



**CITY OF CITRUS HEIGHTS
PLANNING COMMISSION MEETING AGENDA
WEDNESDAY, FEBRUARY 26, 2020
Special Meeting - 6:00 PM
Regular Meeting - 7:00 PM
City Hall Council Chambers
6360 Fountain Square Drive, Citrus Heights, CA**

1. CALL SPECIAL MEETING TO ORDER (6:00 PM)

- a. 2-26-20 PC Packet

Documents:

[FULL AGENDA PACKET.PDF](#)

2. ROLL CALL

Commission Members:

Duncan, Flowers, Ingle, Lagomarsino, Van Duker, Vice Chair Scheeler, Chair Schaefer

3. STUDY SESSION

- a. Discussion Of Old Auburn Complete Streets Plan

4. ADJOURNMENT

5. CALL REGULAR MEETING TO ORDER (7:00 PM)

6. ROLL CALL

Commission Members:

Duncan, Flowers, Ingle, Lagomarsino, Van Duker, Vice Chair Scheeler, Chair Schaefer

7. FLAG SALUTE

8. PUBLIC COMMENT

Under Government Code Section 54954.3, members of the audience may address the Commission on any item within the jurisdiction of the Commission or on any agenda item. If you wish to address the Commission, please fill out a speaker identification form and hand it to the Commission Secretary. When you are called upon to speak, step forward to the podium and state your name clearly for the record. Those wishing to speak on non-agenda items will be called upon at the beginning of the meeting. Those wishing to speak for or against an agenda item will be called upon after the presentation by the City Planning department and the Applicant for that agenda item.

9. CONSENT CALENDAR

Approval of the meeting minutes for February 12, 2020

10. PUBLIC HEARING

- a. CAREFIELD SENIOR CARE FACILITY – 8220 SUNRISE BOULEVARD:

The applicant is requesting approval of a Use Permit, Design Review

Permit and Tree Permit application for the construction of an 80-unit, 88-bed Senior Care Facility, including 60 Assisted Living Units and 20 Memory Care Units. A Mitigated Negative Declaration was prepared for a similar project in 2008, and a Mitigated Negative Declaration Addendum has been prepared. Project Planner: Eric Singer

b. TENTATIVE COMMERCIAL SUBDIVISION AND CONDOMINIUM CONVERSION USE PERMIT – 7916 PEBBLE BEACH DRIVE:

The applicant is requesting approval of a Tentative Commercial Subdivision and Condominium Conversion Use Permit for the conversion of an existing office building into twelve (12) parcels (11 parcels for individually owned office units and one common area. The project is Categorically Exempt from CEQA under Section 15301 (k) which relates to Subdivision of Existing Facilities. Project Planner: Eric Singer

c. ZONING UPDATE – ACCESSORY DWELLING UNITS:

A review of updates to Chapter 106.42.015 and 106.80.020 of the city's Zoning Code. Updates are necessary to bring the city's Zoning Code in conformance with state regulations in regard to accessory dwelling units. A complete list of changes can be obtained from the Planning Division. The project is Categorically Exempt from CEQA under Section 15282(h) which exempts ordinances amendments for accessory dwelling units from environmental review. Project Planner: Bermudez

11. REGULAR CALENDAR

a. GENERAL PLAN ANNUAL REPORT - ERIC SINGER

b. PLANNING MANAGER COMMENTS

12. ADJOURNMENT

The agenda for this meeting of the Planning Commission for the City of Citrus Heights was posted at the sites listed below on or before the close of business at 5:00 p.m. on the Friday preceding the meeting.

City of Citrus Heights, 6360 Fountain Square Drive, Citrus Heights, CA
Rusch Park Community Center, 7801 Auburn Boulevard, Citrus Heights, CA
Sacramento County Library, Sylvan Oaks Branch, 6700 Auburn Boulevard, Citrus Heights, CA

Any writings or documents provided to a majority of the City of Citrus Heights Planning Commission regarding any item on this agenda will be made available for public inspection at City Hall located at 6360 Fountain Square Drive, Citrus Heights, CA 95621.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Karen Ramsay at (916) 727-4742. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. TTY/TDD users with questions or comments can call the California Relay Service by dialing 7-1-1.

Pursuant to Sections 65009 (b) (2), of the State Government Code "If you challenge any of the above projects in court, you may be limited to raising only those issues you or

someone else raised at the public hearing(s) described in this notice, or in written correspondence delivered to the city Planning Commission at or prior to, this public hearing".



**CITY OF CITRUS HEIGHTS
PLANNING COMMISSION MEETING AGENDA**

**Wednesday, February 26, 2020
SPECIAL MEETING – 6:00 PM
REGULAR MEETING – 7:00 PM
City Hall Council Chambers
6360 Fountain Square Drive, Citrus Heights, CA**

NOTE: The Commission may take up any agenda item at any time, regardless of the order listed. Action may be taken on any item on the agenda. The Commission established a procedure for addressing the Commission. Speaker Identification Sheets are provided on the table inside the Council Chambers. If you wish to address the Commission during the meeting please complete a Speaker Identification Form and give it to the Commission Secretary. Those addressing the Commission are limited to five (5) minutes, unless extended by the Chair. The Chair may also reduce the allowed time if there is a lengthy Agenda or a large number of people wanting to address the Commission.

1. CALL SPECIAL MEETING TO ORDER (6:00 PM)

2. ROLL CALL

Commission Members:

Duncan, Flowers, Ingle, Lagomarsino, Van Duker, Vice Chair Scheeler, Chair Schaefer

3. STUDY SESSION

A. Discussion of Old Auburn Complete Streets Plan

4. ADJOURNMENT

5. CALL REGULAR MEETING TO ORDER (7:00 PM)

6. ROLL CALL

Commission Members:

Duncan, Flowers, Ingle, Lagomarsino, Van Duker, Vice Chair Scheeler, Chair Schaefer

7. FLAG SALUTE

8. PUBLIC COMMENT

Under Government Code Section 54954.3, members of the audience may address the Commission on any item within the jurisdiction of the Commission or on any agenda item. If you wish to address the Commission, please fill out a speaker identification form and hand it to the Commission Secretary. When you are called upon to speak, step forward to the podium and state your name clearly for the record. Those wishing to speak on non-agenda items will be called upon at the beginning of the meeting. Those wishing to speak for or against an agenda item will be called upon after the presentation by the City Planning Department and the Applicant for that agenda item.

9. CONSENT CALENDAR

Approval of the meeting minutes for February 12, 2020

10. PUBLIC HEARING

A. CAREFIELD SENIOR CARE FACILITY – 8220 SUNRISE BOULEVARD:

The applicant is requesting approval of a Use Permit, Design Review Permit and Tree Permit application for the construction of an 80-unit, 88-bed Senior Care Facility, including 60 Assisted Living Units and 20 Memory Care Units. A Mitigated Negative Declaration was prepared for a similar project in 2008, and a Mitigated Negative Declaration Addendum has been prepared. Project Planner: Eric Singer

B. TENTATIVE COMMERCIAL SUBDIVISION AND CONDOMINIUM CONVERSION USE PERMIT – 7916 PEBBLE BEACH DRIVE:

The applicant is requesting approval of a Tentative Commercial Subdivision and Condominium Conversion Use Permit for the conversion of an existing office building into twelve (12) parcels (11 parcels for individually owned office units and one common area). The project is Categorically Exempt from CEQA under Section 15301 (k) which relates to Subdivision of Existing Facilities. Project Planner: Eric Singer

C. ZONING UPDATE – ACCESSORY DWELLING UNITS:

A review of updates to Chapter 106.42.015 and 106.80.020 of the city's Zoning Code. Updates are necessary to bring the city's Zoning Code in conformance with state regulations in regard to accessory dwelling units. A complete list of changes can be obtained from the Planning Division. The project is Categorically Exempt from CEQA under Section 15282(h) which exempts ordinances amendments for accessory dwelling units from environmental review. Project Planner: Bermudez

11. REGULAR CALENDAR

A. GENERAL PLAN ANNUAL REPORT – ERIC SINGER

B. PLANNING MANAGER COMMENTS

12. ADJOURNMENT

The agenda for this meeting of the Planning Commission for the City of Citrus Heights was posted at the sites listed below on or before the close of business at 5:00 p.m. on the Friday preceding the meeting.

City of Citrus Heights 6360 Fountain Square Drive, Citrus Heights, CA
Rusch Park Community Center, 7801 Auburn Boulevard, Citrus Heights, CA
Sacramento County Library, Sylvan Oaks Branch, 6700 Auburn Blvd., Citrus Heights, CA

Any writings or documents provided to a majority of the City of Citrus Heights Planning Commission regarding any item on this agenda will be made available for public inspection at City Hall located 6360 Fountain Square Drive, Citrus Heights, CA.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Karen Ramsay at (916) 727-4742. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. TTY/TDD users with questions or comments can call the California Relay Service by dialing 7-1-1.

Pursuant to Sections 65009 (b) (2), of the State Government Code "If you challenge any of the above projects in court, you may be limited to raising only those issues you or someone else raised at the public hearing(s) described in this notice, or in written correspondence delivered to the city Planning Commission at, or prior to, this public hearing".

City of Citrus Heights
Planning Commission Meeting
Minutes
February 12, 2020
DRAFT

1. CALL MEETING TO ORDER

Chair Schaefer called the meeting to order at 7:00 PM.

2. ROLL CALL

Commission Present: Duncan, Flowers, Ingle, Lagomarsino, Schaefer, Scheeler, Van Duker

Staff Present: Bermudez, Flores, Hodgkins, Jones, Kempenaar, McDuffee, Ramsay

3. FLAG SALUTE

Planning Commissioner Lagomarsino led the flag salute.

4. PUBLIC COMMENT

None

5. CONSENT CALENDAR

The meeting minutes for January 22, 2020 were approved as submitted.

AYES: (7) Duncan, Ingle, Flowers, Lagomarsino, Schaefer, Scheeler, Van Duker,

NOES: (0)

6. PUBLIC HEARING

A. SUNRISE SUNGARDEN RETAIL CENTER – 7056 SUNRISE

BOULEVARD: Project Planner Bermudez presented a request for approval of a Design Review Permit and Use Permit to allow the construction of a new 7,559 square foot (SF) multi-tenant retail building with drive-through service. An Initial Study and Mitigated Negative Declaration was prepared for this project.

There was Planning Commission and staff discussion.

Chair Schaefer opened the public hearing.

Applicant, Leslie Burnside addressed the Planning Commission's questions regarding irrigation, electric vehicle parking and signage.

There were no other speakers and Chair Schaefer closed the public hearing. Chair Schaefer re-opened the public hearing so that Nancy Graham, Neighborhood Area 9 President, could comment that she supports the project

and is glad that something is going in there.

Kathy Morris from Neighborhood Area 7 & 8 said they are looking forward to more retail shops.

Chair Schaefer closed the public hearing.

Commission Comments

There were no comments.

Chair Schaefer called for a motion.

Motions

1. Adopt Resolution 20-04 determining the Mitigated Negative Declaration is the appropriate environmental document for this project and no further review is required.

M/S: Lagomarsino/Scheeler

AYES: (7) Duncan, Flowers, Ingle, Lagomarsino, Van Duker, Vice Chair Scheeler, Chair Schaefer

NOES: (0)

2. Approve the Use Permit to allow a new retail building with drive-through services based upon the findings listed in the Staff Report and the conditions of approval listed in Attachment 6.

M/S: Lagomarsino/Duncan

AYES: (7) Duncan, Flowers, Ingle, Lagomarsino, Van Duker, Vice Chair Scheeler, Chair Schaefer

NOES: (0)

3. Approve the Design Review Permit to allow the construction of new 7,759 square foot retail building based upon the findings listed in the Staff Report and the conditions of approval listed in Attachment 6.

M/S: Lagomarsino/Scheeler

AYES: (7) Duncan, Flowers, Ingle, Lagomarsino, Van Duker, Vice Chair Scheeler, Chair Schaefer

NOES: (0)

CONDITIONS OF APPROVAL – USE PERMIT # UP-19-05

- 1) The Use Permit approval shall be exercised within a two (2) year period from the date of final approval otherwise the Use Permit shall expire. The permit may be extended one-year provided the applicant files a written extension request prior to the expiration date of February 12, 2022. (Planning)
- 2) This project is approved as described and as shown in Attachments 1 through 11 and as conditioned or modified below. (Planning)
- 3) The communication ordering system for the drive-through shall have an automatic volume control so the volume of the speaker fluctuates based upon the ambient noise levels. At no time shall the noise exceed the levels allowed by the City's Noise Regulations. (Police and Planning)
- 4) Hours of operation for the center shall not exceed 5:00 AM to Midnight. Shall a tenant desire to extend beyond those operating hours, approval of a modification to the Use Permit is required. (Planning)
- 5) Minor modifications to the Use Permit may be approved by the Planning Division. Significant changes will require approval by the Planning Commission. (Planning)
- 6) The project shall comply with all regulations of the City of Citrus Heights including the city's Municipal Code and Building Code. (Planning)
- 7) The project shall comply with all requirements of all servicing agencies of the City of Citrus Heights including but not limited to Sacramento Metropolitan Fire District, Citrus Heights Water District and Sacramento Area Sewer District. (Planning)
- 8) To the maximum extent practical, the following measures should be incorporated into the project construction operations:
 - Noise-generating construction activities shall not occur within the hours identified in Municipal Code Section 34-88(5).
 - All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
 - All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency

shall comply with such regulations while in the course of project activity.

- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
 - Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
 - Project area and site access road speed limits shall be established and enforced during the construction period.
 - Written notice shall be provided to residents within 500 feet of the project site of the construction schedules. The notice shall include a contact name and phone number should the residents have a question or concern with construction noise levels. (Mitigation Measure 1 – Planning)
- 9) Shall any nuisances arise at the site including noise from the ordering devices, late night hours, loitering or other health and safety issues, the applicant shall provide security measure(s) onsite acceptable to the Community Development Director and Chief of Police. If after reasonable notice and an opportunity to correct those problems, any public nuisances remain onsite, including any health and safety issues, the City can impose reduced operational hours or require a security company to provide onsite security during hours of concern. (Police and Planning)
- 10) The applicant/owner and/or successor in interest agrees to indemnify, defend, and hold harmless the City, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable actions or other proceedings instituted by any person not a party to this permit challenging the validity of the Project Approval or any Subsequent Project Approval, or otherwise arising out of or stemming from these Approvals.

The applicant/owner and/or successor in interest may select its own legal counsel to represent their interest at their sole cost and expense. The parties shall cooperate in defending such action or proceeding. The applicant/owner and/or successor in interest shall pay for City's costs of defense, whether directly or by timely reimbursement on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by City in defense of any such action or other proceeding, plus staff and City Attorney time spent in regard to defense of the action or proceeding. The parties shall use best efforts to select mutually agreeable

defense counsel but, if the parties cannot reach agreement, City may select its own legal counsel and the applicant and/or successor in interest agrees to pay directly or timely reimburse on a monthly basis City for all such court costs, attorney fees, and time referenced herein. (City Attorney)

CONDITIONS OF APPROVAL – DESIGN REVIEW PERMIT # DRP-19-11
--

- 1) The Design Review Permit approval shall be exercised within a two (2) year period from the date of final approval otherwise the Design Review Permit shall expire. The permit may be extended one-year provided the applicant files a written extension request prior to the expiration date of February 12, 2022.(Planning)
- 2) This project is approved as described and as shown in Attachments 1 through 11 and as conditioned or modified below. (Planning)
 - The pedestrian connection from the building across the drive-through lane towards Sunrise Boulevard shall be distinguished through the use of enhanced surface materials such as pavers, bricks, or colored/textured concrete. The final design shall be approved by the Planning Division.
- 3) Minor modifications to the Design Review Permit may be approved by the Planning Division. Significant changes will require approval by the Planning Commission. (Planning)
- 4) A master sign program shall be submitted and approved by the Planning Division should the project create four or more tenants. The master sign program shall meet the requirements of Zoning Code Section 106.38. (Planning)
- 5) The project shall comply with all regulations of the City of Citrus Heights including the city's Municipal Code and Building Code. (Planning)
- 6) The project shall comply with all requirements of all servicing agencies of the City of Citrus Heights including but not limited to Sacramento Metropolitan Fire District, Citrus Heights Water District and Sacramento Area Sewer District. (Planning)
- 7) Prior to commencement of any work on site, all contractors and subcontractors shall obtain a valid City of Citrus Heights Business License. The general contractor shall be responsible for ensuring that all subcontractors obtain required Business License and shall retain copies of said permits on site for verification by City staff. (Planning)

- 8) Construction hours are limited to 6:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends. (Building)
- 9) Prior to excavation or trenching, the applicant shall call Underground Service Alert (dial 811) for a mark out of service utilities. (Building)
- 10) The project's post-development (proposed) stormwater runoff cannot exceed the pre-development (existing) runoff. (Engineering)
- 11) The existing building is currently connected to public sewer. Any required construction and/or modification to the public sewer system must be to the satisfaction of Sacramento Area Sewer District (SASD) prior to the approval of improvement plans. SASD Design Standards and Specifications apply to any onsite and offsite public sewer construction. (SASD)
- 12) SASD Design Standards and Specifications require minimum 6-inch lower laterals for commercial and industrial buildings. Demolishing of the building may require replacing the existing 4-inch lower lateral to a 6-inch lower lateral. (SASD)
- 13) Construction of a grease trap or a sand oil separator may be required. The applicant must verify with the applicable jurisdiction's building department. (SASD)
- 14) If the proposed garbage enclosure will contain a drain to the sewer, it must be covered. (SASD)
- 15) To the maximum extent practical, the following measures should be incorporated into the project construction operations:
 - Noise-generating construction activities shall not occur within the hours identified in Municipal Code Section 34-88(5).
 - All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
 - All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.

- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- Project area and site access road speed limits shall be established and enforced during the construction period.
- Written notice shall be provided to residents within 500 feet of the project site of the construction schedules. The notice shall include a contact name and phone number should the residents have a question or concern with construction noise levels. (Mitigation Measure 1 – Planning)

Conditions Required Prior to Issuance of Building Permit

- 16) The applicant shall submit a Construction Traffic Management Plan (plan) to minimize traffic impacts to public streets and maintain a high level of safety for all roadway users. (Engineering)
- 17) The applicant shall install construction fencing around the staging, equipment storage, and construction area. The construction fencing shall be screened with mesh screening or slats, subject to Planning Division approval. (Planning)
- 18) A pre-construction nesting survey shall be conducted within 14 days of any demolition or construction activities proposed during the nesting season (Feb 1 – Aug 31). If active nests are found, no work shall commence until an avoidance and monitoring plan is developed by a qualified biologist in coordination with the CDFW. If a setback is approved, no work shall occur with the setback area until the fledglings are capable of flight and are no longer reliant on the nest tree, as determined by the qualified biologist. (Planning)
- 19) Required development fees shall be paid prior to building permit issuance. Fee rates assessed shall be calculated during the building permitting process. (Engineering)
- 20) The proposed site improvements shown on the preliminary civil drawings, dated 10-11-2019, reflect the required public improvements along Sunrise

Blvd. and Sungarden Drive. These required improvements will be detailed in the project's improvement plans:

- Remove the existing west driveway along Sungarden Drive and construct 6-ft wide sidewalk, vertical curb, and gutter per City of Citrus Heights requirements.
- Remove and replace existing rolled curbs, gutters, and sidewalks along Sungarden Drive to meet all accessibility requirements (max. cross slope of 2%). All new curbs shall be vertical (Type 2 curb & gutter).
- Remove and replace existing drive approach for the east driveway along Sungarden Drive per City standards.

21)The applicant shall work with the adjoining property owner to the best extent possible to allow "Keep Clear" striping be installed within the Sungarden driveway to deter outbound vehicles from blocking the drive aisle opening. (Planning)

22)Prior to approvals of the improvement plans, a pipeline video inspection of the existing storm drain system shall be submitted to the Engineering Division for review and approval. The existing SD system may need to be cleared of debris prior to connection of the new SD system. (Engineering)

23)The owner must contact Sacramento Area Sewer District (SASD) Permit Services Unit at PermitServices@sacsewer.com or by phone at (916) 876-6100 to determine if sewer impact fees are due. Fees are to be paid prior to the issuance of building permits. (SASD)

Required Prior to Final

24)The luminaire on the existing streetlight along Sunrise Boulevard shall be replaced with an LED luminaire. The existing mast arm may need to be replaced. (Engineering)

25)The State Water Board's Trash Amendment requires that all commercial, industrial, and multi-family sites achieve full trash capture compliance by 2030. Trash capture is the developed site's ability to capture trash debris and litter from the property before it enters the public storm-water system. This site has been identified as a moderate trash generating property. This project is required to develop a full trash capture management plan that complies with the State Water Resource Control Board requirements. Prior to any occupancy of the proposed building, a Trash Maintenance Declaration for the property must be reviewed and approved by the City,

and filed with the County of Sacramento's Recorder's Office.
(Engineering)

- 26) Roof drains for the buildings shall not directly connect into the storm drain system. Downspouts shall flow to rain garden, landscaped areas, bio-swale, and/or other approved filtering methods before entering the City's storm drain system. (Engineering)
- 27) Dedicate 12.5-ft Public Utilities Easement (PUE) along Sunrise Boulevard and Sungarden Drive. The PUE shall be located behind the existing Right-of-Way (ROW) per Sacramento County Book 2794, Page 554 along both streets.
- 28) The applicant shall install a backflow device, including insulated enclosure and concrete pad, per current Citrus Heights Water District (CHWD) specifications. (CHWD)
- 29) The applicant may be required to install a new meter, meter setter, meter box, and meter location to the satisfaction of CHWD.
- 30) The installation of a secondary backflow (sized appropriately) is required down-stream of the primary backflow to isolate the irrigation system from the domestic supply. (CHWD)
- 31) The installation of the water distribution system modifications will be by the developer's contractor at the developer's expense. (CHWD)
- 32) Any easements granted to the District for the water facilities will be prepared by the developer at the developer's expense. (CHWD)
- 33) The applicant shall meet the following: Civil Site Plans, Fire Service Underground Plans, Fire Sprinkler Plans, Fire Alarm Plans and Architectural Plans shall be submitted prior to Final Building Permit being issued. (Fire)
- 34) Approved numbers or addresses shall be placed in such a position as to be easily read from the street or road fronting the property. The minimum size of the numbers shall not be less than ten (10) inches and shall be mounted immediately adjacent to a light source and shall also contrast with their background. (Fire)
- 35) Prior to installation of Landscaping, the project Landscape Architect shall submit documentation to the City that demonstrates:

DRAFT
Planning Commission Minutes
February 12, 2020

- Soil has been tested and prepared as necessary based on the Soils Analysis.
- The Irrigation has been installed compliant with the Zoning Code and approved landscape plan.
- Tree planting sites comply with the minimum soil volume as identified in the Zoning Code and landscape plan. (Planning)

36) Prior to Final of Building Permit, the project Landscape Architect shall:

- Certify in writing that the landscaping has been installed in compliance with the Zoning Code and approved landscape plan.
- Demonstrate and certify in writing that the irrigation has been installed and is in compliance with the Zoning Code and landscape irrigation plans. The City may require an irrigation audit performed by a certified irrigation auditor. (Planning)

37) The walls of the trash enclosures and the screening wall shall be treated with anti-graffiti coating. (Planning)

38) Prior to the Final of Building Permits, the applicant shall call for inspection by the Planning Division to verify compliance with the approved plans. (Planning)

39) Parking lot surface and double-striping shall be maintained in good repair. (Planning)

40) Any graffiti shall be removed within 24-hours (Planning)

41) Outdoor lighting shall be maintained in good working order. (Planning)

42) All landscaping, including the green screen, shall remain watered and in a healthy condition. (Planning)

43) Following occupancy of the building, there shall be no storage of goods outside of the building including the service areas adjacent to the drive-through lane. (Planning)

44) Ensure that addressing for the project is clearly indicated. Approved numbers or addresses shall be not less than six inches and shall be mounted immediately adjacent to a light source and shall also contrast with their background. (Fire)

- 45) Site shall meet the pre and post-construction Best Management Practices (BMP's) for Stormwater Mitigation per State of California requirements, including Low Impact Design (LID) features to mitigate quality of stormwater runoff. The City is a member of the Sacramento Stormwater Quality Partnership and uses their guidelines and requirements. The following is their link: <http://www.beriverfriendly.net/> (Engineering)
- 46) SMUD has existing overhead 12kV and 69kV facilities along the east side of Sunrise Boulevard that will need to remain. The Applicant shall be responsible for maintaining all CalOSHA and State of California Public Utilities Commission General Order No. 95 safety clearances during construction and upon building completion. If the required clearances cannot be maintained, the Applicant shall be responsible for the cost of relocation. (SMUD)
- 47) SMUD has existing underground 12kV facilities spanning from the southwest corner to the northeast corner of the project site that will need to remain. The Applicant shall be responsible for maintaining all CalOSHA and State of California Public Utilities Commission General Order No. 128 safety clearances during construction and upon building completion. If the required clearances cannot be maintained, the Applicant shall be responsible for the cost of relocation. (SMUD)
- 48) The Applicant shall dedicate a 12.5-foot public utility easement for overhead and/or underground facilities and appurtenances adjacent to all public street rights-of-ways. (SMUD)
- 49) If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for pre-contact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
 - If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead agency, the City of Citrus Heights, and applicable landowner. The agencies shall consult on a

finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

- If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Sacramento County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code). A Native American representative from a culturally and geographically affiliated tribe should also assess the significance of the find pursuant to PRC §21080.3.2 (a). Having just an archaeologist evaluate resources is inappropriate, especially if the resource is Native American in origin and may be considered a Tribal Cultural Resource. Also, UAIC would like to rebury any Native American human remains with appropriate dignity and respect, with the landowners permission.
- This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction. (Planning)

50)The applicant/owner and/or successor in interest agrees to indemnify, defend, and hold harmless the City, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable

actions or other proceedings instituted by any person not a party to this permit challenging the validity of the Project Approval or any Subsequent Project Approval, or otherwise arising out of or stemming from these Approvals. The applicant/owner and/or successor in interest may select its own legal counsel to represent their interest at their sole cost and expense. The parties shall cooperate in defending such action or proceeding. The applicant/owner and/or successor in interest shall pay for City's costs of defense, whether directly or by timely reimbursement on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by City in defense of any such action or other proceeding, plus staff and City Attorney time spent in regard to defense of the action or proceeding. The parties shall use best efforts to select mutually agreeable defense counsel but, if the parties cannot reach agreement, City may select its own legal counsel and the applicant and/or successor in interest agrees to pay directly or timely reimburse on a monthly basis City for all such court costs, attorney fees, and time referenced herein. (City Attorney)

7. REGULAR CALENDAR

A. CENSUS 2020 PRESENTATION – Alison Bermudez

Associate Planner Bermudez gave an overview on the 2020 Census and how important it is for everyone to respond.

B. PLANNING MANAGER COMMENTS

February 26 Study Session at 6:00 PM.

8. ADJOURNMENT

There being no further business, the meeting was adjourned at 7:47 PM to the next meeting of February 26, 2020.

Respectfully Submitted,

Karen Ramsay
Planning Commission Secretary



**CITRUS
HEIGHTS**
Solid roots. New growth.

STAFF REPORT

Hearing Date: February 26, 2020

File Number: DRP-19-05 & UP-19-02

Application Type: Design Review Permit & Use Permit

Assessor's Parcel Number:
216-009-0012-0000

Prepared by: Eric Singer, Assistant Planner
(916) 727-4743 esinger@citrusheights.net

Community Development Department
Planning Division
6360 Fountain Square Dr.
Citrus Heights, CA 95621
www.citrusheights.net
(916) 727-4740

Project Name: Carefield Citrus Heights

Project Address: 8220 Sunrise Boulevard

Gross Acreage: 4.55 acres

Net Acreage: 4.48 acres

Maximum FAR: N/A
Provided FAR: N/A

Current Zoning: RD-1

Proposed Zoning: RD-1

Neighborhood Association:
6 & 7

Surrounding Zoning:		Surrounding Land Use Designation	Actual Use:
On-site:	RD-1	Very Low Density Residential	Vacant Parcel, previously Single Family Home
North:	RD-1	Very Low Density Residential	Single Family Home
South:	RD-1	Very Low Density Residential	Day Care, Single Family Home
West:	RD-2	Very Low Density Residential	Single Family Homes
East:	RD-2	Very Low Density Residential	Single Family Homes

Environmental Status:

- ☐ Exempt Section
☐ Negative Declaration
☐ Mitigated Negative Declaration

- ☒ Addendum to Prior MND (Attachment 4)
☐ Environmental Impact Report
☐ Previous Environmental Impact Report

Planning Department Recommendations:

- ☐ Approve
☒ Approve with conditions (Attachment 3)
☐ Denial

Applicant:

Kelsy Laughnan
LRS Paul Boundy Architects
720 NW Davis St., Ste 300
Portland, OR 97209

**Property
Owner:**

Steve Barklis
SH 7 Citrus Heights, LLC
201 Lomas Santa Fe Dr., Ste 500
Solana Beach, CA 92075

SUMMARY RECOMMENDATION

The Planning Division recommends the Planning Commission make the following motions:

- 1) Adopt Resolution No. 20-___, adopting the Mitigated Negative Declaration Addendum as complete and determine that the Mitigated Negative Declaration Addendum is the appropriate level of environmental review for the proposed project;
- 2) Approve a Use Permit to allow for the operation of a Senior Care Facility (Medical Services – Extended Care) including 60 Assisted Living Units and 20 Memory Care Units, totaling 80 units (88 beds), based on the findings and conditions of approval contained in the staff report;
- 3) Approve a Design Review Permit to allow for the construction of a ~74,000 square foot facility on an existing 4.55-acre site based on the findings and conditions of approval contained in the staff report; and
- 4) Approve a Tree Permit to remove 28 protected trees on site based on the findings and conditions contained in the staff report.

BACKGROUND

The 4.55-acre site fronts Sunrise Boulevard to the west and is surrounded on the other three sides by low-density residential zoned parcels. The site has historically been used for a single-family dwelling and accessory uses. The single-family home was demolished in 2008. The site is rectangular in shape and is relatively flat. The remainder of the site is predominantly grasslands and other non-native plants with evidence of a previous agricultural use evident. There is also an existing tributary to Cripple Creek found along the northern and eastern portion of the site. Trees of various size and type are present on the property, scattered throughout the site.

In 2008, the Citrus Heights Planning Commission approved a similar proposed development for a 99-unit Senior Care Facility (UP-08-02 / DRP-08-03). In 2013, the Planning Commission approved a Use Permit Modification and Design Permit Modification (UPMOD-13-04 / DRPMOD-13-08) for the same project, reflecting minor changes to the design and reduction of overall units to 90. The applicant applied for an extension to the entitlement in 2015, and the approval expired on December 11, 2016.

PROJECT DESCRIPTION

The applicant is proposing to construct a two-story, 74,000 square foot senior care facility. The facility is comprised of 80 assisted living and memory care units, totaling 88 beds. Twenty of the units are proposed to be specifically for memory care to provide living assistance for persons experiencing Alzheimer's, dementia, or similar illness. The facility, which will be licensed by the State, will provide daily living assistance, medication administration, housekeeping, entertainment, transportation, and meal service. The facility will accommodate patients from various age and health conditions requiring varying levels of care.

Site Design

The site has been designed to address concerns from the various review agencies including Planning, Engineering, and Citrus Heights Water District. The applicant has focused on preserving the natural amenities on the site such as three of the four large Sycamores fronting Sunrise Boulevard and the tributary along the northern portion of the site. A creek setback of 45' is maintained along the tributary; no structures are permitted or proposed within this setback area.

As seen below, on the western portion of the Site Plan the primary access to the site is provided from a circular driveway with two access points along Sunrise Boulevard spaced approximately 200' apart. The north driveway will be gated, limited to emergency vehicles. The proposed driveway design

respects the existing Sycamore trees by leaving a large portion of the front of the site undeveloped save for a raised wooden deck intended for recreational use. The primary parking area for the site is located in the remaining area between Sunrise Boulevard and the proposed structure. A two-way emergency access/vanpool parking drive continues parallel to the northern property line and continues clockwise around the rear of the proposed structure.

SITE PLAN

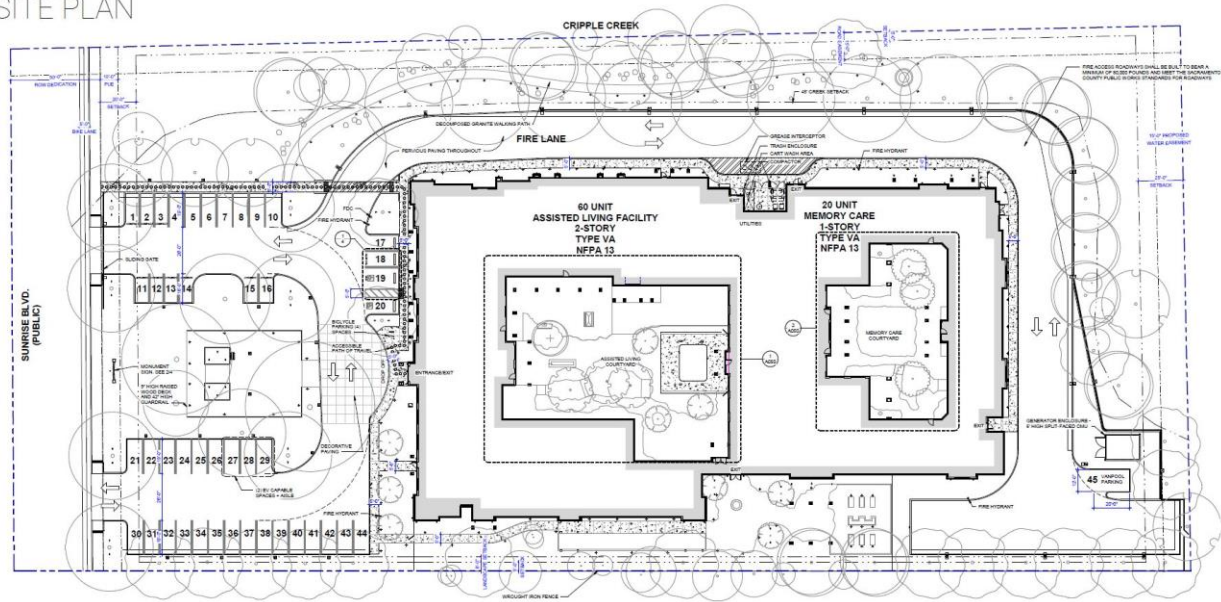


Figure 1: Site Plan

Architectural Design

The architecture of the Senior Care Facility can be considered Tuscan in nature with modern accents. The project includes large arched windows, tiled roofs, stucco, wood accents, and stone veneers. The building maintains a two-story profile across the entire front elevation, dropping to one story in back.



Figure 2: Front Elevation

Building Amenities

The project has been designed to provide several amenities for the users of the building including the following:

- Art studio
- Media room
- Dining area
- Exercise studios
- Family and TV rooms
- Activity/games room
- Library
- Pool
- Central landscaped courtyards

USE PERMIT (FILE #UP-19-02)

Use Permit – Description of Request

The applicant is requesting a Use Permit that would allow the construction of an approximately 74,000 square foot Senior Care Facility (Medical Services – Extended Care) that would accommodate 80 units, 20 of which would be memory care units. The applicant intends to operate a high quality assisted living facility.

The building would be divided into assisted living and memory care wings, with common areas available to all residents. The memory care wing would be secured 24 hours a day for security and well-being of the residents. The facility would maintain a full staff of directors, including Executive, Nursing, Dining, Activity, Maintenance, and Marketing, in addition to the full-time housekeeping and maintenance staff.

Use Permit – Analysis

The Citrus Heights Zoning Code requires that findings be made in order to approve a Conditional Use Permit. The required findings are listed below in italicized bold print and are followed by an evaluation of the map in relation to each finding.

- 1. The proposed use is allowed within the applicable zoning district and complies with all other applicable provisions of this Zoning Code and the Municipal Code.***

The project is consistent with the Very Low Density Residential General Plan Designation. Medical Services – Extended Care is permitted in the RD-1 zone with a Use Permit.

- 2. The proposed use is consistent with the General Plan and any applicable specific plan.***

The project will assist the city in implementing goals and policies found in the General Plan, including:

Policy 25.5 – Promote fair distribution of special needs facilities throughout the city to avoid over-concentration in any particular neighborhood, including assisted housing, below market rate projects, and senior housing.

Goal 28 – Ensure housing opportunities for all segments of the community.

Policy 28.5 – Encourage development of a variety of sizes, designs, and styles of housing so that residents will be encouraged to stay in Citrus Heights as their housing needs change.

3. The design, location, size, and operating characteristics of the proposed activity are compatible with the existing and future land uses in the vicinity.

The project has been designed to comply with the development standards and design guidelines outlined in the Zoning Code, as outlined in the findings for the Design Review Permit (following this section).

4. The site is physically suitable for the type, density and intensity of use being proposed, including access, utilities, and the absence of physical constraints.

The site is a good location for a facility of this nature. Generally facilities of this nature generate low traffic and noise levels, similar to what you may see in a residential neighborhood. The project is compatible with the surrounding residential uses.

5. Granting the permit would not be detrimental to the public interest, health, safety, convenience, or welfare, or materially injurious to person, property, or improvements in the vicinity and zoning district in which the property is located.

The project complies with all provisions of the Citrus Heights Zoning Code and does not pose any health, safety, or other risks to the subject property or any other in the vicinity.

Use Permit – Conclusion

Based upon the analysis above, staff concludes that the findings can be made to approve the Use Permit for the construction and operation of a 74,000 square foot, 80-unit senior care facility at the proposed location.

DESIGN REVIEW PERMIT (FILE #DRP-19-05)

Design Review Permit – Description of Request

The Design Review Permit is requested to allow for the development of an 80-unit senior care facility at the subject property. The proposed two-story structure will be 74,000 square feet and include a variety of amenities for the residents of the site to enjoy.

Design Review Permit – Analysis

The Citrus Heights Zoning Code requires that findings be made in order to approve a Design Review Permit. The required findings are listed below in italicized bold print and are followed by an evaluation of the map in relation to each finding.

- 1. The project is consistent with the General Plan, any applicable specific plan, development agreement and/or any previously approved planning permit;***
- 2. The project complies with the Zoning Code;***

The project has been designed to comply with the development standards and design guidelines outlined in the Zoning Code. Compliance with the relevant Zoning Code standards is discussed below:

Building Setback

The project meets the requirements of Zoning Code Section 106.26.010 that requires the following setbacks for structures within the RD-1 zone:

Setback Location	Required	Proposed
Front	20 feet	~121 feet
Rear	25 feet	~99 feet
Side	10 feet	~76 feet (north) ~28 feet (south)

The project has been designed to respect the privacy of the surrounding neighbors. The building setbacks are far greater than what would typically be required to maintain privacy.

Building Height

The maximum building height in the RD-1 zone is 30 feet. The building has been designed with a maximum height of 30' and a two-story elevation, with a one-story elevation in the rear. Therefore, the project complies with the maximum height requirement.

- 3. The project's architectural design and building massing and scale are appropriate to and compatible with the site surroundings and the community;**
- 4. The project provides attractive and desirable site layout and design, including building arrangement, exterior appearance and setbacks, drainage, fences and walls, grading, landscaping, lighting, signs, etc.;**
- 5. The project complies with all applicable design standards in Chapter 106.31 and/or other applicable city design guidelines and policies;**

Building Design

The applicant has submitted exterior elevation plans for the proposed project; refer to Sheets 1-2 and 5-7 of Exhibit A. The design of the facility can be considered Tuscan with large window and door opening (some arched), stone veneers, and tile roofing. The building integrates both an assisted living section and a separate memory care section all within a single structure. The memory care portion of the facility, located near the rear third of the building, includes controlled entrance/exit to ensure the safety of the memory-impaired residents. The assisted living portion of the facility reaches a maximum height of 30-feet facilitating two stories of assisted living units. The project was designed to minimize the impacts to the surrounding neighborhood, and provides several common landscaped courtyards in the center portion of the building, as well as an outdoor garden for the memory-impaired residents.

Grading / Walls

Although the site is relatively flat, a fair amount of grading is required to accommodate the site improvements. The grading associated with the emergency access road around the site will require retaining walls to facilitate the design. The design of retaining walls has been conditioned

to be subject to Planning and Engineering Division approval. (Design Review Permit Condition #11).

Lighting

The exterior lighting will accommodate the parking lot, provide safe lighting in exterior areas, and serve as accents to the building design. The project has been designed to ensure the lighting levels are reduced to conform to the Zoning Code requirement of 0.5 foot-candles within 2 feet of the property line. In addition, the project is conditioned to require all lights to be “full cut off” style to minimize light pollution into the night sky (Design Review Permit Condition of Approval #5).

Creekside Setback

The project meets the requirements of the Zoning Code Section 106.30.040 regarding development adjacent to creeks. The Zoning Code requires, “Each proposed structure shall be set back a distance of 2.5 times the height of the stream bank plus 30 feet or 30 feet outward from the stream bank, whichever distance is greater, as measured from the top of the stream bank outward.”

Based on these requirements the creekside setback is 45 feet from the southern edge of the creek (6' bank x 2.5 + 30' = 45'). The site has been designed to eliminate any unpermitted encroachments into this setback. A small portion of the ADA path of travel encroaches into this setback; however, the Zoning Code permits paths and trails to encroach into the creekside setback.

Additionally, the Biological Resources Assessment done by Helix Environmental Planning (Attachment 9) identifies that the creekside area is home to the elderberry plant. The plant, in some areas, houses a protected species called the Valley Elderberry Longhorn Beetle (VELB). In this case, Helix identified that due to the location and spacing of the plants from one another, it is not currently nor does it have the potential to be home to the VELB.

6. The project provides safe and efficient public access, circulation and parking, including bicycle and pedestrian accommodations where appropriate; and

Circulation

The project was designed to include a circulation pattern that allowed paved access to all sides of the building. The project has been specifically designed to ensure the roadway surrounding the structure is located entirely outside the creekside setback. The two-way road winds clockwise around the facility, ending in the rear at a fire department turnaround. The driveway ties into the main parking area near the main entry to the facility.

Parking

Section 106.36.040 of the Zoning Code specifies that Medical Services – Extended Care provide a minimum of 1 space per 3 beds. The total number of patient beds is 88 in 80 units; therefore requiring 30 parking spaces which is exceeded by the current site design. Forty-four of the 45 spaces have been provided at the front of the site to provide parking to visitors and staff members, with one vanpool parking space provided at the rear of the facility.

Section 106.36.040(d) also refers to discouraging excessive parking on a site to: “avoid the inefficient use of land, unnecessary pavement, and excessive storm water runoff from paved surfaces.” If the parking provided by a project exceeds 120% of what is required, the applicant has to justify the need for the additional parking.

The previously approved project on this site had a Condition of Approval which stated, “If parking on the site becomes an issue or twelve months after the facility is occupied or reasonable time thereafter, a parking assessment shall be conducted to determine if the parking provided for the site is adequate...” The original project was conditioned due to staff’s concern at the time that other similar sites experienced scarcity of parking during the half-hour period before and after employee shift changes. The current design anticipates this potential shortage, so additional parking has been included in the site design.

Portions of the parking encroach into the driplines of the three Sycamore trees that the site design strives to preserve. The applicant has worked with the arborist to develop a site design to minimize the impacts to these trees. The arborist has provided various mitigation measures including utilizing pervious concrete for the parking and access area located within the driplines of these trees (where feasible). Additional mitigation measures are provided in the attached Arborist Report (Attachment #4).

Public Improvements

The project has been conditioned to dedicate 20-feet of Right-of-Way and install full public improvements along Sunrise Boulevard (Design Review Permit Condition of Approval #13). The ultimate width of Sunrise Boulevard in this location will be 100-feet allowing for 4 lanes, center turn lane/median, bike lanes, curbs, gutters and sidewalks. The applicant will be required to install additional pavement width, curb, gutter, and separated 6’ sidewalk that tapers down adjacent to the property to the south of the site and tapers near the north end of the site at the location of the existing box culvert.

7. The proposal provides appropriate open space and landscaping, including the use of water efficient landscaping.

Landscaping

The applicant has submitted an arborist report that reviewed the existing trees and identified trees that are in the removal zone due to construction of the building. A variety of trees require removal (discussed below under the Tree Permit analysis), however several of the mature trees will be preserved, including three of the four large sycamore trees fronting Sunrise Boulevard.

The applicant has submitted a preliminary landscape plan that identifies tree varieties that will replace trees being removed and further enhance parking lot shading. The project has also been conditioned to provide a Final Tree Impact Assessment prior to beginning any construction work. This assessment will identify construction methods that should be used to protect the trees during construction and during the operation of the facility.

Design Review Permit - Conclusion

Based upon the analysis above, staff concludes that the findings can be made to approve the Design Review Permit for the construction and operation of a 74,000 square foot, 80-unit senior care facility at the proposed location.

TREE PERMIT (FILE #TP-19-58)

Tree Permit – Analysis

Chapter 106.39 of the Zoning Code contains the city’s Tree Preservation and Protection measures. The purpose of this is to preserve and protect the city’s remaining native Oak trees, heritage trees, mature trees, and others as identified in the Zoning Code. The required findings are listed below in italicized bold print and are followed by an evaluation of the map in relation to each finding.

- 1. The 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 this Chapter; and**
- 2. Measures have been incorporated into the project or permit to mitigate impacts to remaining trees or to replace the trees removed.**

The site contains 81 trees greater than 4" DBH dispersed throughout the parcel. Exhibit A shows 36 trees (703-inches total DBH) proposed for removal for the construction of the facility or related improvements. The remainder of the trees surveyed on the site are proposed to remain. Of the 36 trees proposed for removal, 5 (146-inches DBH) are either below the size threshold or are a species that are not protected by the Tree Preservation Ordinance. Thirty-one (31) trees (557-inches DBH) proposed for removal are protected by the Tree Preservation Ordinance and will require mitigation. Mitigation for the loss of these trees includes replanting other tree species acceptable by the city on the site, which would be coordinated with future development plans on site, or the applicant could pay into a tree preservation fund (\$298 per inch of diameter) managed by the city.

Staff has included as a condition of approval in the report that the applicant evaluate the potential impacts of the protected trees and provide mitigation measures to lessen any disruption to the trees during construction activities within the dripline of the remaining trees. A final Tree Assessment will be required based on the construction documents for the project. Mitigation has been included to ensure the survival of the remaining trees onsite.

Tree Permit – Conclusion

Based on the analysis above, including the fact that the applicants have attempted to save as many trees as feasible and the fact that the applicants will be required to mitigate the loss of any trees proposed for removal, staff recommends approval of the Tree Permit. This approval is subject to a condition that each inch of protected tree, identified for removal in this staff report and as shown on Exhibit A, would be replaced by a 15-gallon size tree, within the balance of the site or pay into the city's tree preservation fund (\$298 per inch of diameter) in lieu of any required tree planting, or a combination of both. With this condition in place the project would meet the intent of the Tree Preservation Ordinance, which is to preserve trees to the greatest extent possible.

ENVIRONMENTAL DETERMINATION

As the lead agency under CEQA, the city prepared a draft Initial Study/Mitigated Negative Declaration (IS/MND) in 2008 which evaluated the potential environmental effects of a similar proposed project (a 99-unit assisted living facility) with a nearly identical footprint on the same site. Based on the findings of the draft IS/MND, the city determined that the proposed project, with incorporation of mitigation measures, would not have a significant impact on the environment. The Citrus Heights Planning Commission approved the project on October 22, 2008. The conclusion of no significant impacts from the 2008 IS/MND was supported by the following findings:

- The proposed project would result in no or less-than-significant impacts to land use and planning, population and housing, geologic problems, water, air quality, transportation and circulation, energy and mineral resources, hazards, public services, utilities and service systems, aesthetics, and mandatory findings of significance.
- With incorporation of mitigation measures, the project would result in less-than-significant impacts to biological resources, cultural resources, and noise.

- No substantial evidence exists that the proposed project would have a negative or adverse effect on the environment.
- The proposed project would not substantially degrade the quality of the environment, significantly reduce the habitat for fish and wildlife species, result in fish or wildlife populations below a self-sustaining level, reduce or restrict the range of a special-status species, or eliminate important examples of California history or prehistory.
- The proposed project with incorporation of mitigation measures would not have environmental effects that would cause substantial direct or indirect adverse effects on humans.
- The proposed project would not have environmental effects that are individually limited but cumulatively considerable.

The draft IS/MND, Notice of Intent to Adopt a Mitigated Negative Declaration (NOI), and public review of the draft IS/MND were prepared, posted, and conducted in accordance with Sections 15070 through 15073 and 15105 of the CEQA Guidelines. The public review period occurred from September 24, 2008, through October 14, 2008. No comments were received during the public comment period. A Mitigation Monitoring Plan (dated September 24, 2008) was developed and required the following measures (condensed):

- **BIO 1:** Applicant will schedule tree removal outside of bird nesting and fledging periods.
- **BIO 2:** Obtain and comply with all permits related to water quality requirements.
- **BIO 3:** Will follow all standard construction best management practices, including erosion control and runoff contamination control.
- **BIO 4:** A biologist approved by the City of Citrus Heights shall designate environmentally sensitive areas on the project site to include the wetland and unnamed drainage.
- **BIO 5:** The environmentally sensitive areas will be off-limits to construction activities including grading and clearing and grubbing
- **BIO 6:** All construction personnel will be notified of the environmentally sensitive areas.
- **BIO 7:** If construction of the project cannot avoid impacts to any environmentally sensitive area, the U.S. Army Corps of Engineers should be consulted.
- **BIO 8:** The applicant shall avoid construction impacts on any protected trees on site.
- **CULTURAL 1 (*amended to reflect recent legislation*):** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery and local Native American tribes consulted.
- **NOISE 1:** Mechanical ventilation shall be provided to allow occupants to close windows and doors in order to achieve the desired acoustical isolation.

CEQA recognizes that one or more of the following changes may occur between the date a MND is adopted and a project is fully implemented:

1. The scope of the project may change;
2. The environmental setting in which the project is located may change;
3. Certain environmental laws, regulations, or policies may change; and/or
4. Previously unknown information may arise.

Planning staff prepared an Addendum to the 2008 Mitigated Negative Declaration, per CEQA Guidelines Section 15050 and 15164, because changes made to the previous project do not raise important new issues about the effects on the environment. To confirm the applicability of the findings provided in the Addendum, the currently proposed project has been evaluated for potential impacts to the 2008 IS/MND. Several technical studies were completed to evaluate any new potential environmental impacts associated with the currently proposed project. The following studies are included as Exhibits #B-D:

- *Biological Resources Assessment*. Helix Environmental Planning, July 2018
- *Traffic Impact Study*. Kimley Horn, June 2019
- *Arborist Report*. Helix Environmental Planning, February 2019

Based on the supplemental studies, implementing the proposed project would result in none of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent negative declaration. In summary, there are no altered circumstances or new information of substantial importance since adoption of the 2008 IS/MND, and the proposed project as described above:

- Would not result in any new significant environmental effects;
- Would not substantially increase the severity of previously identified effects;
- Would not result in mitigation measures or alternatives previously found to be infeasible becoming feasible; and
- Would not result in availability/implementation of mitigation measures or alternatives that are considerably different from those analyzed in the previous document that would substantially reduce one or more significant effects on the environment.

PUBLIC OUTREACH

Property owners within 500 feet of the project site were mailed a meeting notice as required and a notice of this hearing was published in the Sacramento Bee. In addition, the nearby Sunrise Ranch Neighborhood Association (NA #6) was notified of the project.

No written comments have been received at the time this staff report was produced.

FINDINGS FOR APPROVAL – USE PERMIT (FILE # UP-19-02)

- *The proposed project is consistent with the General Plan, Municipal Code, and the Zoning Ordinance and the project assists the city in reaching goals outlined in the General Plan;*
- *The design, location, size, and operating characteristics of the facility are compatible with the existing and future land uses in the vicinity in that the relatively low traffic and noise volumes as well as the design of the facility are compatible with the surroundings;*
- *The site is physically suitable for the type, density and intensity of the use, including access, utilities, and the absence of physical constraints as the project has been designed and mitigated to avoid impacts to the sensitive areas on the site; and*
- *Granting the permit would not be detrimental to the public interest, health, safety, convenience, or welfare, or materially injurious to persons, property, or improvements in the vicinity and zoning district in which the project is located.*

FINDINGS FOR APPROVAL – DESIGN REVIEW PERMIT (FILE # DRP-19-05)

- *The senior care facility is consistent with the Municipal Code and the Zoning Ordinance and the project assists the city in reaching goals outlined in the General Plan including:*
 - *Policy 25.5 – Promote fair distribution of special needs facilities throughout the city to avoid over-concentration in any particular neighborhood, including assisted housing, below market rate projects, and senior housing;*
 - *Goal 28 – Ensure housing opportunities for all segments of the community; and*
 - *Policy 28.5 – Encourage development of a variety of sizes, designs, and styles of housing so that residents will be encouraged to stay in Citrus Heights as their housing needs change.*
- *The project complies with the Zoning Code including setbacks and other development standards;*
- *The project's architectural design and building massing and scale are appropriate to and compatible with the site surroundings and the community;*
- *The project provides attractive and desirable site layout and design, including building arrangement, exterior appearance and setbacks, drainage, fences and walls, grading, landscaping, lighting, signs, etc.;*
- *The project complies with all applicable design standards in Chapter 106.31 and other applicable city design guidelines and policies;*
- *The project provides safe and efficient public access, circulation and parking, including bicycle and pedestrian accommodations where appropriate; and*
- *The project provides open space and landscaping, including the use of water efficient landscaping.*

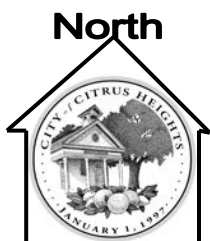
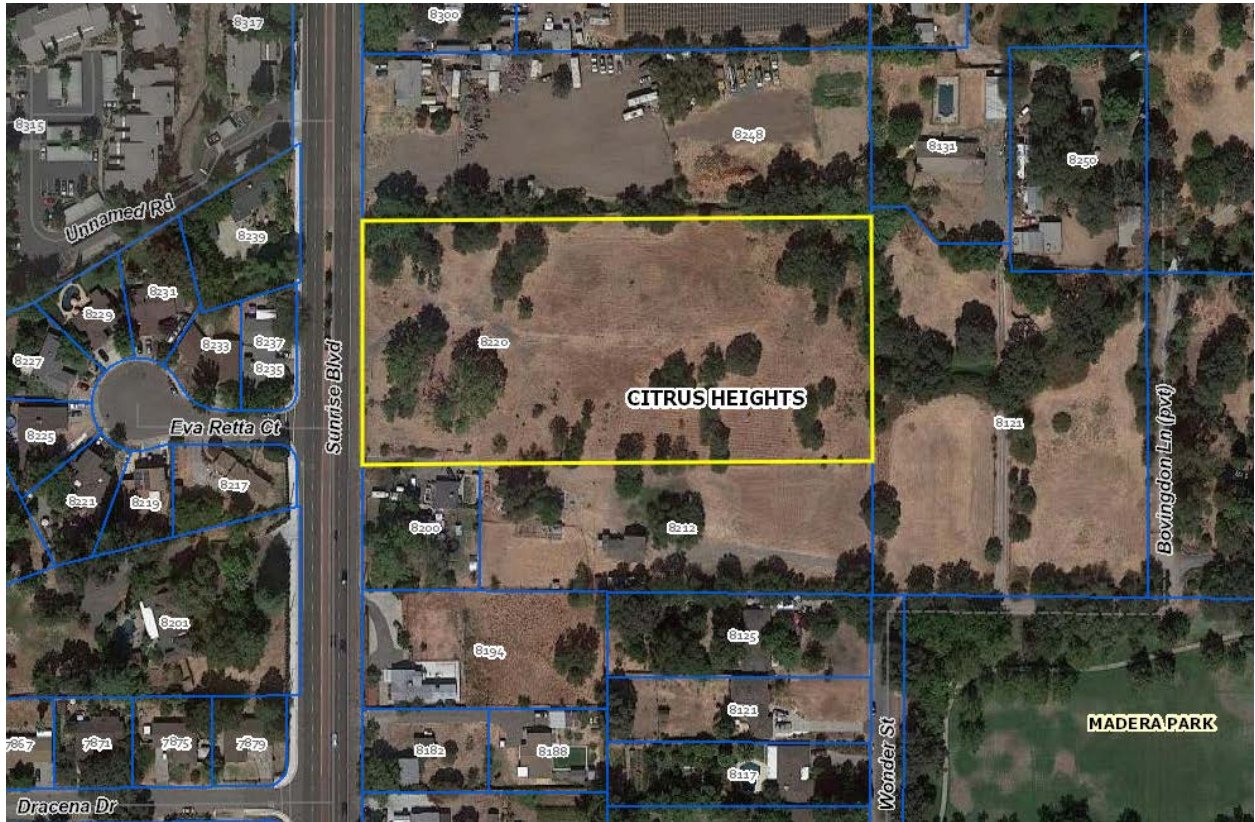
RECOMMENDED MOTIONS

The Planning Division recommends the Planning Commission make the following motions:

- 1) Adopt Resolution No. 20-___, approving the Mitigated Negative Declaration Addendum as complete and determine that the 2008 Mitigated Negative Declaration is appropriate for the proposed project;
- 2) Approve a Use Permit to allow for the operation of a Senior Care Facility (Medical Services – Extended Care) including 60 Assisted Living Units and 20 Memory Care Units, totaling 88 beds, based on the findings and conditions of approval contained in the staff report;
- 3) Approve a Design Review Permit to allow for the construction of a ~74,000 square foot facility on an existing 4.55-acre site based on the findings and conditions of approval contained in the staff report; and
- 4) Approve a Tree Permit to remove 28 protected trees on site based on the findings and conditions contained in the staff report.

Attachments:

- 1) Vicinity Map
- 2) Resolution 20-__
- 3) Conditions of Approval
- 4) Addendum to Mitigated Negative Declaration / Initial Study – Carefield Assisted Living & Memory Care 8220 Sunrise Boulevard
- 5) Mitigation Monitoring and Reporting Program
- 6) Greenhouse Gas Reduction Checklist
- 7) Project Description
- 8) Full Plan Set
- 9) *Biological Resources Assessment*. Helix Environmental Planning, July 2018
- 10) *Traffic Impact Study*. Kimley Horn, June 2019
- 11) *Arborist Report*. Helix Environmental Planning, February 2019



Attachment 1

**Carefield Citrus Heights
Design Review & Use Permit
8220 Sunrise Boulevard
DRP-19-05 & UP-19-02**

RESOLUTION NO. 2020-__

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CITRUS HEIGHTS, CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION ADDENDUM PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA), APPROVING A USE PERMIT, APPROVING A DESIGN REVIEW PERMIT, AND APPROVING A TREE PERMIT FOR CAREFIELD SENIOR CARE FACILITY PROJECT

WHEREAS, LRS Paul Boundy Architects submitted an application for approval of:

- A Use Permit to construct and operate a Senior Care Facility on a single-family residential zoned parcel at 8220 Sunrise Boulevard;
- A Design Review Permit to allow the construction of a Senior Care Facility; and
- A Tree Permit to remove certain protected trees for the development of the project.

WHEREAS, the Planning Commission held a public hearing on February 26, 2020, wherein public testimony was taken and based upon a Mitigated Negative Declaration Addendum, potential impacts could be avoided or reduced to a level of insignificance by mitigation measures; and

NOW, THEREFORE, BE IT RESOLVED that the Citrus Heights Planning Commission hereby finds as follows:

Findings for an Mitigated Negative Declaration:

1. A Mitigated Negative Declaration Addendum was prepared for the Carefield Senior Care Facility project and proper notice provided in accordance with CEQA and local guidelines.
2. That based upon the Mitigated Negative Declaration Addendum, potential impacts resulting from the project have been identified. Mitigation measures have been proposed and agreed to by the applicant as a condition of project approval that will reduce potential impacts to less than significant. In addition, there is no substantial evidence that supports a fair argument that the project, as conditioned and mitigated, would have a significant effect on the environment.
3. That the project does not have the potential to have a significant adverse impact on wildlife resources as defined in the State Fish and Game Code, either individually or cumulatively and is not exempt from Fish and Game filing fees.
4. That the project is not located on a site listed on any Hazardous Waste Site List compiled by the State pursuant to Section 65962.5 of the California Government Code.

5. That the Planning Commission reviewed the Mitigated Negative Declaration Addendum and considered public comments before making a recommendation on the project,
6. That a Mitigation Monitoring Program has been prepared to ensure compliance with the adopted mitigation measures, which Mitigation Monitoring Program was considered by the Citrus Heights Planning Commission and which Mitigation Monitoring Program is made a part of this resolution.
7. That the Mitigated Negative Declaration Addendum prepared concerning the Carefield Senior Care Facility project reflects the independent judgment and analysis of the Planning Commission of the City of Citrus Heights.
8. The Planning Commission adopts as “final” the Carefield Senior Care Facility Mitigated Negative Declaration Addendum comprised of: the Mitigated Negative Declaration Addendum (attached as Attachment 2a); and the Mitigation Monitoring Plan (attached as Attachment 2b).
9. That the record of proceedings of the decision on the project is available for public review at the City of Citrus Heights Community and Economic Development Department, 6360 Fountain Square Drive, Citrus Heights, California.

BE IT FURTHER RESOLVED that the Citrus Heights Planning Commission in reference to the potential impacts identified in the Initial Study, hereby adopts the Mitigated Negative Declaration Addendum prepared for Carefield Senior Care Facility project including the mitigation measures (contained within the attached Mitigated Negative Declaration Addendum and Mitigation Monitoring Program) and included in this resolution by reference.

PASSED AND ADOPTED by the Planning Commission of the City of Citrus Heights, California this 26th day of February 2020, by the following roll call vote:

Commission Members:

AYES:
NOES:
ABSENT:
ABSTAIN:

Attested:

Approved:

**Karen Ramsay, Planning
Commission Secretary**

Tim Schaefer, Chairperson

Attachments:

- a. Mitigated Negative Declaration Addendum
- b. Mitigation Monitoring Program

CONDITIONS OF APPROVAL – USE PERMIT (FILE # UP-19-02)

- 1) The applicant shall comply with all City of Citrus Heights Codes and Regulations, including but not limited to the Citrus Heights Municipal Code and Zoning Code, Uniform Building Code; Uniform Fire Code and Sacramento County Environmental Health Department standards.
- 2) The project is approved as described in this report and as shown in Attachment 6 and described in the Applicant's project description and shall conform to all conditions of approval and exhibits included within this project; File # UP-19-02 and DRP-19-05 for the construction of a 74,000 square foot assisted living facility including 80 senior care units located at 8220 Sunrise Boulevard. The total number of patient beds shall not exceed 88 beds. [Planning]
- 3) The Use Permit approval is valid for two years. The Use Permit will expire on February 26, 2022 unless the permit is effectuated or a time extension has been granted. [Planning]
- 4) Prior to occupancy, the applicant shall supply the city documentation of the State license to operate an assisted living facility at the proposed location. Any modifications to the State license shall require Planning Division approval. [Planning]
- 5) Applicant agrees to indemnify, defend, and hold harmless the City, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable actions or other proceedings instituted by any person not a party to this Permit challenging the validity of the Agreement or any Project Approval or any Subsequent Project Approval, or otherwise arising out of or stemming from this Agreement. Developer may select its own legal counsel to represent Developer's interests at Developer's sole cost and expense. The parties shall cooperate in defending such action or proceeding. Developer shall pay for City's costs of defense, whether directly or by timely reimbursement on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by City in defense of any such action or other proceeding, plus staff and City Attorney time spent in regard to defense of the action or proceeding. The parties shall use best efforts to select mutually agreeable defense counsel but, if the parties cannot reach agreement, City may select its own legal counsel and Developer agrees to pay directly or timely reimburse on a monthly basis City for all such court costs, attorney fees, and time referenced herein.

CONDITIONS OF APPROVAL – DESIGN REVIEW PERMIT (FILE # DRP-19-05)

- 1) The applicant shall comply with all City of Citrus Heights Codes and Regulations, including but not limited to the Citrus Heights Municipal Code and Zoning Code, California Building Standards. [Planning]
- 2) The project is approved as described in this report and as shown in Attachments 1 through 9 and described in the Applicant's project description and shall conform to all conditions of approval and exhibits included within this project; File # UP-19-02 and DRP-19-05 for the construction of a 74,000 square foot assisted living facility including 80 senior care units located at 8220 Sunrise Boulevard. The total number of patient beds shall not exceed 88 beds. [Planning]The project is approved as shown in Attachments 7 & 8 and as conditioned

or modified below. The project shall comply with the requirements of all agencies including service providers. [Planning]

- 3) Minor modifications to the design of the project, including site layout, colors and materials, may be approved by Community Development staff, provided such changes are consistent with the overall design as approved herein. Major modifications will require Planning Commission approval. [Planning]
- 4) This Design Review Permit approval does not include any signs. All sign plans must receive separate review and approval by the Planning Division prior to installation of any new signs. [Planning]
- 5) All outdoor lighting including parking lot lighting shall be designed with full shields, and cut off flat lenses to ensure that all light from any fixture will not direct light skyward, and will minimize light pollution consistent with section 106.35 of the Zoning Code. Flood lights are strictly prohibited. [Planning]
- 6) Rooftop equipment shall be screened from public view subject to Planning Division Approval. [Planning]
- 7) Any plans submitted to the Building Division for review and approval shall indicate all approved revisions/alterations as approved by the Planning Commission. [Planning]
- 8) The applicant shall comply with all mitigation measures outlined in the Staff Report, Mitigated Negative Declaration Addendum, and Mitigation Monitoring Plan as listed below:
 - a) **BIO 1:** Schedule tree removal and ground-clearing activities prior to the initiation of nesting activity (April) or after fledging (August)

If this is infeasible, conduct pre-construction surveys between February 15 and August 15 in potential nesting habitat to identify nest sites. If an active raptor nest is observed within 350 feet of the project site, contact CDFG and establish a 350-foot buffer around the nest tree. Prohibit construction activities in the buffer zone until the young have fledged. [Planning]
 - b) **BIO 2:** The contractor shall adhere to all requirements included in the relevant project permits and approvals as applicable such as the Stormwater Pollution Prevention plan National Pollutant Discharge Elimination System permit, and/or other permits and approvals from the City of Citrus Heights pertaining to water quality requirements. [Planning]
 - c) **BIO 3:** Standard construction best management practices will be implemented throughout construction in order to avoid and minimize adverse effects to the water quality within the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminate runoff from the construction areas into the wetland or unnamed drainage. [Planning]
 - d) **BIO 4:** Prior to construction, a biologist approved by the City of Citrus Heights shall designate environmentally sensitive areas on the project site to include any wetland and unnamed drainage. The biologist will demarcate the boundaries of the environmental sensitive areas with flagging. To ensure that construction equipment and personnel do not affect these environmentally sensitive areas, the contractor will erect orange barrier fencing or other similar approved fencing to clearly define their boundaries. [Planning]
 - e) **BIO 5:** The environmentally sensitive areas will be off limits to construction activities including grading and clearing and grubbing. No construction personnel or equipment will be allowed in the environmentally sensitive areas. No parking of vehicles or storage

of construction equipment, materials, or chemicals such as oil or gasoline will be allowed within the environmentally sensitive area. [Planning]

- f) **BIO 6:** All construction personnel will be notified of the environmentally sensitive areas on the project site and will be instructed regarding the avoidance and minimization measures included in the project approvals. [Planning]
- g) **BIO 7:** If construction of the project cannot avoid impacts to the environmentally sensitive area, the U.S. Army Corp of Engineers should be contacted regarding the potential need for a Section 404 Permit and the Department of Fish and Game should be notified under the Lake and Streambed Alteration Program (1600) regarding the potential need for a Streambed Alteration Agreement. If a Nationwide Permit is required, a Water Quality Certification (401 Permit) will also be required from the Regional Water Quality Control Board. [Planning]
- h) **BIO 8:** The applicant shall submit a final Tree Impact Assessment. The tree impact assessment report shall include all preservation measures, including details for modified curbs and paving that the applicant shall undertake during construction to ensure the long-term health and safety of the trees. The impact assessment report shall take into account improvement plans that show any encroachment into the drip-lines of any protected trees. [Planning]
- i) **CULTURAL 1 (*amended to reflect recent legislation*):** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the City of Citrus Heights, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Sacramento County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public

Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code).

This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction. [Planning]

- j) **NOISE 1:** Mechanical ventilation shall be provided to allow occupants to close windows and doors in order to achieve the desired acoustical isolation. [Planning]

Prior to Issuance of Building Permit

- 9) Final detailed landscaping and irrigation plans for the project site shall be submitted to Planning staff prior to issuance of any building permits. [Planning]
- 10) A Final Tree Impact Assessment shall be submitted and approved by the Planning Division prior to issuance of any building permits. The Impact Assessment shall assess construction impacts to the existing trees as well as outline construction methods that shall be used to protect the trees during construction of the project. [Planning]
- 11) The design and materials for any proposed retaining walls shall be approved by the Planning and Engineering Divisions prior to issuance of building permits. Anti-graffiti coating is required. [Planning]
- 12) Prior to issuance of building permits, Development Impact Fee shall be paid. Rates shall be calculated during the building permitting process. [Engineering]
- 13) The following dedications shall be completed prior to issuance of the Building Permit:
 - a) Dedicate 18-ft wide Public Utilities & Pedestrian Easement (PUPE) along Sunrise Boulevard.
 - b) Dedicate additional Right-of-Way, if any, that is required to accommodate required frontage improvements along Sunrise Boulevard. *This includes the future box culvert extension located at the NW corner of the parcel.*
 - c) For the existing water line and the required 18-in SD pipe, dedicate a 15-ft wide water easement and a second 15-ft drainage easement along the east property line. The easements can overlay each other as long as there is a minimum 10-ft separation between pipes measured from outer walls of pipes.
 - d) Dedicate a minimum 15-ft wide Drainage Easement along the north property line for maintenance of the existing creek.
 - e) Dedicate a maintenance vehicle access easement for the city's crews to maintain the drainage facilities along the north and east property lines. This could be part of the fire lane access easement. [Engineering]
- 14) The owner must contact Permit Services Unit at PermitServices@sacsewer.com or by phone at (916) 876-6100 to determine if sewer impact fees are due. Fees are to be paid prior to the issuance of building permits. [SASD]
- 15) SASD requires each building on each lot with a sewage source to have a separate connection to SASD's sewer system. If there is more than one building in any single parcel and the parcel is not proposed for split, then each building on that parcel must have a separate connection to a private onsite sewer line or a separate connection to the SASD public sewer line. These improvements must be shown on the plans. [SASD]

- 16) SASD requires each building on each lot with a sewage source to have a separate connection to SASD's sewer system. If there is more than one building in any single parcel and the parcel is not proposed for split, then each building on that parcel must have a separate connection to a private onsite sewer line or a separate connection to the SASD public sewer line. These improvements must be shown on the plans. [SASD]
- 17) Show on the plans how Fire Lanes will be marked. Fire Lane identification shall be provided along the required fire access roadway. Fire Lane identification shall be in accordance with the Sacramento Metro Fire Districts Fire Prevention Standard #3 and the California Vehicle Code. Vehicle parking is prohibited on any street less than 28 feet in width. Vehicle parking is permitted on both sides of streets 36 feet or more in width. Roadway widths shall be measured between the gutter-line or edge of pavement on opposite sides of the road. Identification of fire apparatus access roadways may be required on private roads. [Fire]
- 18) All perimeter gates and fences shall be permitted and installed in accordance with the Sacramento County Emergency Access Gates and Barriers Standard. [Fire]
- 19) Provide a note on the plan that reads, "Fire access roadways shall be built to bear a minimum of 80,000 pounds and meet the Sacramento County Public Works Standards for roadways." A report, prepared by a registered geotechnical engineer, verifying the ability of the road to bear the required minimum weight, shall be submitted with any plan indicating construction of roadway. Verification of constructed roadway shall be provided by a registered geotechnical engineer prior to final of the project. [Fire]
- 20) The applicant shall meet the following: Civil Site Plans and Architectural Plans shall be submitted and approved prior to Final Building Permit being issued. Fire Service Underground, Fire Sprinkler and Fire Alarm plans shall be submitted prior to Final Building Permit being issued. Please note: The Sacramento Metro Fire District **does not** allow deferred submittals for Fire Sprinkler and/or Fire Alarm plans. [Fire]
- 21) Approved numbers or addresses shall be placed on all new or existing buildings in such a position as to be easily read from the street or road fronting the property. The minimum size of the numbers shall not be less than twelve (12) inches and shall be mounted immediately adjacent to a light source and shall also contrast with their background. [Fire]

Other Conditions of Approval

- 22) The following frontage improvements are required along Sunrise Boulevard and shall be constructed per city Standards:
 - a) Separated 6-ft wide sidewalks (minimum 5-ft wide sidewalk with 6-in wide vertical curb over the existing SD box culvert at the NW corner of the parcel). Sidewalks shall meet all accessibility requirements.
 - b) Install a LID (Low Impact Design) storm drain inlet between the south side of the creek and the proposed north driveway to capture runoff along Sunrise Blvd. Please contact Engineering for design guidelines.
 - c) Type 2 (vertical) curbs and gutters.
 - d) Class II Bike Lane.
 - e) Street paving widening (as needed).
 - f) Two streetlights (Type A, LED).
 - g) Storm drain system as designed for the project.
 - h) At the NW corner of the parcel, the frontage improvements over the existing box culvert shall match the dimensions & improvements located along the west side of Sunrise Boulevard. However, the height of the existing headwall & rail will need to be modified to meet current accessibility requirements. It is the responsibility of the applicant to verify whether these modifications require permits from California Fish & Wildlife

- (CDFW) and/or U.S. Army Corps of Engineers (USACE). These frontage improvements do not appear to require an extension of the existing box culvert on the east side of the street in order to accommodate the new improvements. However, if during the design phase the box culvert needs to be extended; approvals from California Fish & Wildlife (CDFW) and/or U.S. Army Corps of Engineers (USACE) are required.
- i) Proposed driveways shall be Type A (commercial) driveways.
 - j) Existing power poles may need to be relocated depending on layout of frontage improvements. [Engineering]
- 23) The south driveway shall be aligned with Eva Rita Court on the west side of Sunrise Boulevard. [Engineering]
- 24) The location of the proposed gate across the EVA (Emergency Vehicle Access) driveway shall be approved by Sacramento Metro Fire District and the city's Traffic Engineer to assure that use of the gate will not cause vehicle queuing problems onto Sunrise Boulevard. [Engineering]
- 25) The EVA driveway should be designed in such a manner as not to be mistaken for a driveway into the project. [Engineering]
- 26) All masonry walls for this development, shall have anti-graffiti coating on sides that face the public streets and/or public open space. [Engineering]
- 27) Landscaping between the back of curb and sidewalk shall be maintained by the property owner. [Engineering]
- 28) Plantings adjacent to the driveways shall comply with the visibility restriction requirements per Detail 4-18 (Sac Co Imp Stds). [Engineering]
- 29) Site shall meet the pre- and post-construction Best Management Practices (BMP's) and Low-Impact Development (LID) design for Stormwater Quality Mitigation per State of California requirements. The city is a member of the Sacramento Stormwater Quality Partnership and uses their guidelines and requirements. [Engineering]
- 30) Property owner shall complete a storm-water maintenance declaration for the proposed stormwater treatment system(s) on the site. Declaration shall specify owner's ongoing maintenance responsibilities and allow periodic city inspections of the stormwater treatment devices. Declaration shall be executed prior to issuance of the Certificate of Occupancy for any building on site. [Engineering]
- 31) Project must comply with the State's Stormwater Trash Amendment requiring 100% trash capture of all trash, litter and debris that flows through the storm drain systems. Maintenance plan for the trash capture elements shall be included in the required stormwater maintenance declaration. [Engineering]
- 32) The project's post-development (proposed) stormwater runoff cannot exceed the pre-development (existing) runoff. [Engineering]
- 33) Project shall adhere to the State of California's General Construction Permit requirements. A Storm Water Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the city's Engineering Division prior to any grading or construction on-site. [Engineering]
- 34) Submit a copy of the project's California Notice of Intent (NOI) to the city's Engineering Division prior to any grading or construction on-site. [Engineering]
- 35) Roof drains for the buildings shall not directly connect into the storm drain system. Downspouts shall flow to rain garden, landscaped areas, bio-swale, and/or other approved filtering methods before entering the city's storm drain system. [Engineering]

- 36) A trash enclosure shall be provided that is:
- a) Covered,
 - b) Prevents run on, or run off, and
 - c) Drains to a sanitary sewer.
 - d) It is preferable to also have a hose bib connection to the water system to facilitate cleaning needs.
 - e) If alternative trash handling is proposed, it must be clearly identified on the civil plans including location, capacities, and handling processes. [Engineering]
- 37) The walkway within the creek setback area shall be constructed of a permeable (DG, pavers, etc.) surface. [Engineering]
- 38) The development's stormwater runoff is proposed to discharge into the creek. The discharge into the creek shall be designed such that the slopes of the creek are protected from erosion. Rip-rap outfall or other similar protection is needed. Proposed erosion protection will likely require approvals from California Fish & Wildlife (CDFW) and/or U.S. Army Corps of Engineers (USACE). The applicant shall obtain required approvals from the CDFW and/or USACE or provide written notice from these agencies confirming project is exempt from permits. [Engineering]
- 39) Applicant is required to provide a drainage plan to identify how the additional drainage created by the proposed project will be properly routed to an approved public drainage facility or mitigated for the 100-year design storm. One method for compliance in lieu of the 100-year analysis is to incorporate additional Low Impact Development (LID) and Best Management Practice (BMP) features to reduce stormwater impacts. [Engineering]
- 40) The Zoning Creek Setback prohibits any structures within the setback area. Setback is calculated as 30 feet plus 2.5 time the depth of the creek/channel (as measured from the top of creek bank). [Engineering]
- 41) The emergency generator cannot be located within any easements because the generator may inhibit access for maintenance & repairs to the underground utilities. [Engineering]
- 42) Any work within the city's Right-of-Way (ROW) requires an Encroachment Permit from the General Services Department. [Engineering]
- 43) A 12-inch water main will be required across the entire frontage of the property along the east side of Sunrise Boulevard with two tie-in connections across Sunrise Boulevard. [CHWD]
- 44) A looped water main design will be required for the site with two connections to the aforementioned 12-inch water main and at least one connection to the existing 10-inch water main. [CHWD]
- 45) An easement to the District will be required for District water facilities that are located within the parcel (if not dedicated as private by isolation backflow devices from the main along Sunrise Boulevard) but are outside of the public road Right of Way and Public Utility Easement. [CHWD]
- 46) A new metered domestic water service(s) will need to be installed to serve the property, size(s) dependent upon water demands. [CHWD]
- 47) A dedicated metered irrigation service will need to be installed to serve the property. [CHWD]
- 48) A backflow prevention device with insulated cage will be required for the metered irrigation service. [CHWD]

- 49) The existing on-site private water lines being served through the existing water service to be abandoned should be located and removed in their entirety and not abandoned in place. [CHWD]
- 50) Applicant agrees to indemnify, defend, and hold harmless the City, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable actions or other proceedings instituted by any person not a party to this Permit challenging the validity of the Agreement or any Project Approval or any Subsequent Project Approval, or otherwise arising out of or stemming from this Agreement. Developer may select its own legal counsel to represent Developer's interests at Developer's sole cost and expense. The parties shall cooperate in defending such action or proceeding. Developer shall pay for City's costs of defense, whether directly or by timely reimbursement on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by City in defense of any such action or other proceeding, plus staff and City Attorney time spent in regard to defense of the action or proceeding. The parties shall use best efforts to select mutually agreeable defense counsel but, if the parties cannot reach agreement, City may select its own legal counsel and Developer agrees to pay directly or timely reimburse on a monthly basis City for all such court costs, attorney fees, and time referenced herein.

CONDITIONS OF APPROVAL – TREE PERMIT (FILE # TP-19-58)

- 1) **BIO 8:** The applicant shall submit a final Tree Impact Assessment. The tree impact assessment report shall include all preservation measures, including details for modified curbs and paving that the applicant shall undertake during construction to ensure the long-term health and safety of the trees. The impact assessment report shall take into account improvement plans that show any encroachment into the drip-lines of any protected trees. [Planning]
- 2) No activity within the dripline of any tree beyond that identified within this report is permitted without approval from the Planning Division as identified in Attachment 11. Only those trees identified as appropriate for removal, in accordance with Attachment 11 are authorized for removal, in accordance with the information provided earlier in this staff report. [Planning]
- 3) All recommendations contained in the Arborist Report shall be incorporated as part of these conditions except as modified herein. This includes:
 - Maintenance pruning to remove deadwood and excessive weight and minor clearance pruning;
 - Regrading and mulching as indicated;
 - Deep root fertilization; and
 - Installation of cable system when called for. [Planning]
- 4) The conditions of approval shall be distributed to all contractors and subcontractors who have access to the site. It is the responsibility of the property owners and contractor to inform all subcontractors of the tree preservation requirements. [Planning]

Prior to Issuance of a Building Permit

- 5) A fencing plan shall be shown on the approved site plan demonstrating the dripline for the affected trees. The fencing plan shall be reviewed and approved by the Planning Department prior to the placement of the protective fencing. [Planning]

- 6) The applicant shall install a minimum of a five-foot high chain link fence (or acceptable alternative) at the outermost edge of the dripline of the trees. Signs must be installed by the applicant on the temporary fence at least two (2) equidistant locations to be clearly visible from the front of the lot. 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 DEPARTMENT”

[Planning]

- 7) The applicant shall contact the Planning Department to inspect and approve the temporary fencing and signs around the protected zones before beginning any construction. [Planning]
- 8) All pruning shall be completed prior to the beginning of construction. Pruning shall be done by an Arborist or under the direct supervision of a Certified Arborist, in conformance with International Society of Arboriculturalists (I.S.A.) standards. [Planning]
- 9) Any watering or deep root fertilization which the arborist deems necessary to protect the health of the trees due to the construction impacts shall be completed by the applicant, prior to occupancy. [Planning]
- 10) A utility trenching plan shall be submitted which demonstrates that the trenching-pathway for all utilities will be located outside the dripline of all retained trees. If this mitigation is not feasible other mitigation measures offered by a certified arborist and accepted by the Community Development Director must be made. [Planning]
- 11) Replacement planting of trees shall be completed so that for each inch of protected tree removed, a replacement 15-gallon size tree shall be planted in its place within a the subject property. The applicants must submit a planting plan to the city to the satisfaction of the Community Development Director or pay into the city's tree preservation fund (\$298 per inch of diameter). [Planning]

During Construction and Prior to Issuance of an Occupancy Permit

- 12) Following completion of landscape installation and prior to issuance of occupancy permits for any buildings, the Landscape Architect shall certify that:
- a. Soil has been tested and prepared as necessary based on the Soils Analysis;
 - b. The irrigation has been installed compliant with the Zoning Code and the Model Water Ordinance and approved landscape plan; and
 - c. Tree planting sites shall comply with the minimum soil volume as identified in the Zoning Code and landscape plan. [Planning]
- 13) The following information must be located on-site during construction activities:
- Arborist's report
 - Approved site plan including fencing plan
 - Conditions of approval for the Tree Permit
- 14) To avoid root injury, any excavation within the dripline shall be conducted with hand tools. [Planning]
- 15) A certified arborist shall monitor any excavation within the dripline of any tree. [Planning]

- 16) All finished grading shall ensure that no water will collect within the dripline of any native oak tree. [Planning]
- 17) Submit and receive approval of a Landscape and Irrigation Plan for any landscaping within the dripline of any oak tree. Only low-water usage plantings may be planted under the dripline of any oak tree. [Planning]
- 18) If any native ground surface fabric within the dripline must be removed for any reason, it shall be replaced within forty-eight (48) hours. [Planning]
- 19) Storage of materials, equipment and vehicles is not permitted within the dripline of any oak tree. Vehicles and other heavy equipment shall not be operated within the dripline of any oak tree. [Planning]
- 20) The certified arborist shall immediately treat any severed or damaged roots (NOTE: Without exception, all digging shall be done using hand tools, no machine trenching shall be allowed in the dripline of any oak tree). 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]
- 21) The temporary fencing shall remain in place throughout the entire construction period and shall not be removed without obtaining written authorization from the Planning Department. In no event shall the fencing be removed before the written authorization is received from the Planning Department. [Planning]
- 22) Within 5 days of the completion of the construction, a Certification Letter from a certified arborist shall be submitted to and approved by the Planning Department. The certification letter shall attest to all of the work (regulated activity) which was conducted in the dripline of the trees, either being in conformance with this permit or of the required mitigation still needing to be performed. [Planning]
- 23) Applicant agrees to indemnify, defend, and hold harmless the City, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable actions or other proceedings instituted by any person not a party to this Permit challenging the validity of the Permit or any Project Approval or any Subsequent Project Approval, or otherwise arising out of or stemming from this Permit. Developer may select its own legal counsel to represent Developer's interests at Developer's sole cost and expense. The parties shall cooperate in defending such action or proceeding. Developer shall pay for City's costs of defense, whether directly or by timely reimbursement on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by City in defense of any such action or other proceeding, plus staff and City Attorney time spent in regard to defense of the action or proceeding. The parties shall use best efforts to select mutually agreeable defense counsel but, if the parties cannot reach agreement, City may select its own legal counsel and Developer agrees to pay directly or timely reimburse on a monthly basis City for all such court costs, attorney fees, and time referenced herein.

ADDENDUM TO MITIGATED NEGATIVE DECLARATION / INITIAL STUDY

CAREFIELD ASSISTED LIVING & MEMORY CARE

8220 SUNRISE BLVD

Lead Agency:

City of Citrus Heights

File Numbers DRP-19-05 / UP-19-02

Prepared by:

The City of Citrus Heights

Community Development Department

SEPTEMBER 2019

CAREFIELD ASSISTED LIVING & MEMORY CARE – 8220 SUNRISE BLVD IS/MND ADDENDUM

September 2019

PROJECT TITLE: Carefield Assisted Living & Memory Care – 8220 Sunrise Blvd
LEAD AGENCY: City of Citrus Heights
Planning Division
6360 Fountain Square Drive
Citrus Heights, CA 95621
CONTACT PERSON: Eric Singer
esinger@citrusheights.net
(916) 727-4740

	8220 SUNRISE BOULEVARD
PROJECT LOCATION	8220 Sunrise Boulevard Citrus Heights, CA 95610 APN: 216-009-0012-0000
PROJECT APPLICANT	LRS Paul Boundy Architects
GENERAL PLAN	Low Density Residential
CURRENT ZONING	RD-1 Very Low Density Residential
EXISTING LAND USE	Vacant
PROJECT SUMMARY	The 4.55-acre vacant parcel located along the east side of Sunrise Boulevard, approximately 800 feet south of Twin Oaks Avenue, is proposed to be developed with an 80-unit assisted living and memory care facility and affiliated improvements.
PREVIOUSLY APPROVED PROJECT	The same parcel had been entitled in 2008 with a 99-unit assisted living facility with a similar footprint and affiliated improvements. A comparison chart is provided in the project overview.

INTRODUCTION

The City of Citrus Heights (“the City”) has prepared this Addendum to a previously adopted Mitigated Negative Declaration File No. UP-08-02 and DRP-08-03, because changes made to the project described below do not raise important new issues about the effects on the environment. As the Lead Agency, the City has prepared this Addendum pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15050 and 15164.

The previously adopted Initial Study and Mitigated Negative Declaration (“IS/MND”) was originally prepared to identify and assess the anticipated environmental impacts of a proposed 99-unit Assisted Living Facility located at 8220 Sunrise Boulevard in Citrus Heights. The IS/MND concluded that the project would not result in significant environmental impacts with implantation of

certain mitigation measures. The entitlement for the original project has since expired, and a new project very similar in size and scope has been proposed for the same location.

As described in the following sections, substantial evidence shows that the new project does not create any new significant environmental impact or a significant increase in the severity of impacts identified in the IS/MND. This Addendum is included as part of the IS/MND for the Carefield Assisted Living & Memory Care – 8220 Sunrise Blvd project (State CEQA Guidelines Section 15164(c)).

PROJECT OVERVIEW

The project proposes to construct a new, two-story, 80-unit assisted living and memory care facility on the existing vacant site. The site is zoned RD-1 which requires a Use Permit and Design Review Permit to allow for the construction of a “medical services – extended care facility” as this project is defined in the Citrus Heights Zoning Code. The development of the property would also require construction adjacent to the protected zone of several trees and a riparian habitat, as well as the installation of public improvements. The site is within the City of Citrus Heights, which is within the County of Sacramento. A vicinity map is provided below.

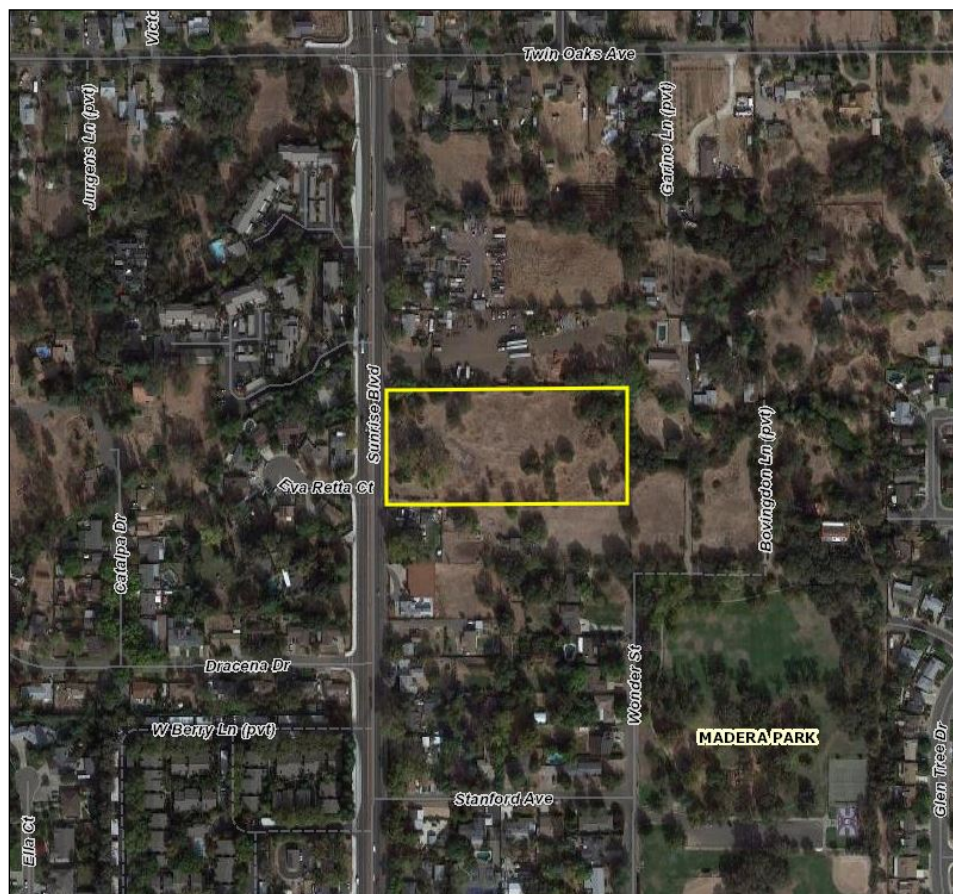


Figure 1: Vicinity Map

Site Location and Existing Conditions

The 4.55-acre site fronts Sunrise Boulevard to the west and is surrounded on the other three sides by low-density residential zoned parcels. The site has historically been used for a single-family dwelling and accessory uses. The single-family home was demolished in 2008. The site is rectangular in shape and is relatively flat. The remainder of the site is predominantly grasslands and other non-native plants with evidence of a previous agricultural use evident. There is also an existing tributary to Cripple Creek found along the northern and eastern portion of the site. Trees of various size and type are present on the property, scattered throughout the site.

Surrounding Land Uses

The site is surrounded on the north, east, and south sides by low-density residential zoned parcels. Across Sunrise Boulevard is Sunrise Creek Apartments on a medium-density residential zoned parcel.

Proposed Project Changes

Project Component	Adopted IS/MND -- SummerPlace (Carefield) 2008	IS/MND Addendum
# of Units	99	80
Square Feet	74,000	74,001
Height	29'6"	30'0"
FAR	.39	.40
Parking Spaces	34	45
Protected Trees Removed	14	28 (due to growth of existing trees)
Creekside Setback	45'0"	45'0"

Proposed Development

The applicant requests approval of a Use Permit and Design Review Permit to allow the construction of an 80-unit assisted living and memory care facility on the existing vacant site. Numerous trees will require removal as a result of the development. Access to the site is provided by a private drive from Sunrise Boulevard, with two points of entry/exit spaced approximately 200' apart. The project does not require widening of the existing culvert under Sunrise Boulevard at this time; the improvements

will taper near the north end of the site at the creek crossing. A detached sidewalk will provide pedestrian access along the frontage of the site.

As recommended by the City of Citrus Heights Greenhouse Gas Reduction Plan, the proposed project would include the following features:

- Utilize recycled materials in construction
- Reduce turf installation/drought tolerant landscaping
- Maximize site improvements that promote infiltration and minimize impervious surfaces
- Install disconnected rain gutters that will discharge into landscaped areas

ENTITLEMENTS AND REQUIRED APPROVALS

- Use Permit
- Design Review Permit
- Building Permit
- Encroachment Permit
- Tree Permit

CEQA PROCESS AND ENVIRONMENTAL DETERMINATION

CEQA recognizes that one or more of the following changes may occur between the date a MND is adopted and a project is fully implemented:

1. The scope of the project may change;
2. The environmental setting in which the project is located may change;
3. Certain environmental laws, regulations, or policies may change; and/or
4. Previously unknown information may arise.

As the lead agency under CEQA, the City prepared a draft IS/MND in 2008 which evaluated the potential environmental effects of a similar proposed project (a 99-unit assisted living facility) with a nearly identical footprint on the same site. Based on the findings of the draft IS/MND, the City determined that the proposed project, with incorporation of mitigation measures, would not have a significant impact on the environment. The Citrus Heights Planning Commission approved the project on October 22, 2008. The conclusion of no significant impacts is supported by the following findings:

- The proposed project would result in no or less-than-significant impacts to land use and planning, population and housing, geologic problems, water, air quality, transportation and

circulation, energy and mineral resources, hazards, public services, utilities and service systems, aesthetics, and mandatory findings of significance.

- With incorporation of mitigation measures, the project would result in less-than-significant impacts to biological resources, cultural resources, and noise.
- No substantial evidence exists that the proposed project would have a negative or adverse effect on the environment.
- The proposed project would not substantially degrade the quality of the environment, significantly reduce the habitat for fish and wildlife species, result in fish or wildlife populations below a self-sustaining level, reduce or restrict the range of a special-status species, or eliminate important examples of California history or prehistory.
- The proposed project with incorporation of mitigation measures would not have environmental effects that would cause substantial direct or indirect adverse effects on humans.
- The proposed project would not have environmental effects that are individually limited but cumulatively considerable.

The draft IS/MND, Notice of Intent to Adopt a Mitigated Negative Declaration (NOI), and public review of the draft IS/MND were prepared, posted, and conducted in accordance with Sections 15070 through 15073 and 15105 of the CEQA Guidelines. The public review period occurred from September 24, 2008, through October 14, 2008. No comments were received during the public comment period. A Mitigation Monitoring Plan (dated September 24, 2008) was developed and required the following measures:

- **BIO 1:** Schedule tree removal and ground-clearing activities prior to the initiation of nesting activity (April) or after fledging (August). If this is infeasible, conduct pre-construction surveys between February 15 and August 15 in potential nesting habitat to identify nesting sites. If an active raptor nest is observed within 350 feet of the project site, contact CDFG and establish a 350-foot buffer around the nest tree. Prohibit construction activities in the buffer zone until the young have fledged.
- **BIO 2:** The contractor shall adhere to all requirements included in the relevant project permits and approvals as applicable such as the Stormwater Pollution Prevention Plan, National Pollutant Discharge Elimination System permit, and/or other permits and approvals from the City of Citrus Heights pertaining to water quality requirements.
- **BIO 3:** Standard construction best management practices will be implanted throughout construction in order to avoid and minimize adverse effects to the water quality within the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips, or other accepted equivalents) to reduce siltation and contaminate runoff from the construction areas into the wetland or unnamed drainage.

-
- **BIO 4:** Prior to construction, a biologist approved by the City of Citrus Heights shall designate environmentally sensitive areas on the project site to include the wetland and unnamed drainage. The biologist will demarcate the boundaries of the environmentally sensitive areas with flagging. To ensure that construction equipment and personnel do not affect these environmentally sensitive areas, the contractor will erect orange barrier fencing or other similar approved fencing to clearly define their boundaries.
 - **BIO 5:** The environmentally sensitive areas will be off-limits to construction activities including grading and clearing and grubbing. No construction personnel or equipment will be allowed in the environmentally sensitive areas. No parking of vehicles or storage of construction equipment, materials, or chemicals such as oil or gasoline will be allowed within the environmentally sensitive area.
 - **BIO 6:** All construction personnel will be notified of the environmentally sensitive areas on the project site and will be instructed regarding the avoidance and minimization measures included in the project approvals.
 - **BIO 7:** If construction of the project cannot avoid impacts to the environmentally sensitive area, the U.S. Army Corps of Engineers should be contacted regarding the potential need for a Section 404 Permit and the Department of Fish and Wildlife should be notified under the Lake and Streambed Alteration Program (1600) regarding the potential need for a Streambed Alteration Agreement. If a Nationwide Permit is required, a Water Quality Certification (401 Permit) will also be required from the Regional Water Quality Control Board.
 - **BIO 8:** The applicant shall avoid construction impacts on any protected tree onsite or provide mitigation if avoiding construction impacts is infeasible upon development of the site. A construction impact assessment shall be required as part of any required Tree Permit and shall be submitted to the Planning Division prior to development, including any grading or trenching, proposed within the dripline of any protected tree.
 - **CULTURAL 1 (amended to reflect recent legislation):** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the City of Citrus Heights, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work may not resume within the no-work radius until the lead agencies, through

consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Sacramento County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code).

This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

- **NOISE 1:** Mechanical ventilation shall be provided to allow occupants to close windows and doors in order to achieve the desired acoustical isolation.

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT FOR PROPOSED PROJECT

To confirm the applicability of the findings provided in the Addendum, the currently proposed project has been evaluated for potential impacts to the 2008 IS/MND. Several technical studies were completed to evaluate any new potential environmental impacts associated with the currently proposed project. The following studies are included as attachments to this Addendum:

Biological Resources Assessment. Helix Environmental Planning, July 2018

Traffic Impact Study. Kimley Horn, June 2019

Arborist Report. Helix Environmental Planning, February 2019

CONCLUSION

Based on the supplemental studies provided above, implementing the proposed project described in this Addendum would result in none of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent negative declaration. In summary, there are no altered circumstances or new information of substantial importance since adoption of the IS/MND, and the proposed project as described in this Addendum:

- Would not result in any new significant environmental effects;
- Would not substantially increase the severity of previously identified effects;
- Would not result in mitigation measures or alternatives previously found to be infeasible becoming feasible; and
- Would not result in availability/implementation of mitigation measures or alternatives that are considerably different from those analyzed in the previous document that would substantially reduce one or more significant effects on the environment.

These conclusions confirm that this Addendum to the IS/MND is the appropriate CEQA document to evaluate and record the project as described above.

Lead Agency Representative

Date

ATTACHMENTS

Attachment A: Adopted Initial Study/Mitigated Negative Declaration

Attachment B: *Biological Resources Assessment*. Helix Environmental Planning, July 2018

Attachment C: *Traffic Impact Study*. Kimley Horn, June 2019

Attachment D: *Arborist Report*. Helix Environmental Planning, February 2019

EVALUATION OF ENVIRONMENTAL IMPACTS:

I. AESTHETICS

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
1. Aesthetics. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	The impact was not analyzed in the MND	No	No	Yes, no impact would occur
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	The impact was not analyzed in the MND	No	No	Yes, no impact would occur
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	The impact was not analyzed in the MND	No	No	Yes, no impact would occur
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	MND pg. 24, Sec. XIII Aesthetics	No	No	Yes, impact remains less than significant

I.I. DISCUSSION

Since the original IS/MND was approved, no substantial changes have occurred in regards to potential aesthetic impacts as the currently proposed project is substantially similar in height, size, scale, and form to the previously approved project. As noted in the previous IS/MND, the proposed facility may produce some marginal increase in light and glare. The Citrus Heights Zoning Code includes applicable provisions to minimize light pollution through the requirement of full cutoff fixtures and similar regulations.

a. – d. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding aesthetics. No additional mitigation measures are required for the project regarding this topic.

II. AGRICULTURE AND FOREST RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
2. Agriculture and Forestry Resources. Would the project:				
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?	Scoped out of MND Resources do not exist in project area	No	No	Yes
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Scoped out of MND No agricultural zoning or Williamson Act contracted lands exist in project area	No	No	Yes
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))?	Scoped out of MND Resources do not exist in project area	No	No	Yes
d. Result in the loss of forest land or conversion of forest land to non-forest land?	Scoped out of MND Resources do not exist in project area	No	No	Yes
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?	Scoped out of MND Resources do not exist in project area	No	No	Yes

II.I. DISCUSSION

Agricultural and forestry impacts were scoped out of the 2008 IS/MND during preparation of the document because these resources do not exist in the area. The project site does not contain any of these resources and would also have no impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding agriculture and forest resources. No additional mitigation measures are required for the project regarding this topic.

III. AIR QUALITY

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents' Mitigations Address/Resolve Impacts?
3. Air Quality. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	Not addressed in the MND	No	No	Yes, impacts would remain less than significant.
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	MND pg. 14, Sec. V Air Quality	No	No	Yes, impacts would remain less than significant.
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Not addressed in the MND	No	No	Yes, impacts would remain less than significant.
d. Expose sensitive receptors to substantial pollutant concentrations?	MND pg. 14, Sec. V Air Quality	No	No	Yes, impacts would remain less than significant.
e. Create objectionable odors affecting a substantial number of people?	MND pg. 14, Sec. V Air Quality	No	No	Yes, no odor impacts would occur under the project.

III.I. DISCUSSION

- a-c. The project site is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD).

The federal and state Clean Air Acts define allowable concentrations of several air pollutants. When monitoring indicates that a region regularly experiences air pollutant concentrations that exceed those limits, the region is designated as non-attainment and is required to develop an air quality plan that describes air pollution control strategies to be implemented to reduce air pollutant emissions and concentrations.

The SVAB is designated as non-attainment for federal and state ozone standards. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and oxides of nitrogen (NOx) in the presence of sunlight. ROG are volatile organic compounds that are photochemically reactive. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NOx are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels.

The SVAB is also designated non-attainment for the state respirable particulate matter (PM10) standards, and the federal 24-hour standard for fine particulate matter (PM2.5). Particulate matter consists of small particles of pollutants, such as windblown dust, particles of smoke from residential and agricultural burning, and particles generated by fuel combustion in motor vehicles, equipment and industrial sources.

As directed by the SMAQMD CEQA Guide to Air Quality Assessment (CEQA Guide), this analysis considers that the project would result in a significant impact if it results in any of the following conditions:

- short-term (construction) emissions of NOx above 85 pounds per day;
- long-term (operational) emissions of NOx or ROG above 65 pounds per day

If emissions remain below these levels, SMAQMD has determined that the project would not violate air quality standards for NOx, ROG, PM10 or PM2.5, would not contribute substantially to an existing or projected air quality violation or interfere with implementation of the applicable clean air plans, and would not result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment.

Construction Emissions

Due to the size of the project just under 5 acres short-term construction emissions of ROG, NOx, PM10, and diesel particulate matter DPM would not exceed the SMAQMD threshold of 85 pounds per day of NOx. The SMAQMD CEQA Guide indicates that “projects that are 35 acres or less in size generally will not exceed the District’s construction NOx threshold of significance,” therefore, construction of the proposed project would result in a less-than-significant impact as long as the SMAQMD’s Basic Construction Emission Control Practices are implemented, as required by Mitigation Measure 1.

Operational Emissions

Operational emissions would be generated from vehicle trips to and from the project area, heating and cooling of the facility, water heaters, and landscape maintenance. The SMAQMD contains operational-related criteria air pollutant emission screening thresholds for residential development projects. Projects that do not exceed the operational-related air quality screening emissions threshold would not be expected to have a substantial impact on air quality. The proposed project consists of the development of a Congregate Care (assisted living) facility. The operational air quality emission screening threshold for Congregate Care (assisted living) is 167 dwelling units. The proposed project is well below the SMAQMD Congregate Care (assisted living) operation air quality emission screening threshold and the proposed project would not:

Include wood stoves or wood-burning appliances;

Generate a trip generation rate greater than the default trip rate in CalEEMod;

Generate a vehicle fleet mix substantially different from the average fleet mix;

Include mixed-use development; or

Include any industrial land use types.

Therefore, the project would be expected to have an insignificant impact on air quality, including ROG and NO_x emissions, during operation.

d. Sensitive Receptors

During project construction, the majority of emissions would be generated by the use of construction equipment on-site. Construction emissions would remain below the SMAQMD thresholds of significance and the emission of air pollutants at the project site would not occur in volumes that are great enough to result in substantial pollutant concentrations at the neighboring land uses. Therefore, the project would have a less-than-significant impact related to exposure of people to substantial pollutant concentrations during project construction.

- e. Some objectionable odors may be generated from the operation of diesel-powered construction equipment during the construction period. However, these odors would occur only during the construction activities and would not result in a long-term or permanent impact. Therefore this impact is considered less than significant.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding air quality. No additional mitigation measures are required for the project regarding this topic.

IV. BIOLOGICAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
4. Biological Resources. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	MND pg. 21-23, Sec. VII Biologic Resources	No	No	Yes, measures from 2008 MND reduce impacts to less than significant levels
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	MND pg. 21-23, Sec. VII Biologic Resources	No	No	Yes, measures from 2008 MND reduce impacts to less than significant levels
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	MND pg. 21-23, Sec. VII Biologic Resources	No	No	Yes, measures from 2008 MND reduce impacts to less than significant levels
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?	MND pg. 21-23, Sec. VII Biologic Resources	No	No	Yes, measures from 2008 MND reduce impacts to less than significant levels
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	MND pg. 21-23, Sec. VII Biologic Resources	No	No	Yes, impact remains less than significant
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?	MND pg. 21-23, Sec. VII Biologic Resources	No	No	Yes, no impact would occur

IV.I. DISCUSSION

As previously discussed, an updated biological resources study was commissioned by the City of Citrus Heights and undertaken by Helix Environmental Planning in July 2018. The study yielded no new results in regards to potentially significant environmental impacts, therefore the recommendations from the 2008 IS/MND are still applicable.

The original IS/MND provided eight mitigation measures to address potential significant environmental impacts from the proposed project. Those measures would be conditioned on the currently proposed project as well, and are listed under the mitigation measures below.

- a. – d. No change from the 2008 IS/MND. Less than significant impact with mitigation measures.

MITIGATION MEASURES

- **BIO 1:** Schedule tree removal and ground-clearing activities prior to the initiation of nesting activity (April) or after fledging (August). If this is infeasible, conduct pre-construction surveys between February 15 and August 15 in potential nesting habitat to identify nesting sites. If an active raptor nest is observed within 350 feet of the project site, contact CDFG and establish a 350-foot buffer around the nest tree. Prohibit construction activities in the buffer zone until the young have fledged.
- **BIO 2:** The contractor shall adhere to all requirements included in the relevant project permits and approvals as applicable such as the Stormwater Pollution Prevention Plan, National Pollutant Discharge Elimination System permit, and/or other permits and approvals from the City of Citrus Heights pertaining to water quality requirements.
- **BIO 3:** Standard construction best management practices will be implanted throughout construction in order to avoid and minimize adverse effects to the water quality within the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips, or other accepted equivalents) to reduce siltation and contaminate runoff from the construction areas into the wetland or unnamed drainage.
- **BIO 4:** Prior to construction, a biologist approved by the City of Citrus Heights shall designate environmentally sensitive areas on the project site to include the wetland and unnamed drainage. The biologist will demarcate the boundaries of the environmentally sensitive areas with flagging. To ensure that construction equipment and personnel do not affect these environmentally sensitive areas, the contractor will erect orange barrier fencing or other similar approved fencing to clearly define their boundaries.
- **BIO 5:** The environmentally sensitive areas will be off-limits to construction activities including grading and clearing and grubbing. No construction personnel or equipment will be allowed in the environmentally sensitive areas. No parking of vehicles or storage of construction equipment, materials, or chemicals such as oil or gasoline will be allowed within the environmentally sensitive area.
- **BIO 6:** All construction personnel will be notified of the environmentally sensitive areas on the project site and will be instructed regarding the avoidance and minimization measures included in the project approvals.

- **BIO 7:** If construction of the project cannot avoid impacts to the environmentally sensitive area, the U.S. Army Corps of Engineers should be contacted regarding the potential need for a Section 404 Permit and the Department of Fish and Wildlife should be notified under the Lake and Streambed Alteration Program (1600) regarding the potential need for a Streambed Alteration Agreement. If a Nationwide Permit is required, a Water Quality Certification (401 Permit) will also be required from the Regional Water Quality Control Board.
- **BIO 8:** The applicant shall avoid construction impacts on any protected tree onsite or provide mitigation if avoiding construction impacts is infeasible upon development of the site. A construction impact assessment shall be required as part of any required Tree Permit and shall be submitted to the Planning Division prior to development, including any grading or trenching, proposed within the dripline of any protected tree.

V. CULTURAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
5. Cultural Resources. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	MND pg. 24, Sec. XIV Cultural Resources	No	No	Yes, impact would remain less than significant
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	MND pg. 24, Sec. XIV Cultural Resources	No	No	Yes, impact would remain less than significant with the application of the adopted mitigation measures
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	MND pg. 24, Sec. XIV Cultural Resources	No	No	Yes, impact would remain less than significant
d. Disturb any human remains, including those interred outside the formal cemeteries?	MND pg. 24, Sec. XIV Cultural Resources	No	No	Yes, impact would remain less than significant with the application of the adopted mitigation measures

V.I. DISCUSSION

The California Environmental Quality Act (CEQA) applies to all discretionary projects undertaken or subject to approval by the state's public agencies. CEQA states that it is the policy of the State of California to "take all action necessary to provide the people of this state with... historic

environmental qualities... and preserve for future generations examples of the major periods of California history". Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment".

CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA planning process. If feasible, significant impacts to historical resources must be avoided or the severity of the impacts mitigated. CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less-than-significant level.

- a. – d. The 4.55-acre project has no known historic, archaeological, or paleontological resources or human remains onsite. It is unlikely that previously unknown cultural resources would be encountered during grading of the site. Implementation of Mitigation Measure 5 would ensure that impacts to cultural resources remain less than significant should any such resources be encountered during project grading and construction.

MITIGATION MEASURES

- **CULTURAL 1 (*amended to reflect recent legislation*)**: If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the City of Citrus Heights, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Sacramento County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources

Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code).

This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

VI. GEOLOGY AND SOILS

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
6. Geology and Soils. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides? 	MND pg. 13, Sec. III Geologic Problems	No	No	Yes, impact would remain less than significant
b. Result in substantial soil erosion or the loss of topsoil?	MND pg. 13, Sec. III Geologic Problems	No	No	Yes, impact would remain less than significant
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in: on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	MND pg. 13, Sec. III Geologic Problems	No	No	Yes, impact would remain less than significant
d. Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	MND pg. 13, Sec. III Geologic Problems	No	No	Yes, impact would remain less than significant
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	MND pg. 13, Sec. III Geologic Problems	No	No	Yes, no impact would occur

VII. DISCUSSION

a. & c. Surface Fault Rupture

There are no active faults within or near the City of Citrus Heights; the project site is not within an Alquist-Priolo Earthquake Fault Zone as delineated by the State Geologist. The closest active fault mapped by the California Division of Mines and Geology is the Foothills Fault Zone about 15 miles to the northeast of the City (City of Citrus Heights 2011b, p. 4-5).

Seismic Shaking

The proposed project is required to comply with the California Building Code which includes requirements for site improvements and building design to ensure project features would withstand the likely level of seismic groundshaking anticipated for the site. This would reduce any impacts related to groundshaking from distant seismic events to a less-than-significant level.

Liquefaction and Landslides

Seismic Hazard Zones are areas delineated by the State Geologist as areas of liquefaction and landslide hazards. There are no Seismic Hazards Zones identified within the City of Citrus Heights (City of Citrus Heights 2011b, pg. 4-5). Compliance with the California Building Code would reduce any minor potential for liquefaction or landslides to a less-than-significant level. As noted in the City of Citrus Heights General Plan EIR, the City of Citrus Heights planning area has not been identified as having liquefaction potential. "The depth to the water table and the underlying geologic materials within the planning area do not support high liquefaction potential."

Geologic and Soil Instability

The General Plan identified the soil underlying the project site as Urban Land-Xerarents-Fiddymment complex. This soil is considered stable and has a low potential for landslide, lateral spreading, subsidence, liquefaction, and/or collapse. As required by chapter 18 of the California Building Code (CBC) and Chapter 18.12 of the City of Citrus Heights Municipal Code, the project's preliminary soil report and geotechnical report must evaluate whether there are expansive soils on-site and provide recommendations for design of the site improvements and building to avoid adverse effects related to expansive soils, if present.

- b. The project will require grading of the site. This soil disturbance could result in soil erosion. The site does not support unique geologic or soil resources, so soil erosion is considered a less than significant impact with respect to Geology and Soils.
- d. Urban Land-Xerarents-Fiddymment complex soil that underlies the project site has a moderate potential for expansion. As noted in the City of Citrus Heights General Plan EIR, "Expansive or shrink-swell soils contain substantial amounts of clay minerals that swell when wet and shrink when dry. These clays tend to swell despite the heavy loads imposed by large structures. Damage (such as cracking of foundations) results from differential movement and from the repetition of the shrink-swell cycle. Shrinking and swelling of soil can damage roads, dams, building foundations, and other structures. In some cases, this problem may be avoided by removing the top soil layer before placing a foundation" (City of Citrus Heights 2011b). The potential for the site to contain expansive soil is low. In compliance with the City of Citrus Heights General Plan Policy 50.2, a soils report that identifies potential for liquefaction, expansive soils, ground settlement, and slope failure will be required for the project site. In accordance with Policy 50.2, this report would also specify remedial measures

that could be feasibly implemented to ensure that project engineering and design appropriately addresses any constraints posed by site soils and geologic conditions (City of Citrus Heights 2011b, p. 4-6). With compliance with the City's General Plan, potential adverse effects related to expansive soils would be avoided.

- e. There are no known septic tanks or alternative wastewater disposal systems on-site and there none proposed.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding geology and soils. No additional mitigation measures are required for the project regarding this topic.

VII. GREENHOUSE GAS EMISSIONS

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents' Mitigations Address/Resolve Impacts?
7. Greenhouse Gas Emissions. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Not addressed in the MND	No	No	Yes. The applicant has completed the required Greenhouse Gas Reduction checklist provided by the city.
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Not addressed in the MND	No	No	Yes. The applicant has completed the required Greenhouse Gas Reduction checklist provided by the city.

VII.I. DISCUSSION

At the time of adoption of the original IS/MND in 2008, the contribution of greenhouse gas (GHG) emissions to climate change was a known issue of concern; however, it was not evaluated in the document. On March 18, 2010, amendments to the State CEQA Guidelines took effect which set forth requirements for the analysis of GHG emissions under CEQA. Since the previous IS/MND has already been adopted, the determination of whether GHG emissions and climate change need to be analyzed for this project is governed by Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15163. GHG emissions and climate change are not required to be analyzed under those standards unless it constitutes "new information of substantial importance, which was not known and could not have been known at the time" the original IS/MND was adopted (CEQA Guidelines Section 15162[a][3]).

The issue of GHG emissions and climate change impacts is not new information that was not known or could not have been known at the time of the adoption of the original IS/MND. Rather, the issue of climate change and GHG emissions was widely known but not commonly evaluated in environmental documents. The United Nations Framework Convention on Climate Change was established in 1992. The regulation of GHG emissions to reduce climate change impacts was extensively debated and analyzed throughout the early 1990s. The studies and analyses of this issue resulted in the adoption of the Kyoto Protocol in 1997.

The courts have repeatedly held that new information that “was known” or “could have been known with the exercise of reasonable diligence” at the time of the adoption of the original document does not trigger subsequent environmental review (*Citizens for Responsible Equitable Environmental Development v. City of San Diego* (2011) 196 Cal.App.4th 515, 532 (“CREED II”); *ALARM*, supra, 12 Cal.App.4th at 1800–1803.) The courts have held that information on GHG emissions could have been known as early as 1994 and, therefore, would not trigger the new information standard under Section 21166 for environmental documents certified after that date (*CREED II*, supra, 196 Cal.App.4th at 530–532 [Impact from GHGs not new information for EIR certified in 1994.]).

In the case of the project, GHG emission impacts and their effect on climate change was a known issue at the time of adoption of the original IS/MND in 2008. The City has since adopted a Greenhouse Gas Reduction Plan. All development on site will be required to comply with the adopted Greenhouse Gas Reduction Plan, as the applicant has completed the required Greenhouse Gas Reduction checklist provided by the city.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding greenhouse gas emissions. No additional mitigation measures are required for the project regarding this topic.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
8. Hazards and Hazardous Materials. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	MND pg. 23, Sec. IX Hazards	No	No	Yes, the impact would be less than significant
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?	MND pg. 23, Sec. IX Hazards	No	No	Yes, the impact would be less than significant
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	This impact was not analyzed in the MND	No	No	Yes, no impact would occur
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?	This impact was not analyzed in the MND	No	No	Yes, no impact would occur
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	This impact was not analyzed in the MND	No	No	Yes, no impact would occur
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working on the project area?	This impact was not analyzed in the MND	No	No	Yes, no impact would occur
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	MND pg. 23, Sec. IX Hazards	No	No	Yes, the impact would be less than significant
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	MND pg. 23, Sec. IX Hazards	No	No	Yes, no impact would occur

VIII.I. DISCUSSION

- a. – b. There are no existing structures on the project site; therefore, the project would not require any demolition that could potentially expose workers or others to asbestos, lead paints, or other hazardous building materials. Furthermore, there are no known hazardous materials release sites on or in the vicinity of the project site.

Construction of the proposed project would involve temporary use of hazardous materials, including fuel for construction equipment, paints, solvents, and sealants. Handling of these materials would be performed in accordance with construction Best Management Practices.

- c. The proposed project is not located within one-quarter mile of any schools and therefore no impacts related to release of hazardous materials would result as part of the project.
- d. The project site is not listed in any federal, state, or local records and is not included on the Department of Toxic Substance Control's site cleanup list. Thus, proposed project would not result in a significant hazard to the public or to the environment.
- e. – f. The project site is located over eight miles from the nearest airport, McClellan Airfield. The proposed project would therefore not result in a safety hazard relating to proximity to an airport.
- g. The project would not interfere with any adopted emergency or evacuation plans.
- h. The project site is not located adjacent to any wildlands, and development of this site would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding hazardous materials. No additional mitigation measures are required for the project regarding this topic.

IX. HYDROLOGY AND WATER QUALITY

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
9. Hydrology and Water Quality. Would the project:				
a. Violate any water quality standards or waste discharge requirements?	MND pg. 13, Sec. IV Water	No	No	Yes, impacts would remain less than significant.
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	MND pg. 13, Sec. IV Water	No	No	Yes, impacts would remain less than significant.
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	MND pg. 13, Sec. IV Water	No	No	Yes, impacts would remain less than significant.
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	MND pg. 13, Sec. IV Water	No	No	Yes, impacts would remain less than significant.
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	MND pg. 13, Sec. IV Water	No	No	Yes, impacts would remain less than significant.
f. Otherwise substantially degrade water quality?	MND pg. 13, Sec. IV Water	No	No	Yes, impacts would remain less than significant.
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	This impact was not analyzed in the MND	No	No	Yes, no impact would occur
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	This impact was not analyzed in the MND	No	No	Yes, impacts would remain less than significant.
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	This impact was not analyzed in the MND	No	No	Yes, the project site is not located in an area protected by levees or dams

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
9. Hydrology and Water Quality. Would the project:				
j. Inundation by seiche, tsunami, or mudflow?	This impact was not analyzed in the MND	No	No	Yes, no impact would occur

IX.I. DISCUSSION

- a. & f. While the project would increase the amount of impervious surface at the project site, and the project includes adequate drainage facilities consistent with the Sacramento Stormwater Quality a Partnership therefore would not change hydrologic patterns in the area, construction and operation of the proposed project could introduce pollutants and sediment into stormwater runoff from the site.

Construction Effects

The proposed development of the 4.55-acre project site would involve typical construction activities including demolition, grading, material storage and stockpiling, paving, and building construction. Sediment created by soil disturbance during or immediately after site grading would have the potential to affect water quality. Surface water runoff from the site could carry sediment through stormdrains to local waterways. In addition, accidental release of pollutants associated with construction could also degrade the quality of water runoff from the site and contribute pollution to local waterways. Construction activities would include the use of gasoline and diesel-powered heavy equipment, such as bulldozers, backhoes, water pumps, and air compressors. Chemicals such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances could be used during construction, and could be released into surface water runoff. Onsite portable toilets would have the potential to leak or tip over and spill, releasing sanitary waste, bacteria, solids, nutrients, and pathogens into surface water runoff.

The proposed project would be required to comply with the City of Citrus Heights Land Grading and Erosion Control Ordinance, City of Citrus Heights Municipal Code Chapter 18, Article XII. This Ordinance includes the stipulation that a grading and erosion control permit be required for any project resulting in the grading, filling, excavation, storage, or disposal of 50 or more cubic yards of soil or earthly material (City of Citrus Heights Land Grading and Erosion Control Ordinance Sec. 18-348). Compliance with the conditions of the Construction General Permit and the requirements of the Land Grading and Erosion Control Ordinance would further ensure that construction of the proposed project would not result in runoff that is polluted with sediments or other water pollutants.

With implementation of the City grading and erosion control permit, the proposed project construction would comply with the applicable water quality and waste discharge standards and would not otherwise substantially degrade water quality. Thus, hydrology and water quality impacts would remain less than significant during project construction.

Project Operation

The City of Citrus Heights is required to operate under a Municipal Stormwater NPDES Permit to discharge stormwater from the City's storm drain system to surface waters. As stated in the City of Citrus Heights Stormwater Ordinance, the City is a co-permittee under the waste discharge requirements of the County of Sacramento and the cities of Sacramento, Elk Grove, Folsom, and Galt for Storm Water Discharges from Municipal Separate Storm Sewer Systems (Order No. R5-2002-0206). These waste discharge requirements also serve as NPDES permits under the federal Clean Water Act (NPDES No. CA0082597) (City of Citrus Heights Stormwater Ordinance Sec. 98-201). The proposed project would comply with the requirements of the municipal stormwater permit.

As stated in the City of Citrus Heights Stormwater Ordinance, the City is authorized to establish specified performance requirements and requirements for BMPs to minimize post-construction discharge of stormwater pollutants from new development or significant redevelopment. The City is also authorized to implement the development standards plan and to comply with the requirements associated with development standards in the municipal stormwater permit. The Stormwater Ordinance states that the requirements for new development and redevelopment "may include but are not limited to operational BMPs, building material specifications or limitations, site design requirements, signage and marking, and associated maintenance programs or schedules" (City of Citrus Heights Stormwater Ordinance Sec. 98-223).

Conformance with the municipal stormwater permit (NPDES permit #CA0082597) and with any additional BMPs and development standards required by the City would ensure that hydrology and water quality impacts would be reduced to a less than significant level during operation of the proposed project and that the project would not conflict with any water quality standards or waste discharge requirements.

- b. According to the City's General Plan, Citrus Heights sits atop the Fair Oaks Geologic Formation which can yield moderate to high quantities of water. Groundwater can be found at depths between 80 feet above mean sea level (msl) to 20 feet below msl and is considered to have good quality in the Citrus Heights area.

Thus, the existing project site does not substantially contribute to groundwater recharge. The proposed project would incorporate LID features and water-conserving building design and equipment to further minimize the project's effects on groundwater. These types of features are required under the General Plan for new development projects (Actions 34.3.B and 62.4.A) the project would not substantially

change the site's contribution to groundwater recharge, and the proposed project would therefore result in a less-than-significant impact to groundwater recharge.

- c. The potential for erosion or siltation to occur during project construction is discussed above, and implementation of the Stormwater Ordinance would ensure that this potential impact remains less than significant. The project construction would not result in the alteration of the course of a stream or river. The nearest watercourse is Cripple Creek that runs just north of the project site.
- d. Construction and operation of the project would not be expected to result in changes to the existing drainage pattern of the site or the surroundings areas or increase the rate or amount surface runoff.

The City of Citrus Heights Stormwater Ordinance, Municipal Code Section 98-223 authorizes the City to establish required BMPs to minimize the long-term, post-construction discharge of stormwater pollutants. The ordinance states that these BMP requirements may be included in development standards, building codes, building permits, conditions of development, or other appropriate instruments administered by the City. Compliance with required BMPs as incorporated by the City into the project's permits, development standards, and conditions of approval would ensure that impacts related to an increase in polluted runoff would remain less than significant. Use of BMPs to protect stormwater quality is also recommended in City of Citrus Heights General Plan policies 37.1 and 37.3.

- e. Compliance with the stormwater ordinance would ensure that construction activities would not create a substantial source of polluted runoff. As discussed above the proposed project would not substantially increase the amount of impervious surfaces at the site, operation of the project would not increase the rate or amount of surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or increase the amount of polluted runoff.
- g. – j. No portion of the project site resides within the 100-year floodplain and none of the proposed site improvements would be located within the 100-year floodplain, therefore, impacts related to flooding would be less than significant.

The project site is physically removed from any large body of water and is not subject to inundation by seiche, tsunami, or mudflow. No impacts related to inundation by seiche, tsunami, or mudflow would occur.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding hydrology and water quality. No additional mitigation measures are required for the project regarding this topic.

X. LAND USE AND PLANNING

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
10. Land Use and Planning. Would the project:				
a. Physically divide an established community?	MND pg. 8, Sec. I Land Use and Planning	No	No	Yes, no impact would occur
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	MND pg. 8, Sec. I Land Use and Planning	No	No	Yes, no impact would occur
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	MND pg. 8, Sec. I Land Use and Planning	No	No	Yes, no impact would occur

X.I. DISCUSSION

a. – c. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding land use and planning. No additional mitigation measures are required for the project regarding this topic.

XI. MINERAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
11. Mineral Resources. Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Scoped out of MND Mineral resources do not exist in the project area	No	No	Yes, no known mineral resources exist on site
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?	Scoped out of MND Mineral resources do not exist in the project area	No	No	Yes, no known mineral resources exist on site

XI.I. DISCUSSION

- a. – b. There are no known mineral resources within the project site and no mineral recovery activities have been known to occur onsite. Construction of the project and landscaping at the project site would not adversely affect any mineral resources of value to the state or region. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding mineral resources. No additional mitigation measures are required for the project regarding this topic.

XII. NOISE

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New or Substantially More Severe Significant Impacts?	Any Substantially Important New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents' Mitigations Address/Resolve Impacts?
12. Noise. Would the project:				
a. Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	MND pg. 11, Sec. X Noise	No	No	Yes, impact would remain less than significant with the application of the adopted mitigation measures
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	The impact was not analyzed in the MND	No	No	Yes, the impact is less than significant
c. Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	MND pg. 11, Sec. X Noise	No	No	Yes, impact would remain less than significant with the application of the adopted mitigation measures
d. Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	The impact was not analyzed in the MND	No	No	Yes, the impact is less than significant
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	The impact was not analyzed in the MND	No	No	Yes, no impact would occur
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	The impact was not analyzed in the MND	No	No	Yes, no impact would occur

XIII. DISCUSSION

- a. - d. Impacts from noise and related issues were analyzed in the 2008 IS/MND and one mitigation measure was recommended. No changes from the 2008 IS/MND, less than significant impacts with implementation of mitigation measure.
- e. - f. The closest airport is Mather Airport located approximately 13 miles from the project site, while McClellan Airfield is located approximately 8 miles from the project site. The project site is not exposed to substantial noise levels associated with air traffic.

MITIGATION MEASURES

- **NOISE 1:** Mechanical ventilation shall be provided to allow occupants to close windows and doors in order to achieve the desired acoustical isolation.

XIII. POPULATION AND HOUSING

Environmental Issue Area	Where Impact Was Analyzed in 2008 EIR	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
13. Population and Housing. Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	MND pg. 13, Sec. II Population and Housing	No	No	Yes, impact remains less than significant
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	MND pg. 13, Sec. II Population and Housing	No	No	Yes, no impact would occur
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	MND pg. 13, Sec. II Population and Housing	No	No	Yes, no impact would occur

XIII.I. DISCUSSION

- a. – c. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding population and housing. No additional mitigation measures are required for the project regarding this topic.

XIV. PUBLIC SERVICES

Environmental Issue Area	Where Impact Was Analyzed in 2008 EIR	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
14. Public Services.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
i. Fire protection?	MND pg. 24, Sec. XI Public Services	No	No	Yes, impact remains less than significant
ii. Police protection?	MND pg. 24, Sec. XI Public Services	No	No	Yes, impact remains less than significant
iii. Schools?	MND pg. 24, Sec. XI Public Services	No	No	Yes, impact remains less than significant
iv. Parks?	MND pg. 24, Sec. XI Public Services	No	No	Yes, impact remains less than significant
v. Other public facilities?	MND pg. 24, Sec. XI Public Services	No	No	Yes, impact remains less than significant

XIV.I. DISCUSSION

- a. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding public services. No additional mitigation measures are required for the project regarding this topic.

XV. RECREATION

Environmental Issue Area	Where Impact Was Analyzed in 2008 EIR	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
15. Recreation.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	MND pg. 25, Sec. XV Recreation	No	No	Yes, impact remains less than significant
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?	MND pg. 25, Sec. XV Recreation	No	No	Yes, impact remains less than significant

XV.I. DISCUSSION

a. – b. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding recreation. No additional mitigation measures are required for the project regarding this topic.

XVI. TRANSPORTATION AND TRAFFIC

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
16. Transportation/Traffic. Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	MND pg. 20, Sec. VI Transportation/Circulation	No	No	Yes, the impact would be less than significant
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by a congestion management agency for designated roads or highways?	MND pg. 20, Sec. VI Transportation/Circulation	No	No	Yes, the impact would be less than significant
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	MND pg. 20, Sec. VI Transportation/Circulation	No	No	Yes, project would have no impact to air traffic patterns.
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	MND pg. 20, Sec. VI Transportation/Circulation	No	No	Yes, the impact would be less than significant.
e. Result in inadequate emergency access?	MND pg. 20, Sec. VI Transportation/Circulation	No	No	Yes, no impact would occur
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	MND pg. 20, Sec. VI Transportation/Circulation	No	No	Yes, no impact would occur

XVI.I. DISCUSSION

As previously discussed, an updated traffic impact study was commissioned by the City of Citrus Heights and undertaken by Kimley Horn in June 2019. The study yielded no new results in regards to potentially significant environmental impacts, therefore the recommendations from the original IS/MND are still applicable.

- a. – b. No change from the 2008 IS/MND. Less than significant impact.
- c. – f. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding transportation and traffic. No additional mitigation measures are required for the project regarding this topic.

XVII. TRIBAL CULTURAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
17. Tribal Cultural Resources. Would the project:				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	The impact was not analyzed in the MND	No	No	Yes, the impact would be less than significant.
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.	The impact was not analyzed in the MND	No	No	Yes, the impact would be less than significant.

XVII.I. DISCUSSION

As discussed in the Cultural Resources section, no known historical resources are known to exist on the site. However, inadvertent discoveries of Cultural or Tribal Resources may occur. Implementation of the mitigation measure outlined in the Cultural Resources section would reduce any potential impacts to less than significant levels. The measure is re-stated below.

MITIGATION MEASURES

- **CULTURAL 1 (*amended to reflect recent legislation*):** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the City of Citrus Heights, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Sacramento County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code).

This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

XVIII. UTILITIES AND SERVICE SYSTEMS

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
17. Utilities and Service Systems. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	MND pg. 24, Sec. XII Utilities and Service Systems	No	No	Yes, impact remains less than significant
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	MND pg. 24, Sec. XII Utilities and Service Systems	No	No	Yes, impact remains less than significant
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	MND pg. 24, Sec. XII Utilities and Service Systems	No	No	Yes, impact remains less than significant
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	MND pg. 24, Sec. XII Utilities and Service Systems	No	No	Yes, impact remains less than significant
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	MND pg. 24, Sec. XII Utilities and Service Systems	No	No	Yes, impact remains less than significant
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	MND pg. 24, Sec. XII Utilities and Service Systems	No	No	Yes, impact remains less than significant
g. Comply with federal, state, and local statutes and regulations related to solid waste?	MND pg. 24, Sec. XII Utilities and Service Systems	No	No	Yes, impact remains less than significant

XVIII.I. DISCUSSION

a. – g. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding utilities and service systems. No additional mitigation measures are required for the project regarding this topic.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue Area	Where Impact Was Analyzed in 2008 MND	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
17. Mandatory Findings of Significance. Would the project:				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	MND pg. 25, Sec. XVI Mandatory Findings of Significance	No	No	Yes, impact remains less than significant
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	MND pg. 25, Sec. XVI Mandatory Findings of Significance	No	No	Yes, impact remains less than significant
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	MND pg. 25, Sec. XVI Mandatory Findings of Significance	No	No	Yes, impact remains less than significant

XIX.I. DISCUSSION

a. – g. No change from the 2008 IS/MND. No impact.

MITIGATION MEASURES

No mitigation measures were required for the 2008 IS/MND regarding mandatory findings of significance. No additional mitigation measures are required for the project regarding this topic.

Attachment A: Adopted Initial Study/Mitigated Negative Declaration

Attachment B: *Biological Resources Assessment*. Helix Environmental Planning, July 2018

Attachment C: *Traffic Impact Study*. Kimley Horn, June 2019

Attachment D: *Arborist Report*. Helix Environmental Planning, February 2019

8220 Sunrise Blvd
Carefield Assisted Living and Memory Care
Mitigation Monitoring and Reporting Program

INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines Section 15097 requires that whenever a public agency approves a project based on a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR), the public agency shall establish a mitigation monitoring or reporting program to ensure that all adopted mitigation measures are implemented.

This mitigation monitoring and reporting program (MMRP) is intended to satisfy this requirement of the CEQA Guidelines as it relates to the Carefield Citrus Heights project (proposed project). This MMRP will be used by the City of Citrus Heights staff to ensure compliance with all mitigation measures identified in the MND is achieved during project implementation. The MMRP provides for monitoring of construction activities, as necessary, and in the field identification and resolution of environmental concerns.

MITIGATION MONITORING PROGRAM DESCRIPTION

The City of Citrus Heights will coordinate monitoring activities and document the implementation of mitigation measures for each project phase. Table 1 lists each mitigation measure as identified in the Final MND and the associated implementation, monitoring/reporting, timing and performance requirements. The table includes:

1. the full text of each applicable mitigation measure;
2. the party or parties responsible for implementation and monitoring of each measure and any reporting requirements;
3. the timing of implementation of each mitigation measure, including any ongoing monitoring and/or reporting requirements; and
4. performance criteria by which to ensure mitigation requirements have been met.

Following completion of the monitoring and reporting process, the final monitoring results will be recorded and incorporated into the project file maintained by the City of Citrus Heights.

Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing	Performance Evaluation Criteria
<i>Biological Resources</i>				
Mitigation Measure 1: Schedule tree removal and ground-clearing activities prior to the initiation of nesting activity (April) or after fledging (August). If this is infeasible, conduct pre-construction surveys between February 15 and August 15 in potential nesting habitat to identify nesting sites. If an active raptor nest is observed within 350 feet of the project site, contact CDFG and establish a 350-foot buffer around the nest tree. Prohibit construction activities in the buffer zone until the young have fledged.	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Prior to commencing any site grading, tree removal, or any onsite activity 	<ul style="list-style-type: none"> • Preconstruction surveys are conducted when construction activities begin • Avoid or relocate consistent with the mitigation measure
Mitigation Measure 2: The contractor shall adhere to all requirements included in the relevant project permits and approvals as applicable such as the Stormwater Pollution Prevention Plan, National Pollutant Discharge Elimination System permit, and/or other permits and approvals from the City of Citrus Heights pertaining to water quality requirements.	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Throughout all construction activity 	<ul style="list-style-type: none"> • Site plans and construction contracts include notes requiring conformance with the performance standards identified in this mitigation measure. • City may conduct unscheduled site visits throughout construction to verify achievement of performance standards
Mitigation Measure 3: Standard construction best management practices will be implanted throughout construction in order to avoid and minimize adverse effects to the water quality within the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips, or other accepted equivalents) to reduce siltation and contaminate runoff from the construction areas into the wetland or unnamed drainage.	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Throughout all construction activity 	<ul style="list-style-type: none"> • Site plans and construction contracts include notes requiring conformance with the performance standards identified in this mitigation measure. • City may conduct unscheduled site visits throughout construction to verify achievement of performance standards

Mitigation Monitoring and Reporting Program

Mitigation Measure 4: <p>Prior to construction, a biologist approved by the City of Citrus Heights shall designate environmentally sensitive areas on the project site to include the wetland and unnamed drainage. The biologist will demarcate the boundaries of the environmentally sensitive areas with flagging. To ensure that construction equipment and personnel do not affect these environmentally sensitive areas, the contractor will erect orange barrier fencing or other similar approved fencing to clearly define their boundaries.</p>	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Prior to commencing any site grading, tree removal, or any onsite activity 	<ul style="list-style-type: none"> • Preconstruction surveys are conducted when construction activities begin • Avoid or relocate consistent with the mitigation measure
Mitigation Measure 5: <p>The environmentally sensitive areas will be off-limits to construction activities including grading and clearing and grubbing. No construction personnel or equipment will be allowed in the environmentally sensitive areas. No parking of vehicles or storage of construction equipment, materials, or chemicals such as oil or gasoline will be allowed within the environmentally sensitive area.</p>	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Throughout all construction activity 	<ul style="list-style-type: none"> • Site plans and construction contracts include notes requiring conformance with the performance standards identified in this mitigation measure. • City may conduct unscheduled site visits throughout construction to verify achievement of performance standards
Mitigation Measure 6: <p>All construction personnel will be notified of the environmentally sensitive areas on the project site and will be instructed regarding the avoidance and minimization measures included in the project approvals.</p>	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Throughout all construction activity 	<ul style="list-style-type: none"> • Site plans and construction contracts include notes requiring conformance with the performance standards identified in this mitigation measure. • City may conduct unscheduled site visits throughout construction to verify achievement of performance standards
Mitigation Measure 7: <p>If construction of the project cannot avoid impacts to the environmentally sensitive area, the U.S. Army Corps of Engineers should be contacted regarding the potential need</p>	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Prior to commencing any site grading, tree 	<ul style="list-style-type: none"> • Preconstruction surveys are conducted when construction activities begin

Mitigation Monitoring and Reporting Program

for a Section 404 Permit and the Department of Fish and Wildlife should be notified under the Lake and Streambed Alteration Program (1600) regarding the potential need for a Streambed Alteration Agreement. If a Nationwide Permit is required, a Water Quality Certification (401 Permit) will also be required from the Regional Water Quality Control Board.			removal, or any onsite activity	<ul style="list-style-type: none"> • Avoid or relocate consistent with the mitigation measure
Mitigation Measure 8: The applicant shall avoid construction impacts on any protected tree onsite or provide mitigation if avoiding construction impacts is infeasible upon development of the site. A construction impact assessment shall be required as part of any required Tree Permit and shall be submitted to the Planning Division prior to development, including any grading or trenching, proposed within the dripline of any protected tree.	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Prior to commencing any site grading, tree removal, or any onsite activity 	<ul style="list-style-type: none"> • Preconstruction surveys are conducted when construction activities begin • Avoid or relocate consistent with the mitigation measure • City approval of Tree Protection and Replacement Plan prepared by licensed arborist.
<i>Cultural Resources and Tribal Cultural Resources</i>				
Mitigation Measure 9: If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for pre-contact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find: <ul style="list-style-type: none"> • If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required. • If the professional archaeologist determines that the find does represent a cultural resource from any 	Project applicant, contractor	City of Citrus Heights	<ul style="list-style-type: none"> • Throughout all construction activity 	<ul style="list-style-type: none"> • Construction activity in the area of any potential archeological resource is stopped until the actions specified in this mitigation measure are completed, subject to approval from the City

Mitigation Monitoring and Reporting Program

<p>time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the City of Citrus Heights, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.</p> <ul style="list-style-type: none"> • If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Sacramento County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the 				
--	--	--	--	--

Mitigation Monitoring and Reporting Program

<p>recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the Public Resources Code).</p> <p>This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.</p>				
<i>Noise</i>				
<p>Mitigation Measure 10: Mechanical ventilation shall be provided to allow occupants to close windows and doors in order to achieve the desired acoustical isolation.</p>	Project applicant	City of Citrus Heights	<ul style="list-style-type: none"> • Prior to the issuance of Occupancy Permit. 	<ul style="list-style-type: none"> • Design and materials are shown on building plans subject to City approval • Features have been installed as described in the mitigation

Mitigation Monitoring and Reporting Program

INTENTIONALLY LEFT BLANK




APPLICATION CHECKLIST

GREENHOUSE GAS REDUCTION COMPLIANCE

The City of Citrus Heights Greenhouse Gas Reduction Plan (GGRP) requires a reduction in community-wide GHG emissions 10-15% below 2005 levels by the year 2020. This checklist identifies the measures incorporated in the GGRP that will contribute to the City's achievement of this goal. Applicants of certain types of development projects are required to demonstrate how their project will use design components and/or operational protocols to achieve the required GHG reduction.

Projects that are not exempt from CEQA review shall fully complete this checklist and submit to the Planning Department in conjunction with the development applications. If a measure is not applicable, please explain. If the project uses an alternate method of GHG reduction, please provide explanation. Complete copies of the City's GGRP are available on the City's website at www.citrusheights.net

	Measure	GGRP #	Applicable (Y/N?)	Comment (Additional Sheets if Necessary)
	Participate in the BERC Sustainable Business Program	1.1.A.A	Y	See additional sheets
	Provide bike/Pedestrian Connections between land uses	2.1.C.A	Y	
	Provide preferential parking spaces for carpool or vanpool use	3.2.A.B	Y	
	Minimize Parking lot area by providing shared parking, motorcycle parking, or rideshare parking	3.3.A.C	Y	
	Provide parking and charging infrastructure for alternative fuel vehicles	3.4.A.A	Y	
	Install improvements identified in the Bicycle Master Plan	3.5.A.A	Y	
	Install bicycle parking facilities	3.5.B.A	Y	
	Provide Transit Stop improvements including shade, route information, lighting, etc. (if applicable)	3.6.A.B	N	
	Provide and implement a Construction Air Quality Mitigation Plan (if NOX exceeds 85lbs/day)	4.1.A.A	N	
	Utilize recycled materials in construction	4.1.C.A	Y	
	Install Solar Hot Water Heaters	4.2.B.A and 4.2.B.B	N	
	Sub-meter all tenant spaces	4.3.C.A	N	
	Utilize Energy Star Appliances	4.3.D.A	Y	
	Reduce Turf installation	5.1.B.E	Y	
	Maximize site improvements that promote infiltration, reuse, and evapotranspiration of rainfall from impervious areas	5.2.C.A	Y	
	Minimize impervious surfaces	5.2.C.C	Y	
	Recycle or re-use all construction materials/debris	6.2.A.A	Y	
	Install Shade Trees consistent with Zoning Code	7.1.A.C	Y	

Citrus Heights Greenhouse Gas Reduction Compliance Comments

1. *Participate in the BERC Sustainable Business Program*

Applicable: Yes

The residential care facility operator will take steps to join this sustainable business program, as required by the City of Citrus Heights.

2. *Provide bike/Pedestrian Connections between land uses*

Applicable: Yes.

This project provides a new sidewalk in the public right-of-way for pedestrian access along Sunrise Blvd.

3. *Provide preferential parking spaces for carpool or vanpool use*

Applicable: Yes

Site plan shows one carpool and one vanpool parking space.

4. *Minimize Parking lot area by providing shared parking, motorcycle parking, or rideshare parking*

Applicable: Yes

Site plan shows one carpool and one vanpool parking space.

5. *Provide parking and charging infrastructure for alternative fuel vehicles*

Applicable: Yes

Site plan shows location of two electric vehicle (EV) charging spaces that are capable of supporting future electric vehicle supply equipment. Note that plans are intended to demonstrate the project's capability and capacity for facilitating future EV charging. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

6. *Install improvements identified in the Bicycle Master Plan*

Applicable: Yes

Project to depict striped bicycle lane along Sunrise Blvd.

7. *Install bicycle parking facilities*

Applicable: Yes

This project provides two bicycle racks near the building entry.

8. *Provide Transit Stop improvements including shade, route information, lighting, etc. (if applicable)*

Applicable: No

There is no transit stop at this location.

9. *Provide and implement a Construction Air Quality Mitigation Plan (if NOX exceeds 85lbs/day)*

Applicable: No

Project is not expected to have NOx levels above 85lbs/day.

10. Utilize recycled materials in construction

Applicable: Yes

This project will specify recycled materials and materials with recycled content when appropriate.

11. Install Solar Hot Water Heaters

Applicable: No

This project will install hot water heaters in compliance with the 2016 CA Energy Code.

12. Sub-meter all tenant spaces

Applicable: No

Not applicable to residential care facilities.

13. Utilize Energy Star Appliances

Applicable: Yes

This project will specify Energy Star Appliances when appropriate.

14. Reduce Turf installation

Applicable: Yes

Landscape plans show a variety of non-turf landscaping.

15. Maximize site improvements that promote infiltration, reuse, and evapotranspiration of rainfall from impervious areas

Applicable: Yes

Landscape plans show compliance with this measure.

16. Minimize impervious surfaces

Applicable: Yes

Landscape plans to show compliance with this measure.

17. Recycle or re-use all construction materials/debris

Applicable: Yes

This project will recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with 2016 CA Green Building Standards Code.

18. Install Shade Trees consistent with Zoning Code

Applicable: Yes

Landscape plans to show compliance with this measure.

April 16, 2019

City of Citrus Heights
Planning Department
Attn: Alison Bermudez
6360 Fountain Square Drive
Citrus Heights, CA 95621

Re: Design Review: Description of Project

Project Name: Carefield Citrus Heights
LRS Project Number: 218295

Dear Ms. Bermudez,

Carefield Living builds and operates Residential Care Facilities for the Elderly (RCFE) offering "state of the art" assisted living and memory care. We are licensed by the California Department of Social Services, Community Care Licensing.

We house seniors over the age of 62 and aid them in their activities of daily living such as eating, bathing, dressing, toileting, transferring (walking) and medication management. The average age of our residents is 85 years old, and most of our residents come from the surrounding community.

We provide 3 meals per day in a common area dining room prepared in our kitchen. We also provide transportation services and physical, cognitive and social activity programs.

Our residents are monitored 24 hours a day by trained care staff and medication assistance staff. We do not provide skilled nursing or 24 hour per day medical care

Our primary services are provided on a 24 hour a day, 7 days a week basis. Visiting hours for residents and outside parties are from 8am to 8pm. Our doors are secured after hours from outside traffic for safety of residents.

Our residents reside in either the assisted living or memory care areas of our community, although we have many common areas that can be shared. Our memory care residents are housed in a portion of the property that is secured 24 hours a day for their security and well-being. Our "Lightfinder" memory care program was created by a noted expert in the field, and we also offer a signature memory enhancement program, "Silver Seeds" for our assisted living residents with early signs of mild cognitive impairment.

We maintain a full staff of community directors, including an Executive Director, Nurse Director, Dining Director, Activity Director, Maintenance Director and Marketing Director.

Our residents are offered a wide range of personalized lifestyle options and we pride ourselves in maintaining a close relationship with the greater community of which we are a part. Our goal for Carefield Living of Citrus

Heights is to meet the demand for senior living in the Citrus Heights community by addressing the individual needs of our residents, their families, our staff and the community at large.

Our motto is "Empowered Living in Connected Communities" and that is what we endeavor to provide.

Shannon McDonald on behalf of Carefield Living

720 NW Davis 503.221.1121 📞
Suite 300 503.221.2077 📠
Portland OR 97209 www.lrsarchitects.com

TRANSMITTAL

To: *City of Citrus Heights Planning Department*

Attn: Alison Bermudez

6360 Fountain Square Dr.

Citrus Heights, CA 95621

☎ 916-727-4740

📄 916-725-5799

Date: *Wednesday, April 17, 2019*

Project Number: *218295*

Project Name: *Carefield Citrus Heights*

Total Pages:

Copies To:

Transmitted By: *Shannon McDonald*

Transmit Via: ☐ Fax ☐ Mail/UPS Ground ☐ Messenger ☐ Overnight ☐ 2 Day ☒ Other *in person*

Item	Date	Description
1	4/10/19	Universal application form
2	4/4/19	Check for processing fee
3	2/7/19	Preliminary title report
4	1/22/19	Arborist report
5		Greenhouse Gas Reduction Compliance
6	4/16/19	(5) Drawing sets at 24"x36" – folded
7	4/16/19	(5) Drawing sets at 30"x42" – folded
8	4/16/19	(1) Drawing set at 11"x17" – folded
9		Operations Report
10	4/16/19	USB flash drive

RE: ***Design Review and Use Permit application***

Dear Ms. Bermudez,

I have attached all documentation required for Design Review and a Use Permit. Last Friday the materials board was delivered to your office, at the attention of Nicole Piva. Please contact us with any questions you may have.

Sincerely,

Shannon McDonald
Job Captain



UNIVERSAL APPLICATION FORM

CITY OF CITRUS HEIGHTS PLANNING DEPARTMENT

www.citrusheights.net

6360 Fountain Square Drive Citrus Heights, CA 95621 (916) 727-4740

Proposed Project Name (Print or type) Carefield Citrus Heights
Address of Project 8220 Sunrise Blvd
Total Land Area 198,198 sq ft Assessor's Parcel #'s 21600900120000
Acreage, Gross Floor Area, No. of Living Units, (if applicable) 74,000 sq ft, 80 units
Project Description New 2-story assisted living and meteor care building. Includes 44 parking spaces on site. Type V-A construction. Installing fire sprinkler system.

Application Entitlement Type(s): Design Review, Use Permit

APPLICATIONS MUST BE SUBMITTED IN PERSON - ORIGINAL INK SIGNATURES ARE REQUIRED

Owner's Authorization: (If the applicant is not the property owner of record), I authorize the Applicant to file this application and to represent me on all matters concerning the application.

PROPERTY OWNER (print or type)

Name Steve Barklis, manager Signature [Signature] Date 4/15/19
Company Name SH 7 Citrus Heights, LLC Day Phone 619.925.5675
Address 201 Lomas Santa Fe Drive City Solana Beach State CA Zip Code 92075
Suite 500

APPLICANT (print or type)

Company Name LRS Paul Boundy Architects Day Phone 503.265.1518
Address 720 NW Davis ST Suite 300 City Portland State OR Zip Code 97209
Name Kelsy Laughnan Signature [Signature] Date 4/10/19
E-Mail klaughnan@lrsarchitects.com

DEVELOPER (print or type)

Name same as property owner Signature _____ Date _____
Company Name _____ Day Phone _____
Address _____ City _____ State _____ Zip Code _____

Designated Primary Contact Person if Different than Applicant. (print or type)

Name _____ Day Phone _____
Address _____ City _____ State _____ Zip Code _____
E-Mail _____

City Use Only:

Approving Authority: _____ Current Zoning _____
Date received: _____
Fees paid: _____
Receipt Number: _____
File Number(s) _____



UNIVERSAL APPLICATION FORM

CITY OF CITRUS HEIGHTS PLANNING DEPARTMENT

www.citrusheights.net

6360 Fountain Square Drive Citrus Heights, CA 95621 (916) 727-4740


Proposed Project Name (Print or type) Carefield Citrus Heights
Address of Project 8220 Sunrise Blvd
Total Land Area 198,198 sq ft Assessor's Parcel #'s 21600900120000
Acreage, Gross Floor Area, No. of Living Units, (if applicable) 74,000 sq ft, 80 units
Project Description New 2-story assisted living and meteor care building. Includes 44 parking spaces on site. Type V-A construction. Installing fire sprinkler system.

Application Entitlement Type(s): Design Review, Use Permit


APPLICATIONS MUST BE SUBMITTED IN PERSON - ORIGINAL INK SIGNATURES ARE REQUIRED

Owner's Authorization: (If the applicant is not the property owner of record), I authorize the Applicant to file this application and to represent me on all matters concerning the application.

PROPERTY OWNER (print or type)

Name Steve Barklis, manager Signature  Date 4/15/19
Company Name SH 7 Citrus Heights, LLC Day Phone 619.925.5675
Address 201 Lomas Santa Fe Drive City Solana Beach State CA Zip Code 92075
Suite 500

APPLICANT (print or type)

Company Name LRS Paul Boundy Architects Day Phone 503.265.1518
Address 720 NW Davis ST Suite 300 City Portland State OR Zip Code 97209
Name Kelsy Laughnan Signature  Date 4/10/19
E-Mail klaughnan@lrsarchitects.com

DEVELOPER (print or type)

Name same as property owner Signature _____ Date _____
Company Name _____ Day Phone _____
Address _____ City _____ State _____ Zip Code _____

Designated Primary Contact Person if Different than Applicant. (print or type)

Name _____ Day Phone _____
Address _____ City _____ State _____ Zip Code _____
E-Mail _____

City Use Only:

Approving Authority: _____ Current Zoning _____
Date received: _____
Fees paid: _____
Receipt Number: _____
File Number(s) _____



PRELIMINARY REPORT

*In response to the application for a policy of title insurance referenced herein, **Chicago Title Company** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.*

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

The policy(ies) of title insurance to be issued hereunder will be policy(ies) of Chicago Title Insurance Company, a Florida corporation.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

Chicago Title Insurance Company

By:

President

Attest:

Secretary

Countersigned By:

Authorized Officer or Agent





ISSUING OFFICE: 11050 Olson Drive, Suite 200, Rancho Cordova, CA 95670

***Another Prompt Delivery From Chicago Title Company Title Department
Where Local Experience And Expertise Make A Difference***

PRELIMINARY REPORT

Title Officer: Cathy Clark
Email: Cathy.Clark@fnf.com
Title No.: FSJP-CTO1900076-CC

TO: Chicago Title Company
4911 Birch Street
Newport Beach, CA 92660
Attn: John Premac

PROPERTY ADDRESS(ES): 8220 Sunrise Boulevard, Citrus Heights, CA

EFFECTIVE DATE: January 22, 2019 at 07:30 AM

The form of policy or policies of title insurance contemplated by this report is:

ALTA Loan Policy 2006

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

A Fee as to Parcel(s) One

Easement(s) more fully described below as to Parcel(s) Two

2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS [VESTED IN:](#)

SH 7 Citrus Heights, a Delaware limited liability company

3. THE LAND REFERRED TO IN THIS REPORT IS DESCRIBED AS FOLLOWS:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 216-0090-012-0000

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CITRUS HEIGHTS, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE:

ALL THAT PORTION OF LOT 180 OF CITRUS HEIGHTS ADDITION NO. 8", ACCORDING TO THE OFFICIAL PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SACRAMENTO COUNTY, CALIFORNIA ON SEPTEMBER 16, 1911, IN [BOOK 12 OF MAPS, MAP NO. 42](#), DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WEST LINE OF SAID LOT 180, BEING ON THE CENTER LINE OF SUNRISE AVENUE, LOCATED NORTH 00° 45' EAST 151.5 FEET FROM THE SOUTHWEST CORNER OF SAID LOT 180; THENCE FROM SAID POINT OF BEGINNING SOUTH 88° 53' EAST, PARALLEL WITH THE SOUTH LINE OF SAID LOT 180, A DISTANCE OF 657.5 FEET TO THE EAST LINE OF SAID LOT; THENCE NORTH 00° 01' WEST, ALONG SAID EAST LINE, 305.44 FEET TO THE SOUTHEAST CORNER OF THAT PARCEL OF LAND DESCRIBED IN THE DEED FROM CHARLES W. BIGGS AND HAZEL BIGGS, HIS WIFE, TO FRANK GARINO, A SINGLE MAN, DATED NOVEMBER 30, 1949, AND RECORDED DECEMBER 5, 1949, IN [BOOK 1735 OF OFFICIAL RECORDS, AT PAGE 92](#); THENCE WEST ALONG THE SOUTH LINE OF SAID PARCEL OF LAND 653.88 FEET TO THE WEST LINE OF SAID LOT 180 AND THE CENTER LINE OF SAID SUNRISE AVENUE; THENCE SOUTH 00° 45' WEST, ALONG SAID WEST LINE AND THE CENTER LINE OF SAID SUNRISE AVENUE 292.02 FEET TO THE POINT OF BEGINNING.

PARCEL TWO:

AN EASEMENT FOR ROAD PURPOSES, BUT NOT THE EXCLUSIVE RIGHT OR PRIVILEGE, OVER A STRIP OF LAND 15.00 FEET IN WIDTH, THE SOUTH BOUNDARY OF WHICH IS THE NORTH BOUNDARY OF THE ABOVE DESCRIBED PROPERTY, AND EXTENDING FROM THE NORTHWEST CORNER TO THE NORTHEAST CORNER OF SAID PROPERTY.

AT THE DATE HEREOF, EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN SAID POLICY FORM WOULD BE AS FOLLOWS:

1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2019-2020.
2. Property taxes, including any personal property taxes and any assessments collected with taxes are as follows:

Code Area: IAFBFA
Tax Identification No.: 216-0090-012-0000
 Fiscal Year: 2018-2019
 1st Installment: \$9,431.15 Paid
 2nd Installment: \$9,431.15 Open
 Land: \$1,550,196.00
 Bill No.: 18406395
 Tracer No.: 06008

3. Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.
4. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.
5. Any unpaid amounts now owing, for delinquent utilities, of record or not. Any such amounts may be ascertained by contacting the following:

County of Sacramento at (916) 875-5555, and/or including :

City of Sacramento at (916) 808-5454.
 City of Folsom at (916) 355-7200.
 City of Galt at (209) 366-7150.
 City of Elk Grove at (916) 478-3642.
 City of Rancho Cordova at (916) 638-9000.
 City of Isleton at (916) 777-7770.
 City of Citrus Heights at (916) 725-2448, and for waste charges - Allied Waste at (916) 725-9060, and as required, fax request to (916) 463-0297.
 Sacramento Suburban Water District at (916) 972-7171.

6. Said land is located within the boundaries of the Energy Independence Program in accordance with Section 5898.22 of Chapter 29 of Part 3 of Division 7 of the California Streets and Highways Code, as shown on a map recorded

District: SB 555 Contractual Assessment District
 Recording Date: September 19, 2012
 Recording No: Book 20120919 Page 0089 of Official Records

EXCEPTIONS

(continued)

7. Said land is located within the boundaries of the Energy Independence Program in accordance with Section 5898.22 of Chapter 29 of Part 3 of Division 7 of the California Streets and Highways Code, as shown on a map recorded

District: Community Facilities District No. 2012-01 (Clean Energy)
 Recording Date: October 3, 2012
 Recording No.: Book 20121003 Page 0418 of Official Records

8. Taxes and assessments levied by the Citrus Heights Irrigation District 916-725-6873 or California American Water 916-568-4200.

9. Water rights, claims or title to water, whether or not disclosed by the public records.

10. Rights of the public to any portion of the Land lying within the area commonly known as Sunrise Boulevard.

11. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Pacific Gas and Electric Company
 Purpose: public utilities
 Recording Date: September 11, 1911
 Recording No.: [Book 346 of Deeds, Page 129](#)
 Affects: exact location not disclosed of record

12. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Citrus Heights Irrigation District
 Purpose: water pipelines
 Recording Date: April 16, 1940
 Recording No.: [Book 817, Page 45 of Official Records](#)
 Affects: exact location not disclosed of record

13. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Charles W. Biggs, et ux
 Purpose: road
 Recording Date: December 5, 1949
 Recording No.: [Book 1735, Page 92 of Official Records](#)
 Affects: Southerly 15 feet

14. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: County of Sacramento
 Purpose: public highway or road and utilities
 Recording Date: April 19, 1954
 Recording No.: [Book 2589, Page 452 of Official Records](#)
 Affects: Westerly 40 feet

EXCEPTIONS
(continued)

15. A deed of trust to secure an indebtedness in the amount shown below,

Amount: \$882,143.00
Dated: June 18, 2018
Trustor/Grantor: SH 7 Citrus Heights, a Delaware limited liability company
Trustee: First Choice Bank
Beneficiary: First Choice Bank
Recording Date: June 26, 2018
Recording No.: [Book 20180626, Page 0123, of Official Records](#)

16. Matters contained in that certain document

Entitled: Hazardous Substances Certificate and Indemnity Agreement
Recording Date: June 26, 2018
Recording No.: [Book 20180626, Page 0124, of Official Records](#)

Reference is hereby made to said document for full particulars.

17. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

18. Matters which may be disclosed by an inspection and/or by a correct ALTA/NSPS Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.

19. The Company will require that an Owner's Affidavit be completed by the party(s) named below before the issuance of any policy of title insurance.

Party(ies): SH 7 Citrus Heights, a Delaware limited liability company

The Company reserves the right to add additional items or make further requirements after review of the requested Affidavit.

EXCEPTIONS

(continued)

20. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the entity named below.

Limited Liability Company: SH 7 Citrus Heights, a Delaware limited liability company

- a. A copy of its operating agreement, if any, and any and all amendments, supplements and/or modifications thereto, certified by the appropriate manager or member.
- b. If a domestic Limited Liability Company, a copy of its Articles of Organization and all amendment thereto with the appropriate filing stamps.
- c. If the Limited Liability Company is member-managed a full and complete current list of members certified by the appropriate manager or member.
- d. A current dated certificate of good standing from the proper governmental authority of the state in which the entity was created
- e. If less than all members, or managers, as appropriate, will be executing the closing documents, furnish evidence of the authority of those signing.
- f) If Limited Liability Company is a Single Member Entity, a Statement of Information for the Single Member will be required.
- g) Each member and manager of the LLC without an Operating Agreement must execute in the presence of a notary public the Certificate of California LLC (Without an Operating Agreement) Status and Authority form

21. The transaction contemplated in connection with this Report is subject to the review and approval of the Company's Corporate Underwriting Department. The Company reserves the right to add additional items or make further requirements after such review.

END OF EXCEPTIONS

NOTES

- Note 1.** Note: The Company is not aware of any matters which would cause it to decline to attach CLTA Endorsement Form 116 indicating that there is located on said Land Commercial , known as 8220 Sunrise Boulevard, Citrus Heights, CA, to an Extended Coverage Loan Policy.
- Note 2.** Note: The only conveyance(s) affecting said Land, which recorded within 24 months of the date of this report, are as follows:
- Grantor: SAL Citrus Heights, LLC, a Delaware Limited Liability Company
 Grantee: SH 7 Citrus Heights, a Delaware limited liability company
 Recording Date: June 26, 2018
 Recording No.: [Book 20180626, Page 0122, of Official Records](#)
- Note 3.** Note: The charge for a policy of title insurance, when issued through this application for title insurance, will be based on the Short Term Rate.
- Note 4.** If a county recorder, title insurance company, escrow company, real estate broker, real estate agent or association provides a copy of a declaration, governing document or deed to any person, California law requires that the document provided shall include a statement regarding any unlawful restrictions. Said statement is to be in at least 14-point bold face type and may be stamped on the first page of any document provided or included as a cover page attached to the requested document. Should a party to this transaction request a copy of any document reported herein that fits this category, the statement is to be included in the manner described.
- Note 5.** Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of an agent, an authorized employee of the insured lender, or by using Bancserv or other approved third-party service. If the above requirements cannot be met, please call the company at the number provided in this report.
- Note 6.** Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.
- Note 7.** Your application for title insurance was placed by reference to only a street address or tax identification number. Based on our records, we believe that the legal description in this report covers the parcel(s) of Land that you requested. If the legal description is incorrect, the seller/borrower must notify the Company and/or the settlement company in order to prevent errors and to be certain that the correct parcel(s) of Land will appear on any documents to be recorded in connection with this transaction and on the policy of title insurance.
- Note 8.** Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.

END OF NOTES



Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. **DO NOT** use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** **DO NOT** send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
<http://www.fbi.gov>

Internet Crime Complain Center:
<http://www.ic3.gov>

FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE
Revised May 1, 2018

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF", "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

Types of Information Collected

We may collect two types of information from you: Personal Information and Browsing Information.

Personal Information. FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver's license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

Browsing Information. FNF may automatically collect the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or mobile device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

How Personal Information is Collected

We may collect Personal Information about you from:

- information we receive from you on applications or other forms;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

How Browsing Information is Collected

If you visit or use an FNF Website, Browsing Information may be collected during your visit. Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to other websites. FNF is not responsible for the privacy practices or the content of any of those other websites. We advise you to read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and third parties' products and services, jointly or independently.

When Information Is Disclosed

We may make disclosures of your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to nonaffiliated third party service providers with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Please see "**Choices With Your Information**" to learn the disclosures you can restrict.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to guard your Personal Information. We limit access to nonpublic personal information about you to employees who need to know that information to do their job. When we provide Personal Information to others as discussed in this Privacy Notice, we expect that they process such information in compliance with our Privacy Notice and in compliance with applicable privacy laws.

Choices With Your Information

If you do not want FNF to share your information with our affiliates to directly market to you, you may send an "opt out" request by email, phone, or physical mail as directed at the end of this Privacy Notice. We do not share your Personal Information with nonaffiliates for their use to direct market to you.

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law.

For Nevada Residents: You may be placed on our internal Do Not Call List by calling (888) 934-3354 or by contacting us via the information set forth at the end of this Privacy Notice. Nevada law requires that we also provide you with the following contact information: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: BCPINFO@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about you creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

Information From Children

The FNF Websites are meant for adults and are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence for any of the purposes described in this Privacy Notice. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except (1) as required or authorized by contract with the mortgage loan servicer or lender, or (2) as required by law or in the good-faith belief that such disclosure is necessary to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The revised Privacy Notice, showing the new revision date, will be posted on the FNF Website. Each time you provide information to us following any amendment of this Privacy Notice, your provision of information to us will signify your assent to and acceptance of the terms of the revised Privacy Notice for all previously collected information and information collected from you in the future. We may use comments, information or feedback that you submit to us in any manner that we may choose without notice or compensation to you.

Accessing and Correcting Information; Contact Us

If you have questions, would like to access or correct your Personal Information, or want to opt-out of information sharing for affiliate marketing, send your requests via email to privacy@fnf.com, by phone to (888) 934-3354, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

ATTACHMENT ONE

CALIFORNIA LAND TITLE ASSOCIATION STANDARD COVERAGE POLICY - 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
(b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

ATTACHMENT ONE (CONTINUED)

CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13) ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 5,000.00

ATTACHMENT ONE (CONTINUED)

2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II, [t]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

[PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

ATTACHMENT ONE (CONTINUED)

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.]
7. [Variable exceptions such as taxes, easements, CC&R's, etc., shown here.]

ATTACHMENT ONE (CONTINUED)

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY - ASSESSMENTS PRIORITY (04-02-15)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

FNF Underwritten Title Companies

CTC – Chicago Title Company
CLTC – Commonwealth Land Title Company
FNTC – Fidelity National Title Company
FNTCCA – Fidelity National Title Company of California
TICOR – Ticor Title Company of California
LTC – Lawyer's Title Company

Underwritten by FNF Underwriters

CTIC – Chicago Title Insurance Company
CLTIC – Commonwealth Land Title Insurance Company
FNTIC – Fidelity National Title Insurance Company
FNTIC – Fidelity National Title Insurance Company
CTIC – Chicago Title Insurance Company
CLTIC – Commonwealth Land Title Insurance Company

Available Discounts

CREDIT FOR PRELIMINARY TITLE REPORTS AND/OR COMMITMENTS ON SUBSEQUENT POLICIES (CTIC, FNTIC)

Where no major change in the title has occurred since the issuance of the original report or commitment, the order may be reopened within twelve (12) to thirty-six (36) months and all or a portion of the charge previously paid for the report or commitment may be credited on a subsequent policy charge.

DISASTER LOANS (CTIC, CLTIC, FNTIC)

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within twenty-four (24) months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be fifty percent (50%) of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC, FNTIC)

On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be fifty percent (50%) to seventy percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be thirty-two percent (32%) to fifty percent (50%) of the appropriate title insurance rate, depending on the type of coverage selected.

03

216-09



0

HELIX Environmental Planning, Inc.
11 Natoma Street, Suite 150
Folsom, CA 95630
916.365.8700 tel
619.462.0552 fax
www.helixepi.com



February 7, 2019

Mr. Pat Brown
President
Cannon Management
10940 SW Barnes Rd. Suite 306
Portland, OR 97225

Subject: Arborist Survey Update for 8220 Sunrise Blvd. Citrus Heights, CA

Dear Mr. Brown:

On behalf of Cannon Management, HELIX Environmental Planning, Inc. (HELIX) conducted a tree inventory of the property located at 8220 Sunrise Blvd. in the City of Citrus Heights, Ca. (APN 216-0090-012-0000; hereafter referred to as "property"). The property is the site of a proposed senior care facility. A tree inventory of the property was conducted in 2008 and updated in 2014; a total of 65 trees were identified in the two inventories. Because the property has not been developed, a further update to the tree inventory is necessary to support current planning and entitlement efforts. Consequently, this tree inventory was undertaken to re-assess the size and condition of existing trees on the property.

The arborist survey was conducted by International Society of Arboriculture (ISA) Certified Arborist, George Aldridge (ISA # WE-11778A) on February 5, 2019. All trees on the property with at least one stem measuring four inches or greater in diameter at breast height (dbh) were inventoried. The locations of all inventoried trees were noted on an aerial photograph of the property and each tree was labeled with a numbered aluminum tree tag. Trees identified in previous inventories that had lost their tree tags were re-tagged with the same number, if available, or issued a new number. Attachment A is a map depicting the locations of all of the trees inventoried on the property. The tree number, common name, dbh, approximate height, approximate dripline radius, and overall vigor were noted for each tree. Field data are included as Attachment B.

Of the 65 trees originally identified in the 2008 and 2014 surveys, seven had died and/or been removed (Trees 3, 4, 6, 10, 19, 47, and 48). An additional 23 trees not originally included in the previous inventories because they were too small were included in the present survey, making a total of 81 live trees with at least one stem equal or greater than 4 inches dbh on the property. Tree species inventoried on the property include interior live oak (*Quercus wislizenii*), valley oak (*Q. lobata*), blue oak (*Q. douglasii*), red oak (*Q. rubra*), sawleaf zelkova (*Zelkova serrata*), miscellaneous fruit trees (*Prunus* spp.), willow (*Salix* spp.), almond (*Prunus dulcis*), white mulberry (*Morus alba*), privet (*Ligustrum lucidum*), and London plane tree (*Platanus x acerifolia*). The majority of the trees were in fair to good condition. Six trees were in poor condition as noted

in Attachment B and would not be suitable for retention on the site in conjunction with the proposed development.

The areas around Tree 25 and Tree 36 were severely disturbed by trash associated with transient encampments. Issues associated with this disturbance include: soil compaction; large quantities of plastic bags, clothing, paper, electronics, and wood covering the ground interfere with water infiltration and gas exchange; ropes attached to trunks and limbs create potential issues with loading, girdling, and damage to bark; wet clothes hanging against trunks and limbs promote decay and harbor insects and pathogens.

It is important to note that the arborist survey represents a general assessment of the existing health and condition of the trees on the property based on a brief visual inspection from the base of the tree and the current site conditions. The assessment did not include a detailed analysis, such as soil excavation to conduct detailed root inspections or climbing the tree or using lifts to conduct aerial inspections within the canopy. Further inspection of trees planned for retention on the property may be necessary prior to implementation of the proposed project. Currently there is no more than a low likelihood that tree or limb failure would result in a hazardous situation due to the low instance of site use by humans; however, trees retained on the site may experience stress or decline prior to or as a result of construction activities, which could lead to potentially hazardous situations associated with the failure of limbs or of entire trees once the site is developed. A certified arborist should be retained to assist with the development of measures to ensure adequate protection of trees planned for retention on the site as well as to determine whether any such trees can be safely retained on the site in conjunction with the proposed development. General guidelines for the protection of trees planned for preservation are provided in Attachment C.

If you have any questions, feel free to contact me at (916) 365-8714 or GeorgeA@helixepi.com.

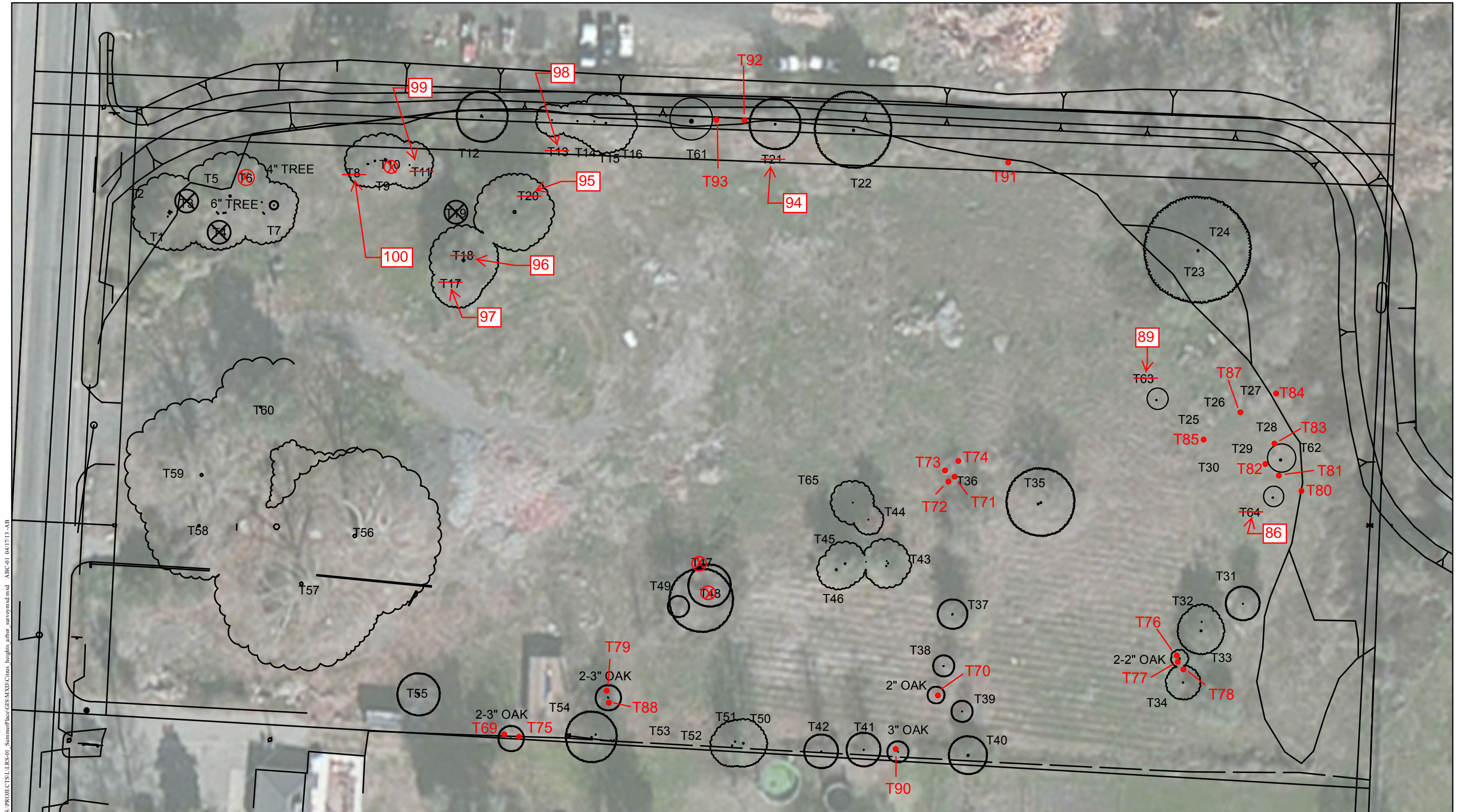
Sincerely,



George Aldridge
ISA Certified Arborist

Attachments:

- A: Tree Location Map*
- B: Arborist Survey Data*
- C: General Protection Guidelines for Preserved Trees*



S:\PROJECTS\11175-01_SummerPlace\GIS\MXD\Clims heights after survey.mxd.mxd ABC-01 04/17/13-AB

Certified Arborist Tree Inventory

SUMMERPLACE LIVING PROJECT

8220 Sunrise Blvd., Citrus Heights, CA



Project Name: SummerPlace Living 8220 SunriseProject Number: LRS-01Arborist Name: George Aldridge (WE-11778A)Date: 2/05/2019

Vigor categories: Excellent; Good; Fair-Good; Fair (dead branches, burns, rot, insects, etc.; but will survive more than 5 years); Fair-Poor; Poor (likely to die within 5 years)

Tag #	Species	DBH	Height	Dripline	Vigor	Comments
1	interior live oak	14.6, 5.7	30	25	F	crowded by tree #2
2	sawleaf zelkova	10.0, 8.3, 8.2, 7.6, 6.5	35	20	P	trunk wounds; dieback; sparse foliage; nearly dead
3	Oregon ash	--	--	--	--	Gone
4	Oregon ash	--	--	--	--	Gone
5	interior live oak	24.3	30	20	P	failure at base, 2 nd trunk gone
6	Prunus	--	--	--	--	Gone
7	Prunus	8.6, 6.3, 5.0, 5.0	25	15	F	trunk wounds
100 (8)	interior live oak	9.4, 8.7	30	15	F-G	
9	valley oak	14.0	35	18	G	
10	willow	--	--	--	0	Dead
99 (11)	valley oak	11.5	35	15	F	callused wounds on trunk
12	almond	6.7, 5.7, 7.0, 4.2, 3.2, 5.8	15	10	F-P	dead limbs; sapsucker damage
98 (13)	blue oak	9.3	15	10	F-G	
14	blue oak	9.5	20	10	F	wounds at base; sparse canopy
15	interior live oak	6.8	20	5	G	
16	blue oak	11.0, 10.8	35	15	G	
97 (17)	blue oak	18.0	40	20	F-G	
96 (18)	interior live oak	10.3, 9.8, 8.3	35	20	F	decayed pruning cuts; included bark
19	zelkova	--	--	--	--	Gone
95 (20)	interior live oak	22.1, 17.8	40	20	F	decayed pruning cuts; included bark
94 (21)	valley oak	16.4	35	15	F	dieback
22	interior live oak	23.4	35	20	G	
23	willow	16, 14, 12	45	25	F-G	dbh estimated – trunk inaccessible
24	interior live oak	10	30	15	G	dbh estimated – trunk inaccessible
25	interior live oak	13.4, 12.2	35	30	P	tree has fallen over

26	valley oak	11.4	40	15	F	dieback
27	valley oak	9.8	35	10	F	dieback
28	interior live oak	5.7, 4.3, 3.5	20	5	F	dieback
29	valley oak	7, 5	30	15	F-G	unable to relocate tree
30	valley oak	8.0, 7.0	30	5	F	suppressed; dieback
31	interior live oak	11.7	20	10	F-G	
32	valley oak	6.8	20	5	F	galls; dieback
33	interior live oak	13.1, 7.6	20	15	F-G	
34	interior live oak	10.8, 7.8	20	10	F-G	
35	blue oak	18.9, 17.4	40	20	F	4 co-dominant trunks have fused into 2
36	white mulberry	7, 6, 4, 4, 4, 4, 4	30	20	F-P	poor branch structure; declining
37	interior live oak	11.0, 9.5	30	10	G	
38	valley oak	9.0, 6.0	25	10	F	galls; dieback
39	valley oak	10.7	25	10	F-G	
40	interior live oak	8.2, 6.4, 9.1	15	10	F-G	
41	valley oak	12.9	30	10	G	
42	valley oak	14.1	40	10	F-G	galls
43	interior live oak	12.4, 9.7, 7.7	25	10	G	
44	interior live oak	8.2	20	10	G	
45	interior live oak	9.2, 8.5	30	10	G	
46	interior live oak	7.2, 6.8, 6.3	20	15	F-G	
47	willow	--	--	--	--	Gone
48	willow	--	--	--	--	Gone
49	valley oak	10.2	25	10	P	epicormic growth; galls; stunted twigs
50	valley oak	14.0	40	15	F	large callused wound on trunk
51	valley oak	11.2	30	15	F	
52	privet	5.6, 5.7	20	5	G	
53	valley oak	7.8, 6.3	20	10	F	galls
54	interior live oak	11.8	25	15	F	callused wounds on trunk
55	fruit tree	8.0, 5.3, 5.2	25	20	F	dieback
56	London plane tree	36.2	60	30	F-G	
57	London plane tree	32.5	50	30	F-G	
58	London plane tree	18.3	50	25	F	
59	London plane tree	30.8	60	30	F	
60	interior live oak	25.2	45	25	F	
61	blue oak	6.9, 5.2	10	8	G	
62	valley oak	7.0	20	5	F	
89 (63)	valley oak	7.4	20	5	F-G	
86 (64)	blue oak	7.0, 6.4	15	8	F-G	
65	red oak	8.4	30	10	G	

69	red oak	4.8, 4.2	20	6	F	
70	valley oak	6.0, 5.2	15	7	F	galls
71	interior live oak	4.7	10	6	G	crowded by tree #36
72	interior live oak	4.5	10	10	G	crowded by tree #36
73	interior live oak	5.9	10	10	G	crowded by tree #36
74	interior live oak	5.4	10	5	G	crowded by tree #36
75	red oak	7.0, 4.7	20	10	F	
76	interior live oak	6.1, 3.1	12	8	G	
77	interior live oak	5.5, 2.5	10	6	F	crowded by tree #76
78	Prunus	7.0, 4.2, 4.0	10	6	F	
79	red oak	5.5	20	7	F	
80	valley oak	5.2, 4.3, 4.2	18	8	G	
81	valley oak	5.1, 4.5	18	6	F	sparse canopy; included bark
82	valley oak	4.5	18	4	P	severe damage at base; sparse canopy; poor structure
83	valley oak	6.0, 4.4	20	6	P	sparse canopy; poor structure; included bark
84	valley oak	11.0, 7.0	30	11	G	
85	valley oak	5.2, 4.6	20	8	F	
87	blue oak	4.6	20	4	F	
88	valley oak	5.0, 4.4	20	9	G	
90	blue oak	6.5	12	10	G	
91	valley oak	6.4, 6.2	20	6	G	
92	interior live oak	4.5, 3.5, 5.7	12	10	G	
93	interior live oak	5.4	12	10	G	

General Protection Guidelines for Trees Planned for Preservation

To prevent soil compaction:

- 6-8 inches of wood chips should be spread inside the dripline of trees where temporary construction traffic or staging would occur. Chips should be removed after project completion, or the depth reduced to no more than 4 inches. Alternatively, bridging root areas with steel plates would reduce damage to roots within construction traffic areas.
- A circle with a radius measurement from the trunk of the tree to the tip of its longest limb, plus one foot, shall constitute the critical root zone protection area of each protected tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each protected tree. Removing limbs that make up the dripline does not change the protected area.

To reduce damage due to raising the existing grade:

- Grading within the protected zone of a protected tree shall be minimized. Cuts within the protected zone shall be maintained at less than 20% of the critical root zone area. Grade cuts shall be monitored by the project Arborist. Any damaged roots encountered shall be root pruned and properly treated as deemed necessary by the Project Arborist.
- Construct an open-joint wall of shell, brick, rock or masonry in a circle around the tree trunk, with at least 1 to 2 feet between the wall and trunk. This wall should be as high as the top of the new grade. This opening is commonly referred to as a tree well.
- If fills exceed 1 foot in depth up to 20% of the critical root zone area, aeration systems may serve to mitigate the presence of the fill materials as determined by the Project Arborist.
- Construct an aeration system using 4-inch agricultural clay tile or 4-inch perforated plastic pipe arranged in five to six horizontal lines radiating from the tree well like spokes in a wheel to a point beyond the branch spread. Allow excess moisture to drain away by installing the radial lines so they slope away from the trunk. Connect the outer ends of the radiating system with a circle of tile or perforated plastic pipe.
- To provide vents, place 4- or 6-inch plastic pipe or bell tile upright over the junction of the radial lines with the circle. They should extend to the surface of the planned grade level. Extend the lower end of the aeration system to a curb or storm drain to carry excess moisture away from the root system.
- Cover the exposed soil and tile system with rock or coarse gravel to a depth of 6 to 18 inches, depending on the amount of fill. Follow this with a covering layer of gravel. Place a thin layer of straw, woven plastic or other porous material over the gravel to prevent soil from filtering into the gravel and stone. Fill with good topsoil to the desired grade.
- When fill materials are deemed necessary on two or three sides of a tree it is critical to provide for drainage away from the critical root zone area of the tree (particularly when considering heavy winter rainfalls). Overland releases and subterranean drains dug outside the critical root zone area and tied directly to the main storm drain system are two options.
- The construction of impervious surfaces within the dripline of a protected tree shall be minimized. When necessary, a piped aeration system shall be installed under the direct supervision of the Project Arborist.

- Preservation devices such as aeration systems, tree wells, drains, special paving and cabling systems must be installed in conformance with approved plans and certified by the Project Arborist.
- To discourage rodents, fill the tree well with enough coarse gravel to cover the ends of the lines opening into the well. Also fill the upright bell tile and cover with a screen or grill.
- Minor roots less than one inch in diameter encountered during approved excavation and/or grading activities may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area as deemed necessary by the Project Arborist.
- Major roots greater than one inch in diameter encountered during approved excavation and/or grading activities may not be cut without approval of the Project Arborist. Depending upon the type of improvement being proposed, bridging techniques or a new site design may need to be employed to protect the roots and the tree.
- Cut faces, which will be exposed for more than 2-3 days, shall be covered with dense burlap fabric and watered to maintain soil moisture at least on a daily basis (or possibly more frequently during summer months). If any native ground surface fabric within the protected zone must be removed for any reason, it shall be replaced within 48 hours.
- In cases where a permit has been approved for construction of a retaining wall(s) within the protected zone of a protected tree the applicant will be required to provide for immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall within the protected zone of the protected tree shall be constructed within 72 hours after completion of grading within the root protection zone.

General Construction Site Recommendations

- A minimum 4-foot tall, brightly colored, synthetic fence should be installed around the limits of the work area or around outermost edge of the protected zone of trees that are designated for retention on-site. Encroachment into the fenced areas should be restricted to the minimum amount feasible and fencing should remain in place until all construction activities have ceased. The protected zone is defined as the “dripline” (which is an imaginary line that is drawn on the ground around the tree at the outermost limit of the canopy) or in cases where construction is encroaching on the dripline of a retained tree, the protected zone is the portion of the tree’s dripline that is being protected. Fencing shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review body. The developer shall contact the Project Arborist and the Planning Department for an inspection of the fencing prior to commencing construction activities on site.
- Signs shall be installed on the protective fence in four equidistant locations around each individual tree. The size of the sign must be a minimum of two by two feet and must contain the following language “Warning: This Fence Shall Not Be Removed or Relocated Without Written Authorization From **insert governing body**”. Protective fencing shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down or otherwise modified without prior written authorization.
- All portions of permanent fencing that will encroach into the protected zone of a protected tree shall be constructed using posts set no closer than ten feet on center. Posts shall be spaced in

such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees(s).

- The fenced area should be kept clear of building materials, waste, and excess soil.
- No digging, trenching, compaction, or other soil disturbance should be allowed in the fenced area.
- The storage of construction equipment or hazardous materials such as gasoline, oil, or other toxic chemicals should not be allowed in or adjacent to the fenced area.
- Storage areas for equipment, soil, and construction materials as well as burn sites (if permitted), cement washout pits, and construction work zones should be kept away from protected trees and outside the fenced in area.
- Cable, chain, rope or signage should not be attached to retained trees.
- Designated roads and parking areas should be established. All construction personnel should be restricted to driving and parking in designated areas. Discharge of exhaust from construction vehicles and equipment should not be allowed near the protected zone of trees.
- Grade changes should be avoided near fenced areas to the maximum extent possible.
- No sprinkler or irrigation system shall be installed in such a manner that sprays water or required trenching within the dripline of a protected tree. An above ground drip irrigation system is recommended. An independent low-flow drip irrigation system may be used for establishing drought tolerant plants within the protected zone of a protected tree. Irrigation shall be gradually reduced and discontinued after a 2-year period.
- Landscaping beneath native oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. Planting live material under protected native oak trees is generally discouraged and is not recommended within 6 feet of the trunk of a native oak tree with a diameter at breast height (DBH) of 18 inches or less, or within 10 feet of the trunk of a native oak tree with DBH of more than 18 inches. The only plant species which shall be planted within the dripline of native oak trees are those which are tolerant of the natural, semi-arid environs of the tree(s).

Recommendations for Construction Activities in the Vicinity of Retained Trees

- Any protected trees on site which require pruning shall be pruned by an ISA Certified Arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards, ANSI Standard 2133.1-2000 regarding safety practices, and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines" and Best Management Practices.
- Trenching within the dripline of retained trees should be avoided to the maximum extent practicable and kept a minimum distance of 10 times the diameter of the tree away from its trunk. If necessary, this trenching should be conducted using hand excavation or compressed air to reduce impacts to tree roots. Machine trenching should not be allowed within the dripline of retained trees. Trenching inside the dripline should be monitored by a certified arborist who may direct the construction crew to use hand tools rather than heavy equipment. Hand saws, pass-through pruners, shovels and trowels, burlap cloth, and water should be available at all times during trenching inside the dripline. If pipes must be installed closer to the tree than a distance of 10 times the diameter of the tree away from its trunk, they should be bored beneath the tree a minimum of 3 feet below the ground surface to reduce impacts to roots.

- Excavation should also be minimized within the dripline of retained trees. Construction within the dripline of retained trees should be conducted in a manner that minimizes excavation and provides for the best preservation of roots as determined by the Project Arborist.
- If tree roots are severed outside of the fenced area, they should be severed cleanly and kept moist. All exposed roots outside of fenced areas should be covered with protective material during construction such as mulch or plywood sheets to reduce soil compaction. Protective material should be removed upon completion of construction activities.
- Construction activities involving soil disturbance should be avoided during hot, dry, weather and trees shall be watered before, during, and after trenching and excavation within the dripline of retained trees to offset water loss due to cut roots.
- Grading within the driplines of retained trees should be avoided wherever feasible.
- Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected tree shall be done under the direct supervision of the Project Arborist.
- No sign, ropes, cables (except those which may be installed by an ISA Certified Arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of identification in preparing tree reports and inventories shall be allowed.
- No vehicles, construction equipment, mobile homes/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within driplines of protected trees.
- Drainage patterns on the site shall not be modified so that water collects, stands or is diverted across the dripline of any protected tree.
- No trenching shall be allowed within the driplines of protected trees, except as specifically approved by the Planning Department as set forth in the project's Conditions of Approval and/or approved tree permit. If it is absolutely necessary to install underground utilities within the dripline of a protected tree the utilizing hand tools to avoid root injury under the direct supervision of the Project Arborist.

Recommendations for Protection of Trees Post-Construction

- Post-construction inspections of the trees should be conducted by a Certified Arborist or Certified Tree Worker to determine if retained trees are stressed (e.g., water stress, nutrient stress) or damaged (e.g., broken branches, trunk damage). Appropriate corrective actions should be implemented as necessary. Such corrective actions may include remediation of severe soil compaction through vertical mulching or a similar technique, remedial pruning to repair damaged or broken limbs, application of mulch, application of root stimulant to encourage new root growth in trees that have a significant portion of their roots lost due to cutting or soil compaction, etc.
- Aeration of soil by vertical mulching or similar technique should be implemented around retained trees to offset the impacts of soil compaction that has already occurred due to construction activities and other site uses.
- Long term maintenance should also be conducted by a Certified Arborist or tree care specialist to assist the trees with recovering from construction related stress and may include watering, fertilization, pruning, and/or pest/disease control.




APPLICATION CHECKLIST

GREENHOUSE GAS REDUCTION COMPLIANCE

The City of Citrus Heights Greenhouse Gas Reduction Plan (GGRP) requires a reduction in community-wide GHG emissions 10-15% below 2005 levels by the year 2020. This checklist identifies the measures incorporated in the GGRP that will contribute to the City's achievement of this goal. Applicants of certain types of development projects are required to demonstrate how their project will use design components and/or operational protocols to achieve the required GHG reduction.

Projects that are not exempt from CEQA review shall fully complete this checklist and submit to the Planning Department in conjunction with the development applications. If a measure is not applicable, please explain. If the project uses an alternate method of GHG reduction, please provide explanation. Complete copies of the City's GGRP are available on the City's website at www.citrusheights.net

	Measure	GGRP #	Applicable (Y/N?)	Comment (Additional Sheets if Necessary)
	Participate in the BERC Sustainable Business Program	1.1.A.A	Y	See additional sheets
	Provide bike/Pedestrian Connections between land uses	2.1.C.A	Y	
	Provide preferential parking spaces for carpool or vanpool use	3.2.A.B	Y	
	Minimize Parking lot area by providing shared parking, motorcycle parking, or rideshare parking	3.3.A.C	Y	
	Provide parking and charging infrastructure for alternative fuel vehicles	3.4.A.A	Y	
	Install improvements identified in the Bicycle Master Plan	3.5.A.A	Y	
	Install bicycle parking facilities	3.5.B.A	Y	
	Provide Transit Stop improvements including shade, route information, lighting, etc. (if applicable)	3.6.A.B	N	
	Provide and implement a Construction Air Quality Mitigation Plan (if NOX exceeds 85lbs/day)	4.1.A.A	N	
	Utilize recycled materials in construction	4.1.C.A	Y	
	Install Solar Hot Water Heaters	4.2.B.A and 4.2.B.B	N	
	Sub-meter all tenant spaces	4.3.C.A	N	
	Utilize Energy Star Appliances	4.3.D.A	Y	
	Reduce Turf installation	5.1.B.E	Y	
	Maximize site improvements that promote infiltration, reuse, and evapotranspiration of rainfall from impervious areas	5.2.C.A	Y	
	Minimize impervious surfaces	5.2.C.C	Y	
	Recycle or re-use all construction materials/debris	6.2.A.A	Y	
	Install Shade Trees consistent with Zoning Code	7.1.A.C	Y	

Citrus Heights Greenhouse Gas Reduction Compliance Comments

1. Participate in the BERC Sustainable Business Program

Applicable: Yes

The residential care facility operator will take steps to join this sustainable business program, as required by the City of Citrus Heights.

2. Provide bike/Pedestrian Connections between land uses

Applicable: Yes.

This project provides a new sidewalk in the public right-of-way for pedestrian access along Sunrise Blvd.

3. Provide preferential parking spaces for carpool or vanpool use

Applicable: Yes

Site plan shows one carpool and one vanpool parking space.

4. Minimize Parking lot area by providing shared parking, motorcycle parking, or rideshare parking

Applicable: Yes

Site plan shows one carpool and one vanpool parking space.

5. Provide parking and charging infrastructure for alternative fuel vehicles

Applicable: Yes

Site plan shows location of two electric vehicle (EV) charging spaces that are capable of supporting future electric vehicle supply equipment. Note that plans are intended to demonstrate the project's capability and capacity for facilitating future EV charging. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

6. Install improvements identified in the Bicycle Master Plan

Applicable: Yes

Project to depict striped bicycle lane along Sunrise Blvd.

7. Install bicycle parking facilities

Applicable: Yes

This project provides two bicycle racks near the building entry.

8. Provide Transit Stop improvements including shade, route information, lighting, etc. (if applicable)

Applicable: No

There is no transit stop at this location.

9. Provide and implement a Construction Air Quality Mitigation Plan (if NOX exceeds 85lbs/day)

Applicable: No

Project is not expected to have NOx levels above 85lbs/day.

10. Utilize recycled materials in construction

Applicable: Yes

This project will specify recycled materials and materials with recycled content when appropriate.

11. Install Solar Hot Water Heaters

Applicable: No

This project will install hot water heaters in compliance with the 2016 CA Energy Code.

12. Sub-meter all tenant spaces

Applicable: No

Not applicable to residential care facilities.

13. Utilize Energy Star Appliances

Applicable: Yes

This project will specify Energy Star Appliances when appropriate.

14. Reduce Turf installation

Applicable: Yes

Landscape plans show a variety of non-turf landscaping.

15. Maximize site improvements that promote infiltration, reuse, and evapotranspiration of rainfall from impervious areas

Applicable: Yes

Landscape plans show compliance with this measure.

16. Minimize impervious surfaces

Applicable: Yes

Landscape plans to show compliance with this measure.

17. Recycle or re-use all construction materials/debris

Applicable: Yes

This project will recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with 2016 CA Green Building Standards Code.

18. Install Shade Trees consistent with Zoning Code

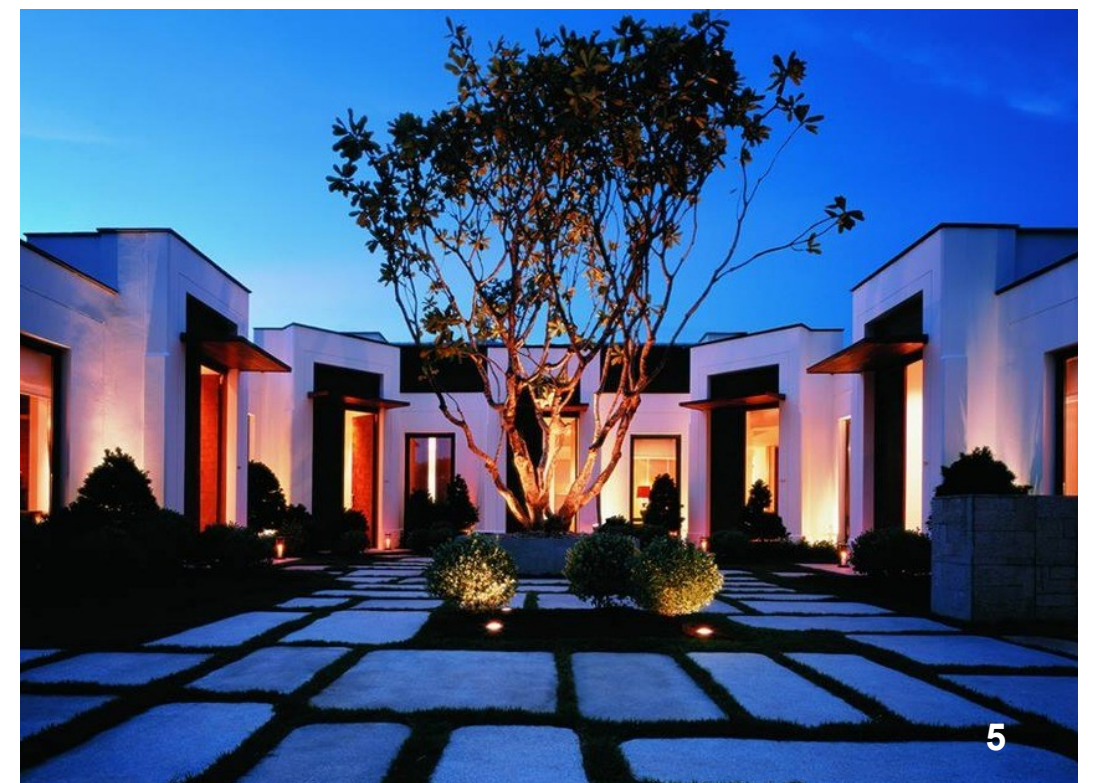
Applicable: Yes

Landscape plans to show compliance with this measure.

CAREFIELD — CITRUS HEIGHTS

ASSISTED LIVING AND MEMORY CARE

EXTERIOR LIGHTING CONCEPT IMAGERY AND FIXTURE IMAGES

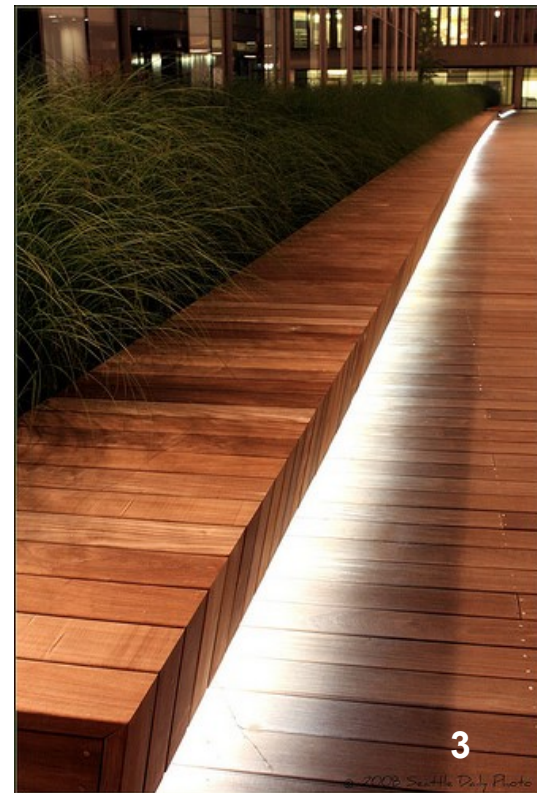




1



2



3



4



5





WAC LIGHTING
GRAND ACCENT
DIMENSIONS: 7"H X 3"W X 8"L
FIXTURE TYPES: AA1, AA2, AA3, AA4



INVUE BY EATON
ARBOR BOLLARD
DIMENSIONS: 36"H
OPTICS: ASSYMETRIC
FIXTURE TYPE: BB1



B-K LIGHTING
STAFF STAR STYLE L
DIMENSIONS: 30"H
FIXTURE TYPE: BB3



MCGRAW-EDISON BY EATON
GALLEON
DIMENSIONS: 16' OVERALL HEIGHT
OPTICS: TYPE 4 FORWARD THROW
FIXTURE TYPE: PP1



INVUE BY EATON
ARBOR POST TOP
DIMENSIONS: 14' OVERAL HEIGHT
OPTICS: TYPE 4 FORWARD THROW
FIXTURE TYPE: PP2




INVUE BY EATON
ARBOR POST TOP
DIMENSIONS: 14' OVERAL HEIGHT
OPTICS: TYPE 5 SYMMETRIC
FIXTURE TYPE: PP3



FEISS LIGHTING
URBANDALE WALL LANTERN
DIMENSIONS: 16.25"H X 10"W X 8"D
FIXTURE TYPE: WW1

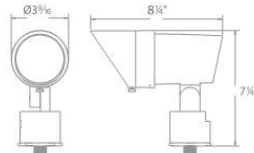


FEISS LIGHTING
URBANDALE WALL LANTERN
DIMENSIONS: 23"H X 10"W X 8"D
FIXTURE TYPE: WW2

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	AA1
				DATE	4/18/19
DESCRIPTION EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		MANUFACTURER PRODUCT CODE WAC HOUSING: 5211-30-BZ		LIGHT SOURCE INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	FAÇADE UPLIGHT	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	35
FINISH	BRONZE	NOTES			

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

Landscape accent luminaire. One fixture replaces all older halogen landscape accent lights

FEATURES

- Adjustable and lockable beam angle
- Integral dimmer
- IP66 rated, Protected against high-pressure water jets
- Includes a detachable shroud
- Solid diecast brass or corrosion resistant aluminum
- Factory sealed water tight fixtures
- Mounting stake, 6' lead wire and direct burial gel filled wire nuts included
- Maintains constant lumen output against voltage drop
- UL 1838 Listed
- Not suitable to use with external dimmers

SPECIFICATIONS

Input: 9 - 15VAC (Transformer is required)
Power: 15W to 35W / 21VA - 44VA
Brightness: 740 lm to 2000 lm
Beam Angle: 15° to 60°
CRI: 85
Rated Life: 45,000 hours

ORDERING NUMBER

		Color Temp	Finish
5211	Grand Accent 12V	27 2700K	BK Black on Aluminum BZ Bronze on Aluminum
		30 3000K	
		40 4000K	

5211-_____

Example: 5211-40BK


wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760











WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	AA1 4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		WAC HOUSING: 5211-30-BZ		INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	FAÇADE UPLIGHT	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	35
FINISH	BRONZE	NOTES		INPUT WATTS	35

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING

Accessories

Accent Snoot		5211-SNOOT-BK 5211-SNOOT-BZ	Black on Aluminum Bronze on Aluminum	Shields lamp and reduces glare
6" Long Shroud		5211-LSHR-BK 5211-LSHR-BZ	Black on Aluminum Bronze on Aluminum	Reduce glare. Ideal for downlighting application
Additional Stake		9000-ST9-BZ	Bronze	Durable PVC stake
Surface Mount Flange/Stake		5000-SCP-BZ 5000-SCP-BBR 5000-SCP-BK	Bronze on Aluminum Bronze on Brass Black on Aluminum	Includes three 7 inch threaded stainless steel stabilizing pins for ground mounting or surface mounts with four screws or over a junction box
Guardian Mount		9000-SP9-BZ	Stainless Steel	Heavy duty stainless steel spike to position fixture Formed from a single piece of metal
Gutter Mount Bracket		5000-GM-BZ 5000-GM-BK	Stainless Steel	Stainless Steel universal mounting bracket for gutter mounting fixture
Tree Mount Junction Box		5000-TCP-BZ 5000-TCP-BK	Bronze on Aluminum Black on Aluminum	Bronze on Aluminum box with Stainless steel mounting screws. Two ½" NPT threaded holes
Optics		LENS-25-AMB Amber LENS-25-GRN Green LENS-25-RED Red	LENS-25-BLU Blue LENS-25-FR Frosted	Enhances saturation of florals and foliage
Extension Rods		5000-X04-BZ 4 in 5000-X04-BK 4 in 5000-X08-BZ 8 in 5000-X08-BK 8 in 5000-X12-BZ 12 in 5000-X12-BK 12 in	5000-X18-BZ 18 in 5000-X18-BK 18 in 5000-X24-BZ 24 in 5000-X24-BK 24 in	Extends distance between Accent light and Surface Mount Canopy, Stake, or Tree Mount box
Rod L-Coupler		5000-LCO-BZ	Bronze	

Magnetic Transformers

Stainless Steel, 12-15V output, IP65 rated, UL 1838 listed
See transformer spec sheet for details and its accessories

9075-TRN-SS
75W Max

9150-TRN-SS
150W Max

9300-TRN-SS
300W Max

9600-TRN-SS
600W Max




wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

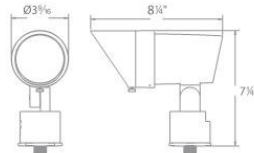
Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

 <p>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</p>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	AA2 4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		WAC HOUSING: 5211-30-BZ		INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	COURTYARD FAÇADE UPLIGHT	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	FIXTURE WATTS	35
FINISH	BRONZE	NOTES	NOT INCLUDED IN PACKAGE		
				INPUT WATTS	35

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

Landscape accent luminaire. One fixture replaces all older halogen landscape accent lights

FEATURES

- Adjustable and lockable beam angle
- Integral dimmer
- IP66 rated, Protected against high-pressure water jets
- Includes a detachable shroud
- Solid diecast brass or corrosion resistant aluminum
- Factory sealed water tight fixtures
- Mounting stake, 6' lead wire and direct burial gel filled wire nuts included
- Maintains constant lumen output against voltage drop
- UL 1838 Listed
- Not suitable to use with external dimmers

SPECIFICATIONS

Input: 9 - 15VAC (Transformer is required)
Power: 15W to 35W / 21VA - 44VA
Brightness: 740 lm to 2000 lm
Beam Angle: 15° to 60°
CRI: 85
Rated Life: 45,000 hours

ORDERING NUMBER

		Color Temp	Finish
5211	<i>Grand Accent 12V</i>	27 2700K	BK Black on Aluminum BZ Bronze on Aluminum
		30 3000K	
		40 4000K	

5211-_____

Example: **5211-40BK**


wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760











WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

<div></div> <div>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</div>		<div>CAREFIELD—CITRUS HEIGHTS</div> <div>DESIGN REVIEW</div>		FIXTURE TYPE	AA2
				DATE	4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		WAC HOUSING: 5211-30-BZ		INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	COURTYARD FAÇADE UPLIGHT	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	FIXTURE WATTS	35
		VOLTAGE	120V PRIMARY/ 12V SECONDARY	INPUT WATTS	35
FINISH	BRONZE	NOTES	NOT INCLUDED IN PACKAGE		

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING

Accessories

Accent Snoot		5211-SNOOT-BK 5211-SNOOT-BZ	Black on Aluminum Bronze on Aluminum	Shields lamp and reduces glare
6" Long Shroud		5211-LSHR-BK 5211-LSHR-BZ	Black on Aluminum Bronze on Aluminum	Reduce glare. Ideal for downlighting application
Additional Stake		9000-ST9-BZ	Bronze	Durable PVC stake
Surface Mount Flange/Stake		5000-SCP-BZ 5000-SCP-BBR 5000-SCP-BK	Bronze on Aluminum Bronze on Brass Black on Aluminum	Includes three 7 inch threaded stainless steel stabilizing pins for ground mounting or surface mounts with four screws or over a junction box
Guardian Mount		9000-SP9-BZ	Stainless Steel	Heavy duty stainless steel spike to position fixture Formed from a single piece of metal
Gutter Mount Bracket		5000-GM-BZ 5000-GM-BK	Stainless Steel	Stainless Steel universal mounting bracket for gutter mounting fixture
Tree Mount Junction Box		5000-TCP-BZ 5000-TCP-BK	Bronze on Aluminum Black on Aluminum	Bronze on Aluminum box with Stainless steel mounting screws. Two ½" NPT threaded holes
Optics		LENS-25-AMB Amber LENS-25-GRN Green LENS-25-RED Red	LENS-25-BLU Blue LENS-25-FR Frosted	Enhances saturation of florals and foliage
Extension Rods		5000-X04-BZ 4 in 5000-X04-BK 4 in 5000-X08-BZ 8 in 5000-X08-BK 8 in 5000-X12-BZ 12 in 5000-X12-BK 12 in	5000-X18-BZ 18 in 5000-X18-BK 18 in 5000-X24-BZ 24 in 5000-X24-BK 24 in	Extends distance between Accent light and Surface Mount Canopy, Stake, or Tree Mount box
Rod L-Coupler		5000-LCO-BZ	Bronze	

Magnetic Transformers

Stainless Steel, 12-15V output, IP65 rated, UL 1838 listed
See transformer spec sheet for details and its accessories

9075-TRN-SS
75W Max

9150-TRN-SS
150W Max

9300-TRN-SS
300W Max

9600-TRN-SS
600W Max




wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

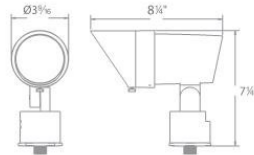
Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

 <p>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</p>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	AA3 4/18/19
DESCRIPTION EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		MANUFACTURER PRODUCT CODE WAC HOUSING: 5211-30-BZ		LIGHT SOURCE INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	ENTRY TREES	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	35
FINISH	BRONZE	NOTES			

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

Landscape accent luminaire. One fixture replaces all older halogen landscape accent lights

FEATURES

- Adjustable and lockable beam angle
- Integral dimmer
- IP66 rated, Protected against high-pressure water jets
- Includes a detachable shroud
- Solid diecast brass or corrosion resistant aluminum
- Factory sealed water tight fixtures
- Mounting stake, 6' lead wire and direct burial gel filled wire nuts included
- Maintains constant lumen output against voltage drop
- UL 1838 Listed
- Not suitable to use with external dimmers

SPECIFICATIONS

Input: 9 - 15VAC (Transformer is required)
Power: 15W to 35W / 21VA - 44VA
Brightness: 740 lm to 2000 lm
Beam Angle: 15° to 60°
CRI: 85
Rated Life: 45,000 hours

ORDERING NUMBER

		Color Temp	Finish
5211	Grand Accent 12V	27 2700K	BK Black on Aluminum
		30 3000K	BZ Bronze on Aluminum
		40 4000K	

5211-

Example: **5211-40BK**


wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760











WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	AA3 4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		WAC HOUSING: 5211-30-BZ		INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	ENTRY TREES	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	35
FINISH	BRONZE	NOTES		INPUT WATTS	35

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING

Accessories

Accent Snoot		5211-SNOOT-BK 5211-SNOOT-BZ	Black on Aluminum Bronze on Aluminum	Shields lamp and reduces glare
6" Long Shroud		5211-LSHR-BK 5211-LSHR-BZ	Black on Aluminum Bronze on Aluminum	Reduce glare. Ideal for downlighting application
Additional Stake		9000-ST9-BZ	Bronze	Durable PVC stake
Surface Mount Flange/Stake		5000-SCP-BZ 5000-SCP-BBR 5000-SCP-BK	Bronze on Aluminum Bronze on Brass Black on Aluminum	Includes three 7 inch threaded stainless steel stabilizing pins for ground mounting or surface mounts with four screws or over a junction box
Guardian Mount		9000-SP9-BZ	Stainless Steel	Heavy duty stainless steel spike to position fixture Formed from a single piece of metal
Gutter Mount Bracket		5000-GM-BZ 5000-GM-BK	Stainless Steel	Stainless Steel universal mounting bracket for gutter mounting fixture
Tree Mount Junction Box		5000-TCP-BZ 5000-TCP-BK	Bronze on Aluminum Black on Aluminum	Bronze on Aluminum box with Stainless steel mounting screws. Two ½" NPT threaded holes
Optics		LENS-25-AMB Amber LENS-25-GRN Green LENS-25-RED Red	LENS-25-BLU Blue LENS-25-FR Frosted	Enhances saturation of florals and foliage
Extension Rods		5000-X04-BZ 4 in 5000-X04-BK 4 in 5000-X08-BZ 8 in 5000-X08-BK 8 in 5000-X12-BZ 12 in 5000-X12-BK 12 in	5000-X18-BZ 18 in 5000-X18-BK 18 in 5000-X24-BZ 24 in 5000-X24-BK 24 in	Extends distance between Accent light and Surface Mount Canopy, Stake, or Tree Mount box
Rod L-Coupler		5000-LCO-BZ	Bronze	

Magnetic Transformers

Stainless Steel, 12-15V output, IP65 rated, UL 1838 listed
See transformer spec sheet for details and its accessories

9075-TRN-SS
75W Max

9150-TRN-SS
150W Max

9300-TRN-SS
300W Max

9600-TRN-SS
600W Max




wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

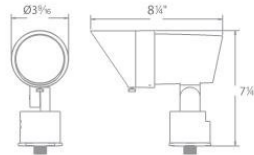
Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	AA4
				DATE	4/18/19
DESCRIPTION EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		MANUFACTURER PRODUCT CODE WAC HOUSING: 5211-30-BZ		LIGHT SOURCE INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	GENERAL SITE TREES	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	35
FINISH	BRONZE	NOTES			

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

Landscape accent luminaire. One fixture replaces all older halogen landscape accent lights

FEATURES

- Adjustable and lockable beam angle
- Integral dimmer
- IP66 rated, Protected against high-pressure water jets
- Includes a detachable shroud
- Solid diecast brass or corrosion resistant aluminum
- Factory sealed water tight fixtures
- Mounting stake, 6' lead wire and direct burial gel filled wire nuts included
- Maintains constant lumen output against voltage drop
- UL 1838 Listed
- Not suitable to use with external dimmers

SPECIFICATIONS

Input: 9 - 15VAC (Transformer is required)
Power: 15W to 35W / 21VA - 44VA
Brightness: 740 lm to 2000 lm
Beam Angle: 15° to 60°
CRI: 85
Rated Life: 45,000 hours

ORDERING NUMBER

		Color Temp	Finish
5211	Grand Accent 12V	27 2700K	BK Black on Aluminum BZ Bronze on Aluminum
		30 3000K	
		40 4000K	

5211-_____

Example: 5211-40BK


wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760











WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

 <p>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</p>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	AA4 4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT		WAC HOUSING: 5211-30-BZ		INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	
LOCATION	GENERAL SITE TREES	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	35
FINISH	BRONZE	NOTES		INPUT WATTS	35

GRAND ACCENT 12V 5211

WAC LANDSCAPE LIGHTING

Accessories

Accent Snoot		5211-SNOOT-BK 5211-SNOOT-BZ	Black on Aluminum Bronze on Aluminum	Shields lamp and reduces glare
6" Long Shroud		5211-LSHR-BK 5211-LSHR-BZ	Black on Aluminum Bronze on Aluminum	Reduce glare. Ideal for downlighting application
Additional Stake		9000-ST9-BZ	Bronze	Durable PVC stake
Surface Mount Flange/Stake		5000-SCP-BZ 5000-SCP-BBR 5000-SCP-BK	Bronze on Aluminum Bronze on Brass Black on Aluminum	Includes three 7 inch threaded stainless steel stabilizing pins for ground mounting or surface mounts with four screws or over a junction box
Guardian Mount		9000-SP9-BZ	Stainless Steel	Heavy duty stainless steel spike to position fixture Formed from a single piece of metal
Gutter Mount Bracket		5000-GM-BZ 5000-GM-BK	Stainless Steel	Stainless Steel universal mounting bracket for gutter mounting fixture
Tree Mount Junction Box		5000-TCP-BZ 5000-TCP-BK	Bronze on Aluminum Black on Aluminum	Bronze on Aluminum box with Stainless steel mounting screws. Two ½" NPT threaded holes
Optics		LENS-25-AMB Amber LENS-25-GRN Green LENS-25-RED Red	LENS-25-BLU Blue LENS-25-FR Frosted	Enhances saturation of florals and foliage
Extension Rods		5000-X04-BZ 4 in 5000-X04-BK 4 in 5000-X08-BZ 8 in 5000-X08-BK 8 in 5000-X12-BZ 12 in 5000-X12-BK 12 in	5000-X18-BZ 18 in 5000-X18-BK 18 in 5000-X24-BZ 24 in 5000-X24-BK 24 in	Extends distance between Accent light and Surface Mount Canopy, Stake, or Tree Mount box
Rod L-Coupler		5000-LCO-BZ	Bronze	

Magnetic Transformers

Stainless Steel, 12-15V output, IP65 rated, UL 1838 listed
See transformer spec sheet for details and its accessories

9075-TRN-SS
75W Max

9150-TRN-SS
150W Max

9300-TRN-SS
300W Max

9600-TRN-SS
600W Max




wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 18 2018

<div></div> <div>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</div>		<div>CAREFIELD—CITRUS HEIGHTS</div> <div>DESIGN REVIEW</div>		<div>FIXTURE TYPE</div>	<div>BB1</div>
				<div>DATE</div>	<div>4/18/19</div>
<div>DESCRIPTION</div> <div>36" LED BOLLARD WITH ASYMMETRICAL OPTICS</div>		<div>MANUFACTURER PRODUCT CODE</div> <div>INVUE ARBOR ABB-B2-LED-36-D1-A-<FINISH>-8030 ACCESSORIES: ABAnchor - ANCHOR BOLT KIT AND TEMPLATE</div>		<div>LIGHT SOURCE</div> <div>INTEGRAL LED BEAM: ASYMMETRIC CCT: 3000°K CRI: 80 LUMENS: 848</div>	
<div>LOCATION</div>	<div>SITE PATHWAYS</div>	<div>POWER SUPPLY</div>		<div>MIN. DIMMING</div>	<div>DIMMING LEVEL AS REQUIRED</div>
<div>MOUNTING</div>	<div>SURFACE MOUNTED TO BURIED CONCRETE PAD</div>	<div>CONTROL</div>	<div>0-10V</div>	<div>FIXTURE WATTS</div>	<div>23</div>
		<div>VOLTAGE</div>	<div>120/277V</div>	<div>INPUT WATTS</div>	<div>23</div>
<div>FINISH</div>	<div>STANDARD</div>	<div>NOTES</div>			

DESCRIPTION

The Arbor Bollard from Invue brings architectural style to the pedestrian level. The Arbor Bollard can be used along with Arbor post top luminaires to provide a coordinated look sure to enhance any architectural setting. WaveStream™ LED optics present a pixilation free image replacing visible glare, while providing high levels of pavement illumination.

SPECIFICATION FEATURES

Construction

Top Housing: Low copper, cast aluminum top maintains strength and precision while providing for: rapid heat dissipation, vandal resistance and superior dayform. Lower Housing: Heavy 0.188" wall seamless extruded aluminum 4" O.D. shaft attaches to base via stainless steel fasteners. BASE: Rugged corrosion resistant extruded aluminum base mounts to foundation with three anchor bolts. Base features a pliable 1/2" thick neoprene leveling pad fitted to the bottom of base allows for sealing against water and dirt ingress regardless of minor deviations in grade of concrete pad.

Optics

Symmetric and asymmetric distributions are available using WaveStream LED optical technology. The optical waveguide is manufactured using precision injection molded acrylic for the ultimate level of glare control and visual comfort. Offered standard in 4000K (+/- 275K) CCT, optional 3000K minimum 80 CRI.

Electrical

LED driver(s) are mounted to electrical tray for easy installation and maintenance for 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Offered standard with 0-10V dimming driver and Eaton's proprietary circuit module designed to withstand 10kV of transient line surge. Luminaire is suitable for ambient temperature applications from -30°C (-22°F) to 40°C (104°F) and IP66 rated against the ingress of dust and water.

Controls

The Arbor Bollard options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. An integrated dimming and occupancy sensor is a standalone control option available in on/off (MSP) and bi-level dimming (MSP/DIM) operation. An optional handheld remote (ISHH) allows custom programming to suit all needs.

Mounting

Luminaire is mounted to 3 x 1/2" anchor bolts on a 2-3/8" bolt circle to with stand a 600 pound overturn moment. Order anchor bolts and installation template separately (ABAnchor).

Finish

Eaton utilizes premium ultra-weatherable TGIC based polyester powder coatings that are specifically formulated to withstand extended outdoor exposure. The powders are formulated exclusively for Eaton to serve functionally as well as decorative. Good film appearance combined with excellent mechanical an exterior exposure qualities display greater than twice as much gloss retention. RAL and custom color matches available. Finish is compliant with ASTM B117 3000hr salt spray standard.

Warranty

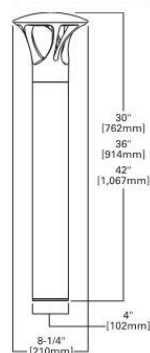
Five-year warranty.



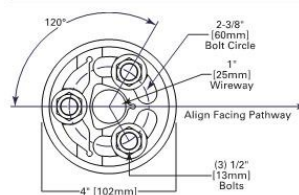
ABB ARBOR BOLLARD

PATHWAY LUMINAIRE

DIMENSIONS



BOLT CIRCLE ORIENTATION




CERTIFICATION DATA

UL/cUL Listed
IP66 Housing
ISO 9001
RoHS

ENERGY DATA

Electronic LED Driver
<0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V 60Hz,
480V 60Hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

Approximate Net Weight:
19.25 lbs. [8.76 kgs.]

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	BB1 4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
36" LED BOLLARD WITH ASYMMETRICAL OPTICS		INVUE ARBOR ABB-B2-LED-36-D1-A-<FINISH>-8030 ACCESSORIES: ABAnchor - ANCHOR BOLT KIT AND TEMPLATE		INTEGRAL LED BEAM: ASYMMETRIC CCT: 3000°K CRI: 80 LUMENS: 848	
LOCATION	SITE PATHWAYS	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	SURFACE MOUNTED TO BURIED CONCRETE PAD	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	23
FINISH	STANDARD	NOTES		INPUT WATTS	23

POWER AND LUMENS

Lumen/Distribution	B1 Symmetric	B2 Symmetric	B1 Asymmetric	B2 Asymmetric
Drive Current				
Power Wattage (Watts)	16W	32W	11W	23W
Input Current (mA) @ 120V	140	270	100	200
Input Current (mA) @ 208V	80	160	60	120
Input Current (mA) @ 240V	70	140	50	100
Input Current (mA) @ 277V	60	120	40	80
Power Wattage (Watts)	19W	37W	13W	27W
Input Current (mA) @ 347V	60	110	40	80
Input Current (mA) @ 480V	180	320	120	240
Optics				
Lumens	717	1,276	472	848
BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G2

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Calculated L70 (Hours)
25°C	>94%	>350,000
40°C	>93%	>250,000
50°C	>90%	>170,000

NOTE: Maintenance data applies to the highest drive current and represents the worst case at the highest wattage.

COLOR TEMPERATURE

Color Temperature (CCT)	CRI (Nominal)	Multiplier (Hours)
4000	70	1.00
3000	80	0.87

ABB ARBOR BOLLARD

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0 C	1.02
10 C	1.01
25 C	1.00
40 C	0.97


ORDERING INFORMATION

Sample Number: ABB-B2-LED-42-D1-A-GM

Product Family	Lumen Output ¹	Source	Height	Voltage	Distribution	Color
ABB=Arbor Bollard	B1=Mid Lumen Output B2=High Lumen Output	LED	30=30" 36=36" 42=42"	D1=Dimming Driver (120-277V) ² 347=347V ³ 480=480V ^{3,4}	A=Asymmetric S=Symmetric	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White CC=Custom Color ⁵
Options (Add as Suffix)					Accessories (Order Separately)	
8030=80 CRI / 3000K CCT ⁶ HA=High Ambient ⁷ MS/DIM-H8=Motion Sensor for Dimming or Bi-Level Operation (Horizontal Detection) ⁸ MS/DIM-2H8=Twin Motion Sensors for 360° Dimming or Bi-Level Operation (Horizontal Detection) ⁸ DIM=0-10V Dimming Driver Leads Brought Out from Fixture					ABAnchor=Anchor Bolt Kit and Template ⁹ ISHH=Wireless Configuration Tool for Integrated Sensor (Occupancy Sensor Settings)	

NOTES:

- Standard 4000K CCT nominal 70 CRI.
- Dimming driver standard.
- Requires the use of a step down transformer.
- Only for use with 480V Wye systems. For NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- RAL and custom color matching available. Consult your lighting representative at Eaton for more information.
- Extended lead times apply. Use dedicated IES files when performing layouts.
- 50°C ambient rating.
- The ISHH configuration tool is required to adjust parameters including high and low dimming levels, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
- Contact your customer service representative at Eaton for advance shipping.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	BB2 4/18/19
DESCRIPTION EXTERIOR RATED 20" LED PATHLIGHT WITH DIRECT DOWNLIGHT MOUNTED TO BURIED CONCRETE BASE		MANUFACTURER PRODUCT CODE BEACHSIDE LIGHTING FIXTURE: R3A-20"-12V-8W-GS2		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 5 DOWN ONLY CCT: 3000°K CRI: 80 LUMENS: N/A	
LOCATION	AL COURTYARD	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	SURFACE MOUNTED TO BURIED CONCRETE PAD	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	8
FINISH	BRASS/COPPER SHADE	NOTES	NOT INCLUDED IN PACKAGE	INPUT WATTS	8

R3A

The R3A pathlight is a durable fixture made from brass and copper. It is ideal for walkway and area lighting in any landscape theme and location.

Construction All brass components. 1/2" schedule 40 brass stem. 18-gauge copper shade, underside powdercoated white.

Lens Frosted borosilicate glass, 4.8mm wall thickness

Stem Height 12 inches is standard. Available stem heights:

— 8	8" [20 cm]
— 12	12" [30 cm]
— 16	16" [40 cm]
— 20	20" [51 cm]

Custom heights upon request

Voltage / Lamp Options

12V GU5.3 • MR16 LED • Remote transformer required.

— 5W-A	5 Watt Amber (1500K) TURTLE FRIENDLY	
Cree chipset (5W)	5W	5 Watt Warm White (3000K)
Lumiled chipset (7W)	7W	7 Watt Warm White (3000K)
Soraa chipset (8W)	8W	8 Watt Warm White (3000K)

120V / 230V GU10 • MR16 LED

— 5W-A	5 Watt Amber (1500K) TURTLE FRIENDLY	
Cree chipset (5W)	5W	5 Watt Warm White (3000K)
Soraa chipset (8W)	8W	8 Watt Warm White (3000K)

Optical Accessories — HSR Half shield for 180° illumination

Mounting Accessories 1/2" male threads. Mounts into any standard j-box or:


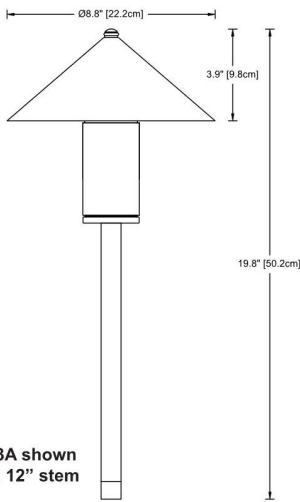
— GS2	Heavy-duty ground spike
— GS2BC	Heavy-duty ground spike with cast brass cap
— GS3R	Heavy-duty ground spike with brass cap for telescoping riser
— GS4	* Standard ground spike with cast brass cap
— JB	Cast brass junction box

* This accessory for 12 Volt fixture only.

Finish: Unfinished is standard; no specification required. The fixture will weather to a natural patina. The patina process is natural with brass and copper. Rate of patina and eventual color is dependent upon climate and proximity to the ocean. Thus, Beachside does not guarantee any specific appearance.

Weight: 3.7 lbs [1.7 kg] with 12" stem

IP66
CSA Listed, file #190030
10 year fixture warranty
3 year warranty on MR16 LED lamps

MADE IN USA

R3A - Horizontal Footcandles at Radius from Fixture base with Standard 12" Stem Height										
Lamp	1' / 0.3m	2' / 0.6m	3' / 0.9m	4' / 1.2m	5' / 1.5m	6' / 1.8m	7' / 2.1m	8' / 2.4m	9' / 2.7m	10' / 3.0m
5W-A	1.73	0.73	0.37	0.24	0.17	0.13	0.10	0.07	0.06	0.04
5W	7.64	3.66	2.05	1.30	0.83	0.50	0.34	0.25	0.19	0.14
8W	9.14	4.53	2.77	1.82	1.02	0.56	0.38	0.28	0.21	0.17

Project _____

By _____

Date _____

For ordering purposes, please specify (example: **R3A—120V—12—5W-A—HSR—GS2**)

R3A

Fixture

—

Voltage

—

Stem Height

—


Lamp

—

Accessory(ies)

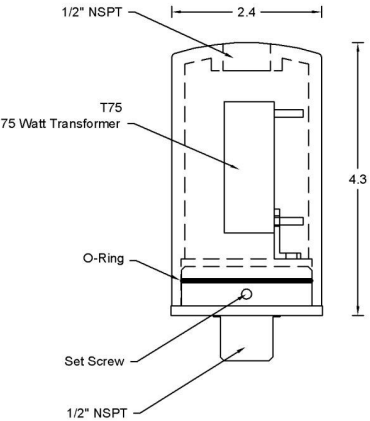
BEACHSIDE LIGHTING • 800-405-6732 • www.BeachsideLighting.com

04/2018


 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	BB2
				DATE	4/18/19
DESCRIPTION EXTERIOR RATED 20" LED PATHLIGHT WITH DIRECT DOWNLIGHT MOUNTED TO BURIED CONCRETE BASE		MANUFACTURER PRODUCT CODE BEACHSIDE LIGHTING FIXTURE: R3A-20"-12V-8W-GS2		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 5 DOWN ONLY CCT: 3000°K CRI: 80 LUMENS: N/A	
LOCATION	AL COURTYARD	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	SURFACE MOUNTED TO BURIED CONCRETE PAD	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	8
FINISH	BRASS/COPPER SHADE	NOTES	NOT INCLUDED IN PACKAGE	INPUT WATTS	8

TRH

The TRH is a cast brass transformer housing supplied with the T75 (75 watt transformer). Used at the bases of pathway or directional fixtures, the TRH allows the use of low voltage fixtures at locations already wired for line voltage. Fixture threads into 1/2" female NSPT at top and TRH threads into 120V rated ground spike or j-box via 1/2" NSPT male threads at bottom. Housing/fixture rotates around brass plug sealed with o-ring. Stainless steel set screw ensures fixture's position.



Project: _____ By: _____ Date: _____

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	BB3 4/18/19
DESCRIPTION EXTERIOR RATED LOW VOLTAGE 30" LED PATHWAY LIGHT WITH 90DEGREE SHROUD, HONEYCOMB LOUVER, AND STAKE MOUNTING		MANUFACTURER PRODUCT CODE BK LIGHTING HOUSING: SF-30-L-LED-E65-MFL-A9-BZP-11-B-PP18B-SF		LIGHT SOURCE INTEGRAL LED BEAM: 23° CCT: 3000°K CRI: 90 LUMENS:	
LOCATION	GARDEN AREA	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	7
FINISH	SATIN BRONZE	NOTES		INPUT WATTS	7



STAFF STAR™ STYLE L

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

Example: SF - 42 - L - LED - e74 - MFL - A3 - BZW - 13 - 11 - B - PP18B

Series: SF - Staff Star™ Pathlight

Stem Length: 24", 30", 36", 42", 48", 54", 60", 66", or 72"
(Specify in inches) * For use with Standard Anchor Base Only

Style: L - 90° Radius

Source: LED - *e* Technology with Integral Dimming Driver (See Specifications for Dimming)
Designed for use with remote 12VAC BK55L* transformers. Requires magnetic Low Voltage dimmer.

LED Type:
e64 - 7WLED/2.7K e66 - 7WLED/4K
e65 - 7WLED/3K e74 - 7WLED/Amber

Optics*:
NSP - Narrow Spot (Red Indicator) MFL - Medium Flood (Yellow Indicator)
SP - Spot (Green Indicator) WFL - Wide Flood (Blue Indicator)

Adjust-e-Lume® Output Intensity (Choose factory setting):
A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1

Finish:

Aluminum Finish			Premium Finish		
Powder Coat Color	Satin	Wrinkle	ABP	CMG	RMG
Bronze	BZP	BZW	AMG	Cracked Ice	SDS
Black	BLP	BLW	AQW	Cream	SMG
White (Gloss)	WHP	WHW	BCM	Hunter Green	TXF
Aluminum	SAP	—	BGE	Mojave Desert Sandstone	WCP
Verde	—	VER	BPP	Natural Brass Powder	WIR
			CAP	Old Copper	Also available in RAL Finishes See submittal SUB-1439-00

Lens Type: 12 - Soft Focus Lens 13 - Rectilinear Lens

Shielding: T1 - Honeycomb Baffle

Cap Style:
A - 45° C - Flush E - 90° less Weep Hole (Interior Use Only)
B - 90° D - 45° less Weep Hole (Interior Use Only) F - 90° cutoff with Flush Lens

Options:
Blank - Anchor Base (Standard, for use with remote transformer)
PP18B - 18" Power Pipe™ stake with 'B' Cap (for use with remote transformer)**
PP-TRe20 - Power Pipe™ "T" option with 18" stake and TRe20 Electronic Transformer** (105-300 VAC, 50/60 Hz, Non-Dimming)
**For use with up to 48" maximum stem length
SF - Stability Flange (for use with Power Pipe™)


B-K LIGHTING

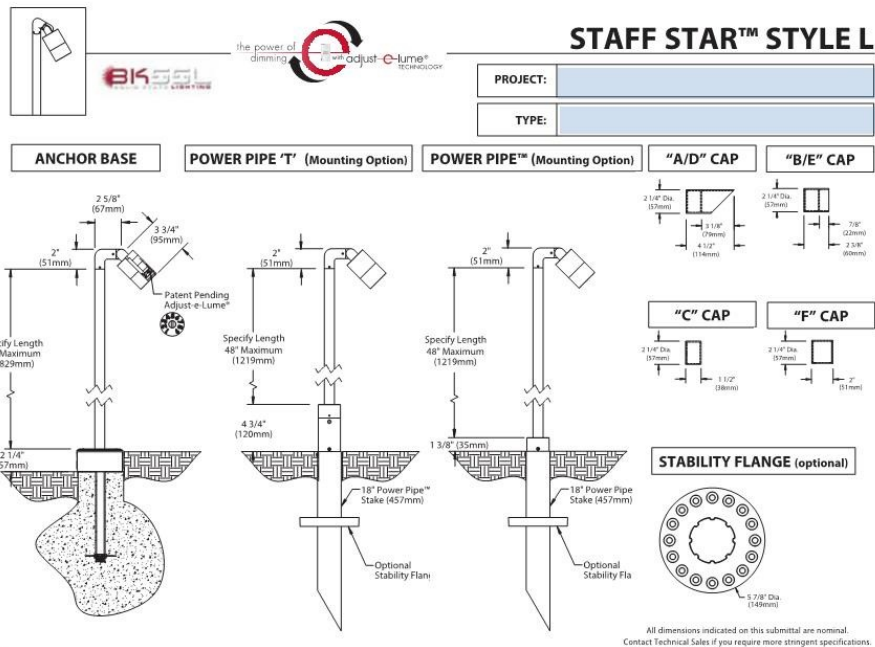
40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

RELEASED
05-17-17

DRAWING NUMBER
SUB-2343-00

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF B-K LIGHTING, INC. AND ITS RECEIPT OR POSSESSION DOES NOT CONVEY ANY RIGHTS TO REPRODUCE, DISCLOSE ITS CONTENTS, OR TO MANUFACTURE, USE OR SELL ANYTHING IT MAY DESCRIBE. REPRODUCTION, DISCLOSURE OR USE WITHOUT SPECIFIC WRITTEN AUTHORIZATION OF B-K LIGHTING, INC. IS STRICTLY FORBIDDEN.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	BB3 4/18/19
DESCRIPTION EXTERIOR RATED LOW VOLTAGE 30" LED PATHWAY LIGHT WITH 90DEGREE SHROUD, HONEYCOMB LOUVER, AND STAKE MOUNTING		MANUFACTURER PRODUCT CODE BK LIGHTING HOUSING: SF-30-L-LED-E65-MFL-A9-BZP-11-B-PP18B-SF		LIGHT SOURCE INTEGRAL LED BEAM: 23° CCT: 3000°K CRI: 90 LUMENS:	
LOCATION	GARDEN AREA	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	7
FINISH	SATIN BRONZE	NOTES		INPUT WATTS	7



SPECIFICATIONS

GreenSource Initiative™

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Style

L' Style provides clean, 90° transition from fixture to stem.

Materials

Furnished in Copper-Free Aluminum (Type 6061-T6).

Body

Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.

Knuckle

The LOCK™ (Locking 'O' Ring Compression Knuckle) is comprised of two components. The first is integral to the body and features an interior, machined taper. The second is machined from solid billet and features a second, reverse angle taper. The resultant mechanical taper-lock allows a full 180° vertical adjustment without the use of serrated teeth, which inherently limit aiming. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lb. static load prior to movement to ensure decades of optical alignment. Biaxial source control with 360° horizontal rotation in addition to vertical adjustment.

Cap

Fully machined. Accommodates (1) lens or lower media. Choose from 45° cutoff (A or D), 1° deep bezel with 90° cutoff (B or E), flush lens (C) cap styles, or 1° deep cutoff with flush mounted lens (F). Accommodates up to (2) lens or lower media. A' and B' caps include weep-hole for water and debris drainage. D' and E' caps exclude weep-hole and are for interior use only.

Stem

Fully machined, 1" dia. with internal threads for maximum visual appeal. Available in configurable lengths to 72" maximum overall (with Anchor Base) and 48" maximum overall (with Power Pipe™).

Lens

Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment. Specify soft focus (#12) or rectilinear (#13) lens.

BKSSL™

Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements, LM-80 certified components.

Integral, constant current driver, 12VAC/VDC input, 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <250mA. Conforms to Safety Std. C22.2 No. 250.13-12.

Dimming

Line voltage dimmable via magnetic low voltage dimmer. For use with low voltage dimmer with dedicated neutral conductor. For purposes of dimming: Remote magnetic transformer with BKSSL™ Power of 'e' technology loads should be loaded to 25% of the transformer VA (watts) rated value.

Adjust-e-Lume® (Pat. Pending)

Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Optics

Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red, Spot (SP) = Green, Medium Flood (MF) = Yellow, Wide Flood (WFL) = Blue.

Installation

Available for installation in three distinct mounting conditions:

Anchor Base (Standard)

Cast aluminum junction box with pass-through cover, 10" galvanized anchor stem for installation into soil or concrete. For use with 12VAC. **⚠️B-K LIGHTING** remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

Power Pipe™ (Optional)

Provides a clean transition from wiring system to fixture. Schedule 80, 18" PVC housing for direct burial into soil or concrete. Machined 2-1/4" dia. cap for fixture mounting. Stainless steel hardware. Optional 6" diameter, molded stability flange, which simplifies installation and projects into substrate to reinforce housing stability. For use with 12VAC. **⚠️B-K LIGHTING** remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

Power Pipe™ with Transformer Housing (Optional)

Additionally features integral transformer housing fully machined from copper-free aluminum. High temperature, silicone 'O' Ring provides water-tight seal. Integral, TRe20 electronic transformer, 105-300VAC primary voltage, 50/60Hz. Non Dimming, 20VA maximum load.

Wiring

Teflon® coated, 18AWG, 600V, 250' C rated and certified to UL 1659 standard.

Hardware

Tamper-resistant, stainless steel hardware. LOCK™ aiming screw screw is additionally black oxide treated for additional corrosion resistance.

Finish

StarGuard®, our exclusive RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating.

Warranty


5 year limited warranty.

Certification and Listing

ETL tested to cUL, UL, UL Listed, Certified to CAN/CSA/ANSI Standards, RoHS compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP66 Rated. Made in USA.



*Teflon is a registered trademark of DuPont Corporation. **STAFF STAR** is a registered trademark of the United States Environmental Protection Agency.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	BB3
				DATE	4/18/19
DESCRIPTION EXTERIOR RATED LOW VOLTAGE 30" LED PATHWAY LIGHT WITH 90DEGREE SHROUD, HONEYCOMB LOUVER, AND STAKE MOUNTING		MANUFACTURER PRODUCT CODE BK LIGHTING HOUSING: SF-30-L-LED-E65-MFL-A9-BZP-11-B-PP18B-SF		LIGHT SOURCE INTEGRAL LED BEAM: 23° CCT: 3000°K CRI: 90 LUMENS:	
LOCATION	GARDEN AREA	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	7
FINISH	SATIN BRONZE	NOTES		INPUT WATTS	7



LAMP & DRIVER DATA


e64, e65, e66, e74

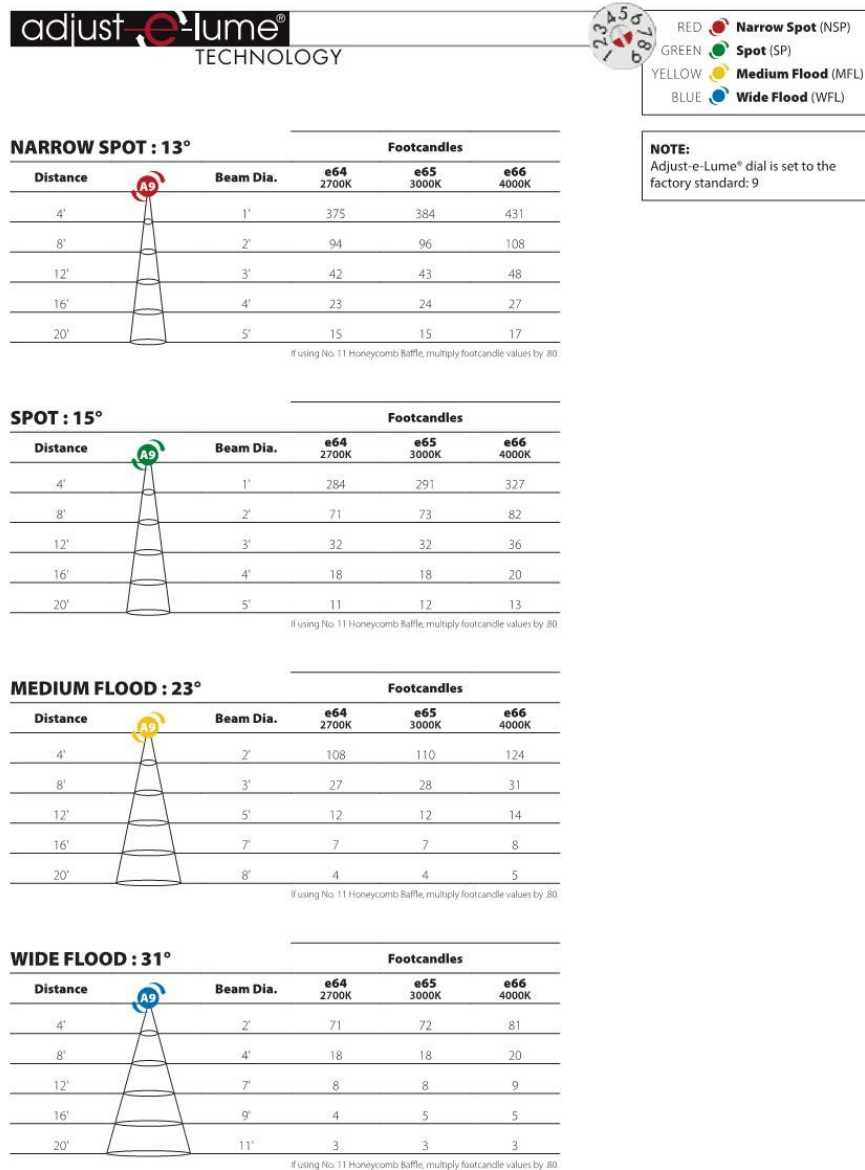
DRIVER DATA	Input Volts	InRush Current	Operating	Dimmable	Operation Ambient Temperature
	12VAC/DC 50/60Hz	<250mA (non-dimmed)	700mA	Magnetic Low Voltage Dimmer	-22°F-194°F (-30°C - 90°C)

LM79 DATA				L70 DATA		OPTICAL DATA		
BK No.	CCT (Typ.)	CRI (Typ.)	Input Watts (Typ.)	Minimum Rated Life (hrs.) 70% of initial lumens (L70)		Angle	CBCP	Delivered Lumens
e64	2700K	80	7	50,000		13°	5993	456
	2700K	80	7	50,000		16°	4546	445
	2700K	80	7	50,000		23°	1726	397
	2700K	80	7	50,000		31°	1131	399
e65	3000K	80	7	50,000		13°	6131	466
	3000K	80	7	50,000		16°	4650	455
	3000K	80	7	50,000		23°	1766	406
	3000K	80	7	50,000		31°	1157	409
e66	4000K	80	7	50,000		13°	6889	524
	4000K	80	7	50,000		16°	5225	511
	4000K	80	7	50,000		23°	1984	456
	4000K	80	7	50,000		31°	1300	459
e74	Amber (590nm)	~	7	50,000		~	~	~

FOR USE WITH	
NS Nite Star™	EC El Capitan Series™
NSII Nite Star II™	ED El Dorado™
AR ArtiStar™	SM-AR ArtiStar™ Surface Downlight
DS Delta Star™	PM Pendant
SN Sign Star™	WM Twin Pendant
ST Twin Sign Star™	UL-AR ArtiStar™ Recessed Uplight
SF Staff Star™	HP2 HP2 Series™
TF Twin Staff Star™	CO2 CO2 Series™
WS Well Star™	CD-VS Core Drill Versa Star™
AW Adjustable Well Star™	CD-VQ Core Drill Square Versa Star™
SW Square Adjustable Well Star™	
GD Gold Star™	
GQ Square Gold Star™	


OPTICS	
Optic	Angle
NSP - Narrow Spot	13°
SP - Spot	16°
MFL - Medium Flood	23°
WFL - Wide Flood	31°

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	BB3
				DATE	4/18/19
DESCRIPTION EXTERIOR RATED LOW VOLTAGE 30" LED PATHWAY LIGHT WITH 90DEGREE SHROUD, HONEYCOMB LOUVER, AND STAKE MOUNTING		MANUFACTURER PRODUCT CODE BK LIGHTING HOUSING: SF-30-L-LED-E65-MFL-A9-BZP-11-B-PP18B-SF		LIGHT SOURCE INTEGRAL LED BEAM: 23° CCT: 3000°K CRI: 90 LUMENS:	
LOCATION	GARDEN AREA	POWER SUPPLY	REMOTE	MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	STAKE MOUNTED	CONTROL VOLTAGE	MAGNETIC LOW VOLTAGE/ FORWARD PHASE 120V PRIMARY/ 12V SECONDARY	FIXTURE WATTS	7
FINISH	SATIN BRONZE	NOTES			



B-K LIGHTING

40429 Brickyard Drive • Madera, CA 93636 • USA • 559.438.5800 • FAX 559.438.5900 • www.bklighting.com

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.

McGraw-Edison

Catalog #	Type
Project	
Comments	Date
Prepared by	



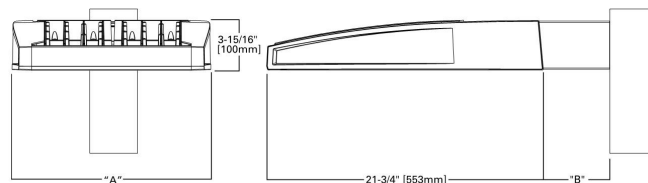
GLEON GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE



DIMENSIONS

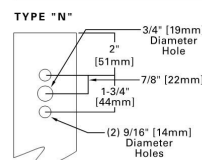


DIMENSION DATA

Number of Light Squares	"A" Width Standard Arm Length	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN



CERTIFICATION DATA


UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)



TD500020EN
February 20, 2019 11:57 AM

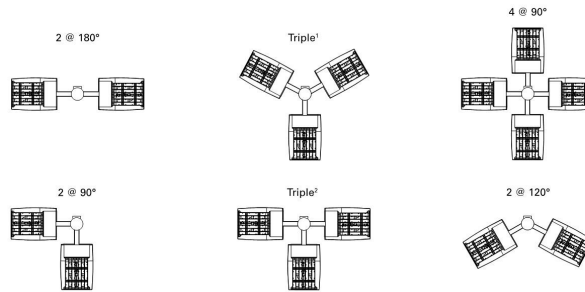
 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 2

GLEON GALLEON LED

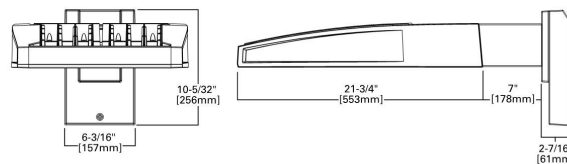
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

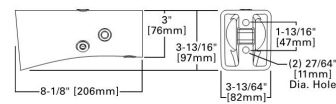


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

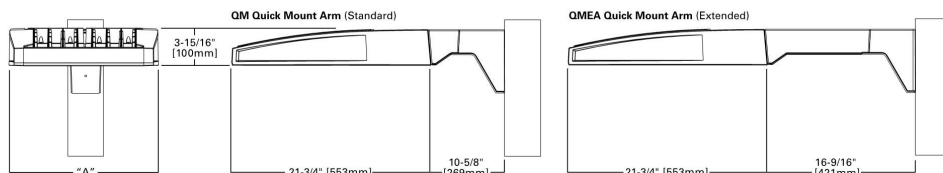
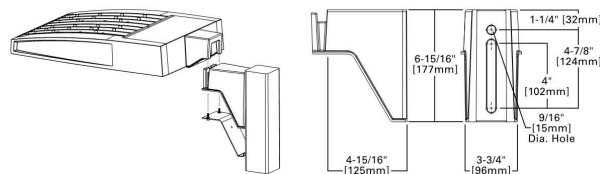
STANDARD WALL MOUNT



MAST ARM MOUNT




QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



QUICK MOUNT ARM DATA

Number of Light Squares ^{1,2}	2" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 ³	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

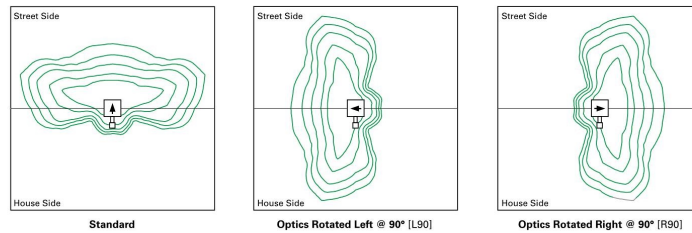
NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	PP1
				DATE	4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

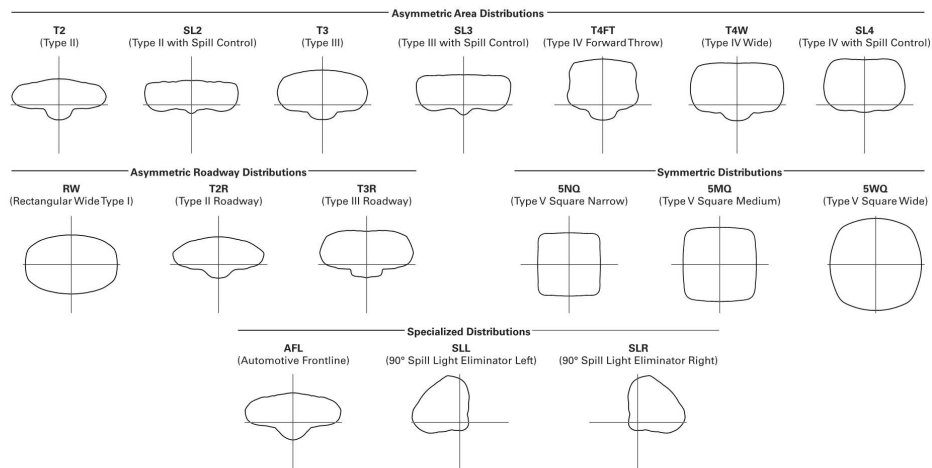
page 3

GLEON GALLEON LED

OPTIC ORIENTATION



OPTICAL DISTRIBUTIONS

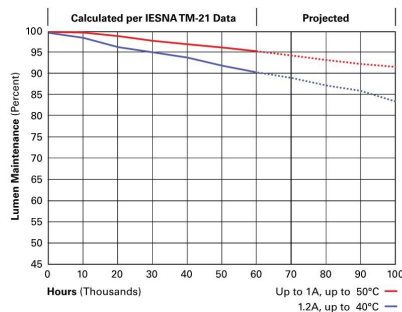



LUMEN MAINTENANCE

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	416,000
1.2A	Up to 40°C	> 90%	205,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97



 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		


page 4

GLEON GALLEON LED

NOMINAL POWER LUMENS (1.2A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		67	129	191	258	320	382	448	511	575	640
Input Current @ 120V (A)		0.58	1.16	1.78	2.31	2.94	3.56	4.09	4.71	5.34	5.87
Input Current @ 208V (A)		0.33	0.63	0.93	1.27	1.57	1.87	2.22	2.52	2.8	3.14
Input Current @ 240V (A)		0.29	0.55	0.80	1.10	1.35	1.61	1.93	2.18	2.41	2.71
Input Current @ 277V (A)		0.25	0.48	0.70	0.96	1.18	1.39	1.69	1.90	2.09	2.36
Input Current @ 347V (A)		0.20	0.39	0.57	0.78	0.96	1.15	1.36	1.54	1.72	1.92
Input Current @ 480V (A)		0.15	0.30	0.43	0.60	0.73	0.85	1.03	1.16	1.28	1.45
Optics											
T2	4000K/5000K Lumens	6,863	13,412	20,011	26,441	32,761	39,205	46,364	52,534	58,601	64,880
	3000K Lumens	6,489	12,681	18,919	25,000	30,974	37,066	43,836	49,668	55,405	61,341
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	7,285	14,238	21,246	28,072	34,780	41,621	49,221	55,770	62,212	68,878
	3000K Lumens	6,888	13,462	20,087	26,541	32,884	39,351	46,537	52,729	58,819	65,122
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,995	13,670	20,397	26,951	33,391	39,959	47,256	53,544	59,728	66,130
	3000K Lumens	6,613	12,924	19,284	25,480	31,570	37,780	44,679	50,624	56,471	62,524
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	7,150	13,973	20,850	27,549	34,134	40,846	48,307	54,734	61,056	67,598
	3000K Lumens	6,761	13,212	19,713	26,046	32,272	38,619	45,673	51,750	57,726	63,911
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	7,036	13,748	20,515	27,107	33,586	40,191	47,530	53,854	60,074	66,512
	3000K Lumens	6,652	12,999	19,397	25,629	31,754	37,999	44,938	50,917	56,797	62,885
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,945	13,571	20,249	26,756	33,152	39,671	46,917	53,160	59,298	65,653
	3000K Lumens	6,566	12,831	19,146	25,297	31,344	37,508	44,358	50,260	56,064	62,072
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,851	13,388	19,977	26,396	32,704	39,137	46,283	52,444	58,498	64,768
	3000K Lumens	6,477	12,658	18,888	24,957	30,920	37,003	43,759	49,584	55,308	61,235
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,994	13,668	20,394	26,947	33,388	39,953	47,249	53,537	59,720	66,119
	3000K Lumens	6,612	12,922	19,281	25,477	31,567	37,774	44,673	50,618	56,463	62,514
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,645	12,986	19,378	25,603	31,723	37,962	44,893	50,868	56,743	62,824
	3000K Lumens	6,282	12,279	18,321	24,207	29,993	35,892	42,445	48,094	53,648	59,398
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	7,214	14,097	21,036	27,795	34,437	41,210	48,734	55,220	61,597	68,199
	3000K Lumens	6,820	13,329	19,888	26,279	32,558	38,962	46,077	52,208	58,237	64,479
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	7,347	14,356	21,423	28,306	35,071	41,969	49,632	56,237	62,730	69,454
	3000K Lumens	6,947	13,573	20,254	26,762	33,158	39,680	46,925	53,170	59,309	65,667
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	7,366	14,396	21,480	28,381	35,164	42,080	49,765	56,386	62,898	69,639
	3000K Lumens	6,964	13,610	20,308	26,833	33,247	39,786	47,050	53,311	59,468	65,842
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	6,147	12,010	17,921	23,679	29,339	35,109	41,521	47,046	52,478	58,102
	3000K Lumens	5,811	11,355	16,944	22,388	27,739	33,194	39,256	44,479	49,617	54,933
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	7,149	13,970	20,846	27,543	34,126	40,837	48,295	54,722	61,042	67,582
	3000K Lumens	6,760	13,208	19,709	26,041	32,264	38,610	45,661	51,738	57,713	63,897
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	7,175	14,021	20,921	27,643	34,249	40,986	48,470	54,920	61,262	67,828
	3000K Lumens	6,784	13,256	19,780	26,136	32,381	38,750	45,827	51,925	57,922	64,129
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

<div><div>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</div></div>		<div>CAREFIELD—CITRUS HEIGHTS</div> <div>DESIGN REVIEW</div>		<div>FIXTURE TYPE</div> <div>DATE</div>	<div>PP1</div> <div>4/18/19</div>
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		


page 5

GLEON GALLEON LED

NOMINAL POWER LUMENS (1A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		59	113	166	225	279	333	391	445	501	558
Input Current @ 120V (A)		0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.60	5.07
Input Current @ 208V (A)		0.29	0.56	0.82	1.11	1.37	1.64	1.93	2.19	2.46	2.75
Input Current @ 240V (A)		0.26	0.48	0.71	0.96	1.19	1.41	1.67	1.89	2.12	2.39
Input Current @ 277V (A)		0.23	0.42	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09
Input Current @ 347V (A)		0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.50	1.68
Input Current @ 480V (A)		0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28
Optics											
T2	4000K/5000K Lumens	6,256	12,225	18,242	24,104	29,865	35,739	42,265	47,888	53,420	59,144
	3000K Lumens	5,915	11,559	17,248	22,789	28,236	33,790	39,960	45,277	50,506	55,919
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	6,642	12,979	19,366	25,589	31,705	37,941	44,870	50,840	56,711	62,789
	3000K Lumens	6,280	12,271	18,311	24,193	29,976	35,872	42,423	48,068	53,619	59,365
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,377	12,461	18,593	24,568	30,439	36,426	43,077	48,810	54,447	60,282
	3000K Lumens	-	-	-	-	-	-	-	-	-	-
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,518	12,739	19,006	25,113	31,116	37,235	44,036	49,895	55,658	61,622
	3000K Lumens	6,029	11,781	17,579	23,229	28,779	34,440	40,729	46,148	51,478	56,995
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,414	12,533	18,702	24,710	30,616	36,637	43,328	49,093	54,763	60,631
	3000K Lumens	6,064	11,849	17,681	23,363	28,946	34,638	40,966	46,417	51,776	57,325
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,331	12,372	18,459	24,391	30,221	36,163	42,769	48,459	54,056	59,849
	3000K Lumens	5,986	11,697	17,452	23,061	28,572	34,192	40,436	46,817	51,108	56,585
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,245	12,205	18,212	24,062	29,813	35,677	42,192	47,807	53,326	59,042
	3000K Lumens	5,904	11,539	17,218	22,750	28,187	33,732	39,891	45,199	50,418	55,822
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,376	12,460	18,591	24,564	30,436	36,421	43,072	48,803	54,439	60,273
	3000K Lumens	6,028	11,780	17,578	23,224	28,776	34,435	40,723	46,141	51,471	56,986
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,058	11,838	17,664	23,340	28,918	34,605	40,924	46,370	51,727	57,269
	3000K Lumens	5,727	11,193	16,701	22,067	27,341	32,718	38,692	43,841	48,906	54,146
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,577	12,851	19,176	25,336	31,392	37,566	44,426	50,337	56,151	62,170
	3000K Lumens	6,218	12,151	18,131	23,955	29,680	35,517	42,003	47,592	53,089	58,779
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	6,697	13,088	19,528	25,803	31,970	38,258	45,243	51,264	57,185	63,313
	3000K Lumens	6,332	12,374	18,463	24,395	30,227	36,171	42,776	48,468	54,066	59,861
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	6,715	13,122	19,580	25,871	32,055	38,360	45,365	51,401	57,337	63,482
	3000K Lumens	6,348	12,406	18,513	24,461	30,307	36,268	42,891	48,599	54,210	60,021
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	5,604	10,949	16,337	21,586	26,745	32,004	37,850	42,886	47,838	52,965
	3000K Lumens	5,298	10,351	15,446	20,409	25,287	30,258	35,786	40,547	45,229	50,077
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	6,517	12,735	19,002	25,107	31,109	37,227	44,025	49,883	55,644	61,607
	3000K Lumens	6,162	12,040	17,965	23,738	29,413	35,197	41,623	47,163	52,609	58,247
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	6,541	12,781	19,072	25,199	31,221	37,362	44,185	50,065	55,846	61,831
	3000K Lumens	6,184	12,084	18,032	23,825	29,519	35,325	41,775	47,334	52,801	58,459
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		


page 6

GLEON GALLEON LED

NOMINAL POWER LUMENS (800MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		44	85	124	171	210	249	295	334	374	419
Input Current @ 120V (A)		0.39	0.77	1.13	1.54	1.90	2.26	2.67	3.03	3.39	3.80
Input Current @ 208V (A)		0.22	0.44	0.62	0.88	1.06	1.24	1.50	1.68	1.87	2.12
Input Current @ 240V (A)		0.19	0.38	0.54	0.76	0.92	1.08	1.30	1.46	1.62	1.84
Input Current @ 277V (A)		0.17	0.36	0.47	0.72	0.83	0.95	1.19	1.31	1.42	1.67
Input Current @ 347V (A)		0.15	0.24	0.38	0.49	0.63	0.77	0.87	1.01	1.15	1.52
Input Current @ 480V (A)		0.11	0.18	0.29	0.37	0.48	0.59	0.66	0.77	0.88	0.96
Optics											
T2	4000K/5000K Lumens	5,054	9,878	14,739	19,475	24,129	28,875	34,148	38,691	43,159	47,785
	3000K Lumens	4,779	9,338	13,935	18,412	22,813	27,301	32,286	36,581	40,805	45,179
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	5,366	10,486	15,647	20,675	25,616	30,654	36,252	41,076	45,819	50,730
	3000K Lumens	5,074	9,914	14,794	19,548	24,218	28,982	34,276	38,835	43,320	47,964
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3	4000K/5000K Lumens	5,153	10,068	15,022	19,849	24,593	29,430	34,805	39,436	43,990	48,705
	3000K Lumens	4,872	9,519	14,203	18,766	23,251	27,825	32,907	37,285	41,591	46,048
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	5,266	10,292	15,356	20,290	25,140	30,084	35,578	40,312	44,968	49,786
	3000K Lumens	4,979	9,731	14,518	19,184	23,769	28,443	33,638	38,114	42,516	47,071
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	5,182	10,126	15,109	19,964	24,736	29,600	35,006	39,664	44,245	48,987
	3000K Lumens	4,899	9,574	14,285	18,876	23,387	27,986	33,097	37,501	41,832	46,315
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	4000K/5000K Lumens	5,115	9,995	14,914	19,706	24,417	29,218	34,554	39,152	43,674	48,354
	3000K Lumens	4,836	9,450	14,100	18,631	23,085	27,624	32,670	37,017	41,292	45,717
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	5,046	9,860	14,713	19,441	24,087	28,825	34,089	38,625	43,085	47,702
	3000K Lumens	4,771	9,322	13,911	18,381	22,774	27,253	32,229	36,518	40,735	45,101
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	5,152	10,067	15,020	19,846	24,591	29,426	34,800	39,431	43,984	48,698
	3000K Lumens	4,871	9,518	14,200	18,764	23,249	27,822	32,902	37,280	41,585	46,042
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	4,894	9,565	14,271	18,857	23,364	27,959	33,065	37,465	41,792	46,270
	3000K Lumens	4,627	9,043	13,492	17,829	22,090	26,434	31,261	35,422	39,513	43,746
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	5,313	10,383	15,493	20,470	25,363	30,351	35,893	40,669	45,367	50,229
	3000K Lumens	5,024	9,817	14,647	19,354	23,980	28,696	33,936	38,452	42,893	47,490
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
5MQ	4000K/5000K Lumens	5,411	10,574	15,778	20,848	25,830	30,911	36,554	41,418	46,202	51,154
	3000K Lumens	5,117	9,997	14,917	19,710	24,421	29,225	34,561	39,160	43,682	48,364
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	5,426	10,603	15,820	20,903	25,899	30,992	36,652	41,529	46,325	51,290
	3000K Lumens	5,130	10,025	14,958	19,763	24,486	29,302	34,654	39,263	43,799	48,493
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	4,528	8,846	13,199	17,440	21,609	25,858	30,580	34,649	38,651	42,792
	3000K Lumens	4,281	8,364	12,480	16,489	20,430	24,448	28,912	32,759	36,543	40,459
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	5,265	10,289	15,353	20,285	25,134	30,077	35,569	40,303	44,958	49,775
	3000K Lumens	4,978	9,727	14,516	19,179	23,763	28,437	33,629	38,105	42,506	47,060
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
AFL	4000K/5000K Lumens	5,285	10,327	15,409	20,360	25,225	30,186	35,699	40,450	45,120	49,956
	3000K Lumens	4,996	9,763	14,569	19,249	23,849	28,540	33,752	38,244	42,659	47,232
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		


page 7

GLEON GALLEON LED

NOMINAL POWER LUMENS (600MA)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		34	66	96	129	162	193	226	257	290	323
Input Current @ 120V (A)		0.30	0.58	0.86	1.16	1.44	1.73	2.03	2.33	2.59	2.89
Input Current @ 208V (A)		0.17	0.34	0.49	0.65	0.84	0.99	1.14	1.30	1.48	1.63
Input Current @ 240V (A)		0.15	0.30	0.43	0.56	0.74	0.87	1.00	1.13	1.30	1.43
Input Current @ 277V (A)		0.14	0.28	0.41	0.52	0.69	0.81	0.93	1.04	1.22	1.33
Input Current @ 347V (A)		0.11	0.19	0.30	0.39	0.49	0.60	0.69	0.77	0.90	0.99
Input Current @ 480V (A)		0.08	0.15	0.24	0.30	0.38	0.48	0.53	0.59	0.71	0.77
Optics											
T2	4000K/5000K Lumens	4,121	8,055	12,019	15,881	19,676	23,547	27,847	31,552	35,196	38,967
	3000K Lumens	3,896	7,615	11,363	15,015	18,604	22,263	26,328	29,831	33,276	36,842
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
T2R	4000K/5000K Lumens	4,376	8,552	12,760	16,860	20,890	24,998	29,563	33,497	37,365	41,369
	3000K Lumens	4,138	8,085	12,064	15,941	19,751	23,635	27,951	31,670	35,328	39,113
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3	4000K/5000K Lumens	4,201	8,210	12,251	16,187	20,055	23,999	28,383	32,159	35,873	39,718
	3000K Lumens	3,973	7,763	11,583	15,304	18,961	22,691	26,835	30,406	33,916	37,552
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3R	4000K/5000K Lumens	4,294	8,393	12,523	16,546	20,501	24,532	29,014	32,875	36,671	40,600
	3000K Lumens	4,060	7,936	11,840	15,644	19,383	23,195	27,432	31,082	34,671	38,386
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	4,226	8,257	12,321	16,280	20,172	24,139	28,547	32,346	36,082	39,948
	3000K Lumens	3,996	7,807	11,649	15,392	19,071	22,822	26,990	30,582	34,114	37,770
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	4000K/5000K Lumens	4,171	8,151	12,162	16,071	19,912	23,827	28,178	31,928	35,615	39,432
	3000K Lumens	3,943	7,706	11,498	15,194	18,825	22,527	26,642	30,187	33,673	37,281
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
SL2	4000K/5000K Lumens	4,114	8,041	11,998	15,854	19,643	23,506	27,799	31,498	35,135	38,901
	3000K Lumens	3,890	7,603	11,344	14,989	18,572	22,224	26,282	29,800	33,219	36,779
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
SL3	4000K/5000K Lumens	4,200	8,209	12,249	16,184	20,053	23,996	28,379	32,154	35,869	39,712
	3000K Lumens	3,972	7,762	11,580	15,302	18,960	22,688	26,831	30,400	33,913	37,546
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	3,992	7,799	11,638	15,378	19,053	22,801	26,964	30,552	34,081	37,733
	3000K Lumens	3,774	7,374	11,003	14,539	18,015	21,557	25,493	28,886	32,222	35,674
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B2-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	4,333	8,467	12,634	16,694	20,683	24,751	29,271	33,166	36,996	40,961
	3000K Lumens	4,097	8,005	11,945	15,784	19,555	23,401	27,674	31,357	34,978	38,727
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
5MQ	4000K/5000K Lumens	4,413	8,622	12,867	17,000	21,064	25,207	29,810	33,777	37,677	41,715
	3000K Lumens	4,173	8,152	12,165	16,073	19,915	23,832	28,185	31,934	35,623	39,440
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	4,424	8,646	12,900	17,046	21,120	25,274	29,890	33,866	37,778	41,826
	3000K Lumens	4,182	8,175	12,197	16,117	19,968	23,896	28,260	32,018	35,717	39,545
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
SLL/SRL	4000K/5000K Lumens	3,692	7,214	10,763	14,222	17,621	21,086	24,937	28,256	31,519	34,897
	3000K Lumens	3,491	6,820	10,176	13,447	16,660	19,937	23,577	26,715	29,800	32,994
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	4,293	8,390	12,520	16,542	20,496	24,527	29,007	32,866	36,662	40,591
	3000K Lumens	4,059	7,932	11,837	15,640	19,378	23,189	27,425	31,074	34,662	38,377
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
AFL	4000K/5000K Lumens	4,310	8,421	12,566	16,602	20,571	24,616	29,112	32,986	36,795	40,738
	3000K Lumens	4,074	7,962	11,881	15,697	19,448	23,273	27,525	31,187	34,788	38,516
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	PP1
				DATE	4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

CONTROL OPTIONS

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (P, R and PER7)

Optional button-type photocontrol (P) and photocontrol receptacles (R and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

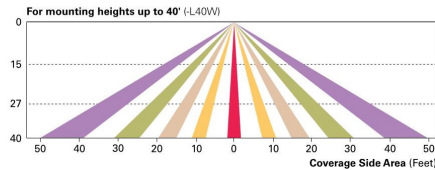
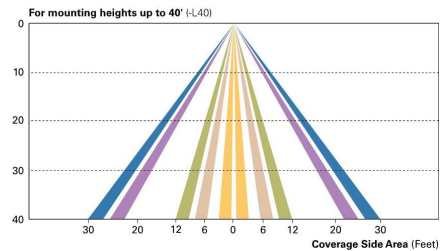
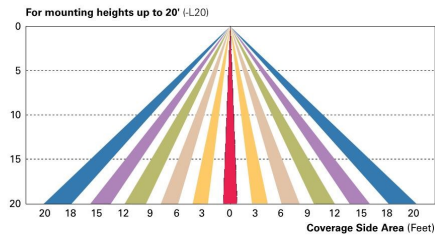
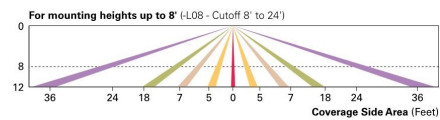
After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)

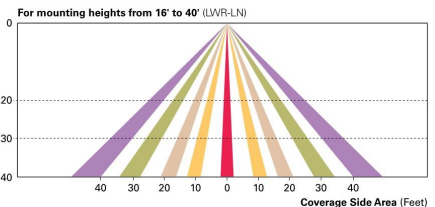
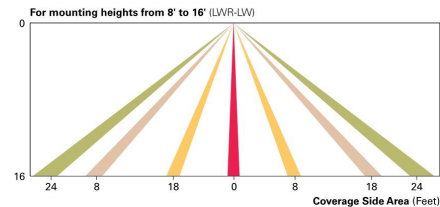
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage. pattern for mounting heights from 8'-40'.



LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)

The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.




WaveLinX Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinX to control outdoor area, site and flood lighting. WaveLinX controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

LumenSafe Integrated Network Security Camera (LD)

Eaton brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL	0-10V	FIXTURE WATTS	59
FINISH	STANDARD	VOLTAGE	120/277V	INPUT WATTS	59
		NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 9

ORDERING INFORMATION

Sample Number: GLEON-AF-04-LED-E1-T3-GM-QM

Product Family ^{1,2}	Light Engine	Number of Light Squares ³	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	AF=1A Drive Current	01=1 02=2 03=3 04=4 05=5 ⁴ 06=6 07=7 ⁵ 08=8 ⁵ 09=9 ⁵ 10=10 ⁴	LED=Solid State Light Emitting Diodes	E1=120-277V 347=347V ⁷ 480=480V ^{7,8}	T2=Type II T2R=Type II Roadway T3=Type III T3R=Type III Roadway T4FT=Type IV Forward Throw T4W=Type IV Wide 5NQ=Type V Narrow 5MQ=Type V Square Medium 5WQ=Type V Square Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I AFL=Automotive Frontline	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	[Blank]=Arm for Round or Square Pole EA=Extended Arm ⁹ MA=Mast Arm Adapter ¹⁰ WM=Wall Mount QM=Quick Mount Arm (Standard Length) ¹¹ OMEA=Quick Mount Arm (Extended Length) ¹²
Options (Add as Suffix)					Accessories (Order Separately)		
7027=70 CRI 2700K ¹³ 7030=70 CRI 3000K ¹⁴ 8030=80 CRI 3000K ¹⁴ 7050=70 CRI 5000K ¹³ 7060=70 CRI 6000K ¹³ 600=Drive Current Factory Set to Nominal 600mA ¹⁵ 800=Drive Current Factory Set to Nominal 800mA ¹⁵ 1200=Drive Current Factory Set to Nominal 1200mA ^{15,16} F=Single Fuse (120, 277 or 347V. Must Specify Voltage) FF=Double Fuse (208, 240 or 480V. Must Specify Voltage) 2L=Two Circuits ^{17,18} DIM=External 0-10V Dimming Leads ^{19,20} P=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) ²¹ PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle ²¹ R=NEMA Twistlock Photocontrol Receptacle ²¹ AHD145=After Hours Dim, 5 Hours ²² AHD245=After Hours Dim, 6 Hours ²² AHD255=After Hours Dim, 7 Hours ²² AHD355=After Hours Dim, 8 Hours ²² HA=50°C High Ambient ²³ MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{24,25} MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height ^{24,26} MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height ^{24,27} MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range) ^{24,28} MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height ^{24,25,29} MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height ^{24,25,29} MS/X-L40=Bi-Level Motion Sensor, 21' - 40' Mounting Height ^{22,27,29} MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height (Wide Range) ^{24,25,29} MS-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height ^{24,25} MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height ^{24,26} MS-L40=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height ^{24,27} MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height (Wide Range) ^{24,28} LWR-LW=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ³⁰ LWR-LN=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ³⁰ L90=Optics Rotated 90° Left R90=Optics Rotated 90° Right MT=Factory Installed Mesh Top TH=Tool-less Door Hardware LCF=Light Square Trim Plate Painted to Match Housing ³¹ HSS=Factory Installed House Side Shield ³² CE=CE Marking ³³					OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V OA/RA1013=Photocontrol Shorting Cap OA/RA1014=120V Photocontrol MA1252=10kV Surge Module Replacement MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon FSIR-100=Wireless Configuration Tool for Occupancy Sensor ³⁴ GLEON-MT1=Field Installed Mesh Top for 1-4 Light Squares GLEON-MT2=Field Installed Mesh Top for 5-6 Light Squares GLEON-MT3=Field Installed Mesh Top for 7-8 Light Squares GLEON-MT4=Field Installed Mesh Top for 9-10 Light Squares GLEON-OM=Quick Mount Arm Kit ¹⁴ GLEON-OMEA=Quick Mount Extended Arm Kit ¹¹ LS/HSS=Field Installed House Side Shield ^{32,33} WOLC-7P-10A=WaveLinX Outdoor Control Module (7-pin) ³⁵		

NOTES:

1 Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2 DesignLights Consortium[®] Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3 Standard 4000K CCT and minimum 70 CRI. 4 Not compatible with MS/4-LXX or MS/1-LXX sensors. 5 Not compatible with extended quick mount arm (OMEA). 6 Not compatible with standard quick mount arm (QM) or extended quick mount arm (OMEA). 7 Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A. 8 Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems. Impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 9 May be required when two or more luminaires are oriented on a 90° or 120° lighting pattern. Refer to arm mounting requirement table. 10 Factory installed. 11 Maximum 6 light squares. 12 Maximum 8 light squares. 13 Extended lead times apply. Use dedicated IES files for 2700K, 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. 14 Extended lead times apply. Use dedicated IES files for 2700K, 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. 15 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. These files are published on the Galleon luminaire product page on the website. 16 Not available with HA option. 17 2L not available with MS, MS/X or MS/ DIM at 347V or 480V. 2L in AF-02 through AF-04 requires a larger housing, normally used for AF-05 or AF-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. 18 Not available with LumaWatt Pro wireless sensors. 19 Cannot be used with other control options. 20 Low voltage control lead brought out 18" outside fixture. 21 Not available if any "MS" sensor is selected. Motion sensor has an integral photocell. 22 Requires the use of P photocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. 23 50°C lumen maintenance data applies to 600mA, 800mA and 1A drive currents. 24 The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information. 25 Approximately 22" detection diameter at 8' mounting height. 26 Approximately 40" detection diameter at 20' mounting height. 27 Approximately 60" detection diameter at 40' mounting height. 28 Approximately 100" detection diameter at 40' mounting height. 29 Replace X with number of Light Squares operating in low output mode. 30 LumaWatt Pro wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1 and LWP-PoE8 in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information. 31 Not available with house side shield (HSS). 32 Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected. 33 CE is not available with the LWR, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only. 34 One required for each Light Square. 35 Requires 7-pin NEMA twistlock photocontrol receptacle. The WOLC-7 cannot be used in conjunction with additional sensors or controls.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology [*]	D=Dome Camera	C=Cellular, Customer Installed SIM Card A=Cellular, Factory Installed AT&T SIM Card V=Cellular, Factory Installed Verizon SIM Card S=Cellular, Factory Installed Sprint SIM Card
		R=Cellular, Factory Installed Rogers SIM Card W=Wi-Fi Networking w/ Omni-Directional Antenna E=Ethernet Networking


*Consult LumenSafe system pages for additional details and compatibility. Not available with 9-10 light square housing. Not available with 347V, 480V or high ambient options.



Eaton
121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TD500020EN
February 20, 2019 11:57 AM

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

Aluminum Poles



**SSA SQUARE
STRAIGHT
ALUMINUM**

Catalog #		Type
Project		
Comments		Date
Prepared by		

FEATURES

- Straight square shaft 6005-T6 aluminum alloy polished
- 356-T6 cast aluminum alloy base with aluminum knock-in bolt covers
- 8'-35' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacement for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Eaton's Light Pole White Paper for risk factors and design considerations. [Learn more.](#)

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

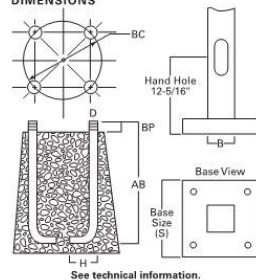
ORDERING INFORMATION

SAMPLE NUMBER: SSA4T08WXM1G


Product Family	Shaft Size (Inches) ¹	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Options (Add as Suffix)
SSA=Square Straight Aluminum	4=4" 5=5" 6=6" 9=9" Steel; 6=3/4" Aluminum	T=0.125" M=0.188" X=0.250"	08=8' 10=10' 12=12' 15=15' 18=18' 20=20' 25=25' 30=30' 35=35'	W=Aluminum	A=Satin Brushed Aluminum B=Clear Anodized C=Dark Bronze Anodized D=Black Anodized E=Medium Bronze Anodized F=Dark Bronze J=Summit White K=Carbon Bronze L=Dark Platinum R=Hartford Green S=Silver T=Graphite Metallic V=Grey W=White X=Custom Color Y=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (6" Long) 4=4" O.D. Tenon (8" Long) 9=3" O.D. Tenon (4" Long) 6=2-3/8" O.D. Tenon (6" Long) 7=4" O.D. Tenon (10" Long) A=Type A Drilling J=Type J Drilling K=Type K Drilling M=Type M Drilling N=Type N Drilling R=Type R Drilling	1=Single 2=2 at 180° 3=Triple 4=4 at 90° 5=2 at 90° X=None	A=1/2" Tapped Hub ³ B=3/4" Tapped Hub ³ C=Convenience Outlet ⁴ E=GFCI Convenience Outlet ⁴ F=Vibration Pad G=Ground Lug H=Additional Hand Hole ⁵ V=Vibration Damper

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90°, round poles are 3 at 120°. 3. Tapped Hub is located 5' below the pole top and on the same side of pole as hand hole, unless specified otherwise. 4. Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 5. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



See technical information.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP1 4/18/19
DESCRIPTION 16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD		MANUFACTURER PRODUCT CODE MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064	
LOCATION	DRIVE LANE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	59
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 2

SSA SQUARE STRAIGHT ALUMINUM

Effective Projected Area (At Pole Top)


Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Base Square ³ (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Size ³ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
									70 mph	80 mph	90 mph	100 mph	
MH			S	BC	BP	B	D x AB x H						
8	SSA4T08W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	23	26.6	19.9	15.2	11.9	350
12	SSA4T12W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	32	16.0	11.5	8.5	6.3	260
15	SSA4T15W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	39	9.1	6.2	4.2	2.8	200
15	SSA4M15W	0.188	10	9	3-1/8	4	3/4 x 17 x 3	55	14.8	10.6	7.7	5.6	200
15	SSA5T15W	0.125	11-9/16	11	3-1/4	5	3/4 x 17 x 3	52	16.0	11.3	8.1	5.8	260
18	SSA4T18W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	46	6.4	4.0	2.3	1.1	100
18	SSA4M18W	0.188	10	9	3-1/8	4	3/4 x 17 x 3	66	11.0	7.4	5.0	3.3	150
18	SSA5T18W	0.125	11-9/16	11	3-1/4	5	3/4 x 17 x 3	61	11.8	7.8	5.1	3.2	150
18	SSA5M18W	0.188	11-9/16	11	3-1/4	5	3/4 x 17 x 3	85	19.2	13.5	9.6	6.8	260
20	SSA4M20W	0.188	10	9	3-1/8	4	3/4 x 17 x 3	72	8.8	5.6	3.5	1.9	150
20	SSA5T20W	0.125	11-9/16	11	3-1/4	5	3/4 x 17 x 3	66	9.5	5.9	3.5	1.7	100
20	SSA5M20W	0.188	11-9/16	11-1/8	3-1/4	5	3/4 x 17 x 3	94	16.4	11.2	7.6	5.0	150
25	SSA5M25W	0.188	11-1/2	11	3-1/4	5	3/4 x 17 x 3	115	10.2	6.0	3.2	1.1	100
25	SSA6M25W	0.188	12-3/4	12-1/2	4	6	1 x 36 x 4	140	16.6	10.6	6.5	3.5	260
30	SSA6X30W	0.250	12-3/4	12-1/2	4	6	1 x 36 x 4	215	14.8	9.0	5.0	2.1	260
30	SSA9X30W ⁵	0.250	15-1/8	14-5/8	4-1/8	6-3/4	1 x 36 x 4	237	21.1	13.5	8.2	4.5	260
35	SSA9X35W ⁵	0.250	15-1/8	14-5/8	4-1/8	6-3/4	1 x 36 x 4	274	14.1	7.6	3.1	--	150

Effective Projected Area (18" Above Pole Top)

Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Base Square ³ (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Size ³ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
									70 mph	80 mph	90 mph	100 mph	
MH			S	BC	BP	B	D x AB x H						
8	SSA4T08W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	23	22.2	16.6	12.7	10	350
12	SSA4T12W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	32	14.1	10.1	7.4	5.5	260
15	SSA4T15W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	39	8.2	5.6	3.8	2.5	200
15	SSA4M15W	0.188	10	9	3-1/8	4	3/4 x 17 x 3	55	13.4	9.6	6.9	5.1	200
15	SSA5T15W	0.125	11-9/16	11	3-1/4	5	3/4 x 17 x 3	52	14.4	10.2	7.3	5.2	260
18	SSA4T18W	0.125	10	9	3-1/8	4	3/4 x 17 x 3	46	5.9	3.6	2.1	0.9	100
18	SSA4M18W	0.188	10	9	3-1/8	4	3/4 x 17 x 3	66	10.0	6.8	4.6	3.0	150
18	SSA5T18W	0.125	11-9/16	11	3-1/4	5	3/4 x 17 x 3	61	10.8	7.2	4.7	2.9	150
18	SSA5M18W	0.188	11-9/16	11	3-1/4	5	3/4 x 17 x 3	85	17.6	12.4	8.8	6.2	260
20	SSA4M20W	0.188	10	9	3-1/8	4	3/4 x 17 x 3	72	8.1	5.2	3.2	1.7	150
20	SSA5T20W	0.125	11-9/16	11	3-1/4	5	3/4 x 17 x 3	66	8.8	5.5	3.2	1.5	100
20	SSA5M20W	0.188	11-9/16	11-1/8	3-1/4	5	3/4 x 17 x 3	94	15.2	10.3	7.0	4.7	150
25	SSA5M25W	0.188	11-1/2	11	3-1/4	5	3/4 x 17 x 3	115	9.5	5.6	3.0	1.0	100
25	SSA6M25W	0.188	12-3/4	12-1/2	4	6	1 x 36 x 4	140	15.6	9.9	6.1	3.3	260
30	SSA6X30W	0.250	12-3/4	12-1/2	4	6	1 x 36 x 4	215	14.0	8.5	4.7	2.0	260
30	SSA9X30W ⁵	0.250	15-1/8	14-5/8	4-1/8	6-3/4	1 x 36 x 4	237	20.0	12.8	7.8	4.3	260
35	SSA9X35W ⁵	0.250	15-1/8	14-5/8	4-1/8	6-3/4	1 x 36 x 4	274	13.5	7.2	2.9	--	150

NOTES:

1. Catalog number includes pole with hardware kit. Anchor bolts not included. Before installing, make sure proper anchor bolts and templates are obtained.
2. Tension size or machining for rectangular arms must be specified. Hand hole position relative to drill location.
3. Shaft size, base square, anchor bolts and projections may vary slightly. All dimensions nominal.
4. EPAs based on shaft properties with wind normal to flat. EPAs calculated using base wind velocity as indicated plus 30% gust factor.
5. Factory installed vibration damper.

 <p>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</p>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP2 4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B2-LED-D1-T4-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	ENTRY TURNAROUND AND PARKING	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	48
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

DESCRIPTION

The Invue Arbor post top brings architectural style to area/site and pedestrian scale applications. Its dayfarm appearance brings a desired organic look into the urban environment. WaveStream™ LED Optics provide a uniform pixelation free image, managing glare while providing high levels of visibility.

SPECIFICATION FEATURES

Construction

Two-piece IP66 rated housing is cast from low copper content corrosion resistant aluminum, maintaining strength and precision to sustain long term dayfarm appearance. ANSI C136.31 testing compliance prevents damage from installation generated vibration. External hardware and casting seams are minimized to enhance appearance.

Optics

Specifically designed for pedestrian applications, WaveStream LED optical waveguide technology produces both symmetric NEMA type V and asymmetric NEMA II, III, IV distributions. The waveguide is manufactured from precision injection molded acrylic resulting in a pixelation free optical image for improved glare control and visual comfort. Luminaire efficacy's measure up to 100 lm/w for 4000K (+/- 275K) CCT at 70 CRI (min), optional 3000K CCT at 80 CRI is also available.

Electrical

LED driver(s) are directly mounted to upper housing thermal pad for optimal thermal performance. Standard 0-10V dimming drivers and Eaton's proprietary surge protection module are designed to withstand 10kV of transient line surge. Drivers operate at 120-

277V 50/60Hz with 347V/60Hz or 480V/60Hz operation optional. Suitable for ambient temperature applications from -30°C (-22°F) to 40°C (104°F). Limited high ambient options allow for 50°C operation.

Controls

The Arbor LED luminaire control options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. The ANSI C136.41 compliant NEMA 7-PIN receptacle enables wireless dimming when used with compatible photocontrol. An integrated dimming and occupancy sensor is a standalone control option available in on/off (MS) and bi-level dimming (MS/ DIM) operation. The optional LumaWatt Pro™ system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication.

Mounting

Fitter assembly mounts over 2-3/8" O.D. tenon and is secured via six concealed stainless steel set screws. Design of fitter provides seamless transition to 3" O.D. round pole top. Additional mounting accessories include a

single fixture arm mount, twin fixture arm mount and wall mount arm. Additional pole mount accessories mount to a 3" x 4" long tenon for 4" - 5" O.D. poles tops. For existing 2-3/8" tenons an adapter is shipped standard.

Finish

Eaton utilizes premium ultra-weatherable TGIC based polyester powder coatings that are specifically formulated to withstand extended outdoor exposure. The powders are formulated exclusively for Eaton to serve functionally as well as decorative. Good film appearance combined with excellent mechanical an exterior exposure qualities display greater than twice as much gloss retention, RAL and custom color matches available. Finish is compliant with ASTM B117 3000hr salt spray standard.

Warranty

Five-year warranty.

Invue

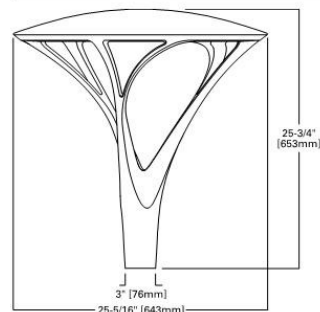
Catalog #		Type	
Project			
Comments		Date	
Prepared by			



ARB ARBOR POST TOP

DECORATIVE LUMINAIRE

DIMENSIONS



CERTIFICATION DATA

UL/cUL Listed
IP66 Housing
ANSI C136.31
1.5G Vibration Tested
RoHS
ISO 9001
Dark Sky Approved (3000K CCT and warmer only)

ENERGY DATA


Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz,
480V/60Hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.9

Approximate Net Weight:
37 lbs. [16.8 kgs.]



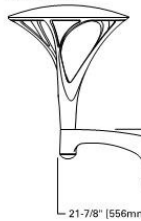
<div></div> <div>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</div>		<div>CAREFIELD—CITRUS HEIGHTS</div> <div>DESIGN REVIEW</div>		FIXTURE TYPE	PP2
				DATE	4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		INVUE ARBOR HEAD: ARB-B2-LED-D1-T4-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		INTEGRAL LED BEAM: TYPE 4 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	ENTRY TURNAROUND AND PARKING	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL	0-10V	FIXTURE WATTS	48
		VOLTAGE	120/277V	INPUT WATTS	48
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 2

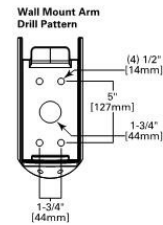
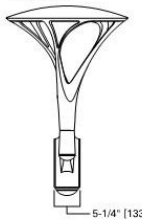
ARB ARBOR POST TOP

MOUNTING CONFIGURATIONS (WEIGHT AND EPAS INCLUDES FIXTURE)

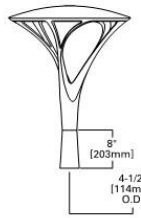
Single Arm Mount
Weight: 56 lbs. [25.45 kgs.]
EPA: 1.7 sq/ft



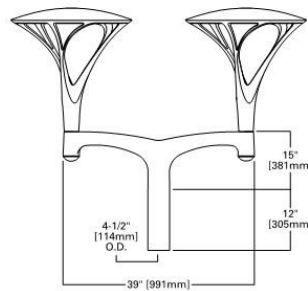
Wall Mount Arm
Weight: 57 lbs. [25.91 kgs.]
EPA: 1.8 sq/ft



Post Top Adapter
Weight: 41 lbs. [18.63 kgs.]
EPA: 1.2 sq/ft



Twin Arm Mount - 1.5G
Weight: 114 lbs. [51.81 kgs.]
EPA: 3.45 sq/ft

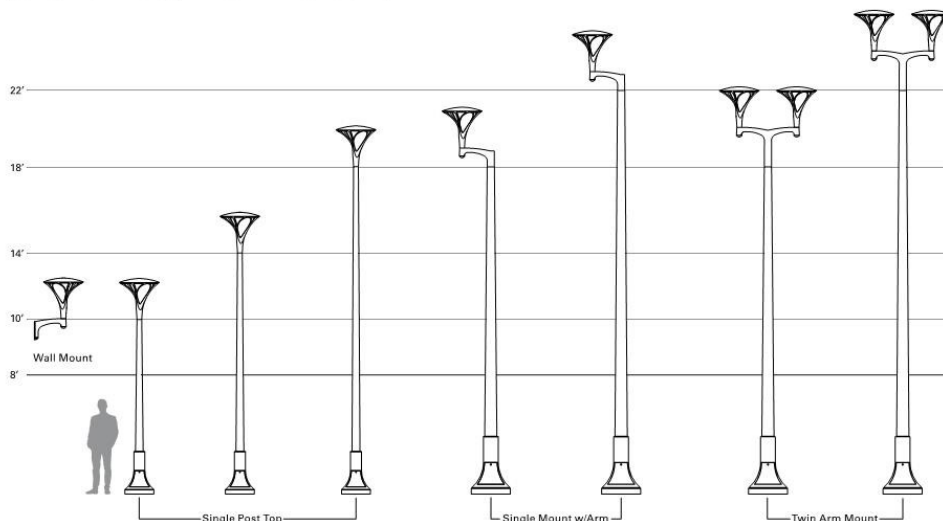



MOUNTING REQUIREMENTS CHART

Tenon O.D. (Inches)	2-3/8" Tenon		
Pole Top O.D. (Inches)	3"	4"	5"
Post Top	Standard	Spacer (Provided) & ARPA4-XX (Order Separately)	Spacer (Provided) & ARPA4-XX (Order Separately)
Single Arm Mount	Spacer (Provided)	Spacer (Provided)	Spacer (Provided)

Tenon O.D. (Inches)	3" Tenon	
Pole Top O.D. (Inches)	4"	5"
Post Top	ARPA4-XX (Order Separately)	ARPA4-XX (Order Separately)
Single Arm Mount	Standard	Standard
Twin Mount	Standard	Standard

POLE CONFIGURATIONS (ARP DECORATIVE POLE SHOWN)



 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	PP2
				DATE	4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B2-LED-D1-T4-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	ENTRY TURNAROUND AND PARKING	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	48
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 3

ARB ARBOR POST TOP

CONTROL OPTIONS

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

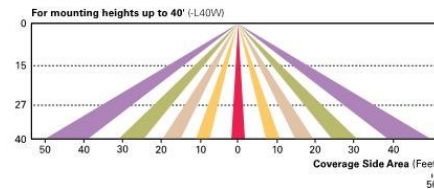
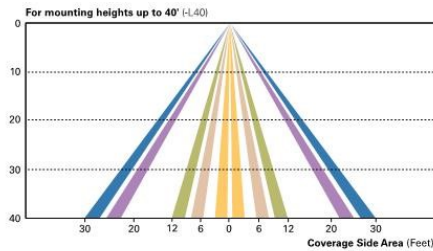
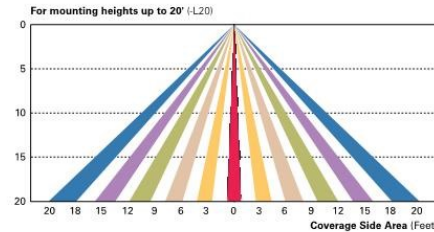
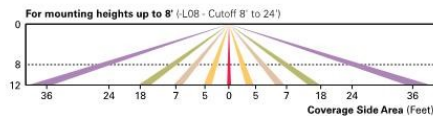
Photocontrol (PC, PER and PER7)

Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX and MS-LXX)

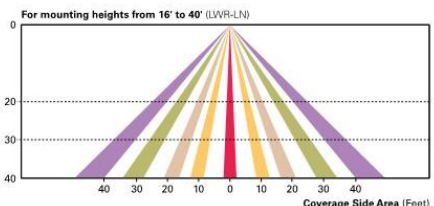
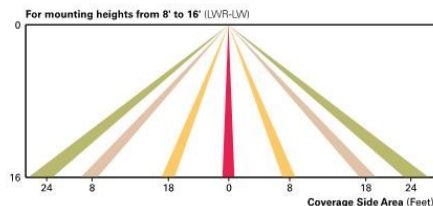
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.




LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)

The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.



WaveLinX Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinX to control outdoor area, site and flood lighting. WaveLinX controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	PP2
				DATE	4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B2-LED-D1-T4-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	ENTRY TURNAROUND AND PARKING	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	48
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 4

ARB ARBOR POST TOP

POWER AND LUMENS

Lumen Package	B1	B2	B3	B4
Drive Current				
Power Wattage (Watts)	24W	48W	96W	99W
Input Current (mA) @ 120V	200	400	800	830
Input Current (mA) @ 208V	120	240	470	480
Input Current (mA) @ 240V	100	200	400	420
Input Current (mA) @ 277V	90	180	350	360
Power Wattage (Watts)	26W	53W	107W	108W
Input Current (mA) @ 347V	79	161	325	328
Input Current (mA) @ 480V	58	117	235	237
Optics				
Type II	Lumens	2,045	3,994	7,362
	BUG Rating	B1-U1-G1	B1-U2-G2	B3-U2-G3
Type III	Lumens	2,324	4,534	8,451
	BUG Rating	B1-U1-G1	B1-U2-G2	B2-U2-G3
Type IV	Lumens	2,408	4,691	8,740
	BUG Rating	B1-U1-G1	B1-U2-G2	B2-U2-G3
Type V	Lumens	2,311	4,529	8,511
	BUG Rating	B2-U1-G1	B3-U2-G2	B3-U2-G3

COLOR TEMPERATURE

Color Temperature (CCT)	CRI (Nominal)	Multiplier (Hours)
4000	70	1.00
3000	80	0.91

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Calculated L70 (Hours)
25 C	>91%	>230,000
40 C	>88%	>172,000
50 C	>86%	>142,000

NOTE: Maintenance data applies to the highest drive current and represents the worst case at the highest wattage.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0 C	1.02
10 C	1.01
25 C	1.00
40 C	0.99
50 C	0.97


ORDERING INFORMATION

Sample Number: ARB-B2-LED-D1-T2-GM

Product Family ^{1,2}	Lumens ³	Lamp Type ⁵	Voltage	Distribution	Color
ARB=Arbor Post Top	B1=Nominal 2,300 Lumens B2=Nominal 4,500 Lumens B3=Nominal 8,500 Lumens B4=Nominal 9,500 Lumens ⁴	LED=Solid State Light Emitting Diodes	D1=Dimming Driver (120-277V) 347=347V ⁶ 480=480V ^{6,7}	T2=Type II T3=Type III T4=Type IV T5=Type V	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White CC=Custom Color ⁸
Options (Add as Suffix)			Accessories (Order Separately) ¹⁸		
7030=70 CRI / 3000K CCT ⁹ 8030=80 CRI / 3000K CCT ⁹ PC=Button Type Photocontrol ¹⁰ PER=Standard 3-PIN Photocontrol Receptacle ¹⁰ PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle ^{10,11} HA=50°C High Ambient ¹² MS-LXX=Photo/Motion Sensor for On/Off Operation ^{13,14} MS/DIM-LXX=Programmable Photo/Motion Sensor ^{13,14,15} LWR-LN=LumaWatt Pro Wireless Sensor, Wide Lens 8' - 16' Mounting Height ¹⁶ LWR-LN=LumaWatt Pro Wireless Sensor, Wide Lens 16' - 40' Mounting Height ¹⁶ SLTD=5th Light Dali Driver ¹⁷ DIM=0-10V External Dimming Leads ¹⁸ VS=Tempered Glass Vandal Shield			ARSA-XX=Single Pole Mount Arm ²⁰ ARWM-XX=Wall Mount Arm ARTA15-XX=Twin Mount Bracket - 1.5G ²⁰ ARPA4-XX=Pole Adapter 4" O.D. Pole FSIR-100=Wireless Configuration Tool for Occupancy Sensor ¹⁸ WOLC-7P-10A=WaveLinux Outdoor Control Module (7-pin) ²¹		

NOTES:

- Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional information.
- Fixture splits over standard 2-3/8" tenon. 3" O.D. tenon when used with a ARPA4-XX 4" O.D. pole adapter.
- Lumens are nominal. See lumen table for more information.
- B4 only available with Type V distribution.
- Standard 4000K CCT, nominal 70 CRI.
- Requires the use of a step down transformer.
- Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- Custom and RAL color matching available upon request. Consult your lighting representative at Eaton for more information.
- Extended lead times apply. Use dedicated IES files when performing layouts. These files are published on the Arbor luminaire product page on the website.
- Not available with MS, MSDIM or DIMRF options.
- Compatible with standard 3-PIN photocontrols and 5-PIN or 7-PIN ANSI controls.
- Not available with Type II, III and IV B3 optics.
- Not available with HA option.
- Replace XX with mounting height in feet for proper lens selection. L8, L20 and L40 are available options.
- This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
- LumaWatt Pro wireless sensors are factory installed and require network components LWP-EM-1, LWP-GW-1, and LWP-Po in appropriate quantities. See www.eaton.com/lighting for LumaWatt application information.
- Only available with B1 and B2 lumen packages.
- Low voltage control leads brought out 18" outside fixture. Not available with control options.
- Replace XX with color designation.
- Fits on 3" O.D. x 4" long tenon for nominal 4-1/2" O.D. pole top.
- Requires 7-pin NEMA twistlock photocontrol receptacle. The WOLC-7 cannot be used in conjunction with additional sensors or controls.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP2 4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B2-LED-D1-T4-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	ENTRY TURNAROUND AND PARKING	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	48
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

Aluminum Poles



RSA ROUND STRAIGHT ALUMINUM

Catalog #		Type
Project		
Comments		Date
Prepared by		

FEATURES

- Straight round shaft 6063-T6 aluminum alloy polished
- Cast aluminum alloy base with aluminum bolt covers
- Anchor bolt per ASTM A576
- 8'-20' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacement for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Eaton's Light Pole White Paper for risk factors and design considerations. [Learn more.](#)

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

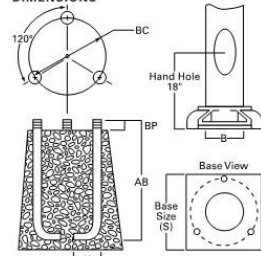
ORDERING INFORMATION

SAMPLE NUMBER: RSA4T08NAA1V

Product Family	Shaft Size (Inches) ¹	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Options (Add as Suffix)
RSA=Round Straight Aluminum	4=4" 5=5"	T=0.125" M=0.188"	08=8' 10=10' 12=12' 15=15' 18=18' 20=20'	A=Aluminum (4-Bolt) ² N=Aluminum (3-Bolt)	A=Satin Brushed Aluminum B=Clear Anodized C=Dark Bronze Anodized D=Black Anodized E=Medium Bronze Anodized F=Dark Bronze J=Summit White K=Carbon Bronze L=Dark Platinum R=Hartford Green S=Silver T=Graphite Metallic V=Grey W=White X=Custom Color Y=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (5" Long) 4=4" O.D. Tenon (6" Long) 5=5" O.D. Tenon (4" Long) 6=2-3/8" O.D. Tenon (6" Long) 7=4" O.D. Tenon (10" Long)	1=Single 2=2 at 180° 3=Triple 4=4 at 90° 5=2 at 90° 6=3 at 90° 7=2 at 120° X=None	A=1/2" Tapped Hub ⁴ B=3/4" Tapped Hub ⁴ C=Convenience Outlet ⁵ D=Base Cover for "A" Base E=GFCI Convenience Outlet ⁶ F=Vibration Pad G=Ground Lug H=Additional Hand Hole ⁶ V=Vibration Damper

NOTES: 1. All shaft sizes nominal. 2. Base cover not included (order as option). 3. Square poles are 3 at 90°, round poles are 3 at 120°. 4. Tapped Hub is located 5" below the pole top and on the same side of pole as hand hole, unless specified otherwise. 5. Outlet is located 4" above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 6. Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



See technical information.

STANDARD BASE


(Round aluminum poles only.)
TYPE "A"
6", 7", 8" or 10"



STANDARD BASE

(Round aluminum poles only.)
TYPE "N"
(Standard with base cover.)
4", 5" or 6"



 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	PP2
				DATE	4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B2-LED-D1-T4-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 4 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	ENTRY TURNAROUND AND PARKING	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	48
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 2

RSA ROUND STRAIGHT ALUMINUM

Effective Projected Area (At Pole Top)


Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Size ³ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
								70 mph	80 mph	90 mph	100 mph	
MH			BC	BP	B	D x AB x H						
8	RS44T08N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	20	16.0	11.9	9.1	7.2	100
10	RS44T10N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	24	12.2	8.9	6.6	5.1	100
12	RS44T12N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	27	9.4	6.7	4.8	3.6	100
12	RS45T12N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	33	16.1	11.8	9.1	7.3	100
15	RS44T15N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	33	6.4	4.2	2.8	1.8	100
15	RS45T15N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	40	11.5	8.2	6.2	4.9	100
18	RS44M18N ⁵	0.188	6-3/4	3-1/4	4	3/4 x 17 x 3	54	7.2	4.8	3.1	2.1	100
18	RS45M18N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	66	13	9.2	7.0	5.5	150
20	RS45M20N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	73	10.3	7.1	5.3	4.1	150

Effective Projected Area (18" Above Pole Top)

Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Size ³ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
								70 mph	80 mph	90 mph	100 mph	
MH			BC	BP	B	D x AB x H						
8	RS44T08N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	20	13.6	10.1	7.7	6.1	100
10	RS44T10N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	24	10.6	7.7	5.8	4.5	100
12	RS44T12N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	27	8.3	5.9	4.3	3.2	100
12	RS45T12N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	33	14.3	10.5	8.1	6.5	100
15	RS44T15N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	33	5.6	3.7	2.4	1.6	100
15	RS45T15N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	40	10.2	7.2	5.5	4.3	100
18	RS44M18N ⁵	0.188	6-3/4	3-1/4	4	3/4 x 17 x 3	54	6.5	4.3	2.8	1.9	100
18	RS45M18N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	66	11.7	8.3	6.3	5.0	150
20	RS45M20N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	73	9.4	6.5	4.9	3.7	150

NOTES:

1. Catalog number includes pole with hardware kit. Anchor bolts not included. Before installing, make sure proper anchor bolts and templates are obtained.
2. Tenon size or machining for rectangular arms must be specified. Hand hole position relative to drill location.
3. Shaft size, anchor bolts and projections may vary slightly. All dimensions nominal.
4. EPAs based on shaft properties with wind normal to flat. EPAs calculated using base wind velocity as indicated plus 30% gust factor.
5. Factory installed vibration damper.

 <p>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</p>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP3 4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B1-LED-D1-T5-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 5 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	FRONT COURTYARD	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL	0-10V	FIXTURE WATTS	24
		VOLTAGE	120/277V	INPUT WATTS	24
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

DESCRIPTION

The Invue Arbor post top brings architectural style to area/site and pedestrian scale applications. Its dayfarm appearance brings a desired organic look into the urban environment. WaveStream™ LED Optics provide a uniform pixelation free image, managing glare while providing high levels of visibility.

SPECIFICATION FEATURES

Construction

Two-piece IP66 rated housing is cast from low copper content corrosion resistant aluminum, maintaining strength and precision to sustain long term dayfarm appearance. ANSI C136.31 testing compliance prevents damage from installation generated vibration. External hardware and casting seams are minimized to enhance appearance.

Optics

Specifically designed for pedestrian applications, WaveStream LED optical waveguide technology produces both symmetric NEMA type V and asymmetric NEMA II, III, IV distributions. The waveguide is manufactured from precision injection molded acrylic resulting in a pixelation free optical image for improved glare control and visual comfort. Luminaire efficacy's measure up to 100 lm/w for 4000K (+/- 275K) CCT at 70 CRI (min), optional 3000K CCT at 80 CRI is also available.

Electrical

LED driver(s) are directly mounted to upper housing thermal pad for optimal thermal performance. Standard 0-10V dimming drivers and Eaton's proprietary surge protection module are designed to withstand 10kV of transient line surge. Drivers operate at 120-

277V 50/60Hz with 347V/60Hz or 480V/60Hz operation optional. Suitable for ambient temperature applications from -30°C (-22°F) to 40°C (104°F). Limited high ambient options allow for 50°C operation.

Controls

The Arbor LED luminaire control options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. The ANSI C136.41 compliant NEMA 7-PIN receptacle enables wireless dimming when used with compatible photocontrol. An integrated dimming and occupancy sensor is a standalone control option available in on/off (MS) and bi-level dimming (MS/DIM) operation. The optional LumaWatt Pro™ system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication.

Mounting

Fitter assembly mounts over 2-3/8" O.D. tenon and is secured via six concealed stainless steel set screws. Design of fitter provides seamless transition to 3" O.D. round pole top. Additional mounting accessories include a

single fixture arm mount, twin fixture arm mount and wall mount arm. Additional pole mount accessories mount to a 3" x 4" long tenon for 4" - 5" O.D. poles tops. For existing 2-3/8" tenons an adapter is shipped standard.

Finish

Eaton utilizes premium ultra-weatherable TGIC based polyester powder coatings that are specifically formulated to withstand extended outdoor exposure. The powders are formulated exclusively for Eaton to serve functionally as well as decorative. Good film appearance combined with excellent mechanical an exterior exposure qualities display greater than twice as much gloss retention, RAL and custom color matches available. Finish is compliant with ASTM B117 3000hr salt spray standard.

Warranty

Five-year warranty.

Invue

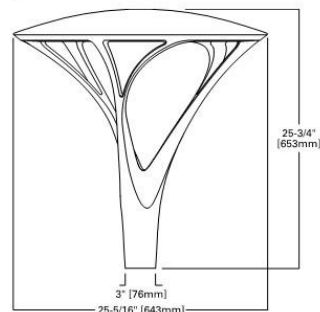
Catalog #		Type	
Project			
Comments		Date	
Prepared by			



ARB ARBOR POST TOP

DECORATIVE LUMINAIRE

DIMENSIONS



CERTIFICATION DATA

UL/cUL Listed
IP66 Housing
ANSI C136.31
1.5G Vibration Tested
RoHS
ISO 9001
Dark Sky Approved (3000K CCT and warmer only)


ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz,
480V/60Hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.9

Approximate Net Weight:
37 lbs. [16.8 kgs.]

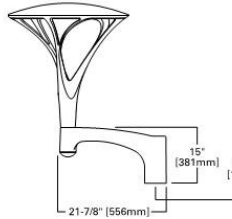
 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP3 4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B1-LED-D1-T5-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 5 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	FRONT COURTYARD	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	24
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 2

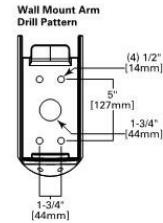
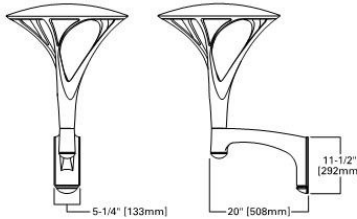
ARB ARBOR POST TOP

MOUNTING CONFIGURATIONS (WEIGHT AND EPAS INCLUDES FIXTURE)

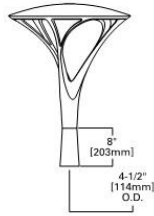
Single Arm Mount
Weight: 56 lbs. [25.45 kgs.]
EPA: 1.7 sq/ft



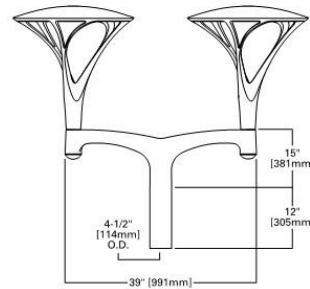
Wall Mount Arm
Weight: 57 lbs. [25.91 kgs.]
EPA: 1.8 sq/ft



Post Top Adapter
Weight: 41 lbs. [18.63 kgs.]
EPA: 1.2 sq/ft



Twin Arm Mount - 1.5G
Weight: 114 lbs. [51.81 kgs.]
EPA: 3.45 sq/ft

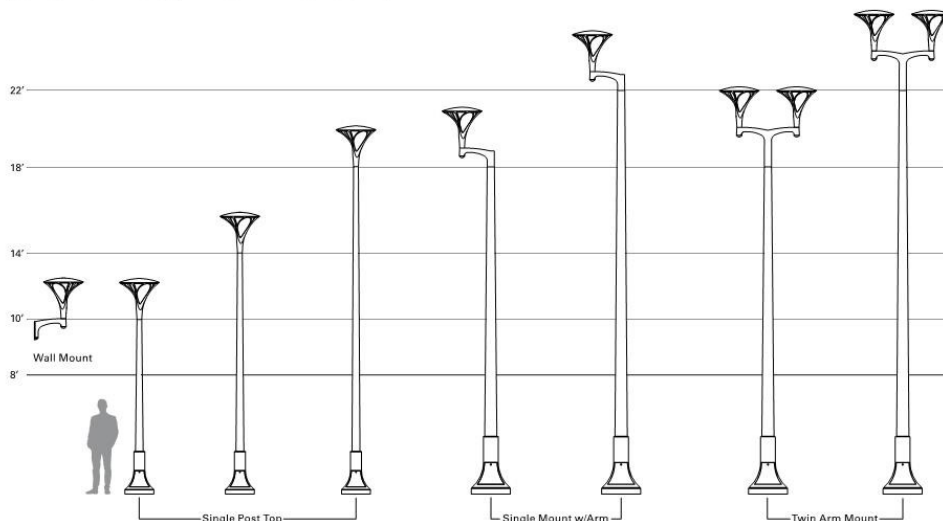



MOUNTING REQUIREMENTS CHART

Tenon O.D. (Inches)	2-3/8" Tenon		
Pole Top O.D. (Inches)	3"	4"	5"
Post Top	Standard	Spacer (Provided) & ARPA4-XX (Order Separately)	Spacer (Provided) & ARPA4-XX (Order Separately)
Single Arm Mount	Spacer (Provided)	Spacer (Provided)	Spacer (Provided)

Tenon O.D. (Inches)	3" Tenon	
Pole Top O.D. (Inches)	4"	5"
Post Top	ARPA4-XX (Order Separately)	ARPA4-XX (Order Separately)
Single Arm Mount	Standard	Standard
Twin Mount	Standard	Standard

POLE CONFIGURATIONS (ARP DECORATIVE POLE SHOWN)



 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP3 4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B1-LED-D1-T5-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 5 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	FRONT COURTYARD	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	24
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 3

ARB ARBOR POST TOP

CONTROL OPTIONS

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

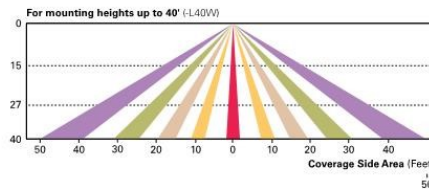
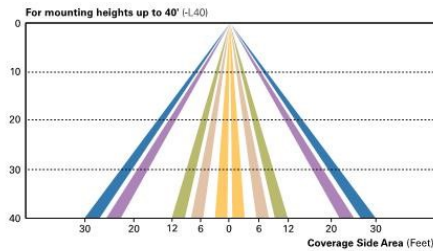
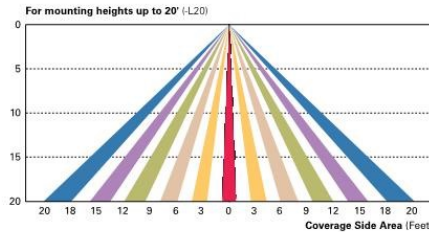
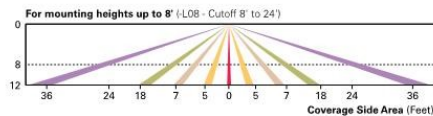
Photocontrol (PC, PER and PER7)

Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX and MS-LXX)

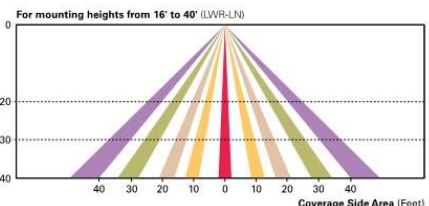
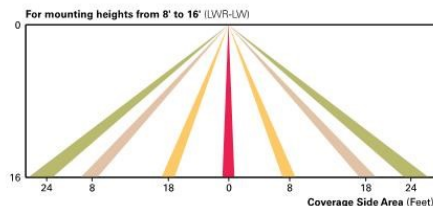
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.




LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)

The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.



WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

<div></div> <div>2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com</div>		<div>CAREFIELD—CITRUS HEIGHTS</div> <div>DESIGN REVIEW</div>		FIXTURE TYPE	PP3
				DATE	4/18/19
DESCRIPTION		MANUFACTURER PRODUCT CODE		LIGHT SOURCE	
14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		INVUE ARBOR HEAD: ARB-B1-LED-D1-T5-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		INTEGRAL LED BEAM: TYPE 5 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	FRONT COURTYARD	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL	0-10V	FIXTURE WATTS	24
		VOLTAGE	120/277V	INPUT WATTS	24
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 4

ARB ARBOR POST TOP

POWER AND LUMENS

Lumen Package	B1	B2	B3	B4
Drive Current				
Power Wattage (Watts)	24W	48W	96W	99W
Input Current (mA) @ 120V	200	400	800	830
Input Current (mA) @ 208V	120	240	470	480
Input Current (mA) @ 240V	100	200	400	420
Input Current (mA) @ 277V	90	180	350	360
Power Wattage (Watts)	26W	53W	107W	108W
Input Current (mA) @ 347V	79	161	325	328
Input Current (mA) @ 480V	58	117	235	237
Optics				
Type II	Lumens	2,045	3,994	7,362
	BUG Rating	B1-U1-G1	B1-U2-G2	B3-U2-G3
Type III	Lumens	2,324	4,534	8,451
	BUG Rating	B1-U1-G1	B1-U2-G2	B2-U2-G3
Type IV	Lumens	2,408	4,691	8,740
	BUG Rating	B1-U1-G1	B1-U2-G2	B2-U2-G3
Type V	Lumens	2,311	4,529	8,511
	BUG Rating	B2-U1-G1	B3-U2-G2	B3-U2-G3

COLOR TEMPERATURE

Color Temperature (CCT)	CRI (Nominal)	Multiplier (Hours)
4000	70	1.00
3000	80	0.91

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Calculated L70 (Hours)
25 C	>91%	>230,000
40 C	>88%	>172,000
50 C	>86%	>142,000

NOTE: Maintenance data applies to the highest drive current and represents the worst case at the highest wattage.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0 C	1.02
10 C	1.01
25 C	1.00
40 C	0.99
50 C	0.97


ORDERING INFORMATION

Sample Number: ARB-B2-LED-D1-T2-GM

Product Family ^{1,2}	Lumens ³	Lamp Type ⁵	Voltage	Distribution	Color
ARB=Arbor Post Top	B1=Nominal 2,300 Lumens B2=Nominal 4,500 Lumens B3=Nominal 8,500 Lumens B4=Nominal 9,500 Lumens ⁴	LED=Solid State Light Emitting Diodes	D1=Dimming Driver (120-277V) 347=347V ⁶ 480=480V ^{6,7}	T2=Type II T3=Type III T4=Type IV T5=Type V	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White CC=Custom Color ⁸
Options (Add as Suffix)			Accessories (Order Separately) ¹⁸		
7030=70 CRI / 3000K CCT ⁹ 8030=80 CRI / 3000K CCT ⁹ PC=Button Type Photocontrol ¹⁰ PER=Standard 3-PIN Photocontrol Receptacle ¹⁰ PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle ^{10,11} HA=50°C High Ambient ¹² MS-LXX=Photo/Motion Sensor for On/Off Operation ^{13,14} MS/DIM-LXX=Programmable Photo/Motion Sensor ^{13,14,15} LWR-LN=LumaWatt Pro Wireless Sensor, Wide Lens 8' - 16' Mounting Height ¹⁶ LWR-LN=LumaWatt Pro Wireless Sensor, Wide Lens 16' - 40' Mounting Height ¹⁶ SLTD=5th Light Dali Driver ¹⁷ DIM=0-10V External Dimming Leads ¹⁸ VS=Tempered Glass Vandal Shield			ARSA-XX=Single Pole Mount Arm ²⁰ ARWM-XX=Wall Mount Arm ARTA15-XX=Twin Mount Bracket - 1.5G ²⁰ ARPA4-XX=Pole Adapter 4" O.D. Pole FSIR-100=Wireless Configuration Tool for Occupancy Sensor ¹⁸ WOLC-7P-10A=WaveLinX Outdoor Control Module (7-pin) ²¹		

NOTES:

- Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional information.
- Fixture splits over standard 2-3/8" tenon. 3" O.D. tenon when used with a ARPA4-XX 4" O.D. pole adapter.
- Lumens are nominal. See lumen table for more information.
- B4 only available with Type V distribution.
- Standard 4000K CCT, nominal 70 CRI.
- Requires the use of a step down transformer.
- Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- Custom and RAL color matching available upon request. Consult your lighting representative at Eaton for more information.
- Extended lead times apply. Use dedicated IES files when performing layouts. These files are published on the Arbor luminaire product page on the website.
- Not available with MS, MSDIM or DIMRF options.
- Compatible with standard 3-PIN photocontrols and 5-PIN or 7-PIN ANSI controls.
- Not available with Type II, III and IV B3 optics.
- Not available with HA option.
- Replace XX with mounting height in feet for proper lens selection. L8, L20 and L40 are available options.
- This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
- LumaWatt Pro wireless sensors are factory installed and require network components LWP-EM-1, LWP-GW-1, and LWP-Po in appropriate quantities. See www.eaton.com/lighting for LumaWatt application information.
- Only available with B1 and B2 lumen packages.
- Low voltage control leads brought out 18" outside fixture. Not available with control options.
- Replace XX with color designation.
- Fits on 3" O.D. x 4" long tenon for nominal 4-1/2" O.D. pole top.
- Requires 7-pin NEMA twistlock photocontrol receptacle. The WOLC-7 cannot be used in conjunction with additional sensors or controls.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP3 4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B1-LED-D1-T5-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 5 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	FRONT COURTYARD	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	24
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

Aluminum Poles



RSA ROUND STRAIGHT ALUMINUM

Catalog #		Type
Project		
Comments		Date
Prepared by		

FEATURES

- Straight round shaft 6063-T6 aluminum alloy polished
- Cast aluminum alloy base with aluminum bolt covers
- Anchor bolt per ASTM A576
- 8'-20' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacement for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Eaton's Light Pole White Paper for risk factors and design considerations. [Learn more.](#)

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

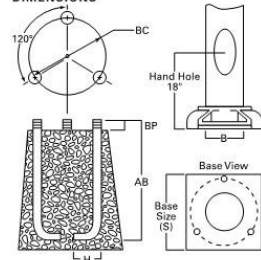
ORDERING INFORMATION

SAMPLE NUMBER: RSA4T08NAA1V

Product Family	Shaft Size (Inches) ¹	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Options (Add as Suffix)
RSA=Round Straight Aluminum	4=4" 5=5"	T=0.125" M=0.188"	08=8' 10=10' 12=12' 15=15' 18=18' 20=20'	A=Aluminum (4-Bolt) ² N=Aluminum (3-Bolt)	A=Satin Brushed Aluminum B=Clear Anodized C=Dark Bronze Anodized D=Black Anodized E=Medium Bronze Anodized F=Dark Bronze J=Summit White K=Carbon Bronze L=Dark Platinum R=Hartford Green S=Silver T=Graphite Metallic V=Grey W=White X=Custom Color Y=Black	2=2-3/8" O.D. Tenon (4" Long) 3=3-1/2" O.D. Tenon (5" Long) 4=4" O.D. Tenon (6" Long) 5=5" O.D. Tenon (4" Long) 6=2-3/8" O.D. Tenon (6" Long) 7=4" O.D. Tenon (10" Long)	1=Single 2=2 at 180° 3=Triple 4=4 at 90° 5=2 at 90° 6=3 at 90° 7=2 at 120° X=None	A=1/2" Tapped Hub ⁴ B=3/4" Tapped Hub ⁴ C=Convenience Outlet ⁵ D=Base Cover for "A" Base E=GFCI Convenience Outlet ⁶ F=Vibration Pad G=Ground Lug H=Additional Hand Hole ⁶ V=Vibration Damper

NOTES: 1. All shaft sizes nominal. 2. Base cover not included (order as option). 3. Square poles are 3 at 90°, round poles are 3 at 120°. 4. Tapped Hub is located 5' below the pole top and on the same side of pole as hand hole, unless specified otherwise. 5. Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 6. Additional hand hole is located 12' below pole top and 90° from standard hand hole location, unless otherwise specified.

DIMENSIONS



See technical information.

STANDARD BASE


(Round aluminum poles only.)
TYPE "A"
6", 7", 8" or 10"



STANDARD BASE

(Round aluminum poles only.)
TYPE "N"
(Standard with base cover.)
4", 5" or 6"



 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE DATE	PP3 4/18/19
DESCRIPTION 14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHEILD		MANUFACTURER PRODUCT CODE INVUE ARBOR HEAD: ARB-B1-LED-D1-T5-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'		LIGHT SOURCE INTEGRAL LED BEAM: TYPE 5 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691	
LOCATION	FRONT COURTYARD	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	POLE MOUNTED	CONTROL VOLTAGE	0-10V 120/277V	FIXTURE WATTS	24
FINISH	STANDARD	NOTES	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLIANCE.		

page 2

RSA ROUND STRAIGHT ALUMINUM

Effective Projected Area (At Pole Top)


Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Size ⁴ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
								70 mph	80 mph	90 mph	100 mph	
MH			BC	BP	B	D x AB x H						
8	RS44T08N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	20	16.0	11.9	9.1	7.2	100
10	RS44T10N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	24	12.2	8.9	6.6	5.1	100
12	RS44T12N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	27	9.4	6.7	4.8	3.6	100
12	RS45T12N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	33	16.1	11.8	9.1	7.3	100
15	RS44T15N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	33	6.4	4.2	2.8	1.8	100
15	RS45T15N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	40	11.5	8.2	6.2	4.9	100
18	RS44M18N ⁵	0.188	6-3/4	3-1/4	4	3/4 x 17 x 3	54	7.2	4.8	3.1	2.1	100
18	RS45M18N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	66	13	9.2	7.0	5.5	150
20	RS45M20N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	73	10.3	7.1	5.3	4.1	150

Effective Projected Area (18" Above Pole Top)

Mounting Height (Feet)	Catalog Number ^{1,2}	Wall Thickness (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection ³ (Inches)	Shaft Size ⁴ (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight	Maximum Effective Projected Area (Square Feet) ⁴				Max. Fixture Load - Includes Bracket (Pounds)
								70 mph	80 mph	90 mph	100 mph	
MH			BC	BP	B	D x AB x H						
8	RS44T08N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	20	13.6	10.1	7.7	6.1	100
10	RS44T10N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	24	10.6	7.7	5.8	4.5	100
12	RS44T12N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	27	8.3	5.9	4.3	3.2	100
12	RS45T12N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	33	14.3	10.5	8.1	6.5	100
15	RS44T15N	0.125	6-3/4	3-1/4	4	3/4 x 17 x 3	33	5.6	3.7	2.4	1.6	100
15	RS45T15N	0.125	7-3/4	3-1/4	5	3/4 x 17 x 3	40	10.2	7.2	5.5	4.3	100
18	RS44M18N ⁵	0.188	6-3/4	3-1/4	4	3/4 x 17 x 3	54	6.5	4.3	2.8	1.9	100
18	RS45M18N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	66	11.7	8.3	6.3	5.0	150
20	RS45M20N	0.188	7-3/4	3-1/4	5	3/4 x 17 x 3	73	9.4	6.5	4.9	3.7	150

NOTES:

1. Catalog number includes pole with hardware kit. Anchor bolts not included. Before installing, make sure proper anchor bolts and templates are obtained.
2. Tenon size or machining for rectangular arms must be specified. Hand hole position relative to drill location.
3. Shaft size, anchor bolts and projections may vary slightly. All dimensions nominal.
4. EPAs based on shaft properties with wind normal to flat. EPAs calculated using base wind velocity as indicated plus 30% gust factor.
5. Factory installed vibration damper.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	WW1
				DATE	4/18/19
DESCRIPTION WET LISTED 16" LED WALL MOUNTED DECORATIVE LANTERN LIGHT		MANUFACTURER PRODUCT CODE FEISS URBANDALE HOUSING: OL13702ANBZ-L1		LIGHT SOURCE INTEGRAL LED BEAM: 180° CCT: 2700°K CRI: 90 LUMENS: 1915	
LOCATION	FAÇADE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	WALL MOUNTED	CONTROL VOLTAGE	VERIFY WITH MANUFACTURER 120V	FIXTURE WATTS	26
FINISH	BRONZE	NOTES	DIMENSIONS: 10" X 16.25" X 8"	INPUT WATTS	26

FEISS
EST. 1955

OL13702ANBZ-L1: 1 - Light Outdoor LED Wall Lantern



Dimensions:

Width:	10"	Extends:	8"
Height:	16 1/4"	Wire:	8"
Weight:	11.88 lbs.	Mounting Proc.:	Set Screw(s)
		Connection:	Mounted To Box
		Bulb Type:	Modules
		Bulb Base:	Integrated
		Volts:	120
		Watts:	26
		Watts Consumed:	26
		Watts Rated:	26
		Hours Rated:	50000
		Lumens:	1915
		Bulb Temp:	2700 °K
		CRI:	90

Bulbs:

1 - LED Integrated Array 26w 120v - included

Features:

- Advanced LED technology that warms in color when dimmed (2700K - 2200K).
- This advanced LED technology is carefully designed and selected to consist of the highest quality LED chipsets for superior performance and reliability.
- Meets Title 24 energy efficiency standards

Material List:

1 Body - StoneStrong - Antique Bronze

Safety Listing:

Safety Listed for Wet Locations

Instruction Sheets:

Trilingual (English, Spanish, and French)
(OL13700-OL13701-OL13702-OL13703-LED)

Collection: Urbandale

UPC #:014817582352

Finish: Antique Bronze (ANBZ)


Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Glass	Glass	Undefined	1									

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	10	9 1/2	1/2			8

Feiss reserves the right to revise the design of components of any product due to parts availability or change in safety listing standards without assuming any obligation or liability to modify any products previously manufactured and without notice. This literature depicts a product design that is the sole and exclusive property of Feiss. In compliance with U.S. copyright and patent requirements, notification is hereby presented in this form that this literature, or the product it depicts, is not to be copied, altered or used in any manner without the express written consent of, or contrary to the best interests of Feiss 1/2 A Generation Brands Company.

 <div> 2 Executive Circle, Suite 290 Irvine, California 92614 P (949) 253 3479 F (949) 250 0181 info@ruzika.com www.ruzika.com </div>		CAREFIELD—CITRUS HEIGHTS DESIGN REVIEW		FIXTURE TYPE	WW2
				DATE	4/18/19
DESCRIPTION WET LISTED 23" LED WALL MOUNTED DECORATIVE LANTERN LIGHT		MANUFACTURER PRODUCT CODE FEISS URBANDALE HOUSING: OL13703ANBZ-L1		LIGHT SOURCE INTEGRAL LED BEAM: 180° CCT: 2700°K CRI: 90 LUMENS: 1915	
LOCATION	FAÇADE	POWER SUPPLY		MIN. DIMMING	DIMMING LEVEL AS REQUIRED
MOUNTING	WALL MOUNTED	CONTROL VOLTAGE	VERIFY WITH MANUFACTURER 120V	FIXTURE WATTS	26
FINISH	BRONZE	NOTES	DIMENSIONS: 10" X 23" X 8"		

FEISS
EST. 1955

OL13703ANBZ-L1: 1 - Light Outdoor LED Wall Lantern



Dimensions:

Width:	10"	Extends:	8"
Height:	23"	Wire:	8"
Weight:	17.38 lbs.	Mounting Proc.:	Set Screw(s)
		Connection:	Mounted To Box
		Bulb Type:	Modules
		Bulb Base:	Integrated
		Volts:	120
		Watts:	26
		Watts Consumed:	26
		Watts Rated:	26
		Hours Rated:	50000
		Lumens:	1915
		Bulb Temp:	2700 °K
		CRI:	90

Bulbs:

1 - LED Integrated Array 26w 120v - included

Features:

- Advanced LED technology that warms in color when dimmed (2700K - 2200K).
- This advanced LED technology is carefully designed and selected to consist of the highest quality LED chipsets for superior performance and reliability.
- Meets Title 24 energy efficiency standards

Material List:

1 Body - StoneStrong - Antique Bronze

Safety Listing:

Safety Listed for Wet Locations

Instruction Sheets:

Trilingual (English, Spanish, and French)
(OL13700-OL13701-OL13702-OL13703-LED)

Collection: Urbandale

UPC #:014817582369

Finish: Antique Bronze (ANBZ)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Glass	Glass	Undefined	1									

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	18 3/4	9 1/2	1/2			11 1/2

Feiss reserves the right to revise the design of components of any product due to parts availability or change in safety listing standards without assuming any obligation or liability to modify any products previously manufactured and without notice. This literature depicts a product design that is the sole and exclusive property of Feiss. In compliance with U.S. copyright and patent requirements, notification is hereby presented in this form that this literature, or the product it depicts, is not to be copied, altered or used in any manner without the express written consent of, or contrary to the best interests of Feiss LLC/A Generation Brands Company.

NORTHWEST TOWER AND DINING ROOM



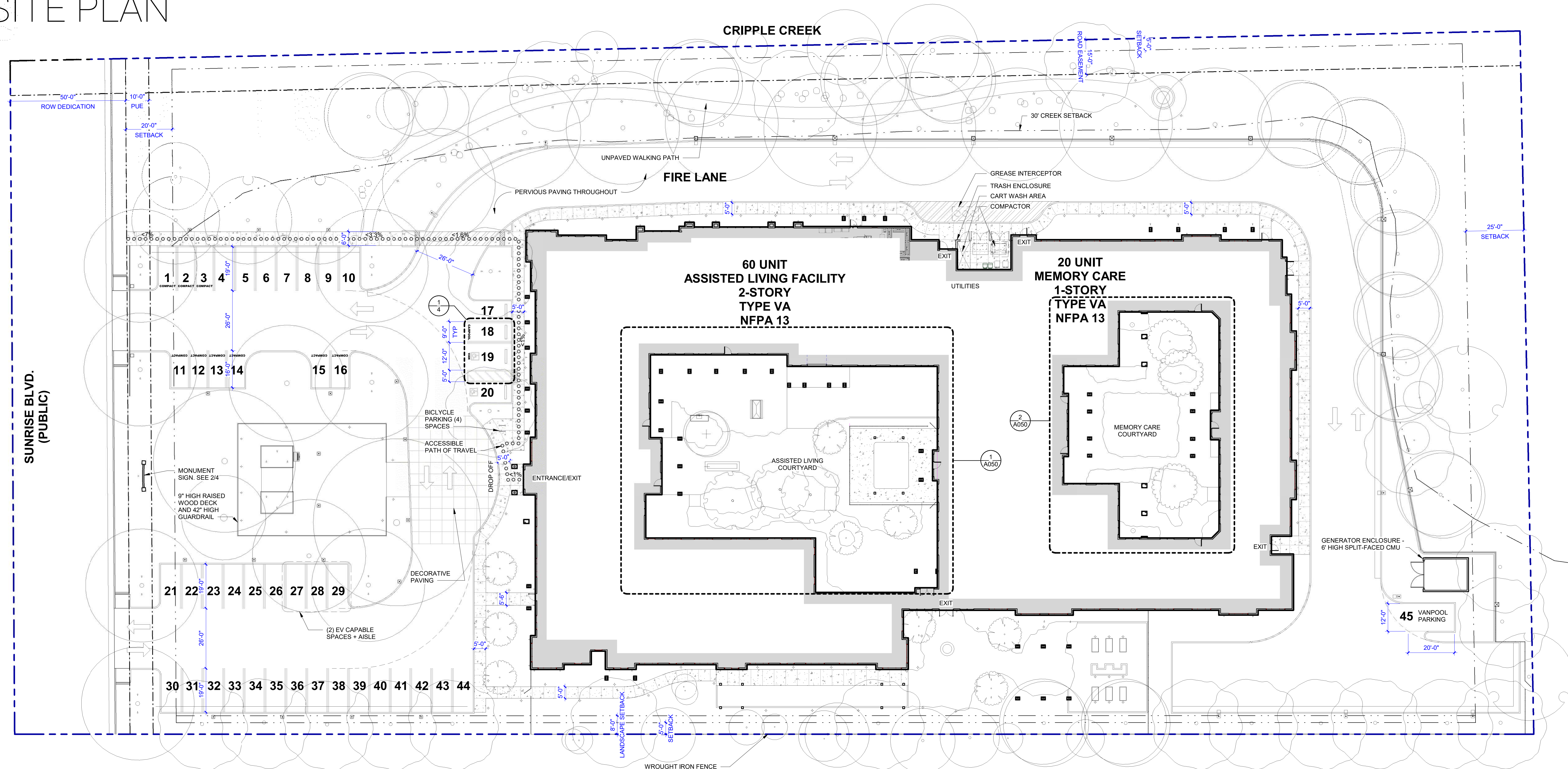
DRAWING LIST

Sheet Number	Sheet Name
1	NORTHWEST TOWER AND DINING ROOM
2	MAIN ENTRANCE
3	SITE PLAN
4	SITE DETAILS
5	BUILDING ELEVATIONS
6	BUILDING ELEVATIONS
7	BUILDING ELEVATIONS
8	ROOF PLAN
C1	SITE PLAN
C2	GRADING PLAN
C3	UTILITY PLAN
L100	TREE PLAN
L101	LANDSCAPE PLAN - SITE
L102	SOIL PLAN
L103	SHADING PLAN
L201	MATERIALS PLAN - AL COURTYARD
L202	MATERIALS PLAN - MC COURTYARD
L401	PLANTING PLAN - AL COURTYARD
L402	PLANTING PLAN - MC COURTYARD
L501	HYDROZONE PLAN
LT0.00	LIGHTING SHEET INDEX
LT0.02	GENERAL EXTERIOR LIGHTING REQUIREMENTS
LT0.11	LIGHTING FIXTURE SCHEDULE
LT1.00	OVERALL SITE LIGHTING
LT5.00	EXTERIOR SITE LIGHTING ELEVATIONS
LT5.01	EXTERIOR LIGHTING ELEVATIONS
LT5.02	EXTERIOR LIGHTING ELEVATIONS
LT9.01	SITE LIGHTING CALCULATIONS
LT9.02	SITE LIGHTING CALCULATIONS
LT9.03	SITE LIGHTING CALCULATIONS

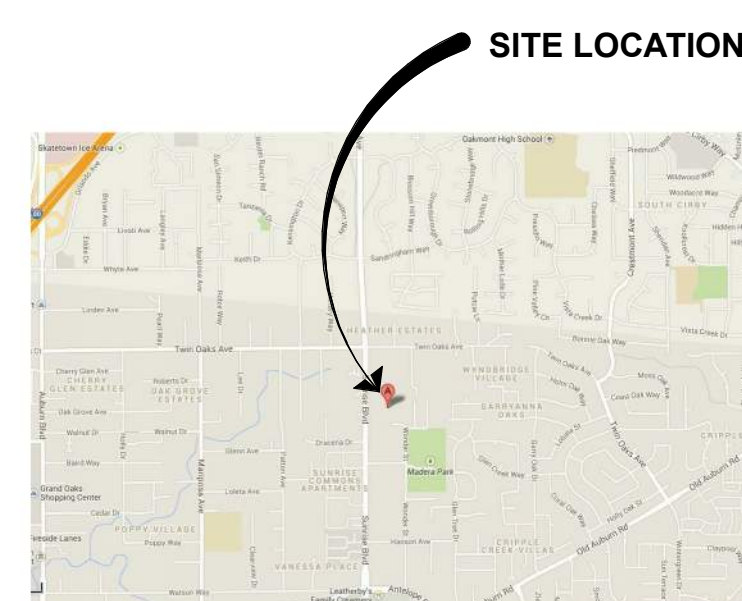
MAIN ENTRANCE



SITE PLAN

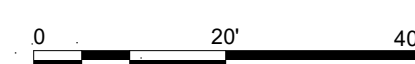


VICINITY MAP

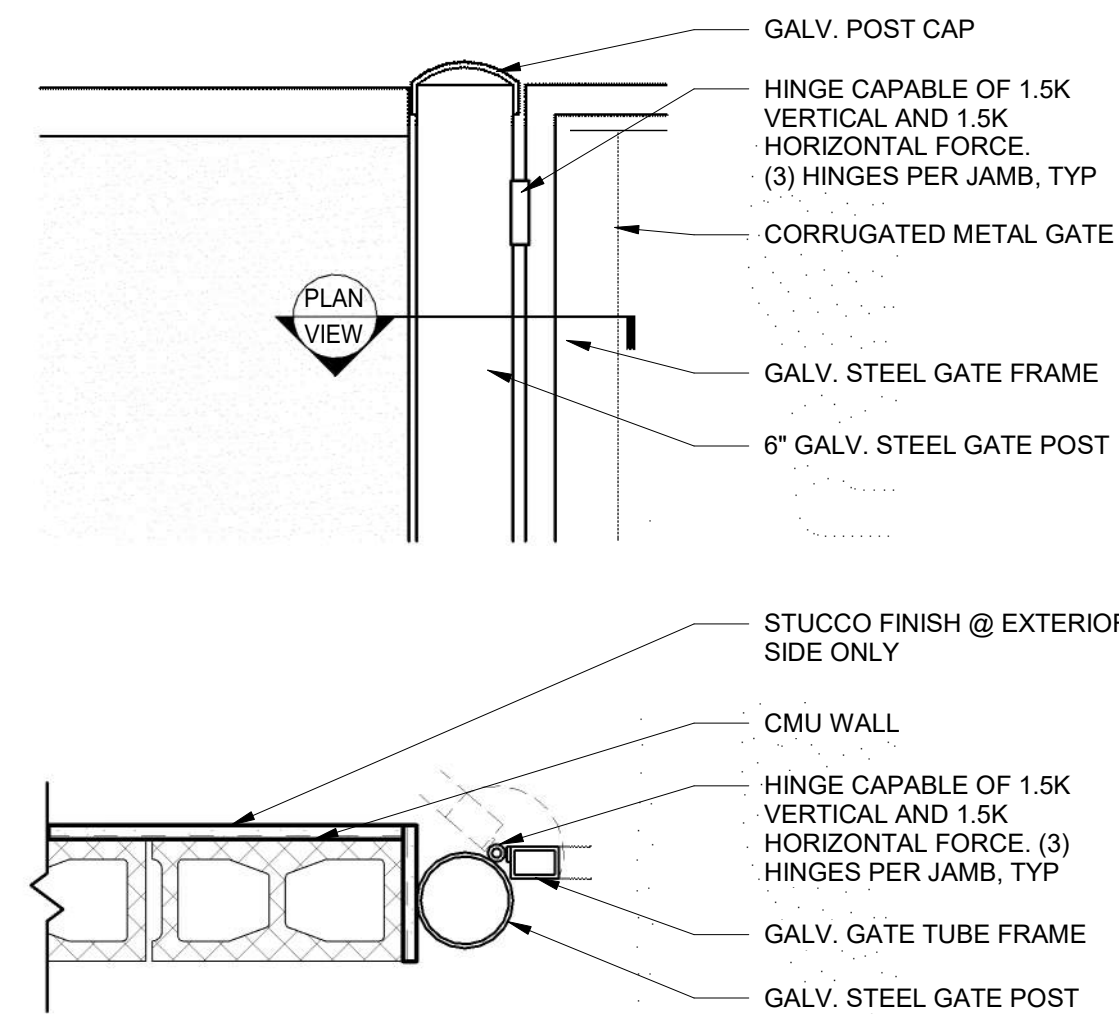


PROJECT SUMMARY - DESIGN REVIEW

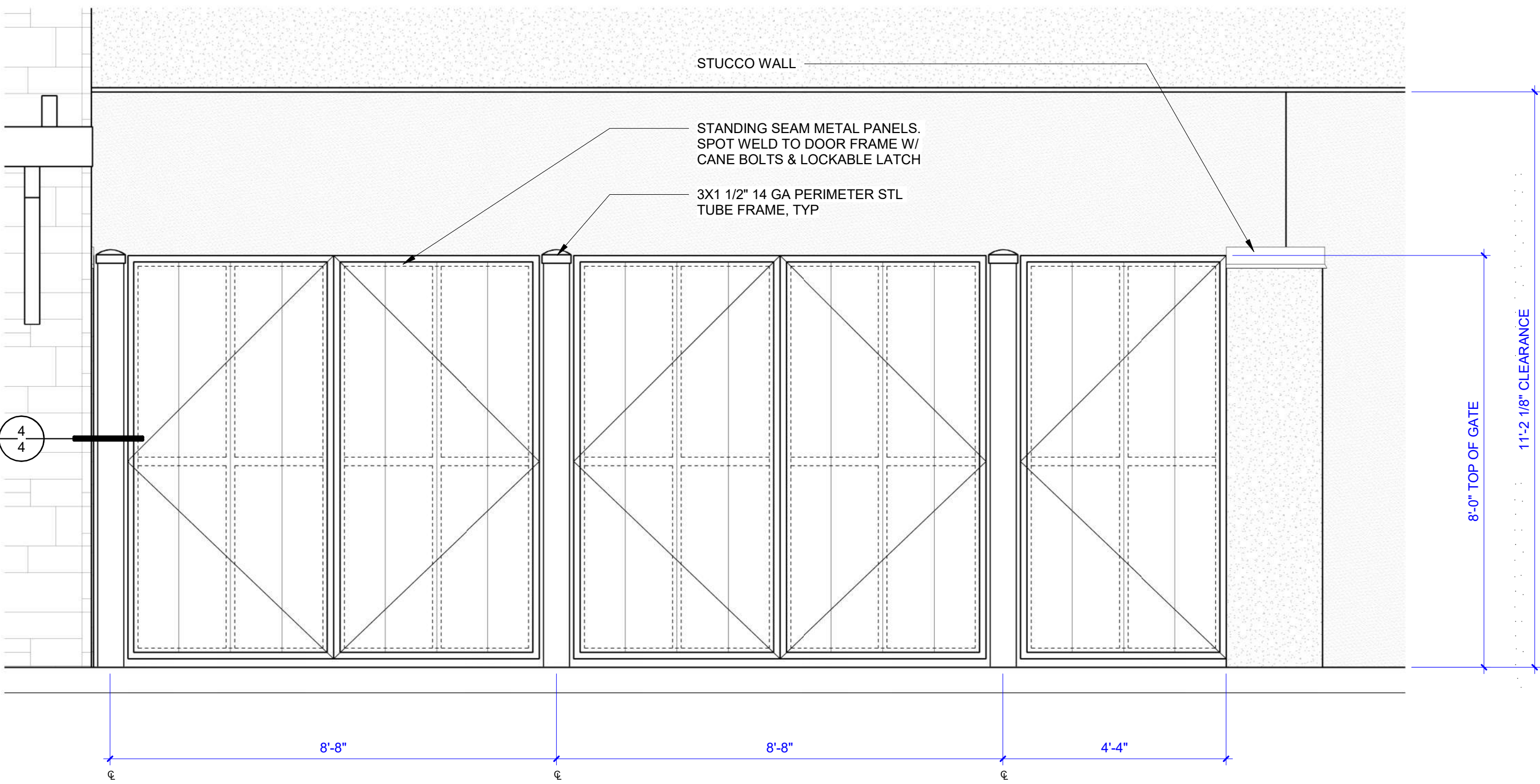
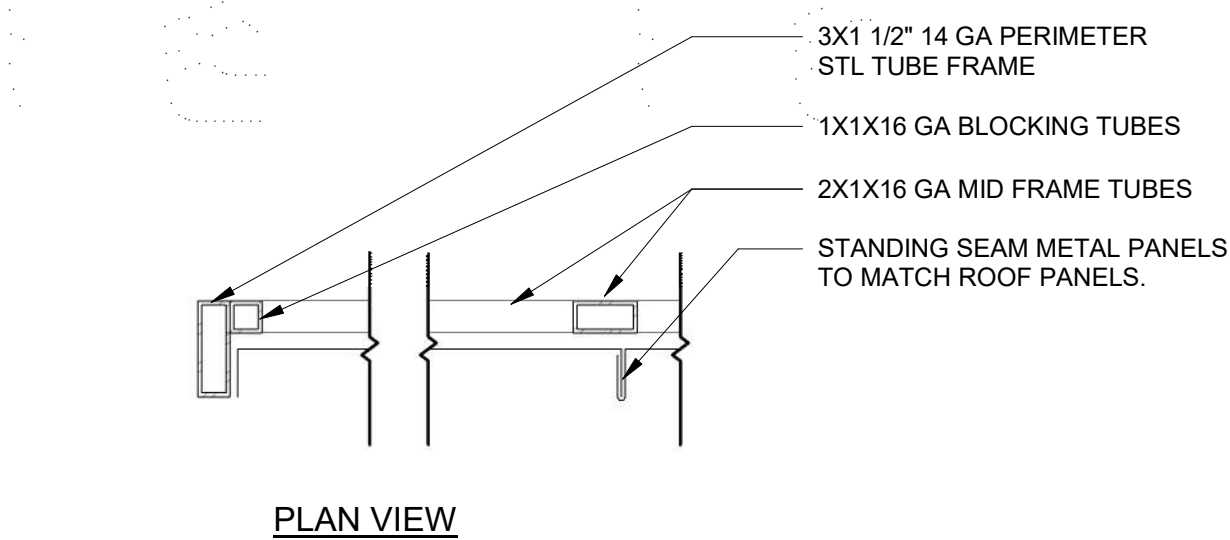
1. ZONING	RD-1	5. PARKING	
2. SITE AREA	195,319 SF	TOTAL REQUIRED PARKING SPACES	88 BEDS / 3 SPACES = 30
		TOTAL PROVIDED PARKING SPACES	45 SPACES
3. BUILDING UNITS		6. CREEK SETBACK	
A. ASSISTED LIVING UNITS		BANK HEIGHT 6'-0" X 2.5 + 30'-0" =	45'-0"
ONE BEDROOM	57 UNITS		
TWO BEDROOM	3 UNITS	7. FLOOR AREA RATIO	
B. MEMORY CARE UNITS		A. FLOOR AREA	74,001 SF
ONE BEDROOM	18 UNITS	B. NET SITE AREA	185,130 SF
TWO BEDROOM	2 UNITS		74,001 SF / 185,130 SF = 40%
TOTAL UNITS	80 UNITS	8. LOT COVERAGE 41,411 SF / 185,130 SF	22% < 30%
3A. TOTAL NUMBER OF BEDS	88 BEDS		
4. BUILDING SQUARE FOOTAGE			
A. FIRST FLOOR	40,326 SF		
B. SECOND FLOOR	33,675 SF		
TOTAL BUILDING			
SQUARE FOOTAGE	74,001 SF		



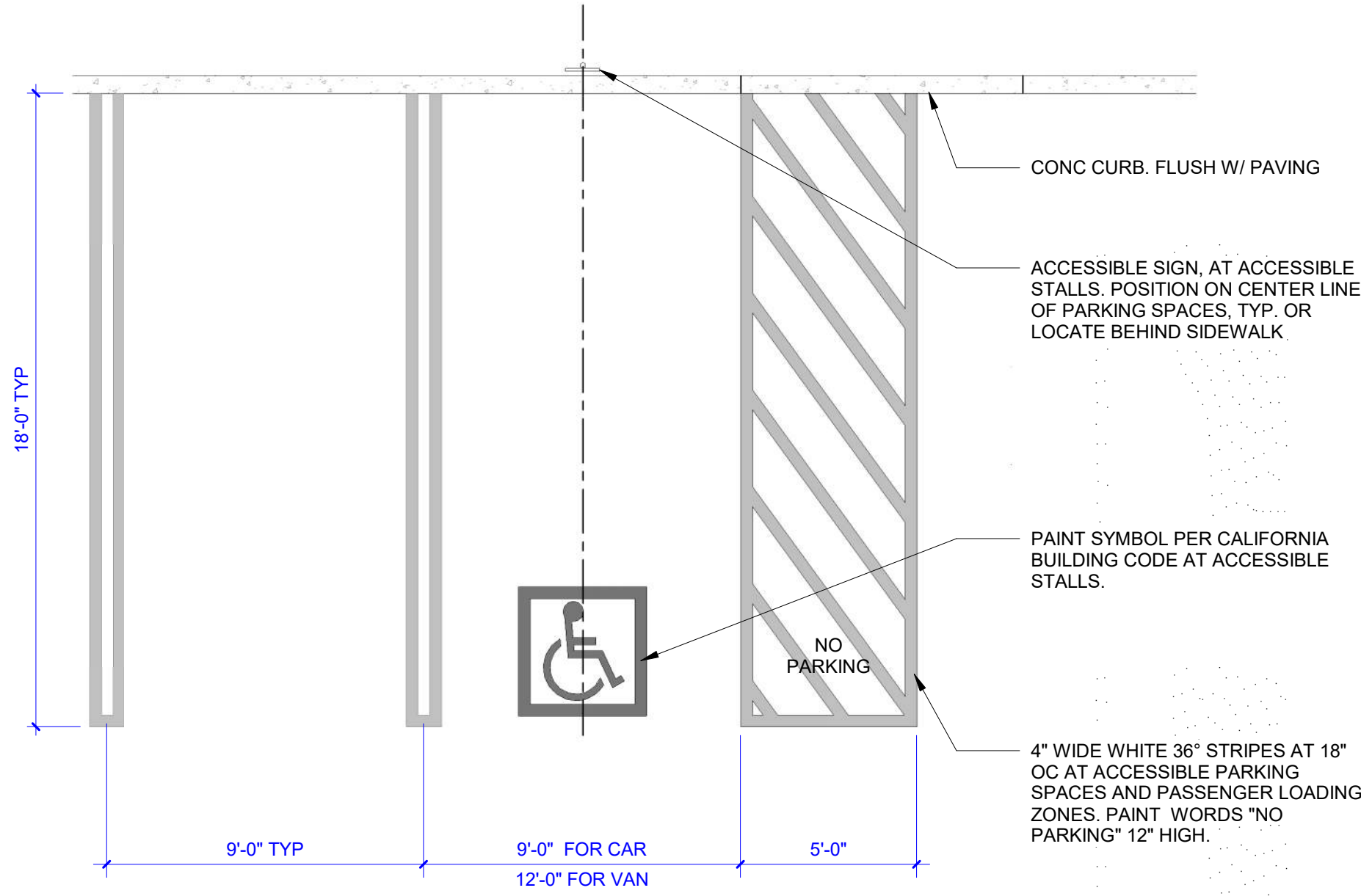
SITE DETAILS



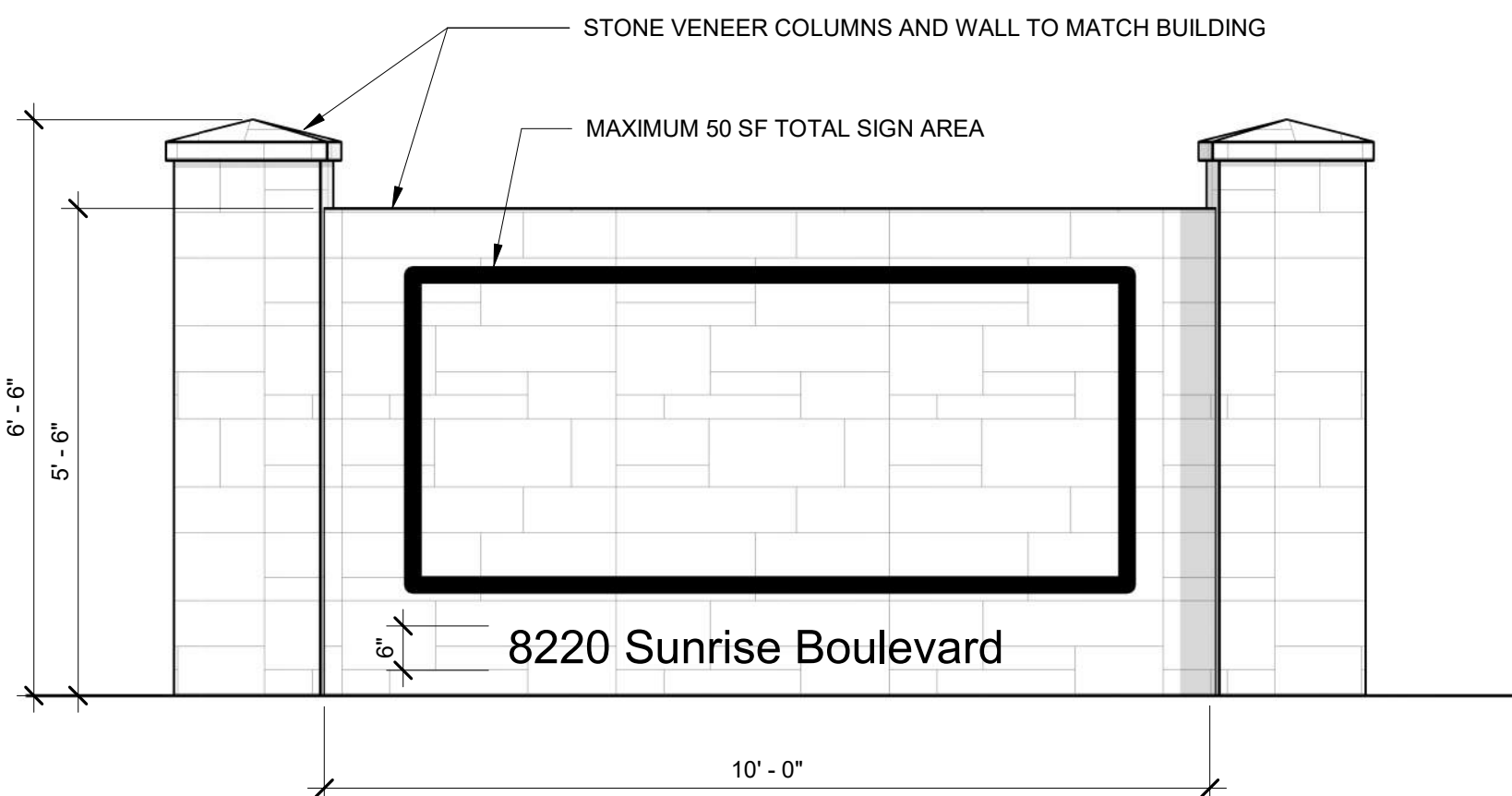
4. GATE DETAIL
SCALE: 1" = 1'-0"



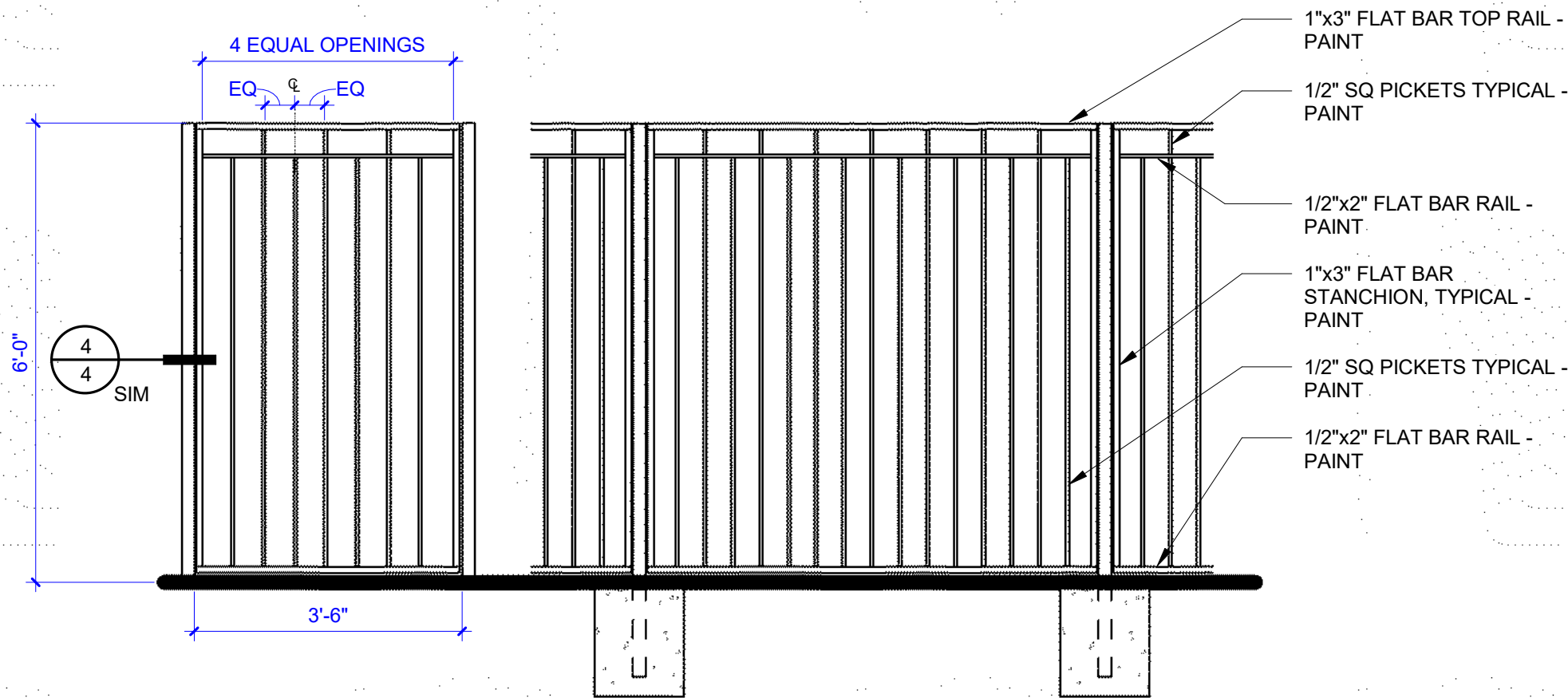
5. TRASH ENCLOSURE ELEVATION
SCALE: 1/2" = 1'-0"



1. TYP. AND ACCESSIBLE PARKING STALL DETAIL
SCALE: 1/4" = 1'-0"



2. SIGNAGE ELEVATION
SCALE: 1/2" = 1'-0"



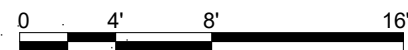
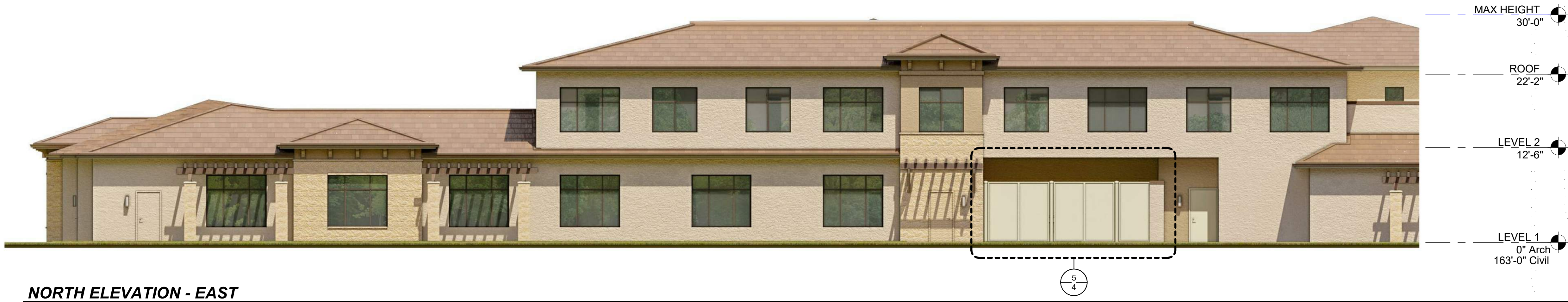
3. FENCE DETAIL
SCALE: 1/2" = 1'-0"

BUILDING ELEVATIONS



0 4' 8' 16'

BUILDING ELEVATIONS



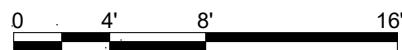
BUILDING ELEVATIONS



SOUTH ELEVATION - WEST

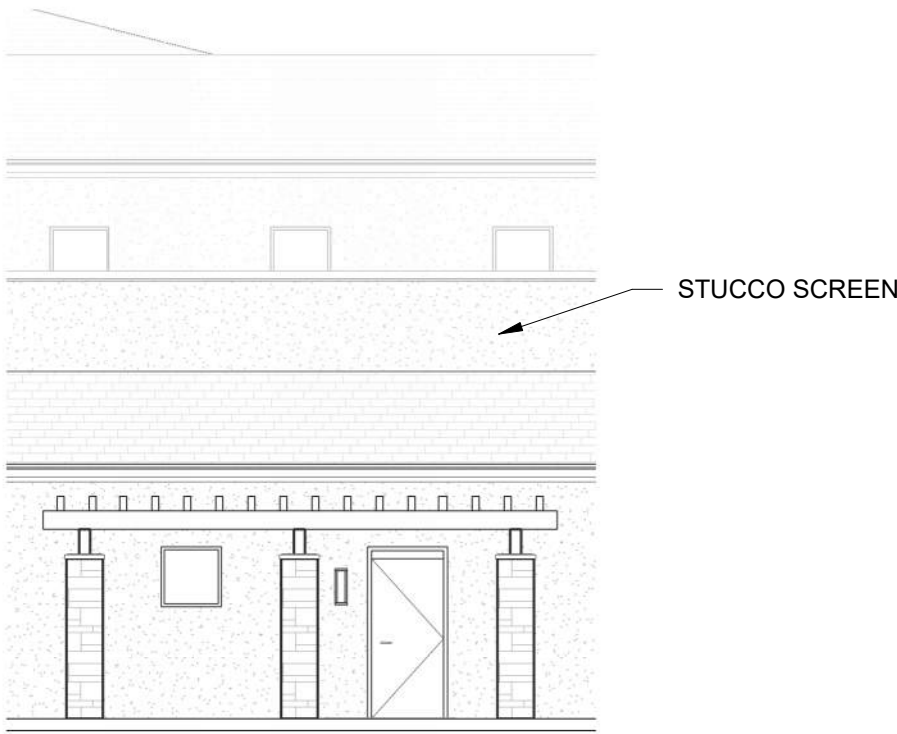


SOUTH ELEVATION - EAST

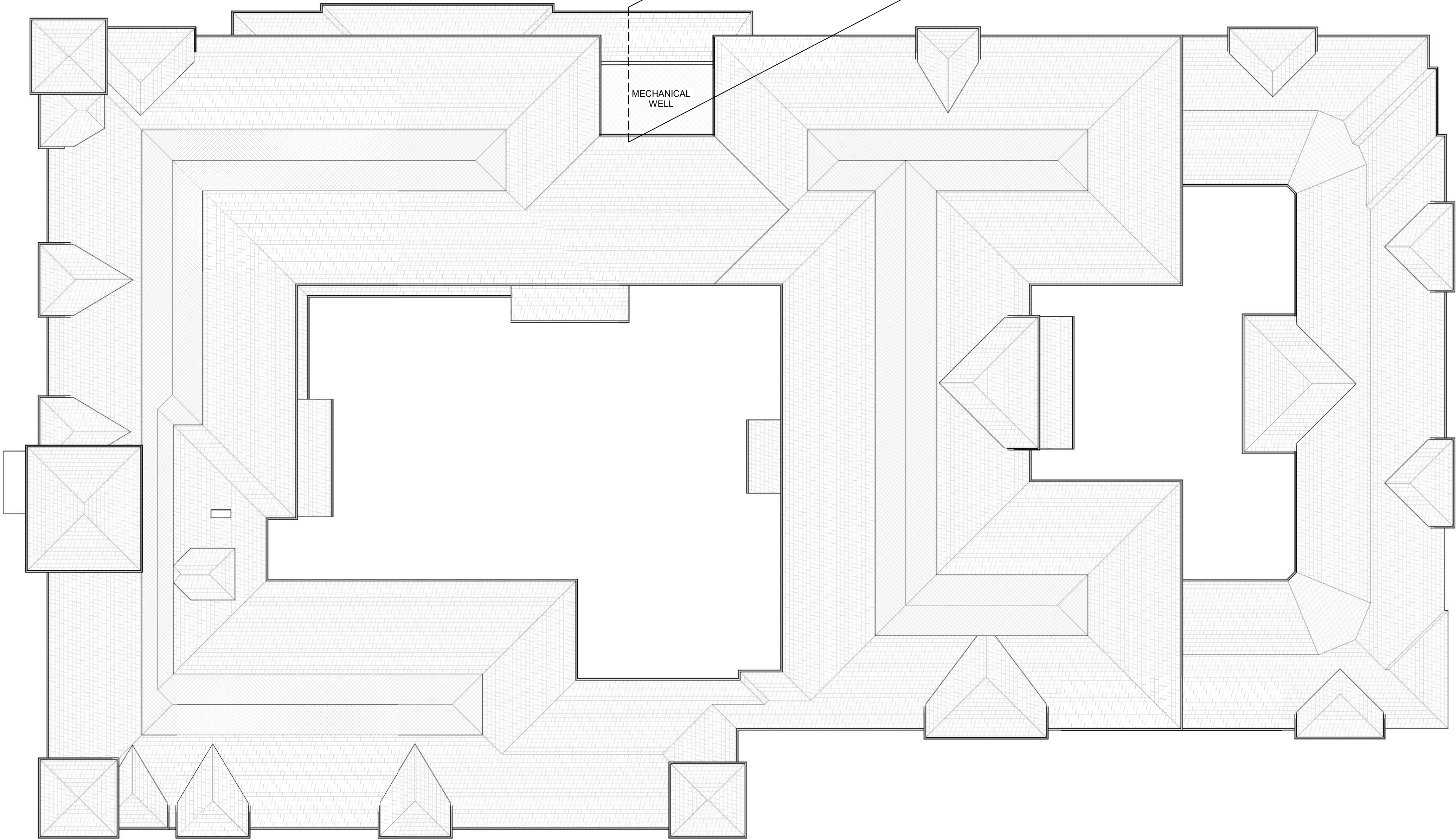
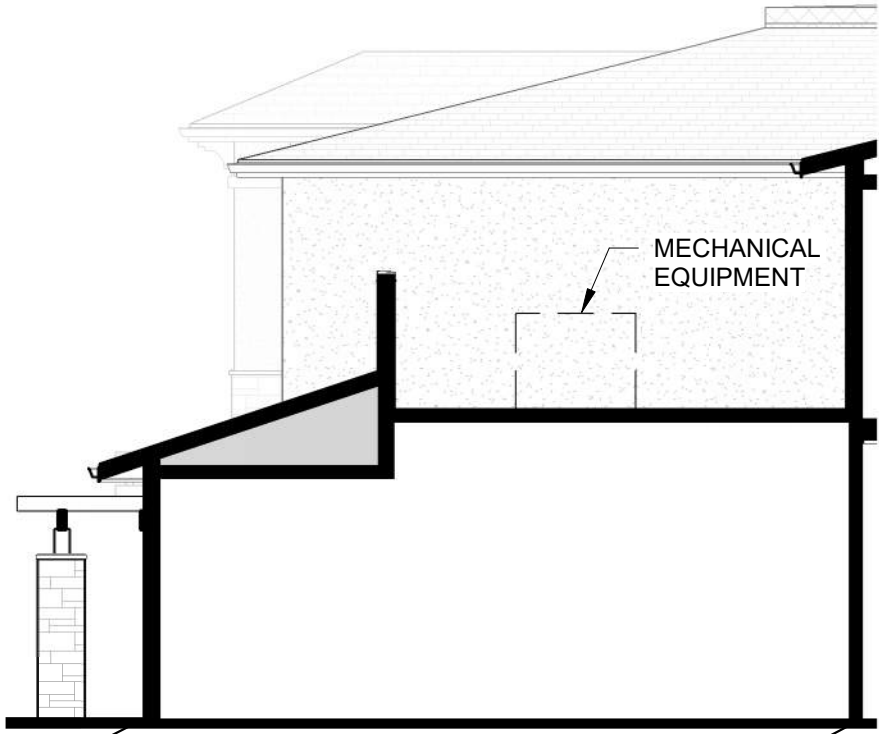


ROOF PLAN

ELEVATION - MECHANICAL SCREEN



SECTION MECHANICAL SCREEN



0 8' 16' 32'



SECTION A-A
N.T.S.

SECTION C-C
N.T.S.

SECTION B-B
N.T.S.

SECTION D-D

SECTION E-E

SHEET INDEX

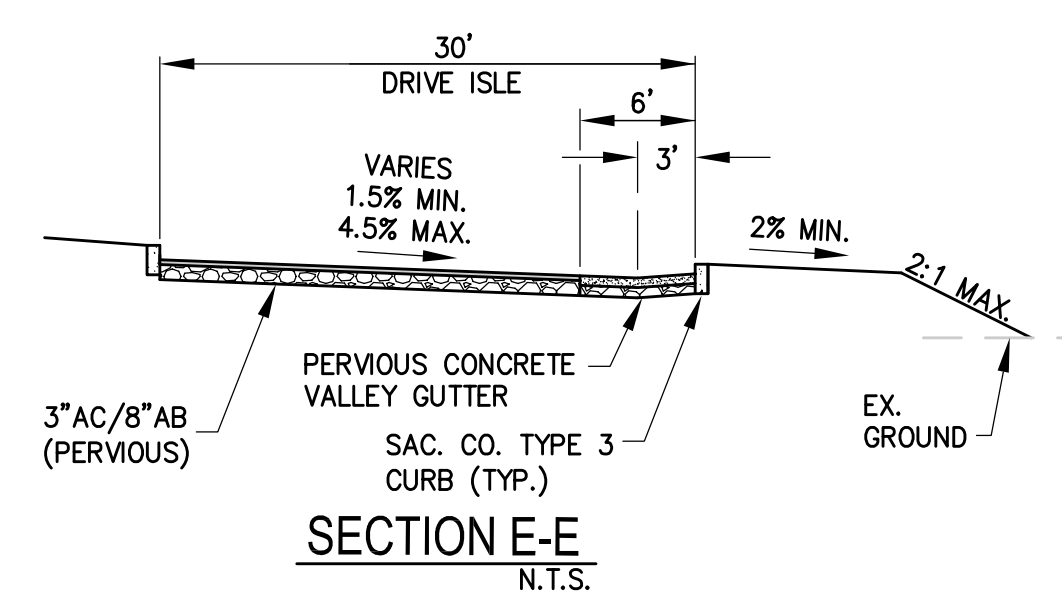
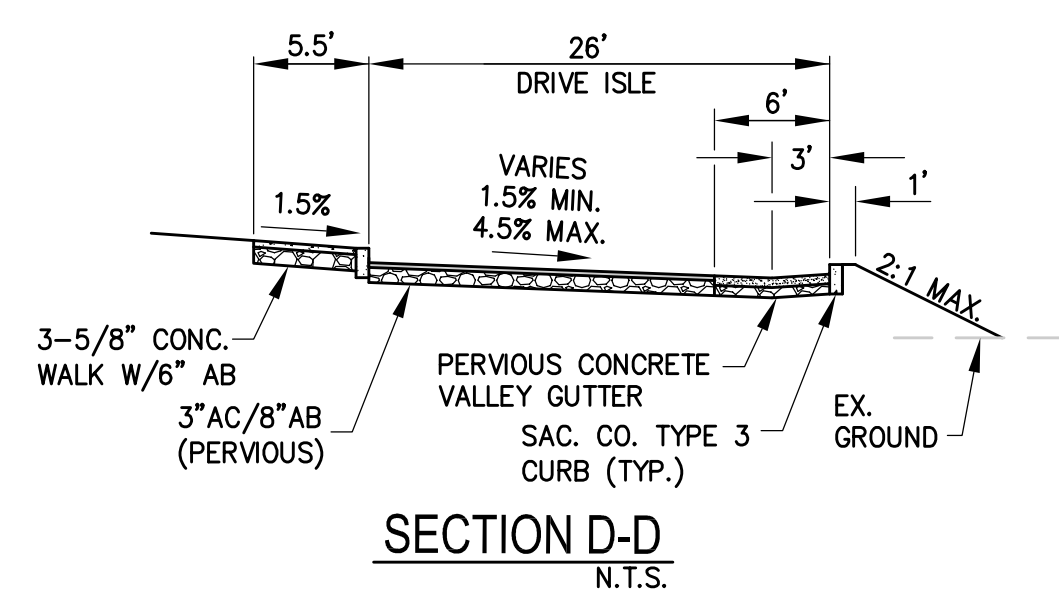
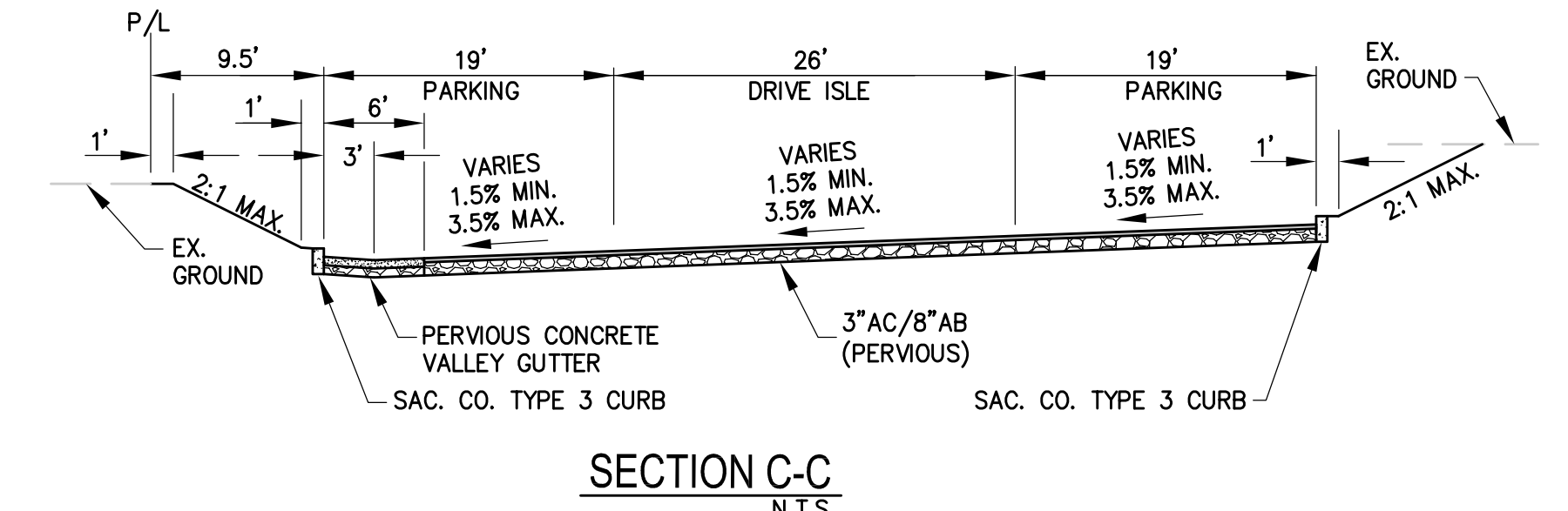
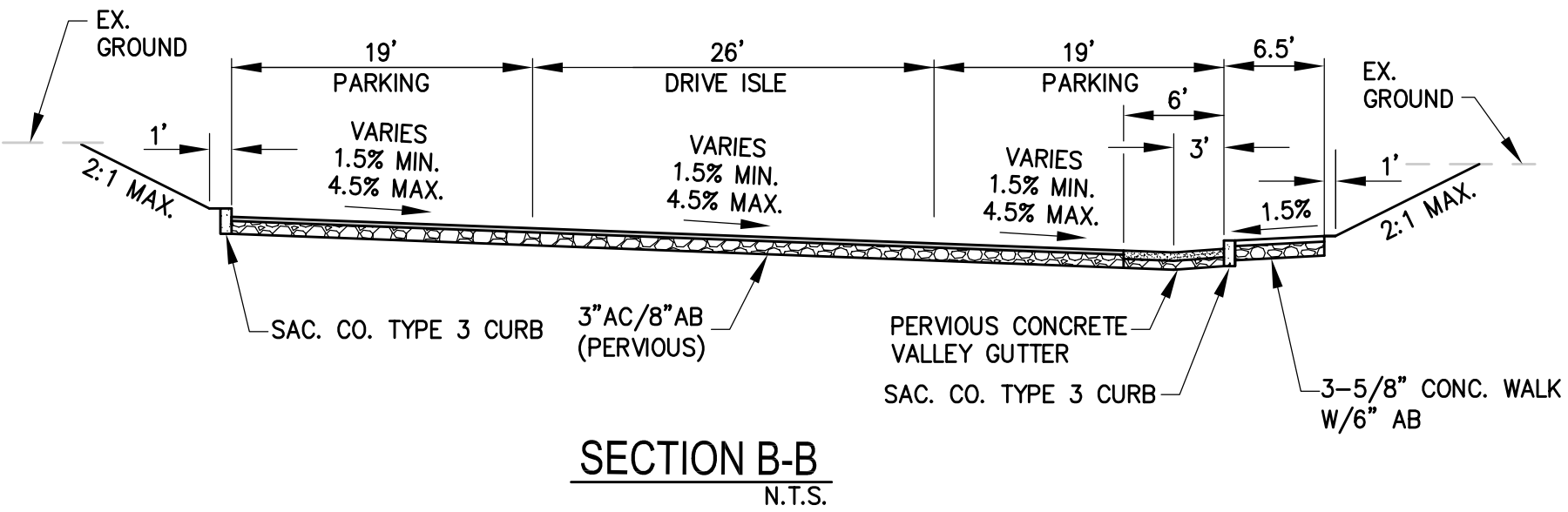
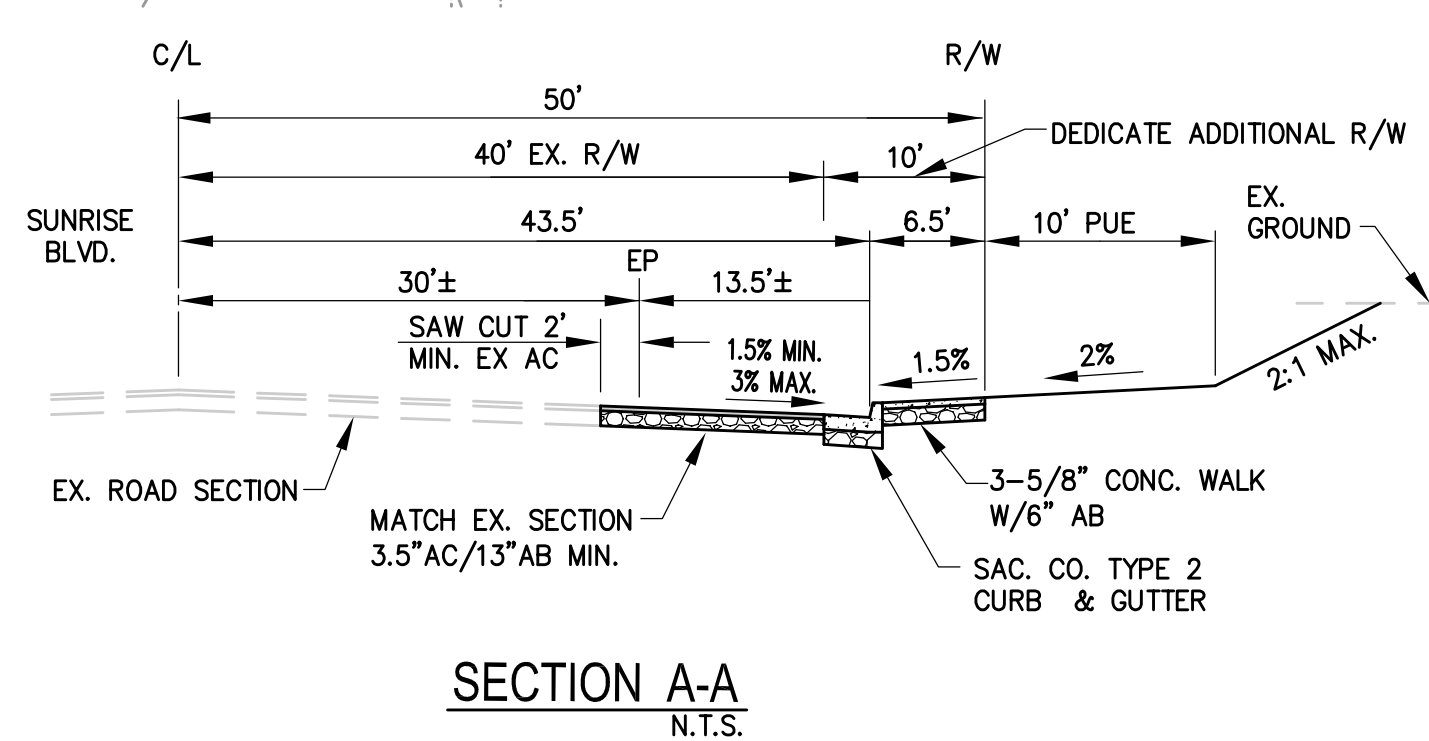
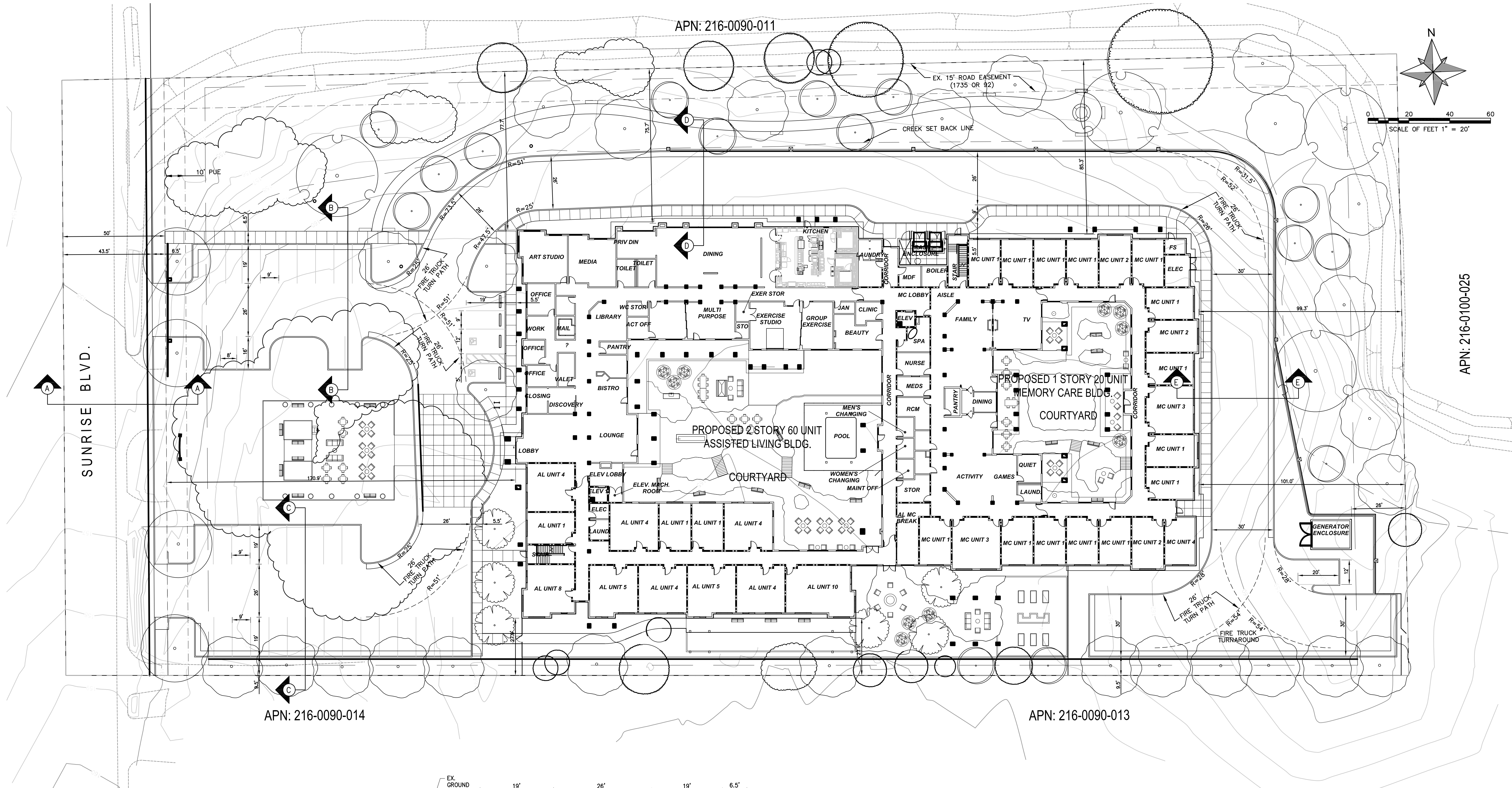
C1 SITE PLAN
C2 GRADING & DRAINAGE PLAN
C3 UTILITY PLAN

DEVELOPER:

CAREFIELD SENIOR LIVING
201 LOMAS SANTE FE DRIVE, #450
SOLANA BEACH, CA 92075

PREPARED BY:

GUIDE ENGINEERING
5930 GRANITE LAKE DRIVE, #150
GRANITE BAY, CA 95746
916-787-0248
ATTN: JARED BROWN



PROJECT NOTES

ASSESSOR'S PARCEL NO.
216-0090-012

AREA OF PROPOSED TENTATIVE SUBDIVISION MAP
4.48 ACRES (GROSS)

EXISTING USE

VACANT

PROPOSED USE

60 ASSISTED CARE UNITS/20 MEMORY CARE UNITS

EXISTING ZONING

RD-1 (VERY LOW RESIDENTIAL)

PROPOSED ZONING

RD-1 (VERY LOW RESIDENTIAL)

FIRE PROTECTION

SACRAMENTO METRO FIRE DEPARTMENT

SCHOOL DISTRICT

SAN JUAN UNIFIED SCHOOL DISTRICT

SEWER

SACRAMENTO AREA SEWER DISTRICT

STORM DRAIN

CITY OF CITRUS HEIGHTS

WATER

CITRUS HEIGHTS WATER DISTRICT

GAS & ELECTRICITY

PACIFIC GAS & ELECTRIC COMPANY

FIRE PROTECTION

SACRAMENTO METRO FIRE DEPARTMENT

SCHOOL DISTRICT

SAN JUAN UNIFIED SCHOOL DISTRICT

SEWER

SACRAMENTO AREA SEWER DISTRICT

STORM DRAIN

CITY OF CITRUS HEIGHTS

WATER

CITRUS HEIGHTS WATER DISTRICT

GAS & ELECTRICITY

PACIFIC GAS & ELECTRIC COMPANY

CA PHASE II LID REQUIREMENTS

39,640 SF OF PERVIOUS PAVEMENT REQUIRED

(ALL ON-SITE GUTTER AND PAVEMENT WILL BE

PERVIOUS EXCLUDING SPECIAL ENTRY PAVEMENT)

SHEET INDEX

C1 SITE PLAN
C2 GRADING & DRAINAGE PLAN
C3 UTILITY PLAN

DEVELOPER:

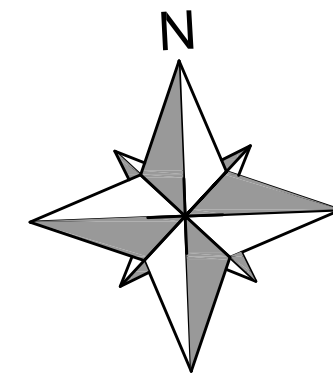
CAREFIELD SENIOR LIVING
201 LOMAS SANTE FE DRIVE, #450
SOLANA BEACH, CA 92075

PREPARED BY:

GUIDE ENGINEERING
5930 GRANITE LAKE DRIVE, #150
GRANITE BAY, CA 95746
916-787-0248
ATTN: JARED BROWN

NOTES:

- SUBDIVIDER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS PURSUANT TO SECTION 66456.1(A) OF SUBDIVISION MAP ACT.
- THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL SITE CHARACTERISTICS ARE TO BE VERIFIED PRIOR TO FINAL MAP.
- ALL EXISTING STRUCTURES, SEPTIC SYSTEMS AND WELLS SHALL BE REMOVED.



0 20 40 60
SCALE OF FEET 1" = 20'

APN: 216-0090-011

APN: 216-0100-025

APN: 216-0090-013

APN: 216-0090-014

SUNRISE BLVD.

LEGEND	
	BOUNDARY LINE
	PROPOSED RIGHT-OF-WAY (RW)
	EXISTING RIGHT-OF-WAY
	PROPOSED PROPERTY LINE
	EXISTING PROPERTY LINE
	CENTERLINE
	ARCHITECTURAL FENCING
	RETAINING WALL W/ ROUGH IRON FENCE
	PROPOSED CURB, GUTTER and SIDEWALK
	PROPOSED ACCESS RAMP
	EXISTING CURB, GUTTER and SIDEWALK
	PROPOSED STREET CLOSURE BARRICADE
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	DITCH FLOWLINE and DIRECTION
	PROPOSED DITCH FLOWLINE (FL)
	EXISTING DITCH FLOWLINE (FL)
	BUILDING NUMBER BUILDING TYPE

- NOTES:
- SUBDIVIDER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS PURSUANT TO SECTION 66456.1(A) OF SUBDIVISION MAP ACT.
 - THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL SITE CHARACTERISTICS ARE TO BE VERIFIED PRIOR TO FINAL MAP.
 - ALL EXISTING STRUCTURES, SEPTIC SYSTEMS AND WELLS SHALL BE REMOVED.

DEVELOPER:
CAREFIELD SENIOR LIVING
201 LOMAS SANTE FE DRIVE, #450
SOLANA BEACH, CA 92075

PREPARED BY:
GUIDE ENGINEERING
5930 GRANITE LAKE DRIVE, #150
GRANITE BAY, CA 95746
916-787-0248
ATTN: JARED BROWN

CONSULTANT:
Guide
ENGINEERING
LAND ENGINEERING AND PLANNING
5930 GRANITE LAKE DR., #100
GRANITE BAY, CA 95746
PHONE: 916-787-0248
projects@Guide-Engineering.com

PROJECT NUMBER: 218295
**CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE**

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610

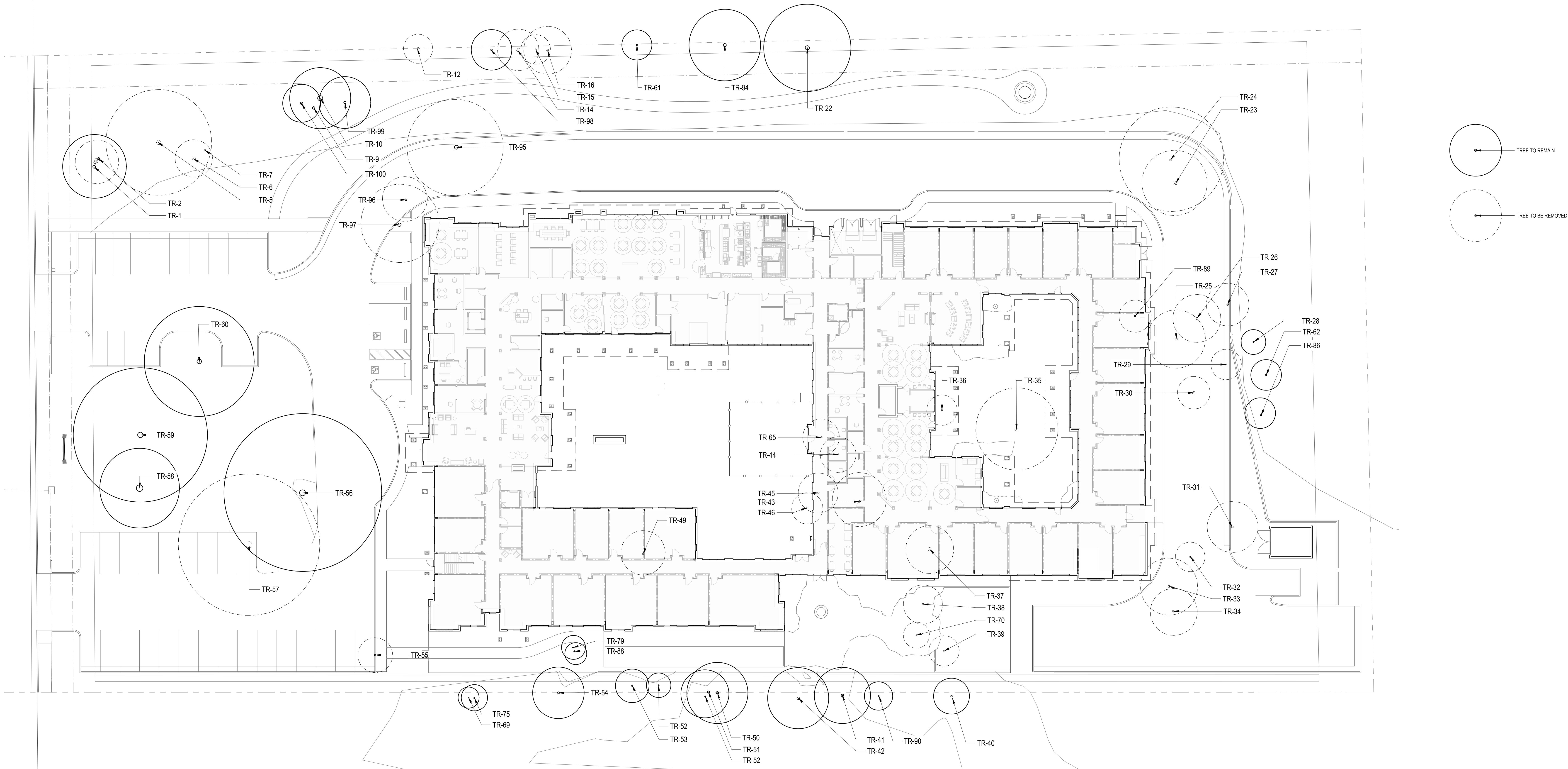


SHEET TITLE:
**UTILITY
PLAN**

DRAWN BY: R. SHEHAN

SHEET INDEX
C1 SITE PLAN
C2 GRADING & DRAINAGE PLAN
C3 UTILITY PLAN

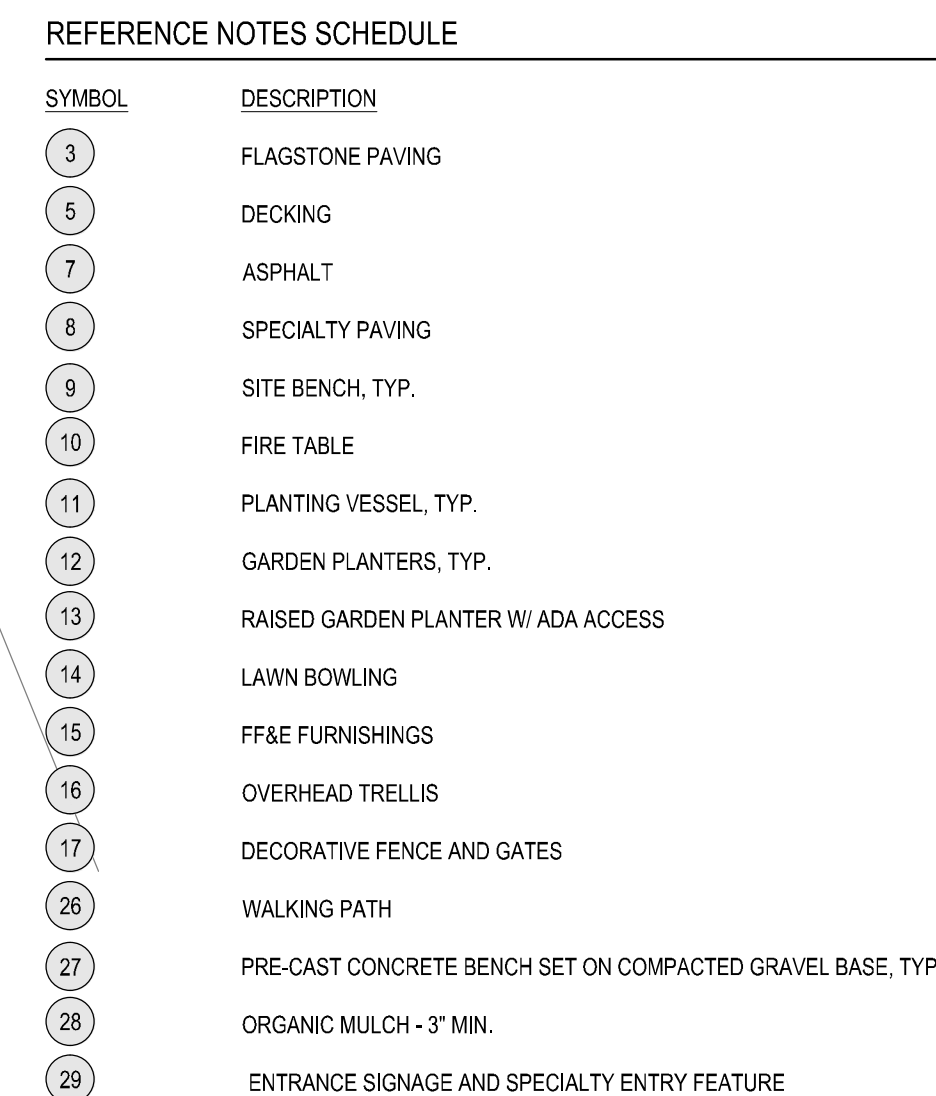
SHEET:
C3
SCHEMATIC DESIGN
FEBRUARY 2019








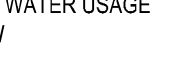



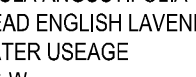










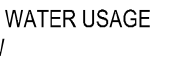





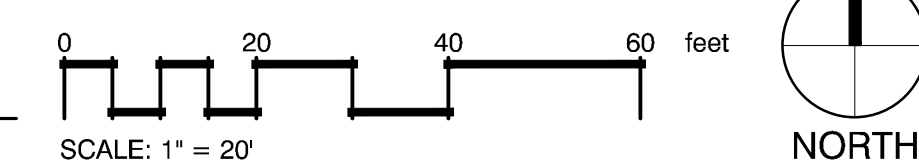
TREE TAG #	SPECIES	DBH	HEIGHT	VIGOR	COMMENTS
TR-1	INTERIOR LIVE OAK	14.6, 5.7	30	F	CROWDED BY TR-2
TR-2	SAWLEAF ZELKOVA	10.0, 8.3, 8.2, 7.6, 6.5	35	P	TRUNK WOUNDS, DECLINING
TR-5	INTERIOR LIVE OAK	24.3	30	P	FAILURE AT TRUNK 2
TR-7	PRUNUS	8.6, 6.3, 5.0, 5.0	25	F	TRUNK WOUNDS, DECLINING
TR-100	INTERIOR LIVE OAK	9.4, 8.7	30	F-G	
TR-9	VALLEY OAK	14	35	G	
TR-10	WILLOW		0	DEAD	
TR-99	VALLEY OAK	11.5	35	F	CALLUSED WOUNDS ON TRUNK
TR-12	ALMOND	6.7, 5.7, 7.0, 4.0, 3.2, 5.8	15	F-P	DEAD LIMBS, SAPSUCKER DAMAGE
TR-98	BLUE OAK	9.3	15	F-G	
TR-14	BLUE OAK	9.5	20	F	WOUNDS AT BASE, SPARE CANOPY
TR-15	INTERIOR LIVE OAK	6.8	20	G	
TR-16	BLUE OAK	11.0, 10.8	35	G	
TR-97	BLUE OAK	18	40	F-G	
TR-96	INTERIOR LIVE OAK	10.3, 9.8, 8.3	35	F	DECAYED PRUNING CUTS
TR-95	INTERIOR LIVE OAK	22.1, 17.8	40	F	DIEBACK
TR-94	VALLEY OAK	16.4	35	F	
TR-22	INTERIOR LIVE OAK	23.4	35	G	
TR-23	WILLOW	16, 14, 12	45	F-G	DBH ESTIMATED
TR-24	INTERIOR LIVE OAK	10	30	G	DBH ESTIMATED
TR-25	INTERIOR LIVE OAK	13.4, 12.2	35	P	TREE FALLEN OVER
TR-26	VALLEY OAK	11.4	40	F	DIEBACK
TR-27	VALLEY OAK	9.8	35	F	DIEBACK
TR-28	INTERIOR LIVE OAK	5.7, 4.3, 3.5	20	F	DIEBACK
TR-29	VALLEY OAK	7.5	30	F-G	NO LONGER ON-SITE
TR-30	VALLEY OAK	8.0, 7.0	30	F	SUPPRESSED, DIEBACK
TR-31	INTERIOR LIVE OAK	11.7	20	F-G	
TR-32	VALLEY OAK	6.8	20	F	GALLS, DIEBACK
TR-33	INTERIOR LIVE OAK	13.1, 7.6	20	F-G	
TR-34	INTERIOR LIVE OAK	10.8, 7.8	20	F-G	

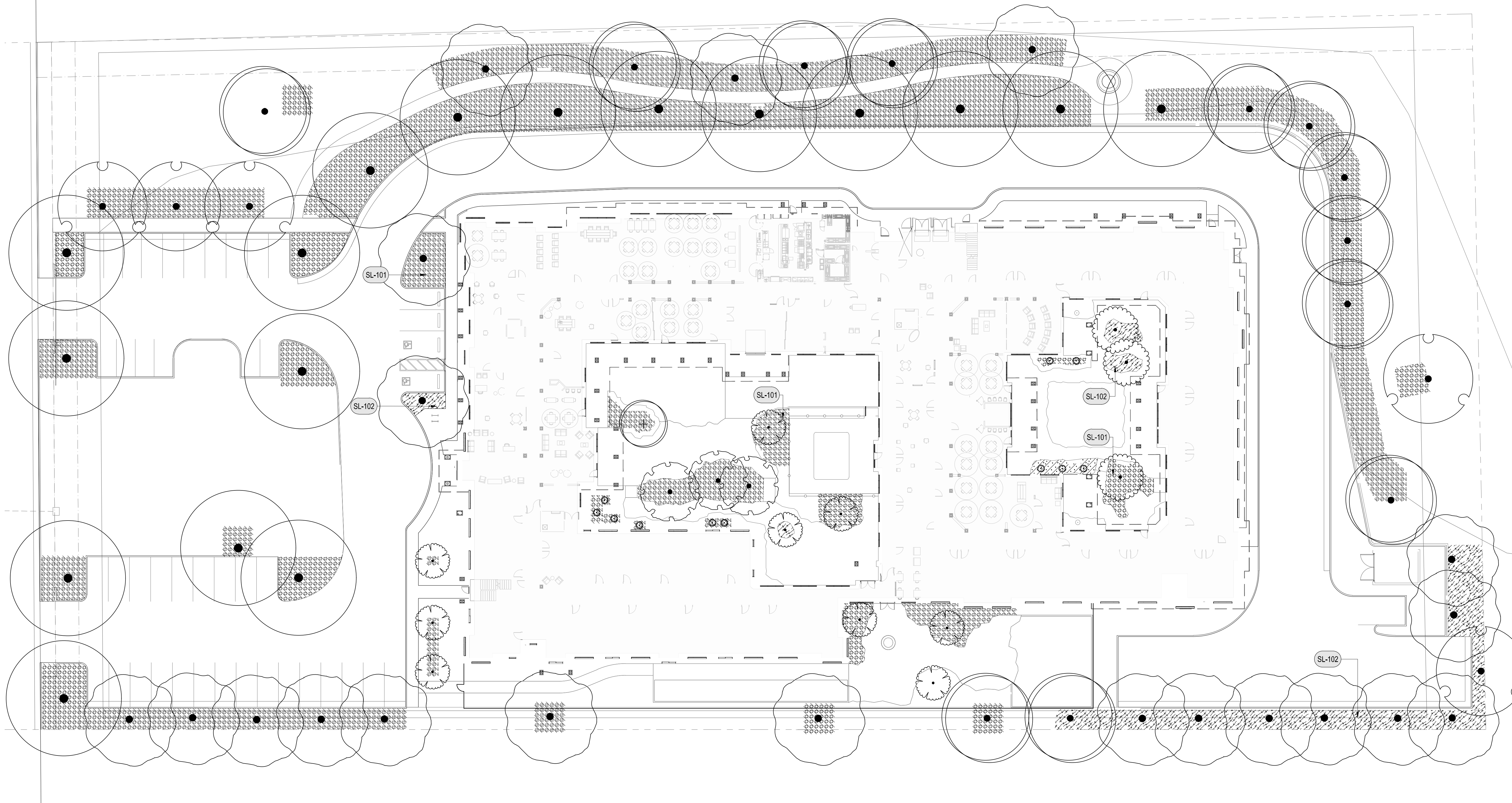
TREE TAG #	SPECIES	DBH	HEIGHT	VIGOR	COMMENTS
TR-35	BLUE OAK	18.9, 17.4	40	F	
TR-36	WHITE MULBERRY	7, 6, 4, 4, 4, 4, 4	30	F-P	
TR-37	INTERIOR LIVE OAK	11.0, 9.5	30	G	
TR-38	VALLEY OAK	9.0, 6.0	25	F	
TR-39	VALLEY OAK	10.7	25	F-G	
TR-40	INTERIOR LIVE OAK	8.2, 6.4, 9.1	15	F-G	
TR-41	VALLEY OAK	12.9	30	G	
TR-42	VALLEY OAK	14.1	40	F-G	GALLS
TR-43	INTERIOR LIVE OAK	12.4, 9.7, 7.7	25	G	
TR-44	INTERIOR LIVE OAK	8.2	20	G	
TR-45	INTERIOR LIVE OAK	9.2, 8.35	30	G	
TR-46	OREGON ASH	7.2, 6.8, 6.3	20	F-G	
TR-49	VALLEY OAK	10.2	25	P	EPICORMIC GROWTH, GALLS
TR-50	VALLEY OAK	14	40	F	LARGE CALLUSED TRUNK WOUND
TR-51	VALLEY OAK	11.2	30	F	
TR-52	PRIVET	5.6, 5.7	20	G	
TR-53	VALLEY OAK	7.8, 6.3	20	F	GALLS
TR-54	INTERIOR LIVE OAK	11.8	25	F	CALLUSED TRUNK WOUNDS
TR-55	FRUIT TREE	8.0, 5.3, 5.2	25	F	DIEBACK
TR-56	LONDON PLANE TREE	36.2	60	F-G	
TR-57	LONDON PLANE TREE	32.5	50	F-G	
TR-58	LONDON PLANE TREE	18.3	50	F	
TR-59	LONDON PLANE TREE	30.8	60	F	
TR-60	INTERIOR LIVE OAK	25.2	45	F	
TR-61	BLUE OAK	6.9, 5.3, 5.2	10	G	
TR-62	VALLEY OAK	7	20	F	
TR-89	VALLEY OAK	7.4	20	F-G	
TR-86	BLUE OAK	7.0, 6.4	15	F-G	
TR-65	RED OAK	8.4	30	G	
TR-69	RED OAK	4.8, 4.2	20	F	

TREE TAG #	SPECIES	DBH	HEIGHT	VIGOR	COMMENTS
TR-70	VALLEY OAK	6.0, 5.2	15	G	CROWDED BY TR-36
TR-71	INTERIOR LIVE OAK	4.7	10	G	CROWDED BY TR-36
TR-72	INTERIOR LIVE OAK	4.5	10	G	CROWDED BY TR-36
TR-73	INTERIOR LIVE OAK	5.9	10	G	CROWDED BY TR-36
TR-74	INTERIOR LIVE OAK	5.4	10	F	
TR-75	RED OAK	7.0, 4.7	20	G	
TR-76	INTERIOR LIVE OAK	6.1, 3.1	12	F	CROWDED BY TR-76
TR-77	INTERIOR LIVE OAK	5.5, 2.5	10	F	
TR-78	PRUNUS	7.0, 4.2, 4.0	10	F	
TR-79	RED OAK	5.5	20	G	
TR-80	VALLEY OAK	5.2, 4.3, 4.2	18	F	
TR-81	VALLEY OAK	5.1, 4.5	18	P	SPARSE CANOPY
TR-82	VALLEY OAK	4.5	18	P	POOR STRUCTURE
TR-83	VALLEY OAK	6.0, 4.4	20	G	POOR STRUCTURE
TR-84	VALLEY OAK	11.0, 7.0	30	F	
TR-85	VALLEY OAK	5.2, 4.6	20	F	
TR-87	BLUE OAK	4.6	20	G	
TR-88	VALLEY OAK	5.0, 4.4	20	G	
TR-90	BLUE OAK	6.5	12	G	
TR-91	VALLEY OAK	6.4, 6.2	20	G	
TR-92	INTERIOR LIVE OAK	4.5, 3.5, 5.7	12	G	
TR-93	INTERIOR LIVE OAK	5.4	12	G	



PLANT SCHEDULE - SITE																										
TREES	CODE	BOTANICAL / COMMON NAME	CONT	SIZE	SHRUBS	CODE	BOTANICAL / COMMON NAME	SIZE	SHRUB AREAS	CODE	BOTANICAL / COMMON NAME	CONT	SPACING													
	CM	LAGERSTROEMIA X TUSCARORA' CRAPE MYRTLE CORAL PINK LOW WATER USAGE 25' H/12' W	24" BOX	10'-12" H		ARC ARCTOSTAPHYLOS DENSIFLORA VINE HILL MANZANITA LOW WATER USAGE 5' H/5'-10' W	5 GAL		CAL CEALAMAGROSTIS X ACUTIFLORA 'AVALANCHE' FEATHER REED GRASS MODERATE WATER USAGE 5' H/2' W	1 GAL	24" o.c.		PPB HEBE X 'PATTY'S PURPLE' HERE MEDIUM WATER USAGE 2' H/2' W	5 GAL	36" o.c.		PIN MUHLENBERGIA CAPILLARIS PINK MUHLY LOW WATER USAGE 4' H/3' W	1 GAL	36" o.c.	32						
	BO	QUERCUS DOUGLASSII BLUE OAK VERY LOW WATER USAGE 70' H/30' W	24" BOX			YPA CEANOTHUS THYRSIFLORUS YANKEE POINT YANKEE POINT CEANOTHUS LOW WATER USAGE 2-3' H/8-12' W	5 GAL		CON CEANOTHUS CONCHA- CONCHA CEANOTHUS LOW WATER USAGE 8' H/10' W	1 GAL	36" o.c.	LAV LAVANDULA ANGUSTIFOLIA 'MUNSTEAD' MUNSTEAD ENGLISH LAVENDER LOW WATER USAGE 1'-2' H/2' W	1 GAL	24" o.c.		NAN NANDINA DOMESTICA 'SIENNA SUNRISE' HEAVENLY BAMBOO MEDIUM WATER USAGE 4' H/4' W	5 GAL	36" o.c.	25							
	VO	QUERCUS LOBATA VALLEY OAK LOW WATER USAGE 90' H/50' W	36" BOX			CEA CEANOTHUS X ANTONETTE WILD LILAC LOW WATER USAGE 10' H/8-9' W	5 GAL		COR CISTUS CORBARIENSIS WHITE ROCKROSE LOW WATER USAGE 4' H/4' W	1 GAL	36" o.c.	PIN MUHLENBERGIA CAPILLARIS PINK MUHLY LOW WATER USAGE 4' H/3' W	1 GAL	36" o.c.		PEN PENNISETUM ALOPECUROIDES 'HAEMEL' HAEMEL DWARF FOUNTAIN GRASS LOW WATER USAGE 2' H/2' W	1 GAL	30" o.c.	408							
	PO	QUERCUS VIRGINIANA SOUTHERN LIVE OAK MEDIUM WATER USAGE 80' H/90' W	24" BOX	14'-16" H		FRE FREMONTODENDRON CALIFORNICUM CALIFORNIA FLANNEL BUSH LOW WATER USAGE 20/20" W	1 GAL		CIS CISTUS X PURPUREUS ORCHID ROCKROSE LOW WATER USAGE 4' H/3' W	5 GAL	36" o.c.	NAN NANDINA DOMESTICA 'SIENNA SUNRISE' HEAVENLY BAMBOO MEDIUM WATER USAGE 4' H/4' W	5 GAL	36" o.c.		SAG PHLOMIS FRUTICOSA JERUSALEM SAGE LOW WATER USAGE 4' H/4' W	1 GAL	36" o.c.	45							
	CO	QUERCUS VIRGINIANA 'CATHEDRAL' CATHEDRAL LIVE OAK MEDIUM WATER USAGE 80' H/120' W	24" BOX	14'-16" H		MUH MUHLENBERGIA CAPILLARIS PINK MUHLY LOW WATER USAGE 4' H/3' W	1 GAL		DEE MUHLENBERGIA RIGENS DEER GRASS LOW WATER USE 5' H/5' W	1 GAL	30" o.c.	PEN PENNISETUM ALOPECUROIDES 'HAEMEL' HAEMEL DWARF FOUNTAIN GRASS LOW WATER USAGE 2' H/2' W	1 GAL	30" o.c.		PSH PHORMIUM X 'SHIRAZ' NEW ZEALAND FLAX MEDIUM WATER USAGE 3' H/2' W	5 GAL	30" o.c.	21							
						RHA RHAMNUS CALIFORNICA CALIFORNIA COFFEE BERRY LOW WATER USAGE 10' H/10' W	5 GAL		NBU ERIOGONUM NUDUM 'ELLA NELSON'S YELLOW' NAKED BUCKWHEAT LOW WATER USAGE 6' H/1' W	1 GAL	30" o.c.	SAG PHLOMIS FRUTICOSA JERUSALEM SAGE LOW WATER USAGE 4' H/4' W	1 GAL	36" o.c.		RIB RIBES SANGUINEUM RED FLOWERING CURRANT LOW WATER USAGE	5 GAL	48" o.c.	36							
						FUC RIBES SPECIOSUM FUCHSIA FLOWERING GOOSEBERRY MEDIUM WATER USAGE 5' H/5' W	5 GAL		GAR GARDENIA JASMINOIDES 'FROSTPROOF' FROSTPROOF GARDENIA MEDIUM WATER USAGE 5' H/5' W	5 GAL	36" o.c.															





PLANT SCHEDULE - SITE

TREES	CODE	BOTANICAL / COMMON NAME	CONT	SIZE
	CM	LAGERSTROEMIA X 'TUSCARORA' CRAPE MYRTLE CORAL PINK LOW WATER USAGE 35' H12' W	24" BOX	10'-12' H
	BO	QUERCUS DOUGLASSII BLUE OAK VERY LOW WATER USAGE 70' H100' W	24" BOX	
	VO	QUERCUS LOBATA VALLEY OAK LOW WATER USAGE 90' H1' 50' W	30" BOX	
	PO	QUERCUS VIRGINIANA SOUTHERN LIVE OAK MEDIUM WATER USAGE 80' H80' W	24" BOX	14-16' H
	CO	QUERCUS VIRGINIANA 'CATHEDRAL' CATHEDRAL LIVE OAK MEDIUM WATER USAGE 80' H120' W	24" BOX	14-16' H

PLANT SCHEDULE - AL COURTYARD

TREES	CODE	BOTANICAL / COMMON NAME
	MS	CUPRESSUS SEMPERVIRENS ITALIAN CYPRESS
	CM	LAGERSTROEMIA X 'TUSCARORA' CRAPE MYRTLE CORAL PINK LOW WATER USAGE 25' H12' W
	SAU	MAGNOLIA X SOULANGIANA SAUCER MAGNOLIA MULTI-TRUNK MEDIUM WATER USAGE
	STY	STYRAX JAPONICUS JAPANESE SNOWBELL MEDIUM WATER USAGE

PLANT SCHEDULE - MC COURTYARD

TREES	CODE	BOTANICAL / COMMON NAME	CONT
	JM	ACER PALMATUM JAPANESE MAPLE	15 GAL
	MS	CUPRESSUS SEMPERVIRENS ITALIAN CYPRESS	15 GAL

SOILS SCHEDULE

SYMBOL	SOILS DESCRIPTION
	36" - AMENDED SOIL
	48" - AMENDED SOIL
	18" - AMENDED SOIL

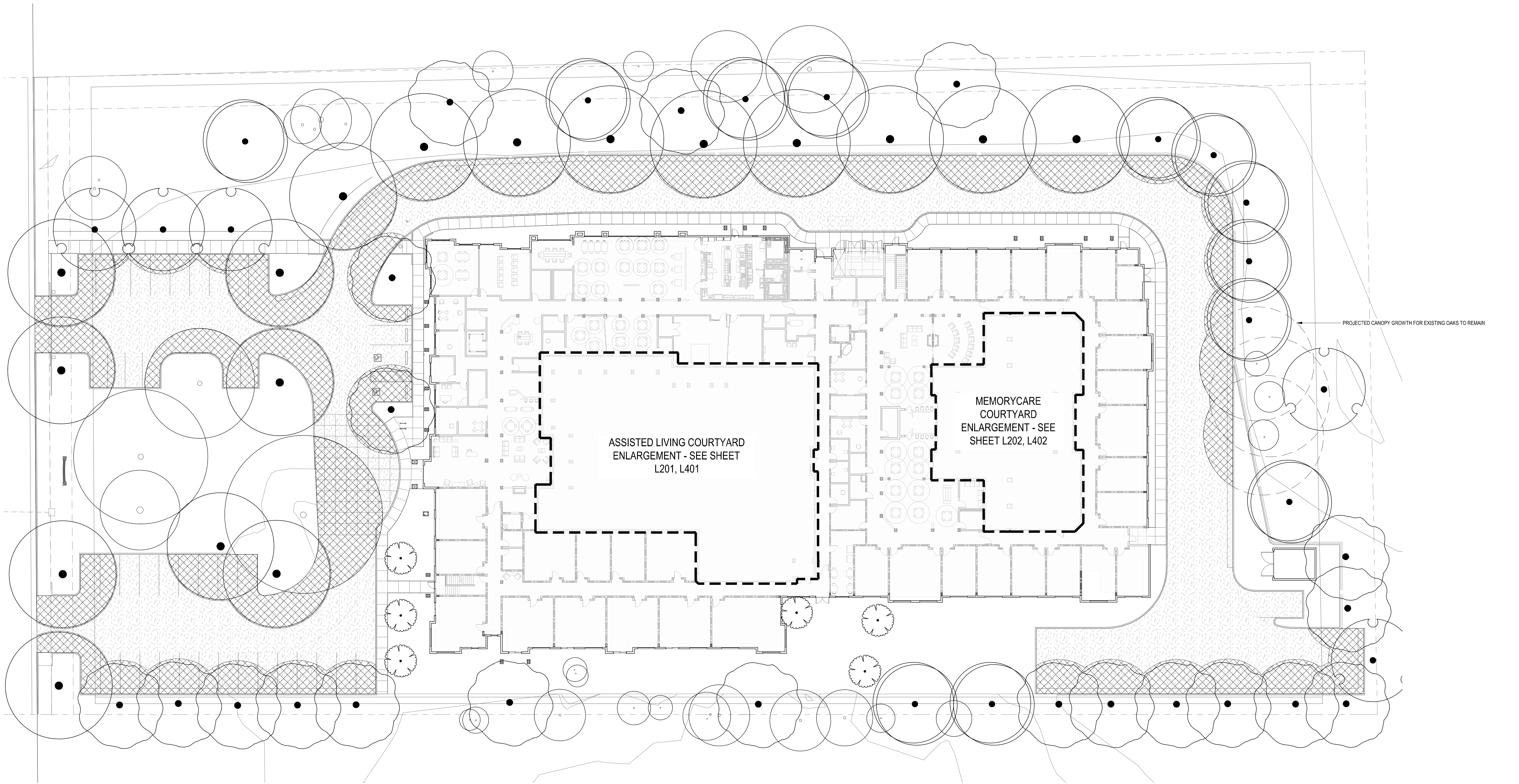
GENERAL SOIL NOTES:

- A MINIMUM 18-INCH DEPTH OF NON-MECHANICALLY COMPACTED SOIL SHALL PLACED IN ALL LANDSCAPE AREAS.
- ORGANIC AMENDMENTS SHALL BE INCORPORATED INTO SOIL AT MINIMUM OF 6-INCH DEPTH AT A MINIMUM RATE OF FIVE CUBIC YARDS FOR EACH 1,000 SF. OF LANDSCAPE AREAS.
- ALL NON-PLANTED LANDSCAPE AREAS SHALL BE COVERED WITH A MINIMUM OF 3-INCHES OF ORGANIC POROUS MULCH.
- ALL TREES SHALL RECEIVE THE FOLLOWING SOIL VOLUMES DESIGNATED BY MATURE HEIGHT:

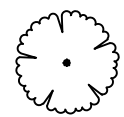
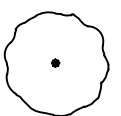
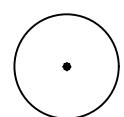
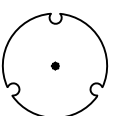
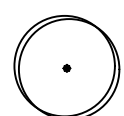
SMALL (UNDER 30' HEIGHT) - TO RECEIVE 60 CF OF AMENDED SOIL.

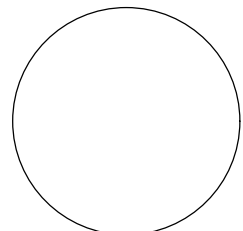
MEDIUM (30'-50' HEIGHT) - TO RECEIVE 300 CF OF AMENDED SOIL.

LARGE (50' AND GREATER IN HEIGHT) - TO RECEIVE 500 CF OF AMENDED SOIL.

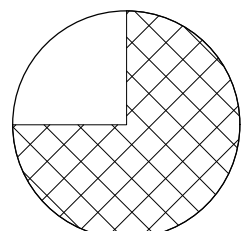


PLANT SCHEDULE - SITE

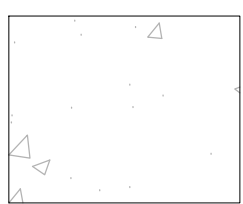
TREES	CODE	BOTANICAL / COMMON NAME	CONT	SIZE
	CM	LAGERSTROEMIA X 'TUSCARORA' GRAPE MYRTLE CORAL PINK LOW WATER USAGE 25' H/12' W	24" BOX	10'-12' H
	BO	QUERCUS DOUGLASII BLUE OAK VERY LOW WATER USAGE 70' H/30' W	24" BOX	
	VO	QUERCUS LOBATA VALLEY OAK LOW WATER USAGE 90' H/50' W	36" BOX	
	PO	QUERCUS VIRGINIANA SOUTHERN LIVE OAK MEDIUM WATER USAGE 80' H/90' W	24" BOX	14'-16' H
	CO	QUERCUS VIRGINIANA 'CATHEDRAL' CATHEDRAL LIVE OAK MEDIUM WATER USAGE 80' H/120' W	24" BOX	14'-16' H



EXISTING TREE TO REMAIN



AREA OF PARKING LOT, DRIVE AISLES AND FIRE ACCESS DIRECTLY SHADED
BY TREES AT 10-YEAR MATURE SIZE
MINIMUM SHADE COVERAGE REQUIRED = 20,886 SF
ANTICIPATED COVERAGE AT TEN YEARS = 21,030 SF



PARKING LOT, DRIVE AISLES AND FIRE ACCESS SURFACE
TOTAL AREA = 41,772 SF

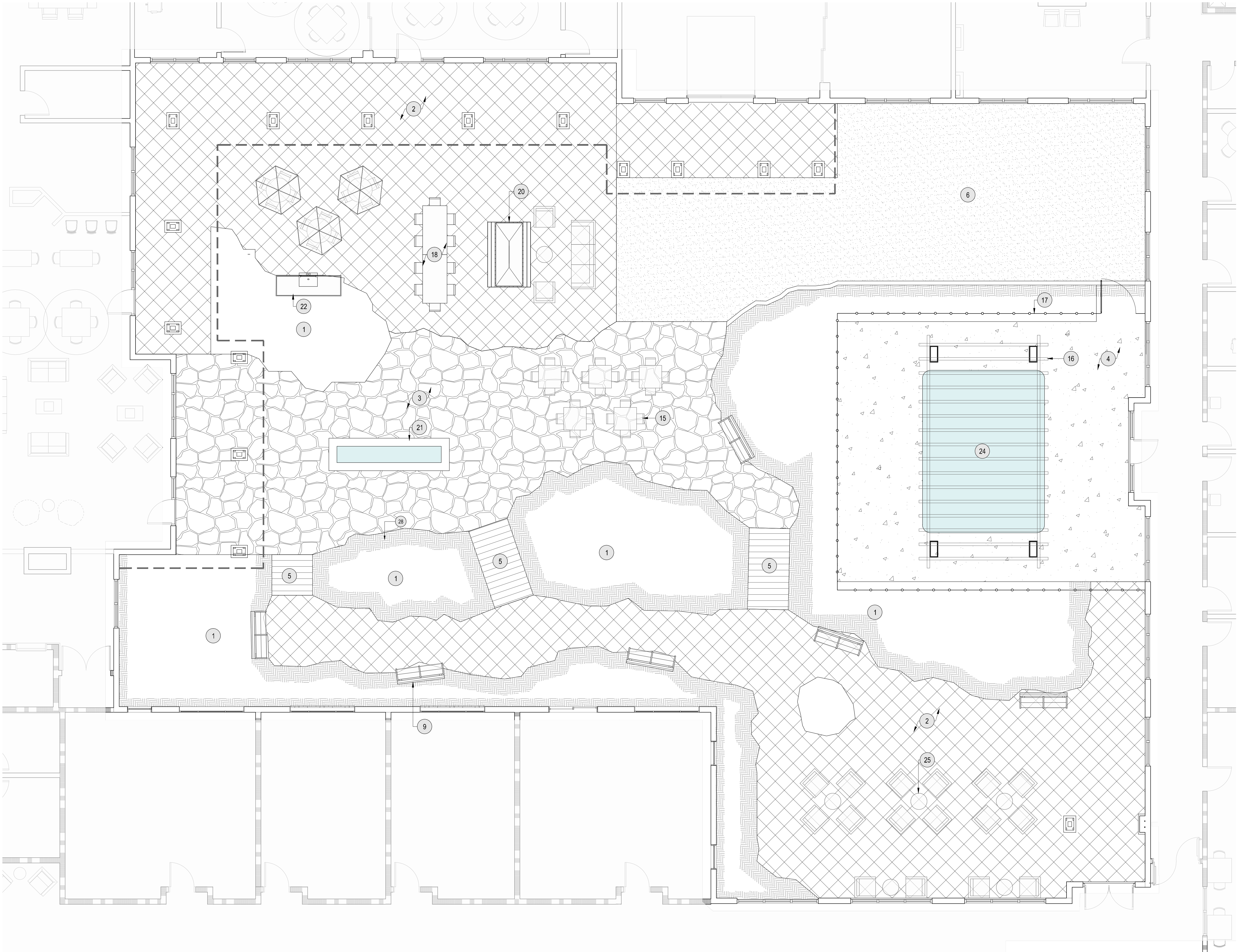
NOTES

- A. TREE CANOPIES ARE SIZED TO 10 YEAR POST INSTALLATION.
B. SHADE CALCULATIONS DETERMINED AS A SINGLE CANOPY AREA.

SHADING REQUIREMENTS:

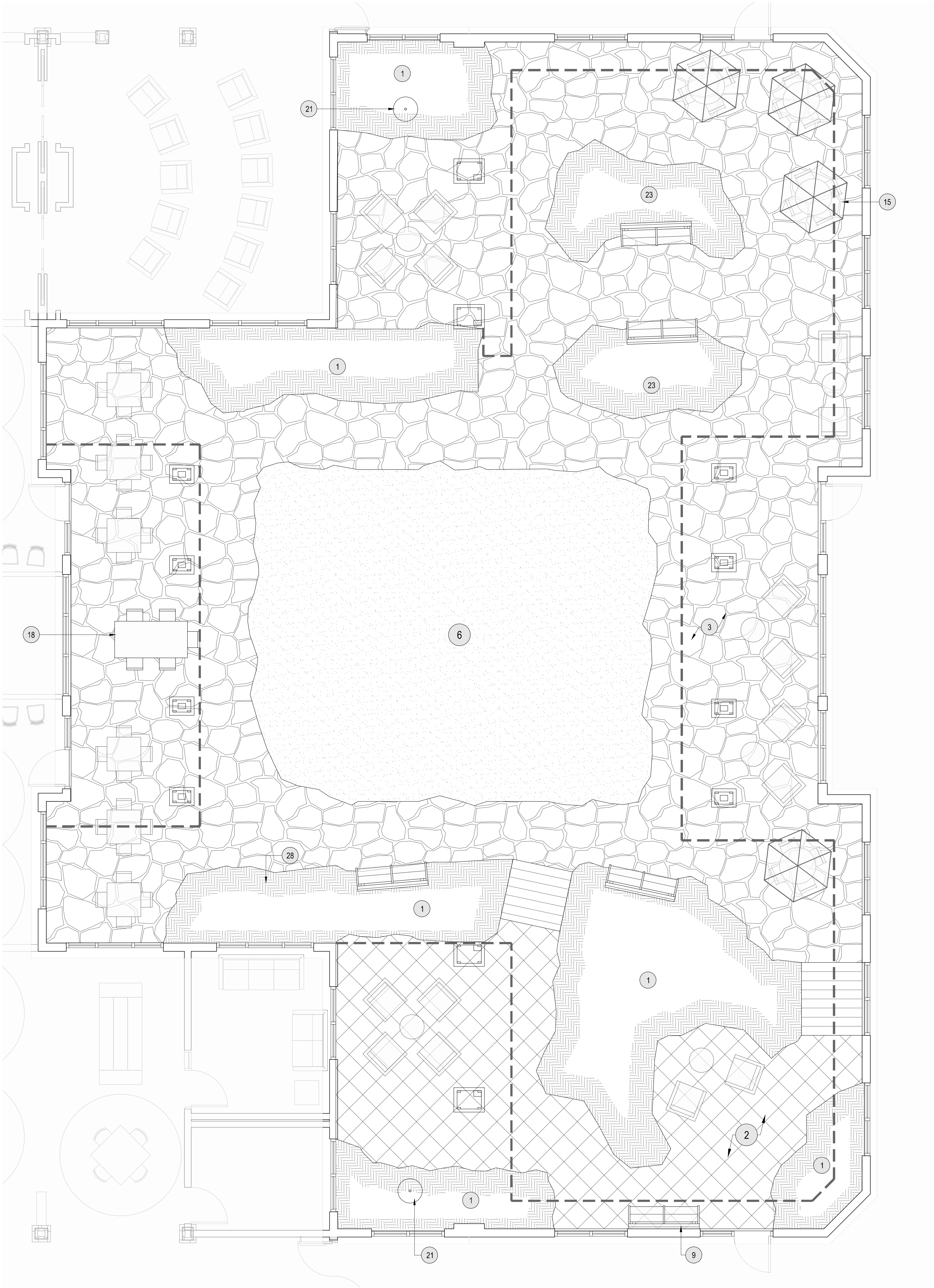
REQUIRED - 50% SHADE COVERAGE AT 10 YEARS = 20,886 SF

PROVIDED - 50% COVERAGE = 21,260 SF



REFERENCE NOTES SCHEDULE - AL COURTYARD

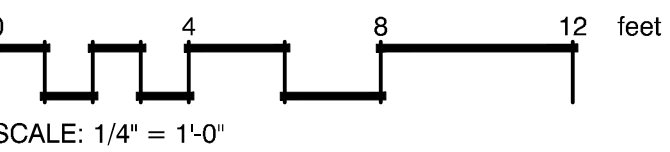
SYMBOL	DESCRIPTION
1	PLANTING AREA
2	DECORATIVE CONCRETE
3	FLAGSTONE PAVING
4	STANDARD CONCRETE SURFACING
5	DECKING
6	SYNTHETIC TURF FLEX SPACE
8	SITE BENCH, TYP.
15	FF&E FURNISHINGS
16	OVERHEAD TRELLIS
17	DECORATIVE FENCE AND GATES
18	OUTDOOR LOUNGE AND DINING
20	DOUBLE-SIDED FIREPLACE
21	WATER FEATURE
22	BBO GRILL STATION
24	POOL
25	GROUP SEATING
28	ORGANIC MULCH - 3" MIN.

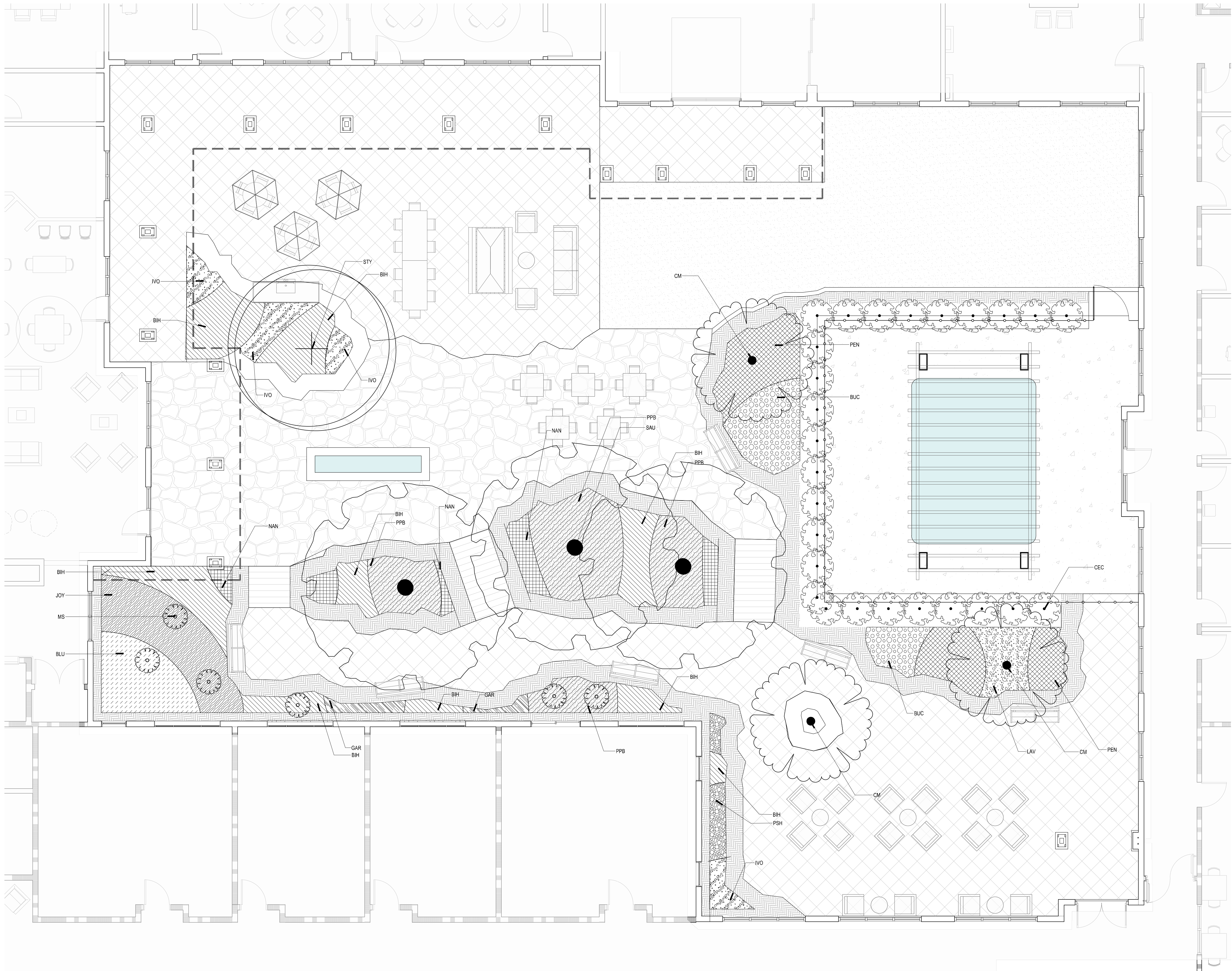


REFERENCE NOTES SCHEDULE - MC COURTYARD

SYMBOL	DESCRIPTION
1	PLANTING AREA
2	DECORATIVE CONCRETE
3	FLAGSTONE PAVING
5	DECKING
6	SYNTHETIC TURF FLEX SPACE
8	SITE BENCH, TYP.
15	FF&E FURNISHINGS
18	OUTDOOR LOUNGE AND DINING
21	WATER FEATURE
23	SENSORY / BOTANICAL GARDEN
28	ORGANIC MULCH - 3" MIN.

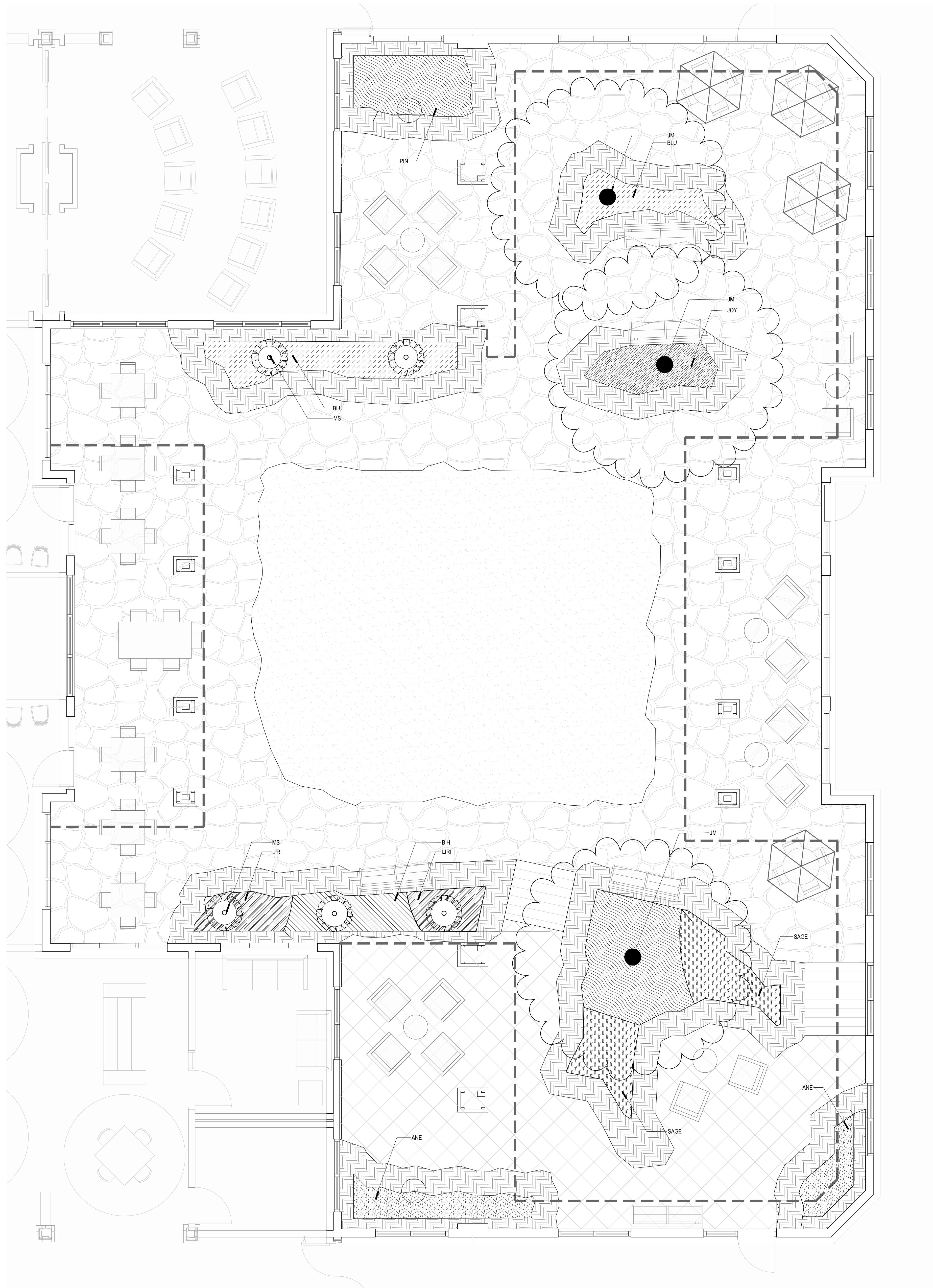
1 MATERIALS PLAN - MC COURTYARD





PLANT SCHEDULE - AL COURTYARD

TREES	CODE	BOTANICAL / COMMON NAME	CONT	SIZE
	MS	CUPRESSUS SEMPERVIRENS ITALIAN CYPRESS	15 GAL	
	CM	LAGERSTROEMIA X 'TUSCARORA' GRAPE MYRTLE CORAL PINK LOW WATER USAGE 25' H12' W	24" BOX	10'-12' H
	SAU	MAGNOLIA X SOULANGIANA SAUCER MAGNOLIA MULTI-TRUNK MEDIUM WATER USAGE	24" BOX	12-15' H
	STY	STYRAX JAPONICUS JAPANESE SNOWBELL MEDIUM WATER USAGE	24" BOX	12-15' H
SHRUBS	CODE	BOTANICAL / COMMON NAME	SIZE	
	CEC	CEANOTHUS CONCHIA - CONCHA CEANOTHUS LOW WATER USAGE 5-7' H8-10' W	5 GAL	
SHRUB AREAS	CODE	BOTANICAL / COMMON NAME	CONT	SPACING
	BLU	BUDDLEIA DAVIDI BLUE CHIP DWARF BUTTERFLY BUSH MEDIUM WATER USAGE	1 GAL	30" o.c.
	IVO	BUDDLEIA DAVIDI BUZZ IVORY BUZZ IVORY BUTTERFLY BUSH MEDIUM WATER USAGE 3' H3' W	1 GAL	30" o.c.
	JOY	CEANOTHUS X 'JOYCE COULTER' CEANOTHUS JOYCE COULTER MEDIUM WATER USAGE	1 GAL	30" o.c.
	BUC	ERIOGONUM NUDUM NAKED BUCKWHEAT LOW WATER USAGE	1 GAL	24" o.c.
	GAR	GARDENIA JASMINOIDES 'FROSTPROOF' FROSTPROOF GARDENIA MEDIUM WATER USAGE 6' H6' W	5 GAL	36" o.c.
	PPB	HEBE X 'PATTY'S PURPLE' HEBE MEDIUM WATER USAGE 2' H2' W	5 GAL	36" o.c.
	LAV	LAVANDULA ANGUSTIFOLIA 'MUNSTEAD' MUNSTEAD ENGLISH LAVENDER LOW WATER USAGE 1'-2' H2' W	1 GAL	24" o.c.
	NAN	NANDINA DOMESTICA 'SIENNA SUNRISE' HEAVENLY BAMBOO MEDIUM WATER USAGE 4' H4' W	5 GAL	36" o.c.
	PEN	PENNISETUM ALOPECUROIDES 'HAEMEL' HAEMEL DWARF FOUNTAIN GRASS LOW WATER USAGE 2' H2' W	1 GAL	30" o.c.
	PSH	PHORMIUM X 'SHIRAZ' NEW ZEALAND FLAX MEDIUM WATER USAGE 3' H2' W	5 GAL	30" o.c.
	BIH	RHAPHIOLEPIS INDICA 'BALLERINA' BALLERINA INDIAN HAWTHORN LOW WATER DEMAND 2' H3-4' W	5 GAL	36" o.c.



PLANT SCHEDULE - MC COURTYARD					
TREES	CODE	BOTANICAL / COMMON NAME	CONT	QTY	
	JM	ACER PALMATUM JAPANESE MAPLE	15 GAL	3	
	MS	CUPRESSUS SEMPERVIRENS ITALIAN CYPRESS	15 GAL	5	
SHRUB AREAS	CODE	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
	BLU	BUDDLEIA DAVIDI BLUE CHIP DWARF BUTTERFLY BUSH MEDIUM WATER USAGE	1 GAL	30" o.c.	16
	ANE	CARPENTERIA CALIFORNICA BUSH ANEMONE LOW WATER USAGE	1 GAL	36" o.c.	8
	JOY	CEANOTHUS X JOYCE COULTER CEANOTHUS JOYCE COULTER MEDIUM WATER USAGE	1 GAL	30" o.c.	7
	PIN	MUHLENBERGIA CAPILLARIS PINK MUHLY LOW WATER USAGE 4' Hx3' W	1 GAL	36" o.c.	16
	BIH	RHAPHIOLEPS INDICA 'BALLERINA' BALLERINA INDIAN HAWTHORN LOW WATER DEMAND 2' Hx3-4' W	5 GAL	36" o.c.	5
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
	LIRI	LIRIOPE MUSCARI 'BIG BLUE' BIG BLUE LILYTOPF MEDIUM WATER USAGE 1' Hx1' W	1 GAL	12" o.c.	45
	SAGE	SALVIA SONOMENSIS CREEPING SAGE LOW WATER USAGE 1' Hx6' W	1 GAL	30" o.c.	13

SECTION B. WATER BUDGET CALCULATIONS

Section B1. Maximum Applied Water Allowance (MAWA)

The project's Maximum Applied Water Allowance shall be calculated using this equation:

MAWA = (Eto) (0.62) [(0.50 x LA) + (0.3 x SLA)]

where:

- MAWA = Maximum Applied Water Allowance (gallons per year)
Eto = Reference Evapotranspiration from Appendix A (inches per year)
0.50 = ET Adjustment Factor (ETAF)
LA = Landscape Area includes Special Landscape Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
0.3 = the additional ET Adjustment Factor for the Special Landscape Area (1.0 - 0.7 = 0.3)

Maximum Applied Water Allowance = 383,548 gallons per year

Show calculations.

(50.5) (0.62) [(0.50x 24,500) + (0.3)x 0] = 383,548

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package

Reference Evapotranspiration (Eto)							50.5
Hydrozone # (Planting Description a)	Plant Factor (PF)	Irrigation Method (b)	Irrigation Efficiency (EE) %	ETAF (PF/EE)	Landscape Area (sq ft)	ETAF X Area	Estimated Total Water Use (ETWU)w
Regular Landscape Areas							
1/shrubs - s.west	.3	Drip	.81	0.37	7,710	2856	89,407
2/shrubs - s.west	.3	Drip	.81	0.37	1,527	566	17,705
3/shrubs - west	.3	Drip	.81	0.37	1,472	545	17,070
4/shrubs - south	.3	Drip	.81	0.37	791	293	9,173
5/shrubs - south	.3	Drip	.81	0.37	3,949	1463	45,794
6/shrubs - south	.3	Drip	.81	0.37	1,533	568	17,777
7/shrubs - north	.3	Drip	.81	0.37	1,038	384	12,037
8/shrubs & trees - north	.3	Drip	.81	0.37	4,433	1642	625
9/shrubs - courtyard	.4	Drip	.81	0.49	1,612	795	400
10/shrubs - courtyard	.4	Drip	.81	0.49	435	215	6,726
				Totals	24,500	9,327	
Special Landscape Areas							
NONE				1			
				1			
				1			
				Totals	0	0	
					ETWU Total		216,915
					Maximum Allowed Water Allowance (MAWA) e		383,548

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE COMPLIANCE

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND
SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE. TITLE 23 CH. 2.7 SECTION 492.9

SCOTT FORNACIARI
CALIFORNIA REGISTERED LANDSCAPE ARCHITECT #3920

4/18/19

DATE

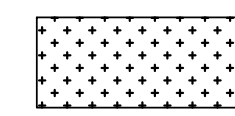
SITE GRADING NOTE:

LANDSCAPE GRADING FOR THE SITE IS SHOWN ON THE CIVIL ENGINEERING SITE IMPROVEMENT PLAN(S).

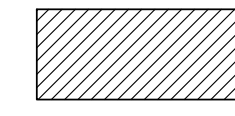
SITE IRRIGATION NOTES:

1. PROJECT SHALL HAVE A SEPARATE WATER METER, SEE CIVIL ENGINEERING PLANS
2. PROJECT SHALL HAVE A SEPARATE REDUCED PRESSURE BACKFLOW PREVENTER FOR IRRIGATION
3. PROJECT STATIC WATER PRESSURE AT THIS LOCATION IS ESTIMATED TO BE 15 PSI

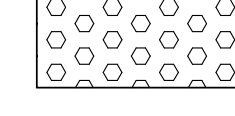
HYDROZONE / IRRIGATION TYPE LEGEND



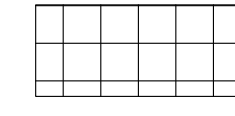
TYPE 1
LAWN AREA
TOTAL = 0 SF



TYPE 2
PLANTER SPRAY AREA
TOTAL = 5F



TYPE 3
PLANTER DRIP AREA
TOTAL = 24,500 SF



TYPE 4
HYDROSEED AREA NOT IRRIGATED
TOTAL = 36,295 SF

Hydrozone Information Table

Hydrozone	Valve	Plant	Irrigation	Area	% of
Type	Circuit	Type PF	Method	(sq. ft.)	Land Area
3	1	LW	Drip	7,710	31%
3	2	LW	Drip	1,527	6%
3	3	LW	Drip	1,472	6%
3	4	LW	Drip	791	3%
3	5	LW	Drip	3,949	16%
3	6	LW	Drip	1,533	6%
3	7	LW	Drip	1,038	4%
3	8	LW	Drip	4,433	18%
3	9	MW	Drip	1,612	7%
3	10	MW	Drip	435	2%
Total				24,500	100%

Hydrozone / Irrigation Type Legend

- 1 Lawn Area - Sprayed
- 2 Planter Area - Sprayed
- 3 Planter Drip Area - Drip or Subsurface Tubing
- 4 Hydroseed Area - No Irrigation

LRS
PAUL BOUNDY
ARCHITECTS
720 NW Davis 503.221.1121
Suite 300 503.221.2077
Portland OR 97209 www.lrsarchitects.com

CONSULTANT:

SHAPIRO / DIDWAY
1204 SE Water Ave
Portland, Oregon 97214
t. 503.232.0620
www.shaprodidway.com

LANDARC
Associates PLLC
360.635.0332

PROJECT NUMBER: 218295

CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE

8220 SUNRUSE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

HYDROZONE PLAN

DRAWN BY:

Author

SHEET:

L501
DESIGN REVIEW
04-18-2019

LRS Architects, Inc. 12/01/19

CONTROL DEVICE LEGEND		LIGHTING SYMBOL LEGEND		DRAWING INDEX																												
<div><div>ZONE</div><div>X</div><div>XXXX</div></div>	CONTROL ZONE TAG	<div><div></div><div></div></div>	RECESSED DOWNLIGHT	<div>2019.04.18 DESIGN REVIEW</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>														
<div>POWER CONTROL METHOD (DIMMER/RELAY/CONSTANT)</div>		<div><div></div><div></div></div>	RECESSED ADJUSTABLE DOWNLIGHT																													
<div>CONTROL LEGS REQUIRED (DMX/0-10V/3-WIRE)</div>		<div><div></div><div></div></div>	RECESSED WALLWASHER (OPEN SIDE LIT)																													
<div>\$</div>	LOCAL SWITCH	<div><div></div><div></div></div>	RECESSED SHOWER LIGHT																													
<div></div>	CONTROL STATION	<div><div></div><div></div></div>	PENDANT OR CLOSE-CEILING MOUNTED FIXTURE																													
<div></div>	CONTROL RECEPTACLE STATION	<div><div></div><div></div></div>	SURFACE-MOUNTED ACCENT LIGHT																													
<div>DEVICE ID</div> <div>TYPE</div>	CONTROL DEVICE TAG	<div><div></div><div></div></div>	TRACK-MOUNTED ACCENT LIGHT																													
<div>DC DIM</div> <div>TRANS</div>	LED DIMMING CONTROLLER TO TRANSFORMER/POWER SUPPLY. REQUIRES 0-10V CONTROL SIGNAL.	<div><div></div><div></div></div>	WALL-MOUNTED FIXTURE																													
<div>CLD</div> <div>WATTAGE LIMIT</div>	TRACK CURRENT LIMITER	<div><div></div><div></div></div>	RECESSED FLUORESCENT 2X2, 2X4, ETC.																													
<div>xx</div>	KEYNOTE	<div><div></div><div></div></div>	SURFACE-MOUNTED FLUORESCENT 2X2, 2X4, ETC.																													
<div>1</div>	REVISION	<div><div></div><div></div></div>	PENDANT-MOUNTED LINEAR FLUORESCENT																													
		<div><div></div><div></div></div>	FLUORESCENT STRIPLIGHT																													
		<div><div></div><div></div></div>	STEPLIGHT																													
		<div><div></div><div></div><div></div></div>	INGRADE UPLIGHT																													
		<div><div></div><div></div></div>	FLOODLIGHT																													
		<div><div></div><div></div></div>	BOLLARD																													
		<div><div></div><div></div></div>	POLE LIGHT																													
		<div><div></div><div></div></div>	LOW-VOLTAGE STRIPLIGHT																													
		<div><div></div><div></div></div>	COLD-CATHODE STRIPLIGHT																													
		<div><div></div><div></div></div>	NEON LAMP																													
		<div><div></div><div></div></div>	LINEAR FIBER-OPTIC SYSTEM																													
		<div><div></div><div></div></div>	LINEAR LED SYSTEM																													
		<div><div></div><div></div></div>	MULTI-HEAD RECESSED TROUGH FIXTURE																													
		</																														

GENERAL EXTERIOR LIGHTING REQUIREMENTS

1. NOTHING IN THESE SPECIFICATIONS OR IN THE ACCOMPANYING DRAWINGS SHALL BE CONSTRUED AS AUTHORITY OR PERMISSION TO PERFORM WORK CONTRARY TO THE CURRENT PROVISIONS OF THE CODES OR REGULATIONS GOVERNING THE WORK OR TO OTHERWISE VIOLATE LEGAL REQUIREMENTS. THE CONTRACTOR SHALL IMMEDIATELY DRAW ANY SUCH CONFLICTS TO THE ATTENTION OF THE ARCHITECT. REQUIREMENTS SHOWN IN THE DRAWINGS OR SPECIFICATIONS SHALL GOVERN WHERE THEY EXCEED THOSE OF THE CODES OR REGULATIONS.
2. LIGHTING FIXTURES
- a. LUMINAIRES SHALL BE PROVIDED AS DESCRIBED IN THE LIGHTING FIXTURE SCHEDULE. THE MANUFACTURER'S CATALOG NUMBERS OR DESCRIPTIONS INDICATE FIXTURE QUALITY, TYPE AND STYLE, BUT MAY NOT CONVEY ALL REQUIREMENTS. PROVIDE FIXTURES WITH ANY DETAILS NOTED IN FIXTURE DESCRIPTIONS OR ELSEWHERE ON PROJECT DRAWINGS. WHERE A SCHEDULED PART NUMBER APPEARS TO CONFLICT WITH THOSE NOTES, SUBMIT AN RFI TO RESOLVE THE CONFLICT.
- b. PRIOR TO ORDERING FIXTURES, THE CONTRACTOR SHALL VERIFY VOLTAGES AND ALL MOUNTING CONDITIONS INCLUDING LANDSCAPE AND HARDSCAPE CONDITIONS AND INFORM THE ARCHITECT AND LIGHTING DESIGN CONSULTANT OF ANY CONFLICTS.
- c. THE CONTRACTOR SHALL PROVIDE LIGHTING FIXTURES COMPLETE WITH FITTINGS, HARDWARE, MOUNTING STAKES, CONCRETE PADS, TRANSFORMERS, CONNECTORS, OR OTHER MISCELLANEOUS COMPONENTS NECESSARY FOR A COMPLETE AND WORKMANLIKE INSTALLATION COMPLIANT WITH THE APPLICABLE CODES.
- d. ANY LIGHTING FIXTURES IN ROCKWORK SHALL BE PROVIDED IN APPROVED FIRE-RATED ENCLOSURES. ALL FIXTURES IN CONDITIONS REQUIRING IC, AIRTIGHT, OR CHICAGO PLENUM HOUSINGS SHALL BE SUPPLIED WITH SUCH HOUSINGS.
3. LAMPS
- a. IF SPECIFIED LAMPS ARE SUBSTITUTED, THE CONTRACTOR SHALL PROVIDE SAMPLES OF THE PROPOSED SUBSTITUTION FOR EVALUATION BY THE LIGHTING DESIGN CONSULTANT. LAMPS SHALL NOT BE ORDERED UNTIL APPROVED.
- b. IF APPLICABLE FOR NONLED LAMPS, FURNISH 5% SPARES FOR ALL SCHEDULED LAMP TYPES. SPARE LAMPS SHALL BE AVAILABLE AND ON-SITE AT THE TIME OF SCHEDULED FOCUS AIMING AND ADJUSTMENT WORK SESSIONS, AND SHALL BE TURNED OVER TO THE OWNER'S OPERATIONS STAFF AS MAINTENANCE STOCK AT SUBSTANTIAL COMPLETION.
4. OPTICAL ACCESSORIES
- a. THE CONTRACTOR SHALL PROVIDE ALL SCHEDULED ACCESSORIES PROPERLY SIZED FOR THE LUMINAIRE AND SECURELY ATTACHED. WHERE THE LUMINAIRE MANUFACTURER OFFERS ACCESSORIES MEETING THE PERFORMANCE OR BASIS-OF-DESIGN CHARACTERISTICS LISTED BELOW, THE CONTRACTOR MAY SUBMIT AND PROVIDE THEM FROM THAT SOURCE. WHEN THE LUMINAIRE MANUFACTURER'S OFFERING IS NOT EQUIVALENT, THE CONTRACTOR SHALL PROVIDE AN ACCESSORY MEETING THOSE REQUIREMENTS FROM AN APPROVED SOURCE, CUT TO THE PROPER SIZE FOR THAT FIXTURE. THE LIGHTING DESIGN CONSULTANT SHALL BE THE FINAL JUDGE OF ACCESSORY EQUIVALENCE.
- b. UNLESS OTHERWISE NOTED, ACCESSORIES SHALL BE INSTALLED PRIOR TO THE FOCUS AIMING AND ADJUSTMENT SESSIONS.
5. BALLASTS, DRIVERS, TRANSFORMERS
- a. WHERE BALLASTS, DRIVERS, OR TRANSFORMERS ARE MOUNTED REMOTE FROM THE FIXTURE HOUSING, PROVIDE A SUITABLE ENCLOSURE WITHIN THE RECOMMENDED DISTANCE.
- b. REMOTE LOCATIONS FOR BALLASTS, DRIVERS, AND TRANSFORMERS ARE TO BE DETERMINED BY THE CONTRACTOR IN THE FIELD TO SUIT FIELD CONDITIONS.
6. CONDUITS, CIRCUITS, AND WIRING
- a. ALL CONDUITS AND WIRING SHALL BE IDENTIFIED WITH NUMBERS AND TAGGED. ALL CIRCUITS SHALL BE IDENTIFIED IN ELECTRICAL PANELS.
- b. CONDUIT RUNS, EXACT LOCATIONS, AND ROUTING TO BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS. ALL CONDUIT RUNS MUST BE CONCEALED FROM PUBLIC VIEW AS PHYSICALLY POSSIBLE.
7. LIGHTING CONTROL SYSTEM
- a. All lighting control equipment must be Title 24 compliant and must provide the necessary astronomical time clock controls, multi-level lighting controls, demand response controls, motion detector devices, and shut-off controls.
- b. Verify that all LED lighting sources have power supply drivers and control interfaces that are appropriate for the lighting control system.
- c. Coordinate with the control equipment manufacturer regarding any non-standard load wiring. All DMX or 0-10V load types shall also be paired with a switched circuit on a control channel-by-channel basis to provide low-end turn off capabilities.
- d. Provide low voltage wiring per the systems manufacturer's final shop drawings.
- e. Provide the services of a factory-trained and authorized representative of the lighting control system manufacturer to configure, test, commission, AND PROGRAM the lighting control system.
8. SUBMITTALS
- a. SUBMITTALS MUST PROVIDE DESCRIPTIVE DATA FOR ALL LUMINAIRES, LAMPS, LENSES, COLOR FILTERS, FIRE-RATED FIXTURE ENCLOSURES AND OTHER MATERIALS.
- b. SHOP DRAWINGS
- i. FOR LUMINAIRES THAT ARE NOT STANDARD CATALOG ITEMS WITH DATASHEETS PROVIDING SIMILAR DETAILS, SUBMIT MANUFACTURER'S SHOP DRAWINGS INDICATING OVERALL DIMENSIONS, DETAIL AND APERTURE DIMENSIONS, FINISHES, MATERIALS AND THICKNESSES, LENS OR DIFFUSER TYPES AND THICKNESSES, LAMP HOLDERS, LOCKING MECHANISMS FOR ADJUSTABLE LUMINAIRES, SHIELDING, TRIM, REFLECTOR AND GASKET DETAILS, METHOD OF RE-LAMPING ACCESS, MECHANICAL AND ELECTRICAL CONNECTIONS, AND ALL OTHER INFORMATION REQUIRED TO EVALUATE THE LUMINAIRE.
- c. SAMPLES
- i. IF REQUESTED, THE CONTRACTOR MUST SUBMIT OPERABLE FIXTURE SAMPLES TO THE LIGHTING DESIGN CONSULTANT AND ARCHITECT FOR APPROVAL. THE SAMPLES SHALL BE TAGGED WITH PROJECT NAME AND FIXTURE TYPE, CONFIGURED FOR 120VAC OPERATION, AND FURNISHED WITH PROPERLY WIRED CORD AND PLUG, SPECIFIED LAMP, AND ANY SCHEDULED ACCESSORIES. THE LIGHTING DESIGN CONSULTANT MAY RETAIN THE SAMPLES UNTIL SUBSTANTIAL COMPLETION OF THE PROJECT. ALLOW TWO WEEKS FROM DATE OF RECEIPT FOR THOROUGH EXAMINATION AND REVIEW BY THE ARCHITECT AND LIGHTING DESIGNER.
- ii. SAMPLE FIXTURES MUST BE PROVIDED FOR ALL PROPOSED FIXTURE SUBSTITUTES.
- iii. FIXTURES INSTALLED, AS PART OF THE WORK SHALL BE IDENTICAL TO THE APPROVED SAMPLE. THE SAMPLES THEMSELVES SHALL NOT BE INSTALLED ON THE PROJECT.
- iv. IN THE EVENT THAT THE SUBMITTED SAMPLES ARE DISAPPROVED, THE FIXTURES WILL BE RETURNED TO THE CONTRACTOR TO IMMEDIATELY MAKE A NEW SUBMITTAL OF A FIXTURE OR FIXTURE MEETING THE REQUIREMENTS.
- v. ALL SHIPPING CHARGES (ROUND-TRIP) ARE TO BE PRE-PAID BY THE CONTRACTOR.
9. MOCKUPS
- a. IF REQUESTED, THE CONTRACTOR SHALL PREPARE MOCKUPS ACCORDING TO THE DIRECTION OF THE ARCHITECT, LANDSCAPE ARCHITECT, AND LIGHTING DESIGN CONSULTANT. A MINIMUM OF (2) MOCKUPS ANTICIPATED.
- b. MOCKUPS ARE TO BE PRESERVED AND PROTECTED UNTIL SUBSTANTIAL COMPLETION, UNLESS OTHERWISE DIRECTED IN WRITING BY THE ARCHITECT.
10. LIGHTING FIXTURE PRICING AND SUBSTITUTIONS
- a. THE CONTRACTOR SHALL BASE LIGHTING FIXTURE BIDS ON THE MANUFACTURERS LISTED IN THE FIXTURE SCHEDULE.
- b. BIDS SHALL INCLUDE UNIT PRICING FOR ALL FIXTURES, AND FIXTURES ADDED OR DELETED FROM THE PROJECT SHALL BE ACCOUNTED FOR AT THAT PRICE.
- c. ANY SUBMITTALS FOR COST-REDUCTION OR VALUE-ENGINEERING ALTERNATES SHALL INCLUDE A TABLE LISTING FIXTURE TYPE, SCHEDULED MANUFACTURER AND PART NUMBER, UNIT PRICE FOR THE SCHEDULED PRODUCT, PROPOSED ALTERNATE PRODUCT, AND UNIT PRICING FOR THE PROPOSED ALTERNATE.
- d. ALL REQUIRED UNIT PRICING SHALL BE CONTRACTOR NET, AND SHALL LIST EQUIPMENT PRICES SEPARATE FROM THOSE FOR INSTALLATION OR MISCELLANEOUS ELECTRICAL COSTS.
- e. THE CONTRACTOR SHALL SUBMIT OPERABLE FIXTURE SAMPLES FOR FIXTURE TYPES FOR WHICH A SUBSTITUTE IS PROPOSED, CONCURRENT WITH THE INITIAL SUBMITTAL OF FIXTURE DATA OR SHOP DRAWINGS. THE CONTRACTOR MAY, IN ADVANCE, SUBMIT A LIST OF THOSE PROPOSED ALTERNATES TO THE ARCHITECT AND LIGHTING DESIGN CONSULTANT TO DETERMINE IF THE SAMPLE REQUIREMENT MAY BE WAIVED FOR ANY OF THOSE FIXTURE TYPES.
11. FOCUS AIMING AND ADJUSTMENTS
- a. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, LIFTS, LADDERS AND OTHER MATERIALS REQUIRED TO AIM AND ADJUST LIGHTING FIXTURES ACCORDING TO THE LIGHTING DESIGN CONSULTANT'S INTENT AND UNDER THE CONSULTANT'S DIRECTION. CREWS PROVIDED TO WORK WITH THE CONSULTANT SHALL BE ABLE TO COMMUNICATE EFFECTIVELY IN ENGLISH.
- b. AT MINIMUM, ALLOW A MINIMUM OF 4 MINUTES TO AIM EACH ADJUSTABLE LIGHTING FIXTURE, PLUS ADDITIONAL TIME AS REQUIRED TO RELOCATE LADDERS, ALLOW ADDITIONAL TIME WHERE HIGH-REACH LIFTS ARE REQUIRED, OR WHERE OBSTRUCTIONS INTERFERE WITH ACCESS.
- c. PRIOR TO AIMING AND ADJUSTMENT, THE CONTRACTOR SHALL VERIFY THAT:
- i. ALL FIXTURES ARE INSTALLED AND OPERABLE.
- ii. THE SPECIFIED LAMP HAS BEEN INSTALLED IN EACH FIXTURE, INCLUDING WATTAGE, BEAM SPREAD AND COLOR TEMPERATURE.
- iii. ANY SPECIFIED ACCESSORIES INCLUDING LENSES, LOUVERS, AND COLOR FILTERS HAVE BEEN INSTALLED.
- iv. SPARES, IF APPLICABLE, ARE AVAILABLE ON-SITE FOR EACH LAMP TYPE.
- v. THE CREW IS EQUIPPED WITH ANY NECESSARY TOOLS NECESSARY TO ACCESS, ADJUST AND SECURELY LOCK ALL FIXTURE TYPES.
- vi. ANY PERSONNEL LIFTS TO BE USED ARE OPERABLE AND, IF BATTERY-OPERATED, FULLY CHARGED.
- vii. ANY NECESSARY PROTECTIVE MATERIALS ARE IN PLACE AT FLOOR SURFACES WHERE LADDERS OR LIFTS ARE TO BE USED.
- d. THE CONTRACTOR SHALL CONTACT THE ARCHITECT AND LIGHTING DESIGN CONSULTANT AT LEAST TWO WEEKS IN ADVANCE TO COORDINATE AND SCHEDULE FOCUS AIMING AND ADJUSTMENT WORK SESSIONS. ALL FOCUS AIMING WORK SESSIONS SHALL BE SCHEDULED TO OCCUR AFTER DUSK. THE GENERAL WORK OF THE PROJECT SHALL BE COORDINATED TO SO THAT INCOMPATIBLE WORK IS NOT SCHEDULED DURING THE SESSIONS, AND SO THAT ALL NECESSARY AREAS OF THE PROJECT ARE ACCESSIBLE DURING THE SESSIONS.
12. PAINTING
- a. ALL SURFACE-MOUNTED EXPOSED CONDUIT, BOTH RIGID AND FLEXIBLE, MUST BE PAINTED TO MATCH THE SURFACE TO WHICH IT IS ATTACHED.
- b. ANY SCREWS, FASTENERS OR OTHER HARDWARE, WHICH MUST BE MANIPULATED FOR FIXTURE ADJUSTMENT OR MAINTENANCE, SHALL BE PROTECTED FROM BEING FIXED IN PLACE BY PAINT.
13. LANDSCAPE MAINTENANCE COORDINATION
- a. ALL CONDUIT RUNS, JUNCTION BOXES, MOUNTING DEVICES, AND LIGHTING FIXTURES INSTALLED IN LANDSCAPE PLANTERS MUST BE CAREFULLY INTEGRATED INTO THE PLANTING PLAN. ALL EXPOSED HARDWARE MUST BE PROPERLY PROTECTED FROM THE LANDSCAPE ELEMENTS.
- b. ALL CLIPPINGS, MULCH, BARK COVERINGS, AND OTHER LANDSCAPE GROUND COVER MATERIALS MUST BE REMOVED FROM ALL AREAS ADJACENT TO THE LIGHTING FIXTURES PRIOR TO THE FOCUS AIMING AND ADJUSTMENT WORK SESSIONS. CAREFUL COORDINATION WITH THE LANDSCAPE CONTRACTOR IS REQUIRED BEFORE, DURING, AND AFTER LIGHTING WORK SESSIONS.
- c. ALL LIGHTING FIXTURES MUST BE INSPECTED AFTER INSTALLATION TO DETERMINE IF ADJACENT SPRINKLERS COULD CREATE WATER DAMAGE. IF WATER DAMAGE COULD BE A POSSIBILITY, COORDINATE WITH THE LANDSCAPE CONTRACTOR THE POTENTIAL RELOCATION OF SPRINKLERS OR OTHER IRRIGATION DEVICES.
14. PRIOR TO SUBSTANTIAL COMPLETION, ALL EXPOSED COMPONENTS SHALL BE CLEANED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS TO REMOVE ALL DUST, PAINT, FINGERPRINTS OR OTHER DEBRIS OR RESIDUE FROM ADJACENT WORK.
15. WARRANTY. FURNISH GUARANTEES COVERING ALL WORK IN ACCORDANCE WITH DIVISION 01 AND THE GENERAL REQUIREMENTS OF THE CONTRACTOR.

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

CONSULTANT:



PROJECT NUMBER: 218295

**CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE**

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

**GENERAL
EXTERIOR LIGHTING
REQUIREMENTS**

DRAWN BY: Author

SHEET:

LTO.02
DESIGN REVIEW
04/18/19

LIGHTING FIXTURE SCHEDULE													
FIXTURE TYPE	DESCRIPTION	FINISH	MOUNTING	MANUFACTURER PRODUCT CODE	LIGHT SOURCE	POWER SUPPLY	FIXT. WATTS (EACH OR PER FOOT)	INPUT WATTS (EACH OR PER FOOT)	FIXTURE VOLTAGE	CONTROL METHOD	DESIGNED REQUIRED MINIMUM DIMMING RANGE	LOCATION	FIXTURE NOTES
AA1	EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT	BRONZE	STAKE MOUNTED	WAC HOUSING: 5211-30-BZ	INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	REMOTE	35	35	120V PRIMARY/ 12V SECONDARY	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	DIMMING LEVEL AS REQUIRED	FAÇADE UPLIGHT	
AA2	EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIEL ADJUSTABLE LUMEN OUTPUT	BRONZE	STAKE MOUNTED	WAC HOUSING: 5211-30-BZ	INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	REMOTE	35	35	120V PRIMARY/ 12V SECONDARY	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	DIMMING LEVEL AS REQUIRED	COURTYARD FAÇADE UPLIGHT	NOT INCLUDED IN PACKAGE
AA3	EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT	BRONZE	STAKE MOUNTED	WAC HOUSING: 5211-30-BZ	INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	REMOTE	35	35	120V PRIMARY/ 12V SECONDARY	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	DIMMING LEVEL AS REQUIRED	ENTRY TREES	
AA4	EXTERIOR RATED LOW VOLTAGE ADJUSTABLE LED ACCENT LIGHT WITH DETACHABLE SHROUD, FIELD ADJUSTABLE OPTICS, AND FIELD ADJUSTABLE LUMEN OUTPUT	BRONZE	STAKE MOUNTED	WAC HOUSING: 5211-30-BZ	INTEGRAL LED BEAM: 15° - 60° CCT: 3000°K CRI: 85 LUMENS: 740-2000	REMOTE	35	35	120V PRIMARY/ 12V SECONDARY	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	DIMMING LEVEL AS REQUIRED	GENERAL SITE TREES	
BB1	36" LED BOLLARD WITH ASYMMETRICAL OPTICS	STANDARD	SURFACE MOUNTED TO BURIED CONCRETE PAD	INVUE ARBOR ABB-B2-LED-36-D1-A-<FINISH>-8030 ACCESSORIES: ABAnchor - ANCHOR BOLT KIT AND TEMPLATE	INTEGRAL LED BEAM: ASYMMETRICAL CCT: 3000°K CRI: 80 LUMENS: 848		23	23	120/277V	0-10V	DIMMING LEVEL AS REQUIRED	SITE PATHWAYS	
BB2	EXTERIOR RATED 20" LED PATHLIGHT WITH DIRECT DOWNLIGHT MOUNTED TO BURIED CONCRETE BASE	BRASS/COPPER SHADE	SURFACE MOUNTED TO BURIED CONCRETE PAD	BEACHSIDE LIGHTING FIXTURE: R3A-20"-12V-8W-GS2	INTEGRAL LED BEAM: TYPE 5 DOWN ONLY CCT: 3000°K CRI: 80 LUMENS: N/A	REMOTE	8	8	120V PRIMARY/ 12V SECONDARY	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	DIMMING LEVEL AS REQUIRED	AL COURTYARD	NOT INCLUDED IN PACKAGE
BB3	EXTERIOR RATED LOW VOLTAGE 30" LED PATHWAY LIGHT WITH 90DEGREE SHROUD, HONEYCOMB LOUVER, AND STAKE MOUNTING	SATIN BRONZE	STAKE MOUNTED	BK LIGHTING HOUSING: SF-30-L-LED-E65-MFL-A9-BZP-11-B-PP18B-SF	INTEGRAL LED BEAM: 23° CCT: 3000°K CRI: 90 LUMENS:	REMOTE	7	7	120V PRIMARY/ 12V SECONDARY	MAGNETIC LOW VOLTAGE/ FORWARD PHASE	DIMMING LEVEL AS REQUIRED	GARDEN AREA	
PP1	16' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD	STANDARD	POLE MOUNTED	MCGRAW-EDISON GALLEON HEAD: GLEON-AF-01-LED-E1-T4 FT-<FINISH>-8030 ACCESSORIES:LS/HSS FIELD INSTALLED HOUSE SIDE SHIELD POLE: SSA-4-<THICKNESS>-15-W-<FINISH>-3-1 POLE HEIGHT 15'	INTEGRAL LED BEAM: TYPE 4 OPTICS WITH FORWARD THROW CCT: 3000°K CRI: 80 LUMENS: 6,064		59	59	120/277V	0-10V	DIMMING LEVEL AS REQUIRED	DRIVE LANE	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLAINCE.
PP2	14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD	STANDARD	POLE MOUNTED	INVUE ARBOR HEAD: ARB-B2-LED-D1-T4-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'	INTEGRAL LED BEAM: TYPE 4 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691		48	48	120/277V	0-10V	DIMMING LEVEL AS REQUIRED	ENTRY TURNAROUND AND PARKING	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLAINCE.
PP3	14' POLE MOUNTED SINGLE HEAD LED LUMINAIRE WITH TYPE 4 FORWARD THROW OPTICS AND HOUSE SIDE SHIELD	STANDARD	POLE MOUNTED	INVUE ARBOR HEAD: ARB-B1-LED-D1-T5-<FINISH>-8030 POLE: RSA-4-<THICKNESS>-12-N-<FINISH>-3-X POLE HEIGHT: 12' OVERALL HEIGHT: 14'	INTEGRAL LED BEAM: TYPE 5 OPTICS CCT: 3000°K CRI: 80 LUMENS: 4691		24	24	120/277V	0-10V	DIMMING LEVEL AS REQUIRED	FRONT COURTYARD	POLE SPECIFICATION TO BE VERIFIED BY LICENCES ENGINEER FOR CODE COMPLAINCE.
WW1	WET LISTED 16" LED WALL MOUNTED DECORATIVE LANTERN LIGHT	BRONZE	WALL MOUNTED	FEISS URBANDALE HOUSING: OL13702ANBZ-L1	INTEGRAL LED BEAM: 180° CCT: 2700°K CRI: 90 LUMENS: 1915		26	26	120V	VERIFY WITH MANUFACTURER	DIMMING LEVEL AS REQUIRED	FAÇADE	DIMENSIONS: 10" X 16.25" X 8"
WW2	WET LISTED 23" LED WALL MOUNTED DECORATIVE LANTERN LIGHT	BRONZE	WALL MOUNTED	FEISS URBANDALE HOUSING: OL13703ANBZ-L1	INTEGRAL LED BEAM: 180° CCT: 2700°K CRI: 90 LUMENS: 1915		26	26	120V	VERIFY WITH MANUFACTURER	DIMMING LEVEL AS REQUIRED	FAÇADE	DIMENSIONS: 10" X 23" X 8"

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

CONSULTANT:



PROJECT NUMBER: 218295

CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

LIGHTING FIXTURE
SCHEDULE

DRAWN BY: Author

SHEET:

LTO.11
DESIGN REVIEW
04/18/19

GENERAL SHEET NOTES

1. VERIFY MOUNTING LOCATIONS AND HEIGHTS OF ALL DEVICES WITH ARCHITECT PRIOR TO INSTALLATION.
2. ALL FIXTURE AND CONTROL LOCATIONS MUST BE VERIFIED BY THE LIGHTING CONSULTANT AT THE JOBSITE PRIOR TO ROUGH-IN.
3. CONTROL LOOPING INDICATES CONTROL ZONE DESIGN INTENT ONLY. REFER TO ELECTRICAL DRAWINGS FOR DIMMING, SWITCHING AND CIRCUITRY INFORMATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND EQUIPMENT THAT IS NECESSARY FOR THE FOCUS AIMING OF ADJUSTABLE LIGHTING FIXTURES AND THE PROGRAMMING OF LIGHTING PRESETS OR EFFECTS PER THE DIRECTION OF THE LIGHTING DESIGN CONSULTANT.
5. ELECTRICAL CONTRACTOR, FIXTURE SUPPLIER, AND LAMP SUPPLIER MUST VERIFY THAT ALL LED LAMPS ARE COMPATIBLE WITH FIXTURE TRIM HOUSINGS, LAMP SOCKETS, LOW VOLTAGE TRANSFORMERS, AND ELECTRICAL DIMMING SYSTEMS PRIOR TO PLACING ANY LIGHTING EQUIPMENT ORDERS AFTER FIXTURE SHOP DRAWING SUBMITTALS ARE APPROVED. LAMPS SHOULD BE OPERABLE AT FULL OR DIMMED INTENSITY WITH NO VISUALLY PERCEIVED FLICKERING WHEN ALL LAMPS ON THE CIRCUIT ARE ENERGIZED.

CONSULTANT:



PROJECT NUMBER: 210295

**CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE**

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

**OVERALL SITE
LIGHTING**

DRAWN BY: Author

SHEET:

LT1.00
DESIGN REVIEW
04/18/19

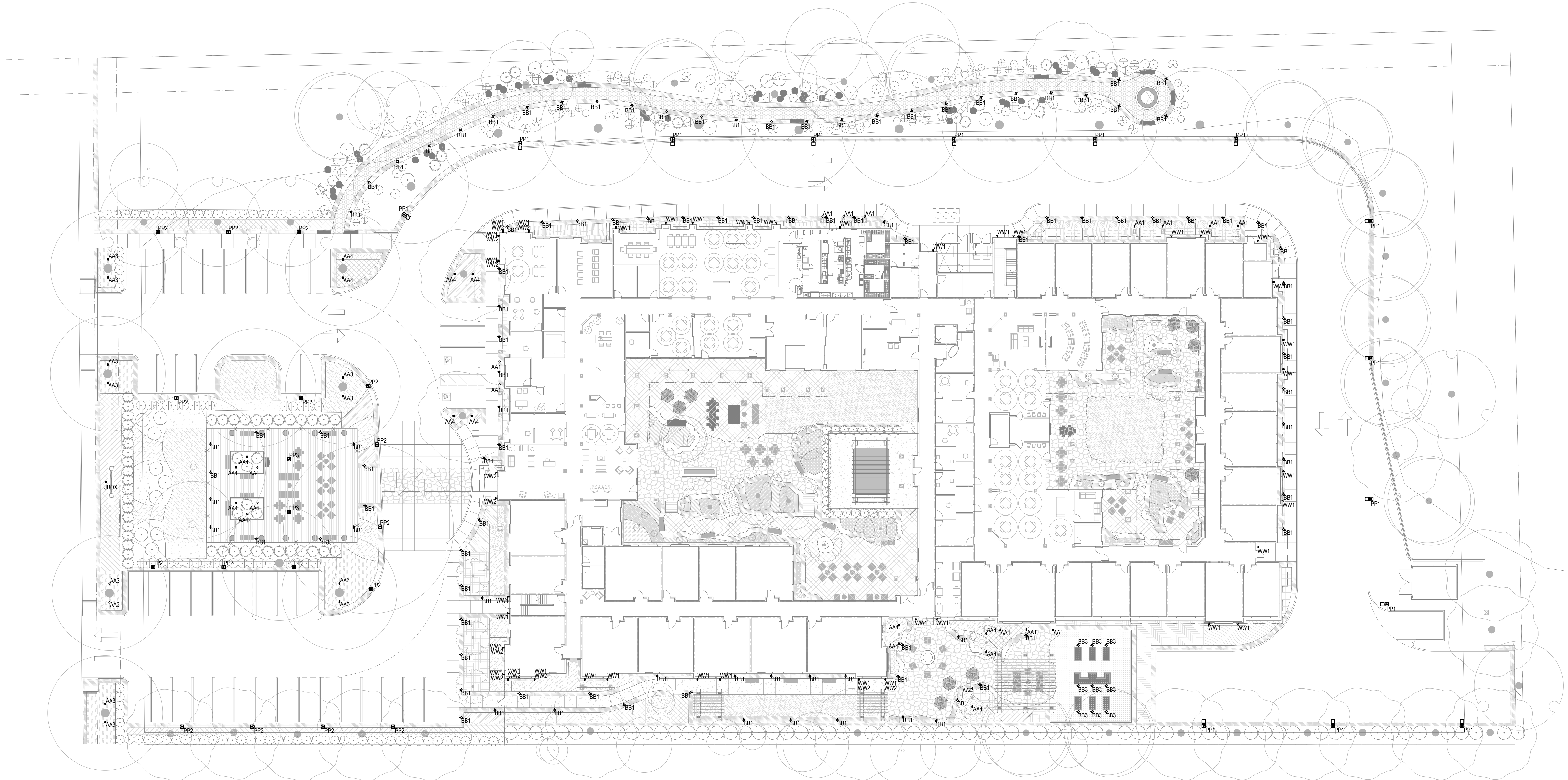
THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

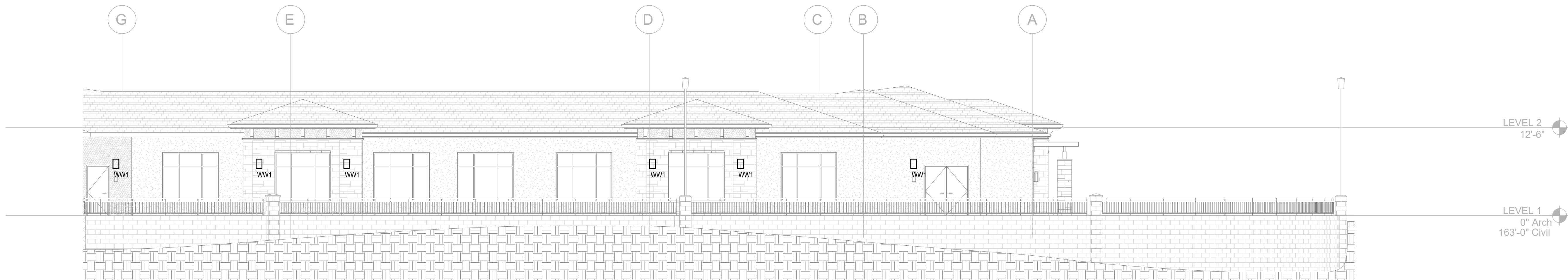
ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY



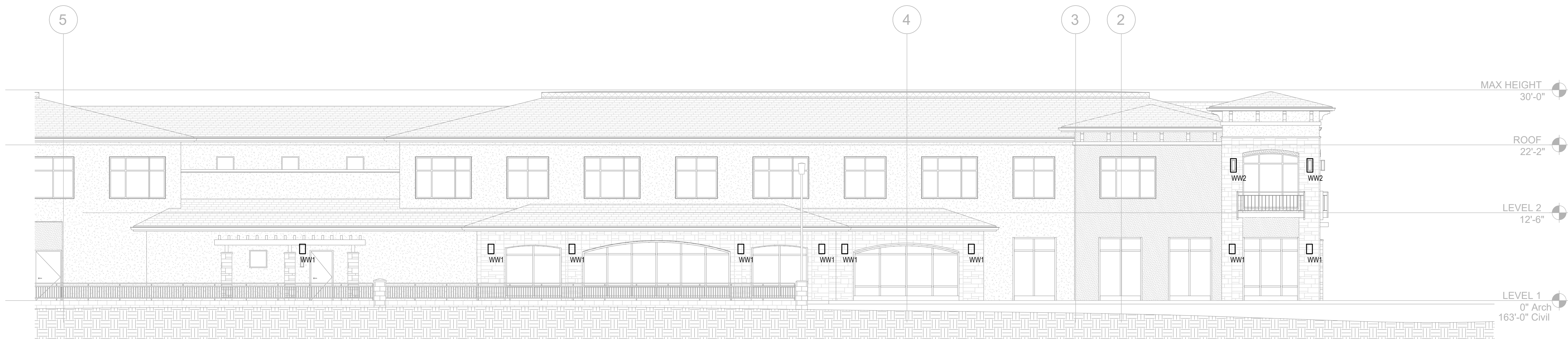
1 OVERALL SITE LIGHTING
LT1.00
1" = 20'-0"
BAR IS 3" LONG WHEN PRINTED AT FULL SCALE



1 EAST RETAINING WALL
LT5.00 1/8" = 1'-0" BAR IS 3" LONG WHEN PRINTED AT FULL SCALE



2 NORTH RETAINING WALL - EAST
LT5.00 1/8" = 1'-0" BAR IS 3" LONG WHEN PRINTED AT FULL SCALE



3 NORTH RETAINING WALL - WEST
LT5.00 1/8" = 1'-0" BAR IS 3" LONG WHEN PRINTED AT FULL SCALE

GENERAL SHEET NOTES

1. VERIFY MOUNTING LOCATIONS AND HEIGHTS OF ALL DEVICES WITH ARCHITECT PRIOR TO INSTALLATION.
2. ALL FIXTURE AND CONTROL LOCATIONS MUST BE VERIFIED BY THE LIGHTING CONSULTANT AT THE JOBSITE PRIOR TO ROUGH-IN.
3. CONTROL LOOPING INDICATES CONTROL ZONE DESIGN INTENT ONLY. REFER TO ELECTRICAL DRAWINGS FOR DIMMING, SWITCHING AND CIRCUITRY INFORMATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND EQUIPMENT THAT IS NECESSARY FOR THE FOCUS AIMING OF ADJUSTABLE LIGHTING FIXTURES AND THE PROGRAMMING OF LIGHTING PRESETS OR EFFECTS PER THE DIRECTION OF THE LIGHTING DESIGN CONSULTANT.
5. ELECTRICAL CONTRACTOR, FIXTURE SUPPLIER, AND LAMP SUPPLIER MUST VERIFY THAT ALL LED LAMPS ARE COMPATIBLE WITH FIXTURE TRIM HOUSINGS, LAMP SOCKETS, LOW VOLTAGE TRANSFORMERS, AND ELECTRICAL DIMMING SYSTEMS PRIOR TO PLACING ANY LIGHTING EQUIPMENT ORDERS AFTER FIXTURE SHOP DRAWING SUBMITTALS ARE APPROVED. LAMPS SHOULD BE OPERABLE AT FULL OR DIMMED INTENSITY WITH NO VISUALLY PERCEIVED FLICKERING WHEN ALL LAMPS ON THE CIRCUIT ARE ENERGIZED.

CONSULTANT:

PROJECT NUMBER: 218295

CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

EXTERIOR SITE
LIGHTING
ELEVATIONS

DRAWN BY: Author

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

SHEET:
LT5.00
DESIGN REVIEW
04/18/19



1 WEST ELEVATION - ASSISTED LIVING
LT5.01 1/8" = 1'-0" BAR IS 3" LONG WHEN PRINTED AT FULL SCALE



2 SOUTH ELEVATION - ASSISTED LIVING
LT5.01 1/8" = 1'-0" BAR IS 3" LONG WHEN PRINTED AT FULL SCALE



3 SOUTH ELEVATION - MEMORY CARE
LT5.01 1/8" = 1'-0" BAR IS 3" LONG WHEN PRINTED AT FULL SCALE

GENERAL SHEET NOTES

1. VERIFY MOUNTING LOCATIONS AND HEIGHTS OF ALL DEVICES WITH ARCHITECT PRIOR TO INSTALLATION.
2. ALL FIXTURE AND CONTROL LOCATIONS MUST BE VERIFIED BY THE LIGHTING CONSULTANT AT THE JOBSITE PRIOR TO ROUGH-IN.
3. CONTROL LOOPING INDICATES CONTROL ZONE DESIGN INTENT ONLY. REFER TO ELECTRICAL DRAWINGS FOR DIMMING, SWITCHING AND CIRCUITRY INFORMATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND EQUIPMENT THAT IS NECESSARY FOR THE FOCUS AIMING OF ADJUSTABLE LIGHTING FIXTURES AND THE PROGRAMMING OF LIGHTING PRESETS OR EFFECTS PER THE DIRECTION OF THE LIGHTING DESIGN CONSULTANT.
5. ELECTRICAL CONTRACTOR, FIXTURE SUPPLIER, AND LAMP SUPPLIER MUST VERIFY THAT ALL LED LAMPS ARE COMPATIBLE WITH FIXTURE TRIM HOUSINGS, LAMP SOCKETS, LOW VOLTAGE TRANSFORMERS, AND ELECTRICAL DIMMING SYSTEMS PRIOR TO PLACING ANY LIGHTING EQUIPMENT ORDERS AFTER FIXTURE SHOP DRAWING SUBMITTALS ARE APPROVED. LAMPS SHOULD BE OPERABLE AT FULL OR DIMMED INTENSITY WITH NO VISUALLY PERCEIVED FLICKERING WHEN ALL LAMPS ON THE CIRCUIT ARE ENERGIZED.

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

CONSULTANT:

PROJECT NUMBER: 218295

CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

EXTERIOR LIGHTING
ELEVATIONS

DRAWN BY: Author

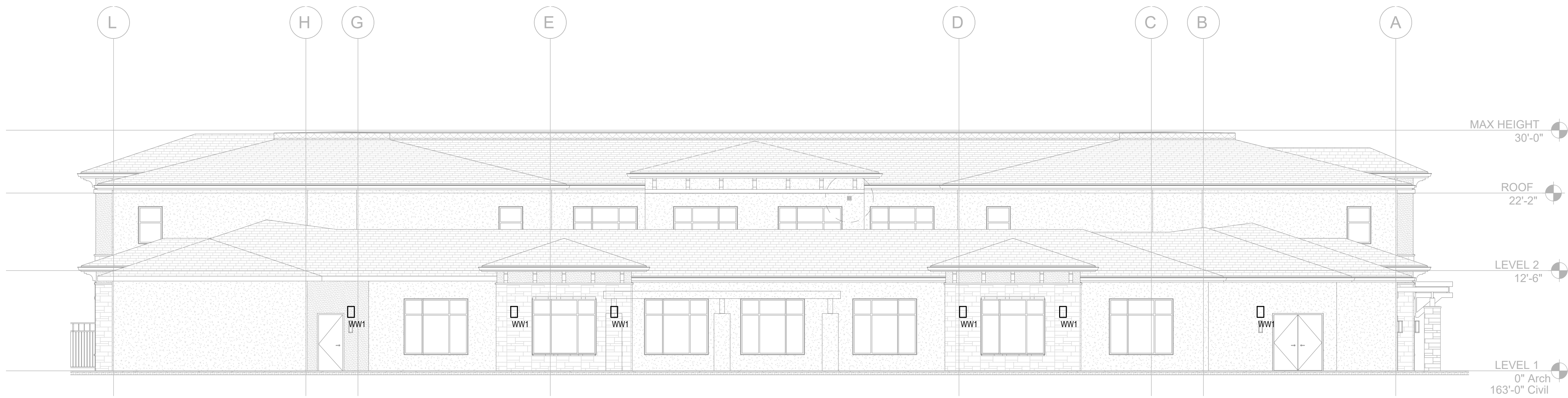
SHEET:
LT5.01
DESIGN REVIEW
04/18/19



1
LT5.02
OVERALL NORTH ELEVATION - EAST
1/8" = 1'-0"
BAR IS 3" LONG WHEN PRINTED AT FULL SCALE



2
LT5.02
OVERALL NORTH ELEVATION - WEST
1/8" = 1'-0"
BAR IS 3" LONG WHEN PRINTED AT FULL SCALE



3
LT5.02
OVERALL EAST ELEVATION
1/8" = 1'-0"
BAR IS 3" LONG WHEN PRINTED AT FULL SCALE

GENERAL SHEET NOTES

1. VERIFY MOUNTING LOCATIONS AND HEIGHTS OF ALL DEVICES WITH ARCHITECT PRIOR TO INSTALLATION.
2. ALL FIXTURE AND CONTROL LOCATIONS MUST BE VERIFIED BY THE LIGHTING CONSULTANT AT THE JOBSITE PRIOR TO ROUGH-IN.
3. CONTROL LOOPING INDICATES CONTROL ZONE DESIGN INTENT ONLY. REFER TO ELECTRICAL DRAWINGS FOR DIMMING, SWITCHING AND CIRCUITRY INFORMATION.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND EQUIPMENT THAT IS NECESSARY FOR THE FOCUS AIMING OF ADJUSTABLE LIGHTING FIXTURES AND THE PROGRAMMING OF LIGHTING PRESETS OR EFFECTS PER THE DIRECTION OF THE LIGHTING DESIGN CONSULTANT.
5. ELECTRICAL CONTRACTOR, FIXTURE SUPPLIER, AND LAMP SUPPLIER MUST VERIFY THAT ALL LED LAMPS ARE COMPATIBLE WITH FIXTURE TRIM HOUSINGS, LAMP SOCKETS, LOW VOLTAGE TRANSFORMERS, AND ELECTRICAL DIMMING SYSTEMS PRIOR TO PLACING ANY LIGHTING EQUIPMENT ORDERS AFTER FIXTURE SHOP DRAWING SUBMITTALS ARE APPROVED. LAMPS SHOULD BE OPERABLE AT FULL OR DIMMED INTENSITY WITH NO VISUALLY PERCEIVED FLICKERING WHEN ALL LAMPS ON THE CIRCUIT ARE ENERGIZED.

CONSULTANT:

PROJECT NUMBER: 218295

CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

EXTERIOR LIGHTING
ELEVATIONS

DRAWN BY: Author

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

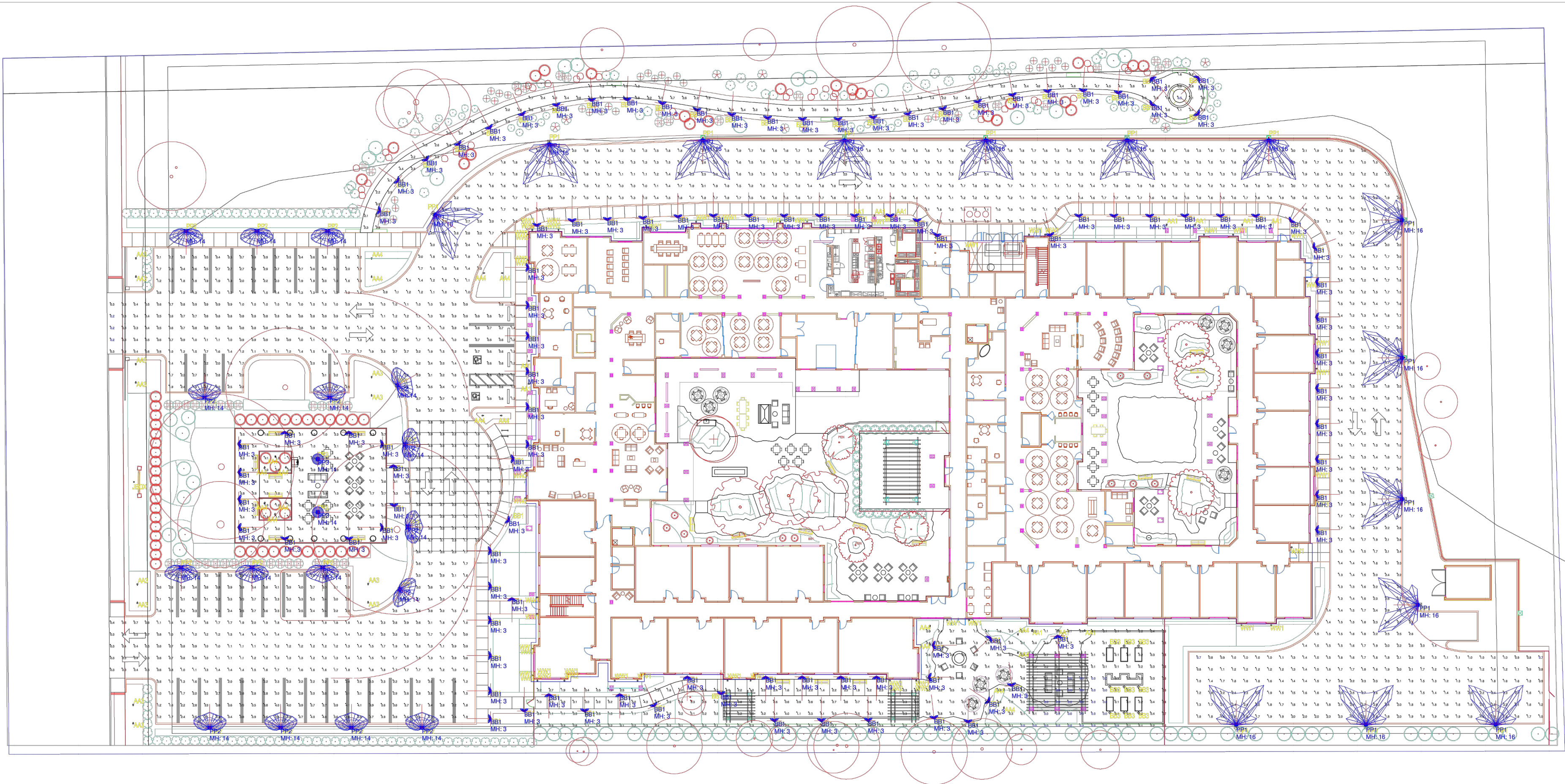
THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

SHEET:
LT5.02
DESIGN REVIEW
04/18/19



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Driving Lanes	Illuminance	Fc	1.70	3.1	0.7	2.43	4.43
Parking Area	Illuminance	Fc	1.87	4.1	0.2	9.35	20.50
Seating Area	Illuminance	Fc	2.59	6.8	0.8	3.24	8.50
South Side	Illuminance	Fc	1.32	7.0	0.0	N.A.	N.A.
Walking Trail	Illuminance	Fc	3.62	6.6	0.5	7.24	13.20

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LLF	Description	Arr. Watts	Arr. Lum. Lumens
○	106	BB1	SINGLE	0.900	ABB-B2-LED-D1-A-8030	23	689
—□	14	PP1	SINGLE	0.900	GLEON-AF-01-LED-E1-T4FT-8030	59	5116
○	16	PP2	SINGLE	0.900	ARB-B2-LED-D1-T4-8030	48	3918
○	2	PP3	SINGLE	0.900	ARB-B1-LED-D1-T5-8030	21	1930

Standard Reflective Values (80/50/20) used in this Model

CONSULTANT:



PROJECT NUMBER: 218295

**CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE**

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

**SITE LIGHTING
CALCULATIONS**

DRAWN BY:

Author

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

SHEET:

LT9.01
DESIGN REVIEW
04/18/19

CONSULTANT:



PROJECT NUMBER: 218295

**CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE**

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

**SITE LIGHTING
CALCULATIONS**

DRAWN BY:

Author

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

SHEET:

LT9.02
DESIGN REVIEW
04/18/19

CONSULTANT:



PROJECT NUMBER: 218295

**CITRUS HEIGHTS
ASSISTED LIVING
& MEMORY CARE**

8220 SUNRISE BLVD
CITRUS HEIGHTS,
CA 95610



SHEET TITLE:

**SITE LIGHTING
CALCULATIONS**

DRAWN BY: Author

THIS DRAWING RELATES TO LIGHTING DESIGN INTENT ONLY. THE RUZIKA COMPANY DOES NOT ASSUME RESPONSIBILITY FOR STRUCTURAL INTEGRITY, BUILDING, RIGGING, CONSTRUCTION, FABRICATION, MATERIAL, OR EQUIPMENT.

THE RUZIKA COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE INABILITY OF CONTRACTORS' OR BUILDERS TO EXECUTE THE DESIGN PLANS.

ALL ELECTRICAL INFORMATION AND LOCAL ENERGY CODE COMPLIANCE FORMS TO BE PROVIDED BY A LICENSED ELECTRICAL ENGINEER OR ELECTRICAL CONTRACTOR.

ALL EQUIPMENT ATTACHMENT DETAILS AND STRUCTURAL LOAD CALCULATIONS MUST BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER.

FOR LIGHTING DESIGN INFORMATION ONLY

SHEET:
LT9.03
DESIGN REVIEW
04/18/19

720 NW Davis 503.221.1121 ☎
Suite 300 503.221.2077 ✉
Portland OR 97209 www.lrsarchitects.com

April 16, 2019

City of Citrus Heights
Planning Department
Attn: Alison Bermudez
6360 Fountain Square Drive
Citrus Heights, CA 95621

Re: Design Review: Description of Project

Project Name: Carefield Citrus Heights
LRS Project Number: 218295

Dear Ms. Bermudez,

Carefield Living builds and operates Residential Care Facilities for the Elderly (RCFE) offering "state of the art" assisted living and memory care. We are licensed by the California Department of Social Services, Community Care Licensing.

We house seniors over the age of 62 and aid them in their activities of daily living such as eating, bathing, dressing, toileting, transferring (walking) and medication management. The average age of our residents is 85 years old, and most of our residents come from the surrounding community.

We provide 3 meals per day in a common area dining room prepared in our kitchen. We also provide transportation services and physical, cognitive and social activity programs.

Our residents are monitored 24 hours a day by trained care staff and medication assistance staff. We do not provide skilled nursing or 24 hour per day medical care

Our primary services are provided on a 24 hour a day, 7 days a week basis. Visiting hours for residents and outside parties are from 8am to 8pm. Our doors are secured after hours from outside traffic for safety of residents.

Our residents reside in either the assisted living or memory care areas of our community, although we have many common areas that can be shared. Our memory care residents are housed in a portion of the property that is secured 24 hours a day for their security and well-being. Our "Lightfinder" memory care program was created by a noted expert in the field, and we also offer a signature memory enhancement program, "Silver Seeds" for our assisted living residents with early signs of mild cognitive impairment.

We maintain a full staff of community directors, including an Executive Director, Nurse Director, Dining Director, Activity Director, Maintenance Director and Marketing Director.

Our residents are offered a wide range of personalized lifestyle options and we pride ourselves in maintaining a close relationship with the greater community of which we are a part. Our goal for Carefield Living of Citrus



Heights is to meet the demand for senior living in the Citrus Heights community by addressing the individual needs of our residents, their families, our staff and the community at large.

Our motto is "Empowered Living in Connected Communities" and that is what we endeavor to provide.

Shannon McDonald on behalf of Carefield Living

July 5, 2018

Mr. Pat Brown
SH7 Citrus Heights, LLC
c/o Carefield Living
201 Lomas Santa Fe Drive Suite 450
Solana Beach, California 92075

Subject: Valley Elderberry Longhorn Beetle Habitat Assessment and Sanford's Arrowhead Survey for 8220 Sunrise Blvd., Citrus Heights, CA.

INTRODUCTION

On behalf of SH7 Citrus Heights, LLC, HELIX Environmental Planning, Inc. (HELIX) conducted a valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*) habitat assessment of the approximately 4.5-acre property located at 8220 Sunrise Boulevard in the City of Citrus Heights, California (APN 216-0090-012-0000; hereafter referred to as "property"). The purposes of the VELB habitat assessment were to inventory elderberry plants (*Sambucus* spp.) on the property as well as assess the suitability of the property to support VELB. Additionally, HELIX conducted a survey of an unnamed tributary to Cripple Creek (Creek) that occurs along the northern boundary of the property to determine presence/absence of Sanford's arrowhead (*Sagittaria sanfordii*). This letter report documents the methods and results of the assessment. **Attachment A** is a site location map.

ENVIRONMENTAL SETTING

The property is in an urban setting in the City of Citrus Heights, California in Sacramento County. The surrounding properties consist of a variety of residential and commercial land uses. There are no undeveloped lands in the vicinity of the property, although properties are large rural residential lots. The property itself is bordered by residential properties on the east and south sides, by Sunrise Boulevard on the west side, and by commercial development on the north side. Several homeless encampments are present on the property, as well as debris piles from illegal dumping.

The property currently supports a mixed woodland community dominated by native oaks with several non-native horticultural trees occurring near the western portion of the property in the location where several buildings have been removed. The understory consists primarily of non-native grassland. A disturbed wetland community occurs along the eastern edge of the property near the Creek.

METHODOLOGY

HELIX conducted a search of the California Natural Diversity Database (CNDDDB) maintained by the California Department of Fish and Wildlife (CDFW) for reported occurrences of VELB and Sanford's arrowhead within a one-mile radius of the property and conducted field surveys of the property to evaluate the property for the potential to support VELB and document presence/absence of Sanford's arrowhead. Biological surveys were conducted at the site by HELIX biologists on July 3, 2018. The methods of the VELB site assessment and plant survey are described below.

Valley Elderberry Longhorn Beetle Site Assessment

The VELB site assessment consisted of a desktop analysis and field surveys. The desktop analysis consisted of a search of the CNDDDB to determine if VELB has been documented on the property or within a one-mile radius of the property. HELIX Senior Biologist, George Aldridge, Ph.D., and HELIX Biologist Patrick Martin conducted an elderberry inventory of the property on July 3, 2018 according to the US Fish and Wildlife Service's (USFWS) *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999) and the current guidance in the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (USFWS 2017). During the surveys, all elderberry with at least one stem equal to or greater than one inch in diameter at ground level were inventoried. In addition, all elderberry stems were searched for presence/absence of VELB sign (exit holes, frass, etc.). The habitat surrounding the elderberry plants was also characterized for suitability to support VELB. The locations of the elderberry plants were mapped with a EOS Positioning System Arrow 100 sub-meter accurate Global Navigational Satellite System. Data were exported to ArcMap 10[®] and used to produce an elderberry location map provided in **Attachment B**.

Sanford's Arrowhead Survey

On July 3, 2018, Dr. Aldridge and Mr. Martin surveyed the segment of Creek that occurs along the northern boundary of the property for the presence of Sanford's arrowhead. The survey was conducted by wading the entire segment of the Creek adjacent to the site while visually searching for Sanford's arrowhead. The survey was conducted during the blooming season of Sanford's arrowhead, which is from May to November (CNPS 2018).

SPECIES OF INTEREST

Valley Elderberry Longhorn Beetle

The U.S. Fish and Wildlife Service (USFWS) adopted the final rule to list the valley elderberry longhorn beetle as a threatened species on August 8, 1980 (45 FR 52803). Critical habitat for the species was designated and published in 50 CFR §17.95. Two areas along the American River in the Sacramento metropolitan area have been designated as critical habitat for the beetle. The first area designated as critical habitat for this species is along the lower American River at River Bend Park (formerly Goethe Park) and Ancil Hoffman Park (American River Parkway Zone) and the second area is at the Sacramento Zone, an area about a half mile from the American River downstream from the American River Parkway

Zone. In addition, an area along Putah Creek, in Solano County, and the area west of Nimbus Dam along the American River Parkway, in Sacramento County, are considered essential habitat according to *The Valley Elderberry Longhorn Beetle Recovery Plan* (USFWS 1984). These critical habitat areas and essential habitat areas within the American River parkway and Putah Creek support large numbers of mature elderberry shrubs with extensive evidence of use by the beetle. The property is located outside of Critical Habitat and Essential Habitat for the beetle.

A final recovery plan was published by the USFWS in 1984 (USFWS 1984). The USFWS published a 90-day finding on a petition to delist the beetle on August 9, 2011 (76 FR 51929), and the proposed rule was published on October 2, 2012 (77 FR 60237). The 60-day comment period ended on December 3, 2012, but was reopened for additional comments until February 22, 2013 (78 FR 4812). The rule, if made final would remove the beetle from the List of Endangered and Threatened Wildlife and would remove the designation of critical habitat for the beetle. However, the delisting proposal was withdrawn September 17, 2014 (79 FR 55874), therefore, the valley elderberry longhorn beetle is currently listed as a threatened species.

Description

In general, longhorn beetles are characterized by elongate, cylindrical bodies with antennae often more than 2/3 of the body length. Valley elderberry longhorn beetles are stout-bodied.

When measured from the front end of the head to the end of the abdomen, males range in length from approximately 0.5 to 1 inch with antennae approximately the length of the body. Females are slightly more robust than males, reaching about 0.75 to 1 inch in length, with slightly shorter antennae. Adult males have a red-orange elytra with four elongate dark spots. The red-orange fades to yellow on some museum specimens. Adult females have dark colored elytra.

Life History

The elderberry shrub is the sole host plant for the valley elderberry longhorn beetle. Elderberries are locally common components of the remaining riparian forest and savannah landscapes, and to a lesser extent the mixed chaparral-foothill woodlands, of the Central Valley. The rate of occupancy by the beetle is reduced in elderberry shrubs in non-riparian habitats, indicating that riparian habitat is important for the beetle.

Use of elderberry shrubs by the wood-boring beetle is rarely obvious. Frequently, the only exterior evidence of the shrub's use by the beetle is an exit hole created by the larva emerging just prior to the pupal stage. Observations of elderberry shrubs along the Cosumnes River and in the Folsom Lake area indicate that larval beetles can be found in elderberry stems with no apparent exit holes; the larvae either succumb prior to constructing an exit hole, or do not develop sufficiently to construct one. Larvae appear to be distributed in stems which are 1 inch or greater in diameter at ground level and can occur in living stems. *The Valley Elderberry Longhorn Beetle Recovery Plan* (USFWS 1984) and Barr (1991) further describe the beetle's life history.

There are four life stages of this species: egg, larva, pupa, and adult. Most records for adults occur from late-April to mid-May (USFWS 2007). Adults feed on elderberry leaves and mate within the elderberry canopy. Adult females deposit eggs on or adjacent to a host shrub in April or May. Egg production varies and females lay between 16 and 180 eggs (USFWS 2007). The eggs hatch within a few days and the larvae bore into the wood of the host shrub and create a long feeding gallery in the pith of the stem. The larvae feed on the pith of the plant for one to two years. When a larva is ready to pupate, it chews an exit hole to the outside of the stem, plugs it with frass, and retreats into the feeding gallery to construct a pupal chamber from wood and frass. Larval metamorphosis occurs between December and April with the pupal stage lasting about a month. The adult remains in the chamber for several weeks after metamorphosis, and then emerges from the chamber through the exit hole.

Historical and Current Range

When the beetle was listed in 1980, the species was known from ten localities along the American River, the Merced River, and Putah Creek. By the time *The Valley Elderberry Longhorn Beetle Recovery Plan* was prepared in 1984, additional occupied localities had been found along the American River and Putah Creek. Currently, the beetle is known to occur from southern Shasta County to Fresno County. The range of the beetle extends throughout California's Central Valley and associated foothills. The majority of VELB have been documented below the 500-foot elevation contour of the Central Valley (USFWS 2017). All or portions of the following 31 counties are included: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Madera, Mariposa, Merced, Napa, Nevada, Placer, Sacramento, San Benito, San Joaquin, San Luis Obispo, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, and Yuba. There are about 190 records of this species, mostly based on exit holes.

The beetle is considered a poor disperser based on the spatial distribution of occupied shrubs (Barr 1991; Collinge *et al.* 2001). Huxel and Hastings (1999) used computer simulations of colonization and extinction patterns based on differing dispersal distances, and found that the short dispersal simulations best matched the 1997 census data. This suggests that dispersal and colonization are limited to nearby sites. At spatial scales greater than 6.2 miles, such as across watersheds, beetle occupancy appears to be strongly influenced by regional extinction and colonization processes, and colonization is constrained by limited dispersal (Collinge *et al.* 2001; Huxel and Hastings 1999). Except for one occasion, drainages examined by Barr that were occupied in 1991 remained occupied in 1997 (Collinge *et al.* 2001; Huxel and Hastings 1999). The exception was Stoney Creek, which was occupied in 1991 but not in 1997. Collinge *et al.* (2001) further found that while the rate of occupancy was similar, the number of sites examined containing elderberry and the density of elderberry at sites had decreased since the previous survey by Barr (1991), resulting in fewer occupied sites and groups. Studies suggest that the beetle is unable to recolonize drainages where it has been extirpated, because of its limited dispersal ability (Barr 1991; Collinge *et al.* 2001). These data suggest that drainages unoccupied by the beetle are likely to remain unoccupied, and that local extinctions are not likely to be recovered.

Population Structure

The beetle is an obligate specialist on elderberry shrubs and tends to have small populations occurring in low densities (Barr 1991; Collinge *et al.* 2001). It has been observed feeding on both blue and red elderberry ([*Sambucus nigra* ssp. *caerulea*]; [*S. racemosa* var. *racemosa*]; USFWS 1984; Barr 1991) with stems equal to or greater than one inch in diameter (Barr 1991). Sightings of adult beetles are rare and, in most circumstances, evidence of the beetle is derived from the observation of the exit holes left when adults emerge from elderberry stems. The beetle tends to occur in areas with higher elderberry densities but has lower exit hole densities than the closely-related California elderberry longhorn beetle ([*Desmocerus californicus californicus*]; Collinge *et al.* 2001).

CNDDDB Records in the Vicinity

There are no documented occurrences of VELB in the CNDDDB within a one-mile radius of the property (CNDDDB 2018).

Sanford's Arrowhead

Sanford's arrowhead has no federal or state listing status but has a California Native Plant Society designated California Rare Plant Rank of 1B.2 (fairly endangered in California [20-80% occurrences threatened]) and meets the criteria of a special-status species according to the California Environmental Quality Act (CEQA).

Sanford's arrowhead is a rhizomatous emergent (aquatic) herb that is found in shallow water within a variety of freshwater habitats, including standing or slow moving freshwater ponds, marshes, and ditches. The known range is within Butte, Del Norte, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties at elevations ranging from 0 to 2,100 feet above mean sea level. This species blooms from May to November (CNPS 2018).

CNDDDB Records in the Vicinity

There is one documented occurrence of Sanford's arrowhead in the CNDDDB within a one-mile radius of the property. Numerous Sanford's arrowhead plants were documented in July of 1994 in a tributary stream to Cripple Creek just east of Fair Oaks Boulevard between Oak Boulevard and Old Auburn Road. There are no other CNDDDB records for special-status species within a 1-mile radius of the property.

PERTINENT REGULATIONS

Federal Endangered Species Act

The USFWS enforces the provisions stipulated within the Federal Endangered Species Act of 1973 (hereafter, "FESA," 16 USC Section 1531 et seq.). Threatened and endangered species on the Federal list (50 Code of Federal Regulations (CFR) Section 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via FESA Section

7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant effect upon such species. Under FESA, habitat loss is considered to be an adverse effect to a species. In addition, said agency is required to determine whether the project is likely to jeopardize the continued existence of any species that is proposed for listing under FESA or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).

California Environmental Quality Act

Under the CEQA of 1970 (Public Resources Code Section 21000 et seq.), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special status species (Public Resources Code Section 21001(c)). These “special-status” species generally include those listed under FESA and CESA, and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed in this study regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity; plants ranked as 1A, 1B, and 2 are generally considered special-status species under CEQA.¹

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur. Thus CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use other than changing from one agricultural use to another, which allows CDFW to salvage listed plants that would otherwise be destroyed.

¹ The CNPS rare plant ranking system can be found online at < <http://www.cnps.org/cnps/rareplants/ranking.php>>

RESULTS

Valley Elderberry Longhorn Beetle Site Assessment

Several clumps of elderberry are present in the eastern portion of the site. The elderberry clumps are located adjacent to, but just outside of a narrow riparian corridor along the Creek. The dominant tree and shrub species within the riparian corridor include willow (*Salix* spp.), valley oak (*Quercus lobata*), and Oregon ash (*Fraxinus latifolia*) with an understory of Himalayan blackberry (*Rubus armeniacus*). The elderberry seedlings are located just outside of the riparian corridor in an upland setting composed of scattered oaks and horticultural trees with a non-native grassland understory.

During the July 3, 2018 site assessment, a clump of elderberry comprising a total of four separate elderberry plants was identified on the property. The clump of four plants contains a total of two stems equal to or greater than one inch in diameter at ground level as well as numerous smaller stems (approximately 120) that are less than one inch in diameter at ground level. The four elderberry plants are the remains of larger plants that have been cut off at ground level and subsequently re-sprouted as well as dozens of small seedlings. The cause of the damage to the elderberry is unknown; however, the site is fenced and presumably subject to unauthorized access by pedestrians. As noted in the setting section of this report, several homeless encampments are present on the site near the elderberry shrubs with footpaths passing through the elderberry shrubs. Human damage was also observed on several other trees on the site during the survey. Large branches had been removed from several trees on the site in addition to areas underneath trees which have been cleared to provide shade for homeless encampments. It is worth noting that HELIX biologists have surveyed this site previously and documented four elderberry shrubs in this location, usually with at least some damage due to harvesting of stems or other unknown reasons.

The following table summarizes the elderberry inventory from July 2018. Photos are provided in **Attachment C**, which show site conditions at the time of each survey.

Elderberry Inventory Table: July 2018

Location ID	Number of Plants	Number of stems by diameter (inches)			Exit holes (Y/N)	Riparian habitat (Y/N)
		≥1 - ≤3	>3 - <5	≥5		
1	1	--	--	--	N	N
2	1	--	--	--	N	N
3	1	1	--	--	N	N
4	1	1	--	--	N	N

No evidence of VELB (exit holes, frass, etc.) was noted on the elderberry plants on the property during the site visit. The elderberry stems that measured one inch were recent stump sprouts that were no more than 4 feet tall. All other young stems that measured less than one inch at the base were recent sprouts or seedlings that measured approximately 2 to 3 feet tall. There are no reported occurrences of VELB in the CNDDDB within a one-mile radius of the property. No other elderberry shrubs were observed on or near the property. Since the property is in an urban setting, which experiences disturbance from human habitation, with no significant undeveloped lands in the vicinity, it is unlikely that other elderberry shrubs occur in the vicinity other than scattered shrubs along creeks or in large rural residential parcels. Therefore, the elderberry plants on the property are believed to represent an isolated population.

Sanford's Arrowhead Survey

No Sanford's arrowhead plants were observed during the July 2018 surveys conducted during the blooming season for this species. The segment of creek adjacent to the property is potentially suitable for Sanford's arrowhead; however, this species does not currently occupy the creek. The creek is narrow (less than 6 feet wide in most places) and ranges from less than 6 inches deep to over 2 feet deep. Himalayan blackberry densely covers the creek banks along much of its length adjacent to the property. Fresh emergent vegetation in the creek consisted primarily of water plantain (*Alisma* spp.). The Creek contained standing water at the time of the survey in July 2018, although some sections were flowing slowly. No other potential habitat for Sanford's arrowhead is present on the property.

DISCUSSION

Valley Elderberry Longhorn Beetle

Based on the results of the site assessment, the site is currently unoccupied by VELB although some elderberry plants are present. No sign of VELB was observed on the elderberry plants on the property during the survey. The elderberry plants on the property represent an isolated population within an urban setting and are subject to routine disturbance by unauthorized pedestrians, whom also likely harvest the berries for food.

VELB is unlikely to colonize the property in the future because the elderberry plants on the property are isolated and not part of a complex of contiguous riparian habitats with elderberry shrubs. As described above in the section discussing the historical and current range of the VELB, the beetle is poor at dispersal and its ability to colonize unoccupied habitat is extremely limited (Barr 1991; Collinge et al. 2001). Because there are no elderberry shrubs near the site, no known records of VELB within a 1-mile radius of the property, the site is situated in an urban area and VELB has limited dispersal capability, there are no identifiable potential opportunities for VELB to disperse into the site currently or in the future.

For the reasons stated above, it is our professional opinion that VELB does not occur on the site and would not be expected to disperse into the site in the future. Any development proposed on the site would have no effect on VELB.

Sanford's Arrowhead

The segment of creek along the northern boundary of the property provides suitable habitat for Sanford's arrowhead but this species is not currently present. Sanford's arrowhead was not observed during a focused survey conducted during the blooming season. This species is not currently present in the segment of Creek along the northern boundary of the site. Therefore, no impacts to Sanford's arrowhead are anticipated as a result of the proposed project.

If you have any questions, feel free to contact me at (916) 365-8700 or StephenS@helixepi.com.

Sincerely,

A handwritten signature in black ink that reads "Stephen Stringer". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

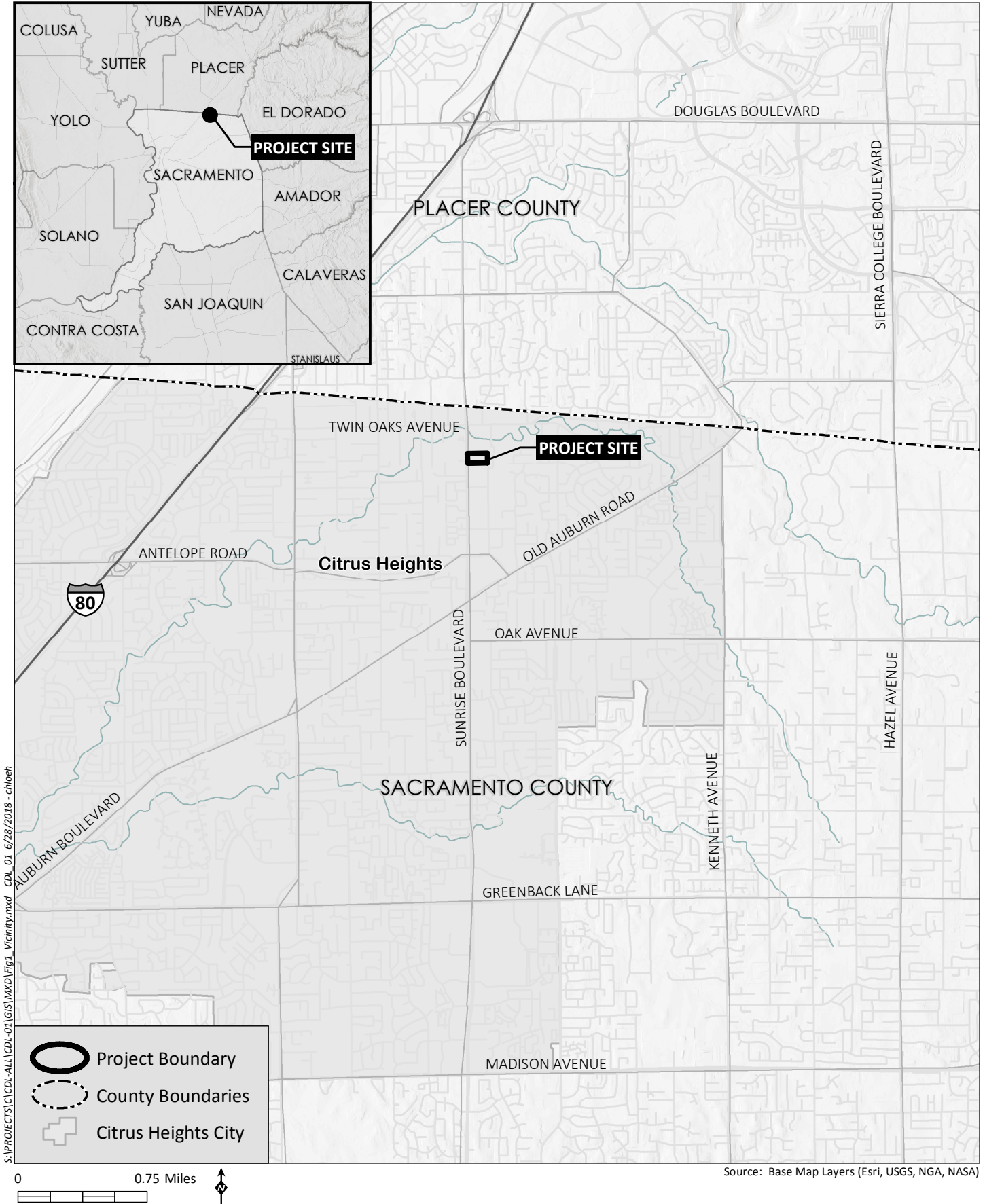
Stephen Stringer, M.S.
Senior Scientist

Attachments:

- A: Site location Map*
- B: Elderberry Shrub Location Map*
- C: Photos*

Literature Cited

- Barr, C.B. 1991. The distribution, habitat and status of the valley elderberry longhorn beetle, *Desmocerus californicus dimorphus*. U.S. Fish and Wildlife Service, Sacramento
- California Natural Diversity Data Base (CNDDB). 2018. California Department of Fish and Game, Natural Diversity Database Biogeographic Data Branch. Sacramento, California. Last accessed July 2018.
- California Native Plant Society, Rare Plant Program (CNPS). 2018. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 3 July 2018].
- Collinge, S. K., M. Holyoak, C. B. Barr, and J. T. Marty. 2001. Riparian habitat fragmentation and population persistence of the threatened valley elderberry longhorn beetle in Central California. *Biological Conservation* 100:103-113.
- Huxel, G.R. and A. Hastings. 1999. Habitat loss, fragmentation, and restoration. *Restoration Ecology* 7:1-7.
- U.S. Fish and Wildlife Service (USFWS). 1980. Listing the Valley Elderberry Longhorn Beetle as Threatened with Critical Habitat; Final Rule. *Federal Register*, Volume 45, Number 155. 52803-52807.
- . 1984. Valley Elderberry Longhorn Beetle Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 62 pp.
- . 1999. Conservation guidelines for the valley elderberry longhorn beetle. U.S. Fish and Wildlife Service, Sacramento, California.
- . 2007. Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) 5-Year Review. February 2007.
- . 2014. Withdrawal of the Proposed Rule to Remove the Valley Elderberry Longhorn Beetle from the Federal List of Endangered and Threatened Wildlife; Proposed rule; withdrawal. *Federal Register*, Volume 79, Number 180. 55874-55917.
- . 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.





S:\PROJECTS\CDL-ALL\CDL-01\GIS\MXD\Fig2_Elderberry.mxd CDL 01 7/5/2018 - Lesleys



Photo 1. View of the western end of the property looking east. Photo date 7/3/2018.



Photo 2. View of Cripple Creek as it passes under Sunrise Boulevard.
Photo date 7/3/2018.



Photo 3. View of the eastern portion of Cripple Creek looking south. Photo date 7/3/2018.



Photo 4. View of elderberry shrub location 1 – 3 looking east. Photo date 7/3/2018.



Photo 5. View of elderberry shrub location 4 (red arrow) looking northeast.
Photo date 7/3/2018.



Photo 6. View of the northwestern portion of the property looking north.
Photo date 7/3/2018.

Traffic Impact Study

Sunrise Boulevard Senior Housing Citrus Heights, California

DRAFT

June 10, 2019

Prepared for:

City of Citrus Heights

Prepared by:

Kimley»Horn

555 Capitol Mall, Suite 300
Sacramento, California 95814

Phone: (916) 858-5800

TABLE OF CONTENTS

INTRODUCTION.....	1
Purpose.....	1
Proposed Project Description	1
Study Area	1
PROJECT AREA ROADWAYS	5
ASSESSMENT OF PROPOSED PROJECT	5
Proposed Project Trip Generation	5
Proposed Project Trip Distribution	5
TRAFFIC IMPACT ANALYSIS METHODOLOGY	5
Intersection Analysis	8
Roadway Segment Analysis.....	8
BASELINE (2019) CONDITIONS.....	8
BASELINE (2019) PLUS PROPOSED PROJECT CONDITIONS.....	10
BASELINE (2019) PLUS APPROVED PROJECTS CONDITIONS.....	12
BASELINE (2019) PLUS APPROVED PROJECTS PLUS PROPOSED PROJECT CONDITIONS.....	14
IMPACTS AND MITIGATION	16
Standards of Significance	16
Impacts and Mitigations.....	17
OTHER CONSIDERATIONS.....	17
Vehicle Queuing at Intersections.....	17
Bicycle, Pedestrian, and Transit Evaluation	17
Site Plan, Access, and Circulation Evaluation	18
CONCLUSIONS	18
APPENDICES	
<i>Traffic Count Data Sheets</i>	<i>Appendix A</i>
<i>Analysis Worksheets for Baseline (2019) Conditions.....</i>	<i>Appendix B</i>
<i>Analysis Worksheets for Baseline (2019) plus Proposed Project Conditions.....</i>	<i>Appendix C</i>
<i>Analysis Worksheets for Baseline (2019) plus Approved Projects Conditions.....</i>	<i>Appendix D</i>
<i>Analysis Worksheets for Baseline (2019) plus Approved Projects plus Proposed Project Conditions</i>	<i>Appendix E</i>

LIST OF TABLES

Table 1 – Proposed Project Trip Generation	5
Table 2 – Intersection Level of Service Criteria	8
Table 3 – Roadway Segment Level of Service Criteria	8
Table 4 – Baseline (2019) Intersection Levels of Service	10
Table 5 – Baseline (2019) Roadway Segment Levels of Service	10
Table 6 – Baseline (2019) and Baseline (2019) plus Proposed Project Intersection Levels of Service.....	12
Table 7 – Baseline (2019) plus Proposed Project Roadway Segments Levels of Service.....	12
Table 8 – Baseline (2019) plus Approved Projects Intersection Levels of Service.....	14
Table 9 – Baseline (2019) plus Approved Projects Roadway Segments Levels of Service.....	14
Table 10 – Baseline (2019) plus Approved Projects and Baseline (2019) plus Approved Projects plus Proposed Project Intersection Levels of Service	16
Table 11 – Baseline (2019) plus Approved Projects plus Proposed Project Roadway Segment LOS	16
Table 12 – Intersection Queuing Evaluation Results.....	17

LIST OF FIGURES

Figure 1 – Proposed Project Vicinity Map	2
Figure 2 – Proposed Project Site Plan.....	3
Figure 3 – Study Intersections, Traffic Control, and Lane Geometries	4
Figure 4 – Proposed Project Trip Distribution	6
Figure 5 – Proposed Project Trip Assignment	7
Figure 6 – Baseline (2019) Peak-Hour Traffic Volumes	9
Figure 7 – Baseline (2019) plus Proposed Project Peak-Hour Traffic Volumes	11
Figure 8 – Baseline (2019) plus Approved Projects Peak-Hour Traffic Volumes	13
Figure 9 – Baseline (2019) plus Approved Projects plus Proposed Project Peak-Hour Traffic Volumes.....	15

INTRODUCTION

Purpose

This report documents the results of a traffic impact analysis completed for the proposed Sunrise Boulevard Senior Housing project (the “Proposed Project”), located along Sunrise Boulevard in Citrus Heights, California. The purpose of this impact analysis is to identify potential environmental impacts to transportation facilities as required by the California Environmental Quality Act (CEQA). This study was performed in accordance with the City of Citrus Heights’ Transportation Impact Study Guidelines¹.

The remaining sections of this report document the Proposed Project, analysis methodologies, impacts and mitigation, and general study conclusions.

Proposed Project Description

Kimley-Horn understands the project applicant proposes to construct senior adult apartment units on the vacant project site located at 8220 Sunrise Boulevard in Citrus Heights, California. Based on the preliminary site plan, we understand that the proposed project will provide 60 assisted living units and 20 memory care units, with a total of 90 beds (some units have more than one bed).

The Proposed Project location is shown in **Figure 1**. Access to the Project site is proposed to be from a new full-access driveway along Sunrise Boulevard at the existing intersection with Eva Retta Court. The Proposed project site plan is shown in **Figure 2**.

Study Area

Figure 3 illustrates the study facilities, existing traffic control, and existing lane configurations. The following transportation facilities are included in this evaluation:

Intersections

1. Sunrise Boulevard @ Twin Oaks Avenue
2. Sunrise Boulevard @ Eva Retta Court
3. Sunrise Boulevard @ Antelope Road

Roadway Segments

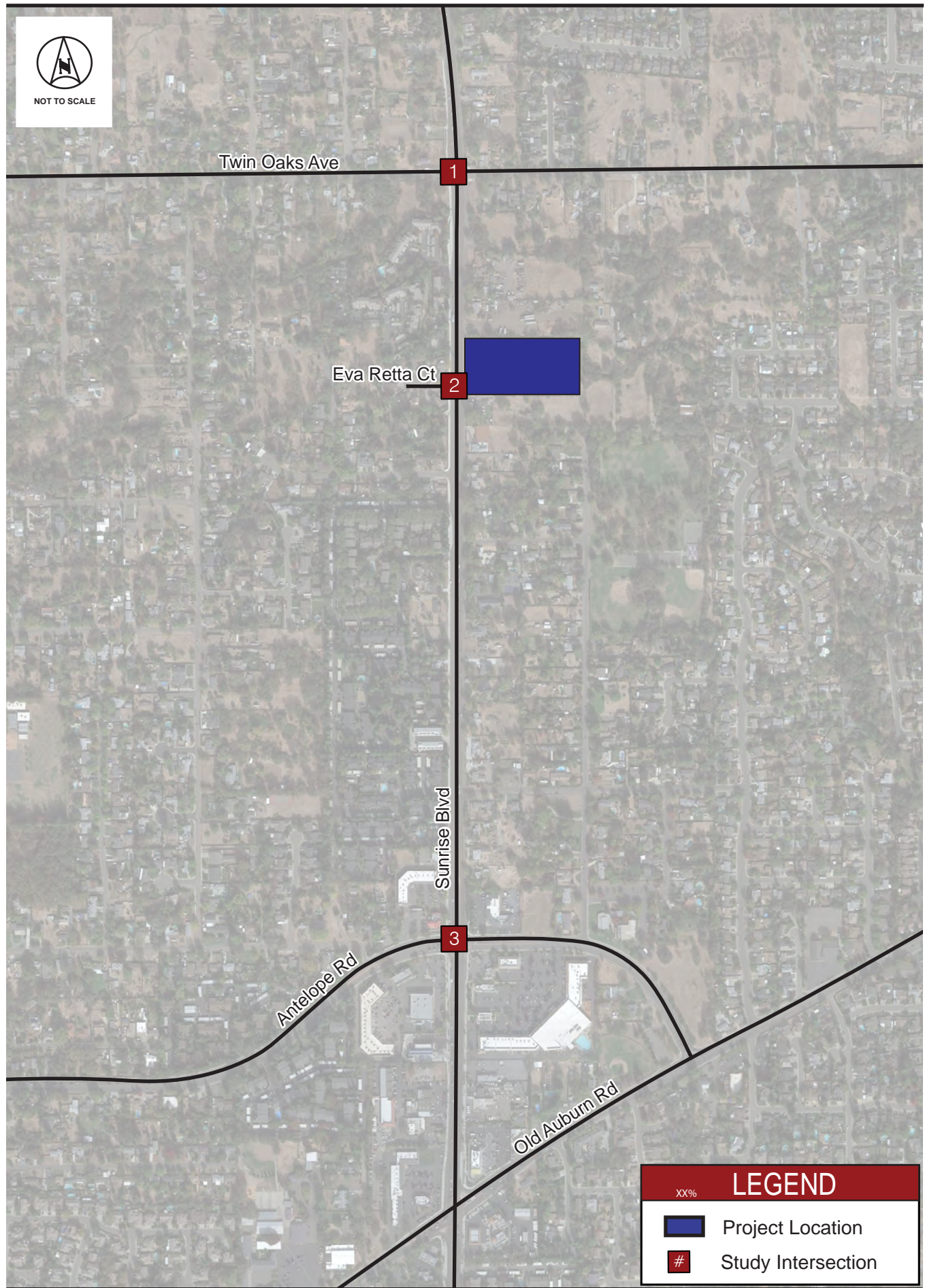
1. Sunrise Boulevard, between Twin Oaks Avenue and Project Site
2. Sunrise Boulevard, between Project Site and Antelope Road

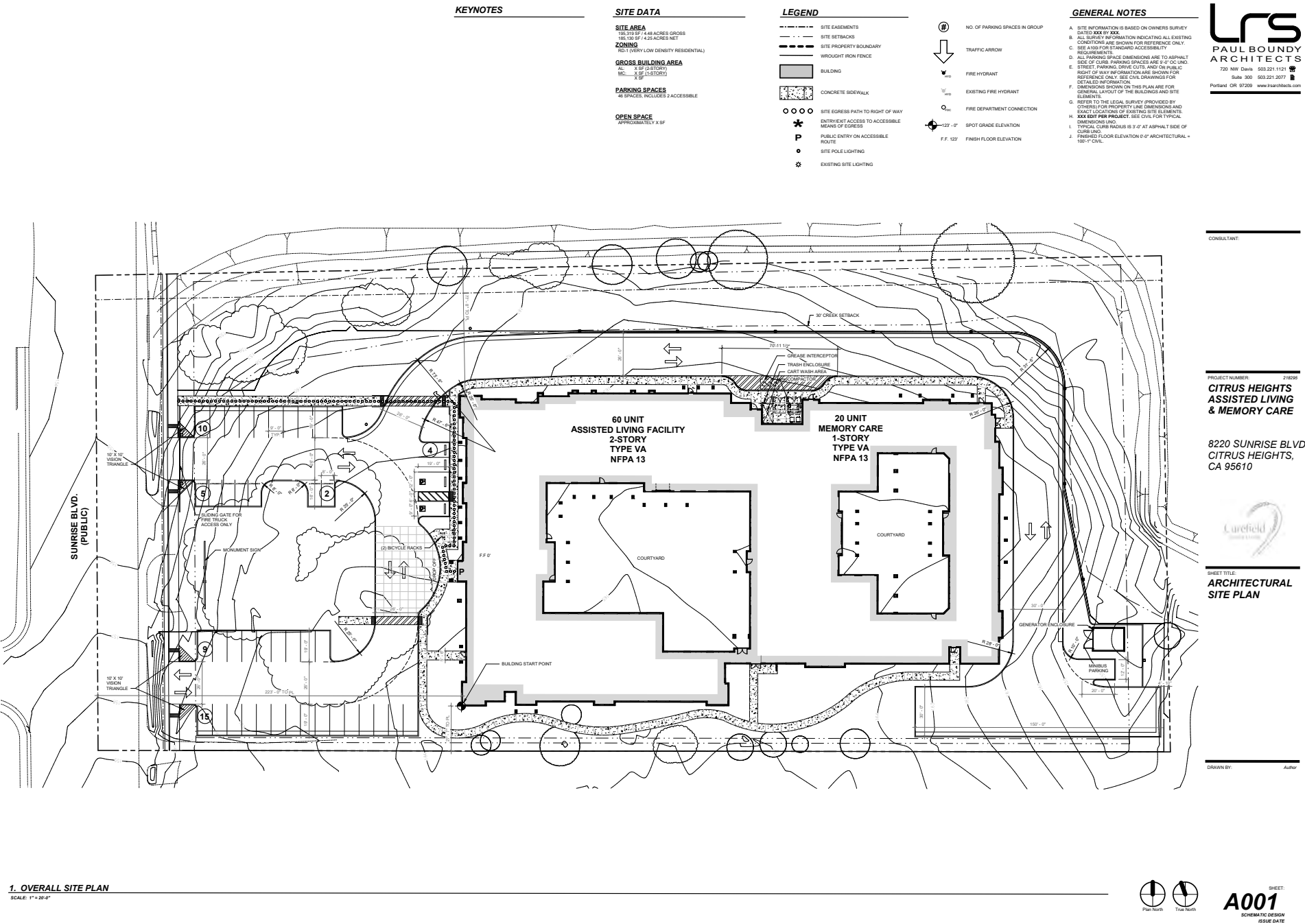
This traffic impact analysis was conducted for the above-listed study facilities for the following scenarios:

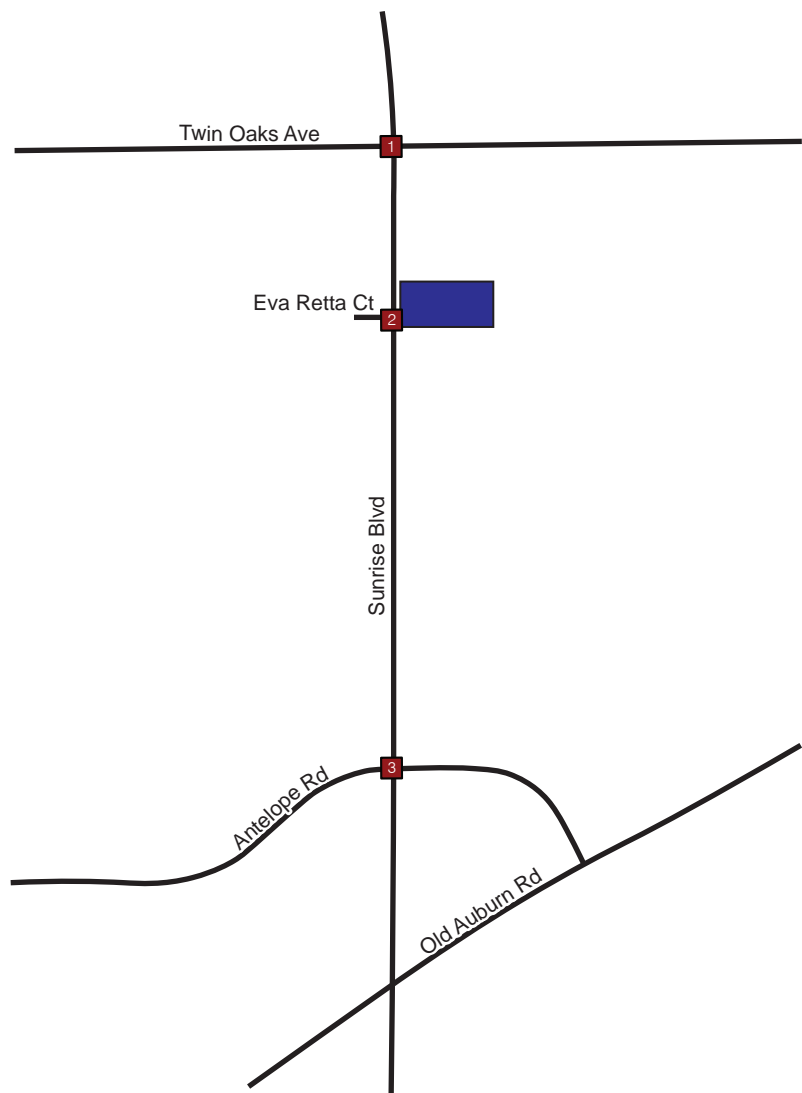
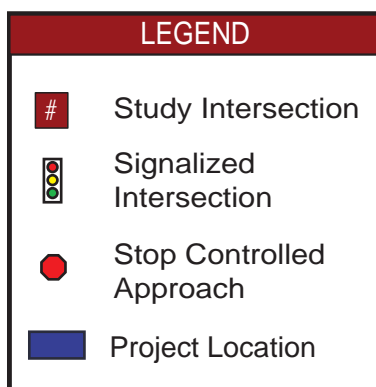
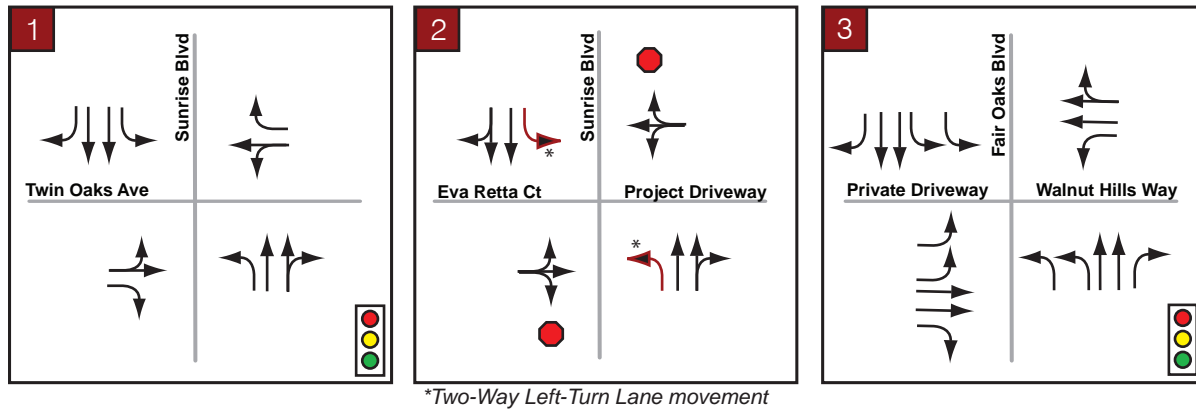
- A. Baseline (2019) Conditions
- B. Baseline (2019) plus Proposed Project Conditions
- C. Baseline plus Approved Projects Conditions
- D. Baseline plus Approved Projects plus Proposed Project Conditions

¹ *Transportation Impact Study Guidelines*, City of Citrus Heights, February 2013.

Sunrise Boulevard Senior Housing - Traffic Impact Study







PROJECT AREA ROADWAYS

The following are descriptions of the primary roadways near the Project site.

Sunrise Boulevard is a north-south arterial west of the Project site. The portion of Sunrise Boulevard in the vicinity of the Project site mainly contains residential areas. There are currently sidewalks along Sunrise Boulevard between Twin Oaks Avenue and Antelope Road.

Twin Oaks Avenue is a local roadway north of the Project site. Twin Oaks Avenue connects residential and commercial areas to the west of the site.

Antelope Road is an east-west arterial south of the Project site. Antelope Road connects residential and commercial areas to the south of the site.

ASSESSMENT OF PROPOSED PROJECT

Proposed Project Trip Generation

The number of trips anticipated to be generated by the Proposed Project was approximated using data included in the *Trip Generation Manual, 10th Edition*, published by the Institute of Transportation Engineers (ITE). ITE Land Use Code 254 (Assisted Living) was used to represent the assisted living and memory care units. The assisted living land use is summarized in the *Trip Generation Manual* as a “residential setting that provides either routine general protective oversight or assistance with activities necessary for independent living to mentally or physically limited persons”. The trips anticipated to be generated by the Proposed Project are presented in **Table 1**.

Table 1 – Proposed Project Trip Generation

Land Use (ITE Code)	Size (Beds)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	In		Out		Total Trips	In		Out	
				%	Trips	%	Trips		%	Trips	%	Trips
Assisted Living (254)	90	234	17	63%	11	37%	6	23	38%	9	62%	14
New Project Trips		234	17		11		6	23		9		14

Source: *Trip Generation Manual, 10th Edition*.

As shown in **Table 1**, the Proposed Project is estimated to generate 234 new daily trips, with 17 and 23 trips occurring during the AM and PM peak-hours, respectively.

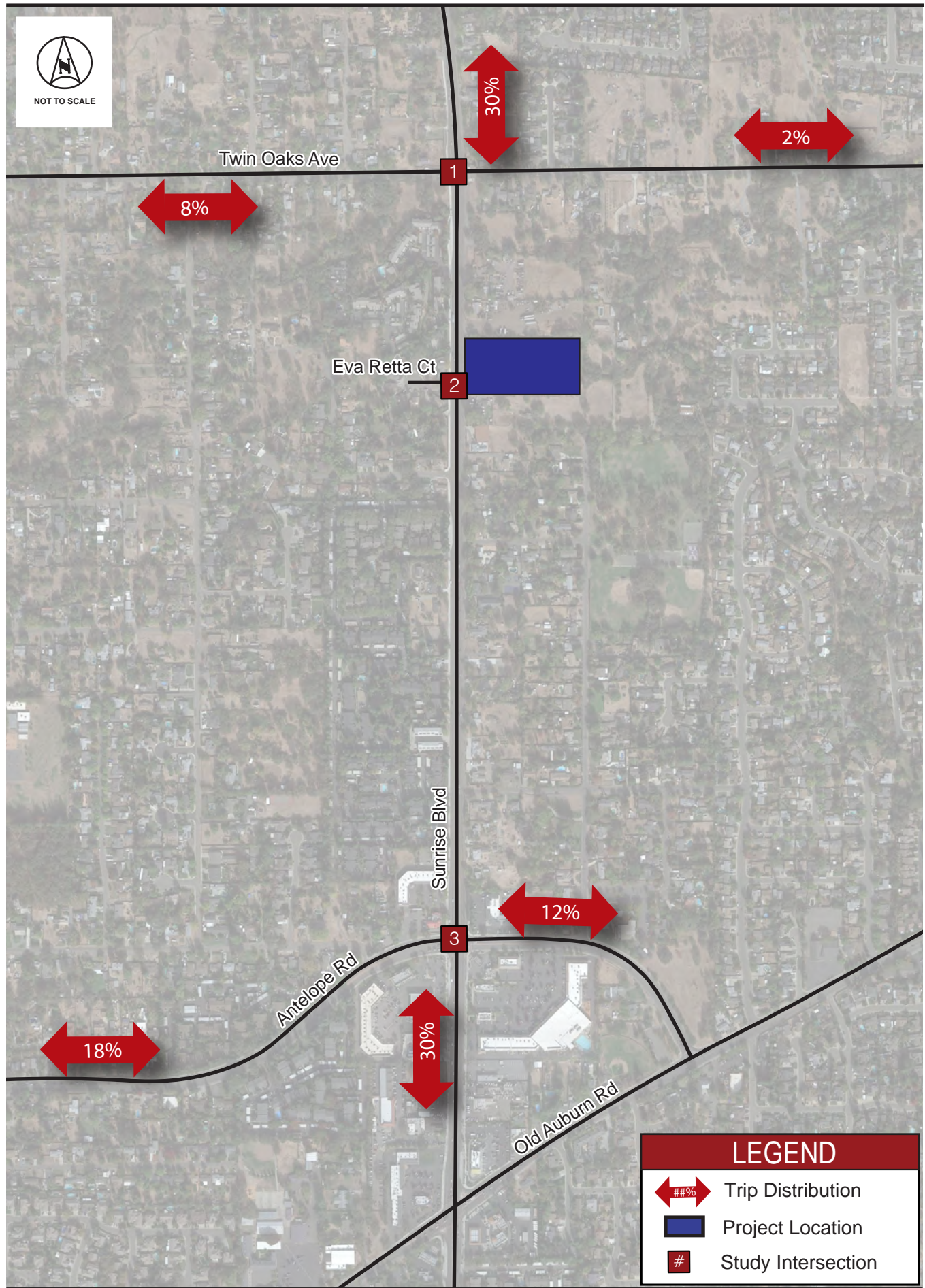
Proposed Project Trip Distribution

The distribution of Proposed Project trips was based on general knowledge of area’s traffic patterns, the Proposed Project layout, and engineering judgement. The Proposed Project trip distribution patterns are reflected in **Figure 4**. The resulting AM and PM peak-hour traffic volumes attributed to the Proposed Project are provided in **Figure 5**.

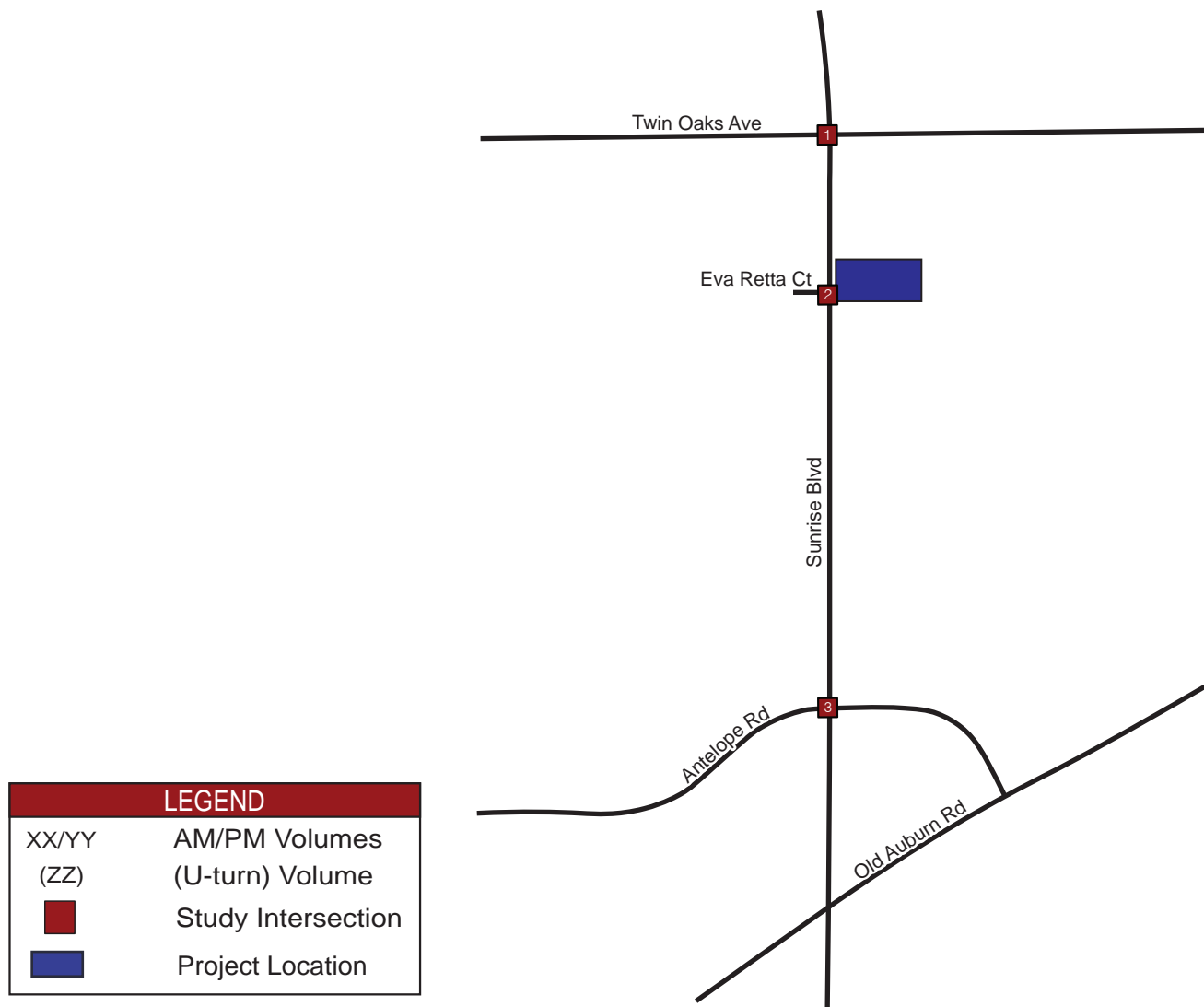
TRAFFIC IMPACT ANALYSIS METHODOLOGY

Analysis of transportation facility significant environmental impacts is based on the concept of Level of Service (LOS). The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity.

Sunrise Boulevard Senior Housing - Traffic Impact Study



<div>1</div> <div> <div> <div>3 / 3</div> <div>↔</div> </div> <div> <div>↔</div> <div>3 / 3</div> </div> </div> <div>Sunrise Blvd</div> <div>Twin Oaks Ave</div> <div> <div>1 / 1</div> <div>↔</div> </div> <div> <div>↔</div> <div>1 / 2</div> <div>↔</div> <div>2 / 4</div> </div>	<div>2</div> <div> <div>4 / 4</div> <div>↔</div> </div> <div>Sunrise Blvd</div> <div>Eva Retta Ct</div> <div> <div>↔</div> <div>3 / 6</div> <div>↔</div> <div>3 / 8</div> </div> <div> <div>↔</div> <div>7 / 5</div> </div>	<div>3</div> <div> <div>1 / 2</div> <div>↔</div> <div>1 / 4</div> <div>↔</div> <div>1 / 2</div> <div>↔</div> </div> <div>Sunrise Blvd</div> <div>Antelope Rd</div> <div> <div>2 / 1</div> <div>↔</div> </div> <div> <div>↔</div> <div>2 / 1</div> <div>↔</div> <div>3 / 3</div> </div>
--	---	--



Intersection Analysis

Intersection Levels of Service for this study were determined using methods defined in the Highway Capacity Manual, 6th Edition (HCM) and appropriate traffic analysis software. The HCM includes procedures for analyzing side-street stop controlled (SSSC), all-way stop controlled (AWSC), and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement. **Table 2** presents intersection LOS definitions as defined in the HCM.

Table 2 – Intersection Level of Service Criteria

Level of Service (LOS)	Unsignalized	Signalized
	Average Control Delay (sec/veh)	Control Delay per Vehicle (sec/veh)
A	≤ 10	≤ 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80

Source: Highway Capacity Manual, 6th Edition
Note: SSSC delay is based on the worst approach movement.

Roadway Segment Analysis

The analysis of roadway segments was completed in accordance with the City of Citrus Heights' Transportation Impact Study Guidelines¹. The analysis involves the comparison of daily segment volumes to the LOS criteria provided in Sacramento County's Traffic Impact Analysis Guidelines² since LOS criteria is not included in the City of Citrus Heights Guidelines. The criteria provide maximum volumes for given service levels for various facility types. **Table 3** replicates the applicable County roadway segment LOS criteria, which have been applied to the City of Citrus Heights' study roadway segments for analysis.

Table 3 – Roadway Segment Level of Service Criteria

Facility Type	# of Lanes	Maximum Volume for Given Service Level				
		A	B	C	D	E
Arterial, Moderate Access Control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000

Source: Traffic Impact Analysis Guidelines, Table 1.2, County of Sacramento Department of Transportation, July 2004.

BASELINE (2019) CONDITIONS

New weekday AM and PM peak-period turning movement volume traffic counts were collected on May 8, 2019. These counts were conducted between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. New weekday, 72-hour roadway segment counts were collected between May 7 and May 9, 2019. Baseline (2019) peak-hour turning movement volumes are presented in **Figure 6**, and the traffic count data sheets are provided in **Appendix A**. Analysis worksheets for this scenario are provided in **Appendix B**.

Intersections

Table 4 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in **Table 4**, the study intersections operate between LOS B and LOS D during the AM and PM peak-hours.

² *Traffic Impact Analysis Guidelines*, County of Sacramento Department of Transportation, July 2004.

<div>1</div> <div> <div>25 / 75</div> <div>993 / 1461</div> <div>6 / 20</div> <div>Sunrise Blvd</div> </div> <div> <div>7 / 5</div> <div>7 / 3</div> <div>10 / 13</div> </div> <div>Twin Oaks Ave</div> <div> <div>52 / 36</div> <div>0 / 4</div> <div>64 / 65</div> </div> <div> <div>46 / 87</div> <div>1364 / 1266</div> <div>5 / 11</div> </div>	<div>2</div> <div> <div>1 / 2</div> <div>1081 / 1587</div> <div>Sunrise Blvd</div> </div> <div>Eva Retta Ct</div> <div> <div>2 / 0</div> <div>1 / 0</div> </div> <div> <div>1 / 1</div> <div>1417 / 1337</div> </div>	<div>3</div> <div> <div>100 / 157</div> <div>943 / 1162</div> <div>106 / 237</div> <div>Sunrise Blvd</div> </div> <div>Antelope Rd</div> <div> <div>121 (13) / 128 (40)</div> <div>458 / 599</div> <div>355 / 313</div> </div> <div> <div>283 / 215</div> <div>492 / 458</div> <div>22 / 57</div> </div> <div> <div>175 / 312 (11)</div> <div>920 / 1063</div> <div>8 / 32</div> </div>
--	---	---

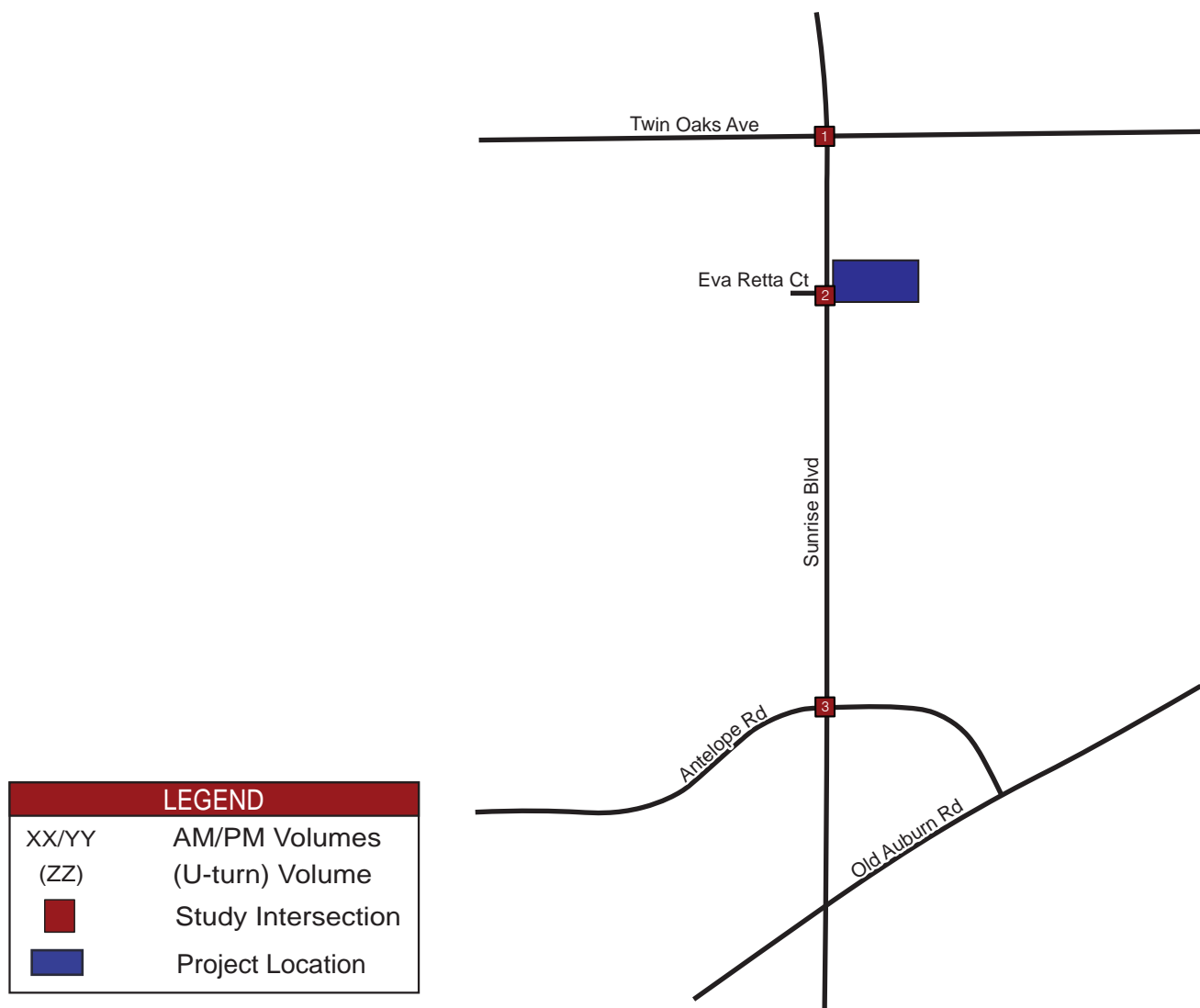


Table 4 – Baseline (2019) Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Baseline (2019)	
				Delay	LOS
1	Sunrise Boulevard @ Twin Oaks Ave	Signal	AM	14.4	B
			PM	17.2	B
2	Sunrise Blvd @ Eva Retta Ct	SSSC*	AM	21.5 (EB)	C
			PM	15.1 (NBL)	C
3	Sunrise Blvd @ Antelope Rd	Signal	AM	43.0	D
			PM	45.3	D

*Unsignalized intersections are reported with the overall intersection delay and LOS followed by the worst movement/approach delay and LOS.

Roadway Segments

Table 5 presents the roadway segment operating conditions for this analysis scenario. As indicated in **Table 5**, the roadway segments operate at LOS F.

Table 5 – Baseline (2019) Roadway Segment Levels of Service

Scenario	Location	Facility Type	Volume (veh/day)	LOS
Baseline (2019)	Sunrise Blvd, between Twin Oaks Ave and Project Driveway	4-Lane Arterial (Moderate Access Control)	36,994	F
	Sunrise Blvd, between Project Driveway and Antelope Road	4-Lane Arterial (Moderate Access Control)	36,888	F

BASELINE (2019) PLUS PROPOSED PROJECT CONDITIONS

Peak-hour traffic associated with the Proposed Project was added to the Baseline (2019) traffic volumes and levels of service were determined at the study facilities. **Figure 7** provides the AM and PM peak-hour traffic volumes at the study facilities for this analysis scenario. The analysis worksheets for this scenario are provided in **Appendix C**.

Intersections

Table 6 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in **Table 6**, the study intersections operate between LOS B and LOS D with the addition of Proposed Project traffic during the AM and PM peak-hours.

<div>1</div> <div> <div>25 / 75</div> <div>996 / 1464</div> <div>6 / 20</div> <div>Sunrise Blvd</div> </div> <div> <div>7 / 5</div> <div>7 / 3</div> <div>10 / 13</div> </div> <div>Twin Oaks Ave</div> <div> <div>52 / 36</div> <div>0 / 4</div> <div>65 / 66</div> </div> <div> <div>47 / 89</div> <div>1366 / 1270</div> <div>5 / 11</div> </div>	<div>2</div> <div> <div>1 / 2</div> <div>1081 / 1587</div> <div>4 / 4</div> <div>Sunrise Blvd</div> </div> <div> <div>3 / 6</div> <div>3 / 8</div> </div> <div>Eva Retta Ct</div> <div> <div>2 / 0</div> <div>1 / 0</div> </div> <div> <div>1 / 1</div> <div>1417 / 1337</div> <div>7 / 5</div> </div>	<div>3</div> <div> <div>101 / 159</div> <div>944 / 1166</div> <div>107 / 239</div> <div>Sunrise Blvd</div> </div> <div> <div>285 / 216</div> <div>492 / 458</div> <div>22 / 57</div> </div> <div>Antelope Rd</div> <div> <div>123 (13) / 129 (40)</div> <div>458 / 599</div> <div>355 / 313</div> </div> <div> <div>175 / 312 (11)</div> <div>923 / 1066</div> <div>8 / 32</div> </div>
--	--	---

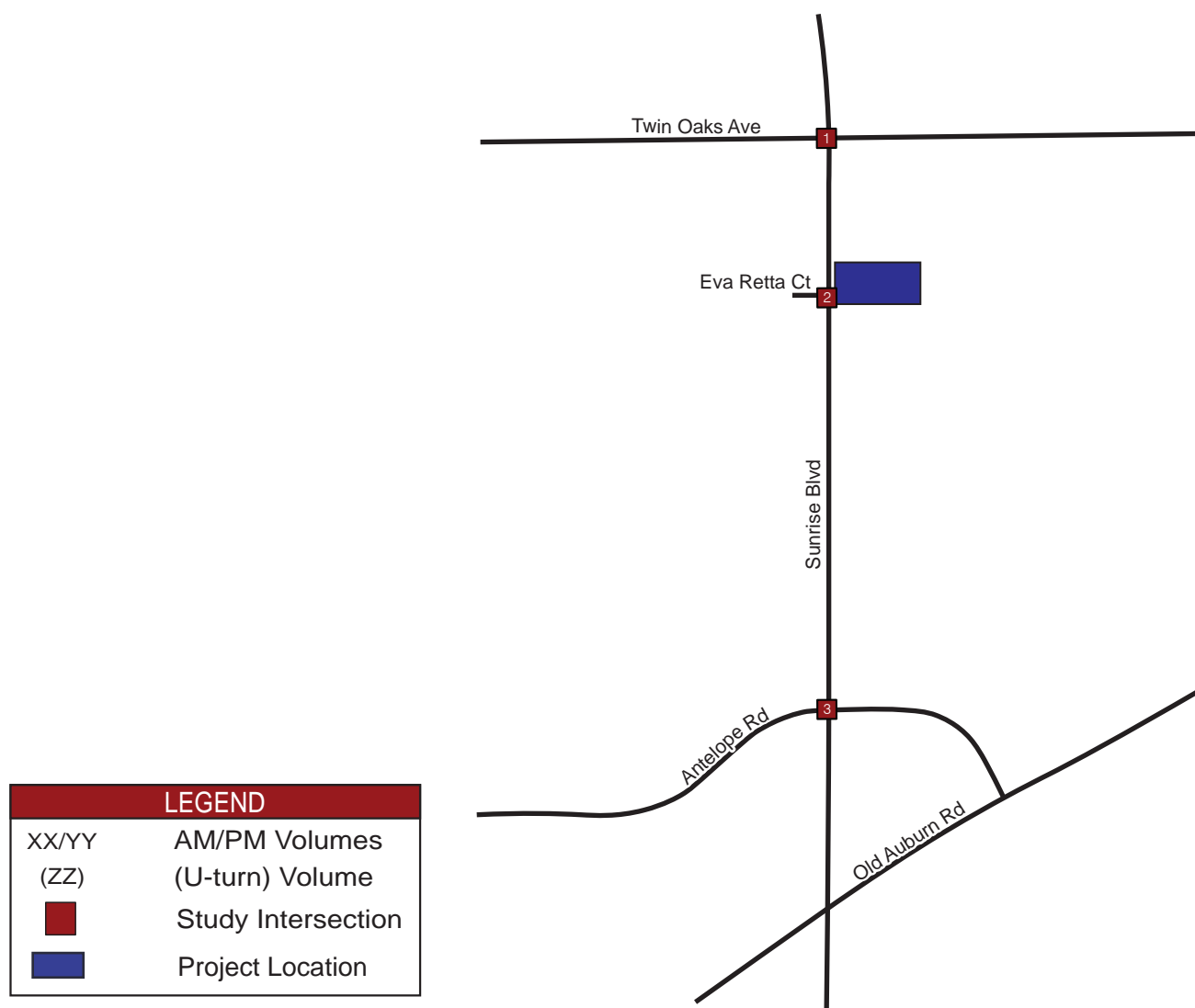


Table 6 – Baseline (2019) and Baseline (2019) plus Proposed Project Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Baseline (2019) plus Project	
				Delay	LOS
1	Sunrise Boulevard @ Twin Oaks Ave	Signal	AM	14.5	B
			PM	17.4	B
2	Sunrise Blvd @ Eva Retta Ct	SSSC*	AM	25.6 (WB)	D
			PM	30.6 (WB)	D
3	Sunrise Blvd @ Antelope Rd	Signal	AM	43.2	D
			PM	45.5	D

*Unsignalized intersections are reported with the overall intersection delay and LOS followed by the worst movement/ approach delay and LOS (Note: Delay and LOS results calculated using HCM 2000 due to changes in intersection geometry associated with the westbound approach).

Roadway Segments

Table 7 presents the roadway segment operating conditions for this analysis scenario. As indicated in **Table 7**, the roadway segments operate at LOS F.

Table 7 – Baseline (2019) plus Proposed Project Roadway Segments Levels of Service

Scenario	Location	Facility Type	Volume (veh/day)	LOS
Baseline (2019) plus Proposed Project	Sunrise Blvd, between Twin Oaks Ave and Project Driveway	4-Lane Arterial (Moderate Access Control)	37,087	F
	Sunrise Blvd, between Project Driveway and Antelope Road	4-Lane Arterial (Moderate Access Control)	37,029	F

BASELINE (2019) PLUS APPROVED PROJECTS CONDITIONS

This scenario analyzes the addition of approved/pending projects in the general Proposed Project vicinity to the Baseline (2019) traffic volumes. Baseline (2019) plus Approved Projects volumes were established by growing Baseline (2019) volumes by five years to account for increases in traffic volume in the Proposed Project vicinity. **Figure 8** provides the AM and PM peak-hour traffic volumes at the study facilities for this analysis scenario. The analysis worksheets for this scenario are provided in **Appendix D**.

Intersections

Table 8 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in **Table 8**, the study intersections operate between LOS B and LOS D with the addition of the approved projects during the AM and PM peak-hours.

<div>1</div> <div> <div>26 / 95</div> <div>1010 / 1484</div> <div>7 / 24</div> <div>Sunrise Blvd</div> </div> <div> <div>8 / 6</div> <div>8 / 4</div> <div>11 / 16</div> </div> <div>Twin Oaks Ave</div> <div> <div>55 / 46</div> <div>0 / 5</div> <div>67 / 83</div> </div> <div> <div>48 / 111</div> <div>1387 / 1286</div> <div>5 / 13</div> </div>	<div>2</div> <div> <div>1 / 2</div> <div>1095 / 1601</div> <div>Sunrise Blvd</div> </div> <div>Eva Retta Ct</div> <div> <div>2 / 0</div> <div>1 / 0</div> </div> <div> <div>1 / 1</div> <div>1436 / 1349</div> </div>	<div>3</div> <div> <div>102 / 161</div> <div>956 / 1178</div> <div>106 / 237</div> <div>Sunrise Blvd</div> </div> <div>Antelope Rd</div> <div> <div>124 (13) / 131 (41)</div> <div>458 / 599</div> <div>363 / 320</div> </div> <div> <div>283 / 215</div> <div>492 / 458</div> <div>22 / 57</div> </div> <div> <div>179 / 319 (11)</div> <div>933 / 1077</div> <div>8 / 32</div> </div>
--	---	---

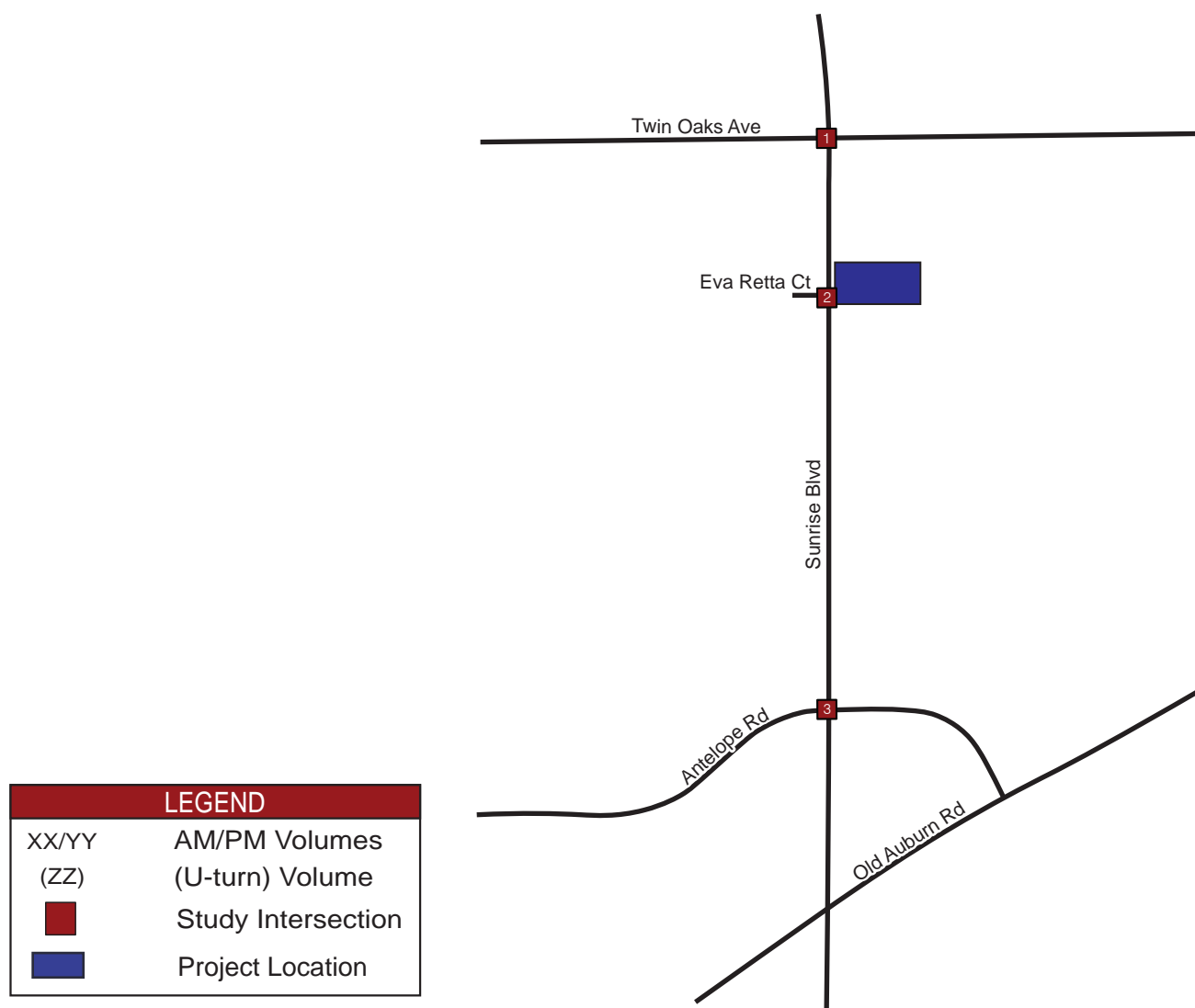


Table 8 – Baseline (2019) plus Approved Projects Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Baseline (2019) plus Approved/Pending Projects	
				Delay	LOS
1	Sunrise Boulevard @ Twin Oaks Ave	Signal	AM	15.1	B
			PM	20.7	C
2	Sunrise Blvd @ Eva Retta Ct	SSSC*	AM	21.7 (EB)	C
			PM	15.3 (NBL)	C
3	Sunrise Blvd @ Antelope Rd	Signal	AM	43.3	D
			PM	46.3	D

*Unsignalized intersections are reported with the overall intersection delay and LOS followed by the worst movement/approach delay and LOS.

Roadway Segments

Table 9 presents the roadway segment operating conditions for this analysis scenario. As indicated in **Table 9**, the roadway segments operate at LOS F.

Table 9 – Baseline (2019) plus Approved Projects Roadway Segments Levels of Service

Scenario	Location	Facility Type	Volume (veh/day)	LOS
Baseline (2019) plus Approved Projects	Sunrise Blvd, between Twin Oaks Ave and Project Driveway	4-Lane Arterial (Moderate Access Control)	37,817	F
	Sunrise Blvd, between Project Driveway and Antelope Road	4-Lane Arterial (Moderate Access Control)	37,704	F

BASELINE (2019) PLUS APPROVED PROJECTS PLUS PROPOSED PROJECT CONDITIONS

Peak-hour traffic associated with the Proposed Project was added to the Baseline (2019) plus Approved Project traffic volumes described above and levels of service were determined at the study facilities. **Figure 9** provides the AM and PM peak-hour traffic volumes at the study facilities for this analysis scenario. The analysis worksheets for this scenario are provided in **Appendix E**.

Intersections

Table 10 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in **Table 10**, the study intersections operate between LOS B and D with the addition of the approved projects and the Proposed Project during the AM and PM peak-hours.

1 <div> <div>26 / 95</div> <div>1013 / 1487</div> <div>7 / 24</div> <div>Sunrise Blvd</div> </div> <div> <div>↔ 8 / 6</div> <div>↔ 8 / 4</div> <div>↔ 11 / 16</div> </div> <div>Twin Oaks Ave</div> <div> <div>55 / 46 ↔</div> <div>0 / 5 ↔</div> <div>68 / 84 ↔</div> </div> <div> <div>49 / 113</div> <div>1389 / 1290</div> <div>5 / 13</div> </div>	2 <div> <div>1 / 2</div> <div>1095 / 1601</div> <div>4 / 4</div> <div>Sunrise Blvd</div> </div> <div> <div>↔ 3 / 6</div> <div>↔ 3 / 8</div> </div> <div>Eva Retta Ct</div> <div> <div>2 / 0 ↔</div> <div>1 / 0 ↔</div> </div> <div> <div>1 / 1</div> <div>1436 / 1349</div> <div>7 / 5</div> </div>	3 <div> <div>103 / 163</div> <div>957 / 1182</div> <div>107 / 239</div> <div>Sunrise Blvd</div> </div> <div> <div>↔ 285 / 216</div> <div>↔ 492 / 458</div> <div>↔ 22 / 57</div> </div> <div>Antelope Rd</div> <div> <div>126 (13) / 132 (41) ↔</div> <div>458 / 599 ↔</div> <div>363 / 320 ↔</div> </div> <div> <div>179 / 319 (11)</div> <div>936 / 1080</div> <div>8 / 32</div> </div>
---	---	--

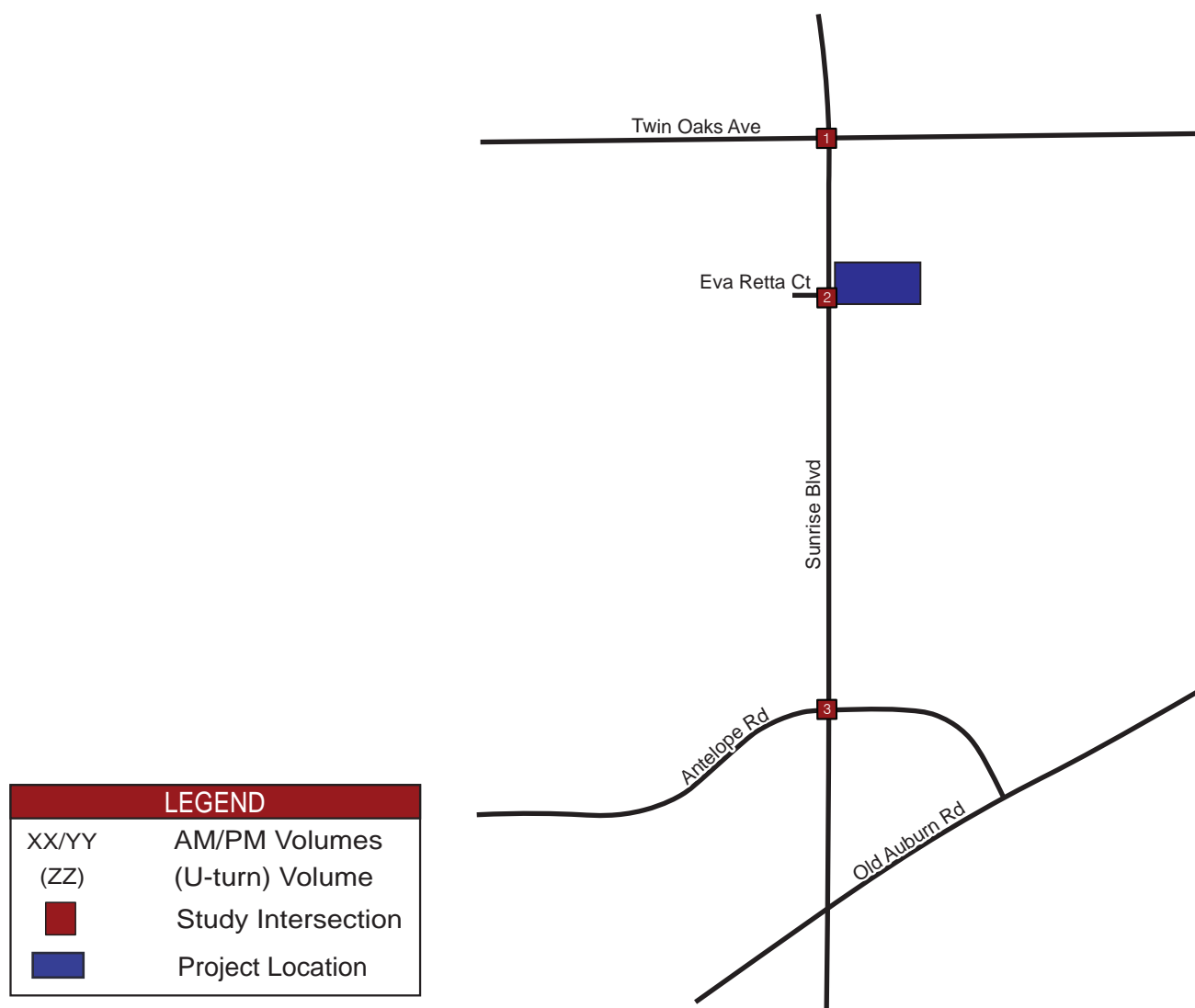


Table 10 – Baseline (2019) plus Approved Projects and Baseline (2019) plus Approved Projects plus Proposed Project Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Baseline (2019) plus Approved/Pending Projects plus Project	
				Delay	LOS
1	Sunrise Boulevard @ Twin Oaks Ave	Signal	AM	15.2	B
			PM	20.9	C
2	Sunrise Blvd @ Eva Retta Ct	SSSC*	AM	26.1 (WB)	D
			PM	31.2 (WB)	D
3	Sunrise Blvd @ Antelope Rd	Signal	AM	43.5	D
			PM	46.6	D

*Unsignalized intersections are reported with the overall intersection delay and LOS followed by the worst movement/ approach delay and LOS (Note: Delay and LOS results calculated using HCM 2000 due to changes in intersection geometry associated with the westbound approach).

Roadway Segments

Table 11 presents the roadway segment operating conditions for this analysis scenario. As indicated in **Table 11**, the roadway segments operate at LOS F.

Table 11 – Baseline (2019) plus Approved Projects plus Proposed Project Roadway Segment LOS

Scenario	Location	Facility Type	Volume (veh/day)	LOS
Baseline (2019) plus Approved Projects plus Proposed Project	Sunrise Blvd, between Twin Oaks Ave and Project Driveway	4-Lane Arterial (Moderate Access Control)	37,910	F
	Sunrise Blvd, between Project Driveway and Antelope Road	4-Lane Arterial (Moderate Access Control)	37,845	F

IMPACTS AND MITIGATION

Standards of Significance

Proposed Project impacts were determined by comparing conditions with the Proposed Project to those without the Proposed Project. Impacts for intersections are created when traffic from the Proposed Project forces the LOS to fall below a specific threshold.

City of Citrus Heights

The City of Citrus Heights' standards¹ specify the following:

"The City will *strive to achieve LOS E or better conditions* for City roadways and intersections during peak hours." According to the Citrus Height General Plan Policy 29.2³, "Exceptions to LOS E are allowed for both roadway segments and intersections along the following streets:

- Sunrise Boulevard – south City limits to north City limits
- Greenback Lane – west City limits to east City limits
- Old Auburn Road – Sylvan Road to Fair Oaks Boulevard
- Antelope Road – I-80 to Auburn Boulevard
- Auburn Boulevard – Old Auburn Road to northern City limits"

³ Citrus Heights General Plan, Community Development, August 2011.

Finally, the City has also established¹ that if “a roadway segment or intersection operates unacceptably according to Policy 29.2 under a no project scenario and the project contributes more than five percent of the total peak hour traffic volume on the roadway segment or entering the intersection”, this would result in a significant impact.

Impacts and Mitigations

Intersections

The addition of the Proposed Project does not result in any significant impacts to the study intersections according to the standards set by the City of Citrus Heights. The impact of the Proposed Project is considered to be *less than significant*. Accordingly, no mitigation is required.

Mitigation: No mitigation is required.

Roadway Segments

The addition of the Proposed Project does not result in any significant impacts to the study roadway segments according to the standards set by the City of Citrus Heights. The impact of the Proposed Project is considered to be *less than significant*. Accordingly, no mitigation is required.

Mitigation: No mitigation is required.

OTHER CONSIDERATIONS

Vehicle Queuing at Intersections

Off-site vehicle queuing was considered for the southbound left-turn movement at the Project driveway study intersection (Intersection #2). The calculated 95th percentile vehicle queues were compared to actual vehicle storage/segment lengths. There is currently a two-way left-turn lane on Sunrise Boulevard between Twin Oaks Avenue and Antelope Road, with a landscaped median located approximately 60-feet north of the proposed Project site driveway alignment. Consideration should be given to determine the appropriate storage and taper length to allow left-turning vehicles to transition into the two-way left-turn lane to make their turn into the project site. As presented in **Table 12**, the southbound left-turn queue at Intersection #2 does not reach or exceed available storage. However, the City may desire to modify the existing median island to allow for a more natural entry into the two-way left-turn lane for vehicles entering the project site even though the anticipated peak-hour volumes are relatively low.

Table 12 – Intersection Queuing Evaluation Results

Intersection / Analysis Scenario	Movement	AM Peak-Hour		PM Peak-Hour	
		Available Storage (ft)	95th % Queue (ft)	Available Storage (ft)	95th % Queue (ft)
#2, Sunrise Blvd @ Eva Retta Ct/ Project Driveway	SBL				
Baseline (2019)		60	-	60	-
Baseline (2019) plus Project			<25		<25
Baseline (2019) plus Approved Projects			-		-
Baseline (2019) plus Approved Projects plus Project			<25		<25

Bicycle, Pedestrian, and Transit Evaluation

There are currently on-street bicycle facilities directly adjacent to the Proposed Project location along Sunrise Boulevard. The Proposed Project will include the provision of two (2) bicycle racks near the entrance of the assisted living facility (**Figure 2**). There are currently sidewalks located along the southbound segment of Sunrise Boulevard between Twin Oaks Avenue and Antelope Road. The two signalized intersections closest to the Project site, (Intersection #1 and Intersection #3), have striped crosswalks provided for pedestrians. The Proposed Project will not result in removal of any existing pedestrian facility or

bikeway/bike lane. The Proposed Project would not add noticeable demand for pedestrian or bicycle facilities. The Proposed Project would not adversely affect existing or planned bicycle or pedestrian facilities.

Sacramento Regional Transit District (RT) provides transit service in the greater Sacramento metropolitan area. The Proposed Project is directly adjacent to one public transit route (Route 21)⁴. The nearest southbound transit stop is located on Sunrise Boulevard less than a quarter mile away from the Project site. The nearest northbound transit stop is located on Sunrise Boulevard approximately one-half mile from the Project site, just north of Antelope Road. There are additional public transit stops near the intersection of Twin Oaks Avenue at Auburn Boulevard, which are served by RT Routes 93 and 103, approximately a one and one-half mile away from the Proposed Project. The Proposed Project would not adversely affect existing or planned transit operations. The Proposed Project would not add noticeable transit demand. Any additional demand is anticipated to be adequately accommodated by the existing/planned transit system.

Site Plan, Access, and Circulation Evaluation

The site plan for the Proposed Project in **Figure 2** was qualitatively reviewed for general access and on-site circulation. The site plan depicts one full-access point to the Project site, and one emergency vehicle access, located along Sunrise Boulevard. The full-access driveway, as well as the on-site circulation system, provide adequate access to/from the surrounding roadway network. There is sufficient driveway throat depth as specified by the City's standard design guidelines. Delivery vehicles will use the same access as passenger vehicles and there is adequate accessibility provided for these vehicles. Additionally, emergency vehicle access and maneuverability (during construction and normal operation) should be confirmed at all drive aisle locations. Based on the site plan, the Project site includes adequate access to accommodate emergency fire vehicles.

Sight distance at the proposed Sunrise Boulevard full-access driveway location was evaluated based on American Association of State Highway Transportation Officials' (AASHTO) guidelines⁵. According to AASHTO guidelines, the time gap for a left-turn out of the driveway onto Sunrise Boulevard is required to be 8.5 seconds, and the corresponding intersection sight distance that should be provided is 500 feet, as the posted speed limit on Sunrise Boulevard is 40 miles per hour. The time gap for a right-turn out of the driveway onto Sunrise Boulevard is required to be 6.5 seconds, and the corresponding intersection sight distance that should be provided is 385 feet. Field observations confirmed time gaps (and therefore intersection sight distances) nearly double these requirements. As such, intersection sight distance at the project's driveway is adequate. All vegetation within the existing Sunrise Boulevard median island located just north of the project driveway should be modified and maintained to ensure the necessary sight triangle is provided for vehicles exiting the project, looking right. Ideally, ground cover would not exceed 2-feet in height (measured above the roadway), with the tree canopy no lower than 8.5-feet (measured above the roadway). It is critical to maintain this clear sight window to ensure that approaching vehicles (southbound on Sunrise Boulevard) are visible to vehicles exiting the project site.

CONCLUSIONS

Based upon the analysis documented in this report, the following conclusions are offered:

- The Proposed Project is estimated to generate 234 new daily trips, with 17 and 23 trips occurring during the AM and PM peak-hours, respectively.
- The Proposed Project's potential environmental impacts to transportation facilities are considered to be ***less than significant***.
- The Proposed Project is anticipated to have a ***less than significant*** effect on existing and planned bicycle, pedestrian, and transit facilities.

⁴ Sacramento Regional Transit District, <http://www.sacrt.com/systemmap/A2.stm>.

⁵ AASHTO, "A Policy on Geometric Design of Highways and Streets", 7th Edition (2018).

Appendix A

Traffic Count Data Sheets

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & Twin Oaks Ave

City: Citrus Heights

Control: Signalized

Project ID: 19-07174-001

Date: 5/8/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				Twin Oaks Ave				Twin Oaks Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	3 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	1 WR	0 WU	
7:00 AM	8	290	1	0	0	238	5	0	13	1	9	0	3	0	4	0	572
7:15 AM	7	370	1	0	1	260	4	0	12	0	19	0	0	1	1	0	676
7:30 AM	12	325	0	0	2	262	7	0	13	0	16	0	4	2	2	0	645
7:45 AM	15	312	1	0	2	244	9	0	14	0	19	0	1	3	2	0	622
8:00 AM	12	357	3	0	1	227	5	0	13	0	10	0	5	1	2	0	636
8:15 AM	14	348	2	1	1	240	12	0	13	0	14	0	3	2	3	0	653
8:30 AM	10	274	2	0	1	243	12	1	15	0	14	0	0	1	1	0	574
8:45 AM	7	307	2	0	7	248	9	0	13	2	14	0	2	3	1	0	615
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	85	2583	12	1	15	1962	63	1	106	3	115	0	18	13	16	0	4993
	3.17%	96.34%	0.45%	0.04%	0.73%	96.13%	3.09%	0.05%	47.32%	1.34%	51.34%	0.00%	38.30%	27.66%	34.04%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	46	1364	5	0	6	993	25	0	52	0	64	0	10	7	7	0	2579
PEAK HR FACTOR :	0.767	0.922	0.417	0.000	0.750	0.948	0.694	0.000	0.929	0.000	0.842	0.000	0.500	0.583	0.875	0.000	0.954
	0.936				0.945				0.879				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	3 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	1 WR	0 WU	
4:00 PM	17	332	2	0	3	392	24	1	12	2	19	0	3	0	1	0	808
4:15 PM	18	317	1	4	2	355	20	1	9	0	7	0	5	1	2	0	742
4:30 PM	16	291	2	1	3	354	20	0	17	2	20	0	1	0	3	0	730
4:45 PM	13	278	0	2	0	361	12	0	14	1	26	0	0	1	1	0	709
5:00 PM	13	274	1	0	4	370	17	3	6	0	18	0	3	3	0	0	712
5:15 PM	22	367	6	1	3	409	12	0	8	1	18	0	4	0	0	0	851
5:30 PM	25	315	0	0	3	348	28	3	14	2	16	0	4	0	3	0	761
5:45 PM	25	310	4	1	4	334	18	0	8	1	13	0	2	0	2	0	722
6:00 PM	14	263	2	2	1	337	13	1	10	0	18	0	3	3	2	0	669
6:15 PM	15	228	3	1	2	284	8	0	8	2	10	0	2	0	0	0	563
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	178	2975	21	12	25	3544	172	9	106	11	165	0	27	8	14	0	7267
	5.59%	93.38%	0.66%	0.38%	0.67%	94.51%	4.59%	0.24%	37.59%	3.90%	58.51%	0.00%	55.10%	16.33%	28.57%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	85	1266	11	2	14	1461	75	6	36	4	65	0	13	3	5	0	3046
PEAK HR FACTOR :	0.850	0.862	0.458	0.500	0.875	0.893	0.670	0.500	0.643	0.500	0.903	0.000	0.813	0.250	0.417	0.000	0.895
	0.861				0.917				0.820				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & Eva Retta Ct

City: Citrus Heights

Control: 1-Way Stop(EB)

Project ID: 19-07174-002

Date: 5/8/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				Eva Retta Ct				Eva Retta Ct				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	287	0	0	0	241	0	0	0	0	1	0	0	0	0	0	529
7:15 AM	0	375	0	0	0	275	0	0	2	0	0	0	0	0	0	0	652
7:30 AM	0	336	0	0	0	281	0	0	0	0	0	0	0	0	0	0	617
7:45 AM	0	334	0	0	0	262	1	0	0	0	1	0	0	0	0	0	598
8:00 AM	1	372	0	0	0	263	0	0	0	0	0	0	0	0	0	0	636
8:15 AM	0	357	0	1	0	242	1	0	2	0	1	0	0	0	0	0	604
8:30 AM	0	291	0	0	0	265	3	0	0	0	0	0	0	0	0	0	559
8:45 AM	0	305	0	0	0	249	0	0	1	0	1	0	0	0	0	0	556
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	2657	0	1	0	2078	5	0	5	0	4	0	0	0	0	0	4751
	0.04%	99.92%	0.00%	0.04%	0.00%	99.76%	0.24%	0.00%	55.56%	0.00%	44.44%	0.00%	0	0	0	0	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	1417	0	0	0	1081	1	0	2	0	1	0	0	0	0	0	2503
PEAK HR FACTOR :	0.250	0.945	0.000	0.000	0.000	0.962	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.960
	0.945				0.963				0.375								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	330	0	0	0	378	1	0	1	0	0	0	0	0	0	0	710
4:15 PM	1	338	0	0	0	388	1	0	1	0	1	0	0	0	0	0	730
4:30 PM	0	330	0	0	0	362	0	0	0	0	1	0	0	0	0	0	693
4:45 PM	0	297	0	0	0	407	0	0	0	0	0	0	0	0	0	0	704
5:00 PM	0	313	0	0	0	385	1	0	0	0	0	0	0	0	0	0	699
5:15 PM	1	386	0	0	0	437	0	0	0	0	0	0	0	0	0	0	824
5:30 PM	0	341	0	0	0	358	1	0	0	0	0	0	0	0	0	0	700
5:45 PM	0	328	0	0	0	343	1	0	1	0	0	0	0	0	0	0	673
6:00 PM	1	299	0	0	0	359	0	0	0	0	1	0	0	0	0	0	660
6:15 PM	0	260	0	1	0	293	1	0	0	0	0	0	0	0	0	0	555
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	3	3222	0	1	0	3710	6	0	3	0	3	0	0	0	0	0	6948
	0.09%	99.88%	0.00%	0.03%	0.00%	99.84%	0.16%	0.00%	50.00%	0.00%	50.00%	0.00%	0	0	0	0	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	1337	0	0	0	1587	2	0	0	0	0	0	0	0	0	0	2927
PEAK HR FACTOR :	0.250	0.866	0.000	0.000	0.000	0.908	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.888
	0.864				0.909												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & Antelope Rd

City: Citrus Heights

Control: Signalized

Project ID: 19-07174-003

Date: 5/8/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				Antelope Rd				Antelope Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2	2	1	0	2	2	1	0	2	2	1	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	42	219	1	1	16	240	29	0	16	86	54	0	3	95	66	0	868
7:15 AM	32	238	3	0	23	235	25	0	27	105	105	1	2	101	73	0	970
7:30 AM	36	230	3	0	23	243	25	0	22	96	72	3	6	136	80	1	976
7:45 AM	47	231	1	2	33	262	39	0	24	129	95	4	4	114	65	1	1051
8:00 AM	56	221	1	2	25	203	11	2	48	128	83	5	8	141	65	0	999
8:15 AM	44	244	5	0	19	244	22	1	24	81	60	1	7	117	71	1	941
8:30 AM	47	222	2	0	20	236	14	0	27	77	76	0	8	99	60	0	888
8:45 AM	31	217	0	0	26	226	17	2	23	76	65	10	9	84	49	1	836
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	335	1822	16	5	185	1889	182	5	211	778	610	24	47	887	529	4	7529
	15.38%	83.65%	0.73%	0.23%	8.18%	83.55%	8.05%	0.22%	13.00%	47.94%	37.58%	1.48%	3.20%	60.46%	36.06%	0.27%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	171	920	8	4	104	943	100	2	121	458	355	13	20	492	283	2	3996
PEAK HR FACTOR :	0.763	0.966	0.667	0.500	0.788	0.900	0.641	0.250	0.630	0.888	0.845	0.650	0.625	0.872	0.884	0.500	0.951
	0.981				0.860				0.897				0.893				


PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2	2	1	0	2	2	1	0	2	2	1	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	77	310	2	2	53	287	40	1	27	140	73	6	14	112	57	0	1201
4:15 PM	60	246	6	0	49	276	33	0	31	177	91	8	12	121	47	0	1157
4:30 PM	82	273	11	0	59	295	39	0	24	142	69	5	14	116	57	0	1186
4:45 PM	69	219	10	3	39	289	34	0	32	152	81	6	17	114	44	0	1109
5:00 PM	85	242	10	1	58	268	36	2	34	153	79	13	16	124	59	0	1180
5:15 PM	80	303	4	7	77	298	50	2	27	149	77	14	8	101	61	0	1258
5:30 PM	78	299	8	0	54	307	37	5	35	145	76	7	15	119	51	1	1237
5:45 PM	80	243	3	1	45	237	42	4	38	120	68	9	21	121	53	2	1087
6:00 PM	93	213	4	2	46	259	35	6	41	149	79	14	9	113	45	0	1108
6:15 PM	69	204	9	1	54	226	33	1	38	155	79	18	17	107	48	1	1060
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	773	2552	67	17	534	2742	379	21	327	1482	772	100	143	1148	522	4	11583
	22.68%	74.86%	1.97%	0.50%	14.53%	74.59%	10.31%	0.57%	12.20%	55.28%	28.80%	3.73%	7.87%	63.18%	28.73%	0.22%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	312	1063	32	11	228	1162	157	9	128	599	313	40	56	458	215	1	4784
PEAK HR FACTOR :	0.918	0.877	0.800	0.393	0.740	0.946	0.785	0.450	0.914	0.979	0.966	0.714	0.824	0.923	0.881	0.250	0.951
	0.900				0.911				0.968				0.917				

Appendix B

*Analysis Worksheets for
Baseline (2019) Conditions*




1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing

Baseline (2019)
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↗	↕		↗	↕	↗
Traffic Volume (veh/h)	52	0	64	10	7	7	46	1364	5	6	993	25
Future Volume (veh/h)	52	0	64	10	7	7	46	1364	5	6	993	25
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	0	73	13	9	9	49	1451	5	6	1056	27
Peak Hour Factor	0.88	0.88	0.88	0.75	0.75	0.75	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	0	101	42	29	62	63	2335	8	113	2378	1061
Arrive On Green	0.06	0.00	0.06	0.04	0.04	0.04	0.04	0.64	0.64	0.06	0.67	0.67
Sat Flow, veh/h	1781	0	1585	1073	743	1585	1781	3632	13	1781	3554	1585
Grp Volume(v), veh/h	59	0	73	22	0	9	49	710	746	6	1056	27
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1817	0	1585	1781	1777	1868	1781	1777	1585
Q Serve(g_s), s	3.5	0.0	5.0	1.3	0.0	0.6	3.0	26.1	26.1	0.3	15.4	0.6
Cycle Q Clear(g_c), s	3.5	0.0	5.0	1.3	0.0	0.6	3.0	26.1	26.1	0.3	15.4	0.6
Prop In Lane	1.00		1.00	0.59		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	114	0	101	71	0	62	63	1142	1201	113	2378	1061
V/C Ratio(X)	0.52	0.00	0.72	0.31	0.00	0.15	0.78	0.62	0.62	0.05	0.44	0.03
Avail Cap(c_a), veh/h	314	0	280	304	0	265	199	1142	1201	235	2378	1061
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	0.0	50.5	51.4	0.0	51.1	52.6	11.7	11.7	48.4	8.6	6.1
Incr Delay (d2), s/veh	1.4	0.0	3.6	0.9	0.0	0.4	7.4	0.8	0.7	0.1	0.6	0.0
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	1.6	0.0	2.1	0.6	0.0	0.2	1.4	9.2	9.6	0.2	5.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.2	0.0	54.1	52.3	0.0	51.5	60.1	12.5	12.4	48.5	9.2	6.2
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	A	A
Approach Vol, veh/h		132			31			1505			1089	
Approach Delay, s/veh		52.8			52.1			14.0			9.3	
Approach LOS		D			D			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	78.9		9.9	11.5	76.0		12.6				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	5.0	17.4		3.3	2.3	28.1		7.0				
Green Ext Time (p_c), s	0.0	4.9		0.0	0.0	4.1		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			14.4									
HCM 6th LOS			B									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

2: Eva Retta Ct & Sunrise Blvd
 Sunrise Blvd Senior Housing























Baseline (2019)
 AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	1417	1081	1
Future Vol, veh/h	2	1	1	1417	1081	1
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	70	70	95	95	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	1	1	1492	1126	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1875	564	1127	0	-	0
Stage 1	1127	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	63	469	616	-	-	-
Stage 1	271	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	62	469	616	-	-	-
Mov Cap-2 Maneuver	177	-	-	-	-	-
Stage 1	269	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21.5	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	616	-	223	-	-	
HCM Lane V/C Ratio	0.002	-	0.019	-	-	
HCM Control Delay (s)	10.9	0	21.5	-	-	
HCM Lane LOS	B	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019)

AM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	13	121	458	355	22	492	283	175	920	8	106	943
Future Volume (veh/h)	13	121	458	355	22	492	283	175	920	8	106	943
Initial Q (Qb), veh		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	
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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		136	515	399	25	553	318	179	939	8	123	1097
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86
Percent Heavy Veh, %		2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h		195	1038	463	43	565	325	240	1507	672	180	1446
Arrive On Green		0.06	0.29	0.29	0.02	0.26	0.26	0.07	0.42	0.42	0.05	0.41
Sat Flow, veh/h		3456	3554	1585	1781	2174	1249	3456	3554	1585	3456	3554
Grp Volume(v), veh/h		136	515	399	25	452	419	179	939	8	123	1097
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1646	1728	1777	1585	1728	1777
Q Serve(g_s), s		4.3	13.2	26.2	1.5	27.8	27.8	5.6	22.7	0.3	3.8	29.1
Cycle Q Clear(g_c), s		4.3	13.2	26.2	1.5	27.8	27.8	5.6	22.7	0.3	3.8	29.1
Prop In Lane		1.00		1.00	1.00		0.76	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		195	1038	463	43	462	428	240	1507	672	180	1446
V/C Ratio(X)		0.70	0.50	0.86	0.58	0.98	0.98	0.75	0.62	0.01	0.68	0.76
Avail Cap(c_a), veh/h		456	1115	497	154	462	428	456	1507	672	298	1446
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
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
Uniform Delay (d), s/veh		51.0	32.2	36.8	53.1	40.4	40.4	50.2	24.8	18.3	51.2	28.0
Incr Delay (d2), s/veh		1.7	0.1	12.8	4.5	36.0	37.9	1.7	0.6	0.0	1.7	3.8
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
%ile BackOfQ(50%),veh/ln		1.8	5.5	11.4	0.7	16.4	15.5	2.4	9.2	0.1	1.7	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.7	32.4	49.6	57.6	76.4	78.3	52.0	25.4	18.3	52.9	31.8
LnGrp LOS		D	C	D	E	E	E	D	C	B	D	C
Approach Vol, veh/h			1050			896			1126			1336
Approach Delay, s/veh			41.6			76.7			29.6			32.8
Approach LOS			D			E			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	50.2	11.7	35.0	11.2	52.1	8.2	38.5				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	7.6	31.1	6.3	29.8	5.8	24.7	3.5	28.2				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	1.9	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			43.0									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd
Sunrise Blvd Senior Housing


Baseline (2019)
AM Peak



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	100
Future Volume (veh/h)	100
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	116
Peak Hour Factor	0.86
Percent Heavy Veh, %	2
Cap, veh/h	645
Arrive On Green	0.41
Sat Flow, veh/h	1585
Grp Volume(v), veh/h	116
Grp Sat Flow(s),veh/h/ln	1585
Q Serve(g_s), s	5.2
Cycle Q Clear(g_c), s	5.2
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	645
V/C Ratio(X)	0.18
Avail Cap(c_a), veh/h	645
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	20.9
Incr Delay (d2), s/veh	0.6
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	2.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	21.5
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	




1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing

Baseline (2019)
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔↔		↔	↔↔	↔
Traffic Volume (veh/h)	36	4	65	13	3	5	87	1266	11	20	1461	75
Future Volume (veh/h)	36	4	65	13	3	5	87	1266	11	20	1461	75
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	5	79	17	4	7	101	1472	13	22	1605	82
Peak Hour Factor	0.82	0.82	0.82	0.75	0.75	0.75	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	12	106	53	13	58	126	2317	20	113	2249	1003
Arrive On Green	0.07	0.07	0.07	0.04	0.04	0.04	0.07	0.64	0.64	0.06	0.63	0.63
Sat Flow, veh/h	1607	183	1585	1455	342	1585	1781	3610	32	1781	3554	1585
Grp Volume(v), veh/h	49	0	79	21	0	7	101	724	761	22	1605	82
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1798	0	1585	1781	1777	1865	1781	1777	1585
Q Serve(g_s), s	2.9	0.0	5.4	1.3	0.0	0.5	6.1	27.1	27.2	1.3	33.3	2.2
Cycle Q Clear(g_c), s	2.9	0.0	5.4	1.3	0.0	0.5	6.1	27.1	27.2	1.3	33.3	2.2
Prop In Lane	0.90		1.00	0.81		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	120	0	106	66	0	58	126	1140	1197	113	2249	1003
V/C Ratio(X)	0.41	0.00	0.74	0.32	0.00	0.12	0.80	0.64	0.64	0.19	0.71	0.08
Avail Cap(c_a), veh/h	316	0	280	301	0	265	199	1140	1197	235	2249	1003
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	0.0	50.4	51.7	0.0	51.3	50.3	11.9	11.9	48.8	13.5	7.8
Incr Delay (d2), s/veh	0.8	0.0	3.8	1.0	0.0	0.3	5.0	0.9	0.9	0.3	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	1.3	0.0	0.1	0.6	0.0	0.2	2.9	9.6	10.1	0.6	12.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	0.0	54.2	52.7	0.0	51.6	55.4	12.8	12.8	49.1	15.5	8.0
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	B	A
Approach Vol, veh/h		128			28			1586			1709	
Approach Delay, s/veh		52.6			52.4			15.5			15.6	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	74.9		9.6	11.5	75.9		13.0				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	8.1	35.3		3.3	3.3	29.2		7.4				
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	3.9		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			17.2									
HCM 6th LOS			B									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												






















2: Eva Retta Ct & Sunrise Blvd
 Sunrise Blvd Senior Housing

Baseline (2019)
 PM Peak

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	1	1337	1587	2
Future Vol, veh/h	0	0	1	1337	1587	2
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	25	70	86	86	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1	1555	1744	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2525	873	1746	0	-	0
Stage 1	1745	-	-	-	-	-
Stage 2	780	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	23	293	356	-	-	-
Stage 1	126	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	23	293	356	-	-	-
Mov Cap-2 Maneuver	94	-	-	-	-	-
Stage 1	123	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	356	-	-	-	-	
HCM Lane V/C Ratio	0.003	-	-	-	-	
HCM Control Delay (s)	15.1	0.2	0	-	-	
HCM Lane LOS	C	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019)
PM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	40	128	599	313	57	458	215	11	312	1063	32	237
Future Volume (veh/h)	40	128	599	313	57	458	215	11	312	1063	32	237
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
Work Zone On Approach			No			No				No		
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h		133	624	326	62	498	234		347	1181	36	260
Peak Hour Factor		0.96	0.96	0.96	0.92	0.92	0.92		0.90	0.90	0.90	0.91
Percent Heavy Veh, %		2	2	2	2	2	2		2	2	2	2
Cap, veh/h		192	865	386	80	547	256		405	1486	663	298
Arrive On Green		0.06	0.24	0.24	0.04	0.23	0.23		0.12	0.42	0.42	0.09
Sat Flow, veh/h		3456	3554	1585	1781	2350	1099		3456	3554	1585	3456
Grp Volume(v), veh/h		133	624	326	62	376	356		347	1181	36	260
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1673		1728	1777	1585	1728
Q Serve(g_s), s		4.2	17.7	21.6	3.8	22.6	22.8		10.8	31.9	1.5	8.2
Cycle Q Clear(g_c), s		4.2	17.7	21.6	3.8	22.6	22.8		10.8	31.9	1.5	8.2
Prop In Lane		1.00		1.00	1.00		0.66		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		192	865	386	80	413	389		405	1486	663	298
V/C Ratio(X)		0.69	0.72	0.85	0.78	0.91	0.92		0.86	0.79	0.05	0.87
Avail Cap(c_a), veh/h		456	1115	497	154	462	435		456	1486	663	298
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		51.0	38.2	39.6	52.0	41.1	41.1		47.6	27.9	19.0	49.6
Incr Delay (d2), s/veh		1.7	1.0	8.3	6.0	19.4	21.4		12.5	2.8	0.0	22.4
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		1.8	7.6	9.0	1.8	11.9	11.5		5.3	13.3	0.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.7	39.2	48.0	58.0	60.5	62.5		60.1	30.7	19.1	72.1
LnGrp LOS		D	D	D	E	E	E		E	C	B	E
Approach Vol, veh/h			1083			794				1564		
Approach Delay, s/veh			43.5			61.2				37.0		
Approach LOS			D			E				D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.4	48.0	11.6	32.0	15.0	51.4	10.4	33.2				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	12.8	39.8	6.2	24.8	10.2	33.9	5.8	23.6				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.8	0.0	0.4	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay			45.3									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019)
PM Peak




















Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1162	157
Future Volume (veh/h)	1162	157
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1870	1870
Adj Flow Rate, veh/h	1277	173
Peak Hour Factor	0.91	0.91
Percent Heavy Veh, %	2	2
Cap, veh/h	1377	614
Arrive On Green	0.39	0.39
Sat Flow, veh/h	3554	1585
Grp Volume(v), veh/h	1277	173
Grp Sat Flow(s),veh/h/ln	1777	1585
Q Serve(g_s), s	37.8	8.3
Cycle Q Clear(g_c), s	37.8	8.3
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	1377	614
V/C Ratio(X)	0.93	0.28
Avail Cap(c_a), veh/h	1377	614
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	32.2	23.2
Incr Delay (d2), s/veh	12.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.7	3.2
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	44.4	24.3
LnGrp LOS	D	C
Approach Vol, veh/h	1710	
Approach Delay, s/veh	46.6	
Approach LOS	D	
Timer - Assigned Phs		

Appendix C

*Analysis Worksheets for
Baseline (2019) plus Proposed Project Conditions*


2: Eva Retta Ct & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + Project
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	1	3	0	3	1	1417	7	4	1081	1
Future Volume (Veh/h)	2	0	1	3	0	3	1	1417	7	4	1081	1
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.95	0.95	0.95	0.96	0.96	0.96
Hourly flow rate (vph)	3	0	1	4	0	4	1	1492	7	4	1126	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							TWLTL			None		
Median storage (veh)							2					
Upstream signal (ft)										1116		
pX, platoon unblocked	0.86	0.86	0.86	0.86	0.86		0.86					
vC, conflicting volume	1886	2636	564	2070	2632	750	1127	1499				
vC1, stage 1 conf vol	1134	1134		1498	1498							
vC2, stage 2 conf vol	752	1501		572	1135							
vCu, unblocked vol	1699	2574	153	1913	2571	750	812	1499				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	99	100	100	97	100	99	100	99				
cM capacity (veh/h)	221	152	741	123	155	354	694	443				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3					
Volume Total	4	8	747	753	4	751	376					
Volume Left	3	4	1	0	4	0	0					
Volume Right	1	4	0	7	0	0	1					
cSH	268	183	694	1700	443	1700	1700					
Volume to Capacity	0.01	0.04	0.00	0.44	0.01	0.44	0.22					
Queue Length 95th (ft)	1	3	0	0	1	0	0					
Control Delay (s)	18.6	25.6	0.0	0.0	13.2	0.0	0.0					
Lane LOS	C	D	A		B							
Approach Delay (s)	18.6	25.6	0.0	0.0								
Approach LOS	C	D										
Intersection Summary												
Average Delay				0.1								
Intersection Capacity Utilization				50.1%	ICU Level of Service					A		
Analysis Period (min)				15								

1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing

Baseline (2019) + Project
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕		↖	↕	↗
Traffic Volume (veh/h)	52	0	65	10	7	7	47	1366	5	6	996	25
Future Volume (veh/h)	52	0	65	10	7	7	47	1366	5	6	996	25
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	0	74	13	9	9	50	1453	5	6	1060	27
Peak Hour Factor	0.88	0.88	0.88	0.75	0.75	0.75	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	0	102	42	29	62	64	2332	8	113	2373	1058
Arrive On Green	0.06	0.00	0.06	0.04	0.04	0.04	0.04	0.64	0.64	0.06	0.67	0.67
Sat Flow, veh/h	1781	0	1585	1073	743	1585	1781	3632	12	1781	3554	1585
Grp Volume(v), veh/h	59	0	74	22	0	9	50	711	747	6	1060	27
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1817	0	1585	1781	1777	1868	1781	1777	1585
Q Serve(g_s), s	3.5	0.0	5.0	1.3	0.0	0.6	3.1	26.2	26.3	0.3	15.5	0.6
Cycle Q Clear(g_c), s	3.5	0.0	5.0	1.3	0.0	0.6	3.1	26.2	26.3	0.3	15.5	0.6
Prop In Lane	1.00		1.00	0.59		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	115	0	102	71	0	62	64	1141	1199	113	2373	1058
V/C Ratio(X)	0.51	0.00	0.72	0.31	0.00	0.15	0.78	0.62	0.62	0.05	0.45	0.03
Avail Cap(c_a), veh/h	314	0	280	304	0	265	199	1141	1199	235	2373	1058
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	0.0	50.5	51.4	0.0	51.1	52.6	11.7	11.7	48.4	8.7	6.2
Incr Delay (d2), s/veh	1.3	0.0	3.6	0.9	0.0	0.4	7.3	0.8	0.8	0.1	0.6	0.0
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	1.6	0.0	2.1	0.6	0.0	0.2	1.5	9.2	9.7	0.2	5.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	0.0	54.1	52.3	0.0	51.5	59.9	12.5	12.5	48.5	9.3	6.2
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	A	A
Approach Vol, veh/h		133			31			1508			1093	
Approach Delay, s/veh		52.8			52.1			14.1			9.4	
Approach LOS		D			D			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	78.8		9.9	11.5	75.9		12.7				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	5.1	17.5		3.3	2.3	28.3		7.0				
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	4.1		0.2				

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B























Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019) + Project
AM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	13	123	458	355	22	492	285	175	923	8	107	944
Future Volume (veh/h)	13	123	458	355	22	492	285	175	923	8	107	944
Initial Q (Qb), veh		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	
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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		138	515	399	25	553	320	179	942	8	124	1098
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86
Percent Heavy Veh, %		2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h		197	1040	464	43	564	326	240	1504	671	181	1444
Arrive On Green		0.06	0.29	0.29	0.02	0.26	0.26	0.07	0.42	0.42	0.05	0.41
Sat Flow, veh/h		3456	3554	1585	1781	2168	1253	3456	3554	1585	3456	3554
Grp Volume(v), veh/h		138	515	399	25	453	420	179	942	8	124	1098
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1645	1728	1777	1585	1728	1777
Q Serve(g_s), s		4.3	13.2	26.2	1.5	27.9	27.9	5.6	22.9	0.3	3.9	29.2
Cycle Q Clear(g_c), s		4.3	13.2	26.2	1.5	27.9	27.9	5.6	22.9	0.3	3.9	29.2
Prop In Lane		1.00		1.00	1.00		0.76	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		197	1040	464	43	462	428	240	1504	671	181	1444
V/C Ratio(X)		0.70	0.50	0.86	0.58	0.98	0.98	0.75	0.63	0.01	0.68	0.76
Avail Cap(c_a), veh/h		456	1115	497	154	462	428	456	1504	671	298	1444
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
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
Uniform Delay (d), s/veh		50.9	32.2	36.8	53.1	40.4	40.4	50.2	24.9	18.4	51.2	28.0
Incr Delay (d2), s/veh		1.7	0.1	12.6	4.5	36.6	38.5	1.7	0.6	0.0	1.7	3.8
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
%ile BackOfQ(50%),veh/ln		1.9	5.5	11.4	0.7	16.6	15.6	2.4	9.3	0.1	1.7	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.6	32.3	49.4	57.6	77.0	79.0	52.0	25.5	18.4	52.9	31.9
LnGrp LOS		D	C	D	E	E	E	D	C	B	D	C
Approach Vol, veh/h			1052			898			1129			1339
Approach Delay, s/veh			41.5			77.4			29.7			32.9
Approach LOS			D			E			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	50.1	11.8	35.0	11.3	52.0	8.2	38.6				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	7.6	31.2	6.3	29.9	5.9	24.9	3.5	28.2				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	1.9	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			43.2									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd
Sunrise Blvd Senior Housing


















Baseline (2019) + Project
AM Peak



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	101
Future Volume (veh/h)	101
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	117
Peak Hour Factor	0.86
Percent Heavy Veh, %	2
Cap, veh/h	644
Arrive On Green	0.41
Sat Flow, veh/h	1585
Grp Volume(v), veh/h	117
Grp Sat Flow(s),veh/h/ln	1585
Q Serve(g_s), s	5.2
Cycle Q Clear(g_c), s	5.2
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	644
V/C Ratio(X)	0.18
Avail Cap(c_a), veh/h	644
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	20.9
Incr Delay (d2), s/veh	0.6
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	2.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	21.5
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	


2: Eva Retta Ct & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + Project
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	8	0	6	1	1337	5	4	1587	2
Future Volume (Veh/h)	0	0	0	8	0	6	1	1337	5	4	1587	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.70	0.70	0.70	0.70	0.70	0.86	0.86	0.86	0.91	0.91	0.91
Hourly flow rate (vph)	0	0	0	11	0	9	1	1555	6	4	1744	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLT			None	
Median storage (veh)								2				
Upstream signal (ft)											1116	
pX, platoon unblocked	0.64	0.64	0.64	0.64	0.64		0.64					
vC, conflicting volume	2542	3316	873	2440	3314	780	1746			1561		
vC1, stage 1 conf vol	1753	1753		1560	1560							
vC2, stage 2 conf vol	788	1563		880	1754							
vCu, unblocked vol	2279	3497	0	2120	3494	780	1028			1561		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	90	100	97	100			99		
cM capacity (veh/h)	135	117	690	112	119	338	427			419		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3					
Volume Total	0	20	778	784	4	1163	583					
Volume Left	0	11	1	0	4	0	0					
Volume Right	0	9	0	6	0	0	2					
cSH	1700	160	427	1700	419	1700	1700					
Volume to Capacity	0.00	0.12	0.00	0.46	0.01	0.68	0.34					
Queue Length 95th (ft)	0	10	0	0	1	0	0					
Control Delay (s)	0.0	30.6	0.1	0.0	13.7	0.0	0.0					
Lane LOS	A	D	A		B							
Approach Delay (s)	0.0	30.6	0.0		0.0							
Approach LOS	A	D										
Intersection Summary												
Average Delay			0.2									
Intersection Capacity Utilization			53.9%	ICU Level of Service					A			
Analysis Period (min)			15									






















1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing

Baseline (2019) + Project
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗	↘		↗	↘	↘	↕		↘	↕	↗
Traffic Volume (veh/h)	36	4	66	13	3	5	89	1270	11	20	1464	75
Future Volume (veh/h)	36	4	66	13	3	5	89	1270	11	20	1464	75
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	5	80	17	4	7	103	1477	13	22	1609	82
Peak Hour Factor	0.82	0.82	0.82	0.75	0.75	0.75	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	12	107	53	13	58	128	2314	20	113	2242	1000
Arrive On Green	0.07	0.07	0.07	0.04	0.04	0.04	0.07	0.64	0.64	0.06	0.63	0.63
Sat Flow, veh/h	1607	183	1585	1455	342	1585	1781	3610	32	1781	3554	1585
Grp Volume(v), veh/h	49	0	80	21	0	7	103	727	763	22	1609	82
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1798	0	1585	1781	1777	1865	1781	1777	1585
Q Serve(g_s), s	2.9	0.0	5.5	1.3	0.0	0.5	6.3	27.3	27.4	1.3	33.6	2.2
Cycle Q Clear(g_c), s	2.9	0.0	5.5	1.3	0.0	0.5	6.3	27.3	27.4	1.3	33.6	2.2
Prop In Lane	0.90		1.00	0.81		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	121	0	107	66	0	58	128	1139	1195	113	2242	1000
V/C Ratio(X)	0.40	0.00	0.74	0.32	0.00	0.12	0.80	0.64	0.64	0.19	0.72	0.08
Avail Cap(c_a), veh/h	316	0	280	301	0	265	199	1139	1195	235	2242	1000
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	0.0	50.3	51.7	0.0	51.3	50.3	12.0	12.0	48.8	13.7	7.9
Incr Delay (d2), s/veh	0.8	0.0	3.8	1.0	0.0	0.3	5.9	0.9	0.9	0.3	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	1.3	0.0	2.3	0.6	0.0	0.2	2.9	9.7	10.1	0.6	12.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.9	0.0	54.1	52.7	0.0	51.6	56.2	12.9	12.9	49.1	15.7	8.1
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	B	A
Approach Vol, veh/h		129			28			1593			1713	
Approach Delay, s/veh		52.5			52.4			15.7			15.8	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.6	74.7		9.6	11.5	75.8		13.1				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	8.3	35.6		3.3	3.3	29.4		7.5				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	3.8		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			17.4									
HCM 6th LOS			B									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019) + Project
PM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	40	129	599	313	57	458	216	11	312	1066	32	239
Future Volume (veh/h)	40	129	599	313	57	458	216	11	312	1066	32	239
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
Work Zone On Approach		No			No				No			
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h		134	624	326	62	498	235		347	1184	36	263
Peak Hour Factor		0.96	0.96	0.96	0.92	0.92	0.92		0.90	0.90	0.90	0.91
Percent Heavy Veh, %		2	2	2	2	2	2		2	2	2	2
Cap, veh/h		193	867	387	80	547	257		405	1484	662	298
Arrive On Green		0.06	0.24	0.24	0.04	0.23	0.23		0.12	0.42	0.42	0.09
Sat Flow, veh/h		3456	3554	1585	1781	2347	1102		3456	3554	1585	3456
Grp Volume(v), veh/h		134	624	326	62	376	357		347	1184	36	263
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1672		1728	1777	1585	1728
Q Serve(g_s), s		4.2	17.7	21.5	3.8	22.7	22.9		10.8	32.0	1.5	8.3
Cycle Q Clear(g_c), s		4.2	17.7	21.5	3.8	22.7	22.9		10.8	32.0	1.5	8.3
Prop In Lane		1.00		1.00	1.00		0.66		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		193	867	387	80	414	389		405	1484	662	298
V/C Ratio(X)		0.70	0.72	0.84	0.78	0.91	0.92		0.86	0.80	0.05	0.88
Avail Cap(c_a), veh/h		456	1115	497	154	462	435		456	1484	662	298
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		51.0	38.1	39.6	52.0	41.1	41.1		47.6	28.0	19.1	49.7
Incr Delay (d2), s/veh		1.7	1.0	8.2	6.0	19.5	21.4		12.5	2.9	0.0	24.1
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		1.8	7.6	9.0	1.8	11.9	11.5		5.3	13.4	0.5	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.7	39.1	47.8	58.0	60.6	62.6		60.1	30.9	19.1	73.8
LnGrp LOS		D	D	D	E	E	E		E	C	B	E
Approach Vol, veh/h			1084			795				1567		
Approach Delay, s/veh			43.4			61.3				37.1		
Approach LOS			D			E				D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.4	47.9	11.6	32.0	15.0	51.3	10.4	33.2				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	12.8	40.0	6.2	24.9	10.3	34.0	5.8	23.5				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.8	0.0	0.3	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay			45.5									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019) + Project
PM Peak

	↓	↙
Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1166	159
Future Volume (veh/h)	1166	159
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1870	1870
Adj Flow Rate, veh/h	1281	175
Peak Hour Factor	0.91	0.91
Percent Heavy Veh, %	2	2
Cap, veh/h	1374	613
Arrive On Green	0.39	0.39
Sat Flow, veh/h	3554	1585
Grp Volume(v), veh/h	1281	175
Grp Sat Flow(s),veh/h/ln	1777	1585
Q Serve(g_s), s	38.0	8.4
Cycle Q Clear(g_c), s	38.0	8.4
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	1374	613
V/C Ratio(X)	0.93	0.29
Avail Cap(c_a), veh/h	1374	613
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	32.3	23.3
Incr Delay (d2), s/veh	12.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.8	3.2
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	45.0	24.4
LnGrp LOS	D	C
Approach Vol, veh/h	1719	
Approach Delay, s/veh	47.3	
Approach LOS	D	
Timer - Assigned Phs		

Appendix D

*Analysis Worksheets for
Baseline (2019) plus Approved Projects Conditions*




1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing

Baseline (2019) + AP
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶	↷		↶	↷	↷	↶↷		↷	↶↷	↷
Traffic Volume (veh/h)	55	0	67	11	8	8	48	1387	5	7	1010	26
Future Volume (veh/h)	55	0	67	11	8	8	48	1387	5	7	1010	26
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	0	76	15	11	11	51	1476	5	7	1074	28
Peak Hour Factor	0.88	0.88	0.88	0.75	0.75	0.75	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	0	104	45	33	68	66	2312	8	113	2351	1048
Arrive On Green	0.07	0.00	0.07	0.04	0.04	0.04	0.04	0.64	0.64	0.06	0.66	0.66
Sat Flow, veh/h	1781	0	1585	1049	769	1585	1781	3633	12	1781	3554	1585
Grp Volume(v), veh/h	62	0	76	26	0	11	51	722	759	7	1074	28
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1818	0	1585	1781	1777	1868	1781	1777	1585
Q Serve(g_s), s	3.7	0.0	5.2	1.5	0.0	0.7	3.1	27.4	27.4	0.4	16.1	0.7
Cycle Q Clear(g_c), s	3.7	0.0	5.2	1.5	0.0	0.7	3.1	27.4	27.4	0.4	16.1	0.7
Prop In Lane	1.00		1.00	0.58		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	117	0	104	78	0	68	66	1131	1189	113	2351	1048
V/C Ratio(X)	0.53	0.00	0.73	0.33	0.00	0.16	0.78	0.64	0.64	0.06	0.46	0.03
Avail Cap(c_a), veh/h	314	0	280	304	0	265	199	1131	1189	235	2351	1048
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	0.0	50.4	51.1	0.0	50.7	52.5	12.2	12.2	48.4	9.0	6.4
Incr Delay (d2), s/veh	1.4	0.0	3.6	0.9	0.0	0.4	7.1	0.9	0.9	0.1	0.6	0.0
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	1.7	0.0	2.2	0.7	0.0	0.3	1.5	9.7	10.2	0.2	5.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	0.0	54.0	52.0	0.0	51.1	59.7	13.2	13.1	48.5	9.7	6.5
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	A	A
Approach Vol, veh/h		138			37			1532			1109	
Approach Delay, s/veh		52.7			51.7			14.7			9.8	
Approach LOS		D			D			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	78.1		10.3	11.5	75.3		12.8				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	5.1	18.1		3.5	2.4	29.4		7.2				
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	3.8		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			15.1									
HCM 6th LOS			B									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												























2: Eva Retta Ct & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + AP
AM Peak

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	1436	1095	1
Future Vol, veh/h	2	1	1	1436	1095	1
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	70	70	95	95	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	1	1	1512	1141	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1900	571	1142	0	-	0
Stage 1	1142	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	61	464	608	-	-	-
Stage 1	266	-	-	-	-	-
Stage 2	423	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	60	464	608	-	-	-
Mov Cap-2 Maneuver	174	-	-	-	-	-
Stage 1	263	-	-	-	-	-
Stage 2	423	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21.7	0.1		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	608	-	220	-	-	
HCM Lane V/C Ratio	0.002	-	0.019	-	-	
HCM Control Delay (s)	10.9	0.1	21.7	-	-	
HCM Lane LOS	B	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019) + AP
AM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	13	124	458	363	22	492	283	179	933	8	106	956
Future Volume (veh/h)	13	124	458	363	22	492	283	179	933	8	106	956
Initial Q (Qb), veh		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	
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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		139	515	408	25	553	318	183	952	8	123	1112
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86
Percent Heavy Veh, %		2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h		198	1041	464	43	565	325	244	1504	671	180	1439
Arrive On Green		0.06	0.29	0.29	0.02	0.26	0.26	0.07	0.42	0.42	0.05	0.40
Sat Flow, veh/h		3456	3554	1585	1781	2174	1249	3456	3554	1585	3456	3554
Grp Volume(v), veh/h		139	515	408	25	452	419	183	952	8	123	1112
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1646	1728	1777	1585	1728	1777
Q Serve(g_s), s		4.3	13.2	27.0	1.5	27.8	27.8	5.7	23.2	0.3	3.8	29.8
Cycle Q Clear(g_c), s		4.3	13.2	27.0	1.5	27.8	27.8	5.7	23.2	0.3	3.8	29.8
Prop In Lane		1.00		1.00	1.00		0.76	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		198	1041	464	43	462	428	244	1504	671	180	1439
V/C Ratio(X)		0.70	0.49	0.88	0.58	0.98	0.98	0.75	0.63	0.01	0.68	0.77
Avail Cap(c_a), veh/h		456	1115	497	154	462	428	456	1504	671	298	1439
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
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
Uniform Delay (d), s/veh		50.9	32.1	37.0	53.1	40.4	40.4	50.2	25.0	18.4	51.2	28.3
Incr Delay (d2), s/veh		1.7	0.1	14.8	4.5	36.0	37.9	1.8	0.7	0.0	1.7	4.1
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
%ile BackOfQ(50%),veh/ln		1.9	5.5	11.9	0.7	16.4	15.5	2.5	9.4	0.1	1.7	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.6	32.3	51.8	57.6	76.4	78.3	51.9	25.7	18.4	52.9	32.4
LnGrp LOS		D	C	D	E	E	E	D	C	B	D	C
Approach Vol, veh/h			1062			896			1143			1354
Approach Delay, s/veh			42.4			76.7			29.8			33.4
Approach LOS			D			E			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	49.9	11.8	35.0	11.2	52.0	8.2	38.6				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	7.7	31.8	6.3	29.8	5.8	25.2	3.5	29.0				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	1.9	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			43.3									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + AP
AM Peak

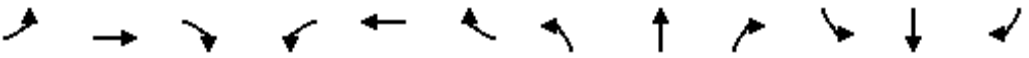


Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	102
Future Volume (veh/h)	102
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	119
Peak Hour Factor	0.86
Percent Heavy Veh, %	2
Cap, veh/h	642
Arrive On Green	0.40
Sat Flow, veh/h	1585
Grp Volume(v), veh/h	119
Grp Sat Flow(s),veh/h/ln	1585
Q Serve(g_s), s	5.3
Cycle Q Clear(g_c), s	5.3
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	642
V/C Ratio(X)	0.19
Avail Cap(c_a), veh/h	642
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	21.1
Incr Delay (d2), s/veh	0.6
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	2.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	21.7
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing




Baseline (2019) + AP

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕		↖	↕	↗
Traffic Volume (veh/h)	46	5	83	16	4	6	111	1286	13	24	1484	95
Future Volume (veh/h)	46	5	83	16	4	6	111	1286	13	24	1484	95
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	6	101	21	5	8	129	1495	15	26	1631	104
Peak Hour Factor	0.82	0.82	0.82	0.75	0.75	0.75	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	14	130	60	14	65	156	2244	23	113	2120	945
Arrive On Green	0.08	0.08	0.08	0.04	0.04	0.04	0.09	0.62	0.62	0.06	0.60	0.60
Sat Flow, veh/h	1616	173	1585	1452	346	1585	1781	3605	36	1781	3554	1585
Grp Volume(v), veh/h	62	0	101	26	0	8	129	737	773	26	1631	104
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1798	0	1585	1781	1777	1864	1781	1777	1585
Q Serve(g_s), s	3.6	0.0	6.9	1.5	0.0	0.5	7.8	29.4	29.5	1.5	37.7	3.1
Cycle Q Clear(g_c), s	3.6	0.0	6.9	1.5	0.0	0.5	7.8	29.4	29.5	1.5	37.7	3.1
Prop In Lane	0.90		1.00	0.81		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	130	74	0	65	156	1106	1160	113	2120	945
V/C Ratio(X)	0.42	0.00	0.78	0.35	0.00	0.12	0.82	0.67	0.67	0.23	0.77	0.11
Avail Cap(c_a), veh/h	316	0	280	301	0	265	199	1106	1160	235	2120	945
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	0.0	49.5	51.3	0.0	50.8	49.3	13.4	13.4	48.9	16.6	9.6
Incr Delay (d2), s/veh	0.7	0.0	3.8	1.1	0.0	0.3	15.8	1.2	1.2	0.4	2.8	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	1.7	0.0	2.9	0.7	0.0	0.2	4.1	10.7	11.2	0.7	14.4	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	0.0	53.3	52.4	0.0	51.1	65.1	14.6	14.6	49.3	19.3	9.8
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	B	A
Approach Vol, veh/h		163			34			1639			1761	
Approach Delay, s/veh		51.6			52.1			18.6			19.2	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.4	70.9		10.1	11.5	73.8		14.6				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	9.8	39.7		3.5	3.5	31.5		8.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.0		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			20.7									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

2: Eva Retta Ct & Sunrise Blvd
 Sunrise Blvd Senior Housing






















Baseline (2019) + AP
 PM Peak

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	1	1349	1601	2
Future Vol, veh/h	0	0	1	1349	1601	2
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	25	70	86	86	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1	1569	1759	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2547	881	1761	0	-	0
Stage 1	1760	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	22	290	351	-	-	-
Stage 1	123	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	22	290	351	-	-	-
Mov Cap-2 Maneuver	91	-	-	-	-	-
Stage 1	120	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	351	-	-	-	-	
HCM Lane V/C Ratio	0.003	-	-	-	-	
HCM Control Delay (s)	15.3	0.2	0	-	-	
HCM Lane LOS	C	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019) + AP

PM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	41	131	599	320	57	458	215	11	319	1077	32	237
Future Volume (veh/h)	41	131	599	320	57	458	215	11	319	1077	32	237
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
Work Zone On Approach			No			No				No		
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h		136	624	333	62	498	234		354	1197	36	260
Peak Hour Factor		0.96	0.96	0.96	0.92	0.92	0.92		0.90	0.90	0.90	0.91
Percent Heavy Veh, %		2	2	2	2	2	2		2	2	2	2
Cap, veh/h		195	868	387	80	547	256		412	1483	661	298
Arrive On Green		0.06	0.24	0.24	0.04	0.23	0.23		0.12	0.42	0.42	0.09
Sat Flow, veh/h		3456	3554	1585	1781	2350	1099		3456	3554	1585	3456
Grp Volume(v), veh/h		136	624	333	62	376	356		354	1197	36	260
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1673		1728	1777	1585	1728
Q Serve(g_s), s		4.3	17.7	22.1	3.8	22.6	22.8		11.1	32.6	1.5	8.2
Cycle Q Clear(g_c), s		4.3	17.7	22.1	3.8	22.6	22.8		11.1	32.6	1.5	8.2
Prop In Lane		1.00		1.00	1.00		0.66		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		195	868	387	80	413	389		412	1483	661	298
V/C Ratio(X)		0.70	0.72	0.86	0.78	0.91	0.92		0.86	0.81	0.05	0.87
Avail Cap(c_a), veh/h		456	1115	497	154	462	435		456	1483	661	298
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		51.0	38.1	39.8	52.0	41.1	41.1		47.5	28.2	19.1	49.6
Incr Delay (d2), s/veh		1.7	1.0	9.7	6.0	19.4	21.4		13.1	3.2	0.0	22.4
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		1.8	7.6	9.4	1.8	11.9	11.5		5.4	13.7	0.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.7	39.1	49.5	58.0	60.5	62.5		60.6	31.3	19.1	72.1
LnGrp LOS		D	D	D	E	E	E		E	C	B	E
Approach Vol, veh/h			1093			794				1587		
Approach Delay, s/veh			43.9			61.2				37.6		
Approach LOS			D			E				D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.6	47.7	11.7	32.0	15.0	51.3	10.4	33.3				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	13.1	40.8	6.3	24.8	10.2	34.6	5.8	24.1				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.8	0.0	0.1	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay			46.3									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + AP
PM Peak

	↓	↙
Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1178	161
Future Volume (veh/h)	1178	161
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A _{pbT})		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1870	1870
Adj Flow Rate, veh/h	1295	177
Peak Hour Factor	0.91	0.91
Percent Heavy Veh, %	2	2
Cap, veh/h	1366	609
Arrive On Green	0.38	0.38
Sat Flow, veh/h	3554	1585
Grp Volume(v), veh/h	1295	177
Grp Sat Flow(s),veh/h/ln	1777	1585
Q Serve(g _s), s	38.8	8.5
Cycle Q Clear(g _c), s	38.8	8.5
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	1366	609
V/C Ratio(X)	0.95	0.29
Avail Cap(c _a), veh/h	1366	609
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	32.8	23.5
Incr Delay (d ₂), s/veh	14.7	1.2
Initial Q Delay(d ₃),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.6	3.3
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	47.5	24.7
LnGrp LOS	D	C
Approach Vol, veh/h	1732	
Approach Delay, s/veh	48.9	
Approach LOS	D	
Timer - Assigned Phs		


















Appendix E

*Analysis Worksheets for
Baseline (2019) plus Approved Projects plus Proposed Project Conditions*

2: Eva Retta Ct & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + AP + PP


AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	1	3	0	3	1	1436	7	4	1095	1
Future Volume (Veh/h)	2	0	1	3	0	3	1	1436	7	4	1095	1
Sign Control	Stop				Stop				Free		Free	
Grade	0%				0%				0%		0%	
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.95	0.95	0.95	0.96	0.96	0.96
Hourly flow rate (vph)	3	0	1	4	0	4	1	1512	7	4	1141	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							TWLTL			None		
Median storage (veh)							2					
Upstream signal (ft)										1116		
pX, platoon unblocked	0.85	0.85	0.85	0.85	0.85		0.85					
vC, conflicting volume	1912	2670	571	2097	2668	760	1142	1519				
vC1, stage 1 conf vol	1150	1150		1518	1518							
vC2, stage 2 conf vol	762	1521		580	1150							
vCu, unblocked vol	1720	2613	144	1938	2609	760	816	1519				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	99	100	100	97	100	99	100	99				
cM capacity (veh/h)	218	149	746	120	152	349	687	435				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3					
Volume Total	4	8	757	763	4	761	381					
Volume Left	3	4	1	0	4	0	0					
Volume Right	1	4	0	7	0	0	1					
cSH	265	179	687	1700	435	1700	1700					
Volume to Capacity	0.02	0.04	0.00	0.45	0.01	0.45	0.22					
Queue Length 95th (ft)	1	3	0	0	1	0	0					
Control Delay (s)	18.8	26.1	0.0	0.0	13.3	0.0	0.0					
Lane LOS	C	D	A		B							
Approach Delay (s)	18.8	26.1	0.0	0.0								
Approach LOS	C	D										
Intersection Summary												
Average Delay			0.1									
Intersection Capacity Utilization			50.6%	ICU Level of Service				A				
Analysis Period (min)			15									

1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing

Baseline (2019) + AP + PP























AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕		↖	↕	↗
Traffic Volume (veh/h)	55	0	68	11	8	8	49	1389	5	7	1013	26
Future Volume (veh/h)	55	0	68	11	8	8	49	1389	5	7	1013	26
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	0	77	15	11	11	52	1478	5	7	1078	28
Peak Hour Factor	0.88	0.88	0.88	0.75	0.75	0.75	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	0	105	45	33	68	67	2310	8	113	2346	1046
Arrive On Green	0.07	0.00	0.07	0.04	0.04	0.04	0.04	0.64	0.64	0.06	0.66	0.66
Sat Flow, veh/h	1781	0	1585	1049	769	1585	1781	3633	12	1781	3554	1585
Grp Volume(v), veh/h	62	0	77	26	0	11	52	723	760	7	1078	28
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1818	0	1585	1781	1777	1868	1781	1777	1585
Q Serve(g_s), s	3.7	0.0	5.2	1.5	0.0	0.7	3.2	27.5	27.5	0.4	16.3	0.7
Cycle Q Clear(g_c), s	3.7	0.0	5.2	1.5	0.0	0.7	3.2	27.5	27.5	0.4	16.3	0.7
Prop In Lane	1.00		1.00	0.58		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	118	0	105	78	0	68	67	1130	1188	113	2346	1046
V/C Ratio(X)	0.52	0.00	0.73	0.33	0.00	0.16	0.78	0.64	0.64	0.06	0.46	0.03
Avail Cap(c_a), veh/h	314	0	280	304	0	265	199	1130	1188	235	2346	1046
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	0.0	50.4	51.1	0.0	50.7	52.5	12.3	12.3	48.4	9.1	6.5
Incr Delay (d2), s/veh	1.3	0.0	3.6	0.9	0.0	0.4	7.0	0.9	0.9	0.1	0.7	0.0
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	1.7	0.0	2.2	0.7	0.0	0.3	1.5	9.8	10.3	0.2	5.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.0	0.0	54.0	52.0	0.0	51.1	59.5	13.2	13.2	48.5	9.8	6.5
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	A	A
Approach Vol, veh/h		139			37			1535			1113	
Approach Delay, s/veh		52.6			51.7			14.8			9.9	
Approach LOS		D			D			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	77.9		10.3	11.5	75.2		12.9				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	5.2	18.3		3.5	2.4	29.5		7.2				
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	3.8		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			15.2									
HCM 6th LOS			B									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019) + AP + PP

AM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	13	126	458	363	22	492	285	179	936	8	107	957
Future Volume (veh/h)	13	126	458	363	22	492	285	179	936	8	107	957
Initial Q (Qb), veh		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	
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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h		142	515	408	25	553	320	183	955	8	124	1113
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.98	0.98	0.98	0.86	0.86
Percent Heavy Veh, %		2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h		201	1045	466	43	564	326	244	1500	669	181	1436
Arrive On Green		0.06	0.29	0.29	0.02	0.26	0.26	0.07	0.42	0.42	0.05	0.40
Sat Flow, veh/h		3456	3554	1585	1781	2168	1253	3456	3554	1585	3456	3554
Grp Volume(v), veh/h		142	515	408	25	453	420	183	955	8	124	1113
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1645	1728	1777	1585	1728	1777
Q Serve(g_s), s		4.4	13.2	26.9	1.5	27.9	27.9	5.7	23.4	0.3	3.9	29.9
Cycle Q Clear(g_c), s		4.4	13.2	26.9	1.5	27.9	27.9	5.7	23.4	0.3	3.9	29.9
Prop In Lane		1.00		1.00	1.00		0.76	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		201	1045	466	43	462	428	244	1500	669	181	1436
V/C Ratio(X)		0.71	0.49	0.88	0.58	0.98	0.98	0.75	0.64	0.01	0.68	0.78
Avail Cap(c_a), veh/h		456	1115	497	154	462	428	456	1500	669	298	1436
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
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
Uniform Delay (d), s/veh		50.9	32.1	36.9	53.1	40.4	40.4	50.2	25.1	18.5	51.2	28.4
Incr Delay (d2), s/veh		1.7	0.1	14.5	4.5	36.6	38.5	1.8	0.7	0.0	1.7	4.2
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
%ile BackOfQ(50%),veh/ln		1.9	5.5	11.9	0.7	16.6	15.6	2.5	9.5	0.1	1.7	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.6	32.2	51.4	57.6	77.0	79.0	51.9	25.8	18.5	52.9	32.6
LnGrp LOS		D	C	D	E	E	E	D	C	B	D	C
Approach Vol, veh/h			1065			898			1146			1357
Approach Delay, s/veh			42.3			77.4			29.9			33.5
Approach LOS			D			E			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	49.8	11.9	35.0	11.3	51.8	8.2	38.7				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	7.7	31.9	6.4	29.9	5.9	25.4	3.5	28.9				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	1.9	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			43.5									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd
Sunrise Blvd Senior Housing


















Baseline (2019) + AP + PP
AM Peak

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	103
Future Volume (veh/h)	103
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	120
Peak Hour Factor	0.86
Percent Heavy Veh, %	2
Cap, veh/h	640
Arrive On Green	0.40
Sat Flow, veh/h	1585
Grp Volume(v), veh/h	120
Grp Sat Flow(s),veh/h/ln	1585
Q Serve(g_s), s	5.4
Cycle Q Clear(g_c), s	5.4
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	640
V/C Ratio(X)	0.19
Avail Cap(c_a), veh/h	640
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	21.1
Incr Delay (d2), s/veh	0.6
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	2.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	21.8
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

2: Eva Retta Ct & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + AP + PP


PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	8	0	6	1	1349	5	4	1601	2
Future Volume (Veh/h)	0	0	0	8	0	6	1	1349	5	4	1601	2
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.25	0.70	0.70	0.70	0.70	0.70	0.86	0.86	0.86	0.91	0.91	0.91
Hourly flow rate (vph)	0	0	0	11	0	9	1	1569	6	4	1759	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							TWLTL			None		
Median storage (veh)							2					
Upstream signal (ft)										1116		
pX, platoon unblocked	0.59	0.59	0.59	0.59	0.59		0.59					
vC, conflicting volume	2564	3345	880	2462	3343	788	1761	1575				
vC1, stage 1 conf vol	1768	1768		1574	1574							
vC2, stage 2 conf vol	796	1577		888	1769							
vCu, unblocked vol	2266	3581	0	2094	3577	788	915	1575				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	100	100	100	90	100	97	100	99				
cM capacity (veh/h)	144	119	644	110	120	334	440	414				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3					
Volume Total	0	20	786	790	4	1173	588					
Volume Left	0	11	1	0	4	0	0					
Volume Right	0	9	0	6	0	0	2					
cSH	1700	157	440	1700	414	1700	1700					
Volume to Capacity	0.00	0.13	0.00	0.47	0.01	0.69	0.35					
Queue Length 95th (ft)	0	11	0	0	1	0	0					
Control Delay (s)	0.0	31.2	0.1	0.0	13.8	0.0	0.0					
Lane LOS	A	D	A		B							
Approach Delay (s)	0.0	31.2	0.0	0.0								
Approach LOS	A	D										
Intersection Summary												
Average Delay	0.2											
Intersection Capacity Utilization	54.3%			ICU Level of Service					A			
Analysis Period (min)	15											

1: Sunrise Blvd & Twin Oaks Ave
Sunrise Blvd Senior Housing

Baseline (2019) + AP + PP






















PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕		↖	↕	↗
Traffic Volume (veh/h)	46	5	84	16	4	6	113	1290	13	24	1487	95
Future Volume (veh/h)	46	5	84	16	4	6	113	1290	13	24	1487	95
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	6	102	21	5	8	131	1500	15	26	1634	104
Peak Hour Factor	0.82	0.82	0.82	0.75	0.75	0.75	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	14	131	60	14	65	159	2242	22	113	2113	943
Arrive On Green	0.08	0.08	0.08	0.04	0.04	0.04	0.09	0.62	0.62	0.06	0.59	0.59
Sat Flow, veh/h	1616	173	1585	1452	346	1585	1781	3605	36	1781	3554	1585
Grp Volume(v), veh/h	62	0	102	26	0	8	131	739	776	26	1634	104
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1798	0	1585	1781	1777	1864	1781	1777	1585
Q Serve(g_s), s	3.6	0.0	6.9	1.5	0.0	0.5	8.0	29.6	29.7	1.5	38.0	3.1
Cycle Q Clear(g_c), s	3.6	0.0	6.9	1.5	0.0	0.5	8.0	29.6	29.7	1.5	38.0	3.1
Prop In Lane	0.90		1.00	0.81		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	148	0	131	74	0	65	159	1105	1159	113	2113	943
V/C Ratio(X)	0.42	0.00	0.78	0.35	0.00	0.12	0.83	0.67	0.67	0.23	0.77	0.11
Avail Cap(c_a), veh/h	316	0	280	301	0	265	199	1105	1159	235	2113	943
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	0.0	49.5	51.3	0.0	50.8	49.3	13.5	13.5	48.9	16.7	9.7
Incr Delay (d2), s/veh	0.7	0.0	3.8	1.1	0.0	0.3	16.5	1.3	1.2	0.4	2.8	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	1.7	0.0	2.9	0.7	0.0	0.2	4.2	10.8	11.3	0.7	14.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	0.0	53.3	52.4	0.0	51.1	65.7	14.7	14.7	49.3	19.6	9.9
LnGrp LOS	D	A	D	D	A	D	E	B	B	D	B	A
Approach Vol, veh/h		164			34			1646			1764	
Approach Delay, s/veh		51.5			52.1			18.8			19.4	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	70.7		10.1	11.5	73.7		14.7				
Change Period (Y+Rc), s	* 4.7	* 5.3		5.6	4.5	5.3		5.6				
Max Green Setting (Gmax), s	* 12	* 39		18.4	14.5	36.7		19.4				
Max Q Clear Time (g_c+I1), s	10.0	40.0		3.5	3.5	31.7		8.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	2.9		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			20.9									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd Sunrise Blvd Senior Housing

Baseline (2019) + AP + PP

PM Peak

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	41	132	599	320	57	458	216	11	319	1080	32	239
Future Volume (veh/h)	41	132	599	320	57	458	216	11	319	1080	32	239
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
Work Zone On Approach			No			No				No		
Adj Sat Flow, veh/h/ln		1870	1870	1870	1870	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h		138	624	333	62	498	235		354	1200	36	263
Peak Hour Factor		0.96	0.96	0.96	0.92	0.92	0.92		0.90	0.90	0.90	0.91
Percent Heavy Veh, %		2	2	2	2	2	2		2	2	2	2
Cap, veh/h		197	871	389	80	547	257		412	1480	660	298
Arrive On Green		0.06	0.25	0.25	0.04	0.23	0.23		0.12	0.42	0.42	0.09
Sat Flow, veh/h		3456	3554	1585	1781	2347	1102		3456	3554	1585	3456
Grp Volume(v), veh/h		138	624	333	62	376	357		354	1200	36	263
Grp Sat Flow(s),veh/h/ln		1728	1777	1585	1781	1777	1672		1728	1777	1585	1728
Q Serve(g_s), s		4.3	17.7	22.1	3.8	22.7	22.9		11.1	32.7	1.5	8.3
Cycle Q Clear(g_c), s		4.3	17.7	22.1	3.8	22.7	22.9		11.1	32.7	1.5	8.3
Prop In Lane		1.00		1.00	1.00		0.66		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		197	871	389	80	414	389		412	1480	660	298
V/C Ratio(X)		0.70	0.72	0.86	0.78	0.91	0.92		0.86	0.81	0.05	0.88
Avail Cap(c_a), veh/h		456	1115	497	154	462	435		456	1480	660	298
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		50.9	38.0	39.7	52.0	41.1	41.1		47.5	28.3	19.2	49.7
Incr Delay (d2), s/veh		1.7	1.0	9.5	6.0	19.5	21.4		13.1	3.3	0.0	24.1
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		1.9	7.6	9.3	1.8	11.9	11.5		5.4	13.8	0.5	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		52.6	39.0	49.2	58.0	60.6	62.6		60.6	31.6	19.2	73.8
LnGrp LOS		D	D	D	E	E	E		E	C	B	E
Approach Vol, veh/h			1095			795				1590		
Approach Delay, s/veh			43.8			61.3				37.7		
Approach LOS			D			E				D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.6	47.6	11.8	32.0	15.0	51.2	10.4	33.4				
Change Period (Y+Rc), s	5.5	* 5.4	5.5	* 6.4	5.5	* 5.4	5.5	* 6.4				
Max Green Setting (Gmax), s	14.5	* 30	14.5	* 29	9.5	* 35	9.5	* 35				
Max Q Clear Time (g_c+I1), s	13.1	41.1	6.3	24.9	10.3	34.7	5.8	24.1				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.8	0.0	0.0	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay			46.6									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved ignoring U-Turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

3: Antelope Rd & Sunrise Blvd
Sunrise Blvd Senior Housing

Baseline (2019) + AP + PP

PM Peak



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1182	163
Future Volume (veh/h)	1182	163
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1870	1870
Adj Flow Rate, veh/h	1299	179
Peak Hour Factor	0.91	0.91
Percent Heavy Veh, %	2	2
Cap, veh/h	1363	608
Arrive On Green	0.38	0.38
Sat Flow, veh/h	3554	1585
Grp Volume(v), veh/h	1299	179
Grp Sat Flow(s),veh/h/ln	1777	1585
Q Serve(g_s), s	39.1	8.6
Cycle Q Clear(g_c), s	39.1	8.6
Prop In Lane		1.00
Lane Grp Cap(c), veh/h	1363	608
V/C Ratio(X)	0.95	0.29
Avail Cap(c_a), veh/h	1363	608
HCM Platoon Ratio	1.00	1.00
Upstream Filter(I)	1.00	1.00
Uniform Delay (d), s/veh	32.9	23.6
Incr Delay (d2), s/veh	15.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.8	3.3
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	48.4	24.8
LnGrp LOS	D	C
Approach Vol, veh/h	1741	
Approach Delay, s/veh	49.8	
Approach LOS	D	
Timer - Assigned Phs		

HELIX Environmental Planning, Inc.
11 Natoma Street, Suite 150
Folsom, CA 95630
916.365.8700 tel
619.462.0552 fax
www.helixepi.com



February 7, 2019

Mr. Pat Brown
President
Cannon Management
10940 SW Barnes Rd. Suite 306
Portland, OR 97225

Subject: Arborist Survey Update for 8220 Sunrise Blvd. Citrus Heights, CA

Dear Mr. Brown:

On behalf of Cannon Management, HELIX Environmental Planning, Inc. (HELIX) conducted a tree inventory of the property located at 8220 Sunrise Blvd. in the City of Citrus Heights, Ca. (APN 216-0090-012-0000; hereafter referred to as "property"). The property is the site of a proposed senior care facility. A tree inventory of the property was conducted in 2008 and updated in 2014; a total of 65 trees were identified in the two inventories. Because the property has not been developed, a further update to the tree inventory is necessary to support current planning and entitlement efforts. Consequently, this tree inventory was undertaken to re-assess the size and condition of existing trees on the property.

The arborist survey was conducted by International Society of Arboriculture (ISA) Certified Arborist, George Aldridge (ISA # WE-11778A) on February 5, 2019. All trees on the property with at least one stem measuring four inches or greater in diameter at breast height (dbh) were inventoried. The locations of all inventoried trees were noted on an aerial photograph of the property and each tree was labeled with a numbered aluminum tree tag. Trees identified in previous inventories that had lost their tree tags were re-tagged with the same number, if available, or issued a new number. Attachment A is a map depicting the locations of all of the trees inventoried on the property. The tree number, common name, dbh, approximate height, approximate dripline radius, and overall vigor were noted for each tree. Field data are included as Attachment B.

Of the 65 trees originally identified in the 2008 and 2014 surveys, seven had died and/or been removed (Trees 3, 4, 6, 10, 19, 47, and 48). An additional 23 trees not originally included in the previous inventories because they were too small were included in the present survey, making a total of 81 live trees with at least one stem equal or greater than 4 inches dbh on the property. Tree species inventoried on the property include interior live oak (*Quercus wislizenii*), valley oak (*Q. lobata*), blue oak (*Q. douglasii*), red oak (*Q. rubra*), sawleaf zelkova (*Zelkova serrata*), miscellaneous fruit trees (*Prunus* spp.), willow (*Salix* spp.), almond (*Prunus dulcis*), white mulberry (*Morus alba*), privet (*Ligustrum lucidum*), and London plane tree (*Platanus x acerifolia*). The majority of the trees were in fair to good condition. Six trees were in poor condition as noted

in Attachment B and would not be suitable for retention on the site in conjunction with the proposed development.

The areas around Tree 25 and Tree 36 were severely disturbed by trash associated with transient encampments. Issues associated with this disturbance include: soil compaction; large quantities of plastic bags, clothing, paper, electronics, and wood covering the ground interfere with water infiltration and gas exchange; ropes attached to trunks and limbs create potential issues with loading, girdling, and damage to bark; wet clothes hanging against trunks and limbs promote decay and harbor insects and pathogens.

It is important to note that the arborist survey represents a general assessment of the existing health and condition of the trees on the property based on a brief visual inspection from the base of the tree and the current site conditions. The assessment did not include a detailed analysis, such as soil excavation to conduct detailed root inspections or climbing the tree or using lifts to conduct aerial inspections within the canopy. Further inspection of trees planned for retention on the property may be necessary prior to implementation of the proposed project. Currently there is no more than a low likelihood that tree or limb failure would result in a hazardous situation due to the low instance of site use by humans; however, trees retained on the site may experience stress or decline prior to or as a result of construction activities, which could lead to potentially hazardous situations associated with the failure of limbs or of entire trees once the site is developed. A certified arborist should be retained to assist with the development of measures to ensure adequate protection of trees planned for retention on the site as well as to determine whether any such trees can be safely retained on the site in conjunction with the proposed development. General guidelines for the protection of trees planned for preservation are provided in Attachment C.

If you have any questions, feel free to contact me at (916) 365-8714 or GeorgeA@helixepi.com.

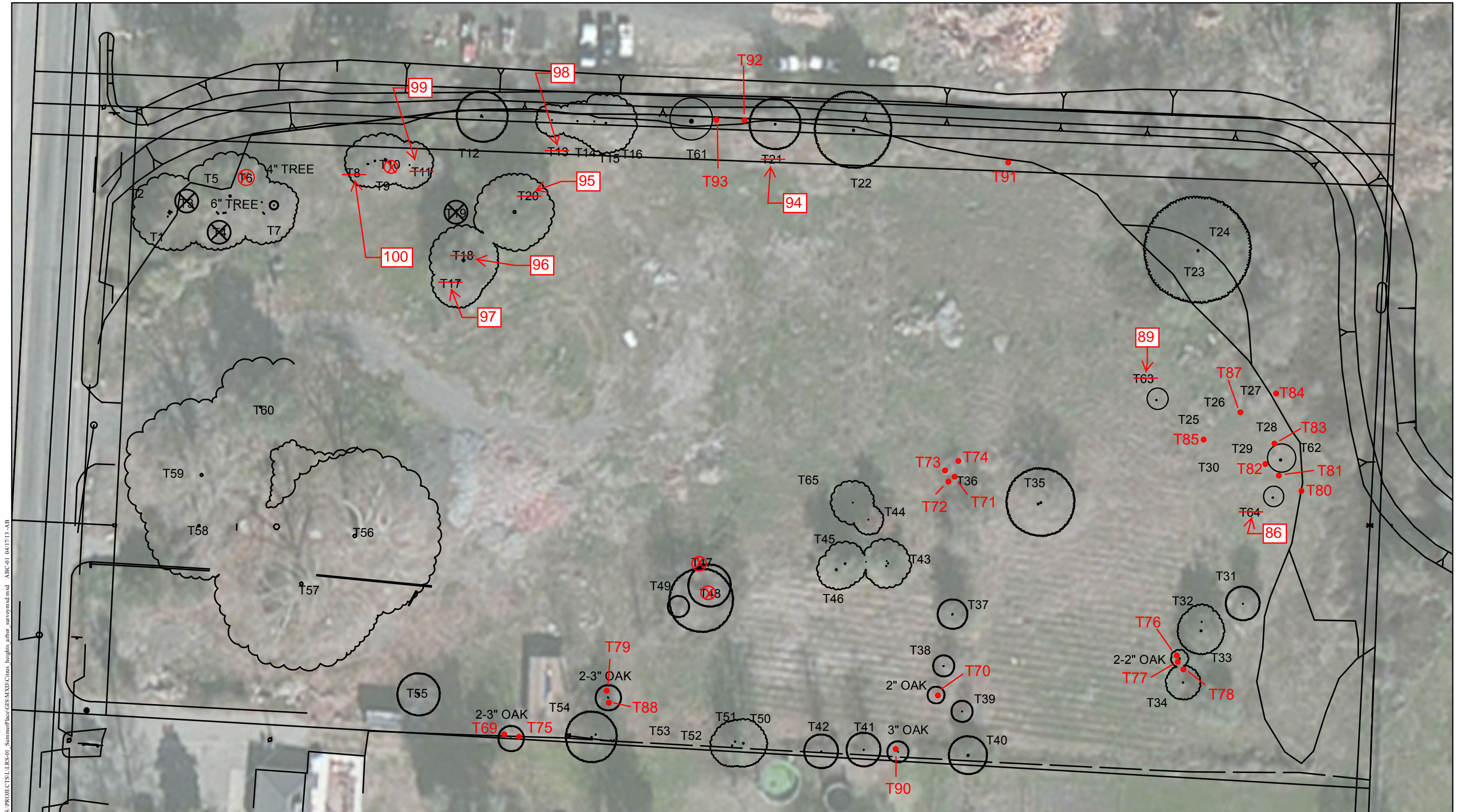
Sincerely,



George Aldridge
ISA Certified Arborist

Attachments:

- A: Tree Location Map*
- B: Arborist Survey Data*
- C: General Protection Guidelines for Preserved Trees*



S:\PROJECTS\11175-01_SummerPlace\GIS\MXD\Clims heights after survey.mxd ABC-01 04/17/13-AB

Certified Arborist Tree Inventory

SUMMERPLACE LIVING PROJECT

8220 Sunrise Blvd., Citrus Heights, CA



Project Name: SummerPlace Living 8220 SunriseProject Number: LRS-01Arborist Name: George Aldridge (WE-11778A)Date: 2/05/2019

Vigor categories: Excellent; Good; Fair-Good; Fair (dead branches, burns, rot, insects, etc.; but will survive more than 5 years); Fair-Poor; Poor (likely to die within 5 years)

Tag #	Species	DBH	Height	Dripline	Vigor	Comments
1	interior live oak	14.6, 5.7	30	25	F	crowded by tree #2
2	sawleaf zelkova	10.0, 8.3, 8.2, 7.6, 6.5	35	20	P	trunk wounds; dieback; sparse foliage; nearly dead
3	Oregon ash	--	--	--	--	Gone
4	Oregon ash	--	--	--	--	Gone
5	interior live oak	24.3	30	20	P	failure at base, 2 nd trunk gone
6	Prunus	--	--	--	--	Gone
7	Prunus	8.6, 6.3, 5.0, 5.0	25	15	F	trunk wounds
100 (8)	interior live oak	9.4, 8.7	30	15	F-G	
9	valley oak	14.0	35	18	G	
10	willow	--	--	--	0	Dead
99 (11)	valley oak	11.5	35	15	F	callused wounds on trunk
12	almond	6.7, 5.7, 7.0, 4.2, 3.2, 5.8	15	10	F-P	dead limbs; sapsucker damage
98 (13)	blue oak	9.3	15	10	F-G	
14	blue oak	9.5	20	10	F	wounds at base; sparse canopy
15	interior live oak	6.8	20	5	G	
16	blue oak	11.0, 10.8	35	15	G	
97 (17)	blue oak	18.0	40	20	F-G	
96 (18)	interior live oak	10.3, 9.8, 8.3	35	20	F	decayed pruning cuts; included bark
19	zelkova	--	--	--	--	Gone
95 (20)	interior live oak	22.1, 17.8	40	20	F	decayed pruning cuts; included bark
94 (21)	valley oak	16.4	35	15	F	dieback
22	interior live oak	23.4	35	20	G	
23	willow	16, 14, 12	45	25	F-G	dbh estimated – trunk inaccessible
24	interior live oak	10	30	15	G	dbh estimated – trunk inaccessible
25	interior live oak	13.4, 12.2	35	30	P	tree has fallen over

26	valley oak	11.4	40	15	F	dieback
27	valley oak	9.8	35	10	F	dieback
28	interior live oak	5.7, 4.3, 3.5	20	5	F	dieback
29	valley oak	7, 5	30	15	F-G	unable to relocate tree
30	valley oak	8.0, 7.0	30	5	F	suppressed; dieback
31	interior live oak	11.7	20	10	F-G	
32	valley oak	6.8	20	5	F	galls; dieback
33	interior live oak	13.1, 7.6	20	15	F-G	
34	interior live oak	10.8, 7.8	20	10	F-G	
35	blue oak	18.9, 17.4	40	20	F	4 co-dominant trunks have fused into 2
36	white mulberry	7, 6, 4, 4, 4, 4, 4	30	20	F-P	poor branch structure; declining
37	interior live oak	11.0, 9.5	30	10	G	
38	valley oak	9.0, 6.0	25	10	F	galls; dieback
39	valley oak	10.7	25	10	F-G	
40	interior live oak	8.2, 6.4, 9.1	15	10	F-G	
41	valley oak	12.9	30	10	G	
42	valley oak	14.1	40	10	F-G	galls
43	interior live oak	12.4, 9.7, 7.7	25	10	G	
44	interior live oak	8.2	20	10	G	
45	interior live oak	9.2, 8.5	30	10	G	
46	interior live oak	7.2, 6.8, 6.3	20	15	F-G	
47	willow	--	--	--	--	Gone
48	willow	--	--	--	--	Gone
49	valley oak	10.2	25	10	P	epicormic growth; galls; stunted twigs
50	valley oak	14.0	40	15	F	large callused wound on trunk
51	valley oak	11.2	30	15	F	
52	privet	5.6, 5.7	20	5	G	
53	valley oak	7.8, 6.3	20	10	F	galls
54	interior live oak	11.8	25	15	F	callused wounds on trunk
55	fruit tree	8.0, 5.3, 5.2	25	20	F	dieback
56	London plane tree	36.2	60	30	F-G	
57	London plane tree	32.5	50	30	F-G	
58	London plane tree	18.3	50	25	F	
59	London plane tree	30.8	60	30	F	
60	interior live oak	25.2	45	25	F	
61	blue oak	6.9, 5.2	10	8	G	
62	valley oak	7.0	20	5	F	
89 (63)	valley oak	7.4	20	5	F-G	
86 (64)	blue oak	7.0, 6.4	15	8	F-G	
65	red oak	8.4	30	10	G	

69	red oak	4.8, 4.2	20	6	F	
70	valley oak	6.0, 5.2	15	7	F	galls
71	interior live oak	4.7	10	6	G	crowded by tree #36
72	interior live oak	4.5	10	10	G	crowded by tree #36
73	interior live oak	5.9	10	10	G	crowded by tree #36
74	interior live oak	5.4	10	5	G	crowded by tree #36
75	red oak	7.0, 4.7	20	10	F	
76	interior live oak	6.1, 3.1	12	8	G	
77	interior live oak	5.5, 2.5	10	6	F	crowded by tree #76
78	Prunus	7.0, 4.2, 4.0	10	6	F	
79	red oak	5.5	20	7	F	
80	valley oak	5.2, 4.3, 4.2	18	8	G	
81	valley oak	5.1, 4.5	18	6	F	sparse canopy; included bark
82	valley oak	4.5	18	4	P	severe damage at base; sparse canopy; poor structure
83	valley oak	6.0, 4.4	20	6	P	sparse canopy; poor structure; included bark
84	valley oak	11.0, 7.0	30	11	G	
85	valley oak	5.2, 4.6	20	8	F	
87	blue oak	4.6	20	4	F	
88	valley oak	5.0, 4.4	20	9	G	
90	blue oak	6.5	12	10	G	
91	valley oak	6.4, 6.2	20	6	G	
92	interior live oak	4.5, 3.5, 5.7	12	10	G	
93	interior live oak	5.4	12	10	G	

General Protection Guidelines for Trees Planned for Preservation

To prevent soil compaction:

- 6-8 inches of wood chips should be spread inside the dripline of trees where temporary construction traffic or staging would occur. Chips should be removed after project completion, or the depth reduced to no more than 4 inches. Alternatively, bridging root areas with steel plates would reduce damage to roots within construction traffic areas.
- A circle with a radius measurement from the trunk of the tree to the tip of its longest limb, plus one foot, shall constitute the critical root zone protection area of each protected tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each protected tree. Removing limbs that make up the dripline does not change the protected area.

To reduce damage due to raising the existing grade:

- Grading within the protected zone of a protected tree shall be minimized. Cuts within the protected zone shall be maintained at less than 20% of the critical root zone area. Grade cuts shall be monitored by the project Arborist. Any damaged roots encountered shall be root pruned and properly treated as deemed necessary by the Project Arborist.
- Construct an open-joint wall of shell, brick, rock or masonry in a circle around the tree trunk, with at least 1 to 2 feet between the wall and trunk. This wall should be as high as the top of the new grade. This opening is commonly referred to as a tree well.
- If fills exceed 1 foot in depth up to 20% of the critical root zone area, aeration systems may serve to mitigate the presence of the fill materials as determined by the Project Arborist.
- Construct an aeration system using 4-inch agricultural clay tile or 4-inch perforated plastic pipe arranged in five to six horizontal lines radiating from the tree well like spokes in a wheel to a point beyond the branch spread. Allow excess moisture to drain away by installing the radial lines so they slope away from the trunk. Connect the outer ends of the radiating system with a circle of tile or perforated plastic pipe.
- To provide vents, place 4- or 6-inch plastic pipe or bell tile upright over the junction of the radial lines with the circle. They should extend to the surface of the planned grade level. Extend the lower end of the aeration system to a curb or storm drain to carry excess moisture away from the root system.
- Cover the exposed soil and tile system with rock or coarse gravel to a depth of 6 to 18 inches, depending on the amount of fill. Follow this with a covering layer of gravel. Place a thin layer of straw, woven plastic or other porous material over the gravel to prevent soil from filtering into the gravel and stone. Fill with good topsoil to the desired grade.
- When fill materials are deemed necessary on two or three sides of a tree it is critical to provide for drainage away from the critical root zone area of the tree (particularly when considering heavy winter rainfalls). Overland releases and subterranean drains dug outside the critical root zone area and tied directly to the main storm drain system are two options.
- The construction of impervious surfaces within the dripline of a protected tree shall be minimized. When necessary, a piped aeration system shall be installed under the direct supervision of the Project Arborist.

- Preservation devices such as aeration systems, tree wells, drains, special paving and cabling systems must be installed in conformance with approved plans and certified by the Project Arborist.
- To discourage rodents, fill the tree well with enough coarse gravel to cover the ends of the lines opening into the well. Also fill the upright bell tile and cover with a screen or grill.
- Minor roots less than one inch in diameter encountered during approved excavation and/or grading activities may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area as deemed necessary by the Project Arborist.
- Major roots greater than one inch in diameter encountered during approved excavation and/or grading activities may not be cut without approval of the Project Arborist. Depending upon the type of improvement being proposed, bridging techniques or a new site design may need to be employed to protect the roots and the tree.
- Cut faces, which will be exposed for more than 2-3 days, shall be covered with dense burlap fabric and watered to maintain soil moisture at least on a daily basis (or possibly more frequently during summer months). If any native ground surface fabric within the protected zone must be removed for any reason, it shall be replaced within 48 hours.
- In cases where a permit has been approved for construction of a retaining wall(s) within the protected zone of a protected tree the applicant will be required to provide for immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall within the protected zone of the protected tree shall be constructed within 72 hours after completion of grading within the root protection zone.

General Construction Site Recommendations

- A minimum 4-foot tall, brightly colored, synthetic fence should be installed around the limits of the work area or around outermost edge of the protected zone of trees that are designated for retention on-site. Encroachment into the fenced areas should be restricted to the minimum amount feasible and fencing should remain in place until all construction activities have ceased. The protected zone is defined as the "dripline" (which is an imaginary line that is drawn on the ground around the tree at the outermost limit of the canopy) or in cases where construction is encroaching on the dripline of a retained tree, the protected zone is the portion of the tree's dripline that is being protected. Fencing shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review body. The developer shall contact the Project Arborist and the Planning Department for an inspection of the fencing prior to commencing construction activities on site.
- Signs shall be installed on the protective fence in four equidistant locations around each individual tree. The size of the sign must be a minimum of two by two feet and must contain the following language "Warning: This Fence Shall Not Be Removed or Relocated Without Written Authorization From **insert governing body**". Protective fencing shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down or otherwise modified without prior written authorization.
- All portions of permanent fencing that will encroach into the protected zone of a protected tree shall be constructed using posts set no closer than ten feet on center. Posts shall be spaced in

such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees(s).

- The fenced area should be kept clear of building materials, waste, and excess soil.
- No digging, trenching, compaction, or other soil disturbance should be allowed in the fenced area.
- The storage of construction equipment or hazardous materials such as gasoline, oil, or other toxic chemicals should not be allowed in or adjacent to the fenced area.
- Storage areas for equipment, soil, and construction materials as well as burn sites (if permitted), cement washout pits, and construction work zones should be kept away from protected trees and outside the fenced in area.
- Cable, chain, rope or signage should not be attached to retained trees.
- Designated roads and parking areas should be established. All construction personnel should be restricted to driving and parking in designated areas. Discharge of exhaust from construction vehicles and equipment should not be allowed near the protected zone of trees.
- Grade changes should be avoided near fenced areas to the maximum extent possible.
- No sprinkler or irrigation system shall be installed in such a manner that sprays water or required trenching within the dripline of a protected tree. An above ground drip irrigation system is recommended. An independent low-flow drip irrigation system may be used for establishing drought tolerant plants within the protected zone of a protected tree. Irrigation shall be gradually reduced and discontinued after a 2-year period.
- Landscaping beneath native oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. Planting live material under protected native oak trees is generally discouraged and is not recommended within 6 feet of the trunk of a native oak tree with a diameter at breast height (DBH) of 18 inches or less, or within 10 feet of the trunk of a native oak tree with DBH of more than 18 inches. The only plant species which shall be planted within the dripline of native oak trees are those which are tolerant of the natural, semi-arid environs of the tree(s).

Recommendations for Construction Activities in the Vicinity of Retained Trees

- Any protected trees on site which require pruning shall be pruned by an ISA Certified Arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards, ANSI Standard 2133.1-2000 regarding safety practices, and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines" and Best Management Practices.
- Trenching within the dripline of retained trees should be avoided to the maximum extent practicable and kept a minimum distance of 10 times the diameter of the tree away from its trunk. If necessary, this trenching should be conducted using hand excavation or compressed air to reduce impacts to tree roots. Machine trenching should not be allowed within the dripline of retained trees. Trenching inside the dripline should be monitored by a certified arborist who may direct the construction crew to use hand tools rather than heavy equipment. Hand saws, pass-through pruners, shovels and trowels, burlap cloth, and water should be available at all times during trenching inside the dripline. If pipes must be installed closer to the tree than a distance of 10 times the diameter of the tree away from its trunk, they should be bored beneath the tree a minimum of 3 feet below the ground surface to reduce impacts to roots.

- Excavation should also be minimized within the dripline of retained trees. Construction within the dripline of retained trees should be conducted in a manner that minimizes excavation and provides for the best preservation of roots as determined by the Project Arborist.
- If tree roots are severed outside of the fenced area, they should be severed cleanly and kept moist. All exposed roots outside of fenced areas should be covered with protective material during construction such as mulch or plywood sheets to reduce soil compaction. Protective material should be removed upon completion of construction activities.
- Construction activities involving soil disturbance should be avoided during hot, dry, weather and trees shall be watered before, during, and after trenching and excavation within the dripline of retained trees to offset water loss due to cut roots.
- Grading within the driplines of retained trees should be avoided wherever feasible.
- Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected tree shall be done under the direct supervision of the Project Arborist.
- No sign, ropes, cables (except those which may be installed by an ISA Certified Arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of identification in preparing tree reports and inventories shall be allowed.
- No vehicles, construction equipment, mobile homes/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within driplines of protected trees.
- Drainage patterns on the site shall not be modified so that water collects, stands or is diverted across the dripline of any protected tree.
- No trenching shall be allowed within the driplines of protected trees, except as specifically approved by the Planning Department as set forth in the project's Conditions of Approval and/or approved tree permit. If it is absolutely necessary to install underground utilities within the dripline of a protected tree the utilizing hand tools to avoid root injury under the direct supervision of the Project Arborist.

Recommendations for Protection of Trees Post-Construction

- Post-construction inspections of the trees should be conducted by a Certified Arborist or Certified Tree Worker to determine if retained trees are stressed (e.g., water stress, nutrient stress) or damaged (e.g., broken branches, trunk damage). Appropriate corrective actions should be implemented as necessary. Such corrective actions may include remediation of severe soil compaction through vertical mulching or a similar technique, remedial pruning to repair damaged or broken limbs, application of mulch, application of root stimulant to encourage new root growth in trees that have a significant portion of their roots lost due to cutting or soil compaction, etc.
- Aeration of soil by vertical mulching or similar technique should be implemented around retained trees to offset the impacts of soil compaction that has already occurred due to construction activities and other site uses.
- Long term maintenance should also be conducted by a Certified Arborist or tree care specialist to assist the trees with recovering from construction related stress and may include watering, fertilization, pruning, and/or pest/disease control.



**CITRUS
HEIGHTS**
Solid roots. New growth.

STAFF REPORT

Hearing Date: February 26, 2020

File Number: TT-19-01 & UP-19-06

Application Type: Tentative Commercial
Subdivision Map & Use Permit

Assessor's Parcel Number: 233-0044-002-0000

Prepared by: Eric Singer, Assistant Planner
(916) 727-4743 / esinger@citrusheights.net

Community Development Department
Planning Division
6360 Fountain Square Dr.
Citrus Heights, CA 95621
www.citrusheights.net
(916) 727-4740

Project Name: Pebble Beach Condo Conversion

Project Address: 7916 Pebble Beach Drive

Gross Acreage: 1.54 acres

Net Acreage: N/A

Maximum FAR: .50
Provided FAR: .28

Current Zoning: Business &
Professional Office (BP)

Proposed Zoning: Business &
Professional Office (BP)

Neighborhood Association: 11

Surrounding Zoning:		Surrounding Land Use Designation	Actual Use:
On-site:	Business and Professional Office (BP)	Business Professional	Existing Office Building
North:	Business and Professional Office (BP)	Business Professional	Existing Office Building
South:	Business and Professional Office (BP)	Business Professional	Existing Office Building
West:	Medium Density Residential (RD-20)	Medium Density Residential	Existing Apartments
East:	Limited Commercial (LC)	General Commercial	Existing Shopping Center

Environmental Status:

☒ Exempt Section 15301

☐ Negative Declaration

☐ Mitigated Negative Declaration

☐ Previous Negative Declaration

☐ Environmental Impact Report

☐ Previous Environmental Impact Report

Planning Department Recommendations:

☐ Approve

☒ Approve with conditions (Attachment 3)

☐ Denial

Applicant:

Sunrise Dental Plaza, LLC
Dr. Tamer Alpagot
P.O. Box 361303
Milpitas, CA 95036

**Property
Owner:**

Same as applicant

SUMMARY RECOMMENDATION

The Planning Division recommends the Planning Commission make the following motions:

1. Adopt Resolution 20-____ finding that the project is Categorically Exempt from CEQA per Section 15301(k) of the California Environmental Quality Act (Subdivision of Existing Facilities);
2. Approve the Tentative Commercial Subdivision Map to allow the split of an existing parcel into 12 separate parcels (11 individual office suites and 1 common area parcel), based on the findings and conditions of approval contained in the staff report; and
3. Approve the Conditional Use Permit for the Pebble Beach Condo Conversion located at 7916 Pebble Beach Drive subject to the findings and conditions of approval contained in the staff report.

BACKGROUND

The site is occupied by an existing 19,140 medical office building, constructed in 1983. The building is known as the Sunrise Dental Plaza, and is occupied almost exclusively by dental practitioners. It is located within the Sunrise MarketPlace and is adjacent to shopping center, office, and medium-density residential uses.

Figure 1: Aerial View

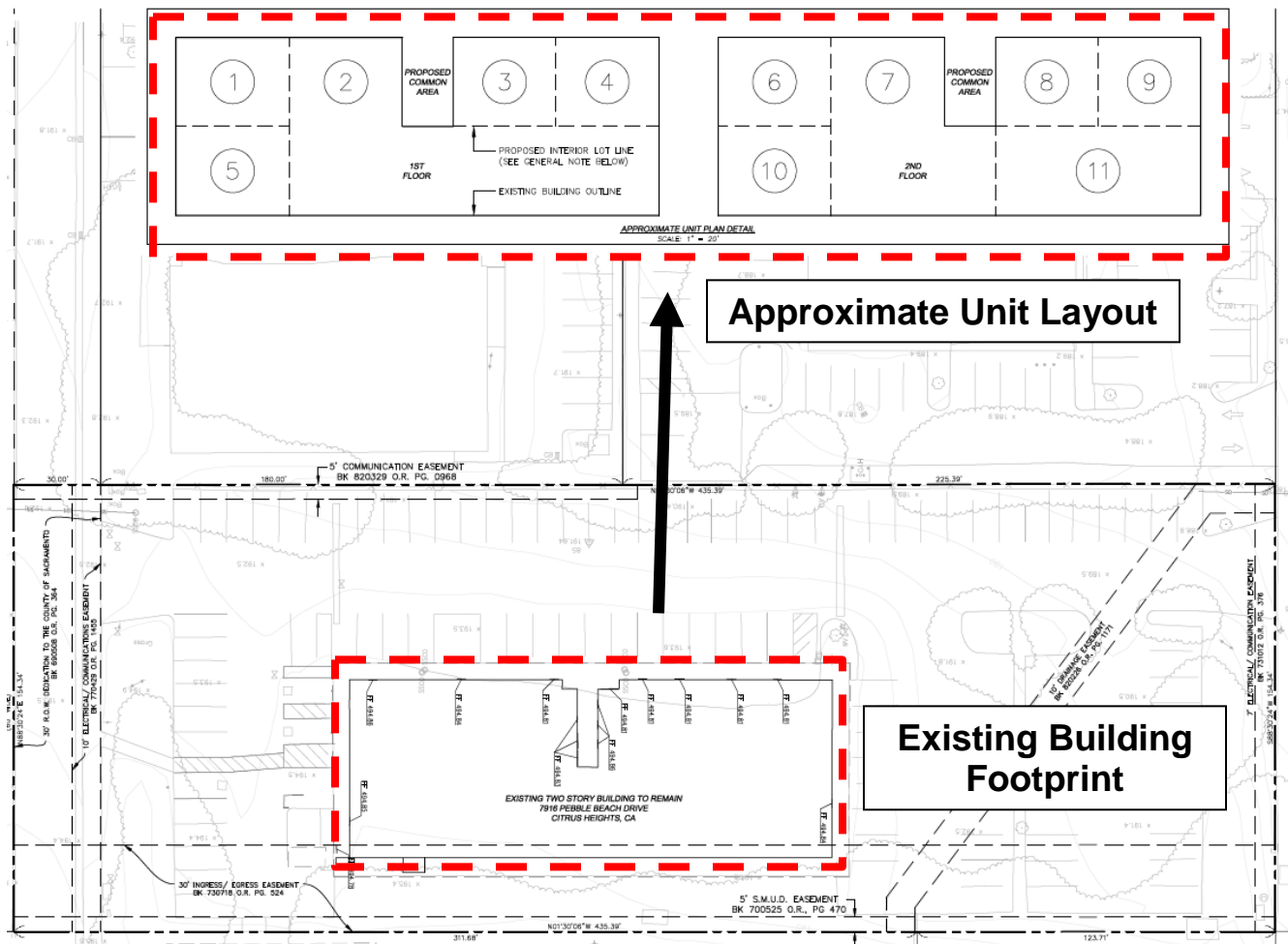


PROJECT DESCRIPTION

The applicant is requesting a commercial condominium conversion of the existing office building to create a total of 12 parcels (11 parcels for individually owned office units and one common area parcel containing the access drive, parking lots, and commonly held landscape areas). No physical improvements are proposed as part of the application.

The name “condo conversion” is a bit misleading in this particular instance, as the applicant is not actually seeking to convert the office units into residential condominiums. The offices will continue to be used by commercial businesses, with the only distinction being that the tenants will also be owners of their individual suites. A “condo conversion” is simply the process within the California Subdivision Map Act by which existing structures may be further divided into individual parcels.

Figure 2: Proposed Tentative Map



TENTATIVE COMMERCIAL SUBDIVISION MAP – TT-19-01

Tentative Commercial Subdivision Map - Analysis

Title 22 of the Citrus Heights Municipal Code and the California Subdivision Map Act require that findings be made in order to approve a Tentative Commercial Subdivision Map. The required findings are listed below in italicized **bold print** and are followed by an evaluation of the map in relation to each finding.

1. The proposed subdivision is consistent with the General Plan and the design or improvement of the proposed subdivision is consistent with the General Plan.

The site is currently zoned Business Professional. The proposed tentative map is consistent with the General Plan in that the creation of individually owned office suites within the existing footprint of the building will not change the use of the site.

The property is largely developed with landscaping, parking and site improvements. No new physical improvements are proposed. The site provides adequate parking spread across the site. The parking is shared between all tenants of the building, and the applicant has stated that the building is serviced by all required utilities. Part of the office condominium conversion will require a set of Covenants, Conditions and Restrictions (CC&Rs) to be established to govern the future condominium plan through the Owner's Association. The CC&Rs will address the use and maintenance of the utilities as well as the building common area (Condition of Approval #3).

The proposed map also conforms to the following General Plan policy:

- Policy 11.1: *Actively seek to attract, retain and expand commercial activities at Sunrise MarketPlace.*

General Plan Policy 9.5

In September 2018, the City Council adopted General Plan Policy 9.5 intended to discourage the creation of new parcels that could hinder the future redevelopment of existing shopping centers. This policy reads:

Discourage the creation of any new parcels within existing commercial centers, if such creation might hinder the viability and/or future redevelopment of the center.

In addition, the City Council adopted a Zoning Code amendment, which placed similar requirements within the Zoning Code section 106.62.090.

In this particular case, the project is consistent with General Plan Policy 9.5 for following reasons:

- The project does not propose any physical changes to the site, rather creating airspace rights within the existing footprint of the building.
- The building in question is not a shopping center or intended for use as a retail complex. It is an office building with limited redevelopment opportunity based on its current zoning.

As a result, staff believes the project meets the goals of the General Plan.

2. The site is physically suited for the type and proposed density of development.

The purpose of the subdivision request is to allow for the applicant to sell individual office suites to other owners. There are no minimum lot dimensions in a commercial zone so long as new development complies with the city's commercial development standards. No new development is proposed within the existing footprint of the building or elsewhere on site. The development complies with all development standards including height, setbacks, parking, etc.

3. *The design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage and the type of improvements are not likely to cause serious public health problems.*

The purpose of the requested tentative map is to provide separate ownership of the existing development. The proposed subdivision does not have the potential to cause substantial environmental damage or cause public health problems.

The existing center will be conditioned to update any existing or newly created CC&R's to ensure the center is maintained (both landscaping and circulation/parking) and reflect the further subdivision into individually owned office suites.

Tentative Commercial Subdivision Map - Conclusion

Based on the information provided in the analysis above, staff recommends approval of the Tentative Map subject to the findings and conditions of approval contained in the staff report.

CONDOMINIUM CONVERSION CONDITIONAL USE PERMIT – UP-19-06

Condominium Conversion Conditional Use Permit – Description of Request

As previously stated, the project request is to subdivide an existing medical office building into 11 individually owned office condos with one common area parcel.

The instrument by which the site in question (single office building) may be subdivided into smaller, individually owned suites is through the Condominium Conversion Conditional Use Permit provision of the Citrus Heights Zoning Code, in accordance with the California Subdivision Map Act.

Condominium Conversion Conditional Use Permit – Analysis

In order to approve a Condominium Conversion Conditional Use Permit, certain findings must be made. The required findings are listed below in italicized **bold print** and are followed by an evaluation of the request in relation to each finding.

1. *That the proposed conversion is consistent with the General Plan and applicable community and specific plans in effect at the time of the use permit application, especially with the objectives, policies, and programs of the Housing Element of the General Plan designed to provide affordable housing to all economic segments of the population.*

As previously mentioned, the proposed application conforms to Policy 11.1 of the General Plan, encouraging commercial development and retention within the Sunrise MarketPlace corridor. Additionally, because this is a commercial subdivision and not residential, the request does not inhibit the affordable housing goals of the General Plan.

2. *That the average rental vacancy rate in multiple family units of similar size in the area and adjacent areas affected by the proposed conversion during the 12 months preceding the filing of the application is greater than five (5) percent; provided, that a use permit may be approved where the vacancy rate is equal to or less than five (5) percent if the applicant has proposed measures which the Commission finds would effectively mitigate the displacement of tenants and any adverse effects upon the housing stock in the affected area which would be caused by the proposed conversion.*

In evaluating the average rental vacancy rate in the affected area and in the building proposed for conversion, the Commission shall consider the rental history of the building, including the number of evictions and increased in rent over the preceding three

(3) years. In addition, the following sources of vacancy rate statistics may be used: 1) Department of Finance (State of California), 2) Postal Service, and 3) HUD vacancy rates. Notwithstanding any other provision of this section, the Commission may deny a use permit if it finds that vacancies in the building have been created by unjust evictions and unreasonable rent increases in order to qualify a project for conversion under this subsection.

Due to the commercial zoning of the property, an analysis of rental vacancy rates is not required.

- 3. That the applicant unconditionally offered to each eligible tenant an adequate plan for relocation to comparable housing. The Commission shall consider the following factors in determining whether the relocation housing is comparable:**
- a. Whether the housing is provided with facilities equivalent to that provided by the landlord in the dwelling unit in which the tenant then resides in regard to each of the following: a) apartment size including number of rooms; b) rent range; c) major kitchen and bathroom facilities; d) special facilities for the handicapped, infirmed or senior citizens; e) willingness to accept families with children;**
 - b. Whether the housing is located in an area not less desirable than the area in which the tenant then resides in regard to a) accessibility to the tenant's place of employment; b) accessibility to community and commercial facilities; c) accessibility to schools; and d) accessibility to public transportation.**

Due to the commercial zoning of the property and the fact that all tenants are to remain, a relocation plan is not required.

Condominium Conversion Conditional Use Permit – Conclusion

Based on the information provided in the analysis above, staff recommends approval of the Condominium Conversion Conditional Use Permit subject to the findings and conditions of approval contained in the staff report.

ENVIRONMENTAL DETERMINATION

The project is categorically exempt from the requirements of the California Environmental Quality Act per Section 15301(k) of the CEQA Guidelines, relating to Subdivision of Existing Facilities.

PUBLIC OUTREACH

Public hearing notices were mailed to property owners within 500 feet of the site. A notice was also sent to a general circulating newspaper, the Sacramento Bee, for posting. A development review sign has been displayed on-site since the city received the application for the requested development entitlements.

FINDINGS FOR TENTATIVE COMMERCIAL SUBDIVISION MAP (FILE # TT-19-01)

- 1. The proposed subdivision is consistent with the General Plan and the design or improvement of the proposed subdivision is consistent with the General Plan.*
- 2. The site is physically suited for the type and proposed density of development.*
- 3. The design of the subdivision is not likely to cause substantial environmental damage and the type of improvements are not likely to cause serious public health problems.*

FINDINGS FOR CONDOMINIUM CONVERSION CONDITIONAL USE PERMIT (FILE # UP-19-06)

1. *That the proposed conversion is consistent with the General Plan and applicable community and specific plans in effect at the time of the use permit application, especially with the objectives, policies, and programs of the Housing Element of the General Plan designed to provide affordable housing to all economic segments of the population.*

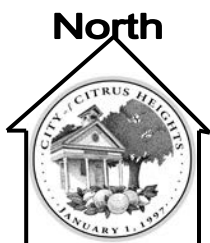
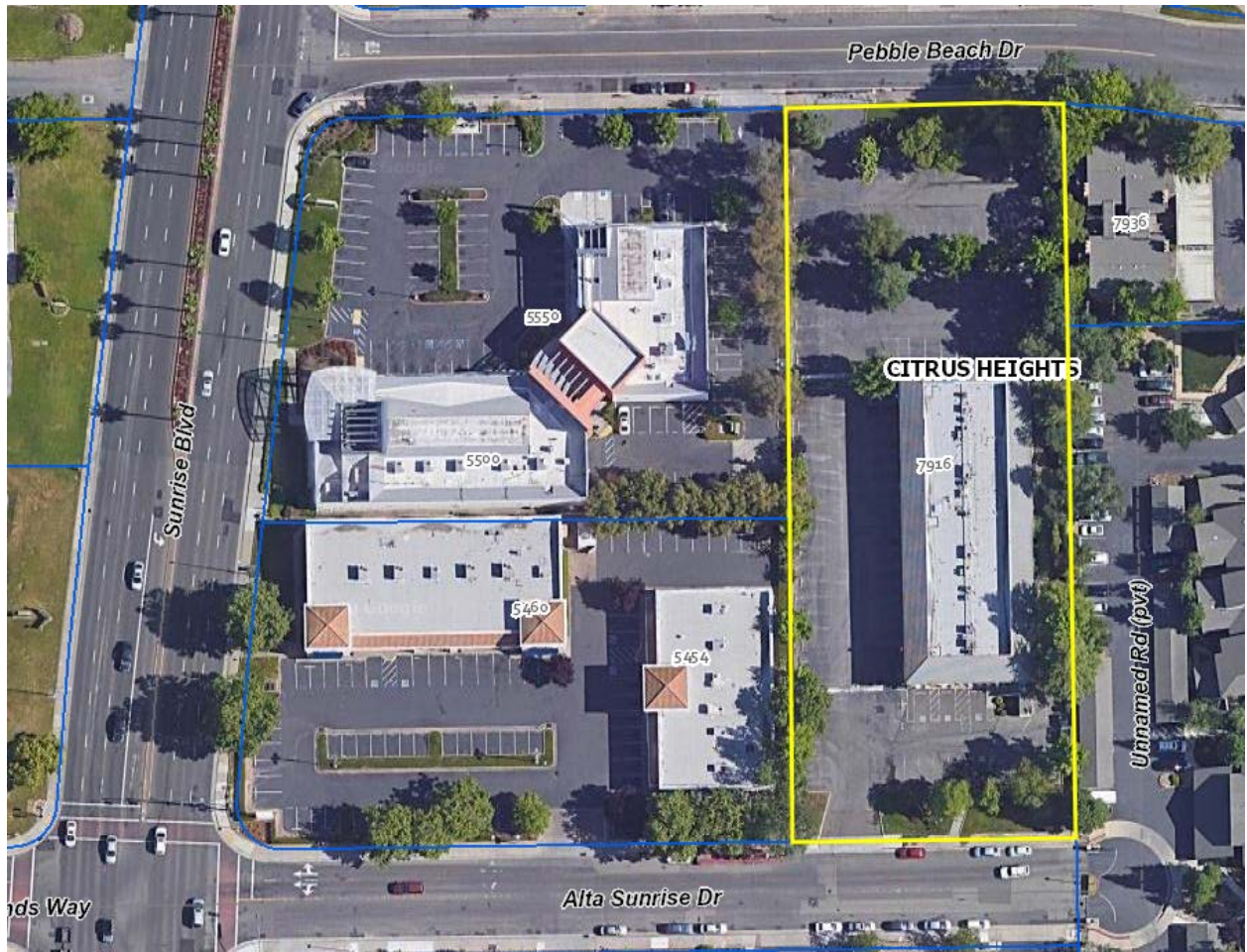
RECOMMENDED MOTIONS

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

1. Adopt Resolution 20-____ finding that the project is Categorically Exempt from CEQA per Section 15301(k) of the California Environmental Quality Act (Subdivision of Existing Facilities);
2. Approve the Tentative Commercial Subdivision Map to allow the split of an existing parcel into 12 separate parcels (11 individual office suites and 1 common area parcel); and
3. Approve the Conditional Use Permit for the Pebble Beach Condo Conversion located at 7916 Pebble Beach Drive subject to the findings and conditions of approval contained in the staff report.

Attachments:

1. Vicinity Map
2. Resolution 20-____
3. Conditions of Approval
4. Tentative Map



Attachment 1

**Pebble Beach Condo Conversion
Subdivision Map & Use Permit
7916 Pebble Beach Drive
TT-19-01 & UP-19-06**

RESOLUTION NO. 2020-__

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CITRUS HEIGHTS, CALIFORNIA, FINDING THAT THE PROJECT IS CATEGORICALLY EXEMPT FROM CEQA PER SECTION 15301 OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, RELATING TO SUBDIVISION OF EXISTING FACILITIES, AND APPROVING THE TENTATIVE COMMERCIAL SUBDIVISION MAP AND CONDOMINIUM CONVERSION CONDITIONAL USE PERMIT FOR THE PEBBLE BEACH DENTAL BUILDING AT 7916 PEBBLE BEACH DRIVE

WHEREAS, pursuant to the California Environmental Quality Act (“CEQA”) (Pub. Resources Code, ' 21000 et seq.), the project is categorically exempt from CEQA per Section 15301(k), related to Subdivision of Existing Facilities;

WHEREAS, the proposed project complies with all required findings for a Condominium Conversion Conditional Use Permit;

WHEREAS, the tenant spaces to be located on individual parcels are currently existing and no physical improvements are proposed;

WHEREAS, the Planning Commission of the City of Citrus Heights finds that the Categorical Exemption is applicable to the proposed Commercial Subdivision Map, and no further review is required; and

WHEREAS, the proposed Commercial Subdivision Map is consistent with the General Plan enacted at the time of the application submittal.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The matters set forth in the preceding clauses of this Resolution are hereby adopted and incorporated.
2. The Planning Commission does hereby approve the Commercial Subdivision Map for 7916 Pebble Beach Drive.

The Planning Commission Secretary shall certify the passage and adoption of this Resolution and enter it into the book of original resolutions.

PASSED AND ADOPTED by the Planning Commission of the City of Citrus Heights, California, this 26th day of February, 2020 by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED

ATTESTED

Tim Schaefer, Chairperson

Karen Ramsay,
Planning Commission Secretary

**CONDITIONS OF APPROVAL FOR COMMERCIAL SUBDIVISION MAP AND
CONDOMINIUM CONVERSION CONDITIONAL USE PERMIT
(FILE # TT-19-01 & UP-19-06)**

- 1) The Tentative Map approval shall be effectuated within a two (2) year period from this date and if not effectuated shall expire on February 26, 2022.
- 2) The project is approved as shown in Attachment 3 and as conditioned or modified below.
- 3) Prior to recordation of the final map, the applicant shall create (or update any existing) Declaration of Covenants, Conditions, and Restrictions (CC&Rs) and Common Area Operating and Maintenance (CAM) Agreement and submit them to the city for City Attorney review and approval. The CC&Rs and/or CAM shall reflect the shared utility cost arrangement for each office suite. Applicant shall have the approved updated CC&Rs and CAM Agreement recorded with the Sacramento County Recorder's Office concurrent with the final map. The City Attorney can modify this requirement as necessary to reflect ownership changes or CC&R modifications [Planning]
- 4) The applicant shall dedicate reciprocal access, parking, sewer, water, use and drainage easements on the Final Map to address roadways, drive aisles, and other common areas including recreation facilities as required by the Community Development Director. [Planning]
- 5) Any physical changes to the project which are required to bring it into compliance with any section of the City Condominium Conversion Ordinance or Building Code requirement, shall be accomplished prior to approval of the final Condominium Map. [Planning]
- 6) Prior to recordation of the final map, the applicant shall update the map to reflect any utility easements necessary for cross-parcel utility access. [Planning]
- 7) Developer agrees to indemnify, defend, and hold harmless the city, its officials, officers, employees, agents and consultants from any and all administrative, legal or equitable actions or other proceedings instituted by any person not a party to this Permit challenging the validity of the Permit or any Project Approval or any Subsequent Project Approval, or otherwise arising out of or stemming from this Permit. Developer may select its own legal counsel to represent Developer's interests at Developer's sole cost and expense. The parties shall cooperate in defending such action or proceeding. Developer shall pay for city's costs of defense, whether directly or by timely reimbursement on a monthly basis. Such costs shall include, but not be limited to, all court costs and attorneys' fees expended by city in defense of any such action or other proceeding, plus staff and City Attorney time spent in regard to defense of the action or proceeding. The parties shall use best efforts to select mutually agreeable defense.

LEGEND

	EXISTING	PROPOSED
DISTINCTIVE BOUNDARY	---	---
LOT LINE	---	---
ADJACENT LOT LINE	---	---
EASEMENT LINE	---	---
CENTERLINE	---	---
SIDEWALK, CURB AND GUTTER	---	---
DRIVEWAY	---	---
STORM DRAIN LINE	SD	SS
SANITARY SEWER LINE	SS	SS
WATER LINE	W	DW
RECLAIMED WATER LINE	RW	RW
FIRE WATER LINE	FW	FW
GAS LINE	G	G
JOINT TRENCH LINE	JT	JT
ELECTRICAL LINE	E	E
TELEPHONE LINE	T	T
STREET LIGHT LINE	SL	SL
ELEVATION	(TC 97.0±)	(TC 100.8)
SLOPE TO DRAIN	→	→
STORM DRAIN MANHOLE	⊙ ①	● SDMH
STORM DRAIN CATCH BASIN	■	■ CB
STORM DRAIN DROP INLET	■	■ DI
OVERLAND RELEASE	→	→
SANITARY SEWER MANHOLE	⊙ ②	● SSMH
SUBSURFACE TRANSFORMER	⊙ SSCO	⊙ UCO
SANITARY SEWER CLEANOUT	⊙ SSCO	● SSCO
FIRE HYDRANT	⊙ FH	⊙ FH
WATER VALVE	⊙ WV	⊙ WV
WATER METER	⊙ WM	⊙ WM
BACK FLOW PREVENTER	— BFP	— BFP
ELECTROLIER	⊙	⊙
REDUCED PRESSURE DETECTOR ASSEMBLY		RPDA
STORMWATER TREATMENT PLANTER		

BENCHMARK

COUNTY OF SACRAMENTO: FOUND 7/8" METAL DISC & RAMSET STAMPED "CO. B.M. 14-194" SET IN A CHISELED SQUARE IN THE TOP OF A ROLLED CURB, EAST SIDE OF A DRAINAGE INLET ON THE SOUTH SIDE OF KINGSWOOD DRIVE, JUST EAST OF A CONCRETE BOX CULVERT ON SAN JUAN CREEK, APPROXIMATELY 0.2 MILES EAST OF SUNRISE BOULEVARD. TAKEN AS 173.18 (NAVD 88). COUNTY ID 14-194, PAGEGRID 260A5. SET 01-19-89, ADJUSTED 01-21-97.

BASIS OF BEARING

THE BEARING NORTH 88°30'24" EAST TAKEN ON THE CENTERLINE OF ALTA VISTA SUNRISE DRIVE AS SHOWN ON THAT PARCEL MAP FILED IN BOOK 04 OF MAPS AT PAGE 47, SACRAMENTO COUNTY RECORDS, WAS USED AS THE BASIS OF BEARINGS SHOWN ON THIS MAP.

FLOOD ZONE

THE PROPERTY IS LOCATED IN FLOOD ZONE "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 06067C0092H, DATED AUGUST 16, 2012.

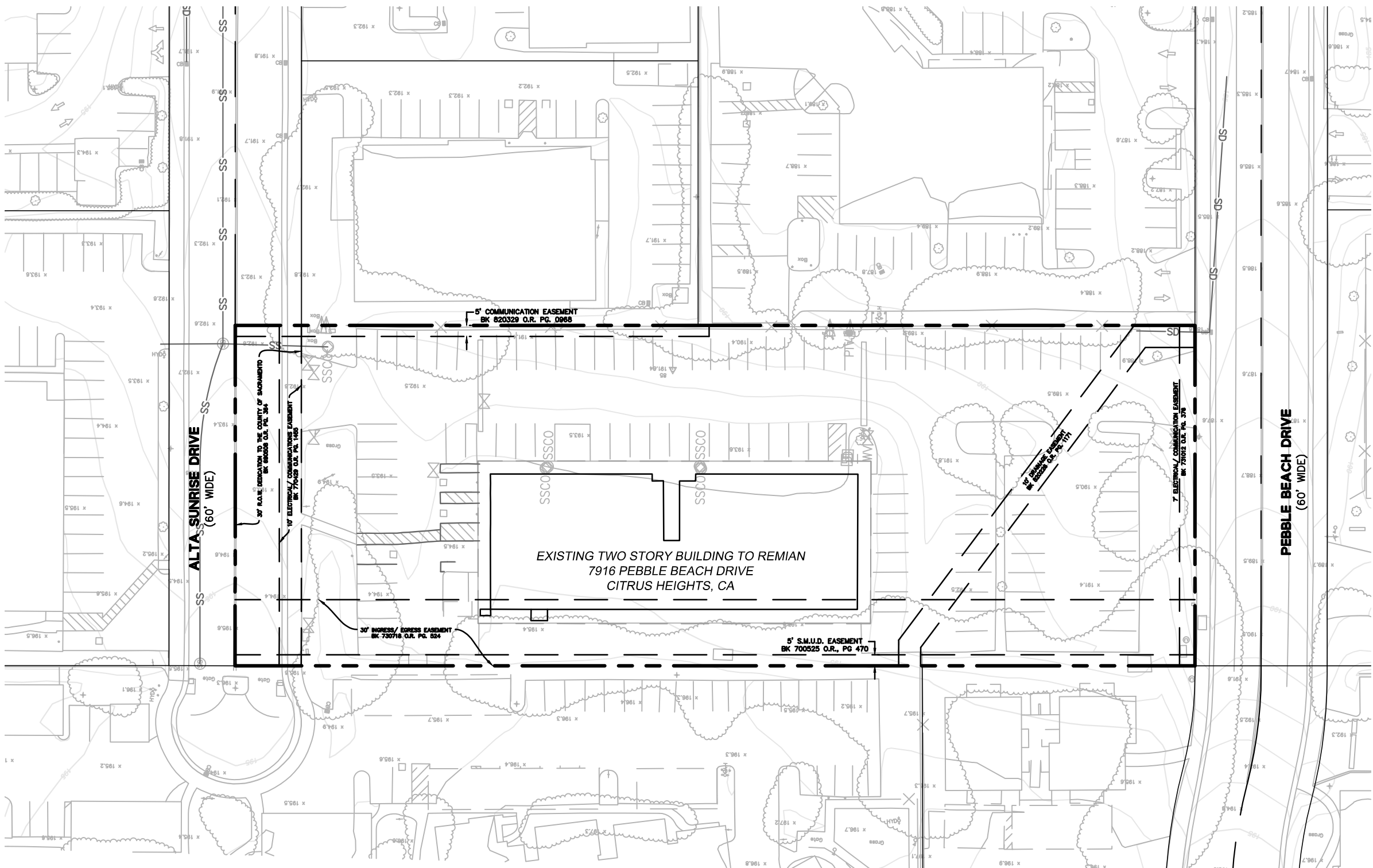
AREAS OF 0.2% ANNUAL CHANCE FLOOD: AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

PURPOSE

THE PURPOSE OF THIS TENTATIVE MAP IS TO PROVIDE FOR THE CREATION OF A SINGLE, DEVELOPABLE LOT (EXISTING PARCEL 2, AS DESCRIBED IN THAT CERTAIN CERTIFICATE OF COMPLIANCE, RECORDED IN BOOK 80-10-09, PAGE 1002) TO BE FURTHER SUBDIVIDED VIA SEPARATE COMMERCIAL CONDOMINIUM MAP INTO ELEVEN (11) CONDOMINIUM UNITS AND COMMON AREA.

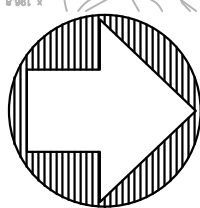
ALL EASEMENTS FOR RECIPROCAL RIGHTS AND MAINTENANCE RESPONSIBILITY FOR INGRESS/EGRESS, EMERGENCY VEHICLE ACCESS, PARKING, UTILITIES, AND SURFACE DRAINAGE SHALL BE IDENTIFIED ON THE FINAL MAP AS A STATEMENT AND ON THE CC&RS.

7916 PEBBLE BEACH DRIVE
TENTATIVE MAP
FOR CONDOMINIUM PURPOSES
CITY OF CITRUS HEIGHTS, CALIFORNIA



SITE MAP

1"=50'



GENERAL NOTES

ASSESSORS PARCEL NO: 233-0044-002-0000
OWNER/SUBDIVIDER: SUNRISE DENTAL PLAZA LLC
A CALIFORNIA LIMITED LIABILITY COMPANY
P.O. BOX 361303
MILPITAS, CA 95036
DR. TAMER ALPAGOT

MAP PREPARED BY: BKF ENGINEERS
1730 NORTH FIRST STREET, SUITE 600
SAN JOSE, CA 95112
(408) 467-9100
PATRICK CHAN
R.C.E. 30747

EXISTING LAND USE: OFFICE
PROPOSED NUMBER OF CONDOMINIUM PARCELS: ELEVEN (11) CONDOMINIUMS & COMMON AREA
ELECTRIC: SACRAMENTO MUNICIPAL UTILITY DISTRICT
GAS: PG&E
SEWAGE DISPOSAL: SACRAMENTO AREA SEWER DISTRICT
STORM DRAINAGE: CITY OF CITRUS HEIGHTS
TELEPHONE: AT&T / COMCAST
WATER SUPPLY: CITRUS HEIGHTS WATER DISTRICT
AREAS SUBJECT TO INUNDATION: NONE

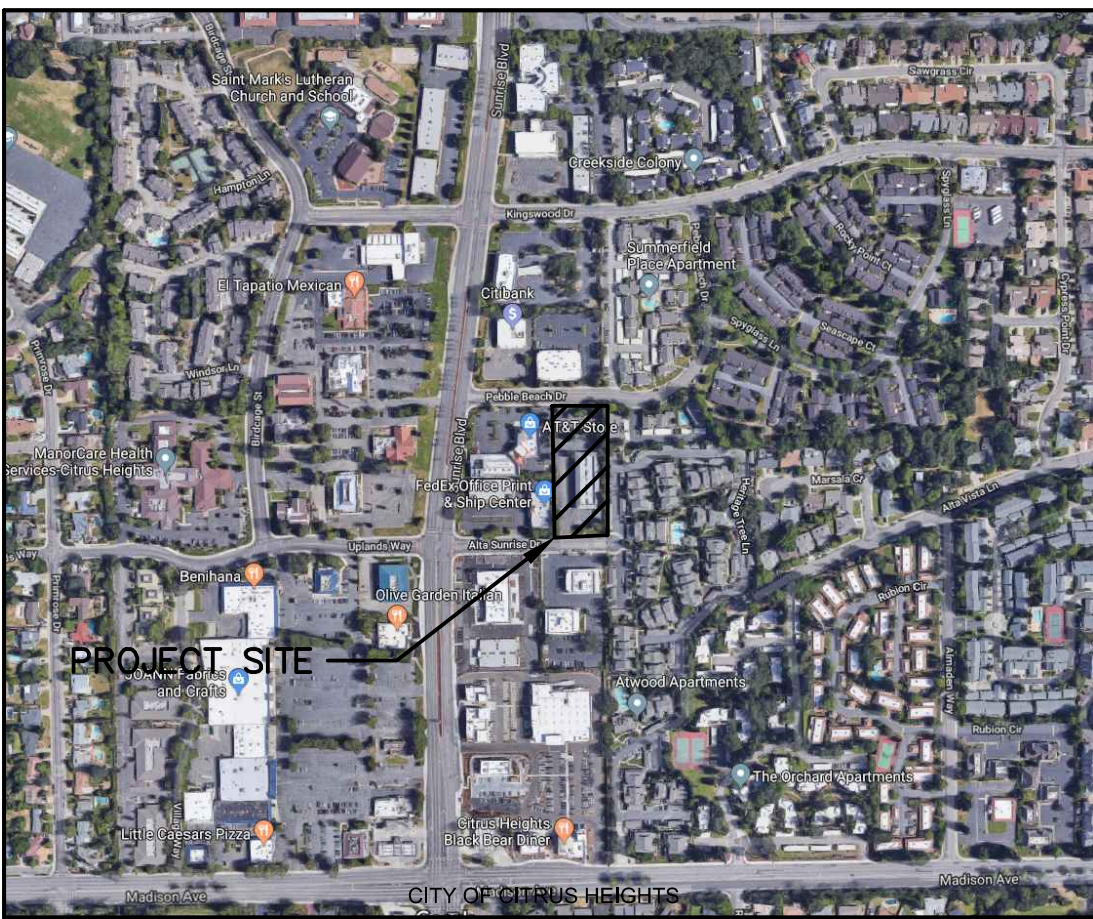
LOT SUMMARY

EXISTING:

	AREA (SF)	AREA (AC)
PARCEL 2	67,198±	1.542±
TOTAL	67,198±	1.542±

TABLE OF CONTENTS

SHEET NO.	SHEET TITLE
TM-1 (1)	TITLE SHEET
TM-2 (2)	EXISTING CONDITIONS



VICINITY MAP

NOT TO SCALE

ABBREVIATIONS

AB	AGGREGATE BASE	PE	POLYETHYLENE
AC	ASPHALT CONCRETE	PIV	POST INDICATOR
AD	AREA DRAIN		VALVE
BC	BACK OF CURB	PP	POWER POLE
BFP	BACKFLOW PREVENTOR	PR	PROPOSED
BLDG	BUILDING	PL, P/L	PROPERTY LINE
BW	BACK OF WALK	PCC	PORTLAND CEMENT
CB	CATCH BASIN		CONCRETE
C/L	CENTERLINE	P.F.S.E.	PRIVATE FIRE SERVICE
CO	CLEANOUT		EASEMENT
CONC	CONCRETE	P.I.E.E.	PRIVATE INGRESS,
CONST	CONSTRUCTION		EGRESS EASEMENT
COS	CITY OF SUNNYVALE	P.S.D.E.	PRIVATE STORM DRAIN
CR	CURB RETURN		EASEMENT
DET, DTL	DETAIL	P.S.S.E	PRIVATE SANITARY
DIP	DUCTILE IRON PIPE		SEWER EASEMENT
D/W	DRIVEWAY	P.U.E.	PUBLIC UTILITY
E	EAST/ELECTRICAL		EASEMENT
(E), EX	EXISTING	PVC	POLYVINYL CHLORIDE
ELEC	ELECTRICAL		PIPE
ELEV	ELEVATION	R	RIGHT/RADIUS
EP	EDGE OF PAVEMENT	RCP	REINFORCED
E.V.A.E.	EMERGENCY VEHICLE		CONCRETE PIPE
	ACCESS EASEMENT	RPDA	REDUCED PRESSURE
	FACE OF CURB		DETECTOR ASSEMBLY
FC	FINISHED FLOOR	R/W	RIGHT OF WAY
FF	FINISHED GRADE	S	SLOPE/SOUTH
FG	FIRE DEPARTMENT	SD	STORM DRAIN
FDC	CONNECTION	SDMH	STORM DRAIN
FH	FIRE HYDRANT		MANHOLE
F	FEET	SF	SQUARE FEET
FC	FACE OF CURB	SHT	SHEET
FS	FINISH SURFACE	S/L	STREET LIGHT
GB	GRADE BREAK	SLB	STREET LIGHT BOX
HP	HIGH POINT	SS	SANITARY SEWER
I.E.E.	INGRESS, EGRESS	SSCO	SANITARY SEWER
	EASEMENT		CLEANOUT
INV	INVERT (ELEVATION)	SSMH	SANITARY SEWER
IRR	IRRIGATION		MANHOLE
JP	JOINT UTILITY POLE	ST	STREET
JT	JOINT UTILITY TRENCH	STD	STANDARD
L	LEFT/LENGTH	S/W	SIDEWALK
LAT	LATERAL	T, TEL	TELEPHONE
LF	LINEAL FEET		
LG	LIP OF GUTTER	T	TRANSFORMER
LOW	LIMIT OF WORK		
MAX	MAXIMUM	TC	TOP OF CURB
MG	MATCH GRADE	TOP	TOP OF WALL
MH	MANHOLE	TYP	TYPICAL
MIN	MINIMUM	UG	UNDERGROUND
NTS	NOT TO SCALE	VCP	VITRIFIED CLAY PIPE
O.D.	OUTSIDE DIMENSION	W	WATER/WEST
OH	OVERHEAD (WIRES)	WM	WATER METER
P	PAVEMENT	WV	WATER VALVE
PB	PULL BOX		

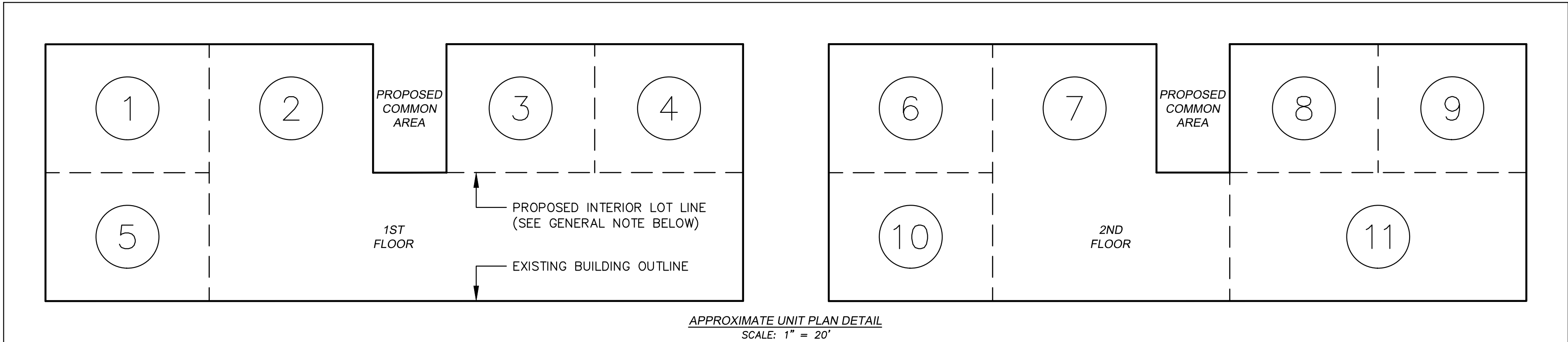
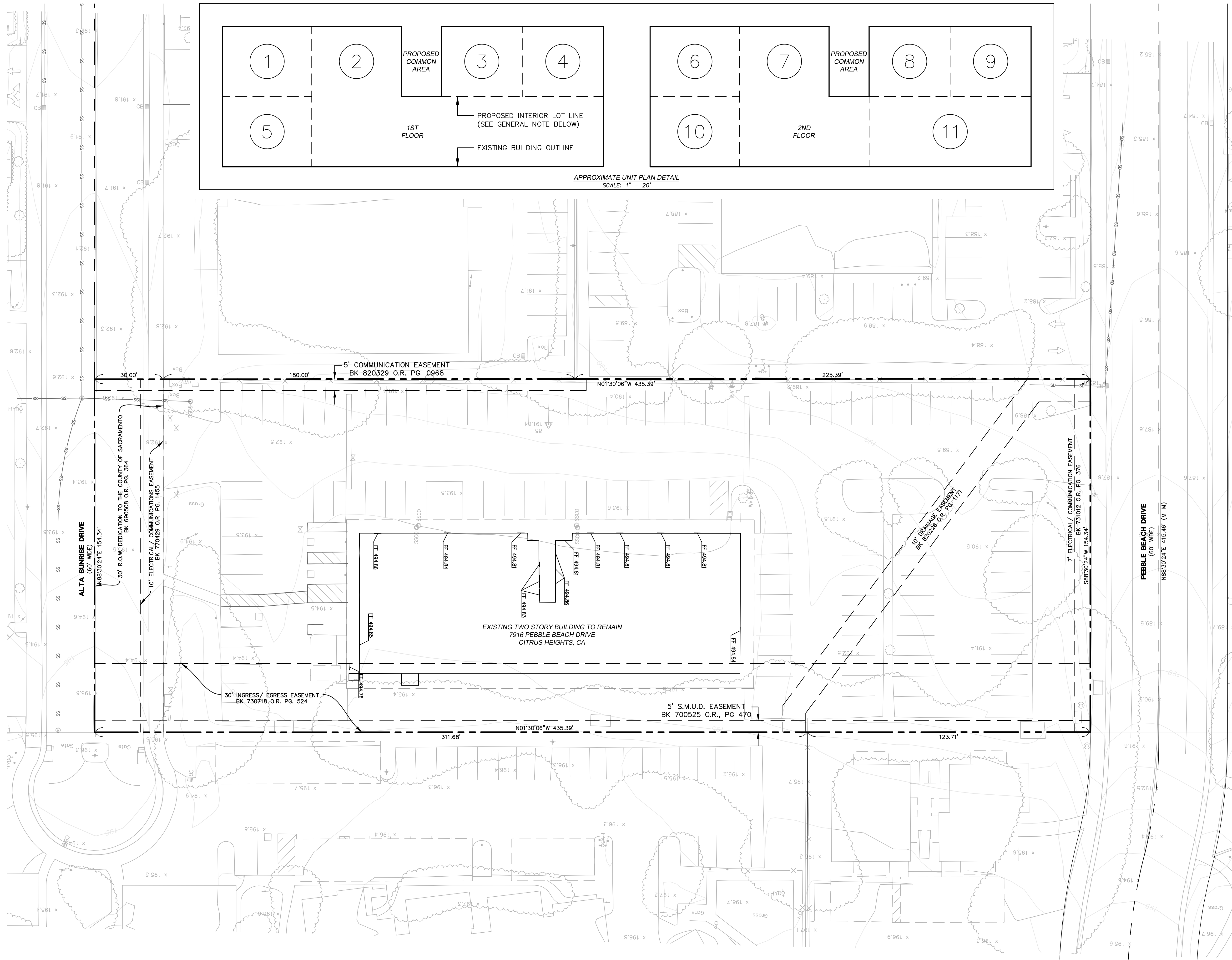


TENTATIVE PARCEL MAP
7916 PEBBLE BEACH DRIVE
TITLE SHEET

CA

CITRUS HEIGHTS

Date: 11-22-19	Revisions	No.	PLANNING SUBMITTAL #1 12/10/2019	PLANNING SUBMITTAL #2 02/10/2020
Scale: AS SHOWN				
Design: LRS				
Drawn: LRS				
Approved: PC				
Job No: 20191527				
Drawing Number:				
TM-1				
1				
2				



LEGEND	
ADJACENT LOT LINE	---
BOUNDARY LINE	---
BUILDING WALL LINE	---
EASEMENT LINE	---
FENCE LINE	---
MONUMENT LINE	---
ROADWAY CENTER LINE	---
TIE LINE	---
DRIVEWAY	---
SIDEWALK	---
OVERHEAD LINE	---
AT&T COMMUNICATION LINE	---
CABLE TELEVISION LINE	---
CHILLED WATER LINE	---
COMMUNICATION LINE	---
ELECTRICAL LINE	---
FIRE WATER LINE	---
FIBER OPTIC LINE	---
GAS LINE	---
HIGH VOLTAGE ELECTRIC	---
JOINT UTILITY TRENCH	---
IRRIGATION WATER LINE	---
RECLAIMED WATER LINE	---
STORM DRAIN LINE	---
SANITARY SEWER LINE	---
STREET LIGHT ELECTRIC	---
TELEPHONE LINE	---
TELEVISION LINE	---
UNKNOWN UTILITY LINE	---
WATER LINE	---
ELEVATION	(TC XX.X+)
ELECTROLIER	---
FIRE HYDRANT	---
GAS METER	---
JOINT POLE	---
STORM DRAIN MANHOLE	---
STORM DRAIN CATCH BASIN	---
STORM DRAIN DROP INLET	---
SANITARY SEWER CLEANOUT	---
SANITARY SEWER MANHOLE	---
SURVEY STREET MONUMENT	---
WATER METER	---
WATER VALVE	---

NOTES

BASIS OF BEARINGS:

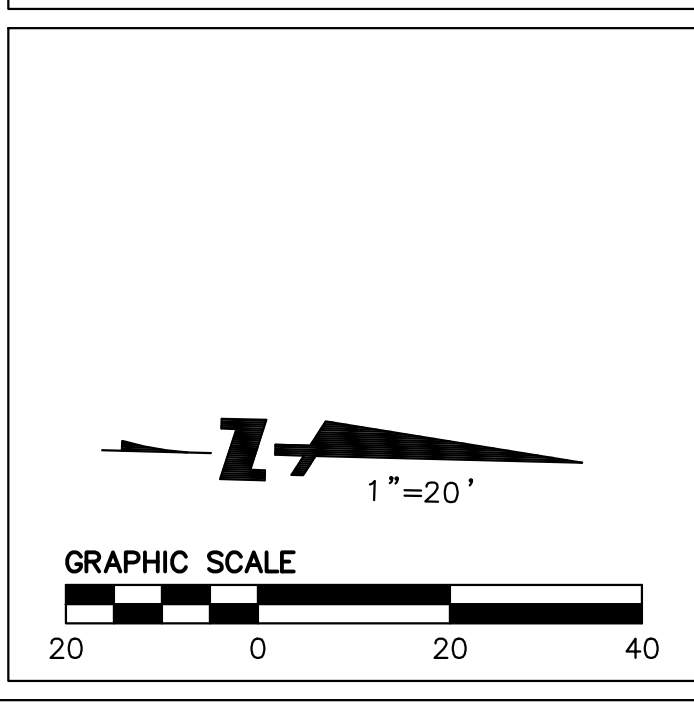
THE BEARING NORTH 88°30'24" EAST TAKEN ON THE CENTERLINE OF ALTA SUNRISE BOULEVARD AS SHOWN ON THAT PARCEL MAP FILED IN BOOK 04 OF MAPS AT PAGE 47, SACRAMENTO COUNTY RECORDS, WAS USED AS THE BASIS OF BEARINGS SHOWN ON THIS MAP.

BENCHMARK:

COUNTY OF SACRAMENTO: FOUND 7/8" METAL DISC & RAMSET STAMPED "CO. B.M. 14-194" SET IN A CHISELED SQUARE IN THE TOP OF A ROLLED CURB, EAST SIDE OF A DRAINAGE INLET ON THE SOUTH SIDE OF KINGSWOOD DRIVE, JUST EAST OF A CONCRETE BOX CULVERT ON SAN JUAN CREEK, APPROXIMATELY 0.2 MILES EAST OF SUNRISE BOULEVARD. TAKEN AS 173.18 (NAVD 88). COUNTY ID 14-194, PAGEGRID 260A5. SET 01-19-89, ADJUSTED 01-21-97.

GENERAL NOTE:

THE PROPOSED CONDOMINIUM UNITS SHOWN IN THE DETAIL ABOVE ARE SCHEMATIC AND FOR REFERENCE ONLY. ADDITIONAL FIELD SURVEY WILL BE REQUIRED TO DOCUMENT AS-BUILT INTERIOR DIMENSIONS IN ORDER TO PRODUCE CONDOMINIUM PLANS COMPLIANT WITH THE CALIFORNIA DEPARTMENT OF REAL ESTATE.





**CITRUS
HEIGHTS**

Solid roots. New growth.

STAFF REPORT

Community Development Department
Planning Division
6360 Fountain Square Dr.
Citrus Heights, CA 95621
www.citrusheights.net
(916) 727-4740

Hearing Date: February 26, 2020

File Number: OTA-19-04

Application Type: Zoning Ordinance
Amendment

Assessor's Parcel Number(s): Citywide

Prepared by: Alison Bermudez, Associate
Planner abermudez@citrusheights.net

Project Name: Zoning Code Amendment Accessory Dwelling Units

Project Address: N/A

Gross Acreage: N/A

Net Acreage: N/A

Net Density: N/A

Current Zoning: N/A

Proposed Zoning: N/A

Surrounding Zoning:

**Surrounding Land Use
Designation**

Actual Use:

**On-
site:**

North:

South:

West:

East:

Not Applicable
Citywide

Environmental Status:

☒ Exempt Section 15282(h)

☐ Previous Negative Declaration

☐ Negative Declaration

☐ Environmental Impact Report

☐ Mitigated Negative Declaration

☐ Previous Environmental Impact Report

Planning Department Recommendations:

☒ Recommend approval (City Council final action scheduled for 3/26/2020)

☐ Approve with conditions

☐ Denial

Applicant:

City of Citrus Heights
Planning Division

**Property
Owner:**

Citywide Ordinance

REQUEST

The Planning Division requests the Planning Commission review the attached Zoning Code Amendment concerning accessory dwelling units and forward their recommendation to the City Council.

SUMMARY RECOMMENDATION

The Planning Division recommends the Planning Commission make the following motions:

1. Recommend the City Council adopt the Resolution to find the proposed amendments are exempt from the California Environmental Quality Act (CEQA) under Section 15282(h) of the CEQA Guidelines and collected impact fees for ADUs will be in compliance with new legislation; and
2. Recommend the City Council adopt the Ordinance to approve the proposed amendments to Section 106.42.015 and Section 106.80.020 in regard to accessory dwelling units as shown in Attachment 1.

BACKGROUND

The city's General Plan encourages housing opportunities for all segments of the community. One such method is through Accessory Dwelling Units or "ADUs". ADUs, also known as granny flats, in-law quarters, or second units, are defined as a second permanent dwelling that is accessory to a primary dwelling on the same site. The ADU provides independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. The city has allowed these types of units subject to a variety of development standards including size limits and parking.

Over the past few years, state legislation has required jurisdictions to provide more flexibility in order to promote the development of ADUs. In response to those efforts, in 2017 the city made significant changes to its ADU ordinance. While many of the changes were in compliance with revisions to state law, the city also adopted regulations which were less restrictive. These more relaxed regulations, including the elimination of parking requirements, were intended to promote ADUs as an affordable housing product. Since the relaxation of the regulations, the city has seen nearly a 300% increase in the number of permits issued for ADUs. Prior to 2017, about two permits a year were issued for ADUs. Since that time, the number of ADU permits issued has increased to an average of seven per year.

The state continues to have unmet housing needs. The 2019 Legislative session saw a record number of housing bills to address the crisis. Several of the new bills enacted pertained to ADUs. The new ADU laws removed local discretion and instead created new mandates to further encourage ADU development.

Listed below is an overview of the ADU bills enacted this past session. As mentioned earlier, the city's update in 2017 included more relaxed regulations than required, therefore some of these new mandates were already in place in Citrus Heights- those items are shown in *italics*.

- **AB 68 (Ting) / AB 881 (Bloom) - Processing Timelines, Ordinance Prohibitions and Triplexes.** These two laws do the following:
 - *Prohibit minimum lot size requirement for ADUs;*
 - *Require ministerial (staff-level only) approval or denial of an ADU project within 60 days;*
 - Cannot limit maximum ADU size to less than 850 square feet (SF) for one- bedroom and to 1,000 SF for two or more bedrooms;
 - Prohibit side or rear yard setbacks greater than 4 feet;
 - Prohibit any local standard that would not allow for at least an 800-square foot, 16-foot tall ADU with 4-foot side and rear setbacks;
 - *Prohibit jurisdictions from requiring replacement off-street parking when a garage, carport or covered parking structure is demolished or converted to an ADU;*
 - Allow an expansion of the existing structure of up to 150 square feet for ingress and egress for converted ADUs;
 - *Prohibit required parking when ADU is located within ½-mile of transit including bus stops;*
 - Allow both an ADU as well as a "junior" ADU on the same single-family parcel where certain access, setback and other criteria are met;
 - Allow up to two (2) detached ADUs on multi-family sites;
 - Allow at least one ADU, but up to 25% of the number of existing units, created through the conversion of existing non-living space on multi-family sites;
 - Cannot require correction of physical non-conforming zoning conditions as a requirement to approve an ADU or junior ADU;
 - Prohibit short-term rental of certain ADUs (i.e., less than 31 days);
 - Render local ordinances null and void if not consistent with state law; and
 - Make jurisdictions accountable to State Housing and Community Development Department (HCD) and Attorney General if violations.
- **SB 13 (Wieckowski) - Owner-Occupancy Prohibitions and Fee Limitations.** This law states that jurisdictions:
 - *Cannot require either the primary dwelling or ADU to be*

- owner-occupied until 2025;*
- o ***Restrict utility providers connection fees and capacity charges for ADUs; and***
- o Cannot impose specified impact fees on ADUs under 750 square feet.
- **AB 587 (Friedman) - Separate Conveyances.**
 - o Enables jurisdictions to allow for the sale of the ADU separately from the primary residence even though both buildings are on the same parcel if certain conditions are met. (This bill was optional and is not being presented for adoption).
- **AB 670 (Friedman) - HOA Limitations.**
 - o Prevents homeowners' associations (HOAs) from barring ADUs.
- **AB 671 (Friedman) / AB 139 (Quirk-Silva) - Local Government Promotion of ADUs and HCD Financial Incentives.** These laws, among other housing requirements, mandate that:
 - o Local governments include in the Housing Element plans to incentivize and promote the creation of affordable ADUs; and
 - o State Housing and Community Development (HCD) Department must identify financial incentives for affordable ADUs.

PROJECT DESCRIPTION

The following is an overview of the key changes included in the proposed amendments to the city's development standards in regard to ADUs. The proposed amendments, provided in Attachment 1, are needed to update the city's Zoning Code to be in compliance with the new legislation.

Floor Area. Previously, the law restricted the size of an attached ADU to a percentage of the primary dwelling (50%) with a 1,200 square foot (SF) maximum size. For a number of years, the city has been less restrictive in that attached ADUs have been allowed to be up to 60% of the size of the primary dwelling. Staff is recommending to retain the less restrictive calculation of 60% of the primary dwelling for the attached ADU.

The new laws amended ADU size allowances by putting in place "minimum" size allowance, and removing the maximum size limits. The new minimum size allowances are:

- 850 SF for an ADU with zero to one bedroom
- 1000 SF for an ADU with two or more bedrooms
- 800 SF for an ADU which exceeds the allowed lot coverage (discussed below)

Since the law does not restrict a jurisdiction from having a maximum size, staff is proposing to retain the current size limit of 1,200 SF. Regardless of the size of the primary home, ADUs will be allowed the minimum size as listed above.

An example of how the above minimums would be applied are as follows:

<i>Scenario 1: Property owner of a 1,300 SF single-family dwelling wants to construct a 2 bedroom detached ADU on their property. The property owner would be allowed a 1,000 SF ADU as shown by the calculation below.</i>	
Existing primary dwelling SF	1,300 SF
Size allowed by application of 60% rule	780 SF
Adjusted maximum size allowed	1,000 SF*
*The size limit was raised since the 780 SF was below the mandated minimum size allowed. Note: These minimum sizes are what the city must allow. A property owner is not required to build to these sizes. An ADU must be at least an “efficiency unit” as defined in H&S Code Section 17958.1	

<i>Scenario 2: A property owner of a 2,000 SF single-family dwelling wants to construct a 2 bedroom detached ADU on their property. The property owner would be allowed a 1,000 SF ADU as shown by the calculation below.</i>	
Existing primary dwelling SF	2,000 SF
Size allowed by application of 60% rule	1,200 SF
Adjusted maximum size allowed	none*
*The size limit did not need adjusted since the application of the 60% exceeded the mandated minimum size of 1,000 SF.	

<i>Scenario 3: A property owner of a 2,000 SF single-story dwelling wants to construct a 2 bedroom detached ADU on their property. The property owner would be allowed an 800 SF ADU as shown by the calculation below.</i>	
Property zoning	RD5
Allowed lot coverage	50%
Property lot size	5000 SF
Existing lot coverage	40% (2000/5000)
Proposed ADU	1000 SF
Proposed lot coverage	60% (3000/5000)
Adjusted size of allowed ADU	800 SF*
*The size was reduced due to the lot coverage limits would have been exceeded with the proposed 1,000 SF ADU	

Bedrooms. Previously, the law and the city's regulations limited ADUs to two bedrooms per unit. The bedroom limit has been removed from the updated legislation and ADUs are now regulated only by square footage.

Setbacks. Previously, the development standards required newly constructed ADUs to maintain the same setbacks for the underlying zoning district, generally a five-foot side yard setback and a 10-foot rear yard setback. The new laws have reduced the setback requirement for newly constructed ADUs to four-feet for both the side and rear yards.

In 2017, the legislation allowed existing accessory buildings (detached garage, barn, etc.) to be converted to an ADU regardless of its existing setbacks. The most recent legislative changes have further relaxed these regulations. Property owners will now be able to remove the existing accessory building and reconstruct an ADU in the same location, regardless of the existing setback.

Height limit. Currently, the city's regulations allow a detached ADU up to 20 feet in height. This height limit is less restrictive than the 16 foot height limit in the state legislation. With the legislation now providing for significantly reduced side and rear yard setbacks as discussed above, staff is recommending the city's height limit be reduced to 16 feet. This height reduction will provide adjoining properties some protection from visual intrusion should an ADU be located at or near the property line. In the case of an ADU above a newly constructed detached residential accessory building (garage, barn, etc.), the regulations will allow for a height limit of 25 feet, with the four foot setback.

Multi-family Dwellings. Previously, the city only permitted ADUs on properties developed with a single-family residence. The new law requires cities to also allow ADUs on properties with a multi-family dwelling. Multi-family projects with existing non-livable space (storage room, boiler room, passageway, etc.) may convert that space into an ADU. In addition to the conversion of existing non-livable space, the multi-family project site may develop up to two detached ADUs to the site. It should be noted that any non-livable space required as an original condition of approval (clubhouse, recreation room, etc.) may not be converted. Multi-family dwellings are those structures with three or more units (tri-plex, four-plex, apartment, etc.). A duplex (two units) would be treated as a single-family project site.

Junior Accessory Dwelling Units (JADU). A JADU is a living unit contained within a primary residence that does not exceed 500 square feet and meets the state law. JADUs were introduced in 2016 state legislation as an option for cities to allow smaller, interior dwelling units. At the time the JADUs were introduced, the city did not adopt the JADU regulations. The latest legislation now requires cities to allow JADUs. Therefore, JADU standards have been added to the Zoning Code. Standards for JADUs include:

- Created through the conversion of space within the primary residence
- Limited to 500 SF maximum
- Must have an “efficiency kitchen”
- May share bathroom with primary residence
- Must have direct access to the outside
- The primary residence or the JADU must be occupied by the property owner
- Property owner must record deed restriction
- A property may have a JADU in addition to a detached ADU

Rental Term. Previously, neither the ADU laws nor the city’s regulations restricted the rental term of ADUs. The 2019 legislation did include the prohibition to use ADUs for short-term rentals in certain situations. The situations include when placement of the ADU results in the site exceeding the allowable lot coverage as well as when an existing structure is removed/replaced for the development of the ADU. There are a few other situations which would prohibit the use of an ADU as a short-term (less than 31 days) rental. Since these situations are somewhat complex, staff is recommending that *all* ADUs and JADUs constructed after January 1, 2020, be restricted from short-term rental use.

Definitions. Definitions have been added to the Zoning Code which provide definition of an “efficiency kitchen” and “housing organization”, both new terms within the ADU ordinance.

Impact Fees. While impact fees are not part of the Zoning Code or under the purview of the Planning Commission, impact fees are an important factor when promoting or encouraging ADUs. Impact fees are collected as new projects are constructed to pay for a share of the cost of providing public services. Some fees, such as roadway and park facility fees, are collected by the city. Other fees, such as school, sewer and drainage fees, are collected by outside agencies. Previously, while some agencies had reduced impact fees for ADUs such as fire and park fees, some impact fees were the same fees collected for the construction of single-family dwelling units.

The new legislation limits when impact fees can be collected for ADUs. The law prohibits the collection of impact fees for ADUs less than 750 SF and fees collected for ADUs 750 SF and greater must be “proportional” to the fees collected for single-family residences. The term “proportional” was not defined in the law. Therefore, following research with other jurisdictions, staff has recommended the impact fee collected for ADUs 750 SF and larger be 50% of the single-family dwelling unit impact fee. As mentioned, fees are not part of the Planning Commission authority. Therefore, when these proposed amendments are presented to the City Council, staff will confirm this interpretation is appropriate.

ANALYSIS

The state legislation which amended Government Code Section 65852.2 in regard to ADUs, currently supersedes the city's current regulations. The proposed revisions are necessary in order to provide compliance with state legislation enacted January 1, 2020.

ADUs continue to increase in popularity. Over the past couple years, the majority of ADU permits issued by the city's Building Division have been to property owners seeking additional housing for family members, in particular aging family members. The proposed amendments will further expand opportunities for these types of affordable housing options within the city.

The following General Plan goal and policy supports the proposed amendments:

- Goal 25: Provide adequate sites for a variety of housing opportunities to serve all residents
 - Policy Action 25.1: Promote development a variety of hosing types in terms of location, cost, design, style, type, and tenure while ensuring compatibly with adjacent uses of land.

Action A: Support development of secondary dwelling units, cluster housing, work/live units, co-op housing, and other innovative housing types al allowed by the Zoning Code.

CONCLUSION

The proposed Zoning Code amendment is consistent with the General Plan and will not be detrimental to the public interest, health, safety, convenience, or welfare of the city. Therefore, staff recommends approval of the amendment.

ENVIRONMENTAL DETERMINATION

The project is exempt from California Environmental Quality Act (CEQA) under CEQA Guidelines Section 15282(h) which exempts the adoption of ordinances to regulate accessory dwelling units from environmental review.

RECOMMENDATION

The Planning Division recommends the Planning Commission make the following motions:

1. Recommend the City Council adopt the Resolution to find the proposed amendments are exempt from the California Environmental Quality Act (CEQA) under Section 15282(h) of the CEQA Guidelines and collected impact fees for ADUs will be in compliance with new legislation; and

2. Recommend the City Council adopt the Ordinance to approve the proposed amendments to Section 106.42.015 and Section 106.80.020 in regard to accessory dwelling units as shown in Attachment 1.

Attachments:

1. Redline/Strikeout of Revisions of Zoning Code Sections 106.42.015 and 106.80.020
2. Resolution for CEQA Exemption and Fees
3. Ordinance for Zoning Code Amendments

106.42.015 – Accessory Dwelling Units

This Section establishes standards for accessory dwelling units **and junior accessory dwelling units**. An accessory dwelling unit may be created by conversion of floor area in a pre-existing primary dwelling unit, by an addition thereto, or created within a new or existing residential accessory structure. Except as otherwise specified by this Chapter, all accessory dwelling units shall comply with all provisions applicable to a primary dwelling unit. Nothing in this Chapter shall provide an exception to the requirements of the Building Code.

- A. Allowed Location.** An accessory dwelling unit is allowed on any property developed with ~~a single-family residence~~ **residential living unit(s)**.
- B. Limitation on number of units **for parcels with a single or duplex dwelling**.** No more than one accessory dwelling unit shall be **located on a parcel developed with a single or duplex dwelling except the parcel may also have one junior accessory dwelling unit provided the junior accessory dwelling unit complies with Section 106.42.105.D.9 approved on a single parcel**. ~~Accessory dwelling units are not included when calculating the density of a parcel.~~
- C. Relationship to primary use.**
- 1. Design, style.** An accessory dwelling unit shall be incidental to the primary ~~single-family~~ residential use of the site in terms of location and appearance and shall not alter the character of the primary structure. The architectural style, exterior materials, and colors of the accessory dwelling unit shall be compatible with the primary dwelling unit.
 - 2. Timing of construction.** An accessory dwelling unit may be constructed simultaneously with or after the primary dwelling. In addition, an existing dwelling that complies with the development standards for accessory dwellings in Subsection D below, may be considered an accessory dwelling unit, and a new primary unit may be constructed which would then be considered the primary dwelling unit.
 - 3. Term of Rentals.** Accessory dwelling units or junior accessory dwelling units shall not be rented for periods of less than thirty one (31) days. This provision shall not apply to accessory dwelling units lawfully constructed prior to January 1, 2020.
- D. Development standards.** The following standards apply to all accessory dwelling units unless an exception is provided in Section 106.42.015.D.6. through 106.42.015.D.9.

TABLE 4-1 – ACCESSORY DWELLING UNIT DEVELOPMENT STANDARDS

	Accessory Dwelling Unit Development Standards			
	Requirement by Zoning District			
Development Feature	RD-1, 2, 3, 4	RD-5, 7	RD-10, 15	RD-20, 25, 30
Setbacks				
Front	20 ft	20 ft	20 ft	25 ft
Side - Interior (each)	5 4 ft ¹	5 4 ft ¹		4 ft ¹
Side - Corner	15 ft	12.5 ft		25 ft
Rear	RD-1, 2 – 25 ft RD-3, 4 – 20 ft 4 ft ¹	20 ft 4 ft ¹		20 ft 4 ft ¹
Density	Accessory dwelling units are not included when calculating the density of a parcel.			
Lot coverage	Maximum percentage of total net lot area occupied by primary structures, all accessory structures, and accessory dwelling units, but not including swimming pools.			
Maximum coverage	30% ²	50% ²	50% ²	60% ²
Height limit	Maximum allowable height of accessory dwelling unit.			
Maximum height-attached unit	30 ft	40 ft	50 ft	
Maximum height-detached unit	16 20 ft ³	16 20 ft ³	16 20 ft ³	16 20 ft ³
¹ No structure may be located within an easement. ² Refer to Section 106.42.015.D.1.a.(3) for a property which would be prohibited from the placement of an accessory dwelling unit due to lot coverage limits. ³ An accessory dwelling unit located above a detached residential accessory structure, shall not exceed an overall height of 25 feet.				

1. **Maximum Allowed floor area.**

- a. The floorspace of an attached accessory dwelling unit shall not exceed 60 percent of the floorspace of the primary dwelling or 1,200 square feet, whichever is less. **Regardless of the size of the primary dwelling, an attached accessory dwelling unit shall be allowed the minimum size as follows:**
 - (1) 850 square feet for an accessory dwelling with zero to one bedrooms; or
 - (2) 1,000 square feet for an accessory dwelling with 2 or more bedrooms; or
 - (3) 800 square feet on properties in which the placement of the accessory dwelling units would be exceeding the allowed lot coverage limits established by the zoning district.
- b. The floorspace of a detached accessory dwelling unit shall not exceed 1,200 square feet, regardless of the size of the primary dwelling.
- c. For purposes of computing the floorspace of an accessory dwelling unit, all enclosed areas accessed from within the accessory dwelling unit shall be included. For purposes of computing the floorspace of the

primary dwelling, ~~an attached garage of up to 400 square feet may~~ **all living area shall** be included when calculating the floorspace of the primary dwelling.

- ~~2. **Number of bedrooms.** An accessory dwelling unit shall have a maximum of two bedrooms.~~
3. **Off-street parking requirements.** Additional off-street parking is not required for an accessory dwelling unit.
4. **Separate entrance required.** An attached ~~second unit~~ **accessory dwelling unit** shall have an entrance separate from the entrance to the primary dwelling.
5. **Window placement.** An accessory dwelling unit that is 15 feet or less from a residential unit on an adjacent parcel shall not have windows that directly face windows in the other unit. A detached accessory dwelling unit located closer than 10 feet to a side lot line or 20 feet from a rear lot line shall have no second floor windows facing the side or rear except obscured glass or clerestory windows, unless the review authority determines that other types of windows will not significantly interfere with the privacy of residents on adjacent parcels.
6. **Conversion of space within a single dwelling.** An accessory dwelling unit may be created through the conversion of space within a single dwelling, subject to the following:
 - a. The conversion of interior space shall not exceed 800 square feet.
 - b. The setbacks of the accessory dwelling unit are sufficient for fire safety.
 - c. An expansion of not more than 150 square feet beyond the same physical dimensions of the structure in which the accessory dwelling unit is contained is allowed to accommodate for ingress and egress.
7. **Conversion of existing accessory structure.** If the accessory dwelling unit is created through the conversion of an existing accessory structure into living space, the following exceptions may be applied:
 - a. ~~An accessory dwelling unit created through the conversion of an existing accessory structure, shall comply with the size limits established in Section 106.42.015.D.1.~~
 - b. An existing legal accessory structure, including legal non-conforming structures, may be converted to an accessory dwelling unit regardless of height limit, lot coverage, or setbacks.
 - c. If an existing legal accessory structure, including legal non-conforming structures, is expanded for the purpose of creating an accessory dwelling unit, a minimum ~~five-foot~~ **four-foot** side and rear yard setback shall apply to all sides of the structure.
 - d. ~~An existing legal accessory structure, including non-confirming structure, may be removed and replaced in the same location with an accessory dwelling unit, regardless of lot coverage or setbacks.~~
8. **Multi-unit project site:** Parcels with multi-unit housing may have accessory dwellings as follows:
 - a. An existing multi-unit residential site may convert existing non-livable space (e.g. storage room, boiler room, passageway, attic, basement or garage) into an accessory dwelling unit provided the space meets building code requirements for dwellings. Each multi-unit project site may create, through the conversion of existing non-livable space, a minimum of one accessory dwelling unit up to an increase not exceeding 25 percent of the total of existing units. For example, a project with 10 units shall not increase more than two accessory dwelling units and a project of three units shall be allowed one accessory dwelling unit.
 - (1) Non-livable space which was required as a previous condition of approval, may not be converted to living space.
 - b. In addition to conversion of space allowed above, a multi-unit project may have up to two detached accessory dwelling units. Each detached accessory dwelling unit shall be limited to a maximum of 800 square feet in size.

9. Junior Accessory Dwelling Unit: As an alternative to the standard accessory dwelling units, a parcel with a single dwelling may have one junior accessory dwelling in addition to a standard accessory dwelling unit.

- a. A unit is considered a junior accessory dwelling unit provided each of the following standards are met:
 - (1) The unit is created through the conversion of living space within an existing single dwelling.
 - (2) The unit does not exceed 500 square feet in size.
 - (3) The unit has at least an efficiency kitchen. The efficiency kitchen shall be removed if the junior accessory unit ceases.
 - (4) The unit has bathroom facilities that are either separate from or shared with the residence in which the unit is contained.
 - (5) The unit has exterior access separate from the entrance to the dwelling in which it is contained.
- b. The development standards provided in Table 4-1 apply to junior accessory dwelling units.
- c. A junior accessory dwelling unit shall be permitted to develop an additional 150 square feet which may exceed the allowable lot coverage otherwise permitted by the underlying zoning district to allow for ingress and egress of the junior accessory dwelling unit.
- d. Either the junior accessory dwelling unit or the residence in which the junior dwelling unit is contained must be occupied by the owner. Owner-occupancy shall not be required if the owner is another governmental agency, land trust, or housing organization.
- e. Prior to the issuance of the building permit, the owner shall show proof of a recorded deed restriction. The deed restriction, which shall run with the land including the transfer of ownership, will prohibit the following:
 - (1) The junior accessory dwelling unit shall not be sold separately from the single dwelling.
 - (2) The junior accessory dwelling unit shall be restricted in size and attributes as describe in Government Code 65852.22.

E. Zoning Clearance. The Director shall issue the Zoning Clearance in compliance with Section 106.62.020.

106.80.020 - Definitions of Specialized Terms and Phrases

As used in this Zoning Code, the following terms and phrases shall have the meaning ascribed to them in this Section, unless the context in which they are used clearly requires otherwise.

Accessory Dwelling Unit. A second permanent dwelling that is accessory to a primary dwelling on the same site. An accessory dwelling unit provides complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation as described in Government Code section 65852.2. An accessory dwelling unit also includes an efficiency unit, as defined in Section 17958.1 of the Health and Safety Code. , and a manufactured home, as defined in Section 18007 of the Health and Safety Code.

Efficiency Kitchen. A kitchen which contains a sink with a drain and cooking facilities with appliances. Food preparation counter and storage cabinets are of reasonable size in relation to the size of the unit.

Housing Organization. As defined in Government Code Section 65589.2, subdivision (k)(2).

RESOLUTION NO. 2020-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CITRUS HEIGHTS, CALIFORNIA, FINDING THAT THE AMENDMENTS TO THE ZONING CODE IN REGARD TO ACCESSORY DWELLING UNITS ARE CATEGORICALLY EXEMPT FROM CEQA PER SECTION 15282(h) OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND THAT IMPACT FEES COLLECTED FOR ACCESSORY DWELLING UNITS WILL BE IN COMPLIANCE WITH SENATE BILL 13, ASSEMBLY BILL 68, AND ASSEMBLY BILL 881

WHEREAS, pursuant to the California Environmental Quality Act (“CEQA”) (Pub. Resources Code, ' 21000 et seq.), the project is categorically exempt from CEQA per Section 15282(h), related to Accessory Dwelling Units;

WHEREAS, the State of California regulates accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) pursuant to Government Code §§ 65852.2 and 65852.22, respectively;

WHEREAS, the State of California amended state laws regarding ADUs and JADUs, effective January 1, 2020, enacting legislation approved by Senate Bill 13, Assembly Bill 68, and Assembly Bill 881;

WHEREAS, the City of Citrus Heights will not impose impact fees on ADUs under 750 square feet;

WHEREAS, the City of Citrus Heights will collect impact fees on ADUs 750 square feet and larger at 50% of the rate imposed for single-family dwellings;

WHEREAS, for the purpose of calculating impact fees, the City of Citrus Heights will not consider JADUs an additional living unit and will not collect impact fees on such units;

WHEREAS, the City of Citrus Heights currently regulates the establishment of Accessory Dwelling Units (ADUs) pursuant to Citrus Heights Municipal Code §§ 106 (Zoning Code); and

WHEREAS, the Planning Commission held a public hearing on February 26, 2020 and found that the Categorical Exemption is applicable to the proposed amendments, and no further review is required.

NOW, THEREFORE, BE IT RESOLVED that the Citrus Heights City Council hereby finds the proposed amendments are categorically exempt from CEQA per Section 15282(h), related to Accessory Dwelling Units and no further environmental review is required.

PASSED AND ADOPTED by the City Council of the City of Citrus Heights, California, this ____ day of _____, 2020 by the following vote, to wit:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:

ABSTAIN:

COUNCIL MEMBERS:

Jeff Slowey, Mayor

ATTEST:

Amy Van, City Clerk

ORDINANCE NO. 2020-__

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CITRUS HEIGHTS, CALIFORNIA, AMENDING SECTION 106.42.015 (ACCESSORY DWELLING UNITS) AND SECTION 106.80 (DEFINITIONS) OF THE ZONING CODE IN REGARD TO ACCESSORY DWELLING UNITS

WHEREAS, the State of California regulates accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) pursuant to Government Code §§ 65852.2 and 65852.22, respectively;

WHEREAS, the State of California amended state laws regarding ADUs and JADUs, effective January 1, 2020, enacting legislation approved by Senate Bill 13, Assembly Bill 68, and Assembly Bill 881;

WHEREAS, the City of Citrus Heights currently regulates the establishment of Accessory Dwelling Units (ADUs) pursuant to Citrus Heights Municipal Code §§ 106 (Zoning Code);

WHEREAS, the City's ADU ordinance and supporting standards of the Citrus Heights Municipal Code must be amended to be consistent with state law;

WHEREAS, ADUs are integral to the achievement of the City's affordable housing and housing density goals;

WHEREAS, the Planning Commission of the City of Citrus Heights reviewed the proposed amendments and found the amendments would not be detrimental to the public interest, health, safety, convenience, or welfare of the City;

WHEREAS, the Planning Commission held a public hearing on February 26, 2020, and forward action to _____ the amendments to the City Council on a _____ vote, with _ votes in favor, _ votes opposed and _ abstention subject to the Findings contained herein; and

THE CITY OF CITRUS HEIGHTS DOES ORDAIN AS FOLLOWS:

Section 1: Purpose and Authority

The purpose of this Ordinance is to amend the Citrus Heights Zoning Code as shown in the attached Exhibit A amending Chapter 106.42 in regard to accessory dwelling units and Chapter 106.80 amending definitions contained in the Zoning Code.

Section 2: Findings

- The proposed amendments in regard to accessory dwelling units are consistent with the General Plan

- The proposed amendments will not be detrimental to the public, interest, health, safety, convenience, or welfare of the City.

Section 3: Amendment

The City Council hereby amends the Zoning Code of the City of Citrus Heights as described within Exhibit A herein, and as discussed within the Staff Report, which is incorporated by reference.

Section 4: Severability

If any section, subdivision, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

Section 5: Effective Date and Publication

This Ordinance shall take effect thirty (30) days after its adoption, provided it is published in full or in summary within fifteen (15) days after its passage, in a newspaper of general circulation and circulated in the City of Citrus Heights.

PASSED AND ADOPTED by the City Council of the City of Citrus Heights this ____day of ____2020 by the following vote:

AYES:	Council Members:
NOES:	Council Members:
ABSENT:	Council Members:
ABSTAIN:	Council Members:

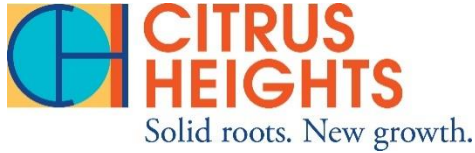
Jeff Slowey, Mayor

ATTEST:

Amy Van, City Clerk

~~Exhibit A~~

- ~~106.42.015 Accessory Dwelling Units~~
- ~~106.80 Definitions~~



CITY OF CITRUS HEIGHTS

PLANNING COMMISSION STAFF REPORT MEMORANDUM

DATE: February 26, 2020

TO: Planning Commission Members
Christopher W. Boyd, City Manager

FROM: Colleen McDuffee, Community Development Director
Casey Kempenaar, Planning Manager
Eric Singer, Assistant Planner

SUBJECT: 2019 General Plan Annual Progress Report

Summary and Recommendation

Staff recommends the Planning Commission recommend the City Council approve the 2019 General Plan Annual Progress Report and direct staff to forward the report to the appropriate state agencies in accordance with Government Code Section 65400.

Fiscal Impact

None

Background and Analysis

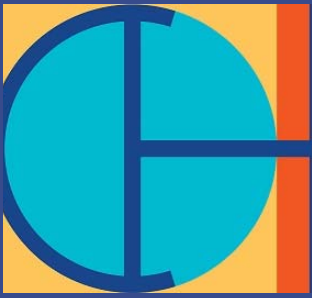
State law requires all cities and counties submit to their legislative bodies an annual progress report on the status of the General Plan and progress in its implementation. The city's General Plan contains 66 goals to guide overall city development. As a basis for local government decision-making, these goals and policies are analyzed and serve as the guiding action to achieve the overall vision for the community.

State law requires each jurisdiction submit a report to Governor's Office of Planning and Research (OPR) to ensure the goals, policies, and action items of the General Plan are being implemented. Furthermore, a report on the progress made to implement the Housing Element of the General Plan must be provided to the Department of Housing and Community Development (HCD). Staff has combined the reporting elements of OPR and HCD into a single Annual Progress Report (Attachment 1), which provides an analysis of those General Plan policies and action items that have made notable progress during calendar year 2019, and also includes the annual Housing Element progress report for all action items.

Following the Planning Commission's review of the General Plan Progress Report, staff will present the report to City Council for review and approval. If approved, staff will forward the report to OPR and HCD as required by law.

Attachments:

1. 2019 General Plan Annual Report



City of Citrus Heights General Plan Annual Progress Report 2019

CITY OF CITRUS HEIGHTS
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION
6360 FOUNTAIN SQUARE DRIVE
CITRUS HEIGHTS, CA 95621
(916) 727-4740

This page intentionally left blank

Purpose of this Document

Section 65400(b) of the State of California Government Code requires planning agencies to provide an annual report to their legislative body, the Governor's Office of Planning and Research (OPR), and the State Department of Housing and Community Development (HCD) on the status of the General Plan and progress in its implementation. The four basic purposes of the annual report are as follows:

- To provide information to assess progress on implementation of the General Plan in accordance with the stated goals, policies and implementation measures.
- Provide information to identify necessary course adjustments or modifications to the General Plan as a means to improve implementation.
- To provide a clear correlation between land use decisions made during the reporting period, and the goals, policies and implementation measures in the General Plan.
- To provide information regarding local agency progress in meeting its share of regional housing needs and local efforts to remove governmental constraints to the development of housing.

State law requires that the General Plan Annual Progress Report (APR) be completed and submitted to the state each year for the previous calendar year. This APR looks at the City of Citrus Heights's progress toward implementing its General Plan during the 2019 planning year.

General Plan Background

Upon incorporation in January 1997, the city adopted the Sacramento County General Plan. Soon thereafter, the city embarked on an intensive process of crafting the first General Plan. The resulting plan was adopted on November 15, 2000. Citizen participation played an important role in preparing the city's General Plan. Because a General Plan needs to reflect community goals and aspirations, citizens were involved with issue identification and goal formulation. The public as well as various civic and professional organizations were consulted during the General Plan preparation stage whenever possible. Numerous public meetings were held to discuss the General Plan. In 2011, a *focused* update to the General Plan was completed that addressed the areas of mobility/complete streets, water quality, climate change/sustainability.

The General Plan addresses State General Plan requirements. California law requires that every city and county adopt a long-term General Plan that addresses seven specific topics or "elements," organized in any format or structure preferred by the community. The General Plan may also address other topics the community feels are relevant. Regardless of the format or issues addressed, the Plan must be internally consistent. The city's Plan is organized into three elements that meet the State requirements, as shown in Table 1: General Plan Content.

Table 1
General Plan Content

Citrus Heights Plan Elements	Required Plan Topics	Issues Covered
Community Development	Land Use Circulation Housing	Community character, neighborhoods, corridors, economic development, gateways, public spaces, housing, transportation and mobility, regional coordination
Resource Conservation	Conservation Open Space	Biological resources, open space, energy conservation, cultural resources
Community Health	Noise Safety	Flooding, seismic activity, hazardous materials, noise, air quality, climate change, services, parks and recreation, education, utilities

City's Responsibility

The effectiveness of the General Plan ultimately depends on how it is implemented and maintained over time. State law requires that most actions of local governments affecting the physical environment be consistent with the General Plan. The implementation of the Plan is the responsibility of numerous departments and divisions including:

- City Manager's Office (City Clerk, Economic Development and Communications Divisions)
- City Attorney
- Community Development Department (Planning, Building and Housing Divisions)
- Police Department (Includes Code Enforcement, Animal Control, Fleet, and Rental Housing Inspection Divisions)
- General Services Department (Public Works & Engineering, Community Services and Facilities, Grounds Divisions)
- Administrative Services Department (Finance, Information Technology, and Human Resources Divisions)

Additionally, several other governmental agencies provide services within the city's boundary. While these agencies are neither part of the city's operational structure nor directly responsible for implementation of the General Plan, the city does coordinate its activities with these other agencies and relies upon their assistance for full implementation of the General Plan. These agencies include, but are not limited to the following:

- Water Districts (3)
- Sacramento Metropolitan Fire District
- San Juan Unified School District
- Sunrise Recreation and Park District
- Sacramento Area Sewer District

Amendments to the General Plan

State law allows the city to amend its General Plan no more than four times per year. Amendments may be proposed and acted upon at any time during the year and one action may include multiple amendments. Any changes to the General Plan require public hearing by the City Council and evaluation of the environmental impacts as required by the California Environmental Quality Act.

In 2019, the city amended the General Plan one time with an amendment addressing the redevelopment of the Sunrise Mall. Goal 12 was amended to add a new policy that states:

Policy 12.3: Transform the Sunrise Mall Area into a premier regional destination and a flourishing center of community life where residents and visitors shop, work, live, and play.

Action A: Prior to issuing any discretionary approval in the Sunrise Mall area, develop a comprehensive specific plan that includes:

- *An effective concentration and complementary mix of land uses;*
- *Streetscape and community gathering features that are engaging and support an active street life and a stronger sense of place;*
- *Architectural and design details to transition this area from an auto-oriented suburban center to an amenity-rich, pedestrian friendly, and experience-oriented regional destination;*
- *Phasing, infrastructure and financing approaches.*

The specific plan shall reflect changing market conditions and provide sustained economic benefit to the City.

Major Milestones and Projects

Construction was approved, initiated or completed within Citrus Heights for the following major projects during the 2019 planning year:

Dignity Health Medical Office Building – This project was completed in 2019, bringing approximately 220 professional jobs and diversifying the local economy.

Mariposa Creek Subdivision – The first new subdivision since 2015 passed final inspections in 2019. Mariposa Creek is a 15-lot subdivision located on the north side of Antelope Road, just west of Mariposa Ave. The project will assist with the city's growing need of for-sale housing.

Mitchell Farms – The Mitchell Farms subdivision broke ground in 2019, with a projected total of 260 single-family residential dwelling units located on approximately 32 acres. The project consists of five villages along the periphery of the site with a mix of three different housing types: 110 paseo units (alley-loaded single-family units), 72 patio units (groups of 2 to 8 single-family units accessed from a central alley), and 78 traditional housing units. The remaining 23 acres in the central portion of the site, including the creek corridor, are devoted to recreational areas and open space uses including a trail system.

Northridge Grove Subdivision – The Northridge Grove subdivision infrastructure improvements were completed and the project was issued building permits for construction of two model homes in late 2019. The entire project will construct 46 homes on an approximately 7.1-acre site.

Stock Ranch Plaza – The city approved an entitlement of a multi-tenant commercial pad building at the front of the Stock Ranch Plaza which began construction in 2019. The building will house a fast casual restaurant and retail tenants.

Studio Movie Grill – In 2018, the city approved an entitlement to convert the vacant former K-Mart building at the Citrus Grove shopping center into a Studio Movie Grill, which began construction in 2019.

Grants Received that Support the Goals of the General Plan

Auburn Boulevard Complete Streets Project (ABCS)

Phase 2 of the project was recommended for \$1,525,000 under the California Transportation Commission's (CTC) Regional Active Transportation Program (ATP). This award was recommended by the Sacramento Area Council of Governments (SACOG) Board of Directors March 21, 2019 and approved by the CTC on May 22, 2019. This funding will provide funding to support the ABCS Project Phase 2 for the construction phase. The Project includes complete streets improvements with sidewalks, lighting, traffic signal upgrades and landscaping on Auburn Boulevard from Rusch Park to the Roseville City limits and includes working with the city of Roseville for improvements near the Louis Orlando Transit Center.

The San Juan Avenue Rehabilitation and Complete Streets Improvements

Phase 1 of the project was approved for \$2,000,000 under SACOG's State of Good Repair 2019 Regional Funding Round. The grant funds will provide funding to support the project design, environmental documentation and right-of-way acquisition between Madison Avenue and Spicer Drive and construction funds for the project between Madison Avenue and Spicer Drive. The project will include localized pavement repair, full asphalt concrete overlay, repair of deteriorated curb, gutter and sidewalk, infill asphalt pedestrian paths (connecting existing sidewalk on the east side), buffered class II bike lanes, ADA improvements, transit stop improvements (bus stopping pads and bus stop improvements), and streetlights at side street intersections and other key points.

Household Hazardous Waste (HHW) Outreach and Education Grant

Awarded \$50,000 from CalRecycle to promote proper disposal of Household Hazardous Waste (HHW). Project includes social media, electronic ads and door hangers to educate residents about the importance of household hazardous waste and direct them to the North Area Recovery Station's HHW drop off facility at 4450 Roseville Road.

Local Road Safety Plan Project

The city applied for funding to develop a Local Road Safety Plan for the City of Citrus Heights. The plan will create a framework to systematically identify and analyze safety problems and recommend safety improvements. This will provide a proactive approach to address safety needs and be responsive to safety challenges throughout the city.

Status of General Plan Implementation Actions

The table below analyzes selected General Plan policies and action items that made notable progress in 2019. The table is not a comprehensive list of all policies and action items in the General Plan; many policies/actions are under ongoing implementation, and may not be listed here. As the majority of the General Plan policies and related action items have been implemented through the adoption of ordinances or resolutions, incorporated into the regular governmental activities of the applicable departments, or included in development proposals as they are reviewed for consistency with the city's policies, the purpose of providing the policy implementations below is simply to streamline the review and highlight the annual progress efficiently. A comprehensive list of all General Plan policies and action items with status and/or implementation can be viewed in prior General Plan APRs.

A review of the Housing Element implementation status for all action items, and progress toward meeting the city's Regional Housing Needs Assessment, is provided in the subsequent section, beginning on page 14.

Government Services		
Goal 56: Strive to provide consistently responsive, efficient and customer-oriented government services and facilities		
Goal/Action #	Policy/Action	Status/Implementation
56.3	<i>Continue pursuit of innovative techniques to deliver public services in a cost-effective and responsive matter.</i>	
56.3.A	Continue to improve the City website to provide community information and respond to service needs.	<p>In January 2019, the city launched a redesigned website. The redesigned website serves as a hub for all things Citrus Heights; while at the same time, it is organized in a way that continually reinforces Citrus Heights' identity incorporating the logo, color scheme and strapline "Solid roots. New Growth." in a modern clean and simple design. Info graphics were utilized to provide simple navigation to frequently requested items based on website analytics. The city also enhanced its online presence by creating a NextDoor social media account to engage with its residents.</p> <p>Additionally, in June 2019, the city held its first live social media gathering to aid in the efforts of community engagement. These efforts have evolved into monthly live sessions via Facebook, featuring a blend of city staff, representatives from partnering agencies, and local</p>

		business members to share dialogue on new and upcoming projects, community services and highlight businesses throughout the community.
Goal 56: Strive to provide consistently responsive, efficient and customer-oriented government services and facilities		
Goal/Action #	Policy/Action	Status/Implementation
56.4	<i>Seek out tools that allow local decision-makers to conduct City business within a balanced budget.</i>	
	The city adopted its first two-year budget for FY 19/20 and 20/21, which is a best practice in financial management. The city also adopted updated fiscal policies on December 12, 2019 that reflect sound financial management practices. In 2019, the city also started its largest community outreach process in its history to gauge community priorities and gather community feedback for maintaining essential services, local control, and fiscal stability.	
Sunrise MarketPlace		
Goal 11: Maintain and strengthen Sunrise MarketPlace as the heart of commercial activity in Citrus Heights		
Goal/Action #	Policy/Action	Status/Implementation
11.1	<i>Actively seek to attract, retain and expand commercial activities at Sunrise MarketPlace.</i>	
11.1.A	Support the activities and programs of the Sunrise MarketPlace Property-based Business Improvement District	The city is supporting the Sunrise MarketPlace in its PBID renewal process, which was kicked off in 2019. The city is also an active participant in all district events, including the first “Brew in the Burbs” craft beer and social event held in 2019.
11.1.B	Establish an ongoing business attraction, retention and expansion program that includes partnerships with key property owners, real estate brokers and retailers.	In order to attract and retain local businesses, the City Council set a strategic planning goal in October 2019 to host appreciation events for each of the city’s three business districts. The initiative will be kicked off in 2020. The city has planned events for the Auburn Boulevard Business Association, Antelope Crossing Business Association, and Sunrise MarketPlace. The city regularly meets and engages with property owners, property managers and brokers of the Sunrise MarketPlace to provide

		support and catalyze business attraction and retention within the Sunrise MarketPlace.
11.1.C	Identify opportunities to expand entertainment, restaurant, lodging and leisure activities that complement and support the retail uses in Sunrise MarketPlace.	The City Council adopted the Sunrise Mall Specific Plan for this purpose (further details in Section 12.3A).
Goal 12: Create an inviting and distinctive identity for Sunrise MarketPlace to promote its image as the City's premier destination to shop, work, live, and play		
Goal/Action #	Policy/Action	Status/Implementation
12.3	<i>Transform the Sunrise Mall area into a premier regional destination and a flourishing center of community life where residents and visitors shop, work, live, and play.</i>	
12.3A	<p>Prior to issuing any discretionary approval in the Sunrise Mall area, develop a comprehensive specific plan that includes:</p> <ul style="list-style-type: none"> • An effective concentration and complementary mix of land uses; • Streetscape and community gathering features that are engaging and support an active street life and a stronger sense of place; • Architectural and design details to transition this area from an auto-oriented suburban center to an amenity-rich, pedestrian friendly, and experience-oriented regional destination; • Phasing, infrastructure and financing approaches. <p>The specific plan shall reflect changing market conditions and provide sustained economic benefit to the City.</p>	<p>In 2019, the city amended the General Plan to recognize the importance of Sunrise Mall within the city and the region, as well as ensure that any future redevelopment of the site is conducted in a holistic manner. The General Plan was updated to require the development of a Specific Plan for the mall property before any new entitlements can be granted for the Sunrise Mall Property.</p> <p>After amendment of the General Plan, the city hired a consultant team, led by Gensler, to develop the Specific Plan. The Gensler team is one of the most experienced teams with mall redevelopment, to aid the city in a robust planning effort to guide the future redevelopment of Sunrise Mall. The specific plan will consider a variety of new uses on the site including, housing, entertainment, office, and other related uses.</p>

Housing		
Goal 25: Provide adequate sites for a variety of housing opportunities to serve all residents		
Goal/Action #	Policy/Action	Status/Implementation
25.2	<i>Strive to meet the City's fair share housing allocation based on the Regional Housing Needs Assessment.</i>	
25.2A	Develop an inventory of land suitable within the City for the development of housing for all segments of the community.	<p>In September 2019, the city purchased an 11.33 acre vacant parcel from the local school district. The parcel, located at what is locally known as "Sylvan Corners", has long been recognized as an important economic and social focus of the community. The eventual development of the property will have a crucial impact on the city.</p> <p>The city purchased the land for its appraised value of \$3.4 million. The city does not have any plans to retain ownership of the property – the intent is to work in partnership with a developer to maximize the city's influence on how the property is developed.</p> <p>In December 2019, the city initiated a contract with a firm to perform a market analysis and local market conditions and constraints. The information gathered will help guide the city on the next steps.</p>
Goal 26: Develop, conserve, and improve the housing stock to ensure decent accommodations for all segments of the community		
Goal/Action #	Policy/Action	Status/Implementation
26.1	<i>Encourage the conservation and improvement of existing housing.</i>	
26.1.A	Promote the use of administrative remedies to remediate substandard rental units.	The city's Rental Housing Inspection Program (RHIP) officially launched on July 1, 2019. Since then, the RHIP team has been in the field conducting inspections and working with rental property owners and property managers to resolve code violations that are negatively impacting the quality of the city's housing stock. Through the end of December, the RHIP team has identified 3,175 individual housing

		units with violations and has identified a total of 4,432 total code violations. In most cases, each one of these violations has the potential to cause a hazard that could result in great bodily harm or death. These impressive results highlight and underscore the need and importance of having a program dedicated to improving the city's rental housing.
Goal 26: Develop, conserve, and improve the housing stock to ensure decent accommodations for all segments of the community		
Goal/Action #	Policy/Action	Status/Implementation
26.5	<i>Conserve the City's stock of sound and viable mobile home and manufactured homes as an important part of the City's affordable housing stock.</i>	
26.5C	Continue to fund the Emergency Repair Program for lower income owners of mobile home and manufactured homes.	The city provided 30 mobile home health and safety repair loans / grants to low-income mobile homeowners in 2019.
Goal 28: Ensure housing opportunities for all segments of the community		
Goal/Action #	Policy/Action	Status/Implementation
28.3	<i>Support and cooperate with regional and community-based organizations in the delivery of special needs housing resources.</i>	
28.3.A	Support SHRA efforts to provide housing assistance within the community.	The city continues to fund programs and services assisting homeless individuals or those at risk of homelessness, seniors, domestic violence victims, and youth living in Citrus Heights.
Public Safety		
Goal 58: Ensure excellent public safety services and rapid and effective emergency response		
Goal/Action #	Policy/Action	Status/Implementation
58.5	<i>Consider public safety issues in all aspects of public facility, commercial, and residential project design, including crime prevention through environmental design.</i>	
	<p>The Police Department has adopted a set of CPTED guidelines that can be applied to development applications or existing businesses in the community. Since PD began tracking the data in 2016, they have conducted 43 formal CPTED analyses to date.</p> <p>Additionally, the city has received numerous complaints of shopping carts being abandoned throughout the city. These abandoned shopping carts are the source of blight and are a visual nuisance in our community. Armed with this information the Special Operations Unit and our CHPD interns formed the S.C.R.A.T. team. The purpose of the team is to take a proactive leadership approach to combat this problem. Additionally, we are using the abandoned cart data obtained from our S.C.R.A.T. team to work with our businesses to improve their cart retrieval accountability. The S.C.R.A.T. team deploys at least twice a week and has been</p>	

	responsible for returning over 50 abandoned shopping carts to the respective businesses.	
Parks and Recreation		
Goal 59: Ensure that ample and appropriate parks and recreation facilities and programs are available to all residents		
Goal/Action #	Policy/Action	Status/Implementation
59.1	Support the provision of recreation and leisure programs for all community residents.	
59.1.D	Encourage the Sunrise Recreation and Park District to maintain and systematically renovate and upgrade existing parks and recreation facilities.	<p>The city has created partnerships with other agencies to make improvements to Rusch Park, including the installation of a new, modern playground facility.</p> <p>The city has also provided Neighborhood Improvement Project funds to its local neighborhood associations – in partnership with SRPD – to create an Arcade Creek Park Preserve Braille Trail by installing a rope guide, bench, garden, and signs. The city also provided funding for the Brooktree Tennis Courts Rehabilitation and the San Juan Park Tennis/Pickleball Court resurfacing.</p>
Resource Conservation		
Goal 36: Preserve, protect and increase plantings of trees within the City		
Goal/Action #	Policy/Action	Status/Implementation
36.1	Incorporate existing trees into development projects. Avoid adverse effects on health and longevity of native oaks or other significant trees through appropriate design measures and construction practices. When tree preservation is not possible, require appropriate tree replacement.	
36.1.B	Prepare a plan to systematically increase tree canopy in the City.	In 2018, the city received a Tree City USA designation. To maintain its designation, for Arbor Day 2019 the city hosted a tree planting event at Rusch Park where volunteer groups and city staff planted 120 new oak trees.

Open Space		
Goal 38: Establish a system of creekside trails, passive open space and parks for public use		
Goal/Action #	Policy/Action	Status/Implementation
38.1	<i>Provide for recreational trail rights-of-way along local creek channels through development easements and agreements.</i>	
38.1.A	Pursue development of recreational trails that respect privacy of adjoining properties, safety of users, and maintenance of natural areas.	The City Council adopted the environmental document that certifies the Electric Greenway Project on 6/27/19. The Greenway will create a nearly 3-mile long, off-street trail for cyclists and pedestrians through parts of Citrus Heights and Orangevale. The project spans Arcade Creek Park Preserve to the west (near the intersection of Sunrise/Sayonara) and Wachtel Way to the east (at the Citrus Heights city limits boundary with unincorporated Sacramento County). The project will connect seven parks, schools and the city's commercial district (Sunrise MarketPlace) to distinct neighborhoods.
Economic Development		
Goal 18: Be responsive to changing economic conditions and opportunities		
Goal/Action #	Policy/Action	Status/Implementation
18.3	<i>Participate in regional economic development and planning efforts to promote the attractiveness of the overall region for business.</i>	
	The Citrus Heights City Manager is an active and engaged board member for the Greater Sacramento Economic Council (GSEC). The city also has representation and actively participates on GSECs Economic Development Director Taskforce. As a result, the city was one of 18 points of interest on the GSEC Site Selectors familiarization tour of the greater Sacramento region in November 2019. The tour brought site selectors from around the country to experience the region, and provide education on industry clusters and workforce availability to attract potential corporate relocations.	
Transportation and Mobility		
Goal 29: Plan, design, construct, and manage a Complete Streets transportation network that accommodates the needs of all mobility types, users and ability levels		
Goal/Action #	Policy/Action	Status/Implementation
29.1	<i>When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use.</i>	

29.1.A	Update the Capital Improvement Program annually to incorporate necessary circulation system improvements.	The Old Auburn Road Complete Streets Plan (The Plan) addresses challenging transportation conditions including excessive speeds, skewed intersections, inadequate bicycle, pedestrian and transit infrastructure, and a history of collisions along nearly 2-miles of Old Auburn Road.
29.1.B	Evaluate projects to ensure that the safety, comfort, and convenience of pedestrians and bicyclists are given equal level of consideration to drivers.	
29.1.C	Consider ways to increase and improve travel choices when reviewing development or transportation infrastructure projects.	
29.1.D	Require sidewalks on all arterial and collector streets. Where feasible, separate sidewalks from streets on arterials and collectors with landscaping including a tree canopy to create shade.	<p>In 2019, staff led a robust community engagement effort to solicit input including hosting 2 community workshops, implementing a 9-day roadway demonstration project, hosting a Community Safety Fair, developing FAQs, in an effort to gain information on the needs, wants, concerns and goals for the nearly 2-mile long corridor. In addition, draft concepts, operational analysis, microsimulation models, cost estimates, and cross sections were developed. It is anticipated this Plan will be complete in March, 2020.</p> <p>Additionally, The Multi Modal Transportation Safety Program (MMTSP) will update and improve the way the city evaluates and prioritizes roadway safety concerns raised by residents. The MMTSP will update the city's 2001 Neighborhood Traffic Management Program to current industry standards to make roads in our community safer for everyone who uses them to walk, drive, bike, and roll.</p> <p>A consultant contract for the work was executed on 01/31/2019 and work on collecting existing traffic complaint history and traffic data began immediately. Community participation was encouraged through social media and mass</p>
29.1.E	Improve the existing street network to minimize travel times and improve mobility for transit, bicycle, and walking trips between new projects and surrounding land uses to reduce vehicle trips.	

		mailings. Community meetings were held on October 2 and 30, 2019. An on-line survey, created to assist with prioritization values, began in December 2019 and will continue to early February 2020.
Goal 29: Plan, design, construct, and manage a Complete Streets transportation network that accommodates the needs of all mobility types, users and ability levels		
Goal/Action #	Policy/Action	Status/Implementation
29.4	<i>Support safe, complete and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.</i>	
29.4.G	Develop and implement a Safe Routes to School Plan. This effort should complement the ADA Transition Plan, the PMP, and the BMP.	<p>The focus of the Carriage Drive & Lauppe Lane Safe Schools Corridor Plan (CLSSCP) is to evaluate safety concerns for all users (pedestrians, bicyclists and drivers) along this one-mile-long school/residential corridor connecting Antelope Road and Auburn Boulevard. Also included in the plan is the segment of Auburn Boulevard adjacent to Sylvan Middle School. The ultimate goal of the CLSSCP, a joint effort between the City and the San Juan Unified School District (SJUSD), is to develop a community supported comprehensive plan to improve this heavily traveled corridor providing access to three schools: Carriage Drive Elementary, Mesa Verde High, and Sylvan Middle.</p> <p>In 2019, the city conducted multiple forums for community engagement to receive the public's input on their experiences and concerns regarding the current conditions. A walk audit was held on the project corridor to gather feedback from the school principals and neighborhood stakeholders. A series of interviews were conducted with school staff, school district staff, and key city personnel. Additionally, the city hosted a community open house at Mesa Verde HS and set up</p>

		information tables at the schools on four different occasions to broaden the engagement and increase feedback.
Flooding/Storm Drainage		
Goal 49: Implement stormwater management programs to protect life and property from flood related hazards		
Goal/Action #	Policy/Action	Status/Implementation
49.1	<i>Promote drainage improvements through natural means and practices that minimize flooding.</i>	
49.1.B	Continue working on solutions to localized flooding problems in the vicinity of Cripple and Arcade Creeks.	Work began on the Highland Rinconada Drainage Improvement Project (HRDIP) In April 2019, and the project was accepted as complete by the City Council at the December 12, 2019 council meeting. The HRDIP eliminated a number of neighborhood flooding issues by constructing curb and gutter, replacing existing the existing roadside ditches and under-sized storm drain system on Highland Avenue, separating the Highland Avenue drainage system from the Rinconada Avenue drainage, and constructing an additional high flow by-pass pipe at the Rinconada Avenue outfall to Arcade Creek.

Housing Element Annual Progress Report

Overview

Preserving and enhancing the range and affordability of housing in an important goal of the General Plan. A goal of the Plan is to continue to address the housing needs for all, including move-up homeowners, low-income renters, seniors, disabled persons, and other with special needs. The Plan includes a variety of goals, policies and actions primarily directed toward the following objective:

- Increase the level of home ownership in the community
- Preserve the existing housing supply and assure its continuing quality.

This annual report includes a review of the Plan's goals as they relate to housing. Table D, included within this report, provides the status/progress of the programs within the housing element section of the General Plan.

Regional Housing Needs Plan

In an effort to address statewide housing needs, the state of California requires regions to address housing issues and needs based on future growth projections for the area. Housing and Community Development (HCD) allocates regional housing needs to councils of government throughout the state. The Regional Housing Needs Plan (RHNP) then allocates to each city and unincorporated county their “fair share” of the region’s projected housing needs by household income level. This distribution is commonly referred to as the Regional Housing Needs Allocation (RHNA).

The intent of the RHNP is to ensure that local jurisdictions address not only the needs of their immediate areas but also fill the housing needs for the entire region. Additionally, a major goal of the RHNP is to ensure that every community provides an opportunity for a mix of affordable housing to all economic segments of its population.

For the city, the RHNP is developed by the Sacramento Area Council of Governments (SACOG). State law requires the city to identify its progress in meeting its share of the RHNA as well as local efforts to remove governmental constraints to housing. The city’s General Plan Housing Element includes programs and actions to be taken to meet these objectives, and reflects the RHNP and RHNA for the Sacramento region.

SACOG, along with the city and the other jurisdictions in the region, prepared the Regional Housing Needs Plan (RHNP) and the Regional Housing Needs Assessment (RHNA) for the 2013–2021 planning period. The RHNP identified a total of 696 dwelling units as the city’s fair share of the regional needs total. Table 2 identifies the breakdown of this number for each of the income categories covered by the RHNP for the city.

Table 2
Regional Housing Needs Allocation

Income Category	RHNA	Total Units to Date of Current Planning Period*	Total Remaining RHNA by Income Level
Extremely Low Income/Very Low	146	5	141
Low Income	102	2	100
Moderate Income	130	24	106
Above Moderate	318	78	240
Total	696	109	587

**Numbers from Table B of the Annual Housing Element Report*

Summary of Units

The information below is a summary of housing unit activity of the City of Citrus Heights during 2018. This information is a summary of Tables A through F submitted to the State of California’s Housing and Community Development Department.

Housing Element Program Implementation

The city adopted its 2013–2021 Housing Element on April 25, 2013. It was subsequently certified by HCD.

Jurisdiction	Citrus Heights	
Reporting Year	2019	(Jan. 1 - Dec. 31)

Building Permits Issued by Affordability Summary		
Income Level		Current Year
Very Low	Deed Restricted	0
	Non-Deed Restricted	6
Low	Deed Restricted	0
	Non-Deed Restricted	0
Moderate	Deed Restricted	0
	Non-Deed Restricted	1
Above Moderate		12
Total Units		19

Note: Units serving extremely low-income households are included in the very low-income permitted units totals

Housing Applications Summary	
Total Housing Applications Submitted:	0
Number of Proposed Units in All Applications Received:	69
Total Housing Units Approved:	47
Total Housing Units Disapproved:	0

Use of SB 35 Streamlining Provisions	
Number of Applications for Streamlining	0
Number of Streamlining Applications Approved	0
Total Developments Approved with Streamlining	0
Total Units Constructed with Streamlining	0

Units Constructed - SB 35 Streamlining Permits			
Income	Rental	Ownership	Total
Very Low	0	0	0
Low	0	0	0
Moderate	0	0	0
Above Moderate	0	0	0
Total	0	0	0

Cells in grey contain auto-calculation formulas

State law requires the city to complete a specific review of the implementation of the programs in the Housing Element. Table D lists each of the programs in the Housing Element and indicates the timeframe to complete the program and the city's efforts to date. As the table shows, the city is on track with implementation of its Housing Element.

This page intentionally left blank

ANNUAL ELEMENT PROGRESS REPORT

Housing Element Implementation

(CCR Title 25 §6202)

Jurisdiction		Citrus Heights	
Reporting Year		2019	
(Jan. 1 - Dec. 31)			
Table D			
Program Implementation Status pursuant to GC Section 65583			
Housing Programs Progress Report			
Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.			
1	2	3	4
Name of Program	Objective	Timeframe in H.E	Status of Program Implementation
24.1A	Use City Housing funds to leverage private funds to create home ownership opportunities	Ongoing.	Ongoing.
24.1B	Continue to participate in programs that encourage people to own homes close to their workplaces	Ongoing.	Ongoing.
24.1C	Develop and distribute the housing resource materials to potential homebuyers	Ongoing.	Housing resources are available on the city's website and may be mailed upon request. Resources are available at various events including Sunday FunDay and other city events. Programs are advertised in city publications including e-newsletter.
24.1D	Use available state and federal funds for the city-wide first time home buyer assistance program	Ongoing.	CAL HOME funds are used for this purpose. Currently the program has funded 138 households.
24.1E	Create and participate in partnerships that encourage home ownership	Ongoing.	Ongoing.
24.1F	Explore and pursue innovative ways of creating opportunities for increased home ownership	Jul-10	Ongoing.
24.1G	Assist homeowners facing possible foreclosure with technical assistance and support to prevent foreclosure	Ongoing.	Housing consulting is provided through Self-Help Housing who work in conjunction with Legal Services of CA to assist homeowners at risk of foreclosure.
24.2A	Develop a program to allow and encourage conversion of small rental properties to owner occupancy	Ongoing.	This is one of the goals of the Sayonara Drive Redevelopment Project. 15 fourplexes have been purchased and demolished by the city. The city intends to redevelop these vacant sites

24.2B	Investigate ways to provide ownership of mobile home parks by their residents	Ongoing.	Ongoing.
25.1A	Support development of secondary dwelling units, cluster housing, work/live units, co-op housing, and other innovative housing types as allowed by the Zoning Code	Ongoing.	Completed with the Zoning Code update in 2006
25.2A	Develop an inventory of land suitable within the City for the development of housing for all segments of the community	Ongoing.	<p>The city maintains a vacant land inventory. Additionally, in September 2019, the city purchased an 11.33 acre vacant parcel from the local school district. The parcel, located at what is locally known as “Sylvan Corners”, has long been recognized as an important economic and social focus of the community. The eventual development of the property will have a crucial impact on the city.</p> <p>The city purchased the land for its appraised value of \$3.4 million. The city does not have any plans to retain ownership of the property – the intent is to work in partnership with a developer to maximize the city’s influence on how the property is developed.</p> <p>In December 2019, the city initiated a contract with a firm to perform a market analysis and local market conditions and constraints. The information gathered will help guide the city on the next steps.</p>
25.2B	Prepare an Annual General Plan Progress Report to analyze the City’s progress to meet the fair share allocation based on the RHNP.	Ongoing.	Ongoing.
25.2C	Establish a housing monitoring program that includes annual review of the following: <ul style="list-style-type: none">· Inventory of land suitable within the City for the development of housing for all segments of the community- Proposed and approved residential projects and building permits issued· Home and apartment vacancies· Rental and home sales survey and Multiple Listing Service summary- Infrastructure and public services capacity.	Jul-10	Ongoing.

25.3A	Implement mixed-use development along the City's major corridors	Ongoing.	Ongoing.	Auburn Specific Plan, the revised Zoning Code, and the Sunrise Mall Specific Plan (in early stages of planning) encourage this type of development.
26.1A	Promote the use of administrative remedies to remediate substandard rental units	Ongoing.	Ongoing.	In July 2019, the Rental Housing Inspection Program formally launched. The program promotes compliance with health & safety standards to reduce the number of substandard rental housing conditions. By end of 2019, it had identified 3,715 individual housing units with violations and 4,432 total code violations.
26.1B	Remove unsafe or dilapidated housing through the Neighborhood Enhancement Program, secure vacant nuisance residential structures and require resolution through the Neighborhood Enhancement Program	Ongoing.	Ongoing.	The Rental Housing Inspection Program will assist in improving dilapidated housing.
26.1C	Offer incentives and financing assistance for affordable housing and housing rehabilitation	Ongoing.	Ongoing.	The city offers affordable housing assistance through its First-Time Homebuyer Program. This program has funded over 138 homebuyer loans. The city also offers a Housing Repair Program that has funded over 241 loans.
26.1D	Work with financial institutions, nonprofit organizations and government agencies to promote housing rehabilitation	Ongoing.	Ongoing.	The city annually provides low- or no-interest loans and grants through its Housing Rehabilitation Program. To date the city has awarded more than 241 loans and grants to residents for health and safety repairs to their homes.
26.1E	Support the efforts of all local service organizations and, schools, and other community groups to provide housing repair assistance, including the Rebuilding Together Program	Ongoing.	Ongoing.	Ongoing.
26.1F	Continue and expand the City's Owner Occupied Rehabilitation Program where feasible	Ongoing.	Ongoing.	The city is in process of issuing monies from a \$1,000,000 grant from Housing and Community Development (HCD) received in 2014. These grant these funds will fund a Mobilehome Repair Program. This program will assist over 30 mobilehome homeowners to make health and safety repairs.
26.1G	Examine the feasibility of creating a Resale Inspection Program	2009		Possible future program.
26.1H	Fund the Senior Housing Emergency Repair Program, or develop a local "handyman" program for seniors	Ongoing.	Ongoing.	Possible future program.
26.1I	Fund the Senior Housing Emergency Repair Program, or develop a local "handyman" program for seniors	Ongoing.	Ongoing.	Possible future program.

26.1J	Pursue a variety of funding sources such as the Housing Stock Fee and the Abandoned Vehicle Abatement Program to fund and strengthen the code enforcement activities.	Ongoing.	Ongoing.
26.1K	Use a system of cumulative and substantial fines to gain compliance from the owners of nuisance properties	Ongoing.	The city's Code Enforcement Division utilizes a fine process to gain compliance from owners of nuisance properties.
26.1L	Work with community based organizations to create self-help housing in the City	Ongoing.	City staff is currently is working with Sacramento Self-Help Housing and the city's Navigator to provide services to those with a housing crisis.
26.1M	Seek new ownership opportunities to redevelop existing problematic housing developments	Ongoing.	Ongoing.
26.1N	Encourage the use of Green Building practices for the revitalization or redevelopment of the existing housing stock	Ongoing.	The city's Housing Repair Program incorporates Green Building practices as feasible
26.1O	Seek grants and other funding mechanisms to assist in redevelopment of existing housing stock	Ongoing.	In city is in process of issuing monies from a \$1,000,000 grant from Housing and Community Development (HCD) received in 2014 for a Mobilehome Repair Program. This program will assist over 30 mobilehome owners to make health and safety repairs
26.2A	Promote the development of mixed-use housing including clustered, live-work and above-retail uses in appropriate zones	Ongoing.	Completed with the Zoning Code update in 2006 as well as the Auburn Boulevard Specific Plan.
26.2B	Continue streamlining the review process to minimize any constraints on or disincentives to housing development	Ongoing.	Ongoing.
26.2C	Promote quality design by offering flexible housing development standards	Ongoing.	Ongoing.
26.2D	Use Redevelopment Funds to assist in developing a variety of housing types for all income levels, including extremely low income	Ongoing.	The city has dedicated \$1.3mil of HOME funds for the development of Sunrise Pointe, a 46-unit housing development for very low income residents.
26.2E	Encourage and offer incentives to developments that include Green practices including LEED Certification and/or Photovoltaic Systems	Ongoing and July 2009.	The city has implemented a flat rate permit fee for the installation of residential photo voltaic systems.

26.2F	Encourage and offer incentives to developmets that promote Universal Housing	Jul-09	Universal Housing design is encouraged but not required.
26.3A	The City will investigate the feasibility of establishing a rental inspection program. The City will consider incorporating the concept of a resale inspection program as a priority as a part of the Climate Action plan, addressing energy efficiency into older homes. Investigate the feasibility of establishing a rental inspection program	Jun-10	In July 2019, the Rental Housing Inspection Program formally launched. The program promotes compliance with health & safety standards to reduce the number of substandard rental housing conditons. By end of 2019, it had identified 3,715 individual housing units with violations and 4,432 total code violations.
26.3B	Work with the local housing authority (Sacramento) to enhance the quality and appearance of public housing in the City	Ongoing.	The city has completed the rehabilitation of two SHRA public housing units for very-low income residents with Housing Trust Funds. Since the Redevelopment Agency has been dissolved, the city has been actively pursuing options for the completion of the Sayonara Drive Revitalization Project.
26.4A	Implement the Design Guidelines within the Zoning Code	Ongoing.	Ongoing.
26.5A	Continue to pursue the use of local, state, and federal funds to make physical improvements to existing mobile home parks	Annually	The city received a CallHome grant from Housing and Community Development (HCD) to provide loans to eligible mobilehome homeowners to assist in health and safety repairs to their home.
26.5B	Continue to offer Community Development Block Grant (CDBG) funds to rehabilitate mobile and manufactured homes	Ongoing.	Continuing progress. The city provides accessiblity grants up to \$5,000 for Mobile Homes; Housing Rehab loans for single-family dwellings and grants up to \$10,00 for crisis repairs.
26.5C	Continue to fund the emergency repair program for lower income owners of mobile and manufactured homes	Ongoing.	An eligible mobilehome owner may receive a loan through the Housing Repair Program using grant funds received by HCD
26.5D	The City will investigate the feasibility of converting mobile home parks to resident owned or similar ownership. The City will conduct annual assessment with Mobile Home Park owners and residents to evaluate the potential for partnerships to achieve resident ownership in mobilehome parks	Annually	Not actively pursuing at this time.

26.5E	Redevelop / Rehabilitate existing deteriorated mobile home parks or manufactured homes	Ongoing.	The city has received a \$1,000,000 Grant from HCD to provide loans to eligible mobilehome owners to make health and safety repairs to their home. Over 30 mobilehome owners will benefit from this funding
27.1A	Annually review the status of housing projects whose government restrictions are expiring or near expiration to determine the need for intervention	Ongoing.	The city has historically worked to save units from converting and actively works with owners on an ongoing basis
27.1B	Work with the federal Housing and Urban Development Department (HUD), Sacramento Housing and Redevelopment Agency (SHRA), and other agencies to determine the City's options in preserving at risk units	Ongoing.	Ongoing.
27.1C	Work with nonprofit housing organizations, SHRA, and other agencies to help purchase complexes where the owner wishes to convert to market rate	Ongoing.	Ongoing.
27.1D	If preservation of an "at-risk" development cannot be accomplished, work with the owners to ensure proper federal notification and moving assistance is provided	Ongoing.	No government-assisted units identified to be at risk of converting to market rate units.
27.1E	Use CDBG, Redevelopment funds and other available resources to subsidize identified "at-risk" units, rehabilitate substandard units, and/or fund self-help projects, to retain their availability as low-income housing	Ongoing.	Ongoing.
27.1F	Continue to implement strategies to redevelop Sayonara Drive (Sunrise to Lialana)"	Ongoing.	The city purchased and demolished 15 fourplexes on Sayonara Drive. The city is exploring redevelopment options
28.1A	Enforce Code requirements to ensure that housing is accessible to the disabled	Ongoing.	Ongoing.
28.1B	The City will consider development of Universal/Adaptable Design Guidelines for disabled and aging populations	Jul-10	The city recently approved a 110-unit senior affordable apartment project featuring Universal Design Guideline principles.

28.2A	Work with other jurisdictions to assess need for transitional housing and develop plans to address this problem. Develop a plan by June 2010	Ongoing.	Ongoing.
28.2B	Continue to work with the Sacramento County Department of Housing Assistance to provide emergency shelters and other support services	Ongoing.	The city continues to work with the Citrus Heights Homeless Assistance Resource Team (HART) to provide a temporary winter sanctuary to those experiencing homelessness. The city maintains a position on the Sacramento Steps Forward Advisory Board to foster partnership on Continuum of Care issues and homelessness programs in general.
28.2C	Provide CDBG funds and other resources as available to help finance the City's fair share of homeless services	Ongoing.	The city currently funds Navigator services through Sacramento Self-Help Housing with CDBG funds. The Navigator provides outreach services to individuals and families who are currently or in immediate danger of becoming homeless
28.3A	Support SHRA efforts to provide housing assistance within the community	Ongoing.	Ongoing.
28.3B	Enforce Federal and State anti-discrimination laws.	Ongoing.	The city funds Self-Help Housing, a non-profit that operates a Renters Help Line. The Help Line provides tenants in a housing crisis or dispute need a reliable resource for information about their rights and obligations as renters. Self-Help Housing will refer calls concerning fair housing or discrimination to Project Sentinel who will then investigate and refer cases to the appropriate state and federal agencies.
28.3C	Continue to fund and support the Human Rights and Fair Housing Commission	Annually	With the dissolution of the Human Rights and Fair Housing Commission, the city currently funds Sacramento Self-Help Housing to provide fair housing services.
28.4A	Conduct annual review as part of the submittal of the Annual Report to HCD as required by law	Annually	Ongoing.

28.4B	<p>Continue to seek grant funding to implement housing programs. The City will aggressively monitor the availability of new housing resources and program funds. In recent years the City has been successful in obtaining a \$1 million grant from the State Housing Trust Fund. The City has also received over \$1 million in State grants (Cal HOME and HOME Consortium funding) to provide down – payment assistance to first time homebuyers. The City has also been the recipient of special funding to assist in the redevelopment of Sayonara Drive which is the City's most hard – pressed low income area. The City will pursue housing resources consistent with the priorities outlined in the City's Housing Element and Consolidated Plan., including pursuing funds for the City's Housing Trust Fund, First Time Homebuyer Program, the Sayonara neighborhood and other pockets of low income and the City's ten mobile home communities. The City will continue housing rehabilitation as a priority need and the City will direct internal resources (Housing Trust funds and Redevelopment Set Aside funds) as well as State and Federal funding resources in addressing these needs</p>	Annually	The city has successfully implemented these efforts
28.4C	<p>Ensure existing affordable housing developments are meeting their rent and income restrictions</p>	Annually	In place.
28.5A	<p>Review the City's available land inventory annually to ensure that sufficient land is designated for an appropriate range of housing types</p>	Annually	The city's available land inventory was completed in 2008 and is reviewed annually

28.6A	<p>Continue to fund the Human Rights and Fair Housing Agency to support of its efforts to prevent housing discrimination. The City will actively promote the Human Rights and Fair Housing Agency to any resident with a question related to Fair Housing. In addition the City will distribute information through the City's website, make information available at City Hall, information at the Library, and provide direct mailings upon request. Most importantly the City will provide information to Neighborhood Associations regarding the agency and distribute pamphlets to residents that participate in these meetings or residents they see that are in need. In addition, the City will provide office space for the Human Rights and Fair Housing representative, including a direct phone line to provide easy access to these services</p>	<p>Annually</p>	<p>With the dissolution of the Human Rights Fair Housing Commission, the city currently funds Sacramento Self-Help Housing to provide a telephone “helpline”, tenant-landlord counseling, investigation, advocacy, and dispute services for Citrus Heights residents with a housing crisis issue. In the event a Self-Help Housing staff member determines a party's actions may be the result of discrimination, Project Sentinel will investigate. Project Sentinel has a full time attorney who will assist in 5 screenings and/or investigate for Citrus Heights residents who experience housing discrimination.</p>
28.7A	<p>Continue to staff the Interdepartmental Development Review Committee to ensure timely processing of development applications</p>	<p>Ongoing.</p>	<p>City staff holds bi-monthly development team meetings with the development staff and the various agencies (fire and water district) and potential applicants</p>
28.7B	<p>Continue to make development decisions at the lowest level possible (e.g. staff approvals) in order to expedite development decision making.</p>	<p>Ongoing.</p>	<p>Ongoing.</p>

28.7C	Continue to use density bonuses, City Redevelopment funds, federal funds and other available resources to promote housing opportunities, especially for low-income persons (including Extremely Low Income) and those with special needs. Meet with developers, including nonprofits and service providers and community stakeholders every two years to promote the City's resources, including available sites, zoning, various incentives and opportunities and financial and other available resources to develop action plans for developing 100 units in the planning period	On-going and every two years with the first meeting in February 2009	The city will continue to promote housing opportunities to low-income persons and those with special needs. With the dissolution of the city's Redevelopment Agency, the city is currently exploring new funding sources for these activities.
28.7D	Examine all City development fees to ensure they are fair, necessary and not an undue impediment to housing production. Consult with outside agencies such as the Human Rights and Fair Housing Agency, housing advocates, building trade organizations, Chamber of Commerce, and other private interests in making this assessment.	Ongoing.	The city went through a comprehensive fee update in 2019 that took effect January 1, 2020. Development and impact fees will be updated in the future.
28.7E	Establish Council policy on fee waivers and deferrals for future development.	Jul-09	The City Council has used, and continues to use this authority.
28.7F	Partner with outside agencies including the Sacramento Metropolitan Fire District, San Juan Unified School District, Sunrise Recreation and Park District, and Sacramento Regional Sanitation District to provide input in evaluating how these agencies' fees impact housing production.	Ongoing.	Ongoing.
28.7G	Research the access to services, facilities, and transportation for special needs populations, including the adequacy of major streets and sidewalks.	Ongoing.	Ongoing.

28.8A	Use City Redevelopment "Set Aside" funds and Low Income Housing funds for low and moderate-income housing projects.	Ongoing.	With the dissolution of the city's Redevelopment Agency, the city is currently exploring new funding sources for these activities.
28.8B	Update the five-year plan to identify specific projects and priorities for City Redevelopment "Set Aside" funds and Low Income Housing Funds.	Jul-08	With the dissolution of the city's Redevelopment Agency, the city is currently exploring new funding sources for these activities.
General Comments:			

This page intentionally left blank

CITY OF CITRUS HEIGHTS
6360 FOUNTAIN SQUARE DRIVE
CITRUS HEIGHTS, CA 95621
PHONE (916) 725-2448
FAX (916) 725-5799
WWW.CITRUSHEIGHTS.NET