shall include storefront design features for at least 50% of the side street elevation wall area.

2.3.3 Parking Orientation

A. Parking lots shall be located to the rear of buildings or shared parking structures.



Figure 2.3.5 The rear of the building provides a good opportunity for parking in Rivertown

B. Rear parking lot entries shall be located on side streets in order to minimize pedestrian and vehicular conflicts along Second and G Streets.

C. Driveways shall be kept to the minimum number and width required for the project.

D. Shared driveway access is encouraged whenever practical to further reduce vehicle/pedestrian interactions and safety concerns.

E. Wide, well-lit pedestrian walkways shall connect parking lots to building entries utilizing directional signs and shall be designed for public access and safety.



2.4 architectural guidelines

The design of an infill building in Rivertown, particularly its front facade, shall be influenced by the historically significant facades in the area. All contemporary infill buildings shall be compatible with these guidelines in terms of height, facade rhythm, placement of doors and windows, solid to void ratios, color and use of materials.

2.4.1 Building Height, Form, and Mass

A. Vertical mixed-use structures, with retail on lower floors and residential or non-retail commercial on upper floors, are encouraged within Rivertown (see additional guidelines for mixed-use development projects in Chapter 5, mixed-use design guidelines).



Figure 2.4.1 Vertical mixed-use structures use detailing on facades to create visual interest and reduce the overall sense of scale

B. Building heights shall enhance views of the San Joaquin River, minimize obstruction of views from adjoining structures, and provide adjacent sites with maximum sun, ventilation, and protection from prevailing winds.

2.4.2 Facades and Rhythm

New infill shall reflect the established scale and rhythm as well as the traditional lot pattern of existing Rivertown structures.

A. The characteristic proportion of height to width on existing facades shall be reflected in new infill development.



Figure 2.4.2 New construction should be similar to existing buildings in height, width and rhythm of openings

B. Building facades shall be detailed in such a way as to make them appear smaller in scale. This can be achieved through vertical and horizontal articulation such as:

1. Breaks (reveals, recesses) in the surface of the wall itself;
2. Placement of window and door openings; or
3. The placement of bay windows, balconies, awnings and canopies.

C. When a proposed infill building has two adjacent commercial structures, every attempt shall be made to maintain the characteristic rhythm, proportion, and spacing of existing door and window openings.

D. Bay windows and balconies that provide usable and accessible outdoor space for upper floor residential uses are strongly encouraged and may slightly encroach over the public right-of-way.



Figure 2.4.3 Bay windows provide vertical and horizontal articulation

E. The predominant difference between upper story openings (windows and doors) and street level storefront openings shall be preserved. Typically, there is a much greater window area (70%) at the storefront level for pedestrians to view merchandise. In contrast, upper stories window openings are much smaller (approximately 40% of facade).

F. Whenever a proposed infill building's facade is wider than the existing facades on the street, the infill facade shall be broken down into a series of appropriately proportioned "structural bays" or components, such as a series of columns or masonry piers, to frame window, door, and bulkhead components.



Figure 2.4.4 Columns help create structural bays to break up a long facade

G. Whenever an infill building is proposed, identify the common horizontal elements (e.g. canopy, awning, cornice line, window height/width and spacing) found among neighboring structures and develop the infill design utilizing a similar rhythm or alignment.



2.4.3 Building Materials and Colors



Figure 2.4.5 Minimizing the number of wall materials on a complex design enhances visual unity of design components

The complexity of building materials shall be based on the complexity of the building design. More complex materials shall be used on simpler building designs and vice versa. In all cases, storefront materials shall be consistent with the materials used on the proposed building and adjacent buildings.

A. Approved Exterior Materials

1. The number of different wall materials used on any one building shall be kept to a minimum, ideally two.
2. The following materials are considered appropriate for building walls within Rivertown:
 - a. Smooth block (excluding cinder-block)

- b. Granite
- c. Marble
- d. New or used face-brick
- e. Terra cotta
- f. Metal
- g. Stucco (smooth or hand troweled)



Figure 2.4.6 Stucco is effectively used in many architectural styles as an exterior wall material in Rivertown

3. Accent materials shall be used to highlight building features and provide visual interest.
4. Accent Materials may include one of the following:
 - a. Wood (or fiber cement look alike for replacement purposes)
 - b. Glass
 - c. Glass block (storefront only)
 - d. New or used face-brick
 - e. Concrete
 - f. Stone
 - g. Cloth (awnings only)
 - h. Plaster (smooth or textured)
 - i. Painted metal

- j. Tile (bulkhead)



Figure 2.4.7 Tile used for bulkheads on the bottom of storefronts adds color and interest

- k. Wrought iron
- l. Cut stone, rusticated block (cast stone)
- m. Terra cotta
- 5. Rooftop materials may include:
 - a. Standing seam metal roofs
 - b. Crushed stone (on flat roofs)
 - c. Built up roof system
 - d. Tile

B. Prohibited exterior wall materials

1. Reflective or opaque glass (ground floor)
2. Imitation stone (fiberglass or plastic)
3. Textured Stucco
4. Rough sawn or "natural" (unfinished) wood
5. Pecky cedar (textured wood caused by a fungus during the tree's growth)
6. Used brick with no fired face (salvaged from interior walls)
7. Imitation wood siding, excluding fiber cement may be considered on a case by case basis

- 8. Plastic panels

C. Exterior color

The intent of these guidelines is to give guidance to create a pleasing and compatible color palette for the streetscape:

1. Light colored base walls of buildings and other large expanses are encouraged. Soft tones ranging from white to very light pastels are required. Neutrals such as off-white, beige and sand are also acceptable colors.
2. Subtle/muted colors shall be used on larger and plainer buildings.
3. Additional colors and more intense colors shall be used on small buildings or those with elaborate detailing.
4. Contrasting colors shall be used to accent architectural details.
5. In general, no more than three colors shall be used on any given facade, including "natural" colors such as unpainted brick or stone.
6. No more than one vivid color shall be used per building.



Figure 2.4.8 Using one vivid color as an accent provides interest without appearing busy



7. Color shall be used to accent entrances.



Figure 2.4.9 A red door color accent this entrance and invites consumers in

8. Colors shall be harmonious with the colors found on adjacent buildings.
9. Finish material with “natural” colors such as brick, stone, copper, etc. shall be used where practical.

2.4.4 Roofs and Upper-Story Details

A. Rivertown buildings shall incorporate historic Antioch flat roofs (with decorative parapets) or gable-end roofs.



Figure 2.4.10 A typical flat roof commonly seen in Antioch

B. Vertical focal elements are encouraged and shall be incorporated as structural design elements. Towers, spires, or domes become landmarks and serve as focal/orientation points for the community.



Figure 2.4.11 Vertical elements can be community focal points

C. Materials used on the visible portion of sloped roofs shall complement the architectural style of the building and other surrounding buildings.

D. Access to roofs shall be restricted to interior access only.

E. Rooftops can provide usable outdoor space in both residential and commercial developments.

F. Roof-mounted mechanical equipment shall be screened by a parapet wall or similar structural feature that is an integral part of the building's architectural design.

2.4.5 Plazas and Paseos

Active plazas and paseos can serve as important components of a successful Rivertown.

A. Ample seating in both shaded and sunny locations shall be provided in plaza and paseo areas.



Figure 2.4.12 A plaza that contains ample seating

B. Plazas and paseos shall contain a visual and somewhat audible feature such as a sculpture, fountain, or a display pond that attracts pedestrians and serves as a landmark.

C. Any decorative paving used in plaza and paseo areas shall complement the pattern and color of the pavers used in the public right-of-way.

D. Furniture and fixtures used in the plaza and paseo areas shall complement those in the public right-of-way. Furniture and fixtures shall be selected with maintenance considerations in mind.

2.4.6 Franchise and Corporate Business

The distinct architectural designs of many franchise and corporate businesses are typically not appropriate for historic areas such as Rivertown. Franchises or national chains must respect the following standards to create unique buildings that are compatible with the existing structures and character of Rivertown.

A. Architecture

1. The scale, design character, architectural style and materials of franchise / corporate architecture shall be consistent with adjacent buildings. Natural materials, such as brick, stone, etc., shall be used where applicable.



Figure 2.34.13 Brick is a natural material that can be used for franchise and corporate businesses

2. No franchise/corporate buildings or portions thereof shall be more than two stories in height.

B. Color and Lighting

1. Color(s) used by franchise/corporate buildings shall be considered carefully to be appropriate within Rivertown.
2. Colors shall complement the existing colors used on adjacent buildings or



other buildings in Rivertown.

3. Franchise/corporate colors shall be consistent with the architectural style or period of the building.
4. Bright or intense colors are not allowed, unless on appropriate architectural styles and reserved for more refined detailing and transient features.
5. The use of symbols and logos can be utilized in place of bright or intense corporate colors.



Figure 2.4.14 This building uses a logo rather than bright or intense colors to advertise the business

6. Lighting of logos shall be compatible with the primary building and respect adjacent buildings. Bright and intense lighting is strongly discouraged.
7. The use of bright and intense neon outlining of windows is strongly discouraged. Refer to Chapter Seven for acceptable neon use in signage.

2.5 storefront design

2.5.1 Introduction

While a storefront is only one of the architectural components of building facade, it is the most important visual element of a Rivertown building. The storefront traditionally experiences the greatest degree of change during a building's lifetime and holds the greatest potential for creative alterations affecting both the character of the building and the streetscape. Traditional storefronts are comprised of a few decorative elements that repeat across the face of the building such as structural bays containing window and door openings, continuous cornice line, transoms, bulkheads. These elements help to and integrate the storefront into the entire building facade.

2.5.2 Storefront Composition

A. Entries and Doorways

One or more of the following design elements or concepts shall be utilized to emphasize the main entry to Rivertown buildings:

1. Flanked columns, decorative fixtures, detailing, recessed entryway within a larger arched or cased decorative opening.



Figure 2.5.1 Flanked columns emphasize the recessed building entry

2. Recessed entryways shall be continuously and thoroughly illuminated.
3. Entryways shall be covered by a portico (formal porch) projecting from, or set into, the building face, and distinguished by a change in roofline, a tower, or a break in the surface of the subject wall.
4. Buildings situated at a corner along Second or G Streets shall provide a prominent corner entrance to street level shops or lobby space.
5. All entryways shall be well illuminated and contain vandal resistant covers to protect lighting devices.

B. Awnings and Canopies

Awnings provide excellent opportunities for color and visual relief as well as protection for buildings and pedestrians from the elements. They add pedestrian scale and visual interest to the storefront.



Figure 2.5.2 Awnings provide color and protection from the elements

Specific awning specifications are included in the Appendix. The following criteria shall be considered when using awnings:

1. Awnings shall be compatible in design and color with the architectural style of the building.
2. Awnings provide excellent opportunities for color and visual relief as well as protection for buildings and pedestrians from the elements.
3. Awning shape shall relate to the window or door opening. Barrel-shaped awnings are only to be used to complement arched windows, while square awnings shall be used on rectangular windows.
4. Awnings shall consist of a durable, commercial grade fabric, canvas, or similar material per the specifications included in the appendix.
5. Glossy, shiny plastic, or similar awning materials are not permitted.
6. Awnings shall use one or two colors. Lettering and trim utilizing more colors is permitted, but will be considered as a sign area.
7. Where the facade is divided into distinct structural bays, awnings shall be placed between the vertical elements rather than overlapping them. The awning design shall respond to the scale, proportion, and rhythm created by these structural bay elements and "nestle" into the space created by the structural bay.
8. Frames and supports shall be painted or coated to prevent corroding.



9. Aluminum awnings or canopies do not fit the atmosphere of Rivertown and are strongly discouraged.
10. Any damaged or faded awnings shall be replaced immediately.

C. Storefront Accessories and Details

There are a number of design elements that may be incorporated into the building design, especially at street level, to add to the pedestrian experience while also meeting important functional needs.

1. Details shall be incorporated into the design to add visual richness and interest while serving functional needs. Such details include the following items:
 - a. Light fixtures, wall mounted or hung with decorative metal brackets;



Figure 2.5.3 Light fixtures are an important storefront accessory for safety and as a design element

- b. Metal grille work at vent openings or as decorative features at windows, doorways, or gates;

- c. Decorative scuppers, catches, and down-spouts;
 - d. Balconies, rails, finials, corbels, and plaques;
 - e. Flag or banner pole brackets;
 - f. Fire sprinkler standpipe enclosures and hose bib covers, preferably of brass; and

2. If security grilles are necessary, they shall be placed inside the building, behind the window display area.

D. Door and Window Design

1. Doors to retail shops shall contain a high percentage of glass in order to view the retail contents. A minimum of a 50% glass area is required.



Figure 2.5.4 Storefront doors contain a high percentage of glass for displays to entice pedestrian interest

2. Clear glass (at least 88% light transmission) is strongly recommended on the ground floor.
3. Doors can be accentuated with simple details such as a brass door pull, brass kickplate, or an attractive painted sign on glass (limited to 10% of door glass area).
4. Traditional storefront windows should be a minimum of 18" from the ground

with a minimum height of 10 feet above the sidewalk to maximize the storefront displays and retail interior.

5. In areas with buildings built before 1950, storefront windows shall be compatible with those of the older buildings.

E. Secondary Entrances

1. Secondary entrances from plazas, paseos, or rear parking area may act as a secondary storefront.
2. The rear and side entry door design shall be compatible with the front door. Special security glass (i.e. wire imbedded) is allowed.
3. Signs shall be modestly scaled to fit the casual visual character of the plaza, paseo, or rear parking area.
4. An awning can soften rear and side facades and provide a pleasant protected space.
5. Security lighting shall be modest and shall focus on the side or rear entry door.
6. Selective use of tree planting, potted plants, and other landscaping complementary to the overall design theme shall be used to improve and complement a side and rear facade.
7. Trash, recycling containers and service facilities shall be screened by a roofed structure and shall be constructed of solid masonry with metal doors. The enclosures shall complement the colors and architecture of the building.
8. Landscaping shall be used on trash enclosures and service facilities to screen walls and help deter graffiti.

2.6 lighting

2.6.1 introduction

Lighting is an important feature in a pedestrian-oriented area such as Rivertown. Residents and visitors shall feel safe and comfortable during nighttime hours.

2.6.2 general

A. Lighting fixtures shall be attractively designed to complement the architecture of the project.

B. All exterior doors, entryways, aisles, passageways and recesses shall be equipped with a lighting device providing a minimum maintained one foot-candle of light at ground level during hours of darkness.

C. Specialty lighting in trees adjacent to or within outdoor patios and restaurants shall be used to create an inviting and festive atmosphere and encourage nighttime use by pedestrians.



Figure 2.6.1 Night lighting of plazas and paseos can be used to create a comfortable ambiance



D. Lighting shall encourage the use of open spaces and plazas.

E. Vandal resistant covers shall protect lighting devices where needed.

F. Lighting sources shall be shielded, diffused or indirect to avoid glare for pedestrians and motorists.

G. Lighting shall be directed so as not to spill onto adjacent properties.

2.7 parking and circulation

2.7.1 Introduction

The design and development of off-street parking in Rivertown will focus on enhancing the pedestrian-oriented streetscape environment.

Some elements of design to incorporate are:

A. Reduce possible conflicts between vehicular and pedestrian traffic, particularly at ingress/egress points and crosswalks;

B. Reinforce the distinction between the street edge and the pedestrian environment;

C. Provide adequate on-site circulation, separate pedestrian walkways, and designated service vehicle zones;

D. Develop parking configurations that incorporate safe pedestrian circulation with a pleasant appearance through the use of canopy trees for shading, colorful accent plantings, and interesting hardscape elements;



Figure 2.7.1 Trees provide valuable shade for Rivertown parking areas

E. Minimize opportunities for crime and undesirable activities through natural surveillance, access control, and activity support;

F. Create a sense of spatial organization by providing a clear layout separating uses within the parking lot.

2.7.2 General Considerations

A. Parking areas shall be separated from buildings by a five foot minimum landscaped strip or raised concrete sidewalk. Conditions where parking stalls directly abut buildings shall be avoided.



Figure 2.7.2 A raised sidewalk separates parking from the building providing safe pedestrian circulation

B. Lighting, landscaping, hardscape, fencing, parking layout and pedestrian paths shall all assist drivers and pedestrians in navigating through parking lots.

C. Parking structures below or above ground level retail or commercial uses are encouraged since they allow for pedestrian activity along the street while providing parking convenient to destinations within Rivertown.

2.7.3 Circulation

A. Parking facilities shall be designed with clearly identified entries and exits and a designated circulation pattern.

B. Parking facilities adjacent to a public street shall provide pedestrians with a point of entry and clear and safe access from the sidewalk to the entrance of the building(s).

C. The layout of parking facilities shall be designed so that pedestrians walk parallel to moving cars.

D. Pedestrian and vehicular entrances shall be clearly identified and easily accessible to create a sense of arrival. The use of enhanced paving, landscaping, and special architectural features and details is required.



Figure 2.7.3 Pedestrian entrances are clearly identified to create a sense of arrival and provide a safe path of travel

2.7.4 Parking Facility Lighting

A. The design of light fixtures shall be compatible with the architectural style of the building.

B. Lighting for parking facilities shall be evenly distributed and at a pedestrian scale.

C. Lighting shall provide pedestrians and drivers with adequate visibility at night.



2.7.5 Landscaping

A. Surface parking facilities shall be landscaped with the following objectives in mind:

1. Maximize distribution of landscaping;
2. Promote compatibility and function as a "good neighbor" by reducing visibility into the parking area from neighboring properties; and
3. Plant one tree for every six parking spaces to provide needed shade.

B. Parking facilities adjacent to a public side street shall be landscaped to soften the visual impact of parked vehicles from the public right-of-way. Screening shall consist of a combination of low walls (a minimum of 3 feet high) and plant materials at the setback line.



Figure 2.7.4 Landscape materials screen parking from the public right-of-way

C. Selection and composition of hardscape materials shall be used to order space and reinforce the relationship of the parking lot to its surroundings and to the buildings it serves.

D. Entrances, exits, and walkways shall use special paving materials such as brick or stamped concrete.

2.8 building additions and renovations

2.8.1 Introduction

The renovation/restoration of older structures provides an excellent means of maintaining and reinforcing the traditional character of Rivertown. Renovation and expansion not only increases property values in the area but also serves as an inspiration to other property owners and designers to make similar efforts.

When an applicant proposes a renovation of, or addition to, an existing structure, the work shall respect the original design character of the structure. The appropriate design guidelines in this section are to be applied whenever a structure is to be renovated or expanded. In addition, renovation of all structures of historic significance shall follow The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, published by the U.S. Department of the Interior, National Park Service (Available on the web at: <http://www.cr.nps.gov/hps/tps/tax/rhb>).

2.8.2 Preservation of Traditional Features and Decoration

Many times during the remodeling of storefronts, original decorative details are intact as visual "leftovers" or simply covered up with previous construction. If the building is to be refurbished, these forgotten details shall not be wasted. If enough of them remain, they can be restored as part of the original design. If only a few remain, they can be incorporated as design features in a new storefront. In either case, the design of any improvements shall evolve through the remaining traditional details and

create a harmonious background that emphasizes them.



Figure 2.8.1 Storefront renovations complement the original design and materials for integrity

A. Existing materials, details, proportions, as well as patterns of materials and openings shall be considered when any additions or building renovations would affect the appearance of an existing building's exterior.

B. All existing historic decorations shall be preserved since they reinforce Rivertown's traditional character and add a richness of detail that is often irreplaceable at today's costs.

2.8.3 Removal of Elements Inconsistent with the Original Facade

Owners or shopkeepers alter buildings over time in an effort to "keep up with changing times" or to "update a tired image." Unfortunately, such changes often result in gradual but severe erosion of the original character and cohesion of Rivertown.

A. Buildings that have been substantially or carelessly altered shall be restored.

B. Existing building elements that are incompatible with the original facade design of the building shall be removed. These include excessive use of exterior embellishments and "modernized" elements such as metal grilles.

2.8.4 Storefront Renovation

A. An original storefront with little or no remodeling shall be preserved and repaired with as little alteration as possible.

B. Where part of the original storefront remains (due to limited remodeling that has occurred), the storefront shall be repaired, maintaining historic materials where possible, including the replacement of extensively deteriorated or missing parts with new parts based upon surviving examples of transoms, bulkheads, pilasters, signs, etc.

C. Where the original storefront is completely missing (due to extensive remodeling that has occurred), the storefront shall be restored based upon historical, pictorial and physical documentation.

D. When reconstruction is not practical, the design of the new storefront shall be compatible with the size, scale, proportion, material and color of the existing structure.



2.8.5 Window Replacement

The impact of windows on the facade is determined by the size, shape, and pattern of openings and the spacing and placement within the facade. When altering or reconstructing windows, consideration of these elements is crucial to retaining the structure's original architectural balance and integrity.

A. Wherever possible, the original window openings shall be retained.



Figure 2.8.2 Original window openings add an air of authenticity to the building

B. If possible, the original windows and frames shall be saved and restored. Missing, rotting or broken sash, frames, mullions, and muntins with similar material shall be replaced.

C. Where transom windows exist, every effort shall be made to retain this traditional storefront feature. If the ceiling inside the structure has been lowered, the ceiling shall be sloped up to meet the transom so that light will penetrate the interior of the building.

D. If the original window openings have been altered, the openings to their original

configuration and detail shall be restored. Blocking or filling window openings that contribute to the overall facade design shall be avoided.

E. If the existing ceiling has been lowered, the dropped ceiling shall be pulled back from the original window.

F. When replacing windows, consideration shall be given to the original size and shape detailing and framing materials. Replacement windows shall be the same operating type as the original window.

2.8.6 Door Replacement

A. Original doors and door hardware shall be retained, repaired and refinished provided they can comply with ADA requirements. If new replacement doors are necessary, they shall be compatible with the traditional character and architectural design of the building.



Figure 2.8.3 Doors are an integral part of a building's appearance and design

2.8.7 Awnings

A. In general, awnings shall fit the historic character of the district and building, be well maintained, functional and not obstruct the flow of pedestrian movement along the public sidewalk space.

B. Original awning hardware shall be used if it is in working order or is repairable.

C. The traditional canvas, slanted awning is most appropriate for older storefronts and is encouraged, however contemporary hooped or box styles may be used if they are appropriate to the architectural style of the building.



Figure 2.8.4 Canvas, slanted awnings are most appropriate for older storefronts

2.8.8 Painting

Painting can be one of the simplest and most dramatic improvements that can be made to a facade. A new coat of paint gives the facade a well-maintained appearance and is essential to the long life of many traditional materials. The steps below shall be followed to insure a quality paint job.

A. Light and neutral building colors are encouraged, particularly on larger, less detailed buildings. Contrasting colors shall accent architectural details.

B. Any necessary repairs shall be made to surfaces before painting (e.g., replace rotten wood, repoint masonry mortar joints, remove rust from metal).



Figure 2.8.5 Paint can provide a fresh appearance for an older building's facade

C. Painting of masonry materials such as brick and stone is strongly discouraged.

D. Chipped and peeling paint shall be surface repaired and repainted immediately.



2.8.9 Repair and Cleaning

A. Surface cleaning shall be undertaken with the gentlest means possible. Sandblasting and other harsh cleaning methods that may damage historic building materials shall not be employed.

B. Waterproofing and graffiti proofing sealers shall be used after cleaning and repair.

2.8.10 Seismic Retrofitting

Where structural improvements for seismic retrofitting affect the building exterior, such improvements shall be done with care and consideration for the impact on appearance of the building. Where possible, such work shall be concealed. Where this is not possible, the improvements shall be planned to carefully integrate into the existing building design.

Seismic improvements shall receive the same care and forethought as any other building modification. An exterior building elevation may be required with seismic retrofit submittals, showing the location and appearance of all such improvements.

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Appendix B

The Opportunities and Constraints Report is available at the following web address:

<http://www.ci.antioch.ca.us/Community/downtown-plan/Antioch-OC-Report.pdf>