



AGENDA

May 14, 2020

Planning Commission Meeting
6:30 p.m.
311 Vernon Street,
Roseville, California
www.roseville.ca.us

Commissioners may teleconference pursuant to Executive Order N-29-20.

Members of the public may view the meeting on Comcast channel 14, Consolidated Communications channel 73 and AT&T U-verse. Meetings are also video streamed live and are available on the City's website and YouTube channel.

Members of the public may offer public comment by the following means:

Dial in Phone Number: 916-774-5353

Email: publiccomment@roseville.ca.us

If you need a disability-related modification or accommodation to participate in this meeting, please contact Voice: 916-774-5200 , TDD: 916-774-5220 . Requests must be made as early as possible.

THE CITY OF ROSEVILLE WELCOMES YOUR PARTICIPATION

If an agenda item is open to public comment, such public comment shall be addressed to the chair of the meeting.

Public Comment - Speakers have three minutes under Public Comment to speak on issues that are not listed on the agenda and are within the City's jurisdiction. The Brown Act does not permit any action or discussion on items not listed on the agenda.

Consent Calendar - If applicable, the Consent Calendar consists of routine items that may be approved by one motion. Any person can remove an item from the Consent Calendar to be discussed separately.

Agenda Items - Speakers have five minutes to address items that are listed on the agenda.

Americans with Disabilities Act - Notify the City Clerk or Secretary at least 72 hours in advance if special assistance is required to participate in a meeting including the need of auxiliary aids or services.

Audio/Visual Presentations - If making a presentation regarding an agenda item, audio/visual materials must be submitted to the City Clerk or Secretary at least 72 hours in advance.

Roseville City Clerk 311 Vernon Street, Roseville, CA 916-774-5200 TDD 916-774-5220

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **PLEDGE OF ALLEGIANCE**
4. **PUBLIC COMMENTS**
5. **CONSENT CALENDAR**

5.1. Minutes of April 23, 2020

6. **REQUESTS/PRESENTATIONS**

6.1. NIPA PCL 51 - Industrial Ave Self-Storage, 8151 Industrial Av, File # PL19-0243

REQUEST

The applicant requests approval of a Design Review Permit to allow construction of a self-storage facility with office and manager's apartment. The proposal includes five 1-story and two 2-story self-storage buildings plus an office building with manager's apartment over top and garage below for a total of 7 buildings. The total square footage for the self-storage buildings is 101,339 sf. The total square footage for the office/manager's apartment is 4,431 sf for an overall total of 105,770 sf. Construction will also include four parking spaces, and the associated landscaping, lighting, and drive aisles.

Applicant: Tiffany Wilson, RSC Engineering, Inc.

Property Owner: Mark Ryan, Pleasant Grove Self-Storage-Industrial Avenue, LLC

RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program; and,
- B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to seventy-five (75) conditions of approval.

6.2. NIPA PCL 28 - McDonalds Drive-Thru Alteration, 1400 Blue Oaks Bl, File # PL20-0022

REQUEST

The applicant requests approval of a Design Review Permit Modification to modify a single lane drive through to a side-by-side drive through. This includes alterations to adjacent landscape planters and parking.

Applicant/Property Owner: Brian McCarthy, McDonald's US LLC

RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact and approve the Design Review Permit Modification subject to three (3) conditions of approval.

6.3. WRSP PCL-31 – The Plaza at Blue Oaks, 1950 Blue Oaks Bl, File # PL17-0368

REQUEST

The applicant requests approval of a Design Review Permit to allow the construction of an 82,100-square-foot shopping center consisting of a 35,000-square-foot anchor grocery store, a 12-pump gas station with a 3,500-square-foot-convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet. The project includes a Tentative Subdivision Map to subdivide the 13.35-acre parcel into eight (8) lots and a Tree Permit to remove several native oak trees on the westerly portion of the site.

Applicant/Property Owner: Joe Zawidski, Signature Management Company

RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the Plaza at Blue Oaks Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program;
- B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to one hundred one (101) conditions of approval;
- C. Adopt the three (3) findings of fact and approve the Tentative Subdivision Map subject to thirty-nine (39) conditions of approval; and
- D. Adopt the two (2) findings of fact and approve the Tree Permit subject to twenty (20) conditions of approval.

7. BOARD MEMBER / COMMISSIONER / STAFF REPORT

8. ADJOURNMENT



PLANNING COMMISSION COMMUNICATION

Title: Minutes of April 23, 2020
Contact: Lupe Nelson, lnelson@roseville.ca.us, 916-774-5281

Meeting Date: 5/14/2020
Item #: 5.1.

ATTACHMENTS:

Description

Minutes of April 23, 2020



MINUTES

April 23, 2020

Planning Commission Meeting
6:30 p.m.
311 Vernon Street,
Roseville, California
www.roseville.ca.us

Commissioners teleconferenced pursuant to Executive Order N-29-20. Members of the public viewed the meeting on Comcast channel 14, Consolidated Communications channel 73 and AT&T U-verse. The meeting was video streamed live and was available on the City's website and YouTube channel.

Members of the public were able to offer public comment by phone or email.

1. CALL TO ORDER

Chair Caporusso called the meeting to order at 6:30 p.m.

2. ROLL CALL

Present: Brashears, Jensen, Krafka, Martin, Mendonsa, Caporusso
Absent: None

3. PLEDGE OF ALLEGIANCE

Commissioner Caporusso led those in attendance in the Pledge of Allegiance.

4. PUBLIC COMMENTS

Chair Caporusso opened the Public Comment period.

Nick Bryant: Businesses should be re-opened and sporting events allowed.

Chair Caporusso closed the Public Comment period.

5. CONSENT CALENDAR

Motion by Commissioner Mendonsa, seconded by Vice-Chair Brashears, to approve the Consent Calendar.

The Motion Passed.

Roll call votes:

Ayes: Brashears, Jensen, Krafka, Martin, Mendonsa, Caporusso

Noes: None

5.1. Minutes of February 27, 2020

5.2. WRSP PCL F-11A & F-12 – Tentative Subdivision Map, 3100 N. Hayden Pw, File # PL20-0052

REQUEST

The project includes a Small Lot Tentative Subdivision Map for parcels F-11A and F-12 in the West Roseville Specific Plan Area. The map was previously approved (file #PL14-0438) and recorded with the County Assessor. This new subdivision map allows minor lot line corrections to be made to the rear lot lines of 39 lots along Holt Parkway and Schellhous Drive.

Applicant: Christopher Ruggeri, Ruggeri Jensen Azar & Associates

Property Owner: Larry Gualco, Lennar Homes; Reggie Decker, Richmond American Homes

RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the three (3) findings of fact and approve the Tentative Subdivision Map subject to twenty-eight (28) conditions of approval.

6. REQUESTS/PRESENTATIONS

6.1. NIPA PCL CO-31 & CO-41 - Campus Oaks Town Center QSR1 and PAD1, 1495 Blue Oaks Bl, File # PL20-0031

REQUEST

The applicant requests approval of a Major Project Permit (MPP) Stage 2 to evaluate the architecture and design of two buildings in the Campus Oaks Town Center development. Quick-Serve Restaurant 1 (QSR1) is a proposed

2,418 square-foot restaurant with a drive-through. Pad Building 1 (PAD1) is a proposed 7,200 square-foot multi-tenant building consisting of a credit union and convenience restaurant.

Applicant: Karenda McDonald, Borges Architectural Group

Property Owner: Kevin Parker, Armstrong CO Roseville, LLC

RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact and approve the Major Project Permit Stage 2 subject to seventy-five (75) conditions of approval.

Assistant Planner, Sean Morales, presented the staff report.

Chair Caporusso opened the public hearing and invited comments from the applicant and/or audience.

Applicant, Karenda McDonald, Borges Architectural Group, stated she had received a copy of the staff report and was in agreement with staff's recommendation. Ms. McDonald responded to Commissioners' questions.

Commissioner Discussion:

- Enhance pad 1 architecture as it is a gateway into the project.
- Del Taco signage and corporate colors.

No public comments were received.

Chair Caporusso closed the public hearing.

Motion by Commissioner Martin, seconded by Vice-Chair Brashears, to:

- A. Adopt the two (2) findings of fact and approve the Major Project Permit Stage 2 subject to seventy-five (75) conditions of approval.

Motion included revision to Condition # 2 (*italics indicate addition to condition*): The project is approved as shown in Exhibit A and as conditioned or modified below. *The PAD1 building shall be enhanced on the west and north elevations to include decorative elements such as corbels and the extension of roof eaves. QSR1 building elevations shall be revised to include colors for the awnings and decorative elements that blend in with the colors of the Campus Oaks Town Center.* (Planning)

The Motion passed.

Roll call vote:

Ayes: Jensen, Krafka, Brashears, Mendonsa, Martin, Caporusso

Noes: None

6.2. NIPA PCL CO-1, 2, 6, 7 12, 14, 24a, 24b, 61, 63, 64, 65 – Campus Oaks Amendment, 6300 Campus Pw, File # PL18-0192

REQUEST

The applicant requests approval of a General Plan Amendment, Rezone, Major Project Permit Stage 1 Modification, Major Project Permit Stage 2, Large Lot Tentative Subdivision Map, Small Lot Tentative Subdivision Map, and a Development Agreement Amendment to modify the Campus Oaks Master Plan and create a phased, 242-lot subdivision with park, landscape, and stormwater facility lots. A General Plan Amendment and Rezone is requested to modify land use and zoning designations for 48.91 acres within the Campus Oaks Master Plan area for Parcels CO-1, 2, 6, 7, 12, 14, 24a, 24b, 61, 63, 64, and 65. As proposed, the land use designations will be modified from 27.36 acres Low Density Residential (LDR), 6.52 acres Medium Density Residential (MDR), 4.7 acres High Density Residential (HDR), and 10.33 acres Parks and Recreation (PR) to 26.11 acres LDR, 10.40 acres MDR, and 12.4 acres PR. The zoning designations will be modified from 33.88 acres Residential Small Lot/Development Standards (RS/DS), 4.7 acres Attached Housing/Development Standards (R3/DS), and 10.33 acres Parks and Recreation (PR) to 36.51 acres RS/DS and 12.4 acres PR. A Major Project Permit Stage 1 Modification (MPP Stage 1 Mod) is requested to modify the acreage and unit allocation within the Campus Oaks Master Plan to reflect the proposed land use changes. Parks and Open Space acreage will increase from 10.33 acres to 12.4 acres. A Major Project Permit Stage 2 is requested to evaluate residential design on Parcel CO-6. A Large Lot Tentative Subdivision Map is requested to create four large lots, Lots A and B for future parks, and a remainder (Lot 5) for the future development of Parcel CO-3. A Small Lot Tentative Subdivision Map is requested to allow the phased development of 242 residential lots, including 70 lots on Parcel CO-7, 27 lots on Parcel CO-12, 86 lots on Parcel CO-6, and 59 lots on Parcel CO-2, as well as Lots A-D and right-of-way lots. A Development Agreement Amendment is requested to amend the Development Agreement by and between the City of Roseville and BBC Roseville Oaks, LLC relative to the Campus Oaks property within the HP Campus Oaks Master Plan.

Applicant/Property Owner: Stephen Des Jardins, BBC Roseville Oaks LLC

RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Consider the Addendum to the Hewlett-Packard Master Plan Environmental Impact Report,
- B. Recommend the City Council approve the General Plan Text and Land Use Amendment,
- C. Recommend the City Council adopt the two (2) findings of fact and approve the Rezone,
- D. Recommend the City Council approve the Development Agreement Amendment,
- E. Adopt the two (2) findings of fact and approve the Major Project Permit Stage One Modification subject to five (5) conditions of approval.
- F. Adopt the two (2) findings of fact and approve the Major Project Permit Stage Two subject to fifty-one (51) conditions of approval.
- G. Adopt the three (3) findings of fact and approve the Large Lot Tentative Subdivision Map subject to twenty-two (22) conditions of approval.
- H. Adopt the three (3) findings of fact and approve the Small Lot Tentative Subdivision Map subject to sixty-four (64) conditions of approval.

Associate Planner, Shelby Vockel, presented the staff report.

Chair Caporusso opened the public hearing and invited comments from the applicant and/or audience.

Applicant, Stephen Des Jardins, BBC Roseville Oaks LLC, stated he had received a copy of the staff report and was in agreement with staff's recommendation. He responded to Commissioners' questions.

Commissioner Discussion:

- Timing of median landscaping work on Blue Oaks Blvd.
- Recap of how the community benefit fee was negotiated in the original approval of the Campus Oaks Master Plan.
- Were the roadway landscaping improvements a priority for City Council?
- How will the city ensure the completion of the Blue Oak median landscaping by November 2020?
- Direct staff to ask the Council to use the default provisions in the Development Agreement if the Blue Oaks median landscaping is not completed by November 2020.

- Discussion regarding appropriate material separating residential subdivision and adjacent apartments, enhanced wood fence with pilasters or masonry wall.
- What is City standard for separating multi-family and single family uses?
- What happened to the road separating the multi-family and single family parcels, was this road required in a tentative map?
- What is the wall/fence condition between CO-4 and CO-22, is there a wall/fence on the property line?
- Who is responsible for maintaining the wall/fence, the single family homeowners or the apartment complex owners?
- Will the single family lots have an HOA, or will the CC&Rs require maintenance of the wall/fence?
- Good project
- Support the land use changes.

No public comments were received.

Chair Caporusso closed the public hearing.

7:23 p.m. Commissioner Mendonsa lost meeting connection. Quorum still in effect.

7:36 p.m. Commissioner Mendonsa was able to rejoin the meeting.

7:38 p.m. Commissioner Martin lost meeting connection. Quorum still in effect.

7:40 p.m. Commissioner Martin was able to rejoin the meeting.

Motion by Commissioner Jensen, seconded by Commissioner Brashears, to: Consider the Addendum to the Hewlett-Packard Master Plan Environmental Impact Report,

- A. Recommend the City Council approve the General Plan Text and Land Use Amendment,
- B. Recommend the City Council adopt the two (2) findings of fact and approve the Rezone,
- C. Recommend the City Council approve the Development Agreement Amendment,
- D. Adopt the two (2) findings of fact and approve the Major Project Permit Stage One Modification subject to five (5) conditions of approval.
- E. Adopt the two (2) findings of fact and approve the Major Project Permit Stage Two subject to fifty-one (51) conditions of approval.
- F. Adopt the three (3) findings of fact and approve the Large Lot Tentative Subdivision Map subject to twenty-two (22) conditions of approval.

- G. Adopt the three (3) findings of fact and approve the Small Lot Tentative Subdivision Map subject to sixty-four (64) conditions of approval.

Motion included the following:

Revision of condition #1 of Major Project Permit Stage 1 Modification

1. This Major Project Permit Modification approval shall be effectuated within a period of two (2) years from this date and if not effectuated shall expire on ~~March 26, 2022~~ **April 23, 2022**. Prior to said expiration date, the applicant may apply for an extension of time, provided, however, this approval shall be extended for no more than a total of one year from ~~March 26, 2022~~ **April 23, 2022**. (Planning)

Revision of condition #5 of Major Project Permit Stage 1 Modification

5. Prior to issuance of Building Permits for homes on Parcels CO-6 and CO-12, a masonry wall shall be installed along the northern property line of Parcels CO-6 and CO-12, adjacent to Parcel CO-23, and shall be consistent with the masonry wall design in Section 3.2.5 "Walls and Fences" of the Campus Oaks Design Guidelines.

Addition of condition #6 to Major Project Permit Stage 1 Modification

6. The masonry wall along the common property line between parcels CO-6, CO-12, and CO-23 shall be maintained by the property owners within CO-6 and CO-12. This requirement shall be memorialized in the CC&Rs.

Revision of condition #1 of Major Project Permit Stage 2

1. This Major Project Permit Stage 2 approval shall be effectuated within a period of two (2) years from ~~March 26, 2020~~ **April 23, 2020** and if not effectuated shall expire on ~~March 26, 2022~~ **April 23, 2022**. Prior to said expiration date, the applicant may apply for an extension of time, providing this approval does not extend the expiration beyond ~~March 26, 2023~~ **April 23, 2023**. (Planning)

Revision of condition #48 Small Lot Tentative Map (Add a subsection c)

c) A clause requiring that the masonry wall along the common property line between parcels CO-6, CO-12, and CO-23 shall be maintained by the property owners within CO-6 and CO-12.

The Motion passed.

Roll call vote:

Ayes: Krafka, Jensen, Mendonsa, Martin, Brashears, Caporusso

Noes: None

7. BOARD MEMBER / COMMISSIONER / STAFF REPORT

Staff Reports

- The City Council has appointed Tracy Librea as the Planning Commissioner to fulfill Commissioner Dohner's term.
- There will be a May 14, 2020 Planning Commission meeting. At this time, three (3) items are on the agenda. It is anticipated that this will be a virtual meeting.
- The May 28, 2020 Planning Commission meeting may also be a virtual meeting.

7.1. Election of Design Committee Chair

Staff Discussion:

- Elect a Design Commission chair when the Planning Commission is fully staffed.
- Currently an item that would be brought before the Design Committee will be heard by the Planning Commission as it is not feasible to hold a Design Committee meeting within the limitations of Covid-19 requirements.

Vice-Chair Brashears made a motion, seconded by Commissioner Jensen, to withdraw this item from the agenda and re-agenized at a later date.

The Motion passed.

Roll call vote:

Ayes: Mendonsa, Brashears, Martin, Krafka, Jensen, Caporuso

Noes: None

8. ADJOURNMENT

Motion by Commissioner Martin, seconded by Vice-Chair Brashears, to adjourn the meeting. The Motion Passed unanimously at 8:09 p.m. with a voice vote.



PLANNING COMMISSION COMMUNICATION

Title: NIPA PCL 51 - Industrial Ave Self-Storage, 8151 Industrial Av, File # PL19-0243
Contact: Sean Morales, smorales@roseville.ca.us, 916-774-5282

Meeting Date: 5/14/2020
Item #: 6.1.

ATTACHMENTS:

Description

Staff Report

Attachment 1

Exhibit A MND

Exhibit B Site Plans

Exhibit C Grading Plan

Exhibit D Elevations

Exhibit E Landscape Plan

Exhibit F Colors and Materials

ITEM 6.1: **Design Review Permit – 8151 Industrial Avenue – NIPA PCL 56 – Industrial Ave Self-Storage – PL19-0243**

REQUEST

The applicant requests approval of a Design Review Permit to allow construction of a self-storage facility with office and manager's apartment. The proposal includes five 1-story and two 2-story self-storage buildings plus an office building with manager's apartment over top and garage below for a total of 7 buildings. The total square footage for the self-storage buildings is 101,339 sf. The total square footage for the office/manager's apartment is 4,431 sf for an overall total of 105,770 sf. Construction will also include four parking spaces, and the associated landscaping, lighting, and drive aisles.

Applicant – Tiffany Wilson, RSC Engineering, Inc.
Owner – Mark Ryan, Pleasant Grove Self-Storage-Industrial Avenue, LLC

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program; and
- B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to seventy-five (75) conditions of approval.

SUMMARY OF OUTSTANDING ISSUES

There are no outstanding issues associated with this request. The applicant has reviewed and is in agreement with the recommended conditions of approval.

BACKGROUND

The project is located at 8151 Industrial Avenue, north of the intersection of Industrial Avenue and Washington Boulevard (Figure 1). The project is located within the North Industrial Plan Area (NIPA). The NIPA, while not subject to a specific plan, is a recognized planning subarea of the City. The NIPA consists of 2,046 gross acres west of Washington Boulevard and north of the Northwest Roseville Specific Plan. Devoted primarily to industrial uses, the area is intended to provide a major employment/industrial center for the South Placer region. The project site was initially subdivided, in 1984, as Lot 7 of the Diamond Oaks Center business park project. In 2008, a Design Review Permit and Conditional Use Permit (File #2006PL-026) were approved for four single-story warehouse buildings. That project was not constructed and the site has remained undeveloped.

The current request is to construct a self-storage facility on the site. Personal storage is a permitted use in the M1 zone. A Design Review Permit is requested to evaluate the building architecture, landscaping, and parking areas.

Figure 1. Project Aerial



SITE INFORMATION

Location: 8151 Industrial Avenue

Total Size: 3.27 acres

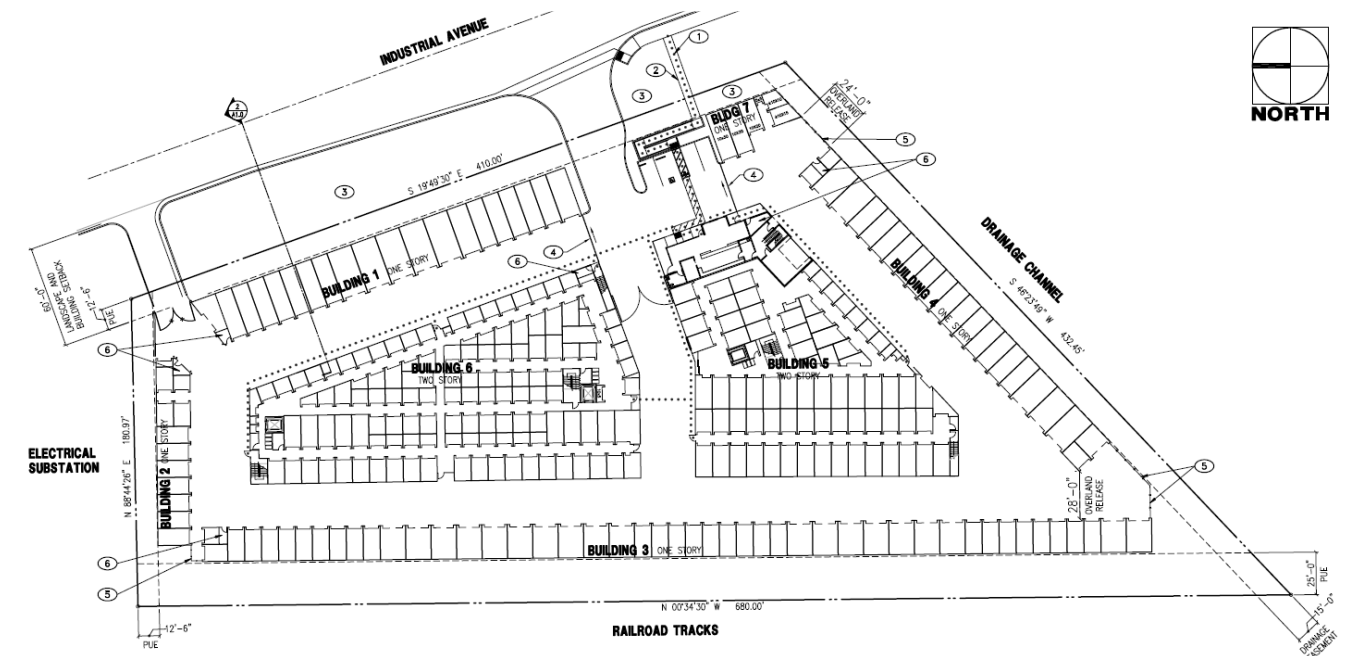
Topography and Setting: The site includes frontage on Industrial Avenue, which is a two-lane arterial roadway with a center turning lane, and includes sidewalk and landscaping. The project site is situated approximately seven feet below the grade of Industrial Avenue and is relatively flat. The only vegetation on the site is non-native grasses, small herbaceous annual plants, and three Oregon ash trees. There are no structures on the property. The parcel is surrounded by industrial uses and zoning on all sides.

EVALUATION: DESIGN REVIEW PERMIT

- 1. The project as approved preserves and accentuates the natural features of the property, such as open space, topography, trees, wetlands and water courses, provides adequate drainage for the project, and allows beneficial use to be made of the site for development.***

The project site is currently undeveloped; however, there are no significant natural features present on site. The property has three trees and one seasonal wetland of less than .01 acres. The site also shows evidence of previous disking, and is primarily populated by non-native annual grasses and dirt. The proposed project has been reviewed by the City Engineering Division, and improvement plans will be required to ensure that adequate drainage and stormwater quality facilities are constructed. The proposed use is consistent with the site's industrial land use designation, and will develop an underutilized parcel. The triangular shape of the site makes retaining the limited natural features difficult while allowing for beneficial use of the site (Figure 2).

Figure 2: Site Plan



- The project site design as approved provides open space, access, vehicle parking, vehicle, pedestrian and bicycle circulation, pedestrian walks and links to alternative modes of transportation, loading areas, landscaping and irrigation and lighting which results in a safe, efficient, and harmonious development and which is consistent with the applicable goals, policies and objectives set forth in the General Plan, the Community Design Guidelines and the applicable Specific Plan and/or applicable design guidelines.**

Projects within the NIPA are subject to the North Roseville Area Design Guidelines (NRADG), which provide development standards for new construction. Table 1 compares the proposed project to the required development standards as outlined by the NRADG. As shown in Table 1, the proposed industrial flex buildings are consistent with the development standards required by the NRADG.

Table 1: Development Standards for Industrial Ave Self-Storage

Development Standard	Required	Proposed
Building Setbacks	35 ft min. and 50 ft. avg	60 feet
Landscape Setbacks	35 ft.	60 feet
Railroad Setback	15 ft.	25 feet
Building Height Limit	50 feet maximum	26 feet
Max. Building Lot Coverage	50% maximum	47%
Parking Spaces	4 spaces plus 2 spaces for the manager's quarters	4 spaces plus 2 spaces for the manager's quarters
% of shaded parking	50%	75%

Access and Circulation

Access to the project site will be provided via a driveway onto Industrial Ave. Internal circulation for the project includes the driveways that provide access to all of the storage units on the perimeter of the parcel

as well as the indoor storage buildings within the project. The internal circulation design is consistent with the intent of the NRADG and the Community Design Guidelines (CDG). CDG Policy OI-23 encourages curved, rather than long and straight drives, to discourage speeding. Additionally, one emergency access point will be provided into the site at the northeastern corner of the site. All driveways have a minimum width of 20-feet and meet the required turning radii as required by the City Fire Department, therefore ensuring adequate emergency access. No conflicts with City policy regarding provision of adequate access and circulation have been identified.

Pedestrian and Bicycle Circulation and Linkages

The proposed project is located within an industrial zone, and industrial uses are not generally conducive to pedestrian and bicyclist activity. Self-storage uses are typically used by customers with vehicles to move items to and from their storage units. The project does propose some improvements to the area to facilitate what pedestrian and bicycle activity may occur, including extending the sidewalk from Industrial Ave. to connect the project with the existing development to the south. The project site is not within an area proposed for new bicycle facilities, as shown in the City's Bicycle Master Plan. However, there are existing bike lanes on Industrial Ave. consistent with the City's development standards. The proposed project is generally consistent with the CDG and Bicycle Master Plan.

Parking

Self-storage facilities typically operate by allowing customers to drive directly to their storage unit on the property. Therefore, only a small number of parking spaces are required on-site for new customers and others needing direct access to the manager's office. The Zoning Ordinance Section 19.26.030 requires that personal storage facilities provide four parking spaces for customers and two spaces for the manager's quarters. The six required spaces are provided, therefore the project is consistent with the Zoning Ordinance parking standards.

Landscaping and Lighting

The NRADG labels Industrial Ave. as a secondary landscape corridor. The NRADG recommends secondary landscape corridors use London Plane as a dominant street tree and American Sweet Gum and Coast Redwood as subordinate trees. The project proposes London Plane as the dominant tree and Crape Myrtle and Freeman Maple as subordinate trees (Exhibit E). A range of shrubs are also proposed to create a visually interesting landscape. The proposed landscaping is generally consistent with the NRADG.

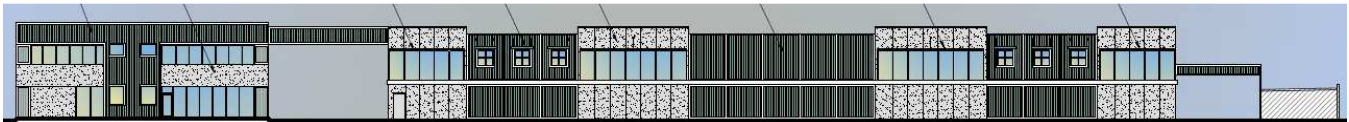
The Community Design Guidelines contain standards for lighting on new projects. Guideline OI-81 requires streets, entry drives, drive aisles, and parking areas have a minimum illumination of 1.0 footcandle. Guidelines OI-83 requires that pedestrian walks have a minimum illumination level of .5 footcandle. Guideline OI-78 requires that light sources have cut off lenses and avoid light spillage onto adjacent properties. The applicant provided a lighting plan that is consistent with these requirements.

- 3. *The building design, including the materials, colors, height, bulk, size and relief, and the arrangement of the structures on the site, as approved is harmonious with other development and buildings in the vicinity and which is consistent with the applicable goals, policies and objectives set forth in the General Plan, the Community Design Guidelines and the applicable Specific Plan and/or applicable design guidelines.***

The proposed project contains a self-storage facility in an industrial zone. The project includes seven buildings. Two of the buildings in the center of the project are proposed for indoor storage and are two stories in height. The other five buildings will contain storage units and are single-story buildings. The seven buildings differ in function and size but are consistent in their design concept. The most architecturally detailed buildings are the east elevations of the two-story buildings. The change in grade and orientation of the one-story buildings toward the center of the project shields them from Industrial

Ave. The east-facing elevations of the two-story buildings are the most visible elevations from the roadway. (approximately 108 feet from the public right-of-way). On this elevation, a variety of building materials, colors, and roof forms are proposed, consistent with CDG Policy OI-34. The elevations consist of tilt-up concrete walls clad in either EIFS or vertical precast metal siding in a moss green color (Figure 4). The variation in color and materials between the two types of siding create a visually engaging design, consistent with CDG Policy OI-39. Although not functional, windows are also added to the east elevation to add visual interest and break up the wall planes.

Figure 4: Buildings 5 and 6 East Elevations



The east elevation of the one story buildings 1 and 7, facing Industrial Ave., are clad in split face masonry units (Exhibit D). These elevations make up the back of the storage units and serve as a perimeter wall for the project. The masonry units on the east elevation serve to further break up the colors and materials facing Industrial Ave. and add visual interest. The north elevation of the one-story building 2 is also clad in split face masonry as there will be some visibility of this elevation when traveling south on Industrial Ave. The other elevations of each building retain many of the architectural elements of the east elevation except for the windows and masonry.

With a variety of colors, roof forms, and materials, as well as a massing and scale that is consistent with the industrial zone and mindful of views from the public way, the project is consistent with the intent of the CDG for architecture.

- 4. The design of the public services, as approved, including, but not limited to trash enclosures and service equipment are located so as not to detract from the appearance of the site, and are screened appropriately and effectively using construction materials, colors and landscaping that are harmonious with the site and the building designs.***

The Community Design Guidelines provide standards for the screening and compatibility of service areas within a project site. The applicant received approval from the Environmental Utilities department to waive the requirement of a standalone trash enclosure. Instead, waste containers will be stored inside one of the storage units and brought out on collection days. This alternative was found to be acceptable because of the minimal trash generated by the storage use.

There is an existing 25' public utility easement on the western property line. This easement exists along the entire western portion of the property and contains an existing 14' wide access road for Roseville Electric maintenance of power poles in this location. The project proposes to retain the access road and construct an 8' tall chain link fence along the western property line. The fence will provide security for the building and reduce potential vandalism along the western elevation of building 3. The fence will not be visible from the public right-of-way.

Condition #13 for the Design Review Permit requires that all mechanical equipment be screened from view. The roof parapet design makes this screening possible. No conflicts with City policy regarding the treatment of service areas have been identified.

ENVIRONMENTAL DETERMINATION

An Initial Study/Mitigated Negative Declaration was prepared for the project and released for public comment on March 13, 2020 (Exhibit A). The 30-day comment period for the document ended on April 13, 2020. One letter was received from the Placer County Air Pollution Control District (Attachment 1) with a request for implementation of a dust control plan for the project. Dust control plans are a standard element of City of

Roseville improvement plans, so no additional mitigation is required. No comments on the adequacy of the document were received. The document analyzed the potential for environmental impacts due to project implementation and determined that potentially significant impacts related to Biological Resources and Cultural Resources could be reduced to less than significant with mitigation. A Mitigation Monitoring and Reporting Program was prepared for the project and is included for adoption with this request.

PUBLIC OUTREACH

The proposed project was distributed to the various agencies and departments which have requested notice of City applications, and all comments were considered and incorporated into the Conditions of Approval, as appropriate. Notice of the application was also distributed to the Roseville Coalition of Neighborhood Associations. No comments were received. A public notice of the Planning Commission hearing was published on May 1, 2020, and was distributed to all property owners within 300 feet of the project site. To date, no comments have been received.

CONCLUSION

As proposed and conditioned, the project complies with applicable development standards of the City's Zoning Ordinance, The North Roseville Area Design Guidelines, and the Community Design Guidelines; therefore, the above findings can be made.

RECOMMENDATION

The Planning Division recommends the Planning Commission take the following actions:

- A. Adopt the Industrial Ave Self-Storage Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program; and
- B. Adopt the findings of fact as stated in the staff report for the **DESIGN REVIEW PERMIT – 8151 Industrial Avenue – NIPA PCL 51 – Industrial Ave. Self-Storage – PL** subject to seventy-five (75) conditions of approval.

CONDITIONS OF APPROVAL FOR DESIGN REVIEW PERMIT FILE # PL19-0243

1. This Design Review Permit approval shall be effectuated within a period of two (2) years from **May 14, 2020** and if not effectuated shall expire on **May 14, 2022**. Prior to said expiration date, the applicant may apply for an extension of time, provided this approval does not extend the expiration beyond **May 14, 2023**. (Planning)
2. The project is approved as shown in **Exhibits A - F** and as conditioned or modified below. (Planning)
3. The project shall comply with all required environmental mitigation identified in **Industrial Ave. Self-Storage Mitigated Negative Declaration**, and shall include all applicable mitigation measures as notes on the grading plans. (All Departments)
4. The project shall be addressed as 8151 Industrial Avenue. All projects with multi-tenants or buildings must submit a site plan with building footprint(s) to the Development Services Department (Business Services – Addressing) for building/suite addressing. (Business Services)
5. The applicant shall pay City's actual costs for providing plan check, mapping, GIS, and inspection services. This may be a combination of staff costs and direct billing for contract professional services. Project billing may occur up to two (2) months after the end of warranty or the Notice of

Termination date for the SWPPP, whichever occurs later. (Engineering, Environmental Utilities, Electric, Finance)

6. The design and construction of all improvements shall conform to the Design and Construction Standards of the City of Roseville, or as modified by these conditions of approval, or as directed by the City Engineer. (Engineering)
7. The applicant shall not commence with any on-site improvements or improvements within the right-of-way until such time as grading and/or improvement plans have been submitted for review and are approved and grading and/or encroachment permits are issued by the Department of Development Services – Engineering Division. (Engineering)
8. The approval of this project does not constitute approval of proposed improvements as to size, design, materials, or location, unless specifically addressed in these conditions of approval. The Developer shall submit civil drawings to the Department of Development Services – Engineering Division for review and approval. (Engineering)

PRIOR TO ISSUANCE OF BUILDING PERMITS:

9. Parking lot design shall conform to the City's design standards, including the following minimum standards for parking stalls:
 - a. All parking stalls shall be double-striped. Parking stalls adjacent to sidewalks, landscaped areas or light fixtures, and all Accessible stalls shall abut a 6-inch raised curb or concrete bumper. (Planning)
 - b. Standard – 9 feet x 18 feet; Compact – 9 feet x 16 feet; Accessible – 14 feet x 18 feet (a 9-foot-wide parking area plus a 5-foot-wide loading area) and a minimum of one (1) parking space shall be Accessible van accessible – 17 feet x 18 feet (9-foot-wide parking area plus an 8-foot-wide loading area). (Planning)
 - c. An 'exterior routes of travel' site accessibility plan incorporating slope, cross-slope, width, pedestrian ramps, curb ramps, handrails, signage, detectable warnings or speed limit signs or equivalent means shall comprise part of the site improvement plans submitted to City for review, prior to building plan check approvals. This site accessibility plan shall also include:
 - i. Accessible parking stalls shall be dispersed and located closest to accessible entrances. The total number of accessible parking spaces shall be established by Table 11B-208.2 of the CBC.
 - ii. Accessible Parking spaces and crosswalks shall be signed, marked and maintained as required by Chapter 11 of the CBC.
 - iii. Accessible parking and exterior route of travel shall comply with CBC, Sections 11B-206 and 11B-208. (Building)
10. Signs and/or striping shall be provided on-site as required by the Planning Department to control on-site traffic movements. Parking lot striping and signage shall be maintained in a visible and legible manner. (Planning)

11. The plans submitted to the Building Division for permits shall indicate all approved revisions/alterations as approved by the Commission including all conditions of approval. (Planning)
12. The project Landscape Plans shall comply with the following:
 - a. The Landscape Plan shall indicate the location of, and be designed to avoid conflicts with, all pole-mounted light fixtures and utility equipment including (but not limited to) electric transformers, switchgear, and overhead lines; backflow preventers; fire department connections; and public water, sewer, and storm drain facilities. (Planning, Fire, Environmental Utilities, Electric, Public Works)
 - b. The tree plantings in the parking lot or covered parking structure shall be designed to provide a minimum of 50% shade coverage after 15 years. (Planning)
 - c. At a minimum, landscaped areas not covered with live material shall be covered with a rock, (3") bark (no shredded bark) or (3") mulch covering. (Planning)
 - d. The landscape plan shall comply with the Landscape Guidelines for the North Industrial Plan Area Roseville and the City of Roseville Water Efficient Landscape Ordinance. (Planning, Environmental Utilities)
 - e. Landscaping adjacent to preserve areas shall consist of California native, drought-tolerant groundcover, shrubs, plants, and trees. (Open Space, Planning)
 - f. All landscaping in areas containing electrical service equipment shall conform to the Electric Department's Landscape Requirements and Work Clearances as outlined in Section 10.00 of the Departments "Specification for Commercial Construction." (Electric)
 - g. Slopes within landscape planters shall be no more than 3:1. A two-foot flat bench located at back-of-walk shall be included in the landscape area to slow or allow absorption of nuisance run-off from the planters. (Parks, Recreation, and Libraries)
 - h. All landscaping shall conform to the standards of crime prevention through environmental design with the intent to create natural surveillance, controlling access, and territorial reinforcement to property boundaries. (Police)
13. Any roof-mounted equipment and satellite dishes proposed shall be shown on the building plans. The equipment shall be fully screened from public streets and the surrounding properties. (Planning)
14. At the time of building permit application and plan submittal, the project applicant shall submit a proposed plan which shows the proposed suite addressing for individual tenant spaces within the building. The Building Official, or the designee, shall approve said plan prior to building permit approval. Refer to the *City of Roseville Addressing Guidelines*. (Building)
15. A separate Architectural Site Accessibility Plan which details the project's site accessibility information as required by California Title 24, Part 2 shall be submitted as part of the project Building Permit Plans. (Building)
16. Building permit plans shall comply with all applicable code requirements (California Building Code – CBC – based on the International Building Code, California Green Building Standards Code–CGBSC, California Mechanical Code – CMC – based on the Uniform Mechanical Code, California

Plumbing Code – CPC – based on the Uniform Plumbing Code, California Fire Code – CFC – based on the International Fire Code – with City of Roseville Amendments – RFC, California Electrical Code – CEC – based on the National Electrical Code, and California Energy Standards – CEC T-24 Part 6), California Title 24 and the American with Disabilities Act - ADA requirements, and all State and Federally mandated requirements in effect at the time of submittal for building permits (contact the Building Division for applicable Code editions). (Building)

17. Maintenance of copy of building plans: Health and Safety Code section 19850 requires the building department of every city or county to maintain an official copy of the building plans for the life of the building. As such, each individual building shall be submitted as a separate submittal package. Building plan review, permit issuance and archiving is based on each individual building address. (Building)
18. For all work to be performed off-site, permission to enter and construct shall be obtained from the property owner, in the form of a notarized right-of-entry. Said notarized right-of-entry shall be provided to Public Works prior to approval of any plans. (Engineering)
19. The Improvement Plans shall include a complete set of Landscape Plans. The Landscape Plans shall be approved with the Improvement Plans. (Planning, Engineering, Fire, Environmental Utilities, Electric)
20. A note shall be added to the grading plans that states:

*“Prior to the commencement of grading operations, the contractor shall identify the site where the **excess/borrow** earthen material shall be imported/deposited. If the **borrow/deposit** site is within the City of Roseville, the contractor shall produce a report issued by a geotechnical engineer to verify that the exported materials are suitable for the intended fill, and shall show proof of all approved grading plans. Haul routes to be used shall be specified.”* (Public Works)
21. Bike parking and clean air vehicle spaces shall be provided per the California Green Building Standards. Bike rack/locker design and location shall be approved by Alternative Transportation. (Alternative Transportation, Building).
22. All storm drainage, including roof drains, shall be collected on site and treated with Best Management Practices (BMP's) per the City's Stormwater Quality Design Manual. All storm water shall be routed to the nearest existing storm drain system or natural drainage facility. Drain outfalls shall extend down to the receiving water and shall be constructed with adequate velocity attenuation devices. The grading/improvement plans for the site shall be accompanied with a shed map that defines that area tributary to this site and all drainage facilities shall be designed to accommodate the tributary flow. The storm drain system and proposed BMP's shall be privately owned and maintained by the property owner. Prior to the issuance of any permits, the owner shall provide a plan for the maintenance of the proposed BMP's. (Engineering)
23. Prior to the approval of the Improvement Plans, the project proponent shall provide proof of preparation and submittal of a Storm Water Pollution Prevention Plan (SWPPP) to the Regional Water Quality Control Board (RWQCB). Proof shall be in the form of the Waste Discharge Identification Number (WDID#), provided to the applicant from RWQCB, placed on the coversheet of the improvement plans. Upon approval of the improvement plans, a copy of the SWPPP shall be required onsite and available for viewing by City inspection staff upon request. (Engineering)

24. The developer shall be responsible for any necessary relocation of signal interconnect cables that may require re-location as a result of the construction of turn lanes and/or driveways. (Engineering)
25. To ensure that the design for any necessary widening, construction, or modifications of Public Streets does not conflict with existing dry utilities generally located behind the curb and gutter, and prior to the submittal of design drawings for those frontage improvements, the project proponent shall have the existing dry utilities pot holed for verification of location and depth. (Engineering)
26. Sight distances for all driveways shall be clearly shown on the improvement plans to verify that minimum standards are achieved. It will be the responsibility of the project proponent to provide appropriate landscaping and improvement plans, and to relocate and/or modify existing facilities as needed to meet these design objectives. (Engineering)
27. Prior to the approval of the improvement plans, it will be the project proponent's responsibility to pay the standard City Trench Cut Recovery Fee for any cuts within the City streets that are required for the installation of underground utilities. (Engineering)
28. Prior to the issuance of building permits, the property owner shall pay into the following fee programs: Citywide Drainage Fee, Citywide Traffic Mitigation Fee (TMF), Highway 65 Joint Partners Association (JPA), South Placer Regional Transportation Authority (SPRTA), and City/County Fee. (Engineering)
29. Prior to the issuance of a grading permit or approval of Improvement Plans, the grading plans shall clearly identify all existing water, sewer and recycled water utilities within the boundaries of the project (including adjoining public right-of-way). Existing utilities shall be identified in plan-view and in profile-view where grading activities will modify existing site elevations over top of or within 15 feet of the utility. Any utilities that could potentially be impacted by the project shall be clearly identified along with the proposed protection measures. The developer shall be responsible for taking measures and incurring costs associated with protecting the existing water, sewer and recycled water utilities to the satisfaction of the Environmental Utilities Director. (Environmental Utilities)
30. The applicant shall pay all applicable water and sewer fees. (Environmental Utilities)
31. Water and sewer infrastructure shall be designed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards and shall include:
 - a. Utilities or permanent structures shall not be located within the area which would be disturbed by an open trench needed to expose sewer trunk mains deeper than 12 feet unless approved by Environmental Utilities in these conditions. The area needed to construct the trench is a sloped cone above the sewer main. The cone shall have 1:1 side slopes.
 - b. Water, sewer and recycled mains shall not exceed a depth of 12 feet below finished grade, unless authorized in these conditions of approval.
 - c. All sewer manholes shall have all-weather, 10-ton vehicle access unless otherwise authorized by these conditions of approval. (Environmental Utilities)
32. Recycled water infrastructure shall be designed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. The applicant shall pay all applicable recycled water fees. Easements shall be provided as necessary for recycled water infrastructure. (Environmental Utilities)

33. The design and installation of all fire protection equipment shall conform to the California Fire Code and the amendments adopted by the City of Roseville, along with all standards and policies implemented by the Roseville Fire Department. (Fire)
34. The applicable codes and standards adopted by the City shall be enforced at the time construction plans have been submitted to the City for permitting. (Fire)
35. The fire flow required, at a 50% reduction due to the buildings being sprinklered, will be based on the largest single structure in accordance with the California Fire Code at the time detail plans are submitted to the City of Roseville for review. The maximum fire flow will not exceed 4,000 gpm based on the Appendix III-AA of the California Fire Code. (Fire)
36. The fire department access road shall meet the City's requirements for width and turning radii of 30 and 50 as noted on the fire department standards for access. The designated fire lanes shall be for aisles fronting the premises. This shall be enforced at the time plan are submitted for review. Additional information can be found on the City's web site www.roseville.ca.us.
37. Automatic fire extinguishing system risers, fire alarm system panels and digital alarm communicator system panels shall be located within an approved fire control room and shall be accessible from an adjacent fire apparatus roadway. There shall be only one fire control room per building. Said fire control room shall be a minimum size of thirty-five (35) square feet in size and shall be openable from the exterior via an approved door opening. (Fire)
38. An **approved** automatic fire extinguishing system shall be provided for all buildings where the total fire area is **3,600** square feet or greater, as required by California Fire Code as adopted by this city for non-single family residential units. For one-and-two single family residential units that do not meet the set-back provisions in the California Building Code are subject to require an automatic fire sprinkler system in accordance with the RFD adopted ordinance for R-3s. All amendments, standards, policies and fee schedule can be found on the City's web site www.roseville.ca.us or contact the Fire and Life Safety Division for information at 916-774-5800. (Fire)
39. All fire apparatuses, such as fire department connections and post indicating valves, serving identified building shall be designed and installed adjacent to each structure for first responder's operational purposes. (Fire)
40. If the existing water supply is unable to support the automatic fire sprinkler system, a listed fire pump would be your only option. If this is the case, you required fire pump room will have to be enlarged to accommodate all the required apparatuses needed to operate such a system. (Fire)
41. There shall be one fire department connection at the public entrance serving all the fire sprinkler systems only. Private fire hydrants shall not be part of this fire line. All private fire hydrants shall be served off their own independent water line. (Fire)
42. The phasing of this project shall not limit the fire department requirements for access and circulation throughout the project as a result of continuous construction in accordance with the California Fire Code, 2016 with the City of Roseville's Amendments. A separate phasing plan (and permit issued by the Building Department) shall be reviewed and approved by this department. (Fire)

43. If added cornice construction is involved, the design shall support the weight of a ladder leaning against the assembly as well as a 330-pound vertical load applied to the **leading edge** of the horizontal projection of the cornice (a 250-pound firefighter carrying 80 pounds of equipment stepping off of a ladder onto the top of the cornice). (Fire)
44. Use, increase of hazardous materials or storage, liquids, gases and/or chemicals shall meet the requirements of the Chapter 6.95 of the Health and Safety Code, the Roseville Fire Department and the National Fire Codes. Submit a complete plan set and the Hazardous Materials Business Plan, including names and amount of any hazardous materials that will be stored or used, to the Fire and Life Safety Division for review and approval. A permit application shall also be provided at the time of submittal. Contact our Hazardous Materials Division within the Fire Department at (916) 774-5800 to initiate the process. Satisfaction of storage and use shall be determined prior to requesting occupancy. (Fire)
45. Adequate radio coverage shall be provided within all buildings for public safety agencies, as required by Roseville Municipal Code and the California Fire Code. A field test shall be provided by a person in possession of a current FCC License, or a current technician certification issued by the Associated Public-Safety Communications Officials International (APCO), or the National Association of Business and Educational Radio (NABER). The building owner shall retain all test records on the inspected premises and a copy shall be submitted to the Fire Department officials in accordance with Section 510 of the California Fire Code.

Adequate radio coverage shall include all of the following:

- a. A minimum signal strength of 95 dBm available in 90% of the area of each floor of the building when transmitted from the closest City of Roseville Radio Communication site.
 - b. A minimum signal strength of 95 dBm received at the closest City of Roseville Communication site when transmitted from 90% of the area of each floor of the building.
 - c. The frequency range that must be supported shall be 821-824 MHz and 866-869 MHz.
 - d. A 100 % reliability factor. (Fire, Police)
46. No grading shall take place within 10' of the existing 60kV poles or under the overhead power lines without prior approval from Roseville Electric. This includes the 60kV and 12kV pole lines along the northern and western boundary of the parcel.
 47. The Electric Department requires the submittal of the following information in order to complete the final electric design for the project:
 - a. one (1) set of improvement plans
 - b. load calculations
 - c. electrical panel one-line drawings

48. All on-site external lighting shall be installed and directed to have no off-site glare. Lighting within the parking areas and pedestrian walkways shall provide a maintained minimum of one (1) foot-candle, and 0.5 foot-candle of light, respectively. All exterior light fixtures shall be vandal resistant. (Planning, Police)
49. The parking lot shall have properly posted signs that state the use of the parking area is for the exclusive use of employees and customers of this project. (See California Vehicle Code Sections 22507.8, 22511.5, 22511.8, 22658(a), and the City of Roseville Municipal Code Section 11.20.110). The location of the signs shall be shown on the approved site plan. (Planning, Police)
50. It is the developer's responsibility to notify PG&E of any work required on PG&E facilities. (PG&E)

DURING CONSTRUCTION & PRIOR TO ISSUANCE OF OCCUPANCY PERMITS:

51. Any backflow preventers visible from the street shall be painted green to blend in with the surrounding landscaping. The backflow preventers shall be screened with landscaping and shall comply with the following criteria:
- a. There shall be a minimum clearance of four feet (4'), on all sides, from the backflow preventer to the landscaping.
 - b. For maintenance purposes, the landscaping shall only be installed on three sides and the plant material shall not have thorns.
 - c. The control valves and the water meter shall be physically unobstructed.
 - d. The backflow preventer shall be covered with a green cover that will provide insulation. (Planning, Environmental Utilities)
52. Easement widths shall comply with the City's Improvement Standards and Construction Standards. Separate document easements required by the City shall be prepared in accordance with the City's "Policy for Dedication of Easements to the City of Roseville". All legal descriptions shall be prepared by a licensed land Surveyor. All existing public utility, electric, water, sewer and reclaimed water easements shall be maintained unless otherwise authorized by these conditions of approval. (Engineering, Environmental Utilities, Electric)
53. Inspection of the potable water supply system on new commercial/industrial/office projects shall be as follows:
- a. The Environmental Utilities Inspector will inspect all potable water supply up to the downstream side of the backflow preventer.
 - b. The property owner/applicant shall be responsible for that portion of the water supply system from the backflow preventer to the building. The builder/contractor shall engage a qualified inspector to approve the installation of this portion of the water supply. The Building Division will require from the builder/contractor, a written document certifying that this portion of the potable water supply has been installed per improvement plans and in accordance with the Uniform Plumbing Code. This certificate of compliance shall be submitted to the Building Division before a temporary occupancy or a building final is approved.

- c. The building inspectors will exclusively inspect all potable water supply systems for the building from the shutoff valve at the building and downstream within the building. (Building, Environmental Utilities)
- 54. All improvements being constructed in accordance with the approved grading and improvement plans shall be accepted as complete by the City. (Engineering)
- 55. The words "traffic control appurtenances" shall be included in the list of utilities allowed in public utilities easements (PUE's) located along public roadways. (Engineering)
- 56. Water, sewer and reclaimed water shall be constructed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. (Environmental Utilities)
- 57. All water backflow devices shall be tested and approved by the Environmental Utilities Department. (Environmental Utilities)
- 58. All Electric Department facilities, including streetlights where applicable, shall be designed and built to the "City of Roseville Specifications for Commercial Construction." (Electric)
- 59. The City of Roseville Electric Department has electrical construction charges which are to be paid by the developer and which are explained in the City of Roseville "Specification for Commercial Construction." These charges will be determined upon completion of the final electrical design. (Electric)
- 60. Any relocation, rearrangement, or change of existing electric facilities due to this development shall be at the developer's expense. (Electric)
- 61. Any facilities proposed for placement within public/electric utility easements shall be subject to review and approval by the Electric Department before any work commences in these areas. This includes, but is not limited to, landscaping, lighting, paving, signs, trees, walls, and structures of any type. (Electric)
- 62. All electric metering shall be directly outside accessible. This can be accomplished in any of the following ways:
 - a. Locate the metered service panel on the outside of the building.
 - b. Locate the metered service panel in a service room with a door that opens directly to the outside. The developer will be required to provide a key to the door for placement in a lock box to be installed on the outside of the door. Any doors leading from the service room to other areas of the building shall be secured to prohibit unauthorized entry. (Electric)
- 63. One ¾-inch conduit with a 2-pair phone line shall be installed from the building's telephone service panel to the meter section of the customer's electrical switchgear or panel. (Electric)
- 64. It is the responsibility of the developer to ensure that all existing electric facilities remain free and clear of any obstruction during construction and when the project is complete. (Electric)

OTHER CONDITIONS OF APPROVAL:

- 65. Signs shown on the elevations are not approved as part of the Design Review Permit. A Sign Permit is required for all project signs. (Planning)

66. Following the installation of the landscaping, all landscape material shall be maintained in a healthy and weed-free condition; dead plant material shall be replaced immediately. All trees shall be maintained and pruned in accordance with the accepted practices of the International Society of Arboriculture (ISA). (Planning)
67. The City reserves the right to restrict vehicle turning movements within the public right-of-way in the future if deemed necessary by the City Engineer. (Engineering)
68. The required width of fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Minimum required widths and vertical clearances established by the Fire Code shall be maintained at all times during construction. Closure of accesses for fire apparatus by gates, barricades and other devices shall be prohibited unless approved by the Fire Chief. (Fire)
69. Temporary aboveground storage tanks may be used at construction sites for diesel fuel only and shall not exceed 1,000 gallon capacity. Tanks shall comply with all provisions found within the Fire Code. A Fire Department Permit shall be obtained prior to tank installation. The permit shall expire after 90 days from the date of issuance, unless extended by the Fire Chief. (Fire)
70. If site survey or earth moving work results in the discovery of hazardous materials in containers or what appears to be hazardous wastes released into the ground, the contractor or person responsible for the building permit must notify the Roseville Fire Department immediately. A representative from the Fire Department will make a determination as to whether the incident is reportable or not and if site remediation is required. (Fire)
71. The location and design of the gas service shall be determined by PG&E. The design of the gas service for this project shall not begin until PG&E has received a full set of City approved improvement plans for the project. (PG&E)
72. The project is subject to the noise standards established in the City's Noise Ordinance. In accordance with the City's Noise Ordinance, project construction is exempt between the hours of seven a.m. and seven p.m. Monday through Friday, and between the hours of eight a.m. and eight p.m. Saturday and Sunday, provided that all construction equipment shall be fitted with factory installed muffling devices and be maintained in good working order. (Building)
73. The developer (or designated consultant) shall certify that the building foundation location has been placed according to all approved setback requirements shown on the approved site plan. The developer shall prepare a written statement confirming building placement and provide an original copy to the City Building Division Field Inspector at the time of or prior to the foundation inspection. (Building)
74. Prior to Certificate of Occupancy, the applicant may apply for a Temporary Certificate of Occupancy (TCO) of the building. If a TCO is desired, the applicant must submit a written request to the Building Division a minimum of thirty (30) days prior to the expected temporary occupancy date and shall include a schedule for occupancy and a description of the purpose for the Temporary Certificate of Occupancy. (Building)
75. Concurrent with submittal for plan check and prior to a request for final building inspection, the applicant may request City approval of an occupancy phasing plan to allow individual or multiple building occupancies. This request shall be made in writing to the Building Division and shall include the following:

- a. A description of measures that will be undertaken to minimize conflict between residents/building occupants and construction traffic (e.g. fencing, etc.);
- b. A phasing plan showing the proposed buildings, internal roads and access routes, landscaping, trash enclosure locations, and any other improvements planned for each phase; and
- c. An estimated time frame for each phase and a specific date for the first phase. (Planning, Building)

Attachments

1. Placer County Air Pollution Control District letter

Exhibits

- A. Industrial Ave Self-Storage Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
- B. Site Plans
- C. Grading Plans
- D. Building Elevations
- E. Landscape Plan
- F. Colors and Materials

Note to Applicant and/or Developer: Please contact the Planning Division staff at (916) 774-5276 prior to the Design Committee meeting if you have any questions on any of the recommended conditions for your project. If you challenge the decision of the Design Committee in court, you may be limited to raising only those issues which you or someone else raised at the public hearing held for this project, or in written correspondence delivered to the Planning Manager at, or prior to, the public hearing.

March 27, 2020

Mr. Sean Morales, Planning Division
City of Roseville
311 Vernon Street
Roseville, C 95678

SENT VIA : smorales@roseville.ca.us

SUBJECT: NIPA PCL 51 – Industrial Ave. Self-Storage; PL 19-0243

Mr. Morales:

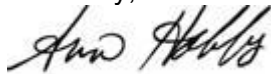
Thank you for the opportunity to review and comment on the NIPA PCL 51 – Industrial Ave. Self-Storage; PL 19-0243 Mitigated Negative Declaration (Project).

The District recommends the requirement of a Dust Control Plan to be submitted and approved by the District prior to the commencement of any ground disturbance as described as follows:

Prior to approval of Grading or Improvement Plans, (whichever occurs first), on the project site, if greater than one acre, the applicant shall submit a Dust Control Plan (DCP) to the Placer County Air Pollution Control District. The applicant shall not break ground prior to receiving District approval and delivering that approval to the local jurisdiction issuing the permit.

Thank you for allowing the District this opportunity to review the project proposal. Please do not hesitate to contact me at 530.745.2327 or ahobbs@placer.ca.gov if you have any questions.

Sincerely,



Ann Hobbs
Associated Planner
Planning & Monitoring Section

MITIGATED NEGATIVE DECLARATION

Project Title/File Number: NIPA PCL 51 - Industrial Ave Self-Storage; PL19-0243
Project Location: 8151 Industrial Ave., Roseville, Placer County, CA
APN: 017-410-017-000
Project Applicant: Tiffany Wilson, RSC Engineering, Inc.; (916) 788-2884; 2250
Douglas Blvd., Suite 150, Roseville, CA 95661
Property Owner: Mark Ryan, Pleasant Grove Self-Storage-Industrial Avenue, LLC;
(650) 208-3430; 20 Antonio Ct., City, Portola Valley 94028
Lead Agency Contact Person: Sean Morales, Assistant Planner - City of Roseville; (916) 774-5282
Date: March 12, 2020

Project Description:

The applicant requests a Design Review Permit to allow the construction of a self-storage facility with an office and manager's apartment above the office. The proposal would allow the construction of four 1-story and two 2-story self-storage buildings plus an office building with manager's apartment over top for a total of 7 buildings. The total square footage for the self-storage buildings is 101,339 sf. The total square footage for the office/manager's apartment is 4,431 sf for an overall total of 105,770 sf.

DECLARATION

The Planning Manager has determined that the above project will not have significant effects on the environment and therefore does not require preparation of an Environmental Impact Report. The determination is based on the attached initial study and the following findings:

- A. *The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, reduce the number or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory.*
- B. *The project will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.*
- C. *The project will not have impacts, which are individually limited, but cumulatively considerable.*
- D. *The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.*
- E. *No substantial evidence exists that the project may have a significant effect on the environment.*
- F. *The project incorporates all applicable mitigation measures identified in the attached initial study.*
- G. *This Mitigated Negative Declaration reflects the independent judgment of the lead agency.*

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	NIPA PCL 51 - Industrial Ave Self-Storage; PL19-0243
Project Location:	8151 Industrial Ave., Roseville, Placer County, CA APN: 017-410-017-000
Project Description:	The applicant requests a Design Review Permit to allow the construction of a self-storage facility with an office and manager's apartment above the office. The proposal would allow the construction of four 1-story and two 2-story self-storage buildings plus an office building with manager's apartment over top for a total of 7 buildings. The total square footage for the self-storage buildings is 101,339 sf. The total square footage for the office/manager's apartment is 4,431 sf for an overall total of 105,770 sf.
Project Applicant:	Tiffany Wilson, RSC Engineering, Inc.
Property Owner:	Mark Ryan For: Pleasant Grove Self-Storage-Industrial Avenue, LLC
Lead Agency Contact:	Sean Morales, Assistant Planner, (916) 774-5282

This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project application. The document relies on site-specific studies prepared to address in detail the effects or impacts associated with the project. Where documents were submitted by consultants working for the applicant, City staff reviewed such documents in order to determine whether, based on their own professional judgment and expertise, staff found such documents to be credible and persuasive. Staff has only relied on documents that reflect their independent judgment, and has not accepted at face value representations made by consultants for the applicant.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA), (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

The initial study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an EIR. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a negative declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures to which the applicant agrees, the impact will be reduced to a less than significant effect, a mitigated negative declaration shall be prepared.

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PROJECT DESCRIPTION

Project Location

The project site is located at 8151 Industrial Avenue in the City's North Industrial Plan Area (Figure 1). The site is zoned M1 (Light industrial) and is currently undeveloped. The site is surrounded by a City electric substation to the north, a Union Pacific railway with industrial uses beyond to the west, a business park to the south, and vacant land and a church to the east. See Table 1 for the land use designations and uses of the subject and surrounding properties.

Figure 1. Project Location



Table 1: Site and Vicinity Land Use Designations

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	M1	LI	Vacant Land
North	M1	P/QP	City of Roseville Electric Substation
South	M1	LI	Business Park
East	M2	IND	Vacant Land/ Church
West	M1	LI	Railway/ Existing and Proposed Industrial Uses

Background

The project is located within the North Industrial Plan Area (NIPA). The NIPA, while not subject to a specific plan, is a recognized planning subarea of the City. The area consists of 2,046 gross acres west of Washington Boulevard and north of the Northwest Roseville Specific Plan. Devoted primarily to industrial uses, the area is intended to provide a major employment/ industrial center for the South Placer region. The project site was initially subdivided, in 1984, as Lot 7 of the Diamond Oaks Center business park project. In 2008, a Design

Review Permit and Conditional Use Permit (File #2006PL-026) were approved for four single-story warehouse buildings. That project was not constructed and the site has remained undeveloped.

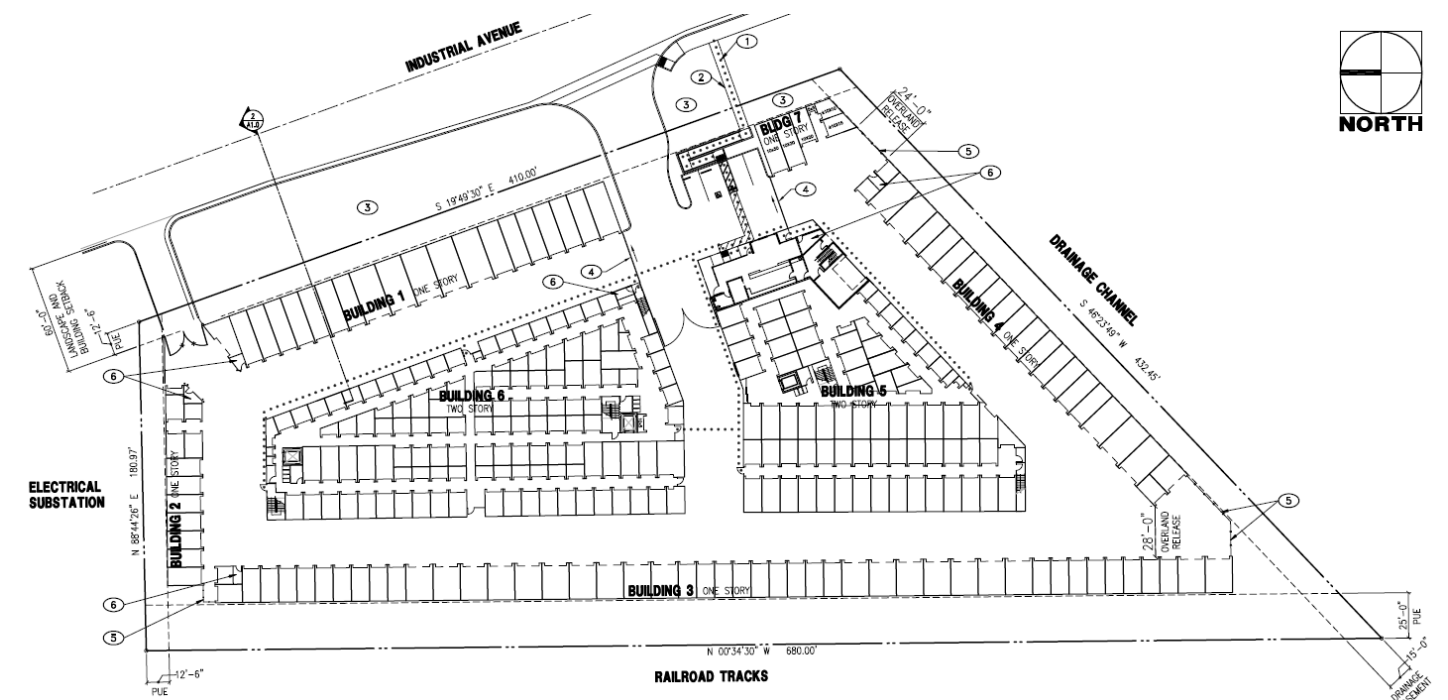
Environmental Setting

The project site is an infill property located in an urbanized setting. The site includes frontage on Industrial Avenue, which is a two-lane arterial roadway with a center turning lane, and includes sidewalk and landscaping. The project site is situated approximately seven feet below the grade of Industrial Avenue and is relatively flat. The only vegetation on the site is non-native grasses, small herbaceous annual plants, and three Oregon ash trees. There are no structures on the property.

Proposed Project

The project consists of a request to allow construction of a self-storage facility with office and manager's apartment (Figure 2). The proposal includes four 1-story and two 2-story self-storage buildings plus an office building with manager's apartment over top and garage below for a total of 7 buildings. The total square footage for the self-storage buildings is 101,339 sf. The total square footage for the office/manager's apartment is 4,431 sf for an overall total of 105,770 sf. Construction will also include four parking spaces, and the associated landscaping, lighting, and drive aisles. Grading activities on the site will also include filling a small depressional seasonal wetland.

Figure 2. Site Plan



CITY OF ROSEVILLE MITIGATION ORDINANCES, GUIDELINES, AND STANDARDS

For projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, CEQA Guidelines section 15183(f) allows a lead agency to rely on previously adopted development policies or standards as mitigation for the environmental effects, when the standards have been adopted by the City, with findings based on substantial evidence, that the policies or

standards will substantially mitigate environmental effects, unless substantial new information shows otherwise (CEQA Guidelines §15183(f)). The City of Roseville adopted CEQA Implementing Procedures (Implementing Procedures) which are consistent with this CEQA Guidelines section. The current version of the Implementing Procedures were adopted in April 2008, along with Findings of Fact, as Resolution 08-172. The below regulations and ordinances were found to provide uniform mitigating policies and standards, and are applicable to development projects. The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist.

- City of Roseville 2035 General Plan
- City of Roseville Zoning Ordinance (RMC Title 19)
- City of Roseville Design and Construction Standards (Resolution 16-75)
- Subdivision Ordinance (RMC Title 18)
- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- West Placer Stormwater Quality Design Manual (Resolution 16-152)
- Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20)
- Traffic Mitigation Fee (RMC Ch.4.44)
- Highway 65 Joint Powers Authority Improvement Fee (Resolution 2008-02)
- South Placer Regional Transportation Authority Transportation and Air Quality Mitigation Fee (Resolution 09-05)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Community Design Guidelines (Resolution 95-347)
- Specific Plan Design Guidelines:
 - o North Roseville Area Design Guidelines (Resolution 92-226)

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- Amoruso Ranch Specific Plan Final Environmental Impact Report

Pursuant to CEQA Guidelines Section 15183, any project which is consistent with the development densities established by zoning, a Community Plan, or a General Plan for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The Amoruso Ranch Specific Plan EIR updated the City's General Plan to 2035, and updated Citywide analyses of traffic, water supply, water treatment, wastewater treatment, and waste disposal. The proposed project is consistent with the adopted land use designations examined within the environmental documents listed above, and thus this Initial Study focuses on effects particular to the specific project site, impacts which were not analyzed within the EIR, and impacts which may require revisiting due to substantial new information. When applicable, the topical sections within the Initial Study summarize the findings within the environmental documents listed above. The analysis, supporting technical materials, and findings of the environmental document are incorporated by reference, and are available for review at the Civic Center, 311 Vernon Street, Roseville, CA.

EXPLANATION OF INITIAL STUDY CHECKLIST

The California Environmental Quality Act (CEQA) Guidelines recommend that lead agencies use an Initial Study Checklist to determine potential impacts of the proposed project on the physical environment. The Initial Study

Checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by this project. This section of the Initial Study incorporates a portion of Appendix G Environmental Checklist Form, contained in the CEQA Guidelines. Within each topical section (e.g. Air Quality) a description of the setting is provided, followed by the checklist responses, thresholds used, and finally a discussion of each checklist answer.

There are four (4) possible answers to the Environmental Impacts Checklist on the following pages. Each possible answer is explained below:

- 1) A “Potentially Significant Impact” is appropriate if there is enough relevant information and reasonable inferences from the information that a fair argument based on substantial evidence can be made to support a conclusion that a substantial, or potentially substantial, adverse change may occur to any of the physical conditions within the area affected by the project. When one or more “Potentially significant Impact” entries are made, an EIR is required.
- 2) A “Less Than Significant With Mitigation” answer is appropriate when the lead agency incorporates mitigation measures to reduce an impact from “Potentially Significant” to “Less than Significant.” For example, floodwater impacts could be reduced from a potentially-significant level to a less-than-significant level by relocating a building to an area outside of the floodway. The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level. Mitigation measures are identified as MM followed by a number.
- 3) A “Less Than significant Impact” answer is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant, or the application of development policies and standards to the project will reduce the impact(s) to a less-than-significant level. For instance, the application of the City’s Improvement Standards reduces potential erosion impacts to a less-than-significant level.
- 4) A “No Impact” answer is appropriate where it can be demonstrated that the impact does not have the potential to adversely affect the environment. For instance, a project in the center of an urbanized area with no agricultural lands on or adjacent to the project area clearly would not have an adverse effect on agricultural resources or operations. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources cited in the Initial Study. Where a “No Impact” answer is adequately supported by the information sources cited in the Initial Study, further narrative explanation is not required. A “No Impact” answer is explained when it is based on project-specific factors as well as generous standards.

All answers must take account of the whole action involved, including off- and on-site, indirect, direct, construction, and operation impacts, except as provided for under State CEQA Guidelines.

INITIAL STUDY CHECKLIST

I. Aesthetics

The project site is located in an area developed with office and industrial uses adjacent to the Union Pacific Railroad to the west and Industrial Avenue to the east. The only public view of the site and its visual setting is from Industrial Avenue and its adjacent sidewalks. The view includes no distinct topography or other visual elements. During the winter the site is green and covered with grasses and small annual plants, and during the

summer the grasses turn brown. The background of the view includes the Union Pacific Railroad tracks with industrial and office uses beyond. The site is in a highly urbanized visual setting.

Would the project:

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

Thresholds of Significance and Regulatory Setting:

The significance of an environmental impact cannot always be determined through the use of a specific, quantifiable threshold. CEQA Guidelines Section 15064(b) affirms this by the statement “an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.” This is particularly true of aesthetic impacts. As an example, a proposed parking lot in a dense urban center would have markedly different visual effects than a parking lot in an open space area. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–d of the checklist below. The Findings of the Implementing Procedures indicate that compliance with the Zoning Ordinance (e.g. building height, setbacks, etc), Subdivision Ordinance (RMC Ch. 18), Community Design Guidelines (Resolution 95-347), and applicable Specific Plan Policies and/or Specific Plan Design Guidelines will prevent significant impacts in urban settings as it relates to items a, b, and c, below.

Discussion of Checklist Answers:

a-b) There are no designated or eligible scenic vistas or scenic highways within or adjacent to the City of Roseville.

c) The project site is in an urban setting, and as a result lacks any prominent or high-quality natural features which could be negatively impacted by development. The City of Roseville has adopted Community Design Guidelines (CDG) for the purpose of creating building and community designs which are a visual asset to the community. The CDG includes guidelines for building design, site design and landscape design, which will result in a project that enhances the existing urban visual environment. When buildings and associated site improvements are proposed for the site they will be reviewed for consistency with these guidelines. Accordingly, the aesthetic impacts of the project are less than significant.

d) The project involves nighttime lighting to provide for the security and safety of project users. However, the project is already located within an urbanized setting with many existing lighting sources. Lighting is conditioned to comply with City standards (i.e. CDG) to limit the height of light standards and to require cut-off lenses and glare shields to minimize light and glare impacts. The project will not create a new source of substantial light. None of the project elements are highly reflective, and thus the project will not contribute to an increased source of glare.

II. Agricultural & Forestry Resources

The State Department of Conservation oversees the Farmland Mapping and Monitoring Program, which was established to document the location, quality, and quantity of agricultural lands, and the conversion of those lands over time. The primary land use classifications on the maps generated through this program are: Urban and Built Up Land, Grazing Land, Farmland of Local Importance, Unique Farmland, Farmland of Statewide Importance, and Prime Farmland. According to the current California Department of Conservation Placer County Important Farmland Map (2012), the majority of the City of Roseville is designated as Urban and Built Up Land and most of the open space areas of the City are designated as Grazing Land. There are a few areas designated as Farmland of Local Importance and two small areas designated as Unique Farmland located on the western side of the City along Baseline Road. The current Williamson Act Contract map (2013/2014) produced by the Department of Conservation shows that there are no Williamson Act contracts within the City, and only one (on PFE Road) that is adjacent to the City. None of the land within the City is considered forest land by the Board of Forestry and Fire Protection.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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 and Monitoring Program of the California Resources Agency, to non-agricultural use?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Thresholds of Significance and Regulatory Setting:

Unique Farmland, Farmland of Statewide Importance, and Prime Farmland are called out as protected farmland categories within CEQA Guidelines Appendix G. Neither the City nor the State has adopted quantified significance thresholds related to impacts to protected farmland categories or to agricultural and forestry resources. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–e of the checklist above.

Discussion of Checklist Answers:

a–e) The project site is not used for agricultural purposes, does not include agricultural zoning, is not within or adjacent to one of the areas of the City designated as a protected farmland category on the Placer County Important Farmland map, is not within or adjacent to land within a Williamson Act Contract, and is not considered forest land. Given the foregoing, the proposed project will have no impact on agricultural resources.

III. Air Quality

The City of Roseville, along with the south Placer County area, is located in the Sacramento Valley Air Basin (SVAB). The SVAB is within the Sacramento Federal Ozone Non-Attainment Area. Under the Clean Air Act, Placer County has been designated a "serious non-attainment" area for the federal 8-hour ozone standard, "non-attainment" for the state ozone standard, and a "non-attainment" area for the federal and state PM₁₀ standard

(particulate matter less than 10 microns in diameter). Within Placer County, the Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring that emission standards are not violated. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a–c, project-related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. To assist in making this determination, the PCAPCD adopted thresholds of significance, which were developed by considering both the health-based ambient air quality standards and the attainment strategies outlined in the State Implementation Plan. The PCAPCD-recommended significance threshold for reactive organic gases (ROG) and nitrogen oxides (NO_x) is 82 pounds daily during construction and 55 pounds daily during operation, and for particulate matter (PM) is 82 pounds per day during both construction and operation. For all other constituents, significance is determined based on the concentration-based limits in the Federal and State Ambient Air Quality Standards. Toxic Air Contaminants (TAC) are also of public health concern, but no thresholds or standards are provided because they are considered to have no safe level of exposure. Analysis of TAC is based on the *Air Quality and Land Use Handbook – A Community Health Perspective* (April 2005, California Air Resources Board), which lists TAC sources and recommended buffer distances from sensitive uses. For checklist item c, the PCAPCD's *CEQA Air Quality Handbook (Handbook)* recommends that the same thresholds used for the project analysis be used for the cumulative impact analysis.

With regard to checklist item d, there are no quantified significance thresholds for exposure to objectionable odors or other emissions. Significance is determined after taking into account multiple factors, including screening distances from odor sources (as found in the PCAPCD CEQA Handbook), the direction and frequency of prevailing winds, the time of day when emissions are detectable/present, and the nature and intensity of the emission source.

Discussion of Checklist Answers:

a–c) Analyses are not included for sulfur dioxide, lead, and other constituents because there are no mass emission thresholds; these are concentration-based limits in the Federal and State Ambient Air Quality Standards which require substantial, point-source emissions (e.g. refineries, concrete plants, etc) before exceedance will occur, and the SVAB is in attainment for these constituents. Likewise, carbon monoxide is not analyzed because the SVAB is in attainment for this constituent, and it requires high localized concentrations (called carbon monoxide “hot spots”) before the ambient air quality standard would be exceeded. “Hot spots” are typically associated with heavy traffic congestion occurring at high-volume roadway intersections. The Amoruso Ranch EIR analysis of Citywide traffic indicated that 198 out of 226 signalized intersections would operate at level of service C or better—that is, they will not experience heavy traffic congestion. It further indicated that analyses of existing CO concentrations at the most congested intersections in Roseville show that CO levels are well below federal and state ambient air quality standards. The discussions below focus on emissions of ROG, NO_x, or PM. A project-level analysis has been prepared to determine whether the project will, on a singular level, exceed the established thresholds.

The project involves construction of 105,000 square feet of non-residential buildings and approximately .85 acres of paved area (parking lots and drive aisles) on a 3.27-acre site. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to model the construction emissions of the project (see Attachment 1). The results are detailed in Table 2 below. According to the model results, the project will result in maximum daily emissions of 54 lb/day of ROG and 20 lb/day of NO_x during construction; these emissions fall below the 82-lb/day thresholds for these constituents. Therefore, construction air quality impacts are less than significant.

The PCAPCD maintains screening thresholds to determine when modeling is required to evaluate impacts resulting from project operation. The screening thresholds indicate a General Commercial project must involve more than 200,000 square feet of building area, and a general industrial project must involve nearly 900,000 square feet of building area, before the PCAPCD significance thresholds for criteria pollutants are likely to be exceeded. The proposed project includes approximately 105,000 square feet of building area, which is well below the screening thresholds; therefore, the project will not result in operational emissions which exceed established thresholds.

Table 2: CalEEMod Results

Maximum Unmitigated Construction-Related Emissions			
Pollutant	Project Emissions (lbs/day)	PCAPCD Significance Threshold (lbs/day)	Exceeds Threshold?
ROG	54.9	82	No
NO _x	42.4	82	No
PM ₁₀	20.4	82	No
Source: CalEEMod, November 2019			

The proposed project would not exceed the applicable thresholds of significance for air pollutant emissions during construction or operation. As such, the project would not conflict with or obstruct implementation of the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (which is the SIP) or contribute substantially to the PCAPCD’s nonattainment status for ozone. In addition, because the proposed project would not produce substantial emissions of criteria air pollutants, CO, or TACs, adjacent residents would not be exposed to significant levels of pollutant concentrations during construction or operation. Therefore, implementation of the proposed project would result in less than significant impacts, and consistent with the

analysis methodology outlined in the Significance Thresholds and Regulatory Setting section, cumulative impacts are less than significant.

With regard to TAC, there are hundreds of constituents which are considered toxic, but they are typically generated by stationary sources like gas stations, facilities using solvents, and heavy industrial operations. The proposed project is not a TAC-generating use, nor is it within the specified buffer area of a TAC-generating use, as established in the *Air Quality and Land Use Handbook – A Community Health Perspective*. Impacts due to substantial pollutant concentrations are less than significant.

d) Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction is temporary and diesel emissions are minimal and regulated. Typical urban projects such as residences and retail businesses generally do not result in substantial objectionable odors when operated in compliance with City Ordinances (e.g. proper trash disposal and storage). The Project is a typical urban development that lacks any characteristics that would cause the generation of substantial unpleasant odors. Thus, construction and operation of the proposed project would not result in the creation of objectionable odors affecting a substantial number of people. A review of the project surroundings indicates that there are no substantial odor-generating uses near the project site; the project location meets the recommended screening distances from odor-generators provided by the PCAPCD. Impacts related to odors are less than significant.

IV. Biological Resources

Biological communities on the site include ruderal herbaceous habitat with yellow star thistle, other common plant species, and three Oregon ash trees. There is one depressional seasonal wetland on the site totaling less than .01 acre.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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 Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Thresholds of Significance and Regulatory Setting:

There is no ironclad definition of significance as it relates to biological resources. Thus, the significance of impacts to biological resources is defined by the use of expert judgment supported by facts, and relies on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to biological resources (as cited and described in the Discussion of Checklist Answers section). Thresholds for assessing the significance of environmental impacts are based on the CEQA Guidelines checklist items a–f, above. Consistent with CEQA Guidelines Section 15065, a project may have a significant effect on the environment if:

The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; [or] substantially reduce the number or restrict the range of an endangered, rare or threatened species . . .

Various agencies regulate impacts to the habitats and animals addressed by the CEQA Guidelines checklist. These include the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration–

Fisheries, United States Army Corps of Engineers, Central Valley Regional Water Quality Control Board, and California Department of Fish and Wildlife. The primary regulations affecting biological resources are described in the sections below.

Checklist item a addresses impacts to special status species. A “special status” species is one which has been identified as having relative scarcity and/or declining populations. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of special concern. Also included are those species considered to be “fully protected” by the California Department of Fish and Wildlife (California Fish and Wildlife), those granted “special animal” status for tracking and monitoring purposes, and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS). The primary regulatory protections for special status species are within the Federal Endangered Species Act, California Endangered Species Act, California Fish and Game Code, and the Federal Migratory Bird Treaty Act.

Checklist item b addresses all “sensitive natural communities” that may be affected by local, state, or federal regulations/policies while checklist item c focuses specifically on one type of such a community: federally-protected wetlands. Focusing first on wetlands, there are two questions to be posed in examining wet habitats: the first is whether the wetted area meets the technical definition of a wetland, making it subject to checklist item b, and the second is whether the wetland is subject to federal jurisdiction, making it subject to checklist item c. The 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland. A delineation verification by the Army Corps verifies the size and condition of the wetlands and other waters in question, and determines the extent of government jurisdiction as it relates to Section 404 of the Federal Clean Water Act and Section 401 of the State Clean Water Act.

The Clean Water Act protects all “navigable waters”, which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Non-navigable waters are called isolated wetlands, and are not subject to either the Federal or State Clean Water Act. Thus, isolated wetlands are not subject to federal wetland protection regulations. However, in addition to the Clean Water Act, the State also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act (Porter-Cologne), which does not require that waters be “navigable”. For this reason, isolated wetlands are regulated by the State of California pursuant to Porter-Cologne. The City of Roseville General Plan also provides protection for wetlands, including isolated wetlands, pursuant to the General Plan Open Space and Conservation Element. Federal, State and City regulations/policies all seek to achieve no net loss of wetland acreage, values, or function.

Aside from wetlands, checklist item b also addresses other “sensitive natural communities,” which includes any habitats protected by local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The City of Roseville General Plan Open Space and Conservation Element includes policies for the protection of riparian areas (streamside habitat) and floodplain areas; these are Vegetation and Wildlife section Policies 2 and 3. Policy 4 also directs preservation of additional area around stream corridors and floodplain if there is sensitive woodland, grassland, or other habitat which could be made part of a contiguous open space area. Other than wetlands, which were already discussed, US Fish and Wildlife and California Department of Fish and Wildlife habitat protections generally result from species protections, and are thus addressed via checklist item a.

For checklist item d, there are no regulations specific to the protection of migratory corridors. This item is addressed by an analysis of the habitats present in the vicinity and analyzing the probable effects on access to those habitats which will result from a project.

The City of Roseville Tree Preservation ordinance (RMC Ch.19.66) requires protection of native oak trees, and compensation for oak tree removal. The Findings of the Implementing Procedures indicate that compliance with

the City of Roseville Tree Preservation ordinance (RMC Ch.19.66) will prevent significant impacts related to loss of native oak trees, referenced by item e, above.

Regarding checklist item f, there are no adopted Habitat Conservation Plans within the City of Roseville.

Discussion of Checklist Answers:

a-b) The project site is located within Section 28, Township 11 north, Range 6 East, of the USGS 7.5-minute series Roseville quadrangle. The project applicant has prepared a Biological Survey, which is included as Attachment 2 to this initial study. The survey identifies the potential biological resources that could occur on the site and the appropriate mitigation measures to reduce potential impacts to the resources. Prior to the site survey, existing information, including the previously prepared wetland delineation and soil maps were reviewed and the results of the database records search and five-mile radius California Natural Diversity Data Base (CNDDB) query were summarized in a table (Attachment 2). The results identified the special status plant and wildlife species with known occurrences in the region. Many of the identified special status species are associated with habitat types that are not present on the site. Only those species known to be present and those that are associated with habitat on and adjacent to the site are discussed further.

The special status species surveys that were conducted identified potential habitat was present onsite for four special-status bird species, and one special-status bat species. Consistent with the mitigation measures listed below, pre-construction surveys shall be conducted to confirm the presence or absence of special status wildlife. With the mitigation measure the impact is considered less than significant.

Construction activities have potential to disrupt offsite nesting species. **Mitigation Measure BIO-1** is required to ensure that special status migratory birds and raptors are not harmed. Ground disturbing activities shall not occur during the active nesting season, if it is necessary to conduct such activities during the nesting season, pre-construction surveys and mitigation as described in **Mitigation Measure BIO-1**, would be required. A pre-construction survey and mitigation as described in **Mitigation Measure BIO-2** is required to ensure that special status Western Burrowing Owls are not harmed. A pre-construction survey and mitigation as described in **Mitigation Measure BIO-3** is required to ensure that special status bat species are not harmed.

Compliance with **Mitigation Measure BIO-1, BIO-2, and BIO-3** will ensure that potential impacts to special status species are less than significant. If species are identified on the site the applicant is directed to cease all construction activities, contact the City, and to apply the appropriate measures. With implementation of these measures impacts to special status species are less than significant.

c) The project involves grading activities that will fill a small depressional seasonal wetland on the site. **Mitigation Measure BIO-4** is required to ensure that the applicant obtains the appropriate wetland permits. Grading activities will impact wetland features.

The City's General Plan Implementation Measures for wetland resources (pg.V-22) require avoidance as a first priority, with compensation or mitigation implemented when avoidance is not feasible. The measures also identify no net loss of wetland acreage, values, or function. The project will provide wetland mitigation as required by the US Army Corps of Engineers. With the proposed mitigation the project will not conflict with local policies regarding protection of biological resources.

Implementation of the **Mitigation Measure BIO-4** would ensure that permits are obtained from federal agencies and adherence to the permit would further ensure that the project will result in "no net loss" of wetlands/waters, and that discharge into the waters is regulated. Therefore, with mitigation measures, impacts to wetlands/waters and potential loss of associated habitat are considered less than significant with mitigation.

d) The City includes an interconnected network of open space corridors and preserves located throughout the City, to ensure that the movement of wildlife is not substantially impeded as the City develops. The development of the project site will not negatively impact these existing and planned open space corridors, nor is the project site located in an area that has been designated by the City, United States Fish and Wildlife, or California Department of Fish and Wildlife as vital or important for the movement of wildlife or the use of native wildlife nursery sites.

e,f) Helix Environmental conducted a tree survey on the site. The three trees on site were found to be Oregon ash, which are not subject to the City of Roseville Tree Preservation Ordinance. There are no Habitat Conservation Plans; Natural Community Conservation Plans; or other approved local, regional, or state habitat conservation plans that apply to the project site.

BIO-1: Implement Measures to Protect Migratory Birds and Raptors

If development activities occur during the nesting season, then a qualified biologist shall conduct a nesting bird survey to determine the presence of any active nests within the Study Area. Additionally, the surrounding 500 feet of the Study Area should be surveyed for active raptor nests, where accessible, and with binoculars as necessary. The nesting bird survey should be conducted no more than 14 days prior to commencement of ground-disturbing or other development activities. If the nesting bird survey shows that there is no evidence of active nests, then a letter report shall be prepared to document the survey and provided to the City of Roseville, and no additional measures are recommended. If development does not commence within 14 days of the nesting bird survey, or halts for more than 14 days, then an additional survey is required prior to starting or resuming work.

If active nests are found, then the qualified biologist shall mark species-specific buffer zones in the field to prohibit development activities and minimize nest disturbance until the young have successfully fledged or the biologist determines that a nest is no longer active. Buffer distances may range from 20 feet for some songbirds up to 250 to 500 feet for most raptors. Nest monitoring may also be warranted during certain phases of development to ensure nesting birds are not adversely impacted by adjacent construction. If active nests are found within any trees slated for removal, then an appropriate buffer should be established around the tree and all trees within the buffer shall not be removed until a qualified biologist determines that the nest has successfully fledged and is no longer active.

In addition, a qualified biologist shall conduct an environmental awareness training for all construction personnel for the potential of nesting birds to occur onsite prior to the initiation of work. This training shall follow the same guidelines as for special-status bats. As applicable, the pre-construction survey and environmental training may be combined with other recommended surveys and trainings.

A nesting bird survey and associated environmental training for nesting birds are not required if construction occurs outside of the nesting bird season (September 1 to January 31).

BIO-2: Implement Measures to Protect Western Burrowing Owls

A survey for burrowing owls must be conducted no more than 14 days prior to the initiation of construction as prescribed by CDFW guidelines (CDFW 2012). The Study Area should be surveyed by a qualified biologist to determine or rule out the presence of burrowing owl onsite. This survey may be conducted in conjunction with a nesting bird survey if construction were to be initiated within the nesting season.

If burrowing owls are observed on or within 500 feet of proposed development activities that will result in ground disturbance, then an impact assessment should be prepared and submitted to the CDFW, in accordance with the 2012 Staff Report. If it is determined that project activities may result in impacts to occupied western burrowing owl habitat, then the project proponent should consult with CDFW and develop a detailed mitigation

plan establishing avoidance and mitigation measures based on the requirements set forth in Appendix A of the 2012 Staff Report (CDFW 2012).

BIO-3: Implement Measures to Protect Special Status Bat Species

Townsend's big-eared bat (a State Species of Special Concern) and pallid bat (included on the CDFW Special Animals List), have the potential to occur within the Study Area. A qualified biologist shall conduct a pre-construction survey for special-status bat species no more than 14 days prior to development or ground disturbing activities including grading, vegetation clearing, tree removal, or construction. This can be performed in conjunction with a nesting bird survey, if applicable. If no bats are observed, then a letter report shall be prepared to document the survey and provided to the City of Roseville, and no additional measures are recommended. If development does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, then an additional survey is required prior to resuming or starting work.

If special-status bats are present and roosting in the Study Area or the surrounding 100 feet of the Study Area, then the qualified biologist should mark an appropriate no disturbance buffer around the roost site prior to the commencement of ground disturbing activities or development. At a minimum, no trees shall be removed until the biologist has determined that a roost site is no longer active, and no bats are present. In addition, a qualified biologist shall conduct an environmental awareness training to all construction personnel prior to the initiation of work. The training should include identification of special-status bat species, required practices before the start of construction, general measures that are being implemented to conserve the species as they relate to the Project, penalties for non-compliance, and boundaries of the permitted disturbance zones. Upon completion of the training, all construction personnel shall sign a form stating that they have attended the training and understand all the measures. Proof of this instruction shall be kept on file with the project proponent. As applicable, the pre-construction survey and environmental training may be combined with other recommended surveys and trainings.

Additional mitigation measures for bat species, such as installation of bat boxes or alternate roost structures, would be recommended only if special-status bat species are found to be roosting within the Study Area.

BIO-4: Implement Measures to Protect Wetlands

Prior to grading permit the project shall obtain an Army Corps of Engineers wetland fill or discharge "Section 404" permit. The project will be required to purchase credits in an approved wetland mitigation fund or other mitigation required by the 404 permit to ensure no net loss of wetlands.

V. Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. The gold rush which began in 1848 marked another settlement period, and evidence of Roseville's ranching and mining past are still found today. Historic features include rock walls, ditches, low terraces, and other remnants of settlement and activity. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of an historic resource pursuant to in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts to cultural resources is based directly on the CEQA Guidelines checklist items a–e listed above. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant resources (Policies 1 and 2). There are also various federal and State regulations regarding the treatment and protection of cultural resources, including the National Historic Preservation Act and the Antiquities Act (which regulate items of significance in history), Section 7050.5 of the California Health and Safety Code, Section 5097.9 of the California Public Resources Code (which regulates the treatment of human remains) and Section 21073 et seq. of the California Public Resources Code (regarding Tribal Cultural Resources). The CEQA Guidelines also contains specific sections, other than the checklist items, related to the treatment of effects on historic resources.

Pursuant to the CEQA Guidelines, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)). A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5(a)(2)); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Public Resources Code Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR.

Discussion of Checklist Answers:

a–c) A Cultural Resources Assessment was prepared for the project by Foothill Associates, Inc. (November, 2018). The report documented the findings of a field survey, record search, and sacred lands search that was done for the site. The report states that no cultural resources are known to exist on the project site; however, a standard mitigation measure, **CUL-1**, was applied to reduce impacts to cultural resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to

address the resource before work can resume. The project will not result in any new impacts; therefore project-specific impacts are less than significant.

CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources Should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains, be encountered during any subsurface development activities, work shall be suspended within 100-feet of the find. The City of Roseville Planning and Public Works Staff shall be immediately notified. At that time, as deemed necessary by the City, the developer shall retain a qualified archaeologist to assess the resource and provide proper management recommendations should potential impacts to the resources be found to be significant. All work by the archeologist shall be completed in consultation with and subject to the approval of City Planning. The archeologist shall also coordinate with and consult potentially-affected tribal representatives. Possible management recommendations for important resources could include resource avoidance or preservation in place. The contractor shall implement any measures deemed feasible and necessary by City staff, in consultation with the archaeologists, to avoid or minimize significant effects to the cultural resources. In addition, pursuant to Section 5097.98 or the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

VI. Energy

Roseville Electric provides electrical power in the City and Pacific Gas and Electric (PG&E) provides natural gas. The City purchases wholesale electrical power from both the Western Area Power Administration (WAPA), which is generated by the federal government's Central Valley Project, which produces 100 percent hydroelectric energy sources from a system of dams, reservoirs, and power plants within central and northern California. In addition, up to 50 percent of the City's power is generated at the City-owned Roseville Energy Park (REP). The REP is a 160 megawatt natural-gas-fired power plant that uses a combined cycle gas turbine technology. The City also owns the 48 megawatt combustion-turbine Roseville Power Plant 2 (REP 2), which is used for peaking energy. The City's electric power mix varies from year-to-year, but according to the most recent Citywide energy analysis (the Amoruso Ranch Environmental Impact Report), the mix in 2013/2014 was 25% eligible renewable (geothermal, small hydroelectric, and wind), 14% hydroelectric, 48% natural gas, and 13% from other sources (power purchased by contract).

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy inefficiency?			X	

Thresholds of Significance and Regulatory Setting:

Established in 2002, California's Renewable Portfolio Standard (RPS) currently requires that 33 percent of electricity retail sales be served by renewable energy resources by 2020, and 50 percent by 2030. The City published a Renewables Portfolio Standard Procurement Plan in June 2018, and continues to comply with the RPS reporting, requirements, and standards. There are no numeric significance thresholds to define "wasteful, inefficient, or unnecessary" energy consumption, and therefore significance is based on CEQA Guidelines checklist items a and b, above, and by the use of expert judgment supported by facts, relying on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to energy. The analysis considers compliance with regulations and standards, project design as it relates to energy use (including transportation energy), whether the project will result in a substantial unplanned demand on the City's energy resources, and whether the project will impede the ability of the City to meet the RPS standards.

Discussion of Checklist Answers:

a & b) The project proposes development of a 105,770 square-foot self-storage facility and manager's quarters. The project would consume energy both during project construction and during project operation.

During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. However, the energy consumed during construction would be temporary, and would not represent a significant demand on available resources. There are no unusual project characteristics that would necessitate the use of construction equipment or methods that would be less energy-efficient or which would be wasteful.

The completed project would consume energy related to building operation, exterior lighting, landscape irrigation and maintenance, and vehicle trips to and from the use. In accordance with California Energy Code Title 24, the project would be required to meet the Building Energy Efficiency Standards. This includes standards for water and space heating and cooling equipment; insulation for doors, pipes, walls, and ceilings; and appliances, to name a few. The project would also be eligible for rebates and other financial incentives from both the electric and gas providers for the purchase of energy-efficient appliances and systems, which would further reduce the operational energy demand of the project. The project was distributed to both PG&E and Roseville Electric for comments, and was found to conform to the standards of both providers; energy supplies are available to serve the project.

VII. Geology and Soils

As described in the Safety Element of the City of Roseville General Plan, there are three inactive faults (Volcano Hill, Linda Creek, and an unnamed fault) in the vicinity, but there are no known active seismic faults within Placer County. The last seismic event recorded in the South Placer area occurred in 1908, and is estimated to have been at least a 4.0 on the Richter Scale. Due to the geographic location and soil characteristics within the City, the General Plan indicates that soil liquefaction, landslides, and subsidence are not a significant risk in the area.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
i) Ruptures of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located in a geological 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?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
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?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to geology and soils is based directly on the CEQA Guidelines checklist items a–f listed above. Regulations applicable to this topic include the Alquist-Priolo Act, which addresses earthquake safety in building permits, and the Seismic Hazards Mapping Act, which requires the state to gather and publish data on the location and risk of seismic faults. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant archeological resources, which for this evaluation will include paleontological resources (Policies 1 and 2). Section 50987.5 of the California Public Code Section is only applicable to public land; this section prohibits the excavation, removal, destruction, or defacement/injury to any vertebrate paleontological site, including fossilized footprints or other paleontological feature.

The Findings of the Implementing Procedures indicate that compliance with the Flood Damage Prevention Ordinance (RMC Ch.9.80) and Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist item b. The Ordinance and standards include permit requirements for construction and development in erosion-prone areas and ensure that grading activities will not result in significant soil erosion or loss of topsoil. The use of septic tanks or alternative waste systems is not permitted in the City of Roseville, and therefore no analysis of criterion e is necessary.

Discussion of Checklist Answers:

a) The project will not expose people or structures to potential substantial adverse effects involving seismic shaking, ground failure or landslides.

i–iii) According to United States Geological Service mapping and literature, active faults are largely considered to be those which have had movement within the last 10,000 years (within the Holocene or Historic time periods)¹ and there are no major active faults in Placer County. The California Geological Survey has prepared a map of the state which shows the earthquake shaking potential of areas throughout California based primarily on an area's distance from known active faults. The map shows that the City lies in a relatively low-intensity ground-shaking zone. Commercial, institutional, and residential buildings as well as all related infrastructure are required, in conformance with Chapter 16, *Structural Design Requirements*, Division IV, *Earthquake Design* of the California Building Code, to lessen the exposure to potentially damaging vibrations through seismic-resistant design. In compliance with the Code, all structures in the Project area would be well-built to withstand ground shaking from possible earthquakes in the region; impacts are less than significant.

iv) Landslides typically occur where soils on steep slopes become saturated or where natural or manmade conditions have taken away supporting structures and vegetation. The existing and proposed slopes of the project site are not steep enough to present a hazard during development or upon completion of the project. In addition, measures would be incorporated during construction to shore minor slopes and prevent potential earth movement. Therefore, impacts associated with landslides are less than significant.

b) Grading activities will result in the disruption, displacement, compaction and over-covering of soils associated with site preparation (grading and trenching for utilities). Grading activities for the project will be limited to the project site. Grading activities require a grading permit from the Engineering Division. The grading permit is reviewed for compliance with the City's Improvement Standards, including the provision of proper drainage, appropriate dust control, and erosion control measures. Grading and erosion control measures will be incorporated into the required grading plans and improvement plans. Therefore, the impacts associated with disruption, displacement, and compaction of soils associated with the project are less than significant.

¹ United States Geological Survey, <http://earthquake.usgs.gov/learn/glossary/?term=active%20fault>, Accessed January 2016

c, d) A review of the Natural Resources Conservation Service Soil Survey for Placer County, accessed via the Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/>), indicates that the soils on the site are cometa-fiddymment complex, which are not listed as geologically unstable or sensitive.

f) No paleontological resources are known to exist on the project site per the General Plan EIR; however, standard mitigation measures apply which are designed to reduce impacts to such resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

VIII. Greenhouse Gases

Greenhouse gases trap heat in the earth's atmosphere. The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. As explained by the United States Environmental Protection Agency², global average temperature has increased by more than 1.5 degrees Fahrenheit since the late 1800s, and most of the warming of the past half century has been caused by human emissions. The City has taken proactive steps to reduce greenhouse gas emissions, which include the introduction of General Plan policies to reduce emissions, changes to City operations, and climate action initiatives.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Thresholds of Significance and Regulatory Setting:

In Assembly Bill 32 (the California Global Warming Solutions Act), signed by Governor Schwarzenegger of California in September 2006, the legislature found that climate change resulting from global warming was a threat to California, and directed that “the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases . . .”. The target established in AB 32 was to reduce emissions to 1990 levels by the year 2020. CARB subsequently prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008. The Scoping Plan provides the outline for actions to reduce California's GHG emissions. CARB's updated August 2011 Scoping Plan calculated a reduction needed of 21.7% from future “Business As Usual” (BAU) conditions in the year 2020. The current Scoping Plan (adopted May 2014) indicates that statewide emissions of GHG in 1990 amounted to 431 million metric tons, and that the 2020 “Business As Usual” (BAU) scenario is estimated as 509³ million metric tons, which would require a reduction of 15.3% from 2020 BAU. In addition to this, Senate Bill 32 was signed by the Governor on September

² <http://www3.epa.gov/climatechange/science/overview.html>, Accessed January 2016

³ Includes Pavely and Renewables Portfolio Standard reduction

8, 2016, to establish a reduction target of 40 percent below 1990 levels by 2030. The Air Resources Board is currently updating the Scoping Plan to reflect this target.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to AB 32 reduction goals, and has adopted thresholds of significance which take into account the 2030 reduction target. The thresholds include a de minimis and a bright-line maximum threshold. Any project emitting less than 1,100 metric tons of carbon dioxide equivalents per year (MT CO₂e/yr) during construction or operation results in less than significant impacts. The PCAPCD considers any project with emissions greater than the bright-line cap of 10,000 MT CO₂e/yr to have significant impacts. For projects exceeding the de minimum threshold but below the bright-line threshold, comparison to the appropriate efficiency threshold is recommended. The significance thresholds are shown in Table 3 below.

Table 3: GHG Significance Thresholds

Bright-line Threshold 10,000 MT CO₂e/yr			
Residential Efficiency (MT CO₂e/capita¹)		Non-Residential Efficiency (MT CO₂e/ksf²)	
Urban	Rural	Urban	Rural
4.5	5.5	26.5	27.3
De Minimis Threshold 1,100 MT CO₂e/yr			
1. Per Capita = per person 2. Per ksf = per 1,000 square feet of building			

Discussion of Checklist Answers:

a–b) Greenhouse gases are primarily emitted as a result of vehicle operation associated with trips to and from a project, and energy consumption from operation of the buildings. Greenhouse gases from vehicles is assessed based on the vehicle miles traveled (VMT) resulting from a project, on a Citywide basis. Residential projects, destination centers (such as a regional mall), and major employers tend to increase VMT in a study area, either by adding new residents traveling in an area, or by encouraging longer trip lengths and drawing in trips from a broader regional area. However, non-residential projects and neighborhood-serving uses (e.g. neighborhood parks) tend to lower VMT in a study area because they do not generate new trips within the study area, they divert existing trips. These trips are diverted because the new use location is closer to home, on their way to another destination (e.g. work), or is otherwise more convenient.

The proposed project includes a self-storage facility, which is a typical non-residential use with low traffic generation proposed in an infill area. As discussed, the project would not be anticipated to increase VMT, since it is providing services in closer proximity to developed residential areas of the City. Therefore, the focus of this analysis is on the emissions which would result from operation of the proposed buildings. CalEEMod Version 2016.3.2 was used to calculate the operational emissions of the project (see Attachment 1), which includes energy to run the building, area emissions such as landscape equipment to maintain the site, and water and wastewater energy demands. According the CalEEMod results, the project would result in annual emissions of 616 MT CO₂e.

Construction related GHG emissions occur at one point in time and are therefore not typically expected to significantly contribute to climate change. Climate change is a cumulative effect that occurs over time, as emissions increase on a year-to-year basis due to increases in developed area and other factors; construction emissions are a one-time emission source, which end once the project is built. However, the proposed project's construction related GHG has been estimated, and have been amortized over the life of the project (25 years, based on PCAPCD guidance). The CalEEMod results indicate total construction emissions of 460 MT CO₂e,

which amortized result in an additional 18 MT CO₂e per year over the life of the project. Including both construction and operational emissions, the project will generate 1,076 MT CO₂e annually. The PCAPCD screening threshold for GHG indicates that projects resulting in less than 1,100 MT of CO₂e annually will result in less than significant impacts. The proposed project will result in GHG emissions which are below thresholds established by PCAPCD. Thus, project-generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and policies and regulation adopted by the California Air Resources Board pursuant to AB32. This impact is considered less than significant.

IX. Hazards and Hazardous Materials

There are no listed hazardous sites within the project vicinity and the proposed use does not involve the use of hazardous materials. Asbestos and lead, which can be present in older buildings, are not onsite as the site is currently undeveloped.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hazardous materials is based directly on the CEQA Guidelines checklist items a–g listed above. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency, or if it has characteristics defined as hazardous by such an agency. The determination of significance based on the above criteria depends on the probable frequency and severity of consequences to people who might be exposed to the health hazard, and the degree to which Project design or existing regulations would reduce the frequency of or severity of exposure. As an example, products commonly used for household cleaning are classified as hazardous when transported in large quantities, but one would not conclude that the presence of small quantities of household cleaners at a home would pose a risk to a school located within ¼-mile.

Many federal and State agencies regulate hazards and hazardous substances, including the United States Environmental Protection Agency (US EPA), California Department of Toxic Substances Control (DTSC), Central Valley Regional Water Quality Control Board (Regional Water Board), and the California Occupational Safety and Health Administration (CalOSHA). The state has been granted primacy (primary responsibility for oversight) by the US EPA to administer and enforce hazardous waste management programs. State regulations also have detailed planning and management requirements to ensure that hazardous materials are handled, stored, and disposed of properly to reduce human health risks. California regulations pertaining to hazardous waste management are published in the California Code of Regulations (see 8 CCR, 22 CCR, and 23 CCR).

The project is not within an airport land use plan or within two miles of a public or private use airport. Therefore, no further discussion is provided for item e.

Discussion of Checklist Answers:

a, b) Standard construction activities would require the use of hazardous materials such as fuels, oils, lubricants, glues, paints and paint thinners, soaps, bleach, and solvents. These are common household and commercial materials routinely used by both businesses and average members of the public. The materials only pose a hazard if they are improperly used, stored, or transported either through upset conditions (e.g. a vehicle accident) or mishandling. In addition to construction use, the operational project would result in the use of common hazardous materials as well, including bleach, solvents, and herbicides. Regulations pertaining to the transport of materials are codified in 49 Code of Federal Regulations 171–180, and transport regulations are enforced and monitored by the California Department of Transportation and by the California Highway Patrol. Specifications for storage on a construction site are contained in various regulations and codes, including the California Code of Regulations, the Uniform Fire Code, and the California Health and Safety Code. These same codes require that all hazardous materials be used and stored in the manner specified on the material packaging. Existing regulations and programs are sufficient to ensure that potential impacts as a result of the use or storage of hazardous materials are reduced to less than significant levels.

c) See response to Items (a) and (b) above. While development of the site will result in the use, handling, and transport of materials deemed to be hazardous, the materials in question are commonly used in both residential and commercial applications, and include materials such as bleach and herbicides. The project will not result in the use of any acutely hazardous materials, substances, or waste.

d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5⁴; therefore, no impact will occur.

f) This project is located within an area currently receiving City emergency services and development of the site has been anticipated and incorporated into emergency response plans. As such, the project will cause a less than significant impact to the City's Emergency Response or Management Plans. Furthermore, the project will be required to comply with all local, State and federal requirements for the handling of hazardous materials, which will ensure less-than-significant impacts. These will require the following programs:

- A Risk Management and Prevention Program (RMPP) is required of uses that handle toxic and/or hazardous materials in quantities regulated by the California Health and Safety Code and/or the City.
- Businesses that handle toxic or hazardous materials are required to complete a Hazardous Materials Management Program (HMMP) pursuant to local, State, or federal requirements.

g) The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility. The project site is in an urban area, and therefore would not expose people to any risk from wildland fire. There would be no impact with regard to this criterion.

X. Hydrology and Water Quality

As described in the Open Space and Conservation Element of the City of Roseville General Plan, the City is located within the Pleasant Grove Creek Basin and the Dry Creek Basin. Pleasant Grove Creek and its tributaries drain most of the western and central areas of the City and Dry Creek and its tributaries drain the remainder of the City. Most major stream areas in the City are located within designated open space.

⁴ <http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm>

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			X	
i) result in substantial erosion or siltation on or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater systems or provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?				X
d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) In flood hazard, tsunami, or seiches zones, risk release of pollutants due to project inundation?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hydrology and water quality is based directly on the CEQA Guidelines checklist items a–e listed above. For checklist item a, c (i), d, and e, the Findings of the Implementing Procedures indicate that compliance with the City of Roseville Design/Construction Standards (Resolution 07-107), Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20), and Stormwater Quality Design Manual (Resolution 16-152) will prevent significant impacts related to water quality or erosion. The standards require preparation of an erosion and sediment control plan for construction activities and includes designs to control pollutants within post-construction urban water runoff. Likewise, it is indicated that the Drainage Fees for the Dry Creek and Pleasant Grove Watersheds (RMC Ch.4.48) and City of Roseville Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist items c (ii) and c (iii). The ordinance and standards require the collection of drainage fees to fund improvements that mitigate potential flooding impacts, and require the design of a water drainage system that will adequately convey anticipated stormwater flows without increasing the rate or amount of surface runoff. These same ordinances and standards prevent impacts related to groundwater (items a and d), because developers are required to treat and detain all stormwater onsite using stormwater swales and other methods which slow flows and preserve infiltration. Finally, it is indicated that compliance with the Flood Damage Prevention Ordinance (RMC Ch. 9.80) will prevent significant impacts related to items c (iv) and e. The Ordinance includes standard requirements for all new construction, including regulation of development with the potential to impede or redirect flood flows, and prohibits development within flood hazard areas. Impacts from tsunamis and seiches were screened out of the analysis (item e) because the project is not located near a water body or other feature that would pose a risk of such an event.

Discussion of Checklist Answers:

a,c (i),d, e) The project will involve the disturbance of on-site soils and the construction of impervious surfaces, such as asphalt paving. Disturbing the soil can allow sediment to be mobilized by rain or wind, and cause displacement into waterways. To address this and other issues, the developer is required to receive approval of a grading permit and/or improvement plants prior to the start of construction. The permit or plans are required to incorporate mitigation measures for dust and erosion control. In addition, the City has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Central Valley Regional Water Quality Control Board which requires the City to reduce pollutants in stormwater to the maximum extent practicable. The City does this, in part, by means of the City's 2016 Design/Construction Standards, which require preparation and implementation of a Stormwater Pollution Prevention Plan. All permanent stormwater quality control measures must be designed to comply with the City's Manual for Stormwater Quality Control Standards for New Development, the City's 2016 Design/Construction Standards, Urban Stormwater Quality Management and Discharge Control Ordinance, and Stormwater Quality Design Manual. For these reasons, impacts related to water quality are less than significant.

b, d) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years, but the effect of groundwater extraction on the aquifer was addressed in the Water Supply Assessment of the Amoruso Ranch Specific Plan EIR, which included a Citywide water analysis. The proposed project is consistent with the General Plan land use designation, and is thus consistent with the citywide Water Supply Assessment. Project impacts related to groundwater extraction are

less than significant. Furthermore, all permanent stormwater quality control measures must be designed to comply with the Stormwater Quality Design Manual, which requires the use of bioswales and other onsite detention and infiltration methods. These standards ensure that stormwater will continue to infiltrate into the groundwater aquifer.

c (ii and iii)) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project includes adequate and appropriate facilities to ensure no net increase in the amount or rate of stormwater runoff from the site, and which will adequately convey stormwater flows.

c (iv) and e) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project is not located within either the Federal Emergency Management Agency floodplain or the City's Regulatory Floodplain (defined as the floodplain which will result from full buildout of the City). Therefore, the project will not impede or redirect flood flows, nor will it be inundated. The proposed project is located within an area of flat topography and is not near a waterbody or other feature which could cause a seiche or tsunami. There would be no impact with regard to these criterion.

XI. Land Use and Planning

The project site has a General Plan Designation of LI (Light Industrial) and is zoned M1 (Light Industrial). The site is surrounded by a City of Roseville electrical substation to the north, the Union Pacific Railroad line with industrial uses to the west, a business park to the south, and a large church with adjacent undeveloped industrially zoned land to the east.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to land use is based directly on the CEQA Guidelines checklist items a and b listed above. Consistency with applicable City General Plan policies, Improvement Standards, and design standards is already required and part of the City's processing of permits and plans, so these requirements do not appear as mitigation measures.

Discussion of Checklist Answers:

a) The project area has been master planned for development, including adequate roads, pedestrian paths, and bicycle paths to provide connections within the community. The project will not physically divide an established community.

b) As part of project review, staff considered consistency with all City policies and regulations, including those which are intended to avoid an environmental effect, and found the project to be consistent.

XII. Mineral Resources

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZ's) based on the known or inferred mineral resource potential of that land. The California Division of Mines and Geology (CDMG) was historically responsible for the classification and designation of areas containing—or potentially containing—significant mineral resources, though that responsibility now lies with the California Geological Survey (CGS). CDMG published Open File Report 95-10, which provides the mineral classification map for Placer County. A detailed evaluation of mineral resources has not been conducted within the City limits, but MRZ's have been identified. There are four broad MRZ categories (MRZ-1 through MRZ-4), and only MRZ-2 represents an area of known significant mineral resources. The City of Roseville General Plan EIR included Exhibit 4.1-3, depicting the location of MRZ's in the City limits. There is only one small MRZ-2 designation area, located at the far eastern edge of the City.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?				X
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?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to mineral resources is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a–b) The project site is not in the area of the City known to include any mineral resources that would be of local, regional, or statewide importance; therefore, the project has no impacts on mineral resources.

XIII. Noise

The project includes a proposed self-storage facility. Potential sources of noise at a self-storage facility include people talking, people moving items into/out of storage, and vehicles driving. These are typical noises which occur in any non-residential development, and typically do not generate substantial noise volumes. The surrounding industrial uses are also noise-generating; they are not sensitive receptors for noise. The nearest sensitive receptors are the residents within the residential area to the east of this site, across Washington Boulevard. The nearest home is approximately 1,300 feet east of the nearest part of the self-storage buildings.

A masonry sound wall is located along the eastern side of Washington Boulevard, behind the landscaping area and sidewalk, for the protection of the residential neighborhood from roadway and other noise. In the existing condition, the City of Roseville General Plan Noise Element Figure IX-1 indicates the residential neighborhood is within the 60 to 65 dB noise contours resulting from traffic on Washington Boulevard.

Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive ground borne vibration of ground borne noise levels?				X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?				X

Thresholds of Significance and Regulatory Setting:

Standards for transportation noise and non-transportation noise affecting existing or proposed land uses are established within the City of Roseville General Plan Noise Element Table IX-1 and IX-3, and these standards are used as the thresholds to determine the significance of impacts related to items a and c. The significance of other noise impacts is based directly on the CEQA Guidelines checklist items b and c listed above. The Findings of the Implementing Procedures indicate that compliance with the City Noise Regulation (RMC Ch. 9.24) will prevent significant non-transportation noise as it relates to items a and b. The Ordinance establishes noise exposure standards that protect noise-sensitive receptors from a variety of noise sources, including non-transportation/fixed noise, amplified sound, industrial noise, and events on public property. The project is not within an airport land use plan, within two miles of a public or public use airport and there are also no private airstrips in the vicinity of the project area. Therefore, item c has been ruled out from further analysis.

Discussion of Checklist Answers:

a) The proposed project includes construction of a self-storage facility. Self-storage facilities produce very low noise levels including people talking, people moving items into/out of storage, and vehicles driving. Overall, the proposed use is not considered to be a substantial noise-generating source. The project will not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of City standards; thus, impacts are less than significant.

b) Surrounding uses may experience short-term increases in groundborne vibration, groundborne noise, and airborne noise levels during construction. However, these increases would only occur for a short period of time. When conducted during daytime hours, construction activities are exempt from Noise Ordinance standards, but the standards do apply to construction occurring during nighttime hours. While the noise generated may be a minor nuisance, the City Noise Regulation standards are designed to ensure that impacts are not unduly intrusive. Based on this, the impact is less than significant.

XIV. Population and Housing

The project site is located within the North Industrial Plan Area and has a land use designation of M1 (Light Industrial). The City of Roseville General Plan Table II-4 identifies the total number of residential units and population anticipated as a result of buildout of the City, and the Specific Plan likewise includes unit allocations and population projections for the Plan Area.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to population and housing is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a) The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (Public Resources Code Section 15126.2), either directly or indirectly. Growth-inducement may be the result of fostering economic growth, fostering population growth, providing new housing, or removing barriers to growth.

Growth inducement may be detrimental, beneficial, or of no impact or significance under CEQA. An impact is only deemed to occur when it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be shown that the growth will significantly affect the environment in some other way. The project is consistent with the land use designation of the site. Therefore, while the project in question will induce some level of growth, this growth was already identified and its effects disclosed and mitigated within the General Plan EIR. Therefore, the impact of the project is less than significant.

b) The project site is vacant. No housing exists on the project site, and there would be no impact with respect to these criteria.

XV. Public Services

Fire protection, police protection, park services, and library services are provided by the City. The project is located within the Roseville Elementary School District and Roseville Joint Union High School District. 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 government 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 following public services:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to public services is based directly on the CEQA Guidelines checklist items a–e listed above. The EIR for the City's General Plan addressed the level of public services which would be needed to serve the planned growth within the City. In addition, the project has been routed to the various public service agencies, both internal and external, to ensure that the project meets the agencies' design standards (where applicable) and to provide an opportunity to recommend appropriate conditions of approval. Commercial and industrial projects, such as this, do not generate student, parkland, or library service demands; therefore, no discussion is provided for checklist questions c, d, or e.

Discussion of Checklist Answers:

a) Existing City codes and regulations require adequate water pressure in the water lines, and construction must comply with the Uniform Fire and Building Codes used by the City of Roseville. Additionally, the applicant is required to pay a fire service construction tax, which is used for purchasing capital facilities for the Fire Department. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Pursuant to the Development Agreement for the project area, the developer is required to pay fees into a Community Facilities District, which provides funding for police services. Sales taxes and property taxes resulting from the development will add revenue to the General Fund, which also serves to fund police services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

XVI. Recreation

There are no existing or planned parks or other recreation facilities adjacent to the site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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 physical deterioration of the facility would occur or be accelerated?				X
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?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to recreation services is based directly on the CEQA Guidelines checklist items a–b listed above.

Discussion of Checklist Answers:

a, b) Commercial and industrial projects do not generate park demand or park users, and the project does not include any recreation facilities. Therefore, there are no impacts with respect to these criteria.

XVII. Transportation

The project site is located on Industrial Avenue, a two-lane arterial roadway with center turning median. Industrial Avenue includes on-street, striped bicycle lanes. A non-separated sidewalk leads to the site from the development to the south. The sidewalk is proposed to be continued north adjacent to the project. One public ingress and egress driveway as well as a fire access driveway are proposed from Industrial Avenue onto the site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature(s) (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Thresholds of Significance and Regulatory Setting:

CEQA Guidelines Section 15064.3 indicates that a project's effect on automobile delay cannot be considered a significant impact, and directs transportation system analysis to focus on vehicle miles traveled (VMT), per checklist item b. However, the CEQA Guidelines also include consistency with a program, plan, or policy addressing transportation systems as an area of potential environmental effects (checklist item a). The City has adopted the following plans, ordinances, or policies applicable to this checklist item: Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan, and General Plan Circulation Element. The project is evaluated for consistencies with these plans and the policies contained within them, which includes an analysis of delay. The Circulation Element of the General Plan establishes Level of Service C or better as an acceptable operating condition at all signalized intersections during a.m. and p.m. peak hours. Exceptions to this policy may be made by the City Council, but a minimum of 70% of all signalized intersections must maintain LOS C. The Findings of the Implementing Procedures indicate that compliance with the Traffic Mitigation Fee (RMC Ch. 4.44) will fund roadway projects and improvements necessary to maintain the City's Level of Service standards for projects consistent with the General Plan and related Specific Plan. An existing plus project conditions (short-term) traffic impact study may be required for projects with unique trip generation or distribution characteristics, in areas of local traffic constraints, or to study the proposed project access. A cumulative plus project conditions (long-term) study is required if a project is inconsistent with the General Plan or Specific Plan and would generate more than 50 pm peak-hour trips. The guidelines for traffic study preparation are found in the City of Roseville Design and Construction Standards—Section 4.

For checklist item b, the CEQA Guidelines Section 15064.3 establishes a detailed process for evaluating the significance of transportation impacts. In accordance with this section, the analysis must focus on the generation of vehicle miles traveled (VMT). Projects within one-half mile of either an existing major transit stop⁵ or a stop along an existing high quality transit corridor⁶ should be presumed to have less than significant impacts, as should any project which will decrease VMT when compared with the existing conditions. VMT may be analyzed qualitatively if existing models or methods are not available to estimate VMT for a particular project; this will generally be appropriate for discussions of construction traffic VMT.

⁵ A site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. (Public Resources Code Section 21064.3)

⁶ A corridor with fixed route bus service at service intervals of 15 minutes or less during peak commute hours.

Impacts with regard to items c and d are assessed based on the expert judgment of the City Engineer and City Fire Department, as based upon facts and consistency with the City's Design and Construction Standards.

Discussion of Checklist Answers:

a) The City of Roseville has adopted a Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. The project was reviewed for consistency with these documents. All facilities identified in these plans for this area are already installed, and the project does not impact or conflict with these planning documents. In addition, the proposed project is consistent with the underlying land use designations, and does not contribute new, unanticipated trips; a cumulative conditions traffic model is not required. After review by City Engineering, it was also determined that an access and circulation analysis was not needed, as there are no peculiar or challenging characteristics to either the project or the existing circulation system. The project is consistent with the most recent Citywide traffic analysis within the Amoruso Ranch Specific Plan EIR, and will not result in any new or unanticipated impacts with respect to the City's Level of Service policy.

b) Traffic analyses focus on the number of trips traveling in specified areas during peak periods, in order to quantify impacts as specific intersections. However, there is no direct relationship between the number of trips and the amount of VMT generated by a use. Projects which substantially increase trips to a specific area may in fact decrease VMT in the City. As an example, if a new grocery store is added to an area, customers who go to that store were already going to a grocery store elsewhere, and are most likely to choose the new store because it is closer to home or on their way to another location (e.g. work). So while the store would generate substantial new trips, it would lower Citywide VMT. Unless a project includes unique characteristics, non-residential projects do not increase VMT; they divert existing trips into a similar or more efficient pathway.

The proposed project is non-residential development of an infill property, surrounded by existing development. The project does not include any unique characteristics which would draw in regional traffic, or which would prompt longer trips. The project would locate services and employment in proximity to existing developed areas, and would therefore have a neutral or positive impact on vehicle miles traveled; impacts are less than significant.

c, d) The project has been reviewed by the City Engineering and City Fire Department staff, and has been found to be consistent with the City's Design Standards. Furthermore, standard conditions of approval added to all City project require compliance with Fire Codes and other design standards. Compliance with existing regulations ensure that impacts are less than significant.

XVIII. Tribal Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically

defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?			X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Thresholds of Significance and Regulatory Setting:

In addition to archeological resources, tribal cultural resources are also given particular treatment. Tribal cultural resources are defined in Public Resources Code Section 21074, as either 1) a site, feature, place, geographically-defined cultural landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register or Historical Resources, or on a local register of historical resources or as 2) a resource determined by the lead agency, supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1(c), and considering the significance of the resource to a California Native American Tribe.

Discussion of Checklist Answers:

a) The General Plan EIR included a historic and cultural resources study, which included research on whether any listed or eligible sites had been documented in the project area. No such sites were found. However, standard mitigation measures apply which are designed to reduce impacts to any previously undiscovered resources, should any be found on-site. The measures require pre-construction inspections, contractor awareness training, and outline inadvertent discovery procedures including an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The three measures **TCR-1**, **TCR-2**, and **TCR-3** are listed below. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

b) Notice of the proposed project was mailed to tribes which had requested such notice pursuant to AB 52. A request for consultation was received from the United Auburn Indian Community (UAIC). As discussed in item a, above, no significant resources are known to occur in the area. However, standard mitigation measures apply which are designed to reduce impacts to resources, should any be found on-site. The measures require pre-construction inspections, unpaid tribal observation, contractor awareness training, and outline post-review discovery procedures including an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. The project will not result in any new impacts beyond those already discussed and disclosed in the General Plan EIR; project-specific impacts are less than significant.

TCR-1: Pre-Construction Inspections. A minimum of seven days prior to beginning earthwork, clearing and grubbing, or other soil disturbing activities, the applicant shall notify lead agency representative of the proposed earthwork start-date. The lead agency representative will contact the United Auburn Indian Community (UAIC) with the proposed earthwork start-date and a UAIC Tribal Representative or Tribal Monitor shall be invited to inspect the project site, including any soil piles, trenches, or other disturbed areas, within the first five days, or as appropriate for the type and size of project, of groundbreaking activity. During this inspection, a UAIC Tribal Representative or Tribal Monitor may provide an on-site meeting for construction personnel information on TCRs and workers awareness brochure.

If any TCRs, such as bone or shell, or isolated artifacts are encountered during this initial inspection, or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the measures included in the Inadvertent Discoveries Mitigation Measure shall be implemented. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign.

TCR-2: Contractor Awareness Training

The Construction Manager shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources and tribal cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the City of any occurrences; and project-specific requirements; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and reviewed by City for approval, and may be provided in an audio-visual format, such as a DVD. The Construction Manager shall provide culturally affiliated tribes that consulted on the project [tribe name] the option of attending the initial training in person and/or providing additional materials germane to the unanticipated discovery of tribal cultural resources for incorporation into the training.

The training program shall be required for all construction supervisors, forepersons, and operators of ground-disturbing equipment, and all personnel shall be required to sign a training roster and display a hard hat sticker that is visible to City inspectors. The construction manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the City as proof of compliance.

TCR-3: Inadvertent Discoveries. If potentially significant Tribal Cultural Resources (TCRs), cultural or archaeological resources ("resources") are discovered by an on-site Tribal Monitor during ground disturbing construction activities, all work shall cease within 100 feet of the find. The Tribal Monitor will immediately notify the appropriate Tribal Representatives who will make recommendations for further evaluation and treatment, as necessary.

A qualified cultural resources specialist meeting the Secretary of Interior's Standards and Qualifications for Archaeology, may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work shall remain suspended or slowed within 100 feet of the find until the resource is evaluated, which shall occur within one day, but no more than two days, of the find.

The project applicant shall coordinate with a UAIC Tribal Representative all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project design.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate Tribal treatment of the find, as necessary.

XIX. Utilities and Service Systems

There are existing storm drains along Foothills Blvd. and Pleasant Grove Blvd. as well as on the site. Storm drains on the site outfall into an existing drainage course. The proposal with the project is to fill the existing drainage course and construct a new storm drain to take the drainage between existing storm drains on the site. No wastewater treatment is necessary as there is none currently on the site and the project involves grading only.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to utilities and service systems is based directly on the CEQA Guidelines checklist items a–e listed above.

Discussion of Checklist Answers:

a) The project will involve minor storm water infrastructure to be constructed within the project site. However, these facilities will be constructed in locations where site development was expected to occur and existing drainage facilities are adequately sized to accommodate the storm water flows from the project site. There are no additional impacts to the storm drain improvements.

b) The City of Roseville 2015 Urban Water Management Plan (UWMP), adopted May 2016, estimates water demand and supply for the City through the year 2040, based on existing land use designations and population projections. In addition, the Amoruso Ranch Water Supply Assessment (AR WSA, Appendix E of the Amoruso Ranch FEIR), dated May 2016, estimates water demand and supply for ultimate General Plan buildout. The project is consistent with existing land use designations, and is therefore consistent with the assumptions of the UWMP and AR WSA. The UWMP indicates that existing water supply sources are sufficient to meet all near term needs, estimating an annual water demand of 45,475 acre-feet per year (AFY) by the year 2020 and existing surface and recycled water supplies in the amount of 70,421 AFY. The AR WSA estimates a Citywide buildout demand of 64,370 AFY when including recycled water, and of 59,657 AFY of potable water. The AR WSA indicates that surface water supply is sufficient to meet demand during normal rainfall years, but is insufficient during single- and multiple-dry years. However, the City's UWMP establishes mandatory water conservation measures and the use of groundwater to offset reductions in surface water supplies. Both the UWMP and AR WSA indicate that these measures, in combination with additional purchased water sources, will ensure that supply meets projected demand. The project, which is consistent with existing land use designations, would not require new or expanded water supply entitlements.

c) The proposed project would be served by the Pleasant Grove Wastewater Treatment Plant (PGWWTP). The Central Valley Regional Water Quality Control Board (RWQCB) regulates water quality and quantity of effluent discharged from the City's wastewater treatment facilities. The Pleasant Grove WWTP has the capacity⁷ to treat 12 million gallons per day (mgd) and is currently treating 7.0⁸ mgd. The volume of wastewater generated by the proposed project could be accommodated by the facility; the proposed project will not contribute to an exceedance of applicable wastewater treatment requirements. The impact would be less than significant.

d, e) The Western Placer Waste Management Authority is the regional agency handling recycling and waste disposal for Roseville and surrounding areas. The regional waste facilities include a Material Recovery Facility (MRF) and the Western Regional Sanitary Landfill (WRSL). Currently, the WRSL is permitted to accept up to 1,900 tons of municipal solid waste per day. According to the solid waste analysis of the Amoruso Ranch Specific Plan FEIR, under current projected development conditions the WRSL has a projected lifespan extending through 2058. There is sufficient existing capacity to serve the proposed project. Though the project will contribute incrementally to an eventual need to find other means of waste disposal, this impact of City buildout has already been disclosed and mitigation applied as part of each Specific Plan the City has approved, including the most recent Amoruso Ranch Specific Plan. All residences and business in the City pay fees for solid waste collection, a portion of which is collected to fund eventual solid waste disposal expansion. The project will not result in any new impacts associated with major infrastructure. Environmental Utilities staff has reviewed the project for consistency with policies, codes, and regulations related to waste disposal and waste reduction regulations and policies and has found that the project design is in compliance.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X

⁷ Waste Discharge Requirements/Monitoring & Reporting Program/NPDES Permit No. CA0079502, Adopted on 28 March 2014

⁸ Dave Samuelson, City of Roseville Environmental Utilities, Personal communication, July 6, 2016.

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to utilities and service systems is based directly on the CEQA Guidelines checklist items a–d listed above. The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility.

Discussion of Checklist Answers:

a–d) Therefore, checklist questions a–d above do not apply, because the project site is not within a Very High Fire Hazard Severity Zone and is not in a CAL FIRE responsibility area.

XXI. Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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, substantially reduce the number or restrict the range of an			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts which 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.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Significance Criteria and Regulatory Setting:

The significance of impacts related to mandatory findings of significance is based directly on the CEQA Guidelines checklist items a–c listed above.

Discussion of Checklist Answers:

a–c) Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated in the General Plan EIR, and mitigation measures have already been incorporated via the General Plan EIR. With implementation of the City's Mitigating Ordinances, Guidelines, and Standards and best management practices, mitigation measures described in this chapter, and permit conditions, the proposed project will not have a significant impact on the habitat of any plant or animal species. Based on the foregoing, the proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of any wildlife species, or create adverse effects on human beings.

ENVIRONMENTAL DETERMINATION:

*In reviewing the site specific information provided for this project and acting as Lead Agency, the City of Roseville, Development Services Department, Planning Division has analyzed the potential environmental impacts created by this project and determined that with mitigation the impacts are less than significant. As demonstrated in the initial study checklist, there are no "project specific significant effects which are peculiar to the project or site" that cannot be reduced to less than significant effects through mitigation (CEQA Section 15183) and therefore an EIR is **not** required. Therefore, **on the basis of the foregoing initial study:***

[X] I find that the proposed project COULD, but with mitigation agreed to by the applicant, clearly will not have a significant effect on the environment and a *MITIGATED NEGATIVE DECLARATION* has been prepared.

Initial Study Prepared by:



Sean Morales, Assistant Planner
City of Roseville, Development Services – Planning Division

Attachments:

1. Mitigation Monitoring and Reporting Program
2. CalEEMod (version 2016.3.1) Modeling
3. Helix, Biological Resources Assessment, 2019



MITIGATION MONITORING AND REPORTING PROGRAM

Project Title/File Number:	NIPA PCL 51; Industrial Ave Self-Storage; PL19-0243
Project Location:	8151 Industrial Ave., Roseville, Placer County, CA, APN: 017-410-017-000
Project Description:	The applicant requests a Design Review Permit to allow the construction of a self-storage facility with an office and manager's apartment above the office. The proposal would allow the construction of four 1-story and two 2-story self-storage buildings plus an office building with manager's apartment over top for a total of 7 buildings. The total square footage for the self-storage buildings is 101,339 sf. The total square footage for the office/manager's apartment is 4,431 sf for an overall total of 105,770 sf.
Environmental Document	Mitigated Negative Declaration
Project Applicant:	Tiffany Wilson, RSC Engineering
Property Owner:	Mark Ryan, For: Pleasant Grove Self-Storage-Industrial Avenue, LLC
Lead Agency Contact Person:	Sean Morales, Assistant Planner, (916) 774-5282

Section 21081.6 of the California Public Resources Code requires public agencies to "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This Mitigation Monitoring and Reporting Program has been adopted for the purpose of avoiding environmental impacts

MONITORING PROCESS: Existing monitoring mechanisms are in place that assist the City of Roseville in meeting the intent of CEQA. These existing monitoring mechanisms eliminate the need to develop new monitoring processes for each mitigation measure. These mechanisms include grading plan review and approval, improvement/building plan review and approval and on-site inspections by City Departments. Given that these monitoring processes are requirements of the project, they are not included in the mitigation monitoring program.

It shall be the responsibility of the project applicant/owner to provide written notification to the City using the Mitigation Verification Cover Sheet and Forms, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The City will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program. Any non-compliance will be reported by the City to the applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance. The purpose of this program is to ensure diligent and good faith compliance with the Mitigation Measures which have been adopted as part of the project.

TABLE OF MITIGATION MEASURES

Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
BIO-1: Implement Measures to Protect Migratory Birds and Raptors If development activities occur during the nesting season, then a qualified biologist shall conduct a nesting bird survey to determine the presence of any active nests within the Study Area. Additionally, the surrounding 500 feet of the Study Area shall be surveyed for active raptor nests, where accessible, and with binoculars as necessary. The nesting bird survey shall be conducted no more than 14 days prior to commencement of ground-disturbing or other development activities. If the nesting bird survey shows that there is no evidence of active nests, then a letter report shall be prepared to document the survey and provided to the City of Roseville, and no additional measures are recommended. If development does not commence within 14 days of the nesting bird survey, or halts for more than 14 days, then an additional survey is required prior to starting or resuming work. If active nests are found, then the qualified biologist shall mark species-specific buffer zones in the field to prohibit development activities and minimize nest disturbance until the young have successfully fledged or the biologist determines that a nest is no longer active. Buffer distances may range from 20 feet for some songbirds up to 250 to 500 feet for most raptors. Nest monitoring may also be warranted during certain phases of development to ensure nesting birds are not adversely impacted by adjacent construction. If active nests are found within any trees slated for removal, then an appropriate buffer shall be established around the tree and all trees within the buffer shall not be removed until a qualified biologist determines that the nest has successfully fledged and is no longer active. In addition, a qualified biologist shall conduct an environmental awareness training for all construction personnel for the potential of nesting birds to occur onsite prior to the initiation of work. This training shall follow the same guidelines as for special-status bats. As applicable, the pre-construction survey and environmental training may be combined with other recommended surveys and trainings. A nesting bird survey and associated environmental training for nesting birds are not required if construction occurs outside of the nesting bird season (September 1 to January 31).	Results of preconstruction surveys shall be submitted prior to the issuance of a grading permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans.	<i>Pre-Construction and Construction:</i> Surveys required prior to construction. If surveys are positive for birds, then remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.	Planning and Engineering	Survey Results	
BIO-2: Implement Measures to Protect Western Burrowing Owls A survey for burrowing owls must be conducted no more than 14 days prior to the initiation of construction as prescribed by CDFW guidelines (CDFW 2012). The Study Area shall be surveyed by a qualified biologist to determine or rule out the presence of burrowing owl onsite. This survey may be conducted in conjunction with a nesting bird survey if construction were to be initiated within the nesting season. If burrowing owls are observed on or within 500 feet of proposed development activities that will result in ground disturbance, then an impact assessment shall be prepared and submitted to the CDFW, in accordance with the 2012 Staff Report. If it is determined that project activities may result in impacts to occupied western burrowing owl habitat, then the project proponent shall consult with CDFW and	Results of preconstruction surveys shall be submitted prior to the issuance of a grading permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans.	<i>Pre-Construction and Construction:</i> Surveys required prior to construction. If surveys are positive for birds, then remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.	Planning and Engineering	Survey Results	

develop a detailed mitigation plan establishing avoidance and mitigation measures based on the requirements set forth in Appendix A of the 2012 Staff Report (CDFW 2012).					
BIO-3: Implement Measures to Protect Special Status Bat Species Townsend’s big-eared bat (a State Species of Special Concern) and pallid bat (included on the CDFW Special Animals List), have the potential to occur within the Study Area. A qualified biologist shall conduct a pre-construction survey for special-status bat species no more than 14 days prior to development or ground disturbing activities including grading, vegetation clearing, tree removal, or construction. This can be performed in conjunction with a nesting bird survey, if applicable. If no bats are observed, then a letter report shall be prepared to document the survey and provided to the City of Roseville, and no additional measures are recommended. If development does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, then an additional survey is required prior to resuming or starting work. If special-status bats are present and roosting in the Study Area or the surrounding 100 feet of the Study Area, then the qualified biologist shall mark an appropriate no disturbance buffer around the roost site prior to the commencement of ground disturbing activities or development. At a minimum, no trees shall be removed until the biologist has determined that a roost site is no longer active, and no bats are present. In addition, a qualified biologist shall conduct an environmental awareness training to all construction personnel prior to the initiation of work. The training shall include identification of special-status bat species, required practices before the start of construction, general measures that are being implemented to conserve the species as they relate to the Project, penalties for non-compliance, and boundaries of the permitted disturbance zones. Upon completion of the training, all construction personnel shall sign a form stating that they have attended the training and understand all the measures. Proof of this instruction shall be kept on file with the project proponent. As applicable, the pre-construction survey and environmental training may be combined with other recommended surveys and trainings. Additional mitigation measures for bat species, such as installation of bat boxes or alternate roost structures, would be recommended only if special-status bat species are found to be roosting within the Study Area.	Results of preconstruction surveys shall be submitted prior to the issuance of a grading permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans.	<i>Pre-Construction and Construction:</i> Surveys required prior to construction. If surveys are positive for birds, then remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.		Survey Results	
BIO-4: Implement Measures to Protect Wetlands Prior to grading permit the project shall obtain an Army Corps of Engineers wetland fill or discharge "Section 404" permit. The project will be required to purchase credits in an approved wetland mitigation fund or other mitigation required by the 404 permit to ensure no net loss of wetlands.	The applicant shall notify Planning and Engineering and provide proof of ACE permit.	Prior to grading permit issuance.	Planning	Army Corps of Engineering 404 permit	
CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources Should any cultural resources, such as structural features, any amount of bone or shell, artifacts, human remains, or architectural remains, be encountered during any subsurface development activities, work shall be suspended within 100-feet of the find. The City of Roseville Planning and Public Works Staff shall be immediately notified. At that time, as deemed necessary by the City, the developer shall retain a qualified archaeologist to assess the resource and provide proper management recommendations should potential impacts to the resources be found to be significant. All work by the archeologist shall be completed in consultation with and subject to the approval of City Planning. The archeologist shall also coordinate with and consult potentially-affected tribal representatives. Possible management recommendations for important resources could include resource	The applicant shall notify the Planning Division of the pre-construction meeting date.	Prior to and During Construction	Planning		

avoidance or preservation in place. The contractor shall implement any measures deemed feasible and necessary by City staff, in consultation with the archaeologists, to avoid or minimize significant effects to the cultural resources. In addition, pursuant to Section 5097.98 or the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.					
TCR-1: Pre-Construction Inspections. A minimum of seven days prior to beginning earthwork, clearing and grubbing, or other soil disturbing activities, the applicant shall notify lead agency representative of the proposed earthwork start-date. The lead agency representative will contact the United Auburn Indian Community (UAIC) with the proposed earthwork start-date and a UAIC Tribal Representative or Tribal Monitor shall be invited to inspect the project site, including any soil piles, trenches, or other disturbed areas, within the first five days, or as appropriate for the type and size of project, of groundbreaking activity. During this inspection, a UAIC Tribal Representative or Tribal Monitor may provide an on-site meeting for construction personnel information on TCRs and workers awareness brochure. If any TCRs, such as bone or shell, or isolated artifacts are encountered during this initial inspection, or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the measures included in the Inadvertent Discoveries Mitigation Measure shall be implemented. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign. The contractor shall implement any measures deemed by CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize significant effects to the resources, including the use of a paid Native American Monitor whenever work is occurring within 100 feet of the find.	Project Applicant/ Contractor/ UAIC/ Tribal Representative	Prior to and During Construction	City of Roseville		
TCR-2: Contractor Awareness Training. The Construction Manager shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources and tribal cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the City of any occurrences; and project-specific requirements; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and reviewed by City for approval, and may be provided in an audio-visual format, such as a DVD. The Construction Manager shall provide culturally affiliated tribes that consulted on the project [tribe name] the option of attending the initial training in person and/or providing additional materials germane to the unanticipated discovery of tribal cultural resources for incorporation into the training. The training program shall be required for all construction supervisors, forepersons, and operators of ground-disturbing equipment, and all personnel shall be required to sign a training roster and display a hard hat sticker that is visible to City inspectors. The construction manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the City as proof of compliance.	Project Applicant/ Contractor/ UAIC/ Tribal Representative	Prior to and During Construction	City of Roseville	Training roster	

TCR-3: Inadvertent Discoveries. If potentially significant Tribal Cultural Resources (TCRs), cultural or archaeological resources (“resources”) are discovered by an on-site Tribal Monitor during ground disturbing construction activities, all work shall cease within 100 feet of the find. The Tribal Monitor will immediately notify the appropriate Tribal Representatives who will make recommendations for further evaluation and treatment, as necessary. A qualified cultural resources specialist meeting the Secretary of Interior's Standards and Qualifications for Archaeology, may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work shall remain suspended or slowed within 100 feet of the find until the resource is evaluated, which shall occur within one day, but no more than two days, of the find. The project applicant shall coordinate with a UAIC Tribal Representative all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project design. The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate Tribal treatment of the find, as necessary.					
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DEVELOPMENT SERVICES DEPARTMENT
311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File # _____

Project Address _____

Property Owner _____

Planning Division Contact _____

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete

I HAVE ATTACHED THE FOLLOWING REQUIRED ITEMS:

- ☐ Table of Applicable Mitigation Measures
- ☐ Mitigation Verification Form(s)
- ☐ Specific supporting documentation required by measure(s), if applicable (e.g. biologist's report)

I hereby certify under penalty of perjury under the laws of the State of California that I am the property owner or an agent of the property owner and am authorized to submit this Mitigation Verification Form. I also certify that the above-listed mitigation measures have been completed in the manner required, and that all of the information in this submittal is true and correct, to the best of my knowledge:

Signature and Date

Print Name

Contact Number

IS Attachment 1

MITIGATION VERIFICATION FORM

Mitigation Measure _____

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

IS Attachment 1

INSTRUCTIONS

COVER SHEET:

A Cover Sheet for the project/development is prepared by City staff, with the top portion filled out. Each time Mitigation Verification Forms(s) are being submitted, a Cover Sheet completed by the Developer, Contractor, or Designee is required. An example of a completed summary table is provided below. The signature on the Cover Sheet must be *original wet ink*.

EXAMPLE MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File #	New Coffee Shop, PL15-0000
Project Address	10 Justashort Street
Property Owner	Jane Owner
Planning Division Contact	Joe Planner, Associate Planner, (916) 774-####

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete
MM-3	Copy of survey report signed by biologist	5/10/2016
MM-4	All information included in Mitigation Verification Form	5/12/2016
MM-5	E-mail from Air District approving Dust Control Plan	5/05/2016

IS Attachment 1

MITIGATION VERIFICATION FORM:

A Mitigation Verification Form is provided by City staff, along with the Cover Sheet and Table of Applicable Mitigation Measures. A form is filled in and submitted for each mitigation measure by the Developer, Contractor, or Designee. The form needs only the mitigation number to be filled in, along with the Description of Monitoring and Verification Work Performed. Multiple forms may be submitted simultaneously, under one cover sheet. It is also permissible to submit a form for each part of a measure, on separate dates. For instance, in the example measure MM-4 in the table above, the actual mitigation requires informing construction workers *and* retaining a qualified archeologist if resources are uncovered. Thus, a developer may submit a form in May certifying that construction workers have been informed, and also submit a second copy of the form in July because resources were discovered and additional actions had to be undertaken.

Each mitigation measure specifies the type of supporting documentation required; this must be submitted in order for the City to accept the mitigation as complete. An example of a completed Mitigation Verification Form is provided below.

EXAMPLE MITIGATION VERIFICATION FORM

Mitigation Measure MM3

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

The mitigation measure text is included on the Improvement Plans General Notes page (Improvement Plan EN15-0001). On May 4, 2016, prior to any ground-disturbing activities (the pre-construction phase), a site meeting was held. At this meeting, workers on the site were informed of the potential to unearth remains, and were instructed to cease work and notify their supervisor immediately if any resources were observed.

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

Industrial Ave Self-Storage Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	105.00	1000sqft	2.41	105,000.00	0
Parking Lot	37.00	1000sqft	0.85	37,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2021
Utility Company	Roseville Electric				
CO2 Intensity (lb/MW hr)	793.8	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - Vehicle Trips - Infill non-residential; does not increase vmt so no mobile analysis required.

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

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					
2020	0.2252	2.1110	1.6873	3.3300e-003	0.1175	0.1076	0.2251	0.0508	0.1008	0.1516	0.0000	292.9015	292.9015	0.0588	0.0000	294.3703
2021	0.6010	0.9951	0.9466	1.8900e-003	0.0296	0.0486	0.0782	8.0300e-003	0.0457	0.0537	0.0000	165.8126	165.8126	0.0311	0.0000	166.5902
Maximum	0.6010	2.1110	1.6873	3.3300e-003	0.1175	0.1076	0.2251	0.0508	0.1008	0.1516	0.0000	292.9015	292.9015	0.0588	0.0000	294.3703

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					
2020	0.2252	2.1110	1.6873	3.3300e-003	0.1175	0.1076	0.2251	0.0508	0.1008	0.1516	0.0000	292.9013	292.9013	0.0588	0.0000	294.3700
2021	0.6010	0.9951	0.9466	1.8900e-003	0.0296	0.0486	0.0782	8.0300e-003	0.0457	0.0537	0.0000	165.8124	165.8124	0.0311	0.0000	166.5901
Maximum	0.6010	2.1110	1.6873	3.3300e-003	0.1175	0.1076	0.2251	0.0508	0.1008	0.1516	0.0000	292.9013	292.9013	0.0588	0.0000	294.3700

[illegible]

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2020	7-31-2020	0.9993	0.9993
2	8-1-2020	10-31-2020	0.8038	0.8038
3	11-1-2020	1-31-2021	0.7802	0.7802
4	2-1-2021	4-30-2021	0.7070	0.7070
5	5-1-2021	7-31-2021	0.6603	0.6603
		Highest	0.9993	0.9993

2.2 Overall Operational

Unmitigated Operational

	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					
Area	0.4618	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-003
Energy	0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	428.5711	428.5711	0.0138	4.3600e-003	430.2179
Mobile	9.7700e-003	0.0697	0.1156	4.4000e-004	0.0326	3.9000e-004	0.0330	8.7600e-003	3.7000e-004	9.1300e-003	0.0000	40.4495	40.4495	1.5800e-003	0.0000	40.4890
Waste						0.0000	0.0000		0.0000	0.0000	26.4294	0.0000	26.4294	1.5619	0.0000	65.4778
Water						0.0000	0.0000		0.0000	0.0000	7.7033	47.3070	55.0103	0.7929	0.0190	80.5075
Total	0.4821	0.1656	0.1975	1.0200e-003	0.0326	7.6800e-003	0.0402	8.7600e-003	7.6600e-003	0.0164	34.1327	516.3302	550.4629	2.3703	0.0234	616.6948

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2.2 Overall Operational**Mitigated Operational**

	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					
Area	0.4618	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-003
Energy	0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	428.5711	428.5711	0.0138	4.3600e-003	430.2179
Mobile	9.7700e-003	0.0697	0.1156	4.4000e-004	0.0326	3.9000e-004	0.0330	8.7600e-003	3.7000e-004	9.1300e-003	0.0000	40.4495	40.4495	1.5800e-003	0.0000	40.4890
Waste						0.0000	0.0000		0.0000	0.0000	26.4294	0.0000	26.4294	1.5619	0.0000	65.4778
Water						0.0000	0.0000		0.0000	0.0000	7.7033	47.3070	55.0103	0.7929	0.0190	80.5075
Total	0.4821	0.1656	0.1975	1.0200e-003	0.0326	7.6800e-003	0.0402	8.7600e-003	7.6600e-003	0.0164	34.1327	516.3302	550.4629	2.3703	0.0234	616.6948

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	5/28/2020	5	20	
2	Site Preparation	Site Preparation	5/29/2020	6/4/2020	5	5	
3	Grading	Grading	6/5/2020	6/16/2020	5	8	
4	Building Construction	Building Construction	6/17/2020	5/4/2021	5	230	
5	Paving	Paving	5/5/2021	5/28/2021	5	18	
6	Architectural Coating	Architectural Coating	5/29/2021	6/23/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 157,500; Non-Residential Outdoor: 52,500; Striped Parking Area: 2,220 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	23.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386

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3.2 Demolition - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173

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	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385

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3.2 Demolition - 2020**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
Worker	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173

3.3 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0452	5.4900e-003	0.0507	0.0248	5.0500e-003	0.0299	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253

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3.3 Site Preparation - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052
Total	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052

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					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0452	5.4900e-003	0.0507	0.0248	5.0500e-003	0.0299	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252

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3.3 Site Preparation - 2020**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
Worker	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052
Total	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052

3.4 Grading - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	9.7200e-003	0.1055	0.0642	1.2000e-004	0.0262	5.0900e-003	0.0313	0.0135	4.6900e-003	0.0182	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078

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3.4 Grading - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069
Total	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069

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					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	9.7200e-003	0.1055	0.0642	1.2000e-004	0.0262	5.0900e-003	0.0313	0.0135	4.6900e-003	0.0182	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078

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3.4 Grading - 2020**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
Worker	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069
Total	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1505	1.3622	1.1962	1.9100e-003		0.0793	0.0793		0.0746	0.0746	0.0000	164.4431	164.4431	0.0401	0.0000	165.4461
Total	0.1505	1.3622	1.1962	1.9100e-003		0.0793	0.0793		0.0746	0.0746	0.0000	164.4431	164.4431	0.0401	0.0000	165.4461

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3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0100e-003	0.1943	0.0383	4.7000e-004	0.0107	8.5000e-004	0.0115	3.0900e-003	8.1000e-004	3.9000e-003	0.0000	45.0765	45.0765	2.2100e-003	0.0000	45.1316
Worker	0.0148	0.0103	0.1106	3.2000e-004	0.0335	2.2000e-004	0.0337	8.9000e-003	2.0000e-004	9.1100e-003	0.0000	28.8738	28.8738	7.1000e-004	0.0000	28.8916
Total	0.0208	0.2046	0.1489	7.9000e-004	0.0441	1.0700e-003	0.0452	0.0120	1.0100e-003	0.0130	0.0000	73.9503	73.9503	2.9200e-003	0.0000	74.0233

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	0.1505	1.3622	1.1962	1.9100e-003		0.0793	0.0793		0.0746	0.0746	0.0000	164.4429	164.4429	0.0401	0.0000	165.4459
Total	0.1505	1.3622	1.1962	1.9100e-003		0.0793	0.0793		0.0746	0.0746	0.0000	164.4429	164.4429	0.0401	0.0000	165.4459

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3.5 Building Construction - 2020**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	6.0100e-003	0.1943	0.0383	4.7000e-004	0.0107	8.5000e-004	0.0115	3.0900e-003	8.1000e-004	3.9000e-003	0.0000	45.0765	45.0765	2.2100e-003	0.0000	45.1316
Worker	0.0148	0.0103	0.1106	3.2000e-004	0.0335	2.2000e-004	0.0337	8.9000e-003	2.0000e-004	9.1100e-003	0.0000	28.8738	28.8738	7.1000e-004	0.0000	28.8916
Total	0.0208	0.2046	0.1489	7.9000e-004	0.0441	1.0700e-003	0.0452	0.0120	1.0100e-003	0.0130	0.0000	73.9503	73.9503	2.9200e-003	0.0000	74.0233

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0836	0.7670	0.7293	1.1800e-003		0.0422	0.0422		0.0397	0.0397	0.0000	101.9204	101.9204	0.0246	0.0000	102.5351
Total	0.0836	0.7670	0.7293	1.1800e-003		0.0422	0.0422		0.0397	0.0397	0.0000	101.9204	101.9204	0.0246	0.0000	102.5351

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3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1200e-003	0.1105	0.0211	2.9000e-004	6.6100e-003	2.5000e-004	6.8600e-003	1.9100e-003	2.4000e-004	2.1500e-003	0.0000	27.7132	27.7132	1.2900e-003	0.0000	27.7455
Worker	8.5100e-003	5.7300e-003	0.0627	1.9000e-004	0.0207	1.3000e-004	0.0209	5.5200e-003	1.2000e-004	5.6400e-003	0.0000	17.2641	17.2641	3.9000e-004	0.0000	17.2740
Total	0.0116	0.1162	0.0838	4.8000e-004	0.0273	3.8000e-004	0.0277	7.4300e-003	3.6000e-004	7.7900e-003	0.0000	44.9773	44.9773	1.6800e-003	0.0000	45.0195

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	0.0836	0.7670	0.7293	1.1800e-003		0.0422	0.0422		0.0397	0.0397	0.0000	101.9203	101.9203	0.0246	0.0000	102.5350
Total	0.0836	0.7670	0.7293	1.1800e-003		0.0422	0.0422		0.0397	0.0397	0.0000	101.9203	101.9203	0.0246	0.0000	102.5350

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3.5 Building Construction - 2021**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	3.1200e-003	0.1105	0.0211	2.9000e-004	6.6100e-003	2.5000e-004	6.8600e-003	1.9100e-003	2.4000e-004	2.1500e-003	0.0000	27.7132	27.7132	1.2900e-003	0.0000	27.7455
Worker	8.5100e-003	5.7300e-003	0.0627	1.9000e-004	0.0207	1.3000e-004	0.0209	5.5200e-003	1.2000e-004	5.6400e-003	0.0000	17.2641	17.2641	3.9000e-004	0.0000	17.2740
Total	0.0116	0.1162	0.0838	4.8000e-004	0.0273	3.8000e-004	0.0277	7.4300e-003	3.6000e-004	7.7900e-003	0.0000	44.9773	44.9773	1.6800e-003	0.0000	45.0195

3.6 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8500e-003	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7336	14.7336	4.6300e-003	0.0000	14.8493
Paving	1.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7336	14.7336	4.6300e-003	0.0000	14.8493

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3.6 Paving - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778
Total	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778

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	9.8500e-003	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7335	14.7335	4.6300e-003	0.0000	14.8493
Paving	1.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7335	14.7335	4.6300e-003	0.0000	14.8493

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3.6 Paving - 2021**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
Worker	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778
Total	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778

3.7 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	0.4938	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019

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3.7 Architectural Coating - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.3000e-004	2.5600e-003	1.0000e-005	8.5000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.3000e-004	0.0000	0.7063	0.7063	2.0000e-005	0.0000	0.7067
Total	3.5000e-004	2.3000e-004	2.5600e-003	1.0000e-005	8.5000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.3000e-004	0.0000	0.7063	0.7063	2.0000e-005	0.0000	0.7067

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					
Archit. Coating	0.4918					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	0.4938	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019

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3.7 Architectural Coating - 2021**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
Worker	3.5000e-004	2.3000e-004	2.5600e-003	1.0000e-005	8.5000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.3000e-004	0.0000	0.7063	0.7063	2.0000e-005	0.0000	0.7067
Total	3.5000e-004	2.3000e-004	2.5600e-003	1.0000e-005	8.5000e-004	1.0000e-005	8.5000e-004	2.3000e-004	1.0000e-005	2.3000e-004	0.0000	0.7063	0.7063	2.0000e-005	0.0000	0.7067

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	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	9.7700e-003	0.0697	0.1156	4.4000e-004	0.0326	3.9000e-004	0.0330	8.7600e-003	3.7000e-004	9.1300e-003	0.0000	40.4495	40.4495	1.5800e-003	0.0000	40.4890
Unmitigated	9.7700e-003	0.0697	0.1156	4.4000e-004	0.0326	3.9000e-004	0.0330	8.7600e-003	3.7000e-004	9.1300e-003	0.0000	40.4495	40.4495	1.5800e-003	0.0000	40.4890

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	138.60	71.40	87,585	87,585
Parking Lot	0.00	0.00	0.00		
Total	0.00	138.60	71.40	87,585	87,585

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
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.494811	0.040252	0.220236	0.128508	0.023782	0.006284	0.029295	0.046215	0.001446	0.001205	0.005961	0.000773	0.001232
Parking Lot	0.494811	0.040252	0.220236	0.128508	0.023782	0.006284	0.029295	0.046215	0.001446	0.001205	0.005961	0.000773	0.001232

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	324.1275	324.1275	0.0118	2.4500e-003	325.1536
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	324.1275	324.1275	0.0118	2.4500e-003	325.1536
NaturalGas Mitigated	0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	104.4437	104.4437	2.0000e-003	1.9100e-003	105.0643
NaturalGas Unmitigated	0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	104.4437	104.4437	2.0000e-003	1.9100e-003	105.0643

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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.9572e+006	0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	104.4437	104.4437	2.0000e-003	1.9100e-003	105.0643
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
Total		0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	104.4437	104.4437	2.0000e-003	1.9100e-003	105.0643

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	tons/yr										MT/yr					
General Light Industry	1.9572e+006	0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	104.4437	104.4437	2.0000e-003	1.9100e-003	105.0643
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
Total		0.0106	0.0959	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	0.0000	104.4437	104.4437	2.0000e-003	1.9100e-003	105.0643

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	887250	319.4647	0.0117	2.4100e-003	320.4760
Parking Lot	12950	4.6628	1.7000e-004	4.0000e-005	4.6776
Total		324.1275	0.0118	2.4500e-003	325.1536

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	887250	319.4647	0.0117	2.4100e-003	320.4760
Parking Lot	12950	4.6628	1.7000e-004	4.0000e-005	4.6776
Total		324.1275	0.0118	2.4500e-003	325.1536

6.0 Area Detail**6.1 Mitigation Measures Area**

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	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	0.4618	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-003
Unmitigated	0.4618	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-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	0.0492					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-003
Total	0.4618	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-003

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

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	0.0492					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-003
Total	0.4618	1.0000e-005	1.3100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5400e-003	2.5400e-003	1.0000e-005	0.0000	2.7100e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	55.0103	0.7929	0.0190	80.5075
Unmitigated	55.0103	0.7929	0.0190	80.5075

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	24.2813 / 0	55.0103	0.7929	0.0190	80.5075
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		55.0103	0.7929	0.0190	80.5075

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	24.2813 / 0	55.0103	0.7929	0.0190	80.5075
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		55.0103	0.7929	0.0190	80.5075

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	26.4294	1.5619	0.0000	65.4778
Unmitigated	26.4294	1.5619	0.0000	65.4778

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	130.2	26.4294	1.5619	0.0000	65.4778
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		26.4294	1.5619	0.0000	65.4778

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	130.2	26.4294	1.5619	0.0000	65.4778
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		26.4294	1.5619	0.0000	65.4778

9.0 Operational Offroad

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

Industrial Ave Self-Storage - Placer-Sacramento County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

8151 Industrial Avenue

Biological Resources Assessment

October 2019 | RSC-01

Prepared for:

RSC Engineering, Inc.
Tiffany Wilson

2250 Douglas Boulevard, Suite 150
Roseville, CA 95661

Prepared by:

HELIX Environmental Planning, Inc.
590 Menlo Drive, Suite 5
Rocklin, CA 95765

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ACRONYMS AND ABBREVIATIONS

BRA	Biological Resources Assessment
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CWA	Clean Water Act
DBH	diameter at breast height
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
IPaC	Information for Planning and Conservation
MBTA	Migratory Bird Treaty Act
MSL	mean sea level
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
OHWM	ordinary high-water mark
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) biologist Zachary Neider conducted a Biological Resources Assessment (BRA) on September 6, 2019 for the 8151 Industrial Avenue project (Project) site located within the City of Roseville, Placer County, California. The site is located within Township 11N, Range 6E, Section 28 of the USGS 7.5-minute series *Roseville* quadrangle. The approximate location of the Project's Study Area is 38° 46' 46.101" North, 121° 18' 29.519" West (Figure 1).

The purpose of this BRA is to summarize the general biological resources in the Study Area, to assess the suitability of the Study Area to support special-status species and sensitive vegetation communities or habitats, and to provide recommendations for any regulatory permitting or further analysis that may be required prior to development activities occurring on the site.

The 3.7-acre Study Area generally comprises ruderal herbaceous habitat that has been historically developed or disturbed and includes three isolated Oregon ash trees (*Fraxinus latifolia*), which are not regulated or protected by the City of Roseville. The Study Area contains 3.47 acres of ruderal herbaceous habitat, 0.24 acre of developed/disturbed area in the form of a gravel road, and <0.01 acre of a potentially jurisdictional depressional seasonal wetland. Surrounding land uses include industrial and commercial business complexes, a power substation, and the Union Pacific railroad line.

Known or potential biological constraints in the Study Area include:

- Potential nesting and foraging habitat for Swainson's hawk (*Buteo swainsoni*);
- Potential foraging habitat for tricolored blackbird (*Agelaius tricolor*);
- Potential habitat for western burrowing owl (*Athene cunicularia*);
- Potential nesting and foraging habitat for white-tailed kite (*Elanus leucurus*);
- Potential habitat for special-status bats including pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*);
- Potential habitat for additional nesting migratory birds and raptors protected under the Migratory Bird Treaty Act (MBTA); and
- Potentially jurisdictional wetlands and waters of the U.S. and state.

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1.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the 3.7-acre 8151 Industrial Avenue project (Project) site located within the City of Roseville, Placer County, California. This document addresses the onsite physical features, plant communities present, and the common plant and wildlife species occurring or potentially occurring in the Project's Study Area. Furthermore, the suitability of Study Area's habitats to support special-status species and sensitive habitats is analyzed, and recommendations are provided for any regulatory permitting or further analysis required prior to development activities occurring on the site.

1.1 PROJECT DESCRIPTION

The proposed Project would include the development of a storage facility consisting of seven multi-unit buildings totaling 105,770 square feet. Buildings 1-4, and 7 are proposed as one-story structures, along the border of the parcel and consisting of various numbers of storage units. Buildings 5 and 6, to be located in the center of the parcel, are proposed as two-story structures consisting of varying numbers of units. Additionally, an office is proposed to be attached to Building 5. Associated landscaping, sidewalks, and vehicle paths of travel are also proposed throughout the site.

2.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies that are relevant to the California Environmental Quality Act (CEQA) review process are summarized below. Applicable CEQA significance criteria are also addressed in this section.

2.1 FEDERAL REGULATIONS

2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

In the context of the proposed project, FESA consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) would be initiated if development resulted in the potential for take of a threatened or endangered species or if issuance of a Section 404 permit or other

federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

2.1.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

2.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to *“take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.”* Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as *“to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”*

2.2 STATE JURISDICTION

2.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW), when preparing CEQA documents. The purpose is to ensure that the State CEQA lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species. It also directs CDFW to determine whether jeopardy would occur and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

2.2.2 California Department of Fish and Game Codes

A number of species have been designated “fully protected” species under Sections 5515, 5050, 3511, and 4700 of the Fish and Game Code, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The California Fish and Game Code defines take as *“hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”* Additionally, Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA), enacted in 1977, allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants protected under the NPPA. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations and emergencies. Vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations require proper advance notification to CDFW.

2.3 JURISDICTIONAL WATERS

2.3.1 Federal Jurisdiction

The U.S. Army Corps of Engineers (USACE) regulates discharge of dredge or fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). “Discharges of fill material” is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)].

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the “normal circumstances” for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high-water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

An aquatic feature is determined to be a water of the U.S. based on nexus with a traditionally navigable water pursuant to the Supreme Court’s decision in the consolidated cases Rapanos v. United States and Carabell v. United States (126 S. Ct. 2208) and agency guidance subsequent to this decision. Under these rules, the USACE asserts jurisdiction over wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries (i.e., waters that have a continuous flow at least three months out of the year), and wetlands that abut relatively permanent tributaries. The USACE determines jurisdiction over waters that are non-navigable tributaries that are not relatively permanent, and wetlands adjacent to these tributaries, by making a determination whether such waters “significantly affect the chemical, physical, and biological integrity of other jurisdictional waters more readily understood as “navigable.”

Finally, the USACE generally does not consider the following to be “waters of the United States”: swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow) and ditches “wholly in and draining only uplands...which do not carry a relatively permanent flow of water.” Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce up to the head of navigation.

2.3.2 State Jurisdiction

Regional Water Quality Control Board

Discharges of fill or waste material to waters of the State are regulated by the State Water Resources Control Board (SWRCB) through its Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (contained in the California Water Code). All waters of the U.S. are also considered waters of the State. In addition, other aquatic features that are not subject to USACE’ jurisdiction, such as roadside ditches or isolated wetlands, may be considered waters of the State. This determination will be made by RWQCB staff on a case-by-case basis.

Section 401 of the CWA requires an applicant to obtain “water quality certification” to ensure compliance with State water quality standards before certain federal licenses or permits may be issued. Section 13260(a) of the Porter-Cologne Water Quality Control Act requires any person discharging waste, including dredged or fill material, or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The permits subject to Section 401 include CWA Section 404 permits issued by the USACE. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. Discharges to waters of the State that are not subject to a CWA Section 404 permit rely on the report of waste discharge process.

California Department of Fish and Wildlife

The CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will “*substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601.*” Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4-inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

2.4 CEQA SIGNIFICANCE

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by

projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist contained in Appendix G of the State CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

2.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

Rank 1A: Plants presumed Extinct in California

Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere

Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere

Rank 3: Plants about which we need more information – A Review List

Rank 4: Plants of limited distribution – A Watch List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

2.4.2 California Department of Fish and Wildlife Species of Concern

Some additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or are fully protected. These species are included on the *Special Animals List*, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to “Species of Special Concern” (SSC), the *Special Animals List* includes species that are tracked in the California Natural Diversity Database (CNDDB) but warrant no legal protection. These species are identified as “California Special Animals” (CSA).

2.5 CITY OF ROSEVILLE GENERAL PLAN

In addition to federal and State regulations described above, the *City of Roseville General Plan (2035)* (General Plan) includes goals, objectives, and policies regarding biological resources within the City limits (City of Roseville 2016). Applicable sections of the General Plan are included in Appendix A.

3.0 METHODS

Available information pertaining to the natural resources of the region was reviewed and the references reviewed for this assessment are listed in the References section. The following site-specific published information was reviewed for this BRA:

- California Department of Fish and Wildlife (CDFW). 2019. *California Natural Diversity Data Base* (CNDDB); For: *Roseville, Sheridan, Lincoln, Gold Hill, Pleasant Grove, Rocklin, Rio Linda, Citrus Heights, and Folsom* U.S. Geological Survey (USGS) 7.5-minute series quadrangles, Sacramento, CA. Accessed [September 11, 2019];
- California Native Plant Society (CNPS). 2019. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.45) For: *Roseville, Sheridan, Lincoln, Gold Hill, Pleasant Grove, Rocklin, Rio Linda, Citrus Heights, and Folsom*, quadrangles. Accessed [September 11, 2019];
- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). 1980. *Placer County, California*. USDA, NRCS, in cooperation with the Regents of the University of California (Agricultural Experiment Station);
- USDA, NRCS. 2019. *Web Soil Survey*. Available online at: <http://websoilsurvey.sc.egov.usda.gov>. Accessed [September 11, 2019];
- U.S. Fish and Wildlife Service (USFWS). 2019. *Information for Planning and Conservation* (IPaC) *Roseville, Placer County, California*. Accessed [September 11, 2019]; and
- USGS. 2012. *Roseville, California*. 7.5-minute series topographic quadrangles. United States Department of Interior.

Prior to conducting the field survey, existing information was reviewed concerning known habitats and special-status species that may occur in the Study Area. The results of the records search and five-mile radius CNDDDB query for the Study Area are summarized in Tables 1-3 of Appendix B. The field survey was conducted on September 6, 2019, by HELIX biologist Zachary Neider. The weather during the field survey was hot and clear with an average temperature of 90°F. The Study Area was systematically surveyed on foot to ensure total search coverage, with special attention given to portions of the Study Area with the potential to support special-status species and sensitive habitats. Mr. Neider used binoculars to further extend site coverage and identify species observed. All plant and animal species observed were recorded (Appendix C), and all biological communities occurring in the Study Area were characterized. Resources of interest were mapped with a handheld Trimble GeoXT GPS unit with sub-meter accuracy.

Following the field survey, the potential for each species identified in the records search to occur within the Study Area was determined based on the site survey, soils, habitats present within the survey area, and species-specific information, as shown in Appendix B.

4.0 RESULTS

4.1 SITE LOCATION AND DESCRIPTION

The 3.7-acre Study Area is located within the City of Roseville, Placer County, California (Figure 1). The Study Area is bordered by a parcel containing a power substation to the north, by Industrial Avenue to the east, by a manmade concrete canal to the south, and by Union Pacific railroad tracks to the west. The Study Area is located within Township 11N, Range 6E, Section 28 of the USGS 7.5-minute series *Roseville* quadrangle. The approximate location of the Project is 38° 46' 46.101" North, 121° 18' 29.519" West (Figure 1). The Study Area comprises almost entirely ruderal herbaceous habitat, with a gravel road running north-to-south along the length of its western border (Figure 2).

4.2 PHYSICAL FEATURES

4.2.1 Topography and Drainage

The general topography of the Study Area is fairly level, with elevations that range from approximately 133 feet (41 meters) above mean sea level (MSL) at the southern portion, to approximately 146 feet (45 meters) above MSL on the northern portion of the Study Area. The overall percent slope within the Study Area is approximately 2.5 percent.

The Study Area is located in the Pleasant Grove Creek watershed, USGS Hydrologic Unit Code HUC12-180201610302, along the fringe of the Central Valley and lower Sierra Nevada foothills in southwestern Placer County, California. In general, water flows from north to south across the Study Area into an unnamed, man-made concrete canal running along the southern border. The canal eventually flows into Pleasant Grove Creek. Pleasant Grove Creek, through an eventual series of canals and agricultural ditches, is a tributary to the Sacramento River.

4.2.2 Soils

The Natural Resources Conservation Service has mapped one soil unit within the Study Area (Figure 3): Cometa-Fiddymment Complex, 1 to 5 percent slopes. The general characteristics and properties associated with this soil type are described below (USDA 2019, NRCS 1980 and 2019).

(141) Cometa-Fiddymment Complex, 1 to 5 Percent Slopes: This soil complex is found on low terraces at an elevation of 75 to 200 feet above MSL. The Cometa soil series is a deep, well-drained claypan soil that formed in alluvium, mainly from granitic sources. Permeability is very slow and surface runoff is slow. The Fiddymment soil series is a moderately deep, well-drained soil over a hardpan formed in old valley siltstone. Permeability is very slow and surface runoff is slow. Typically, vegetation on this soil unit consists primarily of non-native grasses and herbaceous plant species. The hydric soils list for Placer County identifies one hydric inclusion occurring within this soil type: Alamo, that occurs within depressions. This soil type is mapped within the entire Study Area.

4.3 BIOLOGICAL COMMUNITIES

Two biological communities, ruderal herbaceous and developed/disturbed, occur within the Study Area (Figure 4). These communities are described in more detail below. A depressional seasonal wetland also occurs within the ruderal herbaceous habitat in the southwestern portion of the Study Area. A comprehensive list of all plant species observed within the Study Area is provided in Appendix C. Representative site photographs are included in Appendix D.

4.3.1 Ruderal Herbaceous

Ruderal herbaceous habitat is characterized by plant species that are among one of the first to colonize disturbed areas (either naturally disturbed as by fire or artificially disturbed as by construction, grading, etc.). Abandoned agricultural fields, construction sites, vacant lots, and road shoulders are just a few of the settings that can create favorable conditions for ruderal plant species. Ruderal habitat is typically associated with invasive and noxious weeds. Approximately 3.47 acres of ruderal habitat occurs within the Study Area (Figure 4).

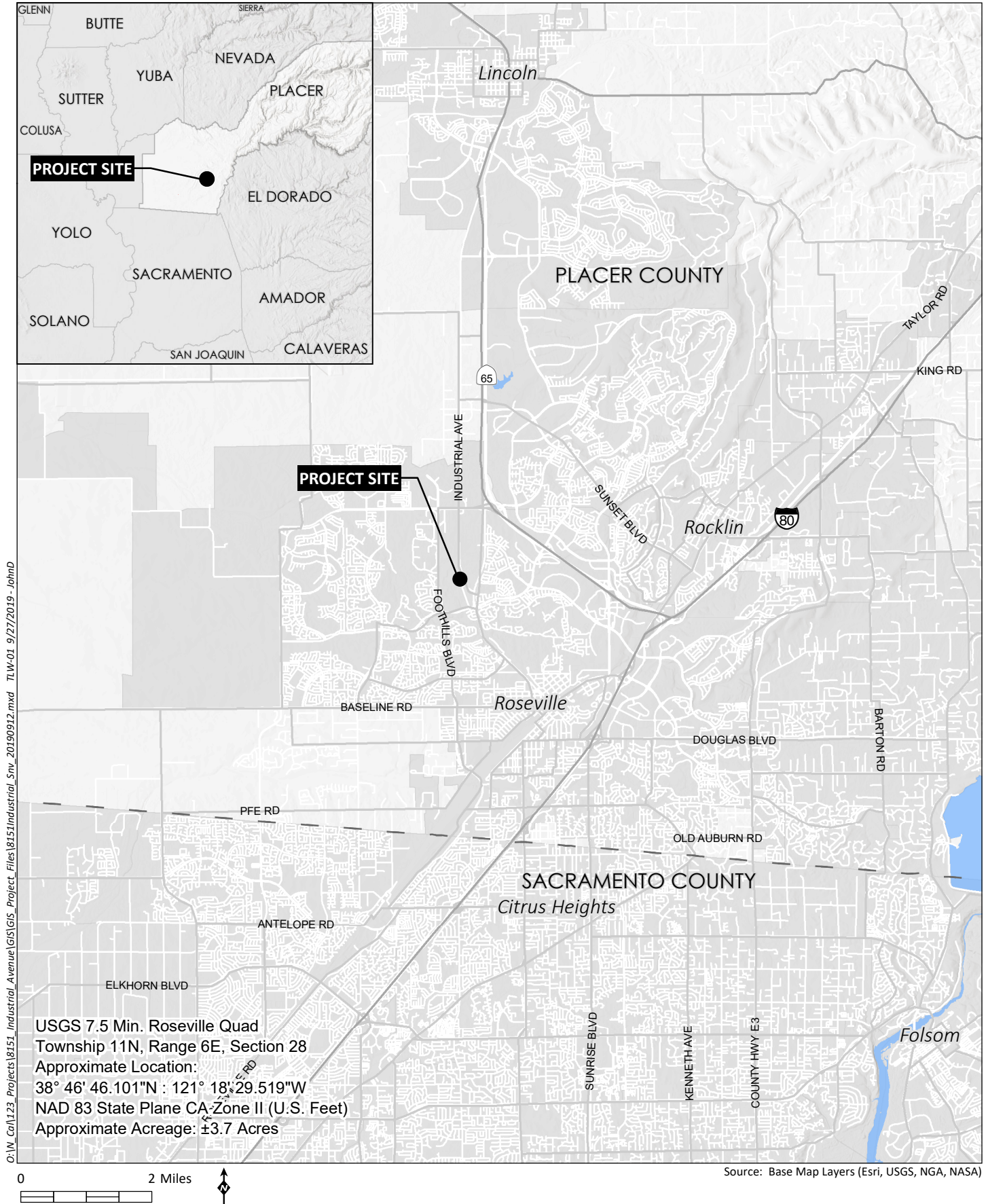
The dominant plant within the Study Area and within this community type is yellow star thistle (*Centaurea solstitialis*). Other dominant plant species within the ruderal community in the Study Area include medusa head (*Elymus caput-medusae*), stinkwort (*Dittrichia graveolens*), Italian thistle (*Carduus pycnocephalus*), fennel (*Foeniculum vulgare*), turkey mullein (*Croton setiger*), tarplant (*Holocarpha virgata*), common groundsel (*Senecio vulgaris*), vinegarweed (*Trichostema lanceolatum*), and soft brome (*Bromus hordeaceus*). Additionally, three Oregon ash trees exist within this community. These trees are not regulated by the City of Roseville, nor do they carry any specific designation that protects them.

4.3.2 Developed/disturbed

Developed/disturbed habitat differs from ruderal habitat by generally have little to no vegetation and containing built structures or maintained surfaces. Vegetation that does occur within this community type is often ornamental, rather than invasive or noxious weeds such as in ruderal habitat. Approximately 0.24 acre of developed/disturbed habitat occurs within the Study Area (Figure 4).

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IS Attachment 3

8151 Industrial Ave





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IS Attachment 3

8151 Industrial Ave

Legend

-  Study Area - ±3.7 Acres
-  Ruderal Herbaceous - 3.47 Acres
-  Depressional Seasonal Wetland - <0.01 Acre
-  Developed/Disturbed - 0.24 Acre

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Source: Aerial (City of Roseville, 3/1/2017)

Plant species that do occur in the Study Area within this community type are similar to the dominant species previously described in the ruderal herbaceous habitat. However, in large part, this biological community is devoid of vegetation and largely consists of the graveled road that runs along the western boundary of the Study Area.

4.4 AQUATIC RESOURCES

One depressional seasonal wetland was identified within the Study Area, but has not been formally delineated or verified by the USACE. This feature is depicted on Figure 4.

4.4.1 Depressional Seasonal Wetland

A depressional seasonal wetland totaling less than 0.01 acre has been delineated within the Study Area. Depressional seasonal wetlands are shallow depressions within the topography that inundate during the normal wet season. A restrictive layer may be present, weakly formed, or absent. These features are typically shallower than vernal pools and generally do not pond for durations as extended as vernal pools. These features exhibit a hydrologic regime dominated by saturation, rather than inundation. Plant species occurring within depressional seasonal wetlands are adapted to withstand short periods of saturated soils conditions but will not withstand prolonged periods of inundation, as is common in vernal pools.

Dominant plant species observed within this community include curly dock (*Rumex crispus*), Mediterranean beard grass (*Polypogon maritimus*), and willowherb (*Epilobium brachycarpum*).

4.5 SPECIAL-STATUS SPECIES

Special-status species are plant and wildlife species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., Migratory Bird Treaty Act);
- Included on the CDFW Special Animals List;
- Identified as Rank 1 to 4 by CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDDB, the USFWS, and CNPS ranked species (online versions) for the *Roseville* USGS quadrangle and eight surrounding quadrangles. Appendix B includes the common name and scientific name for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species' potential for occurrence within the Study Area:

- **Present:** Species known to occur within the Study Area based on CNDDDB records and/or observed within the Study Area during the biological survey.

- **High:** Species known to occur on or in the vicinity of the Study Area (based on CNDDB records within five miles and/or based on professional expertise specific to the Study Area or species) and there is suitable habitat within the Study Area.
- **Low:** Species known to occur in the vicinity of the Study Area and there is marginal habitat within the Study Area **-OR-** Species is not known to occur in the vicinity of the Study Area, however, there is suitable habitat on the Study Area.
- **None:** Species is not known to occur on or in the vicinity of the Study Area and there is no suitable habitat within the Study Area **-OR-** Species was surveyed for during the appropriate season with negative results **-OR-** The Study Area occurs outside of the known elevation or geographic ranges.

Only those species that are known to be *present* or have a *high* or *low* potential for occurrence are discussed further in the following sections.

4.5.1 Listed and Special-Status Plants

According to the records search, 14 listed and special-status plants have the potential to occur onsite or in the vicinity of the Study Area (CDFW 2019). Based on field observations, published information, and literature review, none of these special-status plants have the potential to occur within the Study Area due to the disturbed nature of the site.

4.5.2 Listed and Special-Status Wildlife

According to the records search, 33 listed and special-status wildlife species have the potential to occur onsite or in the vicinity of the Study Area (CDFW 2019). Based on field observations, published information, and literature review, 6 listed and special-status wildlife species have the potential to occur within the Study Area. In addition to these special-status species, additional migratory birds and raptors protected by the MBTA also have potential to occur within the Study Area. No listed or special-status species have a high potential to occur, with the exception of migratory birds protected by the MBTA. There are numerous common avian species protected by the MBTA and California Fish and Game Codes that do not have other special status and therefore, will not be discussed in detail here. Swainson's hawk, white-tailed kite, tricolored blackbird, burrowing owl, pallid bat, and Townsend's big-eared bat have a low potential to occur within the Study Area. These species are discussed in more detail below.

Special-Status Wildlife with a High Potential for Occurrence

Migratory Birds and Raptors

Migratory birds are protected under the MBTA of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10; this also includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All raptors, including common species not considered special-status, are protected under the California Fish and Wildlife Code (Section 3503.5). Removal or destruction of an active raptor nest is considered a violation of this Fish and Wildlife Code.

Migratory birds and raptors have the potential to nest in or adjacent to the Study Area. Suitable nest locations may include but are not limited to trees and shrubs, bare ground, buildings and structures, and grasses and weeds.

Special-Status Wildlife with a Low Potential for Occurrence

Swainson's Hawk

Swainson's hawk is listed as a California state threatened species. It is a long-distance migrant with nesting grounds in western North America. The Swainson's hawk population that nests in the Central Valley winters primarily in Mexico, while the population that nests in the interior portions of North America winters in South America (Bradbury *et al.*). Swainson's hawks arrive in the Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to late August, peaking in late May through July (Zeiner *et al.* 1990). In the Central Valley, Swainson's hawks nest in isolated trees, small groves, or large woodlands next to open grasslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. Nest locations are usually in close proximity to suitable foraging habitats, which include fallow fields, annual grasslands, irrigated pastures, alfalfa and other hay crops, and low-growing row crops. Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September (Bloom and De Water 1994).

There are three CNDDDB records for this species within five miles of the Study Area (CDFW 2019). The Study Area provides suitable nesting habitat within the isolated trees on site, and marginally suitable foraging habitat occurs within the existing ruderal herbaceous habitat. The degree of development surrounding the Study Area and the relatively disturbed nature of the Study Area itself lowers the potential for this species to occur. Therefore, this species has a *low* potential to occur within the Study Area.

Tricolored Blackbird

Tricolored blackbird was incorporated into the State and Federally Listed Endangered and Threatened Animals of California list, and listed as a state-threatened species on March 18, 2019. Tricolored blackbird is a colonial species that breeds in freshwater marshes of cattail (*Typha* sp.), bulrush (*Schoenoplectiella* sp. and *Isolepis* sp.), sedge (*Carex* sp.), and non-native vegetation including Himalayan blackberry (*Rubus armeniacus*). Nests occur in large colonies of up to thousands of individuals (Nature Serve 2019). Nesting locations typically must be large enough to support a minimum colony of approximately fifty pairs (Zeiner *et al.* 1990). This species forages in grasslands and agricultural fields with low-growing vegetation (Shuford and Garbaldi 2008).

There are two CNDDDB records for this species within five miles of the Study Area (CDFW 2019). While the ruderal herbaceous habitat within the Study Area provides marginally suitable foraging habitat for this species, no suitable nesting habitat exists. Therefore, this species has a *low* potential to occur within the Study Area and is not expected to nest in the Study Area.

Burrowing Owl

Burrowing owl is a California Species of Special Concern. This species is a small ground-dwelling owl that occurs in western North America from Canada to Mexico and east to Texas and Louisiana. Although in certain areas of their range, burrowing owls are migratory, these owls are predominantly non-migratory

in California. Burrowing owls generally inhabit gently-sloping areas, characterized by low, sparse vegetation (Poulin *et al.* 2011). The breeding season for burrowing owls is typically from February 1 to August 31 (Haug *et al.* 1993, Thomsen 1971). Burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. Burrowing owls are also known to use artificial burrows including pipes, culverts, and nest boxes.

There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019). The small mammal burrows and ruderal herbaceous habitat within the Study Area provide marginally suitable burrowing and foraging habitat for this species. Therefore, this species has a *low* potential to occur within the Study Area.

White-Tailed Kite

White-tailed kite is a California Fully Protected species. It is a year-long resident in coastal and valley lowlands in California. White-tailed kite breed from February to October, with the breeding season peaking from May to August (Zeiner *et al.* 1990). They inhabit savanna, open woodlands, marshes, desert grassland, partially cleared lands and cultivated fields. This species nests in trees, often near a marsh in a savanna, open woodland, partially cleared lands, or cultivated fields. Foraging occurs within ungrazed or lightly-grazed fields and pastures.

There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019). The isolated trees within the Study Area provide suitable nesting habitat for this species. The ruderal herbaceous habitat within the Study Area provides marginally suitable foraging habitat. Therefore, this species has a *low* potential to occur within the Study Area.

Special-Status Bats

Townsend's big-eared bat is designated as a Species of Special Concern by CDFW and pallid bat is on the CDFW Special Animals List. These species occur in a variety of habitats, usually woodland, grassland, forest, and manmade structures up to approximately 9,000 feet (2,750 meters) above MSL. These species typically roost in rocky crevices, caves, hollow trees, tree foliage, and buildings or other man-made structures.

The Study Area provides suitable roosting habitat for these species within the existing trees onsite. Although some potential roost sites are present, the current level of adjacent human disturbance including roads, buildings, and active railroad tracks, may limit the likelihood of roosting occurring within the Study Area. No signs of roosting (guano, stains, noise) were observed during the field survey on September 6, 2019. Therefore, special-status bat species have a *low* potential to occur within the Study Area.

4.6 SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA; Section 1600 of the California Fish and Game Code, which include riparian areas; and/or Sections 401 and 404 of the Clean Water Act, which include wetlands and other waters of the U.S. Sensitive habitats found with the Study Area are described in more detail below.

4.6.1 Depressional Seasonal Wetland

As discussed in Section 4.4, approximately <0.01 acre of depressional seasonal wetland has been identified within the Study Area (Figure 4). The extent of jurisdictional waters, including the depressional seasonal wetland within the Study Area, have not been formally delineated or verified by the USACE as of the date of this report. Currently, the depressional seasonal wetland is expected to be fully impacted by the Project (Figure 5). Should the Project result in impacts to any waters of the U.S., a Section 404 Authorization would be required by the USACE and a 401 Water Quality Certification would also be required by the RWQCB. If any delineated aquatic features are considered to not be subject to federal jurisdiction, they would still likely be considered a water of the State and therefore subject to regulation by the Central Valley Regional Water Quality Control Board (CVRWQCB).

4.6.2 Wildlife Migration Corridors

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by development creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

Although some wildlife species may utilize portions of the Study Area for foraging, breeding, or other functions, the Study Area itself does not link two significant natural areas and it is not considered a wildlife migration corridor. The Study Area is bordered by active train tracks and a main surface street, which likely limit the potential of any significant wildlife movement or travel through the Study Area. If wildlife were to travel through the Study Area, it would most likely occur along the gravel road and offsite to the north or south.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The Study Area contains approximately 3.47 acres of ruderal herbaceous habitat, 0.24 acre of developed/disturbed habitat, and <0.01 acre of depressional seasonal wetland. Table 1 summarizes the biological communities and expected impacts that would result from the proposed development plan on a habitat level. Proposed Project impacts are also illustrated in Figure 5.

Table 1
IMPACTS TO BIOLOGICAL COMMUNITIES

Biological Communities	Impacted Acreage	Avoided Acreage	Total Acreage*
Ruderal	3.47	0.00	3.47
Developed/Disturbed	0.24	0.00	0.24
Depressional Seasonal Wetland	<0.01	0.00	<0.01

*Total acreage is rounded to two decimal places

No special-status plants or special-status wildlife were observed during the field survey on September 6, 2019, however, suitable habitat is present for several wildlife species that have the potential to occur within the Study Area. Recommendations, including avoidance and minimization measures to limit or avoid impacts to special-status wildlife species that may occur are included in Section 5.1.

As previously mentioned, the existing trees within the Study Area are not regulated or protected and, therefore, no tree protection measures are discussed in this report.

Known or potential biological constraints in the Study Area include the following:

- Potential nesting and foraging habitat for Swainson's hawk;
- Potential foraging habitat for tricolored blackbird;
- Potential habitat for western burrowing owl;
- Potential nesting and foraging habitat for white-tailed kite;
- Potential habitat for special-status bats including pallid bat and Townsend's big-eared bat;
- Potential habitat for additional nesting migratory birds and raptors protected under the MBTA; and
- Potentially jurisdictional wetlands and waters of the U.S. and state.

5.1 RECOMMENDATIONS

5.1.1 Swainson's Hawk

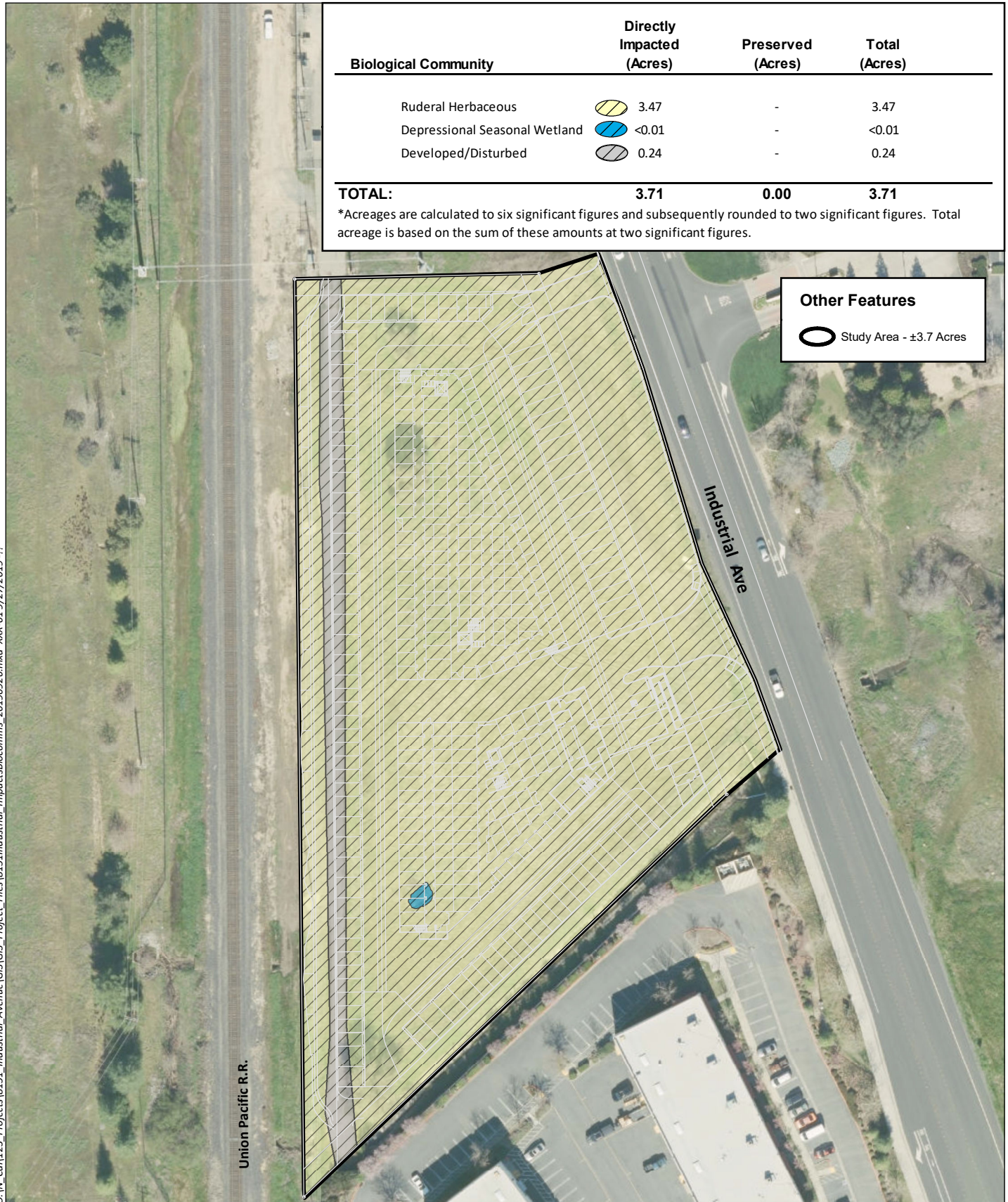
The Study Area may be considered potential habitat for this species since they are known to nest within 10 miles of the Study Area. Currently, the CDFW recommends that impacts to suitable Swainson's hawk

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Biological Community	Directly Impacted (Acres)	Preserved (Acres)	Total (Acres)
Ruderal Herbaceous	3.47	-	3.47
Depressional Seasonal Wetland	<0.01	-	<0.01
Developed/Disturbed	0.24	-	0.24
TOTAL:	3.71	0.00	3.71

*Acreages are calculated to six significant figures and subsequently rounded to two significant figures. Total acreage is based on the sum of these amounts at two significant figures.



Source: Aerial (City of Roseville, 3/1/2017)

foraging habitat within 10 miles of an active nest should be mitigated by securing a conservation easement or fee title on suitable Swainson's hawk foraging habitat in the region. Currently, this translates to the following: (1) for projects within a one-mile radius of an active nest site, the project proponent should preserve 1.0 acre of similar habitat for each acre lost, (2) for projects within a one to five-mile radius of an active nest site, the project proponent should preserve 0.75 acre of similar habitat for each acre lost, and (3) for projects within a five to ten-mile radius of an active nest site, the project proponent should preserve 0.5 acre of similar habitat for each acre lost. The Study Area is currently within five miles of three known occurrences of this species (CDFW 2019).

The lead agency under CEQA, presumably the City of Roseville in this case, in coordination with CDFW, would determine what mitigation would be appropriate for impacts to Swainson's hawk foraging habitat for the proposed project.

5.1.2 Tricolored Blackbird

The Study Area is currently within five miles of two known occurrences of this species (CDFW 2019). While the ruderal herbaceous habitat within the Study Area provides marginally suitable foraging habitat for this species, the Study Area provides no suitable nesting habitat. Therefore, the proposed project is not expected to impact suitable nesting habitat for tricolored blackbird. Impacts to tricolored blackbird foraging habitat is not regulated under CESA. Therefore, the project is not expected to result in take of tricolored blackbird as defined by CESA and an incidental take permit would not be required. No additional measures are suggested for this species.

5.1.3 Burrowing Owl

Although burrowing owls were not observed during the biological assessment, the Study Area contains ruderal herbaceous habitat and some small mammal burrows that are potentially suitable habitat for burrowing owl. It is recommended that a survey for burrowing owls be conducted no more than 14 days prior to the initiation of construction as prescribed by CDFW guidelines (CDFW 2012). The Study Area should be surveyed by a qualified biologist to determine or rule out the presence of burrowing owl onsite. This survey may be conducted in conjunction with a nesting bird survey if construction were to be initiated within the nesting season.

If burrowing owls are observed on or within 500 feet of proposed development activities that will result in ground disturbance, then an impact assessment should be prepared and submitted to the CDFW, in accordance with the 2012 Staff Report. If it is determined that project activities may result in impacts to occupied western burrowing owl habitat, then the project proponent should consult with CDFW and develop a detailed mitigation plan establishing avoidance and mitigation measures based on the requirements set forth in Appendix A of the 2012 Staff Report (CDFW 2012).

5.1.4 Special-Status Bats

Townsend's big-eared bat (a State Species of Special Concern) and pallid bat (included on the CDFW Special Animals List), have the potential to occur within the Study Area. A qualified biologist should conduct a pre-construction survey for special-status bat species no more than 14 days prior to development or ground disturbing activities including grading, vegetation clearing, tree removal, or construction. This can be performed in conjunction with a nesting bird survey, if applicable. If no bats are observed, then a letter report should be prepared to document the survey and provided to the City

of Roseville, and no additional measures are recommended. If development does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, then an additional survey is required prior to resuming or starting work.

If special-status bats are present and roosting in the Study Area or the surrounding 100 feet of the Study Area, then the qualified biologist should mark an appropriate no disturbance buffer around the roost site prior to the commencement of ground disturbing activities or development. At a minimum, no trees should be removed until the biologist has determined that a roost site is no longer active, and no bats are present. In addition, a qualified biologist should conduct an environmental awareness training to all construction personnel prior to the initiation of work. The training should include identification of special-status bat species, required practices before the start of construction, general measures that are being implemented to conserve the species as they relate to the Project, penalties for non-compliance, and boundaries of the permitted disturbance zones. Upon completion of the training, all construction personnel should sign a form stating that they have attended the training and understand all the measures. Proof of this instruction should be kept on file with the project proponent. As applicable, the pre-construction survey and environmental training may be combined with other recommended surveys and trainings.

Additional mitigation measures for bat species, such as installation of bat boxes or alternate roost structures, would be recommended only if special-status bat species are found to be roosting within the Study Area.

5.1.5 Protected and Migratory Birds and Raptors

Migratory birds and raptors have potential to occur and nest within the Study Area. No active nests were observed at the time of the field survey, but the survey was conducted outside of the typical nesting season (February through August) and the Study Area has the potential to support nesting birds within various trees and shrubs, bare ground, grasses and weeds, and remnant structures.

Active nests and nesting birds are protected by the California Fish and Wildlife Code Section 3503.5 and the MBTA. Ground-disturbing and other development activities including grading, vegetation clearing, tree removal, and construction could impact nesting birds if these activities occur during the nesting season (generally February through August). To avoid impacts to nesting birds, all vegetation removal should be completed between September 1 and January 31, if feasible.

If development activities occur during the nesting season, then a qualified biologist should conduct a nesting bird survey to determine the presence of any active nests within the Study Area. Additionally, the surrounding 500 feet of the Study Area should be surveyed for active raptor nests, where accessible, and with binoculars as necessary. The nesting bird survey should be conducted no more than 14 days prior to commencement of ground-disturbing or other development activities. If the nesting bird survey shows that there is no evidence of active nests, then a letter report should be prepared to document the survey and provided to the City of Roseville, and no additional measures are recommended. If development does not commence within 14 days of the nesting bird survey, or halts for more than 14 days, then an additional survey is required prior to starting or resuming work.

If active nests are found, then the qualified biologist should mark species-specific buffer zones in the field to prohibit development activities and minimize nest disturbance until the young have successfully fledged or the biologist determines that a nest is no longer active. Buffer distances may range from

20 feet for some songbirds up to 250 to 500 feet for most raptors. Nest monitoring may also be warranted during certain phases of development to ensure nesting birds are not adversely impacted by adjacent construction. If active nests are found within any trees slated for removal, then an appropriate buffer should be established around the tree and all trees within the buffer should not be removed until a qualified biologist determines that the nest has successfully fledged and is no longer active.

In addition, a qualified biologist should conduct an environmental awareness training for all construction personnel for the potential of nesting birds to occur onsite prior to the initiation of work. This training shall follow the same guidelines as for special-status bats. As applicable, the pre-construction survey and environmental training may be combined with other recommended surveys and trainings.

A nesting bird survey and associated environmental training for nesting birds are not required if construction occurs outside of the nesting bird season (September 1 to January 31).

5.1.6 Aquatic Resources

Approximately <0.01 acre of depressional seasonal wetland was identified within the Study Area. Although this feature has not been formally delineated or verified by the USACE, the depressional seasonal wetland is likely to be classified as a water of the U.S. and/or water of the State. The Project is currently expected to impact the entirety of this feature (Figure 5). A formal aquatic resources delineation should be conducted and submitted to the USACE for verification to confirm the extent of aquatic resources present within the Study Area.

Section 404 authorization from the USACE and a Section 401 Water Quality Certification from the RWQCB will be required prior to the start of construction that will impact any waters of the U.S. Any waters of the U.S. or jurisdictional wetlands that would be lost or disturbed should be replaced or rehabilitated on a “no-net-loss” basis in accordance with the USACE mitigation guidelines and City of Roseville requirements. Habitat restoration, rehabilitation, and/or replacement should be at a location and by methods agreeable to the agencies.

If a 404 permit is required for the proposed project, then water quality concerns during construction would be addressed in the Section 401 water quality certification from the Regional Water Quality Control Board. A Storm Water Pollution Prevention Plan (SWPPP) would also be required during construction activities. SWPPPs are required in issuance of a National Pollutant Discharge Elimination System (NPDES) construction discharge permit by the U.S. Environmental Protection Agency. Implementation of Best Management Practices (BMPs) during construction is standard in most SWPPPs and water quality certifications. Examples of BMPs include stockpiling of debris away from regulated wetlands and waterways; immediate removal of debris piles from the site during the rainy season; use of silt fencing and construction fencing around regulated waterways; and use of drip pans under work vehicles and containment of fuel waste throughout the site during construction.

If the depressional seasonal wetland or other aquatic features found during the formal aquatic resources delineation are determined to not be subject to federal jurisdiction, then these features may still be subject to waste discharge requirements under the Porter-Cologne Water Quality Control Act. Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill

material into the depressional seasonal wetland or other mapped aquatic resources may constitute a discharge of waste that could affect the quality of waters of the State. A report of waste discharge will be filed for impacts to non-federal waters, if required.

5.2 SUMMARY OF AVOIDANCE AND MINIMIZATION MEASURES

- Pre-construction surveys should be conducted for burrowing owl, special-status bats, and nesting migratory birds and raptors (during the nesting season) 14 days prior to the initiation of construction or ground disturbing activities. If construction or ground disturbing activities do not commence within 14 days, or halt for more than 14 days, then additional surveys are required prior to resuming or starting work;
- Consult with the City of Roseville regarding potential Swainson's hawk foraging habitat mitigation;
- Worker environmental awareness trainings should be conducted for all construction personnel prior to the initiation of work for special-status bats and nesting migratory birds and raptors (as applicable);
- Conduct a formal aquatic resources delineation;
- Prepare and submit aquatic resources delineation report to USACE and obtain jurisdictional determination;
- If the Project will result in impacts to regulated aquatic features under the Clean Water Act, then the Applicant would be required to obtain Section 404 authorization for any impacts to features subject to USACE jurisdiction. Impacts to federally jurisdictional features would also require a 401 Water Quality Certification from the RWQCB under Section 401 of the CWA. The 404 and 401 permits will include terms and conditions to minimize impacts and to fully mitigate for any permanent impacts to wetlands and other waters;
- The depressional seasonal wetland would likely be considered a water of the State even if not subject to federal Clean Water Act jurisdiction and therefore would be subject to waste discharge requirements under the Porter-Cologne Water Quality Control Act.

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Appendix A

Applicable Sections of the City of
Roseville General Plan and Tree
Ordinance

Appendix A

Applicable Sections of the City of Roseville General Plan and Tree Ordinance

City of Roseville General Plan

In addition to federal and State regulations, *The City of Roseville General Plan 2035* (General Plan) (City of Roseville 2016) includes goals and policies regarding biological resources. Sections relevant to this project are summarized below.

Open Space and Conservation Element

Vegetation and Wildlife

Goal 1: Preserve, protect, and enhance a significant system of interconnected natural habitat areas, including creek and riparian corridors, oak woodlands, wetlands, and adjacent grassland areas.

Goal 2: Maintain healthy and well-managed habitat areas in conjunction with one another, maximizing the potential for compatible open space, recreation, and visual experiences.

Goal 3: Protect special-status species and other species that are sensitive to human activities.

Policy 1 Incorporate existing trees into development projects, and where preservation is not feasible, continue to require mitigation for the loss of removed trees. Particular emphasis shall be placed on avoiding the removal of groupings or groves of trees.

Policy 2 Preserve and rehabilitate continuous riparian corridors and adjacent habitat along the City's creeks and waterways.

Policy 3 Require dedication of the City's Regulatory Floodplain, as defined in the Safety Element, or comparable mechanism to protect habitat and wildlife values in perpetuity.

Policy 4 Require preservation of contiguous areas in excess of the City's Regulatory Floodplain, as defined in the Safety Element, as merited by special resources or circumstances. Special circumstances may include, but are not limited to, sensitive wildlife or vegetation, wetland habitat, oak woodland areas, grassland connections in association with other habitat areas, slope or topographical considerations, recreation opportunities, and maintenance access requirements.

Policy 11 Habitat preservation and mitigation for woodlands, creeks, riparian and seasonal wetland areas should occur within the defined boundaries of the impacting projects where long-term resource viability is feasible and desirable consistent with applicable state and federal permits.

Appendix A (cont.)

Applicable Sections of the City of Roseville General Plan and Tree Ordinance

Policy 12 Consider the use of City property for habitat preservation and mitigation requirements resulting from development proposals when such efforts do not conflict with existing resources, recreational opportunities, or other City goals, policies, or programs.

City of Roseville Tree Ordinance

The City of Roseville regulates the removal of or impact to protected trees under Chapter 19.66 of the Roseville Municipal Code. Protected trees are defined as any native oak tree, valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), blue oak (*Quercus douglasii*), or hybrid of these species, with a trunk diameter equal to or greater than six inches at breast height (DBH), which is at 54" above grade. No work that might impact the tree, including grading, trenching, or irrigation, is allowed within the protected zone of a protected tree, defined as the dripline radius plus one foot, without a tree permit. No permit is required for the removal of a protected tree under the following situations:

1. Trees damaged by thunderstorm, windstorm, flood, earthquake, fire or other natural cause and determined by a peace officer, fire fighter, public utility official, civil defense official or city code enforcement officer, acting in his or her official capacity, to present a danger to persons or property. Upon discovery of a condition justifying removal, the officer or official making the determination shall immediately provide written notification of the condition and action taken to the planning director.
2. When removal is determined to be necessary by fire department personnel actively engaged in fighting a fire.
3. When compliance would interfere with activities of a public utility necessary to comply with applicable safety regulations and/or necessary to repair or avoid the interruptions of services provided by such a utility. Unless there is an imminent threat to the public health, safety or welfare, the Planning Director shall be notified prior to the removal by a public utility of a protected tree.
4. The Planning Director may allow removal of a protected tree which has been certified by an arborist to be a dead tree. An arborist-certified dead tree may be removed without any replacement or mitigation requirements.
5. A protected tree located on property developed with a single-family or two-family dwelling which has been granted occupancy.
6. When a protected living tree presents a hazard to health and safety or structures due to its structural condition and location, the tree may be removed without any replacement or mitigation requirements. The hazardous condition of the tree must be determined by an arborist. The Planning Director must review the arborist's determination and consider the location of the protected tree prior to approving removal.

Appendix B

Regionally Occurring Listed and
Special-Status Species

Appendix B
Regionally Occurring Listed and Special-Status Species

Table 1 — Legally Protected Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--; CE; --; 1B	Annual herb found on clay soils in vernal pools, marshes, and swamps, occasionally along the lake margins, from 10 to 2,375 meters.	Blooming period: April – August	None ; the Study Area does not provide suitable habitat for this species. There are three CNDDB records for this species within five miles of the Study Area (CDFW 2019).
Sacramento Orcutt grass <i>Orcuttia californica</i> var. <i>viscida</i>	FE; CE; --; 1B	Annual herb found in vernal pools from 20-100 meters.	Blooming period: April – Jul (Sep)	None ; the Study Area does not provide suitable habitat for this species.
Invertebrates				
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE; --; --; --	Found in large vernal pools (30 to 356,253 sq. meters) of varying soils and geology.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	None ; the Study Area does not provide suitable habitat for this species.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT; --; --; --	Associated with elderberry shrubs (<i>Sambucus</i> sp.) often within riparian habitats. Presence can be indicated by bore-holes in stems of elderberries.	March – June (Adults) Year – round (Larvae)	None . Elderberry shrubs are absent from the Study Area.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Alameda, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kings, Madera, Merced, Monterey, Napa, Placer, Riverside, Sacramento, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Ventura, Yolo, and Yuba counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification	None ; the Study Area does not provide suitable habitat for this species. There are 24 CNDDB records for this species within five miles of the Study Area (CDFW 2019).
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kings, Merced, Placer, Fresno, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	None ; the Study Area does not provide suitable habitat for this species. There is one CNDDB record for this species within five miles of the Study Area (CDFW 2019).
Fish				
Delta smelt <i>Hypomesus transpacificus</i>	FT; CE; --; --	Found in open waters of bays, tidal rivers, channels, and sloughs.	Year – Round	None ; the Study Area does not provide suitable habitat for this species.
Steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	FT; --; --; --	Found in the ocean, rivers, creeks, and large inland lakes. This distinct population only occurs in the Sacramento and San Joaquin Rivers and their tributaries.	Year – Round	None . The Study Area does not provide suitable habitat for this species. There is one CNDDB record for this species within five miles of the Study Area (CDFW 2019).
Amphibians/ Reptiles				
California red-legged frog <i>Rana draytonii</i>	FT; CSC; --; --	Found near quiet, permanent pools of streams, marshes, and ponds with extensive vegetation below 1200 meters. Typically occurs in humid forests, woodlands, grassland, and foothill habitats. Adults may disperse considerable distances between pools during rain events. Breeds in permanent pools from January through July.	Year – Round	None ; the Study Area does not provide suitable habitat for this species and the Study Area is outside of the current known range of the species.
Giant garter snake <i>Thamnophis gigas</i>	FT; CT--; --	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands in Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Active outside of dormancy period November-mid March	None ; the Study Area does not provide suitable habitat for this species and the Study Area is outside of the current known range of the species.

Appendix B (cont.)
Regionally Occurring Listed and Special-Status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Birds				
Bank swallow <i>Riparia riparia</i>	--; CT; --; -- Nesting	Found primarily in open riparian areas, grassland, brushland, wetlands, and cropland habitats. Nests in colonies within tunnels dug into sandy banks or cliffs near water.	February – October	None ; the Study Area does not provide suitable habitat for this species.
California black rail <i>Laterallus jamaicensis coturniculus</i>	--; CT; --; --	Saltwater, brackish, and freshwater marshes. This species is known from Alameda, Butte, Contra Costa, Imperial, Los Angeles, Marin, Napa, Nevada, Orange, Placer, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Sutter, and Yuba counties, in California.	Year – round	None ; the Study Area does not provide suitable habitat for this species.
Swainson’s hawk <i>Buteo swainsoni</i>	--; CT; --; --	Nest peripherally in valley riparian systems, lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley.	Breeding: March – October	Low ; the Study Area provides suitable nesting habitat within the isolated trees on site, and marginally suitable foraging habitat within the existing ruderal herbaceous community. There are three CNDDDB records for this species within five miles of the Study Area (CDFW 2019).
Tricolored blackbird <i>Agelaius tricolor</i>	FSC; CCE; --; -- Nesting Colony	Nests in colonies near fresh water, usually within emergent wetland habitat with tall, dense cattails, tule, willow, blackberry, wild rose, and other marshy vegetation. Forages in open grassland, wetland, and agricultural habitats.	Year – Round	Low ; no suitable nesting habitat exists within the Study Area. Marginally suitable foraging potential exists for this species within the ruderal herbaceous habitat. There are two CNDDDB records for this species within five miles of the Study Area (CDFW 2019).
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT; CE; --; --	Found in woodlands, thickets, orchards, and streamside groves. Breeds mostly in dense deciduous stands, including forest edges, tall thickets, dense second growth, overgrown orchards, scrubby oak woods. Often found in willow groves around marshes. In the west, mostly in streamside trees, including cottonwood-willow groves in arid country.	Late Spring – Early Fall	None ; the Study Area does not provide suitable habitat for this species.

Table 1 includes federal threatened or endangered species and eagles, and State threatened, endangered, or fully protected species.

Appendix B (cont.)
Regionally Occurring Listed and Special-Status Species

Table 2 — Species Subject to CEQA Review

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Ahart’s dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--; --; --; 1B	Annual herb found in mesic areas in valley and foothill grasslands from 30 to 229 meters.	Blooming period: April – August	None ; the Study Area does not provide suitable habitat for this species.
Big scale balsamroot <i>Balsamorhiza macrolepis</i>	--; --; --; 1B	Perennial herb found in chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentinite, from 45 to 1,555 meters. Known from approximately 50 occurrences in Alameda, Amador, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama, and Tuolumne counties.	March – June	None ; because the Study Area is almost entirely composed of ruderal, weedy vegetation, there is no suitable habitat present. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019).
Dwarf downingia <i>Downingia pusilla</i>	--; --; --; 2B	An annual herb found in mesic areas within valley and foothill grassland and vernal pool habitats from 1 to 445 meters.	Blooming period: March – May	None ; the existing ruderal herbaceous habitat within the Study Area is highly disturbed, and therefore not suitable to host this species. There are 15 CNDDDB records for this species within five miles of the Study Area (CDFW 2019).
Hispid bird’s-beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	--; --; --; 1B	Annual hemiparasitic herb found in alkaline soils within meadows and seeps, playas, and valley and foothill grassland from 1 to 155 meters.	Blooming period: June – September	None ; the Study Area does not provide the soils required for this species. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019).
Legenere <i>Legenere limosa</i>	--; --; --; 1B	Annual herb found in vernal pools from 1 to 880 meters.	Blooming period: April – June.	None ; the Study Area does not provide suitable habitat for this species. There are three CNDDDB records for this species within five miles of the Study Area (CDFW 2019).
Pincushion navarretia <i>Navarretia myersii</i>	--; --; --; 1B	Annual herb often found in acidic soils within vernal pools from 20 to 330 meters.	Blooming period: April – May	None ; the Study Area does not provide suitable habitat for this species.
Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	--; --; --; 1B	Annual herb found in vernaly mesic areas of chaparral, woodland, meadows and seeps, valley and foothill grassland, and vernal pools from 35 to 1,250 meters.	Blooming period: March – May	None ; the Study Area does not provide suitable habitat for this species. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019).
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--; --; --; 1B	Perennial rhizomatous herb found in marshes and swamps in assorted shallow freshwater areas from 0 to 650 meters.	Blooming period: May – October	None ; the Study Area does not provide suitable habitat for this species. There are two CNDDDB records for this species within five miles of the Study Area (CDFW 2019).
Amphibians/ Reptiles				
Western pond turtle <i>Emys marmorata</i>	--; CSC; --; --	Found in or within 100 meters of permanent water in a wide variety of habitats up to 1450 meters. Nests in sandy banks and soil at least four inches deep.	Year – Round	None ; the Study Area is fragmented on all sides by development, and there is not suitable habitat present to support this species. The off-site seasonal concrete drainage is permanently fenced off, so there is no potential access to the Study Area by this species in the unlikely event that this species periodically utilized the drainage.

Appendix B (cont.)
Regionally Occurring Listed and Special-Status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Western spadefoot <i>Spea hammondi</i>	--; CSC; --; --	Found in a variety of upland habitats, including lowlands, foothills, grasslands, open chaparral, and pine-oak woodlands. Habitat preferences include shortgrass plains, and sandy or gravelly soils for burrowing (e.g. alkali flats, washes, alluvial fans). Hibernates/aestivates for most of the year underground. During the breeding season are found in temporary rain pools, and slow-moving streams (e.g., areas flooded by intermittent streams).	Breeding: January – May	None ; despite the marginally suitable burrows within the ruderal herbaceous habitat, the Study Area is fragmented on all sides by development, and therefore is inaccessible to this species. The Study Area also does not contain suitable aquatic habitat for this species. Additionally, the upland vegetation is likely too tall and weedy to be suitable, as this species prefers short grass annual grassland. There are five CNDDDB records for this species within five miles of the Study Area (CDFW 2019).
Birds				
Burrowing owl <i>Athene cunicularia</i>	--; CSC; --; -- (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year – round	Low ; although there is a nearby occurrence, the ruderal herbaceous habitat that exists within the Study Area is marginal, the vegetation is relatively tall and weedy, and the site and has been historically disturbed. Additionally, only a few small mammal burrows were observed during the 2019 biological survey. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019).
Cooper’s hawk <i>Accipiter cooperii</i>	--; CSC; --; --	Found in cismontane woodland, riparian forest, riparian woodland, and upper montane coniferous forest.	Year – round	Low ; the Study Area does not provide suitable habitat for this species.
Double-crested cormorant <i>Phalacrocorax auritus</i>	--; CSA; --; --	Found in a wide variety of aquatic habitats including coasts, bays, lakes, rivers, mangrove swamps, reservoirs and inland ponds. Nesting occurs in trees near or over water, on sea cliffs or on the ground on islands.	Year – round	None ; the Study Area does not provide suitable habitat for this species.
Grasshopper sparrow <i>Ammodramus savannarum</i>	--; CSC; --; --	Frequents dense, dry, or well drained grassland, especially native grassland. Nests at base of overhanging clump of grass. This species is known from Los Angeles, Mendocino, Orange, Placer, Sacramento, San Diego, San Luis Obispo, Solano, and Yuba counties, in California.	April – July	Low ; the Study Area contains suitable nesting and foraging habitat for this species within the ruderal herbaceous habitat.
Great blue heron <i>Ardea herodias</i>	--; CSA; --; --	Inhabits both freshwater and saltwater habitats and forages in grassland and agricultural field. Breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests.	Year – round	None ; the Study Area does not provide suitable habitat for this species. No known or potential rookery habitat exists within the Study Area.
Great egret <i>Ardea alba</i>	--; CSA; --; --	Found in marshes, swampy woods, tidal estuaries, lagoons, mangroves, streams, lakes, ponds, fields and meadows. Nests primarily in tall trees, or in woods or thickets near water.	Year – round	None ; the Study Area does not provide suitable habitat for this species. No known or potential rookery habitat exists within the Study Area.
Merlin <i>Falco columbarius</i>	--; CSA; --; --	Non-breeding habitats include a wide variety, such as marshes, deserts, sea coasts, near coastal lakes and lagoons, open woodlands, fields, etc. During winter, may roost in conifer trees.	Winter (non-breeding)	None ; the Study Area does not provide suitable habitat for this species.
Osprey <i>Pandion haliaetus</i>	--; CSA; --; --	Found near a water source, either freshwater or salt water, such as coastal estuaries, salt marshes, large lakes, reservoirs, and rivers, where large numbers of fish are present. Sometimes seen in desert habitat during migration.	Winter (Non-Breeding)	None ; the Study Area does not provide suitable habitat for this species.
Purple martin <i>Progne subis</i>	--; CSC; --; --	Nests in wide variety of open and partly open habitats that are often near water or around towns. Nests in tree cavities, abandoned woodpecker holes, crevices in rocks, and sometimes in bird houses or gourds put up by humans.	Summer (breeding)	High ; the Study Area provides suitable habitat for this species within the existing trees on site. There is one CNDDDB occurrence documented within five miles of the Study Area (CDFW 2018).

Appendix B (cont.)
Regionally Occurring Listed and Special-Status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Song sparrow (“Modesto” population) <i>Melospiza melodia</i>	--; CSC; --; --	Found in thickets, brush, marshes, roadsides, gardens. Habitat varies over its wide range. In most areas, found in brushy fields, streamsides, shrubby marsh edges, woodland edges, hedgerows, well-vegetated gardens. Some coastal populations live in salt marshes. Nests in dense streamside brush in southwestern deserts, and in any kind of dense low cover on Aleutian Islands, Alaska.	Year – round	Low ; the Study Area provides marginally suitable nesting and foraging habitat for this species within the thick vegetation of the ruderal herbaceous habitat.
White-tailed kite <i>Elanus leucurus</i>	--; CFP; --; -- (nesting)	Inhabit savanna, open woodlands, marshes, desert grassland, partially cleared lands and cultivated fields. Nests in trees, often near a marsh in savanna, open woodland, partially cleared lands, and cultivated fields. Foraging occurs within ungrazed or lightly-grazed fields and pastures.	Year – round	Low ; the Study Area provides suitable nesting habitat for this species within the existing trees and marginally suitable foraging habitat within the ruderal herbaceous habitat. There is one CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2019).
Mammals				
American badger <i>Taxidea taxus</i>	--; CSC; --; --	Found in a variety of grassland, shrublands, and open woodlands throughout California. Suitable burrowing habitat requires friable soil.	Year – round	None ; although the Study Area contains suitable habitat for this species, the site is fragmented on all sides by development. Therefore, it is highly unlikely that this species could utilize the small and fragmented habitat within the Study Area.
Pallid bat <i>Antrozous pallidus</i>	--; CSA; --; --	Found in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forest habitats. Roosts in colonies usually in rock crevices, caves, mines, hollow trees, and buildings.	March – October	Low ; marginally suitable foraging habitat exists within the ruderal herbaceous habitat, and bats may roost within hollow portions of existing trees on site. The site is fragmented by development on all sides.
Silver-haired bat <i>Lasionycteris noctivagans</i>	--; CSA; --; --	Found in coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodland, and valley foothill and montane riparian habitats below 2750 meters. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	(Feb.) March – October	None ; the Study Area is outside of the known range of this species.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	--; CSC; --; --	Found in a variety of habitats, usually mesic, featuring brush, trees, and habitat edges. Roosts in small colonies in caves, tunnels, mines, and buildings.	(Mar.) April – October	Low ; marginally suitable foraging habitat exists within the ruderal herbaceous habitat, and bats may roost within hollow portions of existing trees on site. The site is fragmented by development on all sides.

Table 2 includes state and federal species of concern and Rank 1 and 2 CNPS species.

Appendix B (cont.)
Regionally Occurring Listed and Special-Status Species

Table 1 — Other Species of Interest

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Adobe navarretia <i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>	--; --; --; 4	Annual herb found on clay, and sometimes serpentinite soils in vernally mesic valley and foothill grasslands and sometimes vernal pools from 100 to 1,000 meters.	Blooming period: April – June	None ; the Study Area does not provide suitable habitat for this species and is outside of its known elevational range.
Brandeggee’s clarkia <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	--; --; --; 4	Annual herb often found on roadcuts within chaparral, cismontane woodland, and lower montane coniferous forest from 75 to 915 meters. Known from approximately 89 occurrences in Butte, El Dorado, Nevada, Placer, Sacramento, Sierra, and Yuba counties.	May – July	None . The Study Area does not provide suitable habitat for this species.
Stinkbells <i>Fritillaria agrestis</i>	--; --; --; 4	Perennial bulbiferous herb found in clay soils, sometimes in serpentinite, chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland from 10 to 1,555 meters (CNPS 2016).	Blooming period: March – June	None ; the Study Area does not provide suitable habitat for this species. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019).
Valley brodiaea <i>Brodiaea rosea</i> ssp. <i>vallicola</i>	--; --; --; 4	Perennial bulbiferous herb found in old alluvial terraces on silty, sandy, or gravelly loam soils within swales of valley and foothill grassland and vernal pools.	Blooming period: April – May (June)	None ; the Study Area does not provide suitable habitat for this species.
Invertebrates				
An andrenid bee <i>Andrena subapasta</i>	--; CSA; --; --	Ground-nesting solitary bee found in grasslands near vernal pools.	Spring – Fall	None ; there are no vernal pools within the Study Area and, therefore, it does not provide suitable habitat for this species. There is one CNDDDB record for this species within five miles of the Study Area (CFW 2019).
California linderiella <i>Linderiella occidentalis</i>	--; CSA; --; --	Found in a variety of natural, and artificial seasonally ponded freshwater habitats, including vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activity.	Wet-season sampling and/or dry season cyst identification	None ; the Study Area does not provide suitable habitat for this species. There are 20 CNDDDB records for this species within five miles of the Study Area (CDFW 2019).
Ricksecker’s water scavenger beetle <i>Hydrochara rickseckeri</i>	--; CSA; --; --	An aquatic beetle known to occur in shallow waters of creeks, artificial ponds, springs and brooks. Known to occur along the San Francisco Bay within Alameda, Marin, San Mateo and Sonoma counties. Can also be found in Lake, Placer, Sacramento, San Joaquin, and Solano counties.	Year – round	None ; the Study Area does not provide suitable habitat for this species. There is one CNDDDB record for this species within five miles of the Study Area (CFW 2019).

Table 3 includes Rank 3 and 4 CNPS species and non-listed invertebrates, which may not be subject to CEQA review.

Appendix C

Plant and Wildlife Species Observed
in the Study Area

Appendix C
Plant Species Observed in the Study Area

Family	Scientific Name ^{*,†}	Common Name
Apiaceae	<i>Foeniculum vulgare</i> *	Fennel
Asteraceae	<i>Holocarpha virgata</i>	Tarweed, tarplant
Asteraceae	<i>Centaurea solstitialis</i> *	Yellow star-thistle
Asteraceae	<i>Senecio vulgaris</i> *	Common groundsel
Asteraceae	<i>Dittrichia graveolens</i> *	Stinkwort
Asteraceae	<i>Leontodon saxatilis</i> *	Hairy hawkbit
Asteraceae	<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i> *	Italian thistle
Convolvulaceae	<i>Convolvulus arvensis</i> *	Bindweed, orchard morning-glory
Euphorbiaceae	<i>Croton setiger</i>	Turkey-mullein
Fabaceae	<i>Acmispon americanus</i> var. <i>americanus</i>	Deervetch, deerweed
Fabaceae	<i>Vicia villosa</i> *	Hairy vetch, winter vetch
Fabaceae	<i>Trifolium</i> sp.	Clover
Fabaceae	<i>Trifolium hirtum</i> *	Rose clover
Gentianaceae	<i>Zeltnera muehlenbergii</i>	Monterey centaury
Lamiaceae	<i>Trichostema lanceolatum</i>	Vinegar weed
Oleaceae	<i>Fraxinus latifolia</i>	Oregon ash
Onagraceae	<i>Epilobium brachycarpum</i>	Willowherb
Poaceae	<i>Festuca perennis</i> *	Rye grass
Poaceae	<i>Hordeum murinum</i> *	Wall barley
Poaceae	<i>Bromus hordeaceus</i> *	Soft chess
Poaceae	<i>Polypogon maritimus</i> *	Mediterranean beard grass
Poaceae	<i>Elymus caput-medusae</i> *	Medusa head
Poaceae	<i>Avena fatua</i> *	Wild oat
Polygonaceae	<i>Rumex crispus</i> *	Curly dock

* Non-native

† Sensitive

IS Attachment 3

Appendix C Wildlife Species Observed in the Study Area

Scientific Name	Common Name
<i>Aphelocoma californica</i>	California scrub jay
<i>Cathartes aura</i>	turkey vulture
<i>Corvus brachyrhynchos</i>	American crow
<i>Lepus californicus</i>	black-tailed jackrabbit
<i>Sayornis nigricans</i>	black phoebe
<i>Zenaida macroura</i>	mourning dove

IS Attachment 3

Appendix D

Representative Site Photos



Photo 1. Typical view of Study Area, facing northwest.



Photo 2. Depressional seasonal wetland.



Photo 3. Typical view of Study Area, facing northeast.



Photo 4. Existing gravel road, facing south.

U:\Templates\PhotoPages Landscape_4 Photos 2019 09 13.docx



Photo 5. Typical view of Study Area, facing north along eastern border.



Photo 6. Typical view of Study Area, facing southwest.



Photo 7. Facing northwest, from southeast portion of Study Area.



Photo 8. Typical view of Study Area, facing southeast.



INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

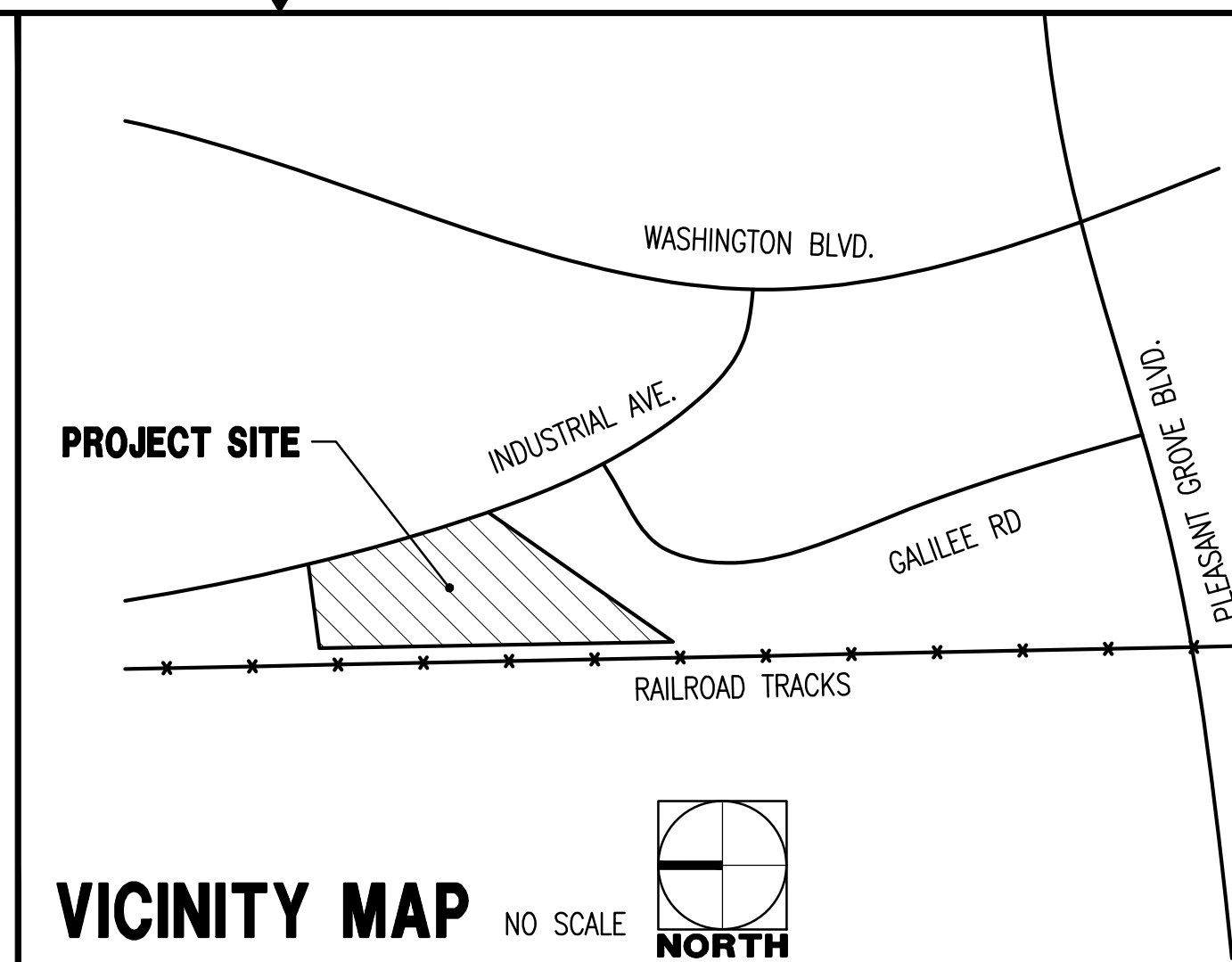
SITE PLAN
SITE SECTION
VICINITY MAP

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REVISIONS

DATE JUNE 3, 2019
SCALE AS NOTED
DRAWN BY
JOB NO. 18-18
SHEET

A1.0



VICINITY MAP

NO SCALE



KEY NOTES

1. ACCESSIBLE PATH OF TRAVEL =
2. NEW CONCRETE SIDEWALK
3. LANDSCAPE
4. ACCESS CONTROLLED SLIDING GATE
5. WROUGHT IRON FENCE
6. FIRE CONTROL/RISER ROOM
7. TRASH ENCLOSURE
8. ELECTRIC TRANSFORMER
9. COVERED PARKING STRUCTURE
10. OVERHEAD CANOPY

BUILDING AREA:

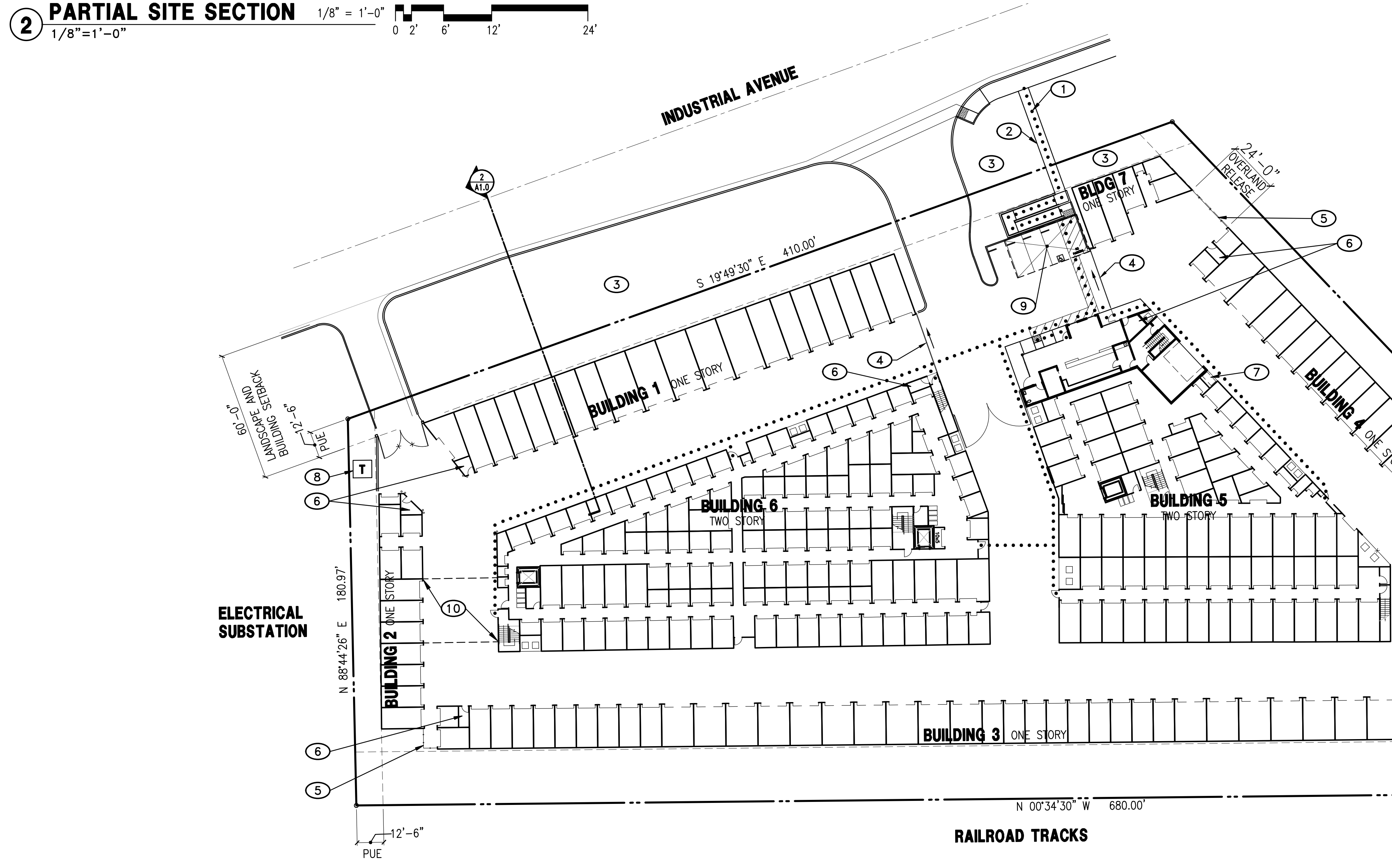
BUILDING 1	=	6,870	SQ.FT.
BUILDING 2	=	2,264	SQ.FT.
BUILDING 3	=	11,401	SQ.FT.
BUILDING 4	=	6,000	SQ.FT.
BUILDING 5	FLOOR 1 =	15,768	SQ.FT.
	FLOOR 2 =	15,763	SQ.FT.
BUILDING 6	FLOOR 1 =	21,092	SQ.FT.
	FLOOR 2 =	21,092	SQ.FT.
BUILDING 7	=	1,089	SQ.FT.
TOTAL STORAGE BLDG	=	101,339	SQ.FT.

OFFICE/RESIDENT APT.	
FLOOR 1 =	2,202 SQ.FT.
FLOOR 2 =	2,229 SQ.FT.
TOTAL	<u>4,431</u> SQ.FT.

TOTAL BUILDING SITE: 105,770 SQ.FT.

2 PARTIAL SITE SECTION

1/8"=1'-0"



1 SITE PLAN

1"=30'-0"



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DESIGNED BY:	RSC Eng

**INDUSTRIAL AVENUE
SELF STORAGE**

**8151 INDUSTRIAL AVENUE
ROSEVILLE, CA 95678**

SHEET TITLE

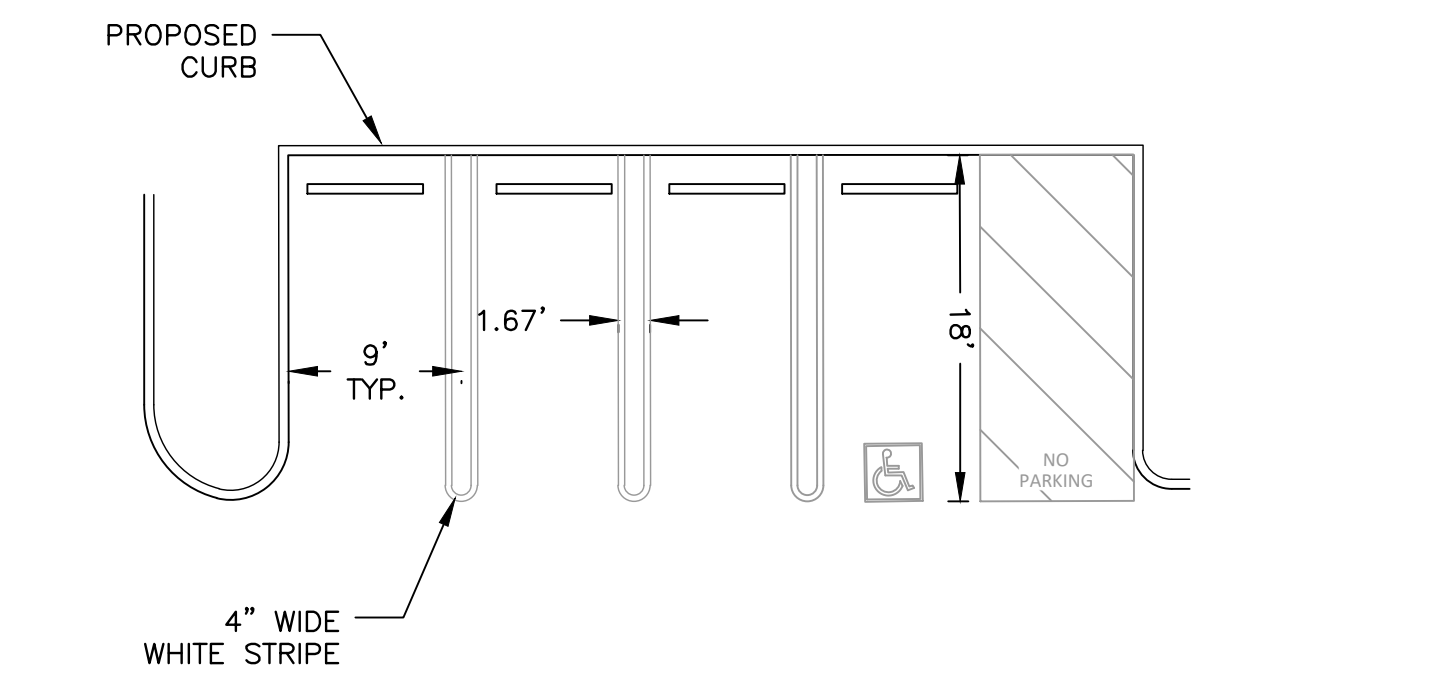
SITE PLAN

SHEET NO.

P

7

DATE: JANUARY 23, 2020

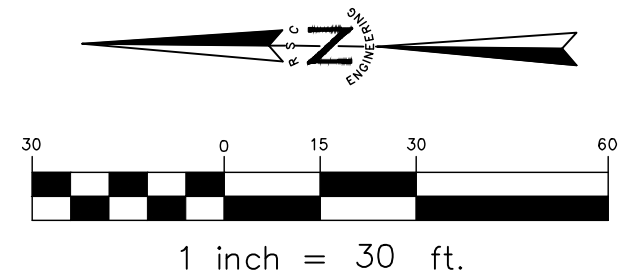


PROPOSED PARKING ENLARGEMENT DETAIL



PARKING REQUIRMENTS:

USE	<u>SPACES REQUIRED</u>	<u>SPACES PROVIDED</u>
STORAGE FACILITY	4 SPACES PLUS 2 FOR QUARTERS	6
MINIMUM NUMBER OF ACCESSIBLE SPACES	1 PER 25 SPACES (COUNTED TOWARDS REQUIRED SPACES)	1
TOTAL	6	6
BICYCLE PARKING (FOR STORAGE FACILITY)	0	0

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Sacramento, CA 95816
916 498-7900



INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

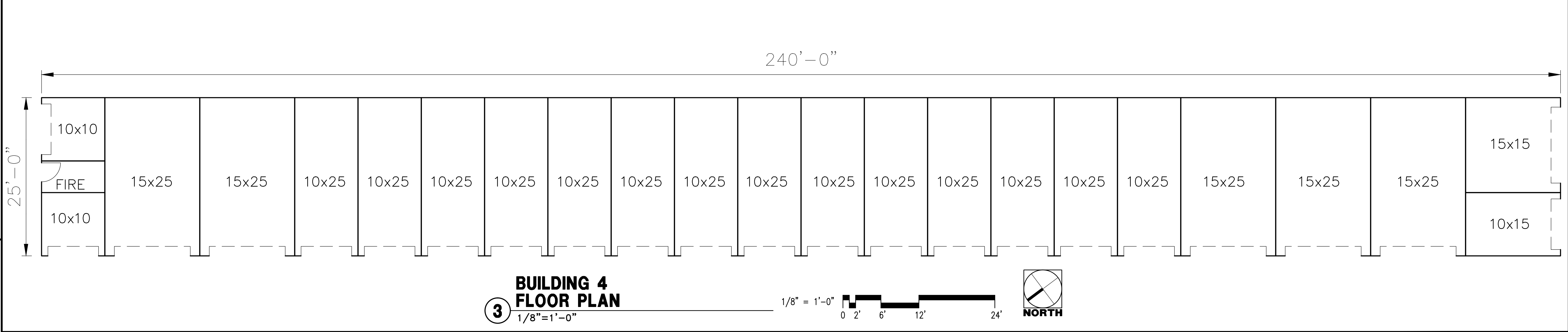
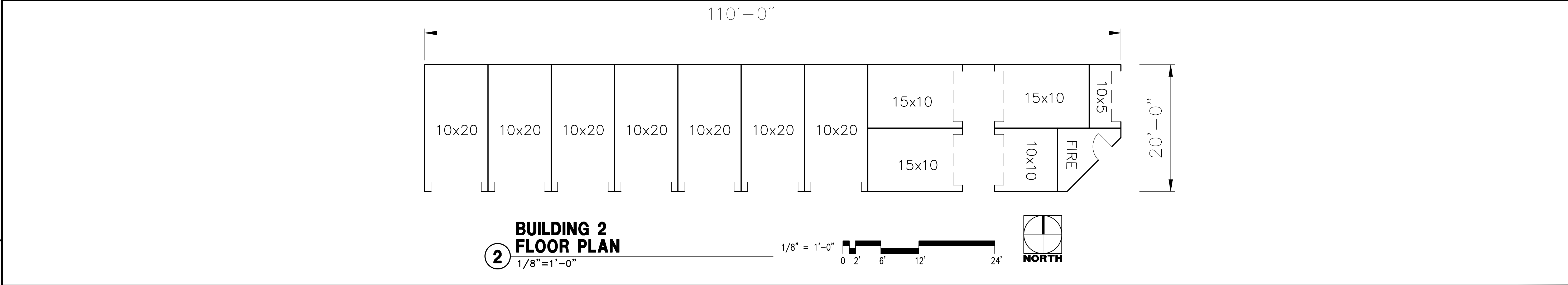
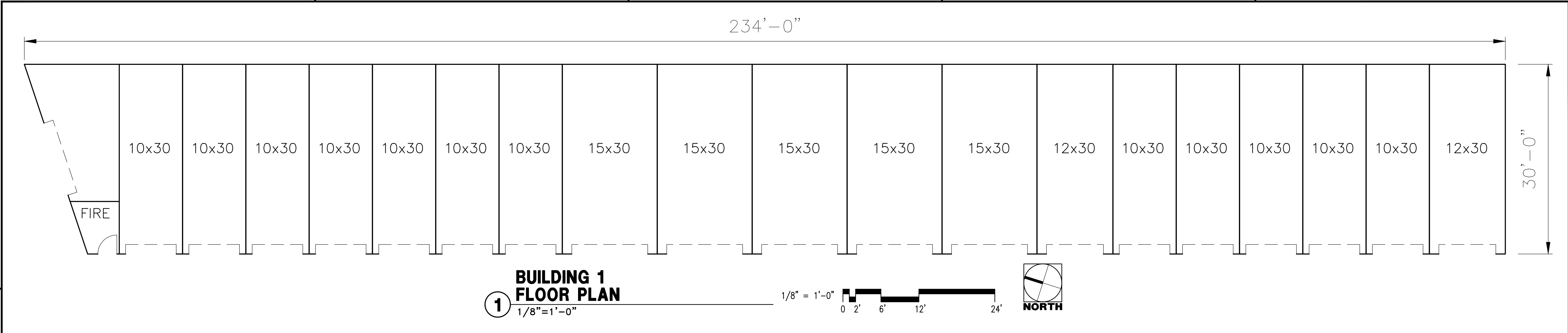
BUILDING 1,2 & 4
FLOOR PLANS

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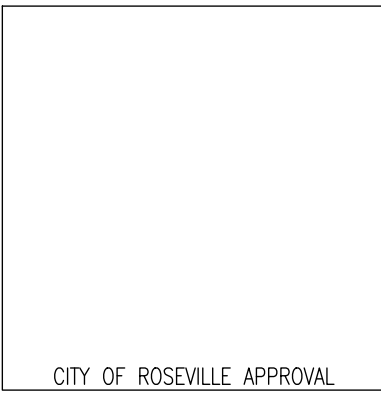
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JOB NO.	18-18
SHEET	

A2.0



KEYNOTES





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BUILDING 3 FLOOR PLAN

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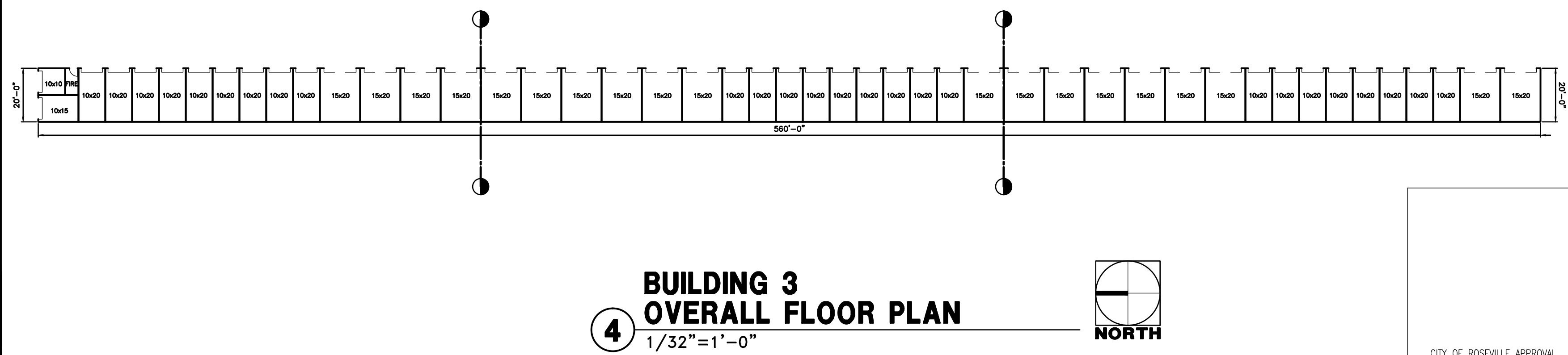
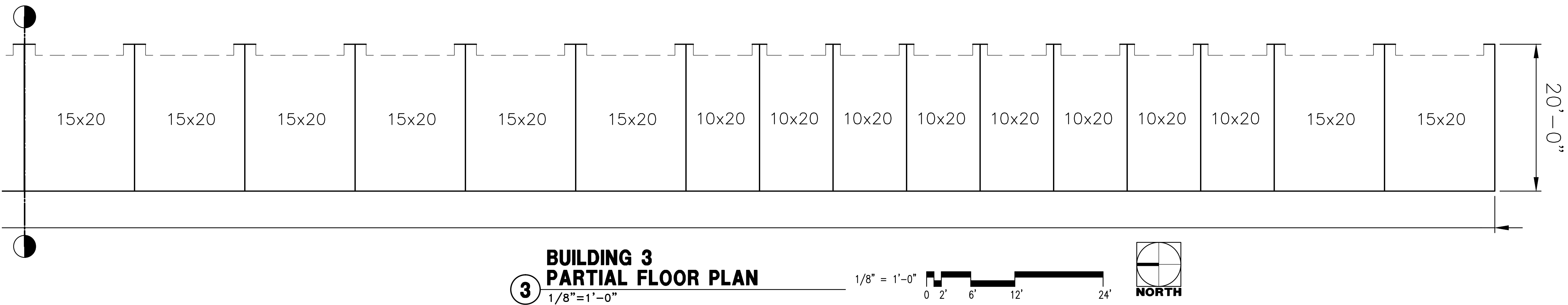
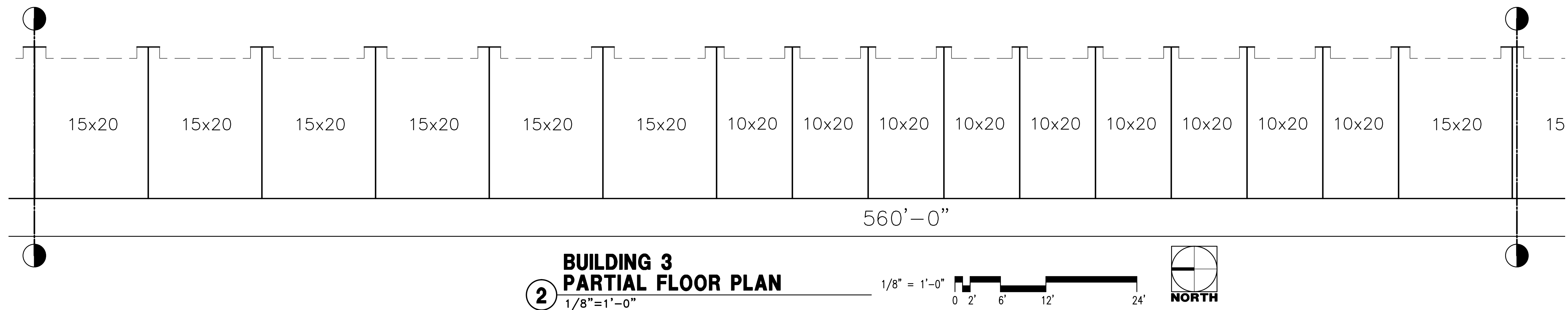
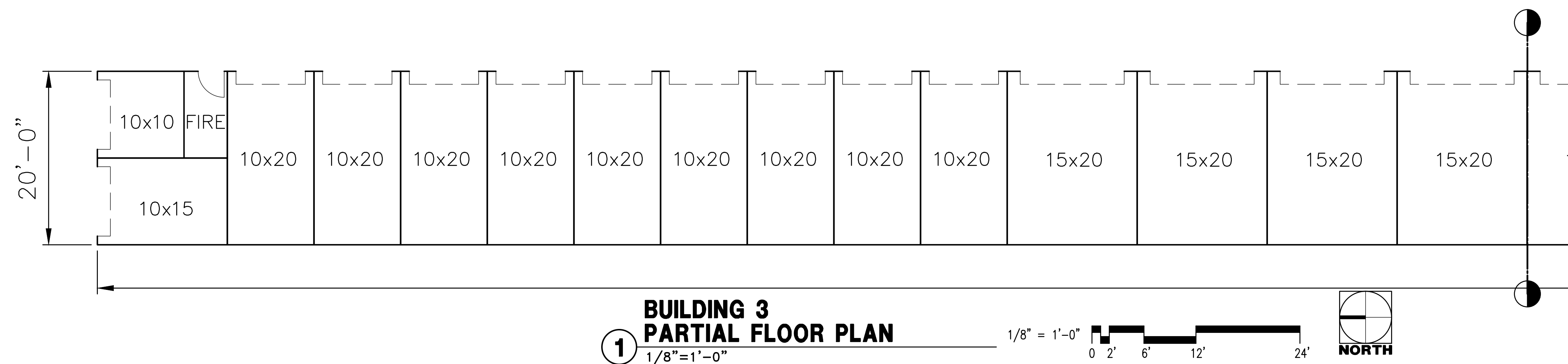
DRAWN BY -

JOB NO. 18-18

SHEET

A2.1

KEYNOTES





INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

BUILDING 5
FIRST FLOOR
PLAN AND
BUILDING 7

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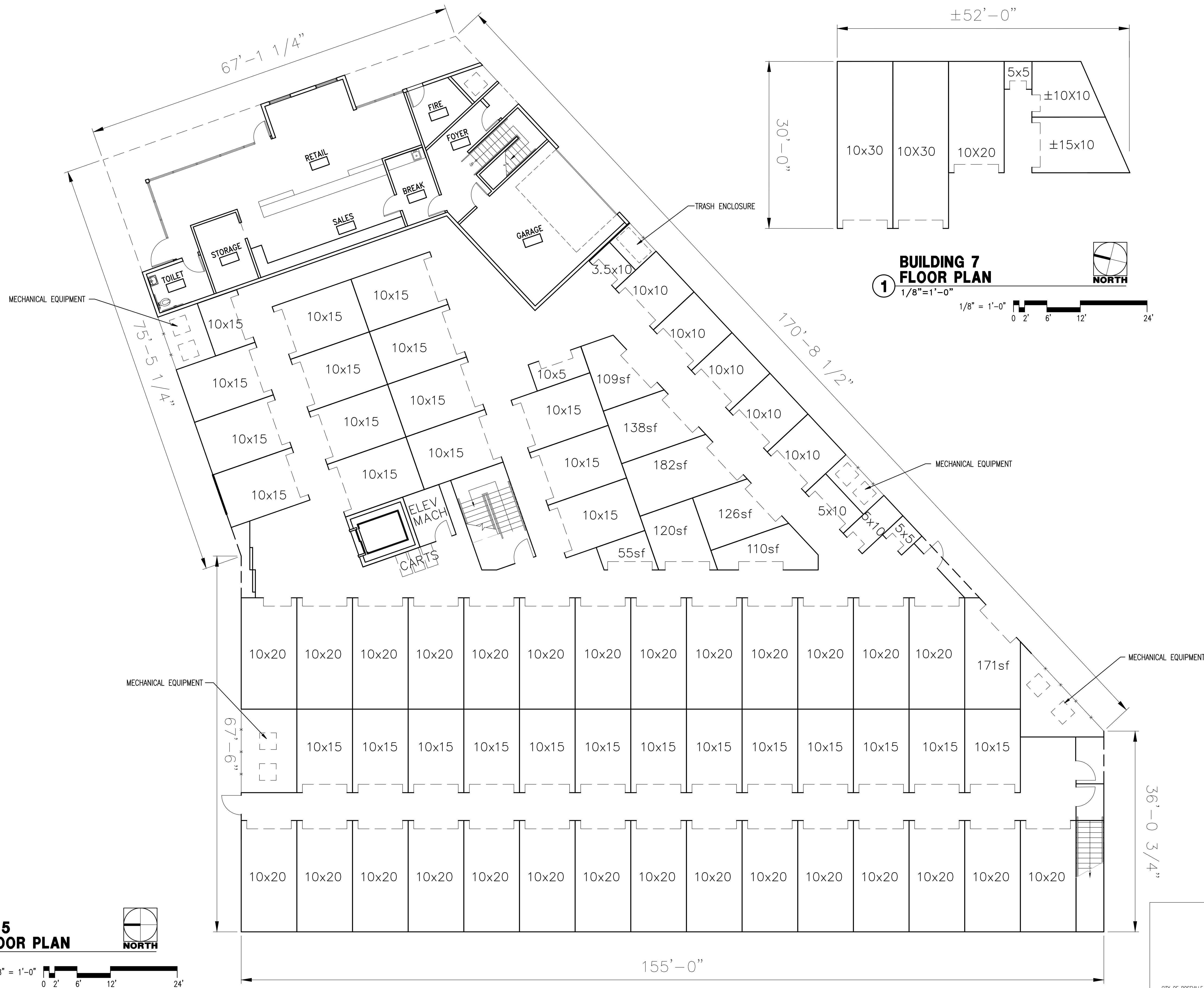
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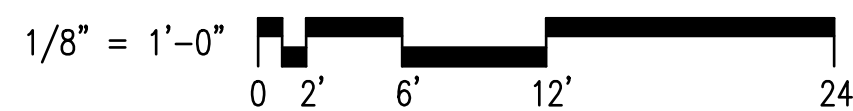
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SHEET

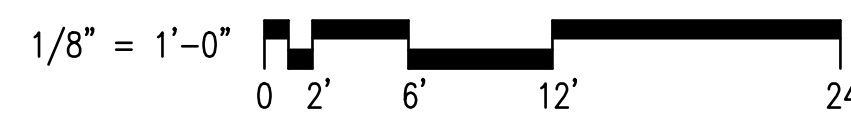
A2.2



**BUILDING 5
FIRST FLOOR PLAN**
1 1/8"=1'-0"



**BUILDING 7
FLOOR PLAN**
1 1/8"=1'-0"



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INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

BUILDING 5
SECOND FLOOR PLAN

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SHEET

A2.3





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INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

SITE ROOF PLAN

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SCALE **AS NOTED**

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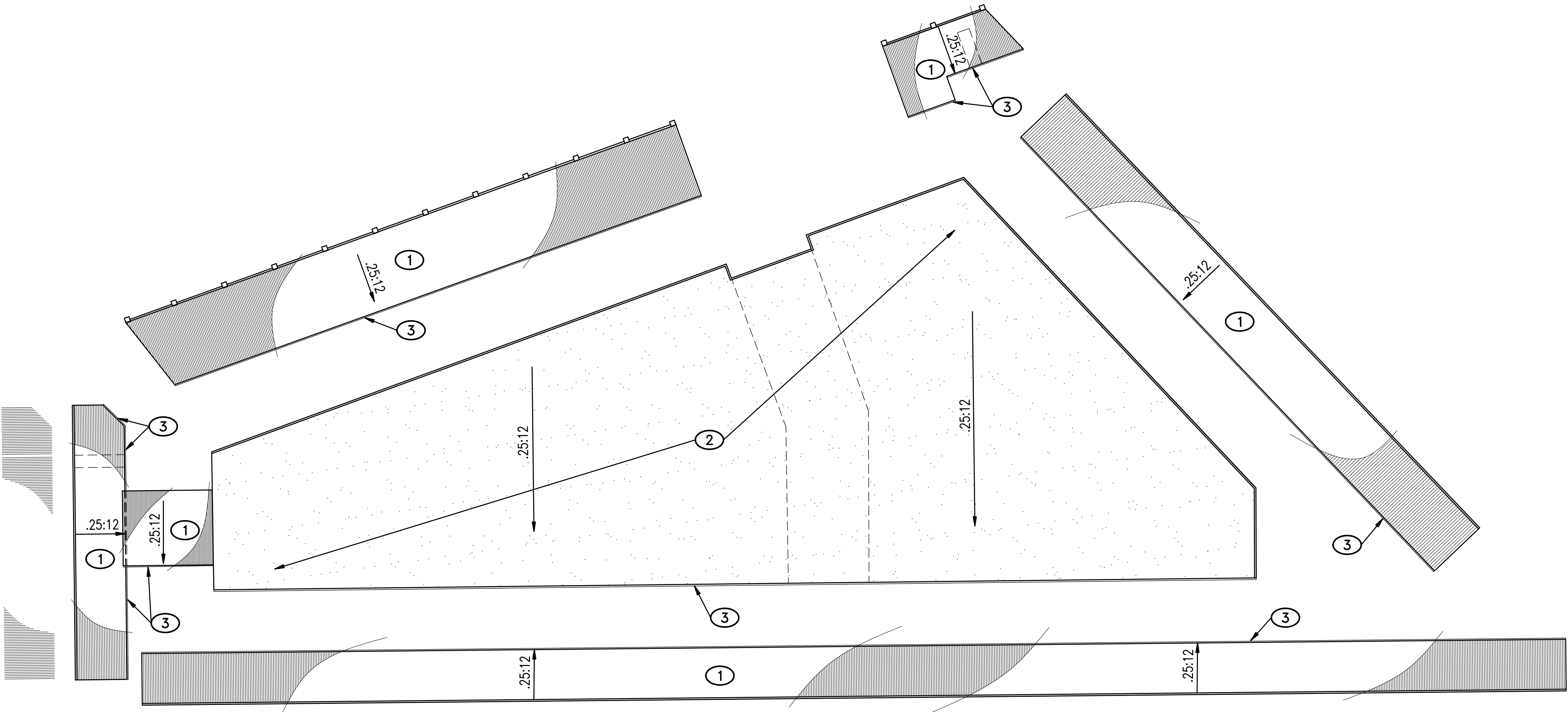
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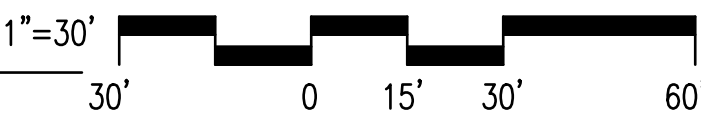
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KEY NOTES #

- 1. PREFINISHED STANDING SEAM METAL ROOF
- 2. SINGLE PLY ROOF MEMBRANE
- 3. CONTINUOUS GUTTER



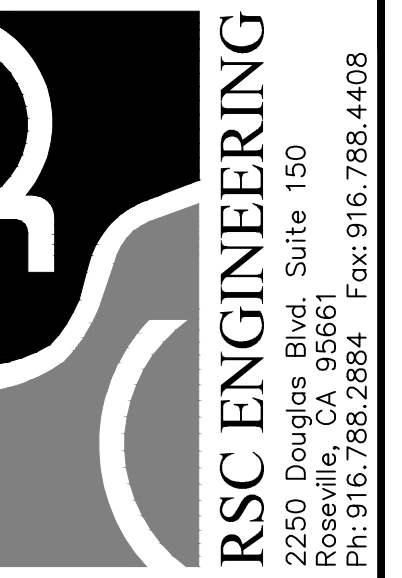
1 SITE ROOF PLAN
1"=30'-0"



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**INDUSTRIAL AVENUE
SELF STORAGE**

**8151 INDUSTRIAL AVENUE
ROSEVILLE, CA 95678**

HEET TITLE

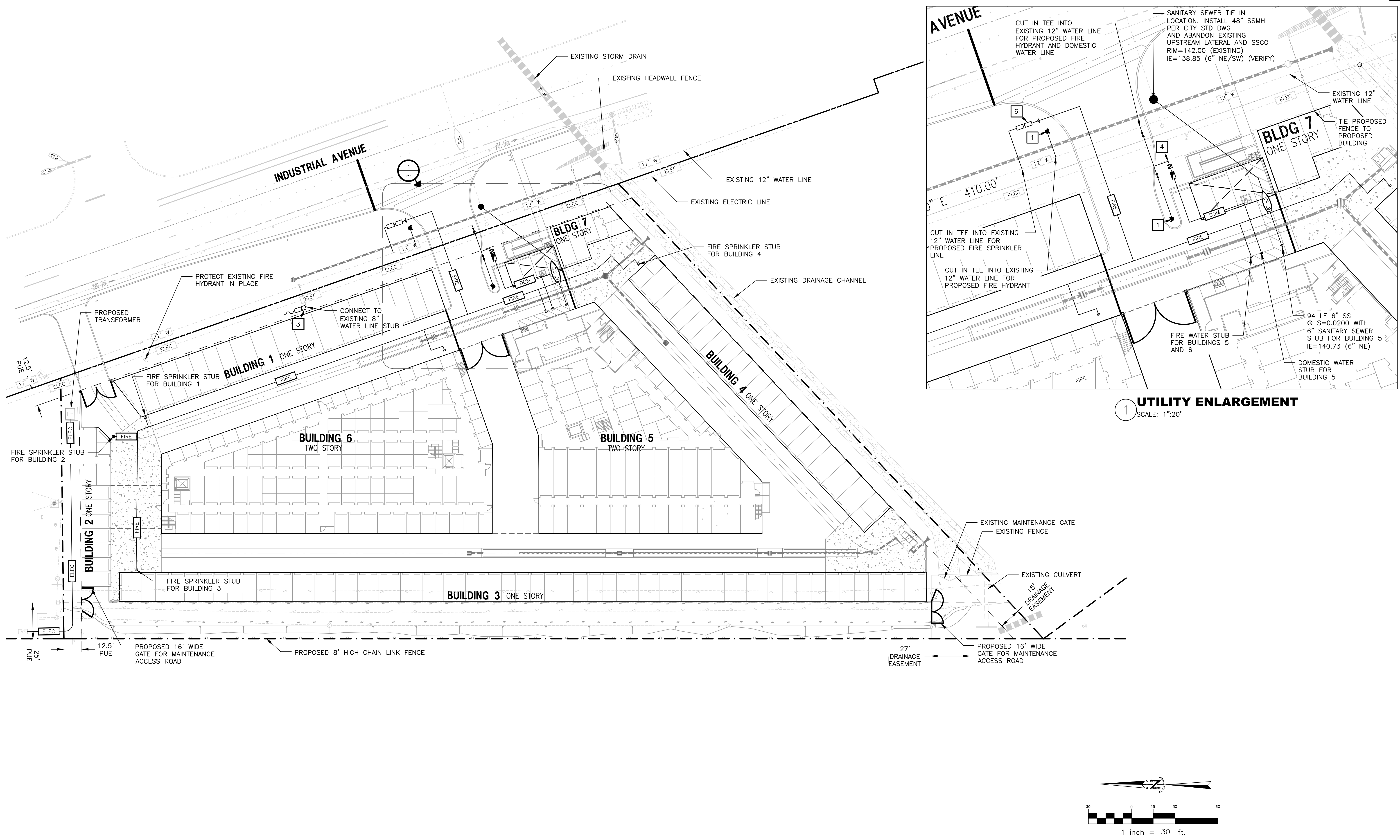
WATER AND SEWER PLAN

SHEET NO.

WT-SS

7

CITY OF ROSEVILLE APPROVAL

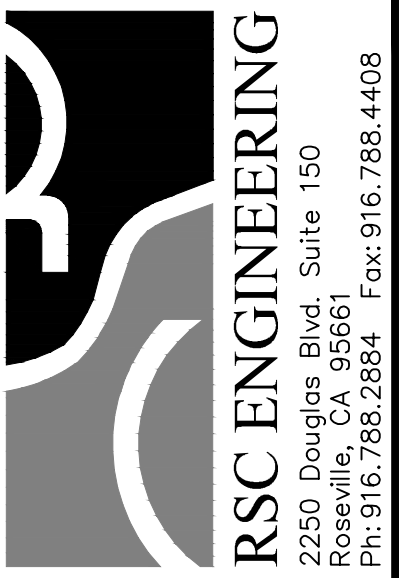
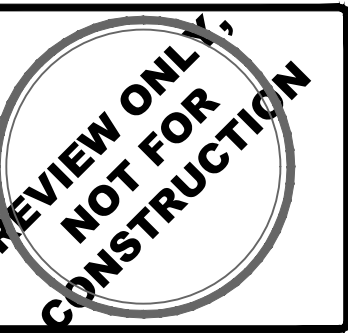


KEYNOTES

- | | | | |
|---|---|---|---|
| 1 | FIRE HYDRANT PER CITY STD.
DWG W-7 WITH PROTECTIVE
BOLLARDS AS SHOWN. | 5 | GATE VALVE AND BOX PER CITY
STD. DWG W-16. |
| 2 | NOT USED | 6 | PLACE DOUBLE DETECTOR CHECK
VALVE WITH ATTACHED FDC PER
CITY STD. DWG W-2 |
| 3 | IRRIGATION SERVICE AND WATER
METER PER CITY STD. STD.
DWG W-7. | | |
| 4 | DOMESTIC WATER SERVICE AND
WATER METER PER CITY STD. DWG
W-7. | | |

CITY OF ROSEVILLE APPROVAL

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△					
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DESIGNED BY:	RSC Eng

**INDUSTRIAL AVENUE
SELF STORAGE**

**8151 INDUSTRIAL AVENUE
ROSEVILLE, CA 95678**

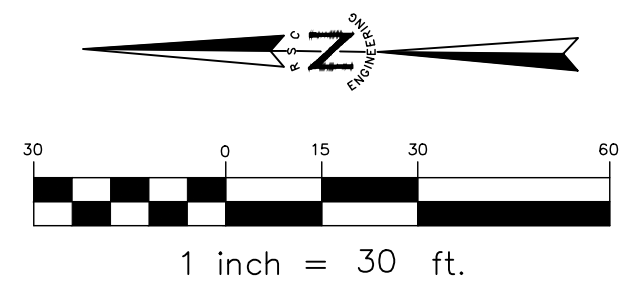
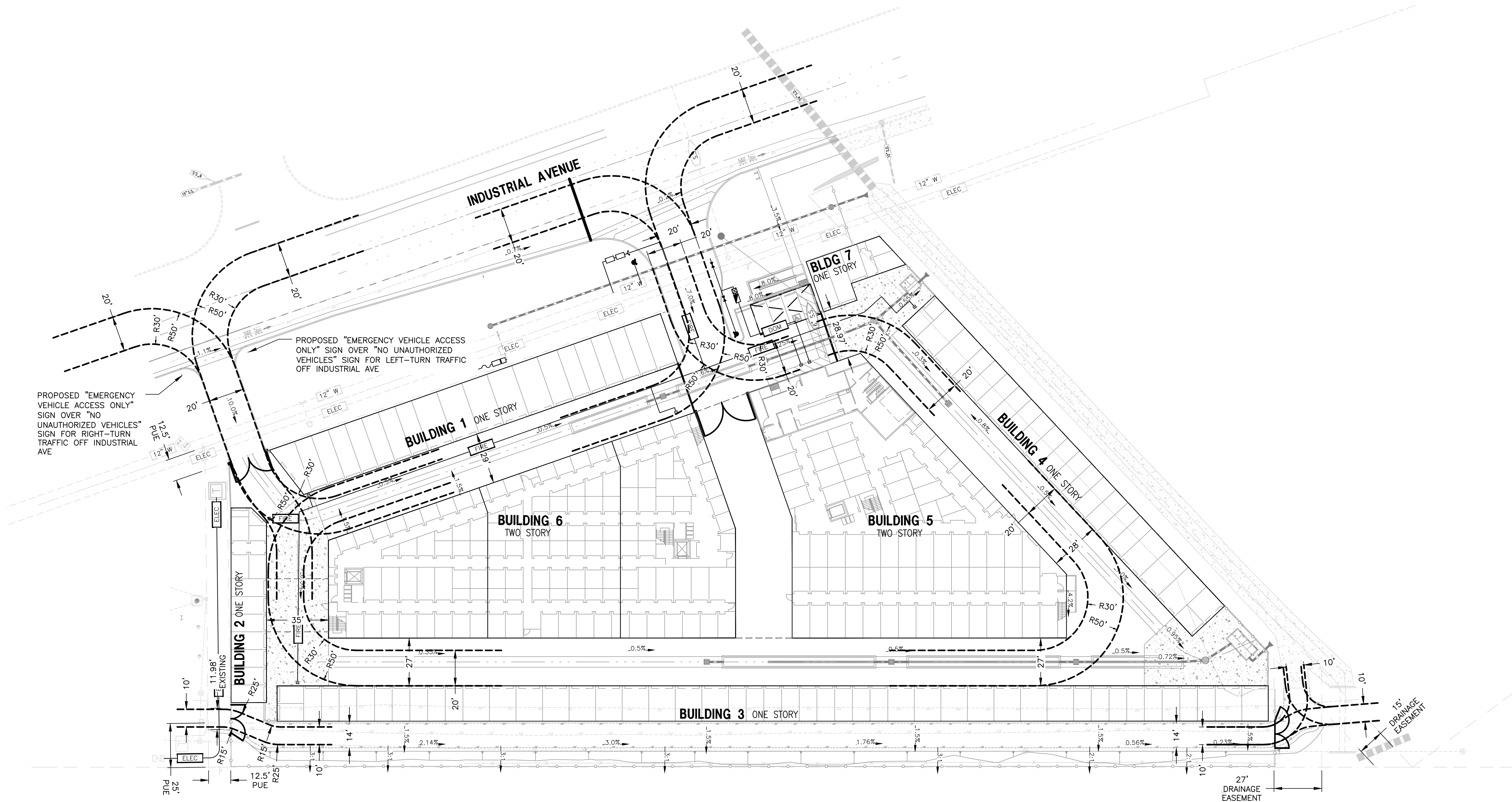
SHEET TITLE
**FIRE
ACCESS
PLAN**

SHEET NO.

FA

OF **7**

CITY OF ROSEVILLE APPROVAL DATE: JANUARY 23, 2020



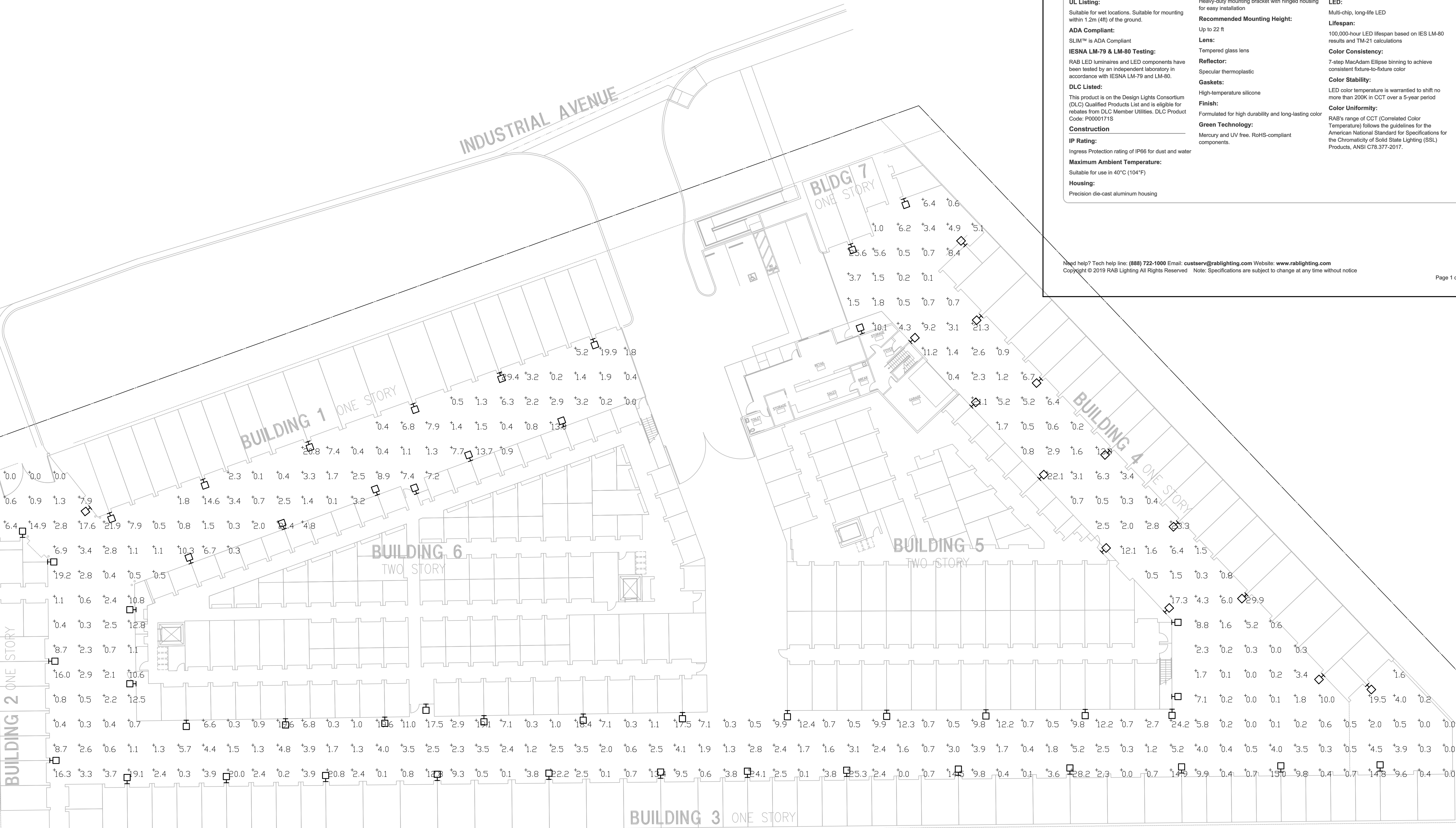
LEGEND



20' WIDE FIRE TURN
INSIDE RADIUS=30'
OUTSIDE RADIUS=50'

SHED	TOTAL SHED AREA (SF)	EX. PERVIOUS AREA (SF)	EX. IMPERVIOUS AREA (SF)	PROPOSED PERVIOUS AREA (SF)	PROPOSED IMPERVIOUS AREA (SF)	PROPOSED IMPERVIOUS %	WATER QUALITY FLOW (CFS)	PROPOSED TREATMENT MEASURES	WATER QUALITY FLOW (CFS) PROVIDED BY TREATMENT MEASURE
1	13,437	13,437	0	13,437	0	0	N/A	LANDSCAPE BUFFER AREA WILL BE GRADED AND LANDSCAPED. THIS SHED AREA WILL DRAIN INTO A STORM DRAIN THAT DISCHARGES INTO THE EXISTING DRAINAGE CHANNEL AND BYPASSES THE SITE STORMWATER QUALITY AND DETENTION UNITS	N/A
2	35,098	35,098	0	3,292	31,806	91	0.163	MODULAR WETLAND SYSTEM 8-8 (UNDERGROUND)	0.230
3	82,780	82,780	0	0	82,780	100	0.364	MODULAR WETLAND SYSTEM 8-16 (UNDERGROUND)	0.462

LIGHTING FIXTURE SCHEDULE							
TYPE	MANUFACTURER	FIXT. VOLT.	LAMPS		INPUT V.A.	MOUNTING	REMARKS
			NO.	TYPE			
A □	RAB LIGHTING SLIM-26	120-277	LED		26	SURFACE WALL +1'-6" AFF	LED WALL PACK FULL CUTOFF STYLE



SLIM26

RAB Outdoor



12, 18 and 26 Watt SLIM wall packs are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.
Color: Bronze Weight: 4.8 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type	Constant Current	Watts	26.00W
120V	0.27A	Color Temp	5100K (Cool)
208V	0.17A	Color Accuracy	75 CRI
240V	0.15A	L70 Lifespan	100,000
277V	0.13A	Lumens	3,536
Input Watts 29.50W		Efficacy	119.9 LPW
Efficiency 88%			

Technical Specifications

Listings
UL Listing:
Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.
ADA Compliant:
SLIM™ is ADA Compliant
IESNA LM-79 & LM-80 Testing:
RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.
DLC Listed:
This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P0000171S
Construction
IP Rating:
Ingress Protection rating of IP66 for dust and water
Maximum Ambient Temperature:
Suitable for use in 40°C (104°F)
Housing:
Precision die-cast aluminum housing

Mounting:
Heavy-duty mounting bracket with hinged housing for easy installation
Recommended Mounting Height:
Up to 22 ft
Lens:
Tempered glass lens
Reflector:
Specular thermoplastic
Gaskets:
High-temperature silicone
Finish:
Formulated for high durability and long-lasting color
Green Technology:
Mercury and UV free, RoHS-compliant components.

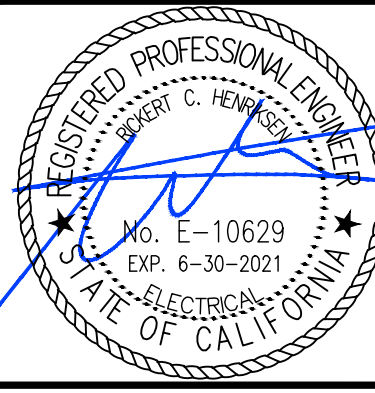
LED Characteristics
LED:
Multi-chip, long-life LED
Lifespan:
100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations
Color Consistency:
7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color
Color Stability:
LED color temperature is warranted to shift no more than 200K in CCT over a 5-year period
Color Uniformity:
RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Need help? Tech help line: (888) 722-1000 Email: custserv@rablighting.com Website: www.rablighting.com
Copyright © 2019 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

Exhibit B



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Sacramento, CA 95816
916 498-7900



Date Signed: October 8, 2019



Job No. 19705

INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

SITE PLAN
SITE SECTION
VICINITY MAP

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REVISIONS

DATE JUNE 3, 2019

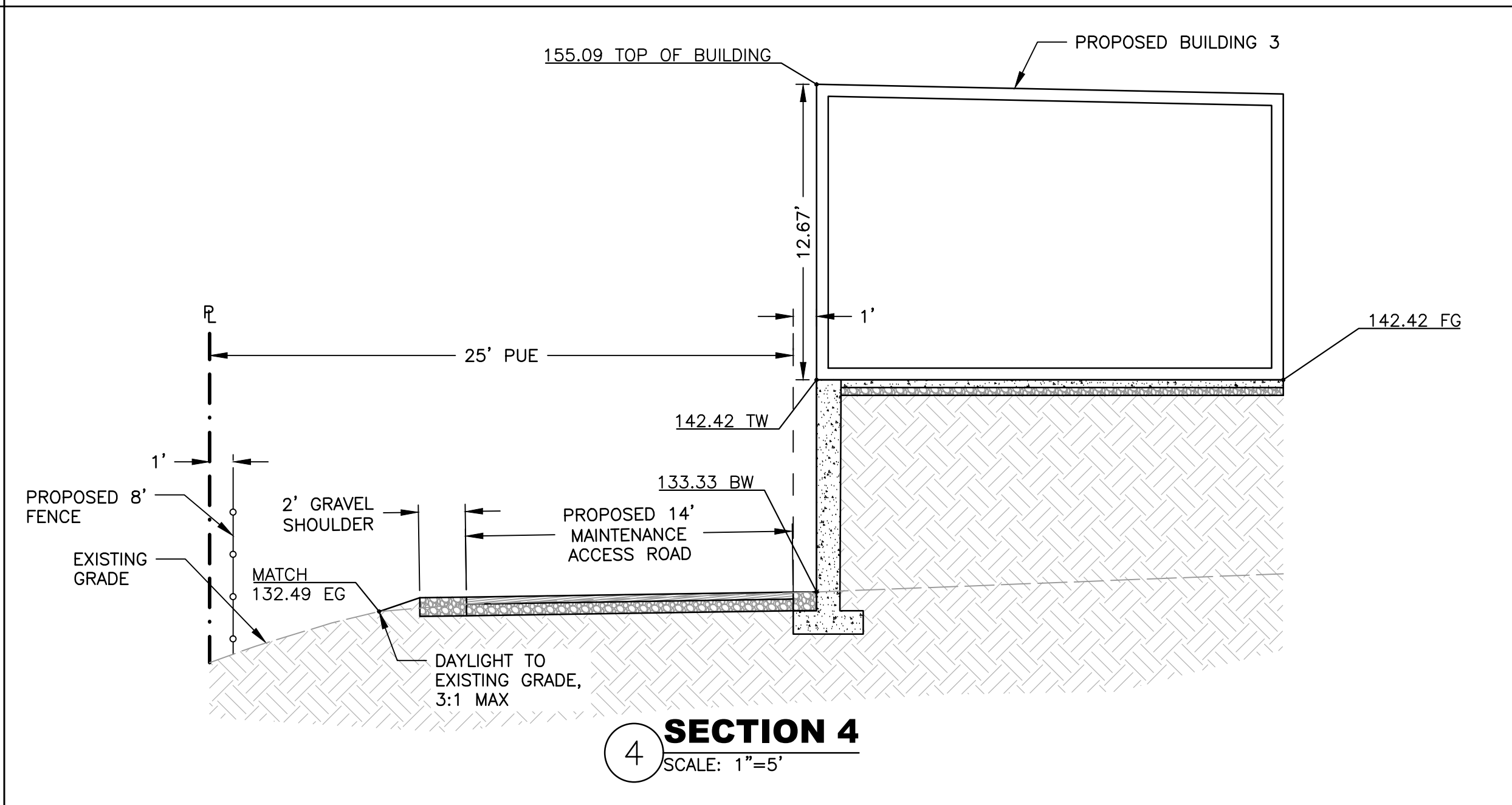
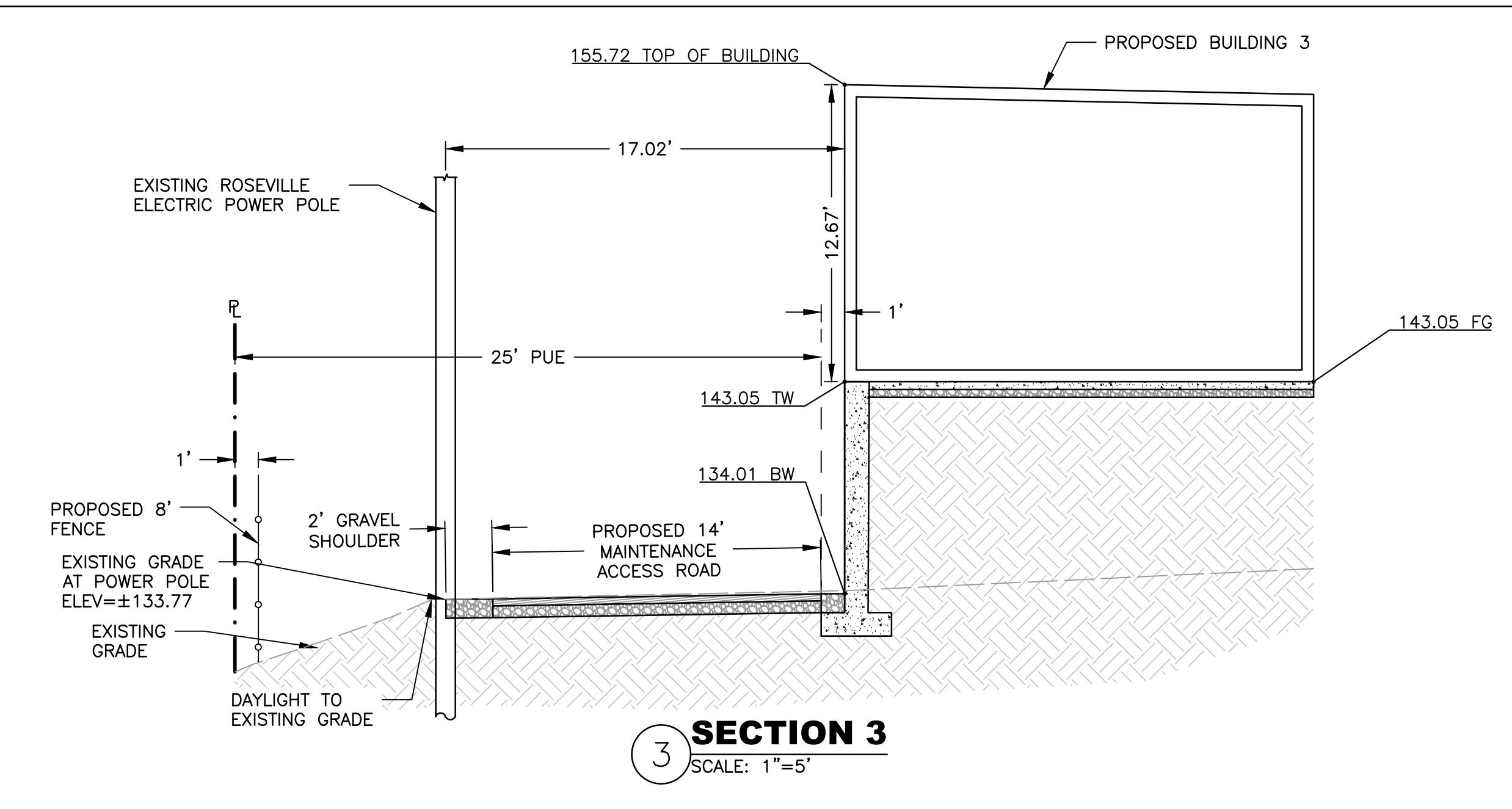
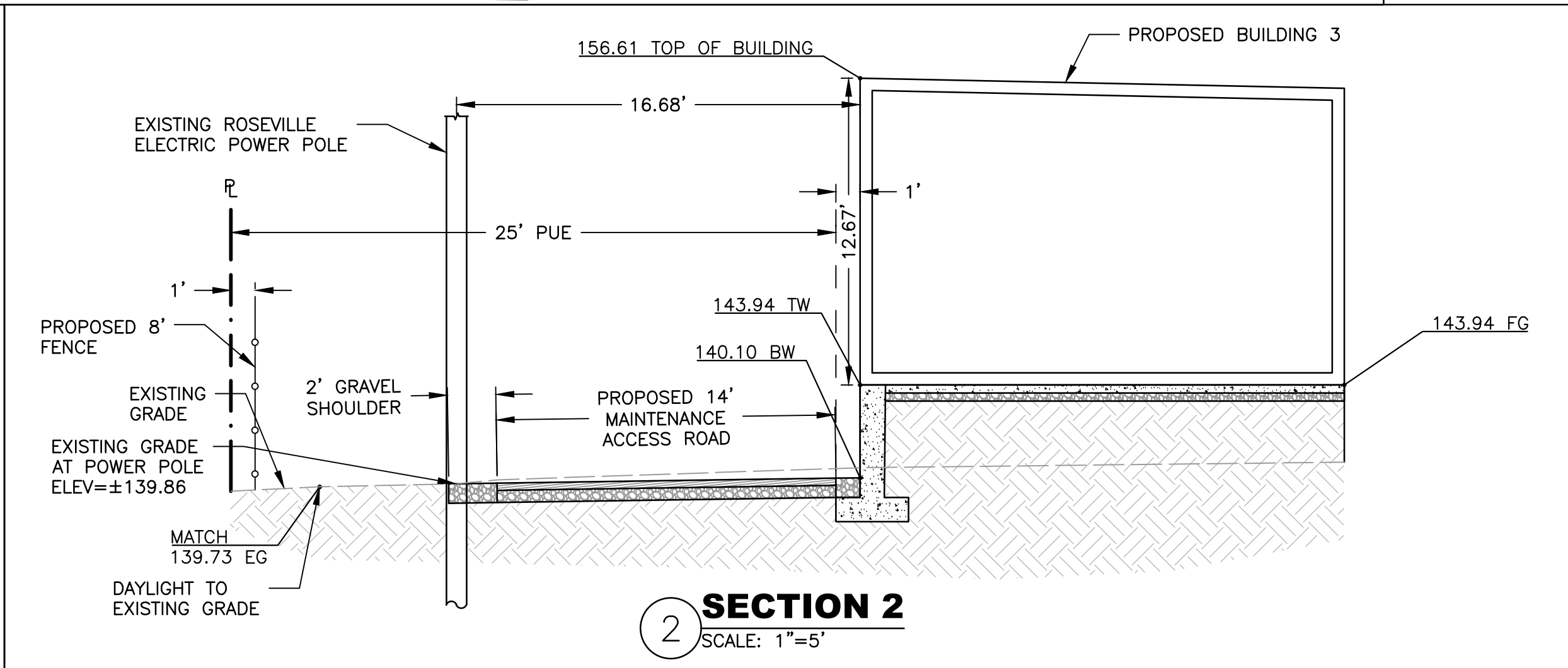
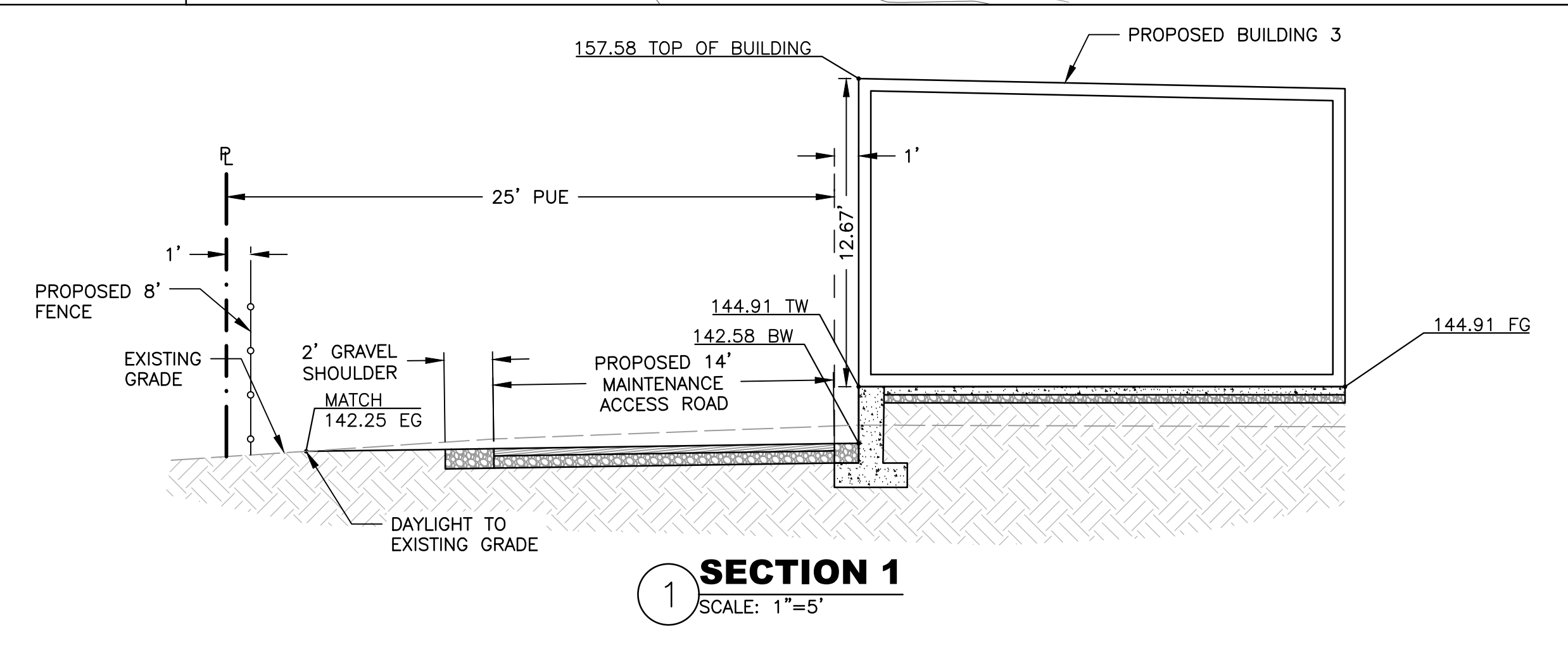
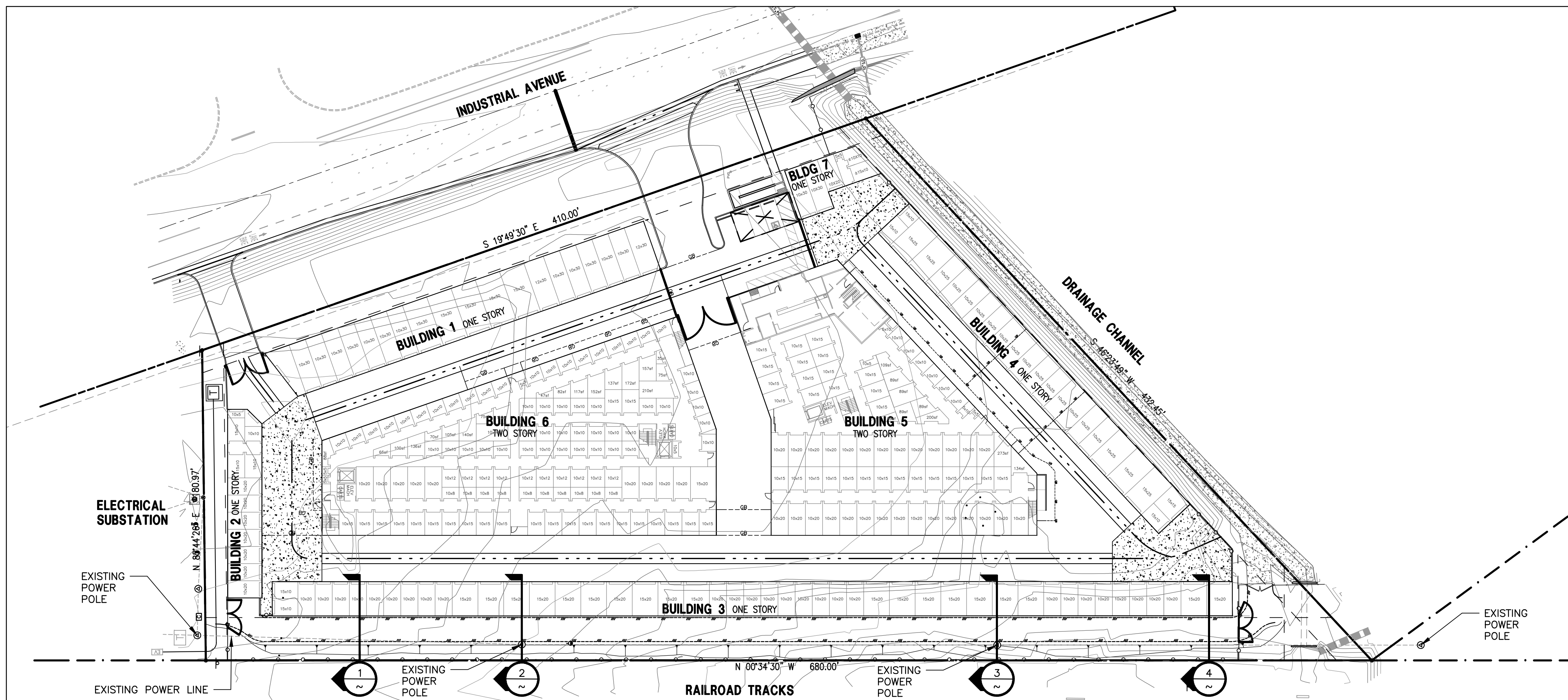
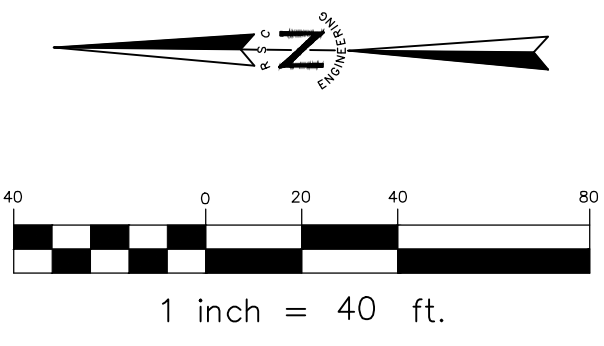
SCALE AS NOTED

DRAWN BY

JOB NO. 18-18

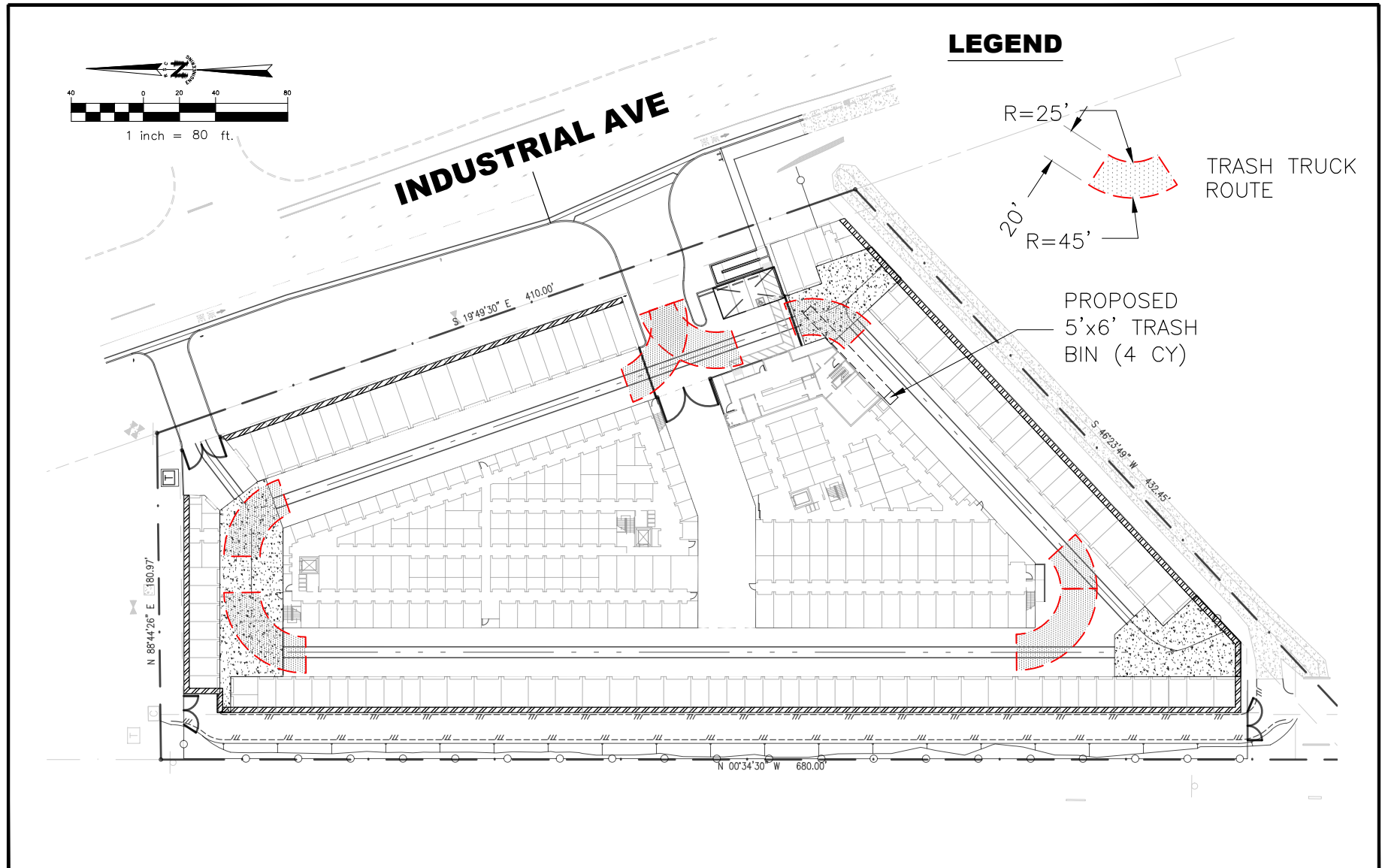
SHEET

E0



**POWER POLE EXHIBIT
INDUSTRIAL AVE SELF STORAGE
8151 INDUSTRIAL AVE
ROSEVILLE, CA 95678**

Exhibit B



INDUSTRIAL AVENUE SELF STORAGE

DATE	BY	CITY APPROVED
DESCRIPTION	DATE	REV





RSC ENGINEERING
2250 Douglas Blvd, Suite 150
Roseville, CA 95661
Ph: 916.788.2884 Fax: 916.788.4408

PROJECT NO:	216-001
DRAWN BY:	RSC Eng
CHECKED BY:	RSC Eng
DESIGNED BY:	RSC Eng

INDUSTRIAL AVENUE
SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CA 95678

SHEET TITLE
GRADING PLAN

SHEET NO.
GR1
OF **7**

DATE: JANUARY 23, 2020

KEYNOTES

- 1 6" STEP IN BUILDING FOUNDATION

LEGEND

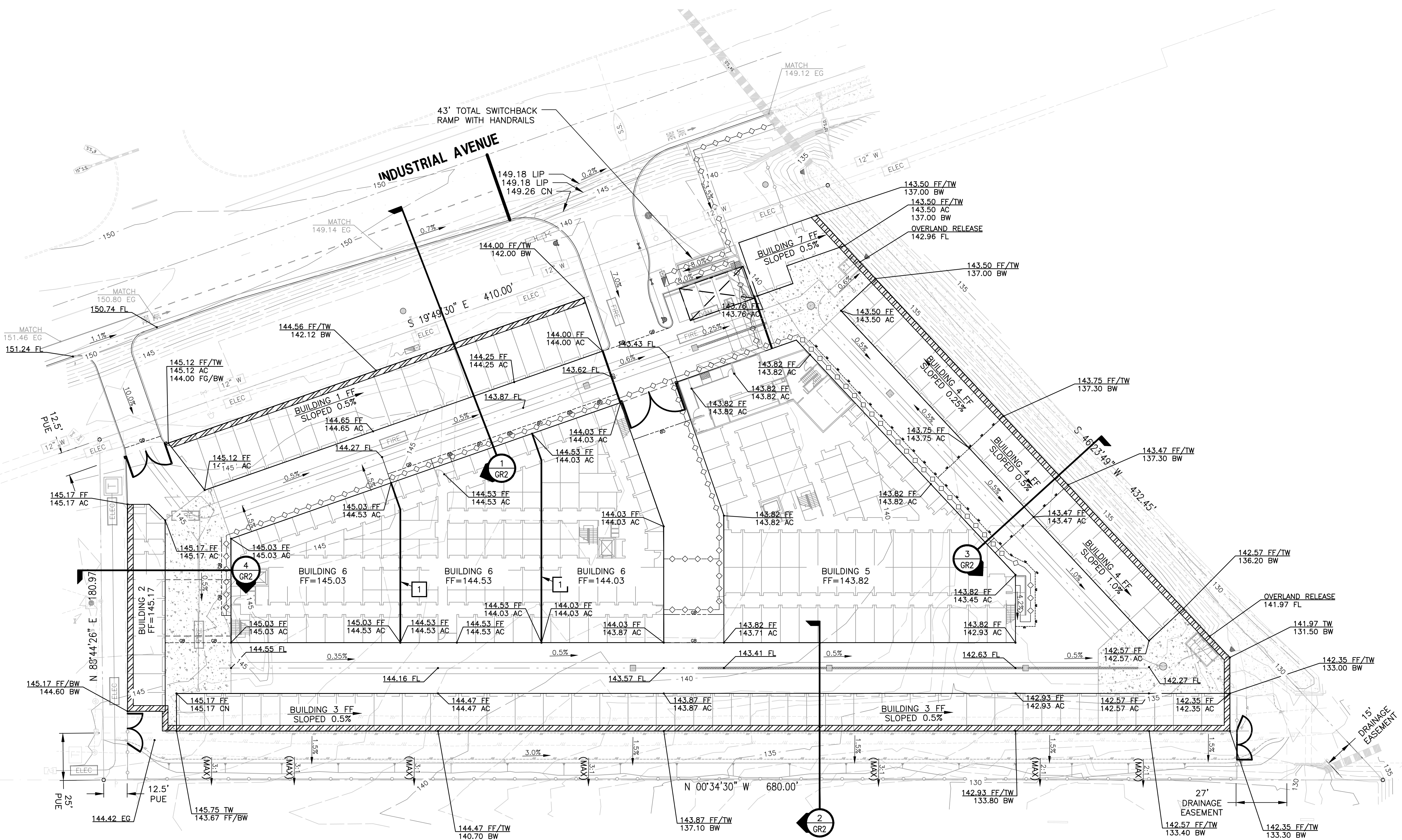
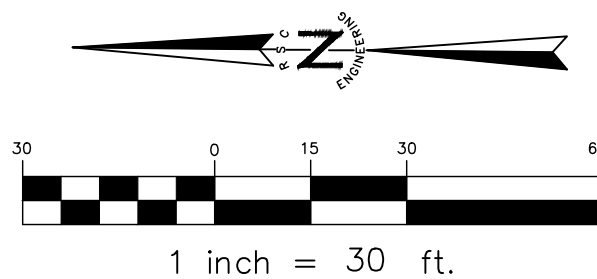
- EXISTING CONTOUR (5' INTERVAL)
- EXISTING CONTOUR (1' INTERVAL)
- PROPOSED GRADE
- EXISTING GRADE
- PROPOSED RETAINING WALL OR RETAINING FOUNDATION FOR BUILDING
- CONCRETE PAVEMENT
- ADA PATH OF TRAVEL

ACRONYMS

- FF - FINISH FLOOR
- TW - TOP OF WALL
- BW - BOTTOM OF WALL
- FG - FINISH GRADE
- EG - EXISTING GRADE
- FL - FLOWLINE
- CN - CONCRETE
- AC - ASPHALT CONCRETE

EARTHWORK*

- 1,661 CY CUT
- 10,964 CY FILL
- 9,303 CY IMPORT
- *EARTHWORK IS TO SUBGRADE

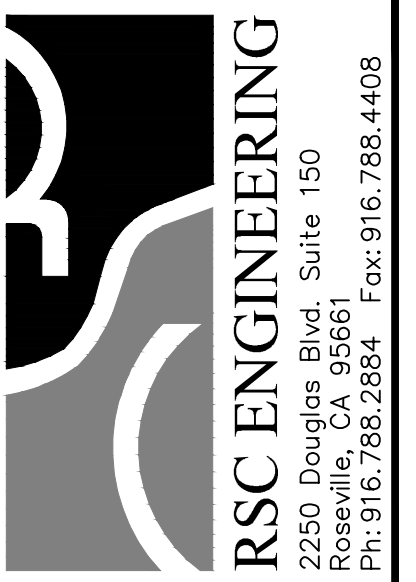


CITY OF ROSEVILLE APPROVAL

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Plot Date: Jan 23, 2020 10:29 AM
Plot Size: 36x48 inches

**INDUSTRIAL
AVENUE SELF
STORAGE**

REV NO.	DATE	DESCRIPTION	ENG INT.	BY CITY	DATE APPROVED
△					
△					
△					
△					
△					



PROJECT NO:	216-001
DRAWN BY:	RSC Eng
CHECKED BY:	RSC Eng
DESIGNED BY:	RSC Eng

**INDUSTRIAL AVENUE
SELF STORAGE**

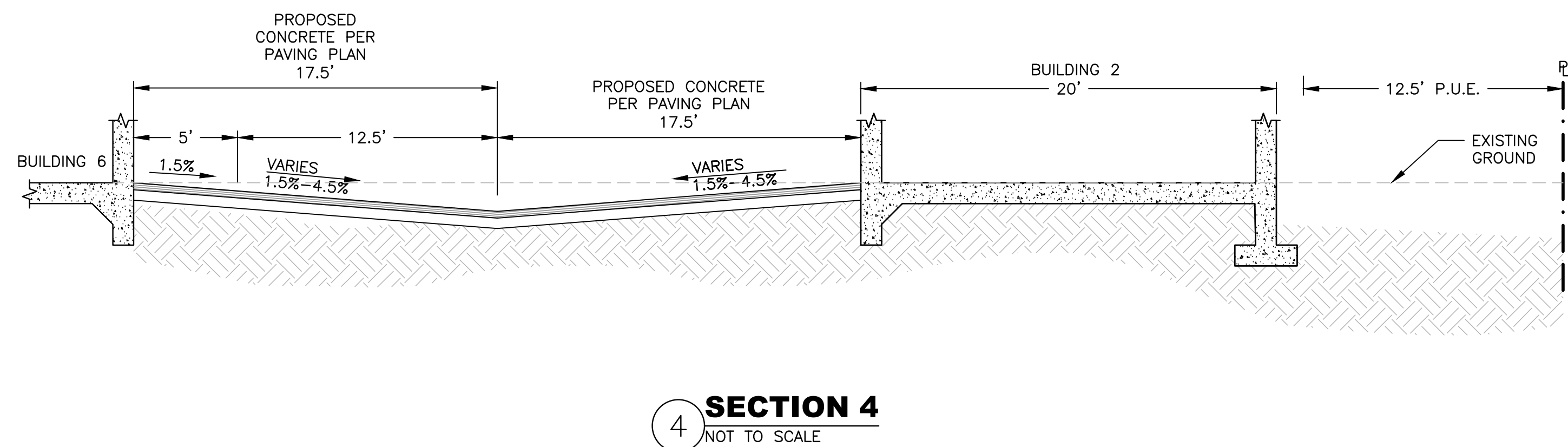
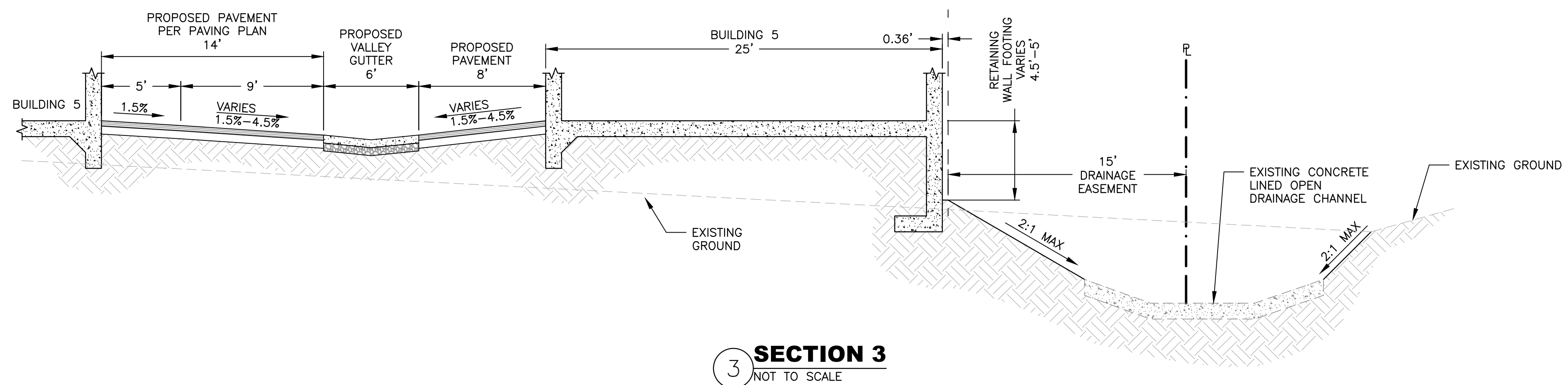
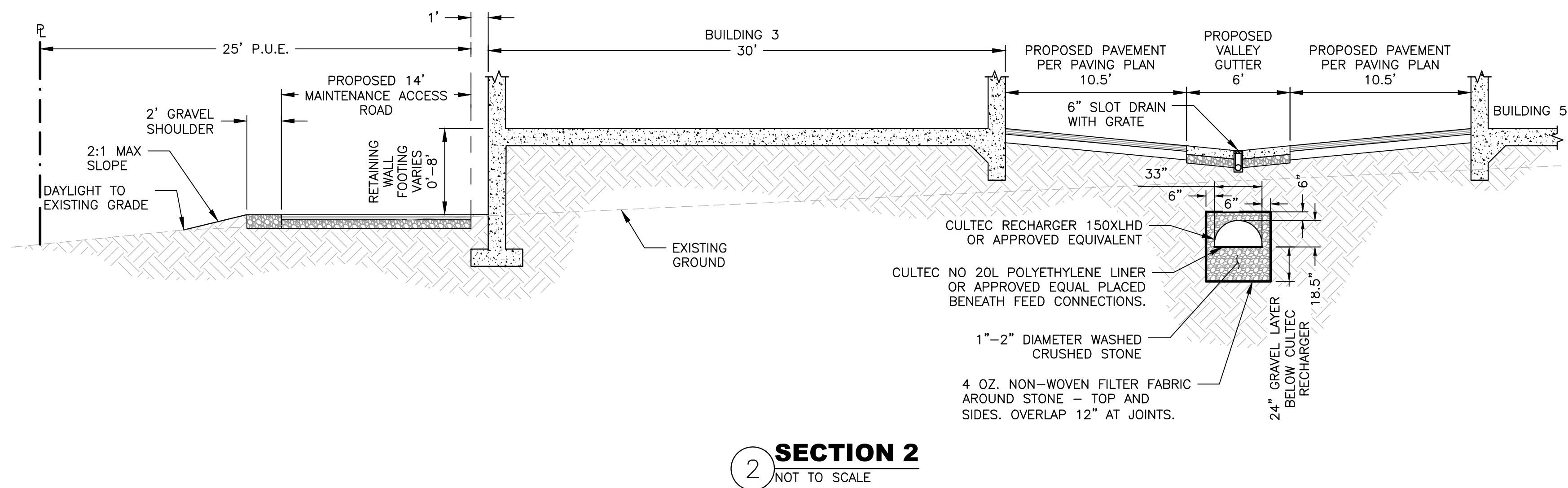
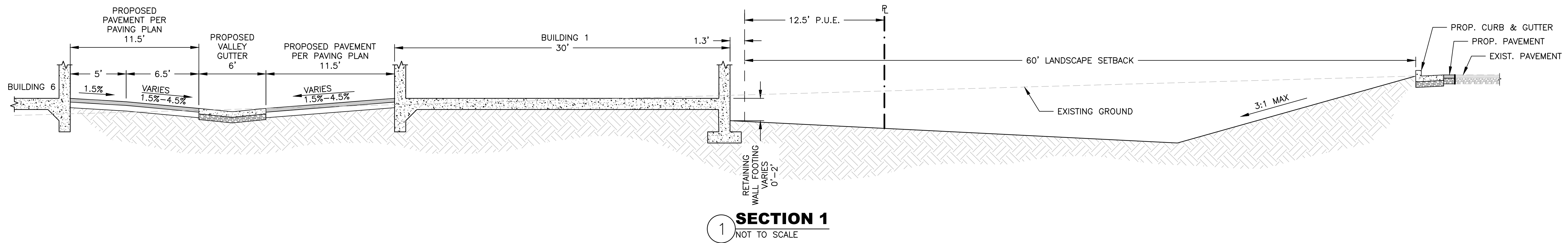
**8151 INDUSTRIAL AVENUE
ROSEVILLE, CA 95678**

SHEET TITLE

**GRADING
SECTIONS**

SHEET NO.
GR2
OF **7**

CITY OF ROSEVILLE APPROVAL DATE: JANUARY 23, 2020



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INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

EXTERIOR
ELEVATIONS

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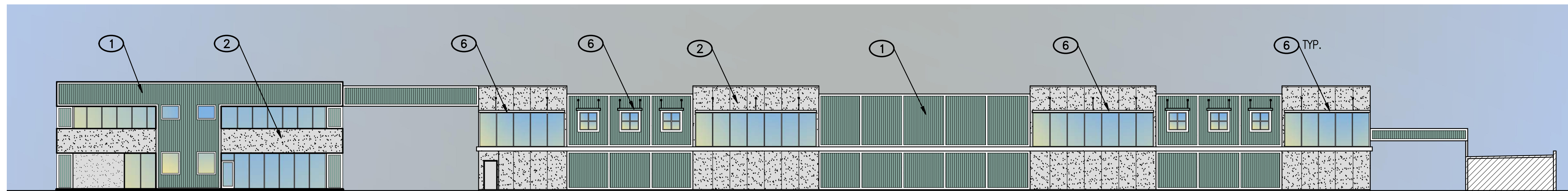
REVISIONS

DATE	JUNE 3, 2019
SCALE	AS NOTED
DRAWN BY	-
JOB NO.	18-18
SHEET	

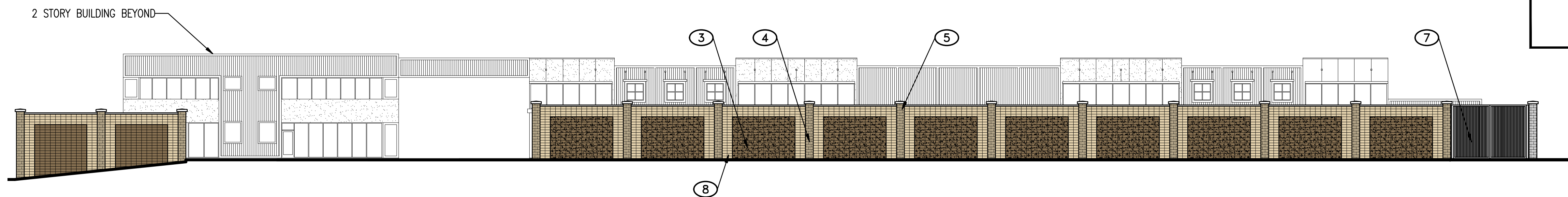
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KEY NOTES #

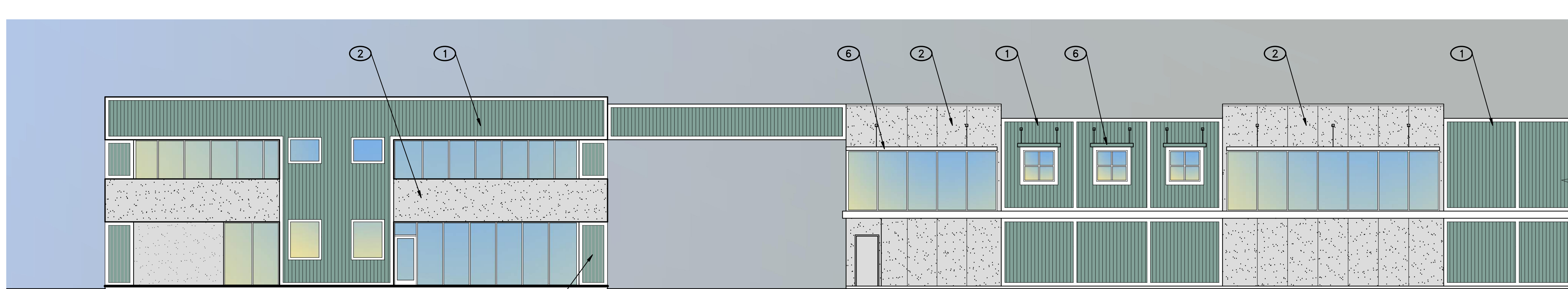
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2. EIFS (EXTERIOR INSULATION FINISH SYSTEM)
3. SPLIT FACE CONCRETE MASONRY WALL UNITS
4. SPLIT FACE CONCRETE MASONRY PILASTERS
5. PRECAST CONCRETE CAP
6. EYEBROW WINDOW SHADES WITH STEEL SUPPORTS
7. WROUGHT IRON GATE
8. SHOT-BLASTED CONCRETE MASONRY WALL UNITS



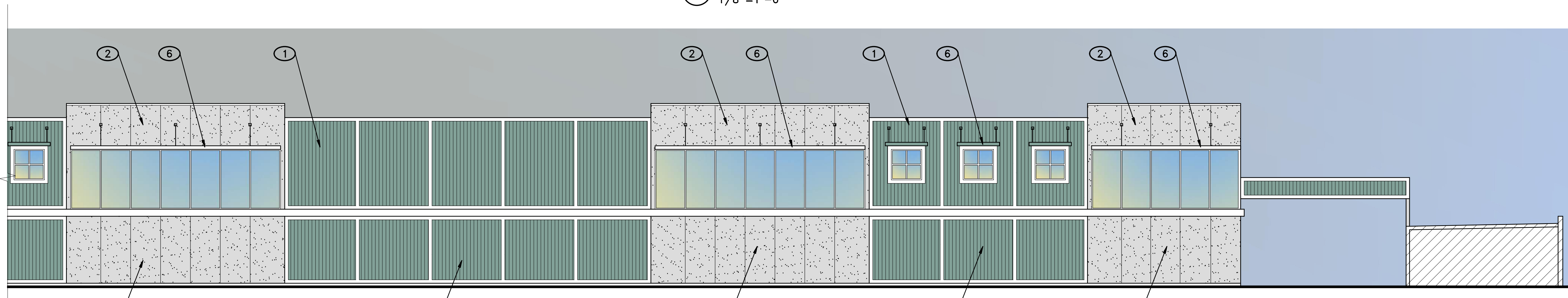
OVERALL EAST ELEVATION
MAIN TWO STORY BUILDING
1
1/16"=1'-0"



OVERALL EAST ELEVATION
OUTSIDE WALL
2
1/16"=1'-0"



ENLARGED EAST ELEVATION
MAIN TWO STORY BUILDING
3
1/8"=1'-0"



ENLARGED EAST ELEVATION
MAIN TWO STORY BUILDING
4
1/8"=1'-0"

CITY OF ROSEVILLE APPROVAL



INDUSTRIAL AVENUE SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

EXTERIOR
ELEVATIONS

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REVISIONS

DATE JUNE 3, 2019

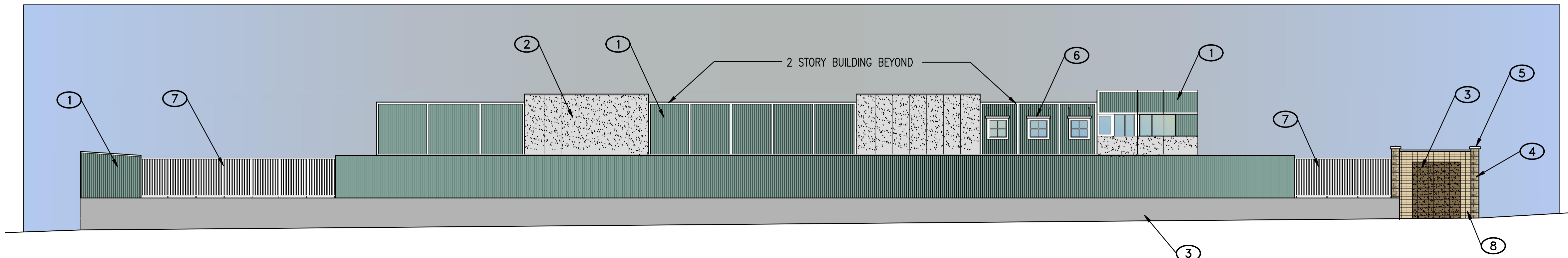
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DRAWN BY -

JOB NO. 18-18

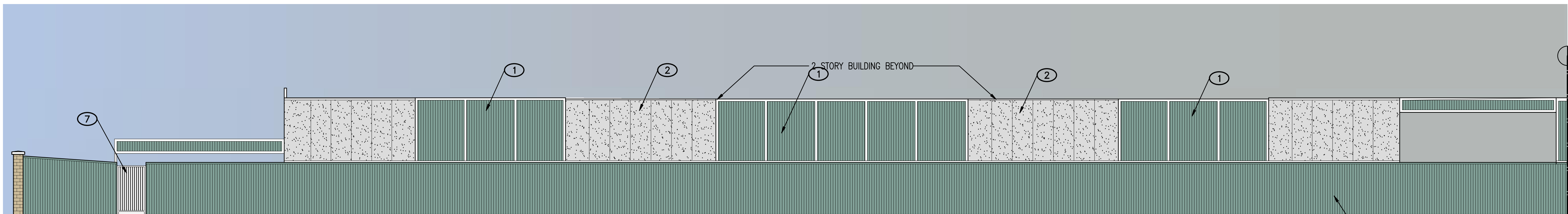
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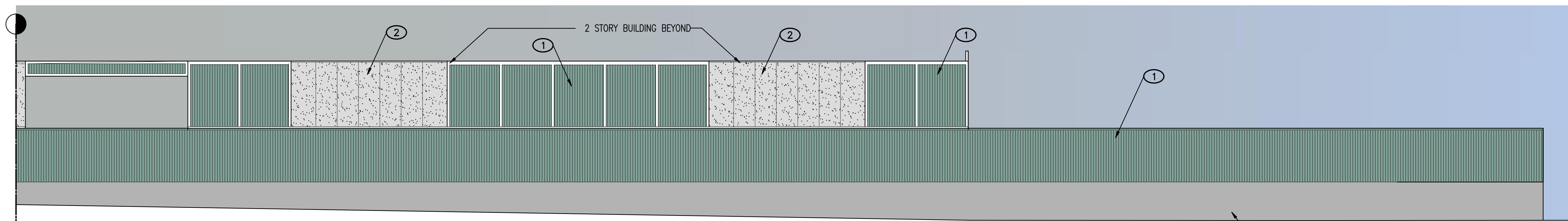
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1/16" = 1'-0"
0 4' 12' 24' 48'



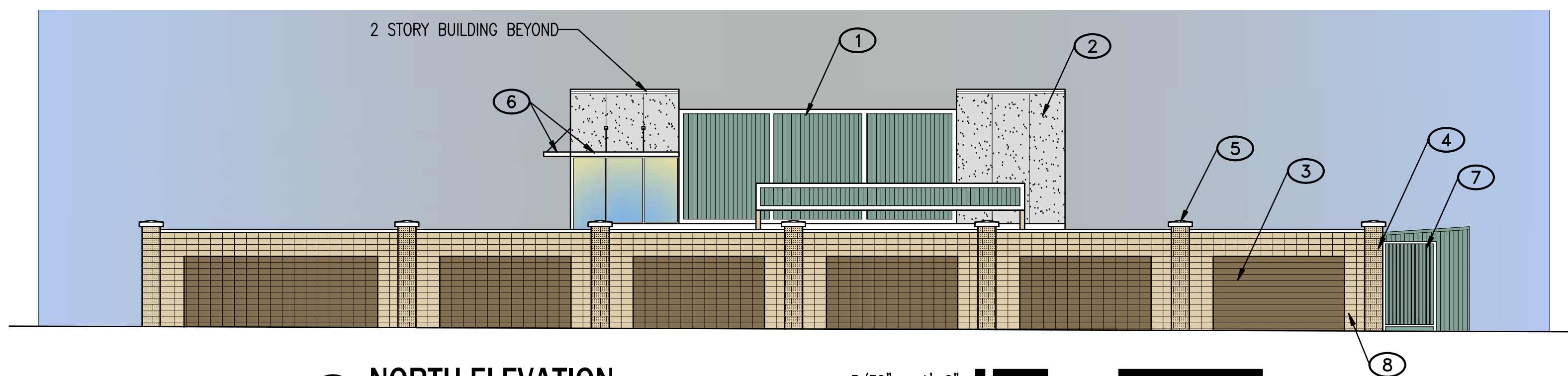
2 PARTIAL WEST EXTERIOR ELEVATION
3/32"=1'-0"

3/32" = 1'-0"
0 2' 8' 16' 32'



2.5 PARTIAL WEST EXTERIOR ELEVATION
3/32"=1'-0"

3/32" = 1'-0"
0 2' 8' 16' 32'



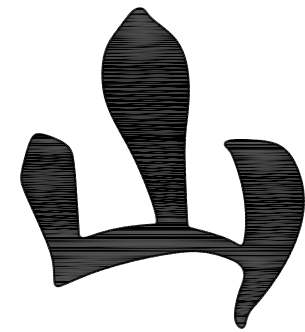
4 NORTH ELEVATION
3/32"=1'-0"

3/32" = 1'-0"
0 2' 8' 16' 32'

KEYNOTES #

1. PREFINISHED METAL SIDING
2. EIFS (EXTERIOR INSULATION FINISH SYSTEM)
3. SPLIT FACE CONCRETE MASONRY WALL UNITS
4. SPLIT FACE CONCRETE MASONRY UNIT PILASTERS
5. PRECAST CONCRETE CAP
6. EYEBROW WINDOW SHADES WITH STEEL SUPPORTS
7. WROUGHT IRON FENCING
8. SHOT BLASTED CONCRETE MASONRY WALL UNITS

CITY OF ROSEVILLE APPROVAL

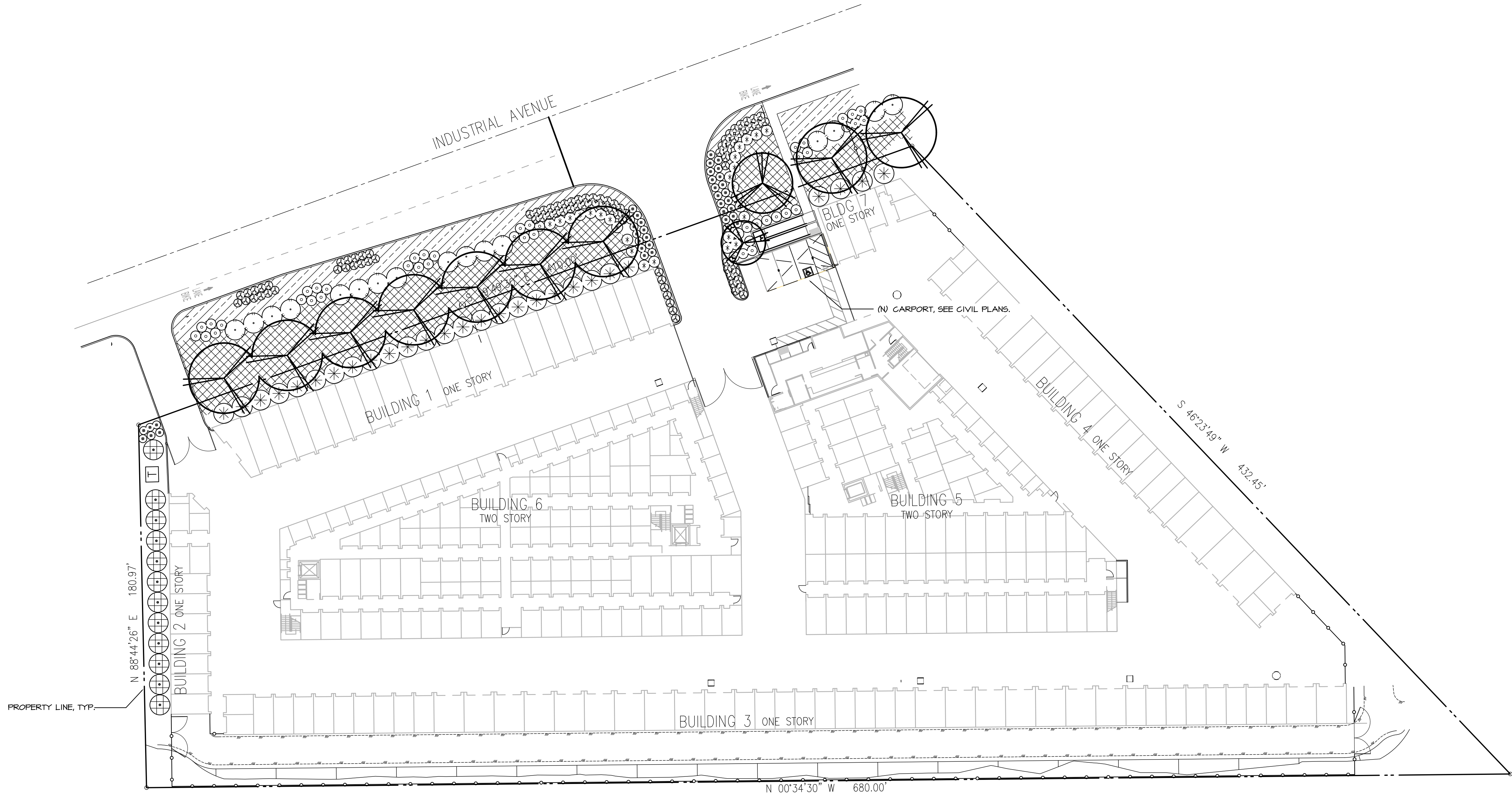


YAMASAKI
LANDSCAPE ARCHITECTURE

JEFF AMBROSIA, ASLA C4057

1223 HIGH STREET
AUBURN, CALIFORNIA 95603
(530) 885-0040
FAX (530) 885-0042
www.yamasaki-la.com

INDUSTRIAL AVENUE SLEF STORAGE
LANDSCAPE DEVELOPMENT PLANS
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678



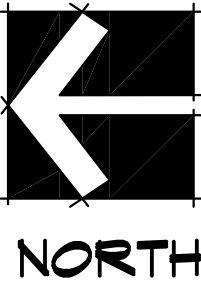
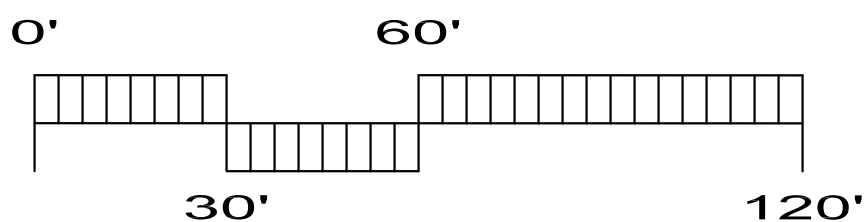
PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	WUCOLS
	ACE FRE	1	Acer x freemanii 'Autumn Fantasy' / Freeman Maple	15 gal	M
	LAG NAT	1	Lagerstroemia x 'Natchez' / Grape Myrtle	15 gal	L
	PLA COL	9	Platanus x acerifolia 'Columbia' / London Plane Tree	15 gal	M
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	WUCOLS
	ARC SUN	27	Arctostaphylos x 'Sunset' / Sunset Manzanita	5 gal	L
	CEA DAR	16	Ceanothus x 'Dark Star' / California Lilac	5 gal	L
	CIS LAD	44	Cistus ladanifer / Crimson Spot Rockrose	5 gal	L
	MUH REG	38	Muhlenbergia capillaris 'Regal Mist' TM / Muhly	5 gal	L
	MUH RIG	87	Muhlenbergia rigens / Deer Grass	5 gal	L
	PHO FRA	27	Photinia x fraseri / Photinia	5 gal	M
	XYL CON	12	Xylosma congestum / Shiny Xylosma	5 gal	L

GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING	WUCOLS
	ACA COG	332	Acacia cognata 'Cousin Itt' / River Wattle	1 gal	60" o.c.	L
	ARC EME	154	Arctostaphylos uva-ursi 'Emerald Carpet' / Emerald Carpet Manzanita	1 gal	48" o.c.	M
	COT LOW	28	Cotoneaster dammeri 'Lowfast' / Lowfast Bearberry Cotoneaster	1 gal	48" o.c.	L

PARKING LOT SHADE CALCULATIONS

TREE SYMBOL	100%	50%	25%
TOTAL PAVED AREA		1,080 s.f.	
SHADE REQUIRED		540 s.f.	
TREE SHADE PROVIDED		0 s.f.	
CARPORT SHADE PROVIDED		647 s.f.	
TOTAL SHADE PROVIDED		647 s.f.	
PERCENT SHADE		60%	



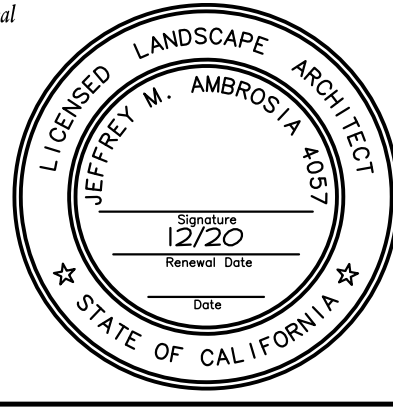
CITY OF ROSEVILLE APPROVAL

These drawings are instruments of service and are the property of Yamasaki Landscape Architecture. All designs and other information on the drawings are for the use on the specified project and shall not be used otherwise without the express written permission of Yamasaki Landscape Architecture.

Sheet Title

PRELIMINARY
PLANTING PLAN

Seal



No.	Date	Revision
▲		
▲		
▲		
▲		

Project Mgr.: JMA

Sheet No.:

Drawn By: CJM

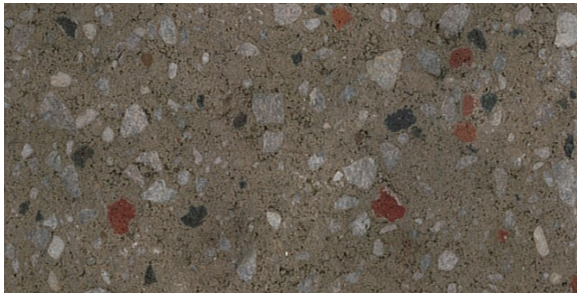
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File Name: 155-PL of 1 sheets

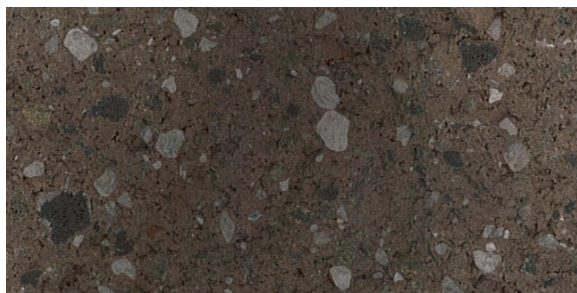
Exhibit F



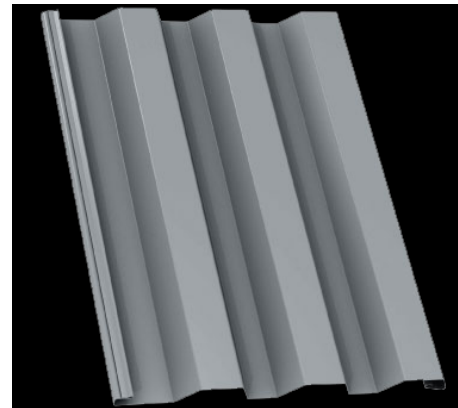
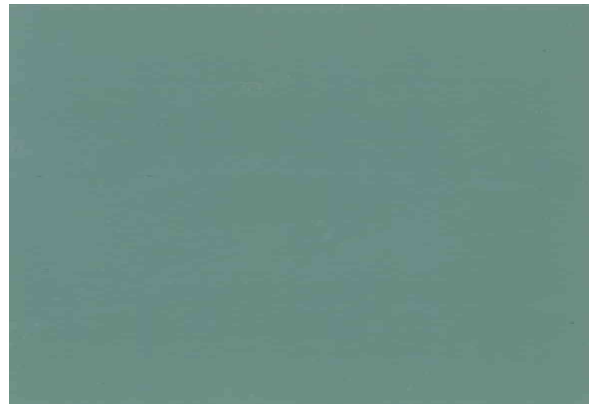
SPLIT FACE CONCRETE MASONRY UNITS:
BASALITE – COLOR D113
PILASTERS



SHOT BLASTED CONCRETE MASONRY UNITS:
BASALITE – COLOR 375
WALLS



SPLIT FACED CONCRETE MASONRY UNITS:
BASALITE – COLOR 264
WALLS



PREFINISHED METAL SIDING:
CENTRIA CONCEPT SERIES – CS-260
COLOR – 977 MOSS



EXTERIOR INSULATION FINISH SYSTEM
SHERWIN WILLIAMS SW 1900
LUMINOUS WHITE



205 23 Street, Suite 130
Sacramento, CA 95816
916 498-7900

MATERIAL/COLOR BOARD

INDUSTRIAL AVENUE
SELF STORAGE
8151 INDUSTRIAL AVENUE
ROSEVILLE, CALIFORNIA 95678

DATE: 12/16/2019

PROJECT NO.: 18-18

SHEET:

A.01



PLANNING COMMISSION COMMUNICATION

Title: NIPA PCL 28 - McDonalds Drive-Thru Alteration, 1400 Blue Oaks Bl, File # PL20-0022
Contact: Sean Morales, smorales@roseville.ca.us, 916-774-5282

Meeting Date: 5/14/2020
Item #: 6.2.

ATTACHMENTS:

Description

Staff Report

Attachment 1

Attachment 2

Exhibit A Plans

ITEM 6.2: **Design Review Permit Modification – 1400 Blue Oaks Boulevard – NIPA PCL 28 – McDonalds Drive-Thru Alteration – PL20-0022**

REQUEST

The applicant requests approval of a Design Review Permit Modification to modify a single lane drive through to a side-by-side drive through. This includes alterations to adjacent landscape planters and parking.

Applicant/Owner – Brian McCarthy, McDonald's US LLC

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact and approve the Design Review Permit Modification subject to three (3) conditions of approval.

SUMMARY OF OUTSTANDING ISSUES

Typically, requests for a Design Review Permit Modification are approved at an administrative level by the Planning Manager unless a hearing is requested by a member of the public. On March 26, 2020, the City received an email from Michael Garabedian, representing Placer County Tomorrow, requesting a public hearing for this item (Attachment 1). An overview of Mr. Garabedian's concerns along with a response from staff and the applicant are provided in the Public Outreach section of this report.

BACKGROUND

The 1.86-acre project site is located on Parcel 28 in the North Industrial Plan Area (NIPA), on the corner of Blue Oaks Boulevard and Foothills Boulevard (Figure 1). The subject property has a zoning designation of Community Commercial and a land use designation of Community Commercial (CC). The property is surrounded by office and retail uses.

The property is currently developed with a 6,243 square-foot co-branded McDonald's restaurant and Chevron gas station with associated parking, lighting, and landscaping. Development of the site was approved by the Design Committee through the City's Design Review Permit process on June 18, 1998 (file #DRP 98-15). On October 12, 2000 a Design Review Permit Modification (file #DRPMOD 00-27) was approved to allow a remodel of the building and the addition of the McDonalds restaurant to the building as well as adding a drive-through.

The current proposal is for a Design Review Permit Modification to modify a single lane drive through to a side-by-side drive through. This includes alterations to adjacent landscape planters and parking.

Figure 1 – Location Map



SITE INFORMATION

Location: 1400 Blue Oaks Blvd.

Total Size: 1.86 acres

Topography and Setting: The site is developed with a co-branded McDonald's restaurant and Chevron gas station. The site is bounded to the south by Blue Oaks Boulevard, to the east by Foothills Boulevard, to the north by a professional office center, and to the west by a commercial center.

EVALUATION: DESIGN REVIEW PERMIT

In order to approve a Design Review Permit Modification, the following two findings must be made:

- 1. The proposed modification is in substantial compliance with the intent of the original approval, prior conditions of approval, and all applicable design, development and improvement standards in effect as of the date of application for the modification.***

No changes to the site grading, building elevations, or building locations, which were approved as part of the original Design Review Permit, will occur with this project. The applicant proposes to modify the drive through to add a second ordering lane at the entrance of the drive through near the northern property boundary. The two ordering lanes will then merge into one single lane after the menu boards which will lead to the pick-up window. The second ordering lane will accommodate four additional vehicles, bringing the queuing capacity of the drive through to fourteen. Staff anticipates that the additional lane will improve the drive through circulation and prevent queuing cars from blocking the existing parking lot drive aisle. The modification will not change the primary function of the restaurant or result in a traffic increase, and is consistent with the intent of the original approval.

- 2. The proposed modification is in compliance with all standards and requirements of the City's Zoning Ordinance, with the applicable goals, policies and objectives set forth in the General Plan, and the applicable Community Design Guidelines.***

The site will be modified to create an additional drive through ordering lane. The result will be two ordering lanes running parallel to each other along the north property line then merging into one lane after the menu boards. The existing menu boards will be removed and replaced with new menu boards for each lane. Construction of the new ordering lanes will require the removal of one existing parking space and associated landscaping. In addition, landscaping will be removed along the northern property boundary to accommodate the second ordering lane. The proposed changes are consistent with all applicable standards, only those sections that warrant further discussion are listed below.

Parking

The redesigned drive through will require the removal of one parking space. Pursuant to the Zoning Ordinance parking requirements for fast food restaurants with a drive through (1 per 100 square feet), the number of spaces required for the 3,176 square-foot restaurant is 32. The McDonalds restaurant building also contains a co-branded 3,067 space Chevron gas station with a parking requirement of 10 spaces. These two uses share a single parking area with a total of 72 spaces provided. With the removal of one parking space with the proposed project there will now be 71 parking spaces provided. The two uses on the site have a combined parking requirement of 42 spaces. Therefore, a 29 space parking surplus will remain on site.

Landscaping

Landscaping, adjacent to the proposed drive through, will be removed to install the proposed improvements as discussed above. The landscaping to be removed consists of four Chinese Pistache trees and adjacent shrubs. The landscape areas along the northern property boundary will be reduced in width to accommodate the additional drive through lane. The four trees will be replaced on-site. Three replacement Chinese Pistache and one Crape Myrtle will be planted adjacent to the drive-through. With replacement of the removed landscaping, the project remains consistent with the previously approved Design Review Permit.

CONCLUSION

The proposed modifications are in substantial compliance with the intent of the original approval, and the modifications comply with the applicable goals, policies, and objectives of the Community Design Guidelines. As such, staff supports the modifications as outlined above. Section 19.78.060(J) of the Zoning Ordinance requires two findings of fact be made in order to approve a Design Review Permit Modification. Based on the analysis contained in this staff report and with the project conditions, the required findings for approval can be made.

PUBLIC OUTREACH

The proposed project was distributed to the various agencies and departments which have requested notice of City applications. Notice of the application was also distributed to the Roseville Coalition of Neighborhood Associations. A notice of intent to approve the project at a staff level was sent to property owners within three hundred feet of the project and to the Roseville Coalition of Neighborhood Associations. A request for public hearing was received by Michael Garabedian, as noted above. Public notice of the Planning Commission hearing was published on May 1, 2020, and was distributed to all property owners within 300 feet of the project site. To date, only those comments provided by Mr. Garabedian have been received.

Mr. Garabedian submitted two emails outlining his concerns with the project (Attachment 1 and Attachment 2). The concerns in both emails are provided below (in bold), followed by a staff response.

Garabedian Email #1 (Attachment 1):

The use of CEQA Section 15301, Existing Facilities exemption is not allowed.

As addressed in the Environmental Determination section of the staff report (see below), the project includes a request to add a second drive through ordering lane, but does not include an increase in the square footage of the drive through fast food restaurant. The environmental impacts associated with the proposed project are calculated using the square footage of the fast food restaurant building and are not based on the configuration of the drive through lane. The proposed project meets the criteria for a CEQA Section 15301, Existing Facilities exemption.

The proposed project will result in increased idling time by cars in the expanded drive through and will result in an increase in vehicle emissions.

The applicant's goal for this project is to reduce the time a customer spends in the drive through lane. The applicant provided information stating that average time spent in the drive through by customers between ordering and receiving their meal, known as OEPE (Order End Present End) is reduced by 1 minute and 20 seconds (from an average of 4 minutes 30 seconds to an average of 3 minutes and 10 seconds) with implementation of the side by side drive through model. This equates to a thirty percent reduction in idling time in the drive through with implementation of a second drive through ordering lane.

Garabedian Email #2 (Attachment 2):

It's not clear that the three trees will be removed to widen to two lanes...

As described above, four trees are proposed to be removed to allow for the construction of the second drive through ordering lane. The applicant has proposed a like for like replacement of these four trees at a new location adjacent to the drive through lane.

It looks like the widening lane will reduce the south bound arrow-marked lane.

The drive aisle to the north of the project will be reduced to 22 feet in areas that do not provide access to parking, meeting City parking lot design standards. This drive aisle will be 28 feet wide where it is used as access to parking, which exceeds the vehicle back up requirement of 24 feet.

There is no traffic to the orders place and windows in the lot closest to the McDonald's entrance; an arrow takes cars to the east side of a barrier and not through there, so parking there is not blocked.

This comment is unclear, however, the project will increase the amount of stacking capacity in the drive through from 10 to 14 cars. This will reduce the likelihood of parked cars being blocked by customers using the drive through lanes.

Cars also enter from the "alley" and north-south street, so there are two entrances, this one not through a parking area. Then the two ways to enter the property merge before the order place.

The overall circulation of the parking lot is not proposed to be altered with this project. One entrance to the drive through lane will remain. Staff finds that the existing circulation on-site is adequate.

There are two order places now. It looks like the hang up/slowdown is at the two pick up windows. There does not seem to be enough pick up to keep up with the two order kiosks. The two approaches do meet before entering the order places.

The two existing menu boards are located linearly within one existing drive through lane. The construction of a second drive through ordering lane and side by side menu boards is proposed to reduce the overall wait time for customers. As described above, the applicant has provided information showing that the average time a customer spends in the drive through will be reduced by 1 minute and 20 seconds, or by 30 percent with implementation of the side by side ordering system. The proposed project is intended to make the drive through more efficient and reduce the overall idling time for vehicles.

I don't see interference with parking by the line now, though this may because people can't go inside.

The comment is unclear, however the proposed project is intended to reduce the potential for vehicles stacking in the drive through to block the existing parking stalls.

It seems that McDonald's has no info on the waiting time before getting to order.

The comment is correct that the applicant has not supplied data regarding how long a customer must wait to reach the menu board. The intent of the project is to construct a second drive through ordering lane and a second menu board, thereby reducing the amount of time a customer must wait to reach a menu board and reducing the overall time spent in the drive through lane.

ENVIRONMENTAL DETERMINATION

This project is exempt from the provisions of the California Environmental Quality Act (CEQA) per Section 15301, Existing Facilities, and pursuant to Section 305 of the City of Roseville CEQA Implementing Procedures.

The Section 15301, Existing Facilities exemption consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The key consideration of this exemption is whether the project involves negligible or no expansion of use. The proposed addition of a second ordering lane and the associated modifications to the existing parking lot and landscaping does not by itself result in an expansion of the use of the site, which is an existing fast food drive through restaurant. The drive through restaurant building is not increasing in square footage, which is the basis for calculating environmental impacts associated with the project, including trip generation and air quality. Trip generation for a fast food restaurant is calculated based on the square footage of the building and is not impacted by the number of ordering lanes or menu boards. Air quality impacts are then calculated using the trip generation numbers associated with the project. In this case, the square footage of the fast food restaurant is not increasing, therefore the project will not increase trip generation or air quality impacts associated with a drive through restaurant. The intent of the project is to decrease the overall time drive through customers wait in the drive through lane. As described above, the applicant has provided information showing that the average time a customer spends in the drive through will be reduced by 1 minute and 20 seconds, or by 30 percent with implementation of the side by side ordering system.

RECOMMENDATION

The Planning Division recommends the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact as stated above and approve the **DESIGN REVIEW PERMIT MODIFICATION – NIPA PCL 28 – McDonalds Drive-Thru Alteration – 1400 Blue Oaks Boulevard – FILE # PL20-0022** subject to three (3) conditions of approval.

CONDITIONS OF APPROVAL FOR DESIGN REVIEW PERMIT FILE # PL20-0022

1. This Design Review Permit Modification approval shall be effectuated within a period of two (2) years from this date and if not effectuated shall expire on **May 14, 2022**. Prior to said expiration date, the applicant may apply for an extension of time, provided this approval does not extend the expiration beyond **May 14, 2023**.
2. The project is approved as shown in **Exhibit A** and as conditioned or modified below. (Planning)
3. The project is subject to the previously approved conditions of approval for the McDonald's Remodel (File #DRPMOD 00-27) and the Chevron Design Review Permit (File #DRP 98-15). (Planning)

Attachments

1. Garabedian Email #1
2. Garabedian Email #2

Exhibits

- A. Plans

Note to Applicant and/or Developer: Please contact the Planning Division staff at (916) 774-5276 prior to the Commission meeting if you have any questions on any of the recommended conditions for your project. If you challenge the decision of the Commission in court, you may be limited to raising only those issues which you or someone else raised at the public hearing held for this project, or in written correspondence delivered to the Planning Manager at, or prior to, the public hearing.

Attachment 1

From: [Michael Garabedian](#)
To: [Morales, Sean](#)
Subject: Fwd: Hearing request for NIPA PCL 28 McDonald's 2nd Drive-Thru lane (for forward)
Date: Thursday, March 26, 2020 5:14:16 PM

EXTERNAL: This email originated from outside of the organization. Do not click on any links or open attachments unless you recognize the sender and know the content is safe.

Some typos are corrected here.

Begin forwarded message:

From: Michael Garabedian <michaelgarabedian@earthlink.net>
Subject: Hearing request for NIPA PCL 28 McDonald's 2nd Drive-Thru lane
Date: March 26, 2020 at 4:50:43 PM PDT
To: "Morales, Sean" <smorales@roseville.ca.us>

Re: Placer County Tomorrow request for hearing

To:
Sean Morales
Assistant Planner
Development Services Department

In response to the Notice of Intent to approve the modification to the McDonald's Blue Oaks Boulevard Design Review Permit, Placer County Tomorrow requests a hearing.

It is essential for this hearing request that we see the original McDonald's application(s), file(s) and approval documents as we requested March 20. I understand that these do not exist for the modification request except for the plot plan you provided.

Issue delineation

The U.S. Department of Energy states that eliminating the idling of car engines would be the same as taking 5 million vehicles off the roads.

A decision on this modification requires attention and review by city staff to review and assess project approval resulting in increased:

- Air pollution
- Greenhouse gas emissions
- McDonald's Window worker exposure to exhaust
- Driver exposure to exhaust
- Heat
- Between lane car accidents.
- Small crowded fast food places that do not have enough tables for their

Attachment 1

usual walk-in crowds are a problem that should be addressed and not encouraged in this manner.

Also at issue are McDonald Roseville and State of California policies:

- The expansion is not in conformity with the approved permit
- There is no explanation about the history of this drive through and for what reason it is being sought to justify it
- McDonald's has changed its standards for double lanes, apparently enabling changes including adding lanes
- Restrictions on adding drive through lanes to existing facilities of all kinds are controversial and prohibited in some jurisdictions
- Drive throughs in new facilities are being prohibited in some jurisdictions
- Roseville and PCT want to encourage people to walk and bike.

Because of these environmental and city policy issues, we believe that a hearing is needed and that the permit modification should not be approved.

Categorical exemption

A CEQA Section 15301 Categorical Exemption is not allowable for this permit because it is not "negligible or no expansion of use."

"Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The types of "existing facilities" itemized below are not intended to be all-inclusive of the types of projects which might fall within Class 1. The key consideration is whether the project involves negligible or no expansion of use."

Section 15301 also specifically prohibits a categorical exemption for a project that adds lanes:

"(c) Existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities (this includes road grading for the purpose of public safety, and other alterations such as the addition of bicycle facilities, including but not limited to bicycle parking, bicycle-share facilities and bicycle lanes, transit improvements such as bus lanes, pedestrian crossings, street trees, and other similar alterations that do not create additional automobile lanes)."

No applicable exemption for the modification can be found in the Roseville CEQA Implementing Procedures Section 305

It doesn't appear that any alternations to existing buildings are exempted from CEQA under Section 305, and this involves a commercial building.

Attachment 1

The modification is not a building alteration as such, but is a change in the routing, passage and idling of automobiles.

There can be no doubt that this is an expansion of use. If it is believed to be negligible, to obtain a categorical exemption there at least needs to be an explanation of how this expansion is negligible.

The expansion could be expected to as much as double the automobile emissions by encouraging more cars to use the Drive Thru than do now. For example lines would appear shorter.

This permit has environmental impacts that need to be identified and addressed with mitigation.

Roseville CEQA Implementing Procedures

This is not a minor alteration to existing buildings

An initial step for this project is to complete an environmental assessment for it.

We asked for the application for this and its file. You have sent the plans and we understand that there is no application or file for it.

Automobile idling issues and impacts

Vehicle emissions contain gasses including carbon dioxide, which contributes climate change, as well as harmful pollutants nitrogen dioxide, carbon monoxide and hydrocarbons.

PCT consulted with an expert on vehicle idling, and this is his response:

I can assure you that when an engine is idling, even an up-to-date, state-of-the-art modern engine, its exhaust - before it reaches the catalytic converter(s) - is at its dirtiest, because no engine designed to produce a combination of power, torque and good mileage runs as well at idle as it does once you're rolling down the freeway, i.e. aside from cold engine start-up, the engine's dirtiest exhaust - HC, CO, NOx, PM10, etc. etc. - is while it's warming up. Once it's warmed up, and you're on your way, out on the road or freeway, driving at the speed limit, the emissions go down significantly, unless you have to slow down in stop-and-go traffic and/or stop completely for a stop sign or a red light.

Put this all together, and you have get heavier tailpipe emissions at idle at a stop sign or traffic light or waiting for someone in front of you to accelerate or turn, from a stop. But these are relatively momentary low-speed phases of a typical driving cycle. When you're driving through the incessant stop-and-go of a traffic jam, heavy traffic, a drive-through, etc. etc. the tailpipe emissions for that trip increase dramatically, because the catalytic converter(s) operate at its/their best when the hot exhaust is flowing steadily through the cat(s). Catalyst efficiency is affected by other modalities (unburned hydrocarbons in the exhaust when a cold engine is still warming up, stop-and-go driving in heavy traffic, etc. etc.). The

Attachment 1

catalyst(s) - some vehicles with a V6 or V8 might have two exhaust pipes, and therefore TWO catalysts, one in each exhaust pipe - performs optimally when the engine is fully warmed up, and you're running down the road at a steady speed.

With respect to low-speed tailpipe emissions at, say, a drive-in food joint or a drive-through bank teller window, the driver usually isn't aware of the problem until he/she takes the car in to be smogged. Once an engine is warmed up, all apparatus in the tailpipe(s) - catalytic converter(s), etc. - are also warmed up and fully functional. So, if the vehicle has been smogged, in theory they're probably doing their job, unless something is starting to wear out and malfunction, a catalyst, for example, and cats do wear out. They're subjected to extraordinary exhaust heat, so if you keep a vehicle long enough you will have to replace the cat(s) at some point. And that's one probable cause of the symptom you mention below, i.e. gradually increasing tailpipe emissions caused by a failing catalyst and/or a failing oxygen sensor (another device that is subjected to high temperatures and eventually fails), or any other device in the exhaust stream, which is a pretty hot and harsh environment. In my own experience, catalysts are fairly robust, but oxygen sensors do eventually malfunction on older, high-mileage vehicles. When that happens, it "sets a code," as we call it, turning on the Check Engine light. It also affects the fuel system's ability to deliver the correct air/fuel ratio, so it has to be fixed sooner rather than later.

Conclusion

Approving this modification could generate similar applications for other existing and new drive through of all kinds.

Stop and go waiting needs to be curtailed. If conditions on the permit that eliminate impacts are possible, such as waiting areas with controlled stop and go lights and mandated engine shut off until an order window is available, they might be considered.

Design requirements for new businesses or alteration of existing ones might facilitate drive up or drive through pick up after ordering a certain time period in advance so there is only one stop and go event.

But what about walking and enough tables for customers to be seated at tables while waiting?

We would like to review the files of the permit that is proposed to be modified and the DRPMOD.

We'd like an opportunity to discuss these issues with you.

Michael Garabedian
Placer County Tomorrow Co-Founder
916-719-7296

Attachment 2

From: [Michael Garabedian](#)
To: [Bitter, Greg](#)
Cc: [Ogden, Derek](#); [Morales, Sean](#)
Subject: Re: McDonald's Drive Thru hearing
Date: Wednesday, April 22, 2020 2:03:45 PM

EXTERNAL: This email originated from outside of the organization. Do not click on any links or open attachments unless you recognize the sender and know the content is safe.

Greg,

I don't want to proceed without the information requested.

Did you send the original permit information and file?

I don't have a current layout and it's not possible to see what is being changed without the original.

I don't think that I have a full sheet to what is proposed now.

It's not clear that the three trees will be removed to widen to two lanes, but it looks like it.

It looks like the widening lane will reduce the south bound arrow-marked lane.

—

There is no traffic to the orders place and windows in the lot closest to the McD entrance; an arrow takes cars to the east side of a barrier and not through there, so parking there is not blocked.

Cars also enter from the "alley" and north-south street, so there are two entrances, this one not through a parking area.

Then the two ways to enter the property merge before the order place.

There are two order places now.

It looks like the hang up/slow down is at the two pick up windows. There does not seem to be enough pick up to keep up with the two order kiosks.

The two approaches do meet before entering the order places.

I don't see interference with parking buy the line now, though this may because people can't go inside.

It seems that McD has not info on the waiting time before getting too order.

—

It looks like the any problems that existed before the new virus are because of a bad initial design.

Mike

> On Apr 22, 2020, at 10:28 AM, Bitter, Greg <GBitter@roseville.ca.us> wrote:
>

Attachment 2

> Mike,
>
> Have you had time to review this information and determine if you want to proceed with a hearing before the Planning Commission. We will be sending out the required public notices tomorrow if we do not hear from you. Feel free to give me a call if you have any questions. My cell is 916-508-6871.
>
> Greg
>
> Gregory W. Bitter, AICP
> Planning Manager
> Development Services Dept.- Planning Division
> o: (916) 774-5294
> f: (916) 774-5129
> Working together to build a quality community.
>
> Civic Center | 311 Vernon Street | Roseville, CA | 95678
>
>
>
> -----Original Message-----
> From: Bitter, Greg
> Sent: Thursday, April 16, 2020 4:42 PM
> To: Michael Garabedian <michaelgarabedian@earthlink.net>
> Cc: Ogden, Derek <DOgden@roseville.ca.us>; Morales, Sean (SMorales@roseville.ca.us)
<SMorales@roseville.ca.us>
> Subject: FW: McDonald's Drive Thru hearing
>
> Mike,
>
> I'm sorry it's taken so long to get you this information. As you can see below, the side by side drive through design for McDonalds reduces the wait time for cars by approximately 80 seconds. This is a little more efficient than I thought it would be, but you can see that the addition of the side by side drive through has the ability to significantly reduce idling time in the drive through lane.
>
> Let me know if this data helps you understanding of the project and whether or not you want to continue with your request for a public hearing before the Planning Commission.
>
> Please let me know if you have any other questions.
>
> Greg
>
> Gregory W. Bitter, AICP
> Planning Manager
> Development Services Dept.- Planning Division
> o: (916) 774-5294
> f: (916) 774-5129
> Working together to build a quality community.
>
> Civic Center | 311 Vernon Street | Roseville, CA | 95678
>
> -----Original Message-----
> From: Mcauley Kevin <kevin.mcauley@us.mcd.com>
> Sent: Thursday, April 16, 2020 3:12 PM
> To: Morales, Sean <SMorales@roseville.ca.us>; Mccarthy Brian <brian.mccarthy@us.mcd.com>
> Subject: RE: McDonald's Drive Thru hearing
>
> EXTERNAL: This email originated from outside of the organization. Do not click on any links or open

Attachment 2

attachments unless you recognize the sender and know the content is safe.

>

>

> Hi Sean,

>

> Here is some info on a side by side versus the existing single lane.

>

> •Average monthly OEPE time for SBS store during 2017 was 190 seconds (3:10 minutes). Single lane DT was close to 270 seconds (4:30 minutes).

>

> oHow the OEPE time is calculated: time starts when the order taking process completes (employee presses Total for the order). Time ends when the order is presented to the customer (crew hits Serve on the drive-thru monitor)

>

> Kevin McAuley

> McDonald's USA

> Walnut Creek Development Team

> Construction Manager

> Cell: 858-342-3536

> eFax: 702-543-2733

> kevin.mcauley@us.mcd.com

>



ROSEV-BLUE OAKS/FOOTHILL
DOUBLE DRIVE THRU UPGRADE

DRAWING INDEX

CVR	COVER SHEET
SP0	DEMOLITION SITE PLAN
SP1	SITE PLAN
SP2	ENLARGED SITE PLAN
SD2	DRIVE THRU GATEWAY & DOUBLE FACE DIRECTIONAL SIGNS
L1	LANDSCAPE PLAN
ODMB-1	DIGITAL MENU BOARDS (REFERENCE)
ODMB-2	DRIVE THRU REFERENCE

PROJECT INFORMATION

ADDRESS:

STATE SITE CODE: 004-3621
STREET ADDRESS: 1400 BLUE OAKS BLVD.
CITY: ROSEVILLE
COUNTY: SACRAMENTO
STATE: CALIFORNIA

SITE DATA:

ZONING: CC – COMMERCIAL

A.P.N.:
017-250-052

AREA: 80,849 SF (1.86 AC)

PARKING EXISTING	72 STALLS
PROPOSED PARKING:	71 STALLS

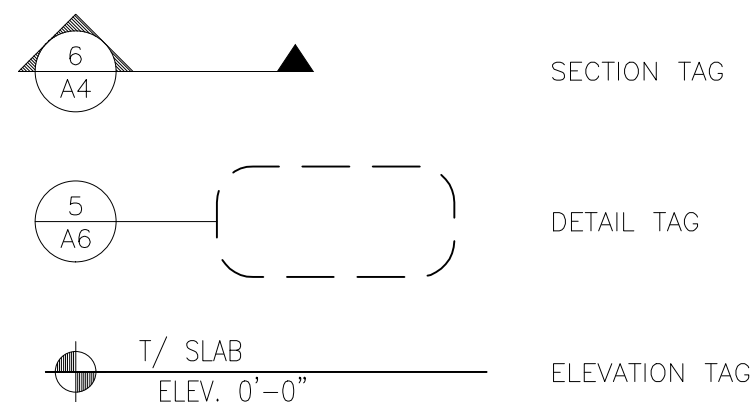
BUILDING DATA:

OCCUPANCY: USE GROUP A2
CONSTRUCTION TYPE: VB
NUMBER OF STORIES: 1
BUILDING HEIGHT: 18'-0" (PARAPET)
BUILDING AREA: ±6,243 S.F.

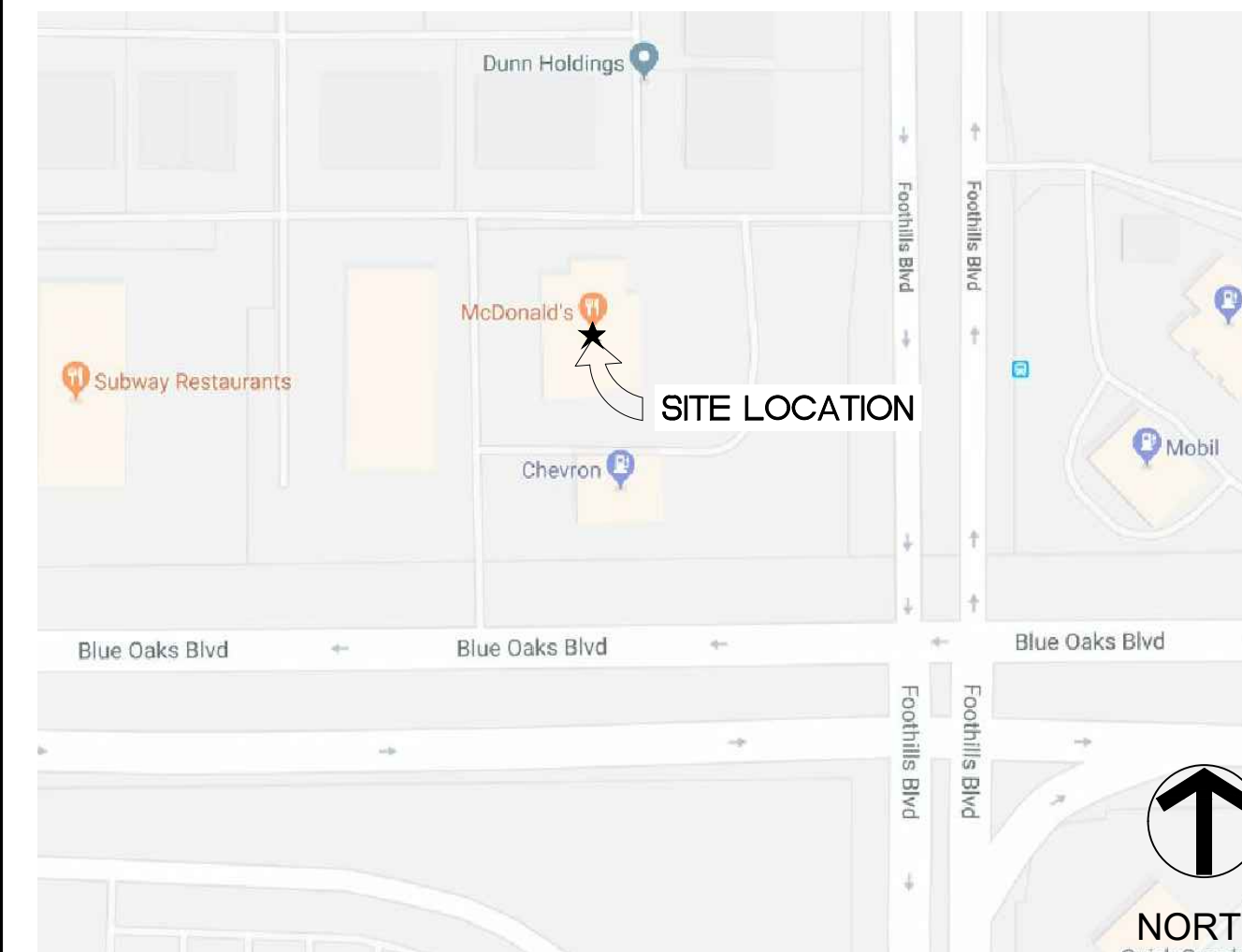
SCOPE OF WORK:

- (N) DOUBLE DRIVE THRU LAYOUT
- MINOR SITE IMPROVEMENTS REPLACING THE (E) DRIVE THRU EQUIPMENT W/ (N) EQUIPMENT INCLUDING DIGITAL PRE BROWSER AND MENU BOARD AND (N) SITE BRANDING

SYMBOL LEGEND:

VICINITY MAP

AREA MAP



DESIGNER OF RECORD:

DISCIPLINE:	NAME	REPRESENTATIVE	ADDRESS	PHONE #
ARCHITECT:	PM DESIGN GROUP INC.	HALA IBRAHIM	3860 BROADWAY DRIVE, STE. 110, AMERICAN CANYON, CA 94503	(925) 222-1673
LANDSCAPE:	LANDSCAPE ARCHITECT	ROD SCACCALOSI	P.O. BOX 2083, PETALUMA, CA 94952	(707) 280-8990
CONSTRUCTION MGR.:	MCDONALD'S USA LLC	MANDIE BAYLESS	2999 OAK ROAD SUITE 900 WALNUT CREEK, CA 94597	(858) 247-3011

[illegible]

Professional of Record:



Architectural
Solutions Group

55 Bennett Valley Rd.
Suite C-102
Santa Rosa, CA. 95404

real

[illegible]

 McDonald's USA, LLC

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SYD	ISSUE DATE	—
REVIEWED BY	THH	—
DATE ISSUED	03/04/20	—
SITE TO	SITE ADDRESS	
004-3621	1400 BLUE OAKS BLVD. ROSEVILLE, CA 95747	

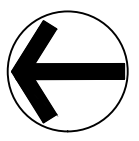
CVR
COVER SHEET

LE: $1'' = 20' - 0''$



BLUE OAKS BLVD.

(E) COMMERCIAL



NORTH

GENERAL NOTES

1. CONTRACTOR TO VERIFY WITH OWNER/OPERATOR REGARDING THE SALVAGING OF ANY ITEMS TO BE REMOVED.
2. CONTRACTOR TO REFER TO CITY / COUNTY PROCEDURES FOR THE REMOVAL OF EXISTING TREES IF REQUIRED.
3. CONTRACTOR SHALL COMPLETELY REMOVE ALL EXISTING LANDSCAPING AS DIRECTED, INCLUDING (BUT NOT LIMITED TO) ALL PLANTING, TREES (UNLESS DESIGNATED FOR SALVAGE), IRRIGATION LINES, VALVES, DRIP IRRIGATION, SPRINKLER HEADS AND ALL ASSOCIATED EQUIPMENT. SEE LANDSCAPE DRAWINGS FOR REFERENCE.
4. CONTRACTOR SHALL COMPLETELY REMOVE EXISTING SIGNAGE (INCLUDING DIRECTIONAL SIGNAGE), SIGHT LIGHTING INCLUDING ALL FOOTINGS, ELECTRICAL WIRING AND CONDUITS AND ASSOCIATED EQUIPMENT.
5. CONTRACTOR SHALL DISPOSE OF ALL WASTE ITEMS, AND ITEMS TO BE RECYCLED IN ACCORDANCE WITH AND ANY APPLICABLE CITY & COUNTY CODES AND OR AMENDMENTS.
6. G.C. TO PROTECT (E) UTILITY LINES DURING DEMOLITION AND CONSTRUCTION OF PROJECT. REPORT AND DISCREPANCIES TO THE ATTENTION OF ARCHITECT AND/OR McDONALD'S REPRESENTATIVE.

PLAN LEGEND

	= CENTER LINE		= POINT OF CURVATURE
COL.	= COLUMN	R.	= RADIUS
(E)	= EXISTING	R.O.W.	= RIGHT OF WAY
F.O.C.	= EQUAL	SHT.	= SHEET
F.O.S.	= FACE OF CURB	SM.	= SIMILAR
F.O.F.	= FACE OF STUD	TYP.	= TYPICAL
(N)	= FACE OF FOUNDATION	FSE	= FINISH SLAB ELEVATION
	= NEW		

		. PROPERTY LINE
		. (E) TO REMAIN
		. TO BE REMOVED
		. (E) PAVEMENT TO BE REMOVED
		. NOT IN CONSTRUCTION (N.I.C.)

03/05/20

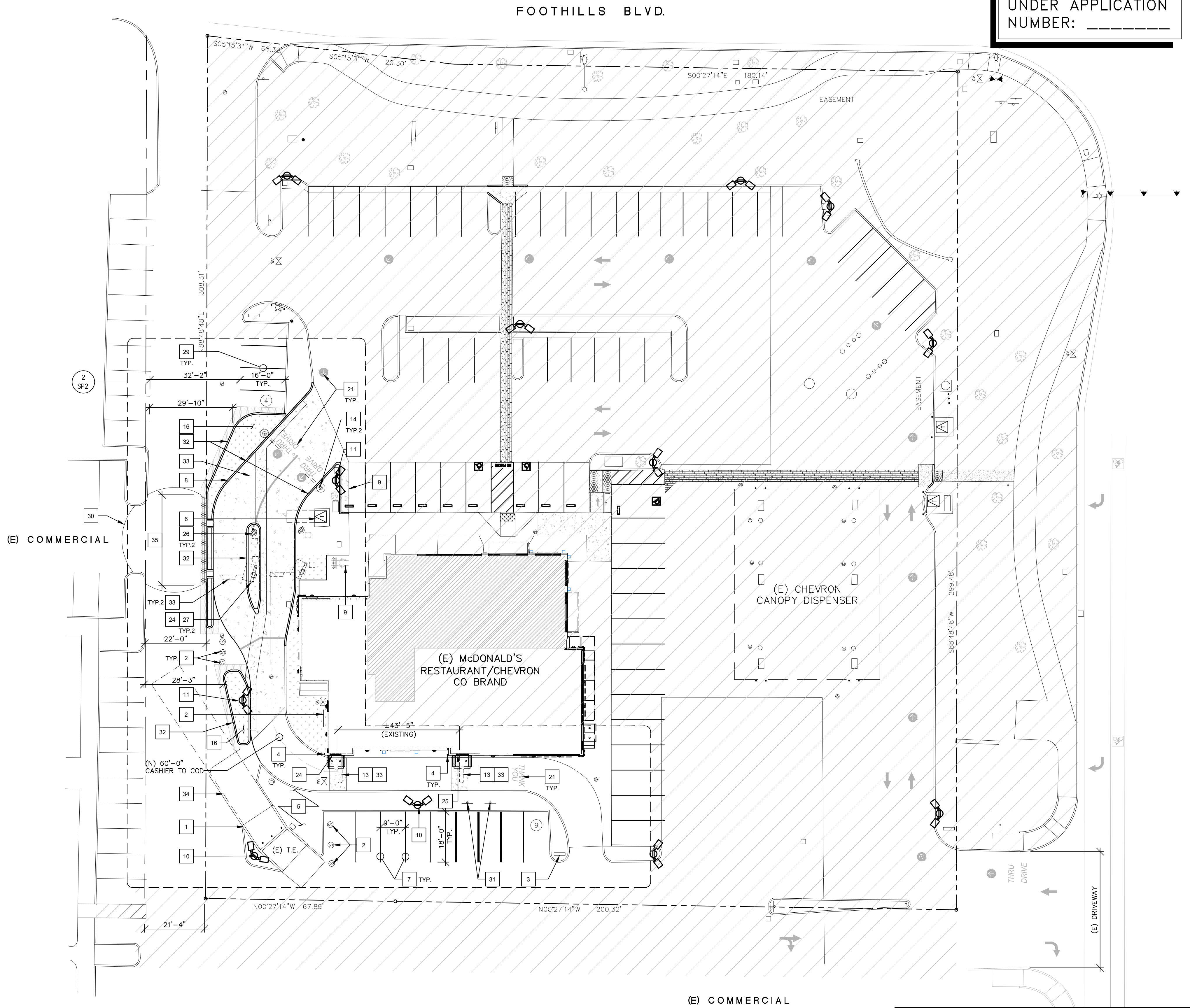
—	STD ISSUE DATE	—
	REVIEWED BY	HII
	DATE ISSUED	03/04/20

SP0
DEMOLITION SITE PLAN

SITE ID	SITE ADDRESS
2024-7004	1400 BLUE OAKS BLVD ROSEVILLE CA 95747

PLAN

M:\MCDONALD'S_1400\2018MCD18243.0 MRP ROSEY BLUE 001-DRAWINGS CURRENT\01-ARCHITECTURAL\02-PLANNING\SSS - PLANNING SET\00_18243.0_SPT DWG 3/20/20 11:41 AM CEDRIC BROOKS



WORK APPROVED
UNDER APPLICATION
NUMBER: _____

KEYNOTES

MARK	DETAIL
1	(E) TRASH ENCLOSURE TO REMAIN. PAINT TO MATCH BUILDING MAIN COLOR.
2	(E) UTILITIES TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION.
3	(E) MCD DRIVE-THRU DIRECTIONAL / INFORMATIONAL SIGN TO REMAIN.
4	(E) BOLLARD TO REMAIN. PAINT SAFETY YELLOW (TYP.)
5	(E) LANDSCAPE TO REMAIN. REFRESH AS NEEDED TO MATCH (E).
6	(E) TRANSFORMER TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION.
7	RESTRIPE PARKING STALLS PER CITY STANDARD (TYP.)
8	(N) ASPHALT OVERLAY
9	(E) BIKE RACK
10	(E) YARD LIGHT w/ (N) LIGHT FIXTURES (TYP.)
11	(N) YARD LIGHT
12	(E) CONCRETE PAVEMENT TO REMAIN.
13	(E) VEHICLE DETECTOR LOOP TO REMAIN.
14	(N) VEHICLE CLEARANCE BAR. UNDER SEPARATE PERMIT. SEE SIGN PACKAGE.
15	(N) CONCRETE FILLED BOLLARD (TYP.)
16	(N) LANDSCAPING
17	5'-0" x 5'-0" CLEAR LEVEL LANDING/ 2% MAXIMUM CROSS SLOPE IN ANY DIRECTION. (TYP.)
18	(E) ACCESSIBLE ROUTE OF CONCRETE PAVERS TO REMAIN. WALK TO BE FREE FROM ABRUPT CHANGES IN LEVEL OF MORE THAN 1/4". WALK NOT TO EXCEED 5% SLOPE IN THE DIRECTION OF TRAVEL. 2% CROSS SLOPE.
19	(N) CONCRETE OVERLAY
20	(N) STREET GRAPHICS TO BE APPLIED AS SHOWN
21	(N) D/T GRAPHICS TO BE APPLIED AS SHOWN (TYP.)
22	(N) ACCESSIBLE CONC. CURB CUT RAMP.
23	(N) DETECTABLE WARNING SURFACE. (TYP.)
24	(N) FORREST PERMA INFORMATIONAL SIGN #777 AT ORDER STATION.
25	(N) FORREST PERMA INFORMATIONAL SIGN #778 AT PRESENTER WINDOWS.
26	(N) DIGITAL PRE-BROWSE BOARD. UNDER SEPARATE PERMIT BY OTHERS.
27	(N) DIGITAL MENU BOARD INTEGRATED w/ SPEAKER. UNDER SEPARATE PERMIT BY OTHERS.
28	(N) CONCRETE SIDEWALK. WALK TO BE FREE FROM ABRUPT CHANGES IN LEVEL OF MORE THAN 1/4". WALK NOT TO EXCEED 5% SLOPE IN DIRECTION OF TRAVEL & 2% CROSS SLOPE.
29	PATCH AND REPAIR (E) ASPHALT AS NEEDED SLURRY SEAL PARKING LOT AND RE-PAINT PARKING STALLS AND PAVEMENT BRANDING. (TYP.) COORDINATE EXTEND WITH MCD.
30	(E) STAMPED CONCRETE
31	(N) PULL FORWARD SIGN (TYP.). UNDER SEPARATE PERMIT BY OTHERS
32	(N) CONCRETE CURB.
33	(N) CONCRETE PAVING & VEHICLE DETECTOR LOOP (TYP.)
34	(E) 60' BACKUP SPACE FOR TRASH ENCLOSURE
35	(N) HEAVY DUTY CONCRETE PAVERS, FINISH AND COLOR TO MATCH EXISTING.
36	(N) CONCRETE VALLEY GUTTER

SITE DATA

EXISTING USE: RESTAURANT
PROPOSED USE: RESTAURANT
ZONING: CC COMMERCIAL
SITE AREA: 80,849 S.F. (1.86 AC)
EXISTING OVERALL BUILDING AREA: ± 6,243 S.F.
PARKING REQUIRED: 1 STALL FOR EACH 100 SF OF GROSS FLOOR AREA
EXISTING 63 STALLS TO REMAIN (NO CHANGE)

ASSESSOR'S PARCEL NUMBER: 017-250-052

PARKING INFORMATION (PROPOSED)

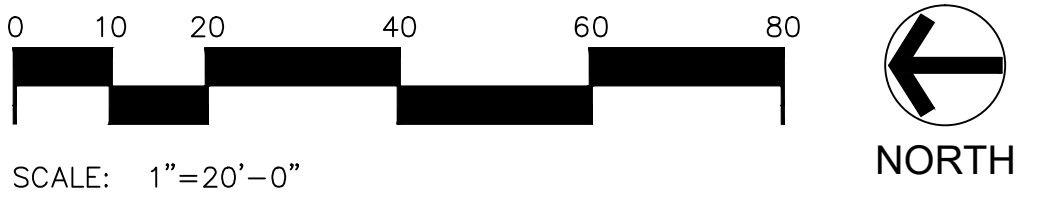
TOTAL SPACES	ACCESSIBLE	3 SPACES	9' X 18' & 19' @ 90°
71	STANDARD	64 SPACES	9' X 18' & 19' @ 90°
	COMPACT	4 SPACES	8' X 16' @ 90°

PLAN LEGEND

- CL = CENTER LINE
- COL = COLUMN
- E = EXISTING
- EQ = EQUAL
- F.O.C. = FACE OF CURB
- F.O.S. = FACE OF STUD
- F.O.F. = FACE OF FOUNDATION
- N = NEW
- P.O.C. = POINT OF CURVATURE
- R = RADIUS
- R.O.W. = RIGHT OF WAY
- SHT. = SHEET
- SIM. = SIMILAR
- TYP. = TYPICAL
- FSE = FINISH SLAB ELEVATION
- (E) CONCRETE CURB
- PROPERTY LINE
- EASEMENT
- ACCESSIBLE PATH OF TRAVEL
- (N) CONCRETE CURB
- (N) CONCRETE PAVING
- (N) SIDEWALK / WALKWAY
- (N) ASPHALT PAVING
- (N) PAVEMENT ARROWS (PAINTED WHITE)
- (N) DRIVE THRU STRIPING (PAINTED YELLOW)

GENERAL NOTES

- SURFACE OF RAMP AND FLARES SHALL BE SLIP RESISTANT AND CONTRASTING FINISH FROM SIDEWALK.
- RAMP SHALL LIE IN SINGLE SLOPE PLANE W/ MIN. SURFACE WARPING AND CROSS SLOPE.
- RAMP LANDING SHALL HAVE A CROSS SLOPE OF 2% MAX. IN ALL DIRECTIONS.
- MAXIMUM SLOPE IN ACCESSIBLE PARKING STALLS & ACCESSIBLE AISLE TO BE 2% IN ANY DIRECTION.
- ALL PARKING LOT IMPROVEMENTS SHALL MATCH SURROUNDING EXISTING GRADES.
- FOR ADDITIONAL INFORMATION REGARDING DRAINAGE & GRADING, CONCRETE CURB, SIDEWALKS & GUTTER DETAILS, SEE CIVIL DRAWINGS.



1 SITE PLAN
SP1 1" = 20'-0"

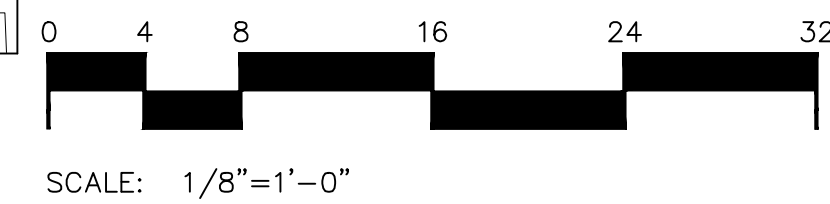
REV	DATE	DESCRIPTION	BY	HI
1	03/04/20	REVISED PER PLANNING		

Professional of Record:

PM DESIGN
Architectural Solutions Group
2455 Bennett Valley Rd.
Suite C-102
Santa Rosa, CA. 95404

STATE OF CALIFORNIA
KENNETH MCCracken
C-32095
Renewal: 6/30/21
LICENSED ARCHITECT
03/05/20
Seal KJM/1912

McDonald's USA, LLC
McDonald's # 25139
ROSEY-BLUEOAKS/FOOTHILL
DESCRIPTION
2018 BB20 - E01F
DATE ISSUED
03/04/20
SITE ID
004-3621
SITE ADDRESS
1400 BLUE OAKS BLVD. ROSEVILLE, CA 95747
SP1
SITE PLAN



DRIVE THRU SIGNAGE PLAN

	DIGITAL MENU BOARD – PRIMARY LANE. – BY OTHERS
1A	IT SHOULD BE AT AN ANGLE OF APPROXIMATELY 25° TO 35° ANGLE (35° PREFERRED) FROM A CAR POSITIONED AT THE COD AND WITH 100% VISIBILITY. DO NOT INSTALL ANYTHING IN THIS AREA, INCLUDING BUT NOT LIMITED TO ANY UTILITY WORK, SPRINKLER SYSTEM, ETCETERA.
1B	ELECTRICAL PULL BOX
	DIGITAL MENU BOARD – SECONDARY LANE. – BY OTHERS
2A	FROM CENTER OF THE COD FOUNDATION WITH THE END CAP OF THE SECONDARY MENU BOARD NOT BE LESS THAN 12" FROM FACE OF CURB. IT SHOULD BE AT AN ANGLE OF APPROXIMATELY 25° FROM A VEHICLE POSITIONED AT THE COD AND WITH 100% VISIBILITY. DO NOT INSTALL ANYTHING IN THIS AREA, INCLUDING BUT NOT LIMITED TO ANY UTILITY WORK, SPRINKLER SYSTEM, ETCETERA.
2B	ELECTRICAL PULL BOX
	DIGITAL PRE-BROWSE BOARD – PRIMARY LANE. – BY OTHERS
3A	PRE-BROWSE BOARD MUST BE 18"–24" FROM FACE OF CURB. THE DISTANCE BETWEEN THE PRIMARY COD AND PRE-BROWSE BOARD IS TO BE 15' AS MEASURED ALONG THE CENTER LINE OF THE LANE. THIS IS MEASURED FROM THE CENTER OF THE PRE-BROWSE BOARD FOUNDATION TO THE CENTER OF THE COD FOUNDATION. THE ANGLE (APPROXIMATELY 50°) OF THE PRE-BROWSE BOARD SHOULD MAXIMIZE VISIBILITY TO THE SECOND CAR FROM COD. DO NOT INSTALL ANYTHING IN THIS AREA, INCLUDING BUT NOT LIMITED TO ANY UTILITY WORK, SPRINKLER SYSTEM, ETCETERA.
3B	ELECTRICAL PULL BOX
	DIGITAL PRE-BROWSE BOARD – SECONDARY LANE. – BY OTHERS
4A	PRE-BROWSE BOARD MUST BE 18"–24" FROM FACE OF CURB. THE DISTANCE BETWEEN THE PRIMARY COD AND PRE-BROWSE BOARD IS TO BE 15' AS MEASURED ALONG THE CENTER LINE OF THE LANE. THIS IS MEASURED FROM THE CENTER OF THE PRE-BROWSE BOARD FOUNDATION TO THE CENTER OF THE COD FOUNDATION. THE ANGLE (APPROXIMATELY 50°) OF THE PRE-BROWSE BOARD SHOULD MAXIMIZE VISIBILITY TO THE SECOND CAR FROM COD. DO NOT INSTALL ANYTHING IN THIS AREA, INCLUDING BUT NOT LIMITED TO ANY UTILITY WORK, SPRINKLER SYSTEM, ETCETERA.
4B	ELECTRICAL PULL BOX

GENERAL NOTES

1. SURFACE OF RAMP AND FLARES SHALL BE SLIP RESISTANT AND CONTRASTING FINISH FROM SIDEWALK.
2. RAMP SHALL LIE IN SINGLE SLOPE PLANE W/ MIN. SURFACE WARPING AND CROSS SLOPE.
3. RAMP LANDING SHALL HAVE A CROSS SLOPE OF 2% MAX. IN ALL DIRECTIONS.
4. MAXIMUM SLOPE IN ACCESSIBLE PARKING STALLS & ACCESSIBLE AISLE TO BE 2% IN ANY DIRECTION.
5. ALL PARKING LOT IMPROVEMENTS SHALL MATCH SURROUNDING EXISTING GRADES.
6. FOR ADDITIONAL INFORMATION REGARDING DRAINAGE & GRADING, CONCRETE CURB, SIDEWALKS & GUTTER DETAILS, SEE CIVIL DRAWINGS.

1. SURFACE OF RAMP AND FLARES SHALL BE SLIP RESISTANT AND CONTRASTING FINISH FROM SIDEWALK.
2. RAMP SHALL LIE IN SINGLE SLOPE PLANE W/ MIN. SURFACE WARPING AND CROSS SLOPE.
3. RAMP LANDING SHALL HAVE A CROSS SLOPE OF 2% MAX. IN ALL DIRECTIONS.
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5. ALL PARKING LOT IMPROVEMENTS SHALL MATCH SURROUNDING EXISTING GRADES.
6. FOR ADDITIONAL INFORMATION REGARDING DRAINAGE & GRADING, CONCRETE CURB, SIDEWALKS & GUTTER DETAILS, SEE CIVIL DRAWINGS.

Professional of Record:

P/M
DESIGN

Architectural
Solutions Group

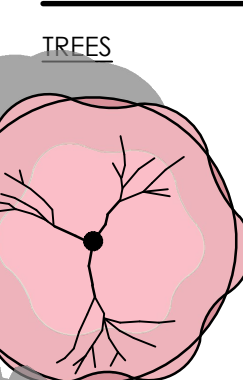
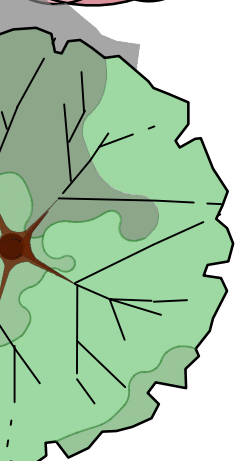
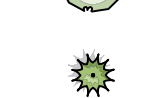
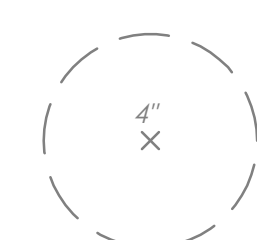
2455 Bennett Valley Rd.
Suite C-102
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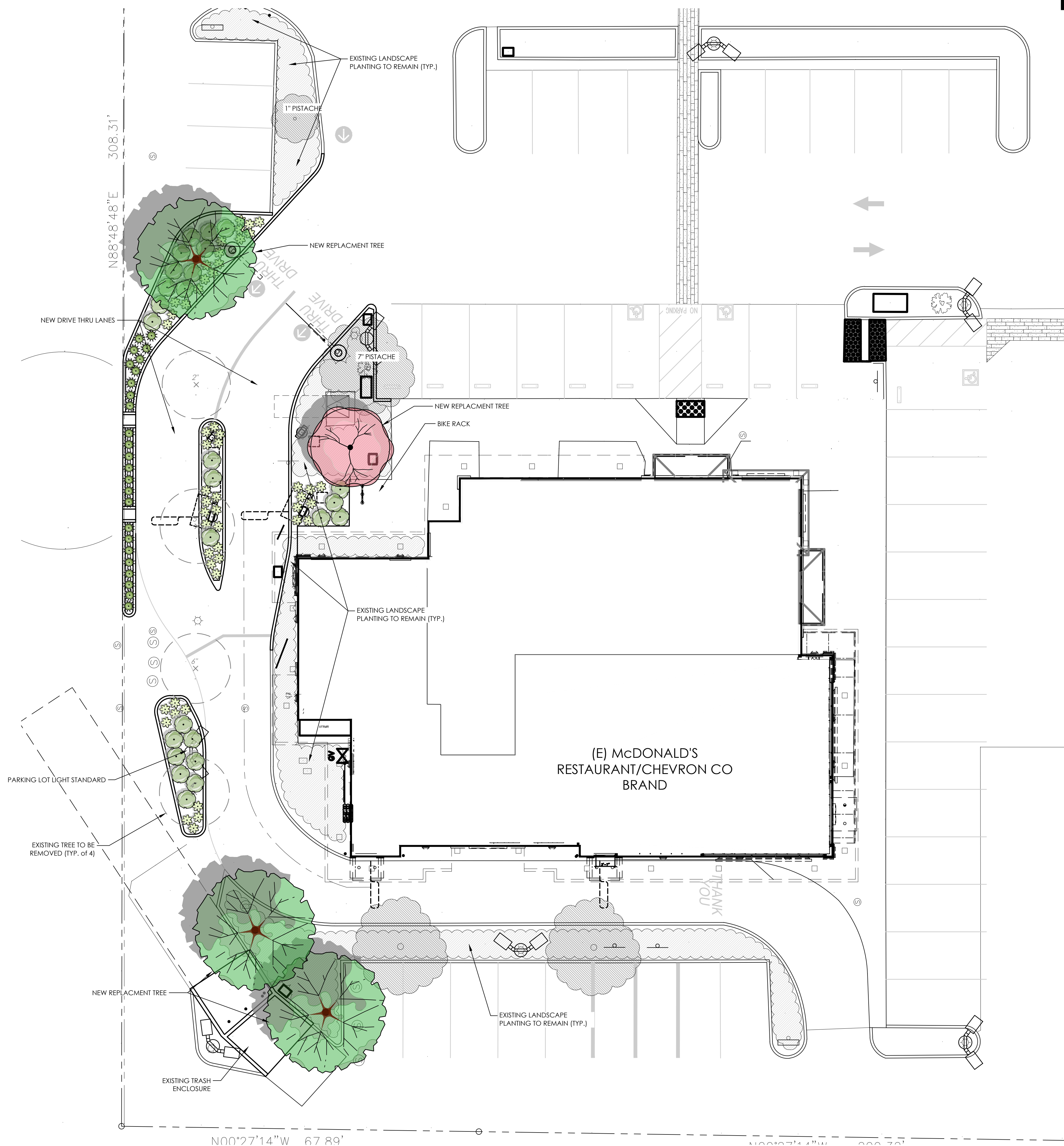
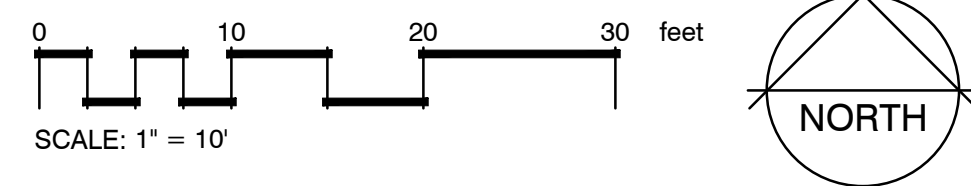
SP2
ENLARGED PLAN

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	CONT	WUCOLS
		Lagerstroemia indica 'Red Rocket' / Crape Myrtle	24" box	Low
	3	Pistacia chinensis 'Keith Davey' / Keith Davey Chinese Pistache	24" box	Moderate
SHRUBS	QTY	BOTANICAL / COMMON NAME	CONT	WUCOLS
	26	Callistemon viminalis 'Little John' / Dwarf Weeping Bottlebrush	5 gal	Low
	25	Dietes x 'Lemon Drop' / Fortnight Lily	1 gal	Low
	51	Hemerocallis x 'Stella de Oro' / Stella de Oro Daylily	1 gal	Low
		EXISTING SHRUBS TO REMAIN		
		EXISTING TREE TO REMAIN		
		EXISTING TREE TO BE REMOVED (4 LOCATIONS)		

GENERAL NOTES

1. All existing trees and shrubs (to remain) shall be protected in place during construction.
2. Proposed Landscape area equals 554 sf
2. All new landscape areas with new plant material shall receive a minimum 3" layer of organic wood chip mulch.
3. Existing irrigation shall remain in place and shall be modified, repaired or upgraded (as necessary) in order to efficiently provide irrigation to new and existing plant material. Irrigation to new plant material shall conform to City of Roseville water conservation standards.



TITLE		DATE	REV	DATE	DESCRIPTION
MCDONALD'S # 25139					
ROSEV—BLUEOAKS/FOOTHILL					
DESCRIPTION					
2018 BB20 — EOTF					
—					
SITE ID					
004—3621					
SITE ADDRESS					
14400 BLUE OAKS BLVD., ROSEVILLE, CA 95747					
DATE ISSUED					
03/04/20					
REVIEWED BY					
HILL					
STD ISSUE DATE					
DRAWN BY					

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McDonald's USA, LLC

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PREPARED FOR:

Professional of Record:



**PM
DESIGN**

Architectural
Solutions Group

2455 Bennett Valley Rd.
Suite C-102
Santa Rosa, CA, 95404

ROD SCACCALOSI
LANDSCAPE ARCHITECT

PO box 2883
Petaluma CA 94952
707-280-8990
OlivesTreeLandscape.com
rod@olivestreetlandscape.com

REVISED PER PLANNING

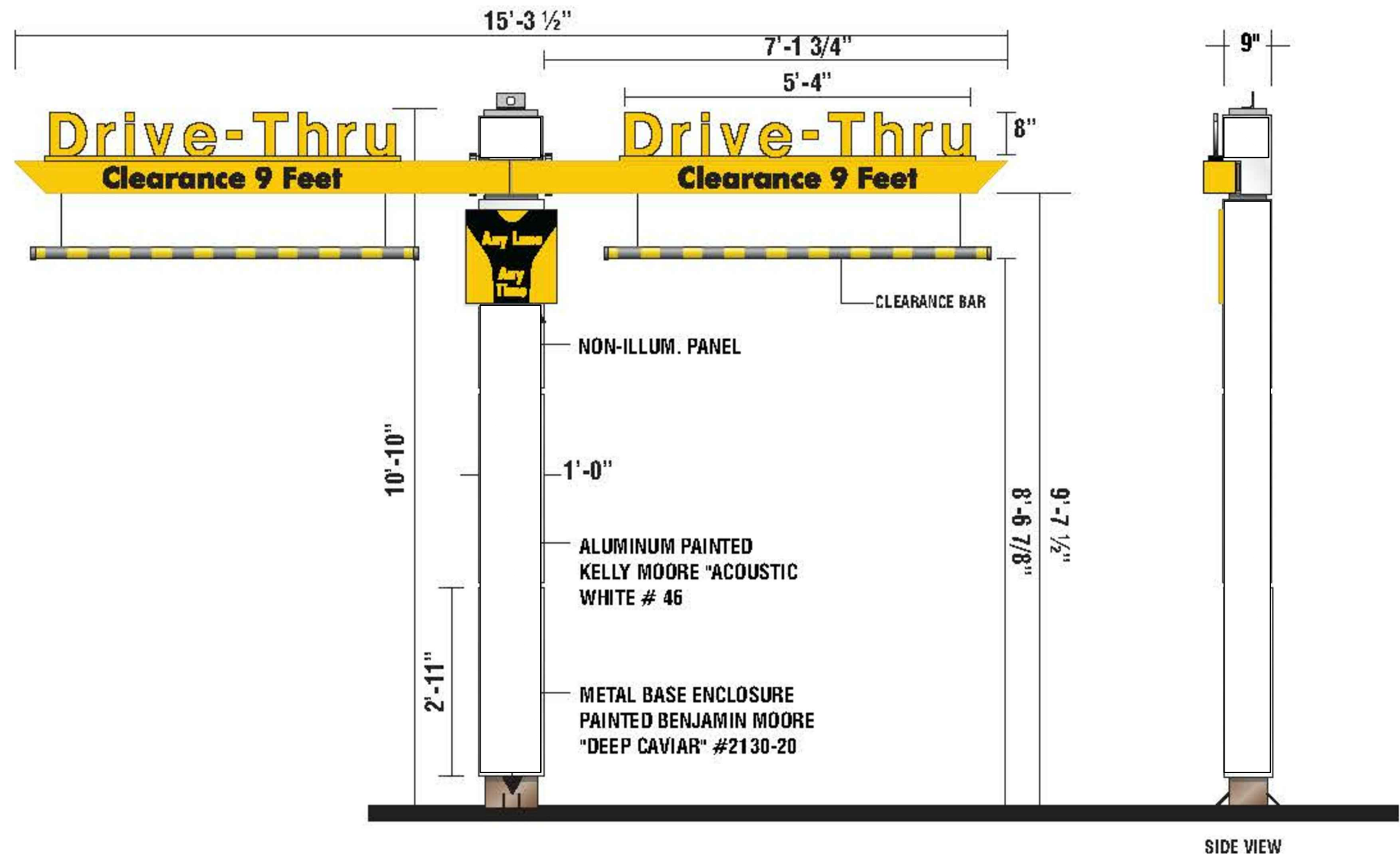
03/04/20



Seal

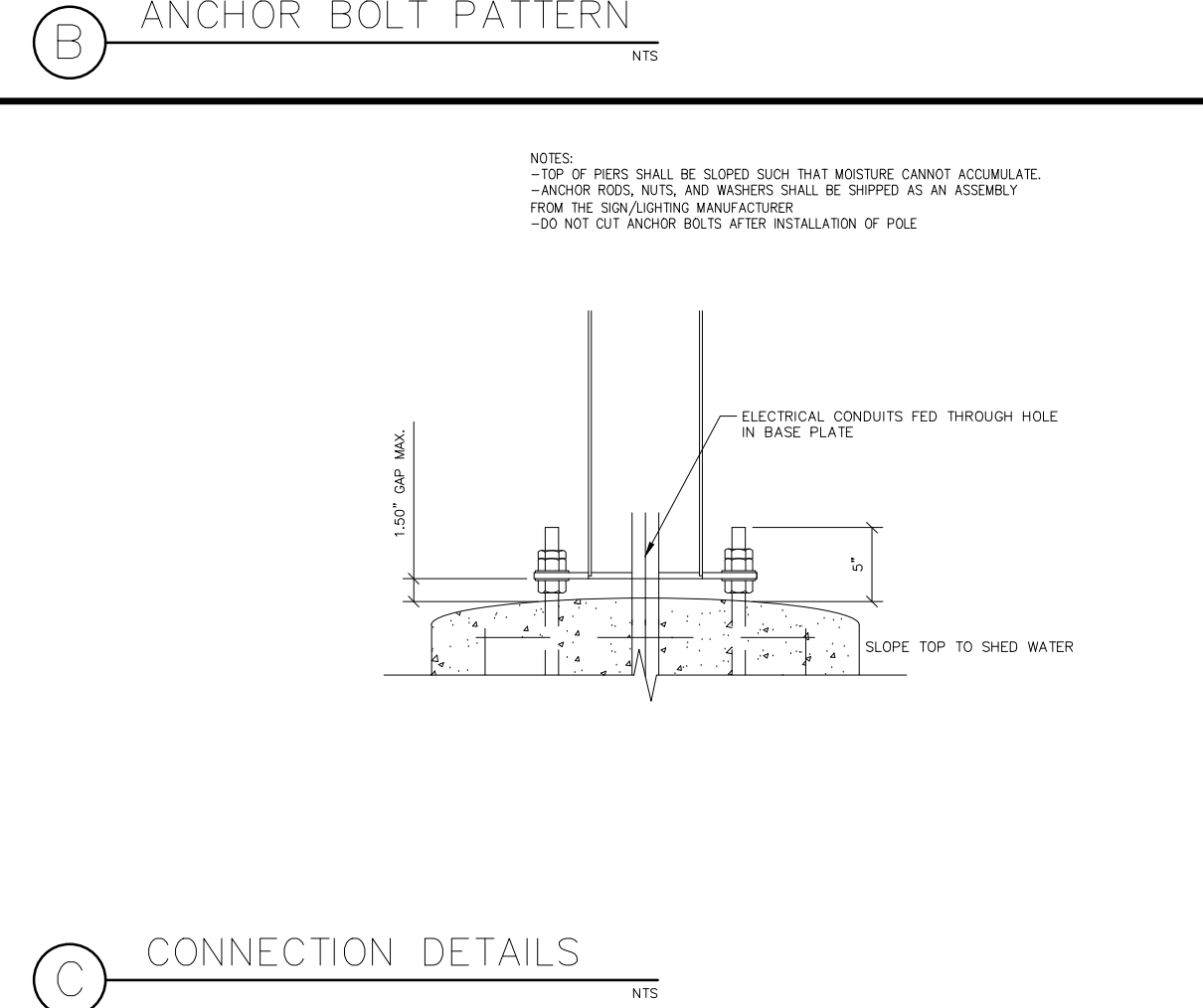
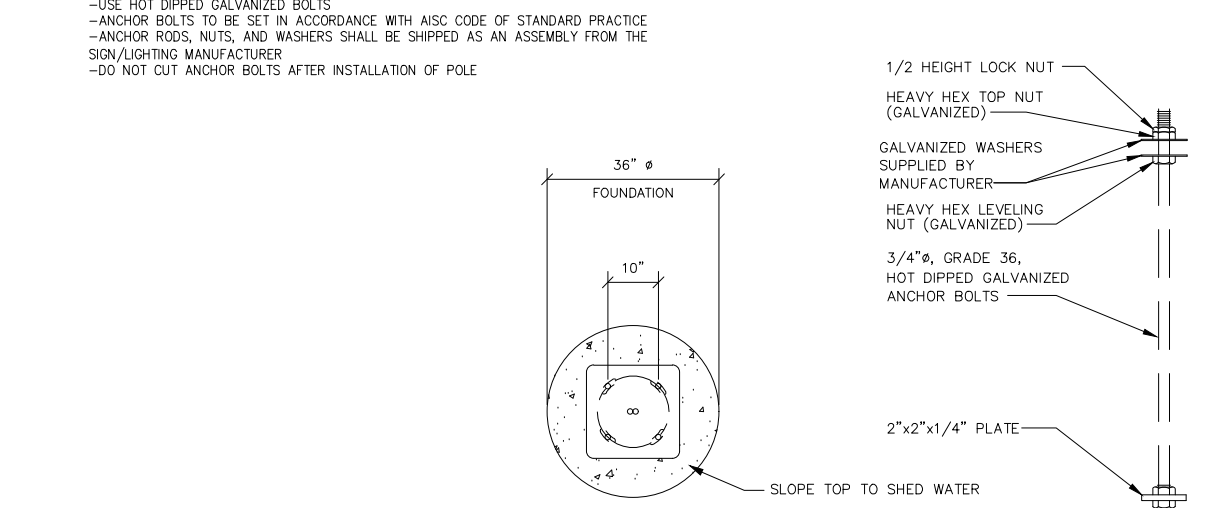
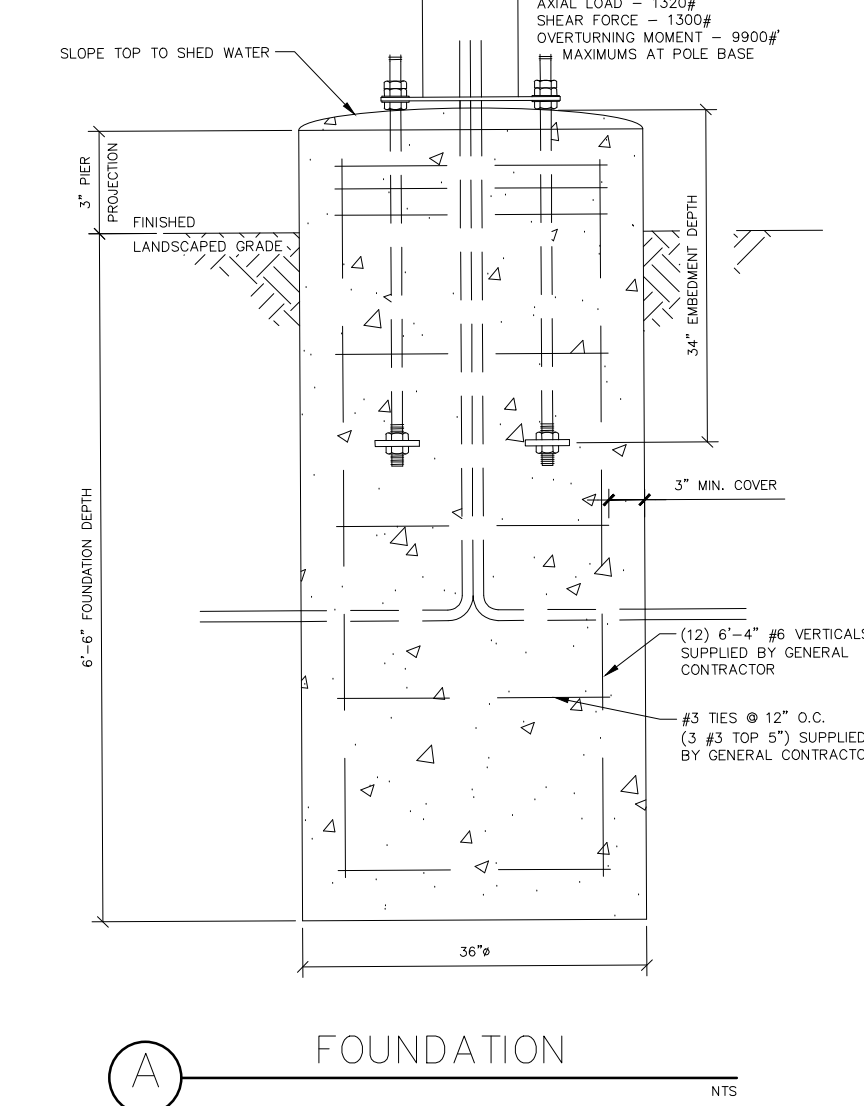
L1

LANDSCAPE PLAN

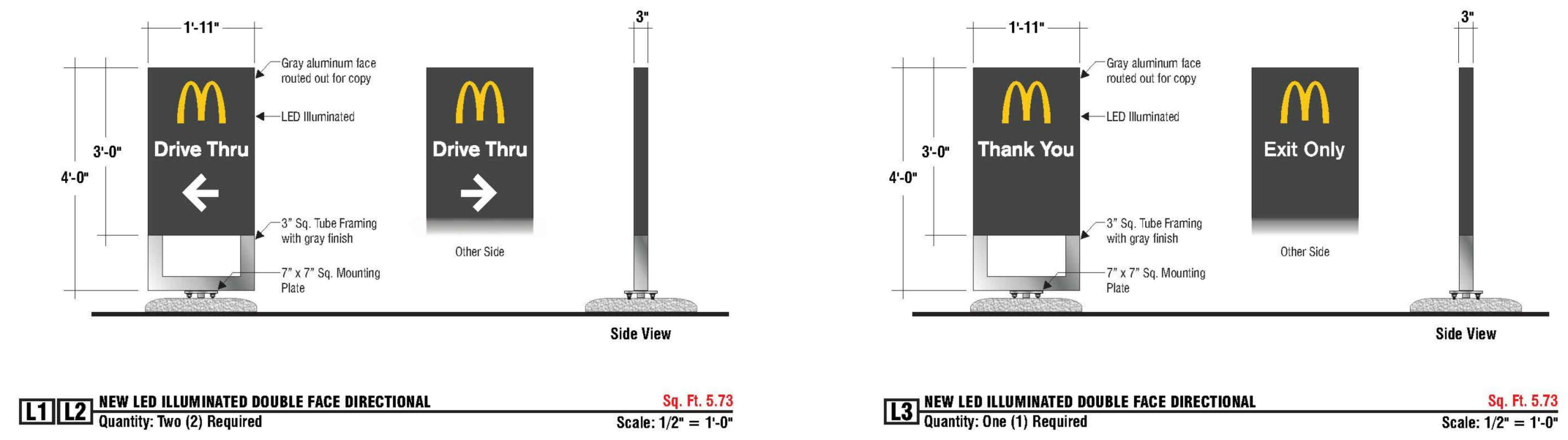


GENERAL NOTES:
-THE FOLLOWING CODES WERE USED IN DESIGN:
-CISC 2016
-ASCE 7-05
-AISC 360-16
-ASCE 13th EDITION
-AWS D1.1
-WIND SPEED (150 MPH 3-SEC GUST)
-EXPOSURE C
-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
-AXIAL - 1320#
-SHEAR - 1300#
-MOMENT - 9900#
-ALL FOOTING EXCAVATIONS ARE TO BE CLEAR OF WATER AND FOREIGN MATTER BEFORE PLACING CONCRETE.
-MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE OF 100PSF/FT (x2)
-SITE SOIL CONDITIONS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER. IF ASSUMED SOIL CONDITIONS ARE NOT PRESENT, FOUNDATION SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER TAKING INTO ACCOUNT ACTUAL SITE SOIL CONDITIONS.
-TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE)
-ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS.
-STEEL PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (Fy = 35ksi)
-HSS ROUND SECTION: ASTM A500 GRADE B (Fy = 42ksi)
-HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (Fy = 46ksi)
-CONNECTION BOLTS A325
-STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES AND PLATES: ASTM A36
-REINFORCEMENT: GRADE 60 - BY GENERAL CONTRACTOR
-NUTS: A56304 OR A194-2H
-WASHERS: F436
-USE HOT DIPPED GALVANIZED BOLTS AND FASTENERS
-ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER
-NO FIELD HEATING TO BEND STEEL SHALL BE ALLOWED WITHOUT ENGINEER'S APPROVAL
-DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE
-AFTER INSTALLATION, ALL EXPOSED STEEL SHALL BE PAINTED WITH AN ENAMEL PAINT TO INHIBIT CORROSION
-ANY FIELD WELDING SHALL FIRST BE VERIFIED BY ENGINEER AND PERFORMED IN ACCORDANCE WITH AWS D1.1.
-REFER TO SIGN MANUFACTURER DRAWINGS AND INSTRUCTIONS FOR ADDITIONAL INFORMATION.
-CONTRACTOR (INSTALLER) IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION IN REGARDS TO JOBSITE SAFETY
-DETAILS AND STRUCTURAL MEMBERS NOT SHOWN DESIGNED BY OTHERS

NOTE:
-DESIGN CODES
-CISC 2016
-ASCE 7-05
-AISC 360-16
-ASCE 13th EDITION
-AWS D1.1
-WIND SPEED (150 MPH 3-SEC GUST)
-EXPOSURE C
-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
-AXIAL - 1320#
-SHEAR - 1300#
-MOMENT - 9900#
-CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH (FC)
-PIER DEPTHS REQUIRED ARE MINIMUM. ALL PIERS TO EXTEND TO PROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
-MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT (2 DEPTH (x2)
-TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE)
-PROVIDE A MINIMUM OF 3" CONCRETE COVER FOR ALL EMBEDDED STEEL
-ALL REINFORCING STEEL BY GENERAL CONTRACTOR



18	DRIVE-THRU GATEWAY (SINGLE)
SD2	NOT TO SCALE

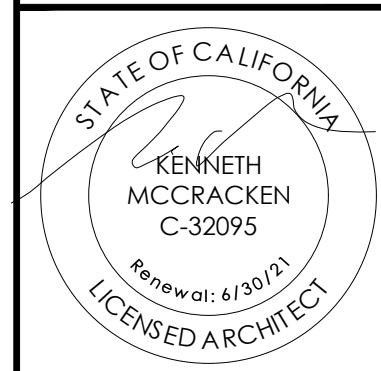


Note to All Contractors

120 Sign Voltage

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign. All wall penetrations to be sealed with UL Listed silicone sealant.

20	DOUBLE FACE DIRECTIONAL SIGN
SD2	NOT TO SCALE



03/05/20
Seal KJM/1912

PREPARED FOR:	McDonald's USA, LLC
TITLE	McDONALD'S # 25139 ROSEY-BLUEOAKS/FOOTHILL
DRAWN BY	STD ISSUE DATE
REVIEWED BY	Hill
DATE ISSUED	03/04/20
SITE ADDRESS	1400 BLUE OAKS BLVD. ROSEVILLE, CA 95747

SD2	GATEWAY DETAILS
-----	-----------------

Technical drawing of the front view of the 15.6 inch LCD monitor. The drawing shows a rectangular monitor with a silver bezel and a black stand. Dimensions are provided in inches: overall width is 66.22, bezel width is 8.25, active display width is 58.9, and bezel depth is 55.9. The overall height is 71.8, bezel height is 48.6, and the stand height is 12. The monitor is shown at a 11.2 degree angle.

ELECTRICAL: FIRST CIRCUIT: 120/1/60, 15 AMP
SECOND CIRCUIT: 120/1/60, 10 AMP

SHIP WEIGHT: 1,200 LBS.

MEDIA PLAYER: COATES

SEE SIGNAGE DRAWINGS FOR
FOOTING DETAILS (TYP.)

REV	DATE	DESCRIPTION	BY
A	03/04/20	REVISED PER PLANNING	Hill

Professional of Record:

Architectural
Solutions Group

455 Bennett Valley Rd.
Suite C-102
Santa Rosa, CA. 95404

Seal

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TITLE	DRAWN BY
MCDONALD'S # 25139	—
ROSEY-BLUEOAKS/FOOTHILL	STD ISSUE DATE
DESCRIPTION	—
2018 BB20 — EOTF	REVIEWED BY
—	Hill
SITE ID	DATE ISSUED
004-3621	03/04/20
SITE ADDRESS	
1400 BLUE OAKS BLVD. ROSEVILLE, CA 95747	

SHEET NO. **ODMB-1**
DIGITAL MENU BOARDS

coates

O₂

SINGLE 55"
Modular Range

Hot-dipped galvanized frame

Aluminum panels

Modular Mounting Structure

Allows for various screen sizes with panel/module replacement

Option for crane in or manual 2 person assembly

Currently designed for the Samsung QHF panel but mounting hardware can be modified for alternate screen specifications in future

Now more choices
All Day Breakfast
Available 7 days a week
• Breakfast
• Lunch
• All Day!

Choose a side.

• Apple
• Hash Browns
• Hash Browns
• Hash Browns

\$2 Small Hot or Cold Coca-Cola Beverage

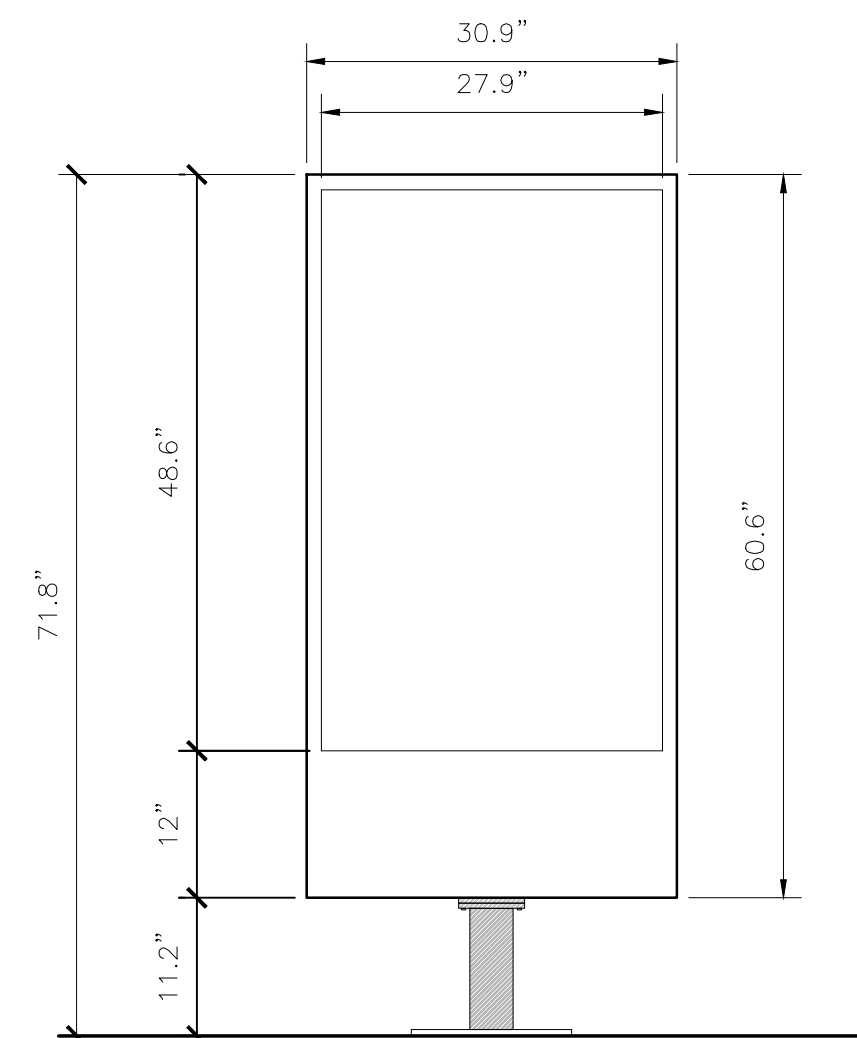
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55" WIDE

31.5" HIGH

UL LISTED

For enquiries and further information on our range of products please visit www.coatesgroup.com



ELECTRICAL: FIRST CIRCUIT: 120/1/60, 15 AMP
SECOND CIRCUIT: 120/1/60, 10 AMP

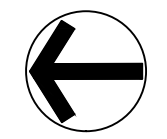
SHIP WEIGHT: 350 LBS.

MEDIA PLAYER: COATES

SEE SIGNAGE DRAWINGS FOR
FOOTING DETAILS (TYP.)

1 DIGITAL MENU BOARD
ODMB1 SCALE: NONE

2 DIGITAL PRE-BROWSE BOARD
ODMB1 SCALE: NONE



PARKING INFORMATION (EXISTING)			
TOTAL SPACES 72	ACCESSIBLE	3 SPACES	9' x 18 & 19' @ 90°
	STANDARD	64 SPACES	9' x 18 & 19' @ 90°
	COMPACT	5 SPACES	8' x 16' @ 90°

REV	DATE	DESCRIPTION	BY
	03/20/20	ISSUED FOR CONSTRUCTION	HII

SPO	TITLE	MCDONALDS # 25139 ROSEV=BLUEOAKS/FOOTHILL
	DRAWN BY	
	STD ISSUE DATE	
	REVIEWED BY	HII
	DATE ISSUED	03/19/20
	DESCRIPTION	2018 BBQ20 - EOTF
SHEET NO.	SITE ID	SITE ADDRESS
	004-3621	1400 BLUE OAKS BLVD. ROSEVILLE, CA 95747
DEMOLITION SITE PLAN		



1. SURFACE OF RAMP AND FLARES SHALL BE SLIP RESISTANT AND CONTRASTING FINISH FROM SIDEWALK.
 2. RAMP SHALL LIE IN SINGLE SLOPE PLANE W/ MIN. SURFACE WARPING AND CROSS SLOPE.
 3. RAMP LANDING SHALL HAVE A CROSS SLOPE OF 2% MAX. IN ALL DIRECTIONS.
 4. MAXIMUM SLOPE IN ACCESSIBLE PARKING STALLS & ACCESSIBLE AISLE TO BE 2% IN ANY DIRECTION.
 5. ALL PARKING LOT IMPROVEMENTS SHALL MATCH SURROUNDING EXISTING GRADES.
- FOR ADDITIONAL INFORMATION REGARDING DRAINAGE & GRADING, CONCRETE CURB, SIDEWALKS & GUTTER DETAILS, SEE CIVIL DRAWINGS.

KEYNOTES

MARK		DETAIL
1	(N) VEHICLE CLEARANCE BAR. UNDER SEPARATE PERMIT. SEE SIGN PACKAGE.	—
2	(N) DIGITAL PRE-BROWSE BOARD. UNDER SEPARATE PERMIT BY OTHERS.	OMDB1 & 2 STRUCTURAL
3	(N) FORREST PERMA INFORMATIONAL SIGN #777 AT ORDER STATION.	7/CVR2
4	(N) DIGITAL MENU BOARD INTEGRATED w/ SPEAKER. UNDER SEPARATE PERMIT BY OTHERS.	OMDB1 & 2 STRUCTURAL
5	(E) TRASH ENCLOSURE TO REMAIN, PAINT TO MATCH BUILDING MAIN COLOR.	
6	(E) YARD LIGHT w/ (N) LIGHT FIXTURES (TYP.)	E0.1
7	(N) FORREST PERMA INFORMATIONAL SIGN #778 AT PRESENTER WINDOWS.	8/CVR2
8	(N) VEHICLE DETECTOR LOOP.	E0.1
9	(N) DT CONCRETE PAVING & VEHICLE DETECTOR LOOP (TYP.)	CIVIL ELEC
10	(E) UTILITIES TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION.	—
11	(N) CONCRETE FILLED BOLLARD, COLOR TO MATCH (E)	
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SITE DATA

EXISTING USE: RESTAURANT
PROPOSED USE: RESTAURANT
ZONING: CC COMMERCIAL
SITE AREA: 80,849 S.F. (1.86 AC)
EXISTING OVERALL BUILDING AREA: ± 6,243 S.F.
PARKING REQUIRED: 1 STALL FOR EACH 100 SF OF GROSS FLOOR AREA
EXISTING 72 STALLS TO REMAIN (NO CHANGE)

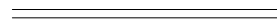
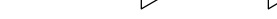
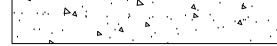
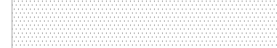
ASSESSOR'S PARCEL NUMBER: 017-250-052

PARKING INFORMATION (PROPOSED)

TOTAL SPACES 71	ACCESSIBLE	3 SPACES	9' X 18 & 19' @ 90°
	STANDARD	64 SPACES	9' X 18 & 19' @ 90°
	COMPACT	4 SPACES	8' X 16' @ 90°

PLAN LEGEND

℄	= CENTER LINE	P.O.C.	= POINT OF CURVATURE
COL.	= COLUMN	R	= RADIUS
(E)	= EXISTING	R.O.W.	= RIGHT OF WAY
EQ.	= EQUAL	SHT.	= SHEET
F.O.C.	= FACE OF CURB	SIM.	= SIMILAR
F.O.S.	= FACE OF STUD	SYM.	= TYPICAL
F.O.F.	= FACE OF FOUNDATION	FSE	= FINISH SLAB ELEVATION
(N)	= NEW		

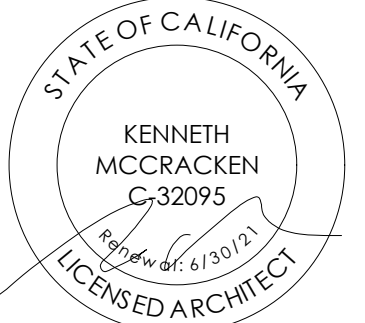
	.....	(E) CONCRETE CURB
	.....	..... PROPERTY LINE
	.....	..... EASEMENT
	.....	..... ACCESSIBLE PATH OF TRAVEL
	.....	(N) CONCRETE CURB
	.....	..... (N) CONCRETE PAVING
	.....	..... (N) SIDEWALK / WALKWAY
	.....	..... (N) ASPHALT PAVING
	.....	(N) PAVEMENT ARROWS (PAINTED WHITE)
	.....	(N) DRIVE THRU STRIPING (PAINTED YELLOW)

REV	DATE	DESCRIPTION	BY
	03/20/20	ISSUED FOR CONSTRUCTION	HII

Professional of Record:

Architectural
Solutions Group

455 Bennett Valley Rd.
Suite C-102
Santa Rosa, CA. 95404



08/09/19

Seal

M/226

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SHEET NO.	SP1		TITLE
	SITE PLAN		
McDONALDS # 25139		ROSEV-BLUEOAKS/FOOTHILL	
DESCRIPTION		STD /ISSUE DATE	REVIEWED BY
2018 B620 - EOTF		THH	
-		DATE ISSUED	05/19/20
SITE ID	SITE ADDRESS		
304-3621	1400 BLUE OAKS BLVD.	ROSEVILLE, CA 95747	

MCD18243.0 ISSUED FOR CONSTRUCTION



PLANNING COMMISSION COMMUNICATION

Title: WRSP PCL-31 – The Plaza at Blue Oaks, 1950 Blue Oaks Bl, File # PL17-0368
Contact: Kinarik Shallow, kshallow@roseville.ca.us, 916-746-1309

Meeting Date: 5/14/2020
Item #: 6.3.

ATTACHMENTS:

Description

Staff Report
Exhibit A Initial Study MND
Exhibit B Site Plan
Exhibit C Tentative Subdivision Map
Exhibit D Grading & Drainage Plan
Exhibit E Utility Plan
Exhibit F Elevations
Exhibit G Materials & Color Board
Exhibit H Photometric & Lighting Plan
Exhibit I Landscape Plan
Exhibit J Arborist Report
Exhibit K Tree Impact Plan
PCAPCD Rules and Regs
City response to Robert Bone letter for Blue Oaks Plaza
5.12.2020 Letter to City of Roseville Planning Commission applicant

ITEM 6.3: **Design Review Permit, Tentative Subdivision Map, and Tree Permit – 1950 Blue Oaks Boulevard – WRSP PCL F-31 – The Plaza at Blue Oaks – File # PL17-0368**

REQUEST

The applicant requests approval of a Design Review Permit to allow the construction of an 82,100-square-foot shopping center consisting of a 35,000-square-foot anchor grocery store, a 12-pump gas station with a 3,500-square-foot-convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet. The project includes a Tentative Subdivision Map to subdivide the 13.35-acre parcel into eight (8) lots and a Tree Permit to remove several native oak trees on the westerly portion of the site.

Applicant/Property Owner – Joe Zawidski, Signature Management Company

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the Plaza at Blue Oaks Initial Study/Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program;
- B. Adopt the four (4) findings of fact and approve the Design Review Permit subject to one hundred one (101) conditions of approval;
- C. Adopt the three (3) findings of fact and approve the Tentative Subdivision Map subject to thirty-nine (39) conditions of approval; and
- D. Adopt the two (2) findings of fact and approve the Tree Permit subject to twenty (20) conditions of approval.

SUMMARY OF OUTSTANDING ISSUES

There are no outstanding issues associated with this request. The applicant has reviewed and is in agreement with all recommended conditions of approval.

BACKGROUND

The 13.35-acre project site is located in the City's West Roseville Specific Plan (WRSP) area, at the northeast corner of Blue Oaks Boulevard and Fiddymont Road (see Figure 1). The WRSP was approved by the City on February 4, 2004 and established the land use designations and zoning standards for the specific plan area. The subject property is located on Parcel F-31 of the WRSP and has a zoning and General Plan land use designation of Community Commercial (CC). Per the WRSP, Parcel F-31 is anticipated for the development of a conventional community/neighborhood retail center.

The proposed project is a request for a Design Review Permit to construct a retail center consisting of a ±35,000 square-foot anchor grocery store, a 12-pump gas station with a ±3,500 square-foot convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet, as well as associated parking, lighting, and landscaping. The total building square footage will be approximately 82,100 square feet. The project also includes a Tentative Subdivision Map to subdivide the parcel into eight (8) lots and a Tree Permit to allow the removal of several native oak trees on the westerly portion of the site in order to facilitate development. The proposed Lot 2 on the

northeastern corner of the site encompasses the future second phase of the project and will require a separate Design Review Permit.

Figure 1: Project Location



SITE INFORMATION

Location: 1950 Blue Oaks Boulevard; APN 017-117-093-000

Total Size: 13.35 acres

Topography and Setting: The project site is currently undeveloped and is comprised mostly of annual grasslands and several native oak trees. The site varies in grade; it generally slopes downward on the southwestern and northwestern corners of the site, where the oak trees are located, and then becomes level with the roadways. There are significant grade changes from Fiddymont Road and Harvey Wy. to the project with these roadways being significantly higher than the project site. The site is also adjacent to Harvey Way to the north with an undeveloped High Density Residential (HDR) parcel beyond, Oak Meadow Drive to the east with Fiddymont Ranch Apartments beyond, Blue Oaks Boulevard to the south with single-family residential uses beyond, and Fiddymont Road to the west with a medical office building beyond. Street and utility improvements for the streets adjacent to the site were completed with the Fiddymont Phase 1 infrastructure improvements.

EVALUATION: DESIGN REVIEW PERMIT

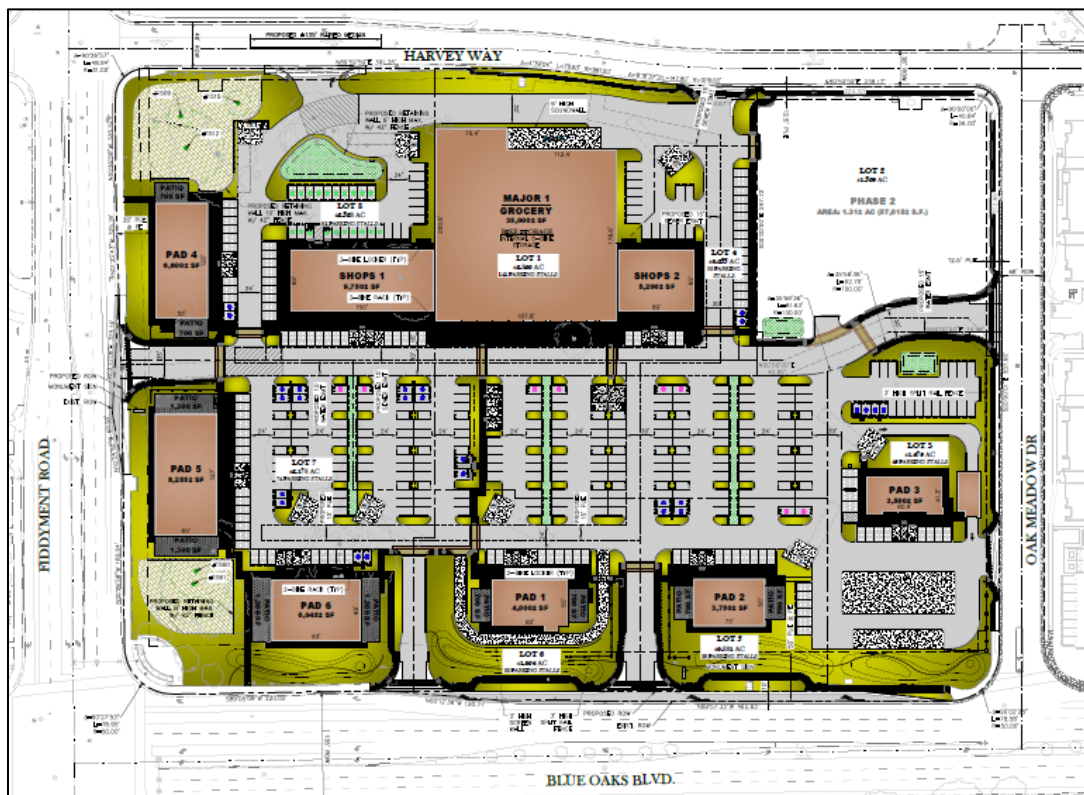
Section 19.78.060(B) of the City of Roseville Zoning Ordinance requires four findings of fact be made in order to approve a Design Review Permit. The four findings for approval of the Design Review Permit are listed below and are followed by an evaluation.

- 1. The project as approved preserves and accentuates the natural features of the property, such as open space, topography, trees, wetlands and water courses, provides adequate drainage for the project, and allows beneficial use to be made of the site for development.***
- 2. The project site design as approved provides open space, access, vehicle parking, vehicle, pedestrian and bicycle circulation, pedestrian walks and links to alternative modes of transportation, loading areas, landscaping and irrigation and lighting which results in a safe, efficient, and harmonious development and which is consistent with the applicable goals, policies and objectives set forth in the General Plan, the Community Design Guidelines and the West Roseville Specific Plan.***
- 3. The building design, including the materials, colors, height, bulk, size and relief, and the arrangement of the structures on the site, as approved is harmonious with other development and buildings in the vicinity and which is consistent with the applicable goals, policies and objectives set forth in the General Plan, the Community Design Guidelines and the West Roseville Specific Plan.***
- 4. The design of the public services, as approved, including, but not limited to, trash enclosures and service equipment are located so as not to detract from the appearance of the site, and are screened appropriately and effectively using construction materials, colors and landscaping that are harmonious with the site and the building designs.***

The evaluation of the Design Review Permit has been based on the applicable development and design standards within the City's Zoning Ordinance, the City's Community Design Guidelines (CDG), and the WRSP. Staff reviewed the proposal for consistency with all applicable standards and found the project to be consistent with the pertinent requirements and guidelines. The following sections of evaluation focus on areas of interest.

Site Planning & Building Siting: The project creates a commercial setting along the adjacent roadways by situating the pad buildings forward along the street (outside of the frontage easements) and locating the parking lots internal to the site (see Figure 2).

Figure 2: Site Plan



The anchor grocery store is identified as Major 1 with in-line tenants on either side (identified as Shops 1 and Shops 2), and is located on the northern portion of the site. A loading dock is proposed on the rear of the building that will be screened with a 9-foot tall wall to comply with the recommendations of the noise study (see Attachment 6 of Exhibit A, the Initial Study/Mitigated Negative Declaration). In addition, a 6-foot tall masonry wall with decorative stone pilasters will be located behind the proposed landscaping along Harvey Way to buffer the future HDR use to the north from the project's loading dock and on-site truck circulation areas.

Pad 1 is designed to accommodate a drive-through user. Although Pad 1 is located along Blue Oaks Boulevard, the drive-through aisle will be screened by a 3-foot tall wall and by the 50-foot wide landscape corridor, consistent with the CDG. Pad 3 is anticipated to be a convenience store with a gas station and drive-through car wash; however, building elevations for Pad 3 and the gas canopy were not included with the project materials. As such, a condition of approval has been added requiring a separate Design Review Permit for Pad 3 to ensure consistency with the overall project design and compliance with applicable design guidelines and standards (Condition #4 of the Design Review Permit).

Vehicle Access & Circulation: The proposed project includes two entries on Blue Oaks Boulevard, one entry on Fiddymment Road, two entries on Harvey Road, and two entries on Oak Meadow Drive. All driveways will be restricted to right turn ingress and egress only, with the exception of the eastern driveway along Harvey Road and the two driveways on Oak Meadow Drive, which will allow for both right and left turning movements. The proposed access and circulation design was evaluated in a technical memorandum prepared by Kimley-Horn, which is included as Attachment 7 of Exhibit A. This study was used to determine driveway spacing, entryway throat depths, turn pocket lengths, and other elements of access and circulation design for the proposed project. The project was also reviewed by the City Engineering and City Fire Department staff and was found to comply with refuse service standards and with emergency circulation requirements.

Pedestrian Access & Circulation: The project includes several internal pedestrian pathways and includes the completion of sidewalks and landscaping around the project perimeter. The sidewalks will provide access from the surrounding uses. Consistent with the WRSP, all frontage pedestrian paths will be a minimum of eight (8) feet in width along Blue Oaks Boulevard and Fiddymment Road, and a minimum of four (4) feet in width along Harvey Way and Oak Meadow Drive. In addition to the sidewalks along the vehicle entries, pedestrian connections will be provided at locations where foot traffic is most likely to occur to provide easy access to the site. These connections are provided near the corner of Blue Oaks Boulevard and Fiddymment Road, near the corner of Fiddymment Road and Harvey Way, and along Oak Meadow Drive. The project is consistent with the WRSP and CDG related to pedestrian access and circulation.

Parking: Based on the City's Zoning Ordinance parking standards for shopping centers, the project is required to provide a total of 411 parking spaces (one space per 200 square feet). As tenant spaces are leased, each tenant will utilize the applicable parking requirement for the use as outlined in the Zoning Ordinance. The project provides a total of 420 parking spaces, which exceeds the total parking requirement. Additionally, the WRSP designates the project site as a Park and Ride lot, with a total of 20 spaces required. The project provides these spaces to the north of the Shops 1 building, which is in close proximity to the transit stop along Fiddymment Road.

Architecture: The WRSP provides standards and guidelines for streetscapes and project design intent, but defers to the CDG for the evaluation of architecture and building design. Key guidelines related to architectural design within the CDG include direction to define development character through the use of a consistent design concept (CC-39), to use variation in wall planes and building form (CC-41), to provide articulation at main building entries (CC-44), to use a variation of colors and materials (CC-46), and to apply architectural treatment to all sides of a building facing public areas (CC-47).

The applicant has proposed a "contemporary prairie" design concept, with an emphasis on clean, horizontal lines and a complementary mix of materials. The building façades have overlapping rectangular forms and flat roofs of varying heights, which provide sufficient screening of mechanical rooftop equipment. Consistent

with the CDG, the building design is well articulated through the use of building projections and recesses, trellises, awnings, and window styles. The building materials primarily consist of cement plaster with brick veneer applied strategically to highlight areas of interest. The buildings include metal cornices and bands, modern glass and anodized aluminum storefronts, and metal trellises. Fabric awnings are used to complement these materials and soften the façades. The building colors consist of earth tones including olive green, gray, tan, and rust colored panels and banding. Figure 3 illustrates the front building elevation of the in-line building that consists of Major 1 (the anchor grocery store) and Shops 1 and 2. The main building entry areas are defined by forward presentation, variation in the roofline, and aluminum storefront windows. The variation in colors and materials combined with the variation in wall planes create texture and depth in the façade.

Figure 3: Major 1, Shops 1 and 2 Front Elevation



The project's street-facing elevations are designed with faux storefronts and other architectural detailing such as clerestory windows, green screen trellises, fabric awnings, and angled roof elements to provide a visually engaging streetscape. Figure 4 below illustrates the south and west elevations of Pad 6, which face Blue Oaks Boulevard and Fiddymment Road, respectively. Overall, the pad buildings are designed to tie in cohesively with the anchor building, achieving a consistent design character for the center. The project architecture is also harmonious with development in the vicinity of the site, using similar and complementing earth tone colors and materials as the medical office building to the west and the Fiddymment Ranch Apartments to the east.

Figure 4: Pad 6 South and West Elevations



Landscaping and Lighting: Landscaping for the project site includes frontage improvements along the perimeter of the property, at project entry points, and within the parking lot. As required by the WRSP Design Guidelines, the landscape corridors for Blue Oaks Boulevard and Fiddymment Road have widths of 50 feet and 35 feet, respectively. Primary street trees consist of Grecian laurel and red maple along Blue Oaks Boulevard, Interior live oak and sour gum along Fiddymment Road, deodar cedar along Harvey Way, and red maple along Oak Meadow Drive. Hedge and border shrubs are proposed around the entire project perimeter to screen parking areas, service areas, future gas station canopies, and drive-through lanes from view. The City's minimum requirement of 50% shading in parking lots is accomplished with a mix of Chinese pistache and evergreen elm trees. As proposed and conditioned, staff finds the landscape plan meets the intent of the CDG and the WRSP design guidelines, and is consistent with the City's Water Efficient Landscape Ordinance.

As mentioned, the project is located at the northeast intersection of Blue Oaks Boulevard and Fiddymment Road, which is considered a key intersection in the WRSP. The existing neighborhood entry feature located at this corner will be retained, which consists of a combination of plant materials, hardscape elements (such as pilasters and raised planters), and signage that is intended to visually define the Plan Area and reinforce the streetscape theme within the Fiddymment Ranch neighborhood. Although the project will involve the removal of native oak trees, some of the existing oak trees located at the northwestern and southwestern corners of the site will be retained and incorporated into the project design, which will help frame the intersections. The outdoor patios of Pads 4—6 will provide views of these oak trees. Further discussion on the removal of oak trees is provided in the Tree Permit evaluation section of this report.

In addition to the planting plan, the landscape plans also include furnishings and fixtures. Furnishings include three-foot tall pre-cast concrete split-rail fencing, building mounted light fixtures that complement the style of the building, steel shade arbors in outdoor patio areas, and the use of stamped and decorative pavement in key areas and pathways to define the pedestrian environment. A photometric plan was included for the project, which demonstrates consistency with the City's minimum lighting level requirements (0.5 foot-candles in pedestrian areas and 1.0 foot-candles in vehicle areas).

Design Review Permit Conclusion

Based on the analysis contained in this staff report and with the project conditions, staff finds that the proposed project is consistent with the policies and intent of the General Plan, the WRSP, and the City's Community Design Guidelines. The project will not be detrimental to public health or safety, nor will it be detrimental to the public welfare.

EVALUATION: TENTATIVE SUBDIVISION MAP

Section 18.06.180 of the City of Roseville Subdivision Ordinance requires that three findings be made to approve or conditionally approve a Tentative Subdivision Map. The three findings are listed below in ***italicized, bold*** text and are followed by an evaluation of the map in relation to each finding.

- 1. The size, design, character, grading, location, orientation and configuration of lots, roads and all improvements for the tentative subdivision map are consistent with the density, uses, circulation and open space systems, applicable policies and standards of the general plan or any applicable specific plan for the area, whichever is more restrictive, and the design standards of Title 18 (Subdivision Ordinance) of the Roseville Municipal Code.***

Parcel size, design, configuration, location, orientation, and character: The proposed subdivision will result in the creation of eight parcels ranging in size from approximately 0.66 to 2.87 acres. The locations of the parcels are based on the locations of the proposed buildings and their associated parking areas. The Map Act and Subdivision Ordinance do not contain any maximum or minimum lot sizes. Based on the Design Review Permit evaluation section, the lots are large enough to adequately allow for the proposed development on the parcels.

Grading and Drainage: Grading and drainage required for development of the parcels have been reviewed with the Design Review Permit and have been determined to comply with City standards as shown in the grading and drainage plan, and as conditioned.

Access & Circulation: The project is conditioned to ensure the driveways are constructed to comply with the City's design standards, and to allow reciprocal access and parking easements on both parcels. On-site circulation has been reviewed with the Design Review Permit and found to be adequate. Access and circulation is consistent with the City's Subdivision Ordinance and the City's Improvement Standards.

- 2. The subdivision will result in lots which can be used or built upon. The subdivision will not create lots which are impractical for improvement or use due to the steepness of terrain or***

location of watercourses in the area; the size or shape of the lots or inadequate building area; inadequate frontage or access; or, some other physical condition of the area.

The proposed parcels are of sufficient size and shape to accommodate the proposed development and are consistent with the applicable zoning and design requirements, as discussed in the Design Review Permit evaluation section of the staff report. There are no watercourses or other natural features on the site that would impede development.

3. The design and density of the subdivision will not violate the existing requirements prescribed by the Regional Water Quality Control Board for the discharge of waste into the sewage system, pursuant to Division 7 of the Water Code.

Anticipated water quality impacts and discharge of waste are not affected by the proposed Tentative Subdivision Map. The design of the sewer lines in the project area and treatment capacity at the City's sewage treatment plant have adequate conveyance and capacity to accommodate development on the proposed parcels created by the Tentative Subdivision Map.

EVALUATION – TREE PERMIT

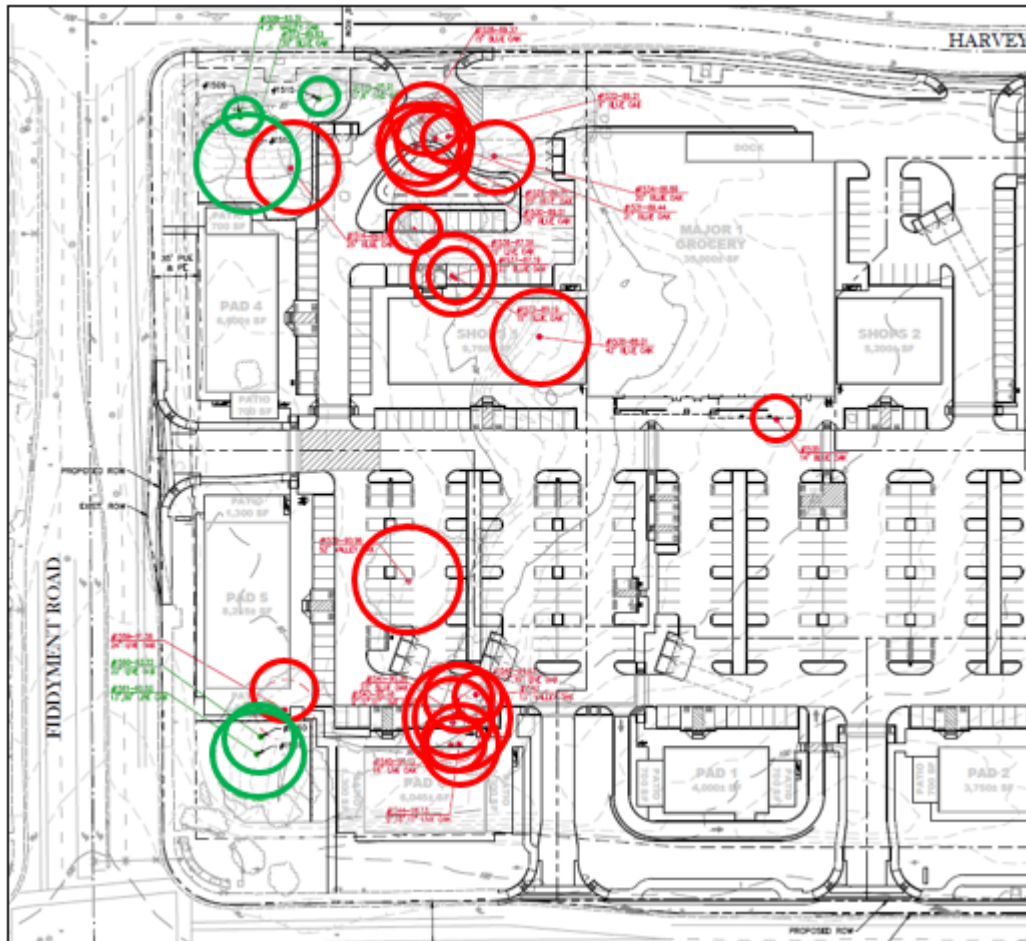
Pursuant to Zoning Ordinance Section 19.66.030, a Tree Permit is required for any removal of native oak trees or for more than 20% encroachment into the dripline of a native oak tree. The proposed project will result in the removal of several native oak trees. The required findings to approve a Tree Permit are listed below.

- 1. Approval of the Tree Permit will not be detrimental to the public health, safety or welfare, and approval of the Tree Permit is consistent with the provisions of Chapter 19.66.***
- 2. Measures have been incorporated into the project or permit to mitigate impacts to remaining trees or to provide replacement for trees removed.***

An arborist report including a tree inventory summary was provided by California Tree and Landscape Consulting, Inc., dated February 20, 2020 (see Exhibit J). A total of 33 protected oak trees were identified on the property. Staff worked with the applicant to preserve as many of the trees to the extent feasible; however, a majority of the trees will require removal because they conflict with the proposed improvements. The loss of these trees were anticipated in the WRSP Environmental Impact Report, which identified the oak trees on the project site as being lost due to development. Of the 33 trees, 28 trees with a total aggregate diameter of 721 inches are proposed for removal to facilitate development of the site, while five (5) trees are proposed to be retained. Eight (8) of the trees proposed for removal were identified as having failed and being in a down and dead condition. Figure 5 and Exhibit K includes the tree locations; those identified in green are proposed for retention and those identified in red are proposed for removal.

The applicant has proposed to comply with the compensation requirements of the City's Tree Preservation Ordinance. Mitigation will be completed with a combination of on-site planting and payment into the City's in-lieu fee program. The total number of mitigation inches for this project is 721. The Tree Preservation Ordinance allows up to 50% of the replacement requirement be met with planting of non-native species, which amounts to 360.5 inches for this project. The project also includes the planting of 13, 24-inch box native oak trees, which provide a total mitigation credit of 26 inches. The remaining 333 inches will be mitigated through payment of in-lieu fees. These funds are used for the replanting and preservation of trees throughout the City. Mitigation fees are calculated at \$118 per inch of tree removed when measured at the tree's diameter at breast height (DBH). The tree mitigation fees for the project equate to \$39,294 and are required to be paid prior to the removal of the trees.

Figure 5: Protected Oak Tree Locations



The Tree Permit contains all of the standard conditions of approval, which includes a requirement to follow all of the recommendations of the Arborist Report. The arborist's recommendations include monitoring any excavation for the retaining wall footings for the trees to remain on the site. The removal of these trees will not be detrimental to the public health, safety, or welfare, and measures have been incorporated to mitigate impacts.

PUBLIC OUTREACH

The proposed project was distributed to all internal and external agencies and departments who have requested such notice, and all comments or recommended conditions of approval have been incorporated into the project, as appropriate. Notice of the application was also distributed to the Roseville Coalition of Neighborhood Associations (RCNA), and the project was brought to the joint Westpark/Fiddyment Farms Neighborhood Association meeting of February 11, 2020. Feedback at the neighborhood meeting, which was attended by more than 50 people, was positive. Questions were generally focused on the types of tenants expected in the center and construction timelines. A public notice of the Planning Commission hearing was published on May 1, 2020 and a notice of hearing was also distributed to RCNA, to all interested persons, and to all property owners within 300 feet of the site. To date, no comments have been received.

ENVIRONMENTAL DETERMINATION

As required by the California Environmental Quality Act (CEQA), the City of Roseville, acting as Lead Agency, prepared an Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate the environmental effects of the project. The document was released for a 20-day public comment period, which began on April 17, 2020 and ended on May 7, 2020. The document analyzed the potential for environmental impacts due to project implementation and determined that potentially significant impacts related to Biological Resources, Noise, and Cultural Resources could be reduced to less than significant levels with mitigation. The Mitigated Negative Declaration and associated Mitigation Monitoring and Reporting Program are included as Exhibit A. On May 7th, Staff received a letter from the Law Office of Robert M. Bone, representing an unincorporated association of Roseville community residents, expressing concern that the environmental impacts of the proposed project had not been adequately reviewed. Staff will provide a separate memorandum including the correspondence and staff's response to the letter prior to the hearing.

RECOMMENDATION

The Planning Division recommends the Planning Commission take the following actions:

- A. Adopt the **Plaza at Blue Oaks Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program**;
- B. Adopt the four (4) findings of fact as stated in the staff report and approve the **DESIGN REVIEW PERMIT – 1950 BLUE OAKS BOULEVARD – WRSP PCL F-31 – THE PLAZA AT BLUE OAKS – PL17-0368** subject to one hundred one (101) conditions of approval;
- C. Adopt the three (3) findings of fact as stated in the staff report and approve the **TENTATIVE SUBDIVISION MAP – 1950 BLUE OAKS BOULEVARD – WRSP PCL F-31 – THE PLAZA AT BLUE OAKS – PL17-0368** subject to thirty-nine (39) conditions of approval; and
- D. Adopt the two (2) findings of fact as stated in the staff report and approve the **TREE PERMIT – 1950 BLUE OAKS BOULEVARD – WRSP PCL F-31 – THE PLAZA AT BLUE OAKS – PL17-0368** subject to twenty (20) conditions of approval.

CONDITIONS OF APPROVAL FOR THE DESIGN REVIEW PERMIT (FILE #PL17-0368)

- 1. This design review permit approval shall be effectuated within a period of two (2) years from **May 14, 2020** and if not effectuated shall expire on **May 14, 2022**. Prior to said expiration date, the applicant may apply for an extension of time, provided this approval does not extend the expiration beyond **May 14, 2023**. (Planning)
- 2. The project is approved as shown in Exhibits B—K, and as conditioned or modified below. (Planning)
- 3. The project shall comply with all required environmental mitigation identified in the Plaza at Blue Oaks Mitigated Negative Declaration. (Planning)
- 4. The applicant shall submit and gain approval of a Design Review Permit for Pad 3 prior to building permit issuance. (Planning)
- 5. The applicant shall submit and gain approval of a Design Review Permit for the future development of Phase 2 (Lot 2). (Planning)
- 6. The project shall be addressed as 1950 Blue Oaks Blvd. The lots and the buildings thereon shall be addressed as follows: Lot 1 (along with Major 1) shall be addressed as 1970 Blue Oaks Blvd, Lot 2 shall be addressed as 2081 Oak Meadow Dr, Lot 3 (along with the building on PAD 3) shall be addressed as 1930 Blue Oaks Blvd, Lot 4 (along with Shops 2) shall be addressed 1960 Blue Oaks Blvd, Lot 5 (along with the building on PAD 2) shall be addressed 1940 Blue Oaks Blvd, Lot 6 (along

with the building on PAD 1) shall be addressed 1980 Blue Oaks Blvd, Lot 7 (along with the building on PAD 6) shall be addressed 2000 Blue Oaks Blvd and the building on PAD 5 shall be addressed 2010 Blue Oaks Blvd, Lot 8 (along with Shops 1) shall be addressed 1990 Blue Oaks Blvd and the building on PAD 4 shall be addressed 2020 Blue Oaks Blvd. All projects with multi-tenants or buildings must submit a site plan with building footprint(s) and suite numbers to the Development Services Department (Business Services – Addressing) for review and approval. The City Addressing Guidelines should be used for reference when assigning suite numbers. (Business Services)

7. The applicant shall pay City's actual costs for providing plan check, mapping, GIS, and inspection services. This may be a combination of staff costs and direct billing for contract professional services. Project billing may occur up to two (2) months after the end of warranty or the Notice of Termination date for the SWPPP, whichever occurs later. (Engineering, Environmental Utilities, Electric, Finance)
8. The design and construction of all improvements shall conform to the Design and Construction Standards of the City of Roseville, or as modified by these conditions of approval, or as directed by the City Engineer. (Engineering)
9. The applicant shall not commence with any on-site improvements or improvements within the right-of-way until such time as grading and/or improvement plans are approved and grading and/or encroachment permits are issued by the Department of Development Service Engineering Division (Engineering)
10. The approval of this project does not constitute approval of proposed improvements as to size, design, materials, or location, unless specifically addressed in these conditions of approval. (Engineering)

PRIOR TO ISSUANCE OF BUILDING PERMITS:

11. Parking stalls shall meet, or exceed, the following minimum standards:
 - a. All parking stalls shall be double-striped. Parking stalls adjacent to sidewalks, landscaped areas or light fixtures, and all Accessible stalls shall about a 6" raised curb or concrete bumper. (Planning)
 - b. Standard -- 9 feet x 18 feet; Compact--9 feet x 16 feet; Accessible--14 feet x 18 feet (a 9 foot wide parking area plus a 5 foot wide loading area) and a minimum of one (1) parking space shall be Accessible van accessible--17 feet x 18 feet (9 foot wide parking area plus an 8 foot wide loading area). (Planning)
 - c. An 'exterior routes of travel' site accessibility plan incorporating slope, cross-slope, width, pedestrian ramps, curb ramps, handrails, signage, detectable warnings or speed limit signs or equivalent means shall comprise part of the site improvement plans submitted to City for review, prior to building plan check approvals. This site accessibility plan shall also include:
 - i) Accessible parking stalls shall be dispersed and located closest to accessible entrances. The total number of accessible parking spaces shall be established by Table 11B-208.2 of the CBC.
 - ii) Accessible Parking spaces and crosswalks shall be signed, marked and maintained as required by Chapter 11B of the CBC.
 - iii) Accessible parking and exterior route of travel shall comply with CBC, Sections 11B-206 and 11B-208. (Building)

12. Signs and/or striping shall be provided on-site as required by the Planning Department to control on-site traffic movements. Parking lot striping and signage shall be maintained in a visible and legible manner. (Planning)
13. The plans submitted to the Building Department for permits shall indicate all approved revisions/alterations as approved by the Commission including all conditions of approval. (Planning)
14. The project Landscape Plans shall comply with the following:
 - a. The Landscape Plan shall indicate the location of, and be designed to avoid conflicts with, all pole-mounted light fixtures and utility equipment including (but not limited to) electric transformers, switchgear, and overhead lines, backflow preventors, fire department connections, and public water, sewer, and storm drain facilities. (Planning, Fire, EUD, Electric, Public Works)
 - b. The tree plantings in the parking lot shall be designed to provide a minimum of 50% shade coverage after 15 years. (Planning)
 - c. At a minimum, landscaped areas not covered with live material shall be covered with a rock, 3" bark (no shredded bark) or 3" mulch covering. (Planning)
 - d. The landscape plan shall comply with the Landscape Guidelines for West Roseville Specific Plan and the City of Roseville Water Efficient Landscape Ordinance. (Planning)
 - f. All landscaping in areas containing electrical service equipment shall conform with the Electric Department's Landscape Requirements and Work Clearances as outlined in Section 10.00 of the Departments "Specification for Commercial Construction." (Electric)
15. Any roof-mounted equipment and satellite dishes proposed shall be shown on the building plans. The equipment shall be fully screened from public streets and the surrounding properties. (Planning)
16. At the time of building permit application and plan submittal, the project applicant shall submit a proposed plan which shows the suite addressing plan for individual tenant spaces within the building. The Chief Building Official, or the designate, shall approve said plan prior to building permit approval. (Building)
17. A separate Architectural Site Accessibility Plan which details the project's site accessibility information as required by California Title 24, Part 2 shall be submitted as part of the project Building Permit Plans. (Building)
18. For Multiple Building Complexes: As part of the required Architectural Site Accessibility Plan, the developer shall delineate the extent of the site accessibility improvements being installed as part of the initial improvements for the project, and those that are planned to be developed as part of subsequent phases (i.e. around future pad buildings). (Building)
19. Building permit plans shall comply with all applicable code requirements (California Building Code – CBC – based on the International Building Code, California Green Building Standards Code-CGBSC, California Mechanical Code – CMC – based on the Uniform Mechanical Code, California Plumbing Code – CPC – based on the Uniform Plumbing Code, California Fire Code – CFC – based on the International Fire Code – with City of Roseville Amendments – RFC, California Electrical Code – CEC – based on the National Electrical Code, and California Energy Standards – CEC T-24 Part 6), California Title 24 and the American with Disabilities Act - ADA requirements, and all State and Federally mandated requirements in effect at the time of submittal for building permits (contact the Building Division for applicable Code editions). (Building)

20. Parapet/cornice construction shall support the weight of a ladder leaning against the parapet as well as a 330-pound vertical load applied to the **leading edge** of the horizontal projection of the cornice (a 250-pound firefighter carrying 80 pounds of equipment stepping off of a ladder onto the top of the cornice). (CFC Chapter 1) (Building)
21. For restaurants, or other food services, contact the Placer County Health Department. (Building)
22. For restaurants, or other food services. The developer shall obtain all required approvals and permits from the Placer County Health Department and the City of Roseville Industrial Waste Division. (Building, Environmental Utilities)
23. Maintenance of copy of building plans: Health and Safety Code section 19850 requires the building department of every city or county to maintain an official copy of the building plans for the life of the building. As such, each individual building shall be submitted as a separate submittal package. Building plan review, permit issuance and archiving is based on each individual building address. (Building)
24. The Improvement Plans shall include a complete set of Landscape Plans. The Landscape Plans shall be approved with the Improvement Plans. (Planning, Engineering, Fire, Environmental Utilities, Electric)
25. A note shall be added to the grading plans that states:
*“Prior to the commencement of grading operations, the contractor shall identify the site where the **excess/borrow** earthen material shall be imported/deposited. If the **borrow/deposit** site is within the City of Roseville, the contractor shall produce a report issued by a geotechnical engineer to verify that the exported materials are suitable for the intended fill, and shall show proof of all approved grading plans. Haul routes to be used shall be specified.”* (Engineering)
26. Blue Oaks Boulevard shall be improved with two A-7 driveways. The western driveway shall be a minimum of 30-foot in width and the eastern driveway shall be a minimum of 35-foot in width. Both driveways shall be restricted to right turn ingress and egress only. An Auxiliary lane with a 90-foot entry taper shall be constructed along the frontage to provide right turn access to the driveway and will terminate into the existing right turn lane at Fiddymment Road. All frontage pedestrian paths shall be a minimum of 8-foot in width. (Engineering)
27. Fiddymment Road shall be improved with a 35-foot wide A-7 driveway. This driveway shall be restricted to right turn ingress and egress only. All frontage pedestrian paths shall be a minimum of 8-foot in width. (Engineering)
28. Harvey Way shall be improved with two A-7 driveways. The western driveway shall be a minimum of 35-foot in width and restricted to right turn ingress and egress access only. The eastern driveway shall be a minimum of 30-foot in width. All frontage pedestrian paths shall be a minimum of 4-foot in width. (Engineering)
29. Oak Meadow Drive shall be improved with two 35-foot wide A-7 driveways. All frontage pedestrian paths shall be a minimum of 4-foot in width. (Engineering)
30. The Developer shall provide striping and signage to prevent the blockage at the first onsite intersections located off of Fiddymment Road driveway and the western driveway on Harvey Way. (Engineering)
31. The Developer shall enter into a construction fee agreement based upon a construction cost of \$10,000 per shelter for future construction of the Bus Shelter on the NE corner of Fiddymment Road and Blue Oak Blvd. (shelter number 176) (Engineering, Alternative Transportation)

32. The project shall include a 20-space park-and-ride per the Specific Plan requirements and in proximity to the transit shelter on Fiddymment Road. The park-and-ride lot shall include accessible parking as required by the building code, a path of travel from the accessible parking to the transit shelter on Fiddymment Road, signs identifying the park-and-ride spaces and their availability to the public. The park-and-ride area shall include appropriate lighting and security measures. The landowner shall be responsible for maintenance of the park-and-ride lot and all its appurtenances. (Engineering, Alternative Transportation)
33. Bike parking and clean air vehicle spaces shall be provided per the California Green Building Standards. Bike rack/locker design and location shall be approved by Alternative Transportation. Parking stall markings are to be marked as "Carpool/Clean Air/EV" instead of using the words "Vanpool". The "clean air" spaces should be distributed throughout the site, including near the major buildings. The building permit plans shall show internal bike parking. (Alternative Transportation, Building)
34. The applicant/developer shall prepare a Transportation Systems Management (TSM) plan for *The Plaza at Blue Oaks* to be reviewed and approved by the Transportation Commission (Alternative Transportation)
35. The applicant shall dedicate all necessary rights-of-way or Public Utility Easement for the widening of any streets or transfer of public utilities across and over any portion of the property as required with this entitlement. A separate document shall be drafted for approval and acceptance by the City of Roseville, and recorded at the County Records Office. (Engineering)
36. All storm drainage, including roof drains, shall be collected on site and treated with Best Management Practices (BMP's) per the City's Stormwater Quality Design Manual. All storm water shall be routed to the nearest existing storm drain system or natural drainage facility. Drain outfalls shall extend down to the receiving water and shall be constructed with adequate velocity attenuation devices. The grading/improvement plans for the site shall be accompanied with a shed map that defines that area tributary to this site and all drainage facilities shall be designed to accommodate the tributary flow. The storm drain system and proposed BMP's shall be privately owned and maintained by the property owner. Prior to the issuance of any permits, the owner shall provide a plan for the maintenance of the proposed BMP's. (Engineering)
37. Prior to the approval of the Improvement Plans, the project proponent shall provide proof of preparation and submittal of a Storm Water Pollution Prevention Plan (SWPPP) to the Regional Water Quality Control Board (RWQCB). Proof shall be in the form of the Waste Discharge Identification Number (WDID#), provided to the applicant from RWQCB, placed on the coversheet of the improvement plans. Upon approval of the improvement plans, a copy of the SWPPP shall be required onsite and available for viewing by City inspection staff upon request. (Engineering)
38. The developer shall be responsible for any necessary relocation of signal interconnect cables that may require re-location as a result of the construction of turn lanes and/or driveways. (Engineering)
39. To ensure that the design for any necessary widening, construction, or modifications of Public Streets does not conflict with existing dry utilities generally located behind the curb and gutter, and prior to the submittal of design drawings for those frontage improvements, the project proponent shall have the existing dry utilities pot holed for verification of location and depth. (Engineering)
40. Sight distances for all driveways shall be clearly shown on the improvement plans to verify that minimum standards are achieved. It will be the responsibility of the project proponent to provide appropriate landscaping and improvement plans, and to relocate and/or modify existing facilities as needed to meet these design objectives. (Engineering)

41. The applicant shall remove and reconstruct any existing damaged curb, gutter, and sidewalk along the property frontage. During plan check of the improvement plans and/or during inspection, Public Works will designate the exact areas to be reconstructed. Any existing public facilities damaged during the course of construction shall be repaired by the property owner and at the property owner's expense, to the satisfaction of the City. (Engineering)
42. Prior to the approval of the improvement plans, it will be the project proponent's responsibility to pay the standard City Trench Cut Recovery Fee for any cuts within the City streets that are required for the installation of underground utilities. (Engineering)
43. Prior to the issuance of building permits, the property owner shall pay into the following fee programs: Citywide Drainage Fee, Citywide Traffic Mitigation Fee (TMF), Highway 65 Joint Partners Association (JPA), South Placer Regional Transportation Authority (SPRTA), and City/County Fee. (Engineering)
44. Upon issuance of each building permit, the property owner shall pay the WRSP Transit Shuttle Service Fee per Development Agreement Section 3.15.14. (Alternative Transportation)
45. The applicant/developer shall prepare a Transportation Systems Management (TSM) Plan for the Plaza at Blue Oaks to be reviewed and approved by the Transportation Commission. (Public Works)
46. Prior to the issuance of a grading permit or approval of Improvement Plans, the grading plans shall clearly identify all existing water, sewer and recycled water utilities within the boundaries of the project (including adjoining public right of way). Existing utilities shall be identified in plan view and in profile view where grading activities will modify existing site elevations over top of or within 15 feet of the utility. Any utilities that could potentially be impacted by the project shall be clearly identified along with the proposed protection measures. The developer shall be responsible for taking measures and incurring costs associated with protecting the existing water, sewer and recycled water utilities to the satisfaction of the Environmental Utilities Director. (Environmental Utilities)
47. The applicant shall pay all applicable water and sewer fees. (Environmental Utilities)
48. Water and sewer infrastructure shall be designed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards and shall include:
 - a. Utilities or permanent structures shall not be located within the area which would be disturbed by an open trench needed to expose sewer trunk mains deeper than 12' unless approved by Environmental Utilities in these conditions. The area needed to construct the trench is a sloped cone above the sewer main. The cone shall have 1:1 side slopes.
 - b. Water, sewer and recycled mains shall not exceed a depth of 12' below finished grade, unless authorized in these conditions of approval.
 - c. All sewer manholes shall have all-weather 10-ton vehicle access unless authorized by these conditions of approval. (Environmental Utilities)
49. Recycled water infrastructure shall be designed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. The applicant shall pay all applicable recycled water fees. Easements shall be provided as necessary for recycled water infrastructure. (Environmental Utilities)
50. Trash enclosures, recycling areas, and enclosure approaches shall be designed to current Refuse Division specifications, the materials and colors shall match the building, and the location of such facilities shall be reviewed and approved by the Refuse Division, Planning and the Fire Department. The enclosure must have inside dimensions of 12 feet wide and 9 feet deep and be built to the specifications of the Solid Waste Department's Enclosure Description. (Refuse, Planning, Fire)

51. Access to trash enclosures shall have an inside turning radius of 25 feet and an outside turning radius of 45 feet must be maintained to allow the refuse truck access to and from the enclosure. Enclosures must have a clear approach of 65 feet in front of the enclosure to allow servicing bins. (Refuse)
52. A trash enclosure and recycling enclosure is required for each building and each tenant, otherwise, the building owner is responsible for the trash service. (Refuse)
53. The design and installation of all fire protection equipment shall conform to the California Fire Code and the amendments adopted by the City of Roseville, along with all standards and policies implemented by the Roseville Fire Department. (Fire)
54. The applicable codes and standards adopted by the City shall be enforced at the time construction plans have been submitted to the City for permitting (Fire)
55. The fire flow required, at a 50% reduction due to the buildings being sprinklered, will be based on the largest single structure in accordance with the California Fire Code at the time detail plans are submitted to the City of Roseville for review. The maximum fire flow will not exceed 4,000 gpm based on the Appendix III-AA of the California Fire Code. (Fire)
56. The fire department access road shall meet the City's requirements for width and turning radii of 30 and 50 as noted on the fire department standards for access. This shall be enforced at the time plan are submitted for review, Additional information can be found on the City's web site www.roseville.ca.us or contact Jason Rizzi, Fire Division Chief, at 916-774-5802 or jrizzi@roseville.ca.us with the Fire and Life Safety Division for information. (Fire)
57. If high-pile storage is involved as part of the construction of this occupancy, a separate fire permit shall be obtain from the fire department in accordance with the California Fire Code. Plans shall be submitted for approval prior to installation. (Fire)
58. Automatic fire extinguishing system risers, fire alarm system panels and digital alarm communicator system panels shall be located within an approved fire control room and shall be accessible from an adjacent fire apparatus roadway. There shall be only one fire control room per building. Said fire control room shall be a minimum size of thirty-five (35) square feet in size and shall be openable from the exterior via an approved door opening. (Fire)
59. All fire apparatuses, such as fire department connections and post indicating valves, serving identified building shall be designed and installed adjacent to each structure for first responder's operational purposes. (Fire)
60. If the existing water supply is unable to support the automatic fire sprinkler system, a listed fire pump would be your only option. If this is the case, you required fire pump room will have to be enlarged to accommodate all the required apparatuses needed to operate such a system. (Fire)
61. The phasing of this project shall not limit the fire department requirements for access and circulation throughout the project as a result of continuous construction in accordance with the California Fire Code, 2016 with the City of Roseville's Amendments. A separate phasing plan (and permit issued by the Building Department) shall be reviewed and approved by this department. (Fire)
62. This building shall be designed with fire department access doors every 100 lineal feet in accordance with Chapter 32 of the California Fire Code. (Fire)
63. This project shall not reduce the responsibilities of the owner(s) or future owners of these parcels from maintaining all on-site fire systems including all underground water lines if applicable. Private

underground fire lines that serve multiple buildings and/or parcels shall be part of the reciprocal easement agreement. There shall be a clear language regarding maintenance and common easements agreement for service in the CCRs. A service company shall be obtained to maintain all on-site fire protection systems as noted in the conditions of approval. (Fire)

64. If added cornice construction is involved, the design shall support the weight of a ladder leaning against the assembly as well as a 330-pound vertical load applied to the **leading edge** of the horizontal projection of the cornice (a 250-pound firefighter carrying 80 pounds of equipment stepping off of a ladder onto the top of the cornice). (Fire)
65. Use, increase of hazardous materials or storage, liquids, gases and/or chemicals shall meet the requirements of the Chapter 6.95 of the Health and Safety Code, the Roseville Fire Department and the National Fire Codes. Submit a complete plan set and the Hazardous Materials Business Plan, including names and amount of any hazardous materials that will be stored or used, to the Fire and Life Safety Division for review and approval. A permit application shall also be provided at the time of submittal. Contact Steve Anderson of our Hazardous Materials Division within the Fire Department at (916) 774-5821 to initiate the process. Satisfaction of storage and use shall be determined prior to requesting occupancy. (Fire)
66. Adequate radio coverage shall be provided within all buildings for public safety agencies, as required by Roseville Municipal Code and the California Fire Code. A field test shall be provided by a person in possession of a current FCC License, or a current technician certification issued by the Associated Public-Safety Communications Officials International (APCO), or the National Association of Business and Educational Radio (NABER). The building owner shall retain all test records on the inspected premises and a copy shall be submitted to the Fire Department officials in accordance with Section 510 of the California Fire Code.
67. Adequate radio coverage shall include all of the following:
 - a. A minimum signal strength of 95 dBm available in 90% of the area of each floor of the building when transmitted from the closest City of Roseville Radio Communication site.
 - b. A minimum signal strength of 95 dBm received at the closest City of Roseville Communication site when transmitted from 90% of the area of each floor of the building.
 - c. The frequency range that must be supported shall be 821-824 MHz and 866-869 MHz.
 - d. A 100 % reliability factor. (Fire, Police)
68. The Electric Department requires the submittal of the following information in order to complete the final electric design for the project:
 - a. one (1) set of improvement plans
 - b. load calculations
 - c. electrical panel one-line drawings (Electric)
69. All on-site external lighting shall be installed and directed to have no off-site glare. Lighting within the parking areas and pedestrian walkways shall provide a maintained minimum of one (1) foot candle, and 0.5 foot candle of light, respectively. All exterior light fixtures shall be vandal resistant. (Planning & Police)
70. The parking lot shall have properly posted signs that state the use of the parking area is for the exclusive use of employees and customers of this project. (See California Vehicle Code Sections 22507.8, 22511.5, 22511.8, 22658(a), and the City of Roseville Municipal Code Section 11.20.110). The location of the signs shall be shown on the approved site plan. (Planning & Police)

71. It is the developer's responsibility to notify PG&E of any work required on PG&E facilities. (PG&E)

DURING CONSTRUCTION & PRIOR TO ISSUANCE OF OCCUPANCY PERMITS:

72. Any backflow preventors visible from the street shall be painted green to blend in with the surrounding landscaping. The backflow preventors shall be screened with landscaping and shall comply with the following criteria:
- a. There shall be a minimum clearance of four feet (4'), on all sides, from the backflow preventor to the landscaping.
 - b. For maintenance purposes, the landscaping shall only be installed on three sides and the plant material shall not have thorns.
 - c. The control valves and the water meter shall be physically unobstructed.
 - d. The backflow preventor shall be covered with a green cover that will provide insulation. (Planning, Environmental Utilities)
73. The following easements shall be provided by separate instrument and shown on the site plan, unless otherwise provided for in these conditions:
- b. Water, sewer, and reclaimed water easements. (Engineering, Environmental Utilities)
 - c. Additional internal easements will be required to cover primary electrical facilities to the project when the final electrical design is completed. (Electric)
 - d. If not already provided with the subdivision map, the applicant shall dedicate a separate easement to the City of Roseville for the bus stop located on NE corner of Fiddymont Road at Blue Oaks Blvd. (shelter #176). The easement documents shall be drafted for approval and acceptance by the City of Roseville and recorded at the County Recorders' office. (Alternative Transportation, Engineering)
74. Easement widths shall comply with the City's Improvement Standards and Construction Standards. Separate document easements required by the City shall be prepared in accordance with the City's "Policy for Dedication of Easements to the City of Roseville". All legal descriptions shall be prepared by a licensed land Surveyor. All existing public utility, electric, water, sewer and reclaimed water easements shall be maintained unless otherwise authorized by these conditions of approval. (Public Works, Environmental Utilities, Electric)
75. Inspection of the potable water supply system on new commercial projects shall be as follows:
- a. The Environmental Utilities Inspector will inspect all potable water supply up to the downstream side of the backflow preventor.
 - b. The property owner/applicant shall be responsible for that portion of the water supply system from the backflow preventor to the building. The builder/contractor shall engage a qualified inspector to approve the installation of this portion of the water supply. The Building Division will require from the builder/ contractor, a written document certifying that this portion of the potable water supply has been installed per improvement plans and in accordance with the Uniform Plumbing Code. This certificate of compliance shall be submitted to the Building Division before a temporary occupancy or a building final is approved.

- c. The building inspectors will exclusively inspect all potable water supply systems for the building from the shutoff valve at the building and downstream within the building. (Building, Environmental Utilities)
- 76. All improvements being constructed in accordance with the approved grading and improvement plans shall be accepted as complete by the City. (Engineering)
- 77. The words "traffic control appurtenances" shall be included in the list of utilities allowed in public utilities easements (PUE's) located along public roadways. (Engineering)
- 78. The applicant/developer shall prepare a Transportation Systems Management (TSM) agreement for The Plaza at Blue Oaks to be reviewed and approved by the City Manager (Alternative Transportation).
- 79. Water, sewer and reclaimed water shall be constructed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. (Environmental Utilities)
- 80. All water backflow devices shall be tested and approved by the Environmental Utilities Department. (Environmental Utilities)
- 81. **Restaurants or other Food Service Establishment (FSE).** The applicant shall design for installation and/or install an exterior grease interceptor if the proposed business could potentially discharge substances containing fats, oils and grease (FOG) into the sewer system. The grease interceptor shall be adequate to separate and remove FOG contained in the wastewater from FSE's prior to discharge to the public sewer. (Environmental Utilities)
- 82. In the event an exterior grease interceptor cannot be installed due to space limitation, the developer shall install a grease trap, per City Standards, that will mechanically separate the FOG contained in the wastewater from the FSE prior to discharge to the public sewer. (Environmental Utilities)
- 83. Pursuant to the Municipal Code, the applicant shall apply for and obtain a FOG waste discharge permit (FOG WDP) from the Environmental Utilities Industrial Waste Division prior to occupancy or prior to discharging waste to the public sewer. The applicant shall submit information required by the Environmental Utilities Department for evaluation, including but not limited to: site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, FOG control device, grease interceptor or other pretreatment equipment and appurtenances by size, location and elevation. Additional information related to the applicant's business operations and potential discharge may be requested to properly evaluate the FOG WDP application. (Environmental Utilities)
- 84. All Electric Department facilities, including streetlights where applicable, shall be designed and built to the "City of Roseville Specifications for Commercial Construction." (Electric)
- 85. The City of Roseville Electric Department has electrical construction charges which are to be paid by the developer and which are explained in the City of Roseville "Specification for Commercial Construction." These charges will be determined upon completion of the final electrical design. (Electric)
- 86. Any relocation, rearrangement, or change of existing electric facilities due to this development shall be at the developer's expense. (Electric)
- 87. Any facilities proposed for placement within public/electric utility easements shall be subject to review and approval by the Electric Department before any work commences in these areas. This includes, but is not limited to, landscaping, lighting, paving, signs, trees, walls, and structures of any type. (Electric)

88. All electric metering shall be directly outside accessible. This can be accomplished in any of the following ways:
- a. Locate the metered service panel on the outside of the building.
 - b. Locate the metered service panel in a service room with a door that opens directly to the outside. The developer will be required to provide a key to the door for placement in a lock box to be installed on the outside of the door. Any doors leading from the service room to other areas of the building shall be secured to prohibit unauthorized entry. (Electric)
89. One 3/4" conduit with a 2-pair phone line shall be installed from the buildings telephone service panel to the meter section of the customer's electrical switchgear or panel. (Electric)
90. It is the responsibility of the developer to insure that all existing electric facilities remain free and clear of any obstruction during construction and when the project is complete. (Electric)

OTHER CONDITIONS OF APPROVAL:

90. Signs shown on the elevations are not approved as part of the Design Review Permit. A Sign Permit is required for all project signs. (Planning)
91. Following the installation of the landscaping, all landscape material shall be maintained in a healthy and weed free condition; dead plant material shall be replaced immediately. All trees shall be maintained and pruned in accordance with the accepted practices of the International Society of Arboriculture (ISA). (Planning)
92. The City reserves the right to restrict vehicle turning movements within the public right-of-way in the future if deemed necessary by the City Engineer. (Engineering)
93. The required width of fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Minimum required widths and vertical clearances established by the Fire Code shall be maintained at all times during construction. Closure of accesses for fire apparatus by gates, barricades and other devices shall be prohibited unless approved by the Fire Chief. (Fire)
94. Temporary aboveground storage tanks may be used at construction sites for diesel fuel only and shall not exceed 1,000 gallon capacity. Tanks shall comply with all provisions found within the Fire Code. A Fire Department Permit shall be obtained prior to tank installation. The permit shall expire after 90 days from the date of issuance, unless extended by the Fire Chief. (Fire)
95. If site survey or earth moving work results in the discovery of hazardous materials in containers or what appears to be hazardous wastes released into the ground, the contractor or person responsible for the building permit must notify the Roseville Fire Department immediately. A representative from the Fire Department will make a determination as to whether the incident is reportable or not and if site remediation is required. (Fire)
96. The location and design of the gas service shall be determined by PG&E. The design of the gas service for this project shall not begin until PG&E has received a full set of City approved improvement plans for the project. (PG&E)
97. All commercial air conditioning units 5 tons or less (<65,000 btu/ h) shall meet the current Consortium for Energy Efficiency ("CEE") Tier I specifications. The SEER/EER ratings will be specified on building plans and Title 24 compliance certificates at the time building permits are requested. The SEER and EER ratings will be verified with appropriate documentation. These requirements shall be utilized in the overall energy compliance calculations required for issuance of any building permit for

any commercial building in the Plan Area. Any variances, with the exception of Tier 2 compliance, must be approved by the Electric Department's Retail Energy Services Department. (Electric)

98. The project is subject to the noise standards established in the City's Noise Ordinance. In accordance with the City's Noise Ordinance project construction is exempt between the hours of seven a.m. and seven p.m. Monday through Friday, and between the hours of eight a.m. and eight p.m. Saturday and Sunday. Provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order. (Building)
99. The developer (or designated consultant) shall certify that the building foundation location has been placed according to all approved setback requirements shown on the approved site plan. The developer shall prepare a written statement confirming building placement and provide an original copy to the City Building Division Field Inspector at the time of or prior to the foundation inspection. (Building)
100. Prior to Certificate of Occupancy, the applicant may apply for a Temporary Certificate of Occupancy (TCO) of the building. If a TCO is desired, the applicant must submit a written request to the Building Division a minimum of thirty (30) days prior to the expected temporary occupancy date and shall include a schedule for occupancy and a description of the purpose for the Temporary Certificate of Occupancy. (Building)
101. Concurrent with submittal for plan check and prior to a request for final building inspection, the applicant may request City approval of an occupancy phasing plan to allow individual or multiple building occupancies. This request shall be made in writing to the Building Department and shall include 10 copies of the following:
 - a. A description of measures that will be undertaken to minimize conflict between residents/building occupants and construction traffic (e.g. fencing, etc.);
 - b. A phasing plan showing the proposed buildings, internal roads and access routes, landscaping, trash enclosure locations, and any other improvements planned for each phase; and
 - c. Estimated time frame for each phase and a specific date for the first phase. (Planning, Building)

CONDITIONS OF APPROVAL FOR THE TENTATIVE SUBDIVISION MAP (FILE #PL17-0368)

1. The approval of a Tentative Map and/or tentative site plan does not constitute approval of proposed improvements as to size, design, materials, or location, unless specifically addressed in these conditions of approval. (Engineering)
2. The design and construction of all improvements shall conform to the Improvement Standards and Construction Standards of the City of Roseville, or as modified by these conditions of approval, or as directed by the City Engineer. (Engineering)
3. The applicant shall not commence with any on-site improvements or improvements within the right-of-way until such time as grading and/or improvement plans are approved and grading and/or encroachment permits are issued by the Department of Development Service Engineering Division (Engineering)
4. The applicant shall pay City's actual costs for providing plan check, mapping, GIS, and inspection services. This may be a combination of staff costs and direct billing for contract professional services. Project billing may occur up to two (2) months after the end of warranty or the Notice of

Termination date for the SWPPP, whichever occurs later. (Engineering, Environmental Utilities, Electric, Finance)

PRIOR TO ISSUANCE OF A GRADING PERMIT AND/OR IMPROVEMENT PLANS:

5. Grading around the native oak trees shall be as shown on the tentative map or as approved in these conditions. (Planning)
6. The applicant shall submit to the Planning and Engineering Departments the appropriate Army Corps of Engineers permit or clearance, the California Department of Fish and Game Stream Bed Alteration Agreement, and/or the Regional Water Quality Control Board Water Quality Certificate. (Planning)
7. Water and sewer infrastructure shall be designed and constructed pursuant to the adopted City of Roseville Improvement Standards and Construction Standards and shall reflect the following:
 - a) Sewer and water service laterals shall not be allowed off of water and sewer mains larger than 12 inches in diameter.
 - b) Utilities or permanent structures shall not be located within the area which would be disturbed by an open trench needed to expose sewer trunk mains deeper than 12' unless approved by Environmental Utilities in these conditions. The area needed to construct the trench is a sloped cone above the sewer main. The cone shall have 1:1 side slopes.)
 - c) Water and sewer mains shall not exceed a depth of 12' below finished grade, unless authorized in these conditions
 - d) All sewer manholes shall have all-weather 10-ton vehicular access unless authorized by these conditions. (Environmental Utilities)
8. Recycled water infrastructure shall be designed pursuant to the adopted City of Roseville Improvement Standards and the City of Roseville Construction Standards. The applicant shall pay all applicable recycled water fees. Easements shall be provided as necessary for recycled water infrastructure. (Environmental Utilities)
9. All sewer on-site between MHs shall be considered public. (Environmental Utilities)
10. Organic enclosures shall be located perpendicular to the main drive aisle. (Environmental Utilities)
11. Fire hydrants shall be located as required by the Fire Department. The maximum distance between fire hydrants shall not exceed 1000 feet on center. (Fire)
12. Minimum fire flow is 3,000 gallons per minute with 20 lbs. psi residual pressure. A change in any of the conditions may increase the required fire flow. (Fire)
13. Any facilities proposed for placement within public/electric utility easements shall be subject to review and approval by the Electric Department before any work commences in these areas. This includes, but is not limited to, landscaping, lighting, paving, signs, trees, walls, and structures of any type. (Electric)
14. The design for electrical service for this project will begin when the Electric Department has received a full set of improvement plans for the project. (Electric)
15. All landscaping in areas containing electrical service equipment shall conform with the "Electric Department Landscape Design Requirements" as outlined in Section 10.00 of the Electric Department's "Specifications for Commercial Construction." (Electric)

16. The Electric Department requires the submittal of the following information in order to complete the final electric design for the project:
 - one (1) set of improvement plans
 - load calculations
 - electrical panel one-line drawings
17. The location and design of the gas service shall be determined by PG&E. The design of gas service for this project shall not begin until PG&E has received a full set of City approved improvement plans for the project. (PG&E)
18. It is the developer's responsibility to notify PG&E of any work required on PG&E facilities. (PG&E)

PRIOR TO OR UPON RECORDATION OF FINAL/PARCEL MAP:

19. The following easements shall be provided and shown on the Final/Parcel Map or by separate instrument, unless otherwise provided for in these conditions:
 - a) Water, sewer, and reclaimed water easements; and,
 - b) The applicant shall dedicate an easement to the City of Roseville for the bus stop located on NE corner of Fiddymment Road at Blue Oaks Blvd. (shelter #176). The easement language/documents shall be drafted for approval and acceptance by the City of Roseville and recorded with the map. (Alternative Transportation, Engineering)

Easement widths shall comply with the City's Improvement Standards and Construction Standards. (Environmental Utilities, Electric, Engineering)

20. All existing easements shall be maintained, unless otherwise provided for in these conditions. (Environmental Utilities, Electric, Engineering)
21. Separate document easements required by the City shall be prepared in accordance with the City's "Policy for Dedication of Easements to the City of Roseville". All legal descriptions shall be prepared by a licensed Land Surveyor (Environmental Utilities, Electric, Engineering)
22. A declaration of Conditions, Covenants and Restrictions (CC&Rs), in a form approved by the City Attorney, shall be recorded on the entire property concurrently with the Final/Parcel Map. The CC&Rs shall include the following item(s):
 - a) A clause stating that the property owners within this subdivision shall agree to participate in a Transportation Systems Management (TSM) Plan and shall agree to enter into a Transportation Management Agreement with the City of Roseville (Alternative Transportation, Planning).
 - b) A clause prohibiting the amendment, revision or deletion of any sections in the CC&Rs required by these conditions of approval without the prior written consent of the City Attorney. (Attorney)
 - c) A clause requiring reciprocal access and parking for all parcels. (Planning)

23. In the event that the Final (Parcel) Map will record prior to the completion of on-site construction, all utility and access easements shall be placed on the face of the Map to the satisfaction of the City Engineer. If all on-site improvements are complete prior to the recordation of the map, then a separate agreement allowing all parcels/lots the rights of reciprocal access, rights to construct, and parking shall

be submitted to the City as a part of final/parcel map submittal. Said agreement shall be in a form acceptable to the City Attorney and referenced on the face of the recorded map. (Engineering)

24. The Final/Parcel Map shall include an irrevocable offer to dedicate public rights-of-way and public and/or private easements as required by the City. (Engineering)
25. The words "traffic control appurtenances" shall be included in the list of utilities allowed in public utilities easements (PUE's) located along public roadways. (Engineering)
26. The Final/Parcel Map shall be submitted per, "The Digital Submittal of Cadastral Surveys." A plot or print of the submittal shall accompany the electronic copy. The complete submittal shall occur after the Engineering Department approval but prior to City Council approval of the Final/Parcel Map. (Engineering)
27. Electric construction costs incurred by the City of Roseville Electric Department for this project shall be paid for by the developer per the applicable policy. (Electric)
28. Additional internal easements will be required to cover primary electrical facilities to the project when the final electrical design is completed. (Electric)
29. All Electric Department facilities, including streetlights where applicable, shall be designed and built to the "City of Roseville Specifications for Commercial Construction." (Electric)
30. The City of Roseville Electric Department has electrical construction charges which are to be paid by the developer and which are explained in the City of Roseville "Specification for Commercial Construction." These charges will be determined upon completion of the final electrical design. (Electric)
31. The Environmental Utilities Department shall make a determination that there is adequate conveyance and treatment capacity in the City sewer system to handle the newly created Lot/Parcels. (Environmental Utilities)
32. The applicant shall pay all applicable water and sewer fees. (Environmental Utilities)

OTHER CONDITIONS OF APPROVAL:

33. The applicant shall pay City's actual costs for providing plan check, installation and inspection services. This may be a combination of staff costs and direct billing for contract professional services. (Environmental Utilities, Engineering)
34. Any relocation, rearrangement, or change to existing electric facilities due to this development shall be at the developer's expense. (Electric)
35. It is the responsibility of the developer to insure that all existing electric facilities remain free and clear of any obstructions during construction and when the project is complete. (Electric)
36. No grading activities shall be permitted within 10 feet around the power poles. If there are major grade changes around the poles, they will be handled case-by-case during civil improvement plan review. (Electric)
37. Contractors working under and around power lines shall maintain Cal OSHA requirements, which will be discussed at the Pre-Construction meeting. (Electric)
38. If site survey or earth moving work results in the discovery of hazardous materials in containers or what appears to be hazardous wastes released into the ground, the contractor shall notify the Roseville Fire Department immediately. A representative from the Fire Department will make a determination as to

whether the incident is reportable or not and if site remediation is required. Non emergency releases or notifications about the presence of containers found shall be reported to the Fire Department. (Fire)

39. The project shall comply with all applicable environmental mitigation measures identified in the Plaza at Blue Oaks Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program. (Planning)

CONDITIONS OF APPROVAL FOR THE TREE PERMIT (FILE #PL17-0368)

PRIOR TO ISSUANCE OF ANY PERMITS OR ANY CONSTRUCTION ON-SITE:

1. All recommendations contained in the Arborist Report (Exhibit J) are incorporated by reference into these conditions, except as modified herein. (Planning)
2. Tree(s) # 1510, 1513, 1514, 1521, 1522, 1523, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1559, 1562, 1563, 1564 (or as listed in Exhibit J and shown on Exhibit K) are approved for removal with this tree permit. All other native oak trees shall remain in place. Trees to be removed shall be clearly marked in the field and inspected by Planning Staff prior to removal. Removal of the trees shall be performed by or under the supervision of a certified arborist. (Planning)
3. The developer shall be responsible for the replacement of the total number of inches proposed for removal. The total number of inches for this project is 721. Mitigation must be provided in the form of payment in the amount of \$39,294 prior to tree removal, and planting of non-native and native trees (as shown in the landscape plan, included as Exhibit I). (Planning)
4. No activity shall be permitted within the protected zone of any native oak tree beyond those identified by this report. (Planning)
5. A \$10,000 cash deposit or bond (or other means of security provided to the satisfaction of the Planning Division) shall be posted to ensure the preservation of all remaining trees during construction. The cash deposit or bond shall be posted in a form approved by the City Attorney. Each occurrence of a violation on any condition regarding tree preservation shall result in forfeiture of all or a portion of the cash deposit or bond. (Planning)
6. A violation of any of the conditions of this Tree Permit is a violation of the Roseville Municipal Code, the Zoning Ordinance (Chapter 19.74) and the Tree Preservation Ordinance (Chapter 19.66). Penalties for violation of any of the conditions of approval may include forfeiture of the bond, suspension or revocation of the permit, payment of restitution, and criminal penalties. (Planning)
7. A fencing plan shall be shown on the approved site plan and/or improvement plans demonstrating the Protected Zone for the affected trees. A maximum of three feet beyond the edge of the walls, driveways, or walkways will be allowed for construction activity and shall be shown on the fencing plan. The fencing plan shall be reviewed and approved by the Planning Division prior to the placement of the protective fencing. (Planning)
8. The applicant shall install a minimum of a five-foot high chain link fence (or acceptable alternative) at the outermost edge of the Protected Zone of the oak tree. Where encroachment is permitted pursuant to Condition 4, above, the fencing for encroachments shall be installed at the limit of construction activity. The applicant shall install signs at two equidistant locations on the temporary fence that are clearly visible from the front of the lot and where construction activity will occur. The size of each sign shall be a minimum of two feet (2') by two feet (2') and must contain the following language: "WARNING THIS

FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE PLANNING DIVISION". (Planning)

9. Once the fencing is installed, the applicant shall schedule an appointment with the Planning Division to inspect and approve the temporary fencing before beginning any construction. (Planning)
10. The applicant shall arrange with the arborist to perform, and certify in writing, the completion of deadwooding, fertilization, and all other work recommended for completion prior to the approval of improvement plans. Pruning shall be done by an Arborist or under the direct supervision of a Certified Arborist, in conformance with International Society of Arboriculture (I.S.A.) standards. Any watering and deep root fertilization which the arborist deems necessary to protect the health of the trees as noted in the arborist report or as otherwise required by the arborist shall be completed by the applicant. (Planning)
11. A utility trenching pathway plan shall be submitted depicting all of the following systems: storm drains, sewers, water mains, and underground utilities. The trenching pathway plan shall show the proposed locations of all lateral lines. (Planning)
12. A Site Planning Meeting shall be held with the applicant, the applicant's primary contractor, the Planning Division and the Engineering Division to review this permit, the approved grading or improvement plans, and the tree fencing prior to any grading on-site. The Developer shall call the Planning Division and Engineering Division two weeks prior to the start of grading work to schedule the meeting and fencing inspection. (Planning)
13. The following information must be located on-site during construction activities: Arborist Report, approved site plan/improvement plans including fencing plan, and conditions of approval for the Tree Permit. All construction must follow the approved plans for this tree permit without exception. (Planning)
14. All preservation devices (aeration systems, oak tree wells, drains, special paving, etc.) shall be designed and installed as required by these conditions and the arborist's recommendations, and shall be shown on the improvement plans or grading plans. (Planning)
15. If any native ground surface fabric within the Protected Zone must be removed for any reason, it shall be replaced within forty-eight (48) hours. (Planning)
16. Storage or parking of materials, equipment, or vehicles is not permitted within the Protected Zone of any oak tree. Vehicles and other heavy equipment shall not be operated within the Protected Zone of any oak tree. (Planning)
17. Where recommended by the arborist, portions of the foundation shall be hand dug under the direct supervision of the project arborist. The certified arborist shall immediately treat any severed or damaged roots. Minor roots less than one (1) inch in diameter may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area. Major roots over one (1) inch in diameter may not be cut without approval of an arborist and any arborist recommendations shall be implemented. (Planning)
18. The temporary fencing shall remain in place throughout the entire construction period and shall not be removed without obtaining written authorization from the Planning Division. In no event shall the fencing be removed before the written authorization is received from the Planning Division. (Planning)

PRIOR TO ISSUANCE OF FINAL:

19. Within 5 days of the completion of construction, a Certification Letter from a certified arborist shall be submitted to and approved by the Planning Division. The certification letter shall attest to all of the work (regulated activity) that was conducted in the protected zone of the tree, either being in conformance with this permit or of the required mitigation still needing to be performed. (Planning)
20. The approval of this Tree Permit shall run with the Design Review Permit and shall tentatively expire on **May 14, 2022**. The applicant may extend the tree permit for an additional year subject to the extension requirements for a Design Review Permit. (Planning)

EXHIBITS

- A. Initial Study/Mitigated Negative Declaration
- B. Site Plan
- C. Tentative Subdivision Map
- D. Preliminary Grading & Drainage Plan
- E. Preliminary Utility Plan
- F. Elevations
- G. Materials & Color Board
- H. Photometric & Site Lighting Plan
- I. Landscape Plan
- J. Arborist Report
- K. Preliminary Tree Impact Plan

<u>Note to Applicant and/or Developer:</u> Please contact Planning Division staff at (916) 774-5276 prior to the Commission meeting if you have any questions on any of the recommended conditions for your project. If you challenge the decision of the Commission in court, you may be limited to raising only those issues which you or someone else raised at the public hearing held for this project, or in written correspondence delivered to the Planning Manager at, or prior to, the public hearing.
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NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Notice is hereby given that, as Lead Agency, the City of Roseville, Development Services Department, Planning Division has prepared an Initial Study leading to a **Mitigated Negative Declaration** for the project referenced below. This Mitigated Negative Declaration is available for public review and comment.

Project Title/File#: WRSP PCL F-31 – The Plaza at Blue Oaks; File #PL17-0368

Project Location: 1950 Blue Oaks Boulevard, Roseville, Placer County, CA; APN 017-117-093-000

Project Owner: Joe Zawidski, Signature Management Company

Project Applicant: Joe Zawidski, West Roseville Development Company, Inc.

Project Planner: Kinarik Shallow, Associate Planner

Project Description: The proposed project is a retail center consisting of a ±35,000 square-foot anchor grocery store, a 12-pump gas station with a ±3,500 square-foot convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet. The project includes a Design Review Permit to review the site design and proposed buildings, a Tree Permit to remove several native oak trees on the westerly portion of the site, and a Tentative Subdivision Map to subdivide the parcel into eight (8) lots.

Document Review and Availability: The public review and comment period begins on April 17, 2020 and ends on May 7, 2020. The **Mitigated Negative Declaration** may be reviewed online at

<https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8774505>

Written comments on the adequacy of the Mitigated Negative Declaration may be submitted to Kinarik Shallow, Associate Planner, at kshallow@roseville.ca.us and must be received no later than 5:00 pm on May 7, 2020. Due to the currently in place Placer County Stay at Home Directive, physical correspondence will not be able to be considered during the review period.

This project will be scheduled for a public hearing before the City's Planning Commission. At this hearing, the Planning Commission will consider the Mitigated Negative Declaration and associated project entitlements. The tentative hearing date is May 14, 2020.

Greg Bitter
Planning Manager

Dated: April 15, 2020

Publish: April 17, 2020

MITIGATED NEGATIVE DECLARATION

Project Title/File Number: WRSP PCL F-31 – The Plaza at Blue Oaks; File # PL17-0368
Project Location: 1950 Blue Oaks Boulevard, Roseville, Placer County, CA; APN 017-117-093-000
Project Applicant: Joe Zawidski, Signature Management Company
Property Owner: Joe Zawidski, West Roseville Development Company, Inc.
Lead Agency Contact Person: Kinarik Shallow, Associate Planner - City of Roseville; (916) 746-1309
Date: April 15, 2020

Project Description:

The proposed project is a retail center consisting of a ±35,000 square-foot anchor grocery store, a 12-pump gas station with a ±3,500 square-foot convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet. The project includes a Design Review Permit to review the site design and proposed buildings, a Tree Permit to remove several native oak trees on the westerly portion of the site, and a Tentative Subdivision Map to subdivide the parcel into eight (8) lots.

DECLARATION

The Planning Manager has determined that the above project will not have significant effects on the environment and therefore does not require preparation of an Environmental Impact Report. The determination is based on the attached initial study and the following findings:

- A. *The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, reduce the number or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory.*
- B. *The project will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.*
- C. *The project will not have impacts, which are individually limited, but cumulatively considerable.*
- D. *The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.*
- E. *No substantial evidence exists that the project may have a significant effect on the environment.*
- F. *The project incorporates all applicable mitigation measures identified in the attached initial study.*
- G. *This Mitigated Negative Declaration reflects the independent judgment of the lead agency.*

INITIAL STUDY & ENVIRONMENTAL CHECKLIST

Project Title/File Number:	WRSP PCL F-31 – The Plaza at Blue Oaks; File #PL17-0368
Project Location:	1950 Blue Oaks Boulevard, Roseville, Placer County, CA; APN 017-117-093-000
Project Description:	The proposed project is a retail center consisting of a ±35,000 square-foot anchor grocery store, a 12-pump gas station with a ±3,500 square-foot convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet. The project includes a Design Review Permit to review the site design and proposed buildings, a Tree Permit to remove several native oak trees on the westerly portion of the site, and a Tentative Subdivision Map to subdivide the parcel into eight (8) lots.
Project Applicant:	Joe Zawidski, Signature Management Company
Property Owner:	Joe Zawidski, West Roseville Development Company, Inc.
Lead Agency Contact:	Kinarik Shallow, Associate Planner; Phone (916) 746-1309

This initial study has been prepared to identify and assess the anticipated environmental impacts of the above described project application. The document relies on previous environmental documents (see Attachments) and site-specific studies prepared to address in detail the effects or impacts associated with the project. Where documents were submitted by consultants working for the applicant, City staff reviewed such documents in order to determine whether, based on their own professional judgment and expertise, staff found such documents to be credible and persuasive. Staff has only relied on documents that reflect their independent judgment, and has not accepted at face value representations made by consultants for the applicant.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA), (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

The initial study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an EIR. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a negative declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures to which the applicant agrees, the impact will be reduced to a less than significant effect, a mitigated negative declaration shall be prepared.

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PROJECT DESCRIPTION

Project Location

The 13.35-acre project site is located on Parcel F-31 of the West Roseville Specific Plan (WRSP), at the northeast corner of Blue Oaks Boulevard and Fiddymment Road (Figure 1). The address of the project site is 1950 Blue Oaks Boulevard.

Figure 1: Project Location



Background

The WRSP was approved by City Council in February 2004. The WRSP area includes 3,162 acres in the northwest portion of the City, west of Fiddymment Road and generally north of Pleasant Grove Boulevard. An Environmental Impact Report (EIR) was certified with the WRSP (State Clearinghouse #2002082057), which examined the impacts of Specific Plan buildout. This addressed the major cumulative impacts of developing the Specific Plan as a whole, including the subject property (Parcel F-31).

Environmental Setting

The project site is currently undeveloped and is comprised mostly of annual grasslands and several native oak trees. The site varies in grade, with a high point on the site at ± 106 feet above sea level and the low point of the site at ± 83 feet above sea level. The site generally slopes downward on the southwestern and northwestern corners of the site, where the oak trees are located, and then becomes level with the roadways. Streetlights are located along the roadway frontages and utility poles exist along Blue Oaks Boulevard. Curb and gutter improvements exist along the perimeter of the property. Sidewalks are fully constructed along Fiddymment Road,

while partial sidewalks exist along the remainder of the site. The corner of Blue Oaks Boulevard and Fiddymment Road consists of a neighborhood entry feature including hardscape elements such as pilasters, raised planters, and small accent trees. The site is adjacent to Harvey Way to the north with an undeveloped High Density Residential parcel beyond, Oak Meadow Drive to the east with Fiddymment Ranch Apartments beyond, Blue Oaks Boulevard to the south with single-family residential uses beyond, and Fiddymment Road to the west with a Community Commercial parcel beyond. Additionally, Pleasant Grove Creek is located approximately one mile north of the site.

Table 1: Adjacent Zoning and Land Use

Location	Zoning	General Plan Land Use	Actual Use of Property
Site	Community Commercial (CC)	Community Commercial (CC)	Vacant
North	Harvey Way with Attached Housing (R3) beyond	High Density Residential (HDR-24.8)	Vacant
South	Blue Oaks Boulevard with Residential Mixed Use/Special Area-Del Webb Specific Plan (RMU/SA-DW)	Low Density Residential (LDR-5)	Single-family residential
East	Oak Meadow Drive with R3 beyond	HDR-25	Apartment Complex
West	Fiddymment Road with CC beyond	CC	Medical Office

Proposed Project

The proposed project is a retail center consisting of a ±35,000 square-foot anchor grocery store, a 12-pump gas station with a ±3,500 square-foot convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet, as well as associated parking, lighting, and landscaping. The total building square footage will be approximately 82,100 square feet. The project includes a Design Review Permit to review the site design and proposed buildings, a Tree Permit to remove several native oak trees on the westerly portion of the site, and a Tentative Subdivision Map to subdivide the parcel into eight (8) lots. No building is being proposed on Lot 2 at this time, which will be located on the northeastern corner of the site and will consist of approximately 1.3 acres.

CITY OF ROSEVILLE MITIGATION ORDINANCES, GUIDELINES, AND STANDARDS

For projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, CEQA Guidelines section 15183(f) allows a lead agency to rely on previously adopted development policies or standards as mitigation for the environmental effects, when the standards have been adopted by the City, with findings based on substantial evidence, that the policies or standards will substantially mitigate environmental effects, unless substantial new information shows otherwise (CEQA Guidelines §15183(f)). The City of Roseville adopted CEQA Implementing Procedures (Implementing Procedures) which are consistent with this CEQA Guidelines section. The current version of the Implementing Procedures were adopted in April 2008, along with Findings of Fact, as Resolution 08-172. The below regulations and ordinances were found to provide uniform mitigating policies and standards, and are applicable

to development projects. The City's Mitigating Policies and Standards are referenced, where applicable, in the Initial Study Checklist.

- City of Roseville 2035 General Plan
- City of Roseville Zoning Ordinance (RMC Title 19)
- City of Roseville Improvement Standards (Resolution 02-37)
- City of Roseville Construction Standards (Resolution 01-208)
- Subdivision Ordinance (RMC Title 18)
- Noise Regulation (RMC Ch.9.24)
- Flood Damage Prevention Ordinance (RMC Ch.9.80)
- Drainage Fees (Dry Creek [RMC Ch.4.49] and Pleasant Grove Creek [RMC Ch.4.48])
- West Placer Stormwater Quality Design Manual (Resolution 16-152)
- Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20)
- Traffic Mitigation Fee (RMC Ch.4.44)
- Highway 65 Joint Powers Authority Improvement Fee (Resolution 2008-02)
- South Placer Regional Transportation Authority Transportation and Air Quality Mitigation Fee (Resolution 09-05)
- Tree Preservation Ordinance (RMC Ch.19.66)
- Community Design Guidelines (Resolution 95-347)
- Specific Plan Design Guidelines:
 - o West Roseville Specific Plan and Design Guidelines (Resolution 04-40)

OTHER ENVIRONMENTAL DOCUMENTS RELIED UPON

- Amoruso Ranch Specific Plan Final Environmental Impact Report
- West Roseville Specific Plan Environmental Impact Report (SCH #2002082057)

Pursuant to CEQA Guidelines Section 15183, any project which is consistent with the development densities established by zoning, a Community Plan, or a General Plan for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The Amoruso Ranch Specific Plan EIR updated the City's General Plan to 2035, and updated Citywide analyses of traffic, water supply, water treatment, wastewater treatment, and waste disposal. The proposed project is consistent with the adopted land use designations examined within the environmental documents listed above. This Initial Study focuses on effects particular to the specific project site, impacts which were not analyzed within the EIR, and impacts which may require revisiting due to substantial new information. When applicable, the topical sections within the Initial Study summarize the findings within the environmental documents listed above. The analysis, supporting technical materials, and findings of the environmental document are incorporated by reference, and are available for review at the Civic Center, 311 Vernon Street, Roseville, CA.

EXPLANATION OF INITIAL STUDY CHECKLIST

The California Environmental Quality Act (CEQA) Guidelines recommend that lead agencies use an Initial Study Checklist to determine potential impacts of the proposed project on the physical environment. The Initial Study Checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by this project. This section of the Initial Study incorporates a portion of Appendix G Environmental

Checklist Form, contained in the CEQA Guidelines. Within each topical section (e.g. Air Quality) a description of the setting is provided, followed by the checklist responses, thresholds used, and finally a discussion of each checklist answer.

There are four (4) possible answers to the Environmental Impacts Checklist on the following pages. Each possible answer is explained below:

- 1) A “Potentially Significant Impact” is appropriate if there is enough relevant information and reasonable inferences from the information that a fair argument based on substantial evidence can be made to support a conclusion that a substantial, or potentially substantial, adverse change may occur to any of the physical conditions within the area affected by the project. When one or more “Potentially Significant Impact” entries are made, an EIR is required.
- 2) A “Less Than Significant With Mitigation” answer is appropriate when the lead agency incorporates mitigation measures to reduce an impact from “Potentially Significant” to “Less than Significant.” For example, floodwater impacts could be reduced from a potentially-significant level to a less-than-significant level by relocating a building to an area outside of the floodway. The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level. Mitigation measures are identified as MM followed by a number.
- 3) A “Less Than significant Impact” answer is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant, or the application of development policies and standards to the project will reduce the impact(s) to a less-than-significant level. For instance, the application of the City’s Improvement Standards reduces potential erosion impacts to a less-than-significant level.
- 4) A “No Impact” answer is appropriate where it can be demonstrated that the impact does not have the potential to adversely affect the environment. For instance, a project in the center of an urbanized area with no agricultural lands on or adjacent to the project area clearly would not have an adverse effect on agricultural resources or operations. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources cited in the Initial Study. Where a “No Impact” answer is adequately supported by the information sources cited in the Initial Study, further narrative explanation is not required. A “No Impact” answer is explained when it is based on project-specific factors as well as generous standards.

All answers must take account of the whole action involved, including off- and on-site, indirect, direct, construction, and operation impacts, except as provided for under State CEQA Guidelines.

INITIAL STUDY CHECKLIST

I. Aesthetics

The project site is located in a typical urbanized setting within a commercially zoned area of the City and is adjacent to roadways on all four sides. Public views of the site are from Blue Oaks Boulevard and Fiddymont Road, both arterial roadways, and its adjacent sidewalks. Public views are also from Harvey Way and Oak Meadow Drive, which are considered primary residential streets. The site is undeveloped and contains several native oak trees with grasses and small annual plants. The project will allow construction of a commercial shopping center consisting of multiple buildings totaling approximately 82,100 square feet. Surrounding uses include an undeveloped High Density Residential parcel to the north, an apartment complex (currently under construction) to the east, a single-family subdivision to the south, and a medical office building to the west.

Except as provided in Public Resources Code Section 21099, would the project:

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

Thresholds of Significance and Regulatory Setting:

The significance of an environmental impact cannot always be determined through the use of a specific, quantifiable threshold. CEQA Guidelines Section 15064(b) affirms this by the statement “an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.” This is particularly true of aesthetic impacts. As an example, a proposed parking lot in a dense urban center would have markedly different visual effects than a parking lot in an open space area. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–d of the checklist below. The Findings of the Implementing Procedures indicate that compliance with the Zoning Ordinance (e.g. building height, setbacks, etc.), Subdivision Ordinance (RMC Ch. 18), Community Design Guidelines (Resolution 95-347), and applicable Specific Plan Policies and/or Specific Plan Design Guidelines will prevent significant impacts in urban settings as it relates to items a and b, below.

Discussion of Checklist Answers:

a–b) There are no designated or eligible scenic vistas or scenic highways within or adjacent to the City of Roseville.

c) The project site is in an urban setting and has street frontage on all four sides, with a future high density residential parcel to the north, a multi-family apartment complex to the east, low density residential uses to the south, and commercial uses to the west. The City of Roseville has adopted Community Design Guidelines (CDG) to establish common design elements and expectations for development within the City. The CDG includes provisions related to architectural design, site design and landscape design, to enhance the visual character of the urban environment. The CDG recommends preserving, to the extent feasible, visual resources such as native oak trees and creek or wetland resources. The site does not contain any creek or wetland resources; however, the project will require the removal of twenty-four (24) native oak trees on the project site, and therefore requires a Tree Permit. Consistent with the City's Tree Preservation ordinance (RMC Ch. 19.66), the Tree Permit would contain conditions of approval that include protective measures for the trees to remain on site, and mitigation measures that include payment of in-lieu mitigation fees to compensate for oak tree encroachment and removal. The project has been reviewed by City staff and was found to be consistent with the goals and policies of the CDG, the WRSP, and applicable zoning regulations. As such, impacts of the project related to this criterion are less than significant.

d) The project involves nighttime lighting to provide for the security and safety of project users. However, the project is already located within an urbanized setting with many existing lighting sources. Lighting for the project is conditioned to comply with City standards (i.e., Community Design Guidelines) to limit the height of light standards and to require cut-off lenses and glare shields to minimize light and glare impacts. The project will not create a new source of substantial light. None of the project elements are highly reflective, and therefore the project will not contribute to an increased source of glare. Impacts of the project are less than significant.

II. Agricultural & Forestry Resources

The State Department of Conservation oversees the Farmland Mapping and Monitoring Program, which was established to document the location, quality, and quantity of agricultural lands, and the conversion of those lands over time. The primary land use classifications on the maps generated through this program are: Urban and Built Up Land, Grazing Land, Farmland of Local Importance, Unique Farmland, Farmland of Statewide Importance, and Prime Farmland. According to the current California Department of Conservation Placer County Important Farmland Map (2012), the majority of the City of Roseville is designated as Urban and Built Up Land and most of the open space areas of the City are designated as Grazing Land. There are a few areas designated as Farmland of Local Importance and two small areas designated as Unique Farmland located on the western side of the City along Baseline Road. The current Williamson Act Contract map (2013/2014) produced by the Department of Conservation shows that there are no Williamson Act contracts within the City, and only one (on PFE Road) that is adjacent to the City. None of the land within the City is considered forest land by the Board of Forestry and Fire Protection.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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 and Monitoring Program of the California Resources Agency, to non-agricultural use?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Thresholds of Significance and Regulatory Setting:

Unique Farmland, Farmland of Statewide Importance, and Prime Farmland are called out as protected farmland categories within CEQA Guidelines Appendix G. Neither the City nor the State has adopted quantified significance thresholds related to impacts to protected farmland categories or to agricultural and forestry resources. For the purpose of this study, the significance thresholds are as stated in CEQA Guidelines Appendix G, as shown in a–e of the checklist above.

Discussion of Checklist Answers:

a–e) The project site is not used for agricultural purposes, does not include agricultural zoning, is not within or adjacent to one of the areas of the City designated as a protected farmland category on the Placer County Important Farmland map, is not within or adjacent to land within a Williamson Act Contract, and is not considered forest land. Given the foregoing, the proposed project will have no impact on agricultural resources.

III. Air Quality

The City of Roseville, along with the south Placer County area, is located in the Sacramento Valley Air Basin (SVAB). The SVAB is within the Sacramento Federal Ozone Non-Attainment Area. Under the Clean Air Act, Placer County has been designated a "serious non-attainment" area for the federal 8-hour ozone standard, "non-attainment" for the state ozone standard, and a "non-attainment" area for the federal and state PM₁₀ standard.

(particulate matter less than 10 microns in diameter). Within Placer County, the Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring that emission standards are not violated.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Thresholds of Significance and Regulatory Setting:

In responding to checklist items a, b, and d, project-related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. To assist in making this determination, the PCAPCD adopted thresholds of significance, which were developed by considering both the health-based ambient air quality standards and the attainment strategies outlined in the State Implementation Plan. The PCAPCD-recommended significance threshold for reactive organic gases (ROG) and nitrogen oxides (NO_x) is 82 pounds daily during construction and 55 pounds daily during operation, and for particulate matter (PM) is 82 pounds per day during both construction and operation. For all other constituents, significance is determined based on the concentration-based limits in the Federal and State Ambient Air Quality Standards. Toxic Air Contaminants (TAC) are also of public health concern, but no thresholds or standards are provided because they are considered to have no safe level of exposure. Analysis of TAC is based on the *Air Quality and Land Use Handbook – A Community Health Perspective* (April 2005, California Air Resources Board), which lists TAC sources and recommended buffer distances from sensitive uses. For checklist item c, the PCAPCD's *CEQA Air Quality Handbook (Handbook)* recommends that the same thresholds used for the project analysis be used for the cumulative impact analysis.

With regard to checklist item d, there are no quantified significance thresholds for exposure to objectionable odors. Significance is determined after taking into account multiple factors, including screening distances from odor sources (as found in the PCAPCD CEQA Handbook), the direction and frequency of prevailing winds, the time of day when odors are present, and the nature and intensity of the odor source.

Discussion of Checklist Answers:

a-b) Analyses are not included for sulfur dioxide, lead, and other constituents because there are no mass emission thresholds; these are concentration-based limits in the Federal and State Ambient Air Quality Standards which require substantial, point-source emissions (e.g. refineries, concrete plants, etc) before exceedance will occur, and the SVAB is in attainment for these constituents. Likewise, carbon monoxide is not analyzed because the SVAB is in attainment for this constituent, and it requires high localized concentrations (called carbon monoxide “hot spots”) before the ambient air quality standard would be exceeded. “Hot spots” are typically associated with heavy traffic congestion occurring at high-volume roadway intersections. The Amoruso Ranch EIR analysis of Citywide traffic indicated that 198 out of 226 signalized intersections would operate at level of service C or better—that is, they will not experience heavy traffic congestion. It further indicated that analyses of existing CO concentrations at the most congested intersections in Roseville show that CO levels are well below federal and state ambient air quality standards. The discussions below focus on emissions of ROG, NO_x, or PM.

PCAPCD recommends that lead agencies use the California Emissions Estimator Model (CalEEMod) to quantify a project's construction and operational emissions for criterial air pollutants (NO_x, ROG, and PM). The results are then compared to the significance thresholds established by the district, as detailed above. However, according to PCAPCD's published screening table, general commercial projects smaller than 249,099 square feet will not result in NO_x emissions that exceed 55 lbs/day, and therefore modeling is not required. Typically, NO_x emissions are substantially higher than ROG and PM10; therefore, it can be assumed that projects that do not exceed the NO_x threshold will not exceed the ROG and PM10 thresholds, and will not result in a significant impact related to operational emissions. The project proposes the construction of a shopping center consisting of six buildings totaling approximately 82,100 square feet, which is well below PCAPCD's modeled example. Thus, the project is not expected to result in construction or operational emissions that would exceed the district's thresholds for significance.

c) The project includes the construction of a gas station consisting of twelve (12) fuel pumps and an approximate 3,500 square-foot convenience store and car wash. A gasoline facility is a source of gasoline vapors that include TACs, primarily benzene. Prior to construction and operation of the gasoline facility, the applicant is required to obtain an Authority to Construct (ATC) permit from the PCAPCD. A Health Risk Analysis is required as part of the ATC permit in order to determine the potential cancer risk that will be generated as a result of the project. The applicant provided a project-specific Health Risk Analysis (Attachment 3), prepared by Trinity Consultants in March 2020, which concluded the annual amount of gasoline dispensed from the facility will be below the significance threshold for cancer risk of 10 in one million.

The Health Risk Analysis determined that the maximum cancer residential risk associated with the project would be 4.45 cancers/million, which is below the PCAPCD's significance threshold of 10 cancers/million. The Analysis determined that the maximum non-cancer risks at nearby homes would be a hazard index (HI) of 0.02 for maximum chronic non-cancer risk and an HI of 0.23 for maximum acute non-cancer risk, both numbers well below the PCAPCD's significance threshold of 1.0 HI for both chronic and acute non-cancer health risks. Based on these factors, impacts are less than significant.

d) Diesel fumes from construction equipment and delivery trucks are often found to be objectionable; however, construction is temporary and diesel emissions are minimal and regulated. Typical urban projects such as residences and retail businesses generally do not result in substantial objectionable odors when operated in compliance with City Ordinances (e.g. proper trash disposal and storage). The Project is a typical urban development that lacks any characteristics that would cause the generation of substantial unpleasant odors. Thus, construction and operation of the proposed project would not result in the creation of objectionable odors affecting a substantial number of people. A review of the project surroundings indicates that there are no substantial odor-generating uses near the project site; the project location meets the recommended screening distances from odor-generators provided by the PCAPCD. Impacts related to odors are less than significant.

IV. Biological Resources

The project site is currently undeveloped and consists of annual grasses and several native oak trees. City staff determined there are no evidence of wetlands or designated open space areas on the site.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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 Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Thresholds of Significance and Regulatory Setting:

There is no ironclad definition of significance as it relates to biological resources. Thus, the significance of impacts to biological resources is defined by the use of expert judgment supported by facts, and relies on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to biological resources (as cited and described in the Discussion of Checklist Answers section). Thresholds for assessing the significance of environmental impacts are based on the CEQA Guidelines checklist items a–f, above. Consistent with CEQA Guidelines Section 15065, a project may have a significant effect on the environment if:

The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; [or] substantially reduce the number or restrict the range of an endangered, rare or threatened species . . .

Various agencies regulate impacts to the habitats and animals addressed by the CEQA Guidelines checklist. These include the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration–Fisheries, United States Army Corps of Engineers, Central Valley Regional Water Quality Control Board, and California Department of Fish and Wildlife. The primary regulations affecting biological resources are described in the sections below.

Checklist item a addresses impacts to special status species. A “special status” species is one which has been identified as having relative scarcity and/or declining populations. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of special concern. Also included are those species considered to be “fully protected” by the California Department of Fish and Wildlife (California Fish and Wildlife), those granted “special animal” status for tracking and monitoring purposes, and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS). The primary regulatory protections for special status species are within the Federal Endangered Species Act, California Endangered Species Act, California Fish and Game Code, and the Federal Migratory Bird Treaty Act (MBTA).

Checklist item b addresses all “sensitive natural communities” that may be affected by local, state, or federal regulations/policies while checklist item c focuses specifically on one type of such a community: federally-protected wetlands. Focusing first on wetlands, there are two questions to be posed in examining wet habitats: the first is whether the wetted area meets the technical definition of a wetland, making it subject to checklist item b, and the second is whether the wetland is subject to federal jurisdiction, making it subject to checklist item c.

The 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland. A delineation verification by the Army Corps verifies the size and condition of the wetlands and other waters in question, and determines the extent of government jurisdiction as it relates to Section 404 of the Federal Clean Water Act and Section 401 of the State Clean Water Act.

The Clean Water Act protects all “navigable waters”, which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Non-navigable waters are called isolated wetlands, and are not subject to either the Federal or State Clean Water Act. Thus, isolated wetlands are not subject to federal wetland protection regulations. However, in addition to the Clean Water Act, the State also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act (Porter-Cologne), which does not require that waters be “navigable”. For this reason, isolated wetlands are regulated by the State of California pursuant to Porter-Cologne. The City of Roseville General Plan also provides protection for wetlands, including isolated wetlands, pursuant to the General Plan Open Space and Conservation Element. Federal, State and City regulations/policies all seek to achieve no net loss of wetland acreage, values, or function.

Aside from wetlands, checklist item b also addresses other “sensitive natural communities,” which includes any habitats protected by local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The City of Roseville General Plan Open Space and Conservation Element includes policies for the protection of riparian areas (streamside habitat) and floodplain areas; these are Vegetation and Wildlife section Policies 2 and 3. Policy 4 also directs preservation of additional area around stream corridors and floodplain if there is sensitive woodland, grassland, or other habitat which could be made part of a contiguous open space area. Other than wetlands, which were already discussed, US Fish and Wildlife and California Department of Fish and Wildlife habitat protections generally result from species protections, and are thus addressed via checklist item a.

For checklist item d, there are no regulations specific to the protection of migratory corridors. This item is addressed by an analysis of the habitats present in the vicinity and analyzing the probable effects on access to those habitats which will result from a project.

The City of Roseville Tree Preservation ordinance (RMC Ch.19.66) requires protection of native oak trees, and compensation for oak tree removal. The Findings of the Implementing Procedures indicate that compliance with the City of Roseville Tree Preservation ordinance (RMC Ch.19.66) will prevent significant impacts related to loss of native oak trees, referenced by item e, above.

Regarding checklist item f, there are no adopted Habitat Conservation Plans within the City of Roseville.

Discussion of Checklist Answers:

a) The project will require the removal of several oak trees, which could potentially provide habitat for nesting birds. Construction activities could also have the potential to disrupt offsite nesting species. A pre-construction nesting survey, **Mitigation Measure BIO-1**, is required in order to ensure that nesting birds are not harmed during construction. Ground disturbing activities shall not occur during the active nesting season, if it is necessary to conduct such activities during the nesting season, pre-construction surveys and mitigation as described in Mitigation Measure BIO-1, would be required. Compliance with Mitigation Measure BIO-1 will ensure that potential impacts to nesting birds are less than significant.

b-c) As discussed in the Environmental Setting, the project site is located in an urbanized area. The site is adjacent to paved roadways and is adjacent to residential and commercial uses. The property does not contain sensitive natural communities which are protected by federal, state or local policies, nor does it contain any wetlands; thus, the project will have no impact with regard to this criterion.

d) The City includes an interconnected network of open space corridors and preserves located throughout the City, to ensure that the movement of wildlife is not substantially impeded as the City develops. The development of the project site will not negatively impact these existing and planned open space corridors, nor is the project site located in an area that has been designated by the City, United States Fish and Wildlife, or California Department of Fish and Wildlife as vital or important for the movement of wildlife or the use of native wildlife nursery sites.

e) As defined by the City of Roseville Zoning Ordinance (Chapter 19.66, Tree Preservation), native oak trees greater than six (6") diameter at breast height are defined as protected. A Tree Permit is required for the removal of any protected tree, and for any regulated activity within the protected zone of a protected tree where the encroachment exceeds 20 percent. An arborist report including a tree inventory summary was provided by California Tree and Landscape Consulting, Inc., dated February 20, 2020 (Attachment 4). A total of 33 protected oak trees were identified on the property. Of the 33 trees, 28 trees with a total aggregate diameter of 721 inches are proposed for removal to facilitate development of the site, while five (5) trees are proposed to be retained (see Table 2 and Table 3). Eight (8) of the trees proposed for removal were identified as having failed and being in down and dead condition. These trees are identified in Table 2. The arborist's recommendations include monitoring any excavation for the retaining wall footings for the trees to remain on the site. The Tree Permit would contain conditions of approval to follow the recommendations of the Arborist Report, and mitigation measures that include payment of in-lieu mitigation fees to compensate for oak tree removal and on-site replacement plantings consisting of both native and non-native tree species. Any deviation from the approved permit would require a Tree Permit Modification, which would require approval by the City.

The above tree impacts were already anticipated and evaluated within the West Roseville Specific Plan EIR (prior EIR). The prior EIR included an evaluation of tree canopy loss within the entire Specific Plan area, and preserved the majority of the oak groves within open space. Figure 4.7-6 of the prior EIR (see Figure 3, EIR Tree Locations) shows the project site as a Community Commercial parcel, and identified the oak trees on this site as being lost due to development. The EIR estimated a total loss of nearly 6,000 inches of oak trees, and to offset this impact included a tree mitigation plan to plant nearly 7,000 oak trees within the WRSP open space. The proposed project is consistent with the prior EIR analysis, and thus does not result in new or previously undisclosed impacts to native oak tree resources. The EIR required future projects comply with the City's Tree Ordinance; this project includes a Tree Permit, consistent with the City's Tree Ordinance. Consistency with the requirements of the Tree Permit for this project will ensure that impacts are less than significant.

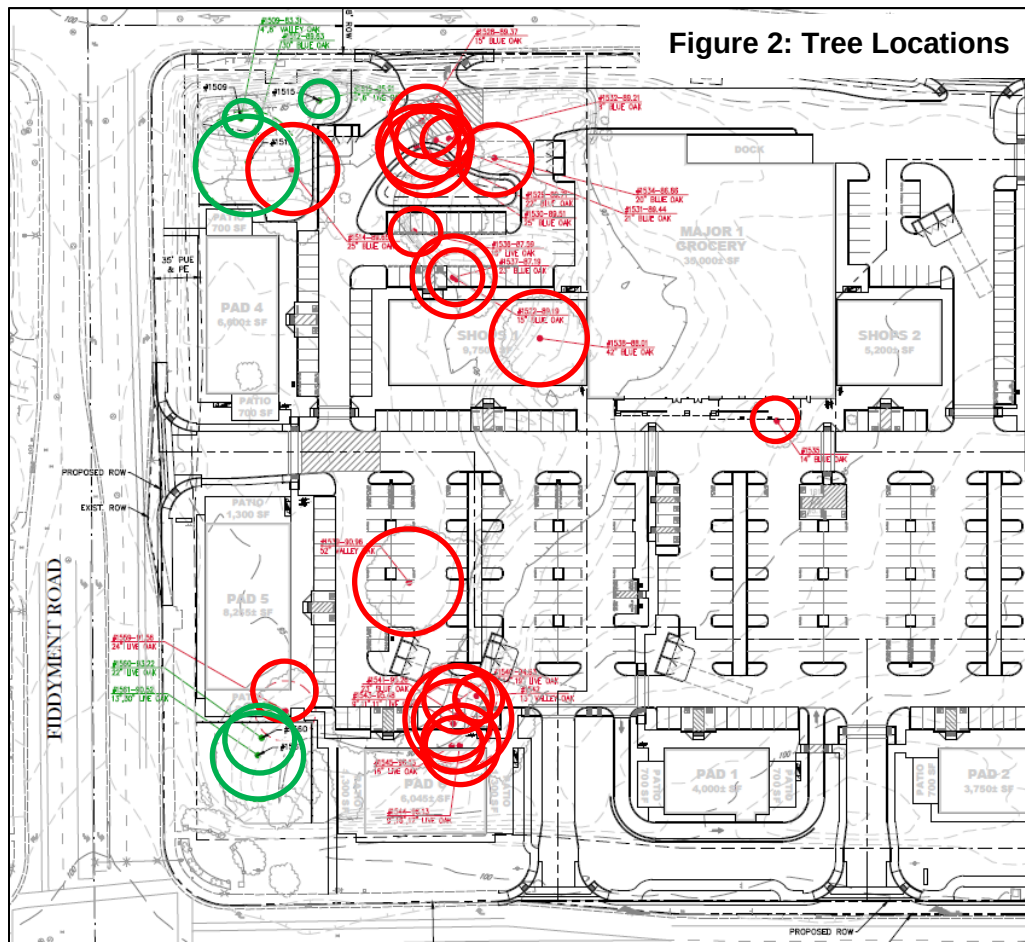


Figure 3: EIR Tree Locations

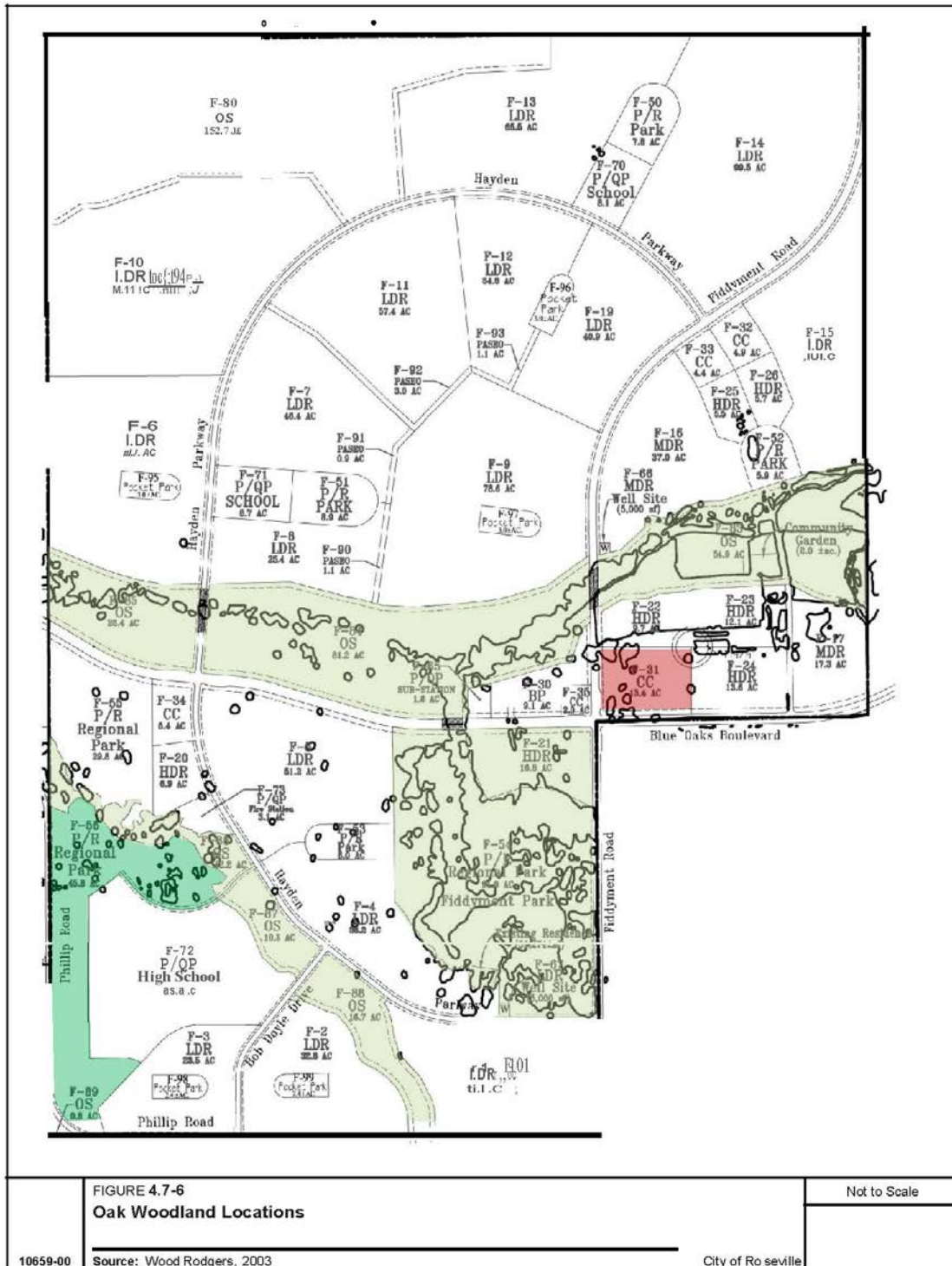


Table 2: Trees Proposed for Removal

Tree Number	Common Name	Structure Health	Dripline Radius (inches)	Total Diameter at Breast Height (DBH) (inches)
1510	Blue Oak	Failed	-	23
1513	Blue Oak	Failed	-	29
1514	Blue Oak	Poor to Fair	33	28
1521	Blue Oak	Failed	-	26
1522	Blue Oak	Fair	22	18
1523	Blue Oak	Failed	-	23
1528	Blue Oak	Poor to Fair	24	17
1529	Blue Oak	Poor to Fair	32	26
1530	Blue Oak	Poor to Fair	33	27
1531	Blue Oak	Poor to Fair	31	24
1532	Blue Oak	Poor	9	8
1533	Blue Oak	Failed	-	20
1534	Blue Oak	Poor	30	21
1535	Blue Oak	Fair	17	14
1536	Interior Live Oak	Fair	22	21
1537	Blue Oak	Fair	31	26
1538	Blue Oak	Fair	37	45
1539	Valley Oak	Poor	39	57
1540	Interior Live Oak	Poor	38	35
1541	Blue Oak	Fair	39	25
1542	Valley Oak	Poor to Fair	16	13
1543	Interior Live Oak	Poor to Fair	32	37
1544	Interior Live Oak	Poor to Fair	32	53
1545	Interior Live Oak	Poor to Fair	29	21
1559	Interior Live Oak	Poor to Fair	26	26
1562	Interior Live Oak	Failed	-	17
1563	Interior Live Oak	Failed	32	21
1564	Blue Oak	Failed	-	20
Total Mitigation Inches				721

Table 3: Trees Retained

Tree Number	Common Name	Structure Health	Dripline Radius (inches)	Total Diameter at Breast Height (DBH) (inches)
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1509	Valley Oak	Fair	17	16
1512	Blue Oak	Poor to Fair	25	24
1515	Interior Live Oak	Poor to Fair	16	17
1560	Interior Live Oak	Fair	28	25
1561	Interior Live Oak	Poor to Fair	30	40
Total Inches				122

f) There are no Habitat Conservation Plans; Natural Community Conservation Plans; or other approved local, regional, or state habitat conservation plans that apply to the project site.

V. Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been recorded in the City. The gold rush which began in 1848 marked another settlement period, and evidence of Roseville's ranching and mining past are still found today. Historic features include rock walls, ditches, low terraces, and other remnants of settlement and activity. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of an historic resource pursuant to Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts to cultural resources is based directly on the CEQA Guidelines checklist items a–e listed above. The Archaeological, Historic, and Cultural Resources section of the City of Roseville General Plan also directs the proper evaluation of and, when feasible, protection of significant resources (Policies 1 and 2). There are also various federal and State regulations regarding the treatment and protection of cultural resources, including the National Historic Preservation Act and the Antiquities Act (which regulate items of significance in history), Section 7050.5 of the California Health and Safety Code, Section 5097.9 of the California Public

Resources Code (which regulates the treatment of human remains) and Section 21073 et seq. of the California Public Resources Code (regarding Tribal Cultural Resources). The CEQA Guidelines also contains specific sections, other than the checklist items, related to the treatment of effects on historic resources.

Pursuant to the CEQA Guidelines, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)). A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5(a)(2)); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Public Resources Code Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR.

Discussion of Checklist Answers:

a–c) No cultural resources are known to exist on the project site per the WRSP EIR; however, standard mitigation measures apply which are designed to reduce impacts to cultural resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. This mitigation need not be applied herein, as it is already applicable and required of the project pursuant to the WRSP. The project will not result in any new impacts beyond those already discussed and disclosed in the WRSP EIR; thus, project-specific impacts are less than significant.

VI. Energy

Roseville Electric provides electrical power in the City and Pacific Gas and Electric (PG&E) provides natural gas. The City purchases wholesale electrical power from both the Western Area Power Administration (WAPA), which is generated by the federal government's Central Valley Project, which produces 100 percent hydroelectric energy sources from a system of dams, reservoirs, and power plants within central and northern California. In addition, up to 50 percent of the City's power is generated at the City-owned Roseville Energy Park (REP). The REP is a 160 megawatt natural-gas-fired power plant that uses a combined cycle gas turbine technology. The City also owns the 48 megawatt combustion-turbine Roseville Power Plant 2 (REP 2), which is used for peaking energy. The City's electric power mix varies from year-to-year, but according to the most recent Citywide energy analysis (the Amoruso Ranch Environmental Impact Report), the mix in 2013/2014 was 25% eligible renewable (geothermal, small hydroelectric, and wind), 14% hydroelectric, 48% natural gas, and 13% from other sources (power purchased by contract).

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Thresholds of Significance and Regulatory Setting:

Established in 2002, California's Renewable Portfolio Standard (RPS) currently requires that 33 percent of electricity retail sales be served by renewable energy resources by 2020, and 50 percent by 2030. The City published a Renewables Portfolio Standard Procurement Plan in June 2018, and continues to comply with the RPS reporting and requirements and standards. There are no numeric significance thresholds to define "wasteful, inefficient, or unnecessary" energy consumption, and therefore significance is based on CEQA Guidelines checklist items a and b, above, and by the use of expert judgment supported by facts, relying on the policies, codes, and regulations adopted by the City and by regulatory agencies which relate to energy. The analysis considers compliance with regulations and standards, project design as it relates to energy use (including transportation energy), whether the project will result in a substantial unplanned demand on the City's energy resources, and whether the project will impede the ability of the City to meet the RPS standards.

Discussion of Checklist Answers:

a-b) The project would consume energy both during project construction and during project operation. During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. However, the energy consumed during construction would be temporary, and would not represent a significant demand on available resources. There are no unusual project characteristics that would necessitate the use of construction equipment or methods that would be less energy-efficient or which would be wasteful.

The completed project would consume energy related to building operation, exterior lighting, landscape irrigation and maintenance, and vehicle trips to and from the use. In accordance with California Energy Code Title 24, the project would be required to meet the Building Energy Efficiency Standards. This includes standards for water and space heating and cooling equipment; insulation for doors, pipes, walls, and ceilings; and appliances, to name a few. The project would also be eligible for rebates and other financial incentives from both the electric and gas providers for the purchase of energy-efficient appliances and systems, which would further reduce the operational energy demand of the project. The project was distributed to both PG&E and Roseville Electric for comments, and was found to conform to the standards of both providers; energy supplies are available to serve the project.

The project is consistent with the existing land use designation of Community Commercial, and has therefore been assumed for development with commercial uses in citywide environmental analyses, such as in the Amoruso Ranch Specific Plan, which updated the City's General Plan. The project is therefore consistent with the current citywide assessment of energy demand, and will not result in substantial unplanned demands. In addition, based on the foregoing analysis, the project will not result in inefficient, wasteful, or unnecessary consumption of energy; impacts are less than significant.

VII. Geology and Soils

As described in the Safety Element of the City of Roseville General Plan, there are three inactive faults (Volcano Hill, Linda Creek, and an unnamed fault) in the vicinity, but there are no known active seismic faults within Placer County. The last seismic event recorded in the South Placer area occurred in 1908, and is estimated to have been at least a 4.0 on the Richter Scale. Due to the geographic location and soil characteristics within the City, the General Plan indicates that soil liquefaction, landslides, and subsidence are not a significant risk in the area.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i) Ruptures of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)			X	
• Strong seismic ground shaking?			X	
• Seismic-related ground failure, including liquefaction?			X	
• Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located in a geological 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?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to geology and soils is based directly on the CEQA Guidelines checklist items a–e listed above. Regulations applicable to this topic include the Alquist-Priolo Act, which addresses earthquake safety in building permits, and the Seismic Hazards Mapping Act, which requires the state to gather and publish data on the location and risk of seismic faults.

The Findings of the Implementing Procedures indicate that compliance with the Flood Damage Prevention Ordinance (RMC Ch.9.80) and Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist item b. The Ordinance and standards include permit requirements for construction and development in erosion-prone areas and ensure that grading activities will not result in significant soil erosion or loss of topsoil. The use of septic tanks or alternative waste systems is not permitted in the City of Roseville, and therefore no analysis of criterion e is necessary.

Discussion of Checklist Answers:

a) The project will not expose people or structures to potential substantial adverse effects involving seismic shaking, ground failure or landslides.

i–iii) According to United States Geological Service mapping and literature, active faults are largely considered to be those which have had movement within the last 10,000 years (within the Holocene or Historic time periods)¹ and there are no major active faults in Placer County. The California Geological Survey has prepared a map of the state which shows the earthquake shaking potential of areas throughout California based primarily on an area's distance from known active faults. The map shows that the City lies in a relatively low-intensity ground-shaking zone. Commercial, institutional, and residential buildings as well as all related infrastructure are required, in conformance with Chapter 16, *Structural Design Requirements*, Division IV, *Earthquake Design* of the California Building Code, to lessen the exposure to potentially damaging vibrations through seismic-resistant design. In compliance with the Code, all structures in the Project area would be well-built to withstand ground shaking from possible earthquakes in the region; impacts are less than significant.

iv) Landslides typically occur where soils on steep slopes become saturated or where natural or manmade conditions have taken away supporting structures and vegetation. The existing and proposed slopes of the project site are not steep enough to present a hazard during development or upon completion of the

¹ United States Geological Survey, <http://earthquake.usgs.gov/learn/glossary/?term=active%20fault>, Accessed January 2016

project. In addition, measures would be incorporated during construction to shore minor slopes and prevent potential earth movement. Therefore, impacts associated with landslides are less than significant.

b) Grading activities will result in the disruption, displacement, compaction and over-covering of soils associated with site preparation (grading and trenching for utilities). Grading activities for the project will be limited to the project site. Grading activities require a grading permit from the Engineering Division. The grading permit is reviewed for compliance with the City's Improvement Standards, including the provision of proper drainage, appropriate dust control, and erosion control measures. Grading and erosion control measures will be incorporated into the required grading plans and improvement plans. Therefore, the impacts associated with disruption, displacement, and compaction of soils associated with the project are less than significant.

c, d) A review of the Natural Resources Conservation Service Soil Survey for Placer County, accessed via the Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/>), indicates that the soils on the site are Cometa-Fiddymont complex, 1 to 5 percent slopes, Ramona sandy loam, 2 to 9 percent slopes, and Xerofluvents, frequently flooded, none of which are listed as geologically unstable or sensitive. Therefore, the project has no impacts related to this criteria.

f) No paleontological resources are known to exist on the project site per the WRSP EIR; however, standard mitigation measures apply which are designed to reduce impacts to such resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. With these measures in place, project-specific impacts are less than significant.

VIII. Greenhouse Gases

Greenhouse gases trap heat in the earth's atmosphere. The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. As explained by the United States Environmental Protection Agency², global average temperature has increased by more than 1.5 degrees Fahrenheit since the late 1800s, and most of the warming of the past half century has been caused by human emissions. The City has taken proactive steps to reduce greenhouse gas emissions, which include the introduction of General Plan policies to reduce emissions, changes to City operations, and climate action initiatives.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

² <http://www3.epa.gov/climatechange/science/overview.html>, Accessed January 2016

Thresholds of Significance and Regulatory Setting:

In Assembly Bill 32 (the California Global Warming Solutions Act), signed by Governor Schwarzenegger of California in September 2006, the legislature found that climate change resulting from global warming was a threat to California, and directed that “the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases . . .”. The target established in AB 32 was to reduce emissions to 1990 levels by the year 2020. CARB subsequently prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008. The Scoping Plan provides the outline for actions to reduce California's GHG emissions. CARB's updated August 2011 Scoping Plan calculated a reduction needed of 21.7% from future “Business As Usual” (BAU) conditions in the year 2020. The current Scoping Plan (adopted May 2014) indicates that statewide emissions of GHG in 1990 amounted to 431 million metric tons, and that the 2020 “Business As Usual” (BAU) scenario is estimated as 509³ million metric tons, which would require a reduction of 15.3% from 2020 BAU. In addition to this, Senate Bill 32 was signed by the Governor on September 8, 2016, to establish a reduction target of 40 percent below 1990 levels by 2030. The Air Resources Board is currently updating the Scoping Plan to reflect this target.

The Placer County Air Pollution Control District (PCAPCD) recommends that thresholds of significance for GHG be related to AB 32 reduction goals, and has adopted thresholds of significance which take into account the 2030 reduction target. The thresholds include a de minimis and a bright-line maximum threshold. Any project emitting less than 1,100 metric tons of carbon dioxide equivalents per year (MT CO₂e/yr) during construction or operation results in less than significant impacts. The PCAPCD considers any project with emissions greater than the bright-line cap of 10,000 MT CO₂e/yr to have significant impacts. For projects exceeding the de minimum threshold but below the bright-line threshold, comparison to the appropriate efficiency threshold is recommended. The significance thresholds are shown in Table 1 below.

Table 1: GHG Significance Thresholds

Bright-line Threshold 10,000 MT CO ₂ e/yr			
Residential Efficiency (MT CO ₂ e/capita ¹)		Non-Residential Efficiency (MT CO ₂ e/ksf ²)	
Urban	Rural	Urban	Rural
4.5	5.5	26.5	27.3
De Minimis Threshold 1,100 MT CO ₂ e/yr			
1. Per Capita = per person			
2. Per ksf = per 1,000 square feet of building			

Discussion of Checklist Answers:

a–b) Greenhouse gases are primarily emitted as a result of vehicle operation associated with trips to and from a project, and energy consumption from operation of the buildings. Greenhouse gases from vehicles is assessed based on the vehicle miles traveled (VMT) resulting from a project, on a Citywide basis. Residential projects, destination centers (such as a regional mall), and major employers tend to increase VMT in a study area, either by adding new residents traveling in an area, or by encouraging longer trip lengths and drawing in trips from a broader regional area. However, non-residential projects and neighborhood-serving uses (e.g. neighborhood parks) tend to lower VMT in a study area because they do not generate new trips within the study area, they divert existing trips. These trips are diverted because the new use location is closer to home, on their way to another destination (e.g. work), or is otherwise more convenient.

³ Includes Pavely and Renewables Portfolio Standard reduction

As discussed, the project would not be anticipated to increase VMT, since it is providing services in closer proximity to developed residential areas of the City. In addition, as discussed in the Transportation section of this Initial Study, the project is anticipated to result in a lower trip generation than what was assumed in the City's traffic model for this area. Therefore, the focus of this analysis is on the emissions which would result from the operation of the proposed buildings. CalEEMod Version 2016.3.2 was used to calculate the operational emissions of the project (see Attachment 5), which includes energy run to the buildings, area emissions such as landscape equipment to maintain the site, and water and wastewater energy demands. According to the CalEEMod results, the project would result in annual operational emissions of 726.45 MT CO₂e, which is below the de minimis threshold of 1,100 MT CO₂e. Therefore, the proposed project would not result in significant operational emissions of GHG.

Construction-related GHG emissions occur at one point in time and are therefore not typically expected to significantly contribute to climate change. Climate change is a cumulative effect that occurs over time, as emissions increase on a year-to-year basis due to increases in developed area and other factors; construction emissions are a one-time emission source, which end once the project is built. The CalEEMod results indicate the project would result in annual construction emissions of 338.07 CO₂e in the most active construction year, which is below the de minimis threshold of 1,100 MT CO₂e/yr. Thus, the project-generated GHG emissions would not conflict with, and are consistent with, the State goals listed in AB32 and other policies and regulations adopted by the California Air Resources Board. This impact is considered less than significant.

IX. Hazards and Hazardous Materials

There are no hazardous cleanup sites of record within 1,000 feet of the site according to both the State Water Resources Control Envirostor database (<http://geotracker.waterboards.ca.gov/>) and the Department of Toxic Substances Control Envirostor database (<http://www.envirostor.dtsc.ca.gov/public/>). The project is not located on a site where existing hazardous materials have been identified, and the project does not have the potential to expose individuals to hazardous materials.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hazardous materials is based directly on the CEQA Guidelines checklist items a–h listed above. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency, or if it has characteristics defined as hazardous by such an agency. The determination of significance based on the above criteria depends on the probable frequency and severity of consequences to people who might be exposed to the health hazard, and the degree to which Project design or existing regulations would reduce the frequency of or severity of exposure. As an example, products commonly used for household cleaning are classified as hazardous when transported in large quantities, but one would not conclude that the presence of small quantities of household cleaners at a home would pose a risk to a school located within ¼-mile.

Many federal and State agencies regulate hazards and hazardous substances, including the United States Environmental Protection Agency (US EPA), California Department of Toxic Substances Control (DTSC), Central Valley Regional Water Quality Control Board (Regional Water Board), and the California Occupational Safety and Health Administration (CalOSHA). The state has been granted primacy (primary responsibility for oversight) by the US EPA to administer and enforce hazardous waste management programs. State regulations also have detailed planning and management requirements to ensure that hazardous materials are handled, stored, and disposed of properly to reduce human health risks. California regulations pertaining to hazardous waste management are published in the California Code of Regulations (see 8 CCR, 22 CCR, and 23 CCR).

The project is not within an airport land use plan or within two miles of a public or public use airport. Therefore, no further discussion is provided for items e.

Discussion of Checklist Answers:

a-b) Standard construction activities would require the use of hazardous materials such as fuels, oils, lubricants, glues, paints and paint thinners, soaps, bleach, and solvents. These are common household and commercial materials routinely used by both businesses and average members of the public. The materials only pose a hazard if they are improperly used, stored, or transported either through upset conditions (e.g. a vehicle accident) or mishandling. In addition to construction use, the operational project would result in the use of common hazardous materials as well, including bleach, solvents, and herbicides. Regulations pertaining to the transport of materials are codified in 49 Code of Federal Regulations 171–180, and transport regulations are enforced and monitored by the California Department of Transportation and by the California Highway Patrol. Specifications for storage on a construction site are contained in various regulations and codes, including the California Code of Regulations, the Uniform Fire Code, and the California Health and Safety Code. These same codes require that all hazardous materials be used and stored in the manner specified on the material packaging. In addition, compliance with state and federal standards governing gas stations, including the PCAPCD's permitting requirements for such uses, would ensure that the project does not result in significant impacts related to hazards and hazardous materials. Existing regulations and programs are sufficient to ensure that potential impacts as a result of the use or storage of hazardous materials are reduced to less than significant levels.

c) The project is not located within a ¼-mile of an existing or proposed school, and thus there is no impact with respect to this criterion.

d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5⁴; therefore, no impact will occur.

f) This project is located within an area currently receiving City emergency services and development of the site has been anticipated and incorporated into emergency response plans. As such, the project will cause a less than significant impact to the City's Emergency Response or Management Plans. Furthermore, the project will be required to comply with all local, State and federal requirements for the handling of hazardous materials, which will ensure less-than-significant impacts. These will require the following programs:

- A Risk Management and Prevention Program (RMPP) is required of uses that handle toxic and/or hazardous materials in quantities regulated by the California Health and Safety Code and/or the City.
- Businesses that handle toxic or hazardous materials are required to complete a Hazardous Materials Management Program (HMMP) pursuant to local, State, or federal requirements.

g) The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating

⁴ <http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm>

Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility. The project site is in an urban area, and therefore would not expose people to any risk from wildland fire. There would be no impact with regard to this criterion.

X. Hydrology and Water Quality

As described in the Open Space and Conservation Element of the City of Roseville General Plan, the City is located within the Pleasant Grove Creek Basin and the Dry Creek Basin. Pleasant Grove Creek and its tributaries drain most of the western and central areas of the City and Dry Creek and its tributaries drain the remainder of the City. Most major stream areas in the City are located within designated open space.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			X	
i. result in substantial erosion or siltation on or off-site;			X	
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater systems or provide substantial additional sources of polluted runoff; or			X	
iv. impede or redirect flood flows?				X
d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	
e) In flood hazard, tsunami, or seiches zones, risk release of pollutants due to project inundation?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to hydrology and water quality is based directly on the CEQA Guidelines checklist items a–e listed above. For checklist item a, c (i), d, and e, the Findings of the Implementing Procedures indicate that compliance with the City of Roseville Design/Construction Standards (Resolution 07-107), Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20), and Stormwater Quality Design Manual (Resolution 16-152) will prevent significant impacts related to water quality or erosion. The standards require preparation of an erosion and sediment control plan for construction activities and includes designs to control pollutants within post-construction urban water runoff. Likewise, it is indicated that the Drainage Fees for the Dry Creek and Pleasant Grove Watersheds (RMC Ch.4.48) and City of Roseville Design/Construction Standards (Resolution 07-107) will prevent significant impacts related to checklist items c (ii) and c (iii). The ordinance and standards require the collection of drainage fees to fund improvements that mitigate potential flooding impacts, and require the design of a water drainage system that will adequately convey anticipated stormwater flows without increasing the rate or amount of surface runoff. These same ordinances and standards prevent impacts related to groundwater (items a and d), because developers are required to treat and detain all stormwater onsite using stormwater swales and other methods which slow flows and preserve infiltration. Finally, it is indicated that compliance with the Flood Damage Prevention Ordinance (RMC Ch. 9.80) will prevent significant impacts related to items c (iv) and e. The Ordinance includes standard requirements for all new construction, including regulation of development with the potential to impede or redirect flood flows, and prohibits development within flood hazard areas. Impacts from tsunamis and seiches were screened out of the analysis (item e) because the project is not located near a water body or other feature that would pose a risk of such an event.

Discussion of Checklist Answers:

a,c (i),d, e) The project will involve the disturbance of on-site soils and the construction of impervious surfaces, such as asphalt paving. Disturbing the soil can allow sediment to be mobilized by rain or wind, and cause displacement into waterways. To address this and other issues, the developer is required to receive approval of

a grading permit and/or improvement plants prior to the start of construction. The permit or plans are required to incorporate mitigation measures for dust and erosion control. In addition, the City has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Central Valley Regional Water Quality Control Board which requires the City to reduce pollutants in stormwater to the maximum extent practicable. The City does this, in part, by means of the City's 2016 Design/Construction Standards, which require preparation and implementation of a Stormwater Pollution Prevention Plan. All permanent stormwater quality control measures must be designed to comply with the City's Manual for Stormwater Quality Control Standards for New Development, the City's 2016 Design/Construction Standards, Urban Stormwater Quality Management and Discharge Control Ordinance, and Stormwater Quality Design Manual. For these reasons, impacts related to water quality are less than significant.

b, d) The project does not involve the installation of groundwater wells. The City maintains wells to supplement surface water supplies during multiple dry years, but the effect of groundwater extraction on the aquifer was addressed in the Water Supply Assessment of the Amoruso Ranch Specific Plan EIR, which included a Citywide water analysis. The proposed project is consistent with the General Plan land use designation, and is thus consistent with the citywide Water Supply Assessment. Project impacts related to groundwater extraction are less than significant. Furthermore, all permanent stormwater quality control measures must be designed to comply with the Stormwater Quality Design Manual, which requires the use of bioswales and other onsite detention and infiltration methods. These standards ensure that stormwater will continue to infiltrate into the groundwater aquifer.

c (ii and iii)) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project includes adequate and appropriate facilities to ensure no net increase in the amount or rate of stormwater runoff from the site, and which will adequately convey stormwater flows.

c (iv) and e) The project has been reviewed by City Engineering staff for conformance with City ordinances and standards. The project is not located within either the Federal Emergency Management Agency floodplain or the City's Regulatory Floodplain (defined as the floodplain which will result from full buildout of the City). Therefore, the project will not impede or redirect flood flows, nor will it be inundated. The proposed project is located within an area of flat topography and is not near a waterbody or other feature which could cause a seiche or tsunami. There would be no impact with regard to these criterion.

XI. Land Use and Planning

The project site has a General Plan land use designation and zoning designation of Community Commercial (CC). Surrounding properties have commercial and residential land use and zoning designations, as described in the Background section of this Initial Study.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to land use is based directly on the CEQA Guidelines checklist items a–c listed above. Consistency with applicable City General Plan policies, Improvement Standards, and design standards is already required and part of the City’s processing of permits and plans, so these requirements do not appear as mitigation measures. Land use regulations applicable to the site include the City’s General Plan 2035, the Zoning Ordinance, and the NERSP. The NERSP contains general design guidelines and policies for development within the NERSP as a whole.

Discussion of Checklist Answers:

- a) The project area has been planned for development, including adequate roads, pedestrian paths, and bicycle paths to provide connections within the community. The project involves frontage improvements including new driveways, sidewalks, and pedestrian connections. As such, the project will not physically divide an established community.
- b) With the application for a Tree Permit, the project is consistent with the Zoning Ordinance requirements for the removal and mitigation of oak trees. The project would be required to comply with the City’s Improvement Standards in order to receive a grading permit. The proposed project is consistent with the General Plan and the WRSP, and does not conflict with the City’s policies and regulations adopted for the purpose of avoiding or mitigating an environmental impact.

XII. Mineral Resources

The Surface Mining and Reclamation Act (SMARA) of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZ’s) based on the known or inferred mineral resource potential of that land. The California Division of Mines and Geology (CDMG) was historically responsible for the classification and designation of areas containing—or potentially containing—significant mineral resources, though that responsibility now lies with the California Geological Survey (CGS). CDMG published Open File Report 95-10, which provides the mineral classification map for Placer County. A detailed evaluation of mineral resources has not been conducted within the City limits, but MRZ’s have been identified. There are four broad MRZ categories (MRZ-1 through MRZ-4), and only MRZ-2 represents an area of known significant mineral resources. The City of Roseville General Plan EIR included Exhibit 4.1-3, depicting the location of MRZ’s in the City limits. There is only one small MRZ-2 designation area, located at the far eastern edge of the City.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to mineral resources is based directly on the CEQA Guidelines checklist items a and b listed above.

Discussion of Checklist Answers:

a–b) The project site is not in the area of the City known to include any mineral resources that would be of local, regional, or statewide importance; therefore, the project has no impacts on mineral resources.

XIII. Noise

The project site is currently undeveloped and is surrounded by residential and commercial uses, which typically do not generate substantial noise volumes. Both of these roadways are identified as transportation noise sources in the City's General Plan Noise Element. According to the General Plan, the project site is within the 60 dB L_{dn} noise contour for existing roadways and within the 65 dB L_{dn} noise contour for future roadways (City of Roseville 2015, Figure IX-1 and Figure IX-2).

Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive ground borne vibration of ground borne noise levels?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?				X

Thresholds of Significance and Regulatory Setting:

Standards for transportation noise and non-transportation noise affecting existing or proposed land uses are established within the City of Roseville General Plan Noise Element Table IX-1 and IX-3, and these standards are used as the thresholds to determine the significance of impacts related to items a and c. The significance of other noise impacts is based directly on the CEQA Guidelines checklist items b and c listed above. The Findings of the Implementing Procedures indicate that compliance with the City Noise Regulation (RMC Ch. 9.24) will prevent significant non-transportation noise as it relates to items a and b. The Ordinance establishes noise exposure standards that protect noise-sensitive receptors from a variety of noise sources, including non-transportation/fixed noise, amplified sound, industrial noise, and events on public property. The project is not within an airport land use plan, within two miles of a public or public use airport and there are also no private airstrips in the vicinity of the project area. Therefore, item c has been ruled out from further analysis.

Discussion of Checklist Answers:

a) The City of Roseville General Plan Noise Element includes Policy 7, which requires proposed fixed noise sources to be mitigated so as not to exceed the noise level performance standards contained within Noise Element Table IX-3. These standards are included in Table 4 below. Fixed noise sources are defined as noises that come from a specified area, while moving noise sources are from transportation facilities (roadway noise, train noise, etc.); the proposed project will generate fixed noise.

Table 4: Noise Element Table IX-3

PERFORMANCE STANDARDS FOR NON-TRANSPORTATION NOISE SOURCES OR PROJECTS AFFECTED BY NON-TRANSPORTATION NOISE SOURCES (As Measured at the Property Line of Noise-Sensitive Uses)		
Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq} , dB	50	45
Maximum level, dB	70	65
¹ For municipal power plants consisting primarily of broadband, steady state noise sources, the hourly (L_{eq}) noise standard may be increased up to 10 dB(A), but not exceed 55 dB(A) Hourly L_{eq} dB. Each of the noise levels specified above should be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). No standards have been included for interior noise levels. Standard construction practices should, with exterior noise levels identified, result in acceptable interior noise levels.		

The proposed project is a shopping center including a grocery store and a mix of retail and commercial uses. The project includes two loading dock areas adjacent to the grocery store and Junior Major buildings on the northern portion of the site, south of Harvey Way. The project also includes a gas station with an approximate 3,500 square-foot convenience store building and drive-through car wash on Pad 3, which is located on the southeastern portion of the overall site (see Figure 3). An Environmental Noise Assessment was prepared for the project by Bollard Acoustical Consultants, Inc. (BAC) and is included as Attachment 6. The assessment evaluates noise from the proposed loading dock areas and car wash portion of the gas station. It concluded that the noise generated by on-site truck circulation, loading docks, and car wash dryer operations could potentially exceed the applicable noise level limits at the nearest residential uses. As such, noise mitigation measures are required in order to comply with the General Plan noise standards, and to ensure impacts are less than significant. Each of these noise sources and related mitigation measures are addressed separately, below.

On-Site Truck Circulation Noise

Noise exposure from on-site truck circulation is expected to exceed the applicable General Plan noise standard for nighttime noise (45 dB L_{eq} and 65 dB L_{max}) at the adjacent residential use to the north, across Harvey Way. Therefore, in order to avoid exceeding General Plan noise standards, **Mitigation Measure NOI-1** is included which requires a solid noise barrier measuring a minimum of 7 feet in height between the proposed truck lane and residential development to the north. Alternatively, commercial truck deliveries shall be restricted to daytime hours (7 a.m. to 10 p.m.) if a noise barrier is not constructed as prescribed.

Loading Dock Noise

Noise exposure from loading dock activities is expected to exceed the General Plan noise standard for daytime and nighttime noise at the adjacent future High Density Residential (HDR) use to the north, across Harvey Way. The assessment concluded a solid noise barrier measuring a minimum of 6 feet in height is required in order to comply with the daytime noise standards, while a solid noise barrier measuring a minimum of 9 feet in height is required in order to comply with the nighttime noise standards. If the noise barrier is less than 9 feet in height,

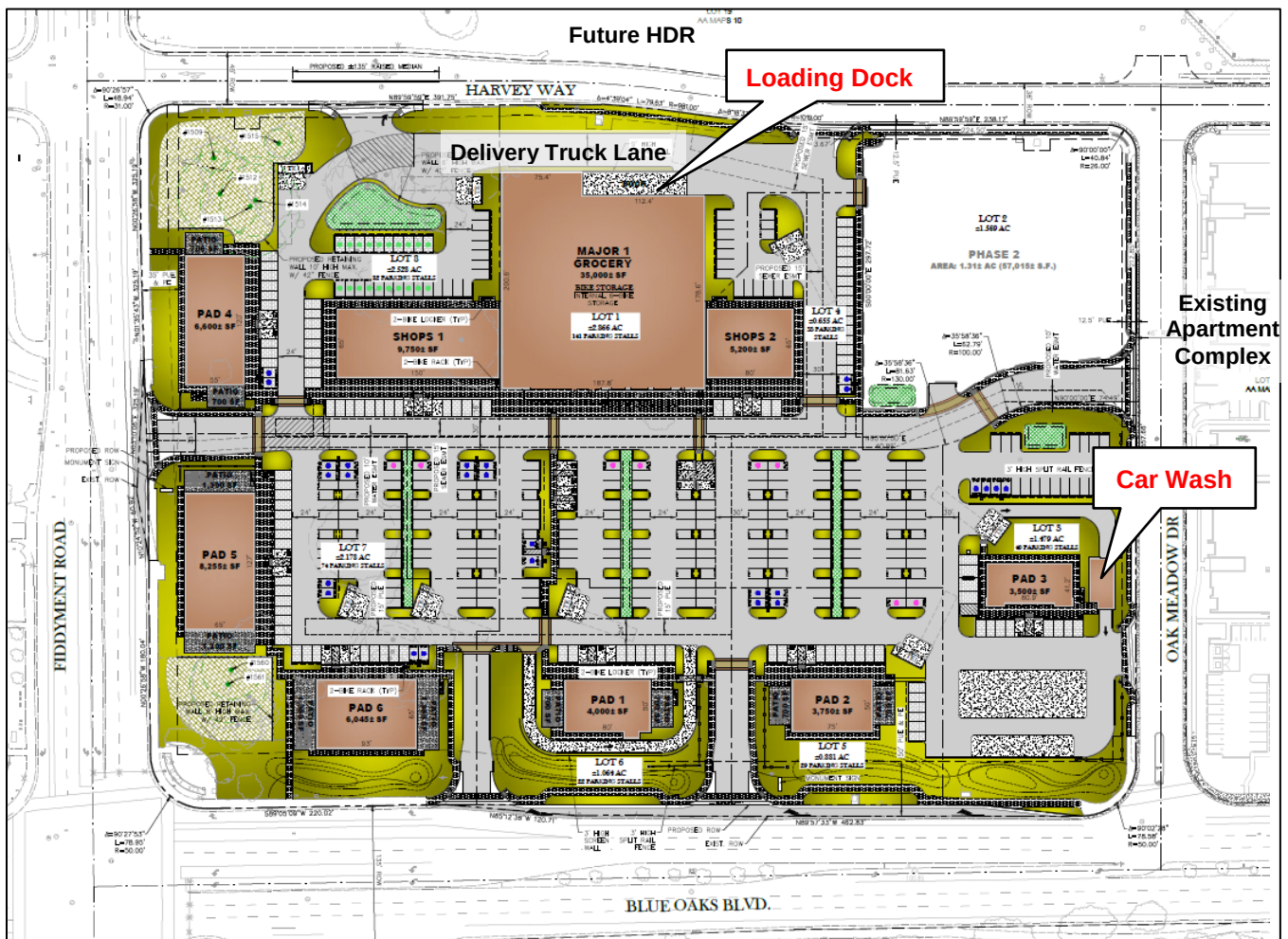
delivery activities shall be restricted to daytime hours (7 a.m. to 10 p.m.) in order to comply with the nighttime noise standards. This is reflected in Mitigation Measure NOI-1.

Car Wash Dryer Noise

The project includes a gas station facility with a car wash located at the southeastern corner of the overall site. The location of the car wash and nearest residential uses are shown on Figure 3. According to the study prepared by BAC, noise levels generated by car wash facilities are primarily due to the drying portion of the operation. As such, the effectiveness of installing car wash entrance and exit doors was considered and it was concluded that the doors would provide 14 dB of noise reduction when kept in the closed position during wash cycles. This meets the City's daytime noise level standard; however, the hourly average car wash noise levels could still exceed the City's 45 dB L_{eq} nighttime noise level standard by 3 dB at the nearest residential property line to the east. Therefore, Mitigation Measure NOI-1 also requires the installation of car wash entrance and exit doors that are kept in the closed position during wash cycles and limits the car wash operations to daytime hours (7 a.m. to 10 p.m.).

With mitigation, impacts will be less than significant.

Figure 3: Project Site Plan



b) Surrounding uses may experience short-term increases in groundborne vibration, groundborne noise, and airborne noise levels during construction. However, these increases would only occur for a short period of

time. When conducted during daytime hours, construction activities are exempt from Noise Ordinance standards, but the standards do apply to construction occurring during nighttime hours. While the noise generated may be a minor nuisance, the City Noise Regulation standards are designed to ensure that impacts are not unduly intrusive. Based on this, the impact is less than significant.

XIV. Population and Housing

The project site is located within the City's West Roseville Specific Plan (WRSP) area, is zoned for commercial uses and has a land use designation of Community Commercial. The City of Roseville General Plan Table II-4 identifies the total number of residential units and population anticipated as a result of buildout of the City, and the Specific Plan likewise includes unit allocations and population projections for the Plan Area. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to population and housing is based directly on the CEQA Guidelines checklist items a–c listed above.

Discussion of Checklist Answers:

a) The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts (Public Resources Code Section 15126.2), either directly or indirectly. Growth-inducement may be the result of fostering economic growth, fostering population growth, providing new housing, or removing barriers to growth. Growth inducement may be detrimental, beneficial, or of no impact or significance under CEQA. An impact is only deemed to occur when it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be shown that the growth will significantly affect the environment in some other way. The project is consistent with the land use designation of the site. The City already has several developed commercial centers, so the presence or absence of commercial centers is not currently a constraint on City growth. Therefore, construction of this commercial center will not remove a barrier to growth or induce substantial growth. Therefore, the impact of the project is less than significant.

b) The project site is vacant. No housing exists on the project site, and there would be no impact with respect to this criterion.

XV. Public Services

Fire protection, police protection, park services, and library services are provided by the City. The project is located within the Roseville Elementary School District and the Roseville Joint Union High School District.

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 government 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 following public services:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to public services is based directly on the CEQA Guidelines checklist items a–e listed above. The EIR for the Amoruso Ranch Specific Plan, which updated Citywide analyses, addressed the level of public services which would need to be provided in order to serve planned growth in the community. The project is consistent with the existing land use designations. In addition, the project has been routed to the various public service agencies, both internal and external, to ensure that the project meets the agencies' design standards (where applicable) and to provide an opportunity to recommend appropriate conditions of approval.

a) Existing City codes and regulations require adequate water pressure in the water lines, and construction must comply with the Uniform Fire and Building Codes used by the City of Roseville. Additionally, the applicant is required to pay a fire service construction tax, which is used for purchasing capital facilities for the Fire Department. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Sales taxes and property taxes resulting from development will add revenue to the General Fund, which provides funding for police services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

c) Project applicants are required to pay school impact fees at a rate determined by the local school districts. School fees will be collected prior to the issuance of building permits, consistent with City requirements. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

d) Future park and recreation sites and facilities have already been identified as part of the Specific Plan process. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

e) Sales taxes and property taxes resulting from development will add revenue to the General Fund, which provides funding for the library system and other such facilities and services. In addition, the City charges fees to end-users for other services, such as garbage and greenwaste collection, in order to fund those

services. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

XVI. Recreation

There are no parks or recreation facilities immediately adjacent to the project site. The nearest recreation area is School House Park, located approximately 0.15-mile south of the site, along Fiddymment Road.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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 physical deterioration of the facility would occur or be accelerated?			X	
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?				X

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to recreation services is based directly on the CEQA Guidelines checklist items a–b listed above.

Discussion of Checklist Answers:

a) The WRSP EIR addressed the level of park services—including new construction, maintenance, and operations—which would need to be provided in order to serve planned growth in the community. Given that the project is consistent with the General Plan and Specific Plan, the project would not cause any unforeseen or new impacts related to the use of existing or proposed parks and recreational facilities. Existing codes, regulations, funding agreements, and facilities plans are sufficient to ensure less than significant impacts.

b) Park sites and other recreational facilities were identified within the WRSP, and the plan-level impacts of developing those facilities were addressed within the Final EIR for the Specific Plan. The project will not cause any unforeseen or new impacts related to the construction or expansion of recreational facilities.

XVII. Transportation

The project site is located at the northwest corner of Blue Oaks Boulevard and Fiddymment Road, both of which are major arterials with transit facilities in the City of Roseville. Blue Oaks Boulevard includes on-street, striped bicycle lanes and partially constructed sidewalks. Fiddymment Road includes on-street, striped bicycle lanes, attached sidewalks, and a bus turn-out for a future transit stop.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Thresholds of Significance and Regulatory Setting:

CEQA Guidelines Section 15064.3 indicates that a project's effect on automobile delay cannot be considered a significant impact, and directs transportation system analysis to focus on vehicle miles traveled (VMT), per checklist item b. However, the CEQA Guidelines also include consistency with a program, plan, or policy addressing transportation systems as an area of potential environmental effects (checklist item a). The City has adopted the following plans, ordinances, or policies applicable to this checklist item: Pedestrian Master Plan, Bicycle Master Plan, Short-Range Transit Plan, and General Plan Circulation Element. The project is evaluated for consistency with these plans and the policies contained within them, which includes an analysis of delay as a potential policy impact. The Circulation Element of the General Plan establishes Level of Service C or better as an acceptable operating condition at all signalized intersections during a.m. and p.m. peak hours. Exceptions to this policy may be made by the City Council, but a minimum of 70% of all signalized intersections must maintain LOS C. The Findings of the Implementing Procedures indicate that compliance with the Traffic Mitigation Fee (RMC Ch. 4.44) will fund roadway projects and improvements necessary to maintain the City's Level of Service standards for projects consistent with the General Plan and related Specific Plan. An existing plus project conditions (short-term) traffic impact study may be required for projects with unique trip generation or distribution characteristics, in areas of local traffic constraints, or to study the proposed project access. A cumulative plus project conditions (long-term) study is required if a project is inconsistent with the General Plan or Specific Plan and would generate more than 50 pm peak-hour trips. The guidelines for traffic study preparation are found in the City of Roseville Design and Construction Standards–Section 4.

For checklist item b, the CEQA Guidelines Section 15064.3 establishes a detailed process for evaluating the significance of transportation impacts. In accordance with this section, the analysis must focus on the generation

of VMT. Projects within one-half mile of either an existing major transit stop⁵ or a stop along an existing high quality transit corridor⁶ should be presumed to have less than significant impacts, as should any project which will decrease VMT when compared with the existing conditions. VMT may be analyzed qualitatively if existing models or methods are not available to estimate VMT for a particular project; this will generally be appropriate for discussions of construction traffic VMT.

Impacts with regard to items c and d are assessed based on the expert judgment of the City Engineer and City Fire Department, as based upon facts and consistency with the City's Design and Construction Standards.

Discussion of Checklist Answers:

a) The City of Roseville has adopted a Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan. The project was reviewed for consistency with these documents. Pedestrian facilities have already been constructed adjacent to Blue Oaks Boulevard, as well as a portion of Fiddymment Road. Bicycle facilities have also been constructed adjacent to Blue Oaks Boulevard and Fiddymment Road, and the project will not decrease the performance or safety of those facilities. The project design includes installation of sidewalks around the perimeter of the site, which would complete the pedestrian circulation system in the project vicinity. Thus, the project results in a beneficial impact related to pedestrian access and circulation. Additionally, the WRSP designates the project site as a park and ride lot. This requires the project to provide 20 parking spaces designated for commuters to leave their vehicles to meet carpools, vanpools or access transit. The project is consistent with the policies of the Pedestrian Master Plan, Bicycle Master Plan, and Short-Range Transit Plan.

A trip generation estimate was prepared by the City's Engineering Division in order to compare the project's anticipated p.m. peak hour trips to the City's modeled trips. Table 5, below, represents the anticipated trip generation for buildout of Transportation Analysis Zone 1107 with and without implementation of the project.

**Table 5: Project Trip Generation Estimate
Traffic Analysis Zone 1107**

Use	Units / Square Feet (sf)	Model Trip Rate	PM Peak Trips
2035 Build Out			
Retail	150,000 sf	2.46	369
Single-Family Residential (SFR)	131	0.69	90
Multi-Family Residential (MFR)	866	0.52	450
Existing			
Retail	0 sf	2.46	0
SFR	227	0.69	157
MFR	0	0.52	0
Proposed			
Retail	82,100 sf	2.46	202
2035 Build Out			910
Existing Plus Project			359
Total			-551

⁵ A site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. (Public Resources Code Section 21064.3)

⁶ A corridor with fixed route bus service at service intervals of 15 minutes or less during peak commute hours.

With the addition of the project's p.m. peak hour trips to the existing condition, the resulting trip generation of 359 peak trips is 551 trips less than what was anticipated for the TAZ. Therefore, a long-term traffic study was not required given the project does not exceed the number of trips anticipated in the General Plan.

Kimley-Horn prepared a short-term traffic study for the proposed project (Attachment 7) to evaluate the project's access points and localized circulation, including throat depths, tapers, storage, and driveway treatments that are necessary to ensure safe and efficient operations and to maintain the City's existing level of service. The study concluded that the signalized intersections at Blue Oaks Boulevard at Fiddymment Road and Blue Oaks Boulevard at Orchard View both operate at LOS C or better during the Existing (2018) plus Project conditions. However, the following improvements have been identified to be constructed by the project:

1. The western project driveway along Harvey Way be restricted to right-turn in/out movements with installation of a narrow-raised median along Harvey Way and the addition of appropriate signing and striping at the driveway approach. This will ensure sufficient storage capacity to accommodate the 95th percentile queue for the westbound left-turn at Harvey Way and Fiddymment Road.
2. For the site driveway along Fiddymment Road, install "KEEP CLEAR" signing and pavement marking within the driveway intersection with the upstream drive aisle to minimize the potential for driveway blockage.
3. Lengthen the deceleration lane along westbound Blue Oaks Boulevard approaching Intersection #2 by 360 feet to adequately accommodate slowing vehicles entering the site.

These improvements have been incorporated into the project plans. Given the fact that the project is consistent with the City's Traffic Model and the results of the study will be implemented by the project, impacts to traffic and level of service have been determined to be less than significant.

b) Traffic analyses focus on the number of trips traveling in specified areas during peak periods, in order to quantify impacts as specific intersections. However, there is no direct relationship between the number of trips and the amount of VMT generated by a use. Projects which substantially increase trips to a specific area may in fact decrease VMT in the City. As an example, if a new grocery store is added to an area, customers who go to that store were already going to a grocery store elsewhere, and are most likely to choose the new store because it is closer to home or on their way to another location (e.g. work). So while the store would generate substantial new trips, it would lower Citywide VMT. Unless a project includes unique characteristics, non-residential projects do not increase VMT; they divert existing trips into a similar or more efficient pathway.

The proposed project is non-residential development of a vacant property, surrounded by existing development. The project does not include any unique characteristics which would draw in regional traffic, or which would prompt longer trips. The project would locate services and employment in proximity to existing developed areas, and would therefore have a neutral or positive impact on vehicle miles traveled. Impacts are less than significant.

c-d) The project has been reviewed by the City Engineering and City Fire Department staff, and has been found to be consistent with the City's Design Standards. Furthermore, standard conditions of approval added to all City project require compliance with Fire Codes and other design standards. Compliance with existing regulations ensure that impacts are less than significant.

XVIII. Tribal Cultural Resources

As described within the Open Space and Conservation Element of the City of Roseville General Plan, the Roseville region was within the territory of the Nisenan (also Southern Maidu or Valley Maidu). Two large permanent Nisenan habitation sites have been identified and protected within the City's open space (in Maidu Park). Numerous smaller cultural resources, such as midden deposits and bedrock mortars, have also been

recorded in the City. A majority of documented sites within the City are located in areas designated for open space uses.

Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?			X	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Thresholds of Significance and Regulatory Setting:

In addition to archeological resources, tribal cultural resources are also given particular treatment. Tribal cultural resources are defined in Public Resources Code Section 21074, as either 1) a site, feature, place, geographically-defined cultural landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register or Historical Resources, or on a local register of historical resources or as 2) a resource determined by the lead agency, supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1(c), and considering the significance of the resource to a California Native American Tribe.

Discussion of Checklist Answers:

a) The WRSP EIR included a historic and cultural resources study, which concluded there were no listed or eligible sites documented in the project area. However, the WRSP EIR includes standard mitigation measures which are designed to reduce impacts to any previously undiscovered resources should any be found on site. Language included in the measure requires an immediate cessation of work, and the requirement to contact the appropriate agencies to address the resource before work can resume. The project will not result in any new

impacts beyond those already discussed and disclosed in the WRSP EIR; therefore, project-specific impacts are less than significant.

b) Notice of the proposed project was mailed to tribes which had requested such notice pursuant to Assembly Bill 52 (AB 52) on January 2, 2020. A request for consultation was received from the United Auburn Indian Community (UAIC) on January 7, 2020. City staff met with tribal representatives at the project site on February 7, 2020 and no resources were found to exist on the site. However, the UAIC recommended that a standard mitigation measure (**TCR-1**) be made a requirement of the project to reduce impacts to resources, should any be found on-site. The measure requires an immediate cessation of work, and contact with the appropriate agencies to address the resource before work can resume. This measure is already required by the prior EIR, but the standard language has been updated since the original EIR was published, and therefore the most current version of this measure is included herein as mitigation measure TCR-1.

In addition to the standard measure, the UAIC stated that oak trees in excess of 100 years in age should be considered tribal cultural resources, and that several of the largest trees on this site were likely to meet this criteria. Acting as lead agency, the City has evaluated the information provided by the UAIC to determine if it meets the definitions in Section 21074(a) of the Public Resources Code. This section states that tribal cultural resources are resources (including landscapes and features) which are:

- included or determined to be eligible for inclusion in the California Register of Historical Resources or a local register of historical resources or
- it meets the following National Register of Historic Places criteria and is determined to be significant, as supported by substantial evidence: it is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; is associated with the lives of persons important in our past; it embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or has yielded, or may be likely to yield, information important in prehistory or history.

The site is not listed on either the California or National Register of Historic Places. To be eligible for either register, a site or resource must be shown to meet one of the criteria for listing *and* must be found to be significant. Native oak trees are associated with tribal cultural history, and have served and continue to serve important purposes in tribal communities, including as a food supply and to provide materials for basketry, regalia and ceremonies, household utensils, structures, tools, and weapons. While oak trees in general are associated with events and persons important to cultural heritage, a site review found no resources on the site (such as hand stones) which would indicate that these trees in particular were associated with tribal activities.

In addition, the second part of the determination of eligibility requires a finding that the resource is significant. Significance requires the resource be uncommon, unique or have other particularly important characteristics. Several of the oak trees on this site are large, but not uncommonly so; there are many oak trees of similar size in the nearby open space preserve. The oak trees on the site do not have any uncommon, unique, or particularly important characteristics which would make them a significant resource. Therefore, the City acting as lead agency finds that the oak trees on the site do not meet the legal definitions of a tribal cultural resource.

The UAIC concluded consultation on April 14, 2020 with incorporation of the TCR-1 mitigation measure. With mitigation, impacts will be less than significant.

TCR-1: Inadvertent Discoveries – If any TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. The appropriate tribal representatives from culturally affiliated tribes shall be immediately notified. Work at the discovery location cannot resume until it is determined, in consultation with culturally affiliated tribes, that the find is not a TCR, or that the find is a TCR and all necessary

investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign. The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary.

XIX. Utilities and Service Systems

Water and sewer services will be provided by the City of Roseville. The developer will be responsible for extending new lines onto the site in order to serve the project. Storm water will be collected on-site and transferred via pipe into an off-site storm drain system. Solid waste will be collected by the City of Roseville's Refuse Department. The City of Roseville will provide electric service to the site, while natural gas will be provided by PG&E. Comcast will provide cable. The project has been reviewed by the City's Engineering Division, Environmental Utilities, Roseville Electric and PG&E. Adequate services are available for the project.

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to utilities and service systems is based directly on the CEQA Guidelines checklist items a–g listed above.

Discussion of Checklist Answers:

a) The major utility infrastructure to serve this area is already installed, which includes a looped sewer line and looped water line system in the streets surrounding the site, and stormwater lines. Minor additional infrastructure will be constructed within the project site to tie the project into the major systems, but these facilities will be constructed in locations where site development is already occurring as part of the overall project; there are no additional substantial impacts specific or particular to the minor infrastructure improvements.

b) The City of Roseville 2015 Urban Water Management Plan (UWMP), adopted May 2016, estimates water demand and supply for the City through the year 2040, based on existing land use designations and population projections. In addition, the Amoruso Ranch Water Supply Assessment (AR WSA, Appendix E of the Amoruso Ranch FEIR), dated May 2016, estimates water demand and supply for ultimate General Plan buildout. The UWMP indicates that existing water supply sources are sufficient to meet all near term needs, estimating an annual water demand of 45,475 acre-feet per year (AFY) by the year 2020 and existing surface and recycled water supplies in the amount of 70,421 AFY. The AR WSA estimates a Citywide buildout demand of 64,370 AFY when including recycled water, and of 59,657 AFY of potable water. The AR WSA indicates that surface water supply is sufficient to meet demand during normal rainfall years, but is insufficient during single- and multiple-dry years. However, the City's UWMP establishes mandatory water conservation measures and the use of groundwater to offset reductions in surface water supplies. Both the UWMP and AR WSA indicate that these measures, in combination with additional purchased water sources, will ensure that supply meets projected demand. The project, which is consistent with existing land use designations, would not require new or expanded water supply entitlements.

c) The proposed project would be served by the Pleasant Grove Wastewater Treatment Plant (PGWWTP). The Central Valley Regional Water Quality Control Board (RWQCB) regulates water quality and quantity of effluent discharged from the City's wastewater treatment facilities. The Pleasant Grove WWTP has the capacity to treat 12 million gallons per day (mgd) and is currently treating 7.0 mgd. The volume of wastewater generated by the proposed project could be accommodated by the facility, because Citywide planning of sewer infrastructure is based on land use, and the project is consistent with the existing land use designations. The proposed project will not contribute to an exceedance of applicable wastewater treatment requirements. The impact would be less than significant.

d,e) The Western Placer Waste Management Authority is the regional agency handling recycling and waste disposal for Roseville and surrounding areas. The regional waste facilities include a Material Recovery Facility (MRF) and the Western Regional Sanitary Landfill (WRSL). Currently, the WRSL is permitted to accept up to 1,900 tons of municipal solid waste per day. According to the solid waste analysis of the Amoruso Ranch Specific Plan FEIR, under current projected development conditions the WRSL has a projected lifespan extending through 2058. The project is consistent with the existing land use designation, and therefore there is sufficient existing capacity to serve the proposed project. Though the project will contribute incrementally to an eventual need to find other means of waste disposal, this impact of City buildout has already been disclosed and mitigation applied as part of each Specific Plan the City has approved, including the most recent Amoruso Ranch Specific Plan. All residences and business in the City pay fees for solid waste collection, a portion of which is collected to fund eventual solid waste disposal expansion. The project will not result in any new impacts associated with major infrastructure. Environmental Utilities staff has reviewed the project for consistency with policies, codes, and regulations related to waste disposal and waste reduction regulations and policies and has found that the project design is in compliance.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of				X

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
runoff, post-fire slope instability, or drainage changes?				

Thresholds of Significance and Regulatory Setting:

The significance of impacts related to utilities and service systems is based directly on the CEQA Guidelines checklist items a–d listed above. The California Department of Forestry and Fire Protection (CAL FIRE) is the state agency responsible for wildland fire protection and management. As part of that task, CAL FIRE maintains maps designating Wildland Fire Hazard Severity zones. The City is not located within a Very High Fire Hazard Severity Zone, and is not in a CAL FIRE responsibility area; fire suppression is entirely within local responsibility.

Discussion of Checklist Answers:

a–d) Checklist questions a–d above do not apply, because the project site is not within a Very High Fire Hazard Severity Zone and is not in a CAL FIRE responsibility area.

XXI. Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, threatened or rare species, or eliminate important examples of the major periods of California history or prehistory?			X	
f) Does the project have impacts which 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			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
the effects of probable future projects.)				
g) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Significance Criteria and Regulatory Setting:

The significance of impacts related to mandatory findings of significance is based directly on the CEQA Guidelines checklist items a–c listed above.

Discussion of Checklist Answers:

a–c) Long term environmental goals are not impacted by the proposed project. The cumulative impacts do not deviate beyond what was contemplated in the WRSP EIR, and mitigation measures have already been incorporated. With implementation of the City's Mitigating Ordinances, Guidelines, and Standards and best management practices, mitigation measures described in this chapter, and permit conditions, the proposed project will not have a significant impact on the habitat of any plant or animal species. Based on the foregoing, the proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of any wildlife species, or create adverse effects on human beings.

ENVIRONMENTAL DETERMINATION:

*In reviewing the site specific information provided for this project and acting as Lead Agency, the City of Roseville, Development Services Department, Planning Division has analyzed the potential environmental impacts created by this project and determined that with mitigation the impacts are less than significant. As demonstrated in the initial study checklist, there are no "project specific significant effects which are peculiar to the project or site" that cannot be reduced to less than significant effects through mitigation (CEQA Section 15183) and therefore an EIR is **not** required. Therefore, **on the basis of the foregoing initial study:***

[X] I find that the proposed project COULD, but with mitigation agreed to by the applicant, clearly will not have a significant effect on the environment and a *MITIGATED NEGATIVE DECLARATION* has been prepared.

Initial Study Prepared by:

Kinarik Shallow

Kinarik Shallow, Associate Planner
City of Roseville, Development Services – Planning Division

Attachments:

1. West Roseville Specific Plan EIR (this document can be found online at:
<https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8775152>)
2. Mitigation Monitoring & Reporting Program
3. Health Risk Assessment
4. Arborist Report and Preliminary Tree Impact Plan
5. CalEEMod Results
6. Environmental Noise Assessment
7. Kimley-Horn Traffic Evaluation


DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION

311 Vernon Street, Roseville, CA 95678 (916) 774-5276

MITIGATION MONITORING AND REPORTING PROGRAM

Project Title/File Number:	WRSP PCL F-31 – The Plaza at Blue Oaks; File #PL17-0368
Project Location:	1950 Blue Oaks Boulevard, Roseville, Placer County, CA; APN 017-117-093-000
Project Description:	The proposed project is a retail center consisting of a ±35,000 square-foot anchor grocery store, a 12-pump gas station with a ±3,500 square-foot convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet. The project includes a Design Review Permit to review the site design and proposed buildings, a Tree Permit to remove several native oak trees on the westerly portion of the site, and a Tentative Subdivision Map to subdivide the parcel into eight (8) lots.
Environmental Document	Mitigated Negative Declaration
Project Applicant:	Joe Zawidski, Signature Management Company
Property Owner:	Joe Zawidski, West Roseville Development Company, Inc.
Lead Agency Contact Person:	Kinarik Shallow, Associate Planner, 916-746-1309

Section 21081.6 of the California Public Resources Code requires public agencies to "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This Mitigation Monitoring and Reporting Program has been adopted for the purpose of avoiding environmental impacts

MONITORING PROCESS: Existing monitoring mechanisms are in place that assist the City of Roseville in meeting the intent of CEQA. These existing monitoring mechanisms eliminate the need to develop new monitoring processes for each mitigation measure. These mechanisms include grading plan review and approval, improvement/building plan review and approval and on-site inspections by City Departments. Given that these monitoring processes are requirements of the project, they are not included in the mitigation monitoring program.

It shall be the responsibility of the project applicant/owner to provide written notification to the City using the Mitigation Verification Cover Sheet and Forms, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The City will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program. Any non-compliance will be reported by the City to the applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance. The purpose of this program is to ensure diligent and good faith compliance with the Mitigation Measures which have been adopted as part of the project.

TABLE OF MITIGATION MEASURES					
Mitigation Measure	Implementation	Timing	Reviewing Party	Documents to be Submitted to City	Staff Use Only
BIO-1: Avoid nesting sites To ensure that fully protected bird and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the project applicant shall implement the following measures: (a) When feasible, all tree removal shall occur between August 30 and February 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the DFG; or (b) Prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 15 and August 30, all trees and potential burrowing owl habitat within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests or burrows by a qualified biologist no more than 30 days prior to disturbance. If active raptor nests or burrows are found, and the site is within 350 feet of potential construction activity, a fence shall be erected around the tree or burrow(s) at a distance of up to 350 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFG. (c) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zones), unless directly related to the management or protection of the legally protected species. (d) In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). (e) If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30th, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist. (f) The project applicant, in consultation with the CDFG, shall conduct a pre-construction survey within the phases of the project site that are scheduled for construction activities. The survey shall be conducted by a qualified biologist to determine if burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site. If the above survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, should burrowing owls be found on the project site, the following measures shall be required: (g) The applicant shall avoid all potential burrowing owl burrows that may be disturbed by project construction during the breeding season between February 15 and August 30 (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 350-foot diameter non-disturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season (August 30 through February 15). Based on approval by the CDFG, preconstruction and nonbreeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance (such as grading). Burrowing owls may be passively excluded from burrows in the construction area by placing one-way doors in the burrows according to current CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls, regardless of whether they exhibit signs of occupation, must be cleared. Burrows that have been cleared through the use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. The one-way doors shall not be used more than two weeks before construction to ensure that owls do not recolonize the area of construction.	Results of preconstruction surveys shall be submitted prior to the issuance of a grading permit or Improvement Plans. Applicable construction restrictions shall be reflected within plans. The applicants shall prepare annual reports on the status and success of mitigation and shall submit these reports to USFWS and CDFG. The applicants shall coordinate with USFWS and CDFG to modify as necessary any mitigation plans in an effort to attain mitigation success.	<i>Pre-Construction and Construction:</i> Surveys required prior to construction. If surveys are positive for birds, then remainder of mitigation steps are required prior to construction. Add as note on Improvement Plans.	Engineering	Nesting bird surveys	
NOI-1: Commercial Noise Control	Project plans will be reviewed for compliance. The applicants shall submit site-specific acoustical	<i>Pre-Construction:</i> Prior to issuance of Improvement Plans and/or Building Permits	Engineering will review Improvement Plans for	An Acoustical Study	

For all commercial uses within 150 feet of residential uses, implement the following or equally effective measures: (a) For commercial loading docks and on-site truck circulation areas that are planned to be within 150 feet of sensitive receptors (including backyards), the following measures shall be implemented: (1) Loading docks and on-site truck circulation routes shall be designed to ensure that noise levels do not exceed 70 dB Lmax or 50 dB hourly Leq at the nearest residence. An acoustic analysis shall demonstrate that the loading area design, including any noise attenuation features (e.g., covering, sound walls, orientation) would be adequate to achieve this standard; and, (2) Deliveries shall generally be limited to the hours between 7:00 A.M. and 10:00 P.M. (b) For all commercial buildings, roof-top HVAC shall be oriented away from residential areas and systems shall not produce noise levels that exceed 50 dB at a distance of 25 feet. In addition, roof-top parapets shall block line-of-sight from noise-sensitive uses to HVAC equipment. (c) Setbacks or enhanced barriers (e.g., 8 feet tall) as needed to achieve City standards. (d) Car wash entrance and exit doors shall be kept in the closed position during wash cycles. Car wash operations shall be limited to the hours of 7:00 A.M. and 10:00 P.M. An acoustical analysis shall be conducted to demonstrate that City noise standards would be achieved by these measures. Additional measures shall be implemented, if needed, to meet the standards.	analyses to the Chief Building Inspector for review.	Add as note on Improvement Plans and Building Plans	compliance with wall and noise requirements. Building will review Building Plans for compliance with HVAC requirements.		
TCR-1: Inadvertent Discoveries If any TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. The appropriate tribal representatives from culturally affiliated tribes shall be immediately notified. Work at the discovery location cannot resume until it is determined, in consultation with culturally affiliated tribes, that the find is not a TCR, or that the find is a TCR and all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign. The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary.	This condition shall be reflected in all construction and building plans, and construction site workers shall be advised by the site manager of this measure.	Construction: Measure applies if resources are discovered during construction. Add as note on Improvement Plans and Building Plans.	Engineering and Building	None	



MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File # _____

Project Address _____

Property Owner _____

Planning Division Contact _____

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete

I HAVE ATTACHED THE FOLLOWING REQUIRED ITEMS:

- ☐ Table of Applicable Mitigation Measures
- ☐ Mitigation Verification Form(s)
- ☐ Specific supporting documentation required by measure(s), if applicable (e.g. biologist's report)

I hereby certify under penalty of perjury under the laws of the State of California that I am the property owner or an agent of the property owner and am authorized to submit this Mitigation Verification Form. I also certify that the above-listed mitigation measures have been completed in the manner required, and that all of the information in this submittal is true and correct, to the best of my knowledge:

Signature and Date Print Name Contact Number

MITIGATION VERIFICATION FORM

Mitigation Measure _____

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

INSTRUCTIONS

COVER SHEET:

A Cover Sheet for the project/development is prepared by City staff, with the top portion filled out. Each time Mitigation Verification Forms(s) are being submitted, a Cover Sheet completed by the Developer, Contractor, or Designee is required. An example of a completed summary table is provided below. The signature on the Cover Sheet must be *original wet ink*.

EXAMPLE MITIGATION VERIFICATION SUBMITTAL COVER SHEET

Project Title/Planning File #	New Coffee Shop, PL15-0000
Project Address	10 Justashort Street
Property Owner	Jane Owner
Planning Division Contact	Joe Planner, Associate Planner, (916) 774-####

SUMMARY OF VERIFICATION MATERIALS INCLUDED IN THIS SUBMITTAL

Mitigation Measure	Supporting Attachments Included	Date Complete
MM-3	Copy of survey report signed by biologist	5/10/2016
MM-4	All information included in Mitigation Verification Form	5/12/2016
MM-5	E-mail from Air District approving Dust Control Plan	5/05/2016

MITIGATION VERIFICATION FORM:

A Mitigation Verification Form is provided by City staff, along with the Cover Sheet and Table of Applicable Mitigation Measures. A form is filled in and submitted for each mitigation measure by the Developer, Contractor, or Designee. The form needs only the mitigation number to be filled in, along with the Description of Monitoring and Verification Work Performed. Multiple forms may be submitted simultaneously, under one cover sheet. It is also permissible to submit a form for each part of a measure, on separate dates. For instance, in the example measure MM-4 in the table above, the actual mitigation requires informing construction workers *and* retaining a qualified archeologist if resources are uncovered. Thus, a developer may submit a form in May certifying that construction workers have been informed, and also submit a second copy of the form in July because resources were discovered and additional actions had to be undertaken.

Each mitigation measure specifies the type of supporting documentation required; this must be submitted in order for the City to accept the mitigation as complete. An example of a completed Mitigation Verification Form is provided below.

EXAMPLE MITIGATION VERIFICATION FORM

Mitigation Measure MM3

Description of Monitoring and Verification Work Performed. The following information is a required part of the description: dates, personnel names or titles, and the stage/phase of construction work. Additional notes sheets may be attached, if necessary, or the below may simply reference a separate attachment that provides the required information.

The mitigation measure text is included on the Improvement Plans General Notes page (Improvement Plan EN15-0001). On May 4, 2016, prior to any ground-disturbing activities (the pre-construction phase), a site meeting was held. At this meeting, workers on the site were informed of the potential to unearth remains, and were instructed to cease work and notify their supervisor immediately if any resources were observed.



HEALTH RISK ASSESSMENT
Signature Homes, Inc. - Plaza at Blue Oaks
Roseville, CA

Placer County Air Pollution Control District
Health Risk Assessment Submittal

Prepared By:

TRINITY CONSULTANTS
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Sacramento, CA 95816
(916) 444-6666

March 2020

Project 180506.0096



Environmental solutions delivered uncommonly well

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LIST OF ABBREVIATIONS / ACRONYMS

AB2588	Air Toxics "Hot Spots" Information and Assessment Act
AERMOD	American Meteorological Society Regulatory Model
BPIPPRIME	Building Profile Input Program PRIME
CARB	California Air Resources Board
CAS	Chemical Abstract System
GIS	Geographic Information System
HARP	Hot Spots Analysis and Reporting Program
HI	Hazard Index
NC Acute	Non-carcinogenic Acute
NC Chronic	Non-carcinogenic Chronic
HRA	Health Risk Assessment
NED	National Elevation Datasets
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
OEHHA	Office of Environmental Health Hazard Assessment
PM	Particulate Matter
PMI	Point of Maximum Impact
REL	Reference Exposure Level
TAC	Toxic Air Contaminants
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
ZOI	Zone of Impact
USGS	United States Geological Survey

1. EXECUTIVE SUMMARY

Signature Homes, Inc. is developing a gas pad (The Facility) in the southeast corner of the Plaza at Blue Oaks development in Roseville, California. The Facility is under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). After reviewing the relevant Committee of the California Air Pollution Control Officers Association (CAPCOA) guidance for conducting health risk assessments (HRAs) at gasoline stations, it was determined that The Facility would be unable to screen out of doing an HRA, as the estimated impacts were above a 10 in 1 million cancer risk. Therefore, Signature Homes, Inc. is submitting this refined HRA for the Facility to demonstrate that health risk impacts are below 10 in 1 million cancer risk and a hazard index of 1. This report constitutes the results of the HRA performed in accordance with the Placer County Air Pollution Control District's guidelines for preparing a health risk assessment and the Office of Environmental Health Hazard Assessment (OEHHA) developed *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments* (OEHHA HRA Guidance Manual).¹ The analysis uses the Hotspots Analysis and Reporting Program (HARP) Version 2.0 with inputs from US-EPA's AERMOD modeling program to perform the exposure/risk assessment.

The objectives of this HRA are to: (1) estimate off-site air concentrations of the substances identified in AB2588 and emitted from the facility, (2) evaluate potential exposures to the surrounding community, (3) characterize the potential health risks to individuals and the exposed population associated with those levels of exposure, and (4) determine if additional actions are required. This report presents the results of the HRA analysis. In addition to this HRA report, supplemental modeling and HRA files have been provided via an electronic data transfer system.

The results obtained from HARP provide the necessary information to generate the zones of impact (ZOIs) and identify potentially exposed populations. In addition, potential health effects were evaluated for the maximum exposed individual resident (MEIR) and the maximum exposed individual worker (MEIW) for both non-carcinogenic and carcinogenic health impacts. The results of the HRA are summarized in Table 1-1 below.

¹ Office of Environmental Health Hazard Assessment (OEHHA), *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015, California Environmental Protection Agency.

Table 1-1. HRA Results Summary

Receptor Type	Cancer Risk		Chronic		Acute	
	Receptor ID	Risk (in a million)	Receptor ID	Hazard Index	Receptor ID	Hazard Index
Point of Maximum Impact	319	48.39	319	0.23	291	0.73
Maximum Exposed Individual Resident	422	4.45	422	0.02	312	0.23
Maximum Exposed Individual Worker	320	2.42	320	0.13	347	0.48

1.1. APPLICABLE REGULATIONS

In accordance with our correspondence with Emmanuel Orozco of Placer County, dated March 24, 2016, public notice and risk reduction are triggered for a cancer risk greater than or equal to 10 in 1 million and non-cancer hazard index greater than or equal to 1. The results in Table 1-1 show that the Facility does not trigger the public notice or risk reduction thresholds for cancer risk or any of the non-cancer hazard indices.

For this HRA, Trinity used HARP – Air Dispersion and Risk Tool (Version 2.0 dated 19121).

2. FACILITY INFORMATION

Table 2-1. Facility Information

Facility Name	The Plaza at Blue Oaks Plaza
Facility Address	1950 Blue Oaks Blvd Fiddymont F-31 Roseville, CA
UTM Coordinates	642,811.78 m E, 4,294,994.31 m N
Datum	UTM, NAD83, Zone Grid 10S

2.1. FACILITY OPERATIONS

The Facility is a gas station that is being installed as part of the Plaza at Blue Oaks development project, which consists of 92,450 square feet of commercial and retail development in Roseville, California. The Facility specifically contains fuel pumps and underground fuel tanks with a Phase I & II vapor recovery system. The annual throughput of the Facility will have a maximum throughput of 5.5 million gallons per year.

2.2. EMISSIONS

The emissions for this HRA are based on the 2017 Risk Assessment Procedures provided by South Coast Air Quality Management District² and the maximum annual gasoline throughput. A summary of facility-wide emissions is provided in Table 2-2.

Table 2-2. Facility Emissions Summary

Pollutant ID	Pollutant Name	lbs/yr	lbs/hr
71432	Benzene	21.74	0.00248
100414	Ethylbenzene	19.96	00.00228
91203	Naphthalene	2.31	0.00026

² South Coast Air Quality Management District, *Risk Assessment Procedures for rules 1401, 1401.1 and 212 version 8.1*, September 1, 2017

3. SOURCE AND EMISSION INVENTORY INFORMATION

3.1. RELEASE INFORMATION

Emission source locations and elevations are provided in Table 3-1. Tables 3-2 and 3-3 identify the release information for the point sources and volume sources at the facility, respectively.

Table 3-1. Emission Source Modeling Locations

Model ID	Description	X (m)	Y (m)	Elevation	Emission Rate (g/s)
VENT	Loading	642,809.3	4,294,992.7	32.98	1
VENT2	Breathing	642,809.3	4,294,992.7	32.98	1
SPILL	Loading Spill Emissions	642,809.3	4,294,992.7	32.98	1
REFUEL	Refueling Emissions	642,809.3	4,294,992.7	32.98	1

Table 3-2. Emission Source Modeling Parameters – Point Sources

Model ID	Description	Stack Height (m)	Temp (F)	Stack Velocity (m/s)	Stack Diameter (ft)
VENT	Loading	3.66	60	0	2
VENT2	Breathing	3.66	60	0	2

Table 3-3. Emission Source Modeling Parameters – Volume Sources

Model ID	Description	Release Height (m)	Init. Lat. Dimension (m)	Init. Vert. Dimension (ft)
REFUEL	Loading Spill Emissions	1	3.02	1.86
SPILL	Refueling Emissions	0	3.02	1.86

4. EMISSION QUANTIFICATION

The emission factors and weight percent values from South Coast Air Quality Management District Risk Assessment Procedures were used to determine emission rates and potential health impacts. Using a maximum yearly throughput of 5.5 million gallons per year and the emission factors listed in Table 4-1, the estimated yearly emissions from the project are summarized in Tables 4-2 below.

Table 4-1. SCAQMD Risk Assessment Procedure Emission Factors

Pollutant	Source	Pollutant Emission Factor (lb Pollutant/1,000 gal)
Benzene	VENT	6.83E-04
	VENT2	1.09E-04
	SPILL	1.70E-03
	REFUEL	1.46E-03
Ethylbenzene	VENT	1.61E-04
	VENT2	2.57E-05
	SPILL	3.10E-03
	REFUEL	3.42E-04
Naphthalene	VENT	6.00E-07
	VENT2	9.60E-08
	SPILL	4.18E-04
	REFUEL	1.28E-06

Table 4-2. Yearly and Hourly Project Emissions

Pollutant	Source	Throughput (gal)	Emission Rate (lb/yr)	Emission Rate (lb/hr)
Benzene	VENT	5,500,000	3.76	8.58E-04
	VENT2	5,500,000	0.60	1.37E-04
	SPILL	5,500,000	9.35	2.13E-03
	REFUEL	5,500,000	8.03	1.83E-03
Ethylbenzene	VENT	5,500,000	0.89	2.02E-04
	VENT2	5,500,000	0.14	3.23E-05
	SPILL	5,500,000	17.1	3.89E-03
	REFUEL	5,500,000	1.88	4.29E-04
Naphthalene	VENT	5,500,000	0.003	7.53E-07
	VENT2	5,500,000	0.001	1.21E-07
	SPILL	5,500,000	2.30	5.25E-04
	REFUEL	5,500,000	0.007	1.61E-06

5. AIR DISPERSION INFORMATION

5.1.1. Spatial Averaging

Spatial averaging was not used to determine risk values for receptors. Instead, the most conservative, representative value for each receptor was chosen. This methodology results in a higher risk values than spatial averaging and is therefore a more conservative approach.

5.1.2. Meteorological and Elevation Data

Five years of pre-processed meteorological data supplied by the California Air Resources Board (CARB) for 2009 through 2013 were used for this model.³ The surface station data are from Sacramento International Airport (WBAN 23232) and the upper air data are from Oakland International Airport (WBAN 23230). Terrain data were obtained from the Multi-Resolution Land Characteristics Consortium (MRLC) in the form of National Elevation Dataset (NED) files at 1/3 arc second resolution.⁴

5.1.3. Model Options

Air dispersion modeling is performed with US-EPA AERMOD through the EPA approved BREEZE user interface. All modeling exercises were conducted using the previous version of EPA AERMOD (v18081). Air dispersion modeling was prepared prior to the release of v19191. No differences are expected between AERMOD versions. Modeling was performed utilizing all regulatory defaults as defined by EPA. Selected outputs were for the 1st high 1-hr and 1st high period values.

The following modeling input files are included electronically in Appendix D.

- Surface Met Data File (*.sfc)
- Profile Met Data File (*.pfl)
- National Elevation Database File (*.ned)
- AERMAP Source File (*.aermap.src)
- AERMAP Receptor File (*.aermap.rec)
- BPIP Input File (*.bpip.inp)
- AERMOD Input File (*.aermod.inp)

The following modeling output files are included electronically in Appendix D.

- AERMAP Output File (*.aermap.out)
- BPIP Summary File (*.bpip.sum)
- BPIP Output File (*.bpip.out)
- AERMOD Output File (*.aermod.out)
- AERMOD Error File (*.aermod.err)
- Plotfiles (*.plt and *.txt)

Building downwash was not included as CAPCOA guidelines for industry-wide risk assessments of gasoline stations states “Results of the modeling indicated that the placement of the buildings and their subsequent potential to create downwash have very little effect on the resultant risks from the vent pipes.”

³ <https://www.arb.ca.gov/toxics/harp/metfiles2.htm>

⁴ <https://www.mrlc.gov/viewerjs/>

5.1.4. Receptor Placement

The following receptor placements were used for this HRA.

- **Nearby Residences and Workers (Discrete Grid)** - The modeling discrete receptor grid uses a variable density receptor grid with 10 m spacing out to 150 m from the center of the facility, and 25m spacing out to 500m from the center of the facility. Given the nature of the facility emissions and the nearby workplaces and residences, a high density receptor approach was used to ensure the worst case Residential and Worker impacts were captured in the modeling exercise. Residential and workplace receptors were identified using a joining of modeled HRA impacts with satellite imagery. The MEI receptors were conservatively matched to grid receptors with the maximum impacts on parcels identified as residences and workplaces.
- **Sensitive Receptors** - No sensitive receptors were identified within the Zone of Influence (ZOI) of the facility.
- **Census Block Receptors** - AB2588 also requires an estimates of the number of impacted individuals in residences and off-site workplaces within the ZOI. Census data is used to determine affected populations within geographic areas defined by census tracts. A census tract centroid (geographical center) is identified as a receptor location, which represents exposure to the population within that census tract. For this HRA, affected populations were estimated based on census data obtained from the built-in HARP 2.0 2010 Census Database. Figure B-2 shows the impacted census tracts for this HRA within the ZOI. Census tract information was obtained directly from HARP 2.0 by inputting the facility center point and requesting receptors out to a radius of 300 meters. All census block receptors with a population of 0 were excluded from the Cancer Burden analysis. Only one census block receptor was identified within the ZOI and is listed in Table 5-1 below.

Table 5-1. Census Block Receptor

Track No.	Block No.	X (m)	Y (m)	Elev. (m)	Population
21039	1002	642,710	4,294,813	31.25	48

- **Onsite Receptors** – No onsite receptors were identified.

5.1.5. Receptors Evaluated for Multipathway Analysis

A summary of receptor pathways chosen for the analysis is shown in Table 5-2 below.

Table 5-2. Receptor Pathways Evaluated

Pathway	Residential Receptors	Worker Receptors
Inhalation	Y	Y
Soil	Y	Y
Dermal	Y	Y
Mother's Milk	Y	
Homegrown Crop		
Chicken		
Egg		

5.1.6. Multipathway and Exposure Parameters

Only default HARP2 values were used for the pathways identified in Section 5.1.6 of this report.

5.1.7. Health Values and HARP Version Used in Risk Analysis

For this HRA, Trinity used the last version of HARP – Air Dispersion and Risk Tool (Version 2.0 dated 19121). This version of HARP utilized a health.mdb file updated on May 1, 2019.

6. SUMMARY OF RESULTS

Summary results are presented in Tables A-1 through A-4. The content contained within each table is listed below:

- Table A-1. Summary of Maximum Cancer Health Risk Impacts
- Table A-2. Summary of Maximum Chronic Non-cancer Health Risk Impacts
- Table A-3. Summary of Maximum Acute Non-cancer Health Risk Impacts
- Table A-4. Census Block Receptors and Impacts

6.1.1. Risk Driver Tables

Tables A-5 through A-7 show the driving devices and pollutants for each MEIR, MEIW, and PMI for cancer, non-cancer chronic, and non-cancer acute impacts.

7. MAPS AND AERIAL PHOTOS REQUIRED BY DISTRICT

Figures B-1 through B-6 included in Appendix B include the required imagery and isopleths and are summarized below:

- > Figure B-1. Facility Location
- > Figure B-2. Census Receptor
- > Figure B-3. 1 in 1 million resident cancer risk isopleth
- > Figure B-4. 1 in 1 million worker cancer risk isopleth
- > Figure B-5. Acute non-cancer HI of 0.1 risk isopleth
- > Figure B-6. Chronic non-cancer HI of 0.1 risk isopleth

8. REQUIRED FILES

The following files are provided electronically.

- Written HRA report (*.pdf)
- HARP 2 Facility and Emissions Database (*.mdb)
- Project Summary Report (ProjectSummaryReport.txt)
- Ground Level Concentration Files (*.txt)
- Health Database (*.mdb)
- Air Dispersion Files
 - o Surface Met Data File (*.sfc)
 - o Profile Met Data File (*.pfl)
 - o National Elevation Database File (*.ned)
 - o AERMAP Source File (*.aermap.src)
 - o AERMAP Receptor File (*.aermap.rec)
 - o BPIP Input File (*.bpip.inp)
 - o AERMOD Input File (*.aermod.inp)
 - o AERMAP Output File (*.aermap.out)
 - o BPIP Summary File (*.bpip.sum)
 - o BPIP Output File (*.bpip.out)
 - o AERMOD Output File (*.aermod.out)
 - o AERMOD Error File (*.aermod.err)
 - o Plotfiles (*.plt and *.txt)
- Risk Analysis Files
 - o Input file with risk scenario and site specific information (*.HRAInput.hra)
 - o Supplemental input file with health values (*.PolDB.csv)
 - o Supplemental input file with GLCs (*.GLCList.csv)
 - o Output log file (*.output.txt)
 - o Output file with cancer risk details (*.CancerRisk.csv)
 - o Output file with chronic non-cancer risk details (*.NCChronicRisk.csv)
 - o Output file with acute non-cancer risk details (*.NCACuteRisk.csv)
 - o Pathway Receptor Information (*.PathwayRec.csv)

Appendix A: TABLES

Table A-1. Summary of Maximum Cancer Health Risk Impacts

Receptor type	Cancer Risk (in a million)	Significance Threshold	Receptor Number	UTME (m)	UTMN (m)
PMI	29.35	N/A	320	642,799.3	4,295,012.7
MEIR	2.84	≥10	423	642,839.3	4,294,922.7
MEIW	1.50	≥10	321	642,799.3	4,295,022.7

Table A-2. Summary of Maximum Chronic Non-cancer Health Risk Impacts

Receptor type	Chronic Non-Cancer HI	Significance Threshold	Receptor Number	UTME (m)	UTMN (m)
PMI	1.28E-01	N/A	320	642,799.3	4,295,012.7
MEIR	1.25E-02	≥1	423	642,839.3	4,294,922.7
MEIW	7.20E-02	≥1	321	642,799.3	4,295,022.7

Table A-3. Summary of Maximum Acute Non-cancer Health Risk Impacts

Receptor type	Acute Non-Cancer HI	Significance Threshold	Receptor Number	UTME (m)	UTMN (m)
PMI	7.34E-01	N/A	292	642,789.3	4,294,992.7
MEIR	2.35E-01	≥1	313	642,799.3	4,294,912.7
MEIW	4.95E-01	≥1	348	642,809.3	4,295,022.7

Table A-4. Census Block Receptors and Impacts

Track:	Block:	X (m)	Y (m)	Population:	AERMOD Description	Excess Cancer Risk	Burden
21039	1002	642,710.00	4,294,813.00	48	Track: 21039, Block: 1002, Population: 48	5.19E-07	2.49E-05
						Total:	2.49E-05

Table A-5. PMI Risk Drivers

Receptor Type	Receptor Number	UTME (m)	UTMN (m)	Driving Pollutant	Driving Source
PMI - Cancer	320	642,799.3	4,295,012.7	Benzene	SPILL
PMI - NC Chronic	320	642,799.3	4,295,012.7	Benzene	SPILL
PMI - NC Acute	292	642,789.3	4,294,992.7	Benzene	SPILL

Table A-6. MEIR Risk Drivers

Receptor Type	Receptor Number	UTME (m)	UTMN (m)	Driving Pollutant	Driving Source
MEIR - Cancer	423	642,839.3	4,294,922.7	Benzene	SPILL
MEIR - NC Chronic	423	642,839.3	4,294,922.7	Benzene	SPILL
MEIR - NC Acute	312	642,809.3	4,295,022.7	Benzene	SPILL

Table A-7. MEIW Risk Drivers

Receptor Type	Receptor Number	UTME (m)	UTMN (m)	Driving Pollutant	Driving Source
MEIW - Cancer	321	642,799.3	4,295,022.7	Benzene	SPILL
MEIW - NC Chronic	321	642,799.3	4,295,022.7	Benzene	SPILL
MEIW - NC Acute	348	642,809.3	4,295,022.7	Benzene	SPILL

Table A-8. Pollutant Health Values¹

Pollutant ID	Pollutant Abbreviation	Inhalation Cancer Potency Factor (mg/kg*d)	Inhalation Chronic REL (µg/m ³)	Inhalation Chronic 8- hour REL (µg/m ³)	Inhalation Acute REL (µg/m ³)	Inhalation Unit Risk (µg/m ³)
71432	Benzene	0.1	3	3	27	2.90E-05
100414	Ethyl Benzene	0.0087	2,000			2.50E-06
91203	Naphthalene	0.12	9			3.40E-05

1. Oral Cancer Slope Factors and Oral Chronic RELs are not listed because none of the pollutants have health values for those pathways

Appendix B: FIGURES

Figure B-1. Facility Location

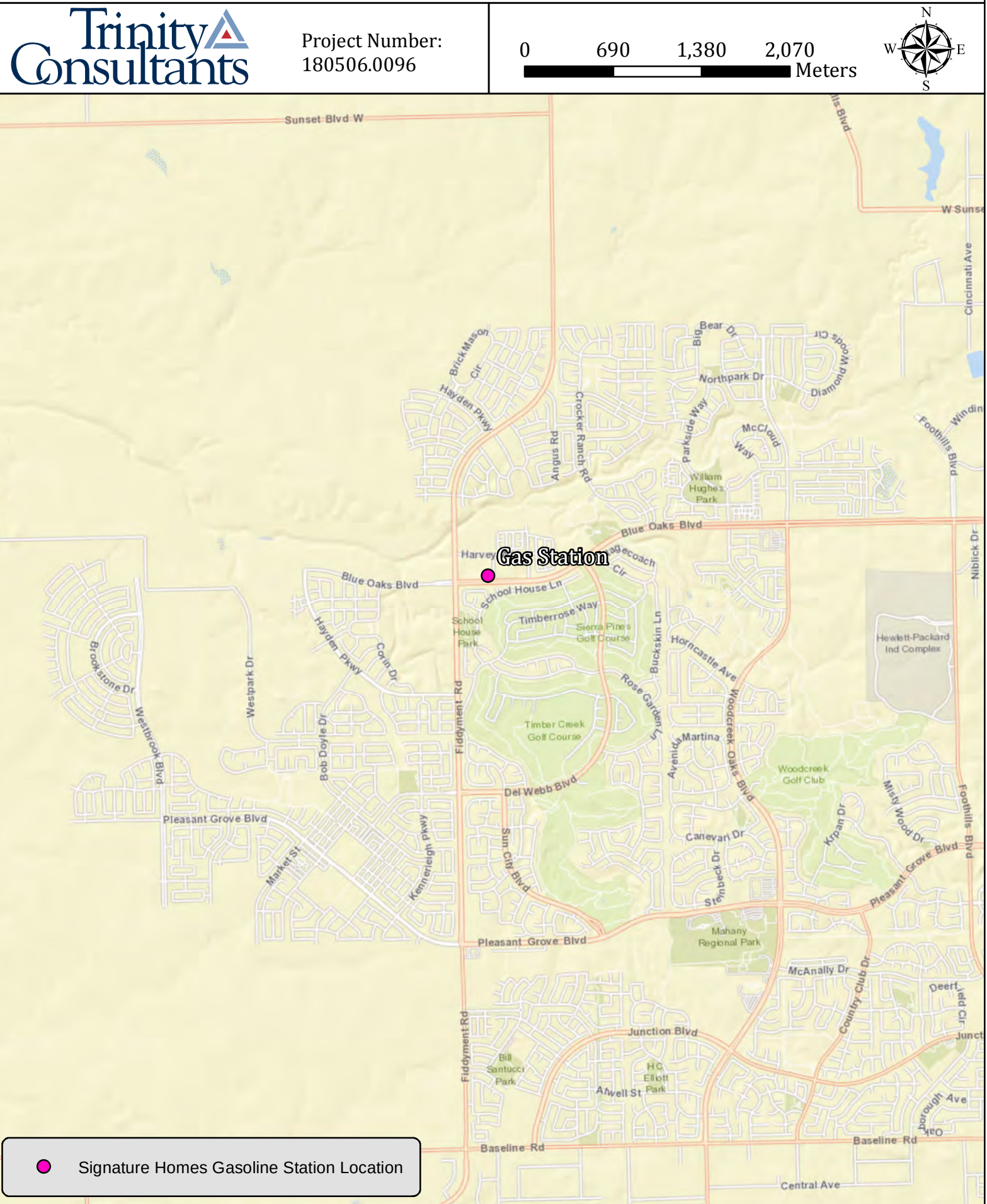


Figure B-2. Census Receptor



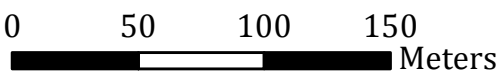
Figure B-3. Resident Cancer Risk



Figure B-4. Worker Cancer Risk

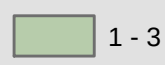


Project Number:
180506.0096



Worker Cancer Risk

1 in 10⁶

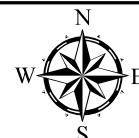
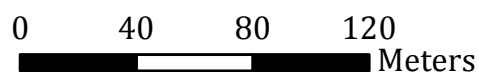


 Signature Homes Gasoline Station Location

Figure B-5. Acute Hazard Index



Project Number:
180506.0096



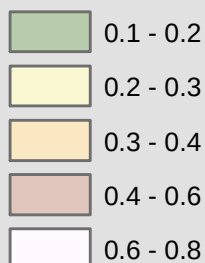
MEIR - Acute - 0.24

PMI - Acute - 0.73

Gas Station

MEIW - Acute - 0.50

Hazard Index



● Signature Homes Gasoline Station Location

Figure B-6. Chronic Hazard Index



Appendix C: MODELING FILES - ELECTRONIC COPY



California Tree and Landscape Consulting, Inc.

February 20, 2020

Joseph Zawidski
Signature Homes, Inc.
4670 Willow Road, Suite 200
Pleasanton, California 94588

Via Email: jzawidski@hotmail.com

PROPERTY TRANSITION ARBORIST REPORT

RE: Arborist Report and Tree Inventory for Fiddymment Farms, Unit 17 Project Site
City of Roseville, California

Executive Summary:

Signature Homes, Inc. contacted California Tree and Landscape Consulting, Inc. to document the trees on the property for a better understanding of the existing resource and any potential improvement obstacles that may arise. Signature Homes, Inc. requested an arborist report and tree inventory updates and impact assessment for the property located at Fiddymment Farms, Unit 17, suitable for submittal to the City of Roseville. This is an Updated Arborist Report and Tree Inventory for the filing of plans to develop the property.

Ed Stirtz, ISA Certified Arborist WE0510A, visited the property on February 17, 2020, to provide updated species identification, measurements of DBH and canopy, field condition notes, recommended actions, ratings, and approximate locations for the trees. A total of 26 trees were evaluated on this property, of which 26 are protected trees according to the City of Roseville's Municipal Code. Chapter 19.66, Tree Preservation, defines a "Protected Tree" as any native oak tree equal to or greater than 6 inches diameter at breast height (DBH) measured as a total of a single trunk or multiple trunks. The purpose of this field reconnaissance effort was to identify, inventory, and comment upon the current structure and vigor of the "protected trees" located within and/or overhanging the project site.

The vegetation on site includes those native oak trees as identified in the inventory and three to five other substandard size oak trees 1" to 2" diameter range.

TABLE 1

Tree Species	Trees on this Site	Protected Trees on the Site	Proposed for Removal for Development	Total Proposed for Retention
Blue Oak	13	13	11	2
Interior Live Oak	10	10	7	3
Valley Oak	3	3	2	1
TOTALS	26	26	20	6



ASSIGNMENT

Perform an examination of the site to document the presence and condition of trees protected by the City of Roseville. The “study area” for this effort includes the area as depicted on “The Plaza at Blue Oaks” preliminary tree impact plan prepared by TSD Engineering, Inc., dated February 5, 2020. (All trees protected by the City are included in the inventory.) Prepare a report of findings.

METHODS

Appendix 2 and Tables 1, 2 and 3 in this report are the detailed inventory and recommendations for the trees. The following terms and Table A – Ratings Descriptions will further explain our findings.

Species of trees is listed by our local common name and botanical name by genus and species.

DBH (diameter breast high) is normally measured at 4’6” (54” above the average ground, height but if that varies then the location where it is measured is noted here. A steel diameter tape was used to measure the trees.

Canopy radius is measured in feet. It is the farthest extent of the crown composed of leaves and small twigs measured by a Stanley digital distance meter. This measurement often defines the Critical Root Zone (CRZ) or Protection Zone (PZ), which is a circular area around a tree with a radius equal to this measurement.

Actions listed are recommendations to improve health or structure of the tree. Trees in public spaces require maintenance. If a tree is to remain and be preserved, then the tree may need some form of work to reduce the likelihood of failure and increase the longevity of the tree. Preservation requirements and actions based on a proposed development plan are not included here.

Arborist Rating is subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead). The rating was done in the field at the time of the measuring and inspection.

Table A – Ratings Descriptions

No problem(s)	5	excellent
No apparent problem(s)	4	good
<u>Minor problem(s)</u>	<u>3</u>	<u>fair</u>
Major problem(s)	2	poor
Extreme problem(s)	1	hazardous, non-correctable
Dead	0	dead

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

Notes indicate the health, structure and environment of the tree and explain why the tree should be removed or preserved. Additional notes may indicate if problems are minor, extreme or correctible.

Remove is the recommendation that the tree be removed. The recommendation will normally be based either on poor structure or poor health and is indicated as follows:

Yes H – Tree is unhealthy

Yes S – Tree is structurally unsound

OBSERVATIONS AND CONCLUSIONS

The site is a partially developed commercial site in northwest Roseville. The east side of the site has been rough graded and has annual grasses and a single oak (#1535). The western portion of the site has two patches of oak trees, which are both well below the surrounding grade and on two sides of both patches are City arterial streets.

Development impacts to the two trees proposed to be retained in the south patch will sustain moderate impacts and are anticipated to adjust to the proposed site changes. The trees to be retained in the north patch will be subjected to some amount of summer irrigation runoff. It is difficult to say with any certainty if this will prove detrimental to the trees. It may, and it may be that the trees adjust and adapt to the presence of additional summer moisture.

Below is a summary of tree condition by Arborist Rating and Species.

TABLE 2

# Trees	Common Name	DBH	Canopy Radius	Arborist Rating	Defects Found	Retain/Remove?
1	Blue Oak	28	33	1 Extreme Structure or Health Problems	Old callusing trunk, west side, 9' above grade with interior decay; slightly out of balance east; above average amount of deadwood.	1 Remove
1	Interior Live Oak	35	38	1 Extreme Structure or Health Problems	Old callusing basal trunk wound, north side; moderate to significant decay; out of balance north; slightly above average amount of deadwood.	1 Remove
1	Valley Oak	57	39	1 Extreme Structure or Health Problems	Numerous large scaffold failures, with resulting decay; scaffold limb failure, north side, resulting in a large callusing wound reaching from 2'-20' above grade, with moderate interior decay; above average amount of deadwood.	1 Remove

# Trees	Common Name	DBH	Canopy Radius	Arborist Rating	Defects Found	Retain/Remove?
1	Blue Oak	24	25	2 Major Structure or Health Problems	Measured 2' above grade. Old callusing trunk wound, south side, at point of limb failure, with interior decay; above average amount of deadwood.	1 Retain
11	Blue Oak	8-45	9-39	3 Fair - Minor Problems	See Tree Inventory.	11 Retain
9	Interior Live Oak	17-53	16-32	3 Fair - Minor Problems	See Tree Inventory.	9 Retain
2	Valley Oak	13-16	16-17	3 Fair - Minor Problems	Out of balance northwest.	1 Retain
26 TOTAL						3 Remove 23 Retain

RECOMMENDED REMOVALS

At this time, 3 trees (totaling 120 aggregate diameter inches) have been recommended for removal from the proposed project area due to the nature and extent of defects, compromised health, and/or structural instability noted at the time of field inventory efforts. If these trees were retained within the proposed project area, it is our opinion that they may be hazardous depending upon their proximity to planned development activities. For reference, the trees which have been recommended for removal due to the severity of noted defects, compromised health, and/or structural instability are highlighted in green within the accompanying Tree Inventory Summary and are briefly summarized as follows:

TABLE 3

Tag #	Protected By Code	Common Name	Species	Multi-Stems (inches)	DBH (inches)	Measured At	Measured Canopy Radius (feet)	Arborist Rating
1514	Yes	Blue Oak	<i>(Quercus douglasii)</i>		28	54	33	1 Extreme Structure or Health Problems
1539	Yes	Valley Oak	<i>(Quercus lobata)</i>		57	54	39	1 Extreme Structure or Health Problems
1540	Yes	Interior Live Oak	<i>(Quercus wislizeni)</i>	14,21	35	54	38	1 Extreme Structure or Health Problems

Trees numbered 1510, 1513, 1521, 1523, 1533, 1562, 1563 and 1564 were all identified as having failed and being in down and dead condition. Some of these trees were identified as down in previous updates and all have been removed from the improvement plans.

CONSTRUCTION REMOVALS

At this time, 20 trees (totaling 535 aggregate diameter inches) have been recommended for construction removal from the proposed project area. Those trees are briefly summarized as follows:

Tree #	Common Name	Species	Multi-Stems (inches)	Total DBH (inches)	DLR (feet)	Structure	Vigor
1522	Blue Oak	(<i>Quercus douglasii</i>)		18	22	Fair	Fair
1528	Blue Oak	(<i>Quercus douglasii</i>)		17	24	Poor to fair	Poor to fair
1529	Blue Oak	(<i>Quercus douglasii</i>)		26	32	Poor to fair	Fair
1530	Blue Oak	(<i>Quercus douglasii</i>)		27	33	Poor to fair	Fair
1531	Blue Oak	(<i>Quercus douglasii</i>)		24	31	Poor to fair	Fair
1532	Blue Oak	(<i>Quercus douglasii</i>)		8	9	Poor	Fair
1534	Blue Oak	(<i>Quercus douglasii</i>)		21	30	Poor	Fair
1535	Blue Oak	(<i>Quercus douglasii</i>)		14	17	Fair	Fair
1536	Interior Live Oak	(<i>Quercus wislizeni</i>)		21	22	Fair	Fair
1537	Blue Oak	(<i>Quercus douglasii</i>)		26	31	Fair	Fair
1538	Blue Oak	(<i>Quercus douglasii</i>)		45	37	Fair	Fair
1539	Valley Oak	(<i>Quercus lobata</i>)		57	39	Poor	Fair
1540	Interior Live Oak	(<i>Quercus wislizeni</i>)	14,21	35	38	Poor	Fair
1541	Blue Oak	(<i>Quercus douglasii</i>)		25	39	Fair	Fair
1542	Valley Oak	(<i>Quercus lobata</i>)		13	16	Poor to fair	Fair
1543	Interior Live Oak	(<i>Quercus wislizeni</i>)	12,12,13	37	32	Poor to fair	Fair
1544	Interior Live Oak	(<i>Quercus wislizeni</i>)	12,20,21	53	32	Poor to fair	Fair
1545	Interior Live Oak	(<i>Quercus wislizeni</i>)		21	29	Poor to fair	Fair
1559	Interior Live Oak	(<i>Quercus wislizeni</i>)		26	26	Poor to fair	Fair
1563	Interior Live Oak	(<i>Quercus wislizeni</i>)		21	32	Poor	Fair

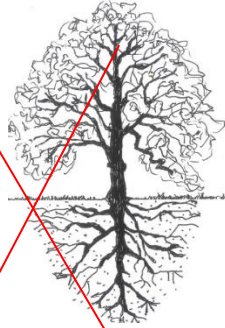
DISCUSSION

Trees need to be protected from normal construction practices if they are to remain healthy and viable on the site. Our recommendations are based on experience, and County ordinance requirements, so as to enhance tree longevity. This requires their root zones remain intact and viable, despite heavy equipment being on site, and the need to install foundations, driveways, underground utilities, and landscape irrigation systems. Simply walking and driving on soil has serious consequences for tree health.

Following is a summary of Impacts to trees during construction and Tree Protection measures that should be incorporated into the site plans in order to protect the trees. Once the plans are approved, they become the document that all contractors will follow. ***The plans become the contract between the owner and the contractor, so that only items spelled out in the plans can be expected to be followed. Hence, all protection measures, such as fence locations, mulch requirements and root pruning specifications must be shown on the plans.***

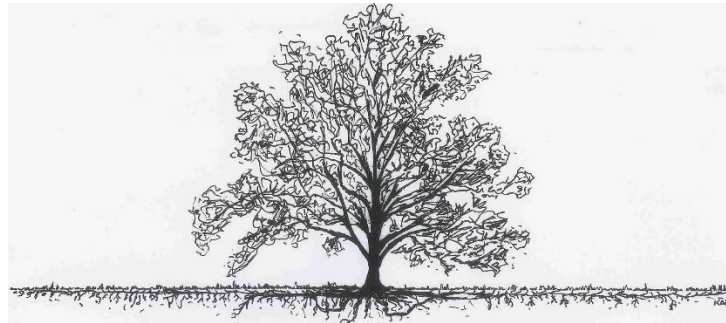
Root Structure

The majority of a tree's roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6" to 3' of soil. It is a common misconception that a tree underground resembles the canopy (see Drawing A below). The correct root structure of a tree is in Drawing B. All plants' roots need both water and air for survival. Surface roots are a common phenomenon with trees grown in compacted soil. Poor canopy development or canopy decline in mature trees is often the result of inadequate root space and/or soil compaction.



Drawing A

Common misconception of where tree roots are assumed to be located



Drawing B

The reality of where roots are generally located

Structural Issues

Limited space for canopy development produces poor structure in trees. The largest tree in a given area, which is 'shading' the other trees is considered Dominant. The 'shaded' trees are considered Suppressed. The following picture illustrates this point. Suppressed trees are more likely to become a potential hazard due to their poor structure.

Dominant Tree

Growth is upright

Canopy is balanced by limbs and foliage equally

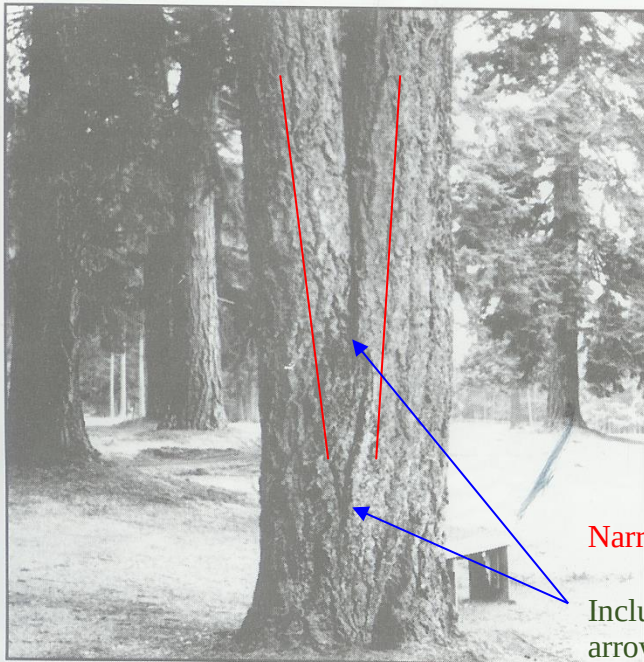


Suppressed Tree

Canopy weight all to one side

Limbs and foliage grow away from dominant tree

Co-dominant leaders are another common structural problem in trees.



The tree in this picture has a co-dominant leader at about 3' and included bark up to 7 or 8'. Included bark occurs when two or more limbs have a narrow angle of attachment resulting in bark between the stems – instead of cell to cell structure. This is considered a critical defect in trees and is the cause of many failures.

Narrow Angle

Included Bark between the arrows

Figure 6. Codominant stems are inherently weak because the stems are of similar diameter.

Photo from Evaluation of Hazard Trees in Urban Areas by Nelda P. Matheny and James R. Clark, 1994 International Society of Arboriculture

Pruning Mature Trees for Risk Reduction

There are few good reasons to prune mature trees. Removal of deadwood, directional pruning, removal of decayed or damaged wood, and end-weight reduction as a method of mitigation for structural faults are the only reasons a mature tree should be pruned. Live wood over 3" should not be pruned unless absolutely necessary. Pruning cuts should be clean and correctly placed. Pruning should be done in accordance with the American National Standards Institute (ANSI) A300 standards. It is far better to use more small cuts than a few large cuts as small pruning wounds reduce risk while large wounds increase risk.

Pruning causes an open wound in the tree. Trees do not "heal" they compartmentalize. Any wound made today will always remain, but a healthy tree, in the absence of decay in the wound, will 'cover it' with callus tissue. Large, old pruning wounds with advanced decay are a likely failure point. Mature trees with large wounds are a high failure risk.

Overweight limbs are a common structural fault in suppressed trees. There are two remedial actions for overweight limbs (1) prune the limb to reduce the extension of the canopy, or (2) cable the limb to reduce movement. Cables do not hold weight they only stabilize the limb and require annual inspection.



Photo of another tree – not at this site.

Normal limb structure

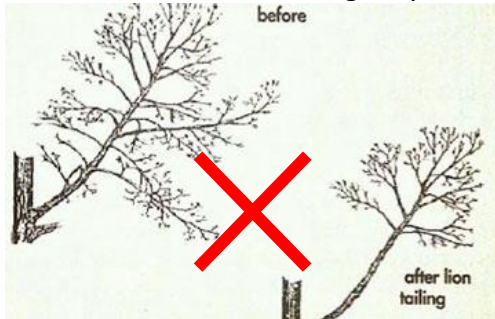
Over weight, reaching limb with main stem diameter small compared with amount of foliage present



Photo of another tree – not at this site

Lion's – Tailing is the pruning practice of removal of “an excessive number of inner and/or lower lateral branches from parent branches. Lion's tailing is not an acceptable pruning practice” ANSI A300 (part 1) 4.23. It increases the risk of failure.

Pruning – Cutting back trees changes their natural structure, while leaving trees in their natural form enhances longevity.



Arborist Classifications

There are different types of Arborists:

Tree Removal and/or Pruning Companies. These companies may be licensed by the State of California to do business, but they do not necessarily know anything about trees;

Arborists. Arborist is a broad term. It is intended to mean someone with specialized knowledge of trees but is often used to imply knowledge that is not there.

ISA Certified Arborist: An International Society of Arboriculture Certified Arborist is someone who has been trained and tested to have specialized knowledge of trees. You can look up certified arborists at the International Society of Arboriculture website: isa-arbor.org.

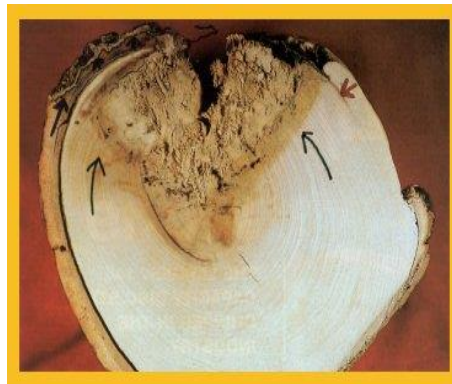
Consulting Arborist: An American Society of Consulting Arborists Registered Consulting Arborist is someone who has been trained and tested to have specialized knowledge of trees and trained and tested to provide high quality reports and documentation. You can look up registered consulting arborists at the American Society of Consulting Arborists website: <https://www.asca-consultants.org/>

Decay in Trees

Decay (in General): Fungi cause all decay of living trees. Decay is considered a disease because cell walls are altered, wood strength is affected, and living sapwood cells may be killed. Fungi decay wood by secreting enzymes. Different types of fungi cause different types of decay through the secretion of different chemical enzymes. Some decays, such as white rot, cause less wood strength loss than others because they first attack the lignin (causes cell walls to thicken and reduces susceptibility to decay and pest damage) secondarily the cellulose (another structural component in a cell walls). Others, such as soft rot, attack the cellulose chain and cause substantial losses in wood strength even in the initial stages of decay. Brown rot causes wood to become brittle and fractures easily with tension. Identification of internal decay in a tree is difficult because visible evidence may not be present.



According to Evaluation of Hazard Trees in Urban Areas (Matheny, 1994) decay is a critical factor in the stability of the tree. As decay progresses in the trunk, the stem becomes a hollow tube or cylinder rather than a solid rod. This change is not readily apparent to the casual observer. Trees require only a small amount of bark and wood to transport water, minerals and sugars. Interior heartwood can be eliminated (or degraded) to a great degree without compromising the transport process. Therefore, trees can contain significant amounts of decay without showing decline symptoms in the crown.



additional cells. The weakest of the vertical wall. Accordingly, decay progression inward at large are more than one pruning cut trunk of the tree, the likelihood of decay progression and the associated structural loss of integrity of the internal wood is high.

Compartmentalization of decay in trees is a biological process in which the cellular tissue around wounds is changed to inhibit fungal growth and provide a barrier against the spread of decay agents into the barrier zones is the formation of while a tree may be able to limit pruning cuts, in the event that there located vertically along the main

Oak Tree Impacts

Our native oak trees are easily damaged or killed by having the soil within the Critical Root Zone (CRZ) disturbed or compacted. All of the work initially performed around protected trees that will be saved should be done by people rather than by wheeled or track type tractors. Oaks are fragile giants that can take little change in soil grade, compaction, or warm season watering. Don't be fooled into believing that warm season watering has no adverse effects on native oaks. Decline and eventual death can take as long as 5-20 years with poor care and inappropriate watering. Oaks can live hundreds of years if treated properly during construction, as well as later with proper pruning, and the appropriate landscape/irrigation design.

RECOMMENTATIONS: SUMMARY OF TREE PROTECTION MEASURES

Hire a Project Arborist to help ensure protection measures are incorporated into the site plans and followed. The Project Arborist should, in cooperation with the Engineers and/or Architects:

- Identify the Root Protection Zones on the final construction drawings, prior to bidding the project.
- Show the placement of tree protection fences, as well as areas to be irrigated, fertilized and mulched on the final construction drawings.
- Clearly show trees for removal on the plans and mark them clearly on site. A Contractor who is a Certified Arborist should perform tree and stump removal. All stumps within the root zone of trees to be preserved shall be ground out using a stump router or left in place. **No trunk within the root zone of other trees shall be removed using a backhoe or other piece of grading equipment.**
- Prior to any grading, or other work on the site that will come within 50' of any tree to be preserved:
 1. Irrigate (if needed) and place a 3" layer of chip mulch over the protected root zone of all trees that will be impacted.
 2. Erect Tree Protection Fences. Place boards against trees located within 3' of construction zones, even if fenced off.
 3. Remove lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site. The Project Arborist should approve the extent of foliage elevation, and oversee the pruning, performed by a contractor who is an ISA Certified Arborist.
- For cuts, expose roots by hand digging, potholing or using an air spade and then cut roots cleanly prior to further grading outside the tree protection zones.
- For fills, if a cut is required first, follow as for cuts.
- Where possible, specify geotextile fabric in lieu of compacting and root cutting, prior to placing fills on the soil surface. Any proposed retaining wall or fill soil shall be discussed with the engineer and arborist in order to reduce impacts to trees to be preserved.
- Clearly designate an area on the site outside the drip line of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the root zones of protected trees.
- Design utility and irrigation trenches to minimize disturbance to tree roots. Where possible, dig trenches with a hydraulic or air spade, placing pipes underneath the roots, or bore the deeper trenches underneath the roots.
- Include on the plans an Arborist inspection schedule to monitor the site during (and after) construction to ensure protection measures are followed and make recommendations for care of the trees on site, as needed.

General Tree protection measures are included as Appendix 3. These measures need to be included on the Site, Grading, Utility and Landscape Plans. A final report of recommendations specific to the plan can be completed as part of, and in conjunction with, the actual plans. This will require the arborist working directly with the engineer and architect for the project. If the above recommendations are followed, the amount of time required by the arborist for the final report should be minim this will require the arborist working directly

with the engineer and architect for the project. If the above recommendations are followed, the amount of time required by the arborist for the final report should be minimal.

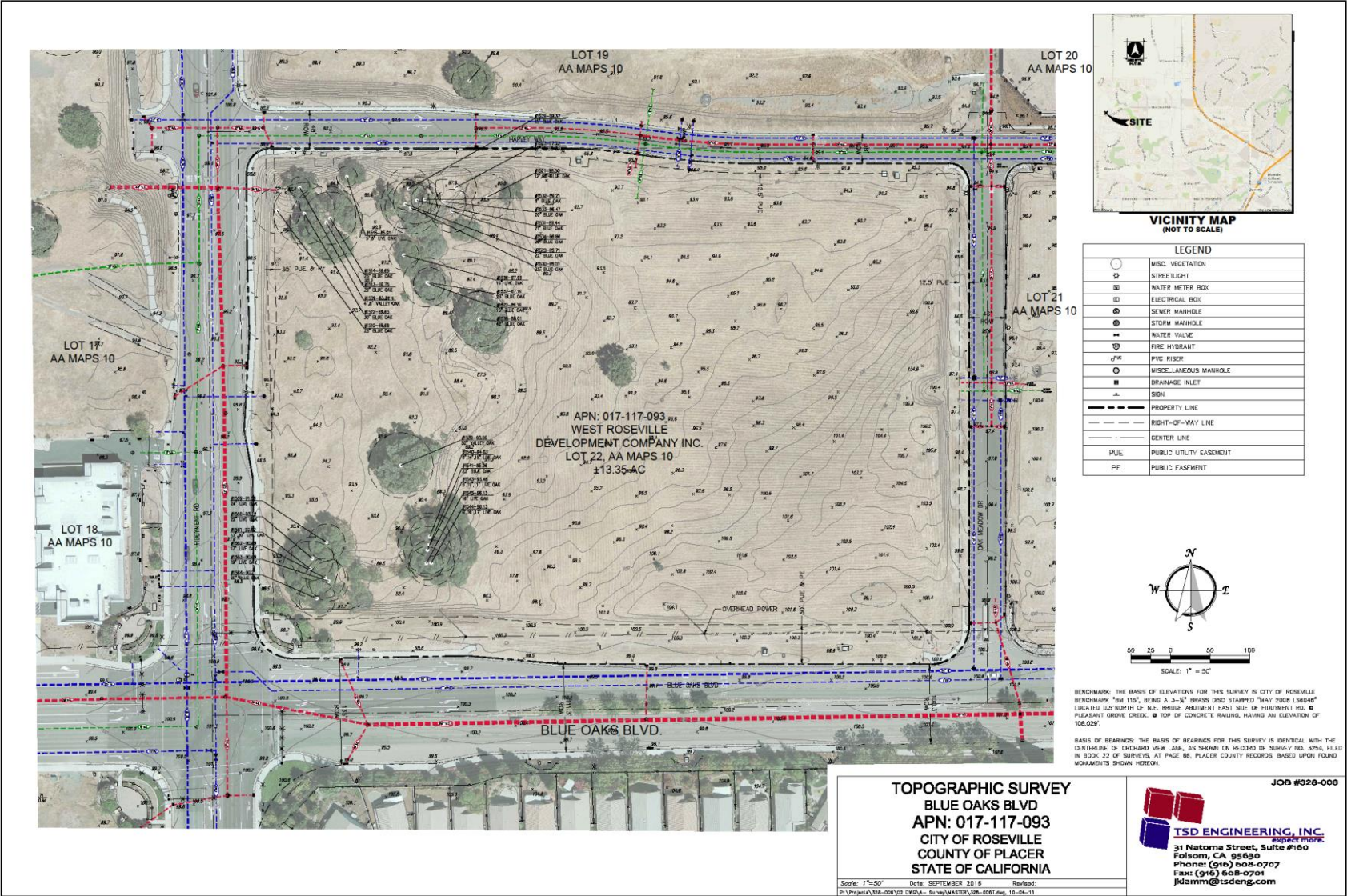
Report Prepared by:



Edwin E. Stirtz, Consulting Arborist
International Society of Arboriculture
Certified Arborist WE-0510A
ISA Tree Risk Assessment Qualified
Member, American Society of Consulting Arborists

Enc.: Appendix 1 – Map of The Property Showing Tree Locations
Appendix 2 – Tree Information Collected
Appendix 3 – General Practices for Tree Protection

APPENDIX 1 – MAP OF THE PROPERTY SHOWING TREE LOCATIONS



APPENDIX 2 – TREE INFORMATION COLLECTED

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1509	Valley Oak	(Quercus lobata)		16	17	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems		No encroachment depicted.	None at this time.	
1512	Blue Oak	(Quercus douglasii)		24	25	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	2 Major Structure or Health Problems	AKA Tree 931 Measured 2' above grade. Old callusing trunk wound, south side, at point of limb failure, with interior decay; above average amount of deadwood.	Minor to negligible encroachment for retaining wall construction south side.	Perform decay detection and provide further recommendations. If retained, any excavation for retaining wall footings shall be monitored by the project arborist. May require root pruning. Will require canopy pruning.	
1514	Blue Oak	(Quercus douglasii)		28	33	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	1 Extreme Structure or Health Problems	AKA Tree 929 Old callusing trunk, west side, 9' above grade with interior decay; slightly out of balance to the east; above average amount of deadwood.	Arborist's tree removal.	Recommend removal due to nature and extent of noted defects	
1515	Interior Live Oak	(Quercus wislizeni)		17	16	Fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	Measured 1.5' above grade; trunk forks 2' above grade into codominant stems which then graft 6'-9' above grade; slightly above average amount of deadwood.	Minor to negligible encroachment for retaining wall construction south side.	Excavation for retaining wall footings shall be monitored by the project arborist. Root pruning may be necessary.	

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1522	Blue Oak	<i>(Quercus douglasii)</i>		18	22	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 917 Above average amount of deadwood.	Tree removal.	None at this time.	18
1528	Blue Oak	<i>(Quercus douglasii)</i>		17	24	Fair	Poor to fair	Poor to fair	Dormant	Poor to fair	Poor to fair	3 Fair - Minor Problems	AKA Tree 927 Out of balance to the south; above average amount of deadwood; poor bud formation.	Tree removal.	None at this time.	17
1529	Blue Oak	<i>(Quercus douglasii)</i>		26	32	Fair	Poor to fair	Poor to fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 926 Out of balance to the west; above average amount of deadwood; sprout growth on the larger wood.	Tree removal.	None at this time.	26
1530	Blue Oak	<i>(Quercus douglasii)</i>		27	33	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 925 Slightly out of balance to the south; above average amount of deadwood.	Tree removal.	None at this time.	27
1531	Blue Oak	<i>(Quercus douglasii)</i>		24	31	Fair	Poor to fair	Poor to fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 924 Out of balance to the east; above average amount of deadwood.	Tree removal.	None at this time.	24
1532	Blue Oak	<i>(Quercus douglasii)</i>		8	9	Poor	Poor to fair	Poor to fair	Dormant	Poor	Fair	3 Fair - Minor Problems	Past partial root system failure, partially on grade.	Tree removal.	None at this time.	8
1534	Blue Oak	<i>(Quercus douglasii)</i>		21	30	Poor	Poor	Poor	Dormant	Poor	Fair	3 Fair - Minor Problems	AKA Tree 922 Tree suffered a partial root system failure in the past and is lying on grade to the south; above average amount of deadwood.	Tree removal.	None at this time.	21

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1535	Blue Oak	(Quercus douglasii)		14	17	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 919 Out of balance to the east; slightly above average amount of deadwood.	Tree removal.	None at this time.	14
1536	Interior Live Oak	(Quercus wislizeni)		21	22	Fair	Fair	Poor to fair	Fair	Fair	Fair	3 Fair - Minor Problems	AKA Tree 918 Old callusing lower trunk wounds, north side, with minor decay; slightly above average amount of deadwood.	Tree removal.	None at this time.	21
1537	Blue Oak	(Quercus douglasii)		26	31	Fair	Poor	Poor to fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 916 Out of balance to the west; inherently weak primary crotch; slightly above average amount of deadwood.	Tree removal.	None at this time.	26
1538	Blue Oak	(Quercus douglasii)		45	37	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 915 Root crown and some buttresses exposed from bank erosion on the northwest side; above average amount of deadwood.	Tree removal.	None at this time.	45

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1539	Valley Oak	(Quercus lobata)		57	39	Fair	Poor	Poor to fair	Dormant	Poor	Fair	1 Extreme Structure or Health Problems	AKA Tree 913 Numerous large scaffold failures, with resulting decay; scaffold limb failure, north side, resulting in a large callusing wound reaching from 2'-20' above grade, with moderate interior decay; above average amount of deadwood.	Arborist's tree removal.	Recommend removal due to nature and extent of noted defects	57
1540	Interior Live Oak	(Quercus wislizeni)	14,21	35	38	Poor	Poor	Poor to fair	Fair	Poor	Fair	1 Extreme Structure or Health Problems	AKA Tree 911Old callusing basal trunk wound, north side; moderate to significant decay; out of balance to the north; slightly above average amount of deadwood.	Arborist's tree removal.	Recommend removal due to nature and extent of noted defects	35
1541	Blue Oak	(Quercus douglasii)		25	39	Poor to fair	Poor to fair	Fair	Fair	Fair	Fair	3 Fair - Minor Problems	AKA Tree 910 Buttress roots exposed due to bank erosion; out of balance east; slightly above average amount of deadwood.	Tree removal.	Clean out crown and perform weight/size reduction pruning.	25
1542	Valley Oak	(Quercus lobata)		13	16	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	Out of balance northwest.	Tree removal.	None at this time.	13

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1543	Interior Live Oak	(Quercus wislizeni)	12,12,13	37	32	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 909 Out of balance south; old callusing wounds in various locations on the scaffold branches, with minor decay evident.	Tree removal.	Clean out crown and perform weight/size reduction pruning.	37
1544	Interior Live Oak	(Quercus wislizeni)	12,20,21	53	32	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 908 Old callusing basal trunk wound, west side, with minor decay; out of balance east; slightly above average amount of deadwood.	Tree removal.	None at this time.	53
1545	Interior Live Oak	(Quercus wislizeni)		21	29	Poor to fair	Fair	Poor to fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 907 Old callusing basal trunk wound, north side, with minor decay; out of balance south; slightly above average amount of deadwood.	Tree removal.	None at this time.	21
1559	Interior Live Oak	(Quercus wislizeni)		26	26	Fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 902 Old callusing wounds, various locations, with no obvious decay; above average amount of deadwood.	Tree removal.	None at this time.	26

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1560	Interior Live Oak	(Quercus wislizeni)		25	28	Fair	Fair	Fair	Fair	Fair	Fair	3 Fair - Minor Problems	AKA Tree 901	Moderate to significant encroachment from retaining wall construction 14' north of trunk.	Excavation for retaining wall footings shall be monitored by the project arborist. Root pruning may be necessary.	
1561	Interior Live Oak	(Quercus wislizeni)		40	30	Fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 903 Measured 2' above grade; callusing on the south side; suspect interior decay; out of balance south; slightly above average amount of deadwood.	Minor to moderate encroachment from retaining wall construction 126'4" north of trunk.	Excavation for retaining wall footings shall be monitored by the project arborist. Root pruning may be necessary.	
1563	Interior Live Oak	(Quercus wislizeni)		21	32	Poor	Poor	Fair	Fair	Poor	Fair	3 Fair - Minor Problems	AKA Tree 905 Partial failure of the root system has left the tree growing prone on grade toward the south; terminal 15' is dead.	Tree removal.	None at this time.	21

TOTAL INVENTORIED TREES = 26 trees (685 aggregate diameter inches)
TOTAL RECOMMENDED REMOVALS = 3 trees (120 aggregate diameter inches)
PRECAUTIONARY TREES HIGHLIGHTED FOR REFERENCE
TOTAL CONSTRUCTION REMOVALS = 20 Trees (535 aggregate diameter inches)

APPENDIX 3 – GENERAL PRACTICES FOR TREE PROTECTION

Definitions

Root zone: The roots of trees grow fairly close to the surface of the soil, and spread out in a radial direction from the trunk of tree. A general rule of thumb is that they spread 2 to 3 times the radius of the canopy, or 1 to 1 ½ times the height of the tree. It is generally accepted that disturbance to root zones should be kept as far as possible from the trunk of a tree.

Inner Bark: The bark on large valley oaks and coast live oaks is quite thick, usually 1" to 2". If the bark is knocked off a tree, the inner bark, or cambial region, is exposed or removed. The cambial zone is the area of tissue responsible for adding new layers to the tree each year, so by removing it, the tree can only grow new tissue from the edges of the wound. In addition, the wood of the tree is exposed to decay fungi, so the trunk present at the time of the injury becomes susceptible to decay. Tree protection measures require that no activities occur which can knock the bark off the trees.

Methods Used in Tree Protection:

No matter how detailed Tree Protection Measures are in the initial Arborist Report, they will not accomplish their stated purpose unless they are applied to individual trees and a Project Arborist is hired to oversee the construction. The Project Arborist should have the ability to enforce the Protection Measures. The Project Arborist should be hired as soon as possible to assist in design and to become familiar with the project. He must be able to read and understand the project drawings and interpret the specifications. He should also have the ability to cooperate with the contractor, incorporating the contractor's ideas on how to accomplish the protection measures, wherever possible. It is advisable for the Project Arborist to be present at the Pre-Bid tour of the site, to answer questions the contractors may have about Tree Protection Measures. This also lets the contractors know how important tree preservation is to the developer.

Root Protection Zone (RPZ): Since in most construction projects it is not possible to protect the entire root zone of a tree, a Root Protection Zone is established for each tree to be preserved. The minimum Root Protection Zone is the area underneath the tree's canopy (out to the dripline, or edge of the canopy), plus 10'. The Project Arborist must approve work within the RPZ.

Irrigate, Fertilize, Mulch: Prior to grading on the site near any tree, the area within the Tree Protection fence should be fertilized with 4 pounds of nitrogen per 1000 square feet, and the fertilizer irrigated in. The irrigation should percolate at least 24 inches into the soil. This should be done no less than 2 weeks prior to grading or other root disturbing activities. After irrigating, cover the RPZ with at least 12" of leaf and twig mulch. Such mulch can be obtained from chipping or grinding the limbs of any trees removed on the site. Acceptable mulches can be obtained from nurseries or other commercial sources. Fibrous or shredded redwood or cedar bark mulch shall not be used anywhere on site.

Fence: Fence around the Root Protection Zone and restrict activity therein to prevent soil compaction by vehicles, foot traffic or material storage. The fenced area shall be off limits to all construction equipment, unless there is express written notification provided by the Project Arborist, and impacts are discussed and mitigated prior to work commencing.

No storage or cleaning of equipment or materials, or parking of any equipment can take place within the fenced off area, known as the RPZ.

The fence should be highly visible, and stout enough to keep vehicles and other equipment out. I recommend the fence be made of orange plastic protective fencing, kept in place by t-posts set no farther apart than 6'.

In areas of intense impact, a 6' chain link fence is preferred.

In areas with many trees, the RPZ can be fenced as one unit, rather than separately for each tree.

Where tree trunks are within 3' of the construction area, place 2" by 4" boards vertically against the tree trunks, even if fenced off. Hold the boards in place with wire. Do not nail them directly to the tree.

The purpose of the boards is to protect the trunk, should any equipment stray into the RPZ.

Elevate Foliage: Where indicated, remove lower foliage from a tree to prevent limb breakage by equipment. Low foliage can usually be removed without harming the tree, unless more than 25% of the foliage is removed. Branches need to be removed at the anatomically correct location in order to prevent decay organisms from entering the trunk. For this reason, a contractor who is an ISA Certified Arborist should perform all pruning on protected trees.¹

Expose and Cut Roots: Breaking roots with a backhoe, or crushing them with a grader, causes significant injury, which may subject the roots to decay. Ripping roots may cause them to splinter toward the base of the tree, creating much more injury than a clean cut would make. At any location where the root zone of a tree will be impacted by a trench or a cut (including a cut required for a fill and compaction), the roots shall be exposed with either a backhoe digging radially to the trunk, by hand digging, or by a hydraulic air spade, and then cut cleanly with a sharp instrument, such as chainsaw with a carbide chain. Once the roots are severed, the area behind the cut should be moistened and mulched. A root protection fence should also be erected to protect the remaining roots, if it is not already in place. Further grading or backhoe work required outside the established RPZ can then continue without further protection measures.

Protect Roots in Deeper Trenches: The location of utilities on the site can be very detrimental to trees. Design the project to use as few trenches as possible, and to keep them away from the major trees to be protected. Wherever possible, in areas where trenches will be very deep, consider boring under the roots of the trees, rather than digging the trench through the roots. This technique can be quite useful for utility trenches and pipelines.

Protect Roots in Small Trenches: After all construction is complete on a site, it is not unusual for the landscape contractor to come in and sever a large number of "preserved" roots during the installation of irrigation systems. The Project Arborist must therefore approve the landscape and irrigation plans. The irrigation system needs to be designed so the main lines are located outside the root zone of major trees, and the secondary lines are either laid on the surface (drip systems), or carefully dug with a hydraulic or air spade, and the flexible pipe fed underneath the major roots.

Design the irrigation system so it can slowly apply water (no more than ¼" to ½" of water per hour) over a longer period of time. This allows deep soaking of root zones. The system also needs to accommodate infrequent irrigation settings of once or twice a month, rather than several times a week.

Monitoring Tree Health During and After Construction: The Project Arborist should visit the site at least twice a month during construction to be certain the tree protection measures are being followed, to monitor the health of impacted trees, and make recommendations as to irrigation or other needs. After construction is

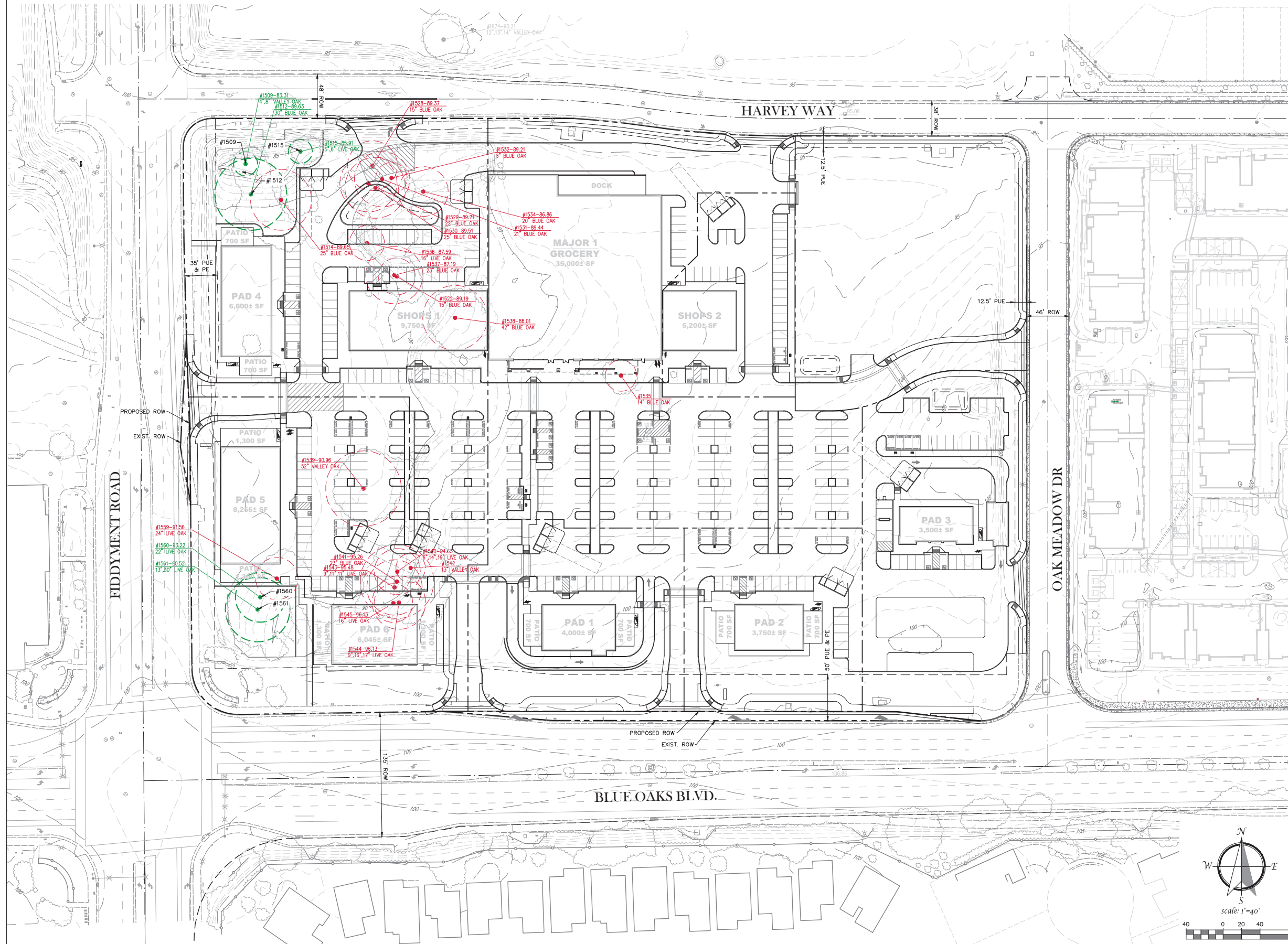
¹ International Society of Arboriculture (ISA), maintains a program of Certifying individuals. Each Certified Arborist has a number and must maintain continuing education credits to remain Certified.

complete, the arborist should monitor the site monthly for one year and make recommendations for care where needed. If longer term monitoring is required, the arborist should report this to the developer and the planning agency overseeing the project.

PRELIMINARY TREE IMPACT PLAN - ALT 4

THE PLAZA AT BLUE OAKS

1950 BLUE OAKS BLVD
FIDDYMENT F-31
ROSEVILLE, CA

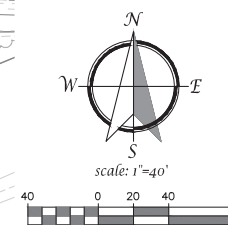


PRELIMINARY
TREE IMPACT PLAN
MARCH 16, 2020



785 Orchard Drive, Suite #110
Folsom, CA 95630
Phone: (916) 608-0707
Fax: (916) 608-0701

SP-4



P:\Projects\328-008\02 DWG\B- Planning\TIG SP-4 Preliminary Tree Impact Plan - Alt4.dwg, Dana Moore, 11:44:21, 03-16-20

Plaza at Blue Oaks - Placer-Sacramento County, Annual

Plaza at Blue Oaks
Placer-Sacramento County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Supermarket	35.00	1000sqft	0.80	35,000.00	0
Regional Shopping Center	43.60	1000sqft	1.00	43,600.00	0
Convenience Market With Gas Pumps	12.00	Pump	0.04	1,694.10	0
Parking Lot	109.00	1000sqft	2.50	109,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2021
Utility Company	Roseville Electric				
CO2 Intensity (lb/MW hr)	531.85	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Plaza at Blue Oaks - Placer-Sacramento County, Annual

Project Characteristics - Start of construction and operational year are estimates. CO2 intensity factor adjusted to reflect R.E.'s anticipated progress towards statewide RPS goals.

Land Use -

Architectural Coating - Low VOC paint.

Vehicle Trips - Non-residential project not anticipated to increase vmt so no mobile analysis is required.

Area Coating - Low VOC.

Energy Use -

Sequestration - based on landscape plan.

Mobile Land Use Mitigation -

Mobile Commute Mitigation - designated park-n-ride site (20 spaces).

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblProjectCharacteristics	CO2IntensityFactor	793.8	531.85
tblSequestration	NumberOfNewTrees	0.00	373.00
tblVehicleTrips	ST_TR	204.47	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	177.59	0.00
tblVehicleTrips	SU_TR	166.88	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	166.44	0.00
tblVehicleTrips	WD_TR	542.60	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	102.24	0.00

2.0 Emissions Summary

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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					
2020	0.1221	1.1780	0.8762	1.7600e-003	0.0943	0.0585	0.1527	0.0445	0.0546	0.0991	0.0000	154.9667	154.9667	0.0327	0.0000	155.7850
2021	0.4045	1.9469	1.7883	3.8100e-003	0.0689	0.0909	0.1598	0.0188	0.0855	0.1042	0.0000	336.6221	336.6221	0.0581	0.0000	338.0752
Maximum	0.4045	1.9469	1.7883	3.8100e-003	0.0943	0.0909	0.1598	0.0445	0.0855	0.1042	0.0000	336.6221	336.6221	0.0581	0.0000	338.0752

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					
2020	0.1221	1.1780	0.8762	1.7600e-003	0.0943	0.0585	0.1527	0.0445	0.0546	0.0991	0.0000	154.9665	154.9665	0.0327	0.0000	155.7848
2021	0.4045	1.9469	1.7883	3.8100e-003	0.0689	0.0909	0.1598	0.0188	0.0855	0.1042	0.0000	336.6219	336.6219	0.0581	0.0000	338.0749
Maximum	0.4045	1.9469	1.7883	3.8100e-003	0.0943	0.0909	0.1598	0.0445	0.0855	0.1042	0.0000	336.6219	336.6219	0.0581	0.0000	338.0749

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2020	11-30-2020	1.0056	1.0056
2	12-1-2020	2-28-2021	0.7721	0.7721
3	3-1-2021	5-31-2021	0.7616	0.7616
4	6-1-2021	8-31-2021	0.7610	0.7610
5	9-1-2021	9-30-2021	0.1484	0.1484
		Highest	1.0056	1.0056

2.2 Overall Operational

Unmitigated Operational

	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					
Area	0.3402	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-003
Energy	0.0102	0.0929	0.0780	5.6000e-004		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	578.9382	578.9382	0.0280	7.2400e-003	581.7968
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	49.3633	0.0000	49.3633	2.9173	0.0000	122.2956
Water						0.0000	0.0000		0.0000	0.0000	2.4332	11.8603	14.2935	0.2506	6.0300e-003	22.3557
Total	0.3504	0.0929	0.0799	5.6000e-004	0.0000	7.0700e-003	7.0700e-003	0.0000	7.0700e-003	7.0700e-003	51.7965	590.8021	642.5986	3.1959	0.0133	726.4519

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2.2 Overall Operational

Mitigated Operational

	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					
Area	0.3167	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-003
Energy	0.0102	0.0929	0.0780	5.6000e-004		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	578.9382	578.9382	0.0280	7.2400e-003	581.7968
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	49.3633	0.0000	49.3633	2.9173	0.0000	122.2956
Water						0.0000	0.0000		0.0000	0.0000	2.4332	11.8603	14.2935	0.2506	6.0300e-003	22.3557
Total	0.3270	0.0929	0.0799	5.6000e-004	0.0000	7.0700e-003	7.0700e-003	0.0000	7.0700e-003	7.0700e-003	51.7965	590.8021	642.5986	3.1959	0.0133	726.4519

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Plaza at Blue Oaks - Placer-Sacramento County, Annual

2.3 Vegetation**Vegetation**

	CO2e
Category	MT
New Trees	264.0840
Total	264.0840

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/5/2020	5	5	
3	Grading	Grading	10/6/2020	10/15/2020	5	8	
4	Building Construction	Building Construction	10/16/2020	9/2/2021	5	230	
5	Paving	Paving	9/3/2021	9/28/2021	5	18	
6	Architectural Coating	Architectural Coating	9/29/2021	10/22/2021	5	18	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 4****Acres of Paving: 2.5**

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Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,441; Non-Residential Outdoor: 40,147; Striped Parking Area: 6,540 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	71.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386

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3.2 Demolition - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173

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	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385

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3.2 Demolition - 2020**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
Worker	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173

3.3 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0452	5.4900e-003	0.0507	0.0248	5.0500e-003	0.0299	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253

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3.3 Site Preparation - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052
Total	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052

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					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0452	5.4900e-003	0.0507	0.0248	5.0500e-003	0.0299	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252

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3.3 Site Preparation - 2020**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
Worker	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052
Total	1.6000e-004	1.1000e-004	1.1700e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3050	0.3050	1.0000e-005	0.0000	0.3052

3.4 Grading - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	9.7200e-003	0.1055	0.0642	1.2000e-004	0.0262	5.0900e-003	0.0313	0.0135	4.6900e-003	0.0182	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078

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3.4 Grading - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069
Total	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069

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					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	9.7200e-003	0.1055	0.0642	1.2000e-004	0.0262	5.0900e-003	0.0313	0.0135	4.6900e-003	0.0182	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078

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3.4 Grading - 2020**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
Worker	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069
Total	2.1000e-004	1.5000e-004	1.5600e-003	0.0000	4.7000e-004	0.0000	4.7000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4067	0.4067	1.0000e-005	0.0000	0.4069

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0583	0.5276	0.4633	7.4000e-004		0.0307	0.0307		0.0289	0.0289	0.0000	63.6928	63.6928	0.0155	0.0000	64.0812
Total	0.0583	0.5276	0.4633	7.4000e-004		0.0307	0.0307		0.0289	0.0289	0.0000	63.6928	63.6928	0.0155	0.0000	64.0812

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3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1400e-003	0.1014	0.0200	2.5000e-004	5.5700e-003	4.4000e-004	6.0100e-003	1.6100e-003	4.2000e-004	2.0300e-003	0.0000	23.5320	23.5320	1.1500e-003	0.0000	23.5608
Worker	6.7700e-003	4.7300e-003	0.0507	1.5000e-004	0.0153	1.0000e-004	0.0154	4.0800e-003	9.0000e-005	4.1700e-003	0.0000	13.2338	13.2338	3.3000e-004	0.0000	13.2420
Total	9.9100e-003	0.1061	0.0707	4.0000e-004	0.0209	5.4000e-004	0.0214	5.6900e-003	5.1000e-004	6.2000e-003	0.0000	36.7658	36.7658	1.4800e-003	0.0000	36.8028

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	0.0583	0.5276	0.4633	7.4000e-004		0.0307	0.0307		0.0289	0.0289	0.0000	63.6927	63.6927	0.0155	0.0000	64.0811
Total	0.0583	0.5276	0.4633	7.4000e-004		0.0307	0.0307		0.0289	0.0289	0.0000	63.6927	63.6927	0.0155	0.0000	64.0811

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3.5 Building Construction - 2020**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	3.1400e-003	0.1014	0.0200	2.5000e-004	5.5700e-003	4.4000e-004	6.0100e-003	1.6100e-003	4.2000e-004	2.0300e-003	0.0000	23.5320	23.5320	1.1500e-003	0.0000	23.5608
Worker	6.7700e-003	4.7300e-003	0.0507	1.5000e-004	0.0153	1.0000e-004	0.0154	4.0800e-003	9.0000e-005	4.1700e-003	0.0000	13.2338	13.2338	3.3000e-004	0.0000	13.2420
Total	9.9100e-003	0.1061	0.0707	4.0000e-004	0.0209	5.4000e-004	0.0214	5.6900e-003	5.1000e-004	6.2000e-003	0.0000	36.7658	36.7658	1.4800e-003	0.0000	36.8028

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1663	1.5253	1.4503	2.3600e-003		0.0839	0.0839		0.0789	0.0789	0.0000	202.6826	202.6826	0.0489	0.0000	203.9051
Total	0.1663	1.5253	1.4503	2.3600e-003		0.0839	0.0839		0.0789	0.0789	0.0000	202.6826	202.6826	0.0489	0.0000	203.9051

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3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.3700e-003	0.2961	0.0566	7.8000e-004	0.0177	6.8000e-004	0.0184	5.1300e-003	6.5000e-004	5.7700e-003	0.0000	74.2807	74.2807	3.4600e-003	0.0000	74.3672
Worker	0.0200	0.0135	0.1475	4.5000e-004	0.0488	3.2000e-004	0.0491	0.0130	2.9000e-004	0.0133	0.0000	40.6263	40.6263	9.3000e-004	0.0000	40.6495
Total	0.0284	0.3096	0.2041	1.2300e-003	0.0665	1.0000e-003	0.0675	0.0181	9.4000e-004	0.0191	0.0000	114.9069	114.9069	4.3900e-003	0.0000	115.0167

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	0.1663	1.5253	1.4503	2.3600e-003		0.0839	0.0839		0.0789	0.0789	0.0000	202.6824	202.6824	0.0489	0.0000	203.9048
Total	0.1663	1.5253	1.4503	2.3600e-003		0.0839	0.0839		0.0789	0.0789	0.0000	202.6824	202.6824	0.0489	0.0000	203.9048

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3.5 Building Construction - 2021**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	8.3700e-003	0.2961	0.0566	7.8000e-004	0.0177	6.8000e-004	0.0184	5.1300e-003	6.5000e-004	5.7700e-003	0.0000	74.2807	74.2807	3.4600e-003	0.0000	74.3672
Worker	0.0200	0.0135	0.1475	4.5000e-004	0.0488	3.2000e-004	0.0491	0.0130	2.9000e-004	0.0133	0.0000	40.6263	40.6263	9.3000e-004	0.0000	40.6495
Total	0.0284	0.3096	0.2041	1.2300e-003	0.0665	1.0000e-003	0.0675	0.0181	9.4000e-004	0.0191	0.0000	114.9069	114.9069	4.3900e-003	0.0000	115.0167

3.6 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8500e-003	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7336	14.7336	4.6300e-003	0.0000	14.8493
Paving	3.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0131	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7336	14.7336	4.6300e-003	0.0000	14.8493

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3.6 Paving - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778
Total	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778

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	9.8500e-003	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7335	14.7335	4.6300e-003	0.0000	14.8493
Paving	3.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0131	0.0976	0.1103	1.7000e-004		5.2100e-003	5.2100e-003		4.8100e-003	4.8100e-003	0.0000	14.7335	14.7335	4.6300e-003	0.0000	14.8493

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3.6 Paving - 2021**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
Worker	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778
Total	5.8000e-004	3.9000e-004	4.2700e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.1771	1.1771	3.0000e-005	0.0000	1.1778

3.7 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1937					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	0.1956	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019

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3.7 Architectural Coating - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	2.7000e-004	2.9900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8240	0.8240	2.0000e-005	0.0000	0.8244
Total	4.1000e-004	2.7000e-004	2.9900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8240	0.8240	2.0000e-005	0.0000	0.8244

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					
Archit. Coating	0.1937					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	0.1956	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019

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3.7 Architectural Coating - 2021**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
Worker	4.1000e-004	2.7000e-004	2.9900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8240	0.8240	2.0000e-005	0.0000	0.8244
Total	4.1000e-004	2.7000e-004	2.9900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8240	0.8240	2.0000e-005	0.0000	0.8244

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Provide Riade Sharing Program

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	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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Supermarket	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.494811	0.040252	0.220236	0.128508	0.023782	0.006284	0.029295	0.046215	0.001446	0.001205	0.005961	0.000773	0.001232
Parking Lot	0.494811	0.040252	0.220236	0.128508	0.023782	0.006284	0.029295	0.046215	0.001446	0.001205	0.005961	0.000773	0.001232
Regional Shopping Center	0.494811	0.040252	0.220236	0.128508	0.023782	0.006284	0.029295	0.046215	0.001446	0.001205	0.005961	0.000773	0.001232
Supermarket	0.494811	0.040252	0.220236	0.128508	0.023782	0.006284	0.029295	0.046215	0.001446	0.001205	0.005961	0.000773	0.001232

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	477.7982	477.7982	0.0261	5.3900e-003	480.0558
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	477.7982	477.7982	0.0261	5.3900e-003	480.0558
NaturalGas Mitigated	0.0102	0.0929	0.0780	5.6000e-004		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	101.1399	101.1399	1.9400e-003	1.8500e-003	101.7410
NaturalGas Unmitigated	0.0102	0.0929	0.0780	5.6000e-004		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	101.1399	101.1399	1.9400e-003	1.8500e-003	101.7410

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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market With Gas Pumps	19821	1.1000e-004	9.7000e-004	8.2000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0577	1.0577	2.0000e-005	2.0000e-005	1.0640
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
Regional Shopping Center	510120	2.7500e-003	0.0250	0.0210	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.2220	27.2220	5.2000e-004	5.0000e-004	27.3837
Supermarket	1.36535e+006	7.3600e-003	0.0669	0.0562	4.0000e-004		5.0900e-003	5.0900e-003		5.0900e-003	5.0900e-003	0.0000	72.8603	72.8603	1.4000e-003	1.3400e-003	73.2933
Total		0.0102	0.0929	0.0780	5.6000e-004		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	101.1400	101.1400	1.9400e-003	1.8600e-003	101.7410

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5.2 Energy by Land Use - NaturalGas**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	tons/yr										MT/yr					
Convenience Market With Gas Pumps	19821	1.1000e-004	9.7000e-004	8.2000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0577	1.0577	2.0000e-005	2.0000e-005	1.0640
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
Regional Shopping Center	510120	2.7500e-003	0.0250	0.0210	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.2220	27.2220	5.2000e-004	5.0000e-004	27.3837
Supermarket	1.36535e+006	7.3600e-003	0.0669	0.0562	4.0000e-004		5.0900e-003	5.0900e-003		5.0900e-003	5.0900e-003	0.0000	72.8603	72.8603	1.4000e-003	1.3400e-003	73.2933
Total		0.0102	0.0929	0.0780	5.6000e-004		7.0600e-003	7.0600e-003		7.0600e-003	7.0600e-003	0.0000	101.1400	101.1400	1.9400e-003	1.8600e-003	101.7410

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	19973.4	4.8185	2.6000e-004	5.0000e-005	4.8412
Parking Lot	38150	9.2034	5.0000e-004	1.0000e-004	9.2469
Regional Shopping Center	514044	124.0096	6.7600e-003	1.4000e-003	124.5955
Supermarket	1.4084e+006	339.7668	0.0185	3.8300e-003	341.3722
Total		477.7982	0.0261	5.3800e-003	480.0558

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	19973.4	4.8185	2.6000e-004	5.0000e-005	4.8412
Parking Lot	38150	9.2034	5.0000e-004	1.0000e-004	9.2469
Regional Shopping Center	514044	124.0096	6.7600e-003	1.4000e-003	124.5955
Supermarket	1.4084e+006	339.7668	0.0185	3.8300e-003	341.3722
Total		477.7982	0.0261	5.3800e-003	480.0558

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

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	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	0.3167	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-003
Unmitigated	0.3402	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-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	0.0194					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3206					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-003
Total	0.3402	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-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	0.0194					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2972					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-003
Total	0.3167	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.8000e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Water Efficient Landscaping

Plaza at Blue Oaks - Placer-Sacramento County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.2935	0.2506	6.0300e-003	22.3557
Unmitigated	14.2935	0.2506	6.0300e-003	22.3557

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.2686	4.1000e-003	1.0000e-004	0.4006
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.22956 / 1.97941	6.9117	0.1056	2.5500e-003	10.3109
Supermarket	4.31439 / 0.133435	7.1133	0.1409	3.3800e-003	11.6442
Total		14.2935	0.2506	6.0300e-003	22.3557

Plaza at Blue Oaks - Placer-Sacramento County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.2686	4.1000e-003	1.0000e-004	0.4006
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.22956 / 1.97941	6.9117	0.1056	2.5500e-003	10.3109
Supermarket	4.31439 / 0.133435	7.1133	0.1409	3.3800e-003	11.6442
Total		14.2935	0.2506	6.0300e-003	22.3557

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Plaza at Blue Oaks - Placer-Sacramento County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	49.3633	2.9173	0.0000	122.2956
Unmitigated	49.3633	2.9173	0.0000	122.2956

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	45.78	9.2929	0.5492	0.0000	23.0228
Supermarket	197.4	40.0704	2.3681	0.0000	99.2728
Total		49.3634	2.9173	0.0000	122.2956

Plaza at Blue Oaks - Placer-Sacramento County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	45.78	9.2929	0.5492	0.0000	23.0228
Supermarket	197.4	40.0704	2.3681	0.0000	99.2728
Total		49.3634	2.9173	0.0000	122.2956

9.0 Operational Offroad

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

Plaza at Blue Oaks - Placer-Sacramento County, Annual

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	264.0840	0.0000	0.0000	264.0840

11.2 Net New Trees**Species Class**

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	373	264.0840	0.0000	0.0000	264.0840
Total		264.0840	0.0000	0.0000	264.0840

Environmental Noise Assessment

The Plaza at Blue Oaks Commercial Development

Roseville, California

BAC Job # 2018-026

Prepared For:

Signature Homes, Inc.

Attn: Mr. Stephen M. Hicks
4670 Willow Road, Suite 200
Pleasanton, CA 94588

Prepared By:

Bollard Acoustical Consultants, Inc.



Paul Bollard, President

April 2, 2018



Introduction

The proposed Plaza at Blue Oaks Commercial Development (project) is located on the east side of Fiddymont Road, between Blue Oaks Boulevard and Harvey Way in Roseville, California. The development proposes to include a shopping center, ARCO AM/PM facility with car wash, and other commercial uses on three parcels totaling approximately 13 acres. The project site is located adjacent to existing single-family residential uses (south), existing commercial uses (west), and future medium and high-density residential uses (north and east). The project area is shown on Figure 1. The overall project site plan and ARCO AM/PM facility site plan are shown on Figures 2 and 3, respectively.

Due to the proximity of the proposed commercial development to the adjacent existing and future residential uses, the City of Roseville has requested an environmental noise assessment to ensure that the applicable noise standards are satisfied. In response to this request, the project applicant has retained Bollard Acoustical Consultants, Inc. (BAC) to prepare this noise analysis. Specifically, the purposes of this analysis are to quantify noise levels associated with the proposed on-site commercial-related activities (i.e., on-site truck circulation, loading dock activities, and car wash operations), to assess the state of compliance of those noise levels with the applicable City of Roseville noise standards, and if necessary, to recommend measures to reduce those noise levels to acceptable limits at the nearest noise-sensitive uses.

Noise Fundamentals and Terminology

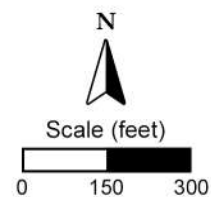
Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard, and thus are called sound. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Appendix A contains definitions of Acoustical Terminology. Figure 4 shows common noise levels associated with various sources.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.



Legend

- Project Border
- # Long-Term Noise Measurement Locations

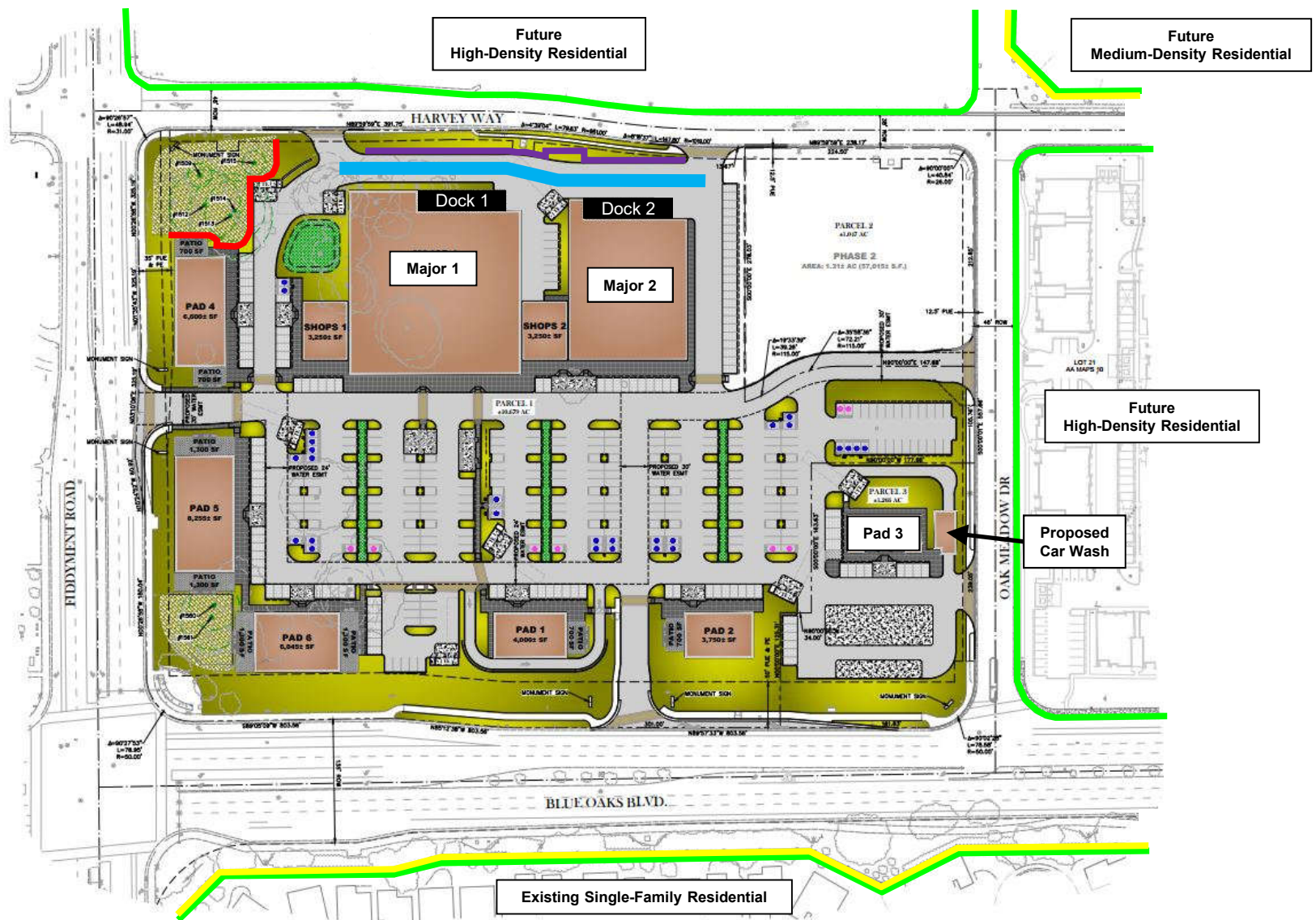


The Plaza at Blue Oaks Development
Roseville, California

Project Area

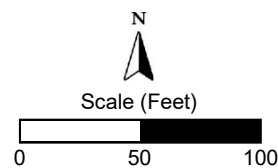
Figure 1





Legend

- Parcel Boundaries
- Existing 6-Foot Tall Solid Noise Barriers
- Proposed Delivery Truck Lane
- Proposed 11-Foot Tall Retaining Wall
- On-Site Truck Circulation & Loading Dock Noise Mitigation - Solid Noise Barrier

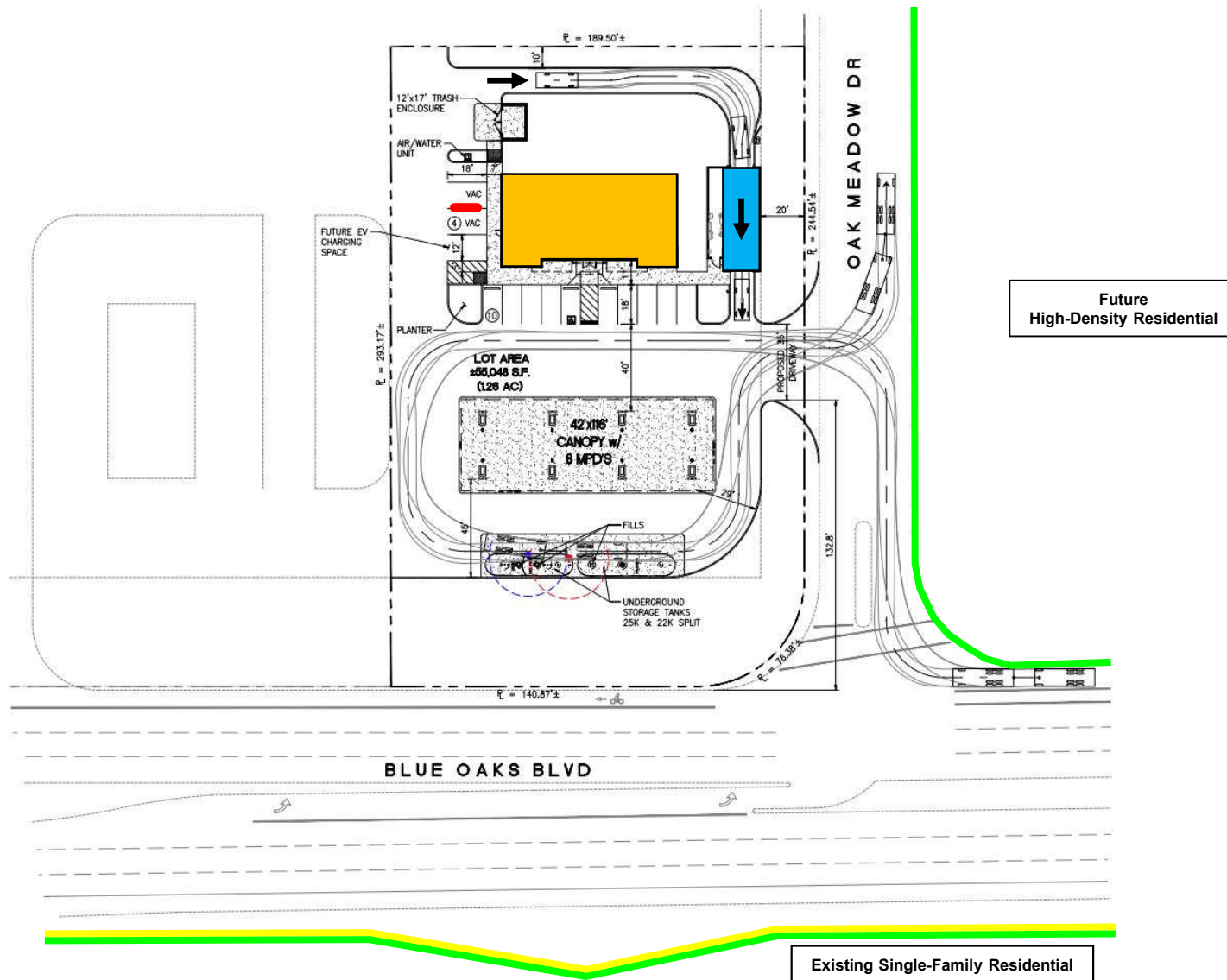


The Plaza at Blue Oaks Development
Roseville, California

Overall Project Site Plan

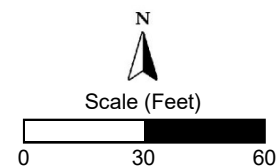
Figure 2





Legend

- Parcel Boundaries
- Existing 6-Foot Tall Solid Noise Barrier
- Proposed ARCO AM/PM Minimart
- Proposed Car Wash Tunnel
- Proposed Vacuum Systems

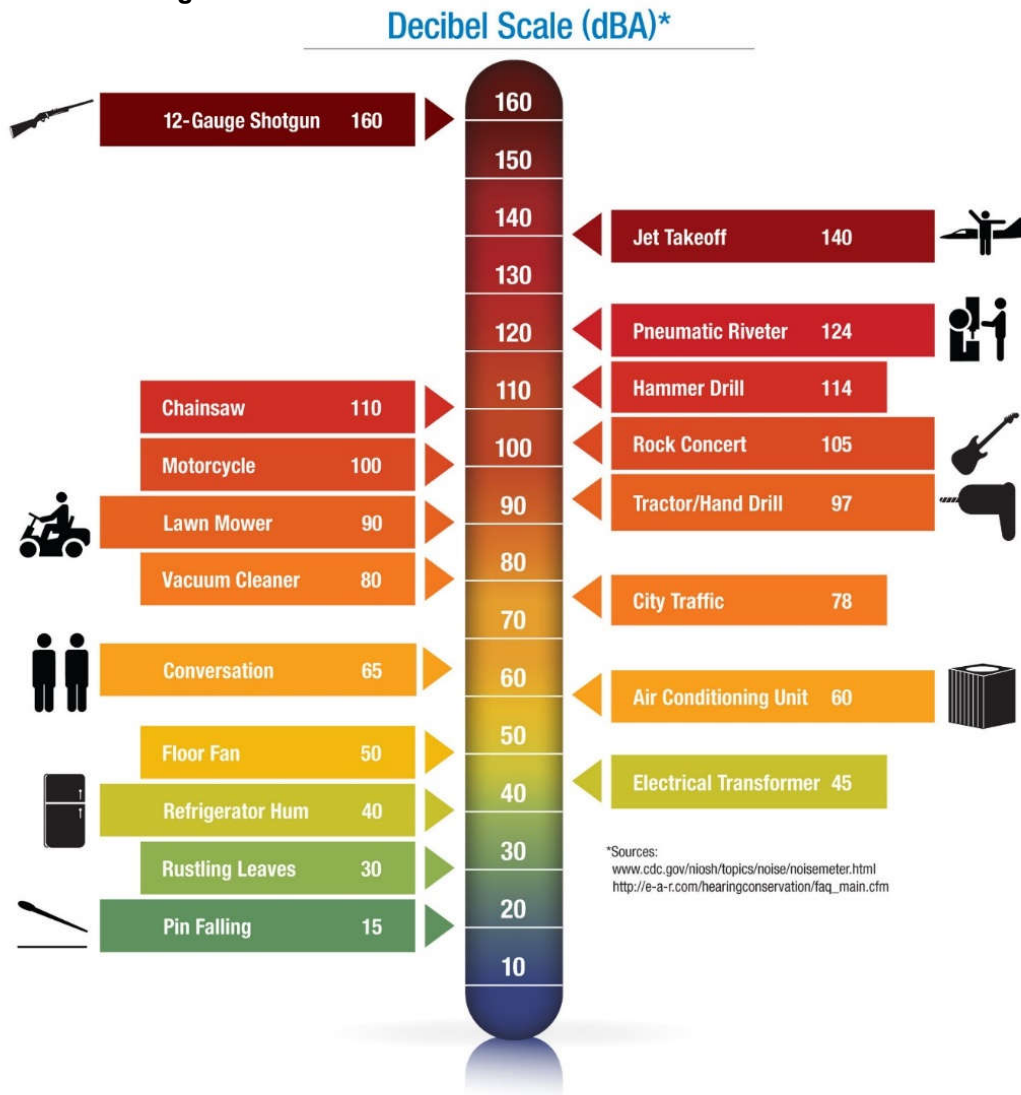


The Plaza at Blue Oaks Development
Roseville, California

Project Site Plan – ARCO AM/PM Facility

Figure 3



Figure 4. Noise levels associated with common noise sources.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The Day-Night Average Level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10 p.m. to 7 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. L_{dn} -based noise standards are commonly used to assess noise impacts associated with traffic, railroad and aircraft noise sources.

Criteria for Acceptable Noise Exposure

City of Roseville General Plan Noise Element 2035

The Noise Element of the City of Roseville General Plan establishes non-transportation noise exposure limits as summarized below in Table 1 (Table IX-3 of the Noise Element). These limits are applicable to non-transportation noise sources (i.e., on-site truck movements, loading docks, and car wash operations) affecting existing noise-sensitive land uses.

Table 1 Performance Standards For Non-Transportation Noise Sources or Projects Affected by Non-Transportation Noise Sources (As Measured at the Property Line of the Noise-Sensitive Uses) City of Roseville General Plan Noise Element		
Noise Level Descriptor	Daytime (7 a.m. - 10 p.m.)	Nighttime (10 p.m. - 7 a.m.)
Hourly L_{eq} , dB	50	45
Maximum Level (L_{max}), dB	70	65
Notes: -Each of the noise limits specified above should be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. -These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). -No Standards have been included for interior noise levels. Standard construction practices should, with exterior noise levels identified, result in acceptable interior noise levels. Source: City of Roseville General Plan Noise Element 2035, Table IX-3		

Noise Standards Applied to the Project

The nearest noise-sensitive land uses to the project site are existing and future residential developments located north, south, and east of the project site. Because the hours of operation of the future commercial uses are not known at this time, it was assumed that each of the evaluated noise sources could potentially occur during any hour within a 24-hour period. In reality, it is likely that the majority of the future commercial uses would not operate during nighttime hours (10 p.m. to 7 a.m.). Based on this conservative assumption, the City of Roseville daytime and nighttime noise level standards for noise-sensitive (residential) land uses shown in Table 1 were applied to the project noise sources.

Existing Ambient Noise Environment

The existing ambient noise level environment in the immediate project vicinity is primarily defined by traffic on Fiddymont Road and Blue Oaks Boulevard. To quantify the existing ambient noise environment in the project vicinity, BAC conducted a continuous (24-hour) noise level measurements at two (2) locations on the project site from February 14-15, 2018. The noise measurement locations are shown on Figure 1, identified as Sites 1 and 2.

Larson-Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used to complete the noise level measurements. The meters were calibrated before use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The results of the measurements are shown numerically and graphically in Appendices B and C, and are summarized below in Table 2. Photographs of the measurement sites are provided in Appendix D.

Table 2 Summary of Long-Term Ambient Noise Monitoring Results¹ The Plaza at Blue Oaks Commercial Development – Roseville, California February 14-15, 2018								
Site	Date	L _{dn} , dB	Average Measured Hourly Noise Levels (dB)					
			Daytime (7 a.m. to 10 p.m.)			Nighttime (10 p.m. to 7 a.m.)		
			L _{eq}	L ₅₀	L _{max}	L _{eq}	L ₅₀	L _{max}
1	2/15	56	50-55 (54)	49-55 (52)	61-73 (66)	42-53 (48)	38-50 (43)	56-71 (63)
2	2/14 – 2/15	57	50-57 (55)	47-56 (52)	64-77 (69)	45-56 (49)	39-54 (44)	59-72 (66)
Notes: ¹ Long-term ambient noise monitoring locations are shown on Figure 1, identified as Sites 1 and 2. Source: Bollard Acoustical Consultants, Inc. (2018)								

The Table 2 data indicate that measured average noise levels at the project site during daytime and nighttime hours were 54-55 dB L_{eq} and 48-49 dB L_{eq}, respectively. Maximum noise levels at the project site during daytime and nighttime hours were 66-69 dB L_{max} and 63-66 dB L_{max}, respectively.

Project Noise Generation

Noise generated by project-related activities were quantified through a combination of use of reference noise level measurements and application of accepted noise modeling techniques. Primary stationary noise sources associated with the proposed development include on-site truck circulation and loading dock activities from deliveries to businesses in buildings Major 1 and 2 at the northern end of the site, and car wash operations from the ARCO AM/PM facility located at the southeastern end of the site. Predicted noise levels resulting from each source are evaluated in the following sections. The predicted project noise levels take into account existing 6-foot tall noise barriers located adjacent to the residential developments to the northeast and south of the project site. Figure 2 shows the locations of the proposed noise sources, buildings, and existing noise barriers adjacent to the project site.

Evaluation of On-Site Truck Circulation Noise Levels

The project proposes a truck lane to be used for primary for deliveries to the businesses located in buildings Major 1 (grocery store) and Major 2. The locations of the proposed delivery truck lane and nearest residential uses are identified on Figure 2.

To quantify on-site truck circulation noise exposure at the nearest residential uses, BAC utilized file data for comparable commercial centers. For a conservative assessment of daily on-site truck circulation noise levels, it was assumed that 1-2 heavy trucks and 4 medium duty trucks/vans would deliver products to the stores at buildings Major 1 and 2 during a typical day. For the purposes of predicting hourly average noise levels for comparison against the city's hourly average (L_{eq}) noise standard, it was assumed that 1 heavy truck and 2 medium duty trucks could have store deliveries during the same hour.

BAC file data indicate that heavy truck passbys produce an average Sound Exposure Level (SEL) of approximately 90 dB at a distance of 50 feet, with medium duty trucks (including side step vans), producing a SEL of approximately 76 dB. In addition, the file data also indicate a single event maximum sound level for slow-moving heavy-duty trucks and medium-duty trucks of 75 dB and 70 dB L_{max} (respectively), at a reference distance of 50 feet. Based on these levels, assuming 1 semi-trailer delivery and 2 medium duty truck deliveries during any given hour, and assuming standard sound wave spreading loss (-4.5 dB per doubling of distance from a moving point source), on-site truck circulation noise exposure at the property lines of the nearest residential uses was calculated and the results of those calculations relative to the city's noise standards are presented in Tables 3 and 4.

The predicted on-site truck circulation noise levels at the nearest residential use to the northeast take into consideration the shielding provided by the existing 6-foot tall noise barrier along the development boundary, as indicated in Figure 2. To account for the screening provided by the existing barrier, an offset of -7 dB was conservatively applied to calculated noise levels at this land use.

Table 3 Predicted On-Site Truck Circulation Noise Levels vs. City Hourly L_{eq} Noise Standards The Plaza at Blue Oaks Commercial Development – Roseville, California				
Property Line	Distance from Passby Route (ft)	Predicted Combined Truck Passby Noise Level, L_{eq} (dB) ¹	Compliance with City Standard?	
			Daytime	Nighttime
North	100	50	Yes	No
East	350	42	Yes	Yes
Northeast	365	35	Yes	Yes
City of Roseville Noise Level Standards, Hourly L_{eq} (dB):			50	45
Notes: ¹ Predicted combined truck (heavy and medium) circulation noise levels at the residential use to the northeast take into consideration the shielding provided by the existing 6-foot tall noise barrier along the development boundary, and have been conservatively adjusted by -7 dB to account for this screening. Source: Bollard Acoustical Consultants, Inc. (2018)				

Table 4 Predicted On-Site Truck Circulation Noise Levels vs. City Maximum L_{max} Noise Standards The Plaza at Blue Oaks Commercial Development – Roseville, California					
Property Line	Distance from Passby Route, (ft)	Predicted Truck Passby Noise Level, L_{max} (dB) ¹		Compliance with City Standard?	
		Heavy-Truck (HT)	Medium Truck (MT)	Daytime (HT/MT)	Nighttime (HT/MT)
North	100	70	65	Yes/Yes	No/Yes
East	350	62	57	Yes/Yes	Yes/Yes
Northeast	365	55	50	Yes/Yes	Yes/Yes
City of Roseville Noise Level Standards, Maximum L_{max} (dB):				70	65
Notes: ¹ Predicted truck circulation noise levels at the residential use to the northeast take into consideration the shielding provided by the existing 6-foot tall noise barrier along the development boundary, and have been conservatively adjusted by -7 dB to account for this screening. Source: Bollard Acoustical Consultants, Inc. (2018)					

As indicated in Table 3, predicted combined truck passby noise levels at the property lines of the nearest residential uses would satisfy the City of Roseville 50 dB L_{eq} daytime noise level standard. The Table 3 data also shows that predicted combined truck passby noise levels would satisfy the City of Roseville 45 dB L_{eq} nighttime noise level standard at the nearest residential uses to the east and northeast. However, the predicted combined truck passby noise level of 50 dB L_{eq} at the nearest proposed residential uses to the north would exceed the City of Roseville 45 dB L_{eq} nighttime noise level standard. As a result, additional consideration of on-site truck circulation noise mitigation measures would be necessary in order to satisfy the

City of Roseville 45 dB L_{eq} nighttime noise level standard at the nearest residential use to the north.

The Table 4 data indicate that predicted heavy and medium-truck passby noise levels at the property lines of the nearest residential uses would satisfy the City of Roseville 70 dB L_{max} daytime noise level standard. In addition, predicted medium-truck passby noise levels would also satisfy the city's nighttime noise level standard at the nearest residential uses. However, the Table 4 data indicates that heavy-truck passby noise levels are predicted to exceed the city's nighttime noise level standard by 5 dB at the property line of the nearest residential use to the north. As a result, additional consideration of heavy-truck passby noise mitigation measures would be necessary in order to satisfy the City of Roseville 65 dB L_{max} nighttime noise level standard at the nearest residential use to the north.

On-Site Truck Circulation Noise Mitigation Measures

Noise exposure from on-site truck circulation is expected to satisfy the applicable City of Roseville daytime noise level standards of 50 dB L_{eq} and 70 dB L_{max} at the nearest residential uses. However, should truck deliveries occur during nighttime hours (10 p.m. to 7 a.m.), truck passby noise levels are predicted to exceed the City of Roseville 45 dB L_{eq} and 65 dB L_{max} nighttime noise level standards at the nearest residential use to the north.

To mitigate on-site truck circulation noise exposure to a state of compliance with the City of Roseville nighttime noise level standards of 45 dB L_{eq} and 65 dB L_{max} at the nearest residential use to the north, the effectiveness of a solid noise barrier between the proposed truck lane and residential development to the north was evaluated. The results from the barrier analysis are provided in Appendices E-1 and E-2, and are summarized in Table 5 relative to the applicable City of Roseville noise standards.

Table 5 Predicted On-Site Truck Circulation Noise Barrier Effectiveness vs. City Standards The Plaza at Blue Oaks Commercial Development – Roseville, California			
Barrier Height (ft) ¹	Resulting Source Noise Level at Residential Use to North, dB ²		Compliance with Nighttime Standards? (Combined/HT)
	Combined Truck Passby, L_{eq}	HT Truck Passby, L_{max}	
6	46	66	No/No
7	45	65	Yes/Yes
City of Roseville Nighttime Noise Level Standards, L_{eq}/L_{max} (dB):			45 / 65
Notes: ¹ Figure 2 shows the location of the recommended noise barrier. ² Complete results of the barrier analysis are provided in Appendices E-1 and E-2. Source: Bollard Acoustical Consultants, Inc. (2018)			

The Table 5 data show that the construction of a solid noise barrier measuring a minimum of 7-feet in height at the location shown on Figure 2 would be required to satisfy the applicable City of Roseville nighttime noise criteria at the adjacent residential use to the north. Figure 2 shows the location of the noise barrier. Alternatively, truck deliveries would need to be restricted to daytime hours (7 a.m. to 10 p.m.) if a noise barrier is not constructed as indicated above.

Evaluation of Loading Dock Noise Levels

The project proposes two commercial delivery loading docks on the northern end of the project site, identified as Docks 1 and 2 on Figure 2. To predict noise levels generated by loading dock activity at the project site, BAC once again utilized file data for comparable commercial centers. BAC file data indicate a commercial loading dock noise level of 55 dB L_{eq} and 70 dB L_{max} at a distance of 100 feet for typical operations. Assuming standard sound wave spreading loss (-6 dB per doubling of distance from a stationary source), loading dock noise exposure at the nearest residential property lines was calculated and the results of those calculations relative to the city's noise standards are presented in Tables 6 and 7.

Table 6 Predicted Loading Dock Noise Levels vs. City Hourly L_{eq} Noise Standards The Plaza at Blue Oaks Commercial Development – Roseville, California						
Property Line	Distance from Loading Docks (ft)		Predicted Hourly Noise Level, L_{eq} (dB) ¹		Compliance with City Standard?	
	Dock 1	Dock 2	Dock 1	Dock 2	Daytime (Dock 1/Dock2)	Nighttime (Dock 1/Dock 2)
North	125	120	53	53	No/No	No/No
East	560	400	40	43	Yes/Yes	Yes/Yes
Northeast	590	430	33	35	Yes/Yes	Yes/Yes
City of Roseville Noise Level Standard, Hourly L_{eq} (dB):					50	45
Notes: ¹ Predicted loading dock noise levels at the residential use to the northeast take into consideration the shielding provided by the existing 6-foot tall noise barrier along the development boundary, and have been conservatively adjusted by -7 dB to account for this screening. Source: Bollard Acoustical Consultants, Inc. (2018)						

Table 7 Predicted Loading Dock Noise Levels vs. City Maximum L_{max} Noise Standards The Plaza at Blue Oaks Commercial Development – Roseville, California						
Property Line	Distance from Loading Docks (ft)		Predicted Maximum Noise Level, L_{max} (dB) ¹		Compliance with City Standard?	
	Dock 1	Dock 2	Dock 1	Dock 2	Daytime (Dock 1/Dock2)	Nighttime (Dock 1/Dock 2)
North	125	120	68	68	Yes/Yes	No/No
East	560	400	55	58	Yes/Yes	Yes/Yes
Northeast	590	430	48	50	Yes/Yes	Yes/Yes
City of Roseville Noise Level Standard, Maximum L_{max} (dB):					70	65
Notes: ¹ Predicted loading dock noise levels at the residential use to the northeast take into consideration the shielding provided by the existing 6-foot tall noise barrier along the development boundary, and have been conservatively adjusted by -7 dB to account for this screening. Source: Bollard Acoustical Consultants, Inc. (2018)						

As indicated in Table 6, predicted loading dock noise levels at the property lines of the nearest residential uses to the east and southeast would satisfy the City of Roseville 50 and 45 dB L_{eq} daytime and nighttime noise level standards (respectively). However, at the adjacent residential use to the north, loading dock noise levels are expected to exceed the applicable City of Roseville daytime and nighttime noise level criteria. As a result, additional consideration of loading dock noise mitigation measures would be necessary in order to satisfy the City of Roseville 50 and 45 dB L_{eq} daytime and nighttime noise level standards at the nearest residential use to the north.

The Table 7 data indicate that predicted loading dock noise levels at the property lines of the nearest residential uses would satisfy the City of Roseville 70 dB L_{max} daytime noise level standard. In addition, predicted loading dock noise exposure is also expected to satisfy the city's nighttime maximum noise level standard at the nearest residential uses to the east and northeast. However, the Table 7 data indicates that loading dock noise levels are predicted to exceed the city's 65 dB L_{max} nighttime noise level standard at the property line of the adjacent residential use to the north. As a result, additional consideration of loading dock noise mitigation measures would be necessary in order to satisfy the City of Roseville 65 dB L_{max} nighttime noise level standard at the nearest residential use to the north.

Loading Dock Noise Mitigation Measures

Noise exposure from loading dock activities is expected to satisfy the applicable City of Roseville daytime and nighttime hourly and maximum noise level standards at the nearest residential uses to the east and southeast. In addition, predicted loading dock noise exposure will also satisfy the city's daytime 70 dB L_{max} noise level standard at the nearest residential use to the north. However, noise levels from loading dock activities are predicted to exceed the City

of Roseville 50 and 45 dB L_{eq} daytime and nighttime noise standards (respectively), and 65 dB L_{max} nighttime noise level standard at the nearest proposed residential uses to the north.

To mitigate loading dock noise exposure to a state of compliance with the applicable City of Roseville noise level criteria at the adjacent residential use to the north, the effectiveness of a solid noise barrier at the location indicated on Figure 2 was evaluated. The results from the barrier analysis are provided in Appendices E-3 through E-6, and are summarized below in Table 8 relative to the applicable City of Roseville noise standards.

Table 8 Predicted Loading Dock Noise Barrier Effectiveness vs. City Standards The Plaza at Blue Oaks Commercial Development – Roseville, California				
Barrier Height (ft) ¹	Resulting Source Noise Level at Residential Use to North, dB ²		Compliance with City Standards?	
	Loading Docks 1 & 2		Daytime (L_{eq}/L_{max})	Nighttime (L_{eq}/L_{max})
	L_{eq}	L_{max}		
6	48	63	Yes/Yes	No/No
7	47	62	Yes/Yes	No/Yes
8	46	61	Yes/Yes	No/Yes
9	45	61	Yes/Yes	Yes/Yes
City of Roseville Noise Level Standards, L_{eq}/L_{max} (dB):			50 / 70	45 / 65
Notes: ¹ Figure 2 shows the location of the noise barrier. ² Complete results of the barrier analysis are provided in Appendices E-3 through E-6. Source: Bollard Acoustical Consultants, Inc. (2018)				

The Table 8 data shows varies noise barrier heights required to satisfy the City of Roseville noise criteria at the adjacent residential use to the north. As shown in Table 8, loading dock activities would need to be restricted to daytime hours (7 a.m. to 10 p.m.) if a noise barrier less than 9-feet in height is constructed at the location shown on Figure 2.

Based on the proposed location of Loading Dock 2, it is expected that the residential use to the north will receive partial shielding from the recommended noise barrier. Due to the reduced level of shielding from the noise barrier, it is recommended that delivery activities at Loading Dock 2 be limited to daytime hours (7 a.m. to 10 p.m.). The restriction of activities at Loading Dock 2 during nighttime hours (10 p.m. to 7 a.m.) will minimize the potential for an exceedance of the City of Roseville nighttime noise level standards at the adjacent residential use to the north.

Evaluation of Car Wash Dryer Noise Levels

The project proposes an ARCO AM/PM facility with a car wash located at the southeastern end of the commercial development. The location of the car wash and nearest residential uses are shown on Figure 3.

Based on the experience of Bollard Acoustical Consultants, noise levels generated by car wash facilities are primarily due to the drying portion of the operation. According to information obtained from the equipment supplier, the proposed car wash will utilize a Ryko 3-Fan Slimline Dryer Model #6050-D. The manufacturer's specifications, provided as Appendix F, indicate that the reference sound level varies relative to the tunnel entrance, exit, and off-axis positions. Figure 3 illustrates the location of the proposed car wash tunnel, and the direction vehicles will move through the tunnel (north to south). Based on the manufacturer reference noise data sheet (Appendix F), and the proposed orientation of the car wash, the worst-case dryer noise exposure at the future high-density residential development to the east will occur at a position 90 degrees off-axis from the car wash tunnel entrance, and 45 degrees off-axis from the tunnel exit. Because the car wash tunnel exit is proposed to be south-facing, the existing residential development to the south will receive direct (0 degrees off-axis) dryer noise exposure.

When the car wash is at its worst-case maximum capacity, the dryers are anticipated to operate for no more than 15 minutes during that hour. The reference noise levels provided in Appendix F represent maximum (L_{max}) dryer noise levels. Because the dryers would be in operation for no more than 15 minutes during any hour, average (L_{eq}) noise levels would be approximately 6 dB less than maximum noise levels. Assuming standard spherical spreading loss (-6 dB per doubling of distance), and 15 minutes of operation during worst-case hour, car wash dryer noise exposure at the nearest residential uses was calculated and the results of those calculations relative to the city's noise standards are presented in Tables 9 and 10.

The predicted car wash dryer noise levels at the existing residential development to the south take into consideration the shielding provided by the existing 6-foot tall noise barrier along the development boundary, as indicated in Figures 2 and 3. To account for the screening provided by the existing barrier, an offset of -7 dB was conservatively applied to calculated noise levels at this land use.

Table 9 Predicted Car Wash Dyer Noise Levels vs. City Hourly L_{eq} Noise Standards The Plaza at Blue Oaks Commercial Development – Roseville, California					
Property Line	Reference Noise Level	Distance to Property Line (ft) ¹	Predicted Noise Level, L_{eq} (dB) ^{2,3}	Compliance with City Standard?	
				Daytime	Nighttime
East	65 dB at 30 feet (entrance, 90° off-axis)	65	52	No	No
East	76 dB at 40 feet (exit, 45° off-axis)	100	62	No	No
South	74 dB at 70 feet (exit, in line)	320	48	Yes	No
City of Roseville Noise Level Standards, Hourly L_{eq} (dB):				50	45
Notes: ¹ Distances from car wash dryer equipment to nearest property lines were scaled using the provided site plans. ² The predicted equipment noise levels at the residential use to the south take into consideration the shielding provided by an existing 6-foot tall solid noise barrier along the development boundary, and have been conservatively adjusted by -7 dB to account for this shielding. ³ Hourly average L_{eq} based on 15 minutes of dryer operation during a worst-case hour. Source: Bollard Acoustical Consultants, Inc. (2018)					

Table 10 Predicted Car Wash Dryer Noise Levels vs. City Maximum L_{max} Noise Standards The Plaza at Blue Oaks Commercial Development – Roseville, California					
Property Line	Reference Noise Level	Distance to Property Line (ft) ¹	Predicted Noise Level, L_{max} (dB) ^{2,3}	Compliance with City Standard?	
				Daytime	Nighttime
East	65 dB at 30 feet (entrance, 90° off-axis)	65	58	Yes	Yes
East	76 dB at 40 feet (exit, 45° off-axis)	100	68	Yes	No
South	74 dB at 70 feet (exit, in line)	320	54	Yes	Yes
City of Roseville Noise Level Standards, Maximum L_{max} (dB):				70	65
Notes: ¹ Distances from car wash dryer equipment to nearest property lines were scaled using the provided site plans. ² The predicted equipment noise levels at the residential use to the south take into consideration the shielding provided by an existing 6-foot tall solid noise barrier along the development boundary, and have been conservatively adjusted by -7 dB to account for this shielding. Source: Bollard Acoustical Consultants, Inc. (2018)					

The Table 9 data indicate that predicted car wash dryer hourly average noise levels at the nearest residential property line to the south would satisfy the City of Roseville 50 dB L_{eq} daytime noise level standard, but exceed the city's 45 dB L_{eq} nighttime criteria. Further, predicted car wash dryer (entrance and exit) noise levels would also exceed the City of Roseville daytime and nighttime noise level criteria at the adjacent residential property line to the east.

As indicated in Table 10, predicted car wash dryer noise levels at the property lines of the nearest residential uses to the east and south would satisfy the City of Roseville 70 dB L_{max} daytime noise level standard. In addition, predicted car wash dryer noise exposure is also expected to satisfy the city's 65 dB L_{max} nighttime noise level standard at the nearest residential use to the south. However, the Table 10 data indicates that car wash dryer (exit) noise levels are predicted to exceed the city's 65 dB L_{max} nighttime noise level standard at the property line of the adjacent residential use to the east.

Car Wash Dryer Noise Mitigation Measures

Car wash dryer noise exposure at the nearest residential property lines is predicted to exceed the City of Roseville daytime and nighttime noise criteria. To mitigate these identified exceedances, the effectiveness of installing car wash entrance and exit doors was considered. Specifically, equipment manufacturer BayWatch offers tunnel doors that provide approximately 14 dB of dryer noise reduction when doors are in the closed position (air tight seal) during wash cycles. The equipment manufacturer reference noise data sheet is provided in Appendix G. Assuming an offset of -14 dB from the reference noise levels shown in Tables 9 and 10 to account for the tunnel doors being in the closed position during the drying cycle of the car wash (air-tight seal), dryer noise levels were predicted at the property lines of the adjacent residential uses. The results of this analysis are summarized in Table 11.

Table 11 Predicted Car Wash Dryer Noise Levels – Mitigated The Plaza at Blue Oaks Commercial Development – Roseville, California					
Property Line	Reference Noise Level	Distance to Property Line (ft)	Offset, dB	Predicted Noise Levels (dB) ¹	
				L _{eq} ²	L _{max}
East	65 dB at 30 feet (entrance, 90° off-axis)	65	-14	38	44
East	76 dB at 40 feet (exit, 45° off-axis)	100	-14	48	54
South	74 dB at 70 feet (exit, in line)	320	-14	34	40
Notes: ¹ Predicted dryer noise levels take into consideration the noise reduction provided by closed entrance and exit doors during drying cycle (air-tight seal), and have been offset by -14 dB to account for this noise reduction. ² Hourly average L _{eq} based on 15 minutes of dryer operation during a worst-case hour. Source: Bollard Acoustical Consultants, Inc. (2018)					

Provided the project incorporates the recommended car wash entrance and exit doors, and that the doors are kept in the closed position with an air tight seal during wash cycles, car wash noise exposure at the adjacent residential property lines to the east and south would satisfy the City of Roseville daytime noise level standards. However, even after implementation of the recommended car wash doors, hourly average car wash noise levels could still exceed the city's 45 dB L_{eq} nighttime noise level standard by 3 dB at the residential property line to the east. Thus, if the recommended car wash entry and exit doors provide 14 dB of noise reduction, car wash operations should be limited to daytime hours (7 a.m. to 10 p.m.). However, should the applicant opt for nighttime car wash operations (10 p.m. to 7 a.m.), the recommended tunnel entrance and exit doors would need to provide a minimum noise level reduction of 17 dB.

Evaluation of Car Wash Vacuum Noise Levels

Based on the site plans, the project proposes two (2) vacuum units on the eastern side of the ARCO AM/PM facility building (see Figure 3). According to information obtained from the equipment distributor, the project proposes two JE Adams Super Vac (3-motor) Model #9200 series vacuum units. The manufacturer's specifications are provided as Appendix H. For the purposes of this analysis, it was assumed that the two vacuums would be in operation concurrently and continuously for the duration of an hour (worst-case hour). Because the vacuums were assumed to be in continuous operation for a full hour, hourly average (L_{eq}) and maximum (L_{max}) noise levels would be equivalent. Based upon the manufacturer's data, the proposed location of the vacuum units, and assuming the continuous use of the vacuums for a given hour, vacuum noise exposure at the nearest residential property lines was calculated and the results of those calculations are presented below in Table 12.

The predicted vacuum noise levels at the residential use to the south take into consideration the shielding provided by an existing 6-foot noise barrier along the development boundary, and have been conservatively adjusted by -7 dB to account for this shielding. In addition, because the proposed intervening ARCO AM/PM building would break line of sight of the vacuum units, predicted vacuum noise levels at the adjacent residential use the east were conservatively adjusted by -10 dB to account for this screening.

Table 12				
Predicted Vacuum Noise Levels ¹				
The Plaza at Blue Oaks Commercial Development – Roseville, California				
Property Line	Reference Noise Level ²	Distance to Property Line (feet)	Offset (dB) ³	Predicted Vacuum Noise Levels, L _{eq} / L _{max} (dB) ⁴
East	65 dBA at 40 feet	205	-10	41
South		330	-7	40
City of Roseville Daytime Noise Level Standards, L _{eq} /L _{max} (dB):				50 / 70
City of Roseville Nighttime Noise Level Standards, L _{eq} /L _{max} (dB):				45 / 65
Notes:				
¹ The proposed vacuum system location is illustrated on Figure 3.				
² The two proposed vacuums were assumed to be operating concurrently.				
³ Offsets of -10 and -7 dB were applied to account for the shielding provided by the proposed intervening ARCO AM/PM building (east) and existing 6-foot tall solid noise barrier (south), respectively.				
⁴ Because the vacuums were assumed to be in continuous operation for a full hour, hourly average (L _{eq}) and maximum (L _{max}) noise levels would be equivalent.				
Source: Bollard Acoustical Consultants, Inc. (2018)				

As shown in Table 12, predicted vacuum operation noise levels at the residential property lines to the south and west would satisfy the City of Roseville average and maximum daytime and nighttime noise level criteria. As a result, no further consideration of noise mitigation measures would be warranted for this aspect of the project.

Conclusions

This analysis concludes that noise generated by on-site truck circulation, loading docks, and car wash dryer operations at the proposed The Plaza at Blue Oaks Commercial Development project could potentially exceed the applicable City of Roseville noise level limits at the nearest residential uses. In order to comply with the applicable noise criteria, the following noise mitigation measures are recommended:

On-Site Truck Circulation Noise

Noise exposure from on-site truck circulation is expected to exceed the applicable City of Roseville nighttime noise criteria at the adjacent residential use to the north. In order to comply with the city's nighttime noise criteria at the nearest residential use to the north, a solid noise barrier measuring a minimum of 7-feet in height will be required at the location shown on Figure

2. Alternatively, commercial truck deliveries would need to be restricted to daytime hours (7 a.m. to 10 p.m.) if a noise barrier is not constructed as prescribed.

Loading Dock Noise

Noise exposure from loading dock activities is expected to exceed the City of Roseville daytime and nighttime noise criteria the adjacent residential use to the north. In order to comply with the city's noise criteria at the residential use to the north, a solid noise barrier will be required at the location shown on Figure 2. Specific barrier heights required to comply with the city's daytime and nighttime noise criteria are shown in Table 8. In addition, because it is expected that the residential use to the north will receive a reduced level of shielding from the required noise barrier, it is recommended that delivery activities at Loading Dock 2 be limited to daytime hours (7 a.m. to 10 p.m.). The restriction of delivery activities at Loading Dock 2 during nighttime hours (10 p.m. to 7 a.m.) will minimize the potential for an exceedance of the City of Roseville nighttime noise level standards at the residential land use to the north.

Car Wash Dryer Noise

Car wash dryer noise exposure at the residential uses to the east and south is predicted to exceed the City of Roseville daytime and nighttime noise level criteria. In order to comply with the City of Roseville daytime noise criteria, the installation of car wash entrance and exit doors would be required. As an example, car wash entrance and exit doors offered by BayWatch provide up to approximately 14 dB of dryer noise reduction (see Appendix G). In order to maximize the effectiveness of the equipment, the car wash entrance and exit doors must be kept in the closed position during wash cycles to create an air tight seal. Provided that the project implement car wash entrance and exit doors that provide a minimum of 14 dB of dryer noise level reduction, project car wash dryer noise exposure is expected to comply with the City of Roseville daytime noise criteria. However, in order to comply with the City of Roseville nighttime noise criteria, the recommended tunnel entrance and exit doors would need to provide a minimum noise level reduction of 17 dB.

Following implementation of the measures recommended above, it is BAC's professional opinion that the project will be satisfactory relative to the applicable City of Roseville noise criteria and would not result in adverse noise impacts at the adjacent residential uses. Ultimately, each use operating within the Plaza at Blue Oaks Commercial Development will be responsible for operating in compliance with the noise standards of the City of Roseville.

This concludes BAC's noise assessment for the proposed Plaza at Blue Oaks Commercial Development in Roseville, California. Please contact BAC at (916) 663-0500 or paulb@bacnoise.com with any questions regarding this assessment.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.



Appendix B-1
The Plaza at Blue Oaks Commercial Development
Ambient Noise Monitoring Results - Site 1
Thursday, February 15, 2018

Hour	Leq	Lmax	L50	L90
0:00	44	56	41	34
1:00	44	63	38	29
2:00	44	59	38	30
3:00	42	58	38	32
4:00	45	59	42	34
5:00	49	62	47	40
6:00	53	69	50	46
7:00	54	65	54	50
8:00	54	67	53	49
9:00	53	63	52	49
10:00	54	66	53	49
11:00	54	68	54	51
12:00	55	62	55	51
13:00	54	71	53	50
14:00	53	70	52	49
15:00	54	62	54	50
16:00	54	68	53	49
17:00	54	71	53	50
18:00	53	73	52	47
19:00	52	61	50	46
20:00	52	68	50	45
21:00	50	61	49	44
22:00	50	71	48	42
23:00	48	67	45	38

Statistical Summary						
Daytime (7 a.m. - 10 p.m.)				Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55	50	54	53	42	48
Lmax (Maximum)	73	61	66	71	56	63
L50 (Median)	55	49	52	50	38	43
L90 (Background)	51	44	49	46	29	36

Computed Ldn, dB	56
% Daytime Energy	86%
% Nighttime Energy	14%

Appendix B-2
The Plaza at Blue Oaks Commercial Development
Ambient Noise Monitoring Results - Site 2
2/14/18 - 2/15/18

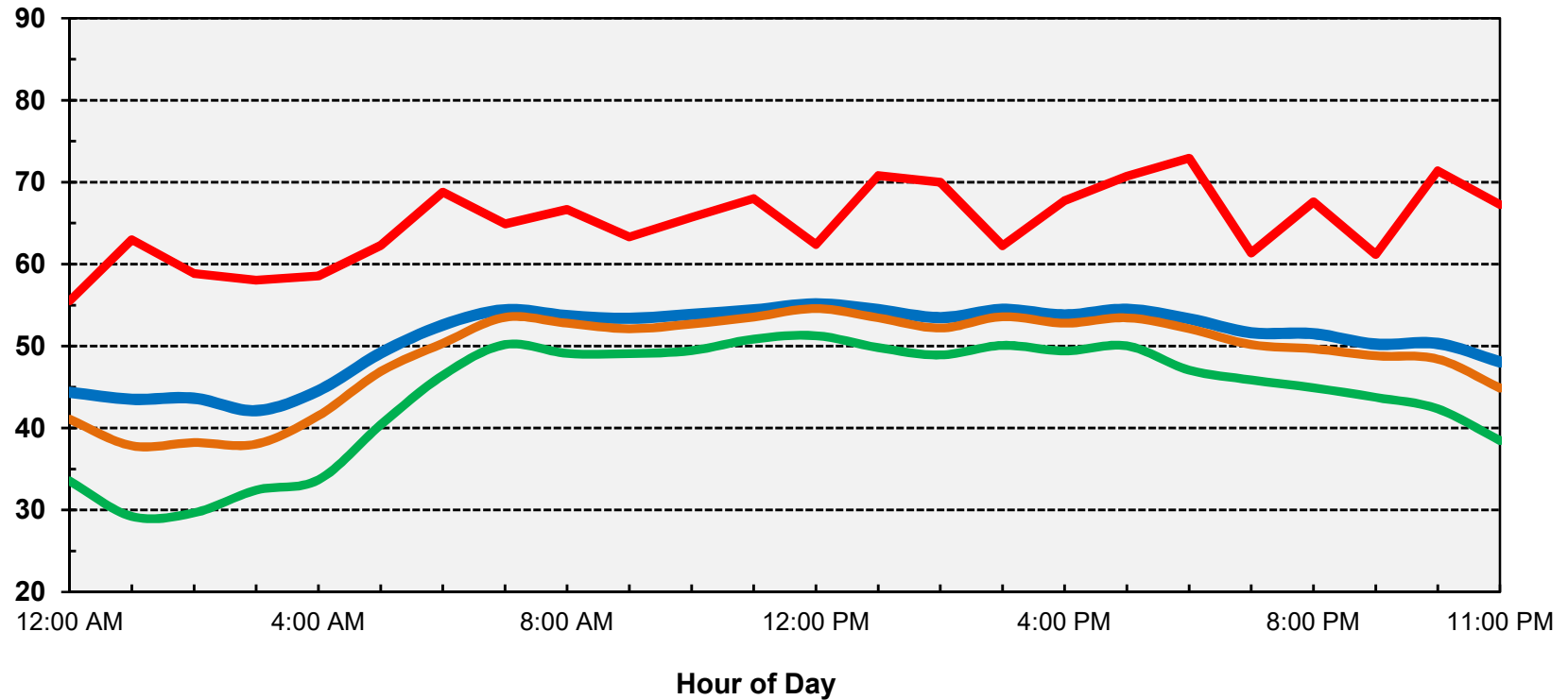
Hour	Leq	Lmax	L50	L90
12:00	53	68	50	45
13:00	51	64	49	46
14:00	52	69	50	47
15:00	54	70	53	49
16:00	54	66	52	49
17:00	54	67	53	49
18:00	53	64	52	48
19:00	51	66	49	46
20:00	50	65	49	45
21:00	50	66	49	45
22:00	50	75	47	42
23:00	48	70	45	36
0:00	46	60	43	34
1:00	47	64	40	28
2:00	46	67	39	29
3:00	45	59	39	32
4:00	47	63	43	34
5:00	52	68	49	41
6:00	56	72	54	49
7:00	57	66	56	53
8:00	57	77	56	52
9:00	56	68	55	51
10:00	56	74	55	51
11:00	56	74	55	52

Statistical Summary						
Daytime (7 a.m. - 10 p.m.)				Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	57	50	55	56	45	49
Lmax (Maximum)	77	64	69	72	59	66
L50 (Median)	56	47	52	54	39	44
L90 (Background)	53	42	48	49	28	35

Computed Ldn, dB	57
% Daytime Energy	84%
% Nighttime Energy	16%

Appendix C-1
The Plaza at Blue Oaks Commercial Development
Ambient Noise Monitoring Results - Site 1
Thursday, February 15, 2018

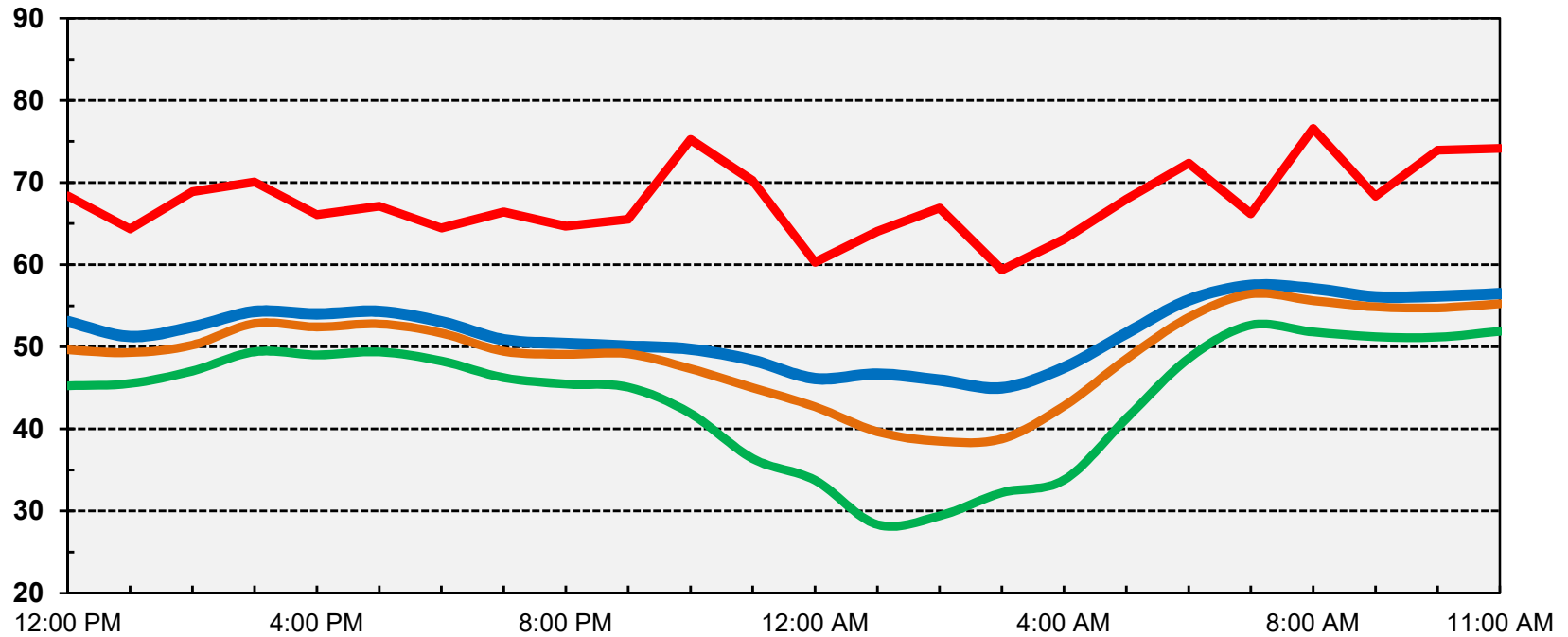
Sound Level, dBA



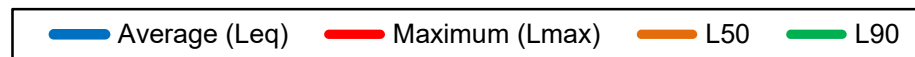
Ldn: 56 dB

Appendix C-2
The Plaza at Blue Oaks Commercial Development
Ambient Noise Monitoring Results - Site 2
2/14/18 - 2/15/18

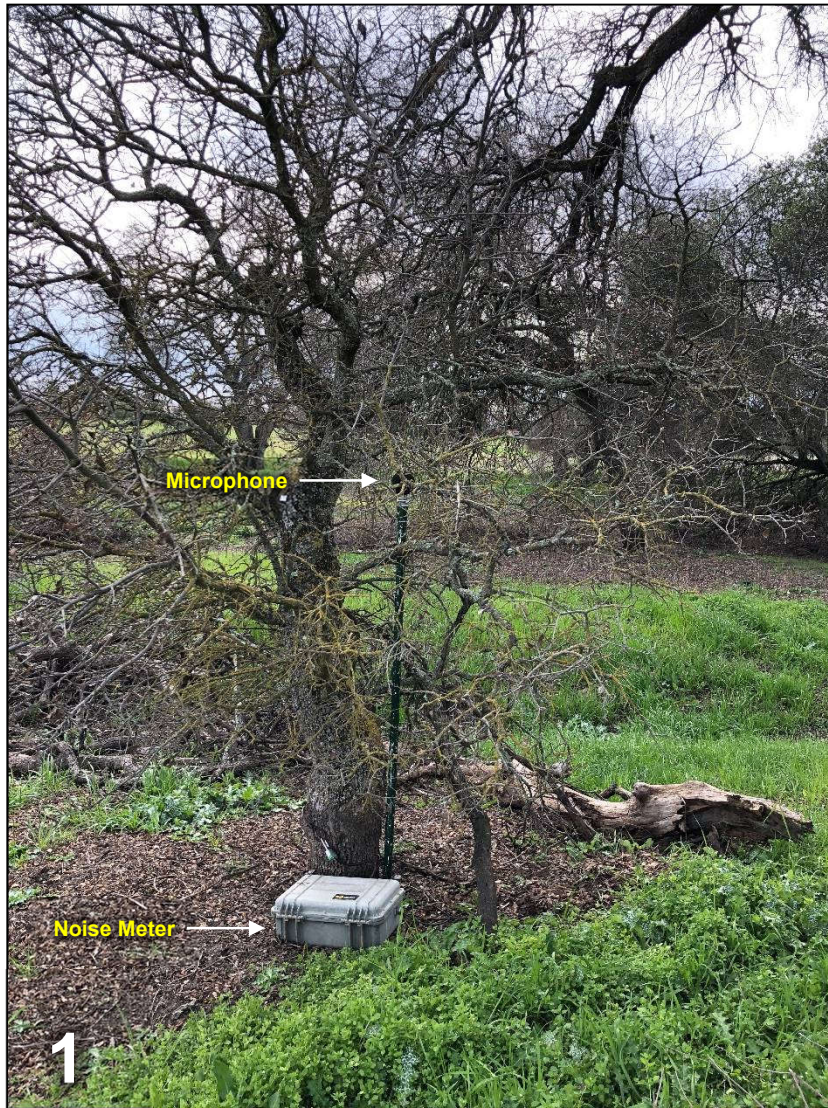
Sound Level, dBA



Hour of Day



Ldn: 57 dB



Notes:

1. Long-term noise measurement Site 1, facing southeast
2. Long-term noise measurement Site 2, facing north

The Plaza at Blue Oaks Development
Roseville, California

Noise Measurement Site Photos

Appendix D



Appendix E-1

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2018-026
 Project Name: The Plaza at Blue Oaks Commercial Development
 Location(s): Property Line

Noise Level Data:

Source Description: On-Site Truck Circulation - Combined Truck
 Source Noise Level, Leq (dBA): 50
 Source Frequency (Hz): 500
 Source Height (ft): 104

Site Geometry:

Receiver Description: Property Line - North
 Source to Barrier Distance (C_1): 20
 Barrier to Receiver Distance (C_2)¹: 80
 Pad/Ground Elevation at Receiver: 96
 Receiver Elevation: 101
 Base of Barrier Elevation: 96
 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier

Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
102	6	-4.2	45.8	No
103	7	-4.9	45.1	No
104	8	-5.0	45.0	Yes
105	9	-5.7	44.3	Yes
106	10	-6.7	43.3	Yes
107	11	-7.7	42.3	Yes
108	12	-8.9	41.1	Yes
109	13	-9.8	40.2	Yes
110	14	-10.5	39.5	Yes
111	15	-11.3	38.7	Yes
112	16	-12.1	37.9	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s).

Appendix E-2

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2018-026
 Project Name: The Plaza at Blue Oaks Commercial Development
 Location(s): Property Line

Noise Level Data:

Source Description: On-Site Truck Circulation - Heavy Truck
 Source Noise Level, Lmax (dBA): 70
 Source Frequency (Hz): 500
 Source Height (ft): 104

Site Geometry:

Receiver Description: Property Line - North
 Source to Barrier Distance (C_1): 20
 Barrier to Receiver Distance (C_2)¹: 80
 Pad/Ground Elevation at Receiver: 96
 Receiver Elevation: 101
 Base of Barrier Elevation: 96
 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier

Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
102	6	-4.2	65.8	No
103	7	-4.9	65.1	No
104	8	-5.0	65.0	Yes
105	9	-5.7	64.3	Yes
106	10	-6.7	63.3	Yes
107	11	-7.7	62.3	Yes
108	12	-8.9	61.1	Yes
109	13	-9.8	60.2	Yes
110	14	-10.5	59.5	Yes
111	15	-11.3	58.7	Yes
112	16	-12.1	57.9	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s).

Appendix E-3

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2018-026
 Project Name: The Plaza at Blue Oaks Commercial Development
 Location(s): Property Line

Noise Level Data:

Source Description: Loading Dock 1
 Source Noise Level, Leq (dBA): 53
 Source Frequency (Hz): 500
 Source Height (ft): 100

Site Geometry:

Receiver Description: Property Line - North
 Source to Barrier Distance (C_1): 55
 Barrier to Receiver Distance (C_2)¹: 70
 Pad/Ground Elevation at Receiver: 96
 Receiver Elevation: 101
 Base of Barrier Elevation: 96
 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier

Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
102	6	-5.3	47.7	Yes
103	7	-5.9	47.1	Yes
104	8	-6.7	46.3	Yes
105	9	-7.4	45.6	Yes
106	10	-8.2	44.8	Yes
107	11	-9.0	44.0	Yes
108	12	-9.7	43.3	Yes
109	13	-10.3	42.7	Yes
110	14	-10.9	42.1	Yes
111	15	-11.3	41.7	Yes
112	16	-12.1	40.9	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s).

Appendix E-4

Barrier Insertion Loss Calculation

Project Information: Job Number: 2018-026
 Project Name: The Plaza at Blue Oaks Commercial Development
 Location(s): Property Line

Noise Level Data: Source Description: Loading Dock 1
 Source Noise Level, L_{max} (dBA): 68
 Source Frequency (Hz): 500
 Source Height (ft): 100

Site Geometry: Receiver Description: Property Line - North
 Source to Barrier Distance (C₁): 55
 Barrier to Receiver Distance (C₂)¹: 70
 Pad/Ground Elevation at Receiver: 96
 Receiver Elevation: 101
 Base of Barrier Elevation: 96
 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
102	6	-5.3	62.7	Yes
103	7	-5.9	62.1	Yes
104	8	-6.7	61.3	Yes
105	9	-7.4	60.6	Yes
106	10	-8.2	59.8	Yes
107	11	-9.0	59.0	Yes
108	12	-9.7	58.3	Yes
109	13	-10.3	57.7	Yes
110	14	-10.9	57.1	Yes
111	15	-11.3	56.7	Yes
112	16	-12.1	55.9	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s).

Appendix E-5

Barrier Insertion Loss Calculation

Project Information: Job Number: 2018-026
 Project Name: The Plaza at Blue Oaks Commercial Development
 Location(s): Property Line

Noise Level Data: Source Description: Loading Dock 2
 Source Noise Level, Leq (dBA): 53
 Source Frequency (Hz): 500
 Source Height (ft): 100

Site Geometry: Receiver Description: Property Line - North
 Source to Barrier Distance (C_1): 55
 Barrier to Receiver Distance (C_2)¹: 65
 Pad/Ground Elevation at Receiver: 96
 Receiver Elevation: 101
 Base of Barrier Elevation: 96
 Starting Barrier Height 6

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
102	6	-5.3	47.7	Yes
103	7	-5.9	47.1	Yes
104	8	-6.7	46.3	Yes
105	9	-7.5	45.5	Yes
106	10	-8.2	44.8	Yes
107	11	-9.1	43.9	Yes
108	12	-9.8	43.2	Yes
109	13	-10.3	42.7	Yes
110	14	-10.9	42.1	Yes
111	15	-11.5	41.5	Yes
112	16	-12.1	40.9	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s).

Appendix E-6

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2018-026
 Project Name: The Plaza at Blue Oaks Commercial Development
 Location(s): Property Line

Noise Level Data:

Source Description: Loading Dock 2
 Source Noise Level, L_{max} (dBA): 68
 Source Frequency (Hz): 500
 Source Height (ft): 100

Site Geometry:

Receiver Description: Property Line - North
 Source to Barrier Distance (C₁): 55
 Barrier to Receiver Distance (C₂)¹: 65

 Pad/Ground Elevation at Receiver: 96
 Receiver Elevation: 101
 Base of Barrier Elevation: 96
 Starting Barrier Height 6

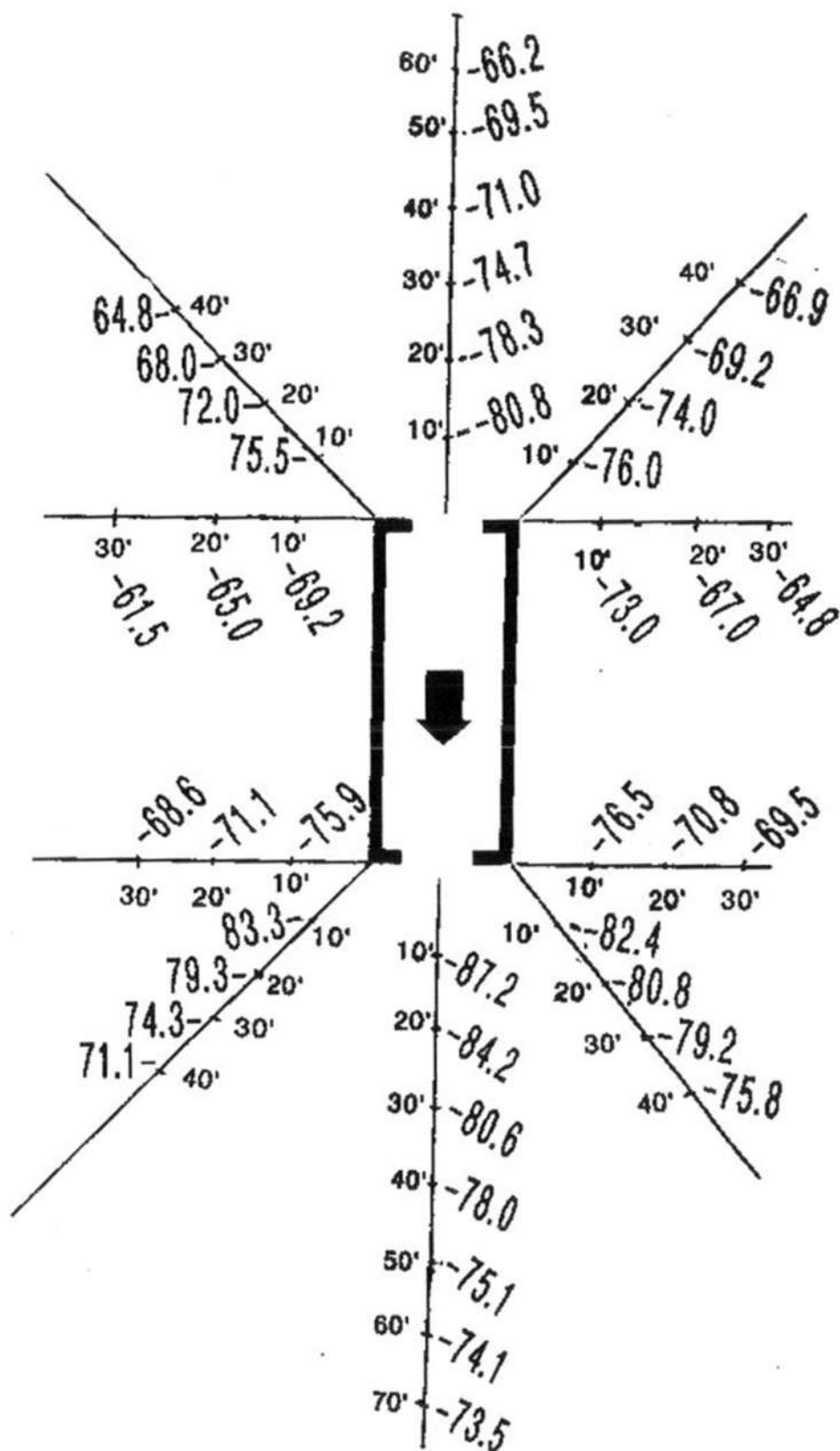
Barrier Effectiveness:

Top of Barrier

Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
102	6	-5.3	62.7	Yes
103	7	-5.9	62.1	Yes
104	8	-6.7	61.3	Yes
105	9	-7.5	60.5	Yes
106	10	-8.2	59.8	Yes
107	11	-9.1	58.9	Yes
108	12	-9.8	58.2	Yes
109	13	-10.3	57.7	Yes
110	14	-10.9	57.1	Yes
111	15	-11.5	56.5	Yes
112	16	-12.1	55.9	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s).

Appendix F



RYKO Mfg. 3-Fan Slimline Dryer



Sound Level Measurements for BayWatch Polycarbonate

Doors With Mark VII AquaJet XT

Car Wash w/ On-Board Dryer (30hp)

Feet From Door	Entry Door Open	Entry Door Closed
10'	93 db	80 db
20'	90 db	76 db
25'	88 db	74 db
30'	85 db	71 db
50'	80 db	66 db

Appendix H-1

WE WORK HARDER TO PROVIDE YOU SOLUTIONS

SUPER VAC WITH BILL VALIDATOR & DIGITAL DISPLAY

MODEL #	VACUUM	MOTORS	VAULT READY	STAINLESS STEEL DOME	LIGHTED DOME	BILL ACCEPTOR	COIN ACCEPTOR	ETL APPROVED	OPTIONAL DECAL PKG.	WEIGHT	AMPS REQ.	VOLTAGE
9200-1	•	2	•	Small	•	•	•	•	•	139	20	120
9200-1VR	•	2	•	Small	•	•	•	•	•	139	20	120
9200-1LD	•	2	•	•	•	•	•	•	•	139	20	120
9200-1VRLD	•	2	•	•	•	•	•	•	•	139	20	120
9200-3	•	3	•	Large	•	•	•	•	•	155	30	120
9200-3VR	•	3	•	Large	•	•	•	•	•	155	30	120
9200-3LD	•	3	•	•	•	•	•	•	•	155	30	120
9200-3VRLD	•	3	•	•	•	•	•	•	•	155	30	120

FEATURES

- Double service doors offer easy access to clean out compartment and 4 filter bag system (Replacement Item #8076)
- Digital display timer with built-in coin counter, scrolls messages, prices for service and counts down remaining time (Replacement Item #8000-10)
- Visual and audible last coin alarm
- Coin box secured with pin lock (Replacement Item #8638)
- Faceplate secured with 2 Medeco cam locks (Replacement Item #8953)
- Hose: 2" x 15', swivel cuff and nozzle included (15', 25', and 50' available in 1 1/2" or 2")
- Coinco bill acceptor takes \$1.00 and \$5.00 bills (Replacement Item #8130-6)
- Imonex coin acceptor takes quarters (Replacement Item #8149)
- Lighted dome available in red, blue, yellow, dark green, light green, purple and white
- Optional coin mechs, motors, colored hoses, extra security, and clean-out containers are available

PROGRAMMER

- 8000-30 Remote control programmer for digital display, 8 oz.

DECALS

- 9200-11 Yellow decals
- 9200-12 Blue decals
- 9200-13 Violet decals
- 9200-14 Black decals (standard)

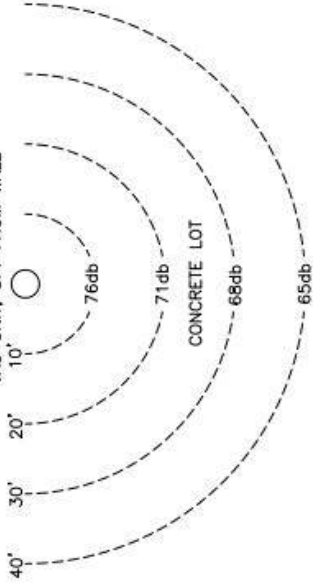


SUPER VAC 9200-1LD SHOWN WITH OPTIONAL BLUE DOME, BLUE HOSE, BLUE DECAL PACKAGE, SERVICE DOORS SECURITY COVER, AND COIN BOX SECURITY PACKAGE

Appendix H-2

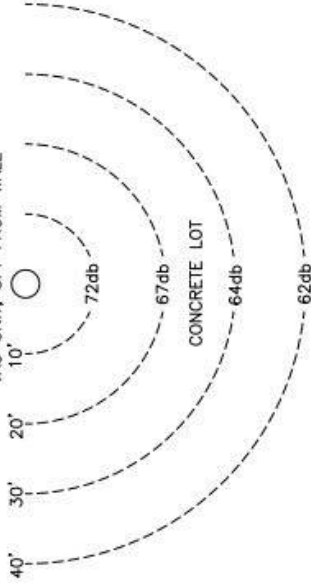
STEEL WALL, 18FT HIGH, 150FT LONG

VAC UNIT, 3FT FROM WALL



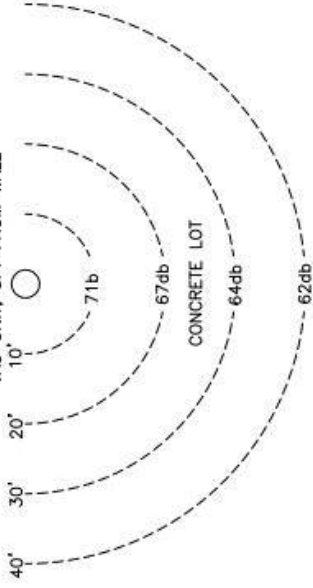
STEEL WALL, 18FT HIGH, 150FT LONG

VAC UNIT, 3FT FROM WALL



STEEL WALL, 18FT HIGH, 150FT LONG

VAC UNIT, 3FT FROM WALL



Memorandum

To: Matt Todd

From: Matt Weir, P.E., T.E., PTOE
Robert Paderna, P.E.

Re: *The Plaza at Blue Oaks*
Traffic Evaluation
Roseville, California

Date: April 6, 2018

Per your request and authorization, we have prepared this traffic evaluation for the above referenced project.

Project Understanding

Kimley-Horn understands that a 13.35-acre neighborhood shopping center is proposed for the vacant site located in the northeast corner of the Blue Oaks Boulevard intersection with Fiddymment Road in the Fiddymment Ranch Development of the City of Roseville. According to the project applicant, the project is proposed to be constructed in two phases, with Phase 2 excluded from the initial Design Review Permit application which is the trigger for this traffic analysis. The proposed project consists of a 35,000-square foot (sf) grocery anchor store, an approximately 20,000-sf major retail store, a gas station (approximately 3,050-sf convenience store with 12 fueling pumps), and seven additional buildings ranging in size from 3,250-sf to 6,045-sf. Access to the project is proposed to be from all four surrounding roadways; one right-in/right-out driveway along Blue Oaks Boulevard, one right-in/right-out driveway along Fiddymment Road, two full access driveways along Harvey Way, and two full access driveways along Oak Meadow Drive. The project site plan is provided in **Exhibit 1**.

The purpose of this analysis is to evaluate the proposed project's access points and localized circulation, including throat depths, tapers, storage, and driveway treatments that are necessary to ensure safe and efficient operations.

Study Facilities and Evaluation Parameters

The following ten intersections (see **Exhibit 2**) were identified in consultation with the City and are included in this access evaluation. **Exhibit 3** details the study intersections' geometries while **Exhibit 4** presents the Existing (2018) conditions AM and PM peak hour traffic volumes, collected on February 27 and March 6 to March 8, 2018. Raw traffic counts are provided in **Attachment A**. For each location, traffic/access control and the primary evaluation parameter(s) are described below:

1. Blue Oaks Boulevard @ Fiddymment Road
 - o Existing traffic signal
 - o Primary consideration is anticipated mix of volumes with project volumes, with a focus on the left- and u-turn movements, and vehicle delay and queuing
2. Blue Oaks Boulevard @ Site Access Driveway
 - o Proposed right-in/right-out driveway
 - o Primary considerations are the minimum required throat depth (MRTD) and the size of the right-turn deceleration lane

3. Blue Oaks Boulevard @ Oak Meadow Drive
 - o Existing side-street stop controlled (SSSC) intersection
 - o Primary consideration is anticipated mix of volumes with project volumes, with a focus on the southbound queue in relation to the South Project Access Driveway intersection
4. Blue Oaks Boulevard @ Orchard View Road
 - o Existing traffic signal
 - o Primary consideration is anticipated mix of volumes with project volumes, with a focus on the left- and u-turn movements
5. Fiddymment Road @ Project Access Driveway Intersection
 - o Proposed right-in/right-out driveway
 - o Primary considerations are the minimum required throat depth (MRTD) and the need for a right-turn deceleration lane
6. Harvey Way @ Fiddymment Road
 - o Existing SSSC intersection
 - o Primary consideration is the anticipated mix of volumes with project volumes, with a focus on the southbound left-turn movement onto Harvey Way
7. Harvey Way @ West Project Access Driveway
 - o Access initially assumed to be full access
 - o Primary considerations are the need for turn restrictions and the MRTD
8. Harvey Way @ Oak Meadow Drive
 - o Existing SSSC intersection
 - o Primary consideration is the anticipated mix of volumes with project volumes, with a focus on the need for all-way stop control (AWSC)
9. Harvey Way @ Orchard View Road
 - o Existing SSSC intersection
 - o Primary consideration is the anticipated mix of volumes with project volumes, with a focus on the need for AWSC
10. Oak Meadow Drive @ South Project Access Driveway
 - o Access initially assumed to be full access
 - o Primary considerations are the need for turn restrictions and the MRTD

This analysis did not include the eastern project driveway along Harvey Way and the northern project driveway along Oak Meadow Drive as these driveway intersections are not anticipated to affect the operations at the adjacent offsite city intersections.

The access evaluation was conducted for the weekday AM and PM peak hours under Existing (2018) plus Proposed Project conditions. Kimley-Horn applied methods defined in the *Highway Capacity Manual (HCM)*, using Synchro 9 traffic analysis software.

Assessment of Proposed Project

Trip Generation

The number of trips anticipated to be generated by the proposed project were approximated using *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE). **Table 1** presents the trip generation data for the proposed project.

Table 1 – Proposed Project Trip Generation

	Size (KSF/ Fueling Pumps)	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Supermarket (850)	35	3738	134	80	54	323	165	158
Shopping Center (820)	55.2	2082	52	32	20	210	101	109
Gas Station with Convenience Store (960)	12 (Fueling Pumps)	2766	337	169	168	276	138	138
Subtotal Trips		8,586	523	281	242	809	404	405
Supermarket Pass-by Trip Reduction : PM Peak-Hour (36%)		0	0	0	0	-116	-59	-57
Shopping Center Pass-by Trip Reduction: PM Peak-hour (34%)		0	0	0	0	-71	-34	-37
Gas Station with Convenience Store Passby Trip Reduction: AM Peak-Hour (62%), PM Peak- Hour (56%)		0	-208	-104	-104	-154	-77	-77
Net New Project Trips		8,586	315	177	138	468	234	234

Source: Trip Generation Manual, 10th Edition, ITE

As reflected in **Table 1**, the proposed project is anticipated to generate 315 new AM peak-hour and 468 new PM peak-hour trips. A pass by trip reduction of 208 and 341 trips was applied during the AM and PM peak-hours, respectively, in accordance with the procedures contained in the *Trip Generation Handbook, 3rd Edition*.

Trip Distribution

The distribution of new project trips was developed based on existing project area roadway volumes, general knowledge of project area traffic patterns, the proposed project layout, guidance from *Transportation and Land Development, 2nd Edition* published by ITE, and engineering judgment. Project trips were assigned to the study intersections and the surrounding roadway network according to these patterns. The assignment of project trips to the site driveways accounts for the turn restrictions at project driveways along Blue Oaks Boulevard and Fiddymment Road.

The trip distribution percentages are presented in **Exhibit 5**. Project only volumes are reflected in **Exhibit 6**. Existing (2018) plus Proposed Project volumes are reflected in **Exhibit 7**.

Traffic Assessment Methodology

As previously discussed, the focus of this traffic evaluation is on vehicle queuing entering the site and the Minimum Required Throat Depth (MRTD) at each project site driveway. For this evaluation, the City's guidelines¹ were referenced to determine the driveways' MRTD.

Synchro was used to evaluate the anticipated operations at the signalized study intersections at Blue Oaks Boulevard/Fiddymment Road (Intersection #1) and Blue Oaks Boulevard/Orchard View Road (Intersection #4) under Existing (2018) plus Proposed Project conditions.

¹ Section 4 Traffic Impact Studies, City of Roseville Design Standards, January 2016.

Additionally, an evaluation of the warrants for All-Way Stop Control (AWSC) was evaluated at the side-street stop controlled study intersections at Harvey Way/Oak Meadow Drive (Intersection #8) and Harvey Way/Orchard View Road (Intersection #9). This AWSC warrant evaluation was performed in accordance with the guidance contained in Section 2B.07 of the *California Manual on Uniform Traffic Control Devices (CMUTCD)*, 2014 Edition, Revision 3 (March 9, 2017).

Signalized Intersection Operations and Queuing

In an effort to confirm the adequacy of the existing configuration at the intersections of Blue Oaks Boulevard/Fiddymont Road (Intersection #1) and Blue Oaks Boulevard/Orchard View Road (Intersection #4), Synchro was used to determine the anticipated 95th percentile vehicle queues, delay, and Level of Service (LOS) under Existing (2018) plus Proposed Project conditions. **Table 2** summarizes the delay and LOS at the two signalized study intersections. Analysis worksheets are provided in **Attachment B**.

Table 2 – Intersection Level of Service for Existing (2018) plus Proposed Project Conditions

Intersection	Control	Peak Hour	Existing (2018)		Existing (2018) plus Proposed Project	
			Delay (sec)	LOS	Delay (sec)	LOS
#1 Blue Oaks Boulevard @ Fiddymont Road	Signal	AM	27.2	C	29.3	C
		PM	29.5	C	33.2	C
#4 Blue Oaks Boulevard @ Orchard View Road	Signal	AM	3.8	A	4.2	A
		PM	3.2	A	4.1	A

As shown in **Table 2**, the project intersections are shown to operate at or above acceptable LOS C during both peak-hours.

As congestion increases it is common for traffic at signals and stop signs to form lines of stopped (or queued) vehicles. Queue lengths were determined for each lane and measure the distance that vehicles will back up in each direction approaching an intersection. The 95th percentile queues were calculated for the two signalized study intersections by using 95th percentile traffic to account for fluctuations in traffic and represents a condition where 95 percent of the time during the peak period, traffic volumes and related queuing will be at, or less, than determined by the analysis. **Table 3** presents a summary of the queuing results. Analysis worksheets are provided in **Attachment B**.

Table 3 – Intersection Queuing for Existing (2018) plus Proposed Project Conditions

Intersection / Analysis Scenario	Movement	AM Peak-Hour		PM Peak-Hour	
		Available Storage (ft)	95 th % Queue (ft)	Available Storage (ft)	95 th % Queue (ft)
#1 Blue Oaks Boulevard @ Fiddymment Road	NBR				
Existing (2018)	245	69	245	61	
Existing (2018) plus Project					74	64
	SBL				
Existing (2018)	245	78	245	70	
Existing (2018) plus Project		93		87	
	EBL				
Existing (2018)	235	24	235	12	
Existing (2018) plus Project		29		20	
	WBL				
Existing (2018)	235	142	235	226	
Existing (2018) plus Project		182		300	
#2 Blue Oaks Boulevard @ Site Access Driveway	SBR				
Existing (2018)	N/A		N/A		
Existing (2018) plus Project	140	18	140	45	
	WBR				
Existing (2018)	N/A		N/A		
Existing (2018) plus Project	360	0	360	0	
#3 Blue Oaks Boulevard @ Oak Meadow Drive	SBR				
Existing (2018)	120	0	120	3	
Existing (2018) plus Project		8		23	
	EBL				
Existing (2018)	265	0	265	0	
Existing (2018) plus Project		5		8	
	WBR				
Existing (2018)	240	0	240	0	
Existing (2018) plus Project		0		0	
#4 Blue Oaks Boulevard @ Orchard View Road	SBL				
Existing (2018)	240	33	240	29	
Existing (2018) plus Project		43		49	
#5 Fiddymment Road @ Project Access Driveway	WBR				
Existing (2018)	N/A		N/A		
Existing (2018) plus Project	130	18	130	38	

Note: Shaded results reflect locations where 95th percentile queues exceed available storage capacity

Table 3 – Intersection Queuing for Existing (2018) plus Proposed Project Conditions (Continued)

Intersection / Analysis Scenario	Movement	AM Peak-Hour		PM Peak-Hour	
		Available Storage (ft)	95 th % Queue (ft)	Available Storage (ft)	95 th % Queue (ft)
#6 Harvey Way @ Fiddymment Road	NBR				
Existing (2018)	220	0	220	0	
Existing (2018) plus Project					0
	SBL				
Existing (2018)	250	3	250	0	
Existing (2018) plus Project					13
	WBR				
Existing (2018)	235	3	235	3	
Existing (2018) plus Project					3
	WBLT				
Existing (2018)	180	5	180	3	
Existing (2018) plus Project					128
#7 Harvey Way @ West Project Access Driveway	NBLR				
Existing (2018)	N/A		N/A		
Existing (2018) plus Project	40	5	40	10	
#8 Harvey Way @ Oak Meadow Drive	NBR				
Existing (2018)	220	0	220	0	
Existing (2018) plus Project					3
#9 Harvey Way @ Orchard View Road	EBR				
Existing (2018)	370	3	370	3	
Existing (2018) plus Project					5
#10 Oak Meadow Drive @ South Project Access Driveway	EBR				
Existing (2018)	N/A		N/A		
Existing (2018) plus Project	25	5	25	8	
#10 Oak Meadow Drive @ South Project Access Driveway	NBL				
Existing (2018)	N/A		N/A		
Existing (2018) plus Project	120	3	120	5	
#10 Oak Meadow Drive @ South Project Access Driveway	SBR				
Existing (2018)	N/A		N/A		
Existing (2018) plus Project	200	0	200	0	

Note: Shaded results reflect locations where 95th percentile queues exceed available storage capacity

As shown in **Table 3**, two project intersections are anticipated to experience 95th percentile queues that exceed available storage at the following locations:

- Blue Oaks Boulevard and Fiddymment Road (Intersection #1)
 - o WBL movement during the PM peak-hour
- Harvey Way and Fiddymment Road (Intersection #6)
 - o WBLT movement during the PM peak-hour

Minimum Required Throat Depth (MRTD)

MRTDs were calculated for four site driveways (Intersections #2, #5, #7, and #10) under Existing (2018) plus Proposed Project conditions. **Table 4** and **Table 5** summarize the findings of the MRTD evaluation based on the City's guidelines for the AM and PM peaks, respectively. Analysis worksheets are provided in **Attachment C**.

Table 4 – MRTD at site driveways (AM Peak-Hour)

INT	TS	Approach Volume	ConflVol (Left)	ConflVol (Right)	LT Out	RT Out	RT%	Minimum Required Throat Depth (MRTD)
2	1	105		159				100
5	1	118		219				100
7	0	62	51	20	62	0	0%	25
10	0	46	77	8	10	36	78%	25

Table 5 – MRTD at site driveways (PM Peak-Hour)

INT	TS	Approach Volume	ConflVol (Left)	ConflVol (Right)	LT Out	RT Out	RT%	Minimum Required Throat Depth (MRTD)
2	1	175		266				125
5	1	195		222				150
7	0	102	38	23	102	0	0%	75
10	0	77	108	16	18	59	77%	25

The following is a summary of this evaluation:

- Intersection #2 (right-in/right-out), as currently proposed per **Exhibit 1**, has a throat depth of 140-feet, which is greater than the minimum required distance of 125-feet (PM peak-hour) that was calculated for the outbound right-turn. Based on the calculations the existing throat depth is sufficient under these conditions.
- Intersection #5 (right-in/right-out), as currently proposed per **Exhibit 1**, has a throat depth of 130-feet, which is less than the minimum required distance of 150 feet (PM peak-hour) that was calculated for the outbound right-turn. Based on the calculations the existing throat depth is insufficient under these conditions.
- Intersection #7 (full access), as currently proposed per **Exhibit 1**, has a throat depth of 35-feet, which is less than the minimum distance of 75 feet (PM peak-hour) that was calculated for the outbound right- and left-turns. Based on the calculations the existing throat depth is insufficient under these conditions.
- Intersection #10 (full access), as currently proposed per **Exhibit 1**, has a throat depth of 25-feet, which is equal to the minimum distance of 25-feet (PM peak-hour) that was calculated for the outbound right- and left-turns. Based on the calculations the existing throat depth is sufficient under these conditions.

All Way Stop Control (AWSC) Warrant Evaluation

According to Section 2B.07 of the *California Manual on Uniform Traffic Control Devices (CMUTCD)*, the total vehicle volumes entering the intersection along the main street approaches must average at least 300 vehicles over an eight-hour period to satisfy AWSC warrants. The volumes for Harvey Way at Oak Meadow Drive (Intersection # 8) and Harvey Way at Orchard View Drive (Intersection #9) are below this threshold for both the AM and PM peak-hours. Therefore, an AWSC warrant would not be satisfied at Intersections #8 and #9 under the Existing (2018) plus Proposed Project conditions.

Right- Turn Deceleration Lane

According to the City's guidelines², a right-turn deceleration lane is required when all four of the following conditions are satisfied:

- A. The driveway is located on an arterial or expressway.
- B. Right turn ingress volume is expected to exceed fifty (50) during peak hour flows on the roadway. For right turn ingress volumes between ten (10) and fifty (50) a right turn curb taper shall be constructed in conformance with the Standard Drawings.
- C. There is ample room and frontage to fit a deceleration lane as determined by the City Engineer.
- D. The travel speed of the roadway, as determined by the City Engineer, equals or exceeds 45 mph.

The requirements and conditions at the project driveways along Blue Oaks Boulevard (Intersection #2) and Fiddymment Road (Intersection #5) are summarized in **Table 6**.

Table 6 – Right Turn Deceleration Lanes

Project Driveway	Time Period	Located on Arterial or Expressway?	Right Turn Volume	Right Turn Volume over 50?	Ample Room and Frontage?	85th Percentile Travel Speed	Travel Speed ≥ 45 mph?	Deceleration Lane Appropriate?
Project Driveway #2	AM	Yes	156	Yes	Yes	51.9	Yes	Yes
	PM	Yes	233	Yes	Yes	51.9	Yes	Yes
Project Driveway #5	AM	Yes	81	Yes	Yes	52.3	Yes	Yes
	PM	Yes	121	Yes	Yes	52.3	Yes	Yes

Based on these guidelines, both driveways satisfy the need for a right turn deceleration lane. According to the Section 201 of the Highway Design Manual³ and the posted speed limit of 45 mph, the required stopping sight distance is 360 feet. Therefore, a 360-foot right-turn deceleration lane would be appropriate for both Intersection #2 (westbound) and Intersection #5 (northbound). The distance between the project driveway along Blue Oaks Boulevard (Intersection #2) and the intersection of Blue Oaks Boulevard and Oak Meadow Drive (Intersection #3) is approximately 360 feet. The right-turn deceleration lane featured in the proposed project site plan should be lengthened to accommodate this stopping sight distance. There is approximately 320 feet available between project driveway along Fiddymment Road (Intersection #5) and the intersection of Blue Oaks Boulevard and Fiddymment (Intersection #1) to the south. Given the existing bus-only striping and the site frontage design as illustrated on the project site plan, there is adequate lateral space to include a right-turn deceleration lane before the driveway. However, there is not adequate space for the entire 360 feet in length to achieve a deceleration lane that meets calculated stopping sight distance.

Conclusions

The following are the primary conclusions based on the analyses discussed herein:

- The signalized intersections at Blue Oaks Boulevard at Fiddymment Road (Intersection #1) and Blue Oak Boulevard at Orchard View (Intersection #4) both operate at LOS C or better during the Existing (2018) plus Project conditions.
- The available storage capacity at the study intersections is sufficient to accommodate the 95-percentile queue lengths under Existing (2018) plus Project conditions, with the exception of the westbound left-turn movement at Blue Oaks Boulevard and Fiddymment Road (Intersection #1) and the westbound left-thru movement at Harvey Way and Fiddymment Road (Intersection #6) during the PM peak hour.

² Section 5 Traffic Impact Studies, City of Roseville Design Standards, January 2016.

³ Section 201, Highway Design Manual, Caltrans, December 2015.

- o The 95th percentile queue for the westbound left-turn at Blue Oaks Boulevard and Fiddymment Road (Intersection #1) is anticipated to exceed the available storage by approximately 3 vehicles. These vehicles are expected to be accommodated within the existing taper and not extend into the adjacent through lane. Additionally, this calculated queue length is conservative as it represents a condition where 95 percent of the time during the peak period, queues will be at or less than the value reported in Synchro. It is recommended that the City monitor queuing at this intersection approach during the peak hours and perform signal timing adjustments as needed.
- o The 95th percentile queue for the westbound left-turn at Harvey Way and Fiddymment Road (Intersection #6) is anticipated to exceed the available storage by approximately 4 vehicles. This condition may restrict access for vehicles making a northbound left-turn out from the project driveway along Harvey Drive (Intersection #7) and potentially result in on-site queues at the project driveway which would block inbound vehicles from Harvey Drive. It is recommended that the western project driveway along Harvey Way (Intersection #7) be restricted to right-turn in/out movements with installation of a narrow-raised median along Harvey Way and the addition of appropriate signing and striping at the driveway approach. This driveway access restriction will extend the storage capacity of the westbound approach back to the easterly driveway along Harvey Way, resulting in sufficient storage capacity. Vehicles assumed to make a left-turn out of the western project driveway would be rerouted to the site driveways along Fiddymment Road (Intersection #5) and eastern project driveway along Harvey Road. The rerouted vehicles are anticipated to be adequately accommodated at these project driveways.
- The volumes at the intersections of Harvey Way at Oak Meadow Drive (Intersection # 8) and Harvey Way at Orchard View Drive (Intersection #9) do not satisfy AWSC warrants. The existing SSSC control at both intersections are appropriate under the Existing (2018) plus Project conditions.
- The site driveway along Fiddymment Road (Intersection #5) and western site driveway along Harvey Way (Intersection #7) have deficient Minimum Required Throat Depth (MRTD). At Intersection #5, the MRTD exceeds the available throat depth by one vehicle length. The MRTD should be provided by installing “KEEP CLEAR” signing and pavement marking within the driveway intersection with the upstream drive aisle to minimize the potential for driveway blockage. There is also a MRTD deficiency at the western project driveway along Harvey Way (Intersection #7). However, this deficiency will also be resolved by restricting driveway access to right-turn in/out movements. The outbound vehicles will be rerouted to the site driveways along Fiddymment Road (Intersection #5) and eastern project driveway along Harvey Road, as described above.
- Right-turn deceleration lanes are appropriate for the project driveways along Blue Oaks Boulevard (Intersection #2) and Fiddymment Road (Intersection #5). As shown on the proposed project site plan, the design accommodates a northbound right-turn deceleration lane along Fiddymment Road, however the available distance is less than the required stopping sight distance. The deceleration lane along westbound Blue Oaks Boulevard approaching Intersection #2 should be lengthened to 360 feet to adequately accommodate slowing vehicles entering the site.

Attachments:

Exhibit 1 – Project Site Plan

Exhibit 2 – Study Intersections

Exhibit 3 – Study Intersections, Traffic Control, and Lane Geometries

Exhibit 4 – Existing (2018) Peak-Hour Volumes

Exhibit 5 – Project Trip Distribution

Exhibit 6 – Project Only Volumes

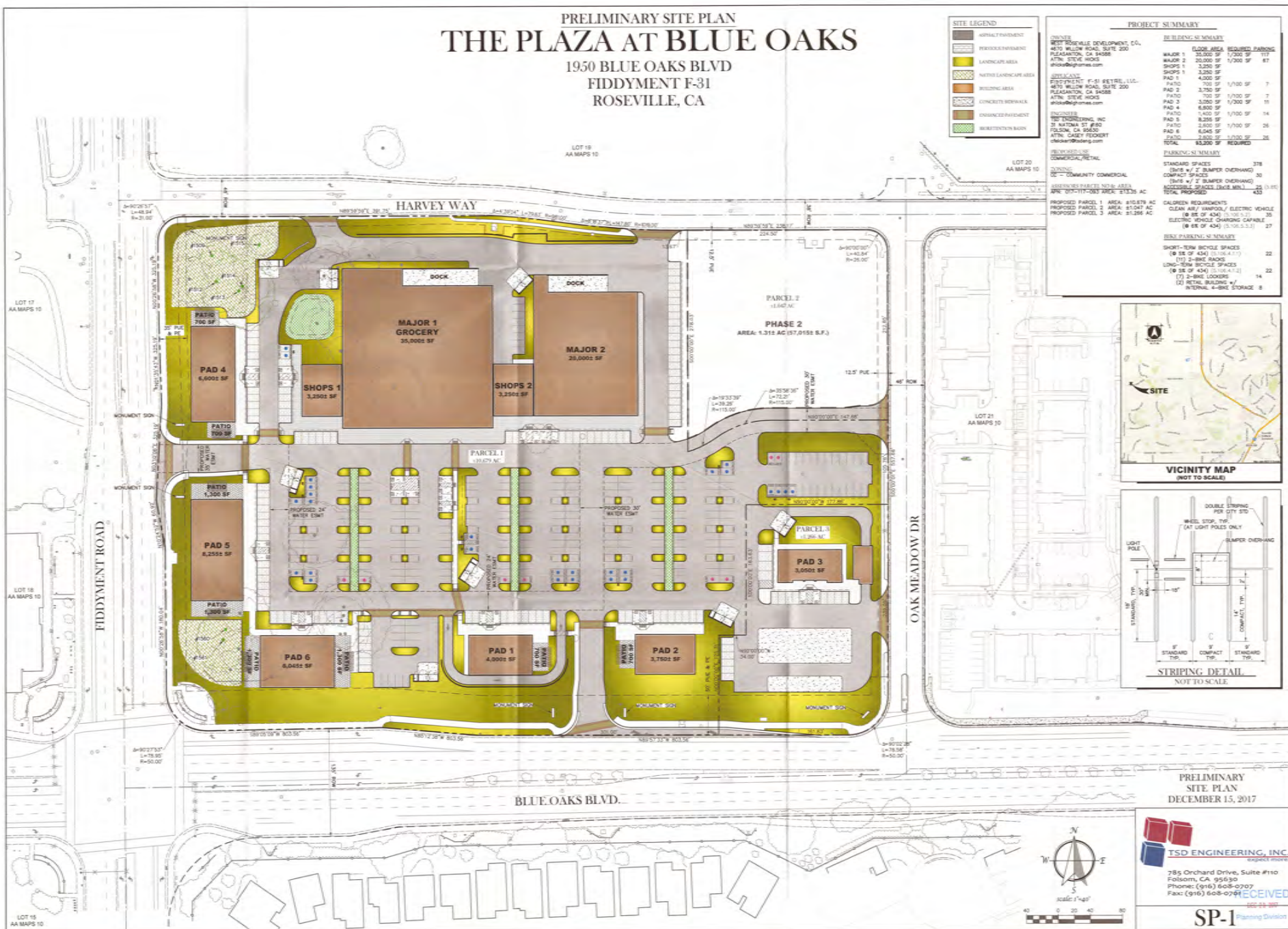
Exhibit 7 – Existing (2018) plus Proposed Project Volumes

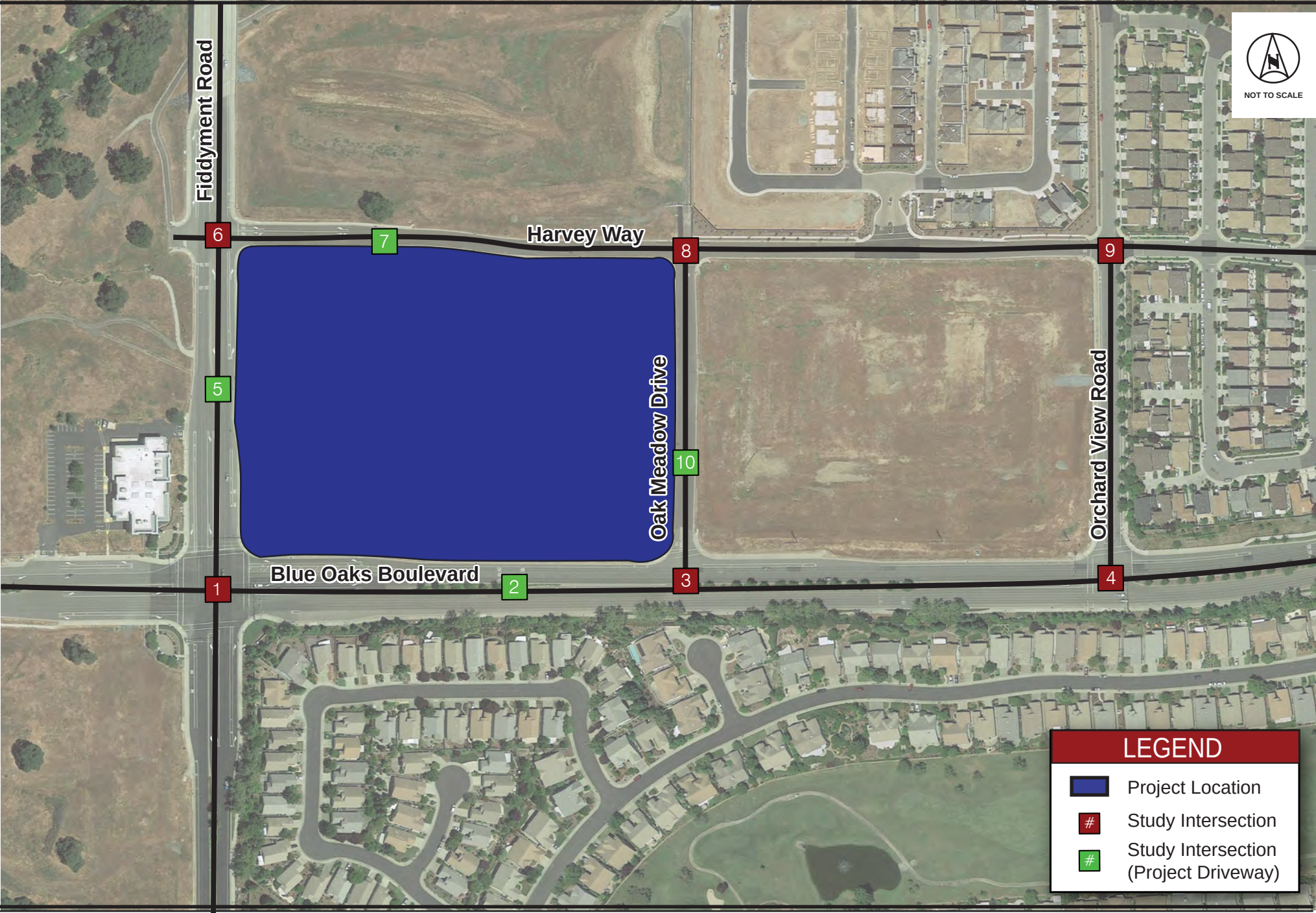
Attachment A – Traffic Count Data Sheets

Attachment B – Signalized Intersection Queuing and Operations Synchro Analysis Worksheets

Attachment C – Minimum Required Throat Depth (MRTD) Analysis Worksheet

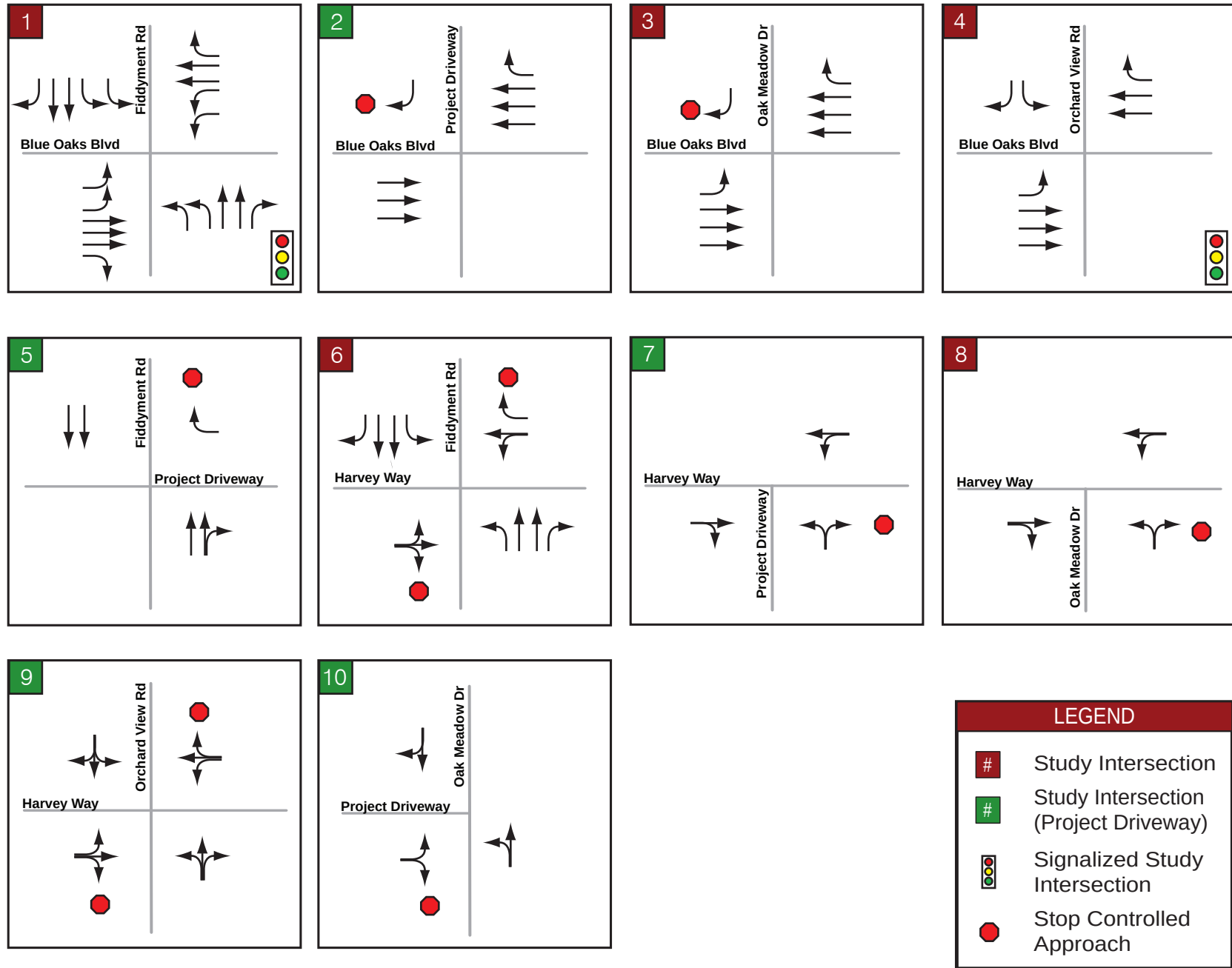
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THE PLAZA AT BLUE OAKS
1950 BLUE OAKS BLVD
FIDDYMONT F-31
ROSEVILLE, CA

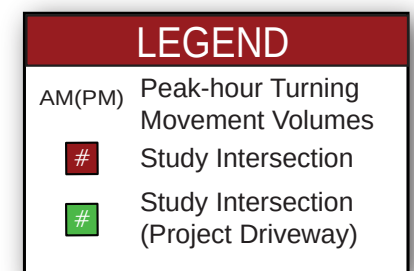
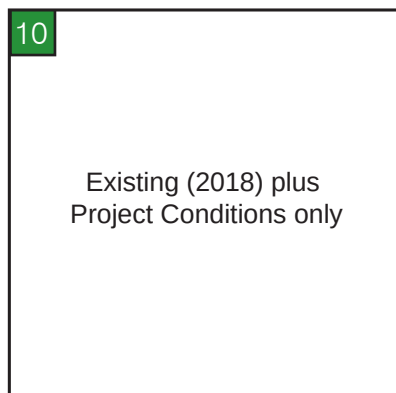
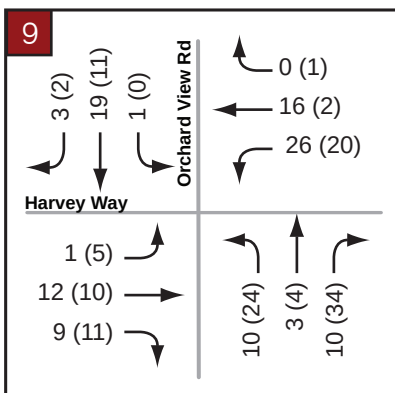
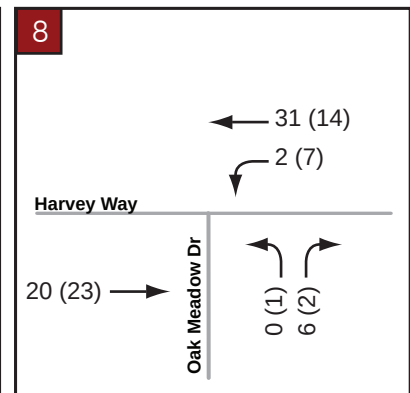
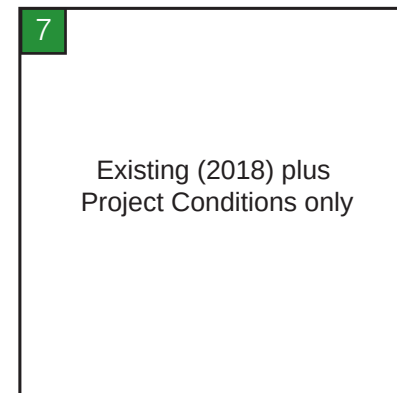
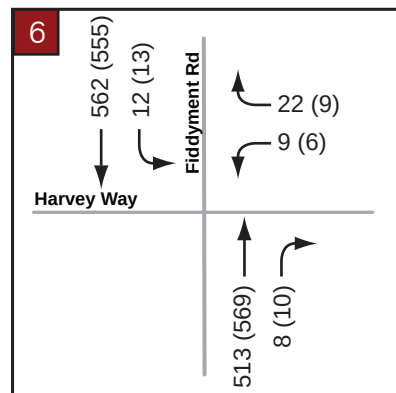
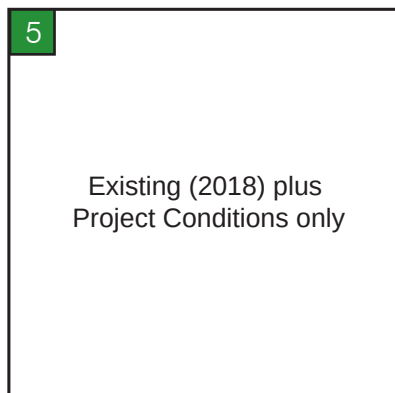
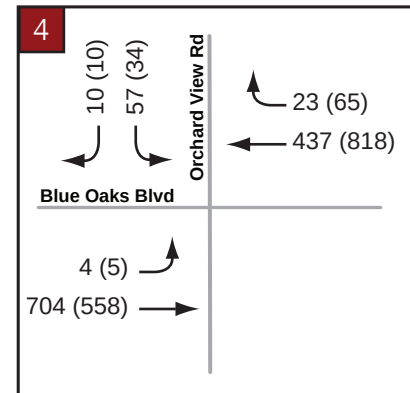
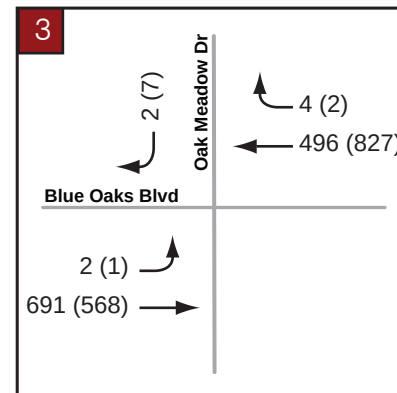
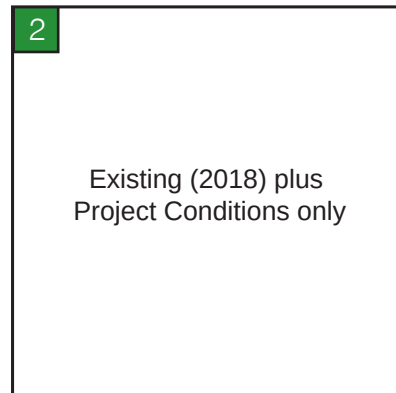
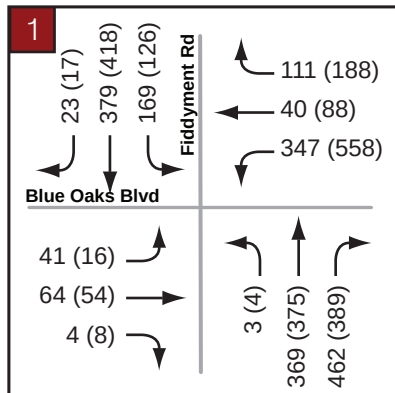




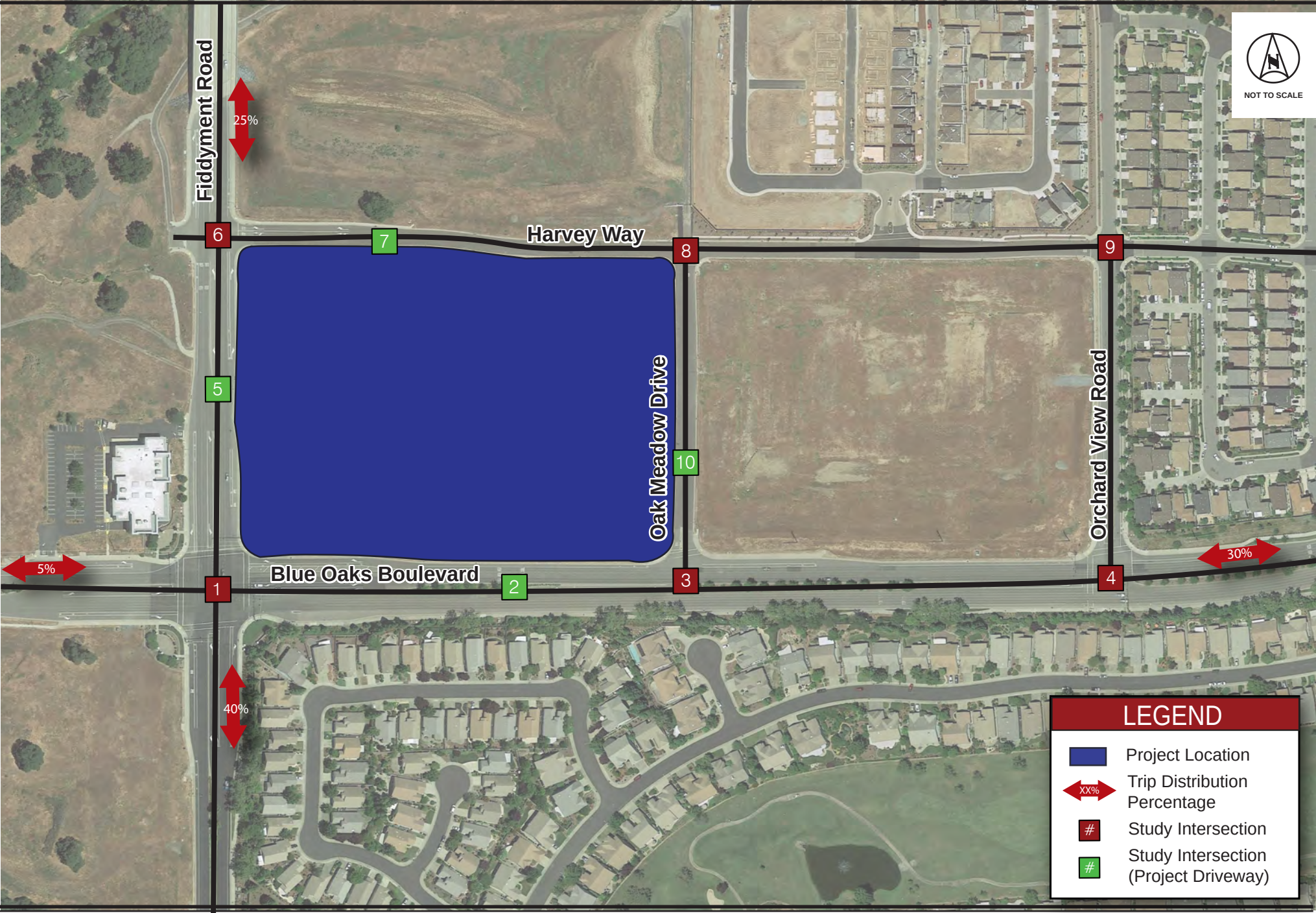
LEGEND

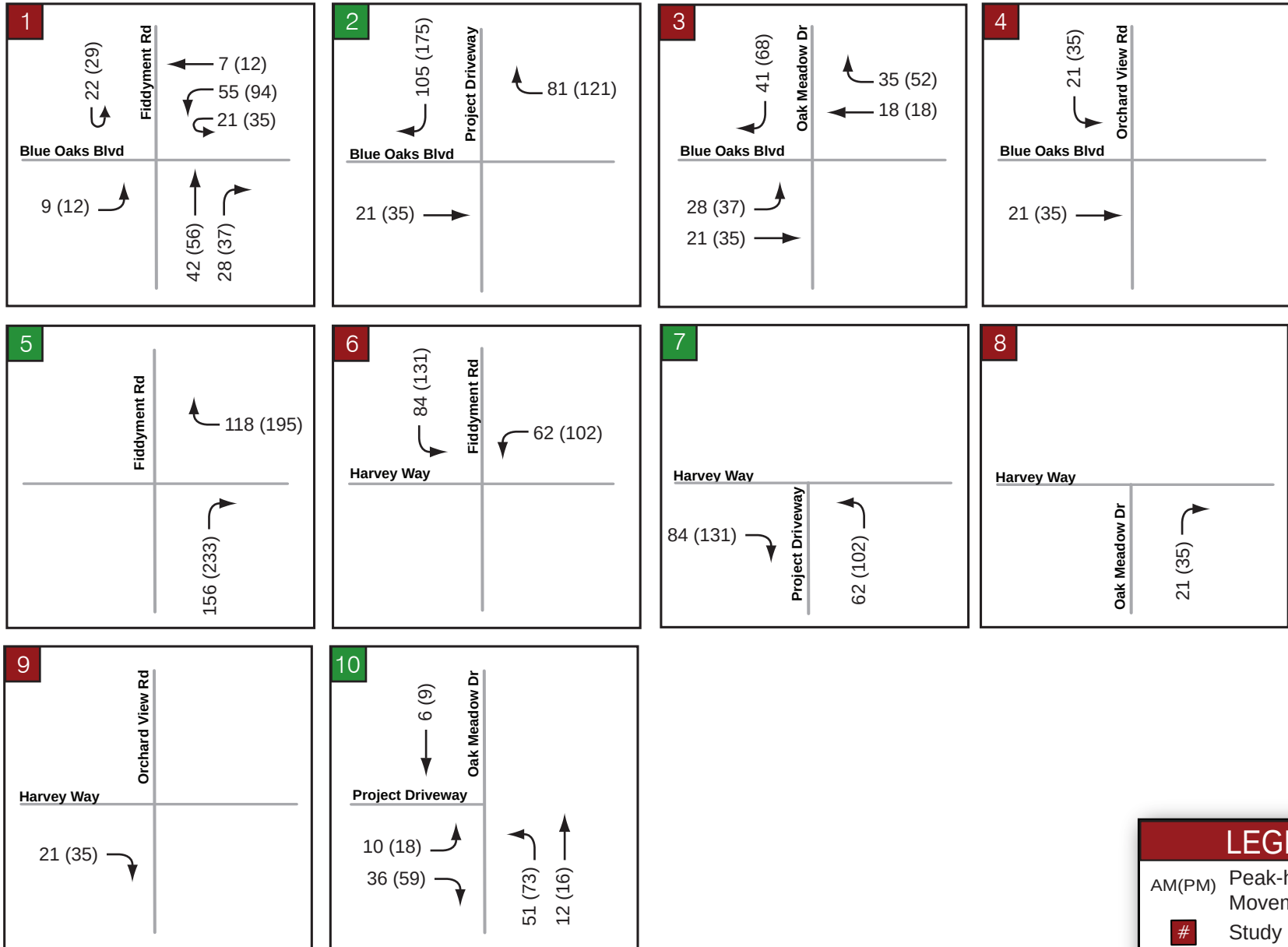
- Project Location
- Study Intersection
- Study Intersection (Project Driveway)



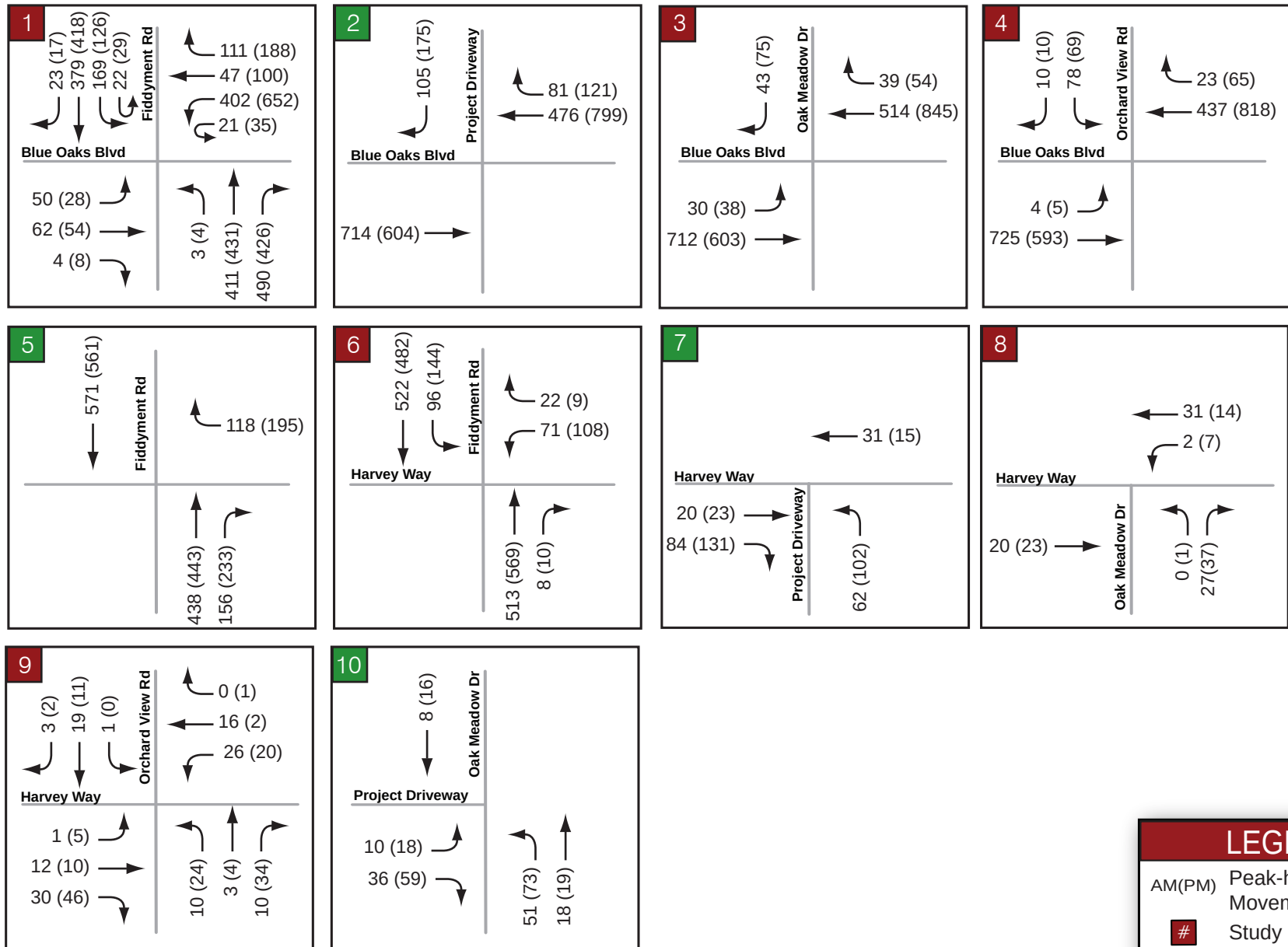


The Plaza at Blue Oaks





LEGEND	
AM(PM)	Peak-hour Turning Movement Volumes
#	Study Intersection
#	Study Intersection (Project Driveway)



LEGEND	
AM(PM)	Peak-hour Turning Movement Volumes
#	Study Intersection
#	Study Intersection (Project Driveway)

Attachment A
Traffic Count Data Sheets



Turning Movement Volume Report

Report Date: 3/15/2018 11:18:46 AM

From 3/6/2018 to 3/8/2018

Intersection: 154

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
03/06/18 00:00-00:15				0	1		0	1	0	5		5		15	0	15	21
03/06/18 00:15-00:30				0	0		0	0	0	7		7		5	1	6	13
03/06/18 00:30-00:45				0	0		1	1	0	6		6		9	0	9	16
03/06/18 00:45-01:00				0	0		0	0	0	6		6		7	1	8	14
03/06/18 01:00-01:15				0	0		0	0	0	0		0		4	0	4	4
03/06/18 01:15-01:30				0	0		0	0	0	2		2		6	1	7	9
03/06/18 01:30-01:45				0	0		0	0	0	2		2		3	0	3	5
03/06/18 01:45-02:00				0	0		0	0	0	2		2		3	0	3	5
03/06/18 02:00-02:15				0	0		0	0	0	4		4		3	0	3	7
03/06/18 02:15-02:30				0	0		0	0	0	0		0		2	0	2	2
03/06/18 02:30-02:45				0	0		0	0	0	5		5		6	0	6	11
03/06/18 02:45-03:00				0	0		0	0	0	3		3		2	0	2	5
03/06/18 03:00-03:15				0	1		0	1	0	5		5		4	0	4	10
03/06/18 03:15-03:30				0	0		0	0	0	4		4		3	0	3	7
03/06/18 03:30-03:45				0	2		0	2	1	5		6		5	0	5	13
03/06/18 03:45-04:00				0	1		0	1	0	7		7		3	2	5	13
03/06/18 04:00-04:15				0	3		0	3	0	14		14		3	0	3	20
03/06/18 04:15-04:30				0	0		1	1	0	7		7		6	0	6	14
03/06/18 04:30-04:45				0	1		0	1	0	12		12		7	1	8	21
03/06/18 04:45-05:00				0	3		0	3	0	19		19		5	1	6	28
03/06/18 05:00-05:15				0	6		0	6	0	30		30		5	1	6	42
03/06/18 05:15-05:30				0	3		1	4	0	29		29		9	0	9	42
03/06/18 05:30-05:45				0	4		0	4	0	40		40		10	0	10	54
03/06/18 05:45-06:00				0	6		0	6	0	45		45		16	0	16	67
03/06/18 06:00-06:15				0	7		0	7	0	63		63		17	0	17	87
03/06/18 06:15-06:30				0	7		0	7	0	52		52		52	3	55	114
03/06/18 06:30-06:45				0	4		1	5	0	63		63		51	2	53	121
03/06/18 06:45-07:00				0	7		5	12	0	87		87		92	6	98	197
03/06/18 07:00-07:15				0	7		2	9	0	105		105		95	5	100	214
03/06/18 07:15-07:30				0	12		4	16	0	142		142		111	3	114	272
03/06/18 07:30-07:45				0	19		3	22	1	202		203		103	3	106	331
03/06/18 07:45-08:00				0	15		3	18	0	197		197		115	4	119	334
03/06/18 08:00-08:15				0	17		1	18	0	206		206		112	8	120	344
03/06/18 08:15-08:30				0	8		4	12	3	131		134		106	7	113	259
03/06/18 08:30-08:45				0	10		5	15	0	160		160		106	4	110	285
03/06/18 08:45-09:00				0	17		3	20	0	173		173		120	5	125	318
03/06/18 09:00-09:15				0	13		0	13	1	160		161		98	4	102	276
03/06/18 09:15-09:30				0	7		1	8	1	137		138		85	5	90	236
03/06/18 09:30-09:45				0	9		1	10	0	99		99		73	2	75	184
03/06/18 09:45-10:00				0	8		0	8	0	84		84		66	2	68	160
03/06/18 10:00-10:15				0	4		2	6	0	97		97		64	3	67	170
03/06/18 10:15-10:30				0	7		0	7	1	102		103		87	6	93	203
03/06/18 10:30-10:45				0	9		7	16	2	82		84		65	5	70	170
03/06/18 10:45-11:00				0	5		0	5	1	98		99		88	3	91	195
03/06/18 11:00-11:15				0	9		1	10	0	95		95		79	6	85	190
03/06/18 11:15-11:30				0	10		2	12	0	88		88		71	2	73	173
03/06/18 11:30-11:45				0	8		0	8	1	86		87		82	13	95	190
03/06/18 11:45-12:00				0	11		2	13	0	103		103		102	5	107	223
03/06/18 12:00-12:15				0	5		2	7	0	88		88		98	3	101	196
03/06/18 12:15-12:30				0	11		1	12	1	89		90		86	6	92	194
03/06/18 12:30-12:45				0	7		2	9	0	83		83		89	11	100	192
03/06/18 12:45-13:00				0	4		4	8	0	84		84		101	8	109	201
03/06/18 13:00-13:15				0	2		2	4	1	96		97		92	5	97	198

03/06/18 13:15-13:30			0	6	0	6	1	90	91	83	8	91	188
03/06/18 13:30-13:45			0	5	2	7	0	96	96	97	9	106	209
03/06/18 13:45-14:00			0	6	1	7	0	100	100	113	5	118	225
03/06/18 14:00-14:15			0	5	2	7	1	83	84	94	9	103	194
03/06/18 14:15-14:30			0	14	3	17	0	100	100	115	5	120	237
03/06/18 14:30-14:45			0	3	6	9	1	105	106	103	6	109	224
03/06/18 14:45-15:00			0	8	1	9	2	91	93	128	5	133	235
03/06/18 15:00-15:15			0	12	0	12	0	98	98	166	6	172	282
03/06/18 15:15-15:30			0	6	2	8	1	114	115	144	15	159	282
03/06/18 15:30-15:45			0	9	2	11	2	131	133	184	8	192	336
03/06/18 15:45-16:00			0	11	1	12	4	113	117	143	10	153	282
03/06/18 16:00-16:15			0	4	1	5	0	104	104	156	15	171	280
03/06/18 16:15-16:30			0	5	0	5	0	120	120	156	3	159	284
03/06/18 16:30-16:45			0	6	1	7	0	137	137	165	12	177	321
03/06/18 16:45-17:00			0	6	4	10	1	122	123	166	12	178	311
03/06/18 17:00-17:15			0	9	0	9	0	125	125	184	12	196	330
03/06/18 17:15-17:30			0	8	5	13	1	127	128	206	15	221	362
03/06/18 17:30-17:45			0	7	5	12	3	124	127	195	18	213	352
03/06/18 17:45-18:00			0	8	2	10	0	168	168	190	20	210	388
03/06/18 18:00-18:15			0	11	1	12	2	140	142	160	6	166	320
03/06/18 18:15-18:30			0	4	1	5	2	134	136	155	18	173	314
03/06/18 18:30-18:45			0	10	0	10	1	106	107	138	17	155	272
03/06/18 18:45-19:00			0	3	0	3	0	129	129	139	12	151	283
03/06/18 19:00-19:15			0	6	1	7	0	94	94	126	12	138	239
03/06/18 19:15-19:30			0	2	3	5	2	84	86	105	15	120	211
03/06/18 19:30-19:45			0	5	3	8	3	50	53	112	10	122	183
03/06/18 19:45-20:00			0	5	0	5	1	43	44	125	7	132	181
03/06/18 20:00-20:15			0	6	0	6	2	47	49	103	5	108	163
03/06/18 20:15-20:30			0	1	0	1	2	36	38	86	6	92	131
03/06/18 20:30-20:45			0	8	2	10	1	51	52	76	6	82	144
03/06/18 20:45-21:00			0	1	0	1	1	34	35	76	4	80	116
03/06/18 21:00-21:15			0	0	0	0	1	26	27	63	7	70	97
03/06/18 21:15-21:30			0	2	1	3	1	35	36	68	7	75	114
03/06/18 21:30-21:45			0	2	1	3	0	31	31	76	7	83	117
03/06/18 21:45-22:00			0	3	0	3	1	31	32	51	5	56	91
03/06/18 22:00-22:15			0	5	0	5	0	17	17	34	3	37	59
03/06/18 22:15-22:30			0	0	0	0	0	20	20	42	6	48	68
03/06/18 22:30-22:45			0	2	0	2	0	19	19	23	1	24	45
03/06/18 22:45-23:00			0	2	0	2	1	16	17	20	1	21	40
03/06/18 23:00-23:15			0	0	1	1	0	11	11	22	3	25	37
03/06/18 23:15-23:30			0	0	0	0	0	8	8	23	2	25	33
03/06/18 23:30-23:45			0	0	0	0	0	6	6	22	2	24	30
03/06/18 23:45-00:00			0	2	0	2	0	12	12	17	2	19	33
03/07/18 00:00-00:15			0	0	1	1	0	4	4	21	0	21	26
03/07/18 00:15-00:30			0	0	0	0	0	3	3	19	0	19	22
03/07/18 00:30-00:45			0	0	0	0	0	5	5	11	2	13	18
03/07/18 00:45-01:00			0	0	0	0	0	5	5	6	1	7	12
03/07/18 01:00-01:15			0	0	0	0	0	2	2	5	2	7	9
03/07/18 01:15-01:30			0	0	0	0	0	2	2	8	0	8	10
03/07/18 01:30-01:45			0	0	0	0	0	2	2	2	0	2	4
03/07/18 01:45-02:00			0	0	0	0	0	3	3	5	0	5	8
03/07/18 02:00-02:15			0	0	0	0	0	2	2	5	0	5	7
03/07/18 02:15-02:30			0	0	0	0	0	1	1	0	0	0	1
03/07/18 02:30-02:45			0	0	0	0	0	1	1	5	0	5	6
03/07/18 02:45-03:00			0	0	0	0	0	3	3	4	0	4	7
03/07/18 03:00-03:15			0	0	0	0	0	2	2	6	0	6	8
03/07/18 03:15-03:30			0	1	0	1	1	4	5	6	0	6	12
03/07/18 03:30-03:45			0	1	0	1	0	1	1	2	0	2	4
03/07/18 03:45-04:00			0	2	0	2	0	10	10	3	0	3	15
03/07/18 04:00-04:15			0	2	0	2	0	9	9	3	0	3	14

03/07/18 04:15-04:30			0	0	1	1	0	8	8	5	1	6	15
03/07/18 04:30-04:45			0	2	0	2	0	14	14	5	1	6	22
03/07/18 04:45-05:00			0	2	0	2	0	21	21	4	1	5	28
03/07/18 05:00-05:15			0	5	0	5	0	29	29	10	0	10	44
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03/07/18 05:45-06:00			0	7	0	7	0	49	49	21	0	21	77
03/07/18 06:00-06:15			0	9	0	9	0	59	59	21	0	21	89
03/07/18 06:15-06:30			0	4	0	4	0	60	60	53	3	56	120
03/07/18 06:30-06:45			0	13	0	13	1	66	67	41	4	45	125
03/07/18 06:45-07:00			0	6	7	13	0	88	88	71	4	75	176
03/07/18 07:00-07:15			0	12	4	16	0	110	110	83	7	90	216
03/07/18 07:15-07:30			0	10	5	15	0	112	112	96	3	99	226
03/07/18 07:30-07:45			0	18	6	24	1	182	183	85	6	91	298
03/07/18 07:45-08:00			0	13	1	14	1	182	183	117	7	124	321
03/07/18 08:00-08:15			0	12	1	13	0	178	178	107	9	116	307
03/07/18 08:15-08:30			0	13	1	14	1	127	128	107	4	111	253
03/07/18 08:30-08:45			0	15	4	19	1	157	158	95	5	100	277
03/07/18 08:45-09:00			0	9	2	11	2	176	178	117	4	121	310
03/07/18 09:00-09:15			0	21	2	23	0	156	156	101	2	103	282
03/07/18 09:15-09:30			0	6	1	7	1	117	118	83	5	88	213
03/07/18 09:30-09:45			0	4	0	4	1	97	98	59	7	66	168
03/07/18 09:45-10:00			0	6	1	7	0	101	101	80	5	85	193
03/07/18 10:00-10:15			0	9	1	10	0	96	96	79	2	81	187
03/07/18 10:15-10:30			0	7	1	8	0	98	98	47	5	52	158
03/07/18 10:30-10:45			0	5	2	7	0	75	75	74	4	78	160
03/07/18 10:45-11:00			0	8	1	9	0	100	100	76	6	82	191
03/07/18 11:00-11:15			0	9	0	9	0	69	69	78	2	80	158
03/07/18 11:15-11:30			0	8	0	8	0	81	81	75	8	83	172
03/07/18 11:30-11:45			0	5	2	7	0	77	77	99	15	114	198
03/07/18 11:45-12:00			0	12	0	12	0	93	93	87	4	91	196
03/07/18 12:00-12:15			0	8	1	9	0	119	119	94	7	101	229
03/07/18 12:15-12:30			0	6	0	6	0	84	84	88	9	97	187
03/07/18 12:30-12:45			0	6	0	6	1	83	84	102	3	105	195
03/07/18 12:45-13:00			0	8	0	8	0	95	95	94	9	103	206
03/07/18 13:00-13:15			0	3	0	3	0	92	92	97	5	102	197
03/07/18 13:15-13:30			0	9	0	9	1	81	82	97	9	106	197
03/07/18 13:30-13:45			0	7	0	7	0	85	85	112	5	117	209
03/07/18 13:45-14:00			0	5	0	5	0	94	94	93	7	100	199
03/07/18 14:00-14:15			0	6	1	7	1	79	80	100	3	103	190
03/07/18 14:15-14:30			0	7	1	8	0	74	74	88	1	89	171
03/07/18 14:30-14:45			0	6	1	7	0	81	81	119	8	127	215
03/07/18 14:45-15:00			0	6	4	10	0	94	94	125	9	134	238
03/07/18 15:00-15:15			0	6	2	8	0	102	102	99	2	101	211
03/07/18 15:15-15:30			0	5	4	9	1	117	118	170	11	181	308
03/07/18 15:30-15:45			0	9	2	11	1	151	152	158	7	165	328
03/07/18 15:45-16:00			0	10	2	12	3	126	129	195	12	207	348
03/07/18 16:00-16:15			0	9	2	11	0	111	111	150	10	160	282
03/07/18 16:15-16:30			0	11	0	11	0	113	113	174	13	187	311
03/07/18 16:30-16:45			0	9	0	9	2	144	146	188	6	194	349
03/07/18 16:45-17:00			0	4	3	7	1	123	124	190	17	207	338
03/07/18 17:00-17:15			0	4	2	6	0	133	133	181	15	196	335
03/07/18 17:15-17:30			0	10	2	12	1	141	142	222	15	237	391
03/07/18 17:30-17:45			0	10	0	10	1	135	136	254	14	268	414
03/07/18 17:45-18:00			0	6	2	8	2	160	162	239	17	256	426
03/07/18 18:00-18:15			0	6	1	7	3	122	125	197	15	212	344
03/07/18 18:15-18:30			0	4	2	6	2	117	119	187	18	205	330
03/07/18 18:30-18:45			0	8	1	9	0	125	125	172	17	189	323
03/07/18 18:45-19:00			0	12	0	12	1	133	134	143	7	150	296
03/07/18 19:00-19:15			0	10	3	13	3	88	91	112	12	124	228

03/07/18 19:15-19:30			0	4	0	4	1	75	76	131	12	143	223
03/07/18 19:30-19:45			0	3	0	3	1	57	58	97	10	107	168
03/07/18 19:45-20:00			0	4	0	4	1	65	66	92	4	96	166
03/07/18 20:00-20:15			0	3	2	5	1	49	50	90	18	108	163
03/07/18 20:15-20:30			0	4	0	4	0	38	38	105	5	110	152
03/07/18 20:30-20:45			0	2	1	3	0	36	36	70	9	79	118
03/07/18 20:45-21:00			0	3	0	3	0	36	36	95	4	99	138
03/07/18 21:00-21:15			0	3	0	3	0	31	31	74	7	81	115
03/07/18 21:15-21:30			0	1	0	1	0	30	30	65	14	79	110
03/07/18 21:30-21:45			0	2	0	2	1	29	30	77	7	84	116
03/07/18 21:45-22:00			0	5	0	5	0	27	27	62	3	65	97
03/07/18 22:00-22:15			0	6	1	7	0	29	29	56	2	58	94
03/07/18 22:15-22:30			0	0	1	1	1	16	17	36	3	39	57
03/07/18 22:30-22:45			0	0	0	0	0	26	26	23	2	25	51
03/07/18 22:45-23:00			0	1	0	1	0	9	9	22	1	23	33
03/07/18 23:00-23:15			0	1	0	1	0	16	16	19	0	19	36
03/07/18 23:15-23:30			0	1	0	1	1	9	10	28	2	30	41
03/07/18 23:30-23:45			0	0	0	0	0	10	10	25	3	28	38
03/07/18 23:45-00:00			0	0	0	0	0	12	12	17	2	19	31
03/08/18 00:00-00:15			0	1	0	1	1	10	11	9	2	11	23
03/08/18 00:15-00:30			0	1	0	1	0	9	9	10	2	12	22
03/08/18 00:30-00:45			0	1	0	1	0	4	4	8	2	10	15
03/08/18 00:45-01:00			0	0	0	0	0	6	6	12	0	12	18
03/08/18 01:00-01:15			0	0	0	0	0	7	7	8	1	9	16
03/08/18 01:15-01:30			0	0	0	0	0	4	4	5	0	5	9
03/08/18 01:30-01:45			0	0	0	0	0	3	3	3	1	4	7
03/08/18 01:45-02:00			0	0	0	0	0	1	1	6	0	6	7
03/08/18 02:00-02:15			0	0	0	0	0	0	0	1	0	1	1
03/08/18 02:15-02:30			0	0	0	0	0	3	3	3	1	4	7
03/08/18 02:30-02:45			0	0	0	0	0	0	0	4	1	5	5
03/08/18 02:45-03:00			0	0	0	0	0	3	3	1	0	1	4
03/08/18 03:00-03:15			0	0	0	0	0	3	3	3	0	3	6
03/08/18 03:15-03:30			0	0	0	0	0	7	7	2	0	2	9
03/08/18 03:30-03:45			0	1	1	2	1	7	8	4	0	4	14
03/08/18 03:45-04:00			0	2	0	2	0	9	9	2	1	3	14
03/08/18 04:00-04:15			0	2	0	2	0	10	10	3	0	3	15
03/08/18 04:15-04:30			0	0	0	0	0	7	7	6	1	7	14
03/08/18 04:30-04:45			0	2	0	2	0	8	8	7	0	7	17
03/08/18 04:45-05:00			0	4	0	4	0	23	23	7	2	9	36
03/08/18 05:00-05:15			0	0	0	0	0	35	35	8	0	8	43
03/08/18 05:15-05:30			0	5	0	5	0	15	15	11	0	11	31
03/08/18 05:30-05:45			0	4	0	4	0	37	37	14	0	14	55
03/08/18 05:45-06:00			0	3	1	4	0	51	51	24	1	25	80
03/08/18 06:00-06:15			0	4	1	5	0	65	65	26	1	27	97
03/08/18 06:15-06:30			0	10	0	10	0	51	51	44	3	47	108
03/08/18 06:30-06:45			0	5	0	5	0	65	65	43	5	48	118
03/08/18 06:45-07:00			0	11	5	16	0	75	75	68	6	74	165
03/08/18 07:00-07:15			0	11	6	17	0	109	109	86	5	91	217
03/08/18 07:15-07:30			0	14	4	18	0	140	140	82	3	85	243
03/08/18 07:30-07:45			0	13	3	16	1	193	194	111	4	115	325
03/08/18 07:45-08:00			0	10	1	11	0	202	202	124	3	127	340
03/08/18 08:00-08:15			0	16	2	18	0	192	192	124	3	127	337
03/08/18 08:15-08:30			0	14	1	15	0	117	117	94	7	101	233
03/08/18 08:30-08:45			0	13	2	15	2	172	174	107	6	113	302
03/08/18 08:45-09:00			0	12	2	14	1	186	187	106	5	111	312
03/08/18 09:00-09:15			0	11	1	12	1	186	187	84	2	86	285
03/08/18 09:15-09:30			0	12	0	12	1	126	127	78	8	86	225
03/08/18 09:30-09:45			0	10	0	10	1	110	111	80	2	82	203
03/08/18 09:45-10:00			0	13	0	13	0	98	98	86	4	90	201
03/08/18 10:00-10:15			0	7	0	7	0	92	92	75	8	83	182

03/08/18 10:15-10:30				0	5		1	6	0	104		104		67	5	72	182
03/08/18 10:30-10:45				0	8		1	9	0	110		110		68	5	73	192
03/08/18 10:45-11:00				0	6		1	7	0	74		74		91	5	96	177
03/08/18 11:00-11:15				0	4		5	9	0	87		87		83	5	88	184
03/08/18 11:15-11:30				0	12		2	14	0	79		79		78	5	83	176
03/08/18 11:30-11:45				0	11		3	14	0	100		100		87	2	89	203
03/08/18 11:45-12:00				0	10		0	10	0	90		90		88	6	94	194
03/08/18 12:00-12:15				0	3		2	5	0	96		96		109	10	119	220
03/08/18 12:15-12:30				0	5		0	5	1	90		91		99	8	107	203
03/08/18 12:30-12:45				0	11		0	11	1	92		93		103	5	108	212
03/08/18 12:45-13:00				0	5		2	7	0	91		91		103	9	112	210
03/08/18 13:00-13:15				0	5		0	5	0	88		88		112	7	119	212
03/08/18 13:15-13:30				0	3		0	3	0	90		90		97	5	102	195
03/08/18 13:30-13:45				0	9		1	10	0	99		99		102	10	112	221
03/08/18 13:45-14:00				0	4		2	6	1	100		101		98	6	104	211
03/08/18 14:00-14:15				0	4		2	6	0	83		83		128	7	135	224
03/08/18 14:15-14:30				0	6		0	6	0	80		80		94	2	96	182
03/08/18 14:30-14:45				0	9		4	13	0	83		83		117	9	126	222
03/08/18 14:45-15:00				0	6		0	6	1	98		99		128	7	135	240
03/08/18 15:00-15:15				0	12		1	13	0	102		102		129	6	135	250
03/08/18 15:15-15:30				0	5		3	8	1	121		122		175	13	188	318
03/08/18 15:30-15:45				0	11		1	12	0	123		123		172	6	178	313
03/08/18 15:45-16:00				0	8		1	9	1	123		124		178	9	187	320
03/08/18 16:00-16:15				0	5		1	6	0	136		136		189	13	202	344
03/08/18 16:15-16:30				0	3		2	5	0	140		140		161	11	172	317
03/08/18 16:30-16:45				0	11		2	13	1	123		124		149	11	160	297
03/08/18 16:45-17:00				0	8		2	10	1	122		123		186	11	197	330
03/08/18 17:00-17:15				0	10		2	12	0	139		139		193	14	207	358
03/08/18 17:15-17:30				0	8		1	9	2	118		120		207	13	220	349
03/08/18 17:30-17:45				0	9		2	11	1	143		144		188	17	205	360
03/08/18 17:45-18:00				0	10		2	12	1	156		157		190	19	209	378
03/08/18 18:00-18:15				0	12		1	13	2	125		127		155	14	169	309
03/08/18 18:15-18:30				0	5		1	6	0	121		121		138	15	153	280
03/08/18 18:30-18:45				0	8		1	9	4	133		137		168	24	192	338
03/08/18 18:45-19:00				0	6		1	7	2	110		112		139	11	150	269
03/08/18 19:00-19:15				0	8		1	9	0	113		113		125	10	135	257
03/08/18 19:15-19:30				0	4		0	4	0	77		77		105	5	110	191
03/08/18 19:30-19:45				0	7		1	8	0	71		71		112	12	124	203
03/08/18 19:45-20:00				0	1		0	1	1	57		58		89	14	103	162
03/08/18 20:00-20:15				0	11		0	11	1	39		40		112	8	120	171
03/08/18 20:15-20:30				0	4		0	4	0	50		50		90	5	95	149
03/08/18 20:30-20:45				0	4		1	5	1	32		33		73	8	81	119
03/08/18 20:45-21:00				0	4		0	4	1	40		41		88	3	91	136
03/08/18 21:00-21:15				0	2		1	3	0	35		35		94	4	98	136
03/08/18 21:15-21:30				0	1		0	1	0	40		40		72	8	80	121
03/08/18 21:30-21:45				0	3		1	4	0	37		37		72	6	78	119
03/08/18 21:45-22:00				0	3		0	3	2	32		34		52	5	57	94
03/08/18 22:00-22:15				0	6		1	7	0	18		18		48	9	57	82
03/08/18 22:15-22:30				0	2		0	2	0	28		28		31	6	37	67
03/08/18 22:30-22:45				0	0		1	1	0	38		38		38	5	43	82
03/08/18 22:45-23:00				0	2		2	4	0	12		12		20	3	23	39
03/08/18 23:00-23:15				0	1		0	1	0	12		12		33	2	35	48
03/08/18 23:15-23:30				0	0		0	0	1	14		15		22	0	22	37
03/08/18 23:30-23:45				0	1		0	1	0	12		12		20	2	22	35
03/08/18 23:45-00:00				0	0		2	2	0	7		7		20	2	22	31
Summary	0	0	0	0	1559	0	289	1848	129	20509	0	20638	0	22303	1556	23859	46345

National Data & Surveying Services Intersection Turning Movement Count

Location: Oak Meadow Dr & Blue Oaks Blvd

City: Roseville

Control: 1-Way Stop(SB)

Project ID: 18-07057-001

Date: 2/27/2018

Total

NS/EW Streets:	Oak Meadow Dr				Oak Meadow Dr				Blue Oaks Blvd				Blue Oaks Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	3 ET	0 ER	0 EU	0 WL	4 WT	0 WR	0 WU	
6:00 AM	0	0	0	0	0	0	0	0	1	56	0	0	0	52	0	0	109
6:15 AM	0	0	0	0	0	0	0	0	1	67	0	0	0	47	1	0	116
6:30 AM	0	0	0	0	0	0	0	0	1	89	0	0	0	68	2	0	160
6:45 AM	0	0	0	0	0	0	1	0	2	106	0	1	0	91	4	0	205
7:00 AM	0	0	0	0	0	0	1	0	0	153	0	0	0	109	0	0	263
7:15 AM	0	0	0	0	0	0	0	0	1	164	0	0	0	121	1	0	287
7:30 AM	0	0	0	0	0	0	1	0	0	186	0	0	0	132	1	0	320
7:45 AM	0	0	0	0	0	0	0	0	0	188	0	0	0	134	0	0	322
8:00 AM	0	0	0	0	0	0	0	0	2	131	0	0	0	116	1	0	250
8:15 AM	0	0	0	0	0	0	0	0	1	161	0	0	0	108	0	0	270
8:30 AM	0	0	0	0	0	0	1	0	2	192	0	0	0	110	1	0	306
8:45 AM	0	0	0	0	0	0	1	0	0	136	0	0	0	100	0	0	237
9:00 AM																	0
9:15 AM																	0
9:30 AM																	0
9:45 AM																	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	5	0	11	1629	0	1	0	1188	11	0	2845
					0.00%	0.00%	100.00%	0.00%	0.67%	99.27%	0.00%	0.06%	0.00%	99.08%	0.92%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	0	1	691	0	0	0	496	2	0	1192
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.919	0.000	0.000	0.000	0.925	0.500	0.000	0.925
							0.500				0.920				0.929		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	3 ET	0 ER	0 EU	0 WL	4 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	2	0	0	146	0	0	0	135	1	0	284
4:15 PM	0	0	0	0	0	0	0	0	1	131	0	1	0	158	0	0	291
4:30 PM	0	0	0	0	0	0	1	0	1	130	0	0	0	153	1	0	286
4:45 PM	0	0	0	0	0	0	0	0	0	138	0	0	0	174	0	0	312
5:00 PM	0	0	0	0	0	0	0	0	0	120	0	0	0	189	0	0	309
5:15 PM	0	0	0	0	0	0	2	0	0	146	0	0	0	200	0	0	348
5:30 PM	0	0	0	0	0	0	5	0	1	147	0	0	0	213	2	0	368
5:45 PM	0	0	0	0	0	0	0	0	0	155	0	0	0	192	0	0	347
6:00 PM	0	0	0	0	0	0	0	0	0	97	0	0	0	160	0	0	257
6:15 PM	0	0	0	0	0	0	0	0	0	115	0	0	0	143	0	0	258
6:30 PM	0	0	0	0	0	0	1	0	0	123	0	0	0	152	0	0	276
6:45 PM	0	0	0	0	0	0	0	0	0	87	0	0	0	114	0	0	201
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	11	0	3	1535	0	1	0	1983	4	0	3537
					0.00%	0.00%	100.00%	0.00%	0.19%	99.74%	0.00%	0.06%	0.00%	99.80%	0.20%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	7	0	1	568	0	0	0	794	2	0	1372
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.000	0.250	0.916	0.000	0.000	0.000	0.932	0.250	0.000	0.932
							0.350				0.918				0.926		



Turning Movement Volume Report

Report Date: 3/15/2018 11:14:25 AM

From 3/6/2018 to 3/8/2018

Intersection: 155

Time	N				S				E				W				Int Total
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
03/06/18 00:00-00:15	0	13	2	15	3	11	0	14	0	0	0	0	6	2	7	15	44
03/06/18 00:15-00:30	0	3	4	7	3	16	1	20	0	0	0	0	2	1	2	5	32
03/06/18 00:30-00:45	0	6	5	11	0	23	0	23	0	1	0	1	6	3	1	10	45
03/06/18 00:45-01:00	0	8	5	13	0	10	0	10	2	1	0	3	3	3	1	7	33
03/06/18 01:00-01:15	0	4	0	4	0	11	0	11	0	0	0	0	4	0	0	4	19
03/06/18 01:15-01:30	0	6	1	7	2	17	0	19	0	0	0	0	3	0	3	6	32
03/06/18 01:30-01:45	0	9	1	10	0	7	0	7	0	0	0	0	2	0	1	3	20
03/06/18 01:45-02:00	0	6	2	8	0	13	0	13	0	0	0	0	2	1	0	3	24
03/06/18 02:00-02:15	0	2	2	4	1	9	0	10	0	0	0	0	2	1	0	3	17
03/06/18 02:15-02:30	0	1	0	1	0	9	0	9	0	0	0	0	1	0	0	1	11
03/06/18 02:30-02:45	0	7	4	11	0	14	0	14	0	1	0	1	4	2	1	7	33
03/06/18 02:45-03:00	0	4	2	6	1	11	0	12	0	0	0	0	2	0	0	2	20
03/06/18 03:00-03:15	0	2	5	7	0	6	0	6	0	0	0	0	3	0	1	4	17
03/06/18 03:15-03:30	0	6	5	11	0	4	0	4	0	0	0	0	3	0	0	3	18
03/06/18 03:30-03:45	0	2	4	6	0	5	0	5	0	1	0	1	2	0	1	3	15
03/06/18 03:45-04:00	0	3	6	9	1	7	1	9	0	0	0	0	3	0	0	3	21
03/06/18 04:00-04:15	0	8	9	17	1	7	0	8	0	4	0	4	2	0	2	4	33
03/06/18 04:15-04:30	0	4	5	9	2	9	0	11	0	1	0	1	6	0	0	6	27
03/06/18 04:30-04:45	0	7	10	17	1	11	0	12	0	1	0	1	6	0	2	8	38
03/06/18 04:45-05:00	0	7	12	19	2	5	0	7	0	5	0	5	5	0	0	5	36
03/06/18 05:00-05:15	0	9	17	26	9	12	0	21	0	3	0	3	4	0	1	5	55
03/06/18 05:15-05:30	0	18	16	34	15	16	0	31	1	3	0	4	7	1	2	10	79
03/06/18 05:30-05:45	0	22	16	38	16	19	1	36	0	4	0	4	9	0	1	10	88
03/06/18 05:45-06:00	0	33	27	60	12	28	0	40	1	6	0	7	13	1	2	16	123
03/06/18 06:00-06:15	0	39	42	81	11	36	0	47	2	11	1	14	15	0	2	17	159
03/06/18 06:15-06:30	0	33	35	68	12	38	0	50	0	5	0	5	38	5	6	49	172
03/06/18 06:30-06:45	0	53	41	94	20	53	0	73	0	8	0	8	40	3	7	50	225
03/06/18 06:45-07:00	1	72	64	137	14	85	3	102	5	9	2	16	74	1	22	97	352
03/06/18 07:00-07:15	0	87	76	163	23	83	0	106	3	15	1	19	56	7	27	90	378
03/06/18 07:15-07:30	0	79	95	174	34	108	0	142	1	14	0	15	73	2	35	110	441
03/06/18 07:30-07:45	1	93	150	244	34	103	5	142	4	19	0	23	87	4	17	108	517
03/06/18 07:45-08:00	1	96	128	225	44	101	2	147	7	23	0	30	91	10	20	121	523
03/06/18 08:00-08:15	0	81	151	232	40	75	2	117	2	13	1	16	79	10	28	117	482
03/06/18 08:15-08:30	0	93	92	185	32	78	5	115	8	12	0	20	74	10	26	110	430
03/06/18 08:30-08:45	0	112	110	222	29	100	1	130	12	27	0	39	74	7	24	105	496
03/06/18 08:45-09:00	2	83	102	187	60	112	17	189	18	13	1	32	94	9	29	132	540
03/06/18 09:00-09:15	0	77	121	198	35	81	13	129	7	13	0	20	75	13	15	103	450
03/06/18 09:15-09:30	1	70	77	148	41	52	2	95	2	12	0	14	47	8	31	86	343
03/06/18 09:30-09:45	0	61	65	126	31	49	0	80	1	8	0	9	48	6	24	78	293
03/06/18 09:45-10:00	0	54	59	113	23	63	0	86	1	6	0	7	40	2	25	67	273
03/06/18 10:00-10:15	0	53	60	113	29	34	0	63	0	7	0	7	39	9	21	69	252
03/06/18 10:15-10:30	1	55	53	109	44	42	0	86	3	6	0	9	57	9	26	92	296
03/06/18 10:30-10:45	0	37	53	90	22	54	0	76	1	9	0	10	43	4	25	72	248
03/06/18 10:45-11:00	0	58	51	109	39	43	1	83	1	10	0	11	48	9	24	81	284
03/06/18 11:00-11:15	0	46	49	95	32	69	4	105	2	13	0	15	49	4	35	88	303
03/06/18 11:15-11:30	0	45	55	100	35	41	5	81	1	2	0	3	41	4	27	72	256
03/06/18 11:30-11:45	2	60	47	109	29	41	0	70	2	10	1	13	41	8	30	79	271
03/06/18 11:45-12:00	1	57	58	116	34	39	2	75	2	12	0	14	55	7	45	107	312
03/06/18 12:00-12:15	3	57	47	107	31	50	4	85	1	9	0	10	59	14	27	100	302
03/06/18 12:15-12:30	0	50	53	103	36	51	2	89	0	7	0	7	46	10	32	88	287
03/06/18 12:30-12:45	1	54	39	94	30	38	4	72	3	16	1	20	49	6	39	94	280
03/06/18 12:45-13:00	0	62	59	121	19	58	2	79	5	7	0	12	58	12	32	102	314
03/06/18 13:00-13:15	3	61	59	123	32	59	0	91	2	9	0	11	51	14	29	94	319
03/06/18 13:15-13:30	0	56	56	112	25	42	5	72	1	9	0	10	53	13	24	90	284

03/06/18 13:30-13:45	2	60	57	119	34	51	1	86	3	13	0	16	54	12	31	97	318
03/06/18 13:45-14:00	1	48	59	108	34	58	7	99	2	8	1	11	74	16	28	118	336
03/06/18 14:00-14:15	0	44	55	99	26	65	1	92	2	3	0	5	59	11	27	97	293
03/06/18 14:15-14:30	0	61	58	119	33	65	2	100	1	10	1	12	65	10	33	108	339
03/06/18 14:30-14:45	1	46	63	110	22	67	2	91	3	19	0	22	71	13	36	120	343
03/06/18 14:45-15:00	1	69	65	135	20	85	3	108	1	12	3	16	84	18	26	128	387
03/06/18 15:00-15:15	0	70	66	136	20	80	1	101	5	17	2	24	98	21	53	172	433
03/06/18 15:15-15:30	1	98	76	175	26	107	5	138	14	10	0	24	84	20	54	158	495
03/06/18 15:30-15:45	0	108	94	202	30	144	22	196	11	9	0	20	107	22	42	171	589
03/06/18 15:45-16:00	0	87	73	160	39	121	4	164	4	7	1	12	100	20	33	153	489
03/06/18 16:00-16:15	0	83	69	152	21	98	5	124	2	16	0	18	99	21	42	162	456
03/06/18 16:15-16:30	0	77	85	162	33	127	3	163	3	9	2	14	92	9	39	140	479
03/06/18 16:30-16:45	1	92	98	191	28	83	2	113	6	8	1	15	122	22	38	182	501
03/06/18 16:45-17:00	1	88	80	169	32	91	5	128	3	11	1	15	117	19	45	181	493
03/06/18 17:00-17:15	0	88	83	171	34	86	1	121	3	13	2	18	113	28	48	189	499
03/06/18 17:15-17:30	2	91	89	182	27	110	4	141	5	7	0	12	126	23	60	209	544
03/06/18 17:30-17:45	0	79	101	180	18	102	2	122	2	8	2	12	133	21	47	201	515
03/06/18 17:45-18:00	0	94	120	214	36	93	6	135	2	14	2	18	123	21	42	186	553
03/06/18 18:00-18:15	1	93	96	190	30	71	3	104	1	14	0	15	104	25	34	163	472
03/06/18 18:15-18:30	1	82	98	181	28	66	0	94	2	8	1	11	80	29	42	151	437
03/06/18 18:30-18:45	0	91	77	168	21	69	1	91	0	7	0	7	90	18	49	157	423
03/06/18 18:45-19:00	1	80	92	173	25	53	0	78	2	15	1	18	77	17	42	136	405
03/06/18 19:00-19:15	2	65	53	120	23	42	0	65	2	14	2	18	75	17	37	129	332
03/06/18 19:15-19:30	1	56	65	122	12	36	0	48	1	10	0	11	68	16	24	108	289
03/06/18 19:30-19:45	0	57	39	96	9	23	1	33	1	4	1	6	77	14	26	117	252
03/06/18 19:45-20:00	0	40	34	74	7	26	3	36	1	2	0	3	57	21	41	119	232
03/06/18 20:00-20:15	2	29	34	65	14	36	1	51	0	5	0	5	55	19	33	107	228
03/06/18 20:15-20:30	0	27	27	54	6	30	0	36	0	5	0	5	48	15	20	83	178
03/06/18 20:30-20:45	0	46	36	82	11	24	1	36	0	4	0	4	52	12	22	86	208
03/06/18 20:45-21:00	0	48	31	79	1	31	0	32	1	4	0	5	35	11	29	75	191
03/06/18 21:00-21:15	0	25	19	44	4	27	2	33	1	1	0	2	41	8	14	63	142
03/06/18 21:15-21:30	0	25	24	49	6	28	2	36	0	5	0	5	43	12	15	70	160
03/06/18 21:30-21:45	0	28	21	49	7	32	0	39	0	4	0	4	51	11	15	77	169
03/06/18 21:45-22:00	0	17	25	42	5	33	0	38	1	2	0	3	30	11	14	55	138
03/06/18 22:00-22:15	1	22	15	38	1	21	0	22	2	2	0	4	22	6	5	33	97
03/06/18 22:15-22:30	2	16	8	26	9	23	1	33	0	2	1	3	22	5	16	43	105
03/06/18 22:30-22:45	0	18	15	33	4	17	0	21	1	1	0	2	11	6	7	24	80
03/06/18 22:45-23:00	0	21	10	31	1	23	0	24	0	4	0	4	18	1	1	20	79
03/06/18 23:00-23:15	0	23	9	32	1	18	0	19	0	1	0	1	14	4	5	23	75
03/06/18 23:15-23:30	0	14	5	19	2	18	0	20	0	1	0	1	16	0	3	19	59
03/06/18 23:30-23:45	0	10	5	15	1	13	0	14	0	1	0	1	19	5	2	26	56
03/06/18 23:45-00:00	0	20	10	30	1	11	1	13	0	0	0	0	10	3	3	16	59
03/07/18 00:00-00:15	0	10	3	13	1	18	0	19	1	1	0	2	12	0	10	22	56
03/07/18 00:15-00:30	0	9	2	11	0	15	0	15	0	0	0	0	10	5	4	19	45
03/07/18 00:30-00:45	0	7	3	10	2	32	0	34	0	1	0	1	5	3	4	12	57
03/07/18 00:45-01:00	2	5	2	9	1	9	0	10	0	1	0	1	4	0	2	6	26
03/07/18 01:00-01:15	0	5	1	6	1	12	1	14	0	0	0	0	1	1	2	4	24
03/07/18 01:15-01:30	1	12	1	14	0	12	0	12	0	1	0	1	5	1	3	9	36
03/07/18 01:30-01:45	0	3	0	3	2	7	0	9	0	0	0	0	1	0	1	2	14
03/07/18 01:45-02:00	0	11	3	14	0	12	0	12	0	0	0	0	3	0	2	5	31
03/07/18 02:00-02:15	0	2	1	3	0	10	0	10	0	2	0	2	3	0	2	5	20
03/07/18 02:15-02:30	0	3	1	4	0	12	0	12	0	0	0	0	0	0	0	0	16
03/07/18 02:30-02:45	0	1	0	1	0	18	0	18	0	1	0	1	3	0	1	4	24
03/07/18 02:45-03:00	0	6	2	8	1	11	0	12	0	0	0	0	3	1	0	4	24
03/07/18 03:00-03:15	0	3	4	7	0	12	0	12	0	0	0	0	5	0	2	7	26
03/07/18 03:15-03:30	0	2	1	3	0	11	0	11	0	3	0	3	4	0	1	5	22
03/07/18 03:30-03:45	0	2	2	4	0	8	0	8	0	0	0	0	3	0	0	3	15
03/07/18 03:45-04:00	0	6	7	13	2	11	0	13	0	0	0	0	2	1	0	3	29
03/07/18 04:00-04:15	0	5	4	9	2	7	0	9	0	3	0	3	3	0	0	3	24
03/07/18 04:15-04:30	0	3	7	10	2	13	0	15	0	1	1	2	5	1	0	6	33

03/07/18 04:30-04:45	0	9	11	20	2	8	0	10	0	1	0	1	5	0	0	5	36
03/07/18 04:45-05:00	1	8	13	22	5	10	0	15	0	2	0	2	4	0	0	4	43
03/07/18 05:00-05:15	0	13	17	30	10	17	0	27	0	3	0	3	8	0	2	10	70
03/07/18 05:15-05:30	0	15	13	28	8	13	0	21	1	3	0	4	10	0	1	11	64
03/07/18 05:30-05:45	0	26	20	46	12	17	1	30	1	4	0	5	14	1	4	19	100
03/07/18 05:45-06:00	0	24	28	52	15	31	0	46	0	6	0	6	14	3	4	21	125
03/07/18 06:00-06:15	0	30	38	68	15	32	0	47	1	7	0	8	16	2	2	20	143
03/07/18 06:15-06:30	0	41	36	77	18	43	0	61	0	4	0	4	37	3	11	51	193
03/07/18 06:30-06:45	0	54	45	99	17	59	0	76	0	9	0	9	28	4	10	42	226
03/07/18 06:45-07:00	1	78	69	148	12	79	4	95	2	5	1	8	52	1	22	75	326
03/07/18 07:00-07:15	0	90	79	169	25	102	1	128	2	7	0	9	65	2	19	86	392
03/07/18 07:15-07:30	0	71	68	139	34	96	1	131	3	18	0	21	70	3	22	95	386
03/07/18 07:30-07:45	0	86	139	225	35	85	3	123	4	17	0	21	66	1	24	91	460
03/07/18 07:45-08:00	0	84	113	197	47	81	0	128	3	19	0	22	82	12	30	124	471
03/07/18 08:00-08:15	0	88	130	218	37	78	2	117	4	15	0	19	75	7	19	101	455
03/07/18 08:15-08:30	2	86	80	168	32	84	0	116	5	16	1	22	76	8	28	112	418
03/07/18 08:30-08:45	2	100	115	217	30	91	1	122	9	13	0	22	72	7	24	103	464
03/07/18 08:45-09:00	0	96	102	198	62	128	20	210	23	12	0	35	70	8	34	112	555
03/07/18 09:00-09:15	3	69	99	171	46	83	14	143	8	11	1	20	74	7	23	104	438
03/07/18 09:15-09:30	0	82	75	157	34	55	3	92	2	7	0	9	61	8	25	94	352
03/07/18 09:30-09:45	0	54	62	116	25	42	2	69	0	17	0	17	38	3	22	63	265
03/07/18 09:45-10:00	1	61	61	123	34	45	2	81	4	4	0	8	46	7	27	80	292
03/07/18 10:00-10:15	0	44	56	100	33	48	0	81	2	9	1	12	51	10	25	86	279
03/07/18 10:15-10:30	0	51	57	108	31	46	0	77	2	11	0	13	30	1	17	48	246
03/07/18 10:30-10:45	1	51	50	102	21	45	5	71	2	7	0	9	55	3	16	74	256
03/07/18 10:45-11:00	0	58	56	114	31	43	1	75	2	10	0	12	47	10	19	76	277
03/07/18 11:00-11:15	1	49	41	91	23	44	1	68	3	4	0	7	41	4	38	83	249
03/07/18 11:15-11:30	1	57	51	109	20	65	2	87	4	7	0	11	35	4	36	75	282
03/07/18 11:30-11:45	1	62	44	107	30	46	3	79	2	8	0	10	50	14	37	101	297
03/07/18 11:45-12:00	0	63	56	119	34	47	3	84	2	8	0	10	42	6	38	86	299
03/07/18 12:00-12:15	2	62	62	126	46	51	3	100	5	7	0	12	45	14	38	97	335
03/07/18 12:15-12:30	1	53	47	101	34	58	1	93	0	7	0	7	54	7	37	98	299
03/07/18 12:30-12:45	2	63	56	121	21	57	1	79	1	6	2	9	57	11	36	104	313
03/07/18 12:45-13:00	1	61	57	119	32	44	1	77	1	8	2	11	62	15	20	97	304
03/07/18 13:00-13:15	2	60	56	118	28	44	2	74	2	11	0	13	66	8	23	97	302
03/07/18 13:15-13:30	0	46	52	98	23	62	3	88	3	11	0	14	52	12	34	98	298
03/07/18 13:30-13:45	1	54	44	99	26	62	4	92	3	15	0	18	73	9	31	113	322
03/07/18 13:45-14:00	1	40	57	98	24	67	4	95	2	11	3	16	53	14	30	97	306
03/07/18 14:00-14:15	0	45	50	95	24	79	1	104	4	6	1	11	60	7	31	98	308
03/07/18 14:15-14:30	0	49	49	98	15	62	1	78	2	7	0	9	64	9	18	91	276
03/07/18 14:30-14:45	0	54	49	103	24	79	1	104	0	12	0	12	66	15	40	121	340
03/07/18 14:45-15:00	0	73	56	129	27	84	2	113	2	12	1	15	77	15	33	125	382
03/07/18 15:00-15:15	0	89	70	159	23	84	3	110	5	11	0	16	57	12	38	107	392
03/07/18 15:15-15:30	1	98	94	193	21	107	4	132	16	10	1	27	115	20	47	182	534
03/07/18 15:30-15:45	5	116	85	206	48	168	36	252	11	12	0	23	97	16	45	158	639
03/07/18 15:45-16:00	0	99	83	182	40	97	7	144	6	12	1	19	115	17	44	176	521
03/07/18 16:00-16:15	1	93	63	157	35	123	3	161	1	12	0	13	112	24	38	174	505
03/07/18 16:15-16:30	1	90	72	163	31	102	5	138	0	15	0	15	108	11	44	163	479
03/07/18 16:30-16:45	0	104	92	196	30	117	4	151	1	18	2	21	122	26	58	206	574
03/07/18 16:45-17:00	0	88	87	175	32	101	5	138	3	11	0	14	114	21	44	179	506
03/07/18 17:00-17:15	1	80	91	172	28	109	3	140	4	12	2	18	139	18	46	203	533
03/07/18 17:15-17:30	0	89	97	186	33	113	3	149	3	15	0	18	145	17	46	208	561
03/07/18 17:30-17:45	2	112	94	208	29	138	3	170	3	9	2	14	201	24	43	268	660
03/07/18 17:45-18:00	0	111	112	223	35	87	4	126	7	13	1	21	159	23	57	239	609
03/07/18 18:00-18:15	0	69	87	156	34	81	2	117	3	7	1	11	142	19	43	204	488
03/07/18 18:15-18:30	0	84	72	156	31	79	2	112	0	14	1	15	119	25	45	189	472
03/07/18 18:30-18:45	1	87	86	174	25	79	1	105	2	13	0	15	104	19	54	177	471
03/07/18 18:45-19:00	0	57	100	157	26	59	2	87	1	12	0	13	86	18	37	141	398
03/07/18 19:00-19:15	1	55	68	124	13	37	2	52	1	7	2	10	68	22	30	120	306
03/07/18 19:15-19:30	0	53	54	107	15	39	0	54	5	8	0	13	56	22	37	115	289

03/07/18 19:30-19:45	0	28	36	64	13	26	5	44	0	4	0	4	61	17	27	105	217
03/07/18 19:45-20:00	0	42	41	83	11	36	2	49	4	13	0	17	43	16	38	97	246
03/07/18 20:00-20:15	0	45	36	81	9	40	1	50	1	5	0	6	51	16	23	90	227
03/07/18 20:15-20:30	0	37	27	64	9	28	3	40	2	6	0	8	60	18	32	110	222
03/07/18 20:30-20:45	0	26	23	49	5	26	2	33	0	8	0	8	51	8	12	71	161
03/07/18 20:45-21:00	0	26	27	53	7	23	1	31	0	4	0	4	51	13	21	85	173
03/07/18 21:00-21:15	0	31	21	52	6	21	2	29	0	3	0	3	48	16	20	84	168
03/07/18 21:15-21:30	1	47	21	69	7	26	0	33	1	2	0	3	38	10	20	68	173
03/07/18 21:30-21:45	0	25	23	48	6	25	2	33	1	1	1	3	43	14	17	74	158
03/07/18 21:45-22:00	1	25	19	45	8	27	0	35	3	1	1	5	35	9	17	61	146
03/07/18 22:00-22:15	1	21	20	42	2	28	1	31	0	5	1	6	25	9	20	54	133
03/07/18 22:15-22:30	1	29	15	45	3	24	1	28	2	0	0	2	26	9	8	43	118
03/07/18 22:30-22:45	0	15	15	30	7	21	0	28	0	5	0	5	16	2	5	23	86
03/07/18 22:45-23:00	0	15	6	21	1	22	0	23	1	1	1	3	12	5	6	23	70
03/07/18 23:00-23:15	2	15	12	29	1	15	0	16	0	3	0	3	12	1	6	19	67
03/07/18 23:15-23:30	0	11	8	19	2	20	0	22	1	0	0	1	16	4	7	27	69
03/07/18 23:30-23:45	0	10	9	19	0	11	0	11	0	1	0	1	16	1	7	24	55
03/07/18 23:45-00:00	0	12	9	21	3	14	0	17	0	1	0	1	9	5	5	19	58
03/08/18 00:00-00:15	0	14	8	22	0	15	0	15	0	1	0	1	6	0	3	9	47
03/08/18 00:15-00:30	2	4	6	12	3	19	0	22	0	0	0	0	4	1	4	9	43
03/08/18 00:30-00:45	1	7	2	10	2	20	0	22	0	0	0	0	3	4	2	9	41
03/08/18 00:45-01:00	0	11	4	15	1	11	0	12	0	0	0	0	8	1	1	10	37
03/08/18 01:00-01:15	0	6	4	10	3	14	0	17	0	1	0	1	8	1	2	11	39
03/08/18 01:15-01:30	0	9	3	12	1	12	0	13	0	0	0	0	2	1	2	5	30
03/08/18 01:30-01:45	0	9	1	10	1	7	1	9	0	1	0	1	1	0	2	3	23
03/08/18 01:45-02:00	0	13	0	13	1	4	1	6	0	0	0	0	3	1	2	6	25
03/08/18 02:00-02:15	0	4	0	4	0	6	0	6	0	0	0	0	1	0	0	1	11
03/08/18 02:15-02:30	0	2	3	5	0	11	0	11	0	0	0	0	1	1	1	3	19
03/08/18 02:30-02:45	0	4	0	4	0	12	0	12	0	0	0	0	3	1	0	4	20
03/08/18 02:45-03:00	0	7	3	10	1	10	0	11	0	0	0	0	1	0	0	1	22
03/08/18 03:00-03:15	0	3	1	4	1	7	0	8	0	0	0	0	2	0	1	3	15
03/08/18 03:15-03:30	0	1	6	7	1	8	0	9	0	0	0	0	2	0	0	2	18
03/08/18 03:30-03:45	0	7	6	13	2	10	0	12	0	1	0	1	1	1	2	4	30
03/08/18 03:45-04:00	0	5	7	12	1	12	0	13	0	0	0	0	2	0	0	2	27
03/08/18 04:00-04:15	0	3	6	9	1	8	0	9	0	3	0	3	1	0	1	2	23
03/08/18 04:15-04:30	0	8	4	12	2	5	0	7	0	2	0	2	5	0	0	5	26
03/08/18 04:30-04:45	0	8	4	12	1	12	0	13	0	2	0	2	8	0	0	8	35
03/08/18 04:45-05:00	0	7	17	24	3	10	0	13	0	4	0	4	6	1	0	7	48
03/08/18 05:00-05:15	0	13	25	38	8	15	0	23	0	1	0	1	6	0	1	7	69
03/08/18 05:15-05:30	0	12	8	20	6	16	0	22	1	0	0	1	11	1	0	12	55
03/08/18 05:30-05:45	0	19	19	38	12	18	0	30	0	5	1	6	13	0	1	14	88
03/08/18 05:45-06:00	0	33	35	68	15	29	1	45	0	5	0	5	17	3	5	25	143
03/08/18 06:00-06:15	0	28	42	70	14	39	0	53	2	9	0	11	22	2	4	28	162
03/08/18 06:15-06:30	0	43	31	74	13	41	0	54	0	6	0	6	29	3	9	41	175
03/08/18 06:30-06:45	0	43	37	80	15	55	1	71	0	12	1	13	25	4	12	41	205
03/08/18 06:45-07:00	2	65	56	123	21	88	1	110	2	4	1	7	50	5	18	73	313
03/08/18 07:00-07:15	1	77	70	148	29	98	0	127	2	6	0	8	76	3	12	91	374
03/08/18 07:15-07:30	0	95	92	187	39	97	1	137	0	14	1	15	61	1	22	84	423
03/08/18 07:30-07:45	0	77	148	225	39	101	5	145	5	14	0	19	92	6	19	117	506
03/08/18 07:45-08:00	1	100	124	225	42	88	2	132	7	36	0	43	87	6	27	120	520
03/08/18 08:00-08:15	0	82	145	227	38	88	2	128	2	7	0	9	95	8	22	125	489
03/08/18 08:15-08:30	0	87	80	167	26	88	1	115	4	12	1	17	67	7	22	96	395
03/08/18 08:30-08:45	0	106	123	229	35	94	1	130	11	23	1	35	84	11	21	116	510
03/08/18 08:45-09:00	1	91	109	201	64	117	17	198	21	12	0	33	79	8	23	110	542
03/08/18 09:00-09:15	1	85	106	192	64	89	16	169	5	13	0	18	61	7	16	84	463
03/08/18 09:15-09:30	0	64	79	143	34	32	3	69	4	18	0	22	49	6	20	75	309
03/08/18 09:30-09:45	2	53	61	116	37	47	2	86	6	11	0	17	50	9	19	78	297
03/08/18 09:45-10:00	0	52	62	114	28	47	0	75	6	6	2	14	56	8	30	94	297
03/08/18 10:00-10:15	1	49	60	110	25	34	1	60	3	8	1	12	50	5	19	74	256
03/08/18 10:15-10:30	1	51	69	121	27	38	3	68	3	9	1	13	41	10	14	65	267

03/08/18 10:30-10:45	1	58	62	121	37	48	1	86	2	8	2	12	38	10	23	71	290
03/08/18 10:45-11:00	2	43	53	98	19	40	2	61	2	7	0	9	37	11	39	87	255
03/08/18 11:00-11:15	1	45	43	89	30	42	1	73	2	9	0	11	53	8	26	87	260
03/08/18 11:15-11:30	0	52	42	94	29	53	0	82	1	11	0	12	52	9	31	92	280
03/08/18 11:30-11:45	1	62	64	127	31	37	1	69	2	7	0	9	44	7	24	75	280
03/08/18 11:45-12:00	3	55	48	106	34	42	2	78	3	10	0	13	65	6	30	101	298
03/08/18 12:00-12:15	0	48	47	95	39	61	3	103	1	12	0	13	50	13	48	111	322
03/08/18 12:15-12:30	0	55	55	110	28	38	2	68	0	8	0	8	48	10	33	91	277
03/08/18 12:30-12:45	1	52	47	100	31	42	0	73	3	14	0	17	58	10	43	111	301
03/08/18 12:45-13:00	0	61	63	124	25	39	1	65	1	9	0	10	59	14	29	102	301
03/08/18 13:00-13:15	3	59	54	116	23	48	2	73	1	8	0	9	52	15	47	114	312
03/08/18 13:15-13:30	1	39	52	92	33	50	2	85	2	5	0	7	56	15	31	102	286
03/08/18 13:30-13:45	0	66	66	132	27	54	3	84	3	7	1	11	54	6	45	105	332
03/08/18 13:45-14:00	2	62	56	120	30	71	1	102	0	13	1	14	57	2	40	99	335
03/08/18 14:00-14:15	0	61	48	109	31	73	3	107	3	3	0	6	79	8	40	127	349
03/08/18 14:15-14:30	1	43	52	96	22	64	4	90	1	9	0	10	64	13	19	96	292
03/08/18 14:30-14:45	2	64	50	116	28	92	4	124	5	9	1	15	70	12	38	120	375
03/08/18 14:45-15:00	0	68	58	126	27	76	3	106	1	10	1	12	85	7	39	131	375
03/08/18 15:00-15:15	0	71	62	133	31	82	6	119	3	9	3	15	75	19	36	130	397
03/08/18 15:15-15:30	1	92	84	177	29	111	6	146	16	11	1	28	110	18	46	174	525
03/08/18 15:30-15:45	0	112	76	188	39	131	26	196	13	10	1	24	107	27	34	168	576
03/08/18 15:45-16:00	2	91	81	174	31	99	5	135	8	11	0	19	97	24	56	177	505
03/08/18 16:00-16:15	0	105	92	197	32	104	4	140	2	18	1	21	116	30	52	198	556
03/08/18 16:15-16:30	4	79	80	163	45	108	5	158	0	10	0	10	101	24	38	163	494
03/08/18 16:30-16:45	0	90	77	167	31	108	1	140	11	13	2	26	102	18	37	157	490
03/08/18 16:45-17:00	2	105	98	205	26	92	8	126	3	9	3	15	118	21	47	186	532
03/08/18 17:00-17:15	1	97	84	182	35	115	6	156	3	14	5	22	139	22	40	201	561
03/08/18 17:15-17:30	1	87	80	168	26	79	7	112	4	15	1	20	116	24	50	190	490
03/08/18 17:30-17:45	0	90	91	181	35	118	3	156	4	20	0	24	151	19	38	208	569
03/08/18 17:45-18:00	1	103	108	212	34	98	3	135	4	15	1	20	125	18	43	186	553
03/08/18 18:00-18:15	2	64	78	144	32	76	5	113	1	14	2	17	104	30	35	169	443
03/08/18 18:15-18:30	0	80	81	161	33	56	2	91	1	18	1	20	73	13	47	133	405
03/08/18 18:30-18:45	2	83	97	182	22	63	3	88	0	10	0	10	108	27	47	182	462
03/08/18 18:45-19:00	1	61	85	147	22	44	2	68	2	14	3	19	87	21	35	143	377
03/08/18 19:00-19:15	1	58	70	129	24	46	1	71	0	15	2	17	67	17	43	127	344
03/08/18 19:15-19:30	1	55	47	103	15	34	0	49	0	10	0	10	59	15	32	106	268
03/08/18 19:30-19:45	0	38	50	88	15	35	1	51	0	7	1	8	58	19	33	110	257
03/08/18 19:45-20:00	0	42	34	76	22	29	0	51	0	3	0	3	36	20	36	92	222
03/08/18 20:00-20:15	1	43	31	75	6	43	1	50	1	6	1	8	70	15	25	110	243
03/08/18 20:15-20:30	0	38	35	73	8	37	0	45	5	4	2	11	49	20	21	90	219
03/08/18 20:30-20:45	1	48	28	77	4	32	2	38	1	3	1	5	41	16	22	79	199
03/08/18 20:45-21:00	1	23	30	54	6	29	1	36	1	2	0	3	47	12	25	84	177
03/08/18 21:00-21:15	0	23	27	50	7	20	3	30	0	4	1	5	44	15	33	92	177
03/08/18 21:15-21:30	0	30	22	52	13	29	2	44	3	4	1	8	40	14	19	73	177
03/08/18 21:30-21:45	1	26	23	50	7	23	0	30	1	6	1	8	50	10	15	75	163
03/08/18 21:45-22:00	0	27	26	53	7	21	0	28	0	2	0	2	26	9	18	53	136
03/08/18 22:00-22:15	0	24	11	35	3	31	0	34	0	4	1	5	29	6	13	48	122
03/08/18 22:15-22:30	0	15	18	33	11	16	1	28	0	3	0	3	18	4	9	31	95
03/08/18 22:30-22:45	0	25	29	54	4	22	0	26	2	1	0	3	23	5	9	37	120
03/08/18 22:45-23:00	0	20	8	28	2	17	1	20	0	1	1	2	13	3	7	23	73
03/08/18 23:00-23:15	0	15	4	19	4	20	0	24	0	3	0	3	20	1	13	34	80
03/08/18 23:15-23:30	0	11	12	23	3	25	0	28	0	0	0	0	13	4	6	23	74
03/08/18 23:30-23:45	1	13	10	24	1	18	0	19	0	1	0	1	13	0	6	19	63
03/08/18 23:45-00:00	0	21	5	26	2	12	0	14	0	0	0	0	12	3	5	20	60
Summary	139	13404	13424	26967	5323	13922	576	19821	600	2035	115	2750	14104	2528	6131	22763	72301

National Data & Surveying Services Intersection Turning Movement Count

Location: Fiddymment Rd & Harvey Way

City: Roseville

Control: 1-Way Stop(WB)

Project ID: 18-07057-002

Date: 2/27/2018

Total

NS/EW Streets:	Fiddymment Rd				Fiddymment Rd				Harvey Way				Harvey Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
6:00 AM	0	47	1	0	0	58	0	0	0	0	0	0	0	0	1	0	107
6:15 AM	0	62	0	0	1	66	0	0	0	0	0	0	2	0	0	0	131
6:30 AM	0	80	1	0	2	100	0	0	0	0	0	0	5	0	0	0	188
6:45 AM	0	131	3	0	2	103	0	0	0	0	0	0	0	0	1	0	240
7:00 AM	0	104	7	0	0	143	0	0	0	0	0	0	2	0	0	0	256
7:15 AM	0	99	1	0	0	136	0	1	0	0	0	0	2	0	2	0	241
7:30 AM	0	124	2	0	1	138	0	0	0	0	0	0	4	0	2	0	271
7:45 AM	0	109	2	0	1	110	0	0	0	0	0	0	1	0	4	0	227
8:00 AM	0	100	2	0	1	123	0	2	0	0	0	0	3	0	1	0	232
8:15 AM	0	122	1	0	1	105	0	0	0	0	0	0	2	0	5	0	236
8:30 AM	0	132	2	0	7	203	0	0	0	0	0	0	2	0	12	0	358
8:45 AM	0	90	2	0	3	120	0	0	0	0	0	0	2	0	2	0	219
9:00 AM																	0
9:15 AM																	0
9:30 AM																	0
9:45 AM																	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1200	24	0	19	1405	0	3	0	0	0	0	25	0	30	0	2706
	0.00%	98.04%	1.96%	0.00%	1.33%	98.46%	0.00%	0.21%					45.45%	0.00%	54.55%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	463	7	0	10	541	0	2	0	0	0	0	8	0	22	0	1053
PEAK HR FACTOR :	0.000	0.877	0.875	0.000	0.357	0.666	0.000	0.250	0.000	0.000	0.000	0.000	0.667	0.000	0.458	0.000	0.735
	0.877				0.658								0.536				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
4:00 PM	0	132	0	0	0	142	0	0	0	0	0	0	0	0	0	0	274
4:15 PM	0	128	0	0	1	131	0	0	0	0	0	0	2	0	5	0	267
4:30 PM	0	113	0	0	1	142	0	0	0	0	0	0	2	0	2	0	260
4:45 PM	0	126	0	0	7	124	0	0	0	0	0	0	0	0	1	0	258
5:00 PM	0	152	2	0	3	123	0	0	0	0	0	0	1	0	3	0	284
5:15 PM	0	169	7	0	0	147	0	0	0	0	0	0	3	0	3	0	329
5:30 PM	0	124	1	0	2	125	0	0	0	0	0	0	0	0	3	0	255
5:45 PM	0	132	7	1	2	120	0	0	0	0	0	0	1	0	0	0	263
6:00 PM	0	127	1	0	2	102	0	0	0	0	0	0	1	0	1	0	234
6:15 PM	0	109	4	0	0	85	0	1	0	0	0	0	0	0	1	0	200
6:30 PM	0	106	2	0	2	82	0	0	0	0	0	0	0	0	0	0	192
6:45 PM	0	76	1	0	1	69	0	0	0	0	0	0	0	0	0	0	147
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1494	25	1	21	1392	0	1	0	0	0	0	10	0	19	0	2963
	0.00%	98.29%	1.64%	0.07%	1.49%	98.44%	0.00%	0.07%					34.48%	0.00%	65.52%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	560	9	0	11	536	0	0	0	0	0	0	6	0	9	0	1131
PEAK HR FACTOR :	0.000	0.828	0.321	0.000	0.393	0.912	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.750	0.000	0.859
	0.808				0.930								0.625				

National Data & Surveying Services Intersection Turning Movement Count

Location: Oak Meadow Dr & Harvey Way

City: Roseville

Control: 1-Way Stop(NB)

Project ID: 18-07057-003

Date: 2/27/2018

Total

NS/EW Streets:	Oak Meadow Dr				Oak Meadow Dr				Harvey Way				Harvey Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
6:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
6:15 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	3	0	0	5
6:30 AM	0	0	0	1	0	0	0	0	0	2	1	0	1	4	0	0	9
6:45 AM	0	0	1	0	0	0	0	0	0	5	0	0	1	1	0	0	8
7:00 AM	0	0	1	0	0	0	0	0	0	5	1	0	2	2	0	0	11
7:15 AM	0	0	3	0	0	0	0	0	0	2	0	0	2	4	0	0	11
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	0	9
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	1	0	4	0	0	7
8:00 AM	0	0	1	0	0	0	0	0	0	3	0	0	0	4	0	0	8
8:15 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	8	0	0	11
8:30 AM	0	0	3	0	0	0	0	0	0	9	0	0	1	14	0	0	27
8:45 AM	0	0	1	0	0	0	0	0	0	5	0	0	1	3	0	0	10
9:00 AM																	0
9:15 AM																	0
9:30 AM																	0
9:45 AM																	0
TOTAL VOLUMES :	NL 0	NT 0	NR 11	NU 2	SL 0	ST 0	SR 0	SU 0	EL 0	ET 40	ER 2	EU 1	WL 8	WT 54	WR 0	WU 0	TOTAL 118
APPROACH %'s :	0.00%	0.00%	84.62%	15.38%					0.00%	93.02%	4.65%	2.33%	12.90%	87.10%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	6	0	0	0	0	0	0	19	0	0	2	29	0	0	56
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.528	0.000	0.000	0.500	0.518	0.000	0.000	0.519
			0.500							0.528				0.517			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	3
4:15 PM	0	0	1	0	0	0	0	0	0	3	0	0	0	7	0	0	11
4:30 PM	0	0	2	0	0	0	0	0	0	3	0	0	0	4	0	0	9
4:45 PM	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	9
5:00 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	1	10
5:15 PM	0	0	0	0	0	0	0	0	0	5	0	0	3	4	0	0	12
5:30 PM	1	0	2	0	0	0	0	0	0	5	0	0	0	3	0	0	11
5:45 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	2	0	0	8
6:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6
6:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
6:30 PM	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	0	6
6:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
TOTAL VOLUMES :	NL 1	NT 0	NR 6	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 50	ER 0	EU 0	WL 5	WT 28	WR 0	WU 1	TOTAL 91
APPROACH %'s :	14.29%	0.00%	85.71%	0.00%					0.00%	100.00%	0.00%	0.00%	14.71%	82.35%	0.00%	2.94%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	0	2	0	0	0	0	0	0	23	0	0	3	12	0	1	42
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.719	0.000	0.000	0.250	0.750	0.000	0.250	0.875
			0.250							0.719				0.571			

National Data & Surveying Services Intersection Turning Movement Count

Location: Orchard View Rd & Harvey Way

City: Roseville

Control: 2-Way Stop(EB/WB)

Project ID: 18-07057-004

Date: 2/27/2018

Total

NS/EW Streets:	Orchard View Rd				Orchard View Rd				Harvey Way				Harvey Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
6:00 AM	0	0	1	0	0	2	0	0	0	0	0	0	5	1	0	0	9
6:15 AM	1	0	2	0	0	1	0	0	0	0	1	0	5	2	0	0	12
6:30 AM	2	1	1	0	0	1	0	0	0	0	2	0	5	1	0	0	13
6:45 AM	6	0	3	0	0	3	0	0	0	0	2	0	8	0	0	0	22
7:00 AM	3	0	2	0	0	3	0	0	0	0	1	0	8	0	0	0	17
7:15 AM	3	1	1	0	0	7	1	0	0	0	7	0	14	2	0	0	36
7:30 AM	0	0	0	0	0	2	0	0	0	1	1	0	10	3	0	0	17
7:45 AM	2	0	5	0	0	6	0	0	0	0	2	0	9	2	0	0	26
8:00 AM	2	0	4	0	0	3	0	0	0	0	1	0	7	1	0	0	18
8:15 AM	2	2	3	0	0	5	3	1	0	1	2	0	6	4	0	0	29
8:30 AM	3	1	1	0	0	6	0	0	0	6	5	0	4	10	0	0	36
8:45 AM	3	0	2	0	0	5	0	0	1	5	1	0	9	1	0	0	27
9:00 AM																	0
9:15 AM																	0
9:30 AM																	0
9:45 AM																	0
TOTAL VOLUMES :	NL 27	NT 5	NR 25	NU 0	SL 0	ST 44	SR 4	SU 1	EL 1	ET 13	ER 25	EU 0	WL 90	WT 27	WR 0	WU 0	TOTAL 262
APPROACH %'s :	47.37%	8.77%	43.86%	0.00%	0.00%	89.80%	8.16%	2.04%	2.56%	33.33%	64.10%	0.00%	76.92%	23.08%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	10	3	10	0	0	19	3	1	1	12	9	0	26	16	0	0	110
PEAK HR FACTOR :	0.833	0.375	0.625	0.000	0.000	0.792	0.250	0.250	0.250	0.500	0.450	0.000	0.722	0.400	0.000	0.000	0.764
	0.821				0.639				0.500				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	5	2	3	0	0	0	0	0	1	0	5	0	4	0	0	0	20
4:15 PM	6	1	7	0	0	3	0	0	0	0	1	0	2	3	0	0	23
4:30 PM	1	1	11	0	0	2	0	0	0	0	3	0	7	4	0	0	29
4:45 PM	5	2	10	0	0	0	0	0	0	9	0	0	6	0	0	0	32
5:00 PM	4	1	7	0	0	3	0	0	0	2	3	0	4	2	1	0	27
5:15 PM	8	0	5	0	0	4	1	0	1	3	4	0	4	0	0	0	30
5:30 PM	5	1	11	0	0	4	1	0	2	3	2	1	3	0	0	0	33
5:45 PM	7	2	11	0	0	0	0	0	2	2	2	0	9	0	0	0	35
6:00 PM	3	1	10	0	0	1	0	0	0	2	3	0	4	1	0	0	25
6:15 PM	6	3	11	0	1	1	0	0	1	1	2	0	3	0	0	0	29
6:30 PM	6	1	7	0	0	2	0	0	0	4	2	0	4	0	0	0	26
6:45 PM	1	1	5	0	0	2	0	0	0	1	2	0	11	1	0	0	24
TOTAL VOLUMES :	NL 57	NT 16	NR 98	NU 0	SL 1	ST 22	SR 2	SU 0	EL 7	ET 27	ER 29	EU 1	WL 61	WT 11	WR 1	WU 0	TOTAL 333
APPROACH %'s :	33.33%	9.36%	57.31%	0.00%	4.00%	88.00%	8.00%	0.00%	10.94%	42.19%	45.31%	1.56%	83.56%	15.07%	1.37%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	24	4	34	0	0	11	2	0	5	10	11	1	20	2	1	0	125
PEAK HR FACTOR :	0.750	0.500	0.773	0.000	0.000	0.688	0.500	0.000	0.625	0.833	0.688	0.250	0.556	0.250	0.250	0.000	0.893
	0.775				0.650				0.844				0.639				

Attachment B

Signalized Intersection Queuing and
Operations Synchro Analysis Worksheets

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Conditions

AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	55	83	5	365	42	117	3	405	508	238	534	32
v/c Ratio	0.10	0.14	0.01	0.58	0.07	0.27	0.01	0.39	0.62	0.44	0.32	0.04
Control Delay	27.5	33.5	0.0	32.1	32.5	1.5	30.3	22.0	6.0	32.8	15.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.5	33.5	0.0	32.1	32.5	1.5	30.3	22.0	6.0	32.8	15.7	0.1
Queue Length 50th (ft)	10	12	0	74	8	0	0	73	0	49	68	0
Queue Length 95th (ft)	24	26	0	142	27	1	4	132	69	78	137	0
Internal Link Dist (ft)		462			385			709			365	
Turn Bay Length (ft)	235		235	235			245		245	245		245
Base Capacity (vph)	1555	1567	627	1640	1199	672	1058	1799	1054	1058	1856	911
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.05	0.01	0.22	0.04	0.17	0.00	0.23	0.48	0.22	0.29	0.04
Intersection Summary												

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	62	4	347	40	111	3	369	462	169	379	23
Future Volume (veh/h)	41	62	4	347	40	111	3	369	462	169	379	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	55	83	5	365	42	117	3	405	508	238	534	32
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.75	0.75	0.75	0.95	0.95	0.95	0.91	0.91	0.91	0.71	0.71	0.71
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	400	125	490	365	163	852	1366	611	412	818	366
Arrive On Green	0.09	0.08	0.08	0.14	0.10	0.10	0.25	0.39	0.39	0.12	0.23	0.23
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	55	83	5	365	42	117	3	405	508	238	534	32
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	1.1	1.1	0.1	7.6	0.8	3.8	0.0	5.9	21.7	4.9	10.2	1.2
Cycle Q Clear(g_c), s	1.1	1.1	0.1	7.6	0.8	3.8	0.0	5.9	21.7	4.9	10.2	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	400	125	490	365	163	852	1366	611	412	818	366
V/C Ratio(X)	0.18	0.21	0.04	0.74	0.11	0.72	0.00	0.30	0.83	0.58	0.65	0.09
Avail Cap(c_a), veh/h	922	1363	424	1429	1043	467	922	1565	700	922	1565	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	32.2	9.6	30.7	30.4	16.7	21.1	15.9	20.7	31.1	26.0	22.5
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.9	0.2	8.3	0.0	0.2	8.9	0.5	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.1	3.7	0.4	2.5	0.0	2.9	10.9	2.3	5.2	0.5
LnGrp Delay(d),s/veh	31.4	32.5	9.8	31.6	30.6	25.0	21.1	16.1	29.6	31.5	27.7	22.7
LnGrp LOS	C	C	A	C	C	C	C	B	C	C	C	C
Approach Vol, veh/h		143			524			916			804	
Approach Delay, s/veh		31.3			30.0			23.6			28.6	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	34.8	14.6	12.3	24.5	23.3	13.2	13.7				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.4	6.0	* 6	6.4	* 6				
Max Green Setting (Gmax), s	20.0	33.0	31.0	20.0	20.0	* 33	20.0	* 22				
Max Q Clear Time (g_c+I1), s	6.9	23.7	9.6	3.1	2.0	12.2	3.1	5.8				
Green Ext Time (p_c), s	0.5	5.2	1.0	0.5	8.0	5.1	0.5	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			27.2									
HCM 2010 LOS			C									
Notes												

The Plaza at Blue Oaks
3: Blue Oaks Boulevard & Oak Meadow Drive

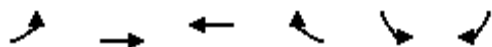
Existing Conditions

AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	691	496	4	0	2
Future Vol, veh/h	2	691	496	4	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	240	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	751	533	4	0	3
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	533	0	-	0	838	267
Stage 1	-	-	-	-	533	-
Stage 2	-	-	-	-	305	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	653	-	-	-	374	623
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	661	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	653	-	-	-	373	623
Mov Cap-2 Maneuver	-	-	-	-	373	-
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	659	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		10.8		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	653	-	-	-	623	
HCM Lane V/C Ratio	0.003	-	-	-	0.005	
HCM Control Delay (s)	10.5	-	-	-	10.8	
HCM Lane LOS	B	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

The Plaza at Blue Oaks
4: Blue Oaks & Orchard View

Existing Conditions
AM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	4	774	470	25	71	13
v/c Ratio	0.01	0.20	0.13	0.02	0.15	0.03
Control Delay	14.2	2.8	4.6	3.7	13.9	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.2	2.8	4.6	3.7	13.9	7.8
Queue Length 50th (ft)	1	23	13	0	16	0
Queue Length 95th (ft)	7	34	44	10	33	8
Internal Link Dist (ft)		333	430		493	
Turn Bay Length (ft)	230			245		240
Base Capacity (vph)	993	5085	5085	1583	993	894
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.15	0.09	0.02	0.07	0.01
Intersection Summary						

The Plaza at Blue Oaks
4: Blue Oaks & Orchard View

Existing Conditions

AM Peak

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	4	704	437	23	57	10		
Future Volume (veh/h)	4	704	437	23	57	10		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	4	774	470	25	71	12		
Adj No. of Lanes	1	3	3	1	1	1		
Peak Hour Factor	0.91	0.91	0.93	0.93	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	64	3358	2745	855	302	269		
Arrive On Green	0.04	0.66	0.54	0.54	0.17	0.17		
Sat Flow, veh/h	1774	5253	5253	1583	1774	1583		
Grp Volume(v), veh/h	4	774	470	25	71	12		
Grp Sat Flow(s),veh/h/ln	1774	1695	1695	1583	1774	1583		
Q Serve(g_s), s	0.1	2.2	1.7	0.3	1.2	0.2		
Cycle Q Clear(g_c), s	0.1	2.2	1.7	0.3	1.2	0.2		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	64	3358	2745	855	302	269		
V/C Ratio(X)	0.06	0.23	0.17	0.03	0.24	0.04		
Avail Cap(c_a), veh/h	1053	6896	6896	2147	1053	939		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	16.5	2.4	4.1	3.8	12.7	12.3		
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.0	0.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.8	0.1	0.6	0.2		
LnGrp Delay(d),s/veh	16.6	2.5	4.2	3.8	12.8	12.3		
LnGrp LOS	B	A	A	A	B	B		
Approach Vol, veh/h		778	495		83			
Approach Delay, s/veh		2.5	4.2		12.8			
Approach LOS		A	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				26.4		9.0	4.3	22.1
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s				45.0		20.0	20.0	45.0
Max Q Clear Time (g_c+I1), s				4.2		3.2	2.1	3.7
Green Ext Time (p_c), s				12.4		0.1	0.0	12.4
Intersection Summary								
HCM 2010 Ctrl Delay			3.8					
HCM 2010 LOS			A					
Notes								

The Plaza at Blue Oaks
6: Fiddymment Road & Harvey Way

Existing Conditions

AM Peak

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕	↕	↕	↕↕	↕	↕	↕↕	↕
Traffic Vol, veh/h	0	0	0	9	0	22	0	513	8	12	562	0
Future Vol, veh/h	0	0	0	9	0	22	0	513	8	12	562	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	235	205	-	220	250	-	180
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	70	70	70	88	88	88	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	13	0	31	0	583	9	17	803	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1128	1420	401	1019	1420	291	803	0	0	583	0	0
Stage 1	837	837	-	583	583	-	-	-	-	-	-	-
Stage 2	291	583	-	436	837	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	159	135	599	191	135	706	817	-	-	987	-	-
Stage 1	327	380	-	465	497	-	-	-	-	-	-	-
Stage 2	693	497	-	569	380	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	150	133	599	188	133	706	817	-	-	987	-	-
Mov Cap-2 Maneuver	150	133	-	188	133	-	-	-	-	-	-	-
Stage 1	327	373	-	465	497	-	-	-	-	-	-	-
Stage 2	662	497	-	559	373	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		14.7		0		0.2					
HCM LOS	A		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	817	-	-	-	188	706	987	-	-			
HCM Lane V/C Ratio	-	-	-	-	0.068	0.045	0.017	-	-			
HCM Control Delay (s)	0	-	-	0	25.6	10.3	8.7	-	-			
HCM Lane LOS	A	-	-	A	D	B	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1	0.1	-	-			

The Plaza at Blue Oaks
8: Oak Meadow Road & Harvey Way

Existing Conditions

AM Peak

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	0	2	31	0	6
Future Vol, veh/h	20	0	2	31	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	0	3	44	0	9
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	29	0	79	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	50	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1584	-	924	1046
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1584	-	922	1046
Mov Cap-2 Maneuver	-	-	-	-	922	-
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	970	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		8.5	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1046	-	-	1584	-	
HCM Lane V/C Ratio	0.008	-	-	0.002	-	
HCM Control Delay (s)	8.5	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

The Plaza at Blue Oaks
9: Orchard View Road & Harvey Way

Existing Conditions

AM Peak

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	12	9	26	16	0	10	3	10	1	19	3
Future Vol, veh/h	1	12	9	26	16	0	10	3	10	1	19	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	75	75	75	82	82	82	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	17	13	35	21	0	12	4	12	1	27	4
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	77	72	29	81	68	10	31	0	0	16	0	0
Stage 1	32	32	-	34	34	-	-	-	-	-	-	-
Stage 2	45	40	-	47	34	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	912	818	1046	907	823	1071	1582	-	-	1602	-	-
Stage 1	984	868	-	982	867	-	-	-	-	-	-	-
Stage 2	969	862	-	967	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	888	811	1046	875	816	1071	1582	-	-	1602	-	-
Mov Cap-2 Maneuver	888	811	-	875	816	-	-	-	-	-	-	-
Stage 1	976	867	-	974	860	-	-	-	-	-	-	-
Stage 2	937	855	-	935	866	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.2		9.5			3.2			0.3			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1582	-	-	897	852	1602	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.035	0.066	0.001	-	-				
HCM Control Delay (s)	7.3	0	-	9.2	9.5	7.2	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile O(veh)	0	-	-	0.1	0.2	0	-	-				

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Conditions

PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	17	59	9	607	96	204	5	426	442	135	449	18
v/c Ratio	0.04	0.11	0.03	0.72	0.09	0.33	0.01	0.43	0.58	0.30	0.29	0.02
Control Delay	31.6	36.5	0.1	32.1	23.1	6.5	33.5	24.6	6.0	36.4	18.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	36.5	0.1	32.1	23.1	6.5	33.5	24.6	6.0	36.4	18.4	0.1
Queue Length 50th (ft)	3	9	0	135	14	0	1	85	0	30	66	0
Queue Length 95th (ft)	12	26	0	226	51	61	6	147	61	70	173	0
Internal Link Dist (ft)		462			385			709			365	
Turn Bay Length (ft)	235		235	235			245		245	245		245
Base Capacity (vph)	1446	1457	597	1525	1331	723	983	1673	981	983	1716	855
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.04	0.02	0.40	0.07	0.28	0.01	0.25	0.45	0.14	0.26	0.02
Intersection Summary												

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	54	8	558	88	188	4	375	389	126	418	17
Future Volume (veh/h)	16	54	8	558	88	188	4	375	389	126	418	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	17	59	9	607	96	204	5	426	442	135	449	18
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	350	109	741	489	219	812	1233	552	373	691	309
Arrive On Green	0.12	0.07	0.07	0.22	0.14	0.14	0.24	0.35	0.35	0.11	0.20	0.20
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	17	59	9	607	96	204	5	426	442	135	449	18
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	0.3	0.9	0.2	13.2	1.9	7.3	0.1	7.0	19.9	2.9	9.2	0.7
Cycle Q Clear(g_c), s	0.3	0.9	0.2	13.2	1.9	7.3	0.1	7.0	19.9	2.9	9.2	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	416	350	109	741	489	219	812	1233	552	373	691	309
V/C Ratio(X)	0.04	0.17	0.08	0.82	0.20	0.93	0.01	0.35	0.80	0.36	0.65	0.06
Avail Cap(c_a), veh/h	874	1292	402	1355	989	442	874	1483	664	874	1483	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	34.5	11.4	29.4	30.1	17.7	23.0	19.0	23.2	32.6	29.2	25.8
Incr Delay (d2), s/veh	0.0	0.3	0.4	0.9	0.3	21.4	0.0	0.3	7.5	0.2	2.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.4	0.2	6.3	0.9	5.1	0.0	3.5	9.8	1.4	4.7	0.3
LnGrp Delay(d),s/veh	30.6	34.8	11.9	30.3	30.3	39.1	23.0	19.3	30.7	32.8	31.2	25.9
LnGrp LOS	C	C	B	C	C	D	C	B	C	C	C	C
Approach Vol, veh/h		85			907			873			602	
Approach Delay, s/veh		31.6			32.3			25.1			31.4	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	33.4	21.0	11.8	24.6	21.4	15.9	16.9				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.4	6.0	* 6	6.4	* 6				
Max Green Setting (Gmax), s	20.0	33.0	31.0	20.0	20.0	* 33	20.0	* 22				
Max Q Clear Time (g_c+I1), s	4.9	21.9	15.2	2.9	2.1	11.2	2.3	9.3				
Green Ext Time (p_c), s	0.3	5.6	1.7	0.3	7.5	4.2	0.3	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			29.5									
HCM 2010 LOS			C									
Notes												

The Plaza at Blue Oaks
3: Blue Oaks Boulevard & Oak Meadow Drive

Existing Conditions

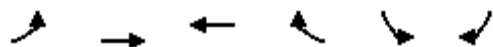
PM Peak

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	568	827	2	0	7
Future Vol, veh/h	1	568	827	2	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	240	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	617	889	2	0	10
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	889	0	-	0	1138	445
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	249	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	443	-	-	-	264	479
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	443	-	-	-	263	479
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	704	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		12.7		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	443	-	-	-	479	
HCM Lane V/C Ratio	0.002	-	-	-	0.021	
HCM Control Delay (s)	13.1	-	-	-	12.7	
HCM Lane LOS	B	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

The Plaza at Blue Oaks
4: Blue Oaks & Orchard View

Existing Conditions

PM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	6	649	852	68	37	11
v/c Ratio	0.02	0.15	0.20	0.05	0.08	0.03
Control Delay	18.0	1.6	3.3	2.2	16.2	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.0	1.6	3.3	2.2	16.2	10.4
Queue Length 50th (ft)	1	0	0	0	5	0
Queue Length 95th (ft)	9	26	77	15	29	10
Internal Link Dist (ft)		333	430		493	
Turn Bay Length (ft)	230			245		240
Base Capacity (vph)	976	5085	4951	1543	976	877
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.13	0.17	0.04	0.04	0.01
Intersection Summary						

The Plaza at Blue Oaks
4: Blue Oaks & Orchard View

Existing Conditions

PM Peak

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	5	558	818	65	34	10		
Future Volume (veh/h)	5	558	818	65	34	10		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	6	649	852	68	37	11		
Adj No. of Lanes	1	3	3	1	1	1		
Peak Hour Factor	0.86	0.86	0.96	0.96	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	65	3711	3139	977	210	188		
Arrive On Green	0.04	0.73	0.62	0.62	0.12	0.12		
Sat Flow, veh/h	1774	5253	5253	1583	1774	1583		
Grp Volume(v), veh/h	6	649	852	68	37	11		
Grp Sat Flow(s),veh/h/ln	1774	1695	1695	1583	1774	1583		
Q Serve(g_s), s	0.1	1.6	3.0	0.7	0.7	0.2		
Cycle Q Clear(g_c), s	0.1	1.6	3.0	0.7	0.7	0.2		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	65	3711	3139	977	210	188		
V/C Ratio(X)	0.09	0.17	0.27	0.07	0.18	0.06		
Avail Cap(c_a), veh/h	942	6173	6173	1922	942	841		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	18.4	1.7	3.5	3.0	15.7	15.5		
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.0	0.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.7	1.4	0.3	0.4	0.2		
LnGrp Delay(d),s/veh	18.6	1.7	3.5	3.1	15.8	15.5		
LnGrp LOS	B	A	A	A	B	B		
Approach Vol, veh/h		655	920		48			
Approach Delay, s/veh		1.8	3.5		15.8			
Approach LOS		A	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				31.9		7.7	4.4	27.4
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s				45.0		20.0	20.0	45.0
Max Q Clear Time (g_c+I1), s				3.6		2.7	2.1	5.0
Green Ext Time (p_c), s				16.6		0.1	0.0	16.4
Intersection Summary								
HCM 2010 Ctrl Delay			3.2					
HCM 2010 LOS			A					
Notes								

The Plaza at Blue Oaks
6: Fiddymment Road & Harvey Way

Existing Conditions

PM Peak

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	0	0	0	6	0	9	0	569	10	13	555	0
Future Vol, veh/h	0	0	0	6	0	9	0	569	10	13	555	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	235	205	-	220	250	-	180
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	70	70	70	81	81	81	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	9	0	13	0	702	12	14	597	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	976	1327	298	1028	1327	351	597	0	0	702	0	0
Stage 1	625	625	-	702	702	-	-	-	-	-	-	-
Stage 2	351	702	-	326	625	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	206	154	698	188	154	645	976	-	-	891	-	-
Stage 1	439	475	-	395	439	-	-	-	-	-	-	-
Stage 2	639	439	-	661	475	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	199	152	698	186	152	645	976	-	-	891	-	-
Mov Cap-2 Maneuver	199	152	-	186	152	-	-	-	-	-	-	-
Stage 1	439	468	-	395	439	-	-	-	-	-	-	-
Stage 2	626	439	-	651	468	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		16.5		0		0.2					
HCM LOS	A		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	976	-	-	-	186	645	891	-	-			
HCM Lane V/C Ratio	-	-	-	-	0.046	0.02	0.016	-	-			
HCM Control Delay (s)	0	-	-	0	25.3	10.7	9.1	-	-			
HCM Lane LOS	A	-	-	A	D	B	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0.1	0	-	-			

The Plaza at Blue Oaks
8: Oak Meadow Road & Harvey Way

Existing Conditions

PM Peak

Intersection						
Int Delay, s/veh	1.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	23	0	7	14	1	2
Future Vol, veh/h	23	0	7	14	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	0	10	20	1	3
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	32	0	72	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	40	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1580	-	932	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1580	-	926	1042
Mov Cap-2 Maneuver	-	-	-	-	926	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	976	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	2.4		8.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1000	-	-	1580	-	
HCM Lane V/C Ratio	0.004	-	-	0.006	-	
HCM Control Delay (s)	8.6	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

The Plaza at Blue Oaks
9: Orchard View Road & Harvey Way

Existing Conditions

PM Peak

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	10	11	20	2	1	24	4	34	0	11	2
Future Vol, veh/h	5	10	11	20	2	1	24	4	34	0	11	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	70	70	70	78	78	78	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	12	13	29	3	1	31	5	44	0	16	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	108	127	17	118	107	27	19	0	0	49	0	0
Stage 1	17	17	-	88	88	-	-	-	-	-	-	-
Stage 2	91	110	-	30	19	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	871	764	1062	858	783	1048	1597	-	-	1558	-	-
Stage 1	1002	881	-	920	822	-	-	-	-	-	-	-
Stage 2	916	804	-	987	880	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	854	749	1062	824	767	1048	1597	-	-	1558	-	-
Mov Cap-2 Maneuver	854	749	-	824	767	-	-	-	-	-	-	-
Stage 1	982	881	-	902	806	-	-	-	-	-	-	-
Stage 2	893	788	-	962	880	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.2		9.5			2.8			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1597	-	-	879	826	1558	-	-				
HCM Lane V/C Ratio	0.019	-	-	0.035	0.04	-	-	-				
HCM Control Delay (s)	7.3	0	-	9.2	9.5	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile O(veh)	0.1	-	-	0.1	0.1	0	-	-				

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Plus Project Conditions

AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	67	83	5	445	49	117	3	452	538	269	534	32
v/c Ratio	0.10	0.15	0.01	0.65	0.12	0.32	0.01	0.42	0.63	0.50	0.32	0.04
Control Delay	28.5	37.1	0.0	34.7	37.2	2.3	32.7	23.5	6.0	36.1	17.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.5	37.1	0.0	34.7	37.2	2.3	32.7	23.5	6.0	36.1	17.0	0.1
Queue Length 50th (ft)	13	13	0	100	11	0	0	90	0	61	75	0
Queue Length 95th (ft)	29	28	0	182	33	0	4	158	74	93	152	0
Internal Link Dist (ft)	462			502			709			365		
Turn Bay Length (ft)	235		235	235			245		245	245		
Base Capacity (vph)	1443	1454	597	1521	1113	638	983	1670	1030	981	1793	886
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.06	0.01	0.29	0.04	0.18	0.00	0.27	0.52	0.27	0.30	0.04
Intersection Summary												

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	50	62	4	21	402	47	111	3	411	490	22	169
Future Volume (veh/h)	50	62	4	21	402	47	111	3	411	490	22	169
Number	7	4	14		3	8	18	5	2	12		1
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0		0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863		1863	1863	1863	1863	1863	1863		1863
Adj Flow Rate, veh/h	67	83	5		423	49	117	3	452	538		238
Adj No. of Lanes	2	3	1		2	2	1	2	2	1		2
Peak Hour Factor	0.75	0.75	0.75		0.95	0.95	0.95	0.91	0.91	0.91		0.71
Percent Heavy Veh, %	2	2	2		2	2	2	2	2	2		2
Cap, veh/h	379	387	121		546	351	157	870	1384	619		393
Arrive On Green	0.11	0.08	0.08		0.16	0.10	0.10	0.25	0.39	0.39		0.11
Sat Flow, veh/h	3442	5085	1583		3442	3539	1583	3442	3539	1583		3442
Grp Volume(v), veh/h	67	83	5		423	49	117	3	452	538		238
Grp Sat Flow(s),veh/h/ln	1721	1695	1583		1721	1770	1583	1721	1770	1583		1721
Q Serve(g_s), s	1.4	1.2	0.1		9.2	1.0	4.1	0.1	7.0	24.6		5.2
Cycle Q Clear(g_c), s	1.4	1.2	0.1		9.2	1.0	4.1	0.1	7.0	24.6		5.2
Prop In Lane	1.00		1.00		1.00		1.00	1.00		1.00		1.00
Lane Grp Cap(c), veh/h	379	387	121		546	351	157	870	1384	619		393
V/C Ratio(X)	0.18	0.21	0.04		0.77	0.14	0.74	0.00	0.33	0.87		0.61
Avail Cap(c_a), veh/h	878	1297	404		1360	993	444	878	1489	666		878
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Uniform Delay (d), s/veh	31.7	34.0	10.4		31.6	32.3	18.4	21.9	16.7	22.0		33.1
Incr Delay (d2), s/veh	0.1	0.4	0.2		0.9	0.3	9.8	0.0	0.3	12.4		0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0
%ile BackOfQ(50%),veh/ln	0.7	0.6	0.1		4.5	0.5	2.7	0.0	3.4	12.9		2.5
LnGrp Delay(d),s/veh	31.8	34.4	10.5		32.5	32.5	28.2	21.9	16.9	34.4		33.6
LnGrp LOS	C	C	B		C	C	C	C	B	C		C
Approach Vol, veh/h		155				589			993			
Approach Delay, s/veh		32.5				31.7			26.4			
Approach LOS		C				C			C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	36.7	16.5	12.4	25.8	23.8	15.0	13.8				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.4	6.0	* 6	6.4	* 6				
Max Green Setting (Gmax), s	20.0	33.0	31.0	20.0	20.0	* 33	20.0	* 22				
Max Q Clear Time (g_c+I1), s	7.2	26.6	11.2	3.2	2.1	12.8	3.4	6.1				
Green Ext Time (p_c), s	0.5	4.1	1.2	0.6	8.7	5.0	0.6	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			29.3									
HCM 2010 LOS			C									
Notes												

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Plus Project Conditions

AM Peak

	↓	↙
Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	379	23
Future Volume (veh/h)	379	23
Number	6	16
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863
Adj Flow Rate, veh/h	534	32
Adj No. of Lanes	2	1
Peak Hour Factor	0.71	0.71
Percent Heavy Veh, %	2	2
Cap, veh/h	802	359
Arrive On Green	0.23	0.23
Sat Flow, veh/h	3539	1583
Grp Volume(v), veh/h	534	32
Grp Sat Flow(s),veh/h/ln	1770	1583
Q Serve(g_s), s	10.8	1.3
Cycle Q Clear(g_c), s	10.8	1.3
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	802	359
V/C Ratio(X)	0.67	0.09
Avail Cap(c_a), veh/h	1489	666
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	1.00	1.00
Uniform Delay (d), s/veh	27.6	23.9
Incr Delay (d2), s/veh	1.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.6
LnGrp Delay(d),s/veh	29.5	24.1
LnGrp LOS	C	C
Approach Vol, veh/h	804	
Approach Delay, s/veh	30.5	
Approach LOS	C	
Timer		

The Plaza at Blue Oaks
2: Blue Oaks Boulevard

Existing Plus Project Conditions

AM Peak

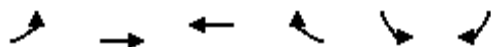
Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↑	↗		↗
Traffic Vol, veh/h	0	714	476	81	0	105
Future Vol, veh/h	0	714	476	81	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	776	517	88	0	114
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	259
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	-	0	631
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	631
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		12		
HCM LOS				B		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	631		
HCM Lane V/C Ratio	-	-	-	0.181		
HCM Control Delay (s)	-	-	-	12		
HCM Lane LOS	-	-	-	B		
HCM 95th %tile O(veh)	-	-	-	0.7		

The Plaza at Blue Oaks
3: Blue Oaks Boulevard & Oak Meadow Drive

Existing Plus Project Conditions

AM Peak

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	712	514	39	0	43
Future Vol, veh/h	30	712	514	39	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	240	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	774	553	42	0	61
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	553	0	-	0	928	276
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	375	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	639	-	-	-	337	615
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	609	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	639	-	-	-	320	615
Mov Cap-2 Maneuver	-	-	-	-	320	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	578	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.4		0		11.5	
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	639	-	-	-	615	
HCM Lane V/C Ratio	0.051	-	-	-	0.1	
HCM Control Delay (s)	10.9	-	-	-	11.5	
HCM Lane LOS	B	-	-	-	B	
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	4	797	470	25	98	13
v/c Ratio	0.01	0.23	0.14	0.02	0.21	0.03
Control Delay	13.8	3.5	5.2	3.7	14.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	3.5	5.2	3.7	14.3	7.6
Queue Length 50th (ft)	1	24	13	0	19	0
Queue Length 95th (ft)	7	35	44	10	43	8
Internal Link Dist (ft)		333	430		493	
Turn Bay Length (ft)	230			245		240
Base Capacity (vph)	959	5085	5085	1583	959	863
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.16	0.09	0.02	0.10	0.02
Intersection Summary						

The Plaza at Blue Oaks
4: Blue Oaks & Orchard View

Existing Plus Project Conditions

AM Peak

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	4	725	437	23	78	10		
Future Volume (veh/h)	4	725	437	23	78	10		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	4	797	470	25	98	12		
Adj No. of Lanes	1	3	3	1	1	1		
Peak Hour Factor	0.91	0.91	0.93	0.93	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	62	3281	2691	838	341	304		
Arrive On Green	0.03	0.65	0.53	0.53	0.19	0.19		
Sat Flow, veh/h	1774	5253	5253	1583	1774	1583		
Grp Volume(v), veh/h	4	797	470	25	98	12		
Grp Sat Flow(s),veh/h/ln	1774	1695	1695	1583	1774	1583		
Q Serve(g_s), s	0.1	2.4	1.8	0.3	1.7	0.2		
Cycle Q Clear(g_c), s	0.1	2.4	1.8	0.3	1.7	0.2		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	62	3281	2691	838	341	304		
V/C Ratio(X)	0.06	0.24	0.17	0.03	0.29	0.04		
Avail Cap(c_a), veh/h	1010	6618	6618	2060	1010	901		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	17.2	2.8	4.5	4.2	12.7	12.1		
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.0	0.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	1.1	0.8	0.1	0.9	0.2		
LnGrp Delay(d),s/veh	17.4	2.8	4.5	4.2	12.9	12.2		
LnGrp LOS	B	A	A	A	B	B		
Approach Vol, veh/h		801	495		110			
Approach Delay, s/veh		2.9	4.5		12.8			
Approach LOS		A	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				26.8		10.1	4.3	22.5
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s				45.0		20.0	20.0	45.0
Max Q Clear Time (g_c+I1), s				4.4		3.7	2.1	3.8
Green Ext Time (p_c), s				12.7		0.2	0.0	12.8
Intersection Summary								
HCM 2010 Ctrl Delay			4.2					
HCM 2010 LOS			A					
Notes								

The Plaza at Blue Oaks
5: Fiddymment Road

Existing Plus Project Conditions

AM Peak

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	118	438	156	0	571
Future Vol, veh/h	0	118	438	156	0	571
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	128	476	170	0	621
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	323	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	673	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	673	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.6	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	673		-		
HCM Lane V/C Ratio	-	0.191		-		
HCM Control Delay (s)	-	11.6		-		
HCM Lane LOS	-	B		-		
HCM 95th %tile Q(veh)	-	0.7		-		

The Plaza at Blue Oaks
6: Fiddymment Road & Harvey Way

Existing Plus Project Conditions

AM Peak

Intersection												
Int Delay, s/veh	8.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	71	0	22	0	513	8	96	522	0
Future Vol, veh/h	0	0	0	71	0	22	0	513	8	96	522	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	235	205	-	220	250	-	180
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	70	70	70	88	88	88	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	101	0	31	0	583	9	137	746	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1311	1603	373	1230	1603	291	746	0	0	583	0	0
Stage 1	1020	1020	-	583	583	-	-	-	-	-	-	-
Stage 2	291	583	-	647	1020	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	116	105	624	134	105	706	858	-	-	987	-	-
Stage 1	253	312	-	465	497	-	-	-	-	-	-	-
Stage 2	693	497	-	426	312	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	90	624	120	90	706	858	-	-	987	-	-
Mov Cap-2 Maneuver	99	90	-	120	90	-	-	-	-	-	-	-
Stage 1	253	269	-	465	497	-	-	-	-	-	-	-
Stage 2	662	497	-	367	269	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0		88.3		0		1.4					
HCM LOS	A		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	858	-	-	-	120	706	987	-	-			
HCM Lane V/C Ratio	-	-	-	-	0.845	0.045	0.139	-	-			
HCM Control Delay (s)	0	-	-	0	112.5	10.3	9.2	-	-			
HCM Lane LOS	A	-	-	A	F	B	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	-	5.1	0.1	0.5	-	-			

The Plaza at Blue Oaks
7: Harvey Way

Existing Plus Project Conditions

AM Peak

Intersection						
Int Delay, s/veh	2.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	84	0	31	62	0
Future Vol, veh/h	20	84	0	31	62	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	91	0	34	67	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	113	0	101	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	34	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1476	-	898	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	988	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1476	-	898	997
Mov Cap-2 Maneuver	-	-	-	-	898	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	988	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9.3		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	898	-	-	1476	-	
HCM Lane V/C Ratio	0.075	-	-	-	-	
HCM Control Delay (s)	9.3	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0.2	-	-	0	-	

The Plaza at Blue Oaks
8: Oak Meadow Road & Harvey Way

Existing Plus Project Conditions

AM Peak

Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	0	2	31	0	27
Future Vol, veh/h	20	0	2	31	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	0	3	44	0	39
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	29	0	79	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	50	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1584	-	924	1046
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	972	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1584	-	922	1046
Mov Cap-2 Maneuver	-	-	-	-	922	-
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	970	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.4		8.6		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1046	-	-	1584	-	
HCM Lane V/C Ratio	0.037	-	-	0.002	-	
HCM Control Delay (s)	8.6	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

The Plaza at Blue Oaks
9: Orchard View Road & Harvey Way

Existing Plus Project Conditions

AM Peak

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	12	30	26	16	0	10	3	10	1	19	3
Future Vol, veh/h	1	12	30	26	16	0	10	3	10	1	19	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	75	75	75	82	82	82	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	17	43	35	21	0	12	4	12	1	27	4
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	77	72	29	96	68	10	31	0	0	16	0	0
Stage 1	32	32	-	34	34	-	-	-	-	-	-	-
Stage 2	45	40	-	62	34	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	912	818	1046	887	823	1071	1582	-	-	1602	-	-
Stage 1	984	868	-	982	867	-	-	-	-	-	-	-
Stage 2	969	862	-	949	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	888	811	1046	831	816	1071	1582	-	-	1602	-	-
Mov Cap-2 Maneuver	888	811	-	831	816	-	-	-	-	-	-	-
Stage 1	976	867	-	974	860	-	-	-	-	-	-	-
Stage 2	937	855	-	891	866	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9		9.7			3.2			0.3			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1582	-	-	964	825	1602	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.064	0.068	0.001	-	-				
HCM Control Delay (s)	7.3	0	-	9	9.7	7.2	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile O(veh)	0	-	-	0.2	0.2	0	-	-				

The Plaza at Blue Oaks
10: Oak Meadow Drive/Oak Meadow Road

Existing Plus Project Conditions

AM Peak

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	36	51	18	8	0
Future Vol, veh/h	10	36	51	18	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	39	55	20	9	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	139	9	9	0	-	0
Stage 1	9	-	-	-	-	-
Stage 2	130	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	854	1073	1611	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	824	1073	1611	-	-	-
Mov Cap-2 Maneuver	824	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.8	5.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1611	-	1007	-	-	
HCM Lane V/C Ratio	0.034	-	0.05	-	-	
HCM Control Delay (s)	7.3	0	8.8	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Plus Project Conditions

PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	30	59	9	747	109	204	5	490	484	166	449	18
v/c Ratio	0.05	0.12	0.03	0.77	0.12	0.36	0.01	0.48	0.60	0.39	0.30	0.02
Control Delay	30.4	41.6	0.1	34.4	31.5	8.2	36.8	27.4	6.1	41.5	21.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	41.6	0.1	34.4	31.5	8.2	36.8	27.4	6.1	41.5	21.0	0.1
Queue Length 50th (ft)	7	10	0	188	17	0	1	113	0	43	78	0
Queue Length 95th (ft)	20	28	0	300	61	64	6	180	64	87	188	0
Internal Link Dist (ft)		462			502			709			365	
Turn Bay Length (ft)	235		235	235			245		245	245		245
Base Capacity (vph)	1284	1294	553	1354	1195	670	874	1486	945	874	1600	808
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.05	0.02	0.55	0.09	0.30	0.01	0.33	0.51	0.19	0.28	0.02
Intersection Summary												

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	28	54	8	35	652	100	188	4	431	426	29	126
Future Volume (veh/h)	28	54	8	35	652	100	188	4	431	426	29	126
Number	7	4	14		3	8	18	5	2	12		1
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0		0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863		1863	1863	1863	1863	1863	1863		1863
Adj Flow Rate, veh/h	30	59	9		709	109	204	5	490	484		135
Adj No. of Lanes	2	3	1		2	2	1	2	2	1		2
Peak Hour Factor	0.92	0.92	0.92		0.92	0.92	0.92	0.88	0.88	0.88		0.93
Percent Heavy Veh, %	2	2	2		2	2	2	2	2	2		2
Cap, veh/h	506	332	103		833	486	217	837	1255	562		346
Arrive On Green	0.15	0.07	0.07		0.24	0.14	0.14	0.24	0.35	0.35		0.10
Sat Flow, veh/h	3442	5085	1583		3442	3539	1583	3442	3539	1583		3442
Grp Volume(v), veh/h	30	59	9		709	109	204	5	490	484		135
Grp Sat Flow(s),veh/h/ln	1721	1695	1583		1721	1770	1583	1721	1770	1583		1721
Q Serve(g_s), s	0.6	0.9	0.3		16.9	2.4	8.2	0.1	8.9	24.4		3.2
Cycle Q Clear(g_c), s	0.6	0.9	0.3		16.9	2.4	8.2	0.1	8.9	24.4		3.2
Prop In Lane	1.00		1.00		1.00		1.00	1.00		1.00		1.00
Lane Grp Cap(c), veh/h	506	332	103		833	486	217	837	1255	562		346
V/C Ratio(X)	0.06	0.18	0.09		0.85	0.22	0.94	0.01	0.39	0.86		0.39
Avail Cap(c_a), veh/h	801	1183	368		1241	906	405	837	1358	608		801
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Uniform Delay (d), s/veh	31.6	38.0	12.9		31.1	33.0	20.6	24.7	20.8	25.8		36.2
Incr Delay (d2), s/veh	0.0	0.3	0.5		2.5	0.3	22.5	0.0	0.4	12.7		0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.1		8.3	1.2	5.0	0.0	4.4	12.5		1.5
LnGrp Delay(d),s/veh	31.6	38.3	13.4		33.6	33.4	43.1	24.7	21.2	38.5		36.5
LnGrp LOS	C	D	B		C	C	D	C	C	D		D
Approach Vol, veh/h		98				1022			979			
Approach Delay, s/veh		34.0				35.5			29.7			
Approach LOS		C				D			C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.6	36.5	24.8	12.0	26.9	22.2	19.0	17.8				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.4	6.0	* 6	6.4	* 6				
Max Green Setting (Gmax), s	20.0	33.0	31.0	20.0	20.0	* 33	20.0	* 22				
Max Q Clear Time (g_c+I1), s	5.2	26.4	18.9	2.9	2.1	12.1	2.6	10.2				
Green Ext Time (p_c), s	0.3	4.1	1.9	0.3	8.4	4.1	0.3	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			33.2									
HCM 2010 LOS			C									
Notes												

The Plaza at Blue Oaks
1: Fiddymment Road & Blue Oaks Boulevard

Existing Plus Project Conditions

PM Peak

	↓	↙
Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	418	17
Future Volume (veh/h)	418	17
Number	6	16
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863
Adj Flow Rate, veh/h	449	18
Adj No. of Lanes	2	1
Peak Hour Factor	0.93	0.93
Percent Heavy Veh, %	2	2
Cap, veh/h	668	299
Arrive On Green	0.19	0.19
Sat Flow, veh/h	3539	1583
Grp Volume(v), veh/h	449	18
Grp Sat Flow(s),veh/h/ln	1770	1583
Q Serve(g_s), s	10.1	0.8
Cycle Q Clear(g_c), s	10.1	0.8
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	668	299
V/C Ratio(X)	0.67	0.06
Avail Cap(c_a), veh/h	1358	608
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	1.00	1.00
Uniform Delay (d), s/veh	32.4	28.6
Incr Delay (d2), s/veh	2.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.4
LnGrp Delay(d),s/veh	34.7	28.8
LnGrp LOS	C	C
Approach Vol, veh/h	602	
Approach Delay, s/veh	34.9	
Approach LOS	C	
Timer		

The Plaza at Blue Oaks
2: Blue Oaks Boulevard

Existing Plus Project Conditions

PM Peak

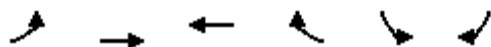
Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↑	↗		↗
Traffic Vol, veh/h	0	604	799	121	0	175
Future Vol, veh/h	0	604	799	121	0	175
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	657	868	132	0	190
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	434
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	0	-	-	-	0	487
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	487
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		17.1		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	487		
HCM Lane V/C Ratio	-	-	-	0.391		
HCM Control Delay (s)	-	-	-	17.1		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	1.8		

The Plaza at Blue Oaks
3: Blue Oaks Boulevard & Oak Meadow Drive

Existing Plus Project Conditions

PM Peak

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	38	603	845	54	0	75
Future Vol, veh/h	38	603	845	54	0	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	240	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	655	909	58	0	107
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	909	0	-	0	1254	454
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	345	-
Critical Hdwy	5.34	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	3.12	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	433	-	-	-	231	473
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	631	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	433	-	-	-	209	473
Mov Cap-2 Maneuver	-	-	-	-	209	-
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	571	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		14.8		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	433	-	-	-	473	
HCM Lane V/C Ratio	0.095	-	-	-	0.227	
HCM Control Delay (s)	14.2	-	-	-	14.8	
HCM Lane LOS	B	-	-	-	B	
HCM 95th %tile Q(veh)	0.3	-	-	-	0.9	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	6	690	852	68	75	11
v/c Ratio	0.02	0.17	0.22	0.06	0.17	0.03
Control Delay	17.4	2.4	4.1	2.2	16.7	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.4	2.4	4.1	2.2	16.7	9.9
Queue Length 50th (ft)	1	20	26	0	18	0
Queue Length 95th (ft)	9	27	76	15	49	10
Internal Link Dist (ft)		333	430		493	
Turn Bay Length (ft)	230			245		240
Base Capacity (vph)	935	5085	4970	1549	935	841
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.14	0.17	0.04	0.08	0.01
Intersection Summary						

The Plaza at Blue Oaks
4: Blue Oaks & Orchard View

Existing Plus Project Conditions

PM Peak

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		  	  					
Traffic Volume (veh/h)	5	593	818	65	69	10		
Future Volume (veh/h)	5	593	818	65	69	10		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	6	690	852	68	75	11		
Adj No. of Lanes	1	3	3	1	1	1		
Peak Hour Factor	0.86	0.86	0.96	0.96	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	62	3563	3027	943	281	251		
Arrive On Green	0.03	0.70	0.60	0.60	0.16	0.16		
Sat Flow, veh/h	1774	5253	5253	1583	1774	1583		
Grp Volume(v), veh/h	6	690	852	68	75	11		
Grp Sat Flow(s),veh/h/ln	1774	1695	1695	1583	1774	1583		
Q Serve(g_s), s	0.1	2.0	3.5	0.8	1.6	0.3		
Cycle Q Clear(g_c), s	0.1	2.0	3.5	0.8	1.6	0.3		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	62	3563	3027	943	281	251		
V/C Ratio(X)	0.10	0.19	0.28	0.07	0.27	0.04		
Avail Cap(c_a), veh/h	875	5735	5735	1786	875	781		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	19.9	2.2	4.2	3.6	15.7	15.2		
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.0	0.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.9	1.6	0.4	0.8	0.2		
LnGrp Delay(d),s/veh	20.1	2.2	4.3	3.7	15.9	15.2		
LnGrp LOS	C	A	A	A	B	B		
Approach Vol, veh/h		696	920		86			
Approach Delay, s/veh		2.4	4.2		15.8			
Approach LOS		A	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				32.8		9.7	4.5	28.3
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s				45.0		20.0	20.0	45.0
Max Q Clear Time (g_c+I1), s				4.0		3.6	2.1	5.5
Green Ext Time (p_c), s				17.1		0.1	0.0	16.9
Intersection Summary								
HCM 2010 Ctrl Delay			4.1					
HCM 2010 LOS			A					
Notes								

The Plaza at Blue Oaks
5: Fiddymment Road

Existing Plus Project Conditions

PM Peak

Intersection

Int Delay, s/veh 1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	195	443	233	0	561
Future Vol, veh/h	0	195	443	233	0	561
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	212	482	253	0	610

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	367	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	630	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	630	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	- 630	-
HCM Lane V/C Ratio	-	- 0.336	-
HCM Control Delay (s)	-	- 13.6	-
HCM Lane LOS	-	- B	-
HCM 95th %tile Q(veh)	-	- 1.5	-

The Plaza at Blue Oaks
6: Fiddymment Road & Harvey Way

Existing Plus Project Conditions

PM Peak

Intersection												
Int Delay, s/veh	31.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	0	0	0	108	0	9	0	569	10	144	482	0
Future Vol, veh/h	0	0	0	108	0	9	0	569	10	144	482	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	235	205	-	220	250	-	180
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	70	70	70	81	81	81	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	154	0	13	0	702	12	155	518	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1179	1530	259	1271	1530	351	518	0	0	702	0	0
Stage 1	828	828	-	702	702	-	-	-	-	-	-	-
Stage 2	351	702	-	569	828	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	146	116	740	~ 125	116	645	1044	-	-	891	-	-
Stage 1	332	384	-	395	439	-	-	-	-	-	-	-
Stage 2	639	439	-	474	384	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	124	96	740	~ 108	96	645	1044	-	-	891	-	-
Mov Cap-2 Maneuver	124	96	-	~ 108	96	-	-	-	-	-	-	-
Stage 1	332	317	-	395	439	-	-	-	-	-	-	-
Stage 2	626	439	-	392	317	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		287.1			0			2.3			
HCM LOS	A		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR			
Capacity (veh/h)	1044	-	-	-	108	645	891	-	-			
HCM Lane V/C Ratio	-	-	-	-	1.429	0.02	0.174	-	-			
HCM Control Delay (s)	0	-	-	0	310.1	10.7	9.9	-	-			
HCM Lane LOS	A	-	-	A	F	B	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	-	11	0.1	0.6	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection						
Int Delay, s/veh	3.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	23	131	0	15	102	0
Future Vol, veh/h	23	131	0	15	102	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	142	0	16	111	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	167	0	112	96
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1411	-	885	960
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	1007	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1411	-	885	960
Mov Cap-2 Maneuver	-	-	-	-	885	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	1007	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	885	-	-	1411	-	
HCM Lane V/C Ratio	0.125	-	-	-	-	
HCM Control Delay (s)	9.7	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile O(veh)	0.4	-	-	0	-	

The Plaza at Blue Oaks
8: Oak Meadow Road & Harvey Way

Existing Plus Project Conditions

PM Peak

Intersection						
Int Delay, s/veh	4.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	23	0	7	14	1	37
Future Vol, veh/h	23	0	7	14	1	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	0	10	20	1	53
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	32	0	72	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	40	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1580	-	932	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1580	-	926	1042
Mov Cap-2 Maneuver	-	-	-	-	926	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	976	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	2.4		8.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1039	-	-	1580	-	
HCM Lane V/C Ratio	0.052	-	-	0.006	-	
HCM Control Delay (s)	8.7	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.2	-	-	0	-	

The Plaza at Blue Oaks
9: Orchard View Road & Harvey Way

Existing Plus Project Conditions

PM Peak

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	10	46	20	2	1	24	4	34	0	11	2
Future Vol, veh/h	5	10	46	20	2	1	24	4	34	0	11	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	70	70	70	78	78	78	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	12	55	29	3	1	31	5	44	0	16	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	108	127	17	138	107	27	19	0	0	49	0	0
Stage 1	17	17	-	88	88	-	-	-	-	-	-	-
Stage 2	91	110	-	50	19	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	871	764	1062	833	783	1048	1597	-	-	1558	-	-
Stage 1	1002	881	-	920	822	-	-	-	-	-	-	-
Stage 2	916	804	-	963	880	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	854	749	1062	769	767	1048	1597	-	-	1558	-	-
Mov Cap-2 Maneuver	854	749	-	769	767	-	-	-	-	-	-	-
Stage 1	982	881	-	902	806	-	-	-	-	-	-	-
Stage 2	893	788	-	901	880	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9		9.8			2.8			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1597	-	-	976	778	1558	-	-				
HCM Lane V/C Ratio	0.019	-	-	0.074	0.042	-	-	-				
HCM Control Delay (s)	7.3	0	-	9	9.8	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile O(veh)	0.1	-	-	0.2	0.1	0	-	-				

The Plaza at Blue Oaks
10: Oak Meadow Drive/Oak Meadow Road

Existing Plus Project Conditions

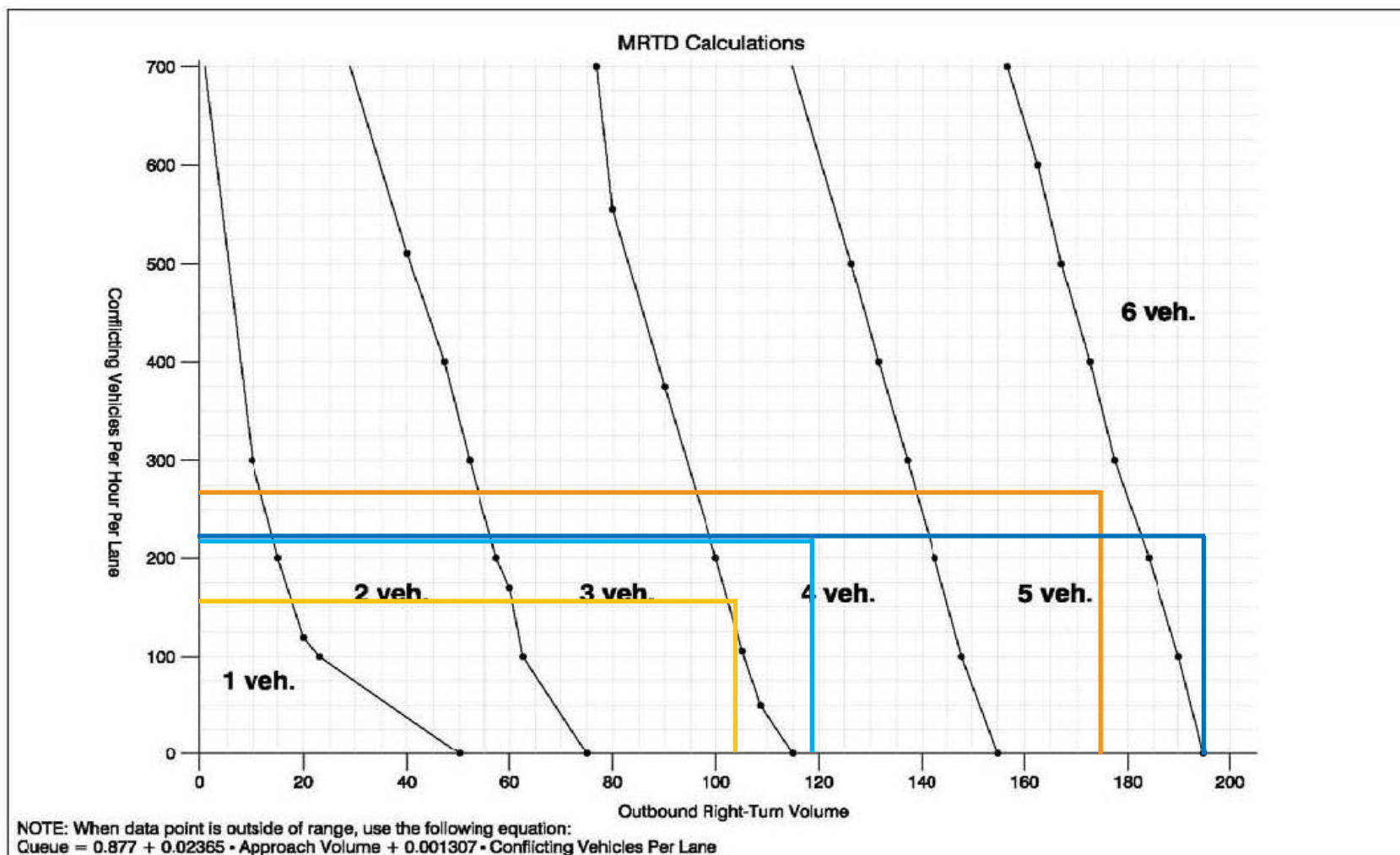
PM Peak

Intersection						
Int Delay, s/veh	6.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	59	73	19	16	0
Future Vol, veh/h	18	59	73	19	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	64	79	21	17	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	196	17	17	0	-	0
Stage 1	17	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	793	1062	1600	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	753	1062	1600	-	-	-
Mov Cap-2 Maneuver	753	-	-	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.1	5.8		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1600	-	969	-	-	
HCM Lane V/C Ratio	0.05	-	0.086	-	-	
HCM Control Delay (s)	7.4	0	9.1	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-	

Attachment C

Minimum Required Throat Depth (MRTD) Analysis Worksheet

Exhibit 4-2
Minimum Required Throat Depth
For Right-Turn Only Movements



LEGEND

Project Driveway #2	Project Driveway #5
AM Volumes	AM Volumes
PM Volumes	PM Volumes

PRELIMINARY SITE PLAN - ALT 4.2

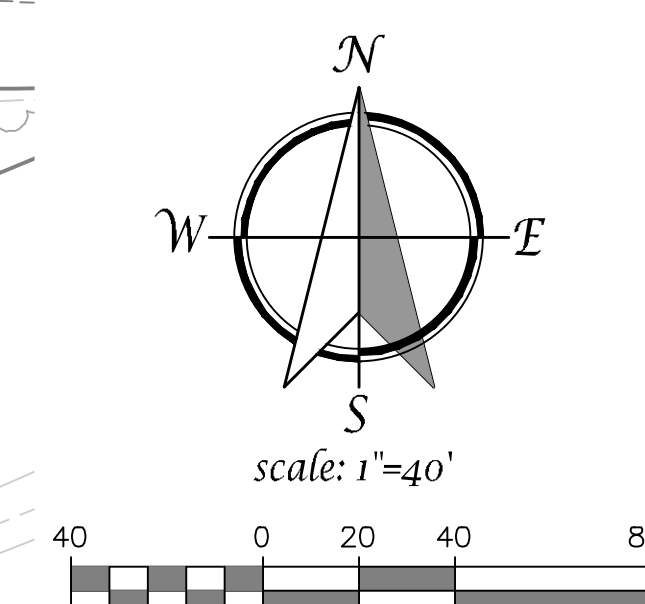
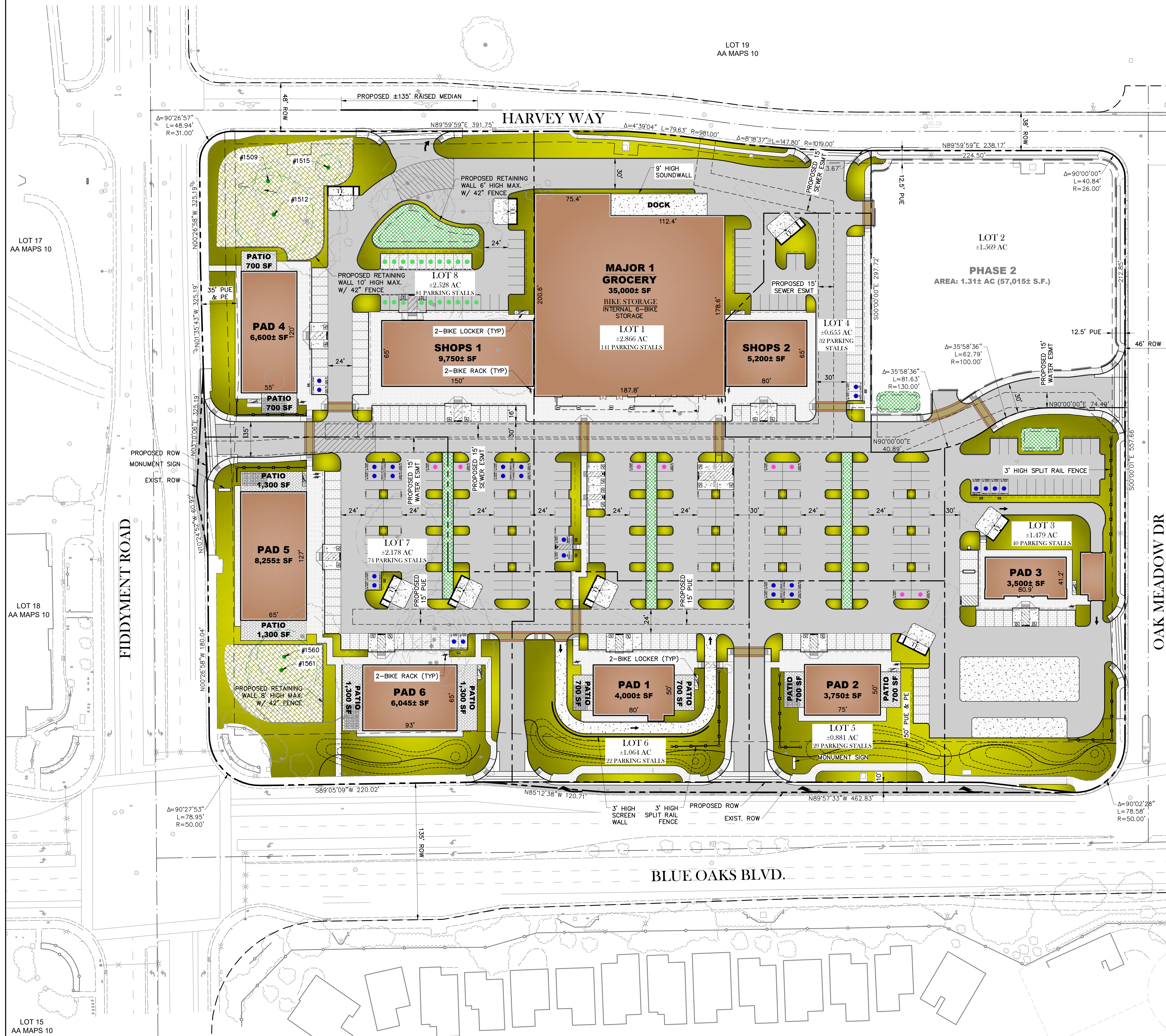
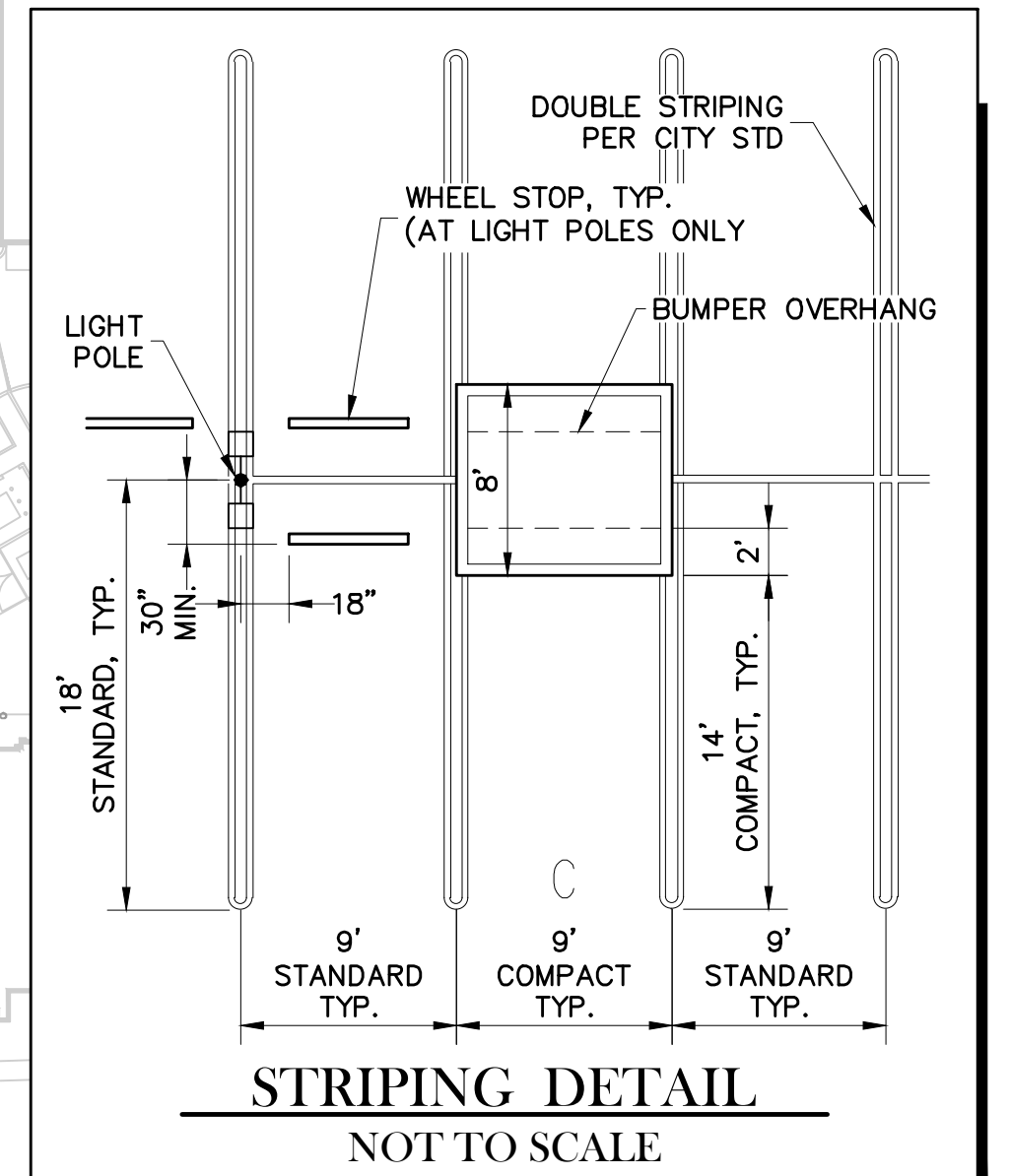
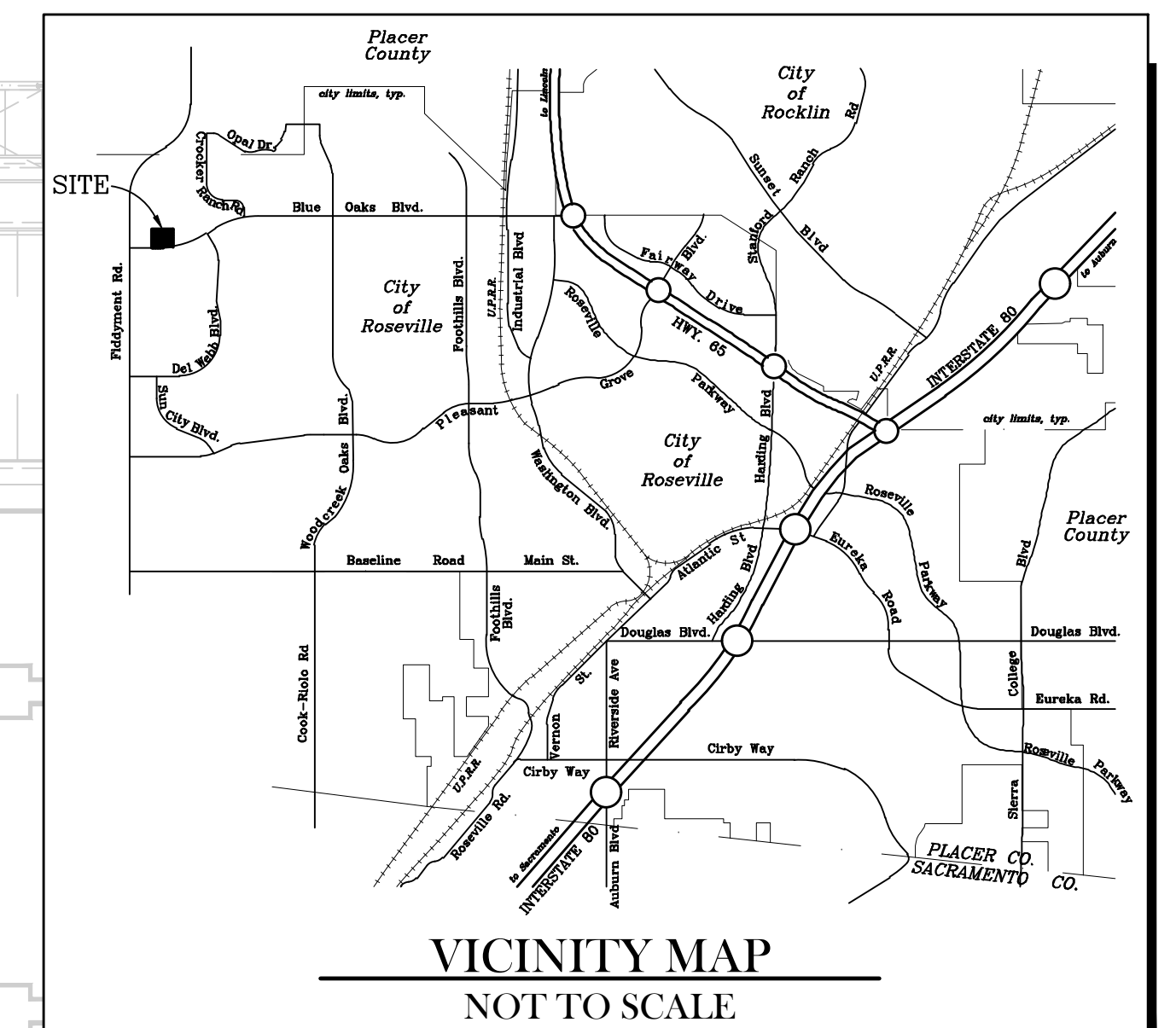
THE PLAZA AT BLUE OAKS

1950 BLUE OAKS BLVD
FIDDYMENT F-31
ROSEVILLE, CA

SITE LEGEND	
	ASPHALT PAVEMENT
	PERVIOUS PAVEMENT
	LANDSCAPE AREA
	NATIVE LANDSCAPE AREA
	BUILDING AREA
	CONCRETE SIDEWALK
	ENHANCED PAVEMENT
	BIORETENTION BASIN

BUILDING SUMMARY			
OWNER WEST ROSEVILLE DEVELOPMENT CO. 4670 WILLOW ROAD, SUITE 200 PLEASANTON, CA 94588 ATTN: JOE ZAWODSKI jezawodski@hotmail.com			
APPLICANT/DEVELOPER FIDDYMENT F-31 RETAIL, LLC 4670 WILLOW ROAD, SUITE 200 PLEASANTON, CA 94588 ATTN: JOE ZAWODSKI jezawodski@hotmail.com			
ENGINEER TSD ENGINEERING, INC. 785 ORCHARD DRIVE, SUITE 110 FOLSOM, CA 95630 ATTN: CASEY FEICKERT cfeickert@tsdeng.com			
ASSESSORS PARCEL NO. & AREA APN: 017-117-093 AREA: ±13.35 AC			
PROPOSED LOT 1	AREA: ±2.866 AC	FLOOR AREA	REQUIRED PARKING
PROPOSED LOT 2	AREA: ±1.569 AC	MAJOR 1	35,000 SF 1/300 SF 117
PROPOSED LOT 3	AREA: ±1.479 AC	SHOPS 1	9,750 SF 1/200 SF 49
PROPOSED LOT 4	AREA: ±0.655 AC	SHOPS 2	5,200 SF 1/200 SF 26
PROPOSED LOT 5	AREA: ±0.881 AC	PAD 1	4,000 SF 1/200 SF 20
PROPOSED LOT 6	AREA: ±1.064 AC	PAD 2	3,750 SF 1/200 SF 19
PROPOSED LOT 7	AREA: ±2.178 AC	PAD 3	3,500 SF 1/300 SF 12
PROPOSED LOT 8	AREA: ±2.528 AC	PAD 4	6,600 SF 1/200 SF 33
		PAD 5	8,255 SF 1/200 SF 42
		PAD 6	6,045 SF 1/200 SF 31
		TOTAL	82,100 SF REQUIRED 349

PARKING SUMMARY	
STANDARD SPACES	364
COMPACT SPACES	32
ACCESSIBLE SPACES (9'x18' MIN.)	23 (5.5%)
TOTAL PROPOSED	419
CITY PARK & RIDE REQUIREMENTS (w/ (2) ACCESSIBLE SPACES)	
GREEN REQUIREMENTS	
● CLEAN AIR / CARPOOL / ELECTRIC VEHICLE (● 8% OF 419) (5,106.5.2)	34
● ELECTRIC VEHICLE CHARGING CAPABLE (● 8% OF 419) (5,106.5.3.3)	26
BIKE PARKING SUMMARY	
SHORT-TERM BICYCLE SPACES (● 5% OF 419) (5,106.4.1.1)	21
(1) 2-BIKE RACKS	
LONG-TERM BICYCLE SPACES (● 5% OF 419) (5,106.4.1.2)	21
(8) 2-BIKE LOCKERS	16
(1) RETAIL BUILDING w/ INTERNAL 6-BIKE STORAGE	6



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SP-1

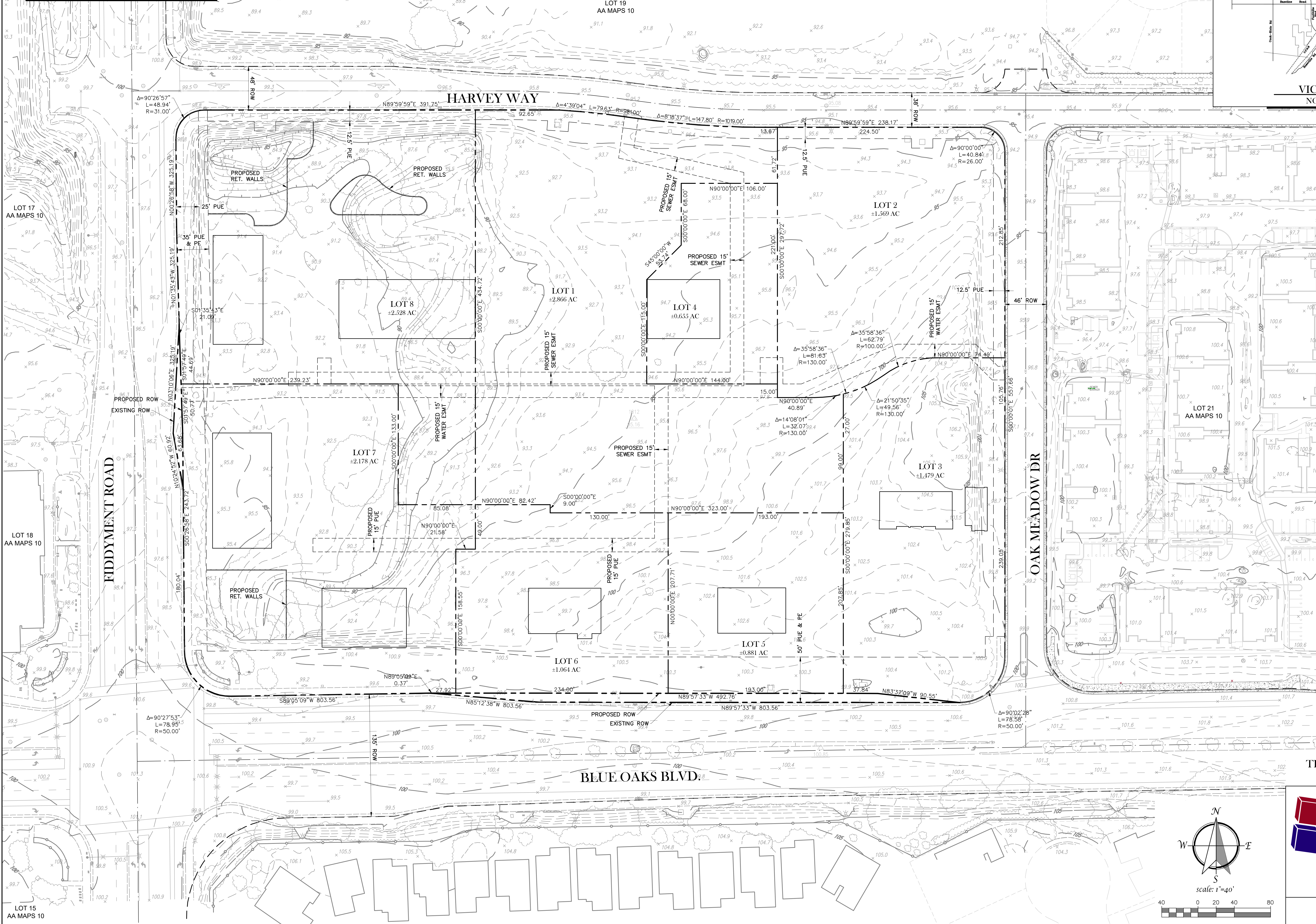
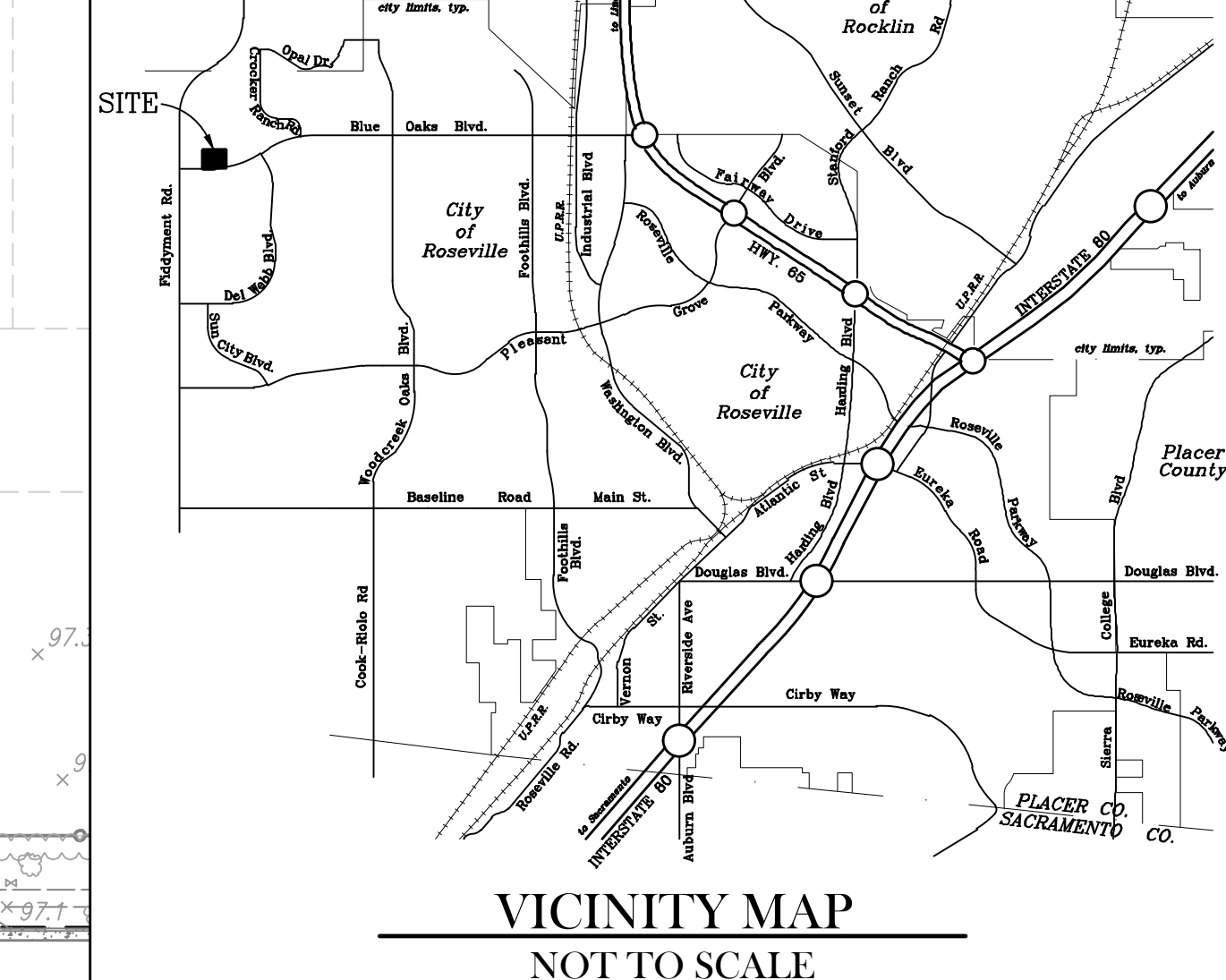
- GENERAL NOTES
1. THIS TENTATIVE PARCEL MAP SUBDIVIDES LOT 22 OF BOOK AA OF MAPS, AT PAGE 10, RECORDS OF PLACER COUNTY.
 2. PARCEL DIMENSIONS AND AREAS ARE APPROXIMATE.
 3. PARCEL LINES AND AREAS MAY BE ADJUSTED AT THE TIME OF THE FINAL PARCEL MAP PROVIDED NO NEW ADDITIONAL PARCELS ARE CREATED, SUBJECT TO THE APPROVAL OF THE CITY OF ROSEVILLE.
 4. THE FINAL MAPPING AND SUBSEQUENT DEVELOPMENT OF LOTS MAY BE PHASED IN ANY SEQUENCE PROVIDED EACH PHASE PROVIDES FOR ACCESS AND FOR BACKBONE INFRASTRUCTURE, SUBJECT TO THE APPROVAL OF THE CITY OF ROSEVILLE.
 5. THE EXTENT OF CONSTRUCTION OF PUBLIC STREETS MAY ALSO BE PHASED, SUBJECT TO THE APPROVAL OF THE CITY OF ROSEVILLE.
 6. PURSUANT TO GOVERNMENT CODE SECTION 66456.1, THE SUBDIVIDER MAY FILE MULTIPLE FINAL MAPS BASED UPON THIS TENTATIVE PARCEL MAP. THE FILING OF A FINAL MAP ON A PORTION OF THIS TENTATIVE PARCEL MAP SHALL NOT INVALIDATE ANY PART OF THIS TENTATIVE PARCEL MAP.
 7. RECIPROCAL ACCESS, PARKING, DRAINAGE, AND UTILITY INFRASTRUCTURE AGREEMENTS ARE TO BE RECORDED WITH THE FILING OF EACH PARCEL MAP RELATING TO THIS TENTATIVE PARCEL MAP.
 8. EASEMENTS TO ACCOMMODATE NEW PUBLIC UTILITY IMPROVEMENTS, ACCESS REQUIRED FOR PARCEL DEVELOPMENT, OR OTHER SIMILAR MAPPING REQUIREMENTS NEEDED TO ACCOMPLISH THE FINAL DESIGN MAY BE ADDED PRIOR TO EACH FINAL MAP BASED ON THIS TENTATIVE PARCEL MAP.

TENTATIVE PARCEL MAP

THE PLAZA AT BLUE OAKS

1950 BLUE OAKS BLVD
FIDDYMENT F-31
ROSEVILLE, CA

PC EXHIBIT C

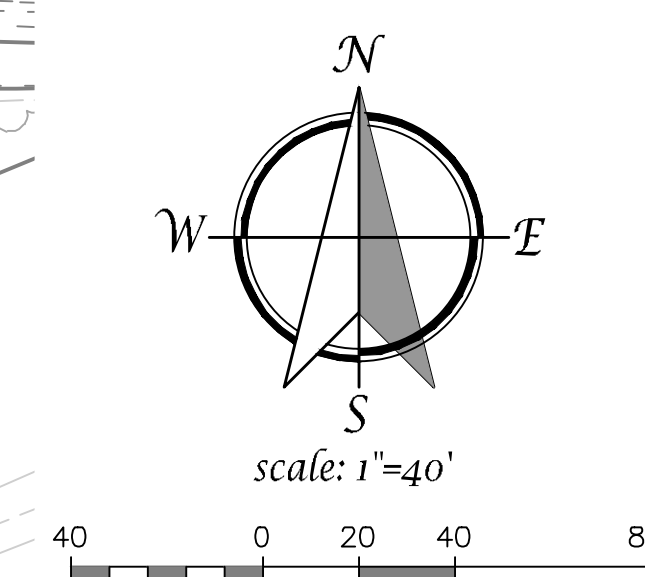


PROJECT SUMMARY	
OWNER WEST ROSEVILLE DEVELOPMENT CO. 4670 WILLOW ROAD, SUITE 200 PLEASANTON, CA 94588 ATTN: JOE ZAWIDSKI joezawidski@hotmail.com	
APPLICANT/DEVELOPER FIDDYMENT F-31 RETAIL, LLC 4670 WILLOW ROAD, SUITE 200 PLEASANTON, CA 94588 ATTN: JOE ZAWIDSKI joezawidski@hotmail.com	
ENGINEER TSD ENGINEERING, INC 785 ORCHARD DRIVE, SUITE 110 FOLSOM, CA 95630 ATTN: CASEY FEICKERT cfeickert@tsdeng.com	
PROPOSED USE COMMERCIAL/RETAIL	
ZONING CC - COMMUNITY COMMERCIAL	
NUMBER OF PARCELS 1 EXISTING PARCEL 8 PROPOSED LOTS	
ASSESSORS PARCEL NO & AREA APN: 017-117-093 AREA: ±13.35 AC	
PROPOSED LOT 1	AREA: ±2.866 AC
PROPOSED LOT 2	AREA: ±1.569 AC
PROPOSED LOT 3	AREA: ±1.179 AC
PROPOSED LOT 4	AREA: ±0.655 AC
PROPOSED LOT 5	AREA: ±0.881 AC
PROPOSED LOT 6	AREA: ±1.064 AC
PROPOSED LOT 7	AREA: ±2.178 AC
PROPOSED LOT 8	AREA: ±2.528 AC
SERVICE PROVIDERS	
PARKS & RECREATION DISTRICT CITY OF ROSEVILLE (916) 772-PLAY (7529)	
SCHOOL DISTRICT ROSEVILLE CITY SCHOOL DISTRICT (916) 771-1600 ROSEVILLE JOINT UNION HIGH SCHOOL (916) 786-2051	
WATER CITY OF ROSEVILLE (916) 774-5750	
SANITARY SEWER CITY OF ROSEVILLE (916) 774-5750	
STORM DRAIN CITY OF ROSEVILLE (916) 774-5780	
SOLID WASTE CITY OF ROSEVILLE (916) 774-5780	
GAS PG&E (916) 386-5722	
ELECTRIC ROSEVILLE ELECTRIC (916) 797-6937	
TELEPHONE CONSOLIDATED COMMUNICATIONS (916) 780-8000	
CABLE COMCAST 1 (800) 266-2278	
POLICE DEPARTMENT CITY OF ROSEVILLE (916) 774-5800	
FIRE DEPARTMENT CITY OF ROSEVILLE (916) 774-5000	

TENTATIVE PARCEL MAP
MARCH 16, 2020

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TPM-1



PRELIMINARY GRADING & DRAINAGE PLAN
THE PLAZA AT BLUE OAKS
1950 BLUE OAKS BLVD
FIDDYMENT F-31
ROSEVILLE, CA

PC EXHIBIT D

GRADING SECTION
SCALE: 1" = 20'-0"
VERTICAL: 1:1

GRADING SECTION
SCALE: 1" = 20'-0"
VERTICAL: 1:1

GRADING SECTION
SCALE: 1" = 20'-0"
VERTICAL: 1:1

GRADING SECTION
SCALE: 1" = 20'-0"
VERTICAL: 1:1

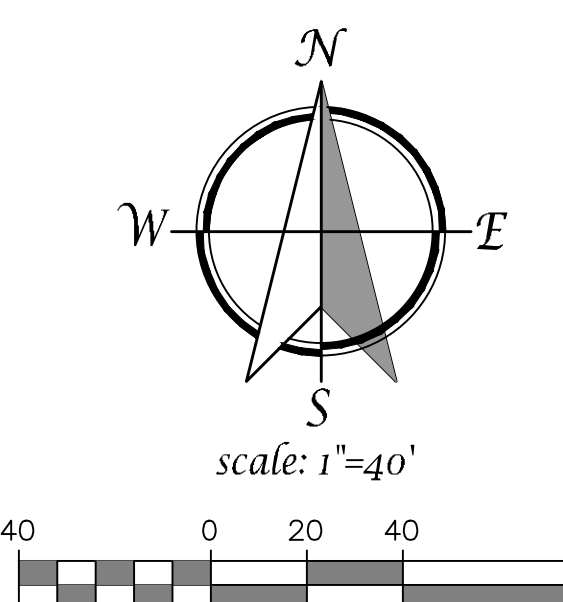
GRADING SECTION
SCALE: 1" = 20'-0"
VERTICAL: 1:1

LEGEND		
DESCRIPTION	PROPOSED	EXISTING
DESIGN ELEVATION	130.0 FG	(98.0) FF
CONTOUR	99	99
STORM DRAIN	100	100
MANHOLE	●	●
DROP INLET	■	■
GRADE BREAK	≡	≡
OVERLAND RELEASE	→	→

FLOOD ZONE
ZONE X (AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD-PLAIN) PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, MAP NO. 06061C0394 F, DATED JUNE 8, 1998.

EARTHWORK
(FOLLOWING NUMBERS ARE FOR PERMITTING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR THEIR OWN EARTH WORK QUANTITIES)
OUT: ±24,000 CUBIC YARDS
FILL: ±40,500 CUBIC YARDS
NET: ±16,500 CUBIC YARDS - IMPORT
THE ABOVE EARTHWORK ASSUMES 15% SHRINKAGE. PRIOR TO SITE CONSTRUCTION, CONTRACTOR SHALL PROVIDE CITY INSPECTOR THE LOCATION OF THE IMPORT (OR EXPORT) SITE AND THE ASSOCIATED GRADING PERMIT FOR THE CORRESPONDING SITE.

- GRADING NOTES**
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE.
 - THE PROPOSED UTILITIES AND INFRASTRUCTURE SHOWN ARE CONCEPTUAL ONLY AND ARE SUBJECT TO REVISION.
 - UTILITIES MAY BE PHASED DEPENDING UPON THE DEVELOPMENT SEQUENCE OF THE PROJECT, SUBJECT TO THE REVIEW OF THE CITY OF ROSEVILLE.
 - THE EXISTING GROUND CONTOURS SHOWN ON THIS EXHIBIT REPRESENT THE EXISTING GRADE CONDITION AND ARE FOR PLANNING LEVEL STUDIES ONLY.
 - THE CONCEPTUAL GRADING PLAN IS BASED ON A CONCEPTUAL SITE PLAN AND IS SUBJECT TO CHANGE.
 - FINAL SITE DESIGN MAY ALTER THE GRADING AND EARTHWORK DESIGN SHOWN HEREON.

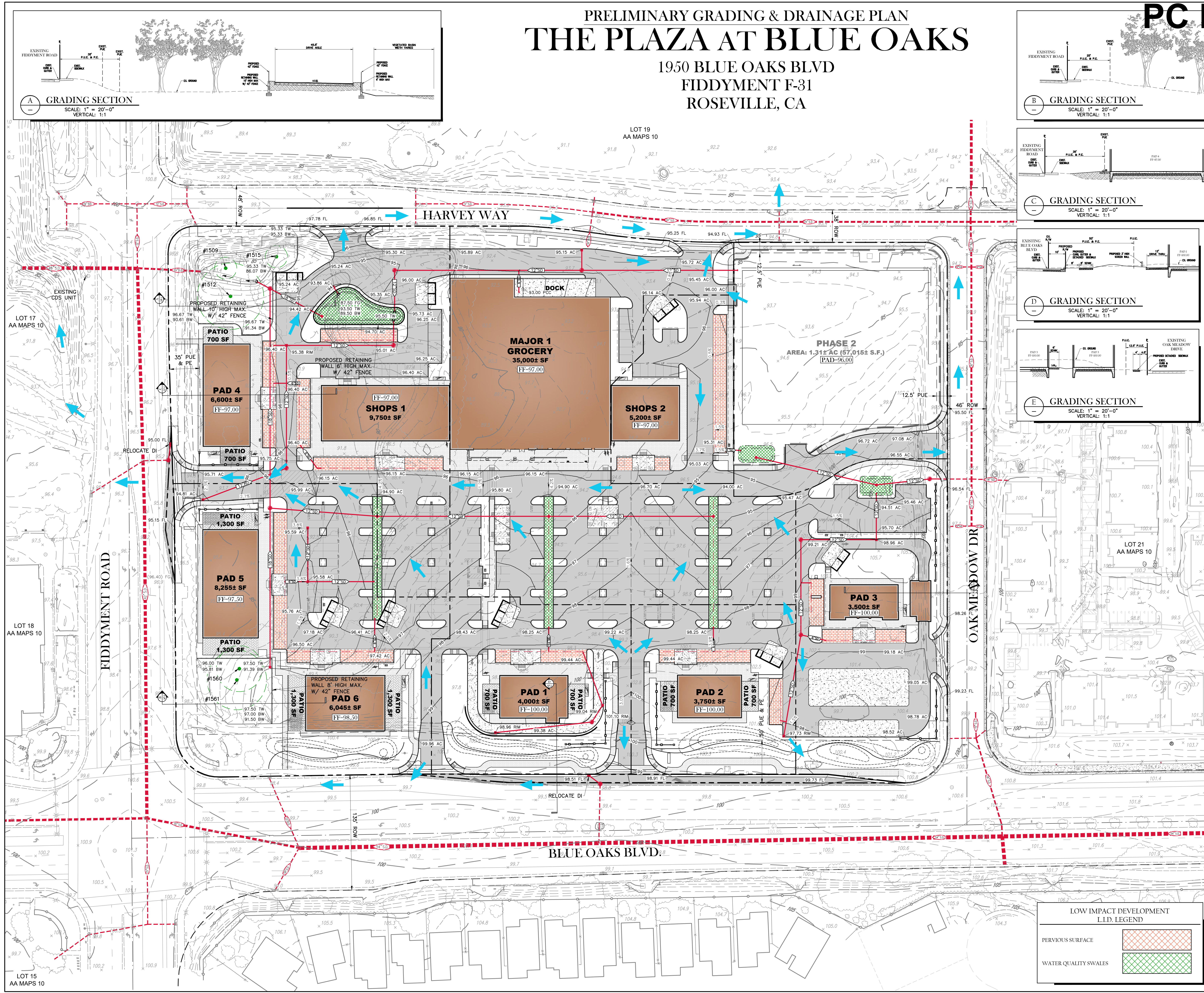


PRELIMINARY
GRADING & DRAINAGE PLAN
MARCH 16, 2020

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SP-2

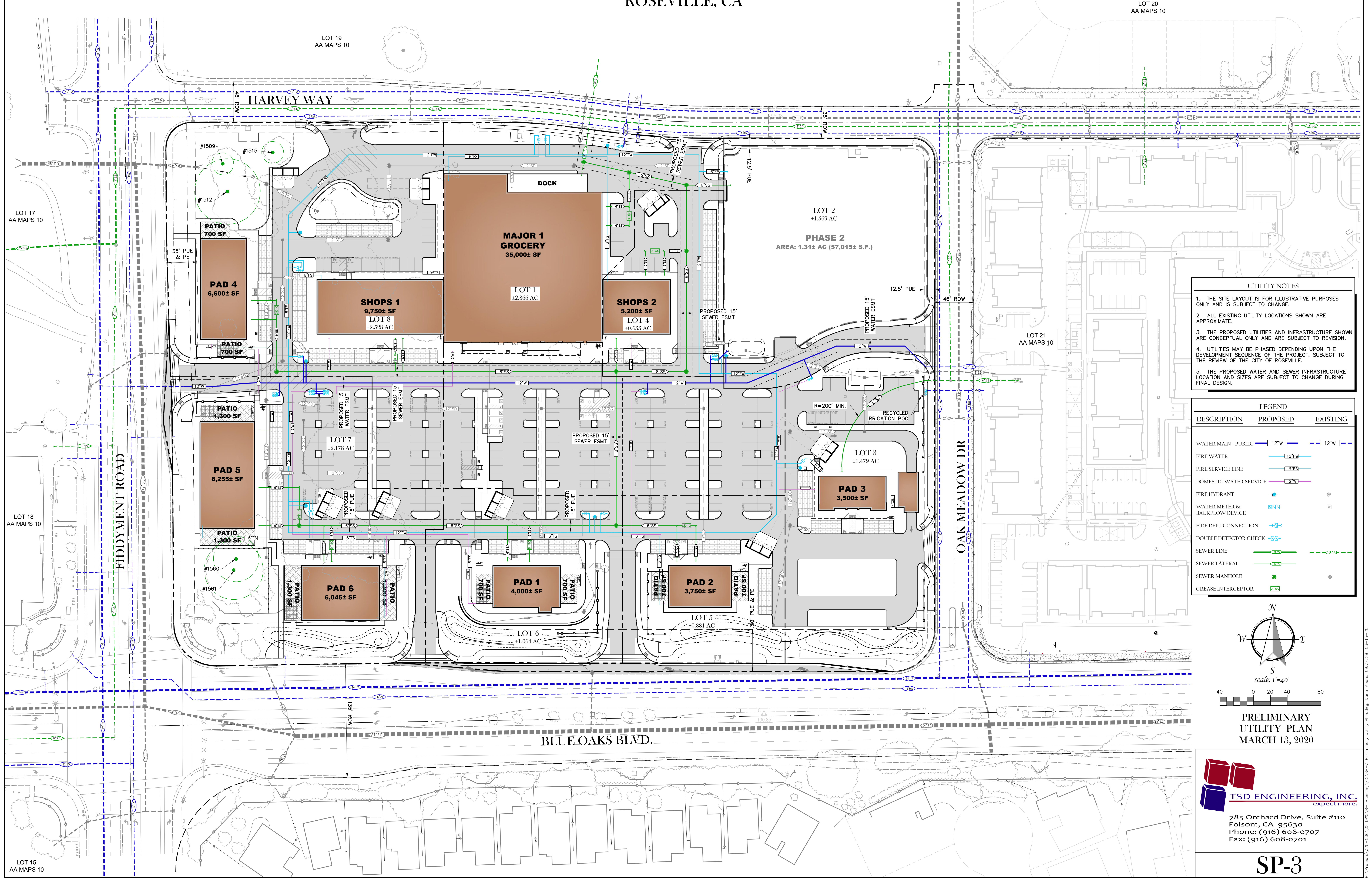
LOW IMPACT DEVELOPMENT L.I.D. LEGEND	
PERVIOUS SURFACE	
WATER QUALITY SWALES	



PRELIMINARY UTILITY PLAN
THE PLAZA AT BLUE OAKS

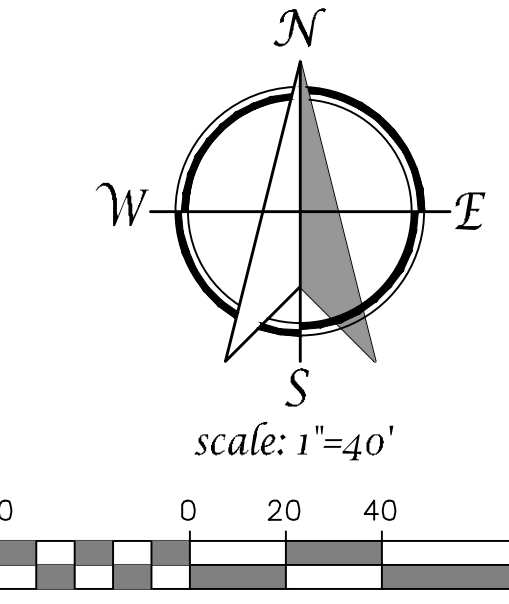
1950 BLUE OAKS BLVD
FIDDYMENT F-31
ROSEVILLE, CA

PC EXHIBIT E



- UTILITY NOTES**
1. THE SITE LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY AND IS SUBJECT TO CHANGE.
 2. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE.
 3. THE PROPOSED UTILITIES AND INFRASTRUCTURE SHOWN ARE CONCEPTUAL ONLY AND ARE SUBJECT TO REVISION.
 4. UTILITIES MAY BE PHASED DEPENDING UPON THE DEVELOPMENT SEQUENCE OF THE PROJECT, SUBJECT TO THE REVIEW OF THE CITY OF ROSEVILLE.
 5. THE PROPOSED WATER AND SEWER INFRASTRUCTURE LOCATION AND SIZES ARE SUBJECT TO CHANGE DURING FINAL DESIGN.

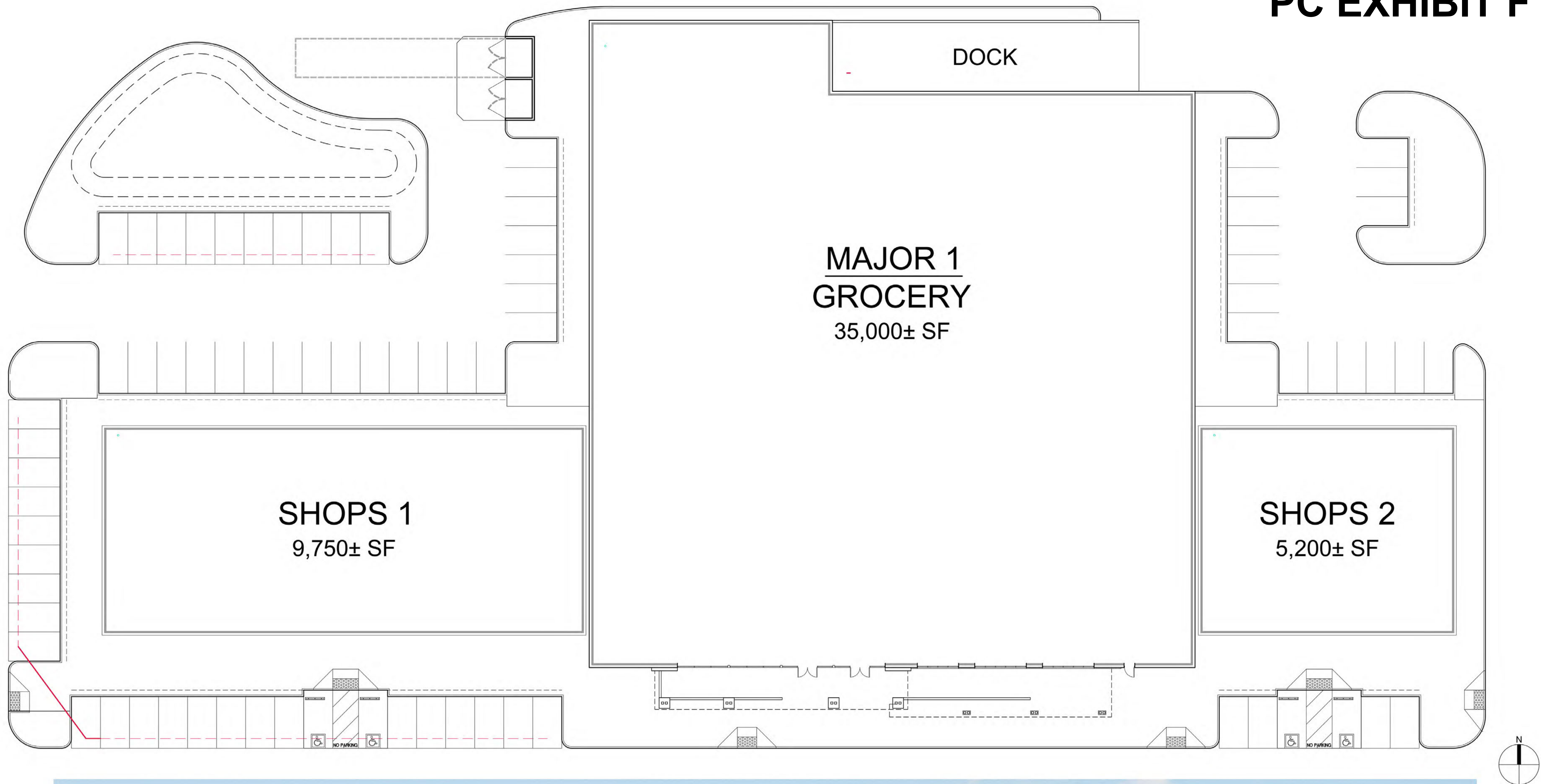
LEGEND		
DESCRIPTION	PROPOSED	EXISTING
WATER MAIN - PUBLIC	12" W	12" W
FIRE WATER	12" W	
FIRE SERVICE LINE	8" TS	
DOMESTIC WATER SERVICE	2" W	
FIRE HYDRANT		
WATER METER & BACKFLOW DEVICE		
FIRE DEPT CONNECTION		
DOUBLE DETECTOR CHECK		
SEWER LINE	8" TS	8" TS
SEWER LATERAL	4" TS	
SEWER MANHOLE		
GREASE INTERCEPTOR		



PRELIMINARY
UTILITY PLAN
MARCH 13, 2020

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SP-3



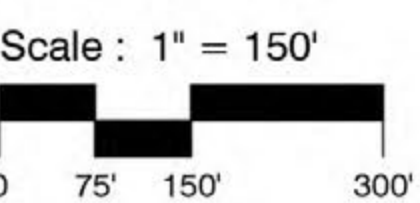
BUILDING ELEVATIONS

MAJOR 1, SHOPS 1&2

DATE:	10/29/2019
MCG JOB #:	16.480.01

DATE	REVISIONS

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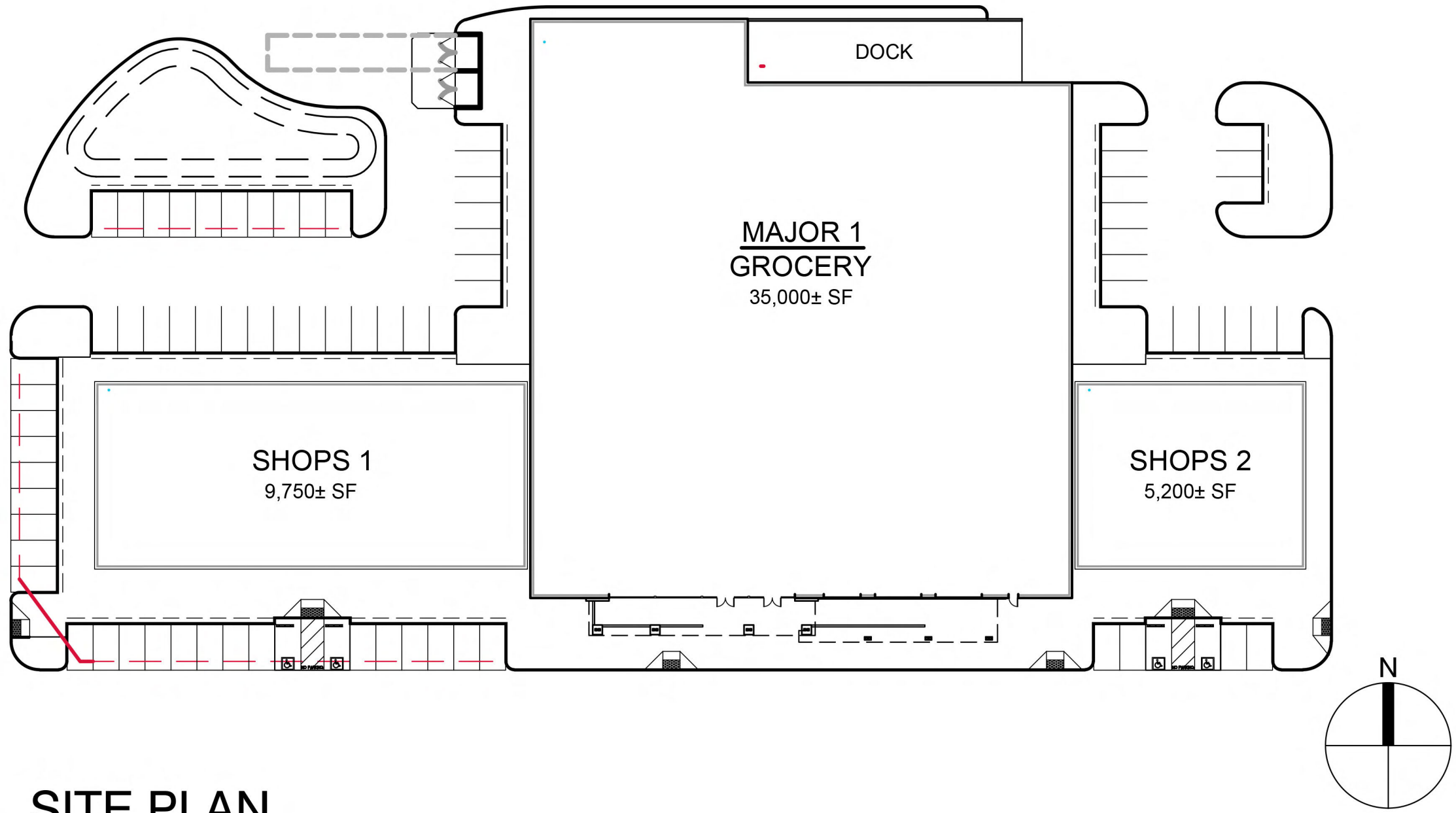
BLUE OAKS PLAZA
ROSEVILLE, CA 95744

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San Francisco, California 94108-4461
☎ 415.974.6002 ☎ 415.974.1556
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EAST ELEVATION



SITE PLAN
NTS



SOUTH ELEVATION

DATE: 10/29/2019
MCG JOB #: 16.480.01

DATE	REVISIONS

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MAJOR 1, SHOPS 1&2

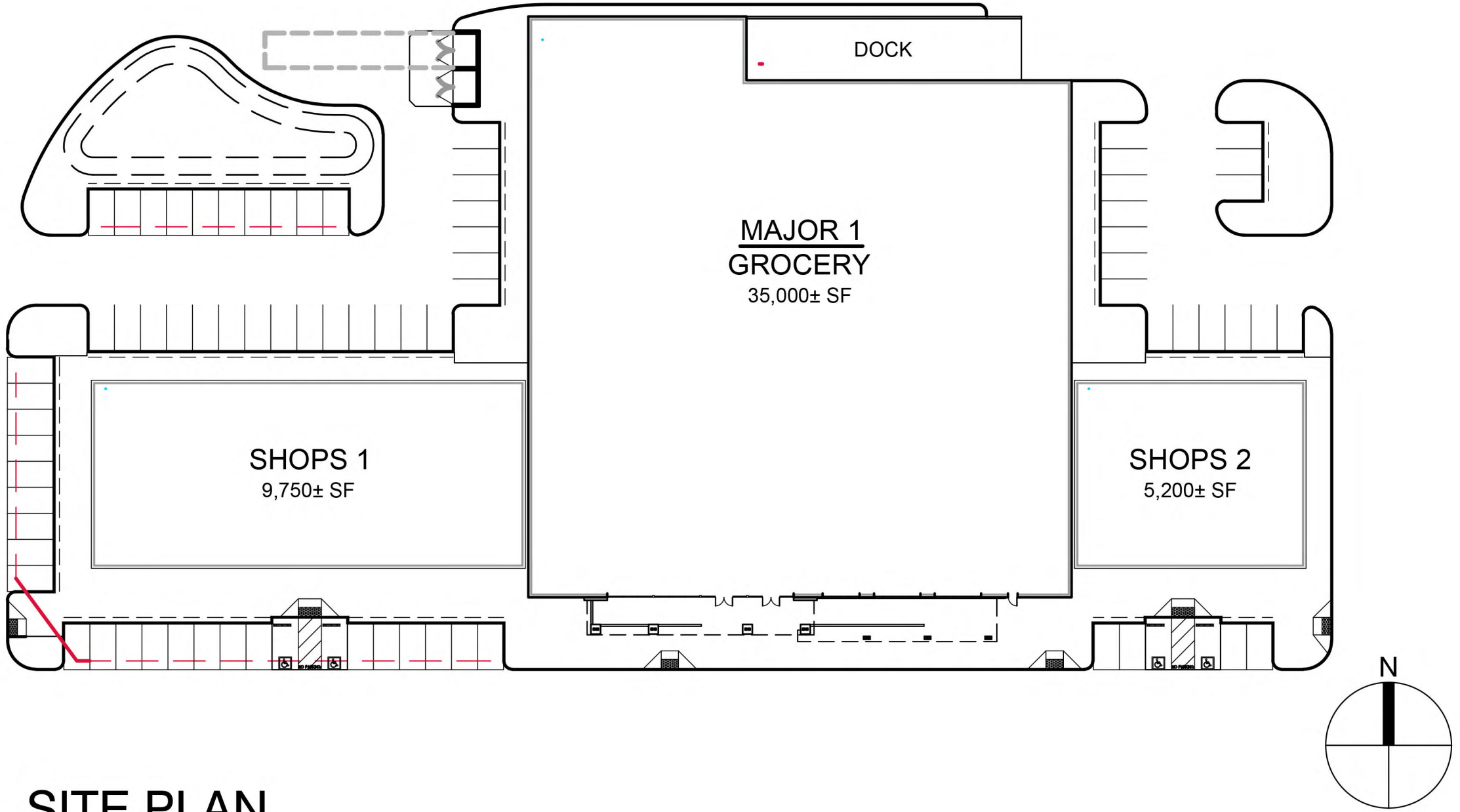
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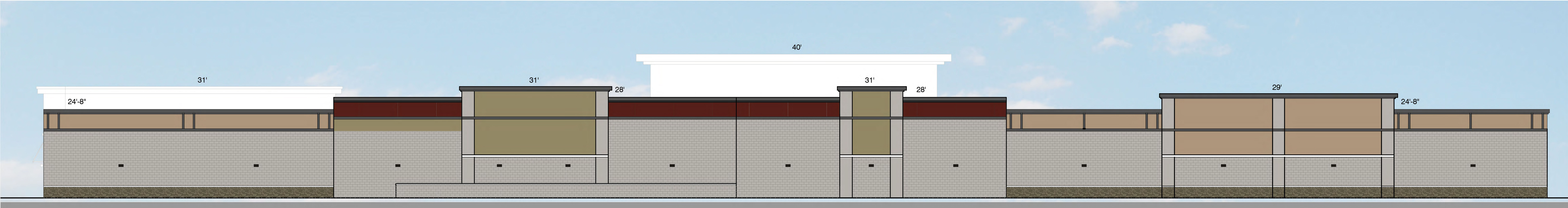




WEST ELEVATION



SITE PLAN
NTS



NORTH ELEVATION

BUILDING ELEVATIONS

MAJOR 1, SHOPS 1&2

DATE: 10/29/2019
MCG JOB #: 16.480.01

DATE	REVISIONS

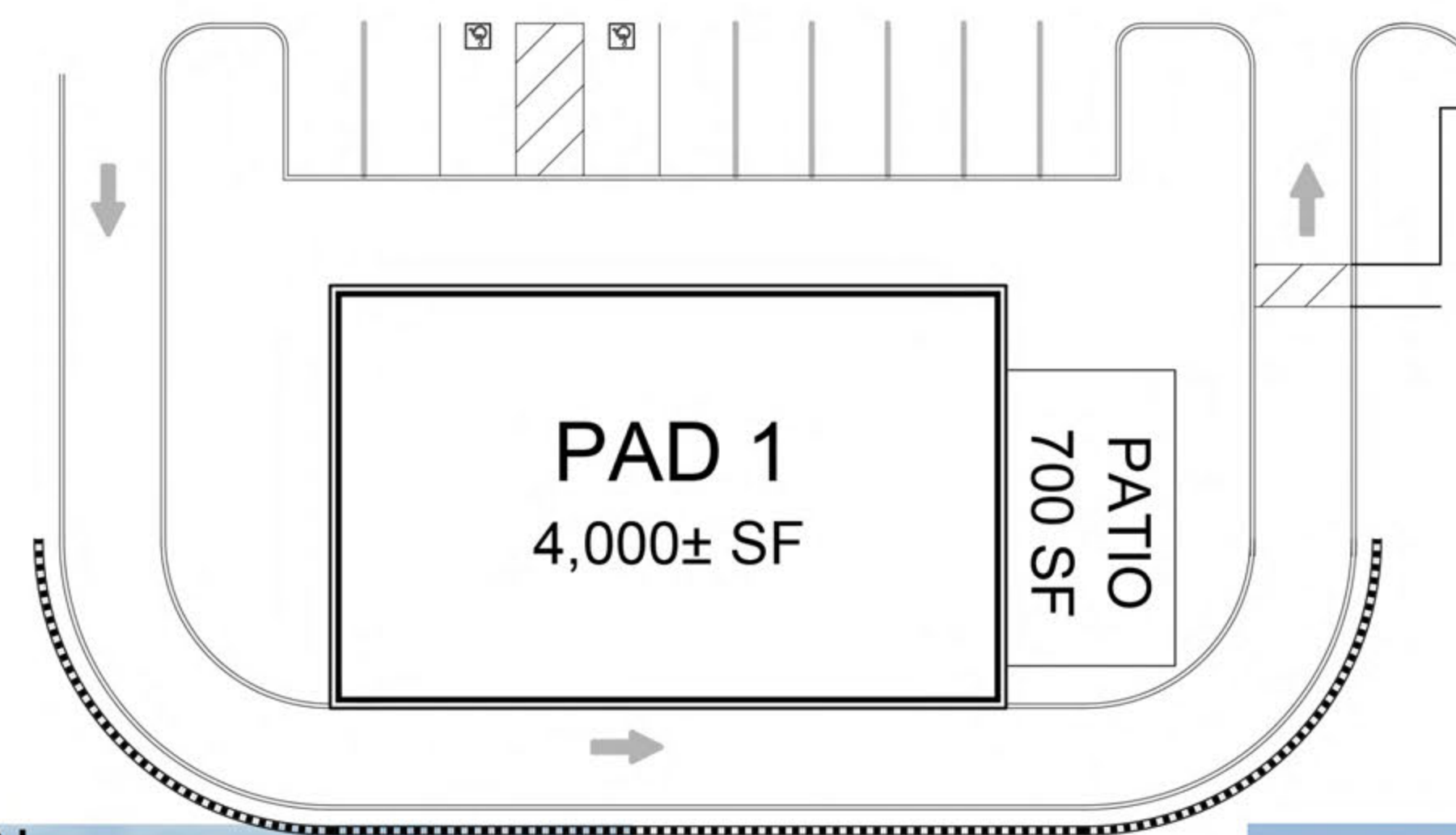
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Scale : 3/32" = 1'-0"
0 5'-4" 10'-8" 21'-4"

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ROSEVILLE, CA 95744

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DATE: 12/04/2017
MCG JOB #: 16.480.01

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BUILDING ELEVATIONS

Scale : 3/16" = 1'-0"
0 5'-4" 10'-8" 21'-4"

PAD 1

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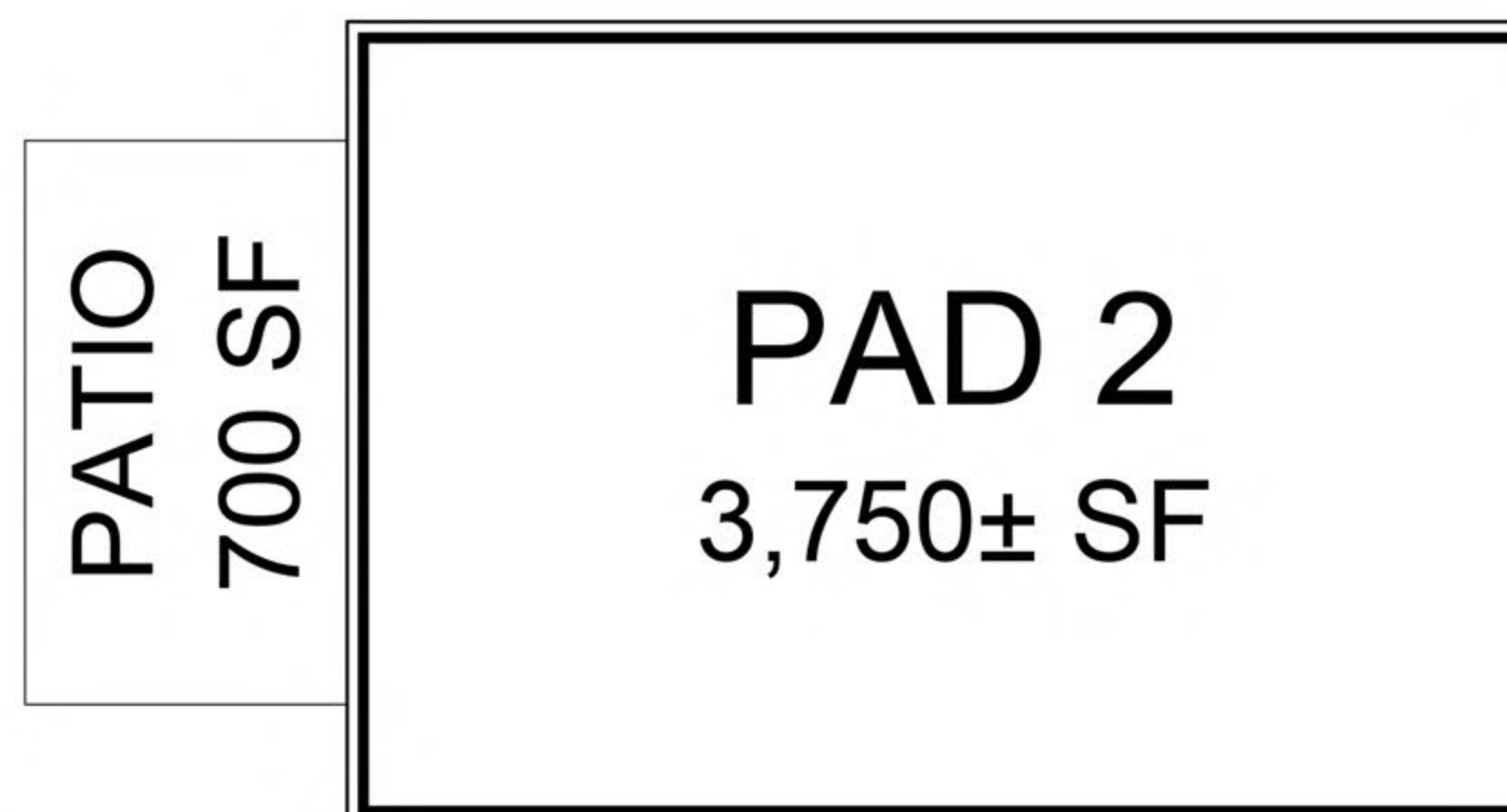




NORTH ELEVATION



WEST ELEVATION



SITE PLAN
NTS



SOUTH ELEVATION



EAST ELEVATION

BUILDING ELEVATIONS

PAD 2

DATE: 12/04/2017
MCG JOB #: 16.480.01

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Scale : 3/16" = 1'-0"
0 5'-4" 10'-8" 21'-4"

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NORTH ELEVATION



EAST ELEVATION



WEST ELEVATION



SOUTH ELEVATION

PATIO
700 SF

PAD 4
7,200± SF

PATIO
700 SF

SITE PLAN
NTS

BUILDING ELEVATIONS

PAD 4

DATE: 11/27/2017
MCG JOB #: 16.480.01

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Scale : 3/16" = 1'-0"
0 5'-4" 10'-8" 21'-4"

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San Francisco, California 94108-4461
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NORTH ELEVATION



SOUTH ELEVATION



WEST ELEVATION



EAST ELEVATION

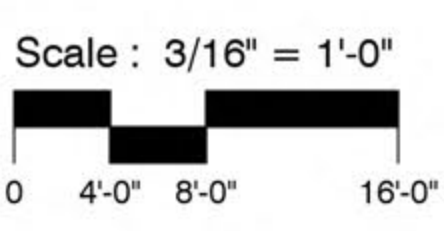
PATIO
1,300 SF

PAD 5
8,255± SF

SITE PLAN
NTS

BUILDING ELEVATIONS

PAD 5



DATE:	11/27/2017
MCG JOB #:	16.480.01
DATE	REVISIONS

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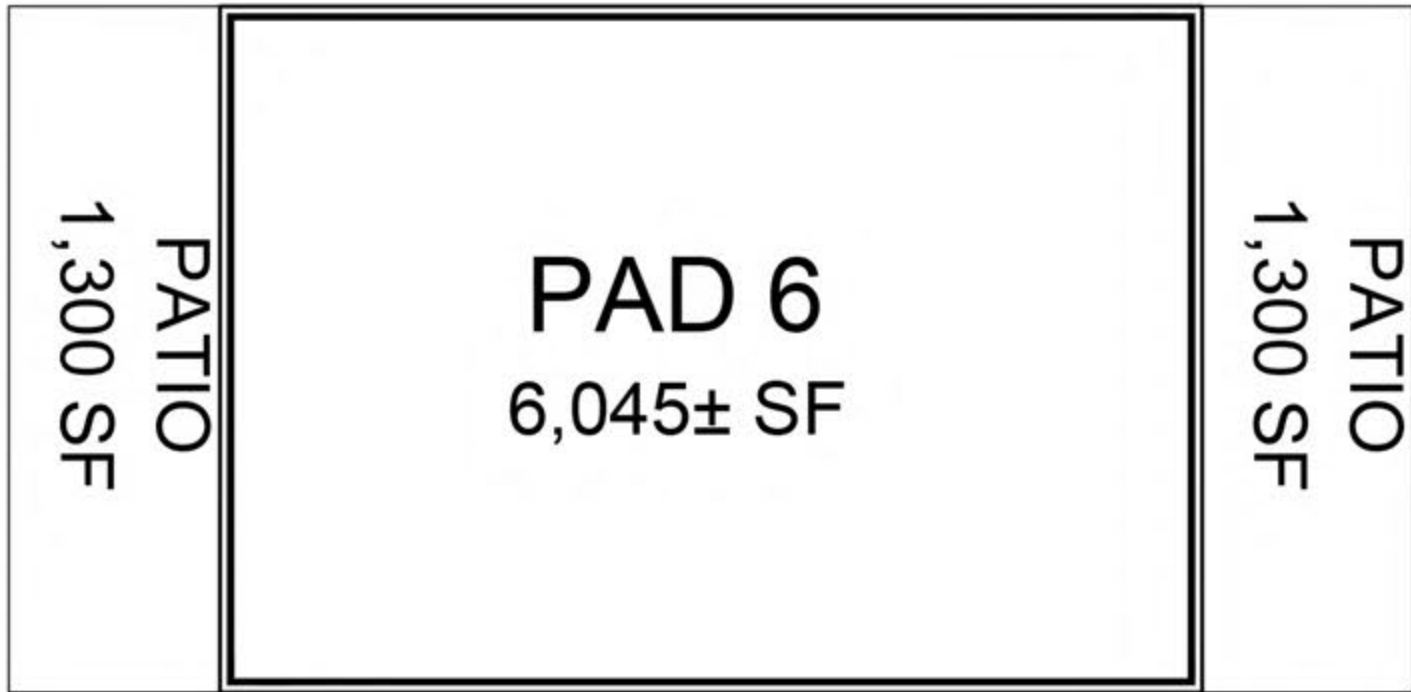




NORTH ELEVATION



WEST ELEVATION



SITE PLAN
NTS



SOUTH ELEVATION



EAST ELEVATION

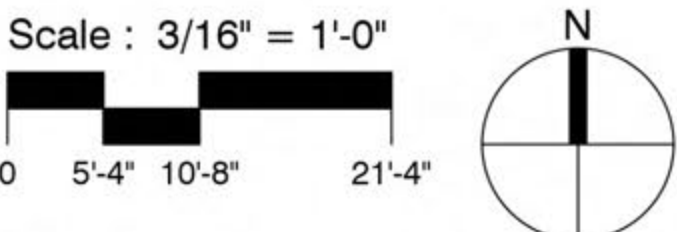
BUILDING ELEVATIONS

PAD 6

DATE: 02/20/2018
MCG JOB #: 16.480.01

DATE	REVISIONS

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San Francisco, California 94108-4461
415.974.6002 415.974.1556
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PC EXHIBIT G

PAINTS



P1
BENJAMIN MOORE,
#AF100, PASHMINA



P2
BENJAMIN MOORE,
#201, GOLD LEAF



P3
BENJAMIN MOORE
#420, AGAVE



P4
BENJAMIN MOORE
#AF1, KONA



P5
BENJAMIN MOORE,
#2115-20, INCENSE STICK



P6
BENJAMIN MOORE,
#CW250, CARRIAGE RED



P7
BENJAMIN MOORE,
#AF185, VENETIAN PORTICO



P8
BENJAMIN MOORE,
#HC166, KENDALL CHARCOAL



P9
BENJAMIN MOORE,
#F705, CINDER

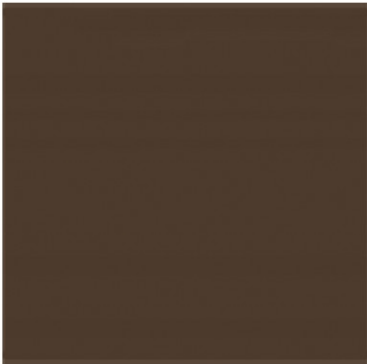


AW1 UNITY LEAF



AW2 EMBER

STOREFRONT



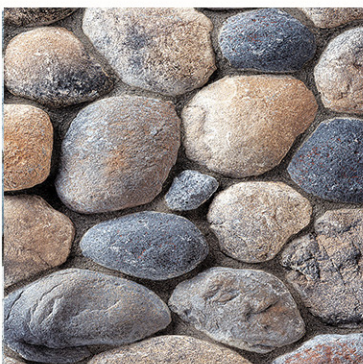
SF1
KAWNEER
ANODIZED #28 MEDIUM BRONZE

BRICK WALL



W1
BELDEN BRICK
BERWICK BLEND

STONE WALL



W2
CORONADO
RIVER ROCK,
RENO BLEND

METAL GRILLE



G1
BOK MODERN,
PATTERN #C1, COLOR P5,
POWDER COAT ALUMINUM

MAJOR 1&2, SHOPS 1&2, & PAD BUILDINGS

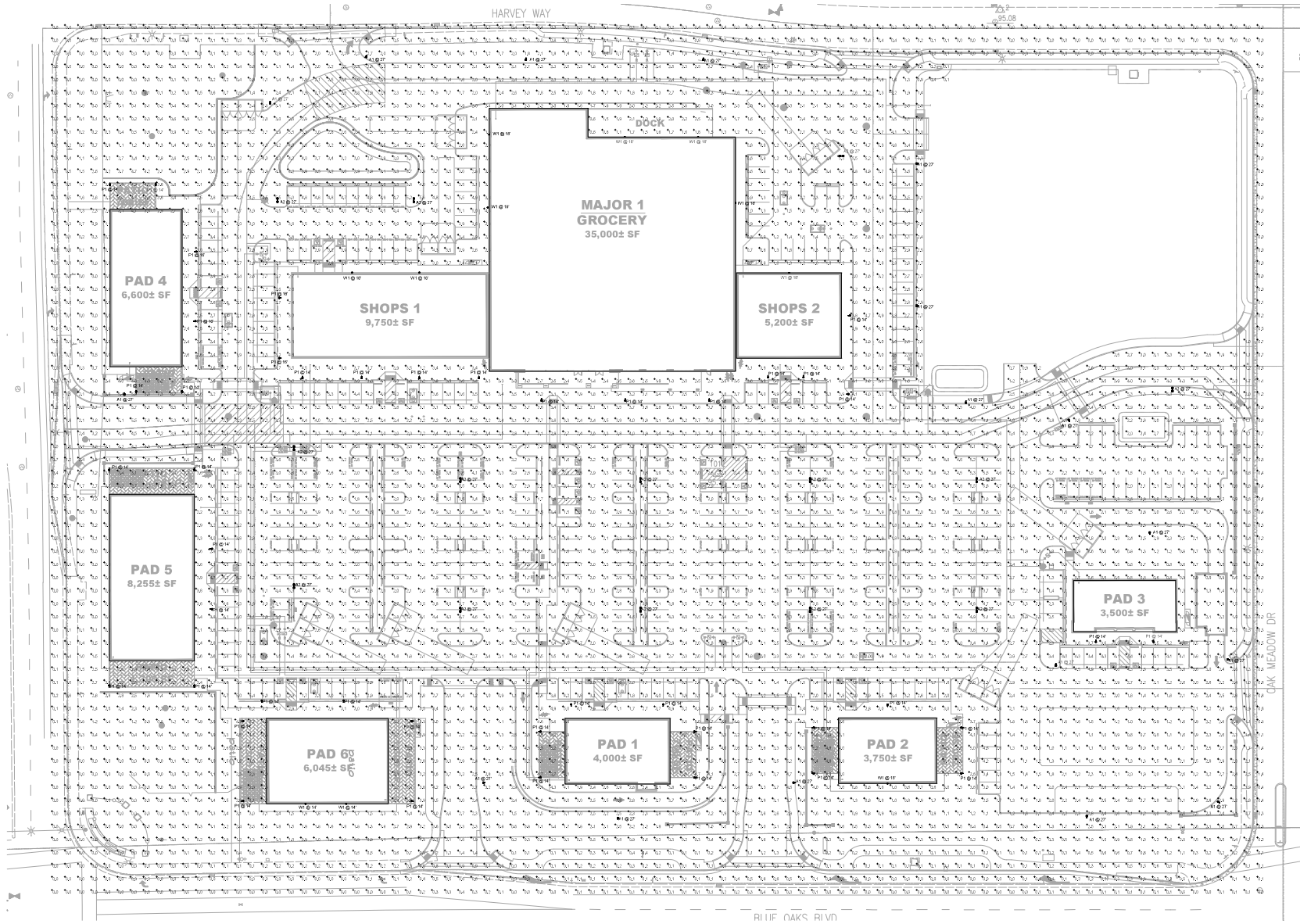
MATERIALS AND COLOR BOARD

BLUE OAKS PLAZA
ROSEVILLE, CA 95744

250 Sutter Street, Suite 500
San Francisco, California 94108-4461
☎415.974.6002 ☎415.974.1556
mcgarchitecture.com



PC EXHIBIT H



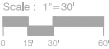
Statistics					
Description	Symbol	Avg	Max	Min	Max/Min
Site	+	2.1 f	7.3 f	0.0 f	N/A

DATE: 05/04/2020
MOG JOB #: 19102-01

DATE	REVISIONS

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2020. This information is confidential in nature and is subject to adjustment pending further verification and Client, Tenant, and Governmental agency approvals. No warranties or guarantees of any kind are given or implied by the Architect.

SITE LIGHTING
PHOTOMETRIC PLAN



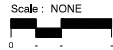
BLUE OAKS PLAZA
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San Francisco, California 94108-4461
① 415.574.0802 ② 415.574.1000
mgsarchitects.com



Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A2	14	EATON - MCGRAW-EDISON (FORMER COOPER LIGHTING)	GLEONAF-034-LED-E1-T3	GALLERIE AREA AND ROADWAY LUMINAIRE (3) 70 CRI 4000K 1000mA LIGHT SQUARES WITH 16 LEDS EACH AND TYPE III OPTICS Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET		48	GLEONAF-034-LED-E1-T3.xls	388	0.91	332
	A1	17	EATON - MCGRAW-EDISON (FORMER COOPER LIGHTING)	GLEONAF-034-LED-E1-T3	GALLERIE AREA AND ROADWAY LUMINAIRE (3) 70 CRI 4000K 1000mA LIGHT SQUARES WITH 16 LEDS EACH AND TYPE III OPTICS Retail, Roadway, Sidewalk, Site, Street, Substation, Security, Corrosion Resistant, Vandal Resistant, Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET		48	GLEONAF-034-LED-E1-T3.xls	388	0.91	166
	P1	44	EATON - INVUE (FORMER COOPER LIGHTING)	EMAE034-LED-E1-MMD	EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE (3) LIGHTS WITH ANGULED OPTICS-TYPE 5 SQUARE MEDIUM	(B3) 4000K CCT, 70 CRI LEDS ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET Hospitality, Hotel, Industrial, Institutional, Library, Manufacturing, Office, Parking, Parks, Pathway, Pedestrian, Prison, Recreation, Residential, Retail, Roadway, Sidewalk, Site, Street, Substation, Utility Walkway, Warehouse, Wet Location	63	EMAE034-LED-E1-MMD.xls	145	0.91	75.2
	W1	11	EATON - MCGRAW-EDISON (FORMER COOPER LIGHTING)	BSAF-1004-LED-E1-TW	IMPACT ELITE LED QUARTER SPHERE LUMINAIRE LIGHT SQUARE WITH ANGULED OPTICS-TYPE IV MDE	(16) 4000K CCT, 70 CRI LEDS Wet Location ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER	16	BSAF-1004-LED-E1-TW.xls	369	0.91	54.8

LIGHT FIXTURE SCHEDULE



BLUE OAKS PLAZA
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[illegible][illegible]

B-105

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BENDING ACCESSORIES

Our customers can be helped by the basic analysis of BENDING ACCESSORIES. Every dimension is accompanied with the following parameters: Area, Material or chemical resistance and dimensions. The dimensions are given in inches and millimeters. The material is CPVC. The chemical resistance is to water, acids, alkalis, oils, greases, and solvents. The dimensions are given in inches and millimeters. The material is CPVC. The chemical resistance is to water, acids, alkalis, oils, greases, and solvents.

90° ELBOW SINGLE-PIECE
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

90° ELBOW SINGLE-PIECE WITH ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

90° ELBOW TWO-PIECE SINGLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

90° ELBOW TWO-PIECE DOUBLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

45° ELBOW SINGLE-PIECE
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

45° ELBOW SINGLE-PIECE WITH ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

45° ELBOW TWO-PIECE SINGLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

45° ELBOW TWO-PIECE DOUBLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

30° ELBOW SINGLE-PIECE
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

30° ELBOW SINGLE-PIECE WITH ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

30° ELBOW TWO-PIECE SINGLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

30° ELBOW TWO-PIECE DOUBLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

15° ELBOW SINGLE-PIECE
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

15° ELBOW SINGLE-PIECE WITH ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

15° ELBOW TWO-PIECE SINGLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

15° ELBOW TWO-PIECE DOUBLE ARM
MATERIAL AREA: 1.06 sq. in. (6.86 sq. cm)
WEIGHT: 0.05 lb. (0.02 kg)

EX-ON
 MEDICAL TUBING

Ex-on Medical Tubing
 10000 E. 10th Ave.
 Denver, CO 80231
 (303) 751-1111

August 1994

PC EXHIBIT I

PRELIMINARY TREE LIST AND LEGEND

SYMBOL	BOTANICAL NAME COMMON NAME	SIZE WHY SIZE	WATER USE	DESIGN USE
	ACER RUBRUM ARMSTRONG ARMSTRONG COLUMNAR MAPLE	15 GAL 15'X40'	MOD	STREET TREE
	CEDRUS DEODORA DEODAR CEDAR	15 GAL 35'X65'	LOW	SCREEN TREE
	LAGERSTROEMIA INDICA 'ARAPAH0' CRAPE MYRTLE	15 GAL 15'X20'	LOW	ACCENT TREE
	LAURUS NOBILIS GRECIAN LAUREL	15 GAL 20'X20'	MOD	SCREEN TREE
	MAGNOLIA GRANDIFLORA LITTLE GEM LITTLE GEM MAGNOLIA	24" BOX 15'X20'	LOW	ACCENT TREE
	NYSSA SYLVATICA SOUR GUM	24 BOX 25'X45'	LOW	STREET TREE
	OLEA EUROPAEA 'MAJESTIC BEAUTY' FRUITLESS OLIVE	15 G/VARIES	LOW	ACCENT TREE
	PISTACIA CHINENSIS CHINESE PISTACHE	24" BOX 40'X40'	MOD	SHADE TREE
	TILIA CORDATA GREENSPIRE LITTLE LEAF LINDEN	15 GAL 30' X 40'	MOD	SCREEN TREE
	QUERCUS WISLIZNII INTERIOR LIVE OAK	24" BOX NAT. 50'X60'	LOW	STREET TREE
	ULMUS PARVIFOLIA 'TRUE GREEN' EVERGREEN ELM	24" BOX 30'X35'	MOD	SHADE TREE

NOTE: 33% OF TOTAL TREE QUANTITY SHALL BE 24" BOX.

SHRUBS: BACKGROUND/SCREEN

SYMBOL	BOTANICAL NAME COMMON NAME	SIZE	WATER USE
	BACKGROUND / SCREEN SHRUBS - EVERGREEN, LARGE SHRUBS TO 6'-0" USED FOR REDUCING BUILDING MASS OR SCREENING UNDESIRABLE VIEWS.		
	ELAEAGNUS X EBBINGEI GILT EDGE GILT EDGE SILVERBERRY	5 G	LOW
	ARCTOSTAPHYLOS HOWARD MCMINN HOWARD MCMINN MANZANITA	5 G	LOW
	ROSAMARINUS TUSCAN BLUE TUSCAN BLUE ROSEMARY	5 G	LOW
	HYPERICUM X MOSERIANUM GOLD FLOWER	5 G	MOD
	PODOCARPUS MACROPHYLLUS 'MAKI' SHRUBBY YEW PINE	5 G	MOD
	PRUNUS C. BRIGHT N TIGHT CAROLINA CHERRY	15 G	MOD
	RHAMNUS CALIFORNICA MOUND SAN BRUNO SAN BRUNO COFFEEBERRY	5 G	LOW
	XYLOSMIA C. 'COMPACTA' COMPACT XYLOSMIA	15 G	LOW

SHRUBS: FACER/FILLER

SYMBOL	BOTANICAL NAME COMMON NAME	SIZE	WATER USE
	FACER/FILLER SHRUBS & GRASSES EVERGREEN OR DECIDUOUS SHRUBS TO 4'-0". USED FOR "TERRACING" OF PLANT MATERIAL. SEASONAL COLOR AND SOFTENING OF BUILDING EDGES AND FOUNDATION SHRUBS.		
	AGAVE WEBERI WEBERS AGAVE	5 G	LOW
	CALLISTEMON V. 'LITTLE JOHN' DWARF BOTTLEBRUSH	5 G	LOW
	DIETES BICOLOR FORTNIGHT LILY	5 G	LOW
	LEPTOSPERMUM SCOPARIUM RUBY GLOW RUBY GLOW TEA TREE	5 G	LOW
	EUONYMUS JAPONICA GREENSPIRE GREENSPIRE EUONYMUS	5 G	LOW
	GREVILLEA CANBERRA HUMMINGBIRD BUSH	5 G	LOW
	PINUS MUGO MUGO MUGO MUGO PINE	5 G	LOW
	WESTRINGIA FRUITICOSA COAST ROSEMARY	5 G	LOW
	RHAPHIOLEPIS UMBELLATA SOUTHERN MOON YEDDO	5 G	LOW

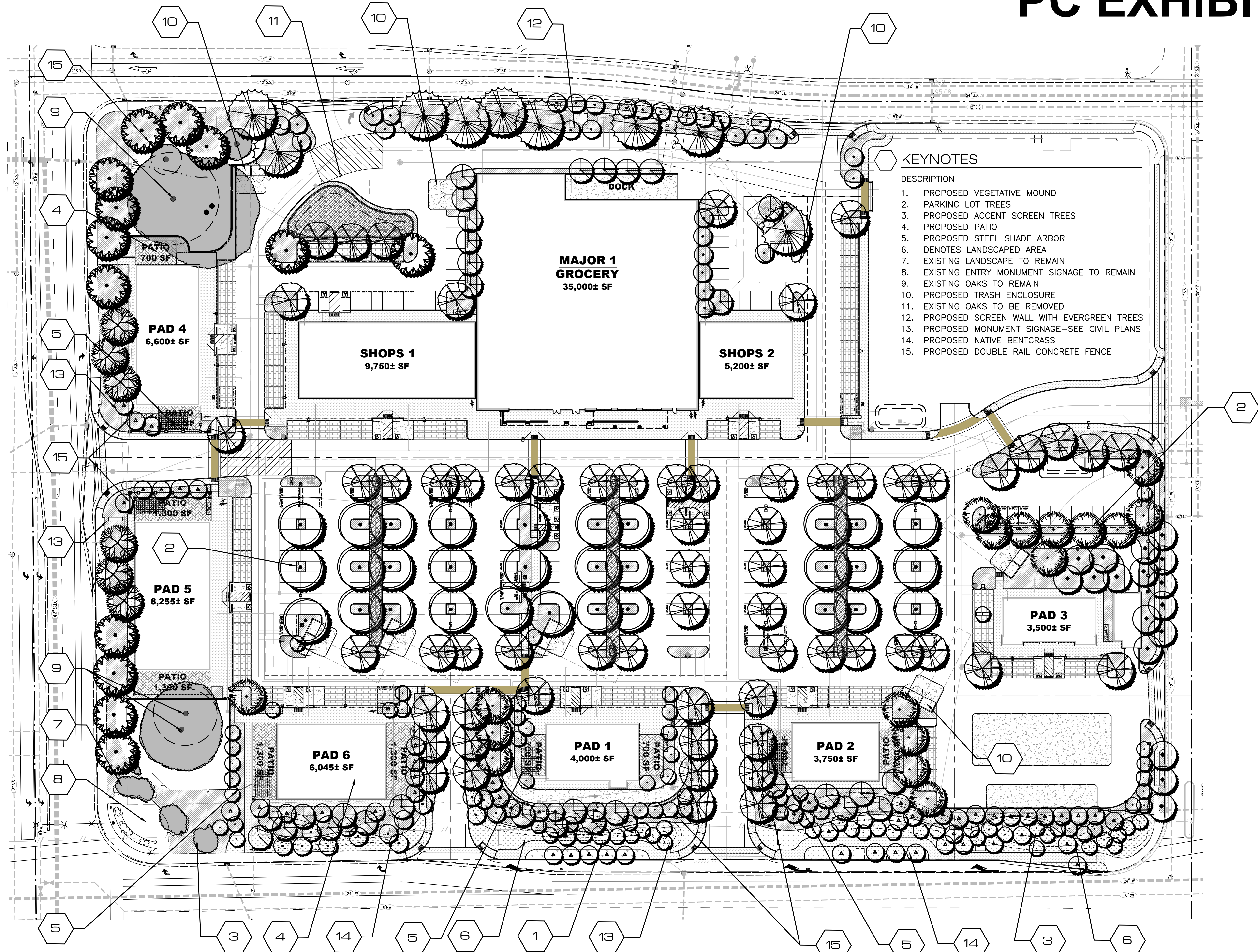
SHRUBS AND GROUNDCOVERS

SYMBOL	BOTANICAL NAME COMMON NAME	SIZE	WATER USE
	PERENNIALS, GRASSES, AND GROUND COVER MATERIAL - SMALL SCALE DUE TO PROJECT TYPE, EVERGREEN OR PERENNIAL SHRUBS TO 24" HIGH. USED AS A FILLER BETWEEN SITE WORK EDGES AND FACER SHRUBS.		
	ARCTOSTAPHYLOS U. URSI MANZANITA	1 G	LOW
	BOULEDOIA GRACILIS 'BLONDE AMBITION' BLUE GRAMA GRASS	1 G	LOW
	CISTUS 'SUNSET' MAGENTA ROCKROSE	1 G	LOW
	COPROSMA KIRKII COPROSMA	1 G	LOW
	HYPERICUM CALYCIUM AARONS BEARD	1 G	MOD
	LANTANA MONTEVENDENSIS LANTANA	5 G	LOW
	MUHLBERGIA CAPILLARIS REGAL MIST PINK MUHLY	1 G	LOW
	MYOPORUM PARVIFOLIUM CREEPING MYOPORUM	1 G	LOW
	ROSA FLOWER CARPET (WHITE AND RED) FLOWER CARPET ROSE	1 G	MOD
	TRACHELOSPERMUM JASMINODES STAR JASMINE	1 G	MOD
	NATIVE BENTGRASS "NO MOW" OR "MOW FREE" NATIVE FESCUE BLEND	SOD	MOD
	BIOREMEDIATION AREA AND OR WATER QUALITY BASIN		
	JUNCUS EFFUSUS RUSH	1 G	MOD
	CORNUS STOLONIFERA 'KELSEY' DWARF REDTIG DOGWOOD	1 G	MOD
	LOMANDRA LONGIFOLIA BREEZE DWARF MAT RUSH	1 G	LOW

KEYNOTES

DESCRIPTION

1. PROPOSED VEGETATIVE MOUND
2. PARKING LOT TREES
3. PROPOSED ACCENT SCREEN TREES
4. PROPOSED PATIO
5. PROPOSED STEEL SHADE ARBOR
6. DENOTES LANDSCAPED AREA
7. EXISTING LANDSCAPE TO REMAIN
8. EXISTING ENTRY MONUMENT SIGNAGE TO REMAIN
9. EXISTING OAKS TO REMAIN
10. PROPOSED TRASH ENCLOSURE
11. EXISTING OAKS TO BE REMOVED
12. PROPOSED SCREEN WALL WITH EVERGREEN TREES
13. PROPOSED MONUMENT SIGNAGE-SEE CIVIL PLANS
14. PROPOSED NATIVE BENTGRASS
15. PROPOSED DOUBLE RAIL CONCRETE FENCE



THE PLAZA AT BLUE OAKS
Roseville, CA

PRELIMINARY LANDSCAPE PLAN

SCALE:

1" = 400'



SHEET

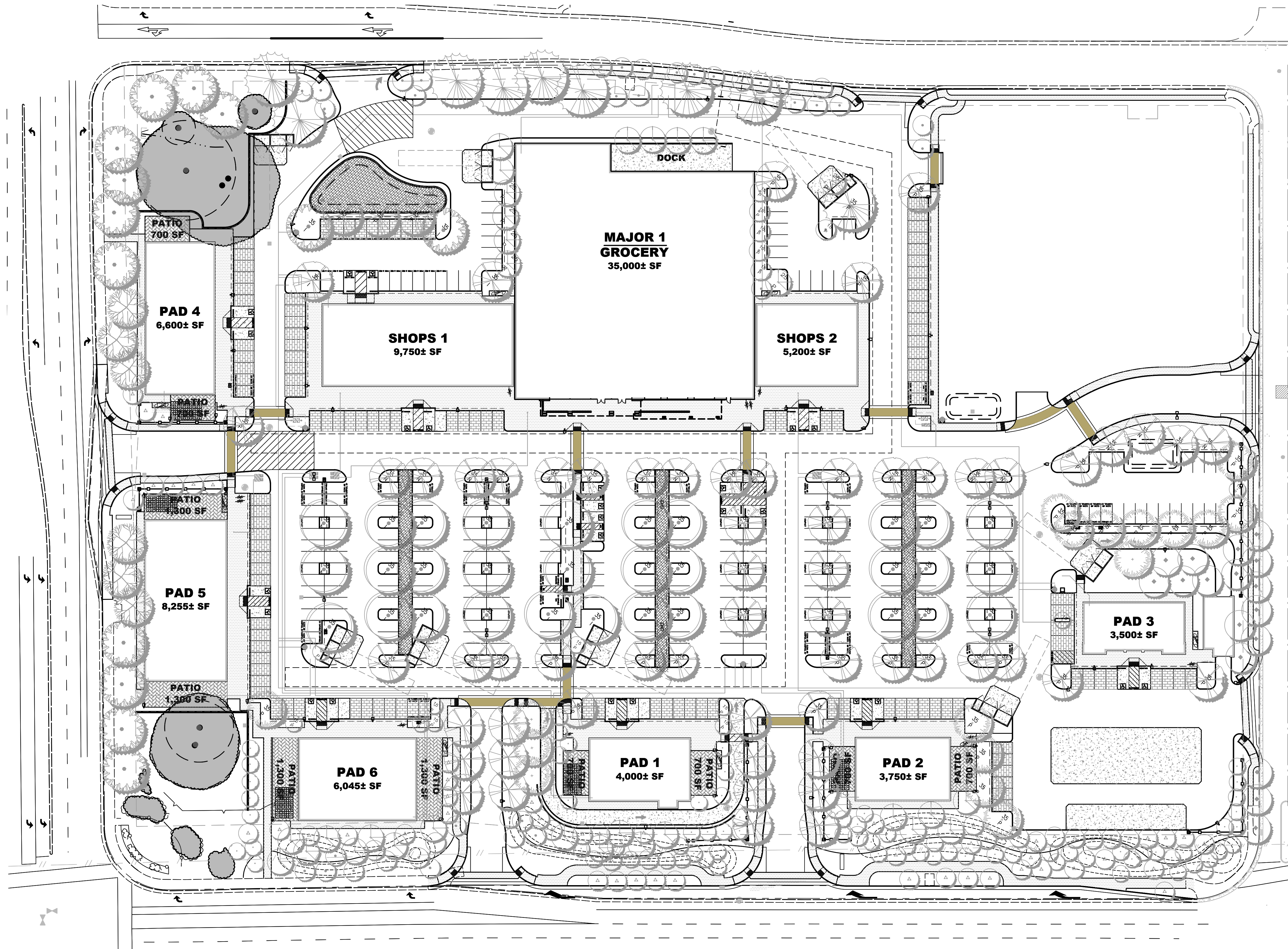
PL1



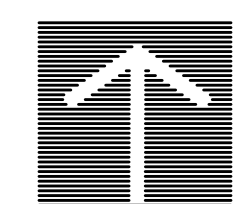
FUHRMAN LEAMY
LAND GROUP
DESIGN • SERVICE • SOLUTIONS

DATE:
PROJECT:

03/16/2020
TSD.16079

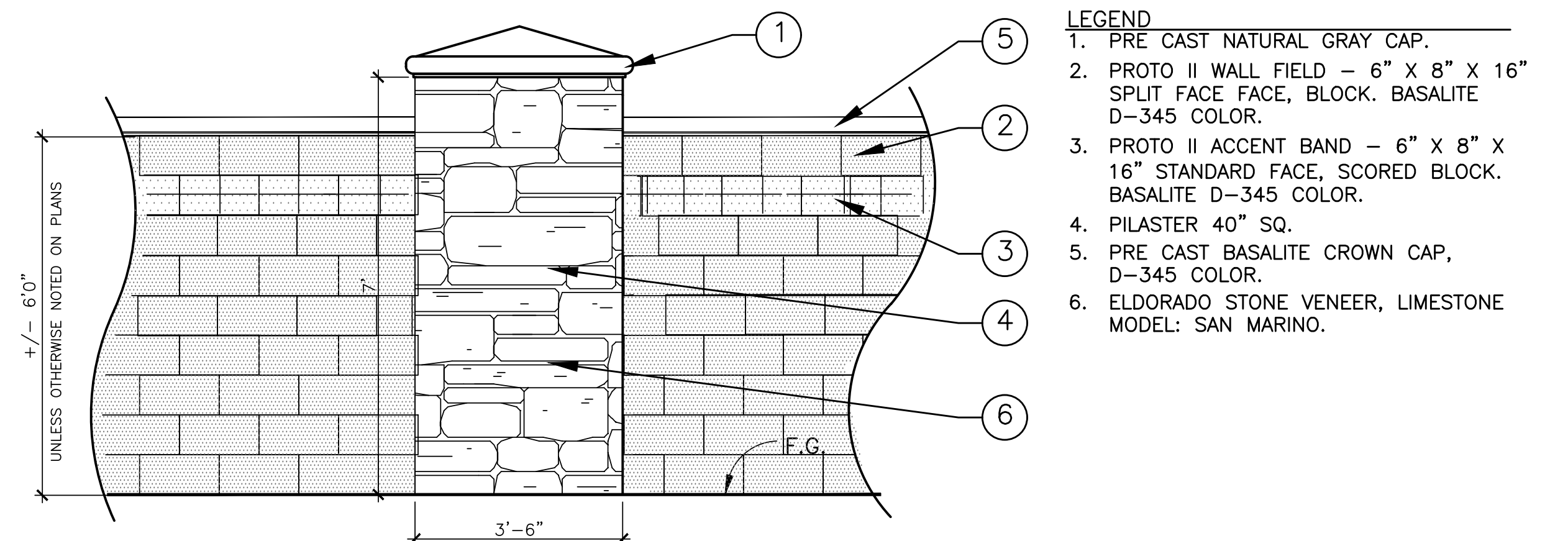


SHADE STUDY CALCULATIONS				
PROJECT:		THE PLAZA AT BLUE OAKS		12.4.2019
OVERALL SITE			QTY.	SQ. FT. AREA
STANDARD STALLS			352	95,040
COMPACT STALLS			34	8,568
HANDICAP STALLS			25	6,300
TOTAL PAVED PARKING AREA:				109,908
TOTAL SHADE REQUIRED:			50%	54,954
TOTAL SHADE PROVIDED:				64,731
TOTAL SHADE PERCENTAGE				58.9%
SYMBOL	PATTERN	QTY.	UNIT	TOTAL S.F.
30 TO 35' TREES				
Ulmus p., Quercus w., Cedrus d.	35-I	41	X 961	39,401
	35-P	37	X 481	17,797
	35-N	19	X 240	4,560
25' TO 30' TREES				
Nyssa s.	30-I	0	X 707	0
	30-P	0	X 354	0
	30-N	0	X 177	0
20' TO 25' TREES				
Laurus n.	25-I	0	X 491	0
	25-P	6	X 246	1,476
	25-N	0	X 123	0
15' TO 20' TREES				
	20-I	0	X 314	0
	20-P	0	X 157	0
	20-N	0	X 79	0
10' TO 15' TREES				
Acre r., Olea e., Magnolia g. Little Gem, Lagerstroemia i.	15-I	1	X 177	177
	15-P	15	X 88	1,320
	15-N	0	X 44	0
TOTAL				64,731

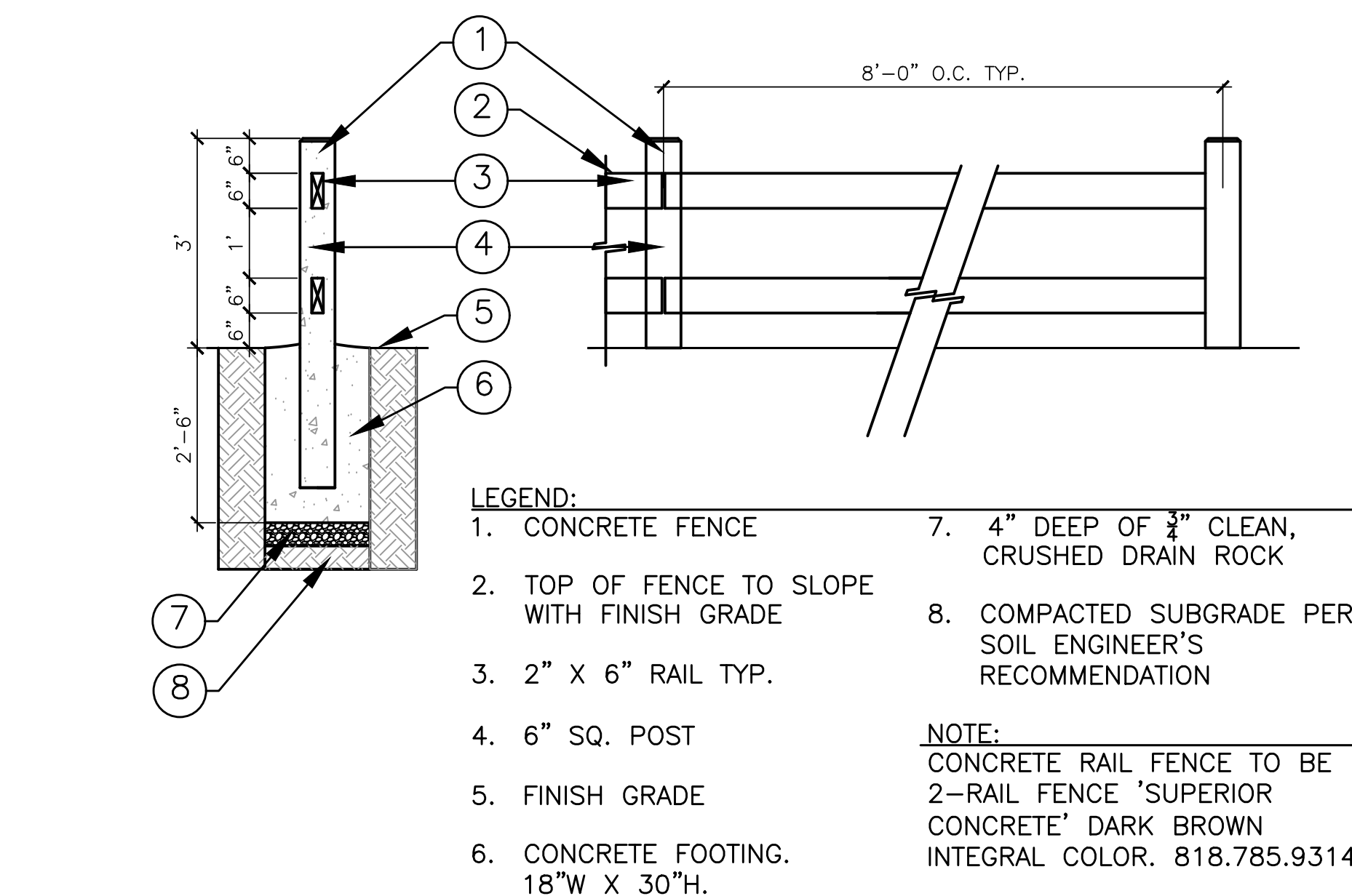
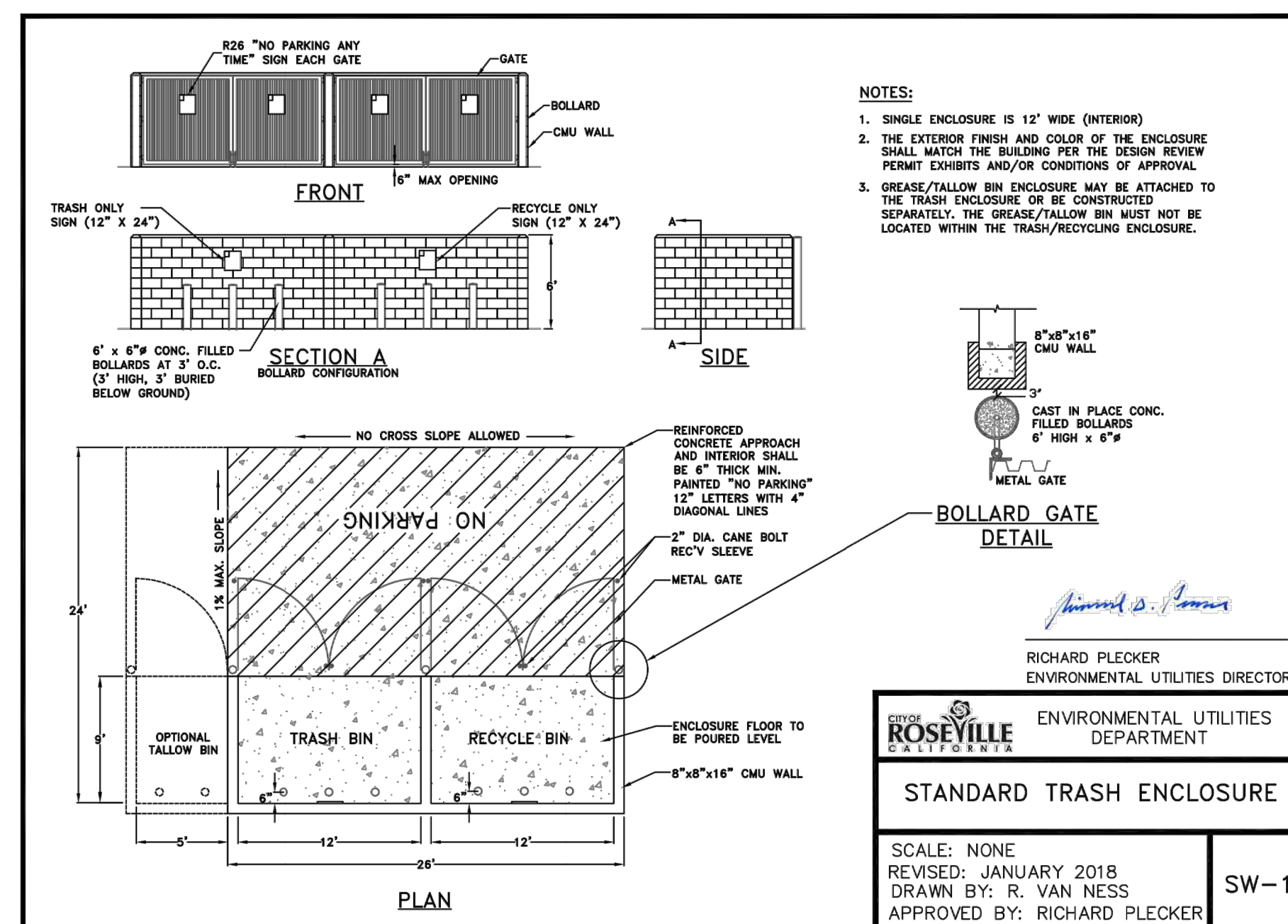




C CONCEPTUAL OUTDOOR PATIO SPACE
SCALE: NTS



A MASONRY WALL - ELEVATION
SCALE: 1/2" = 1'-0"



B CONCRETE RAIL FENCE
SCALE: 1/2" = 1' - 0"



California Tree and Landscape Consulting, Inc.

February 20, 2020

Joseph Zawidski
Signature Homes, Inc.
4670 Willow Road, Suite 200
Pleasanton, California 94588

Via Email: jzawidski@hotmail.com

PROPERTY TRANSITION ARBORIST REPORT

RE: Arborist Report and Tree Inventory for Fiddymont Farms, Unit 17 Project Site
City of Roseville, California

Executive Summary:

Signature Homes, Inc. contacted California Tree and Landscape Consulting, Inc. to document the trees on the property for a better understanding of the existing resource and any potential improvement obstacles that may arise. Signature Homes, Inc. requested an arborist report and tree inventory updates and impact assessment for the property located at Fiddymont Farms, Unit 17, suitable for submittal to the City of Roseville. This is an Updated Arborist Report and Tree Inventory for the filing of plans to develop the property.

Ed Stirtz, ISA Certified Arborist WE0510A, visited the property on February 17, 2020, to provide updated species identification, measurements of DBH and canopy, field condition notes, recommended actions, ratings, and approximate locations for the trees. A total of 26 trees were evaluated on this property, of which 26 are protected trees according to the City of Roseville's Municipal Code. Chapter 19.66, Tree Preservation, defines a "Protected Tree" as any native oak tree equal to or greater than 6 inches diameter at breast height (DBH) measured as a total of a single trunk or multiple trunks. The purpose of this field reconnaissance effort was to identify, inventory, and comment upon the current structure and vigor of the "protected trees" located within and/or overhanging the project site.

The vegetation on site includes those native oak trees as identified in the inventory and three to five other substandard size oak trees 1" to 2" diameter range.

TABLE 1

Tree Species	Trees on this Site	Protected Trees on the Site	Proposed for Removal for Development	Total Proposed for Retention
Blue Oak	13	13	11	2
Interior Live Oak	10	10	7	3
Valley Oak	3	3	2	1
TOTALS	26	26	20	6



ASSIGNMENT

Perform an examination of the site to document the presence and condition of trees protected by the City of Roseville. The “study area” for this effort includes the area as depicted on “The Plaza at Blue Oaks” preliminary tree impact plan prepared by TSD Engineering, Inc., dated February 5, 2020. (All trees protected by the City are included in the inventory.) Prepare a report of findings.

METHODS

Appendix 2 and Tables 1, 2 and 3 in this report are the detailed inventory and recommendations for the trees. The following terms and Table A – Ratings Descriptions will further explain our findings.

Species of trees is listed by our local common name and botanical name by genus and species.

DBH (diameter breast high) is normally measured at 4’6” (54” above the average ground, height but if that varies then the location where it is measured is noted here. A steel diameter tape was used to measure the trees.

Canopy radius is measured in feet. It is the farthest extent of the crown composed of leaves and small twigs measured by a Stanley digital distance meter. This measurement often defines the Critical Root Zone (CRZ) or Protection Zone (PZ), which is a circular area around a tree with a radius equal to this measurement.

Actions listed are recommendations to improve health or structure of the tree. Trees in public spaces require maintenance. If a tree is to remain and be preserved, then the tree may need some form of work to reduce the likelihood of failure and increase the longevity of the tree. Preservation requirements and actions based on a proposed development plan are not included here.

Arborist Rating is subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead). The rating was done in the field at the time of the measuring and inspection.

Table A – Ratings Descriptions

No problem(s)	5	excellent
No apparent problem(s)	4	good
<u>Minor problem(s)</u>	<u>3</u>	<u>fair</u>
Major problem(s)	2	poor
Extreme problem(s)	1	hazardous, non-correctable
Dead	0	dead

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

Notes indicate the health, structure and environment of the tree and explain why the tree should be removed or preserved. Additional notes may indicate if problems are minor, extreme or correctible.

Remove is the recommendation that the tree be removed. The recommendation will normally be based either on poor structure or poor health and is indicated as follows:

Yes H – Tree is unhealthy

Yes S – Tree is structurally unsound

OBSERVATIONS AND CONCLUSIONS

The site is a partially developed commercial site in northwest Roseville. The east side of the site has been rough graded and has annual grasses and a single oak (#1535). The western portion of the site has two patches of oak trees, which are both well below the surrounding grade and on two sides of both patches are City arterial streets.

Development impacts to the two trees proposed to be retained in the south patch will sustain moderate impacts and are anticipated to adjust to the proposed site changes. The trees to be retained in the north patch will be subjected to some amount of summer irrigation runoff. It is difficult to say with any certainty if this will prove detrimental to the trees. It may, and it may be that the trees adjust and adapt to the presence of additional summer moisture.

Below is a summary of tree condition by Arborist Rating and Species.

TABLE 2

# Trees	Common Name	DBH	Canopy Radius	Arborist Rating	Defects Found	Retain/ Remove?
1	Blue Oak	28	33	1 Extreme Structure or Health Problems	Old callusing trunk, west side, 9' above grade with interior decay; slightly out of balance east; above average amount of deadwood.	1 Remove
1	Interior Live Oak	35	38	1 Extreme Structure or Health Problems	Old callusing basal trunk wound, north side; moderate to significant decay; out of balance north; slightly above average amount of deadwood.	1 Remove
1	Valley Oak	57	39	1 Extreme Structure or Health Problems	Numerous large scaffold failures, with resulting decay; scaffold limb failure, north side, resulting in a large callusing wound reaching from 2'-20' above grade, with moderate interior decay; above average amount of deadwood.	1 Remove

# Trees	Common Name	DBH	Canopy Radius	Arborist Rating	Defects Found	Retain/Remove?
1	Blue Oak	24	25	2 Major Structure or Health Problems	Measured 2' above grade. Old callusing trunk wound, south side, at point of limb failure, with interior decay; above average amount of deadwood.	1 Retain
11	Blue Oak	8-45	9-39	3 Fair - Minor Problems	See Tree Inventory.	11 Retain
9	Interior Live Oak	17-53	16-32	3 Fair - Minor Problems	See Tree Inventory.	9 Retain
2	Valley Oak	13-16	16-17	3 Fair - Minor Problems	Out of balance northwest.	1 Retain
26 TOTAL						3 Remove 23 Retain

RECOMMENDED REMOVALS

At this time, 3 trees (totaling 120 aggregate diameter inches) have been recommended for removal from the proposed project area due to the nature and extent of defects, compromised health, and/or structural instability noted at the time of field inventory efforts. If these trees were retained within the proposed project area, it is our opinion that they may be hazardous depending upon their proximity to planned development activities. For reference, the trees which have been recommended for removal due to the severity of noted defects, compromised health, and/or structural instability are highlighted in green within the accompanying Tree Inventory Summary and are briefly summarized as follows:

TABLE 3

Tag #	Protected By Code	Common Name	Species	Multi-Stems (inches)	DBH (inches)	Measured At	Measured Canopy Radius (feet)	Arborist Rating
1514	Yes	Blue Oak	<i>(Quercus douglasii)</i>		28	54	33	1 Extreme Structure or Health Problems
1539	Yes	Valley Oak	<i>(Quercus lobata)</i>		57	54	39	1 Extreme Structure or Health Problems
1540	Yes	Interior Live Oak	<i>(Quercus wislizeni)</i>	14,21	35	54	38	1 Extreme Structure or Health Problems

Trees numbered 1510, 1513, 1521, 1523, 1533, 1562, 1563 and 1564 were all identified as having failed and being in down and dead condition. Some of these trees were identified as down in previous updates and all have been removed from the improvement plans.

CONSTRUCTION REMOVALS

At this time, 20 trees (totaling 535 aggregate diameter inches) have been recommended for construction removal from the proposed project area. Those trees are briefly summarized as follows:

Tree #	Common Name	Species	Multi-Stems (inches)	Total DBH (inches)	DLR (feet)	Structure	Vigor
1522	Blue Oak	(<i>Quercus douglasii</i>)		18	22	Fair	Fair
1528	Blue Oak	(<i>Quercus douglasii</i>)		17	24	Poor to fair	Poor to fair
1529	Blue Oak	(<i>Quercus douglasii</i>)		26	32	Poor to fair	Fair
1530	Blue Oak	(<i>Quercus douglasii</i>)		27	33	Poor to fair	Fair
1531	Blue Oak	(<i>Quercus douglasii</i>)		24	31	Poor to fair	Fair
1532	Blue Oak	(<i>Quercus douglasii</i>)		8	9	Poor	Fair
1534	Blue Oak	(<i>Quercus douglasii</i>)		21	30	Poor	Fair
1535	Blue Oak	(<i>Quercus douglasii</i>)		14	17	Fair	Fair
1536	Interior Live Oak	(<i>Quercus wislizeni</i>)		21	22	Fair	Fair
1537	Blue Oak	(<i>Quercus douglasii</i>)		26	31	Fair	Fair
1538	Blue Oak	(<i>Quercus douglasii</i>)		45	37	Fair	Fair
1539	Valley Oak	(<i>Quercus lobata</i>)		57	39	Poor	Fair
1540	Interior Live Oak	(<i>Quercus wislizeni</i>)	14,21	35	38	Poor	Fair
1541	Blue Oak	(<i>Quercus douglasii</i>)		25	39	Fair	Fair
1542	Valley Oak	(<i>Quercus lobata</i>)		13	16	Poor to fair	Fair
1543	Interior Live Oak	(<i>Quercus wislizeni</i>)	12,12,13	37	32	Poor to fair	Fair
1544	Interior Live Oak	(<i>Quercus wislizeni</i>)	12,20,21	53	32	Poor to fair	Fair
1545	Interior Live Oak	(<i>Quercus wislizeni</i>)		21	29	Poor to fair	Fair
1559	Interior Live Oak	(<i>Quercus wislizeni</i>)		26	26	Poor to fair	Fair
1563	Interior Live Oak	(<i>Quercus wislizeni</i>)		21	32	Poor	Fair

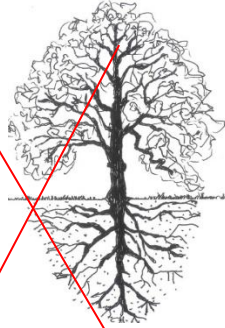
DISCUSSION

Trees need to be protected from normal construction practices if they are to remain healthy and viable on the site. Our recommendations are based on experience, and County ordinance requirements, so as to enhance tree longevity. This requires their root zones remain intact and viable, despite heavy equipment being on site, and the need to install foundations, driveways, underground utilities, and landscape irrigation systems. Simply walking and driving on soil has serious consequences for tree health.

Following is a summary of Impacts to trees during construction and Tree Protection measures that should be incorporated into the site plans in order to protect the trees. Once the plans are approved, they become the document that all contractors will follow. ***The plans become the contract between the owner and the contractor, so that only items spelled out in the plans can be expected to be followed. Hence, all protection measures, such as fence locations, mulch requirements and root pruning specifications must be shown on the plans.***

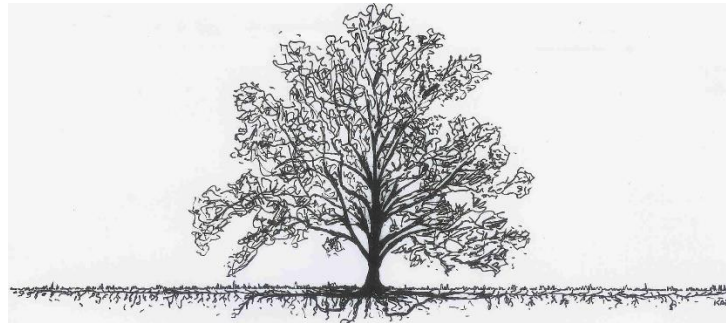
Root Structure

The majority of a tree's roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6" to 3' of soil. It is a common misconception that a tree underground resembles the canopy (see Drawing A below). The correct root structure of a tree is in Drawing B. All plants' roots need both water and air for survival. Surface roots are a common phenomenon with trees grown in compacted soil. Poor canopy development or canopy decline in mature trees is often the result of inadequate root space and/or soil compaction.



Drawing A

Common misconception of where tree roots are assumed to be located



Drawing B

The reality of where roots are generally located

Structural Issues

Limited space for canopy development produces poor structure in trees. The largest tree in a given area, which is 'shading' the other trees is considered Dominant. The 'shaded' trees are considered Suppressed. The following picture illustrates this point. Suppressed trees are more likely to become a potential hazard due to their poor structure.

Dominant Tree

Growth is upright

Canopy is balanced by limbs and foliage equally

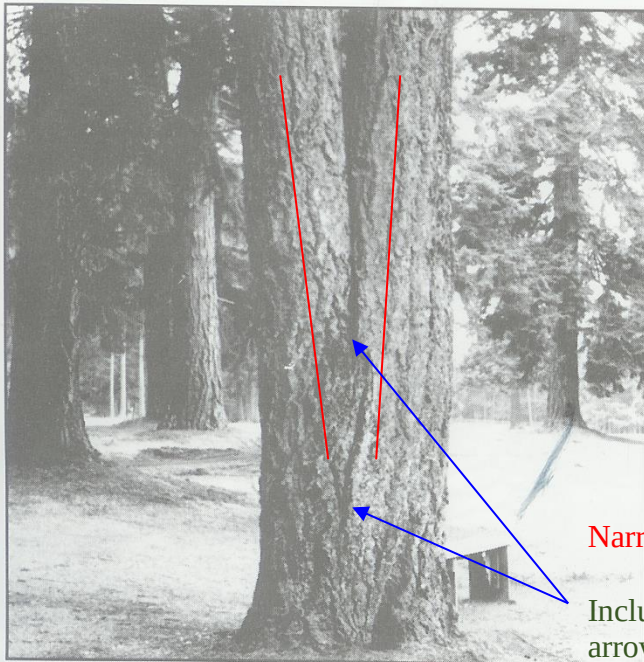


Suppressed Tree

Canopy weight all to one side

Limbs and foliage grow away from dominant tree

Co-dominant leaders are another common structural problem in trees.



The tree in this picture has a co-dominant leader at about 3' and included bark up to 7 or 8'. Included bark occurs when two or more limbs have a narrow angle of attachment resulting in bark between the stems – instead of cell to cell structure. This is considered a critical defect in trees and is the cause of many failures.

Narrow Angle

Included Bark between the arrows

Figure 6. Codominant stems are inherently weak because the stems are of similar diameter.

Photo from Evaluation of Hazard Trees in Urban Areas by Nelda P. Matheny and James R. Clark, 1994 International Society of Arboriculture

Pruning Mature Trees for Risk Reduction

There are few good reasons to prune mature trees. Removal of deadwood, directional pruning, removal of decayed or damaged wood, and end-weight reduction as a method of mitigation for structural faults are the only reasons a mature tree should be pruned. Live wood over 3" should not be pruned unless absolutely necessary. Pruning cuts should be clean and correctly placed. Pruning should be done in accordance with the American National Standards Institute (ANSI) A300 standards. It is far better to use more small cuts than a few large cuts as small pruning wounds reduce risk while large wounds increase risk.

Pruning causes an open wound in the tree. Trees do not "heal" they compartmentalize. Any wound made today will always remain, but a healthy tree, in the absence of decay in the wound, will 'cover it' with callus tissue. Large, old pruning wounds with advanced decay are a likely failure point. Mature trees with large wounds are a high failure risk.

Overweight limbs are a common structural fault in suppressed trees. There are two remedial actions for overweight limbs (1) prune the limb to reduce the extension of the canopy, or (2) cable the limb to reduce movement. Cables do not hold weight they only stabilize the limb and require annual inspection.



Photo of another tree – not at this site.

Normal limb structure

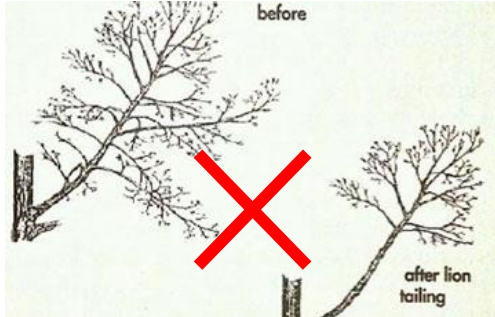
Over weight, reaching limb with main stem diameter small compared with amount of foliage present



Photo of another tree – not at this site

Lion's – Tailing is the pruning practice of removal of “an excessive number of inner and/or lower lateral branches from parent branches. Lion's tailing is not an acceptable pruning practice” ANSI A300 (part 1) 4.23. It increases the risk of failure.

Pruning – Cutting back trees changes their natural structure, while leaving trees in their natural form enhances longevity.



Arborist Classifications

There are different types of Arborists:

Tree Removal and/or Pruning Companies. These companies may be licensed by the State of California to do business, but they do not necessarily know anything about trees;

Arborists. Arborist is a broad term. It is intended to mean someone with specialized knowledge of trees but is often used to imply knowledge that is not there.

ISA Certified Arborist: An International Society of Arboriculture Certified Arborist is someone who has been trained and tested to have specialized knowledge of trees. You can look up certified arborists at the International Society of Arboriculture website: isa-arbor.org.

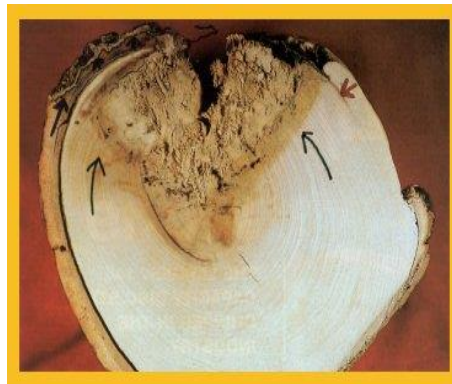
Consulting Arborist: An American Society of Consulting Arborists Registered Consulting Arborist is someone who has been trained and tested to have specialized knowledge of trees and trained and tested to provide high quality reports and documentation. You can look up registered consulting arborists at the American Society of Consulting Arborists website: <https://www.asca-consultants.org/>

Decay in Trees

Decay (in General): Fungi cause all decay of living trees. Decay is considered a disease because cell walls are altered, wood strength is affected, and living sapwood cells may be killed. Fungi decay wood by secreting enzymes. Different types of fungi cause different types of decay through the secretion of different chemical enzymes. Some decays, such as white rot, cause less wood strength loss than others because they first attack the lignin (causes cell walls to thicken and reduces susceptibility to decay and pest damage) secondarily the cellulose (another structural component in a cell walls). Others, such as soft rot, attack the cellulose chain and cause substantial losses in wood strength even in the initial stages of decay. Brown rot causes wood to become brittle and fractures easily with tension. Identification of internal decay in a tree is difficult because visible evidence may not be present.



According to Evaluation of Hazard Trees in Urban Areas (Matheny, 1994) decay is a critical factor in the stability of the tree. As decay progresses in the trunk, the stem becomes a hollow tube or cylinder rather than a solid rod. This change is not readily apparent to the casual observer. Trees require only a small amount of bark and wood to transport water, minerals and sugars. Interior heartwood can be eliminated (or degraded) to a great degree without compromising the transport process. Therefore, trees can contain significant amounts of decay without showing decline symptoms in the crown.



additional cells. The weakest of the vertical wall. Accordingly, decay progression inward at large are more than one pruning cut trunk of the tree, the likelihood of decay progression and the associated structural loss of integrity of the internal wood is high.

Compartmentalization of decay in trees is a biological process in which the cellular tissue around wounds is changed to inhibit fungal growth and provide a barrier against the spread of decay agents into the barrier zones is the formation of while a tree may be able to limit pruning cuts, in the event that there located vertically along the main

Oak Tree Impacts

Our native oak trees are easily damaged or killed by having the soil within the Critical Root Zone (CRZ) disturbed or compacted. All of the work initially performed around protected trees that will be saved should be done by people rather than by wheeled or track type tractors. Oaks are fragile giants that can take little change in soil grade, compaction, or warm season watering. Don't be fooled into believing that warm season watering has no adverse effects on native oaks. Decline and eventual death can take as long as 5-20 years with poor care and inappropriate watering. Oaks can live hundreds of years if treated properly during construction, as well as later with proper pruning, and the appropriate landscape/irrigation design.

RECOMMENTATIONS: SUMMARY OF TREE PROTECTION MEASURES

Hire a Project Arborist to help ensure protection measures are incorporated into the site plans and followed. The Project Arborist should, in cooperation with the Engineers and/or Architects:

- Identify the Root Protection Zones on the final construction drawings, prior to bidding the project.
- Show the placement of tree protection fences, as well as areas to be irrigated, fertilized and mulched on the final construction drawings.
- Clearly show trees for removal on the plans and mark them clearly on site. A Contractor who is a Certified Arborist should perform tree and stump removal. All stumps within the root zone of trees to be preserved shall be ground out using a stump router or left in place. **No trunk within the root zone of other trees shall be removed using a backhoe or other piece of grading equipment.**
- Prior to any grading, or other work on the site that will come within 50' of any tree to be preserved:
 1. Irrigate (if needed) and place a 3" layer of chip mulch over the protected root zone of all trees that will be impacted.
 2. Erect Tree Protection Fences. Place boards against trees located within 3' of construction zones, even if fenced off.
 3. Remove lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site. The Project Arborist should approve the extent of foliage elevation, and oversee the pruning, performed by a contractor who is an ISA Certified Arborist.
- For cuts, expose roots by hand digging, potholing or using an air spade and then cut roots cleanly prior to further grading outside the tree protection zones.
- For fills, if a cut is required first, follow as for cuts.
- Where possible, specify geotextile fabric in lieu of compacting and root cutting, prior to placing fills on the soil surface. Any proposed retaining wall or fill soil shall be discussed with the engineer and arborist in order to reduce impacts to trees to be preserved.
- Clearly designate an area on the site outside the drip line of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the root zones of protected trees.
- Design utility and irrigation trenches to minimize disturbance to tree roots. Where possible, dig trenches with a hydraulic or air spade, placing pipes underneath the roots, or bore the deeper trenches underneath the roots.
- Include on the plans an Arborist inspection schedule to monitor the site during (and after) construction to ensure protection measures are followed and make recommendations for care of the trees on site, as needed.

General Tree protection measures are included as Appendix 3. These measures need to be included on the Site, Grading, Utility and Landscape Plans. A final report of recommendations specific to the plan can be completed as part of, and in conjunction with, the actual plans. This will require the arborist working directly with the engineer and architect for the project. If the above recommendations are followed, the amount of time required by the arborist for the final report should be minim this will require the arborist working directly

with the engineer and architect for the project. If the above recommendations are followed, the amount of time required by the arborist for the final report should be minimal.

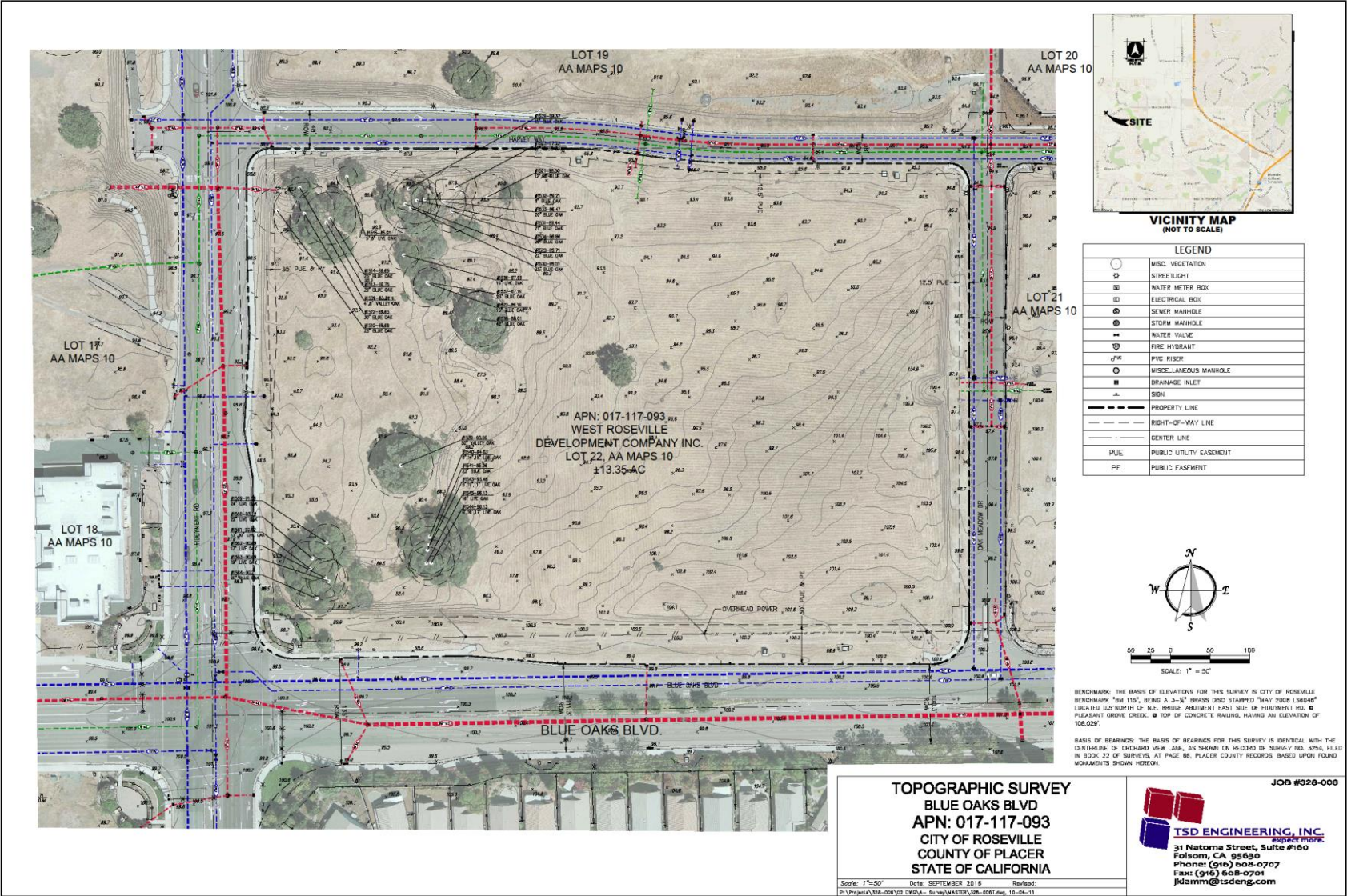
Report Prepared by:



Edwin E. Stirtz, Consulting Arborist
International Society of Arboriculture
Certified Arborist WE-0510A
ISA Tree Risk Assessment Qualified
Member, American Society of Consulting Arborists

Enc.: Appendix 1 – Map of The Property Showing Tree Locations
Appendix 2 – Tree Information Collected
Appendix 3 – General Practices for Tree Protection

APPENDIX 1 – MAP OF THE PROPERTY SHOWING TREE LOCATIONS



APPENDIX 2 – TREE INFORMATION COLLECTED

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1509	Valley Oak	(Quercus lobata)		16	17	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems		No encroachment depicted.	None at this time.	
1512	Blue Oak	(Quercus douglasii)		24	25	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	2 Major Structure or Health Problems	AKA Tree 931 Measured 2' above grade. Old callusing trunk wound, south side, at point of limb failure, with interior decay; above average amount of deadwood.	Minor to negligible encroachment for retaining wall construction south side.	Perform decay detection and provide further recommendations. If retained, any excavation for retaining wall footings shall be monitored by the project arborist. May require root pruning. Will require canopy pruning.	
1514	Blue Oak	(Quercus douglasii)		28	33	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	1 Extreme Structure or Health Problems	AKA Tree 929 Old callusing trunk, west side, 9' above grade with interior decay; slightly out of balance to the east; above average amount of deadwood.	Arborist's tree removal.	Recommend removal due to nature and extent of noted defects	
1515	Interior Live Oak	(Quercus wislizeni)		17	16	Fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	Measured 1.5' above grade; trunk forks 2' above grade into codominant stems which then graft 6'-9' above grade; slightly above average amount of deadwood.	Minor to negligible encroachment for retaining wall construction south side.	Excavation for retaining wall footings shall be monitored by the project arborist. Root pruning may be necessary.	

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1522	Blue Oak	<i>(Quercus douglasii)</i>		18	22	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 917 Above average amount of deadwood.	Tree removal.	None at this time.	18
1528	Blue Oak	<i>(Quercus douglasii)</i>		17	24	Fair	Poor to fair	Poor to fair	Dormant	Poor to fair	Poor to fair	3 Fair - Minor Problems	AKA Tree 927 Out of balance to the south; above average amount of deadwood; poor bud formation.	Tree removal.	None at this time.	17
1529	Blue Oak	<i>(Quercus douglasii)</i>		26	32	Fair	Poor to fair	Poor to fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 926 Out of balance to the west; above average amount of deadwood; sprout growth on the larger wood.	Tree removal.	None at this time.	26
1530	Blue Oak	<i>(Quercus douglasii)</i>		27	33	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 925 Slightly out of balance to the south; above average amount of deadwood.	Tree removal.	None at this time.	27
1531	Blue Oak	<i>(Quercus douglasii)</i>		24	31	Fair	Poor to fair	Poor to fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 924 Out of balance to the east; above average amount of deadwood.	Tree removal.	None at this time.	24
1532	Blue Oak	<i>(Quercus douglasii)</i>		8	9	Poor	Poor to fair	Poor to fair	Dormant	Poor	Fair	3 Fair - Minor Problems	Past partial root system failure, partially on grade.	Tree removal.	None at this time.	8
1534	Blue Oak	<i>(Quercus douglasii)</i>		21	30	Poor	Poor	Poor	Dormant	Poor	Fair	3 Fair - Minor Problems	AKA Tree 922 Tree suffered a partial root system failure in the past and is lying on grade to the south; above average amount of deadwood.	Tree removal.	None at this time.	21

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1535	Blue Oak	(Quercus douglasii)		14	17	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 919 Out of balance to the east; slightly above average amount of deadwood.	Tree removal.	None at this time.	14
1536	Interior Live Oak	(Quercus wislizeni)		21	22	Fair	Fair	Poor to fair	Fair	Fair	Fair	3 Fair - Minor Problems	AKA Tree 918 Old callusing lower trunk wounds, north side, with minor decay; slightly above average amount of deadwood.	Tree removal.	None at this time.	21
1537	Blue Oak	(Quercus douglasii)		26	31	Fair	Poor	Poor to fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 916 Out of balance to the west; inherently weak primary crotch; slightly above average amount of deadwood.	Tree removal.	None at this time.	26
1538	Blue Oak	(Quercus douglasii)		45	37	Fair	Fair	Fair	Dormant	Fair	Fair	3 Fair - Minor Problems	AKA Tree 915 Root crown and some buttresses exposed from bank erosion on the northwest side; above average amount of deadwood.	Tree removal.	None at this time.	45

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1539	Valley Oak	(Quercus lobata)		57	39	Fair	Poor	Poor to fair	Dormant	Poor	Fair	1 Extreme Structure or Health Problems	AKA Tree 913 Numerous large scaffold failures, with resulting decay; scaffold limb failure, north side, resulting in a large callusing wound reaching from 2'-20' above grade, with moderate interior decay; above average amount of deadwood.	Arborist's tree removal.	Recommend removal due to nature and extent of noted defects	57
1540	Interior Live Oak	(Quercus wislizeni)	14,21	35	38	Poor	Poor	Poor to fair	Fair	Poor	Fair	1 Extreme Structure or Health Problems	AKA Tree 911Old callusing basal trunk wound, north side; moderate to significant decay; out of balance to the north; slightly above average amount of deadwood.	Arborist's tree removal.	Recommend removal due to nature and extent of noted defects	35
1541	Blue Oak	(Quercus douglasii)		25	39	Poor to fair	Poor to fair	Fair	Fair	Fair	Fair	3 Fair - Minor Problems	AKA Tree 910 Buttress roots exposed due to bank erosion; out of balance east; slightly above average amount of deadwood.	Tree removal.	Clean out crown and perform weight/size reduction pruning.	25
1542	Valley Oak	(Quercus lobata)		13	16	Fair	Poor to fair	Fair	Dormant	Poor to fair	Fair	3 Fair - Minor Problems	Out of balance northwest.	Tree removal.	None at this time.	13

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1543	Interior Live Oak	(Quercus wislizeni)	12,12,13	37	32	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 909 Out of balance south; old callusing wounds in various locations on the scaffold branches, with minor decay evident.	Tree removal.	Clean out crown and perform weight/size reduction pruning.	37
1544	Interior Live Oak	(Quercus wislizeni)	12,20,21	53	32	Poor to fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 908 Old callusing basal trunk wound, west side, with minor decay; out of balance east; slightly above average amount of deadwood.	Tree removal.	None at this time.	53
1545	Interior Live Oak	(Quercus wislizeni)		21	29	Poor to fair	Fair	Poor to fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 907 Old callusing basal trunk wound, north side, with minor decay; out of balance south; slightly above average amount of deadwood.	Tree removal.	None at this time.	21
1559	Interior Live Oak	(Quercus wislizeni)		26	26	Fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 902 Old callusing wounds, various locations, with no obvious decay; above average amount of deadwood.	Tree removal.	None at this time.	26

Tree #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						ARBORIST RATING	NOTABLE CHARACTERISTICS	PERCEIVED IMPACTS	RECOMMENDATIONS	Construction Removal Mitigation Inches
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
1560	Interior Live Oak	(Quercus wislizeni)		25	28	Fair	Fair	Fair	Fair	Fair	Fair	3 Fair - Minor Problems	AKA Tree 901	Moderate to significant encroachment from retaining wall construction 14' north of trunk.	Excavation for retaining wall footings shall be monitored by the project arborist. Root pruning may be necessary.	
1561	Interior Live Oak	(Quercus wislizeni)		40	30	Fair	Poor to fair	Fair	Fair	Poor to fair	Fair	3 Fair - Minor Problems	AKA Tree 903 Measured 2' above grade; callusing on the south side; suspect interior decay; out of balance south; slightly above average amount of deadwood.	Minor to moderate encroachment from retaining wall construction 126'4" north of trunk.	Excavation for retaining wall footings shall be monitored by the project arborist. Root pruning may be necessary.	
1563	Interior Live Oak	(Quercus wislizeni)		21	32	Poor	Poor	Fair	Fair	Poor	Fair	3 Fair - Minor Problems	AKA Tree 905 Partial failure of the root system has left the tree growing prone on grade toward the south; terminal 15' is dead.	Tree removal.	None at this time.	21

TOTAL INVENTORIED TREES = 26 trees (685 aggregate diameter inches)
TOTAL RECOMMENDED REMOVALS = 3 trees (120 aggregate diameter inches)
PRECAUTIONARY TREES HIGHLIGHTED FOR REFERENCE
TOTAL CONSTRUCTION REMOVALS = 20 Trees (535 aggregate diameter inches)

APPENDIX 3 – GENERAL PRACTICES FOR TREE PROTECTION

Definitions

Root zone: The roots of trees grow fairly close to the surface of the soil, and spread out in a radial direction from the trunk of tree. A general rule of thumb is that they spread 2 to 3 times the radius of the canopy, or 1 to 1 ½ times the height of the tree. It is generally accepted that disturbance to root zones should be kept as far as possible from the trunk of a tree.

Inner Bark: The bark on large valley oaks and coast live oaks is quite thick, usually 1" to 2". If the bark is knocked off a tree, the inner bark, or cambial region, is exposed or removed. The cambial zone is the area of tissue responsible for adding new layers to the tree each year, so by removing it, the tree can only grow new tissue from the edges of the wound. In addition, the wood of the tree is exposed to decay fungi, so the trunk present at the time of the injury becomes susceptible to decay. Tree protection measures require that no activities occur which can knock the bark off the trees.

Methods Used in Tree Protection:

No matter how detailed Tree Protection Measures are in the initial Arborist Report, they will not accomplish their stated purpose unless they are applied to individual trees and a Project Arborist is hired to oversee the construction. The Project Arborist should have the ability to enforce the Protection Measures. The Project Arborist should be hired as soon as possible to assist in design and to become familiar with the project. He must be able to read and understand the project drawings and interpret the specifications. He should also have the ability to cooperate with the contractor, incorporating the contractor's ideas on how to accomplish the protection measures, wherever possible. It is advisable for the Project Arborist to be present at the Pre-Bid tour of the site, to answer questions the contractors may have about Tree Protection Measures. This also lets the contractors know how important tree preservation is to the developer.

Root Protection Zone (RPZ): Since in most construction projects it is not possible to protect the entire root zone of a tree, a Root Protection Zone is established for each tree to be preserved. The minimum Root Protection Zone is the area underneath the tree's canopy (out to the dripline, or edge of the canopy), plus 10'. The Project Arborist must approve work within the RPZ.

Irrigate, Fertilize, Mulch: Prior to grading on the site near any tree, the area within the Tree Protection fence should be fertilized with 4 pounds of nitrogen per 1000 square feet, and the fertilizer irrigated in. The irrigation should percolate at least 24 inches into the soil. This should be done no less than 2 weeks prior to grading or other root disturbing activities. After irrigating, cover the RPZ with at least 12" of leaf and twig mulch. Such mulch can be obtained from chipping or grinding the limbs of any trees removed on the site. Acceptable mulches can be obtained from nurseries or other commercial sources. Fibrous or shredded redwood or cedar bark mulch shall not be used anywhere on site.

Fence: Fence around the Root Protection Zone and restrict activity therein to prevent soil compaction by vehicles, foot traffic or material storage. The fenced area shall be off limits to all construction equipment, unless there is express written notification provided by the Project Arborist, and impacts are discussed and mitigated prior to work commencing.

No storage or cleaning of equipment or materials, or parking of any equipment can take place within the fenced off area, known as the RPZ.

The fence should be highly visible, and stout enough to keep vehicles and other equipment out. I recommend the fence be made of orange plastic protective fencing, kept in place by t-posts set no farther apart than 6'.

In areas of intense impact, a 6' chain link fence is preferred.

In areas with many trees, the RPZ can be fenced as one unit, rather than separately for each tree.

Where tree trunks are within 3' of the construction area, place 2" by 4" boards vertically against the tree trunks, even if fenced off. Hold the boards in place with wire. Do not nail them directly to the tree.

The purpose of the boards is to protect the trunk, should any equipment stray into the RPZ.

Elevate Foliage: Where indicated, remove lower foliage from a tree to prevent limb breakage by equipment. Low foliage can usually be removed without harming the tree, unless more than 25% of the foliage is removed. Branches need to be removed at the anatomically correct location in order to prevent decay organisms from entering the trunk. For this reason, a contractor who is an ISA Certified Arborist should perform all pruning on protected trees.¹

Expose and Cut Roots: Breaking roots with a backhoe, or crushing them with a grader, causes significant injury, which may subject the roots to decay. Ripping roots may cause them to splinter toward the base of the tree, creating much more injury than a clean cut would make. At any location where the root zone of a tree will be impacted by a trench or a cut (including a cut required for a fill and compaction), the roots shall be exposed with either a backhoe digging radially to the trunk, by hand digging, or by a hydraulic air spade, and then cut cleanly with a sharp instrument, such as chainsaw with a carbide chain. Once the roots are severed, the area behind the cut should be moistened and mulched. A root protection fence should also be erected to protect the remaining roots, if it is not already in place. Further grading or backhoe work required outside the established RPZ can then continue without further protection measures.

Protect Roots in Deeper Trenches: The location of utilities on the site can be very detrimental to trees. Design the project to use as few trenches as possible, and to keep them away from the major trees to be protected. Wherever possible, in areas where trenches will be very deep, consider boring under the roots of the trees, rather than digging the trench through the roots. This technique can be quite useful for utility trenches and pipelines.

Protect Roots in Small Trenches: After all construction is complete on a site, it is not unusual for the landscape contractor to come in and sever a large number of "preserved" roots during the installation of irrigation systems. The Project Arborist must therefore approve the landscape and irrigation plans. The irrigation system needs to be designed so the main lines are located outside the root zone of major trees, and the secondary lines are either laid on the surface (drip systems), or carefully dug with a hydraulic or air spade, and the flexible pipe fed underneath the major roots.

Design the irrigation system so it can slowly apply water (no more than ¼" to ½" of water per hour) over a longer period of time. This allows deep soaking of root zones. The system also needs to accommodate infrequent irrigation settings of once or twice a month, rather than several times a week.

Monitoring Tree Health During and After Construction: The Project Arborist should visit the site at least twice a month during construction to be certain the tree protection measures are being followed, to monitor the health of impacted trees, and make recommendations as to irrigation or other needs. After construction is

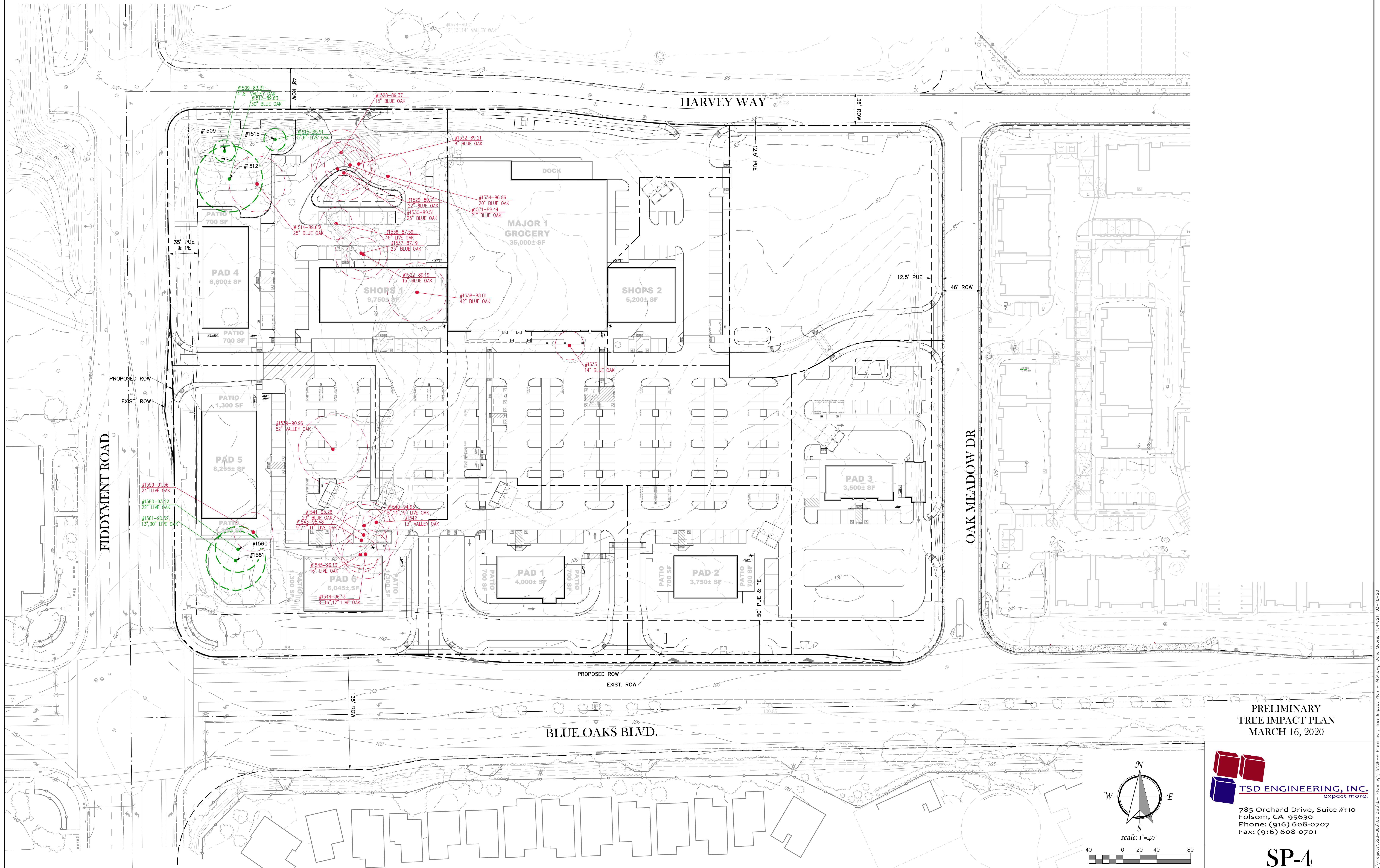
¹ International Society of Arboriculture (ISA), maintains a program of Certifying individuals. Each Certified Arborist has a number and must maintain continuing education credits to remain Certified.

complete, the arborist should monitor the site monthly for one year and make recommendations for care where needed. If longer term monitoring is required, the arborist should report this to the developer and the planning agency overseeing the project.

PRELIMINARY TREE IMPACT PLAN - ALT 4
THE PLAZA AT BLUE OAKS

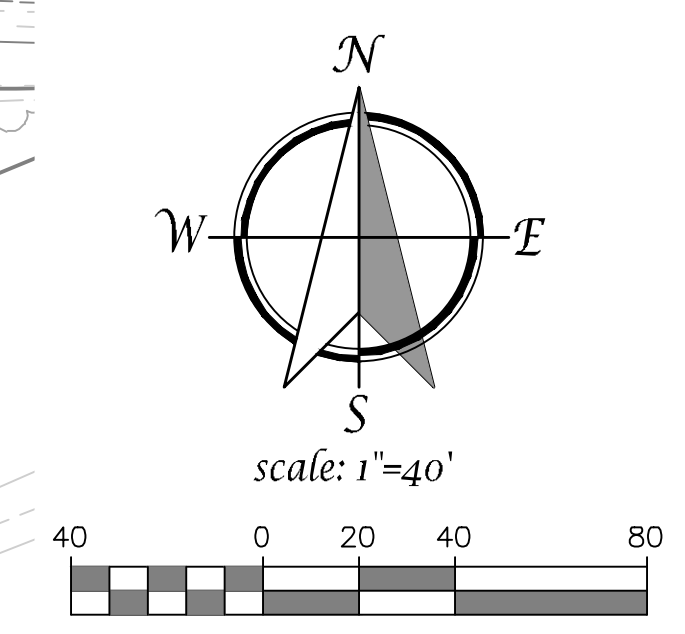
1950 BLUE OAKS BLVD
FIDDYMENT F-31
ROSEVILLE, CA

PC EXHIBIT K



PRELIMINARY
TREE IMPACT PLAN
MARCH 16, 2020

TSD ENGINEERING, INC.
expect more.
785 Orchard Drive, Suite #110
Folsom, CA 95630
Phone: (916) 608-0707
Fax: (916) 608-0701



SP-4

MEMORANDUM

To: Planning Commission

From: Kinarik Shallow, Associate Planner

Date: May 13, 2020

Re: Placer County Air Pollution Control District – Air Quality Permit Regulations

The purpose of this memorandum is to provide additional information regarding Placer County Air Pollution Control District (PCAPCD)'s rules and regulations related to air quality permits. Air quality impacts of the Plaza at Blue Oaks project were evaluated in the Initial Study prepared for the project, which determined that compliance with these rules and regulations would ensure impacts would be less than significant. The PCAPCD permit process ensures that the required local, state, and federal standards are adhered to as it relates to air quality impacts, and that no permit is provided if PCAPCD significance thresholds are exceeded. The applicable PCAPCD permit requirements, rules and regulations are included as Attachments 1-3, below.

Attachments

1. PCAPCD Air Quality Permitting
2. Rule 501 General Permit Requirements
3. PCAPCD Advisory Notice for Gasoline Dispensing Facilities

PCAPCD Air Quality Permitting

State law gives local air pollution control districts “the primary responsibility for control of air pollution from all sources, other than emissions from motor vehicles.” (Health & Safety Code, § 40000.) Pursuant to this authority, the Placer County APCD requires that gas stations obtain a permit known as an “Authority to Construct” prior to building the facility and another annual permit known as a “Permit to Operate” before dispensing gasoline. The APCD’s Rules and Regulations require denial of these permits if the proposed gas station’s air emissions would violate federal, State or local air quality standards. (Placer County APCD, Rules and Regulations, Rule 501, § 303, and Rule 502, § 408.) In addition to controlling the emission of various “criteria pollutants,” the APCD’s permits will address any potential emission of Toxic Air Contaminants from gas stations, including benzene. The APCD will review the proposed “annual throughput” for the gas station and will place any necessary restrictions on the operation to ensure that the facility’s emissions of TACs do not exceed the APCD’s established “health risk” threshold of 10 in 1 million. (See PCAPCD Advisory Notice for Gasoline Dispensing Facilities) Notably, this “10 in 1 million” threshold is identical to the APCD’s CEQA threshold of significance for TACs. Accordingly, it can be said with certainty that a gas station which must obtain an Authority to Construct and Permit to Operate from APCD will not result in any significant TAC emission impacts.

RULE 501 GENERAL PERMIT REQUIREMENTS

Adopted 12-08-70

(Amended 05-09-72, 11-12-74, 05-24-77, 06-19-79, 09-21-93, 11-03-94, 12-09-04, 8-12-10)

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100 GENERAL

101 PURPOSE: To provide an orderly procedure for the review of new sources of air pollution and modification and operation of existing sources through the issuance of permits. Procedures for issuing, modifying, or renewing Title V Permits to Operate for stationary sources that are subject to Rule 507, FEDERAL OPERATING PERMIT PROGRAM, shall also be consistent with the procedures specified in that rule.

102 EXEMPTION RECORDKEEPING: Records must be maintained to substantiate the following exemptions. Records must be maintained on site and made available to the District upon request.

110 EXEMPTION, GENERAL: An Authority to Construct and Permit to Operate shall not be required for the equipment listed in Sections 111 to 122, unless an emissions unit is:

110.1 Subject to New Source Performance Standards, except engines less than 50 horsepower subject to NSPS JJJJ, Standards of Performance for Stationary Spark Ignition ICE; or

110.2 Subject to National Emission Standards for Hazardous Air Pollutants; or

110.3 Subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM; or

110.4 Emits, in levels deemed appropriate for review by the Air Pollution Control Officer, substances identified as a toxic air contaminant or which are under review pursuant to Health and Safety Code Section 39650 et seq.; or

110.5 The Air Pollution Control Officer makes a determination that the emission unit may not operate in compliance with the District Rules and Regulations; or

110.6 An emissions unit or stationary source for which emission reduction credits have been requested or granted in accordance with Rule 504, EMISSION REDUCTION CREDITS.

110.7 An otherwise exempt piece of equipment that is part of a process that requires a permit.

111 EXEMPTION, MOBILE SOURCES:

111.1 Engines used to propel mobile equipment or a motor vehicle of any kind, but not including any article, machine, equipment or other contrivance mounted on such a vehicle that would otherwise require a permit under the provisions of these rules and regulations.

111.2 Locomotives, airplanes and watercraft used to transport passengers or freight. This exemption shall not apply to equipment used for dredging of waterways or equipment used in pile driving adjacent to or in waterways.

112 EXEMPTION, COMBUSTION AND HEAT TRANSFER EQUIPMENT:

112.1 Internal combustion engines with a manufacturer's maximum continuous rating of 50 brake horsepower or less or gas turbine engines with a maximum heat input rate of 3,000,000 British Thermal Units (Btu) per hour or less at ISO standard day conditions (288 degrees Kelvin, 60 percent relative humidity, and 101.3

kilopascals pressure). The ratings of all engines or turbines used in the same process will be accumulated to determine whether this exemption applies.

112.2 Any combustion equipment that has a maximum heat input of less than 1,000,000 Btu per hour (gross) and is equipped to be fired exclusively with natural gas, liquefied petroleum gas or any combination thereof. The ratings of all combustion equipment used in the same process will be accumulated to determine whether this exemption applies.

113 EXEMPTION, RESIDENTIAL STRUCTURES: Equipment utilized exclusively in connection with any structure, when the structure is designed for and used exclusively as a dwelling for not more than four families.

114 EXEMPTION, AGRICULTURAL OPERATIONS: Equipment used exclusively in the growing of agricultural crops, or in the commercial raising of fowl or other animals. This exemption does not apply to an agricultural source, as defined in this Rule, that is:

114.1 A Major Stationary Source or Major Modification, as defined in Rule 502, NEW SOURCE REVIEW, or

114.2 A stationary source that emits in any 12-month period air contaminant emissions equal to or more than the following quantities of emissions:

- a. 50 percent of the major source thresholds for regulated air pollutants (excluding HAPs);
- b. 5 tons per year of a single HAP;
- c. 12.5 tons per year of any combination of HAPs; and
- d. 50 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.

115 EXEMPTION, COOLING SYSTEMS AND VACUUM CLEANING: Refrigeration, air conditioning, ventilating, or vacuum cleaning systems not designed to remove air contaminants generated by equipment which would require a permit under these rules and regulations.

116 EXEMPTION, COOLING TOWERS: Water cooling towers that have a circulation rate of less than 10,000 gallons per minute and which are not used for the cooling of process water, water from barometric jets, or water from barometric condensers.

117 EXEMPTION, STORAGE AND TRANSFER: Tanks, reservoirs, vessels or other containers and their associated dispensing, pumping and compression systems used exclusively for the storage of:

117.1 Liquefied or compressed gases.

117.2 Unheated organic materials with an initial boiling point of 150 degrees Celsius (302 degrees Fahrenheit) or greater, as determined by the testing procedure specified in Section 501.2, or with an organic vapor pressure of 5 mm Hg (0.1 psia) or less at 20°C, as determined by the testing procedure specified in Section 501.3.

117.3 Organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psia) or less at 20°C, as determined by the testing procedure specified in Section 501.3, stored in containers having a capacity of 23,000 liters (6076 gallons or less). Equipment used exclusively for the transfer of organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psia) at 20°C to or from storage.

117.4 Unheated solvent dispensing containers of 380 liters (100 gallons) capacity or less.

118 EXEMPTION, SURFACE COATING AND PREPARATION:

118.1 Water solution containing no more than two percent volatile organic compounds by weight for surface preparation, cleaning, stripping, etching (other than chemical milling) or the electrolytic plating with electrolytic polishing of, or the electrolytic stripping of brass, bronze, cadmium, copper, iron lead, nickel, tin, zinc, and precious metals.

118.2 Surface coating operations using a combined total of one gallon per day or less of coating material and solvent.

118.3 Unheated non-conveyorized solvent rinsing containers or unheated non-conveyorized coating dip tanks of 380 liters (100 gallons) capacity or less with an open surface area of one square meter (11 square feet) or less providing no more than 25 gallons of solvent are evaporated or lost to the atmosphere from all such equipment per calendar year.

119 EXEMPTION, FOOD PROCESSING: The following processing equipment for food or other human consumables and exhaust systems or collectors serving exclusively such equipment:

119.1 Used in eating establishments for the purpose of preparing food for human consumption.

119.2 Smokehouses in which the maximum horizontal inside cross sectional area does not exceed 2 square meters (21.5 square feet).

119.3 Mixers and blenders used in bakeries.

119.4 Confection cookers.

119.5 Used exclusively to grind, blend or package tea, cocoa, spices, or roasted coffee.

120 EXEMPTION, LABORATORY EQUIPMENT: Laboratory equipment used exclusively for chemical or physical analysis and bench scale tests, including associated vacuum-producing equipment.

121 EXEMPTION, REPAIRS AND MAINTENANCE: Repairs or maintenance not involving changes to any equipment for which a permit has been granted under Section 301 of this rule.

122 EXEMPTION, OTHER EQUIPMENT: Unless subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, other equipment authorized for exemption by the Air Pollution Control Officer and which would emit less than 2 pounds in any 24 hour period of any pollutants without the benefit of air pollution control devices.

200 DEFINITIONS: Unless otherwise defined below, the terms used in this rule are defined in Rule 502, NEW SOURCE REVIEW; Rule 504, EMISSIONS REDUCTION CREDITS; and Rule 102, DEFINITIONS; and apply in hierarchical order.

201 ADMINISTRATIVE PERMIT AMENDMENT: An amendment to a Permit to Operate which:

- 201.1 Corrects a typographical error; or
- 201.2 Identifies a minor administrative change at the stationary source; for example, a change in the name, address, or phone number of any person identified in the permit; or
- 201.3 Requires more frequent monitoring or reporting by a responsible official of the stationary source; or
- 202 AGRICULTURAL SOURCE OF AIR POLLUTION OR AGRICULTURAL SOURCE:** A source of air pollution or a group of sources used in the production of crops, or the raising of fowl or animals located on contiguous property under common ownership or control, including, but not limited to the following criteria:
- 202.1 Is a confined animal facility, including, but not limited to, any structure, building, installation, barn, corral, coop, feed storage area, milking parlor, or system for the collection, storage, treatment, and distribution of liquid and solid manure, if domesticated animals, including, but not limited to, cattle, calves, horses, sheep, goats, swine, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- 202.2 Is an internal combustion engine used in the production of crops or the raising of fowl or animals, including, but not limited to, an engine subject to Section 41750 of the California Health & Safety Code, except an engine that is used to propel implements of husbandry, as that term is defined in Section 36000 of the Vehicle Code, as that section existed on January 1, 2003.
- 203 ANNIVERSARY DATE:** The day and month of issuance of a Permit to Operate and that same day and month of each succeeding year.
- 204 APPLICABLE REQUIREMENTS:** Air quality requirements with which a facility must comply pursuant to the District's regulations, codes of California statutory law, the Federal Clean Air Act as amended in 1990 and implementing regulations, other provisions of the United States Code, and the Code of Federal Regulations.
- 205 AUTHORITY TO CONSTRUCT:** A preconstruction permit authorizing construction prior to the starting of construction and conforming to the requirements of Rule 502, NEW SOURCE REVIEW.
- 206 COMMENCE:** As applied to construction, means that the owner or operator has all of the necessary permits or approvals required under state and federal air quality control laws, District Rules and Regulations, and those air quality control laws and regulations which are part of the California State Implementation Plan, and has:
- 206.1 Begun, or caused to begin, a continuous program of on-site construction of the source, to be completed in a reasonable time; or
- 206.2 Entered into binding agreements or contractual obligations which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- 207 CONTIGUOUS PROPERTY:** Two or more parcels of land with a common boundary or separated solely by a public roadway or other public right-of-way.

- 208 EMISSIONS UNIT:** An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any air pollutant directly or as fugitive emissions.
- 209 REGULATED POLLUTANT:** A pollutant for which an Ambient Air Quality Standard has been established by the EPA or by the California Air Resources Board (ARB), and the precursors to such pollutants.
- 210 RESPONSIBLE OFFICIAL:** An individual with the authority to certify that a source complies with all applicable requirements, including the conditions of permits issued to sources in accordance with Regulation 5, PERMITS. A "responsible official" means one of the following:
- 210.1** For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - 210.1.1** The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - 210.1.2** The delegation of authority to such representative is approved in advance by the Air Pollution Control Officer;
 - 210.2** For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or
 - 210.3** For a municipality, state, federal, or other public agency, either a principal executive officer or a ranking elected official; or
 - 210.4** For an acid rain unit subject to Title IV (Acid Deposition Control) of the Clean Air Act, the "responsible official" is the designated representative of that unit for any purposes under Title IV and Rule 507, FEDERAL OPERATING PERMIT PROGRAM.
- 211 STARTUP:** means the setting in operation of a stationary source or emission unit for any purpose.
- 212 STATIONARY SOURCE (SOURCE OR FACILITY):** Any building, structure, facility, or emissions unit which emits or may emit any regulated pollutant directly or as fugitive emissions.
- 212.1** Building, structure, facility, or emissions unit includes all pollutant emitting activities which:
 - 212.1.1** Belong to the same industrial grouping; and
 - 212.1.2** Are located on one property or on two or more contiguous properties; and
 - 212.1.3** Are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.

212.2 Pollutant emitting activities shall be considered as part of the same industrial grouping if:

212.2.1 They belong to the same two-digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual; or

212.2.2 They are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)

212.3 The emissions of cargo carriers associated with the stationary source shall be considered emissions from the stationary source to the extent that emission reductions from these cargo carriers are proposed as offsets.

213 TITLE V PERMITS: A permit issued, denied, renewed, amended, or reopened pursuant to Rule 507, FEDERAL OPERATING PERMIT PROGRAM, and the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.), and Part 70 Code of Federal Regulations, "State Operating Permit Programs".

300 STANDARDS

301 AUTHORITY TO CONSTRUCT: Any person building, erecting, placing on site, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, shall first obtain authorization for such construction from the Air Pollution Control Officer (APCO) as specified in Section 403 of this rule. The emissions unit(s) shall not commence operation until the Air Pollution Control Officer takes final action to approve the Authority to Construct. After the emissions unit(s) commence operation, the Authority to Construct may remain in effect as a Temporary Permit to Operate until a Permit to Operate the equipment is granted or denied or the application is canceled.

301.1 An Authority to Construct, unless extended, shall expire no later than one year following the construction completion date given by the applicant, or no later than two years following the date of permit issuance, whichever occurs first.

301.2 If a written request to extend the Authority to Construct is received by the Air Pollution Control Officer prior to the expiration of the Authority to Construct, an extension may be granted for up to two years if the Air Pollution Control Officer determines that: (1) commencement of construction has occurred, and a good faith effort to complete the project has been made; and (2) the parameters of the project remain the same as in the initial application.

301.3 The Air Pollution Control Officer shall be notified of the anticipated date of initial startup or operation of any permitted emission unit.

301.4 The Air Pollution Control Officer shall be notified of the actual date of initial startup within five (5) days after such date.

302 PERMIT TO OPERATE: Any person operating an emission unit, shall first obtain a written permit from the Air Pollution Control Officer.

303 STANDARDS FOR GRANTING APPLICATIONS:

303.1 The Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate, except as provided in Rule 502, NEW SOURCE REVIEW, if the

applicant does not show that every emission unit is so designed, controlled, equipped, and operated with such air pollution control equipment that it may be shown to operate without emitting or without causing to be emitted air contaminants in violation of these rules and regulations or of such state or federal statutes as may be enforceable by the Air Pollution Control Officer on the date the application is deemed complete.

303.2 No Permit to Operate shall be granted, either by the Air Pollution Control Officer or the Hearing Board, for any emission unit which has been constructed or installed without authorization as required by Section 301 of this rule, until:

303.2.1 The information necessary to enable the Air Pollution Control Officer to make the determination required by Section 303 of this rule and Rule 502, NEW SOURCE REVIEW is presented to the Air Pollution Control Officer; and

303.2.2 Such emission unit is altered, if necessary, and made to conform to the standards set forth in Section 303 of this rule, elsewhere in these rules and regulations, and in the California Health and Safety Code.

303.3 In acting upon a Permit to Operate, if the Air Pollution Control Officer finds that the emission unit has not been constructed in accordance with the Authority to Construct, he or she shall deny the Permit to Operate. The Air Pollution Control Officer shall not accept any further application for a Permit to Operate the emission unit so constructed until he or she finds that the emission unit has been reconstructed in accordance with the Authority to Construct.

303.4 The Air Pollution Control Officer shall require enforceable emission limitations as permit conditions in Authorities to Construct and Permits to Operate to assure the permanence of surplus actual emissions reductions applied for use as internal reductions or emission reduction credits in accordance with Rule 502, NEW SOURCE REVIEW and Rule 504, EMISSION REDUCTION CREDITS.

303.5 The Air Pollution Control Officer shall determine that an applicant for an authority to construct or modify a potential source of air contaminants located within 1,000 feet from the outer boundary of a school has complied with the applicable requirements of California Health and Safety Code Section 42301.6, preparation and distribution of a public notice, prior to approving an application for an Authority to Construct permit.

303.6 Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with all applicable requirements, including applicable provisions of the California State Implementation Plan, District Rules and Regulations, or State or Federal law.

303.7 The Air Pollution Control Officer shall require the applicant, as a condition of the Authority to Construct, to comply with the requirements of California Health and Safety Code Part 6, (Section 44300 et seq.), Air Toxics "Hot Spots" Information and Assessment Act.

304 PROVISION OF SAMPLING AND TESTING FACILITIES: In addition to the monitoring and testing required to comply with state or federal laws or regulations, the Air Pollution Control Officer may, upon reasonable written notice or before an Authority to Construct or Permit to Operate is granted, require the applicant or the owner or operator of any emission unit to:

- 304.1 Provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from the equipment in question. In the event of such a requirement, the Air Pollution Control Officer shall notify the applicant in writing of the required size, number and location of sampling holes; the size and location of the sampling platform; the access to the sampling platform; and the utilities for operating the sampling, testing, and air monitoring equipment. Such platform and access shall be constructed in accordance with the applicable General Industry Safety Orders of the State of California.
- 304.2 Provide and maintain sampling and monitoring apparatus to measure emissions of air contaminants.
- 304.2.1 Continuous emission monitoring systems, as a minimum, shall be installed to meet the performance specifications required, by Section 502 of this rule.
- 304.2.2 A violation of emission standards of these rules, as shown by the continuous emission monitoring system, shall be reported by the owner or operator to the Air Pollution Control Officer within 96 hours, or such earlier time as may be required by Rule 404, UPSET CONDITIONS, BREAKDOWN AND SCHEDULED MAINTENANCE.
- 304.2.3 In the event of a breakdown of monitoring equipment, the owner or operator shall notify the Air Pollution Control Officer within 48 hours and shall initiate repairs. The owner or operator shall inform the Air Pollution Control Officer of the intent to shutdown any monitoring equipment at least 24 hours prior to the event.
- 304.2.4 Compliance with the subsections above, does not exempt the owner or operator from applicable provisions of Rule 404, UPSET CONDITIONS, BREAKDOWN AND SCHEDULED MAINTENANCE, the emergency provisions of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, pursuant to 40 CFR 70.6(g), or the separate reporting requirements of other federal regulations to which the stationary source or emissions unit is subject.
- 304.3 If the Air Pollution Control Officer determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of a numerical emission standard infeasible, the Air Pollution Control Officer may instead prescribe a design, operational, or equipment standard. In such cases, the Air Pollution Control Officer may require the installation or modification of process monitoring devices such that the design characteristics or equipment will be properly maintained, or that the operational conditions will be properly performed, so as to continuously achieve the assumed degree of control. To the extent applicable, reporting requirements for process monitors shall be the same as for continuous emission monitoring systems.
- 304.4 A person operating or using a continuous emission monitoring system shall, upon written notice from the Air Pollution Control Officer, provide a summary of the data obtained from such systems. This summary of the data shall be in the form and manner prescribed by the Air Pollution Control Officer. The summary of data shall be available for public inspection at the office of the Air Pollution Control District. Records from the monitoring equipment shall be kept by the owner or

operator for a period of five (5) years, during which time they shall be available to the Air Pollution Control Officer in such form as he or she directs.

305 TRANSFER: An Authority to Construct or Permit to Operate shall only be transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another by means of an application for authorization in accordance with Section 403 of this rule.

306 PERMIT RENEWAL: Every Permit to Operate, except as specified below, shall be renewable annually on the permit's anniversary date, commencing one (1) year after the date of issuance.

306.1 Action to suspend or revoke the permit has been initiated and such action has resulted in a final determination to suspend or revoke the permit by the Air Pollution Control Officer or the Hearing Board and all appeals, or time for appeals, has been exhausted.

306.2 Fees applicable to the renewal of the permit(s) to operate have not been paid, as specified in Regulation 6, FEES.

306.3 The Air Pollution Control Officer shall review every Permit to Operate upon annual renewal, pursuant to Health and Safety Code Section 42301(e), to determine that permit conditions are adequate to ensure compliance with, and the enforceability of, District Rules and Regulations and state and federal laws and regulations applicable to the emission unit for which the permit was issued. Applicable District Rules and Regulations shall include those which were in effect at the time the permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing emission unit by the District Board of Directors. The Air Pollution Control Officer shall revise the conditions, if such conditions are not consistent, in accordance with these rules, regulations, and laws.

306.4 The Air Pollution Control Officer may establish an annual permit renewal date for all Permits to Operate held by a stationary source. Thereafter, Permits to Operate shall be renewable that same day and month of each succeeding year, subject to any other requirements of these Rules and Regulations and of state law, regarding validity, voiding or revocation of permits.

307 PERFORMANCE TESTING: Within sixty (60) days after achieving the maximum production rate or the maximum rate of emissions to which the source is limited by enforceable conditions, but not later than one hundred eighty (180) days after initial startup of such source, or as otherwise required by the Air Pollution Control Officer to determine continuous compliance with emission limitations or to confirm emission reductions claimed, the owner or operator of such source shall conduct performance test(s) in accordance with methods and under operating conditions as are approved by the Air Pollution Control Officer and furnish the Air Pollution Control Officer a written report of the results of such performance test(s) within 60 days of completion of such tests..

307.1 Such test(s) shall be at the expense of the owner or operator.

307.2 Testing shall be conducted with the source(s) of emissions operating at maximum capacity or other rate conforming to the maximum rate of emissions to which the source(s) are limited by enforceable condition(s).

- 307.3 The Air Pollution Control Officer may monitor such test and may also conduct performance tests.
- 307.4 The owner or operator of a source shall provide the Air Pollution Control Officer prior notice of the performance test to afford the Air Pollution Control Officer the opportunity to have an observer present. Notice shall be at least 15 days prior to the test, or as agreed to by the Air Pollution Control Officer.
- 307.5 The Air Pollution Control Officer may waive the requirement for performance tests if the owner or operator of a source has demonstrated by other means to the Air Pollution Control Officer's satisfaction that the source is being operated in compliance with all local, state, and federal regulations which are part of the California State Implementation Plan.

400 ADMINISTRATIVE REQUIREMENTS

- 401 POSTING:** A person who has been granted a Permit to Operate any emission unit described in Section 302 of this rule shall maintain a legible copy of said permit on the premises of the subject equipment. Other information, analysis, plans or specifications which disclose the nature, extent, quantity, or degree of air contaminants which are or may be discharged from such source shall be readily available for inspection by the Air Pollution Control Officer.
- 402 ALTERING OF PERMIT:** A person shall not willfully deface, alter, forge, counterfeit, or falsify a Permit to Operate any emission unit described in Section 302 of this rule. A permit amendment or revision requested by the owner or operator, other than an administrative permit, shall require the filing of an application. For an administrative permit amendment, a responsible official may implement the change addressed in the written request immediately upon submittal of the request. The Air Pollution Control Officer shall take final action no later than sixty (60) days after receiving the written request for an administrative permit amendment.
- 402.1 After verifying that the permit revision is an administrative permit amendment, the Air Pollution Control Officer may revise the permit without providing notice to the public or any affected state.
- 402.2 The Air Pollution Control Officer shall provide a copy of the revised permit to the responsible official
- 402.3 While the Air Pollution Control Officer need not make a completeness determination on a written request, the Air Pollution Control Officer shall notify the responsible official if the Air Pollution Control Officer determines that the permit cannot be revised as an administrative permit amendment.
- 403 APPLICATIONS:** An application for an Authority to Construct, Permit to Operate, change of ownership, or an application for a permit amendment, permit reopening, or revision shall be filed in the manner and form prescribed by the Air Pollution Control Officer, and shall give all the information necessary to enable the Air Pollution Control Officer to make the determinations required by Section 303 of this rule and other applicable District Rules and Regulations and state and federal laws and regulations.
- 403.1 A responsible official representing the owner or operator shall certify the truth, accuracy and completeness of application forms.
- 403.2 When the information submitted with the application is insufficient for the Air Pollution Control Officer to make the required determinations, upon the written

request of the Air Pollution Control Officer a responsible official shall supplement any complete application with additional information within the time frame specified by the Air Pollution Control Officer.

403.3 A responsible official shall promptly provide additional information in writing to the Air Pollution Control Officer upon discovery of submittal of any inaccurate information as part of the application or as a supplement thereto, or of any additional relevant facts previously omitted which are needed for accurate analysis of the application.

403.4 Intentional or negligent submittal of inaccurate information shall be reason for denial of an application.

403.5 An application for an Authority to Construct, Permit to Operate, or permit amendment or revision shall be accompanied by payment of the application filing fee specified in Regulation 6, FEES.

404 ACTION ON APPLICATIONS: The Air Pollution Control Officer shall notify the applicant in writing of his or her approval, conditional approval, suspension, or denial of the application for an Authority to Construct or Permit to Operate.

404.1 In the event said notification or notification of application completeness pursuant to Rule 502, NEW SOURCE REVIEW, is not received by applicant within 30 days of the filing of the application, or within 30 days of providing further information as required by Section 403, the applicant may, at his or her option, deem the application to construct or Permit to Operate denied.

404.2 Service of said notification may be made in person or by mail, and such service may be proved by the written acknowledgment of the person(s) served or affidavit of the person making the service.

405 CONDITIONAL APPROVAL: The Air Pollution Control Officer may issue an Authority to Construct or a Permit to Operate subject to conditions which will bring the operation of the emission unit within the standards of Section 303 of this rule. The conditions shall be specified in writing. Commencing work under such an Authority to Construct, or operation under such a Permit to Operate, shall be deemed acceptance of all the conditions so specified. The Air Pollution Control Officer shall issue an Authority to Construct or a Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates that the emission unit can operate under the revised conditions within the standards of Section 303 of this rule.

406 DENIAL OF APPLICATION: In the event of a denial of an Authority to Construct or Permit to Operate, the Air Pollution Control Officer shall notify the applicant in writing of the reasons therefore. Service of this notification may be made in person or by mail, and such service may be proved by the written acknowledgment of the person(s) served or affidavit of the person making the service. The Air Pollution Control Officer shall not accept a further application unless the applicant has complied with the objections specified by the Air Pollution Control Officer as his or her reasons for denial of the Authority to Construct or the Permit to Operate.

407 DISCLOSURE: The Air Pollution Control Officer, at any time, may require from an applicant, or holder of, any permit provided for in these rules and regulations, such information, analyses, plans, or specifications which will disclose the nature, extent, quality, or degree of air contaminants which are, or may be, discharged by the source for which the permit was issued or applied. The Air Pollution Control Officer may require that such disclosures be certified by a professional engineer registered in the State of

California. A responsible official representing the owner or operator shall certify the truth, accuracy and completeness of disclosures. Studies necessary to provide such information shall be at the expense of the owner or operator of the source for which a permit was issued or applied.

408 EMISSION STATEMENT: Upon the request of the Air Pollution Control Officer and as directed by the Air Pollution Control Officer, the owner or operator of any stationary source operation which emits or may emit oxides of nitrogen or reactive organic gas shall provide the Air Pollution Control Officer with a written statement, in accordance with Rule 503, EMISSION STATEMENT, showing actual emissions of oxides of nitrogen and reactive organic gas from that source.

409 SUSPENSION: The Air Pollution Control Officer may suspend a permit if a holder of such permit willfully fails and refuses to furnish information, analyses, plans, and specifications, within a reasonable time, as requested by the Air Pollution Control Officer pursuant to California Health and Safety Code Section 42303, District Rules and Regulations, or any other law, rule, regulation, agreement, or order enforceable by the District. The Air Pollution Control Officer shall serve notice, in writing, of such suspension and the reasons therefore. Service of said notification may be made in person or by mail, and such service may be proved by the written acknowledgment of the persons served or affidavit of the person making the service. The permit shall be reinstated when the Air Pollution Control Officer is furnished with all requested information, analyses, plans, and specifications.

410 CANCELLATION OF APPLICATION: An Authority to Construct or Permit to Operate application may be canceled by the Air Pollution Control Officer:

410.1 At the request of the applicant; or

410.2 If additional information has been requested of the applicant in accordance with Section 403 without the subsequent submittal of information within a reasonable time.

410.3 If applicable permit fees of Rule 601, PERMIT FEES are not paid when due the application may be cancelled and any issued Authority to Construct or Permit to Operate may be voided.

411 CANCELLATION OF PERMIT TO OPERATE: If, prior to the surrender of the operating permit, the Air Pollution Control Officer determines that the source or the emissions unit has been removed or fallen into an inoperable or un-maintained condition, the Air Pollution Control Officer may notify the owner of the intent to cancel the permit, providing the owner or operator with 30 days to respond. If the owner cannot demonstrate to the satisfaction of the Air Pollution Control Officer that the owner intended to operate again, or the owner does not respond within 30 days from the date a second noticing of the District's intent to cancel the permit is mailed by the District to the owner or operator, then the Air Pollution Control Officer may cancel the permit and deem the source or emissions unit shutdown as of the last known date the source or emissions unit discharged emissions.

411.1 The owner or operator may request an extension of time, in writing prior to the end of the sixty (60) day period following the initial notice, from the Air Pollution Control Officer.

411.2 The Air Pollution Control Officer may grant an extension of time not to exceed ninety (90) days.

411.3 The owner or operator may claim emissions reductions resulting from the shutdown in accordance with the provisions of Rule 504, EMISSION REDUCTION CREDITS, prior to the end of the sixty (60) day period following the initial notice, or prior to the expiration of an extension.

411.4 The Air Pollution Control Officer shall advise, in writing, the owner or operator of the stationary source or emissions unit for which a permit is canceled of the cancellation decision.

411.5 The owner or operator may appeal the decision to cancel the permit pursuant to Section 413 of this rule.

412 TEMPORARY PERMIT: The Air Pollution Control Officer may issue a temporary Permit to Operate. The temporary Permit to Operate shall specify a reasonable period of time during which the emission unit may be operated in order for the District to determine whether it will operate in accordance with the conditions specified in the permit.

413 APPEALS: Within ten days after notice, by the Air Pollution Control Officer, of cancellation, suspension, denial, or conditional approval of an Authority to Construct, Permit to Operate, or emissions reduction credit application, the applicant or any other aggrieved person who participated in the permit issuance proceedings may petition the Hearing Board, in writing, for an order modifying or reversing that decision. The Hearing Board after public notice and a public hearing held within thirty days after filing the petition, may sustain or reverse the action of the Air Pollution Control Officer; such order may be made subject to specified conditions.

500 MONITORING AND RECORDS

501 TESTING PROCEDURES:

501.1 General Requirements: Except as otherwise specified in the District Rules and Regulations, the State Implementation Plan, and the applicable federal requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, testing methods for determining compliance with emission limits shall be:

501.1.1 The appropriate methods adopted by the California Air Resources Board and cited in Title 17, California Code of Regulations, Division 3, Subchapter 8, Compliance with Non-vehicular Emission Standards; or

501.1.2 The appropriate methods of 40 CFR part 50, Appendix M, Recommended Test Methods for State Implementation Plans; or

501.1.3 Any appropriate method of 40 CFR part 60, Appendix A, Test Methods; or

501.1.4 An alternative method following review and approval of that method by the California Air Resources Board and US Environmental Protection Agency.

501.2 Initial Boiling Point: ASTM D-1078-86, "Test Method for Distillation Range of Volatile Organic Liquids".

501.3 Vapor Pressure: ASTM D-2879-86, "Vapor Pressure-Temperature Relation and Initial Decomposition Temperature of Liquids by Isoteniscope".

502 MONITORING: As applicable, each emission source subject to the requirements of Section 301 and 302 shall comply with the following monitoring requirements:

502.1 The requirements of Title 40, Code of Federal Regulations, Part 60, Appendix B and F.

502.2 The applicable federal requirements for monitoring of Title V of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.).

503 RECORDKEEPING:

503.1 The following records shall be maintained and provided to the Air Pollution Control Officer upon request.

503.1.1 Emissions monitoring and process data records necessary for the determination and reporting of emissions, in accordance with applicable provisions of the District Rules and Regulations, shall be maintained. Records shall be kept for at least two years and shall be kept 5 years for sources subject to the applicable requirements of Title V and Rule 507, FEDERAL OPERATING PERMIT PROGRAM.

503.1.2 Other records of the nature and amounts of emissions or any other information as may be deemed necessary by the Air Pollution Control Officer to determine whether the stationary source or emissions unit is in compliance with applicable emission limitations, credited emission reductions, exemptions from rule provisions, or other requirements. The information must include emission measurements, continuous emission monitoring system performance testing measurements, performance evaluations, calibration checks and adjustments, maintenance performed on such monitoring systems, and other records and reports required by Title 40, Code of Federal Regulations, Part 60, Appendix B and F.

503.1.3 Operation and maintenance plans shall be submitted to the District for all add-on capture and control equipment for review and approval by the Air Pollution Control Officer. Such plans shall demonstrate, though the use of specific recordkeeping requirements, continuous operation of the add-on control equipment when emission producing operations are occurring. The plan shall also specify records to be kept to document the performance of required periodic maintenance. Records shall be consistent with compliance time frames and employ the most recent US Environmental Protection Agency recordkeeping guidance.

503.2 The Air Pollution Control Officer may require recordkeeping to verify or maintain any exemption.

RULE 502 NEW SOURCE REVIEW

Adopted 11-12-74

(Amended 05-24-77, 06-19-79, 09-21-93, 11-03-94, 08-09-01, 12-09-04,
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100 GENERAL

101 PURPOSE: The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets, by which authorities to construct for such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards.

102 APPLICABILITY: This rule shall apply to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units that, after construction, emit or may emit any NSR regulated pollutant within the District.

If any source or modification becomes a major source or major modification solely by virtue of the relaxation of any limitation that was established after August 7, 1980, on the capacity of the source or modification to emit a federal nonattainment pollutant or its precursor such as a restriction on hours of operation, then the requirements of this rule shall apply to such a source or modification as though construction had not yet commenced on the source or modification.

This rule shall not apply to prescribed burning of forest, agriculture or range land; open burning in accordance with District Regulation 3, OPEN BURNING; road construction, or any non-point source common to timber harvesting or agricultural practices.

The regulations in effect at the time any application for an Authority to Construct for a new or modified source is deemed complete shall apply to that source except when a new federal requirement not yet incorporated into this Rule applies to the new or modified source.

103 PUBLIC NOTIFICATION REQUIREMENTS: The public notice requirements of Sections 406 and 407 shall apply if the project is for a new or modified stationary source or emissions unit for which offsets are required pursuant to Section 303.1, and to all new or modified stationary sources that are projected to emit increased actual lead emissions at a rate of 5 tons per year or greater.

200 DEFINITIONS: The following definitions apply for all terms used in this Rule. If a term is not defined below, then the definitions provided in Rule 102, DEFINITIONS, and Rule 504, EMISSIONS REDUCTION CREDITS, apply in that hierarchical order.

201 ACTUAL EMISSIONS: Emissions having occurred from a source, based on source test and actual fuel consumption or process data, or monitoring data. If source test or monitoring data is not available, other appropriate, APCO-approved, emission factors may be used. Fugitive emissions associated with the emissions unit shall be included in the actual emissions of the emissions unit.

202 ACTUAL EMISSIONS REDUCTIONS (AER): The decrease of actual emissions, compared to Baseline Actual Emissions, from an emissions unit. AER shall be real, federally enforceable, quantifiable, surplus, and permanent.

203 ACTUAL INTERRUPTIONS OF ELECTRICAL POWER: When electrical service is interrupted by an unforeseeable event.

204 ALLOWABLE EMISSIONS: The emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, hours of operation, or both) and the most stringent of the following:

204.1 Any applicable standards set forth in these regulations and 40 CFR Part 60, 61, or 63;

- 204.2 Any applicable emission limitation in the State Implementation Plan (SIP), including those with a future compliance date; or
- 204.3 The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.
- 205 AMBIENT AIR QUALITY STANDARDS:** There are both State and federal ambient air quality standards. For the purpose of submittal to the U.S. Environmental Protection Agency for inclusion in the California State Implementation Plan all references in this rule to Ambient Air Quality Standards shall be interpreted as National Ambient Air Quality Standards.
- 206 BASELINE ACTUAL EMISSIONS (BAE):**
- 206.1 "Baseline Actual Emissions" are the actual emissions for the existing emissions unit averaged over the consecutive two (2) year period immediately preceding the date of the application. If the last two years are unrepresentative of normal source operations as determined by the APCO, then any other 2 consecutive year period during the last five years which the APCO determines represents normal source operations may be used.
- 206.2 If, at any time during the 2 year period, actual emissions exceeded allowable emission levels, then actual emissions shall be reduced to reflect emission levels that would have occurred if the unit were in compliance with all applicable limitations and rules.
- 206.3 Where an emissions unit has been in operation for less than 2 years, a shorter averaging period of at least 12 months may be used, provided that the averaging period is representative of the full operational history of the emissions unit. If less than 12 months has passed since the date of issuance of the Permit to Operate then Actual Emissions shall be used as the Baseline Actual Emissions.
- 207 BEGIN ACTUAL CONSTRUCTION:** Initiation of physical on-site construction activities on an emissions unit which is of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipe work, and construction of permanent storage structures. With respect to a change in method of operation that does not involve a physical change, this term refers to those on-site activities, other than preparatory activities, which mark the start of the change in the method of operation.
- 208 BEST AVAILABLE CONTROL TECHNOLOGY (BACT):** The most stringent emission limitation or control technique of the following:
- 208.1 Achieved in practice for such category and class of source; or
- 208.2 Contained in any SIP approved by the EPA for such category and class of source. A specific limitation or control technique shall not apply if the owner of the proposed emissions unit demonstrates to the satisfaction of the APCO that such a limitation or control technique is not presently achievable; or
- 208.3 Contained in an applicable federal New Source Performance Standard; or
- 208.4 Any other emission limitation or control technique, including process and equipment changes of basic or control equipment, found by the APCO to be cost effective and technologically feasible for such class or category of sources.

- 209 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):** The California Environmental Quality Act, Public Resources Code, Section 21000, et seq.
- 210 CLASS I AREA:** Any area listed as Class I in 40 CFR 81.405 or an area otherwise specified as Class I in the legislation that creates a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore. The only designated Class I area within 20 miles of Placer County as of October 13, 2011 was Desolation Wilderness Area in El Dorado County.
- 211 COMMENCE:** As applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:
- 211.1 Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- 211.2 Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- 212 CARGO CARRIERS:** Cargo carriers are trains dedicated to a specific source.
- 213 CONSTRUCTION:** Means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.
- 214 CONTIGUOUS PROPERTY:** Two or more parcels of land with a common point or boundary or separated solely by a public roadway or other public right-of-way.
- 215 COST-EFFECTIVE:** A cost per unit of emissions reduction which is lower than or equivalent to the maximum unit costs of the same emissions reduction through the use of Best Available Control Technology, calculated in current year dollars, in accordance with methodology and criteria specified in guidelines developed by the District.
- 216 EMERGENCY ENGINES:** A stationary engine that meets the criteria specified below:
- 216.1 It is installed for the primary purpose of providing electrical power or mechanical work for emergency use and is not the source of primary power at the facility; and
- 216.2 It is operated to provide electrical power or mechanical work during any emergency use; and
- 216.3 It is operated no more than 100 hours per year for maintenance and testing, emissions testing or initial start-up testing. Diesel engines may be further limited by the California Air Resources Board's Airborne Toxic Control Measure for Stationary Compression Engines in Section 93115.6(a)).
- 217 EMERGENCY USE:** The providing of electrical power or mechanical work during any of the following events.
- 217.1 The failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility, or the failure of a facility's internal power distribution system:

- 217.1.1 Which is caused by any reason other than the adherence to a contractual obligation the owner or operator has with a third party or any other party; and
- 217.1.2 Which is demonstrated by the owner or operator, to the APCO's satisfaction, to have been beyond the reasonable control of the owner or operator.
- 217.2 The pumping of water or sewage to prevent or mitigate a flood or sewage overflow.
- 217.3 The pumping of water for fire suppression or protection.
- 217.4 The powering of ALSF-1 or ALSF-2 airport runway lights under category II or III weather conditions.
- 217.5 The pumping of water to maintain pressure in the water distribution system for the following reasons:
 - 217.5.1 A pipe break that substantially reduces water pressure; or
 - 217.5.2 High demand on the water supply system due to high use of water for fire suppression; or
 - 217.5.3 The breakdown of electric-powered pumping equipment at sewage treatment facilities or water delivery facilities.
- 217.6 The emergency operation of ski lifts during an actual interruption of normal electrical power service to the facility.
- 218 EMISSION DECREASE:** Any modification that would result in an emission decrease of actual emissions.
- 219 EMISSION REDUCTION CREDITS (ERC):** Reductions of actual emissions from emission units that are certified by an air district in accordance with that district's rules and are issued by the air district in the form of ERC certificates.
- 220 EMISSIONS LIMITATION:** One or more federally enforceable permit conditions specific to an emissions unit that restricts its maximum emissions, at or below the emissions associated with the maximum design capacity; and that is contained in the latest Authority to Construct or enforceable by the latest Permit to Operate for the emission unit.

Emissions limitations should be stated in a manner consistent with testing procedures. They may be expressed as an enforceable design, operational, or equipment standard.
- 221 EMISSIONS UNIT:** An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any air pollutant directly or as fugitive emissions.
- 222 FEDERALLY ENFORCEABLE:** All limitations and conditions which are enforceable by the EPA administrator, including those requirements developed pursuant to 40 CFR parts 60, 61 and 63, requirements within the California State Implementation Plan (SIP), any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under such program.

- 223 FUGITIVE EMISSIONS:** Those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- 224 FUNCTIONALLY EQUIVALENT EMISSION UNIT:** An emission unit that serves the identical function as the unit being replaced. The maximum rating and the potential to emit any pollutant shall not be greater from the functionally equivalent emission unit than the replaced unit. The emission increase from any such replacement shall not result in a major modification.
- 225 HALOGENATED HYDROCARBONS:** For the purposes of this rule, halogenated hydrocarbons are the following:
- 225.1 1,1,1-trichloroethane
 - 225.2 methylene chloride
 - 225.3 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
 - 225.4 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
 - 225.5 trichlorofluoromethane (CFC-11)
 - 225.6 dichlorodifluoromethane (CFC-12)
 - 225.7 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
 - 225.8 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114)
 - 225.9 chloropentafluoroethane (CFC-115)
 - 225.10 pentafluoroethane (HFC-125)
 - 225.11 1,1,2,2-tetrafluoroethane (HFC-134)
 - 225.12 tetrafluoroethane (HFC-134a)
 - 225.13 1,1-dichloro-1-fluoroethane (HCFC-141b)
 - 225.14 1-chloro-1,1-difluoroethane (HCFC-142b)
 - 225.15 1,1,1-trifluoroethane (HFC-143a)
 - 225.16 chlorodifluoromethane (HCFC-22)
 - 225.17 trifluoromethane (HFC-23)
 - 225.18 1,1-difluoroethane (HFC-152a)
 - 225.19 The following four classes of perfluorocarbon compounds:
 - a. Cyclic, branched, or linear, completely fluorinated alkanes.
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no unsaturations.
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations.
 - d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
 - e. Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.
- 226 HAZARDOUS AIR POLLUTANT (HAP):** Any air pollutant listed pursuant to Section 112(b) of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.).
- 227 HISTORIC ACTUAL EMISSIONS (HAE):** Historic Actual Emissions shall be calculated for each pollutant.
- 227.1 For a new emissions unit Historic Actual Emissions are equal to zero.
 - 227.2 For an existing emissions unit, Historic Actual Emissions equals either, in hierarchical order;

227.2.1 The federally enforceable potential to emit (PTE) limit contained in the most recent Authority to Construct or Permit to Operate, if actual emissions are at least 80% of the permitted PTE limit, or

227.2.2 The federally enforceable PTE limit contained in the most recent Authority to Construct or Permit to Operate, if the emission unit was fully offset for any emission increases incurred since September 21, 1993, within the 5 year period prior to the date of application for the current project, or

227.2.3 The Baseline Actual Emissions.

- 228 IDENTICAL EMISSION UNIT:** A replacement emissions unit which is the same as the original unit in all respects except for serial number.
- 229 LAKE TAHOE AIR BASIN:** Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60113 (b), the basin includes that portion of Placer County within the drainage area naturally tributary to Lake Tahoe including said Lake, plus that area in the vicinity of the head of the Truckee River described as follows: commencing at the point common to the aforementioned drainage area crest line and the line common to Townships 15 North and 16 North, Mount Diablo Base and Meridian (M.D.B. & M.), and following that line in a westerly direction to the northwest corner of Section 3, Township 15 North, Range 16 East, (M.D.B. & M.), thence south along the west line of Sections 3 and 10, Township 15 North, Range 16 East, M.D.B. & M., to the intersection with the drainage crest line, thence following the said drainage area boundary in a southwesterly, then northeasterly direction to and along the Lake Tahoe Dam, thence following the said drainage area crest line in a northeasterly, then northwesterly direction to the point of beginning. This Air Basin is delineated on an official map on file at the California Air Resources Board Headquarters Office.
- 230 MAJOR STATIONARY SOURCE – SACRAMENTO AIR BASIN:** A stationary source which emits or has the potential to emit: 25 tons per year (tpy) or more of nitrogen oxides or reactive organic compounds, or 100 tpy or more of sulfur oxides, or PM2.5. In addition, any physical change occurring at a stationary source not otherwise qualifying as a major stationary source, which would constitute a major stationary source by itself, makes the source a major stationary source.
- 231 MAJOR STATIONARY SOURCE – MOUNTAIN COUNTIES AIR BASIN:** A stationary source which emits or has the potential to emit 25 tons per year (tpy) or more of nitrogen oxides or reactive organic compounds. In addition, any physical change occurring at a stationary source not otherwise qualifying as a major stationary source, which would constitute a major stationary source by itself, makes the source a major stationary source.
- 232 MAJOR MODIFICATION:** A modification to a major stationary source in the Sacramento or Mountain Counties Air Basins which results in a significant emissions increase of the pollutant for which the source is classified as a major stationary source. For nitrogen oxides and reactive organic compounds, the increase shall be aggregated with all other increases and decreases in potential to emit over the period of the four consecutive years before the application for modification, plus the calendar year of the most recent application.
- 233 MODIFICATION:** Any physical change, change in method of operation (including change in fuel characteristics), addition to, or any change in hours of operation, or change in production rate of, which:

- 233.1 For an emissions unit: would necessitate a change in permit conditions, permit equipment description, or emissions limitation.
- 233.2 For a stationary source: is a modification of any emissions unit, or addition of any new emissions unit.
- 233.3 Unless previously limited by a permit condition and that permit condition must be changed, the following shall not be considered a modification:
- 233.3.1 A change in ownership.
- 233.3.2 Routine maintenance and repair, or an identical replacement.
- 233.3.3 The addition of a continuous emission monitoring system.
- 233.3.4 The replacement of air pollution control equipment with new control equipment if the actual emissions of the new equipment are less than or equal to those from the original piece of equipment and the replacement is not a major modification under the United States Environmental Protection Agency (EPA) regulations promulgated pursuant to Title I of the Federal Clean Air Act, including 40 CFR Part 51.
- 233.3.5 Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan pursuant to the Federal Power Act.
- 233.3.6 Use of an alternative fuel by reason of an order or rule under Section 125 of the Act.
- 233.4 A reconstructed stationary source or emissions unit shall be treated as a new stationary source or emissions unit, not as a modification.
- 234 **MOUNTAIN COUNTIES AIR BASIN:** Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60111 (I), the Mountain Counties Air Basin includes all of Placer County except that portion included in the Lake Tahoe Air Basin, defined by 17 CCR 60113(b), and that portion included in the Sacramento Valley Air Basin, defined by 17 CCR 60106(k).
- 235 **NECESSARY PRECONSTRUCTION APPROVALS OR PERMITS:** Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the SIP.
- 236 **NONATTAINMENT POLLUTANT:** Any pollutant as well as any precursors of such pollutants which have been designated "nonattainment" by the U.S. Environmental Protection Agency as codified in 40 CFR 81.305, or which has been designated nonattainment by the California Air Resources Board pursuant to Section 39607 of the Health and Safety Code for specific air basins in Placer County.
- 237 **NSR REGULATED POLLUTANT:** A pollutant for which an Ambient Air Quality Standard has been established by the EPA or by the California Air Resources Board (ARB), and the precursors to such pollutants, including, but not limited to, reactive organic compounds (ROC), nitrogen oxides (NO_x), sulfur oxides (SO_x), PM₁₀, PM_{2.5}, carbon monoxide (CO) and lead.

- 238 PM2.5:** Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 2.5 microns. Gaseous emissions which condense to form PM2.5 shall also be counted as PM2.5.
- 239 PM10:** Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns. Gaseous emissions which condense to form PM10 shall also be counted as PM10.
- 240 PORTABLE EQUIPMENT:** Equipment that is periodically relocated and is not operated more than a total of 180 days at any one location in the District within any continuous twelve (12) month period.
- 241 POTENTIAL TO EMIT (PTE):** The maximum physical and operational design capacity to emit an air pollutant. Any limitation on the physical or operational design capacity, including emission control devices and restrictions on hours of operation, or on the type, or amount of material combusted, stored, or processed, may be considered as part of the design only if the limitation, or the effect it would have on emissions, is incorporated into the Authority to Construct as a federally enforceable permit condition. Fugitive emissions associated with the emissions unit or stationary source shall be included in the potential to emit of the emissions unit or stationary source.
- 242 PRECURSOR:** A pollutant that, when emitted into the atmosphere, may undergo either a chemical or physical change which then produces another pollutant for which an Ambient Air Quality Standard has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more Ambient Air Quality Standards. The following precursor-secondary air contaminant relationships shall be used for the purposes of this rule:

Precursor	Secondary Air Contaminant
Reactive Organic Compound	a. Photochemical oxidants (Ozone) b. Organic fraction of PM10
Nitrogen Oxides	a. Nitrogen dioxide b. Nitrate fraction of PM10 c. Nitrate fraction of PM2.5 d. Photochemical oxidants (Ozone)
Sulfur Oxides	a. Sulfur dioxide b. Sulfates c. Sulfate fraction of PM10 d. Sulfate fraction of PM2.5

- 243 PREVENTION OF SIGNIFICANT DETERIORATION (PSD):** A federal permitting program for new and modified major stationary sources of air pollution for pollutants that do not exceed National Ambient Air Quality Standards.
- 244 PRIORITY RESERVE BANK:** A depository for preserving emission reduction credits pursuant to Rule 505, PRIORITY RESERVE.
- 245 PROPOSED EMISSIONS:** Emissions based on the potential to emit for the new or modified emissions unit which will be incorporated into the permit as federally enforceable permit conditions.
- 246 QUARTERLY:** Calendar quarters beginning January 1, April 1, July 1, and October 1.
- 247 QUARTERLY EMISSION LIMITATION:** One or a combination of permit conditions specific to an emissions unit that restricts its maximum emissions, in pounds per quarter, at or below the emissions associated with the maximum design capacity. A quarterly emissions limitation must be:

- 247.1 Contained in the latest Authority to Construct or enforceable by the latest Permit to Operate for the emissions unit, and
- 247.2 Enforceable on a quarterly basis.
- 248 **REACTIVE ORGANIC COMPOUND:** For the purposes of this rule, reactive organic compound (ROC) has the same definition as volatile organic compound (VOC) in Rule 102, DEFINITIONS.
- 249 **RECONSTRUCTED SOURCE:** Any stationary source or emissions unit undergoing physical modification where the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost of a comparable entirely new stationary source or emissions unit. Fixed capital cost means that capital needed to provide all the depreciable components. A reconstructed source shall be treated as a new stationary source or emissions unit.
- 250 **REDUCED SULFUR COMPOUNDS:** The sulfur compounds hydrogen sulfide, carbon disulfide and carbonyl sulfide.
- 251 **REPLACEMENT EMISSION UNIT:** An emissions unit for which all the criteria listed below are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced unless:
- 251.1 The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit, or
- 251.2 The emissions unit is an identical emission unit or a functionally equivalent emission unit, or
- 251.3 The replacement does not alter the basic design parameters of the process unit, and
- 251.4 The replaced emissions unit is permanently removed from the stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is federally enforceable. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
- 252 **SACRAMENTO VALLEY AIR BASIN:** Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60106(k), the basin includes that portion of Placer County which lies west of Range 9 east, Mount Diablo Base and Meridian (M.D.B. & M.).
- 253 **SIGNIFICANT:** In reference to an emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:
- 253.1 Carbon monoxide: 100 tpy;
- 253.2 Nitrogen oxides: 25 tpy;
- 253.3 Sulfur dioxide: 40 tpy;
- 253.4 Ozone: 25 tpy of VOCs or 25 tpy of nitrogen oxides;
- 253.5 PM10: 15 tpy

- 253.6 PM2.5: 10 tpy of direct PM2.5 emissions or 40 tpy of sulfur dioxide emissions or 40 tpy of nitrogen oxide emissions
- 253.7 Lead: 0.6 tpy.
- 254 SIGNIFICANT EMISSIONS INCREASE:** For a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.
- 255 STATIONARY SOURCE (SOURCE OR FACILITY):** Any building, structure, facility, or emissions unit that emits or may emit any NSR regulated pollutant directly or as fugitive emissions.
- 255.1 Building, structure, facility, or emissions unit includes all pollutant emitting activities which:
- 255.1.1 belong to the same industrial grouping, and;
- 255.1.2 are located on one property or on two or more contiguous properties, and;
- 255.1.3 are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.
- 255.2 Pollutant emitting activities shall be considered as part of the same industrial grouping if:
- 255.2.1 they belong to the same two digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual, or;
- 255.2.2 they are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)
- 255.3 The emissions of cargo carriers associated with the stationary source shall be considered emissions from the stationary source to the extent that emission reductions from these cargo carriers are proposed as offsets.
- 256 STATIONARY SOURCE PTE:** The sum of the PTE for each emission unit which has been issued a Permit to Operate, Authority to Construct or for which an application has been submitted. Any fugitive emissions from such emission units shall be included in this calculation.
- 257 SURPLUS:** The amount of emission reductions that are, at the time of generation of an Emissions Reduction Credit (ERC), not otherwise required by federal, state, or local law, not required by any legal settlement or consent decree, and not relied upon to meet any requirement related to the California State Implementation Plan (SIP). However, emission reductions required by a state statute that provides that the subject emission reductions shall be considered surplus may be considered surplus for purposes of this Rule if those reductions meet all other applicable requirements.
- Examples of federal, state, and local laws, and of SIP-related requirements, include, but are not limited to, the following:
- 257.1 The federally-approved California SIP;

- 257.2 Other adopted state air quality laws and regulations not in the SIP, including but not limited to, any requirement, regulation, or measure that: (1) the District or the state has included on a legally-required and publicly-available list of measures that are scheduled for adoption by the District or the State in the future; or (2) is the subject of a public notice distributed by the District or the State regarding an intent to adopt such revision;
- 257.3 Any other source- or source-category specific regulatory or permitting requirement, including, but not limited to, Reasonable Available Control Technology (RACT), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Best Available Control Measures (BACM), Best Available Control Technology (BACT), and the Lowest Achievable Emission Rate (LAER); and
- 257.4 Any regulation or supporting documentation that is required by the federal Clean Air Act but is not contained or referenced in 40 C.F.R. Part 52, including but not limited to: assumptions used in attainment and maintenance demonstrations (including Reasonable Further Progress demonstrations and milestone demonstrations), including any proposed control measure identified as potentially contributing to an enforceable near-term emissions reduction commitment; assumptions used in conformity demonstrations; and assumptions used in emissions inventories.
- 258 **TEMPORARY SOURCE:** Temporary emission sources such as pilot plants, and portable facilities which will be terminated or located outside the District after less than a cumulative total of 90 days of operation in any 12 continuous months.
- 259 **TOTAL REDUCED SULFUR COMPOUNDS:** The sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide.

300 STANDARDS

- 301 **EMISSION AND OFFSET CALCULATIONS:** The following provisions shall be used to calculate emission increases and decreases from all new and modified emissions units located at a stationary source.
- 301.1 **BACT – Emissions Increase:** The emissions increase for each emissions unit related to the project for the purposes of determining BACT applicability shall be calculated as the proposed emissions minus the Baseline Actual Emissions. Calculations shall be performed separately for each emissions unit for each calendar quarter.
- 301.2 **Offsets - Emissions Increase or Decrease:** The emissions increase or decrease for each emissions unit related to the project for the purposes of determining Offset applicability shall be calculated as the proposed emissions, minus the Historic Actual Emissions. Emission increases or decreases shall be calculated for each emission unit and the project as a whole.
- 301.3 **Project Emissions:** If a project consists of more than one emission unit, the total emissions from all emissions units shall be summed for each pollutant to determine the emissions increase for the project. The project includes the entire scope of the preconstruction application for a new or modified stationary source.
- 301.4 **Calculation Periods:** The emissions increase or decrease for a project shall be calculated on a daily, quarterly and annual basis for each pollutant.

- 301.5 Potential To Emit - Stationary Sources: The potential to emit of a new or modified stationary source shall be calculated as the sum of the potential to emit, including fugitive emissions, for all emissions units, based on emission limitations established by current Permits to Operate, Authorities to Construct where permits to operate have not been issued, and the pending application.
- 301.6 Quantity of Offsets Required For New Major Sources or Major Modifications: If offsets are required pursuant to Section 303.2, the quantity of offsets to be provided shall be determined by calculating the emission increase for the project and applying the appropriate offset ratio based on pollutant and location as specified in Section 303.3. The calculations shall be performed separately for each pollutant and each emissions unit for each calendar quarter.
- 301.7 Quantity of General (State) Offsets Required: If offsets are required pursuant to Section 303.1, the quantity of offsets to be provided shall be determined as follows:
- 301.7.1 If offsets have already been provided by a stationary source for a particular pollutant, then multiply the emission increase calculated for the project by the appropriate offset ratio based on pollutant and location as specified in Section 303.3, or
- 301.7.2 If no offsets have been provided previously by a stationary source for a particular pollutant, then subtract the offset threshold specified in Section 303.1 for that pollutant from the stationary source PTE and multiply the value by the appropriate offset ratio based on pollutant and location as specified in Section 303.3.
- 301.8 Quantity of Offsets Required For A Modification That Makes An Existing Source A Major Stationary Source: When the proposed modification will make an existing minor source a new major source, offsets required shall be calculated as the sum of proposed PTE for all emissions units installed after September 21, 1993 based on current permits to operate and Authority to Construct where permits to operate have not been issued, plus the pending application, minus offsets supplied since September 21, 1993. Calculations shall be performed separately for each pollutant and each emissions unit for each calendar quarter. The offset ratios of Section 303.3 shall be applied to determine the ERCs required.
- 302 REQUIREMENT TO APPLY BEST AVAILABLE CONTROL TECHNOLOGY:** An applicant shall apply Best Available Control Technology (BACT) to a new emissions unit or modification of an existing emissions unit, except cargo carriers, if the change would result in an increase in quarterly emissions of a NSR regulated pollutant from the new or modified emissions unit and if the PTE of the new or modified emissions unit equals or exceeds the levels specified below.

<u>Pollutant</u>	<u>lb/day</u>
Reactive organic compounds	10
Nitrogen oxides	10
Sulfur oxides	80
PM10	80
PM2.5	80
Carbon monoxide	550
Lead	3.3
Vinyl chloride	5.5
Sulfuric acid mist	38
Hydrogen sulfide	55

Total reduced sulfur compounds	55
Reduced sulfur compounds	55

303 OFFSET REQUIREMENTS

- 303.1 General Requirement to Provide Offsets: An applicant whose facility is located in the Sacramento Valley Air Basin or the Mountain Counties Air Basin shall provide offsets for a NSR regulated pollutant if the potential to emit of a new or modified source exceeds either of the threshold quantities listed below:

<u>Pollutant</u>	<u>Pounds per quarter</u>	<u>Tons per year</u>
Reactive organic compounds	5,000	10
Nitrogen oxides	5,000	10
Sulfur oxides	13,750	27.5
PM10	7,500	15
PM2.5	7,500	15
Carbon monoxide	49,500	99

- 303.2 Major Source or Major Modification Requirement to Provide Offsets: An applicant whose facility is located in the Sacramento Valley Air Basin or the Mountain Counties Air Basin, and whose project emissions will result in a new major source or major modification, shall provide offsets for each NSR regulated pollutant that constitutes a major source or major modification.

- 303.3 Location of Offsets and Offset Ratios: The applicable offset ratio shall be determined based on the location of the new or modified stationary source required to provide offsets and the distance to the location of the emission offsets, as indicated in the following table.

<u>Location of Offset</u>	<u>Offset Ratio</u>	<u>Offset Ratio</u>
	<u>NOx and ROC</u>	<u>Other Pollutants</u>
Same Source	1.0 to 1.0	1.0 to 1.0
Within 15-Mile radius and within the same air basin	1.3 to 1.0	1.2 to 1.0
Greater than 15-Miles but within 50-Mile radius within the same air basin	1.5 to 1.0	1.5 to 1.0
Greater than 50-Mile radius and within the same air basin	Greater than 1.5 to 1.0	Greater than 1.5 to 1.0

- 303.3.1 The APCO may impose, based on the air quality analysis, a higher offset ratio such that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard.

- 303.3.2 Applicants providing offsets obtained pursuant to Rule 505, PRIORITY RESERVE, shall be subject to an offset ratio of 1.2 to 1.0 for all pollutants, except NOx and VOC, at all distances. The offset ratio for NOx and VOC offsets obtained pursuant to Rule 505, PRIORITY RESERVE, shall be subject to an offset ratio of 1.3 to 1.0 at all distances.

303.4 General Offset Provisions

- 303.4.1 All offsets shall be real, surplus, federally enforceable, quantifiable and permanent.

- 303.4.2 All offsets provided for major sources and major modifications shall be surplus at the time ERCs are surrendered to the District.
- 303.4.3 All offsets shall be surrendered to the District prior to the initial startup of the new or modified source, and the offsets shall be maintained throughout the operation of the new or modified source which is the beneficiary of the offsets.
- 303.4.4 Offsets can only come from air basins with the same or worse air quality designations than that of the stationary source requiring the offsets.
- 303.4.5 In no case shall halogenated hydrocarbons, exempt compounds or any other compound excluded from the definition of reactive organic compounds, be used as offsets for reactive organic compounds.
- 303.4.6 For sources which have provided full offsets of total suspended particulate (TSP), the PM10 emissions from an existing stationary source shall be recalculated from the TSP emission increases and decreases which have occurred since December 31, 1976, using PM10 emission factors. When PM10 emission factors do not exist, it shall be assumed that 50% of the TSP is PM10.
- 303.5 Timing of Quarterly Emission Offsets: Sufficient offsets shall be provided, from the same calendar quarter as the proposed emission increase, with the following exceptions:
- 303.5.1 Emission reductions of reactive organic compounds or nitrogen oxides during the quarters starting April 1 or July 1 may be used to offset emission increases of the same pollutants during any calendar quarter.
- 303.5.2 Emission reductions of carbon monoxide during the quarters starting January 1 or October 1 may be used to offset emission increases of carbon monoxide during any calendar quarter.
- 303.5.3 Emission reductions of PM10 or PM2.5 during the quarters starting January 1 or October 1 may be used to offset emission increases of PM10 or PM2.5 during any calendar quarter.
- 303.5.4 Emission reductions of sulfur oxides during any quarter may be used to offset emission increases of sulfur oxides during any calendar quarter.
- 303.6 Interpollutant Offsets
- 303.6.1 The APCO may approve interpollutant offsets for precursor pollutants on a case by case basis, provided that the applicant demonstrates, through the use of an air quality model, that the emission increases from the new or modified source will not cause or contribute to a violation of an ambient air quality standard.
- 303.6.2 Interpollutant offsets between PM10 and PM10 precursors are allowed only if PM10 precursors contribute significantly to the PM10 levels that exceed the PM10 ambient standards.
- 303.6.3 PM10 emissions shall not be allowed to offset nitrogen oxides or reactive organic compound emissions in ozone nonattainment areas,

nor be allowed to offset sulfur oxide emissions in sulfate nonattainment areas.

303.6.4 Interpollutant emission offsets between PM2.5 precursors are not allowed unless modeling demonstrates that PM2.5 interpollutant offset ratios are appropriate in an approved PM2.5 attainment plan.

303.6.5 EPA and ARB must concur with all proposed interpollutant offsets ratios prior to use.

303.7 Intra-District Offsets

303.7.1 ERCs generated in another district may be used to offset emission increases in Placer County.

303.7.2 If the ERC generating source and the source with the proposed emissions increase are not in the same air basin, both of the following requirements must be met:

- a. The ERC generating source must be located in an upwind district that is classified, pursuant to Health and Safety Code Section 40910 et seq., as being in the same or a worse nonattainment status than the downwind district where the stationary source with the proposed emission increases will be located.
- b. The stationary source at which the emission increases are to be offset must be located in a downwind district that is overwhelmingly impacted, as determined pursuant to Health and Safety Code Section 39610, by emissions transported from the upwind district where the ERC generating source is located.

303.7.3 Any offset credited to a stationary source in one district using offsets obtained from reductions at a stationary source in another district shall be approved by a resolution adopted by the governing boards of both the upwind and downwind districts, after taking into consideration the impact of the offset on air quality, public health, and the regional economy. The District's governing board may delegate to the APCO the Board's authority to approve the offsets credited.

303.7.4 For ERCs generated in another district, the District may adjust the value of such credits to reflect any District requirements that would have applied if the credits had been generated within the District.

303.8 Emission Reductions, Shutdowns, and Curtailments: Actual emission reductions from an internal shutdown or curtailment of a permitted emission unit may be credited for the purposes of providing internal offsets provided:

303.8.1 The crediting of emission reductions from source shutdowns and curtailments comply with the current U.S. Environmental Protection Agency emissions trading policy and applicable federal regulations; and

303.8.2 Emissions reductions are ensured by federally enforceable emission limitations contained in the Permit to Operate, or the permanent surrender or cancellation of the Permit to Operate; and

303.8.3 If the shutdown emission unit is being replaced with a new or modified emission unit, the APCO may allow a maximum of 90 days as a

shakedown period for simultaneous operation of the existing and the new or modified emission unit.

303.9 Exemptions From Offset Requirements

- 303.9.1 Offsets shall not be required for temporary sources or portable equipment, if the emissions from such units do not constitute a major source or major modification to a major source.
- 303.9.2 Offsets shall not be required for an emergency engine which is used exclusively for testing, maintenance and emergency use, if the emissions from the emergency engine, excluding emergency use, do not exceed the offset limit by itself.
- 303.9.3 Offsets shall not be required for increases in carbon monoxide emissions if the applicant, using an Air Quality Model approved by the APCO, demonstrates that the increase in ambient concentration does not exceed 500 micrograms per cubic meter, 8 hour average, at or beyond the property line of the stationary source.
- 303.9.4 The requirement to provide offsets shall not apply to the following:
- a. Relocation of emissions units solely within only one air basin within the District, and the relocation does not result in any increase in potential to emit.
 - b. Replacement emissions units, provided the replacement does not constitute a major source or major modification.
 - c. Modifications necessary to comply with any regulations contained in Regulation 2 – PROHIBITIONS, or in the SIP, unless the modification will result in a major modification. This provision does not apply to changes in production rate, hours of operation, or any other change or modification not required for compliance with Regulation 2 or the SIP.
 - d. If requested by the APCO, the applicant shall demonstrate through the use of an air quality model that the emission increases from the new or modified source will not cause or contribute to a violation of an ambient air quality standard.

304 MAJOR SOURCE ADMINISTRATIVE REQUIREMENTS: The following administrative requirements shall apply to any new major source or major modification regulated by the rule. Power plants over 50 megawatts shall be subject to the additional requirements of Section 500.

- 304.1 Alternative Siting: The applicant shall prepare an analysis functionally equivalent to the requirements of Division 13 of the Public Resources Code (California Environmental Quality Act-CEQA). The District will not issue an Authority to Construct unless the APCO has concluded, based on the information included in the Alternative Siting Analysis that the benefits of the proposed source significantly outweigh the environmental and social cost imposed as a result of its location, construction, or modification.
- 304.2 Certification of Compliance: The owner or operator of the proposed new or modified source has certified that all existing major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under

common control with such person) in California which are subject to emission limitations are in compliance, or on an expeditious schedule for compliance, with all applicable emission limitations and standards.

- 304.3 Potential Visibility Impacts: The APCO shall consult with the Federal Land Manager on a proposed major stationary source or major modification that may impact visibility in any Class 1 Area, in accordance with 40 CFR 51.307 if the net emissions increase from the new or modified source exceeds 10 tons/year of PM_{2.5}, 15 tons/year of PM₁₀, or 40 tons/year of NO_x; and the location of the source, relative to the closest boundary of a specified federal Class I area is within 20 miles.

305 GENERAL PROVISIONS

- 305.1 Air Quality Models: All estimates of ambient concentrations required pursuant to this rule shall be based on applicable air quality models, databases, and other requirements specified in 40 CFR Part 51, Appendix W ("Guideline on Air Quality Models"). Where an air quality model specified in 40 CFR Part 51, Appendix W ("Guideline on Air Quality Models") is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis. Written approval from the United States Environmental Protection Agency (EPA) must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment.

- 305.2 Ambient Air Quality Standards: In no case shall emissions from the new or modified stationary source prevent or interfere with the attainment or maintenance of any applicable ambient air quality standard. The Air Pollution Control Officer (APCO) may require the use of an air quality model to estimate the effects of a new or modified stationary source. The analysis shall estimate the effects of the new or modified stationary source, and verify that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard. In making this determination the APCO shall take into account the mitigation of emissions through offsets pursuant to this rule and the impacts of transported pollutants on downwind pollutant concentrations. The APCO may impose, based on an air quality analysis, offset ratios greater than the requirements of Section 303.2.

400 APPLICATION PROCESSING

- 401 **REQUIREMENT TO SUBMIT APPLICATION:** Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, shall first obtain authorization for such construction from the APCO as specified in this rule. Exemptions from this requirement are listed in Rule 501, GENERAL PERMIT REQUIREMENTS. The application shall be submitted on forms supplied by the District.
- 402 **COMPLETE APPLICATION REQUIREMENT:** The APCO shall determine whether an application is complete no later than 30 days after receipt of the application, or after such longer time period that the applicant and the APCO have agreed to in writing.

If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information required. Upon receipt of any re submittal of the application, a new 30-day period to determine completeness shall begin. Completeness of an application or a re-submitted application shall be evaluated on the basis of the information requirements set forth in District regulations as they exist on

the date on which the application or re-submitted application was received, or when the CEQA-related information which satisfies the requirements of the District's CEQA Guidelines has been received, whichever is later.

The APCO may, during the processing of the application, request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.

- 403 PRELIMINARY DECISION:** Following acceptance of an application as complete, the APCO shall perform the evaluations required to determine compliance with all applicable District rules and regulations and make a preliminary written decision as to whether an Authority to Construct should be approved, conditionally approved, or denied.

The decision shall be based on the Section 300 standards in force on the date the application is deemed complete, except when a new federal requirement not yet incorporated into this Rule applies to the new or modified source.

When the District is the CEQA Lead Agency for a project, the APCO shall not issue a preliminary decision until the draft Environmental Impact Report or Negative Declaration is available for public review. The decision shall be supported by a succinct written analysis. For projects requiring offsets, the APCO shall transmit its preliminary written decision and analysis to the California Air Resources Board and the U.S. Environmental Protection Agency for a 45 day review period.

404 TIMING FOR FINAL ACTION

- 404.1** The APCO shall not take final action for any project for which an Environmental Impact Report (EIR) or a Negative Declaration is being prepared until a final EIR for that project has been certified or a Negative Declaration for that project has been approved, and the APCO has considered the information in that final EIR or Negative Declaration.

The APCO shall take final action on the application within whichever of the following periods of time is longer:

404.1.1 Within 180 days after the certification of the final EIR or approval of the Negative Declaration, or

404.1.2 Within 180 days of the date on which the application was determined complete by the APCO.

- 404.2** Except as provided in Section 103, the APCO shall provide written notice of the final action to the applicant, any commenters, the U.S. Environmental Protection Agency, and the California Air Resources Board.

- 405 AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE CONTENT:** Each Authority to Construct and/or Permit to Operate issued by the APCO shall include the following minimum terms and conditions:

- 405.1** A provision stating that the emission unit shall be operated in a manner consistent with the application used to determine compliance with this rule.

- 405.2** The following emissions limitations shall be included, if applicable:

405.2.1 BACT emission limitations if required by Section 302. Such condition(s) shall be expressed in a manner consistent with testing procedures, such as ppmv NOx, g/liter VOC, or lbs/hr.

405.2.2 A quarterly emissions limitation for each offset pollutant, if offsets are required pursuant to Section 303.

405.2.3 An emission limitation (daily, monthly, or quarterly) shall be contained in the Authority to Construct and Permit to Operate for all NSR pollutants for which offsets are not being provided pursuant to Section 303, or when required to be consistent with ambient air quality standards.

405.3 Design, Operational, or Equipment Standards: If the APCO determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of a numerical emission standard infeasible, the APCO may instead prescribe a design, operational, or equipment standard. In such cases, the District shall make its best estimate as to the emission rate that will be achieved and shall specify that rate in required submissions to the U.S. Environmental Protection Agency. Any Authority to Construct or permit issued without an enforceable numerical emission standard must contain enforceable conditions which assure that the design characteristics or equipment will be properly maintained, or that the operational conditions will be properly performed, so as to continuously achieve the assumed degree of control.

406 **PUBLICATION AND PUBLIC COMMENT:** If a proposed project is required to provide offsets pursuant to Section 303, or if a proposed project may emit increased actual lead emissions at a rate of 5 tons per year or greater, within ten calendar days following a preliminary decision, the APCO shall publish in at least one newspaper of general circulation in the District a notice stating the preliminary decision of the APCO, noting how the pertinent information can be obtained, and inviting written public comment for a 30-day period following the date of publication.

407 **PUBLIC INSPECTION:** Except as provided in Section 103, the APCO shall make available for public inspection at the District's office the information submitted by the applicant and the APCO's analysis no later than the date the notice of the preliminary decision is published. Information submitted which contains trade secrets shall be handled in accordance with Section 6254.7 of the California Government Code and relevant sections of the California Administrative Code. Further, all such information shall be transmitted no later than the date of publication to the California Air Resources Board and the U.S. Environmental Protection Agency regional office, and to any party which requests such information.

408 **DENIAL, FAILURE TO MEET STANDARDS:** The APCO shall deny any Authority to Construct or Permit to Operate if the APCO finds that the subject of the application would not comply with the standards set forth in District, state, or federal rules or regulations.

409 **DENIAL, FAILURE TO MEET CEQA:** The APCO shall deny any Authority to Construct or Permit to Operate if the APCO finds that the subject of the application would not comply with the standards set forth in CEQA.

410 **ISSUANCE, PERMIT TO OPERATE:** The APCO shall issue a Permit to Operate an emissions unit subject to the requirements of this rule after determining that all conditions specified in the Authority to Construct have been complied with or will be complied with by the dates specified on the Authority to Construct. Such applicable conditions shall be contained in the Permit to Operate. Where a new or modified stationary source is, in whole or in part, a replacement for an existing stationary source on the same property, the APCO may allow a maximum of 90 days as a shakedown period for simultaneous operation of the existing stationary source and the new source or replacement.

500 **ADDITIONAL PROVISIONS FOR POWER PLANTS:** This Section shall apply to power plants with maximum ratings equal to, or in excess of 50 megawatts proposed to be constructed in the District and for which a Notice of Intention (NOI) or Application for Certification (AFC) has been accepted by the California Energy Commission.

501 Within 14 days of receipt of a Notice of Intention, the APCO shall notify the California Air Resources Board and the California Energy Commission of the District's intent to participate in the Notice of Intention proceeding. If the District chooses to participate in the Notice of Intention proceeding, the APCO shall prepare and submit a report to the California Air Resources Board and the California Energy Commission prior to the conclusion of the non-adjudicatory hearing specified in Section 25509.5 of the California Public Resources Code. That report shall include, at a minimum:

501.1 A preliminary specific definition of Best Available Control Technology for the proposed facility;

501.2 A preliminary discussion of whether there is substantial likelihood that the requirements of this rule and all other District regulations can be satisfied by the proposed facility;

501.3 A preliminary list of conditions which the proposed facility must meet in order to comply with this rule or any other applicable District regulation.

The preliminary determinations contained in the report shall be as specific as possible within the constraints of the information contained in the Notice of Intention.

502 Upon receipt of an Application for Certification for a power plant, the APCO shall conduct a determination of compliance review. This determination shall consist of a review identical to that which would be performed if an application for an Authority to Construct had been received for the power plant. If the information contained in the Application for Certification does not meet the requirements of this rule, the APCO shall, within 20 calendar days of receipt of the Application for Certification, so inform the California Energy Commission, and the Application for Certification shall be considered incomplete and returned to the applicant for re-submittal.

503 The APCO shall consider the Application for Certification to be equivalent to an application for a permit to construct during the determination of compliance review, and shall apply all provisions of this rule which apply to applications for an Authority to Construct.

504 The APCO may request from the applicant any information necessary for the completion of the determination of compliance review. If the APCO is unable to obtain the information, the APCO may petition the presiding Commissioner of the California Energy Commission for an order directing the applicant to supply such information.

505 Within 180 days of accepting an Application for Certification as complete, the APCO shall make a preliminary decision on:

505.1 Whether the proposed power plant meets the requirements of this rule and all other applicable District regulations, and;

505.2 In the event of compliance, what permit conditions will be required including the specific Best Available Control Technology requirements and a description of required mitigation measures.

The preliminary written decision of this Section shall be treated as a preliminary decision under Section 403 of this Rule, and shall be finalized by the APCO only after being

subject to the public notice and comment requirements of Sections 406 and 407. The APCO shall not issue a determination of compliance for the power plant unless all requirements of this rule are met.

- 506** Within 240 days of the filing date, the APCO shall issue and submit to the California Energy Commission a determination of compliance or, if such a determination cannot be issued, shall so inform the California Energy Commission. A determination of compliance shall confer the same rights and privileges as an Authority to Construct only when and if the California Energy Commission approves the Application for Certification, and the California Energy Commission certificate includes all requirements of the conditions contained within the determination of compliance.
- 507** Any applicant receiving a certificate from the California Energy Commission pursuant to this Section and in compliance with all conditions of the certificate shall be issued a Permit to Operate by the APCO.

600 MONITORING AND RECORDS

- 601 RECORDKEEPING:** The following records shall be maintained for two years. Records shall be provided to the APCO upon request.
- 601.1 Emergency Engines: Records of hours of operation for maintenance purposes and for actual interruptions of electrical power. Such records shall include the date and hours of operation, as well as the reason for operation.
- 601.2 Portable and Temporary Equipment: Records of operating location(s) and corresponding dates of operation.

1. The Board shall have the authority to establish, amend, and repeal rules and regulations that are necessary to carry out the purposes of the Act and to ensure the efficient and effective operation of the Board.

2. The Board shall have the authority to establish, amend, and repeal rules and regulations that are necessary to carry out the purposes of the Act and to ensure the efficient and effective operation of the Board.

3. The Board shall have the authority to establish, amend, and repeal rules and regulations that are necessary to carry out the purposes of the Act and to ensure the efficient and effective operation of the Board.

4. The Board shall have the authority to establish, amend, and repeal rules and regulations that are necessary to carry out the purposes of the Act and to ensure the efficient and effective operation of the Board.

5. The Board shall have the authority to establish, amend, and repeal rules and regulations that are necessary to carry out the purposes of the Act and to ensure the efficient and effective operation of the Board.

6. The Board shall have the authority to establish, amend, and repeal rules and regulations that are necessary to carry out the purposes of the Act and to ensure the efficient and effective operation of the Board.

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11464 B Avenue, Auburn, CA 95603 • (530) 889-7130 • Fax (530) 889-7107
www.placer.ca.gov/apcd

August 21, 2002

ADVISORY NOTICE FOR GASOLINE DISPENSING FACILITIES

This advisory notice is intended for all persons who are required to *have a Permit to Operate for a retail or a non-retail gasoline dispensing facility* in Placer County. Information is provided below regarding Enhanced Vapor Recovery regulations and Air Toxics Review of new and/or existing gasoline dispensing facilities.

ENHANCED VAPOR RECOVERY

On April 1, 2001, the California Air Resources Board (ARB) adopted an "Enhanced Vapor Recovery" (EVR) program that seeks to fix existing problems with service station vapor recovery systems. This EVR Program will phase in new standards over a four (4) year period to achieve a total of 25 tons per day in statewide VOC emission reductions over the performance of existing systems. By April 1, 2005, all underground tanks will need to change to the new EVR equipment.

In the June 2002 Advisory sent out with this fiscal year's billing for your permits, the District noted that any changes that require an upgrade to EVR equipment requires an Authority to Construct. Based on clarification and information obtained from the California Air Resources Board (CARB), the District has refined the criteria for applying for and obtaining an Authority to Construct for the installation of Phase I EVR equipment.

The District is classifying the installation of Phase I EVR equipment into two categories: **major modifications** and **non-major modifications**.

A **major modification** is one in which underground excavation occurs and requires the replacement of Phase I vapor recovery equipment. All major modifications require an Authority to Construct prior to the installation of Phase I EVR replacement equipment.

A **non-major modification** occurs when replacing failed components on Phase I systems. All replacement parts must be EVR-certified parts or components. However, if Phase I EVR components or parts are not compatible, pre-EVR certified parts or components may continue to be sold and used. For example, currently there are no certified Phase I EVR components for Phase I coaxial systems, thus non-EVR components can still be used in repairs. All facilities that replace Phase I equipment as a non-major modification are required to notify the District to assure that such replacement is not considered a major modification. Additionally, facilities will be required to apply for and obtain an Authority to Construct to "capture" these changes when the EVR systems must be demonstrated to be in place by April 1, 2005.

Further information on EVR can be found at the CARB website under Programs at www.arb.ca.gov

AIR TOXICS REVIEW

Background

The Air Toxics "Hot Spots" Information and Assessment Act was enacted in September 1987, with subsequent amendments. The Air Toxics "Hot Spots" Act establishes a formal air toxics emission inventory risk quantification program that Districts manage. The goal of the Air Toxics "Hot Sports" Act is to:

- ? collect emission data indicative of routine predictable releases of toxic substances to the air;
- ? identify facilities having localized impacts;
- ? evaluate health risks from exposure to the emissions;
- ? notify nearby residents of significant risks; and
- ? reduce risk below the determined level of significance.

Those facilities that pose a potentially significant health risk are required to reduce their risks, thereby reducing the near-source exposure of Californians to toxic air pollutants. Significant risks posed by facilities require public notification and if requested, districts must make health risk assessments available for public review.

The District is evaluating both proposed and existing GDFs to determine the cancer risk that is based upon annual gasoline throughput. Listed below is the specific process for proposed and existing facilities.

For proposed facilities, the District is using an initial health risk screening that is based upon the proposed annual throughput for the facility. For those facilities proposing to pump 1.5 million gallons of gasoline or more a year (i.e. those that have a cancer risk greater than 10-in-a-million), a slightly refined risk screening analysis will be conducted by utilizing distance information from the centroid of the pump islands to the nearest commercial and residential structures. If the cancer risk remains greater than 10-in-a-million following the refined risk assessment, a gasoline throughput limitation will be placed upon the facility. This limitation will be based on a gasoline throughput that will reduce the cancer risk too less than 10-in-a-million. If the applicant chooses, a detailed health risk assessment, approved by the District, may be conducted by the applicant or risk reduction measures may be implemented to reduce emissions. These steps may result in the 10-in-a-million cancer risk threshold being exceeded at a higher annual gasoline throughput limitation.

For existing GDFs, the District is reviewing the high throughput facilities that have an initial screening of greater than 10-in-a-million cancer risk. Information regarding distances from the centroid of the pump islands to the nearest commercial and residential structures is being gathered to refine the initial screening. If the cancer risk remains greater than 10-in-a-million, then the risk analysis will be submitted to the facility for review and comment before being forwarded to the Office of Environmental Health Hazard Assessment (OEHHA) for approval.

Following OEHHA approval of the risk assessment, Public Notification is required of all persons exposed in accordance with adopted District policies, and risk reduction through gasoline throughput curtailment or improved emission controls will be required. These requirements are likely to apply to only those facilities that have a very high annual throughput and with neighbors in close proximity.

This advisory notice and other previously issued advisories can be found on our website at www.placer.ca.gov/apcd or by calling Ms. Ann Hobbs at (530) 889-7137.

MEMORANDUM

To: Planning Commission

From: Kinarik Shallow, Associate Planner

Date: May 13, 2020

Re: Comments on the Initial Study/Mitigated Negative Declaration for WRSP PCL F-31 – The Plaza at Blue Oaks (File #PL17-0368)

The purpose of this memorandum is to provide a response to the May 6, 2020 letter from the Law Office of Robert M. Bone, representing an unincorporated association of Roseville community residents (the “Association”), to the City of Roseville (City). The letter is included as Attachment 1.

In the letter, the Association challenges the adequacy of the City’s environmental review, alleging that the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the Plaza at Blue Oaks project (“Project”) is not in compliance with the California Environmental Quality Act (CEQA). However, as this response will show, the Association has failed to offer any evidence that the initial study analysis is flawed. As clearly stated in CEQA Guidelines Section 15384, “argument, speculation, [and] unsubstantiated opinion or narrative” is not substantial evidence.

The Association’s letter claims that the IS/MND fails to adequately inform the public about environmental impacts, by citing CEQA Guidelines Section 15002(a), which identifies the basic purposes of CEQA. The Association has included a paraphrased portion of this section and inaccurately concludes that the environmental impacts of a project are required to be analyzed in an Environmental Impact Report (EIR). The Association fails to acknowledge the process in determining whether an EIR is the appropriate environmental document. For instance, CEQA Section 15063(a) identifies that an initial study is used to determine if the project may have a significant effect on the environment. An initial study is not required if the lead agency can determine that an EIR will clearly be required for the project, but it may still be desirable. In the case of this Project, the City prepared an initial study that led to a mitigated negative declaration. The Project’s initial study analysis relies upon two certified Specific Plan EIRs (the Amourso Ranch Specific Plan EIR and the West Roseville Specific Plan EIR) and is consistent with the land use designations examined in these documents. In fact, the WRSP anticipated the Project site to be developed with a conventional community/neighborhood retail center, consistent with the proposed Project. Consistent with CEQA Guidelines Section 15183, the Initial Study focuses on effects particular to the specific project site, impacts which were not analyzed within the EIRs, and impacts which may require revisiting due to substantial new information.

The Association asserts the City’s findings in determining a Mitigated Negative Declaration were incorrectly reached, but does not provide substantial evidence to support this claim. The Association further alleges the Project cannot be approved as proposed because there are “feasible mitigation measures available” that were not considered in the IS/MND. Again, the letter does not provide substantial evidence to support this claim nor does it identify what these supposed mitigation measures are.

Noise

The Association claims that the initial study analysis found noise impacts would occur only during construction and that the analysis “dismissed” the noise impacts caused by operation of the Project. This statement is flawed, as the IS/MND concluded noise impacts would occur during both construction and operation of the Project, and that these impacts would be considered less than significant and less than significant with mitigation, respectively (see Section XIII of the Initial Study). Mitigation measures were

incorporated based on the findings and recommendations made in the Environmental Noise Assessment (ENA) prepared by Bollard Acoustical Consultants, Inc. (see Attachment 6 of the IS/MND). While the ENA recommended mitigation measures specific to the car wash operations, loading dock and on-site truck circulation areas (as these were found to be the Project's "primary stationary noise sources"), the IS/MND also includes noise mitigation measures applicable to all commercial uses within 150 feet of residential uses. These measures are included as Attachment 2 of the IS/MND. The Association claims the noise analysis underestimates the noise levels that would be generated by the Project, but does not provide any data to support this argument. The ENA analysis is based on a combination of on-site noise level measurements, application of accepted noise modeling techniques, and file data for comparable commercial centers, which was then compared against the City's noise level standards.

Air and Water Quality

The Association argues that air quality issues were not properly considered in the IS/MND. The Association further argues that the proposed 12-pump gas station and car wash would increase poor air quality, ground water quality, and soil contamination during construction and operation. The Association fails to provide substantial evidence to support these claims and instead relies on argument and speculation.

Air quality impacts of the Project were evaluated in Section III (Air Quality) of the Initial Study. The analysis concluded that the Project was under the Placer County Air Pollution Control District (PCAPCD)'s adopted thresholds of significance for both construction and operational emissions for criterial air pollutants. In addition, the PCAPCD governs air quality impacts specifically related to gas stations and requires permits prior to construction and prior to dispensing gasoline to ensure the required local, state, and federal standards are adhered to as it relates to air quality impacts. The air quality analysis is supplemented with a Health Risk Analysis (HRA), prepared by Trinity Consultants, to determine the potential cancer risk that will be generated as a result of the Project (see Attachment 3 of the IS/MND). The HRA was reviewed by PCAPCD and concluded the annual amount of gasoline dispensed from the facility would be below PCAPCD's significance thresholds for cancer and non-cancer health risks.

As stated in Section X (Hydrology & Water Quality) of the Initial Study, the City's CEQA Findings of Implementing Procedures indicate that compliance with the City's Design/Construction Standards (Resolution 07-107), Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch. 14.20), and Stormwater Quality Design Manual (Resolution 16-152) will prevent significant impacts related to water quality and erosion. In addition, grading activities are subject to the City's Improvement Standards, which include provision of proper drainage, appropriate dust control, and erosion control measures. The Project is required to prepare and submit a Storm Water Pollution Prevention Plan (SWPP) to the Regional Water Quality Control Board (RWQCB) to prevent the discharge of any unpermitted pollution and to preserve water quality.

Transportation

The Association claims that "morning, afternoon, and other peak-hour commute times will be permanently greatly increased" from the Project and identified this as a significant impact. The letter fails to provide substantial evidence to support this claim. As cited in Section XVII (Transportation) of the Initial Study, CEQA Guidelines Section 15064.3 indicates that a project's effect on automobile delay cannot be considered a significant impact. However, the project is evaluated for consistency with the General Plan Circulation Element, which includes an analysis of delay as a potential policy impact. The Circulation Element establishes Level of Service (LOS) C or better as an acceptable operating condition at all signalized intersections during a.m. and p.m. peak hours; a minimum of 70% of all signalized intersections must maintain LOS C. The Initial Study is supplemented with a short-term traffic study prepared by Kimley-Horn (Attachment 7 of the IS/MND), which concluded that the signalized intersections surrounding the project would operate at LOS C or better during the Existing (2018) plus Project conditions. In addition, the traffic study included recommendations to ensure sufficient vehicle throat depths, tapers, and storage capacity; the Project incorporated these recommendations into the project design.

Conclusion

The Association concludes in the same manner it began, by claiming the IS/MND fails to adequately disclose, evaluate, and mitigate the Project's environmental impacts, and requests an "appropriate" environmental review be conducted and circulated for public review. As stated throughout this response letter, the Association does not provide substantial evidence to support its claims. Staff is confident that the Initial Study adequately discloses, evaluates, and mitigates the Project's environmental impacts and a Mitigated Negative Declaration is the appropriate environmental determination for this project; the Initial Study provides substantial evidence to support this finding.

Law Office of
ROBERT M. BONE

May 6, 2020

VIA EMAIL ONLY

publiccomment@roseville.ca.us

City of Roseville Planning Commission
311 Vernon Street
Roseville, California 95678

RE: Comments on Proposed Mitigated Negative Declaration for
WRSP PCL F-31 – The Plaza at Blue Oaks; File # PL17-0368

Dear Sir or Madam:

Our firm writes on behalf of an unincorporated association of Roseville community residents (the "Association") to provide comments on the proposed mitigated negative declaration finding prepared by the City of Roseville Planning Commission ("Planning Commission"), and proposed by Joe Zawidski, West Roseville Development Company, Inc., the project owner ("Owner"), and Joe Zawidski, Signature Management Company, the project developer ("Developer") for the Project defined below.

The proposed Project, located at 1950 Blue Oaks Boulevard, in the City of Roseville, Placer County, CA (APN 017-117-093-000) is a proposed retail center consisting of an approximately 35,000 square-foot anchor grocery store, a 12-pump gas station with an approximately 3,500 square-foot convenience store and car wash, and seven additional buildings ranging in size from approximately 3,750 square feet to 9,750 square feet (the "Project"). The Project approvals include a Design Review Permit to review the site design and proposed buildings, a Tree Permit to remove several native oak trees on the westerly portion of the site, and a Tentative Subdivision Map to subdivide the parcel into eight (8) lots (the "Approvals"). No building is being proposed on Lot 2 at this time, which will be located on the northeastern corner of the site and will consist of approximately 1.3 acres.

The Association includes individuals that may be adversely affected by the potential traffic, air quality, ground water quality, soil quality, noise, public health, and other environmental impacts caused by the Project. The Association includes individuals who live and work in Roseville and their families. Because they are local residents, the individual members of the Association would be directly affected by the traffic, air quality, ground water quality, noise, public health and other environmental issues created by the Project. Individual members may also

work on the Project itself. As such, they would be first in line to be exposed to any health and safety hazards that exist on site.

The Initial Study/Mitigated Negative Declaration is Not in Compliance With CEQA

The IS/MND Fails to Adequately Inform the Public About Environmental Impacts

Based upon our review of the initial study/mitigated negative declaration (“IS/MND”), we feel the IS/MND fails to comply with California Environmental Quality Act (“CEQA”) requirements in the following ways. CEQA is designed to inform decisionmakers, and the public about the potential significant environmental effects of a project. CEQA Guidelines §15002(a)(1). CEQA requires that an agency analyze potentially significant environmental impacts in an [environmental impact report (“EIR”)]. Pub. Resources Code §21000; CEQA Guidelines §15002. Specifically, that EIR should result from “extensive research and information gathering,” including consultation with state and federal agencies, local officials, *and the interested public*. (emphasis added.) *Berkeley Keep Jets Over the Bay Comm. v. Board of Port Comm.* (2001) 91 Cal.App.4th 1344, 1367 (Berkeley Jets); *Schaeffer Land Trust v. San Jose City Council* (1989) 215 Cal.App.3d 612, 620.

CEQA also directs public agencies to avoid, or reduce, environmental damage when possible by requiring alternatives, or mitigation measures. CEQA Guidelines §15002(a)(2)-(3); *Berkeley Jets*, supra, 91 Cal.App. 4th at 1354. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to “identify ways that environmental damage can be avoided or significantly reduced.” CEQA Guidelines §15002(a)(2). If a project has a significant effect on the environment, the agency may approve the project only upon a finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible,” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in CEQA §21081. CEQA Guidelines §15092(b)(2)(A)-(B).

The IS/MND begins with a Declaration, on page 2, that states:

The Planning Manager has determined that the above project will not have significant effects on the environment and therefore does not require preparation of an Environmental Impact Report. The determination is based on the attached initial study and the following findings [(“Findings”)]

A. The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels,

threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, reduce the number or restrict the range of rare or endangered plants or animals or eliminate important examples of the major periods of California history or prehistory.

B. The project *will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals. (emphasis added.)*

C. The project *will not have impacts, which are individually limited, but cumulatively considerable. (emphasis added.)*

D. The project *will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. (emphasis added.)*

E. No *substantial evidence exists that the project may have a significant effect on the environment. (emphasis added.)*

F. The project incorporates all applicable mitigation measures identified in the attached initial study.

G. This Mitigated Negative Declaration reflects the independent judgment of the lead agency.

The Association asserts that substantial evidence exists to support their assertion that the Findings, noted above, were incorrectly reached. It defies imagination how the construction of a 12-pump gas station, with its attendant underground gasoline storage tanks, a car wash that will undoubtedly wash chemicals into the soil, and potentially into the ground water, and other commercial uses *will not cause any impact* to the environment such that a fulsome environmental review is unnecessary. The planned uses will have considerable cumulative, long-term, adverse impacts on the environment and nearby residents, either directly, or indirectly. Approving the Project without a full environmental review amounts to achieving a short-term goal to the disadvantage of long-term environmental goals.

The IS/MND incorporates a checklist of potential environmental impacts. Although the analysis considered various impacts as provided in the checklist, and as required by CEQA, the IS/MND found in the vast majority of the analysis that the Project would have “No Impact,” or a “Less Than Significant Impact” on the environment. Thus, mitigation measures were not adequately considered.

Potential impacts were found in only two cases. In one case, the IS/MND found the Project may create significant impacts on the resources of California Native American tribes. Of greater concern to the Association, however, is the fact that the analysis found noise impacts would occur only during construction of the Project, but dismissed the noise impacts caused by operation of the Project after the construction is completed. This effect was considered to be “Less Than Significant With Mitigation” if such mitigation measures were implemented during construction. Little attention was paid to the fact that the Project will flank two existing residential neighborhoods. The permanent noise levels that will be generated by a 12-pump gas station, an automatic car wash and convenience store, and 35,000 a foot grocery store, in addition to other anticipated commercial uses, are certain to increase substantially over current ambient noise levels in the neighborhood. This is hardly a “Less Than Significant” impact. This impact, and potential mitigation measures to lessen the impact, warrants further study.

Other than the two instances noted above, the IS/MND noted no significant impacts to the environment caused by the Project. The Association disagrees. The subdivision of a single parcel into 8 parcels and the construction of more than 48,000 square feet of commercial structures in that footprint absolutely creates significant negative impacts on the surrounding residential community. These impacts to the traffic, air quality, ground water quality, soil quality, noise and other aspects of the community must be properly determined and studied.

Air quality issues were not properly considered in the IS/MND. Many of the residents near the Project are older and/or are otherwise considered to be sensitive receptors. The dust, soot, exhaust, fumes and other particulate matter that will necessarily increase due to large construction vehicles, and further due to permanently increased traffic and idling vehicles in the area, will create negative health impacts on residents, who are sensitive receptors, for an unknown period of time. These sensitive receptors may experience prolonged and significant impacts to their health.

The negative health effects on area residents caused by the Project will be exacerbated by the construction of a 12-pump gas station as the site. Not only will this increase poor air quality, ground water quality, and soil contamination during construction, but nearby residents will be permanently negatively impacted by known carcinogens that will be pumped into underground tanks, as well as exhaust and fumes created by cars idling and using the gas station. Additionally, detergents, waxes and other chemicals used by the car wash will be rinsed away, and may flow into the ground, eventually reaching the water table. This will have deleterious effects on the water table and the health of nearby residents. These issues were found to cause either “No Impact,” or “Less Than Significant Impact” in the IS/MND. These deleterious impacts must be properly studied so that their true impacts on nearby residents can be determined and mitigated.

The IS/MND Fails to Consider Feasible Mitigation Measures That Alleviate Negative Environmental Impacts

The Planning Commission cannot approve the Project as proposed because there are feasible mitigation measures available which would substantially lessen one, or more, of the Project’s significant environmental effects. Pub. Resources Code, § 21002. For example, morning,

Roseville Planning Commission
WRSP PCL F-31 – The Plaza at Blue Oaks
File # PL17-0368
May 6, 2020
Page 5 of 5

afternoon and other peak-hour commute times will be permanently greatly increased throughout the area if the Project is developed as currently proposed. The IS/MND failed to propose mitigation measures to alleviate this significant impact.

The Environmental Noise Assessment, included as Attachment 6 to the IS/MND, states, in pertinent part, on Page 6 that the “Noise Element of the City of Roseville General Plan establishes non-transportation noise exposure limits as summarized...in Table 1 (Table IX-3 of the Noise Element). These limits are applicable to non-transportation noise sources (i.e., on-site truck movements, loading docks, and car wash operations) affecting existing noise-sensitive land uses.” The report suggests that a 6-foot sound barrier be constructed and that construction trucks be limited in their hours of operation. The report dubiously suggested this 6-foot sound barrier is enough to mitigate the significant impact the operation of the gas station, the loading dock, the car wash and the other commercial uses will cause to adjacent neighborhoods after construction.

The noise assessment in the IS/MND dismissed operations noise that will be caused by idling vehicles and traffic at the 12-pump gas station and ignores the Project’s other commercial uses. Instead, although the document recognized the fact that the nearest noise-sensitive land uses to the Project site are existing and future residential developments located north, south, and east of the Project site, significant impacts to these receptors was minimized by the report. It was assumed that each of the evaluated noise sources would only operate during limited, mostly daytime, hours. Based on this assumption, Roseville’s daytime and nighttime noise level standards for noise-sensitive residential land were applied to the Project’s noise sources. This represents a serious underestimation of the noise levels to be generated by the commercial uses in this Project.

Due to the fact that the IS/MND wholly dismissed the vast majority of the potential environmental impacts caused by the Project, mitigation measures were inadequately considered or completely ignored. For this reason, the IS/MND fails to adequately disclose, evaluate, and mitigate the Project’s environmental impacts, resulting in a legally deficient CEQA document. The Planning Commission must conduct an appropriate environmental review that addresses these inadequacies and must circulate the document for public review to consider these critical issues. Thank you for your attention to these comments.

Sincerely,



Robert M. Bone, Esq.

May 12, 2020

VIA EMAIL ONLY

publiccomment@roseville.ca.us

City of Roseville Planning Commission
311 Vernon Street
Roseville, CA 95678

**RE: Comments on the Initial Study/Mitigated negative Declaration for WRSP PCL F-31
– The Plaza at Blue Oaks (File #PL17-0368))**

Dear Sir or Madam:

This office represents West Roseville Project Development Company, Inc., the project owner ("Owner"), and Signature Management Company, the project developer ("Developer"), of the above-referenced project. The purpose of this letter is to provide a response to the May 6, 2020 letter from the Law Offices of Robert M. Bone, representing an unincorporated association of Roseville community residents (the "Association"), to the City of Roseville ("City"). Owner and Developer are real parties in interest.

In the letter, the Association challenges the adequacy of the City's environmental review, alleging that the Initial Study/Mitigated Negative Declaration ("IS/MND") prepared for the Plaza at Blue Oaks project ("Project") is not in compliance with the California Environmental Quality Act ("CEQA"). However, Owner and Developer agree with Planning Commission Staff ("Staff") that the Initial Study adequately discloses, evaluates, and mitigates the Project's environmental impacts and a Mitigated Negative Declaration is the appropriate environmental determination for this project. Owner and Developer also assert that all aspects of CEQA with regard to the IS/MND have been fully complied with and that an Environmental Impact Report ("EIR") is not required for the Project.

CEQA requires the preparation of an EIR whenever an agency proposes to approve or implement a project that "may have a significant effect on the environment." (§§ 21100, 21151.) "If there is no substantial evidence of any significant environmental impact, however, the agency may [instead] adopt a negative declaration." (City of Redlands v. County of San Bernardino, (2002) 96 Cal.App.4th 398, 405.) A *mitigated* negative declaration may be utilized by an agency when a project as initially proposed may have a significant effect on the environment but will not have a significant environmental effect because changes have been made or agreed on that mitigate such potential effects. (Cal. Code Regs. tit. 14, § 15071(e)). In evaluating a claim that an agency improperly approved a project by using a negative declaration, rather than preparing an EIR, a trial court applies the "fair argument" test. (Porterville Citizens for Responsible Hillside Development v. City of Porterville, (2007) 157 Cal.App.4th 885, 899.) "Under this test, the agency must prepare an EIR whenever substantial evidence in the record supports a fair

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argument that a proposed project may have a significant effect on the environment." (Gentry v. City of Murrieta, (1995) 36 Cal.App.4th 1359, 1399-1400.) A trial court's function is to decide whether substantial evidence supports the agency's conclusion as to whether a fair argument of environmental impact could be made. (Id. at p. 1399.)

Like any petitioner challenging an agency's decision to proceed by negative declaration, the Association bears the burden of proof "to demonstrate by citation to the record the existence of substantial evidence supporting a fair argument of significant environmental impact." Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359, 1379. The Association cannot meet this burden.

CEQA and its implementing regulations provide that facts, reasonable assumptions predicated on facts, and expert opinions supported by facts may constitute substantial evidence; argument, speculation, unsubstantiated opinion or narrative, clearly inaccurate or erroneous factual statements or evidence of social or economic impacts that do not result in physical impacts on the environment may not. (§§ 21080, subd. (c); 21080. 2, subd (c); 14 Cal. Code Regs., §§ 15064, subd. (f)(5), 15384.) "[I]n the absence of a specific factual foundation in the record, dire predictions by non-experts regarding the consequences of a project do not constitute substantial evidence." (Porterville Citizens for Responsible Hillside Development, *supra*, 157 Cal.App.4th at p. 901.) In its letter, the Association relies on nothing more than argument, speculation, and unsubstantiated opinion and narrative in its attempt to claim that further environmental study is required. Such a dearth of substantiated evidence cannot and will not rise to the level of substantial evidence required to overcome the Planning Commission's discretionary and well-supported decision as set forth in its IS/MND.

The Planning Commission has taken all necessary specific actions to achieve CEQA compliance to date and no further environmental review is required.

Sincerely,

IRONHORSE LAW GROUP PC

A handwritten signature in black ink, appearing to read "Nathan Scheg". The signature is fluid and cursive, with the first name "Nathan" and last name "Scheg" clearly distinguishable.

Nathan L. Scheg, Esq.

cc: Client (via email only)